Washington Metropolitan Area Transit Authority (WMATA)

Compact Public Hearing Staff Report

Takoma Metrorail Station
Parking and Bus Bay Changes

Staff Analysis of the Public Hearing
and
Staff Recommendations

Hearing No. 645
Docket No. R23-01

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1.0 Introduction

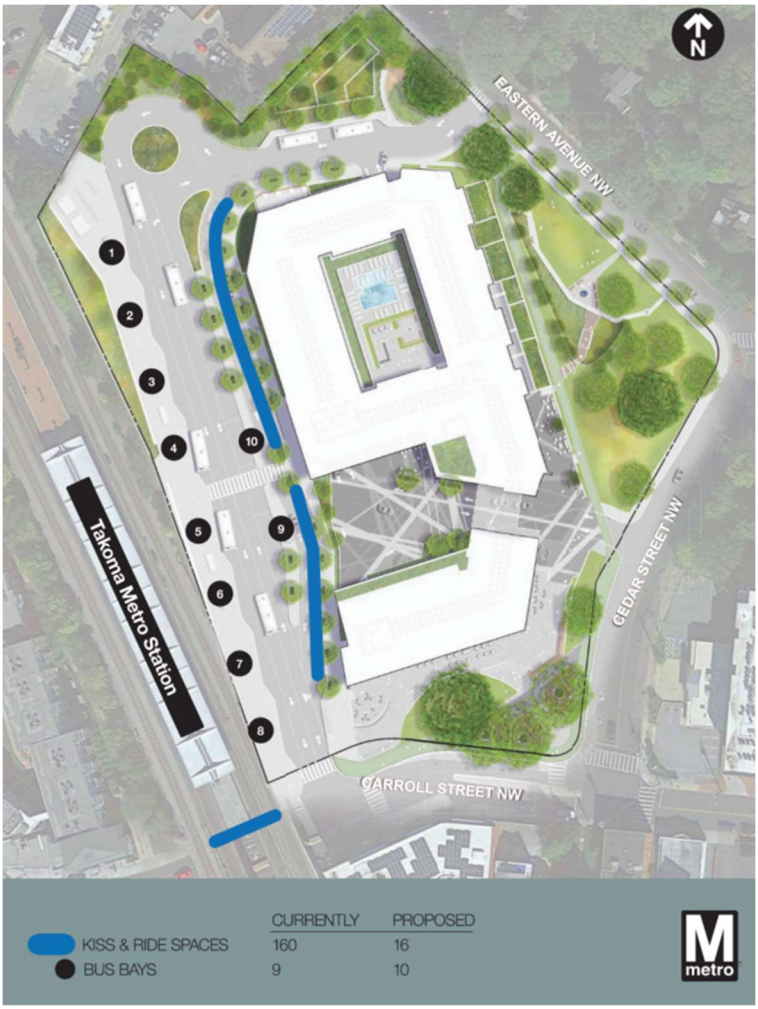
1.1 The Project

WMATA proposes changes ("Project") to the Takoma Metro Station ("Metro Station" or "Takoma Station") to enable a joint development project. The Project includes modifications to the parking and bus loop facilities at Takoma Station. The proposed joint development concept is shown in Figure 1 below; more detailed drawings can be found in Appendix G of this report.

Metro obtained public input on the following proposed transit modifications:

- Relocation of the bus loop and Kiss & Ride spaces
- Addition of one alighting bus stop
- Removal of 144 Kiss & Ride spaces
- Addition of a traffic signal on Carroll Street NW at the WMATA bus loop and Kiss & Ride entrance

Figure 1. Proposed Metro Facility Modifications



Of specific interest to Metro customers are the changes to the transit facilities, station access, and circulation in the vicinity of the Metro Station, which were presented at a public hearing on January 17, 2023. Details of the proposal were provided in the General Plans and the Environmental Evaluation, which included a parking analysis. The Notice of Public Hearing, Environmental Evaluation, and the General Plans were available online at www.wmata.com/plansandprojects beginning December 17, 2022 and are included in Appendices A, E, and F, respectively, of this document.

These documents were also available for inspection during normal business hours at the following locations:

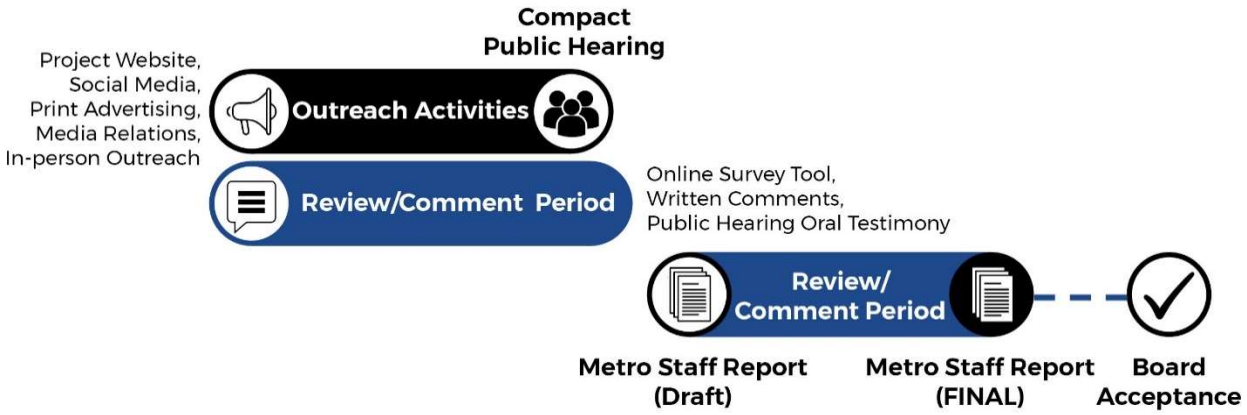
Washington Metropolitan Area Transit Authority
300 7th Street SW, Washington, DC 20024

1.2 Public Hearing Staff Report

As required by the WMATA Compact, Metro's organizational document, the public was provided with the opportunity to comment on the Project. Following the guidelines established by WMATA's Board-approved Public Participation Plan, the following report is a summary of Metro's public outreach efforts, the Project's public hearing, comments that were received, and Metro's response to questions and issues raised by the public about the Project.

This draft report is shared with the public on the project webpage for review and comment for ten (10) days. Following that review, the report will be finalized and presented by staff to Metro's Board of Directors, where the Board will make a determination on whether the proposed facility modifications will be accepted as an amendment to Metro's Mass Transit Plan. The activities and actions Metro takes to prepare and finalize the Public Hearing Staff Report are shown in Figure 2.

Figure 2. Staff Report Process



2.0 Communications and Outreach to the Public

2.1 Overview

Communications and outreach were guided by the requirements for WMATA Compact Public Hearings and Metro's federally mandated, Board-approved Public Participation Plan (PPP).

Beyond meeting basic requirements for a Compact Public Hearing, Metro followed PPP guidelines to create a targeted communications plan. The plan was designed to collect feedback inclusively and collaboratively with a focus on engaging minority, low-income and Limited English Proficient (LEP) populations.

Most of the communications and outreach efforts outlined in this report occurred during the official public comment period timeframe (**December 17, 2022 through January 27, 2023**).

The final communications and outreach plan included the following efforts:

- Stakeholder communication
- Targeted marketing and media
- In-person outreach
- In-Person and Virtual Compact Public Hearing

Feedback was collected from the following sources during the public comment period:

- Written comments received online and by the Board Secretary's Office
- Oral testimony received at the In-Person and Virtual Compact Public Hearing

The comments received can be found in Appendix E of this report.

2.2 Stakeholder Communication

Metro sent a targeted email update on December 19, 2022 to 38 individuals representing 34 nearby stakeholders. Recipients included representatives from businesses, community-based organizations, places of worship, hospital and medical services, schools, government facilities and agencies, apartment and residential communities, and schools. Recipients were invited to provide feedback and attend the public hearing. The email included a link to an online survey. A summary of the survey findings can be found in Appendix E of this report. The list of stakeholders who received the targeted email can be found in Appendix B.

2.3 Targeted Marketing and Media

To obtain maximum reach, Metro used targeted marketing, in-person outreach, and media relations campaigns to increase awareness and encourage public feedback.

2.3.1 Project Webpage

Figure 3. Project Website



The project webpage on Metro's website served as the Project information hub and the primary channel for collecting public feedback (Figure 3). Information was presented in English and Spanish, and a variety of content was available for the public to review, including the environmental evaluation and design plans of the proposed changes. Metro's public hearing was also streamed live on this page and on YouTube.

During the public comment period, the project webpage received 1,787 unique views. The average time spent on the page was just over 4 minutes. This webpage will remain online for the duration of the Project to serve as a resource for the public.

2.3.2 Social Media

Metro leveraged its social media following to inform the public about the Project across a variety of channels. In total, Metro's social media posts resulted in more than 61,000 impressions and more than 2,000 engagements across all platforms (Table 1). Examples of social media content are shown on the following page. On January 12, 17, and 27, Montgomery County DOT tweeted out Metro's link to the project details, survey, and public hearing.

Table 1. Social Media Engagement Summary

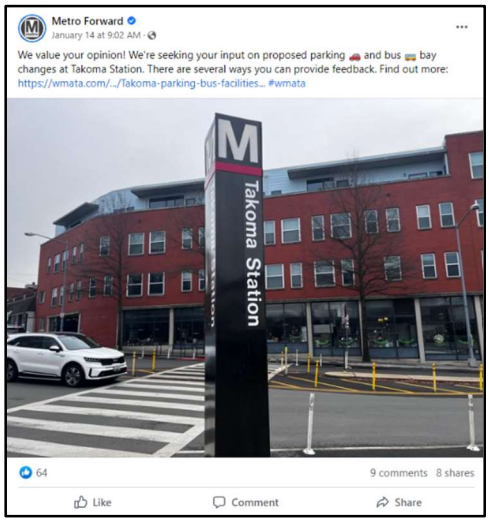
Media	Date	Details
Twitter	1/9/23	• 31,373 impressions • 927 engagements (including 23 retweets, 40 likes, 5 replies) • 334 link clicks
Twitter (second part to thread started on 1/9)	1/14/23	• 8,080 impressions • 120 engagements (including 5 retweets and 9 likes) • 42 link clicks
Facebook	1/9/23	• 1,112 people reached • 20 total engagements (20 reactions, 0 comments, 0 shares) • 15 link clicks
Facebook	1/14/23	• 6,480 people reached • 95 total engagements (73 reactions, 14 comments, 8 shares) • 51 link clicks

Media	Date	Details
Instagram	1/9/23	• 7,590 people reached • 489 total engagements (470 reactions, 10 comments, 9 shares)
Instagram	1/14/23	• 6,386 people reached • 419 total engagements (407reactions, 8 comments, 4 shares)
Nextdoor	1/10/23	• Posted to the zip code around the station (20012) • 53 impressions

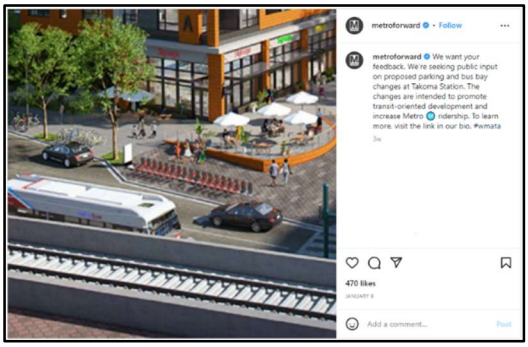
Note: Reach = the total number of people who saw the content (measure is estimated). Impressions = the number of times the content was displayed on a user's screen, no matter if it was seen, clicked, or engaged with or not. Engagements = Likes, comments, and shares.

Social Media Examples

Facebook



Instagram



Twitter



Nextdoor



2.3.3 Print Advertising

Two legal notices were placed in *The Washington Post* prior to the public hearing. Paid advertisements were also placed in publications covering multiple languages based on the station's demographic profile: *Atref, El Tiempo Latino, and Washington Hispanic*. Table 2 lists the publications and the run dates.

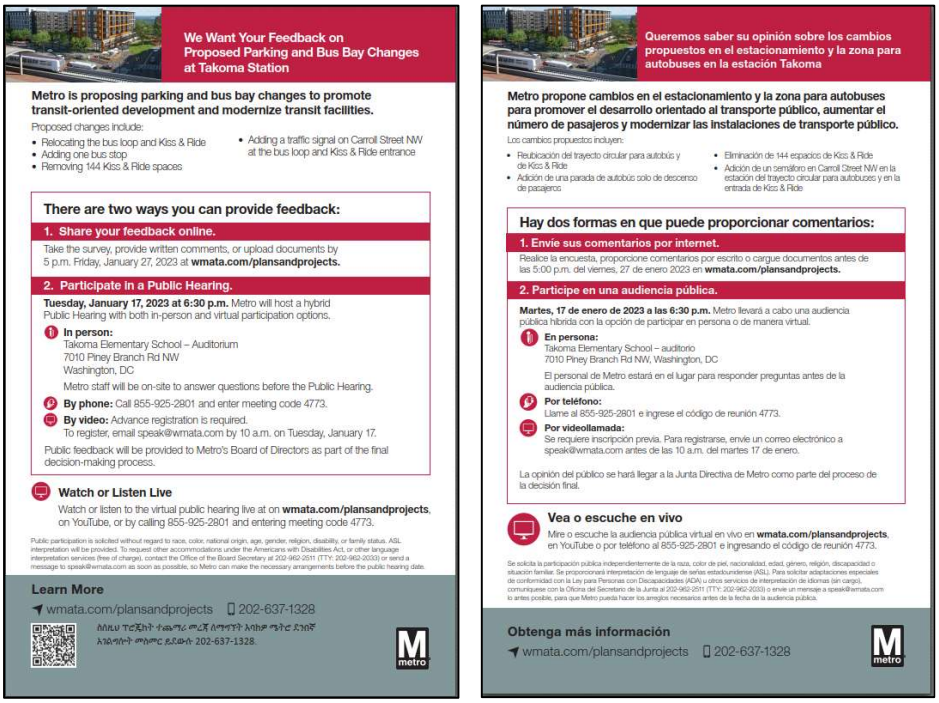
Table 2. Summary of Print Advertisements

Publication	Language	Run Date(s)	Total Est. Impressions
Atref	Amharic	1/6/23	8,000
El Tiempo Latino	Spanish	1/6/23	49,200
The Washington Post	English	12/17/22, 12/24/22	98,400
Washington Hispanic	Spanish	12/23/22	45,000

2.3.4 Signage and Flyers

Information was posted in English and Spanish in and around the Takoma Station to reach rail, bus, and parking customers.

- Digital graphics were posted on the digital displays in the station mezzanine.
- Signs were posted at each bus bay at the station.
- Flyers were distributed to the station manager and throughout the station on January 5, 6, 14, 17, and 18.



Printed and digital signs were posted in the station and at bus bays.

2.3.5 Media Relations

Metro issued a press release on January 9, 2023 to encourage public feedback on the project (Table 3).

Table 3. Press Release Summary

Date	Title	Details
1/9/23	Metro seeks public input on proposed parking and bus bay changes at Takoma Station	Metro is seeking public input on the proposed parking and bus bay changes at Takoma Station

2.3.6 In-Person Outreach

Contracted professional bilingual outreach teams, in the yellow Metro-branded outreach aprons, were positioned at Takoma Station mezzanine and bus loop to inform customers and residents about the proposed changes and public hearing and encourage customers to provide comment via the online survey and at the public hearing. The outreach teams distributed a one-page flyers about the project and were equipped with tablets to assist customers with the online survey on-site. In-person outreach took place on the follow days and times:

- Thursday January 5, 6:00 a.m. – 10:30 a.m.
- Friday January 6, 2:00 p.m. – 6:30 p.m.
- Saturday January 14, 10:00 a.m. – 5:00 p.m.
- Tuesday January 17, 3:30 p.m. – 7:30 p.m.
- Wednesday January 18, 6:30 a.m. – 10:30 a.m.



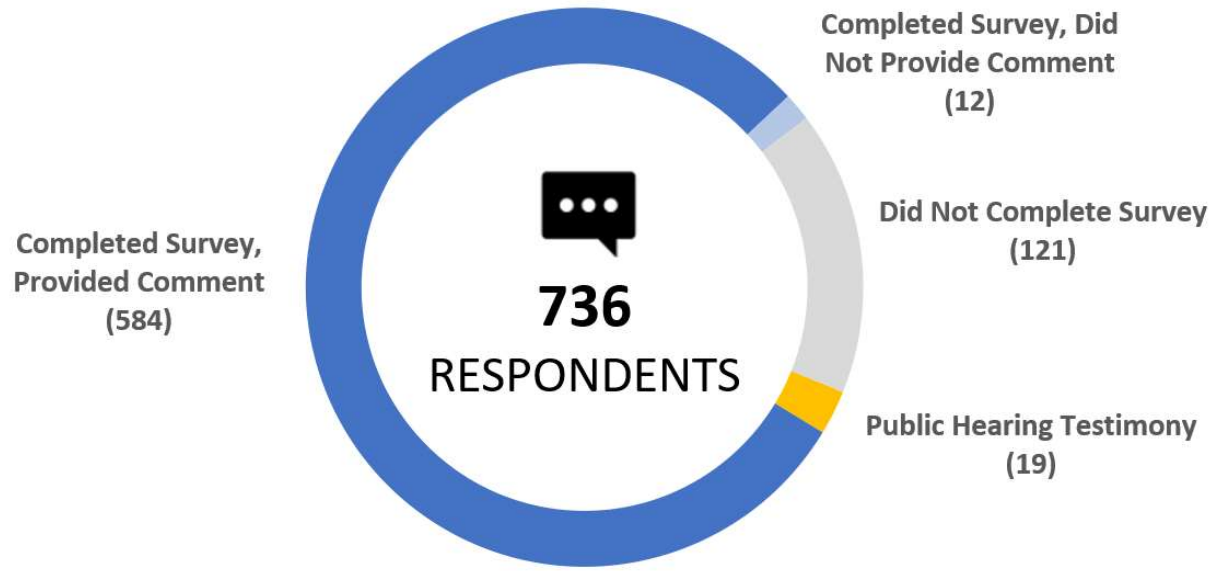


The days and times for the outreach were selected at times of high ridership to reach the maximum number of customers and to coincide with the public hearing to help get customers from the station to the public hearing location. Outreach staff were fluent in English, Spanish, and Amharic and identified by their yellow language button. **Overall, the outreach team interacted with 2,985 customers, including 400 interactions in Spanish and 150 interactions in Amharic and distributed 1,297 one-page flyers.**

2.4 Public Input Results

Metro collected public input during the public comment period through an online survey tool and at an In-Person and Virtual Compact Public Hearing. The survey was started by 717 people, 596 surveys were completed, and 584 survey respondents provided written comments. Additionally, nineteen oral testimonies were presented during the public hearing. See Figure 4. The public comment period was open from 9 a.m. Saturday December 17, 2022, through 5 p.m. Friday January 27, 2023.

Figure 4. Public Input Methods



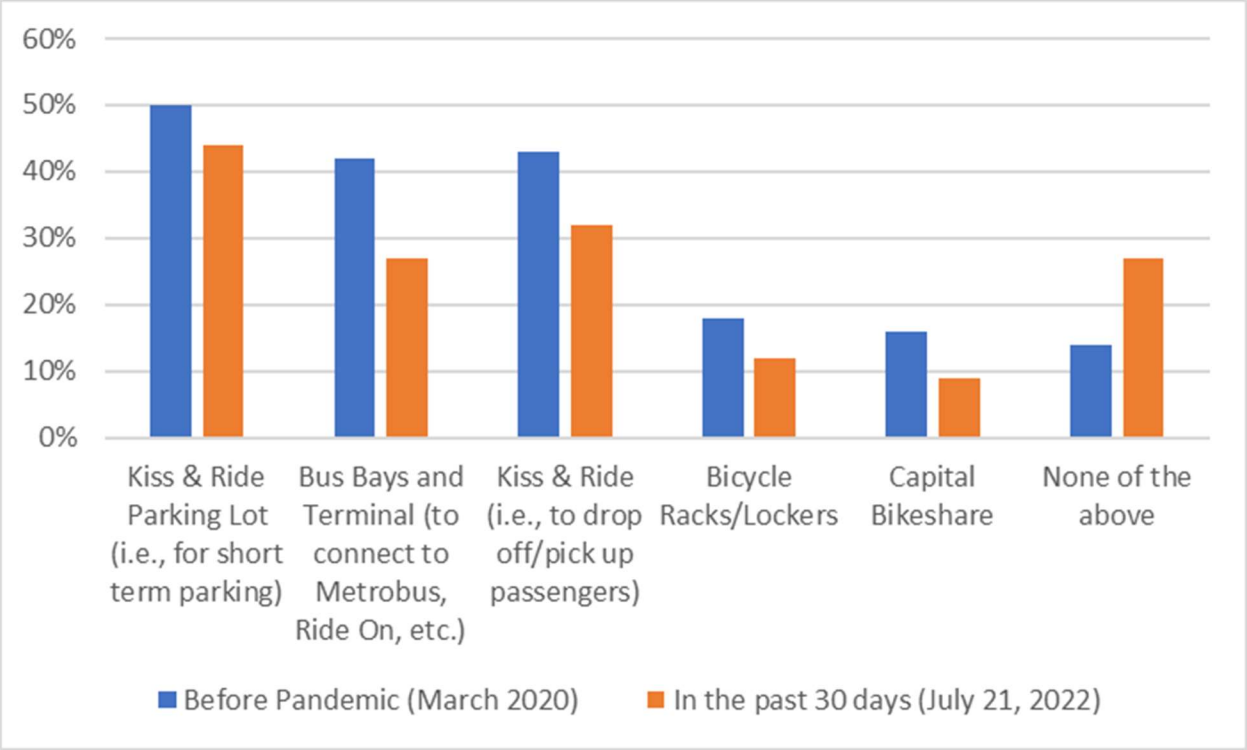
2.4.1 Facilities Used at Takoma Station

The survey asked respondents which facilities they typically used at the Takoma Station before the pandemic (March 2020) and in the past 30 days (Table 4 and Figure 5).

Table 4. Facility Usage at Takoma Station

Facilities Used Takoma Station	Before Pandemic (March 2020) n=557	In the past 30 days (July 21, 2022) n=557
Kiss & Ride Parking Lot (i.e., for short term parking)	50%	44%
Bus Bays and Terminal (to connect to Metrobus, Ride On, etc.)	42%	27%
Kiss & Ride (i.e., to drop off/pick up passengers)	43%	32%
Bicycle Racks/Lockers	18%	12%
Capital Bikeshare	16%	9%
None of the above	14%	27%

Figure 5. Facility Usage at Takoma Station



2.4.2 Survey Demographics

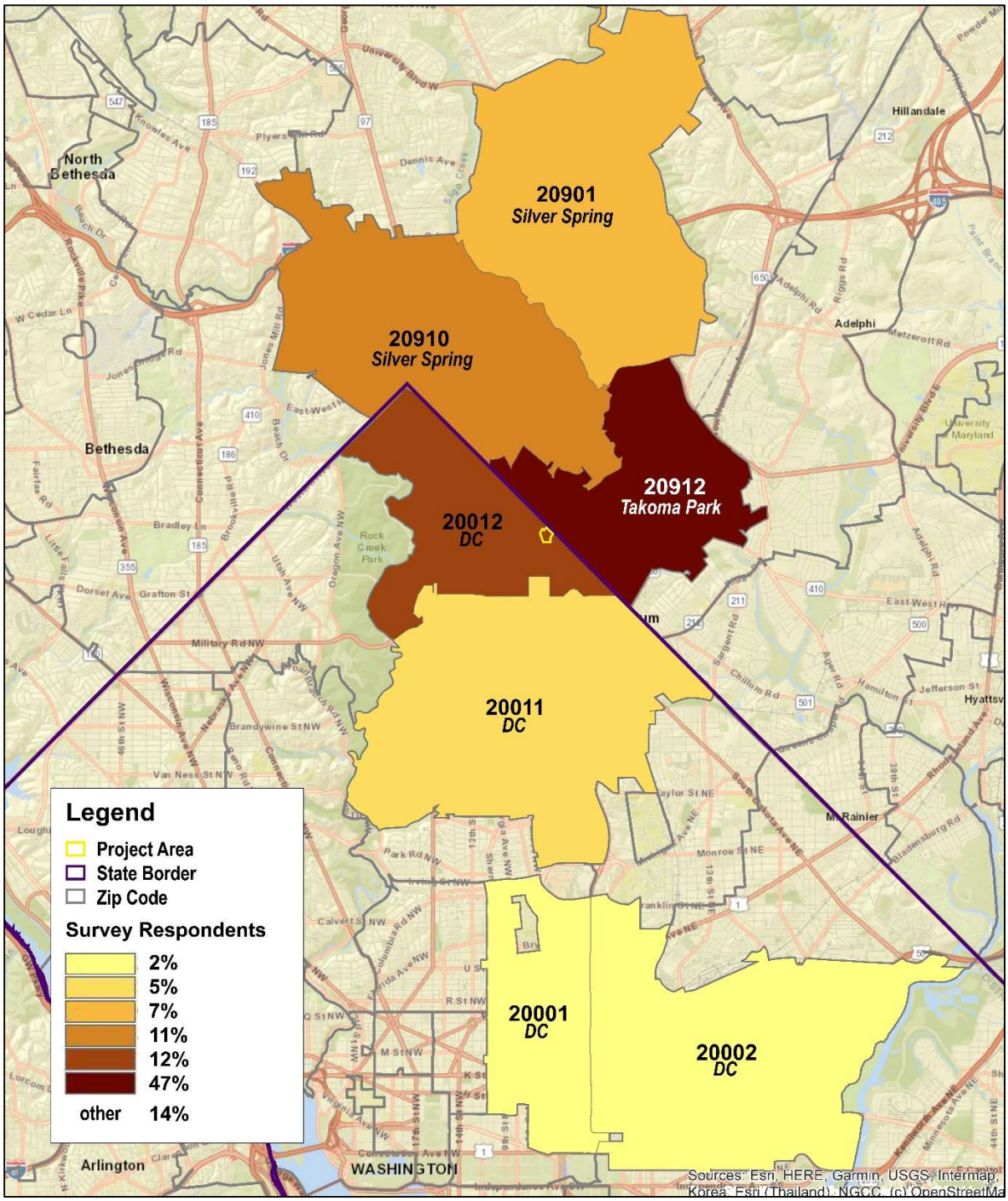
Table 5 shows the percentage breakdown of survey demographics. More than fifty percent of survey respondents were between the ages of 25 and 44. Almost all people responding to the survey identified as white and non-Latino. Sixty percent of respondents lived in single family, detached homes.

Most of the survey respondents (47%) said they live in Takoma Park, MD—more than double the number of respondents who live in Silver Spring, MD (18%). Twelve percent of survey respondents share the Project's DC zip code (20012), and nine percent live in other DC zip codes. Fourteen percent of survey respondents said they live elsewhere. Figure 6 shows the percentage of respondents by zip code.

Table 5. Survey Demographics

Age (n=511)	18-24	5%
	25-34	22%
	35-44	31%
	45-54	17%
	55-64	10%
	65+	15%
Gender (n=559)	Male	52%
	Female	45%
	Other	3%
Hispanic or Latino (n=554)	Yes	7%
	No	93%
Race (n=557)	African American or Black	7%
	American Indian or Alaska Native	1%
	Asian	7%
	Native Hawaiian or other Pacific Islander	1%
	White	78%
	Other	6%
Zip Code (n=548)	20912 (Takoma Park, MD)	47%
	20012 (DC, Project)	12%
	20910 (Silver Spring, MD)	11%
	20901 (Silver Spring, MD)	7%
	20011 (DC)	5%
	20002 (DC)	2%
	20001 (DC)	2%
	Somewhere else	14%
Housing Type (n=596)	Apartment or condominium	25%
	Single family, detached house	60%
	Townhome, attached to other houses	13%
	Other	2%

Figure 6. Zip Codes of Survey Respondents



3.0 Summary of the Public Hearing

In-Person and Virtual Compact Public Hearing

The Compact Public Hearing was held on Tuesday, January 17, 2023 at 6:30 p.m. Metro Board Vice Chair Lucinda Babers chaired the hearing. The hearing was a hybrid meeting where staff hosted attendees in-person at Takoma Elementary School Auditorium, 7010 Piney Branch Road, NW, Washington, DC. Others had the opportunity to participate via Zoom or watch a simultaneous live-stream of the hearing on Metro's website and YouTube page Metro Forward (Figure 7 and Figure 8). The hearing was viewed on YouTube 210 times, and the recording remains available for reference on Metro Forward.

In keeping with Metro's policy to ensure that a hearing is accessible to as many parties as possible, participants were also able to dial-in by phone and the hearing included live American Sign Language interpretation. The hearing's recording on YouTube provides captions. The contracted professional bilingual outreach staff were also tasked to install signs from the station to the public hearing and assist Metro staff with various tasks and with any customer language needs at the public hearing.

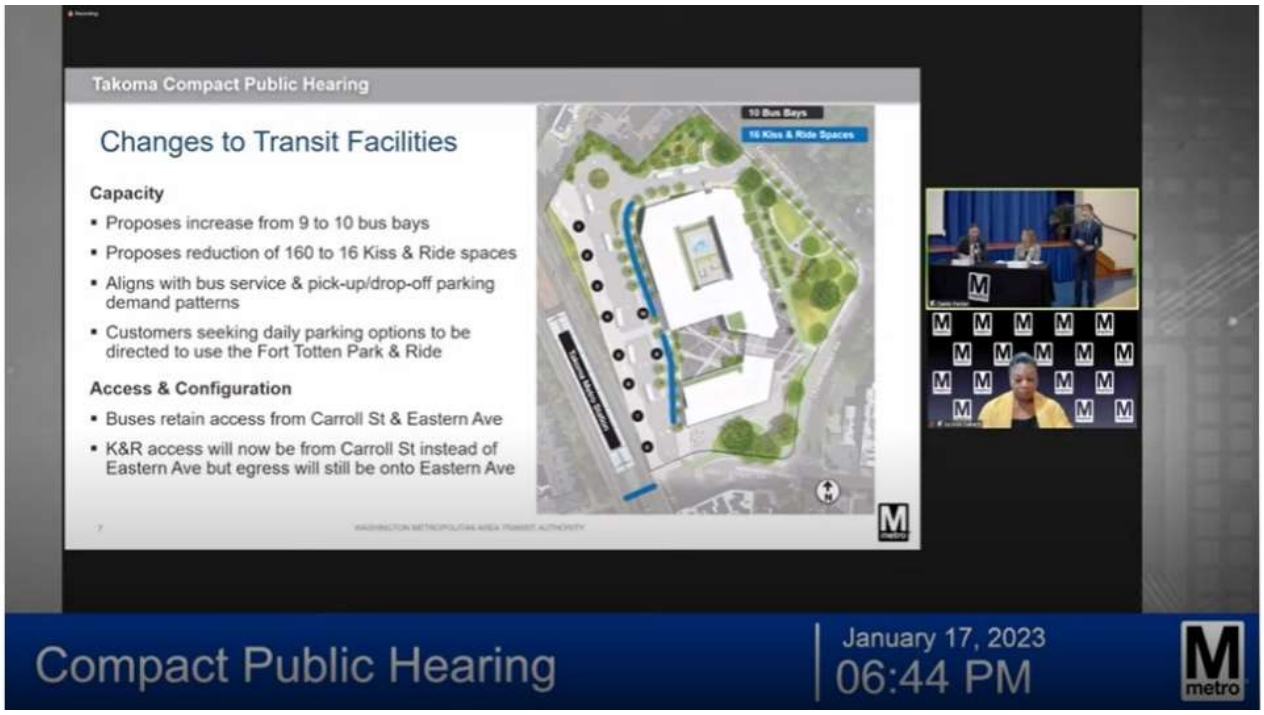
Following an opening statement by Ms. Babers, Metro staff described the proposed facility changes. Seventeen people provided oral testimony at the hearing in-person and two people provided oral testimony by phone. The staff presentation and script of the public hearing can be found in Appendices B and C of this report.

Figure 7. Takoma In-Person Public Hearing





Figure 8. Screenshot of Takoma Virtual Public Hearing



4.0 Comments Received for the Record

Comments to be considered for the record as part of this process were received through the online survey tool and oral testimony at the public hearing. The public comment period ran from 9 a.m. Saturday December 17, 2022 through 5 p.m. Friday January 27, 2023.

A total of 736 people responded to Metro's request for comment. Of those, 584 people provided comment through the online survey and 19 individuals provided oral testimony at the public hearing (Table 6 and Figure 9). One comment was written in Spanish, and the remaining were in English.

Table 7 provides a breakdown of the comments by topic. Because some comments contained multiple topics, the numbers shown in

Table 7 is greater than the total number of actual comments received. Comments made for the public record are provided in Appendix E.

Table 6. Summary of Respondent Opinions

	Number	Percentage
Support	297	40%
Neither	213	29%
Oppose	226	31%
TOTAL	736	100%

Figure 9. Respondent Opinions

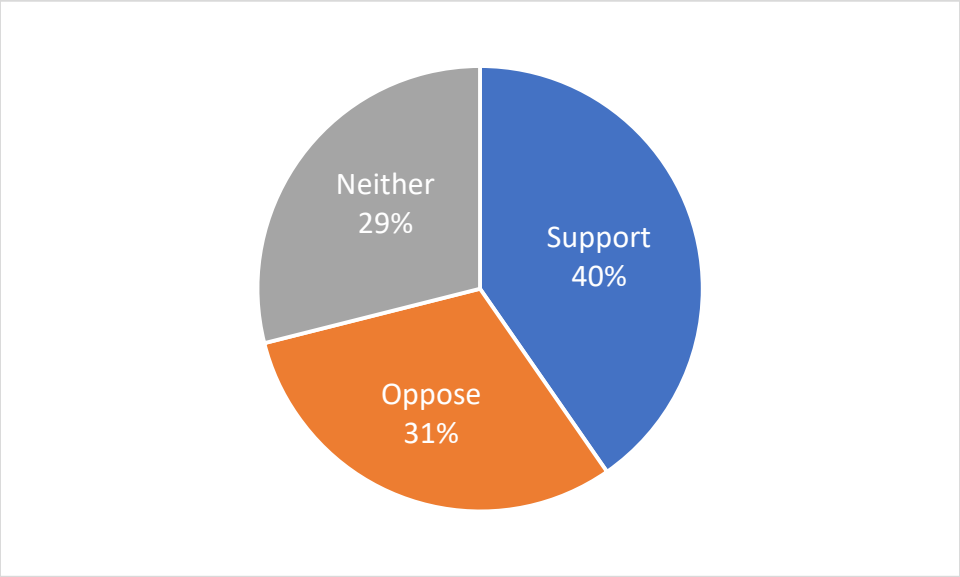


Table 7. Summary of Comments by Topic

Topic	Frequency	Overview
General Support for the Project	297	Comments expressed support of the project
General Opposition to the Project	226	Comments expressed opposition to the project
Kiss & Ride Spaces	292	Comments related to long-term and accessible parking needs at the station; not all these comments were in opposition to the project
Bicycle and Pedestrian Improvements	29	Comments expressed value of providing improved bicycle and pedestrian access to and through the station area
Development Review Process	16	Commenters did not think that Metro's public hearing and DC's land development process should be separate
Other Transit Related Comments	20	Comments associated with improvements or priorities Metro and RideOn should focus on
Other Comments	82	These comments were associated with green space, the environmental evaluation, and other topics not related to the above-described categories

5.0 Comments and Responses to Comments Received

The 584 written comments and 19 oral testimonies were categorized into broader, recurring themes. WMATA staff provided responses to the overall concerns and themes expressed below. Additional information is provided in the following sections to include representative comments (see Appendix E for full comment details).

5.1 General Support for the Project

Forty percent of all respondents (297 comments) expressed support for the project. They supported the removal of the 144 Kiss & Ride spaces and relocation of the bus loop. People noted that the surface lot was underutilized and that that more-dense, transit-oriented development next to the station was a more appropriate use for the land and could provide benefits to neighboring areas.

Representative Comments

- *I support the renovation plans, particularly moving the unnecessary parking spaces. I urge WMATA to move forward as quickly as possible to build desperately needed housing and commercial space for our community.*
- *I support changes to the Takoma Park Metro area, especially the removal of parking spaces when that leads to better mix of land use, including affordable housing and better green infrastructure (at the very least from the opportunity to change a swath of impermeable surface to at least some permeable). Takoma Park is a genuinely cool, unique area. It has a lot of draws already. Better pedestrian and bike access and, perhaps most importantly, safety; more control of vehicular traffic, and less vehicular traffic; and more space for mixed retail and housing would only benefit Takoma Park's stability, longevity, and appeal.*
- *The city needs more housing and this would be a great, Metro-accessible place to build it!*
- *Yes. Love the plan.*
- *I support changes to the Takoma Park Metro area, especially the removal of parking spaces when that leads to better mix of land use, including affordable housing and better green infrastructure (at the very least from the opportunity to change a swath of impermeable surface to at least some permeable).*
- *This sounds like an excellent plan!*
- *We need housing for people not cars*
- *This location is perfect for dense, transit-oriented housing. Please ensure that housing and mixed-use commercial development are part of the redevelopment plan.*
- *I would love to see the station updated to reflect its urban context and put the valuable land to more productive use. Count me as a vote for less parking and more housing around the station.*
- *Do it!*
- *This change would make my life much easier and be an overall improvement to our community!I strongly support the development of Metro's underutilized parking lot in Takoma DC. The proposal will create the necessary conditions for Metro to earn far more revenue from its land at the Takoma Metro station than it currently receives through the operation of an underutilized parking lot. We all benefit from a financially healthy public transit system with more riders. The spill-over of additional patrons to Takoma Park businesses will contribute to the financial health of Takoma Park MD and Takoma DC.*

5.2 General Opposition to the Project

Thirty-one percent of respondents (226 comments) expressed opposition to the overall project. Opposing commenters raised several concerns including kiss & ride utilization, green space preservation, safety concerns, and the development review process.

Representative Comments

- *This proposed project is a terrible idea.*
- *I do not support the proposed changes as currently defined. WMATA must do a more systematic and complete analysis of the traffic and environmental impact of the entire development. WMATA must also do more to engage all affected jurisdictions, most notably the neighboring Takoma Park, MD.*
- *I completely oppose this plan without further details.*
- *I'm opposed to the changes to the metro green space. (1) The green space gives much needed breathing room to commuters and strollers. (2) The planned development itself is large and unattractive. (3) The loss of paid parking will discourage Metro riders.*
- *Please do not eliminate all of these parking spaces. This will pose immense challenges for disabled people and those who live too far from the station to walk.*
- *I am opposed to this project. We need to have places to park. I am very concerned about the disabled and those who have long commutes and drive to Metro before embarking on long commutes. This is a terrible plan.*
- *As a resident of Takoma Park I am against the plan as it currently stands. More housing is a great thing to be sure, but it appears to be at the expense of green space and a significant impact on available parking.*

Metro Response: This redevelopment of the Takoma Station presents an opportunity to increase ridership in support of Metro's Transit Oriented Development and Joint Development policy objectives but also to help achieve the District's goals as well.

The District of Columbia has been planning redevelopment of this site since 2000 as a mixed-use hub that incorporates open space but with fewer parking spaces and less impervious area. After the District's extensive collaboration and outreach, the resulting 2002 Takoma Central District Plan called for building more housing, mitigating commuter traffic, developing retail opportunities on Carroll Street NW, and improving the pedestrian environment. The proposed joint development project at the Takoma Metro Station is consistent with the goals identified in this Plan as well as DC Office of Planning's Comprehensive Plan and its Rock Creek East Area Element, which proposes to concentrate economic development activity, employment growth, and new housing, including affordable housing at Takoma Metro station. Additionally, the Future Land Use Map (FLUM) also proposes an increase in development allowances from moderate to medium density.

5.3 Kiss & Ride Spaces

Respondents provided 292 comments related to parking needs at the station. Most people (233 comments) felt that some sort of long-term commuter parking was needed at the station, and 40 commenters expressed the need for accessible spaces for people with disabilities or limited mobility. Nineteen comments were that expecting customers to park at another station or to take the bus to the Metro station would not be feasible. Also, doubts were expressed about the lot's reported utilization.

It is important to note that not all parking comments were associated with opposition to the project. Sixty-six comments supported or were neutral about the project and expressed the need for some spaces (not necessarily the same number as provided today) to be available for customers at Takoma Station.

Representative Comments

- *Strongly support removing parking and expanding housing in this space.*
- *Remove as much parking as possible, replace with people-oriented infrastructure*
- *I think this plan makes sense, the 160 parking spot lot is a misuse of public land. On the other hand, metro helping along transit-oriented-development would help both the environment, as well as make financial sense.*
- *Please develop the land, the parking is mostly unused. But please keep a convenient kiss and drop area*
- *It is extremely helpful to have daily parking available at the Metro station, as it is a quick 10 minute drive from my residence and the RideOn buses are not reliable or timely. I strongly encourage Metro to reconsider the plan to remove the parking lot and identify alternatives for retaining some amount of daily spots at the station. If no parking remains available, I implore Metro to attempt to work with RideOn to improve and increase the bus availability and reliability. Thank you for your consideration.*
- *The recent changes to allow all day parking at the station have been extremely helpful to cut my commute time and make riding the metro more convenient. With the elimination of these parking spots, I will likely not ride the metro as often (currently 4 times a week). Please figure out a way to include parking spots for metro commuters as part of the building development. I assume there will be a parking garage for the people who will live in the complex, so building additional (paid) spots for commuters should be possible.*
- *I would support a proposal that removes 1/3 of the parking, but this proposal goes too far. I use the parking lot regularly, and though it is usually not at full capacity, removing all the spaces would create a major inconvenience. Saying we can go to Fort Totten is not realistic since their parking is 20 minutes away and often full.*
- *I strongly object to Metro's decision to eliminate all parking at the site. Your description of the current 144 spaces as 'Kiss and Ride' spaces is absolutely false, and contributes to the lack of trust of our community in your communication about this project At a minimum, please consider retaining some parking for senior citizens and people living with disabilities. I do support the overall development plan, and I support reducing the number of parking spaces - just not eliminating entirely.*

Metro Response: The proposed change to remove 144 Kiss & Ride spaces in the surface lot is based on an evaluation of current and future parking demand for the Takoma Station as detailed in the Environmental Evaluation. The Project does not eliminate the facility but will reconstruct and replace approximately 16 total spaces adjacent to the Metro station as on-street spaces. This includes two on-street ADA spaces adjacent to the crosswalk, near the station entrance.

The private development adjacent to the Metro facilities will also include retail parking and the Planned Unit Development (PUD) application anticipates parking spaces that will exceed the zoning minimum. These spaces are not Metro-owned or operated but can be utilized by the public for longer-term parking to access station area retail or to ride Metro. adjacent mixed-use joint development is undergoing the District's entitlements processes for jurisdictional approval of the number of developer-built parking spaces as part of the joint development. Updates, including the latest project traffic study, will be posted to the development's Zoning Case page.

Regarding concerns about longer-term parking options recommended at Fort Totten Station, Staff will share these comments with Metropolitan Transit Police Department (MTPD) for consideration.

5.4 Bicycle and Pedestrian Improvements

Twenty-nine comments discussed the value of providing improved bicycle and pedestrian access to and through the station area and provided comments on activities and actions they would like to Metro and others make as part.

Representative Comments

- *I would encourage you all to keep parking minimized and work to make getting to the station by bike, bus, or foot easier and safer.*
- *This sounds great! DC needs transit oriented housing and this is a perfect opportunity. New residents will enliven the takoma community! Please make sure the pedestrian access is good and incorporate as many units as possible.*
- *Whatever happens in this space must: *Improve bicycle mobility, access and safety in a way that connects to existing bicycle infrastructure in the city.*
- *Please consider those who bike and walk to and from this station. There aren't any bike lanes at the station, and there's a large hill up to the silver spring section of the MBT. And the parking lot cars enter the road right near the bottom of the hill and there's no stopping the cars coming down the hill. Makes me nervous when I ride my bike from the station up to the MBT.*
- *I would also strongly request that WMATA do everything possible to promote pedestrian and cyclist safety around the Metro station - any intersection redevelopments should prioritize buses, pedestrians, and cyclists, with cars a distant afterthought. Additionally, WMATA should seek out opportunities to add secure bicycle parking to any developments. I would ride my bicycle to take the Metro much more often if there were secure, high-capacity bicycle storage protected from the weather, like that currently being planned by the county for the Bonifant-Dixon garage near Silver Spring station.*

Metro Response: The Project will enhance pedestrian and bicycle access to the Metro Station by removing the large Kiss & Ride surface lot and replacing with new sidewalks and shared use paths designed to promote a safe and inviting environment for pedestrians and cyclists—goals consistent with the District's Bicycle Master Plan and Pedestrian Master Plan.

5.5 Development Review Process

A secondary concern raised in the comments (16 comments) was the separation of Metro's process and DC's land development process. Commenters expressed that it was inappropriate to decide what happens to WMATA's facilities without a full understanding and evaluation of what would go up in its place.

Representative Comments

- *I do not support the proposed changes as currently defined. WMATA must do a more systematic and complete analysis of the traffic and environmental impact of the entire development.*
- *I'm not pleased with this plan. There is insufficient detail to the plan, NO information on any proposed development, and there was NO information provided to Takoma Park residents, who would be most impacted by the changes, other than this recent posting. Most of DC is on the other side of the tracks and wouldn't even be impacted by any changes. It's insulting that you would work with younger people in DNCs in DC but ignore Takoma Park residents and station users in this way. It is also ridiculous to divorce any changes to the bus and parking from any proposed development.*
- *THIS NARROW PROPOSAL -- A SLICE OF A LARGER PROJECT -- SHOULD NOT BE CONSIDERED WITHOUT THE REST OF THE PIE. NO PRIOR PROPOSAL FOR "DEVELOPMENT" AT THE TP METRO WAS DELIBERATED IN SUCH A "SLICED" MANNER. DOING SO CALLS INTO QUESTION THE LEGITIMACY -- AND LEGALITY -- OF WMATA VIS-A-VIS "DEVELOPMENT" AT THE TP METRO STOP.*

Metro Response: These comments are outside of Metro's scope in the Compact Public Hearing and will be shared with the District of Columbia for consideration. The public can further comment on the development plan through the District's development review process, see Zoning Case 22-36.

5.6 Transit Related Comments

Commenters provided suggestions not related specifically to the proposed project. These 20 comments included suggestions to increase reliability of the bus service that serves Takoma station, especially if long-term parking will be reduced; have Metro provide more amenities for pick-up/drop-off customers; install in-route electric bus vehicle infrastructure; crack down on fare evasion; and focus on fixing the existing system before taking on new projects.

Representative Comments

- *If you're taking away that many parking spaces in an already parking constrained part of town, then there needs to be much more investment in local transportation options. I completely support the need to prioritize public transport over driving, but that doesn't happen simply by eliminating parking. Especially at a time where people already don't see Metro as a reliable option. There needs to be complementary investment in public transport access. This metro stop already has few buses that serve it, a situation that is much worse in off-peak hours.*
- *12, 13, 25 the bus services are so bad. Envest on map that actually works. The buses should not leave too early, they don't even stop.*
- *We need to consider benches with covers to keep those waiting out of rain and snow. We also need to consider placement of garbage cans around the loop to prevent liter.*
- *Focus on fixing the metro - lower crime, increase reliability. Stop taking on new projects until you get the baseline down.*
- *Concerned that there are no plans for en-route electric bus charging infrastructure. Implementing at least EV ready infrastructure in conjunction with this redesign is the most responsible use of long term financing to support stated goals of carbon emission reductions.*
- *It is incredibly frustrating to see people regularly jump the turnstile without agents or anyone visibly doing anything to prevent people from breaking the law and not paying. I understand the agents don't have the authority to enforce this. I've traveled and lived in major metropolitan areas around the world and I've never seen such flagrant disregard for paying the metro fare. Simultaneously, the metro is one of the most expensive urban metro systems I've ever taken. It is unfair that I am directly with my fares and indirectly with my taxes supplementing people who are breaking the law.*

Metro Response: These comments are outside of Metro's scope in this Compact Public Hearing and will be shared with the respective Metro departments for consideration.

5.7 Other Comments

There were 82 comments that were not related to the issues discussed above. They included statements about green spaces and tree preservation, traffic analysis, stormwater management, safety within the new development, bus exhaust, the Environmental Evaluation, and activities and outcomes that should be a part of any development project, including affordable housing.

Representative Comments

- *Please keep the trees/natural vegetation for the wildlife!!! I also worry that this project will make surrounding areas extra hot.*
- *Importantly- and this should be key to any redevelopment- as much green space should be retained as possible, including saving the large mature trees in the current green space and along the Metro tracks. I've seen to many developments where the entire area was clear cut to facilitate construction. This need not be the case and it should be made a priority to save as many of the large trees as possible.*
- *The stormwater runoff is already bad, it better not get worse*
- *I was also shocked there hasn't been a traffic study to analyze the impact of the proposed changes on surrounding streets. The traffic light you want to install at the Carroll St., NW entrance to the Metro station could have a disastrous effect on the nearby Blair Road/Cedar Street/4th Street NW intersection, a frequent site of accidents that's rated an "F" by DC's transportation department. It is foolhardy to proceed with that traffic light without analyzing its effect on surrounding streets, and factoring in traffic from the apartment proposed on the site as well as all the other apartment buildings under construction in the area…*
- *I've spoken with a lot of people in Takoma/MD and some have said: -I don't see how I will feel safe walking through the complex at night after work when it's dark (females) - It looks like a bad idea (Ride On bus driver) -- I think you should ask the drivers their opinions as well as the residents and developers.*
- *Another issue never mentioned is trapped exhaust. When I walk to the metro about 8 am in the mornings, there are often 10 metro buses idling. Their fumes are released into the surrounding open area and filtered by over 200 trees. Where are the buses going to idle when there is no place for them on metro's site? And what will the air quality be near those buses, to be hemmed in on the side by an enormous retaining wall unrelieved by any grass slope or trees, and a 7-story apartment building on the other?*
- *I would oppose this project unless: 1) at least 20% of the proposed new housing units are set aside as affordable housing units for the long term, AND 2) the new apartment buildings have at least a couple of dozen parking spaces within the building, AND 3) the new apartment buildings have some retail space, community space, or other amenity that would help offset their impact on neighborhood resources.*

Metro Response: Matters related to the development plan are addressed in the District of Columbia review process, including through the review of the developer's PUD application and Zoning Case 22-36.

The District is responsible for evaluating the scale of development and its impact on public facilities. This includes and is not limited to the evaluation of the development's green space, traffic impacts, stormwater design, housing affordability, and parking.

The proposed joint development project provides an open space design that considers existing heritage trees on site, and further details can be found in the Developer's PUD application. Tree preservation is a District of Columbia development review matter through DDOT's Urban Forestry Division.

The Developer will complete a traffic study as the District's development and entitlements process continues and will be posted on the project's Zoning Case 22-36 page. Additionally, the Project site is being designed to account for the latest stormwater management requirements as defined by DOEE, which includes the addition of bioretention facilities—that do not exist today—that capture and temporarily store surface rain runoff on-site, where it is filtered and slowly reintroduced to the municipal system. As a result, on-site stormwater conditions will be significantly improved in the new design.

6.0 Responses to Comments Received on the Draft Public Hearing Staff Report

Comments received on the draft Public Hearing Staff Report can be found in Appendix I. The draft Public Hearing Staff Report was posted on Metro's website on Tuesday April 11, 2023, and the public comment period closed 5:00 p.m. Friday April 21, 2023.

Seventy-five comments were received. Fourteen comments (19%) expressed support for the project. The remaining comments discussed:

- Different perspectives on the parking space classifications
- Preference for more parking
- Desire to preserve additional open space
- Status of joint development traffic study
- Interest to reduce the scale of the proposed development
- Funding and construction method for changes to the transit facilities
- Questions about the District of Columbia's development review process and the Compact hearing analysis related to development impacts

Metro Response: The parking spaces at the Takoma Metro station are classified as Kiss & Ride spaces as shown in the station vicinity map. Kiss & Ride signage at Takoma Metro station and system-wide, has varied over time as Metro has applied various strategies to maximize utilization and revenue collection at these facilities (e.g., ParkMobile, etc.).

The proposed Kiss & Ride capacity was determined through an evaluation of parking utilization trends using ParkMobile transaction data and customer survey data. This information was provided in the Environmental Evaluation published at least 30-days prior to the Compact hearing and is also included in Appendix F of the Staff Report. Metro customers desiring longer-term parking can use the Park & Ride facility at Fort Totten Metro station or the public parking spaces in the adjacent mixed-use development. See the developer's Planned Unit Development (PUD) application for more details on their parking program, including ADA spaces. It anticipates delivering approximately 67 spaces, which is 48 spaces more than the minimum zoning requirement of 19 spaces (pending approval by the District of Columbia).

Regarding open space, the developer's Planned Unit Development (PUD) application proposes to reconfigure and upgrade the existing 1.5-acre area into a neighborhood amenity. The future size is roughly two acres, which is slightly larger than the current condition. It will include passive recreational areas along Eastern Avenue NW and an activated retail and transit plaza facing Carroll Street. The landscaped open space provides a buffer between the development and existing single-family homes.

The Joint Developer has completed a Comprehensive Traffic Review (CTR) in close coordination with the District Department of Transportation. This review includes a Transportation Demand

Management (TMD) plan as well as a complete assessment of the additional traffic signal at Carroll Street NW. The CTR can be found in Appendix J.

As for the scale of the proposed development, the District of Columbia has been planning redevelopment of this site since 2000 as a mixed-use hub that incorporates open space and less impervious area. After the District's extensive collaboration and outreach, the resulting 2002 Takoma Central District Plan called for building more housing, mitigating commuter traffic, developing retail opportunities on Carroll Street NW, and improving the pedestrian environment. The proposed joint development project at the Takoma Metro station is consistent with the goals identified in this plan as well as the District's Comprehensive Plan Update and Rock Creek East Area Element, adopted in 2021, that proposes to concentrate economic development activity, employment growth, and new housing, including affordable housing at Takoma Metro station. The Comprehensive Plan also included a new Future Land Use Map (FLUM) that increased in development allowances from moderate to medium residential density. The public can further comment on the development plan through the District's development review process, see Zoning Case 22-36.

Metro funds will not be used to construct the new facilities. The Joint Developer will be funding and constructing the proposed changes to the transit facilities.

The Compact public hearing materials included the most recent information available about the development project with references and links to the PUD application and Zoning Case 22-36, which includes more detailed information. These documents cover the potential impacts associated with the development plan, staff reports from the District's agencies, and public testimony or other related documents addressing public input. The feedback from the Compact public hearing about the changes to the transit facilities are used for coordination with the District on the final design details and development approvals.

APPENDIX A: NOTICE OF PUBLIC HEARING

Notice of Public Hearing

Washington Metropolitan Area Transit Authority
Proposed Changes to Transit Facilities at Takoma Metro Station
Washington, DC
Docket R23-01

Purpose

Notice is hereby given that a public hearing will be held by the Washington Metropolitan Area Transit Authority on proposed changes to transit facilities at the Takoma Metro Station in Washington, DC as follows:

Hearing No. 645

Tuesday, January 17, 2023

Open House 6 p.m. **Public Hearing 6:30 p.m.**

Takoma Elementary School - Auditorium
7010 Piney Branch Rd NW
Washington, DC 20012

This hearing will also be conducted virtually and testimony can be provided via phone or video (see below). The hearing can be viewed online at:
wmata.com/plansandprojects **or** youtube.com/metroforward

To listen via telephone: 855-925-2801, Meeting Code 4773

Please note that this date is subject to cancellation. In the event of a cancellation, Metro will post information about the rescheduled hearing on wmata.com

Sign language interpretation will be provided. Any individual who requires special assistance or additional accommodation to participate in this public hearing, or who requires these materials in an alternate format, should contact the Office of the Board Corporate Secretary at 202-962-2511 or TTY: 202-962-2033 as soon as possible in order for Metro to make necessary arrangements. For language assistance, such as an interpreter or information in another language, please call 202-962-1082 at least 48 hours prior to the public hearing date.

For more information please visit
wmata.com/plansandprojects

PURPOSE OF THE PUBLIC HEARING

Notice is hereby given that a public hearing will be held by the Washington Metropolitan Area Transit Authority (WMATA) regarding the environmental report and general plans for changes to transit facilities at the Takoma Metro Station, Washington, D.C. At the hearing, WMATA will receive and consider public comments and suggestions about the proposal. The proposed design concepts may change as a result of this hearing.

HOW TO REGISTER TO SPEAK AT THE PUBLIC HEARING

All organizations or individuals desiring to be heard with respect to the proposal will be afforded the opportunity to present their views and make supporting statements and to offer alternative proposals. Public officials will be allowed five minutes each to make their presentations. All others will be allowed three minutes each. Relinquishing of time by one speaker to another will not be permitted.

Individuals can provide testimony at the hearing in one of three ways:

In person: Individuals wishing to provide testimony in person during the hearing are encouraged to pre-register by emailing speak@wmata.com or calling (202) 962-2511 by 10 a.m. on Tuesday, January 17, 2023. Please submit only one speaker's name per request. Advance registration to provide in-person testimony is not required.

By videoconference: Individuals wishing to provide testimony during the hearing via videoconference are required to furnish, in writing, their name and organizational affiliation, if any, via email to speak@wmata.com by 10 a.m. on Tuesday, January 17, 2023. Please submit only one speaker's name per request.

By telephone: Individuals should call (855) 925-2801 during the hearing and enter Meeting Code 4773. Advance registration to provide testimony via telephone is not available.

HOW TO SUBMIT TESTIMONY NOT AT THE PUBLIC HEARING

Testimony may be submitted online about this proposal at wmata.com/plansandprojects. Options to submit testimony online include completing a survey, providing written comments or uploading letters or other documents. Online submission will begin at 9 a.m. on Saturday, December 17, 2022 and will close on Friday, January 27, 2023 at 5 p.m. This is in addition to your ability to speak at a public hearing. For those without access to computers or internet, testimony may also be mailed to the Office of the Board Corporate Secretary, SECT 2E, Washington Metropolitan Area Transit Authority, P.O. Box 44390, Washington, DC 20026-4390. All comments must be received by the Office of the Secretary by 5 p.m. on Friday, January 27, 2023 to be included in the public record.

The comments received by the Office of the Board Corporate Secretary, along with the online submissions and public hearing comments, will be presented to the WMATA Board of Directors and will be part of the official public hearing record. Please note all statements are releasable to the public and may be posted on WMATA's website, without change, including any personal information provided.

WHAT IS PROPOSED

WMATA proposes changes to the Takoma Metro Station ("Metro Station") to enable a joint development project ("Project"). The Project's site plan is consistent with Washington, DC's future land use vision for the area.

The Project includes the following modifications of WMATA facilities:

- Relocation of the bus loop and Kiss & Ride
- Addition of one alighting bus stop
- Removal of 144 Kiss & Ride spaces
- Addition of a traffic signal on Carroll Street NW at the WMATA bus loop and Kiss & Ride entrance

Because the Project includes a modification of WMATA facilities and facility access, an Environmental Evaluation (EE) has been prepared to assess the potential effects of this action on the human and natural environment in terms of transportation, social, economic, and environmental factors. Impacts identified in the EE are summarized in Table 1.

- For more information, please refer to the provided Environmental Evaluation.

Table 1 Project Environmental Impacts

Environmental Feature	Permanent Impacts	Construction-Related (Temporary) Impacts	Minimization & Mitigation Efforts
Transportation	Improved busway configuration with additional capacity and safer access. Daily parkers at Takoma Metro Station will be encouraged to use the Fort Totten Park & Ride facility	Disruption to pedestrian, bicycle, and vehicular traffic during construction	Establish interim operations plan to maintain access during construction for motorized & non-motorized (bike/ped) traffic to the station
Stormwater	None – total impervious areas of transit facilities to be reduced	Minor sediment or erosion risk	Controls to be applied per District of Columbia requirements for construction operations
Air Quality and Noise	No impacts resulting from changes to transit facilities	Dust or noise from construction-related equipment and operation	Cleaning, minimizing night-time work, noise control measures.

REFERENCE MATERIAL AVAILABLE FOR INSPECTION

The docket consists of this Notice of Public Hearing, an environmental report, and general plans for the proposed changes to transit facilities at the Takoma Metro Station. These documents are available online at wmata.com/plansandprojects and may be inspected during normal business hours at the following location:

WMATA
Office of the Board Corporate Secretary
300 7th Street, SW
Washington, D.C. 20024
202-962-2511
(Please call in advance to coordinate)

WMATA COMPACT REQUIREMENTS

WMATA's Compact requires that the Board, in amending the Mass Transit Plan, consider current and prospective conditions in the transit zone should the project be built. The transit zone includes Fairfax County and considerations include, without limitation, land use, population, economic factors affecting development plans, existing and proposed transportation and transit facilities, any dislocation of families or businesses; preservation of the beauty and dignity of the DC Metro Area; factors affecting environmental amenities and aesthetics, and financial resources. The mass transit plan encompasses, among other things, transit facilities to be provided by WMATA, including stations and parking facilities, and the character, nature, design, location and capital and operating cost thereof. The mass transit plan, in addition to designating the design and location of transit facilities, also provides for capital and operating expenses, as well as "various other factors and considerations, which, in the opinion of the Board, justify and require the projects therein proposed" all as more particularly set forth in WMATA's Compact.

APPENDIX B: PUBLIC HEARING STAKEHOLDER LIST

Organization	Category
Old Takoma Business Association	BID/Civic Association
Addis Ababa Cuisine	Business
Aikido Martial Arts	Business
All Set Restaurant Bar	Business
Bus Boys and Poet	Business
Dance Exchange	Business
Denizens Brewing Company	Business
Dexterity Driving School	Business
Rhizome DC	Business
Willow Street Yoga	Business
Prince George's Park and Recreation	Event Venue
National Children's Center	Government Facility/Agency
Takoma Park Library	Government Facility/Agency
Takoma Park Maryland Library	Government Facility/Agency
CCI Health Wellness Services	Hospital/Medical Services
Walter Reed Army Medical Center	Hospital/Medical Services
Washington Adventist Hospital	Hospital/Medical Services
Hilltop Hostel	Hotel
Seekers Church	Place of Worship
Sligo Seventh Day Adventist Church	Place of Worship
Takoma Park Baptist Church	Place of Worship
Takoma Park Seventh Day Adventist Church	Place of Worship
Trinity Church	Place of Worship
Deauville Apartments	Residence
Edinburgh House	Residence
Gables Takoma Park	Residence
Action Langley Park Neighborhood Organization	Residence/Apts
Metro Village Apartments	Residence/Apts
Takoma Central Apartments	Residence/Apts
Takoma Village Cohousing	Residence/Apts
Montgomery College - Takoma Park/Silver Spring Campus	School
Strayer University - Takoma Park Campus	School
Washington Adventist University	School
Whittier Education Campus	School

APPENDIX C: PUBLIC HEARING PRESENTATION MATERIALS

Compact Public Hearing R23-01

Takoma Station

January 17, 2023
Public Hearing

Agenda

- Purpose of Public Hearing
- Proposed Changes to Metro Facilities
- Public Comments
- Next Steps

wmata.com/plansandprojects

Para recibir información sobre este proyecto, sírvase llamar a la línea de servicio al cliente de Metro al 202-637-1328.

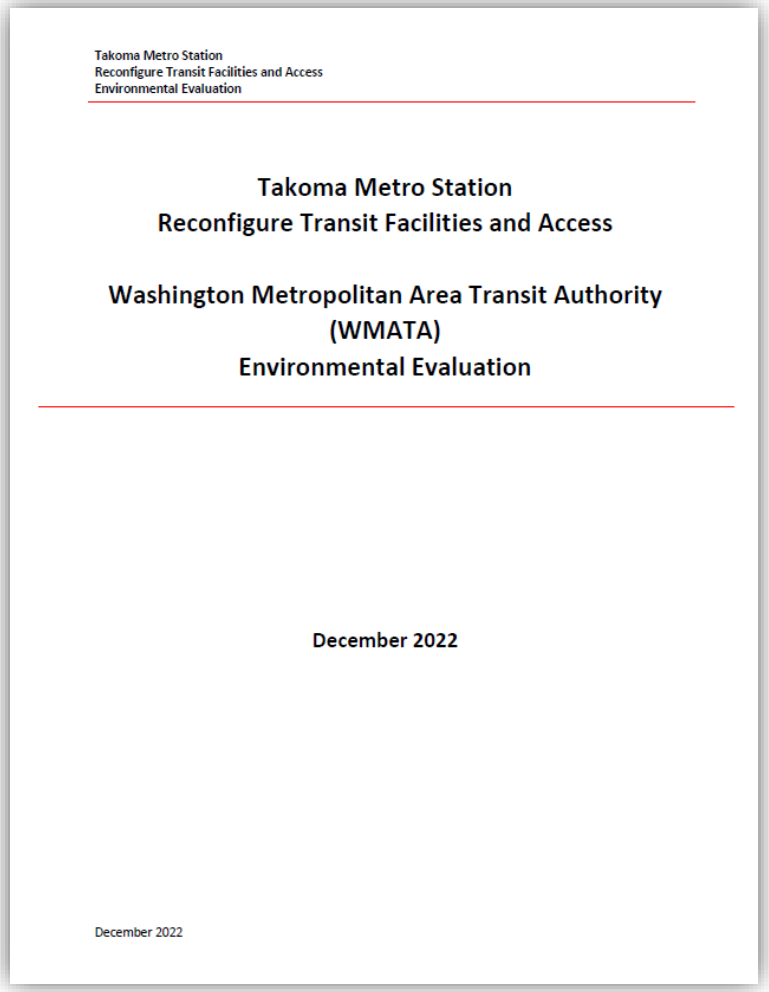
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Reference Materials

WMATA Compact Public Hearing Materials

- https://www.wmata.com/initiatives/plans/takoma-joint-development.cfm

- www.wmata.com/plansandprojects


Takoma Metro Station
Reconfigure Transit Facilities and Access
Environmental Evaluation

Takoma Metro Station
Reconfigure Transit Facilities and Access

Washington Metropolitan Area Transit Authority
(WMATA)
Environmental Evaluation

December 2022

Providing Testimony at Hearing

Call **855-925-2801** and enter code **4773**

Press ***3** to be added to the speakers' queue

Public Hearing Procedures

- Public Officials **5 minutes each**
- Private Citizens **3 minutes each**

Relinquishing of time by one speaker to another speaker is not allowed

Purpose of Hearing

- To obtain public input on the following changes to the facilities at the Takoma Metro Station:
  - Relocation of the bus loop and Kiss & Ride
  - Addition of one alighting bus stop
  - Removal of 144 Kiss & Ride spaces
  - Addition of a traffic signal on Carroll Street NW at the WMATA bus loop and Kiss & Ride entrance

Background

- 1978 Station opens
- 2005 WMATA Board approval of Joint Development Agreement
- 2007 1st Compact Public Hearing to consolidate parking facilities
- 2008 Financial market crisis
- 2014 2nd Compact Public Hearing to reduce parking capacity
- 2021 DC Comprehensive Plan update adopted, increasing development potential

Existing Site



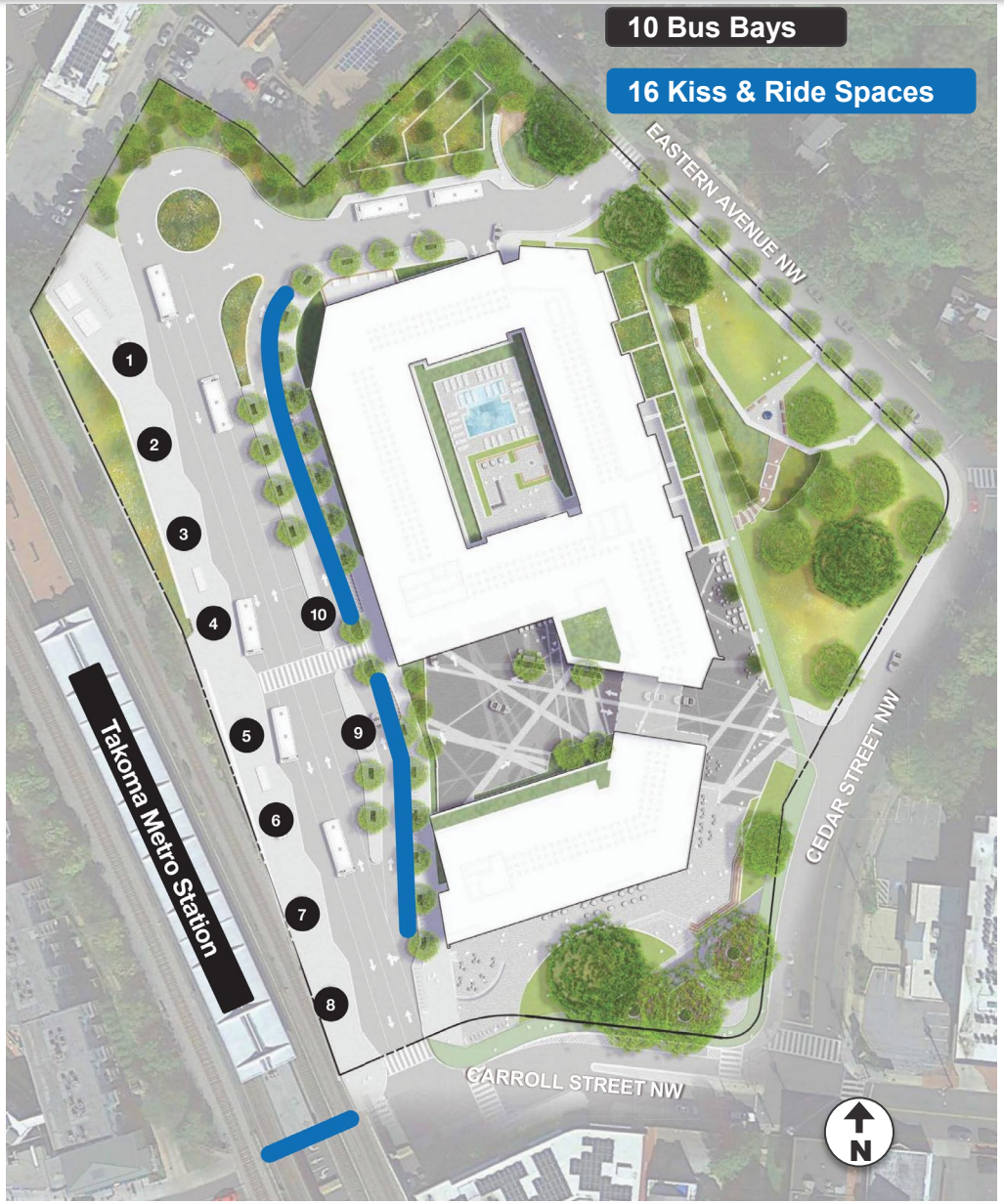
Changes to Transit Facilities

Capacity

- Proposes increase from 9 to 10 bus bays
- Proposes reduction of 160 to 16 Kiss & Ride spaces
- Aligns with bus service & pick-up/drop-off parking demand patterns
- Customers seeking daily parking options to be directed to use the Fort Totten Park & Ride

Access & Configuration

- Buses retain access from Carroll St & Eastern Ave
- K&R access will now be from Carroll St instead of Eastern Ave but egress will still be onto Eastern Ave



Environmental Analysis

- An Environmental Evaluation (EE) for the transit facility changes has been provided as part of the Docket. Likely environmental impacts are summarized in the table below.

Environmental Feature	Permanent Impacts	Construction-Related (Temporary) Impacts	Minimization and Mitigation Efforts
Transportation	Improved busway configuration. Daily parkers encouraged to use the Fort Totten Park & Ride facility	Disruption to pedestrian, bicycle, and vehicular traffic during construction	Establish interim operations plan to maintain access during construction
Stormwater	None – total impervious areas of transit facilities to be reduced	Minor sediment or erosion risk	Controls to be applied per DC requirements
Air Quality and Noise	No impacts resulting from changes to transit facilities	Dust or noise from construction-related equipment and operation	Cleaning, minimizing night-time work, noise control measures.

Providing Testimony at Hearing

Call **855-925-2801** and enter code **4773**

Press ***3** to be added to the speakers' queue

Public Hearing Procedures

- Public Officials **5 minutes each**
- Private Citizens **3 minutes each**

Relinquishing of time by one speaker to another speaker is not allowed

Providing Written Comments

Must be received by **5 p.m**. on **Friday, January 27, 2023**

Option 1

Submit online at:
www.wmata.com/plansandprojects

- You can comment anonymously or give your name
- You can write your comment or upload a document

Option 2

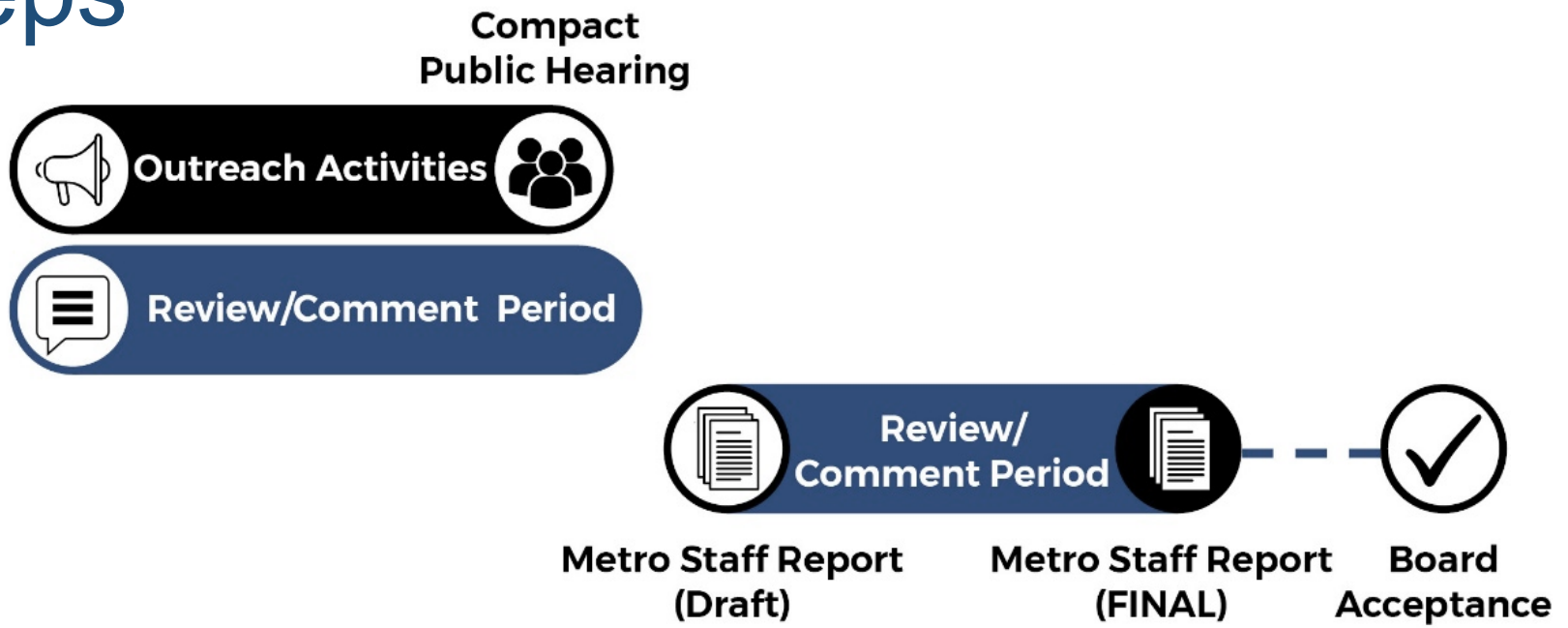
Submit by mail to:

- Office of the Secretary
  SECT 2E
  WMATA
  PO Box 44390 Washington, DC 20026-4390
- Reference “Takoma Public Hearing” in the subject line.

Things Outside the Purpose of this Hearing

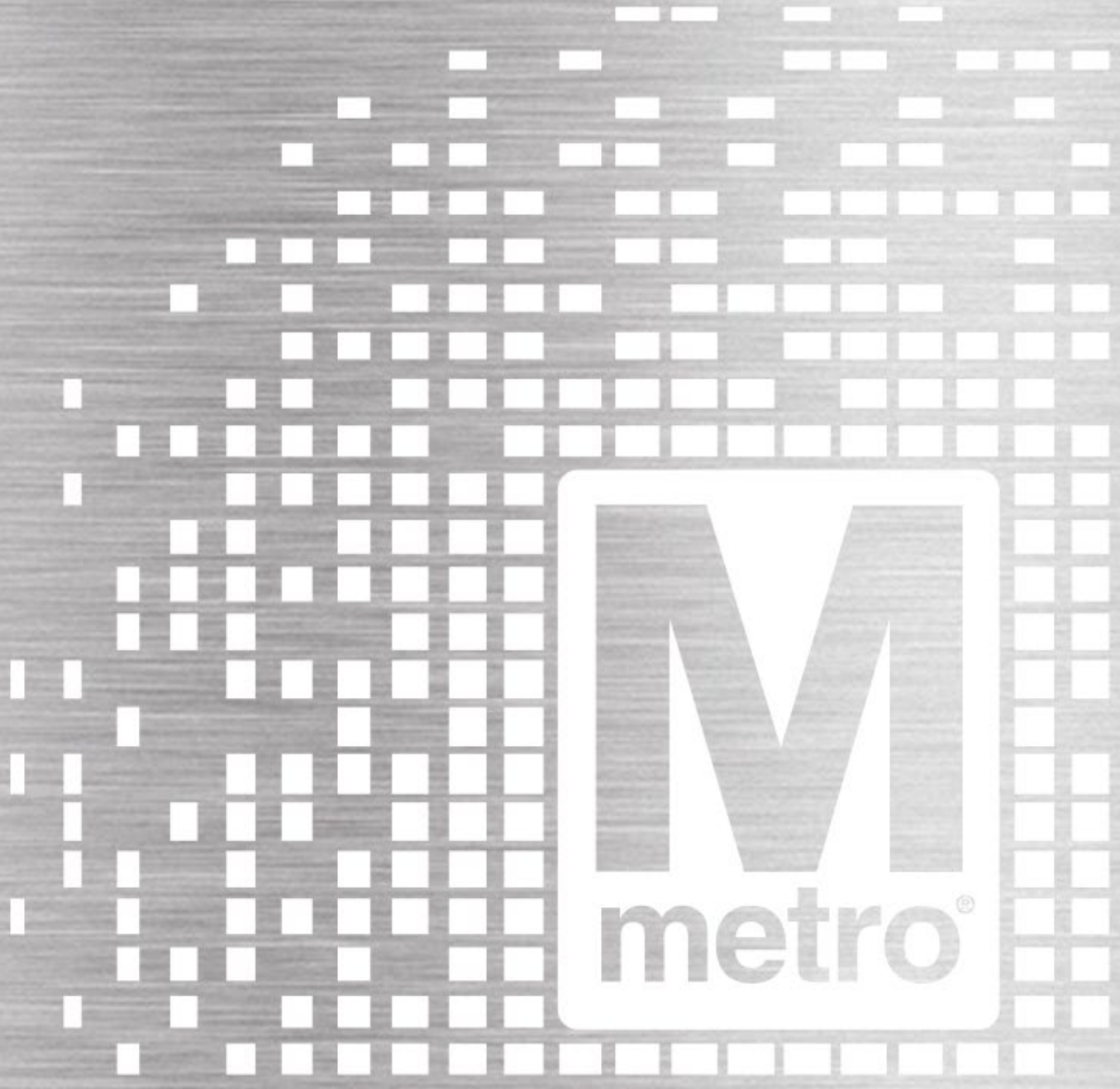
- *Not* within the scope of this hearing are, for example:
  - Size, mix or design of buildings or future joint development projects
  - Land use matters
  - Service complaints
  - Fares
- Any matters raised outside the scope of this hearing cannot be resolved as part of this hearing process

Next Steps



January 27, 2023	Spring 2023	Summer 2023
Public Review Comment Period Closes	Draft Staff Report posted on WMATA website for 10-day public comment period	Final Staff Report presented to Metro's Board of Directors for approval

Thank you for
your participation!



APPENDIX D: PUBLIC HEARING SCRIPT

Takoma – WMATA Compact Public Hearing – January 17, 2023, 6:30 p.m.

MS. BABERS

SLIDE 1

- I call this meeting to order.
- I am Lucinda Babers, the Vice Chair of the Metro Board of Directors and the District's Deputy Mayor for Operations and Infrastructure.
- With me tonight is Jennifer Ellison, Metro's Board Corporate Secretary, and
- Steven Segerlin [SEGG-ERR-LYNN], the Director for Metro's Office of Real Estate and Development who will be giving tonight's presentation.
- I'd also like to recognize that we're joined this evening by City of Takoma Park Councilmember Jason Small. Welcome, Councilmember Small.

SLIDE 2 - AGENDA

- This hearing is convened by the Metro Board of Directors to gather public comments on a proposed changes to the Takoma Metro Station located in Washington, D.C.
- This is our Agenda today; We will begin with some background information, then move to describing the proposed project, followed by an overview of the protocol for commenting. We will then hear public comments and discuss next steps.

SLIDE 3 – REFERENCE MATERIALS

- The General Plans and Environmental Evaluation for this project are available online at these links in the presentation. Two copies are also available in the hallway at the registration table.
- Notice of this hearing was made by publication in the Washington Post, and ads were placed in El Tiempo, Washington Hispanic, and Atref.
- The hearing notice was also sent to all local governments and other organizations within the Compact Zone, as well as posted at wmata.com.

SLIDE 4- PROVIDING TESTIMONY AT HEARING

- There are three ways to provide comments at this evening's hearing: in-person, via Zoom, or over the phone.
- If you're with us in person and would like to provide testimony, please see the staff at the registration table if you have not already put your name on the list of speakers.
- For those of you who have pre-registered and joined via Zoom we ask that you remain muted with your camera off until you're called on to speak.
- And those of you participating via telephone – if you'd like to provide testimony, please press *3. This will put you in the speakers' queue.
- Elected public officials will be allowed five minutes and everyone else will be allowed three minutes each.
- Extra time will be given for translation, if needed.
- If you have copies of your testimony to distribute, please hand them to Staff at the registration table.
- I'd also like to note that tonight's hearing is being broadcast live via YouTube on the MetroForward YouTube channel and will be archived there after the hearing concludes.

I now call on Mr. Segerlin for the staff presentation.

STEVEN

SLIDE 5 – PURPOSE OF HEARING

- Thank you, Vice Chair Babers.
- The Purpose of the Hearing is to obtain public input on the following changes to the facilities at the Takoma Metro Station:
    - Relocation of the bus loop and Kiss and Ride
    - Addition of one alighting bus stop
    - Removal of 144 Kiss and Ride spaces
    - Addition of a traffic signal on Carroll Street Northwest at the WMATA bus loop and Kiss and Ride entrance

SLIDE 6 – BACKGROUND

- Before discussing the changes further, let me give some context or background about how we got to this meeting today.
- As many of you may know, the Takoma Station opened in 1978 had around 5,000 to 6,000 riders per average weekday in the year leading up to the COVID-19 pandemic – and has recovered to around 2,500 riders per average weekday over the past few months.
- Since the station's opening, there have been no substantial changes to the transit facilities, but there have long been discussions about opportunities for transit-oriented development.
- That lead Metro to engage a Joint Development partner in 2005, EYA to prepare an execute a plan to include housing at the station and any needed reconfiguration or resizing of the transit facilities, which currently include
    - 9 bus bays, and
    - 160 Kiss & Ride spaces
- Subsequently, Metro held a Compact Public Hearing in 2007 to consolidate parking facilities in support of an initial plan that largely consisted of townhouses, but that effort was delayed by the financial market crash in 2008.
- A few years later after the economic recovery, a new development plan was proposed that increased the housing potential, and a second Compact Public Hearing was held in 2014 to reduce parking capacity and consolidate it into a garage.
- After the Compact Hearing approval, the project did not proceed because of ambiguity in the DC Comprehensive Plan and because of unresolved community feedback about the proposed development concept – but in 2021 the District of Columbia adopted an update to the Comprehensive Plan that clarified and increased the housing development potential of the site to support of the District's housing & transit-oriented development goals.
- Through the consultation process for the District's Comprehensive Plan and community engagement led by development team over the past few years, a new site plan was proposed integrating that feedback, but requires reconfiguration of the both the parking & bus facilities.

SLIDE 7 – CHANGES TO TRANSIT FACILITIES

- Regarding the changes to the transit facilities, we'll cover aspects of capacity and access & site configuration.
- For the bus facilities, the project proposes an increase in capacity from 9 to 10 bays with the additional location supporting bus alighting – OR customers departing buses – which will improve the operations of the bus loop and reduce congestion resulting from the high volume of bus services.
- For the Kiss & Ride facilities, the project proposes a reduction in capacity from 160 to 16 Kiss & Ride spaces.

- This capacity aligns with pick-up/drop-off parking demand patterns and includes some additional capacity to accommodate future growth in households in the station's park-shed that may result in increased pick-up/drop-off demand.
- The supporting data & analysis is included in the Environmental Evaluation Report posted on Metro's website. In this evaluation, another subset of customers was identified at Takoma Metro Station that are parking for extended periods of time – with more than 82% of users exceeding 2 hours to more than 12 hours in parking duration.
- With the proposed reduction in Kiss & Ride capacity, those customers seeking daily parking options will be directed to use the Fort Totten Park & Ride, which is the next station along the red line.
- Regarding access & configuration, the bus loop is proposed to be relocated closer to the Metro Station, but entrances will be retained on Carrol Street & Eastern Avenue.
- As for the Kiss & Ride, it will be reconstructed between the bus loop & development with access from Carroll Street instead of Eastern Avenue. However, the egress or exit of the Kiss & Ride will still be onto Eastern Avenue as it is today.

SLIDE 8 – ENVIRONMENTAL ANALYSIS

- Finally, as part of the Compact Public Hearing, Staff has prepared an Environmental Evaluation for the project to assess any permanent or temporary impacts and to identify opportunities to minimize or mitigation them.
- This analysis identifies whether there are impacts to transportation, stormwater, open space, and air quality and noise as a result of the changes to the transit facilities. This analysis does not evaluate impacts related to the private development, which are subject to review and approval by the District's entitlements and approval process.
- Regarding transportation, there should be no permanent impacts given that the parking capacity and trip potential is being reduced and some improvements given to the bus facility and safer pedestrian and bicycle access being provided on-site.
- During the reconstruction of the transit facilities and road network, an interim operations plan—sometimes called a Maintenance of Traffic plan—will be stablished to ensure access for all travel modes to the Takoma Metro Station is always provided throughout the project.
- Then regarding air quality, noise, and stormwater, there are also no permanent impacts anticipated as a result of the transit facility changes, however there may some minor temporary impacts during reconstruction of the transit facilities, like dust, equipment noise, or sediment and erosion. These will be mitigated following typical construction mitigation techniques and following the District of Columbia's requirements for construction operations.

This concludes my presentation on the project. I'll turn the floor back over to Ms. Babers to go over the procedures for tonight's hearing.

SLIDE 9 – PROVIDING TESTIMONY AT HEARING

MS. BABERS

- Thank you, Mr. Segerlin. Briefly, I will cover the procedures that we will follow during the hearing.
- We will be alternating between the three ways that we are accepting comments today in this hearing: in person, via zoom, and over the phone.
    - For those of you here in person, you can start making your way towards the podium once your name is called. However, if you need a microphone brought to you, please wave your hand when your name is called so we can see you, and we'll bring one to you.
    - For those of you who have pre-registered and joined via Zoom we ask that you remain muted with your camera off until you're called on to speak. Once you've given your testimony, you can log off Zoom and watch the hearing on YouTube.
    - And those of you participating via telephone in the speaker's queue: when it's your turn to speak, we'll announce your phone number and you'll receive an automated message that it is your turn to speak.
- Elected public officials will be allowed five minutes and everyone else will be allowed three minutes each.
- Extra time will be given for translation, if needed.
- We have a timer that will count down how much time you have left to speak. It will give you a warning beep when you have 20 seconds left and will beep continuously when your time is up.
- The timer is important because we have a lot of folks who want to speak today.
- We ask that you stay within your allotted time to ensure that we can hear from everyone who wants to provide testimony.

SLIDE 10 – PROVIDING WRITTEN COMMENTS

- In addition to the opportunity to speak at this evening's hearing, Metro also welcomes written comments on the proposed changes.
- Further written testimony may be submitted and must be received by 5 PM January 27, 2023.
- Testimony can be submitted online at wmata.com *forward slash* plans and projects. Online, you can enter freeform testimony or upload letters or other documents.
- You can also mail testimony to: Office of the Secretary, SECT 2E, WMATA, Post Office Box 44390, Washington, D.C. 20026-4390. Please Reference "Takoma Public Hearing" in the "subject" line. This testimony must be received (not postmarked) by January 27th, 2023 in order to be included in the hearing record.

- Your comments will become part of the public record that will be reviewed by the Metro Board of Directors.
- Changes to the project presented here tonight may be proposed in response to testimony received and subsequent staff analysis.

SLIDE 11 – THINGS OUTSIDE THE PURPOSE OF THIS HEARING

- I will note that this public hearing process is unable to address any comments outside the scope of this docket. Those include comments on size, mix or design of buildings or future joint development projects; land use matters; service complaints; and fares.
- Please note that profanity will not be tolerated during this public meeting. I would also ask that you mute yourself and turn your camera off when you're not speaking and, for those providing testimony that may be watching the hearing on another device, please make sure that device is muted when you're giving testimony to avoid feedback.
- I want to take a moment to recognize that this is where *we* listen to *you*.
- This is your opportunity to comment on the proposal, and we are here to listen, so we won't be able to answer questions during your testimony.
- Before you begin your remarks, please state your name and the organization you represent, if any.
- Please note that all statements, including any personal information such as name, e-mail address, address, or telephone number you provide in the statement, are releasable to the public upon request, and may be posted on Metro's website, without change, including any personal information provided.

SLIDE 12 – NEXT STEPS

- The public comment period will close on January 27, 2023. Staff anticipates releasing the draft staff report to the Metro website in the Spring.
- Once the staff report is released to the public, those of you who provided comments will have the opportunity to review the report to ensure that we captured your comments accurately. That review and comment period will close two weeks after the draft staff report is posted.
- Staff anticipates that the Final Staff Report and Supplement will be submitted to the Board of Directors for acceptance in the Summer.

SLIDE 13 – THANK YOU FOR YOUR PARTICIPATION

- Now that we have all the background out of the way, it's time to call the first witness.
- We'll begin with those on Zoom tonight and then go through those joining in person and via phone, until everyone who wants to provide testimony has had that opportunity. Our first speaker is _____.

Read the names from the speakers list to be provided to you in advance. Additional speakers will be put into the speakers queue from the phone line. Staff will announce the phone numbers of those in the speakers queue. When there are no more names:

- Is there anyone present in this room who wishes to provide testimony? Please approach the mic.
- Is there anyone else on the phone who wishes to provide testimony tonight? If so, please press *3 to be put in the speakers' queue. (Wait 20-30 seconds to see if anyone joins speakers' queue.) If not, this hearing is now concluded.
- As a reminder, we'll be accepting written testimony until 5 p.m. on Friday, January 27, 2023 Testimony can be submitted online at: W-M-A-T-A.com *forward slash* plansandprojects (all one word).
- Testimony can also be sent via U.S. Mail to: Office of the Secretary, WMATA, S-E-C-T 2E, PO Box 44390. Washington, DC 20026-4390. All mailed testimony must be received (not postmarked), by 5 p.m. on Friday January 27, 2023.
- As a reminder, a video recording of this hearing will be posted on YouTube at YouTube.com/MetroForward, if you'd like to view it to help with developing written testimony, which, again, must be received by Metro by 5 p.m. January 27th.
- Thank you again for participating in this evening's hearing. Have a good evening.

APPENDIX E: SURVEY RESULTS AND COMMENTS

Q1. Proposed Parking and Bus Bay Changes at Takoma Station

Metro is proposing changes to parking and bus facilities at Takoma Station. The proposed changes would allow Metro and its private development partner to move forward with redevelopment plans, including future mixed-use development and transit facility modernization.



Proposed changes to the site include:

- Relocating the bus loop and Kiss & Ride
- Adding one drop-off only bus stop
- Removing 144 Kiss & Ride spaces
- Adding a traffic signal on Cedar Street NW and Carroll Street NW

Proposed changes are intended to promote transit-oriented development, increase Metro ridership, enhance bicycle and pedestrian access to the station, and modernize transit facilities.

How do you wish to use this form to provide your comment regarding the Proposed Parking and Bus Bay Changes at Takoma Station?

	(n=717)
Type and submit a written comment	95%
Upload and submit a document	3%
Both upload a document and type a written comment	2%

Q2. Now, some basic background questions to close out the survey: Metro will host a Public Hearing on Wednesday, January 17, 2023, at 6:30 p.m. You can participate in in person, virtually or by phone. Do you plan on attending?

	(n=593)
1. Yes, in-person	5%
2. Yes, virtually	12%
3. Yes, by phone	1%
4. No	61%
5. Not sure	21%

Q3. Which type of housing best describes your home?

	(n=596)
1. Apartment or condominium	25%
2. Single family, detached house	60%
3. Townhome, attached to other houses	13%
4. Other	1%

Q4. Before the pandemic (i.e. before March 2020), which of the following facilities did you typically use at the Takoma Station?

	(n=557)
1. Kiss & Ride Parking Lot (i.e. for short term parking)	45%
2. Bus Bays and Terminal (to connect to Metrobus, Ride On, etc.)	38%
3. Kiss and Ride (i.e. to drop off and pick up of passengers)	38%
4. Bicycle racks/lockers	16%
5. Capital Bikeshare	15%
6. None of the above	13%
7. Something else	3%
8. Not Applicable (I didn't ride Metro before the pandemic, etc.)	10%

Q5. In the past 30 days, which of the following facilities did you use at the Takoma Station?

	(n=557)
1. Kiss & Ride Parking Lot (i.e. for short term parking)	44%
2. Bus Bays and Terminal (to connect to Metrobus, Ride On, etc.)	27%
3. Kiss and Ride (i.e. to drop off and pick up of passengers)	32%
4. Bicycle racks/lockers	12%
5. Capital Bikeshare	9%
6. None of the above	27%

Q6. If you would like to receive email updates regarding this project, please enter your email address in the box below:

email addresses received are not included in this document*

Q7. In what year were you born?

	(n=511)
Under 25	5%
25-34	22%
35-44	31%
45-54	17%
55-64	10%
65+	15%

Q8. What is your gender identity?

	(n=559)
Male	52%
Female	45%
Other	3%

Q9. Are you of Hispanic or Latino origin?

	(n=554)
Yes	7%
No	93%

Q10. Which of the following best describes you? Please select all that apply.

	(n=557)
1. African American or Black	7%
2. American Indian or Alaska Native	1%
3. Asian	7%
4. Native Hawaiian or other Pacific Islander	1%
5. White	78%
6. Other	2%

Q11. What is your zip code?

	(n=548)
Takoma Park (20912)	47%
DC (20012)	12%
Silver Spring (20910)	11%
Silver Spring (20901)	7%
DC (20011)	5%
DC (20002)	2%
DC (20001)	2%
Somewhere else	14%

Comments Received Through Metro's Online Portal

1	I do not support the proposed changes as currently defined. WMATA must do a more systematic and complete analysis of the traffic and environmental impact of the entire development. WMATA must also do more to engage all affected jurisdictions, most notably the neighboring Takoma Park, MD. Please see the attached testimony for specific details on the failure of WMATA to fulfill these obligations. Furthermore, WMATA's assessments must put this development in the context of the many other new developments in the surrounding blocks, which will bring more than 1,000 new units to an area with failing intersections and growing traffic congestion. The proposed new light on Cedar Ave is particularly concerning as to the impact on traffic flows. I also oppose the removal of parking spaces for transit users. WMATA should work with the developer to retain public transit parking within the new structures being built. Surrounding streets cannot accommodate additional parking and there are individuals with health or other concerns that limit their ability to walk to metro. Thank you for taking these views into consideration.
2	I am opposed to the removal of all public metered parking at the lot (approx 144) - which WMATA has disingenuously labeled "Kiss and Ride" parking. The term "Kiss and Ride" in common parlance is a term which refers only to drop off and pick up. The proposed removal of all metered spaces will impede the public's access to the station and cause people to drive to their destinations, rather than take the train, a violation of WMATA's mandate to encourage transit use. WMATA is essentially proposing to transfer this public parking to the future occupants of the building by providing them private parking in the building garage. Such a transfer is a violation of WMATA's responsibility to preserve access to the station for the benefit of the public. In short, I support maintaining metered parking for what in the past has been referred to as "non-commuter" parking, that is, parking for 7 hours or less so that members of the nearby communities in Maryland and DC, including but not limited to the elderly and handicapped, can access the trains.
3	The picture you provide is fraudulent. It claims to be a picture of 100 actual parking spots that have never been part of Kiss and Ride. I will grant that this parking lot has never been user-friendly. I have yet to figure out how to park there, but I walk through it every day to get to the metro. And I use it on weekends, when I know it is free, to hop the metro downtown. It is unfortunate that it was never interplanted with flowering trees, that provision was not made for some all-day parking, that payment was not possible using a farecard. But that is no reason to eliminate it. If I cannot park at metro on the weekends, then I will just drive downtown. Another alternative would be to park on streets surrounding metro, but is that something that is 'transportation oriented?' Is that not pushing the parking problem onto someone else? Another issue never mentioned is trapped exhaust. When I walk to the metro about 8 am in the mornings, there are often 10 metro buses idling. Their fumes are released into the surrounding open area and filtered by over 200 trees. Where are the buses going to idle when there is no place for them on metro's site? And what will the air quality be near those buses, to be hemmed in on the side by an enormous retaining wall unrelieved by any grass slope or trees, and a 7-story apartment building on the other? The next set of questions are deceptive because they do not take into account the many of us who walk to the metro on a daily basis. My walk will now be significantly longer and more dangerous. I am used to walking home at midnight and always felt that the wide-open parking lot gave me security. A narrow canyon between a hulking retaining wall and a 7-story building feels threatening. It will also be much more polluted.
4	This is the final version of the draft document previously provided. In the next document I will attempt to attach the two photos referenced in the document that show that the parking area with 144 spaces is designated for 12 hour PARKING, not drop-offs or Kiss and Ride. The second photo shows the small area for 17 cars to park for a limited time to drop off or pick up passengers. These photos show that the Metro Report contained serious errors and mischaracterized the nature of the parking areas near the Takoma Metro stop.
5	RE: the Proposed Parking and Bus Bay Changes at Takoma Station. I'm especially concerned with the proposal to take away existing paid parking spaces from the surrounding communities that have relied on these parking spots for years. I urge you to leave the existing number of paid parking spots for use by Metro commuters in any new development on this site. NOTE: Most of these spaces have been designated as PARKING spots NOT "Kiss and Ride" spots for over 30 years that I've lived here. • The Plan Developers have misidentified the approximately 160 current paid parking spots as "Kiss and Ride" spaces. In fact, there are currently and historically only a handful of spaces identified as "Kiss and Ride." The rest of the spaces are identified as Paid Parking Spots – with meters and signed instruction regarding-hours-of-operation. The vast majority of the historical parking spots have been heavily used during daytime hours prior to the Pandemic and now with the Pandemic in the background parking spots are filling up again (NOTE: parking has been and still is available for multiple hours during weekdays as well as in the evenings and on the weekends). Also, note that several of the 160 parking spots are designated "Handicapped." Unfortunately the proposed plan doesn't even address the needs of the "Handicapped" nor our growing"Senior" population (65+ years old)

	that would like to stay in the neighborhood to "Retire in Place." • Until the Pandemic, these paid parking spots were used by local DC and MD residents – the lot was full or almost full during daylight hours as well as evenings and weekends. Please note that the handful of handicapped spots were most often FULL. • Much of the data in the Proposal was based on ParkMobile meter transaction records available since 2020 (p. 9 of the Report). Please note that the study period was at the height of the pandemic when many workplaces, stores, restaurants, etc. in DC were closed and tele-working, tele-medicine, tele-recreation, and take out pick-up and delivery had replaced Metro trips to brick-and-mortar workplaces and recreational activities. • No current and projected traffic and parking studies were presented. In addition to the over 400+ units proposed by EYA for construction at the Metro site, there are hundreds of apartment and condo units both under construction and proposed. Parking and Transportation studies must be done and/or updated to meet current conditions of vastly increased housing units adjacent to the Takoma Metro. • No studies were done to back up the assumption that current Takoma, DC and Takoma Park, MD residents will drive all the way to Fort Totten to use the Metro – once they're driving that far, some will surely drive to downtown DC theaters, restaurants, workplaces instead – thus Metro would be losing potential riders and DC would be gaining more traffic. From some parts of Takoma and Takoma Park, driving to Fort Totten would take 15-20 minutes (or more in rush hour) -- an additional burden for those with disabilities or for senior citizens. • Many of the Metro planners assume that everyone can either easily walk to Metro, ride a bike to Metro, or find a bus close to where they live that runs often enough and on weekends and nights. For example, one of the Ride-on buses (the 14) that goes from the Metro to a stop near my house runs infrequently on weekdays, stops running in the early evening – and has no service on Sundays. The other Ride-on near my house (the 24) only has inbound AM service from 5:25am until 8:30am and outbound PM service from 3:50PM-8:10PM. No service is available on the weekends. Do we expect senior citizens who often have multiple chronic illnesses and are taking multiple meds – some of which affect vision, hearing, balance, etc. – to ride a bike through heavy traffic to the metro? • Some of the EYA proposals have discussed providing parking for rental units in their proposed high-rise buildings. If the goal is to serve transportation needs, why provide parking for housing and/or retail establishments as opposed to Metro riders? Needs of Metro riders should be paramount. Otherwise, Metro riders may revert to their cars – surely not what we want to see in the era of severe climate change and declining Metro revenues. • Many people in the neighborhoods surrounding the Takoma Metro rely on being able to park at Takoma Station for numerous reasons: 1. They are disabled or partially-disabled 2. They are injured or have one or more chronic illness that are not disabling, but would make it difficult to walk or ride a bike to the station – here are but a few examples: i. Sciatica ii. Recent knee, foot, or hip surgery iii. Recovering from an infectious or non-infections disease and fatigued iv. Carrying heavy items (or not-so-heavy) v. Carrying a baby or having 2 or more small children in hand vi. etc. 3. There are security concerns about walking to and from METRO, especially during nighttime hours, given the rise of assaults, armed robberies, etc. Safety at the transportation hub for Metro riders in the form of Metro parking for riders should take precedence to EYA building a larger number of housing units -- parking priority should go to meet the goals of transit users. The developers should NOT take away our current METRO parking to build an oversized apartment building. Rather, they need to continue to include parking for area residents who utilize Metro, especially the disabled and elderly (over 65 – Smart Card for Seniors users) – this should be a priority over providing parking spaces for their apartment buildings and retail shops). KEEP THE EXISTING NUMBER OF PARKING SPACES FOR METRO USERS AT THE TAKOMA STATION – after all its primary mission is as a Transportation Hub. Thank you for your consideration, Carol Mermey Holly Ave Takoma Park, MD
6	Do not remove the parking!!
7	Hi there, The QR code on your handout doesn't work (see attached screen shot). Perhaps you could just have the folks who hand out the brochures hold up big cardboards with the QR code on them for people to scan if you really want feedback? Please create space for people to be dropped off at the metro by the front entrance. I take the bus sometimes and walk sometimes but when I get a ride, particularly at night, I want to be able to have a family member pick me up there. The back parking lot is creepy, smells like urine, and the turnstile near the elevator is often broken. It is incredibly frustrating to see people regularly jump the turnstile without agents or anyone visibly doing anything to prevent people from breaking the law and not paying. I understand the agents don't have the authority to enforce this. I've traveled and lived in major metropolitan areas around the world and I've never seen such flagrant disregard for paying the metro fare. Simultaneously, the metro is one of the most expensive urban metro systems I've ever taken. It is unfair that I am directly with my fares and indirectly with my taxes supplementing people who are breaking the law. Other cities have figured out how to make people pay their fare, and to make equitable fares for folks who are students and/or are unable to pay. In New York they had cops for awhile making sure people didn't jump over. In Europe they

	do spot checks for receipts and give people tickets. In Pittsburgh the agent simply won't let you pass. I've seen police enforcing people paying ONCE and that was in metro center during rush hour. My parents benefit from the senior rate but meanwhile I often pay as much as $7/day to take the metro from Takoma to points downtown. It's unfair and unaffordable. While I appreciate that you're making the bus free, that often takes longer. If you're hurting for money, collect the fares. Thank you.
8	More housing please!
9	The city needs more housing and this would be a great, metro accessible place to build it!
10	Mixed use is desperately needed. More housing is desperately needed. Housing near transit is desperately needed. It would be ideal if some of this housing could be *owned* instead of rented, but I would prefer this does not stop the development from taking place at all.
11	Yes - please build more housing by the Metro.
12	As a resident, I am entirely in favor of any pro-transit, pro-walkability, pro-student changes to the neighborhood. I hope that the parking lot to will be adapted into housing. The city urgently needs more housing (and fewer parking lots!)
13	More housing is good. Dense units in urban areas that meet market demand are the best way to fight climate change
14	This should absolutely be converted into housing!
15	It seems like the best use to serve as many people as possible would be multifamily housing or mixed-use development. The DC area needs a lot of housing to serve all the people who want to live here. Building apartments or condos would not only serve the people who live there and can take a train straight into DC for work; it would also help to relax costs on other housing in the area.
16	The area desperately needs more housing, and transit-proximate housing is the best housing. Parking minimums, especially somewhere so convenient to transit, are economically inefficient and irrational at best; using so much space for *just* parking is bordering on insane. This is a great opportunity to build, and plenty of other development in the greater DC area has shown that people do not mind being adjacent to tracks, or even prefer it; to wit, NoMa is now full of buildings looming over WMATA and normal rail tracks, and there doesn't seem to be a problem filling those units. Plus it provides opportunities for a more vibrant city by providing space for businesses, restaurants, and other services and amenities. What does parking provide? Space, often unused, that could be better utilized, that's what. End the hegemony of parking lots! (At MOST, I could see an argument for a garage on which housing is provided, a la the building at the end of the walkway thing out at ... Wiehle Reston I think? Some parking, and some housing. But that mostly makes sense if you're far enough out to require commuting by car before commuting by rail, and I'm not sure Takoma makes as much sense for that.) In short: DEVELOP THE LOT! Housing, not parking! Go as high and dense as legally allowed and ignore the NIMBYs.
17	Yes. Love the plan
18	I support changes to the Takoma Park Metro area, especially the removal of parking spaces when that leads to better mix of land use, including affordable housing and better green infrastructure (at the very least from the opportunity to change a swath of impermeable surface to at least some permeable). Takoma Park is a genuinely cool, unique area. It has a lot of draws already. Better pedestrian and bike access and, perhaps most importantly, safety; more control of vehicular traffic, and less vehicular traffic; and more space for mixed retail and housing would only benefit Takoma Park's stability, longevity, and appeal.
19	More housing & traffic lights would be a terrific improvement! Do it quickly!
20	Given chronic housing shortages and the general crisis around affordability, this parcel of land should absolutely be made available for housing. Hundreds of people living in this spot would likely become regular WMATA users. Such valuable land should not sit empty for some cars to park on now and then.
21	Crazy not to allow apartments next to Metro station--except that Metro is scarcely functioning these days.
22	Adding housing to the Takoma Park metro station in lieu of the huge bus lot and park area no one uses makes a lot of sense. DC and it's suburbs need more housing. This is evident from the often absurdly high prices people have to pay here. Adding more housing will help with price stability, especially in a desirable area like Takoma Park. Also, more housing near metro means more ridership for metro, and we need more people riding metro if we're going to meet our climate goals. Finally, this development project will help metro's finances, and we need a healthy Metro to keep our region moving. Fully support!
23	This sounds like an excellent plan!
24	Great idea to have more housing near Metro!
25	We need housing for people not cars

26	There is not enough housing in the Maryland suburbs of DC. Please remove all parking from this station and build transit oriented, mixed use development here.
27	I think the WMATA, the city, and developers should prioritize building housing, removing parking, and making the area around Takoma station more friendly for pedestrians, cyclists, and other non-car traffic. Doing so would increase ridership and ensure metro is safely enjoyed by more.
28	Please build housing. We do not need more surface parking lots next to major transit stations.
29	The DC region needs more housing and less parking. I fully support the redevelopment of this space to promote transit oriented development. Cities are for people, not cars.
30	Metro should develop transit-oriented, low or mid-rise residential apartments or condos over street-level retail on this site.
31	Build some dang housing
32	Replace the parking lot with dense housing.
33	Land this close to a metro station should absolutely be used for housing. More housing is needed in DC and more housing that is close to metro is essential so that people can get around without needing a car.
34	Please build a lot of housing and some neighborhood-scale retail and workplaces/offices in this space that's walking distance from Takoma metro station.
35	I support and would like to see more housing and people walking distance to the metro in Takoma.
36	The district is in dire need for more housing, especially near metro stations. Please do whatever is possible to build as many homes as possible, as high as possible, near the metro station.
37	Build as much housing as possible. We have a housing shortage, and cannot be prioritizing parking when people need places to live.
38	Build as much housing as possible. We have a housing shortage, and many people are struggling to afford their rent. We need housing far more than we need parking.
39	This location is perfect for dense, transit-oriented housing. Please ensure that housing and mixed-use commercial development are part of the redevelopment plan.
40	I'm in favor of this redevelopment plan. We need more housing near transit stops.
41	I would love to see the station updated to reflect it's urban context and put the valuable land to more productive use. Count me as a vote for less parking and more housing around the station.
42	All suggested changes will benefit Takoma Park. I believe more housing close to transit is vital to the quality of life to residents.
43	Yes!!!
44	Please do this! I am a Montgomery county resident (longtime silver spring, now Chevy Chase) and my sister in law lives in Takoma Park. More housing please! Particularly adjacent to transit.
45	I want more housing
46	More housing is good for the community!
47	I strongly support these efforts. We need more transit oriented development in D.C. and to prioritize people over cars. We also desperately need housing in D.C., and this approach would provide some of that important housing
48	I am in favor of the new housing units
49	Turn it into apartments and townhouses. Do not encourage car usage.
50	Hooray for new housing! Build the apartments and get rid of the parking spaces!
51	I am à DC area homeowner. I believe that scarce land near metro stations should be densely developed, especially with housing.
52	Please develop the land, the parking is mostly unused. But please keep a convenient kiss and drop area
53	We Need more affordable Housing and it would be Good to have it By The Metro where people can Use it. Count me in Favor.
54	Strongly support removing parking and expanding housing in this space.
55	Attached please find collated feedback of Advisory Neighborhood Commission 4B. It includes, written testimony by Commissioner Evan Yeats (4B04) at the public hearing on January 17, 2023, two relevant Resolutions passed by the Commission and three relevant Letters passed by the Commission. All are in reverse chronological order and contain details on notice and legal standards where relevant.
56	This photo shows the daily parking rate for the 144 spots Metro proposes to eliminate. It's a PARKING area not a drop off area contrary Metro's erroneous Evaluation. Steven Ney, Esq
57	Here's the photo showing that the 144 spaces are for Daily Parking not drop off parking as stated in the Metro Environmental Evaluation. Steven Ney, Esq

58	Do it!
59	I support transit oriented development. I visited the Takoma Park metro stop at night last weekend and found it really empty and quiet. By contrast, the NoMa stop near my home was lively at the same hour. I felt safer walking around the NoMa stop than the Takoma Park stop. Developing the Takoma Park metro stop will make that area feel safer as well.
60	Any plan to alter Metro parking facilities should include dense housing, allowing residents to quickly and easily walk a very short distance to the station.
61	Transit oriented development is environmentally friendly development. In order to reduce the impact of traffic more people must ride the metro. The best way to encourage that is development within a quarter mile of a metro stop. This parcel is one of best remaining opportunities near a metro. Opponents like to talk about green space, but a parking lot is not green space. This will not increase traffic but reduce it as those that choose to live in these potential apartments are ones that do not wish to rely on cars for all of their trips. Lastly the region does have an affordability problem. The best way to help that is to simply build more units. Despite what critics say about luxury apartments, the fact of the matter is if you build more, that has a trickle down affect. Build more, costs will come down. We shouldn't let those who already own a place hold hostage development that prevents others from gaining equal standing.
62	I support adding housing to this site. It is under utilized as just a parking lot. The area would benefit from development.
63	Housing for people, not cars!
64	I think removing the 'kiss' and ride spaces is a good idea. I'm hoping to see more plans on housing and amenities for the neighborhood that the site could be used for.
65	I strongly support the construction of new housing near mass transit, and especially in areas like Takoma Park, which due to a housing shortage are becoming unaffordable to all but the very wealthy.
66	Please develop this site in order to maximize housing. It's an ideal location for homes where residents would not need to own a car. That's a win for the environment and a win for housing needs, the most significant issue facing the DC area at this time.
67	we have way too many parking spots. my disabled friends don't drive, they need places to live. the new housing will make it easy to take metro and the parking lots are often empty anyways. why not let there be housing there? We have a housing crisis, and the new housing will make tax revenue. The extra parking is not friendly to people who are disabled and cars run into my wheelchair all the time and tailgate me because I am slow. I support removing as much parking as possible and putting in as much housing as possible
68	It would be good to add housing near public transit, and the current green space is minimally used by the public
69	I strongly support the proposed changes to the takoma station area to facilitate new housing close to transit.
70	This change would make my life much easier and be an overall improvement to our community!
71	Yes to everything but the traffic signal, please! - moco resident
72	Add more housing. There is plenty of parking, much of which is not used
73	It makes excellent sense to develop all metro station adjacent land for high density housing and ground-level commercial space serving residents. I fully support any and all efforts to build dense residential developments next to metro stations.
74	We should maximize the amount of housing in the proposal. Housing near transit just makes sense. We should remove as much parking as possible. I don't have a car and the exess parking is often dangerous at night anyways
75	I am a senior citizen who uses the Takoma Metro station to get to doctors' appointments and occasionally to go into DC for other reasons. If I have to arrange for a ride to and from the station because it is no longer possible for me to drive myself there and leave my car, I honestly do not know what I willl do. I will not be able to afford one of the new apartments. My income is very limited.
76	These are not "kiss and ride" spaces - these are parking spaces that people use every day to commute to the city. If you eliminate the parking spaces, I will have nowhere to park making it difficult to commute to my job in downtown DC where I work for the federal government. If the plan is to increase ridership, this makes zero sense. And labeling these spaces "kiss and ride" is extremely disingenuous if not an outright lie. These are not spots used to briefly drop people off at the metro, they are all-day parking spaces and commuters utilize the park mobile app to pay for them.
77	I oppose removal of all metered parking at the Takoma Metro parking lot because I believe it will cause people to drive to their destinations rather than park and take the train. Your materials say that people can

	simply drive another 10 minutes and park at Ft. Totten. But that extra time and inconvenience will inevitably motivate people to choose to drive all the way into town. Further, you justify removing the "Kiss & Ride" spaces because you say they are underutilized. Converting their status to "Park & Ride" will reduce the current confusion that exists around how that parking area can legally be used and increase its utilization overall. I also oppose your proposed treatment of the heritage trees as described in the plan's Environmental Evaluation. The evaluation acknowledges that there are only four heritage trees on the site, and that many of the other trees on the site are in poor condition. Nevertheless, your plan will eliminate two of the heritage trees. Your plan calls for removing one heritage tree outright, a mature tree that is healthy and making a significant contribution to improved air quality as well as the beautification and ecological diversity of the site. You also propose relocating another heritage tree, but that action will in all likelihood kill that tree, given how difficult it is to successfully transplant any tree of significant size. The design needs to be reconfigured to protect all four heritage trees on the site, as well as the metered parking currently available.
78	First, I apologize I am late in submitting this. I am a working mother of a 14 month old and I just learned about the proposal. Here is how my life would change if you removed 144 kiss & ride spots from Takoma metro: I work in person, five days a week as a journalist. I drive to drop my son at daycare and then straight to the metro to get to work. When i finish my day, I am right back to the metro to drive and pick my son up. If you remove these spots and make it more difficult for people to park full time at the metro you are hands down making the life of young mothers and fathers more difficult. I had a panic attack when I learned of the proposal. I live in the hillwood manor neighborhood of Takoma - a block from the border of PG county. It's the only neighborhood of the city we could afford to live in. Having a young child and trying to work full time in office is trouble enough. Removing the kiss and ride spots is deciding you are going to make life impossible for someone like me, and destining me to spending 15 hours a week less with my son. I will probably have to end up quitting my job - and trust me, it's hard enough as a woman to stay in my field when you have kids. Don't do this. And don't tell me to go to Fort Totten because Ive done that and if you're ever driven down New Hampshire Ave during rush hour you know that it can take an hour to move a mile. Please don't do this.
79	As a mother of 5 young kids who I strongly oppose this development plan. I drive to the takoma park metro on the regular when I take my kids into DC. We park there and take metro into the city. It is very easy for us to get to the metro with stroller and multiple kids. Removing this would make it extremely difficult for families like mine who drive to public transit with multiple kids. Taking a bus with a stroller and multiple kids is so challenging and time consuming. Having to break down double stroller to enter the bus to reopen and proceed to metro. Having parking close to the elevator is very convenient and offers a level of safety when walking back to car after a day in the DC. When its dark early in the winter especially safer to have that convenience. Having a densely populated building with only 16 parking spaces for kiss and ride affordable daily rates is wrong on all levels and not a benefit to current community members.
80	I'm opposed to the changes to the metro green space. (1) The green space gives much needed breathing room to commuters and strollers. (2) The planned development itself is large and unattractive. (3) The loss of paid parking will discourage metro riders. In sum, I generally support density around metros, but (1) Takoma has recently significantly increased its density with the addition of several complexes. (2) not the detriment to the live-ability of the neighborhood (3) not if parking is eliminated and (4) the environment and aesthetic is so diminished.
81	Please preserve green space! And no shadows from whatever building/s will be erected! The space has a nice, almost a park-like quality right now and it's safe for me & my 8 year old. Relatively calm & ok for bikes too. Dont want it to turn into another snarled traffic nightmare like the disastrous 6-way intersection nearby at Blair/Cedar/4th. Our condo is directly adjacent to the Takoma Metro station. Some noise abatement will likely be needed
82	Takoma metro station parking lot has been in operation for decades serving customers and riders of train and bus services. I think it would be wrong to terminate the parking park just because some rich people paid to build houses over there. They should find a better place to build whatever they want elsewhere and leave the station park alone. God bless America.
83	I use the parking lot so that I can take metro to work. Without the parking I'll be forced to drive creating more emissions
84	The parking lot needs to stay as it is. I am 1 of the many that use this parking lot when I need to take the metro down into DC. I use this parking lot daily now that I commute into DC for work. Removing the parking lot would create a huge desterbance within the area and take away from the clam neighborhood environment that I feel good about leaving my car for multiple hours each day.

85	This proposed project is a terrible idea. Everyday I drive to the metro and use the parking lot, and everyday the lot is full of other commuters who are taking advantage of a public service that they support with their ridership. Not only does the parking lot allow me and so many other tax paying professionals access to Washington DC, where I work and contribute to the DC economy, but it also provides enrichment to my child and so many other children living in the the Takoma Park silver spring neighborhood. Erasing this parking lot will cut countless people off from Washington DC and culture it has to offer because getting there will become too burdensome. Not to mention the environmental impact. Everyone who used to metro into the city will now just drive there, further overcrowding our roads and eroding our environment with greenhouse gasses While this proposed plan may be a good idea for WMATA and some no name developer. It is a bad idea for our community and the lives of so many people who rely on and PAY FOR parking in this lot. I'm tired of nameless and faceless bureaucrats stomping on people's lives and livelihoods and thinking they are serving communities by overcrowding them with a philosophy of development at all costs. Rethink this terrible idea. I beg you. My child begs you. My neighbors beg you. Don't sell us out for a quick buck.
86	Please create parking spaces for residents of Takoma DC and Takoma Park MD who live further away from the metro than will the residents of the apartments constructed adjacent to the station. Many in surrounding DC and MD jurisdictions live a mile or more from the station. The surrounding area has much lower residential density than many DC metro station. People who are disable, elderly, with small children, and for other serious reasons cannot walk a mile or more to the Takoma Station, the one closest to their home. Removing the existing metered parking places will unduly burden taxpaying commuters who support the system and rely on metro. Apartment dwellers in the buildings next to the tracks do not need parking; residents living much farther away do. The existing parking lots are NOT kiss and ride lots. Commuters park all day at metered spaces. There is no other parking in nearby neighborhoods as street parking is short term and regulated by DC or Takoma Park or Montgomery County. While we support metro development we cannot support development that denies others the same commuting resources. The burden of your proposal will of course fall on the poorest commuters and is patently unfair.
87	The Takoma Station parking spaces are valuable for commuters in the surrounding neighborhoods. Will you add a new parking lot? I use Daily Parking daily, which has made getting to work much easier. Please create a new parking lot.
88	As a City of Takoma Park resident, I strongly support the development of Metro's underutilized parking lot in Takoma DC. The proposal will create the necessary conditions for Metro to earn far more revenue from its land at the Takoma Metro station than it currently receives through the operation of an underutilized parking lot. We all benefit from a financially healthy public transit system with more riders. The spill-over of additional patrons to Takoma Park businesses will contribute to the financial health of Takoma Park MD and Takoma DC. I fully support WMATA and EYA's vision of a vibrant neighborhood that will provide adequate mixed-use parking, while allowing a large plot of land to be upgraded for a more productive use favoring greater density and diversity, especially much-needed housing in a time of short supply. I encourage WMATA and EYA to explore ways to enhance density to improve Metro accessibility and safety including expansion of underground parking and higher buildings to preserve green space. Use of Takoma Metro has been in flux over the last few years with the pandemic and with closure of several private commuter parking lots on Willow and Laurel Streets in DC. The elimination of these lots has occurred with exciting property development benefitting both DC and MD residents. Unfortunately, given life circumstances, not all residents are able and ready to give up completely metered parking. I advocate for retention of some longer-term metered parking in the mix of resident, retail, and Metro parking to complement development. I favor approaches that have been taken at other urban Metro stations to support development and ridership like Rhode Island station. It appears much of the discussion has been dominated by abled bodied white residents. It would be good to hear from disabled and immigrant residents as well as Black and Brown residents who may not be as ready and able to sacrifice parking to walk, bike, or bus to Metro. Given the growth and development in the area, can WMATA confirm for public any future improvements in terms of safety, accessibility, and expansion of long-term parking at Fort Totten and Silver Spring. I look forward to WMATA and EYA's proposals for Takoma Metro site and encourage further elaboration of proposals to enhance broad use and development! The best is yet to come for Takoma! Best wishes, Troy Jacobs Flower Ave Takoma Park MD
89	Please do not eliminate the 144 parking spaces! I have no other way to get to the metro station.
90	I am writing to support the changes to parking at the Takoma metro and the new development at the site. We are in the midst of both a housing and climate crisis and the answer to both is dense transit oriented development near metro. I believe the top priority should be ensuring that the most amount of housing

	feasible is put at the site through the densest development possible. I live around a mile and a half from the Takoma metro and when I need to use the train I either take the route 12 ride on bus or ride my bicycle. I believe you should consider replacing some of the currently planned kiss and ride spots with ADA parking for people with disabilities which I think would be considerate and help with community support, but to be clear I think that should be a matter of reprioritizing the currently planned spaces, and should not come at the expense of any units of housing.
91	There has been inadequate outreach efforts to get input on this proposal from residents and riders living in Takoma Park. I am President of the South of Sligo Citizens Association and received NO notice of these proposed changes. My contact information and that of all of our officers is maintained by Montgomery County so that we can be notified of proposed developments. This development will affect many more of our residents than most other deveopments in Takoma Park because of the nature of transit. I request that you provide clear and adequate outreach to Takoma Park residents and extend your comment period so that the views of all interested Takoma Park residents can be considered. I have heard from a few residents that they are opposed to the removal of parking. This parking is necessary for people to effectively use Metrorail for work and business appointments in downtyown DC as well as medical appointments and social and political events. The Takoma Metro parking is heavily used which is clear evidence of its need. Your proposal is not in the public interest.
92	I am against the removal of hourly parking, handicapped parking, and established trees as part of the Takoma Metro development. I believe this development is not in the interest of the surrounding community nor in the stated mission of Metro. The removal of hourly parking will reduce overall ridership and visitors to the District merchants and social venues. Furthermore, the elimination of handicapped parking places an undue burden on handicapped riders who will have fewer choices in accessing Metro.
93	The elimination of public parking (long and shorter) at the Takoma metro station does not portend well for a transit hub that serves diverse metro riders. Taking a bus to the station may not work for all riders, depending on time of day and distance to bus stops. - There doesn't seem to be any provision for handicapped parking. - People will drive to the station and, inevitably end up parking on nearby residential streets, despite parking regulations. The proposed parking light at the underpass -- is this in addition to the light less than a block away at the corner of Blair and 4th St.? -- Will the additional bus bays solve the problem of buses currently idling on Cedar Street? The individual changes need to be considered in the context of an overall TRAFFIC STUDY.
94	I disagree with this recommendation. There are not enough parking spaces near the Takoma Park Metro station; particularly, given the residential parking restrictions. The ability to park at the Takoma Park Metro station provides numerous residents with a SAFE and affordable option for transportation to and from work at various hours. Additionally, the Takoma Park Metro station parking gives residents off all ages a means to travel and enjoy various recreational activities throughout the DMV.
95	I would like to oppose the elimination of parking at the Takoma metro. My family frequently utilizes the parking on weekdays and weekends. We use the parking on weekdays as we commute to our offices by Metro. Unfortunately the RideOn bus service is unreliable for us and the parking is important to ensure we arrive at our jobs on time. On weekends, we will park and take Metro to sporting events downtown or to the museums. With the elimination of this parking, we may likely eliminate our transit use and drive to our jobs downtown. On weekends, we would definitely eliminate our transit use and drive into the city. In our view, the proposal is not balanced given the transit deficiencies beyond the immediate metro station. We therefore ask that you reconsider the elimination of parking.
96	I use the Kiss and Ride at least 3 times a week and it would be a great shame to see the number of available spaces reduced down to 11% of its original number. The more disappointing part about this plan is that the proposed building will need to provide parking spaces for its prospective tenants who happens to be less than a 2 minute walk from the Station. It seems very counterintuitive that commuters traveling from further distances will have no where to park in order to continue their daily travels by Metro. Even if and a big "if" some of the private parking were to become accessible to the public, I'm generally sure it will come at a much higher cost. I would hope that WMATA reconsiders this part of the plan and its impact on their loyal commuters. Thank You!
97	I would like to request that WMATA make public the Usage Study it has conducted of the parking lot at Takoma Metro. I park there several days a week, and lately, it has become quite full. Many USG workers have not even gone back to the office yet and so the demand is likely to grow for a safe, convenient, and fast way to access Metro. Metro is a valuable community resource and one that I would like to continue to use. As a resident of Takoma Park, I believe I should be able to drive the short distance to the Metro and park there

	when commuting to work. The change has been a welcome one for me and for many who currently use the lot daily. I implore metro to provide sufficient COMMUTER ALL DAY parking with this plan. From the hearing, I understood there is currently NO COMMUTER ALL DAY parking that will be provided. This will be a major loss for the community and one that will make traffic to the other stations nearby worse. And traffic going into downtown worse. Parking there enables me to patronize the local businesses before and after work as well, which is important to the town. I would really like to make Metro accessible for all people with all life situations and arrangements. Whether picking or dropping kids off before/after work, whether they are impaired mobility wise, or if they are elderly. I also value the local small lot as a safe alternative to the large lots of the other nearby stations. As a woman commuting alone, I feel quite safe going to and from this station, in ways that I do not feel safe at the other stations / lots. Please consider keeping more commuter parking please for those of us who are going back to the office and contributing to our local economy!
98	The proposed plan for the Takoma Station describes removing 144 Kiss and Ride spots. However, these spots are not kiss and ride--they are day-long parking spots. These parking spots are critical for residents who are parking and riding the metro into downtown for work. Unfortunately, the RideOn busses have become extremely unreliable and scarce, so I need to park at the metro in order to make it to work on time in the morning and get to daycare pick-up on time after work. If you reduce the number of parking spots, I am not likely to seek another metro station with parking lots that is further north - instead, I will drive to work and you will lose a metro rider. I urge you to reconsider eliminating all 144 of the spots and leaving only 16 spots--this is simply not enough spots to accommodate the number of cars that are typically parked at the metro each day.
99	As a regular Metro rider who prefers to take public transportation I feel that cutting parking for the public will force me to use my car rather than take Metro. In the evening it is not advisable for a single person, or even a couple to have to walk to a home or to a car parked on a side street, Many people who regularly take the Metro to events downtown park in the public lot at night. Getting rid of the parking will decrease Metro ridership especially for seniors and people with disabilities. Please reconsider taking away public parking for Metro riders.
100	I strongly oppose the plan to eliminate of 144 parking spots at the Takoma Metro. In my experience, the spaces are used by people who are using the Metro, and not to drop people off. Eliminating the spaces will make the Takoma station unusable for residents who are not within walking distance of the station or a connecting bus route. Removing the parking spaces will deprive residents, many of whom are elderly, of the benefits of using Metro station that they rely on. The alternatives will be either drive to Fort Totten or to simply drive instead of taking the Metro at all.
101	The recent changes to allow all day parking at the station have been extremely helpful to cut my commute time and make riding the metro more convenient. With the elimination of these parking spots, I will likely not ride the metro as often (currently 4 times a week). Please figure out a way to include parking spots for metro commuters as part of the building development. I assume there will be a parking garage for the people who will live in the complex, so building additional (paid) spots for commuters should be possible.
102	Removing the parking spaces is not a reasonable idea. I and so many others use that parking lot to park while commuting to work via the metro. Should you go forward with this poor idea of removing the parking spaces, will there be alternative parking in that area? Before you make this decision, I would urge someone from your staff to actually go to the Takoma metro stop and see how many vehicles are in the lot each day. It's much more than a "Kiss and Ride"
103	My name is Mark Brochman, and I live within the city of Takoma Park. I too am concerned about the loss of the green space next to the metro. The plan states that of the four heritage trees located on the property, one will be removed, and one will be relocated. It is illegal to remove a heritage tree in the District of Columbia. Perhaps you are planning to just pay the very high fine for breaking this law. I respectfully request that you redesign the plan to leave the heritage trees undisturbed in their current locations. They provide much more value to our community than the benefits of this project. Also, this document does not include the full scope of this project, and is missing the plan & impact of the private development partner. No where is it clarified wether the heritage trees, or the special trees would remain, after the completion of the entire project. The parking study on page 10 was done in October of 2021, during the pandemic, when many were still working from home, and not using the metro system. I feel a new study needs to be done to reflect a more accurate account of the frequency of use for the metered parking. Although the 160 Kiss & Ride spaces have historically not been used as quick drop-off spaces as intended, that is no reason to disregard the need for daily & overnight parking specifically at the Takoma Park location. This will put more cars on the road, and increase congestion. Thank you

104	The parking area is heavily used both by people parking for all day or part of the day. Many do not have a second driver so drop off does not work for them. Building an apt building will do nothing for metro riders, elimination of parking will destroy the lives of many depend on metro services and reduce riddrship, csuse hardship and anger against metro services.
105	We are concerned about WMATA's proposed changes to the Metro parking lot at the Takoma station. We are nearby residents and can generally walk to the station. However, this is not advisable in the evening, given the potential dangers in walking in the dark from the station. We really are appalled at the proposal to eliminate all 144 metered parking spaces, as well as the handicapped spaces. In addition, as we (and many of our neighbors) are getting older, there are times when it really becomes essential to use the Metro parking spaces. We believe that making these changes will adversely affect ridership to and from the Takoma station and will really work in opposition to Metro's stated goal of increasing ridership. Paul and Rita Marth Cedar Avenue Takoma Park, MD
106	This is a very bad idea. Currently there is all day parking for commuters at Takoma Metro. This plan will eliminate the parking lot, forcing commuters to park a long way from the metro station and overloading the street parking in Takoma Park.
107	This mixed use development project for Takoma Dc and surrounding areas is long overdue. I'm so glad to see a lot of housing wi to minimal resident parking. Seems there could be improved handicapped and short term parking at this facility. (But if commuter parking is to be included you may need many more stories or improved traffic circulation. Please support robust housing right next to a metro station and transit hub. Thanks you.
108	I support the proposed changed to the Takoma Station area. I think mixed use development around it will very much so raise metro usage and add desirable places to live. It will promote more trips to and from that stop.
109	I oppose the proposed changes to the Takoma Park metro parking lot. The parking lot is used for daily parking and hourly parking which allows Takoma Park residents who do not live within walking distance to utilize the metro Red Line. As a community, we need to ensure accessibility to mass transit to reduce traffic, car emissions and serve vulnerable populations (seniors, non-drivers, handicapped). The current parking lot is mislabeled as a "kiss and ride only" as it is used daily by commuters who need daily parking.
110	Not sure how taking away hundreds of parking spaces is supposed to increase/enhance Metro ridership. We park at that station and board the Metro there. If you remove our ability to park there, that's 144 folks or more who now have to figure out another way to get to Metro - one that, by necessity, won't be nearly as convenient - or else drive to their destination. You are forcing hundreds of folks OFF of Metro by this move. As I think must be clear, I oppose taking away all ability to park at this station. Unless you offer an alternate space for parking, you are discommoding hundreds of regular commuter riders. While proclaiming your aim is to make Metro more accessible, you are, in fact, making it LESS accessible.
111	Takoma station is a major hub for Metro and generates a large portion of revenue for Metro. I park at this Metro station and if you eliminate the parking I will no longer ride the Metro. I will not wake up 45 minutes early and drive an additional 45 minutes to look for parking at Silver Spring or Ft. Totten to then pay Metro which is unreliable to commute to work.
112	We as a community do not want our lot taken away from us. This station is extremely helpful to many people in the area and will be creating stress on a lot of people.
113	Please do not eliminate the already small (144) number of parking spaces available at the Takoma Metro Station. Elimination of these spaces, which were originally designated for off-peak use, and now can be used from 5 AM to 2 AM, will reduce ridership. Many citizens of Takoma DC and Takoma Park, MD have need of these spaces. Even if we live within walking distance some, like me (age 78), are not able to walk several blocks over hilly terrain. Others may not want to walk home after dark, as concerns about street crime continue in our neighborhoods. Or, we may need to park near the station for an emergency or to be on time for an appointment, especially in inclement weather. The number of spaces available now is appropriate to the station's location in the middle of a residential neighborhood and encourages ridership. Eliminating these spaces does the opposite. Please do not do it. Jennifer Saloma Maple Ave. Takoma Park, MD
114	I am opposed to Metro's plan to redevelop the parking area at Takoma Metro. I am a daily commuter to downtown SW DC and use the daily parking. Alternative transit options for me if the parking were removed would add significantly more time to my commute and so I would most likely opt for driving all the way in to work.
115	I am a long time Takoma Park resident and I have used Metrorail and other public transit for 35 years. I am strongly opposed to Metro's plan to eliminate all public parking at the Takoma Metro station. I think that it is

	important for Metro to provide easy access to its stations. This includes access for everyone, including people with disabilities and those who may have trouble walking or taking the bus to Metro from home. The public parking option at the Takoma Metro station has made it possible for me and many others to use Metrorail for our daily commute to work, especially during bad weather or during the winter when it gets dark early. I am also strongly opposed to the development of more than 400 new apartments next to downtown Takoma Park. This new planned development will greatly add to already increasing neighborhood congestion and completely change the character of our community. It will not increase Metro ridership but will make access to the station more difficult. I do understand that this kind of development will increase DC tax revenues and will give Metro a temporary source of needed money. But it provides no long-term solution to Metro's financial issues. For me, as an advocate and daily user of public transit, I would prefer to see Metro working for better access to its trains and buses, better long-term solutions to its infrastructure and financial issues, and a better quality of life—including open space around its stations—for the communities it serves. Thank you for the opportunity to comment on this disappointing plan.
116	I live in Takoma Park and commute to downtown DC, using the metro once or twice per week. Removing the parking at Takoma station will mean that it is far more efficient for me to drive downtown on those days when I would otherwise take the metro. It will reduce my use of metro significantly, and may even eliminate it. Going to Fort Totten is not really an option, as by the time I drive and park there, I have already dealt with enough traffic that it is easier for me to go directly downtown (in my car) from Takoma. In the past, I have sometimes walked to the metro (20 mins) or taken the bus (which has an erratic schedule), but both options are considerably less efficient than parking at the station. Bottom line, removing the parking spaces will certainly lead to a significant decrease in my use of metro. FYI, I note that in the survey, the parking spaces are identified as kiss & ride/short term. But these are daily parking spaces, which is what makes them essential for commuters such as myself, who arrive at 8:00 am and leave at 6 pm.
117	I am a resident of Takoma Park, MD and maintain a parking spot and drive to my office near Union Station, DC. I do this because I cannot rely on making timely connections between my home and the Takoma Metro station via Ride On to accommodate my child care obligations, so I drive from door-to-door. Just recently, I started using the Metro because I can park all day at the Takoma Metro and take the Red line to and from work, with minimal time getting to the station from my home and returning there at the end of the day to meet my child's bus. Although it would be less costly and more environmentally friendly for me to take Ride On between my home and the Takoma Metro, I simply cannot afford the additional time or risk running late with. my work and family schedule. The all-day parking spots at the Takoma Metro station make it possible and more convenient for me to take the Metro to work. Without them, I'll have to go back to driving every day. Traffic on North Capital is horrendous during morning and afternoon drive times. It's a waste of fuel and time to sit in traffic and bad for the environment. I strongly oppose any plan to remove the all-day parking spots from Takoma Metro, which would only. make metro less convenient and driving on already crowded DC streets far more likely. Also, please note: on the following pages, the parking is described as "short term" kiss-and-ride parking. That is no longer the case. Metro riders can park all day under the current arrangement.
118	I am kindly requesting that the daily parking spaces at Takoma Metro Station NOT be removed. These parking spaces are an essential part of many long time, hardworking residents daily commute throughout the 'extremely' congested DMV.
119	I oppose removal of all metered parking at the Takoma Metro parking lot because I believe it will cause people to drive to their destinations rather than park and take the train. Your materials say that people can simply drive another 10 minutes and park at Ft. Totten. But that extra time will inevitably motivate people to choose to drive all the way in. Further, you justify removing the "Kiss & Ride" spaces because you say they are underutilized. Converting their status to "Park & Ride" will reduce the current confusion that exists around how that parking area can legally be used and increase its utilization overall. I also oppose removal of the heritage tree that's called for in the plans. and described in the Environmental Evaluation. Your plans acknowledge that there are only four heritage trees on the site, and that many of the other trees on the site are in poor condition. Nevertheless, your plan will eliminate two of the heritage trees. You plan calls for removing one heritage tree outright, a mature tree that is healthy and making a significant contribution to improved air quality as well as the beautification and ecological diversity of the site. You also propose relocating another heritage tree, an action that in all likelihood will kill that tree, given how difficult it is to successfully transplant any tree of significant size. The design needs to be reconfigured to protect both those trees, as well as the metered parking currently available. Thank you. Diane MacEachern, Takoma Park MD resident and frequent Takoma Metro user; M.S., School of Environment and Sustainability, University of Michigan

120 I am submitted written comments to oppose the development project because it will remove 144 "kiss and ride" parking spaces at the Takoma Park Metro station. These parking spaces are very important to maintain for the quality of life and ease of transportation for the people in the community. These parking spaces allow commuters who do not live within walking distance of the Metro station to travel to Washington DC for work on a daily basis. The bus system for many community members is not sufficient to allow mass transit to the Metro station for everyone, and many people must drive to park at the Metro station. I am opposed to the proposed development for the reason that it will remove these parking spaces, and therefore make the Metro station useful for only the limited and wealthy community members who live within walking/biking distance to the Metro.

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121 STATEMENT OF PETER KOVAR HOLLY AVENUE TAKOMA PARK, MD A key challenge for the proposed Takoma Metro station development is the reality that -- while the project is located entirely within Washington, DC -- because of the geography of the site there will be significant impacts on residents of Takoma Park, Maryland. With that in mind, I encourage stakeholders to seek a pathway forward on the project which appropriately balances major relevant factors, including concerns which have been raised by residents of Takoma Park. Our area needs more affordable housing, smarter growth, convenient access to transit, preservation of green space, and compatible development. The design of the project, in weighing all of those goals, should preserve a much larger percentage of the existing Metro parking spaces than the current proposal would, and produce a building with a height more in line with most of the other close-by apartment buildings (not to mention those around the Fort Totten, Brookland, and Rhode Island Avenue Metro Stations), which typically don't exceed four or five stories. This WMATA hearing is to a large extent centered on transit and related matters, so – beyond parking and traffic concerns -- questions about the development's height and footprint, its external design features, the kind of commercial tenants it may include, size and uses of green space, stormwater management, and so on, may be considered in more detail at later stages of the process. But decisions on matters more directly related to transportation will inevitably affect some of those points, so they shouldn't be separated from the current hearing. And in that context, it's worth looking briefly at previous versions of the proposed development. Early on, it took the form of condominiums with two-car garages, an idea which drew major opposition, given the likelihood it would promote excessive car-based commuting. That plan was ultimately withdrawn. When a later design calling for a larger apartment complex emerged in 2013, I was part of a small group of residents from both sides of the District-Maryland border which met with EYA and suggested a series of changes. Some of the recommendations from the group and from the 2013 Takoma Park City Council resolution (rotating the structure's physical orientation, preserving more green space, finding a better location for trash handling, widening the driveways, and creating a less monolithic façade on Eastern Avenue) were incorporated into subsequent versions of that plan. And even today's version of the proposal reflects aspects of some of those recommendations. For that earlier plan, the group also suggested underground parking as a way to retain a sufficient number of spots for tenants and Metro users, while enabling a lower building height. Although EYA didn't support that idea, the WMATA Board, at the group's urging, included in its resolution on the project at that time language calling for underground parking to be considered. In other words, this hasn't been a case of residents unalterably opposed to developing the site. Rather, there has been a willingness to work with EYA and WMATA to seek improvements to the development ideas which have been advanced. That's in contrast with some who under the rubric of smart growth have uncritically supported each version of the proposed development which has been put forward over the years. As noted above, I don't agree with the idea of eliminating, as the current plan does, so many of the parking spaces which are available for Metro riders (and which are certainly not "kiss and ride" spots, as WMATA's hearing announcement claims). On weekdays during business hours the lot is typically quite full, and it's heavily used during non-peak hours as well. It runs counter to smart growth concepts to in effect require people who can now access the station via short car trips to drive longer distances to reach other Metro stations where there is more parking. That is perhaps less of a concern for residents who live within easy walking distance of the station, as I do. But for those who live farther away within Takoma Park, or who otherwise may face physical challenges in terms of walking or who may prefer not to walk after dark, cutting back substantially on Metro parking spaces is short-sighted. More spaces can be preserved if the total number of apartment units is reduced and/or if – as suggested in the earlier WMATA resolution – undergrounding some of the parking spaces is part of the project. More broadly, because the nearby streets are relatively narrow, and intersections adjacent to the Metro station often fail even outside of rush hour, we need a clear analysis of the project's impact on traffic. In particular, with hundreds of additional new apartment units (separate from the EYA project) already planned or under construction in the area near the station, it would be preferable to have a comprehensive analysis of the combined traffic impact of all the

	new developments. The analysis should take into account not only the number of proposed parking spaces connected to each project, but an estimate of the number of additional automobiles that can be expected for residents of the proposed EYA building who don't obtain parking spaces as part of their tenancies, along with anticipated additional traffic related to the commercial components of the project, and safety for pedestrians, cyclists and disabled Metro users. This is an opportunity to demonstrate that there's no need for more extreme proposals to unduly dictate the terms of the public debate. Rather than insisting on a too-small project or pushing for one that's excessively large for the site, let's instead work together on a development that meets the surrounding community's needs in a balanced way. I urge the WMATA Board, EYA and other stakeholders to proceed along those lines.
122	I support this project, pending getting details of how much and what kind of parking will be available. Please include info about time limits for parking spaces and whom they are intended for. Also, please report how many disabled spots will be provided.
123	I am a homeowner in Takoma Park, Maryland, and I have lived in the DC Metro area for 28 years. I wholeheartedly support this redevelopment project and the associated changes to parking at the Takoma Metro station. While I am a professional housing economist, I have no financial or business-related associations that relate in any way to either WMATA or the development industry. Please note also that my views and comments are entirely my own and should not be taken to reflect those of my employer or any other persons or groups I am associated with. My interest in transit-oriented development in our region dates back to the late 1990s when, as a volunteer, I assisted MNC-PPC staff with analysis for their initial Transportation Policy Report. At that time, the Takoma Station area was one of many in DC and Maryland that was under-developed. The current proposal for mixed-use development addresses many urgent needs, including affordable housing, and has many positive design features including green space preservation, as well as an appropriate mix of parking. The one obvious drawback to this change is that it eliminates some low-cost all-day parking spots that were established in the Covid-19 era. Those who need Metro commuter parking would need to drive to Silver Spring or Fort Totten, which was the status quo for most of the Takoma station's history. I do not believe that this should be a roadblock to the proposed changes. Activists who are opposed to the overall project (or, indeed, to any development in their vicinity) have seized on this issue. In my view, though, this is merely a pretext and an opportunity to attempt to delay or derail development by forcing changes to make the project less economically viable or attractive. Sincerely, Walter Scott Takoma Park, MD
124	Dear WMATA, I am a resident of Takoma Park, MD since 1986 and I have been a frequent user of the Takoma Metro since then. As I have grown older, it has been helpful to use the parking lot at the Takoma Metro for trips downtown for medical appointments, to go to a museum or play or for shopping. I think doing away with almost all of the parking spots at Takoma Metro will be a hardship to people who do not have ready access to bus service to the metro and those people who are handicapped or older. I understand that you are encouraging people to use the Fort Totten parking facilities, but before the Covid pandemic that parking lot was always full by 8 am. I am assuming that as people go back to work, it will continue to fill up and people who want to use the metro during the day will not have any parking available. I urge you to find another solution so that people can continue to use the Metro parking lot during the day or evening so that they can ride Metro to their destination, rather than driving. Thank you for your attention to this concern. Sally Taber Auburn Avenue Takoma Park, MD
125	Please don't all but eliminate the parking at the metro
126	I'm handicapped and live in Takoma and think it's a very bad idea to reduce the Peking at Takoma metro from 166 spaces to 16
127	I'm not pleased with this plan. There is insufficient detail to the plan, NO information on any proposed development, and there was NO information provided to Takoma Park residents, who would be most impacted by the changes, other than this recent posting. Most of DC is on the other side of the tracks and wouldn't even be impacted by any changes. It's insulting that you would work with younger people in DNCs in DC but ignore Takoma Park residents and station users in this way. It is also ridiculous to divorce any changes to the bus and parking from any proposed development. WHY make changes at all except to promote development on the site--OUR PUBLIC SITE--without telling us your plans for the WHOLE of the site. You know that the prior proposed development was roundly rejected by Takoma Park residents, was too massive and imposing. So you you plan a divide and conquer approach? That is reprehensible. And 7 to 10 stories as discussed is way beyond the zoning for the area and would destroy the character of the site, especially the surrounding neighborhoods in Takoma Park. Removing virtually all parking is a horrible idea and discriminatory to elderly and disabled Metro riders. We NEED spaces where we can park and travel to doctor

	appointments and other activities downtown or in Bethesda or Rockville. The current parking is NOT "kiss and ride!" There are currently about 3 kiss and ride spots and many more metered spots. Having just a few 2-hour spots is ridiculous. If there are no backups, that might allow you to take a train downtown and turn right around and come back. That is not practical for anything. Saying people can drive and park at Fort Totten is also absurd and insulting. Those parking spots are full by early morning, much further to walk to the trains, and the neighborhood is not safe. It takes up to 40 minutes to drive there in the morning from my house in Takoma Park because of the traffic. And the Fort Totten neighborhood is much less safe. As a senior, I found this whole proposal insulting. If you want to make changes, the only change needed is to allow users to use their Smartrip cards for parking instead of carrying a ton of quarters!!! While you are being silent for now on any other changes to the lot, it is clear you plan to destroy the current green space and spring a massive development on the rest of the site on us. NO. STOP! This green space is part of our neighborhood. And we are not forgetting the agreement WMATA made years ago to keep the green space in perpetuity. We have a say in what happens on the site and we say no. Again your approach of severing the removal of parking and reconfiguring the bus bays while being silent on any development is reprehensible. I hear what some are saying about "smarter growth." I also know from decades as an environmental professional that what is sold as "smart growth" is really just slightly less dumb growth. And I know that people living in urban and suburban environments need green space, peace and quiet, and clean air to be healthy. Your proposal would destroy that. I am opposed.
128	I fully support the proposed transit infrastructure changes, as well as the site redevelopment itself. The most common concerns I hear from area residents relate to 1) stormwater impacts from both construction and post-redevelopment site use; and 2) the loss of kiss-and-ride parking slots that area residents use on an ad-hoc basis on evenings and weekends (close-by residents walk to metro for daily use, but they drive to and park at lot on evenings and weekends to take metro downtown to avoid walking home at night). I think the use of the Fort Totten lot seems a good workaround for the latter parking concern, while I think the stormwater program at the DC Dept. of Energy and Environment will address the latter. However, many of my neighbors remain more skeptical on one or both counts, so more discussion on these two points would be helpful.
129	Where are residents supposed to park? Are you removing all the parking spaces? Why are you calling it Kiss N Ride? There are regular spot for commuters. Those are needed and necessary. I don't think you should be removing all the parking spaces. Having parking at the station allows riders to use Metro to go into DC.
130	The Takoma Station daily parking lot and bus depot give thousands of people the ability to easily ride Metro every day on their commutes, including my wife and me. In this part of DC and Maryland, the Metro stations are farther apart and the neighborhoods are less walkable. By removing parking and bus options, you will make it extremely difficult for thousands of people to get to work or school and add significantly to local traffic. I understand the need for new housing, but build it on disused land, not land that is actively used. Or, better yet, convert some commercial real estate to housing in a post-pandemic world. This is a standard, unimaginative, and greedy move by local developers in which Metro is complicit. Don't build on our parking lot and bus depot.
131	Eliminating parking at Takoma Metro will reduce ridership. Being able to park there is why I take Metro to work in Washington. Before all-day parking was allowed, I had to walk 0.3 miles to a RideOn stop in all kinds of weather and wait for the often-delayed bus to take me to Metro. I often gave up and just drove all the way into D.C. The idea that commuters who want to park at a Metro station can just "go to Fort Totten" is unrealistic -- that stop is not convenient for many people who use Takoma. WMATA should be making it easier to use Metro, not more difficult. I'm all for creating more mixed-income housing, but there must be a way to do so while preserving parking.
132	I use the metro 2 to 3 times a week to get to work. Being able to park in Takoma has made my commute possible. Reducing parking paces to 16 is a no win solution.
133	I support replacing as many parking spots with the additional bus bays and housing. It will drive more transit ridership and reduce carbon emissions. I am excited to see this project progress.
134	More housing, less parking! It's ridiculous that nearly half a century after it opened, Takoma Park Station remains surrounded by suboptimal lane uses. The climate emergency makes it all the more important that we use land next to a transit station for something other than the cheap, subsidized car storage. The housing crisis also adds urgency to add housing next to this transit station. (Opposition from incumbent Jo wieners to new housing at this is immoral and should be ignored.)
135	I strongly support this change to the Takoma parking lot. It is both better for Metro's finances and for the region as a whole to have people living right next to the station, rather than an often-empty parking lot.

	Takoma Park is a dense, transit accessible, neighborhood and it shouldn't need a large parking lot to operate. A vocal minority will try to stop this project, as well as the hundreds of new neighbors it will bring. Please don't listen to them and build this project.
136	The proposed changes which involve removing the parking spots would be detrimental to the local community who rely on the parking to get to work on weekdays and weekends. Moreover, families use the parking on weekends and holidays to access downtown DC. Removing the parking would adversely affect people of color and of lower socio-economic status, who rely on the metro's more affordable parking options. Please DO NOT remove the parking Takoma Park.
137	I am incredibly disappointed that Metro is even considering removing the parking spaces at the Metro. This will only decrease the ridership of metro for people who live in and around Takoma Park. It appears Metro has sold out to the developers at the detriment of the community. Where are people who live in neighboring Takoma Park supposed to park? If we cannot park at the Takoma Park Metro, we might as well just drive and not use the Metro. This doesn't help the community, it hurts the community. I have lived in Takoma Park for more than 20 years and park at the Takoma Metro every time I go to DC. People would have used the Takoma lot to park for work if the Metro had not limited the hours of parking to prevent it. This is clearly a way for Metro to sell the land to a developer and make money. It has nothing to do with helping the community. I am disgusted by this proposal as if completely disincentivizes use of the Metro. The arguments raised in favor of the proposal make absolutely no sense whatsoever. It is only a way to make money by selling the land. It is outrageous.
138	This proposal eliminates all parking spaces and will significantly impact my ability to use metro. Currently there are no buses that run between the metro and my daughter's school and after care. I have to drive to drop her off, then I park at the metro as an alternative to driving downtown. The variability of summer camp locations only exacerbates this challenge. Even on days when I do not have to drop her off (no school days), the bus does not run with enough frequency or reliability to know I can for sure get a bus home from the metro in time for evening events. In addition, adding yet another high rise apartment building is going to further exacerbate parking in the area. If you do not live in a half mile radius of downtown, driving is Takoma a critical way of getting around. There are not safe bike lanes on the main roads (Piney, Carroll, or Maple), buses may not get you where you need to go, and sidewalks are inconsistent for scooters. Your proposal eliminates a main mode of access without creating any real alternatives.
139	The proposed plan to eliminate nearly all parking greatly reduces the utility of the Takoma Station for me. Suggesting Fort Totten as alternative parking is pointless as there are almost no spaces there. Making Metro usable only to those within walking distance is not conducive to increasing ridership
140	I am a supporter of Smart Growth. However, I do not understand how Smart Growth concepts align with eliminating ALL parking for the Takoma community (144 spaces) while providing 163 parking for new residents of an massive apartment building and an additional 67 spaces for retail. Either eliminate all parking OR provide some accommodation for residents in the Takoma Park community.
141	I do not like or support this idea. I have lived in Takoma for over 20 yrs and the area is becoming more and more congested. I like that you added the ParkMobile option and I feel that some metro stations need parking. I cannot always walk from my home to the metro, either because I have bags, or I'm fatigued but it is nice and convenient to drive to my local metro stop, park my car and hop on the train to parts of DC that has no parking hence my I am on the train! We already have enough apartments and tenants that have moved into this community and it is becoming congested and changing the vibe of the area.
142	This proposal is replacing a resource that serves the public with something for a select private few. It is unclear if a survey has been done to garner how many people use the park and ride at Takoma Station. If completed, were these results of such a survey made public? These metrics would help inform the level of need for parking at Takoma Station. And from that information, a better decision could be made on how to mitigate the disruption to parking. Diverting daily park and ride to Ft Totten is not reasonable if there is no plan to expand the already crowded parking availability at Ft Totten. Furthermore, being on the edge of DC where metro stations are farther apart, unlike downtown, walking from your place of residence is usually not realistic. Current patrons are unlikely to divert to Ft Totten and are more likely to drive to their final destinations, as southbound traffic to Ft Totten is already burdensome. In aligning with DC metro's desires to increase ridership, incentives such as easy parking solutions encourage those living on the outskirts of DC to take the metro.
143	The "Kiss & Ride" listed is mis-labeled. These are daily parking spaces that are vital the local community. Without them there is nowhere to park and we will not be able to use the metro at all.

144	I live in Takoma Park, MD and use the metro -- sometimes I walk, sometimes I use the short-term parking, and sometimes I park all day as a commuter. My comments: 1. It is duplicitous (and arguably illegal) to be looking at this "proposed parking and bus bay changes" as if they were a project in and of themselves. This project is being proposed only because of the much larger EYA construction plans. 2. The proposal says there are 144 "kiss and ride" parking spaces. This is factually incorrect; this inaccuracy casts suspicion on the proposal and on this process of soliciting comments. These are commuter parking places. Some of my neighbors and I use them for daylong parking (so that we can take the metro to our offices). At other times, we use them for shorter-term parking for taking the metro to a doctor's appointment, or to park safely at the metro in the evening etc. Those of my neighbors who cannot walk to the metro, either because they are physically unable or because of the distance from their homes, depend on theses commuter parking spaces. 3. Telling residents who live closer to TP metro that they should just drive further & park at Fort Totten instead hardly makes sense in terms of the goals of real "smart growth" or a metro system. Think of the added car emissions of what is a longer drive and of the more crowded streets from TP to FT, etc. Indeed, I find this "just park at FT instead" logic quite baffling. But if Fort Totten is the alternative, then there has to be an environmental assessment and a traffic assessment of that aspect of the changes in parking. 4. Others have suggested that commuters can just park on city streets. But there are very few such streets within walking distance of the metro that do not have limited parking due to residential parking restrictions. Those residential parking restrictions are very important on our already busy close-in streets. So, again: where is the assessment of the impact of the proposed lack of commuter parking on city parking and traffic? 5. The purpose of a metro station is to provide transit. The reason there is a TP metro and not just a Fort Totten or a Silver Spring metro is precisely to be sure that there is a convenient metro stop, with appropriate parking, for residents in both TP, MD and TP, DC. This proposal negates that very purpose. IN SUM: THIS NARROW PROPOSAL -- A SLICE OF A LARGER PROJECT -- SHOULD NOT BE CONSIDERED WITHOUT THE REST OF THE PIE. NO PRIOR PROPOSAL FOR "DEVELOPMENT" AT THE TP METRO WAS DELIBERATED IN SUCH A "SLICED" MANNER. DOING SO CALLS INTO QUESTION THE LEGITIMACY -- AND LEGALITY -- OF WMATA VIS-A-VIS "DEVELOPMENT" AT THE TP METRO STOP.
145	There are little to no long term/daily public parking options in this area. The Metro parking lot that is proposed to be removed is the only parking lot around that allows for public parking all day. The only other public parking options nearby are 2-hour street parking. I use this parking lot so that I can park while I'm at work. 2-hour street parking doesn't work for working 8-hours a day. This parking lot is largely used by commuters who need to drive into Takoma to either work there or Metro further into the city. Removing this parking lot removes a major transportation need. This lot is very full every weekday - that is clear proof of its necessity to the local area.
146	I rely on the parking at the Takoma station for my daily commute. The parking lot is rarely full and could likely lose some spaces without impact, but I think 144 spaces is too many.
147	The Takoma Metro station parking has an important function for families whose children attend the Takoma Park Child Development. center and the Takoma Children's School. These parking spaces are more accessible for elderly grandparents as well - the lot is located right at the metro and requires very easy access to the parking spaces and the metro elevator. Takoma park has one of the few areas where multigenerational family access is super easy.
148	I'm all for redevelopment....train station needs to be updated and the area could definitely use more apts/restaurants/bars
149	I am against the relocation of the bus loop and Kiss & Ride as well as completely removing Kiss & Ride spaces. An added traffic light would be a great addition; however, if it's all or nothing, then I am against it all.
150	Thousands of people in the area depend on metro parking to make their commutes possible at the Takoma metro. Creating a drastic overhaul to my life, alongside everybody else who utilizes parking, is outrageous for the proposed plans of adding a residential apartment. There is current, daily parking at this metro. IT IS NOT A KISS AND RIDE AREA, as metro believes. People depend on this to get to work each day, and there simply are not equitable alternatives for these people to use the metro with the elimination of these parking spots. Parking at the Takoma metro is vital for accessibility of Washington DC and removal of parking is inequitable and unjust. Parking in metro stations outside of Washington DC is incredibly important to allow the members of our community who cannot afford the high rent prices of Washington DC to commute in. It sets disturbing precedent for surrounding areas and promotes the idea of only privileged and wealthy individuals being able to afford to work in the city. I will consider moving from the area if this change is made. It would add over an hour to my commute each day, an absurd amount for how close I live to the city.

151	The plans to develop the greenspace and parking lot at Takoma Park metro station does not serve the community or Metro's interest in increasing ridership. Without daily/hourly/handicap parking, ridership will decline in Takoma Park, a community that is supportive of public transit. The proposed plan will cripple commuter and handicap access to the station. It makes NO SENSE. Please STOP this ill-advised and anti-community development plan.
152	That parking you want to remove is not kiss and ride, and those who use kiss and ride don't park. That is the parking people like me (70 years old) use to take the metro downtown. There are many older people in our community who rely on that parking. I ask that you leave that parking for its intended purpose.
153	Although this proposal is much better than the previous dense development plan, there is so little open space available around here is seems to make much more sense to leave the very scare parking provided here and use the remaining space as a quiet park space, and then redevelop the 7-11 lot as housing.
154	I live at the corner of cedar and eastern. I feel that there needs to be parking for people that use the Metro.
155	I'm strongly opposed to this idea. It's terrible for anyone who lives more than 15 minutes walk from the station. The existing bus service to the station is unreliable and infrequent even when it adheres to the schedule. You will effectively be eliminating the metro or forcing people to build in an extra 30 plus minutes every day for commuting.
156	I am a Takoma Park resident and I am urging you: please do not reduce public commuter parking for the Takoma metro! I am looking out on the parking lot that is now 90 percent full, as it is most weekdays as Covid has wained. The lot allows all day parking for commuters as well as hourly parking and handicapped parking. Nearly all of these parkers are presumably heading downtown. How many of them would simply push on to Fort Totten through the rush hour on Blair and New Hampshire, and how many would simply drive downtown? Or maybe not go at all? To eliminate this parking is idiotic if METRO truly seeks to serve the community, to keep Takoma viable as a commuter hub, and provide a viable METRO option for all. Thank you.
157	I think it's absolutely necessary to have parking spaces remain for the Takoma Metro Station, especially considering senior citizens, the disabled, and people with small children. The assumption that everyone can walk to the station is absurd. At night, it is too dangerous for people to walk to or from that station. There have been many muggings and other crimes in that area. Buses don't go where everyone lives, and they are not frequent enough to substitute for the use of cars. Weather is also an issue if the assumption is that everyone can walk to the station. If there is ice on the sidewalks, it's very hot, or very cold it can be dangerous. People don't live just a few blocks from the station. It can be too long a walk for many in the Takoma Park area. I strongly oppose the idea of getting rid of the parking lot.
158	Plz do not eliminate parking at the Takoma Station. If anything, liberalize the hours one might park there and modernize the payment method.
159	I strongly oppose the elimination of most public parking at Takoma Station. This parking lot serves many Takoma Park, MD residents who do not live close enough to the station to walk. You will be forcing them to find other ways to commute and given the added step of configuing a Ride-On bus to the metro station incrreses the likelihood that many of these people will drive to work instead, which is not your intent. Please consider the adverse consequences of removing the parking. Thank you! Dawn Reeves Glenside Drive Takoma Park MD
160	I completely oppose this plan without furthur details.
161	Do not take away the parking spaces! With all the new development and housing, the need for parking will only increase!
162	Currently, there seems to be decent parking space utilization at Takoma station, certainly more than what the proposed 16 parking spaces would provide. Removing that many parking spaces would represent a hardship for those of us who live alone and drive to the Metro station, especially in circumstances of inclement weather. On rainy days the existing parking lot is typically 50% - 75% full. For the meager gains in bus bays, losing that much parking capacity to the proposed green space is a bad trade-off and will discourage ridership.
163	I am a resident of Takoma Park, MD and live within a mile of this project. I encourage METRO to proceed with its plan to remove the surface parking area/bus loop and replace them with dense, transit-adjacent housing.
164	I am a Takoma park Maryland resident. Although I support development near public transit hubs, I also believe in easy access to those transportation hubs. Removing essentially all of the public parking at the site impedes that needed accessability. I would think that derogating Metro access is at odds with a (the?) core WMATA objective. Surely there is a reasonable way to develop the site without doing this evident harm to public transit. Steven Silverman cedar ave takoma park MD
165	Hello. I live in Silver Spring and agree with the plan to eliminate surface parking at this Metro stop. Using this property for car storage is a waste of valuable space and encourages car use, exactly what Metrorail itself was

	intended to replace. As for the proposed development, the more users/occupants the better. Keep in mind not too many people want to live immediately adjacent to a busy railroad right-of-way due to the noise. Some sort of buffer will be necessary. Otherwise, putting hundreds of potential Metro users next to a rail station makes good sense. Thanks.
166	I am a Takoma Park resident and rely on the parking spots at the metro station. Please don't eliminate these spots or please be sure to provide spots for those of us that need to use metro! It's important to have spots available for access to metro. We might not need as many as currently available but I can't tell from your plans if you intent to eliminate all paid parking spots or just some. Eliminating all spots would cause a huge burden and as you can see, many spots are being used each day. Please don't eliminate all paid daily use parking!
167	Please keep the parking spaces at the Takoma Metro. They are necessary for people who live just a little too far to walk, or who cannot walk, to access the Metro station, which is an important link to downtown and the broader metro region.
168	Please do not eliminate all of these parking spaces. This will pose immense challenges for disabled people and those who live too far from the station to walk.
169	I live 3 block from the Takoma Metro Station. First of all, I support development/housing at Metro stations to reduce car traffic and create Metro based community. However, there are a few inaccuracies in the Takoma Station info. This is NOT only a Kiss & Ride. There are space for parking that are particularly important for persons who are elderly and/or have a disability. I do NOT want to see parking eliminated entirely. Please consider this comment.
170	As a commuter, and a single parent who cannot afford to live within easy walking distance of the Metro but who still needs easy access to my car in case of emergency, I strongly oppose the removal of commuter parking at the Takoma Metro. Please consider preserving commuter parking, even if it requires a shift to the planned development.
171	I do not think this is a good idea. It doesn't seem appropriate to do an analysis of use of this station during pandemic times- it is not representative of typical use patterns. Personally, I use this parking lot as my preferred lot as the other stations near to me are riddled with safety concernsZ the silver spring lots are far from the station and are not easy for metro access. Also, they are public lots and in the last few years there has been a lot of crime in those lots specifically (lots of smash and grab and armed muggings) as well as much crime all over that are- shootouts, high speed car chases, increase in petty crime, armed muggings. I do not feel safe with the prospect of using that parking facility. I feel the same about fort totten- the station itself is rather unsafe and there has been much crime in the parking lot. Forest Glen is never patrolled and has also experienced crime and a lot of station closings. The community counts on having that small amount of spaces at Takoma metro, as it is easier to access metro for those with accessibility concerns. Buses are slow and not reliable and don't service every neighborhood around, so trying to force people into using them more is an unrealistic initiative.
172	Takoma metro station is the closest station with available parking that allows community members to take advantage of metro into DC. What are the alternative options for removal of parking spots? How will community members be able to access this public transportation when the metro stops are few and far between and limited in our area?
173	While I will miss the parking at the metro I believe mixed use development including residences to encourage transit use is a far more valuable use of the property. As it is now, the Takoma Metro is underwhelming. It would be wonderful to have a vibrant surrounding area that incorporates condos and apartments. Takoma is a desirable, walkable community but too many people are priced out. We desperately need more housing in this part of Maryland and DC. I support this project.
174	I support the proposal to remove the parking and build more housing.
175	My name is Andrew, and I have lived my entire life in the DC area. I grew up on Bonifant Street in Silver Spring, roughly equidistant from the Silver Spring and Takoma Metro stations. This area desperately needs more high-density, sustainable, walkable development, and I strongly support any efforts by Metro to develop as many units of housing and as many retail amenities as possible. High-density is exactly what we need on Metro-owned land - it will both provide income through rent and land sales to WMATA, and induce more Metro ridership, which will reduce the amount of subsidy required to operate Metro service and provide impetus to improve frequency and service quality in the future. Beyond the general comment in support of as much housing as possible, I would also strongly request that WMATA do everything possible to promote pedestrian and cyclist safety around the Metro station - any intersection redevelopments should prioritize buses, pedestrians, and cyclists, with cars a distant afterthought. Additionally, WMATA should seek out

	opportunities to add secure bicycle parking to any developments. I would ride my bicycle to take the Metro much more often if there were secure, high-capacity bicycle storage protected from the weather, like that currently being planned by the county for the Bonifant-Dixon garage near Silver Spring station. Thank you for taking the time to read my comments.
176	We should absolutely transition the mostly empty parking into more housing in the area. The spaces are barely used as-is and bringing more people and more local businesses into the neighborhood benefits us all.
177	The parking spaces aren't being used and aren't necessary.
178	I fully support all plans to build more housing near metro stops.
179	I strongly support the removal of parking in place of housing development adjacent to the metro. Though I am a strong believer in history and tradition, and thus I respect that Takoma Park was named after the inventor of parking lots, I also value the importance of the 1896 streetcar in the development of Takoma Park and look forward to a future when the neighborhood is again centered around housing adjacent to transit and does not instead prioritize parking
180	I am very supportive of the proposed development. Bike and pedestrian improvements should be prioritized, as should bringing new affordable housing to the area. Thank you!
181	I strongly support the proposal to relocate the bus loop, remove the parking, and build housing on the WMATA-owned parcels adjacent to the Takoma Metro Station. As Metro knows better than anybody, the entire DC region benefits when people live transit-oriented lifestyles where they do not need to use a car all the time. Although it is true that park-and-rides enable some transit ridership, that commuter use pales in comparison to the ridership that is gained from people living next to transit and building their lives around it. I am one of these people and my daily commute has been just one part of my Metro usage: I have ridden Metro to visit friends, to go to the airport and train station, to meet my parents for dinner downtown, to see shows at the Kennedy Center, to be disappointed by the Hoyas at the Verizon Center, to get my phone fixed at the Sprint store, to testify at the Wilson Building, to get my hair cut at Diego's, to feed my friend's cat in Pentagon City when he was on vacation, to go to mass at St. Augustine's on Sunday, to grab a drink on U Street, and even to take home a bar cart and turntable from Target. In short, Metro is simply the way I get around DC. When people treat Metro that way, it results in far more ridership than any park-and-ride could ever generate. So replace the parking at Takoma with housing! You will end up with more folks who treat Metro as the default.
182	I am a homeowner in Takoma DC and fully support this plan. It makes no sense to subsidize car ridership when we have bus, bike, and walking infrastructure, and hope to build more. The new building will help alleviate high housing costs. We must continue to grow or Takoma will become a boring ghost town of elderly millionaires where no one else can afford to live.
183	No notes! Fully support taking away as many parking spaces as possible. Thank you!
184	It is hard to tell from the description and picture whether there will be a drop off location for riders arriving at the metro by car. Since there is no longer parking, many riders will need to be dropped off by family or ride sharing services. The current drop off areas in the Kiss and Ride are impractical so most riders get dropped off on Carol St. The additional traffic calming measures that block the previous drop off area before the bridge has made the situation very unsafe as drivers now need to drop of riders under the bridge where traffic is lining up to turn. PLEASE consider addressing that situation prior to and during construction, and having a permanent fix with the new construction. Thank you.
185	To whom it may concern, I'm writing in support of the plans to eliminate all parking at the Takoma Metro Station. I believe the societal and economic benefits of additional housing at this location far outweigh any benefits from keeping the parking lot. Research has shown that reducing parking does not impact the demand for transit services; instead, it increases the proportion of people taking alternative modes to get to the transit station. The additional housing would be a much needed step towards alleviating the housing shortage in this city and would almost certainly result in more metro usage and less car traffic. Please move forward with this plan for the good of the city and its residents. Best regards, Zach Proom
186	I testified at the public meeting at Takoma ES concerning the scope of the public meeting. WMATA limited the scope of the meeting to the relocation of the bus bays and elimination of the 144 PARKING SPACES. Referring to the 144 PARKING SPACES proposed for elimination as "Kiss and Ride" spaces is patently dishonest.. I do not expect public agencies to be dishonest. The incorrect referral to "Kiss and Ride" spaces is still on the WMATA website today weeks after public commenters pointed out the (in my view) intentional error. My other comment concerning the scope of the public meeting is that WMATA is [intentionally in my view] avoiding assessing the impacts of the ENTIRE project. Limiting WMATA's assessment to the impacts of moving the bus bays and parking and ignoring the proverbial elephant in the room, the BUILDING, is patently dishonest.

	Presenters at the public meeting and public commenters pointed out that there is no traffic study. If this was a Federal government project WMATA would be REQUIRED to conduct a traffic study prior to making ANY decision on selling the property, AND WMATA would be REQUIRED to assess ALL of the impacts of their decision to sell the property including, of course, the impacts of the building the property is being sold to build. Conducting a traffic study AFTER WMATA sells the property would be useless to inform WMATA's, and the public's decision making. WMATA should conduct a complete study of ALL of the impacts of WMATA's decision to sell the property. At present WMATA is assessing maybe ten percent of the impacts. Neither WMATA nor the public know anything about the impacts of selling the property on traffic, air quality, water quality, or anything else because WMATA has not assessed the impacts. WMATA telling the public that stormwater impacts of the building are not WMATA's responsibility is dishonest and deceptive, especially when my neighbors on Eastern Avenue already have stormwater accumulating on their lawns. If the Takoma Station land sale was a Federal government project, what WMATA is doing by piecemealing the impact assessment would not be legal. WMATA should step back from their decision making process, assess ALL of the potential impacts of selling the property, and allow WMATA and the public to make a fully informed decision concerning whether to sell the property, and to whom, and for what purpose. And WMATA arguing publicly that they are constrained by a contract and their hands are tied and they cannot assess all of the impacts of the decision to sell the property is also dishonest. If WMATA has a contract with a particular developer, the contract can and should be modified to allow WMATA to fully assess the impacts of WMATA's decision to sell the property. My point is that the public has an expectation of an honest and open decision making process, and we are not getting that with WMATA's current decision making process. That needs to change before any decision is made.
187	To Whom It May Concern: I am a physically disabled resident of Takoma Park who uses the metro parking lot daily to go to work. My disability limits my mobility and my residence is too far to walk to Takoma station, so I park and pay everyday to get work on time. The metro has been a lifeline for me because it allows me to remain gainfully employed. Without the parking lot, my life would be much more difficult than it already is. It would require me to add more travel time to/from work. Given my mobility, it will be very easy for me to miss a bus, potentially making my daily trip to/from work much longer. I am not asking for sympathy, only for reconsideration of your plans because it would affect a lot of people, particularly people like me who have physical disabilities. Thank you. Hong Ta-Moore (Mr.)
188	I have been a resident of Takoma Park for the past 7 years, and started driving to the Takoma Metro station about 6 months ago when I changed jobs that requires me to be in the office 4 days per week. It is extremely helpful to have daily parking available at the Metro station, as it is a quick 10 minute drive from my residence and the RideOn buses are not reliable or timely. I strongly encourage Metro to reconsider the plan to remove the parking lot and identify alternatives for retaining some amount of daily spots at the station. If no parking remains available, I implore Metro to attempt to work with RideOn to improve and increase the bus availability and reliability. Thank you for your consideration.
189	I agree with the proposed development plan. More housing is needed in the area. For too long, the residents of the City of Takoma Park had stood in the way of development. Housing is in dire need in this area. This plan moves the needled forward and put lands to good use.
190	I am fully supportive of building additional housing here. There is no reason to preserve parking spaces when there is such an incredible housing shortage. I live in an apartment very close by and am fully supportive of making this area more dense.
191	The value of 144 parking spaces pales in comparison to the value of allowing hundreds of people and dozens of families to find a new home next to a metro station. 144 parking spots is not even enough to fill one train, never mind consistently provide enough riders to support current Metro service levels. WMATA should never allow the prioritization of parking above supporting housing for families.
192	I support housing at Takoma metro. There is plenty of parking in Silver Spring and Fort Totten stations.
193	The area in and around the TP metro has become increasingly more dangerous with crimes and shootings in the rise. I don't feel comfortable walking around that area anymore. If there are no places to park, I can't see using this metro stop as a viable transit option. On average, I usually see 20 cars on the lot. Can u hold on I o at least that's many? It would make a world of difference for those that live slightly too far to walk. The entire neighborhood is permit only and that lot is the only thing that encourages me to use metro.
194	I am absolutely in favor of WMATA building more housing next to the Takoma Metro Station. I live in an apartment building in Takoma, DC, just around the corner. Dense housing and commercial corridors near existing transit infrastructure are one of the primary ways we can start to address two crises at once: (1) housing is too expensive in DC - the solution is to build more! (2) building more housing near transit also helps

	reduce climate emissions. Manhattan has the least carbon emissions per Capita than anywhere else in the country. Why? It's not because of electric cars or LED lightbulbs, it's because the citizens who live there DON'T DRIVE CARS. My opinion: get rid of all parking at Takoma Metro Station, run more buses more frequently to other areas of DC and MD from which people might take the Takoma Metro, and build a 30-story apartment building. Go. Fight. Win. BUILD MORE HOUSING
195	I am dismayed to learn that Metro plans to eliminate all but a small number of parking places at Takoma Metro. I use these often on weekends, and I note the lot is heavily used during weekdays. Suggesting that riders opt to park at Fort Totten is very inconsiderate of your users. I'm all for developing open areas near Metro, but I don't see why an underground parking garage available to Metro riders isn't part of the plan. I also worry about bike lockers at Takoma. Are they to be eliminated too? I'm glad to see plans to increase ridership, but pushing away your current riders seems to be a poor plan to do that.
196	I am opposed to this project. We do not need more expensive condos. We need parking. We have old people and disabled people who need parking.
197	I am opposed to this project. We need to have places to park. I am very concerned about the disabled and those who have long commutes and drive to metro before embarking on long commutes. This is a terrible plan.
198	As a driver, WMATA public transit user (bus and metro), and DC resident, I highly approve of this plan. Relocating the kiss and ride/bus loop will make things work better. Taking away the parking space is what makes this feasible and a good, forward looking plan. I say that as a driver because I know parking does not serve people and communities! Cars sit for 90% of their lives, and instead our focus needs to remain on catering to those who take public transit and want to live in walkable communities, like Takoma.
199	I would not be able to use the Takoma station, despite it being the closest to my home, if there was no parking. I am disabled and rely on accessible parking. Biking, and walking won't work for me. If there were a limited amount of accessible spaces they would likely be full early in the day.
200	I support the transit-oriented development planned by wmata. Modernizing public transportation, building mixed-use development, and created less car dependent spaces are really the only hope we have in creating a more sustainable future.
201	The Takoma Metro parking has been essential for the community who need to drive to the metro to use it. The mentioned parking spots are not kiss and ride, which indicates that someone is being kissed goodby and dropped off. It is actually a parking lot where people park and leave there car for how ever many hours (as noted by the parking meters there which are not found in kiss and rides). This allows many to use the metro rather than drive into DC and decreasing traffic and pollution. I urge you to reconsider this plan and along with the development proposed, provide sufficient parking for the residents who need it. Thank you
202	I am happy to see the parking lot turned in to mixed use development :)
203	Metro has a great opportunity to promote transit-oriented development here and should seize the moment. We need more transit-accessible housing, not a parking lot serving a subway station in a walkable neighborhood.
204	I object to the proposal to remove all public parking from Takoma's Metro Station. These are not Kiss and Ride spots as described in the WMATA posting. Rather, they are spots that can be used by locals for whom walking and cycling are not reasonable options. This may be because of age, mobility, distance, or time. Multiple problems arise from this aspect of the proposal. In the overarching sense, a public good is transferred to private hands for profit. That is the root of the remaining problems, because the private owners have no incentive to be of assistance to the public in terms of access to the Metro. The ensuing problems included loss of ridership, increased car traffic, dense and/or unsafe traffic with parking in the surrounding neighborhoods, damage to neighboring businesses because of loss of foot traffic and loss of parking, hardship for neighbors who are not able to walk or bike to Metro. Furthermore, the plan to relocate the bus lanes obscures the loss of green space that provides health and cooling for our urban neighborhood. The lanes are relocated for the purpose of downgrading what is another public good--a park-like environment for those approaching Metro. Such environments are key climate protections for city neighborhoods, and relocating the buses to allow for this destructive move is more harmful than "relocation" conveys. My objections to rerouting the buses is this: the plan for bus lane location should be made with enhancement of city green space as a concern.
205	I would like to express my strong support for Metro's proposal to remove 144 kiss and ride parking spaces from the Takoma Metro station. As WMATA is well aware, those 144 parking spaces translate to a minuscule fraction of the approximately 1400 individuals a SINGLE 8 car train can convey (assuming a capacity of 175 persons per car). Therefore, it is self evident that these parking spaces are only being utilized by a small fraction of Metro riders. The Takoma region would be better served by replacing the valuable land occupied

	by these parking spaces with a mixed-use development that will provide sustainable, transit-adjacent housing for hundreds of additional residents and add additional retail space in the coveted Takoma corridor. Thank you very much for considering these comments! -Robert Fares Montgomery County resident and frequent Metro rider
206	I am writing to oppose the new development next to the Takoma Metro Station. Although this station is in the District of Columbia, it is mainly used as a commuter station for residents in nearby Takoma Park, MD and Takoma DC who are going downtown to work or for entertainment. It is not in a business area and is not destination for commuters. Because of this, parking is needed for the residents who are too far away to walk. Ride On Bus service has been cut since the beginning of the pandemic, and taking a bus to the Metro outside of rush hour is difficult. There are already several multi-family residential buildings near the Metro, including one directly on the opposite side of the tracks from the proposed site. Another new high rise is currently under construction right across from the Metro Station, and there are several other new apartment buildings nearby. All of these buildings have easy pedestrian access to the Metro station. At this time, many people are not going into the city for work every weekday, so demand for housing next to a noisy Metro station is most likely lower than it was a few years ago, and will probably not rise in the near future. Thank you.
207	I support the proposed project and the associated elimination of the current parking spaces.
208	I strongly disagree with removing Kiss and Ride parking spaces and green space for this development. It's illogical to allow the removal of all those parking spaces with no replacement, making it less likely that people will use Metro for commuting, and eliminating that green space is short-sighted and harmful to the community and our environment. I strongly urge you to reconsider this proposal to allow development only on existing parking lots/roadways, maintain the green space, and require that the development replace displaced parking spaces. Please don't prioritize finances and developer preference over environment and community.
209	I support this project for more TOD development. There should be a majority of affordable housing in the new development.
210	This project is long overdue and, if anything, not ambitious enough. In any other country, the area next to a rapid transit station offering service every 6 minutes would be skyscrapers housing thousands of people. We have a housing crisis, and need to treat housing as a good thing that helps people, not as an evil thing to be stopped. It certainly shouldn't be stopped to preserve surface parking lots. Every parking space is about the size of a person's bedroom, and for a tower, multiple bedrooms. Anyone who wants a parking space can buy a monthly space somewhere. WMATA could even offer to sell them now, in advance, but I'd be surprised if many take you up on it.
211	This is going to be detrimental to the people who need to park and use the metro for work. Most citizens do not want this
212	I am a member of a local community organization focused on enhancing the health and well-being of Takoma Park and its surroundings. Whatever happens in this space must: *Improve bicycle mobility, access and safety in a way that connects to existing bicycle infrastructure in the city. *Ensure that a portion of the land is used to establish a community food forest, or other forms of edible landscaping (to boost local resilience and food security & sovreignity, enhance social well-being and to mitigate stormwater runoff and the heat island affect) Many thanks.
213	I use the Takoma Metro Station's parking, Kiss & Ride, and bus loop on a regular basis. I hope that WMATA will reconsider eliminating these elements from the Takoma Station.
214	Get rid of the parking and get some TOD built there.
215	The stated proposed changes include adding a traffic signal on Cedar Street NW and Carroll Street NW. However there is already a traffic signal there. Are you proposing a new traffic signal in-between the light at Cedar and Carrol and the one at Carrol, 4th and Blair? if so that would seem like too many in that short distance.
216	I support this move. To make metro thrive in the future it needs to become a regional rail rather than commuter. Putting more people and retail close to stops takes that a long way.
217	I oppose the parking changes, specifically the removal of 144 parking spaces (they're not "Kiss and Ride" spaces). If anything, parking spaces need to be added. Removing the spaces would result in at least 144 daily Metro riders driving, instead of using Metro, and put 144 more vehicles on the roads.
218	As a Takoma resident who uses metro regularly I am in total agreement with these changes and believe that the majority of people who utilize this metro station do not require parking, or at least not the current number or parking spaces. This area is better utilized as a mixed use community space to increase foot traffic

	in the neighborhood and naturally increase revenue and attendance in local business and community activities. A large parking lot promotes a transient nature and offers nothing to the community at large.
219	I strongly support the proposed parking and bus bay changes at Takoma Station. These changes will allow for building highly transit-accessible housing which will lower the costs of housing in the area and reduce congestion.
220	As a frequent rider of the Red Line, I fully support the proposed plans. Converting the existing parking lots to mixed use development will be a net positive for the surrounding area and region.
221	I very much support this development. I am a regular user of the Takoma Station and I think it is long past due that the area directly around it be properly utilized to maximize use of the Metro and the connecting busses. I understand the concerns some have about parking, especially as someone with a child that has parked at the station. However, I would encourage you all to keep parking minimized and work to make getting to the station by bike, bus, or foot easier and safer. I'd also like to express my support for increasing the a.kunt of affordable housing but not to such an extent that it kills the project. Lastly, I don't know if I missed it but it's unclear if the developer will be leasing the la d from wmata. I would hope that wmata retains ownership of the land so that it can collect non-fare and non-state funds, a model that exists in other international cities with good transit use and development. Thank you for your consideration.
222	This sounds great! DC needs transit oriented housing and this is a perfect opportunity. New residents will enliven the takoma community! Please make sure the pedestrian access is good and incorporate as many units as possible.
223	I fully support the relocation of the bus bay and removal of parking spaces to provide for transit oriented development. Providing high density, walkable communities near transit increases the return on infrastructure investment, provides desperately needed housing, and improves the health and well-being of nearby residents. I urge WMATA to support the maximum density allowed at this location with mixed use of retail and housing to bring the greatest number of residents to this transit location.
224	Very excited to see housing being planned right next to the metro stop! We have a massive housing shortage in the region and need more housing near jobs, amenities, and transit. Not only that but more housing here will support local businesses and help revitalize the storefronts on Carroll Ave across from the stop.
225	Hi I use metro parking at Takoma regularly to commute to work downtown. I just parked there this morning and the lot is very full. I would encourage you to collect data on how many commuters park in the lot each day. While 144 spots may not be needed, removing ALL parking spots at Takoma will be a significant disruption for many commuters who rely on metro parking. Thank you.
226	Sounds like a good idea. We need more housing and retail in this area. Don't know anyone that uses the kiss and ride.
227	It is confusing that WMATA is categorizing all 144 of the lost parking spaces as "Kiss and Ride" when they are clearly not. This is DAILY parking which is extremely useful to use this metro station. I agree that it is almost never full and Takoma could lose a lot of that parking, but there is clearly some need for daily/hourly parking at this station. Losing all parking spots would be a huge loss to mobility in our area.
228	Strongly in favor. Land adjacent to Metro stations should be used for dense housing and retail, not surface parking. Ignore the NIMBYs and do what's right.
229	We need less parking and more dense housing near stations!
230	In favor of these changes - we are in desperate need of housing and human lives are more important than parking spaces.
231	I fully support the removal of parking spaces, and am glad to see Metro prioritizing housing and other active uses of the space immediately adjoining transit stations.
232	Hello, I strongly support the elimination of parking spaces to allow for more housing. The DC region is facing a housing crisis and we need more housing. Many studies have proven that increasing the housing supply decreases housing costs, which decreases homelessness and displacement of low-income residents. More housing near a metro station is especially desirable since it would allow more people to rely on public transportation rather than cars, which would decrease carbon emissions from transportation. Increased density also decreases emissions since multi-unit buildings are less carbon intensive and new buildings tend to be more energy efficient overall. More housing near metro stations like Takoma Park would also allow for more types of housing for families like mine so that we can one day afford to live in the area.
233	I'm a daily rider of Metro and often park daily at the Takoma lot. That said, I am in full support of WMATA's efforts to re-develop this space to build metro accessible housing on rare infill space. It is crucial that we provide housing in our community that is walkable to mass transit.

234	There must be some way to provide parking for the public. I am unable to walk to the bus stop. I am not alone in this. Dig a parking lot or keep things as they are.
235	This is a great project that will bring needed housing and commerce to the neighborhood and is in line with the city's vision to build more transit-oriented development. It aligns with a number of DC plans, such as moveDC, the Comprehensive Plan and Sustainable DC, among others. WMATA should move forward with this plan with haste. Further, WMATA should reconsider the presentation's guidance that Fort Totten serve as the new destination for residents and commuters seeking parking. The Fort Totten parking facility should be developed with even greater urgency due to both it's urban location, access to bus transit, access to the Met Branch Trail, and the fact it serves both the Red and Green Lines. This parking facility is in mis-alignment with the District's vision and its key planning documents. The same could be said for the Silver Spring Transit Center, which lacks development above the bus depot and has two large sparsely used parking lots (which I do myself occasionally use). But that is outside the scope of this project.
236	I depend on the parking spaces to access the metro and removing the parking spaces will make it more challenging to use the metro to commute to work. Where are commuters who have to drive to the metro supposed to park if we aren't close enough to walk? Does DC or Takoma Park, MD expect to modify the zone parking to enable parking on nearby streets? There is only a small amount of street parking nearby that is unzoned, and eliminating the metro parking will likely reduce the availability of those unzoned street parking spaces. Please consider an alternative plan to fully eliminating the metro parking or consider modifications to current zoned parking nearby the metro to enable to metro to be accessible to those who don't live within walking distance.
237	I live nearby in the historic district of takoma park. I am fully in favor of replacing parking with housing and mixed use retail. It is a horrible waste of public resources to use that space for cars so that wealthier individuals like myself can have more convenient access to the metro instead of someone who could live right there.
238	I am supportive of this project. Open-space parking lots like this are a waste of usable space for affordable and transit-oriented housing. The project should include some parking for metro riders so they don't park in the nearby neighborhood. In the spirit of Montgomery County's Thrive 2050, the Climate Action Plan, Climate Ready DC plan, this type of project is what we hope to see more of in the region. Please ensure the project achieves a high level of a green building certification, is all-electric where possible, and includes climate adaptation features.
239	I strongly support the reconfiguration and redevelopment of this land. Please work with relevant parties to improve and/or straighten the Metropolitan Branch Trail through this site.
240	I would support a proposal that removes 1/3 of the parking, but this proposal goes too far. I use the parking lot regularly, and though it is usually not at full capacity, removing all the spaces would create a major inconvenience. Saying we can go to Fort Totten is not realistic since their parking is 20 minutes away and often full. I purchased my home in Takoma Park in part because of the convenience of the metro station with park and ride spaces. I like the idea of more housing and retail, but not at the exclusion of all metro parking.
241	This is a fantastic idea that is long overdue. The priority of WMATA, and it's infrastructure, should be serving people; not cars! Moreover, making room for much needed housing in this area is the type of transit oriented development that is needed for a sustainable future in DC and Montgomery County. I fully support this project and urge WMATA to see it through!
242	WMATA should take all efforts to change parking at the station to support development projects.
243	Please accept the proposal to reduce parking in favor of more housing in TP. Our area needs additional units and density. Consider making parking available under the new building!
244	I am innfabor of the new building with apartments and retail. However, vutting 144 parking spaces(they are not Kiss & ride they are day parking for commuters) would be a mistake without alson improving the frequency and reliabilitybof rideon bus services from the Maryland side. Preserving 50 spaces while also increasing the parking charges to control demand might be a good compromise. The charges are currently $5 for a full day.
245	I am a resident of Takoma Park, MD who has used Metro and these parking facilities for over 26 years. I support the development of this parcel for apartments and retail, as well as the relocation of bus bays and the reconfiguration of parking.
246	I fully support the proposed development at the Takoma Metro station. It will provide much needed housing and also reduce the need to drive in favor of taking public transit.
247	I am in support of this proposal. We need less parking and less auto infrastructure, which is killing people and our environment. We need more housing and help alleviate our housing crisis and more car-free and car-light

	residents who can support the Metro we love. Please advance this project without delay. I appreciate the opportunity to give feedback
248	I am a Takoma Park resident and property owner. I also live 2 blocks from the proposed project. I fully support this project and the proposed plan appears sensible and will greatly increase the variety of housing and retail adjacent to Takoma Station. In addition, the project will provide additional noise reduction between the trains and the residential neighborhood. Takoma does not need to protect parking.
249	My comment is inspired by the pleas of a neighbor, who bought a house near mine specificly so that she could use her car to access Metro from the parking at the Takoma Station. She feels that it is the safest way for her to travel with her mobility issues. I support additional affordable housing but think that some parking spaces, especially for those with mobility challenges should be retained in order to enable independence among riders with various needs. Thank you for considering real people and their concerns.
250	This is a good project. Metro should not be running massive parking lots in urban locations, where much needed housing could be built instead. We should be locating dense housing adjacent to metro stations to maximize transit use. Fort Totten is another location where this could be done.
251	I am very much in favor of this initiative. Kudos to Metro for being creative about increasing future ridership as well as recognizing the importance of density near transit. Best wishes!
252	We live about 2.5 miles away and rely on the parking spaces for our daily commute by metro. We only have one car and we have created a routine that includes using it to drop off and pick up our kid from daycare. Without the parking spaces that routine falls apart. We will likely have to save to buy another car and we will stop using metro. This plan makes metro less accessible for people like my family. Please prioritize including commuter parking spots.
253	Removal of the 144 Daily Parking spaces is a terrible idea. I am a handicapped senior, who moved to the Longbranch Silver Spring area. One of the main reasons I chose the house I bought was because of easy access to occasionally use the Metro. I drive a short distance, park my car with all my emergency supplies and equipment, enjoy a day downtown or visit many doctors in the Dupont Circle area and come back safely to my car even at night. Not having that easy access to the station - having to take a scheduled bus with limited hours would completely ruin this access. And not only for me, but for many tens of thousands of others who live a short drive away from Metro and use it as I do. My blind, diabetic and handicapped husband passed away in 2021, but we used my ability to park at the Takoma Metro as a lifeline to get to his doctors and enjoy mobility and city life safely.
254	Removing any parking is ludicrous! The only people this plan helps is contractors, not the people who use the station.
255	I strongly disagree with the planned changes to the Takoma Metro station. My husband and I depend on parking at the Takoma Station in order to be able to commute using Metro to our daily jobs. If the parking goes away, I don't know how we will get to work, and it may mean that we drive or have to find another less environmentally sound solution. It will also, inevitably, increase our commute times. If you look at a map of the metro, you can see that all of the other metro stops out as far as Takoma have parking, because cars are (unfortunately) necessary to get to the metro in these areas. Takoma already has less parking than these stops, so why would you take away what we have? In addition, it looks like you are planning to take away many of the bus options by transitioning to only one bus stop. This is a huge decrease in service for the Takoma area and is unacceptable. The 'bus loop' is also absolutely necessary as a way to separate buses from the near grid-lock situation with cars around the station during rush hour. Taking it away will harm the traffic patterns and decrease quality of life for both the bus riders and also for the drivers in the area. Finally, this in conjunction with the parking going away will increase the nightmare for (newly non-driving and non-parking) pedestrians trying to get to the metro (it's already not a great walking set-up nearby). This is overall a terrible idea. Do not enact the proposed changes.
256	I think this area should be developed. The parking lot is barely used.
257	I am opposed to removing all the parking at the Takoma metro station. I rely on being able to park at the station, especially when riding the Metro at night due to safety concerns traveling by myself (neighbors have been mugged walking home when followed off the Metro)
258	My family relies on parking at the Takoma metro to commute to work. If you eliminate parking at metro (or cut it down to a tiny 16-spot lot) it means we will have to drive into the city. It seems irresponsible to keep approving all these new developments in the Takoma neighborhood while eliminating parking. Takoma is a suburban community that does not have the bike or public transportation infrastructure to support all these new developments and residents while eliminating parking. I can't rely on the bus to get to metro because it's still not back to pre-pandemic frequency. Parking at the metro is essential for metro commuters!

259	I support better utilizing the land for infill development. However a 90% reduction in parking spaces is drastic. It makes sense to have regular daily Parkers be directed to Fort Totten parking garage but on any given weekday, there is still a need for more short term parking than 16 spots. If it is possible to increase the spots by a few, that will help many of us commuters being picked up.
260	I rely on the parking at Takoma metro to commute to and from work via metro. I do not live near metro and need to be able to park close enough that when I return I can retrieve my car quickly to pick up my child at daycare. There is some street parking nearby but it is a fairly significant walk in bad weather or if running late. I support the idea of more housing but would strongly urge you to consider leaving more parking for commuters than is currently planned. Thank you for considering.
261	An informal poll of my neighbors living on Gist Ave (7 blocks from the Takoma Metro) showed that ALL are against removing parking spaces. The parking lot is being actively used by metro riders/commuters during the work week and on weekends for riding to downtown DC, etc "No" to removing parking spaces.
262	I'm supportive of more housing
263	As a resident of Takoma Park I am against the plan as it currently stands. More housing is a great thing to be sure, but it appears to be at the expense of green space and a significant impact on available parking. On a daily basis more than 16 spots are in use at the metro. This metro does not have sufficient bike storage to allow folks to bike to the metro as an option, and many area residents live too far from the metro to walk. Taking the bus instead of a car adds at least 20 minutes to a commute making it not a feasible alternative. Already this area suffers from near miss accidents on a regular basis because of the terrible set-up for pick-up/drop-off from the metro. Cutting the parking area this severely will also push cars that wait there for pick-up into the street and increase the likelihood of accidents, including those involving pedestrians. While certainly parking can be reduced, I think it is ill-advised to reduce it to this extreme level and will create more problems then it solves.
264	I would prefer if more of the parking spaces were preserved. Sometimes I use the metro with my kids to go downtown to the museums, but we are too far to walk to the metro, and the bus schedule is not very convenient or reliable. I drive to the metro and park there. If 144 parking spaces are removed then I will likely not drive to the metro or use it anymore. I do not think this plan will increase metro use.
265	The current kiss and ride feature is essential to dropping off Metro passengers by auto. Being able to stop the car, allowing the Metro rider to get something out of the car's trunk, and then walk easily to the Metro entrance is important to our household on at least a once a week basis. The current arrangement works, though after dark or in the rain, the walk from car to Metro turnstiles feels a bit dark (so a security concern) or in the rain, wet. This could be improved easily with more lights, a canopy covering and perhaps allowing the drop spot to be closer to the actual station entrance.
266	Yes to the housing!
267	Parking is a VERY important aspect of my ability to take the Metro at Takoma. If there is no parking, I would not be able to metro and would have to drive to downtown DC. Keep the parking lot at the Takoma Metro!
268	I park at the Takoma metro station at least 2x a week. The lot is not all kiss and ride parking, the vast majority is daily parking and is typically at least 3/4 dull during the week. Without the ability to park at the Takoma metro, I will have to drive to my office in downtown Washington DC instead of taking the metro.
269	I recently started parking at the Takoma metro station because the buses (12, 13, 25) are not frequent and reliable. I found myself too often waiting in the cold for the next bus (especially after work in the evenings). I decided to start parking in the long term section and it has enhanced my commuting experience significantly. I don't usually have a problem finding long-term parking spots which is wonderful. I think it is important to have these parking spots available to commuters in the future and I do not recommend moving the location of the parking because the proximity to the metro station is ideal. Please construct the proposed mixed-use development in another location. Sincerely,
270	I am in favor of this proposal
271	I do not think that metro should get rid of the parking spots. Train riders deserve to be able to park at the bus in this area as they are able too at Fort totten and other stations which are located in areas that have elements of suburbia. Eliminating these parking spots will most likely reduce ridership in a time in which Metro needs people to ride the metro .
272	We use the Takoma kiss and ride frequently as a convenient and safe place to pick up or drop off family or friends taking the Metro. I hope this doesn't go away.
273	The proposed changes to the Takoma Metro "Kiss and Ride" parking lot will introduce significant burden to the residents who rely on this parking for access to jobs and facilities around the DC metro area. Specifically, the parking area currently provides necessary accessibility to the metro, particularly for people who cannot

	afford housing close to the metro stop or bus routes. Removal of the parking area will prohibit access to lower income communities and promote further gentrification of the area. As a resident of the area and a frequent rider of the metro I, as many in my community, rely on the metro parking to get to my job. I am confident that the metro will consider the significant economic and social repercussions that this proposed project will have on our community.
274	I fully support this development. Climate change is real and our population is increasing. Building high density housing near the metro is the best way to fight climate change. I have lived in the area for 7 years and am excited for this development to move forward!
275	This is a TERRIBLE idea. D.C. Needs to use all of its empty housing vacated by empty business in the downtown. Furthermore, cramming more housing into Takoma Park areas is not wise. More crowding? Really. Finally, if METRO (which I ride daily) wants to recover its $$, EVERYONE needs to pay - MANY people jump the gates daily and refuse to pay for the bus. This is a nice green area for many of us and if we really want to be GREEN - we need to use all of the empty housing that is vacant and probably overpriced. Tearing down this lot is NOT the way to resolve METRO $$ troubles; addressing the real problem of unaffordable housing in DC AND folks not paying for their ridership fares - that is the problem. Did folks notice that the 7-11 at this same area of Takoma was just sold and more housing was placed on that corner? Where will this ever end?
276	Please do everything possible to prioritize transit, walking and biking.
277	Having parking is an incentive for our family to use Takoma Station. Without it, we would consider driving.
278	I use the parking at takoma station frequently. Without more frequent and predictable ground transportation from my home, the station will become less accessible. Its unclear if the proposed plans eliminate all public parking spaces, or just reduces the number. A reduction in number seems feasible. Eliminating all public access parking without comprehensive upgrades to bus system in Takoma Park, Takoma and surrounding Montgomery county region would be a disservice to the community.
279	I think this proposal is horrible and I oppose it vehemently. I don't understand how 144 spaces can be labeled as "kiss-and-ride" spots. Those are daily parking spots with meters that charge $5 for the entire day. This change would entirely eliminate my ability to use the Takoma Metro Station.
280	I use the parking lot often and would like it to remain. If parking is removed, parking will shift to Piney Branch and risk more accidents with the higher car traffic on Piney Branch
281	I use the Takoma park and ride 3x a week. I park my car here each time. It helps reduce traffic congestion in the city for commuters. I think it would be very disappointing to see the parking spots eliminated, thus making it impractical for people to drive and and take the metro, which I believe is what it was designed for in the 1st place. Please reconsider.
282	I am opposed to Metro eliminating parking spaces at Takoma Station. Daily and hourly parking is a necessity for many residents, including myself, at a time when metro bus service has been severely curtailed. Please make sure parking spots remain available!
283	I am writing to support the proposed development at the Takoma Metro Station. I have lived in Takoma Park, MD for over 20 years and I have used the parking lot frequently. While I have appreciated the convenience that the parking lot provides, it is far more important to me to have in-fill (including affordable) housing that is metro accessible. We all win when we reduce the need for car trips. As the plan develops, I hope that it will optimize bicyclist and pedestrian-friendly features. Thank you for the opportunity to comment.
284	This is very sad news for our household. We depend on the parking at the metro for our commute because other alternatives are just not feasible. We don't live close to a bus route, it's too far to walk or bike, and we can't drive because our jobs don't allow for parking. If this happens we would have to consider moving from the area, which would be a shame because we like it so much. If you plan to remove all the parking spaces, please at least consider replacing them in a nearby location so people like us who depend on them can continue using metro and still live relatively far away from the nearest station. Thank you S. Persson resident in the Takoma park area
285	This is a terrible idea, taking away spots that already are NOT meant for all day parking. A quick trip on Metro will now require scouring the near-by neighborhood for spots. This "survey" is coming late, and it seems like the decision has already been made. Takoma Station is a low profile station, with very limited parking compared with SS or Fort Totten, and it should be left that way.
286	I am opposed to the removal of the 144 parking spaces. These spaces are needed by the community and are especially important for those of us with disabilities and for seniors.
287	Takoma station needs parking spaces for the commuter community, especially for elderly and disabled riders. A kiss and ride serive is not adequate for our needs. In order to provide these spaces development must be on

	a smaller scale. The proposed building on the site is much too big and overwhelms the residential houses and low height apartments that are adjacent to the station.
288	If you eliminate those 144 spots, where do you expect people to park? Not everyone has ready access to a bus line or lives too far away to walk. Won't this push more cars into the neighborhood where parking is often an issue. There will also be more cars associated with the new development. I strongly oppose this measure, as my family lives in Shephard Park and at times it is not feasible to walk to the Takoma Station.
289	As a long time resident of Takoma Park, and now a bona fide senior of 71, the importance of being able to drive and park at the Metro has been so important and helpful. It would be both a major inconvenience and a bit of an insult to us older citizens to remove badly need parking. I am confident that I am speaking for many others in the community to request you consider keeping as many parking spaces as possible. Thanks you. Steven Mackler Lincoln Avenue Takoma Park, MD
290	Metro riders with mobility issues and who live outside of walk-shed of the station will have significant reductions of access to Takoma Metro with the loss of 144 metered parking spaces. The plan labels these Kiss and Ride, which does not adequately describe multi-hour parking. While not daily parking, these spaces provide extremely useful, close to entrance short term parking. The alternative stations of Fort Totten and Silver Spring represent driving times of 10-15 minutes additional from Takoma Metro Station. Please consider expanding the short-term parking, as part of the configuration of outdoor space or as a condition of development. Frank Demarais , Maple Ave Takoma Park MD
291	As a Takoma Park resident I believe the loss of public parking adjacent to the Takoma Metro station would be unfortunate both for those who drive a significant distance to make use of the existing lot and those who live closer but use the lot on a sporadic or spot basis. The existing parking is used for more than simply "Kiss and Ride" access to the Metro, but more extensive use on both a regular and spot basis. The description of the changes describes both retail and further housing development that is likely to bring increased traffic to the area at the same time the level of public parking is being reduced. Losing that parking, along with the added development that is planned for the site, will also put additional pressure on limited parking near the station in Takoma Park. Taken as a whole with the significant current development (e.g., at Eastern and Carrol and on Willow), the changes now being planned portend less comfortable ready access to Metro and a more dense, potentially foreboding Takoma environment.
292	Reducing parking to nothing will prevent some folks (older, infirm, handicapped, families with young children,...) from using the station. Also problematic is the elimination of buses, which ties into some of these same access issues.
293	I am an area resident who parks at Takoma Station some, but not all, of the time that I use the Metro. It is a misnomer to call the parking spaces "Kiss & Ride" -- people park, get on the metro, do their business wherever, return to the station, and get back in their cars. We need to keep this commuter parking. The developers of the site can make it possible if the planned building is not so big. I do not object to development of this property, but this plan reduces our accessibility to the Metro. We need a plan that includes parking for area residents, especially the disabled and elderly.
294	As a resident of Takoma Park, I wholeheartedly support development of the area by the metro. However, the plan to reduce parking from 160 spaces to 16 is too extreme. I live about a 20 minute walk to the metro, so I am fortunate that my husband and I can walk there much of the time, but that is often not feasible due to weather, timing, or the logistics of having a baby with us. I consistently see more than 16 spaces filled in the lot. I'm concerned about spots reaching capacity under the new plan — especially if some spots are filled by patrons of new businesses in the development.
295	I'm concerned about losing 144 public parking spaces to a development. Many people, including seniors, disabled and folks who cannot walk to the metro rely on these spaces to commute into the city. Additionally, traffic backs up pretty bad on carroll ave and im concerned about the light and affect it will have on backing up traffic on blair road.
296	It is very disturbing that this proposal does not accurately describe the parking proposed for tremoval. This proposal will remove All existing community parking. This is unacceptable and will severely limit access to WMATA transit by community members in Takoma Park Maryland. Last time I checked, WMATA stands for TRANSIT and not housing. That means transit functions should be the highest priority, not housing. development including this proposal, should NOT be allowed because it will permanently reduce transit usability by those in the larger Takoma Park community.
297	WHY? Silver Spring Metro is a nightmare to try to park. Fort Totten can be on the scary side. Takoma metro is small and tolerable. When you can get the pot smoking kids out of the elevator corridor. Metro is there a

	need for multi- dwelling units or is this a money grab? Has there been a study? Has Old Takoma voiced their concerns. I for one oppose the removal of the parking lot.!
298	The parking spaces at the Takoma Metro station are an important way for our community to access use of the metro trains. Many neighbors can walk, but many also cannot make the distance, and driving to the park is the best option. Additionally, our neighborhood (sadly) is the scene of many muggings in the late evening. When I access Metro for evening events (sports events and cultural activities) I drive to the station as I do not want to walk home in the dark. If the parking lot was not there it will be a burden on close enighbors for street parking, which is limited. The designation of "144 kiss and ride" is an inaccurate description of the parking, which is actually hourly parking for Metro riders. If it exclusively becomes kiss and ride that will double the trips, if indeed the rider has a family member/friend dropping them off or picking them up. Abolishing a well-used community resource that actually benefits Metro users is short sited. Carol Hightower Cedar Ave, Takoma Park, Metro rider since inception in 1976
299	Removing all the parking will make me less likely to commute by metro and instead would make me have to drive into the city for work. The parking at Takoma makes it more accessible.
300	Regarding the "Kiss & Ride" - This is clearly more than a Kiss and Ride parking lot. The parking lot is used for hourly and daily parking. This is an important feature of the Takoma metro location. While perhaps it could be reduced, converting to a Kiss and Ride only is an extreme change that would have significant consequences to those who rely on the station for commuting into the city. Similarly, what would people use if there was only one "drop off" bus stop only? This is a drastic change with long lasting effects to multiple commuters! Please consider thoroughly!
301	The 100+ parking spots at the Takoma Metro Station are not used for Kiss and Ride but for parking. It is quite weird to see them referred to as Kiss and Ride spots. I have used these parking spaces for many years so that in evenings and on weekends I can take advantage of the subway to attend cultural events and classes downtown or go to restaurants and be able to drive home on return. This is one of the main reasons I paid a premium to live in the Takoma area. The typical time needed for one of my trips is 4 to 5 hours. Walking the streets at night when I return home has always been worrisome but as I age it is impossible to imagine that muggers will not be looking for foolish people like in the dark of the night. DC police coverage in this area is renowned for its lack of presence. To expose citizens to crime is itself collusion with criminals. Taking a cab or Uber is too expensive. Without being able to park at the Metro I will either stop attending events in town or drive if there is a way to park affordably in town. Removing these parking spots is the opposite of transit friendly. It is transit antagonistic and defeating. Having parking spaces at the Metro stop, by contrast, supports the economy of Washington DC and this supports the business mission of Metro, to serve the transportation needs of residents. The very thought of removing all these spaces is bewildering. There is no parking at the Silver Spring Metro, and the parking at Fort Totten is way too insecure for evenings. Please be reasonable and restore enough parking to serve evening demand for 4 to 5 hour periods. You are the transportation experts, and I hope you will start acting like such. Thank you.
302	Excited to see the development occur especially the new guiding design and integration of the green space. There are many who are mobility assisted in the local community so pls keep in mind widths and grades of walkways and paths, ramps and access points to city owned sidewalks and ability of car drop off areas. Overall excited to see the residential and retail (a grocer would be superb) in this new development.
303	It will not serve the Takoma and Takoma Park communities to get rid of all the parking at Takoma Station. The parking lot is NOT all kiss and ride, more than half of it is metered spots and spots for people with disabilities. The parking lot is very busy and well used and many people, including my family use the parking lot in order to use Metro to go downtown in the evenings, for meetings downtown, or on weekends for the day. We would not be able to do that if we could not park nearby. The neighborhoods around the metro parking are already very parked up with residents and are permit only. So many Metro riders depend on the parking lot at Takoma station. You might be able to cut it in half and have the kiss and ride part elsewhere, but the regular metered and disabled parking needs to stay.
304	Removing the parking from Takoma Station is a terrible idea. It will lower metro ridership and increase congestion and the parking burden on the surrounding neighborhood. Aside from commuters, it is a key conduit to allow residents to travel into the city. It is much faster to metro downtown compared to driving. If parking is removed, those trips will be replaced by cars, or worse, eliminated altogether. The net benefit to the bus stops is minimal in comparison. There is plenty of space to add bus stops in the existing bus loop, or on Eastern Ave or Cedar St.
305	I strongly oppose the proposed reduction in the number of kiss and ride spaces, as well as the overall reduction of public parking spaces on the Metro site. Many residents who want to access Metro from Takoma

	cannot walk from their homes to the station due to various disabilities and conditions. With an aging population, the number of residents who would be adversely affected only will increase. The limitations on Metro access that would be caused by the proposed changes would be exacerbated by the influx of residents in the proposed condominium who will take up on-street parking slots due to the inadequate number of parking that are provided in the condominium plan. Yuri Zelinsky Takoma Park, MD
306	I am writing to urge Metro to retain the 160 public parking spaces at the Takoma Metro station. Contrary to the environmental evaluation, only a few of these are Kiss & Ride spaces: All but roughly a half-dozen are long term parking. Also contrary to the environmental analysis (performed during the pandemic when telecommuting was much more prevalent than before or since), during normal times they are used heavily. And as long as they are available, these parking spaces will continue to be used heavily. Having parking available at the Metro is essential for those with disabilities, seniors, parents with small children, and others who have difficulty getting from the Takoma Metro station to their homes nearby. It is also important for those wanting to use Metro to access the District in the evening but feel unsafe walking home after dark due to frequent outbreaks of muggings in the area surrounding the Takoma Metro station. Bus service is infrequent, unreliable, and, in many cases, unavailable outside of rush hour. For many, the distance from the nearest bus stop to their homes may be unacceptable as well. The environmental evaluation claims that parking at Fort Totten is a good substitute for parking at Takoma. I beg to differ. Once people are taking the extra time in their cars to get to Fort Totten, some (perhaps many) will find it just as easy to continue driving to their destinations. For others, the parking lot at Fort Totten is unacceptable due to distance from the parking lot to the station, fear of crime, exposure to the elements, etc. Metro is certain to lose at least some ridership as a result. Sufficient public parking will also be necessary to make any commercial development in the proposed mixed-use project economically viable. Driving continues to be essential for anyone making bulky purchases like groceries, dry goods, etc. Anyone claiming otherwise is deluding themselves.
307	We are senior citizens .We live in takoma park and often drive and park on the parking lot to take the metro. If we cannot park there anymore, we would not use metro anymore since it would discourage us by removing so much parking. Since we live here, it would be helpful to reserve the parking spots for the locals. Thank you
308	I believe it's incorrect to label current parking "Kiss and ride". For years (until sometime in the last couple of years), the Takoma Metro lot was not intended for commuters, nor was it considered a "kiss and ride" lot for people to be dropped off. The short-term (up to 7 hours) parking spots have been a critical asset for many local residents (both DC and MD) who need to use Metro for a whole range of reasons - medical appointments, cultural events, and more. Not everyone can walk to Metro -- elderly, disabled, small children, and those who are uneasy about the safety of walking home late at night. Please ask the developers to retain 144 parking spots, with a 7-hour limit to minimize use of the lot by commuters. Cutting back on these parking spots is going to mean a reduction in Metro ridership. Thank you, Linda Carlson, Valley View Ave., Takoma Park, MD
309	I'm a resident of Takoma Park, and live just a couple of blocks from the Takoma metro station. I write in support of the proposed changes. Our aim should be to increase the use of public transportation, and reduce the dependence on cars for transportation. The proposed changes do just that, by increasing the potential for the site to be used in a way that will bring increased ridership to the metro. I've lived near the metro for 10 years. For most of that time the parking lot was a kiss and ride, and was very under used. Increasing the potential for infill near the station, and prioritizing the space for users for public transport (rather than car users) is fully in line with METRO's mandate. Moreover, for those people who are dependent on cars to access the metro, the Fort Totten station is very close, and has an enormous parking lot that is never full.
310	I am 80 years old and use TAKOMA METRO regularly. I live too far from the station to walk, so I drive and park and so appreciate the available parking. I only drive in the neighborhood to buy groceries at Safeway on Thayer, the local TPPC church and the METRO parking lot. I am working hard to stay in my home and use public transportation. I WOULD GREATLY GRIEVE NOT BEING ABLE TO USE THE PARKING LOT. I cannot drive to Fort Totten as my Dr wants me to drive only a few blocks in the daylight hours. Not having use of a parking space would be both sad and unthinkable as I live alone and have limited mobility. PLEASE ALLOW MORE PARKING SPACES THAN YOUR PLAN SHOWS. It would be horrible for the many older persons who have been regular riders since METRO opened and cannot bear to loose the ability to park and ride. Thank you for considering my needs which represent all my friends who live near by. Mary Duru
311	The 144 spaces now described as Kiss and Ride, are not Kiss and Ride. They are metered parking spaces so that people can drive to the station, park, pay, and ride MetroRail or Metro Bus. If Metro eliminates these spaces, people will drive all the way to their destinations rather than parking and then riding. Takoma Metro riders are usually going to downtown DC. MD and DC traffic will be worse and Metro ridership will go down.

	Plus the proposed changes would eliminate parking for disabled people, who could no longer use the system and would drive to the destinations rather than ride a Metro bus or train. I'm for building housing at the Metro. I favor smart growth. However, eliminating (rather than reducing) parking opportunities, would not be smart and would counteract our efforts to increase Metro ridership.
312	We who are aging who live in Takoma Park Maryland need to keep enough parking spaces so we can park at Metro. Do not get rid of 144 Park & Ride spots. Keep all of the 144 Kiss and Ride spots. Also make it easy for us in Maryland to access Metro without getting run over by buses, climbing stairs, etc. Jill Gay, Spruce Avenue, Takoma Park, MD
313	I am opposed to removing the parking spaces which are mischaracterized in the description as solely "kiss and ride". While there are a few kiss and ride spaces now, most of the current spaces are available for multi-hour parking. Their removal would make it more difficult to make difficult to make shorter duration trips on metro (e.g. for medical appointments, business meetings, shopping, etc.)
314	I am very concerned about the loss of public parking. My husband and I live not far from the Metro, and usually walk, but as we age we may need to park. I am 75 now. If all that is left is "Kiss and Ride" that won't help us at all. Please maintain the current number of parking spaces.
315	The proposal states that it will remove 144 kiss and ride parking spaces. These are no longer kiss and ride spaces, at the present time they're commuter spaces and are fully used. It's important to keep some commuter parking at this station particularly for individuals who have a disability for our elderly. I hope that metro and the development partner can reconfigure development to provide commuter parking
316	As a resident of 343 Cedar Street NW next to Takoma Metro, I fully support the plans to develop this site with housing and retail, along with the bus bay changes. From everything I have heard about this project, it will bring significant improvements to the neighborhood. There is such a big demand for new housing in the area, so I would favor the maximum number of units to be built. The additional residents will also strengthen the shopping and restaurant options and help keep the area around the station safe.
317	I live one-half mile from the Takoma Metro station. I can and do walk there. But many of my neighbors in our city cannot, either because they live too far away, or because they are older or live with disabilities. In addition to older and disabled neighbors, many of us currently use the parking in the evening, because sadly we do not feel safe to walk home alone from the station after an evening out in DC. I strongly object to Metro's decision to eliminate all parking at the site. Your description of the current 144 spaces as 'Kiss and Ride' spaces is absolutely false, and contributes to the lack of trust of our community in your communication about this project At a minimum, please consider retaining some parking for senior citizens and people living with disabilities. I do support the overall development plan, and I support reducing the number of parking spaces - just not eliminating entirely. Last, I have some concerns that the plan does not allow for future expansions of bus transit (more bus bays). Thank you for considering my comments.
318	Thank you for the opportunity to respond to this request. The City of Takoma Park City Council would like to submit the following feedback regarding the proposed changes to the Takoma Metro Station. We look forward to working with you on addressing these questions. Talisha Searcy Mayor of Takoma Park
319	I support the proposed parking and bus bay changes at the Takoma Metro station, as a step toward boosting transit ridership and more effective land use including the creation of new, mixed-income housing and commercial and park space. A reduction in parking is appropriate and welcome as way of increasing transit utilization while reducing the traffic impact of new residences and businesses. There are adequate parking facilities nearby in Silver Spring and Fort Totten for those who do wish to drive to/from a station for transit use. The loss of Takoma parking will be offset by ridership gains from new residents. Thank you for your consideration.
320	There are not 145 Kiss and Ride spots. There are 145 PARKING spots. Parking should be retained at least for handicapped and 65+ citizens who may find it difficult or impossible to drive to Silver Spring or Fort Totten to park. Importantly- and this should be key to any redevelopment- as much green space should be retained as possible, including saving the large mature trees in the current green space and along the Metro tracks. I've seen to many developments where the entire area was clear cut to facilitate construction. This need not be the case and it should be made a priority to save as many of the large trees as possible.
321	I am in favor of removing the automobile parking spaces from the Takoma Metro Station. Providing parking at this site is a waste of space - we should instead focus on making this site highly accessible on foot and by bicycle. Most of the people who are coming out in opposition to removing the parking live within an easy walking distance of the Metro Station, in the surrounding neighborhoods. They are going to have to walk to their final destination once they get off the train, anyway - so a short walk to the Metro Station should not be an undue burden. This land is so valuable, and we gain so much more by building a transit-oriented

	development that is also a destination for the people who live near the Takoma Station, than we would gain by providing real estate for people to park their cars. We need high volume, secure bicycle parking at this station, as well.
322	The parking lot at Takoma Station CURRENTLY PROVIDES HOURS LONG PARKING and MUST CONTINUE to provide that parking, or even more parking, to the local community. It seems dishonest of you to claim that all current spaces are kiss-and-ride spaces since you must certainly know that these spaces provide hours, not minutes, of parking and are widely used by the community. Revise your plan. Include at a minimum the current level of parking for patrons.
323	The parking in the current proposal looks fine - this is an underutilized parking lot of prime real estate that should be used for housing. Particularly once the Purple Line is built, the Takoma stop will be surrounded in all sides by other nearby Metro stations. Please do not hold up this development.
324	This plan to remove all current commuter parking (It is not Kiss and Ride only) will create a hardship for commuters who enter Metro at the Takoma Station. Residents with special needs and seniors especially will not be able to access the station as they do now. Early morning and late night Metro users from the area but who live too far to walk would have to use taxis. This removal of accessibility is not necessary to the building project at Takoma. The developer just needs to make sure not to plan a building which is too large to allow current and perhaps even more parking for residents of the area around the Takoma stop. I personally use this lot and pay to do so. The lot is almost always full ever since a proper system of payment was installed. If I the paid commuter parking is completely removed from the Takoma Station, I and others will be forced to use taxis. Removal of commuter parking should not be necessary for development to take place. I would like to see development at the Metro, but not at the cost of our commuter services.
325	As a resident who has used the Takoma station for various reasons for the last 10 years these are my general comments: Parking: - These are not all kiss and ride spots. They are paid parking for all day. This is misrepresented in the proposal. - The parking proposal will directly impact me. I park there up to four times a week for work and also has made it easier with older relatives who can not walk as well on weekends. I will have to probably switch to another metro stop or use a highly unreliable bus route. This will provide a very big inconvenience for residents. - Suggest incorporating more paid parking (maybe a small garage) to fully represent and provide is being used in the station. Green Space: -Have you ever came off the metro in the spring and the fall and after a day in the "grind" feel this sense of calm? That is what the green space at the metro provides for me (and I can not believe I am the only one). This proposal is destroying most of that. This will directly impact our community in may ways- the look and also peoples emotions (green spaces create calmness and studies shown less crime). What will happen to the cherry trees? I think the lose of this green space needs to be addressed more fully and reconsidered. I would pick it over the parking.
326	I strongly oppose the elimination of rider parking at the Takoma Metro. While we live a 12-minute walk away from the Takoma Metro station, when we go out at night (to a restaurant, play or sporting event) and return home after 10:00 pm, the walk home is unsafe. For the 26 years we have lived in Takoma Park, we have always parked at the Takoma Metro when going out at night. To eliminate this option will sharply reduce or eliminate our use of Metro in the evening. That would be counterproductive to your core mission, which is to maximize the use of the Metro. Please redesign this project in order to retain the current number of Metro rider parking spaces at Takoma Metro. Thank you for your consideration. Bruce Kozarsky Willow Ave. Takoma Park MD
327	I want daily, hourly, and handicapped parking at the Takoma Metro Station preserved. I also want to see secure location for parking/locking up your personal bicycle.
328	I am a resident of Takoma Park who uses the park and ride. I am in favor of converting the parking lot into housing with increased bike access. Please also provide better transit options to the metro station, such as a tram line down Eastern Ave. Thank you. Gregory Kohler
329	It would be helpful to provide the data that support the claims. People will just drive to work or drive to another station. Those that are close enough can already walk or bike and that isn't always an accessible option for many. Why not mixed use but offer more parking to commuters not just the residents of the place being built? Takoma park Is larger than just those who live downtown and a huge hill divides parts and makes some options less accessible for people. Why does it have to be either/or? Why can't it be both residences and sufficient parking? The current proposal doesn't seem to provide that.
330	My name is Sabrina Eaton and I live across the street from the Takoma Metro station on Eastern Ave. I would like to share several concerns I have about the proposed changes to its facilities and how they'll impact neighbors and the surrounding community. It is flat out wrong to describe the parking you're eliminating as "Kiss & Ride." For $4.70, people can use an app to park there from 5 AM through 2 AM. That's all-day

	commuter parking. The lot is often packed. WMATA is supposed to be a transit agency and this plan would deny access to customers who drive to the Takoma station. The plan should retain more parking spaces for Metro users and ensure handicapped parking access to the station elevator for those who need it. I was also shocked there hasn't been a traffic study to analyze the impact of the proposed changes on surrounding streets. The traffic light you want to install at the Carroll St., NW entrance to the Metro station could have a disastrous effect on the nearby Blair Road/Cedar Street/4th Street NW intersection, a frequent site of accidents that's rated an "F" by DC's transportation department. It is foolhardy to proceed with that traffic light without analyzing its effect on surrounding streets, and factoring in traffic from the apartment proposed on the site as well as all the other apartment buildings under construction in the area. Your environmental study falsely claims that there's no flooding issues in the area. Runoff from your current bus ingress and egress creates a waterfall on my property during heavy downpours. Stormwater from WMATA's property gushes out the bus entrance, overwhelms the street's storm sewers, and streams over my retaining wall after spilling down my neighbor's driveway. These floodwaters knocked over our longtime retaining wall in 2021, forcing me to spend many thousands of dollars to replace it. Footage of this problem and a photo of my collapsed retaining wall is at the 3:17 mark of the below video on flooding problems in Takoma Park. Please use the Metro station reconfiguration to fix this problem and stop claiming it does not exist. https://www.youtube.com/watch?v=ZU4nzYpwLsY&t=197s
331	I am against the proposed changes. I use the parking at Takoma station at least 5 days a week, and allows me to use the metro conveniently and frequently. To call all the spaces at Takoma "Kiss & Ride" spaces is dismissive and not reflective of how the majority of the over 100 spaces are used. If the parking is removed from Takoma, I would find another solution to my transit needs, and avoid using the metro. The time it would take me to drive to Fort Totten, and proposed in the in plans, as well as the walking distance from the parking to the platform at Fort Totten (as I'm disabled and use a cane) make it unlikely that I would save any time using that station over finding another transit solution.
332	This is such a great reprioritization of space. We all know that some of the most valuable space in a city is the area neighboring a public transit station. Great to see this station mirror that of the transit-oriented developments in Arlington!
333	Hi, I'd like to comment that my wife and I are Takoma Park residents, and use the metro station regularly and find it very helpful. We often take advantage of the option to park our car in the lot and then ride, so we wanted to highlight that we'd prefer that a reasonable number of parking spaces be maintained in any eventual redevelopment plan. We understand if some number of spaces might need to be eliminated to make room for other priorities, but perhaps a reduction by half to something like 80 spaces would be more reasonable, rather than the proposed 90% reduction which seems overly draconian. Thanks very much, David
334	To whom it may concern, My name is Doug and I live about one and a half miles from the bus stop, and I wanted to express my concern about the removal of all of the parking spots at Takoma Park metro stop. Removing nearly all of the spaces at takoma park metro stop will make it much harder for me to get to work. Currently, I drive to the metro station, and park at the kiss and ride parking, and hop on the metro because I work close to downtown. The Bus is not very convenient for me to take to the metro stop, because it does not come often enough. While there are often some empty spaces in the parking lot, removing nearly all of the spaces is quite extreme. Frankly, I'm not exactly sure how I'd get to work once nearly all of the parking spaces are removed. And, I worry that removing all of the parking at the metro stop will make it so that those of us who drive have to park further away, in town near takoma park, where it is often challenging to find street parking already. If the goal is to use that space better for development, perhaps some of the spaces could be condensed into a small parking structure, or only "some" of the spaces could be removed (60-80 parking spots would probably suffice there). Thank you so much for allowing public comment, for reading this, and for taking my comment into consideration. All the best, Doug
335	I support most of the proposed changes, except the elimination of the majority of Kiss & Ride spaces. Allotting at least 50 spaces seems more reasonable to accommodate Metro riders who drive in to the station and park for the day.
336	I support redeveloping the site to include housing. I would like to see a bicycle access improved and connected with the Metropolitan Branch Trail. I would also like to see the park space preserved but add more amenities to activate it.
337	The parking spaces with affordable parking prices are the reason we use Takoma Station. Please do not get rid of all the parking spaces with affordable parking. There are very few metro stations with affordable public parking - so it's either drive to your location or find a metro with said parking. I can understand reducing parking places to develop something but please do not get rid of all of them!

338	Thousands of housing units are already being built or have just been built within a quarter-mile of this Metro. It is not clear yet whether more are needed. Meanwhile, the parking at this Metro allows people from throughout the region to park and take Metro, rather than drive into the City. This is essential to reduce car traffic in the City. Zeroing out the parking is a terrible idea. Also, there is zero need for new retail--retail is struggling, and there is a lot of turnover and empty storefronts nearby. The green space with large, mature trees is essential to the rapidly-growing community all around the metro. Do not fill it in. Thank you
339	I've spoken with a lot of people in Takoma/MD and some have said: - I don't see how I will feel safe walking through the complex at night after work when it's dark (females) - It looks like a bad idea (Ride On bus driver) -- I think you should ask the drivers their opinions as well as the residents and developers. - The stormwater runoff is already bad, it better not get worse
340	I am a manager of a Main Street Takoma small business and a resident of Takoma Park for almost 31 years. The City of Takoma Park has always been home to unique shops, restaurants and experiences. However, what sets it apart isn't necessarily what's here, but what isn't. The proposed change to the Kiss & Ride / green space does not convey efficient or aligned with the philosophy the town was founded on. I do think there is a compromise to better use the (mostly) empty parking lots. But, I do not think removing the green areas around the lots will be received negatively by those who have lived and work in the area. Over the last 5-8 years a shift has happened in Takoma Park. It is no longer DC's best kept secret neighborhood. It offered the convenience of city life but with small town friendly hospitality…an enchanting oasis. Alas, the proposed changes prove the charm is gone. Takoma Park is now suffocating. The area has boomed because it's NOT like DC. Sadly, this is no longer true. Roads have not been widened or modified to accommodate the projects built, every walkway feels cramped, it takes over 10 minutes to drive half a mile to work, the skyline is disappearing, construction plagues every block, and green is being replaced by asphalt and concrete. Please do not cram more overpriced condos or unwanted "flavor of the week" type commercial buildings in this city. Yes, please, streamline the bus area/routes and parking lot spaces to better serve the community. However, the ultimate goal of this proposed plan isn't based in utility. This proposal fakes as an efficiency plan, but in reality it's about future monetary gain with private companies; which is totally fine. I understand how things work. Just please be honest when presenting this to the public. Here's a novel idea: improvement is not defined by how much you ADD. The area I question CAN be improved WITHOUT building over natural/green spaces. In summation: the proposed changes to the Takoma Park metro area are not aligned with what the long time residents want for our neighborhood. It would remove too much green and natural space, and confirm the City is becoming just another generic, gentrified and unappealing city.
341	Please do not take away all of the parking spots. Parking in Takoma Park (MD and DC) is already sparse and a problem! Please do not build another monstrosity that will create more traffic in what is already a traffic heavy and backed up area. Please keep some of the green space!
342	I think the parking lot is underutilized and using the space for something else would be an improvement. I think a kiss and ride type lane is important, since I sometimes pick up and drop off people at the metro. They usually go through the elevator entrance/exit when I do that. I also take the bus sometimes and I think it's important to have multiple bays for drop-off/pick-up since so many different bus lines go through there.
343	These changes sound great!
344	I am in favor of smart growth which includes denser development adjacent to Metro stations. People in Takoma Park tend to have so many opinions and reservations about development that we end up with a NIMBY situation. Of course there are always downsides as well as upsides to any development project, and you can't make an omelette without breaking eggs. Bottom line is I support this project and hope it moves forward expeditiously. That is my personal opinion.
345	I support responsible transit development and hope that this change to the project creates more opportunities for multimodal transportation but most importantly provides an opportunity for increased affordable housing in the area near the metro station. I hope that there are steep requirements related to the % of affordable housing required in these units. I support the removal of the kiss & ride stops in favor of a more accessible train station for all residents and those without cars.
346	Please move forward with this project. It's absurd that this metro station doesn't have more housing, more density, and a civic lot for parking like every other metro station near it.
347	As a resident of Takoma Park, MD, I go to the station nearly every day and I can't wait to see what the area will become with new neighbors and amenities right next to the station. I understand the bus loop and parking changes are necessary to accommodate the new development, so to me, the changes WMATA is proposing are positive as long as the development occurs. For people who make use of the park and ride, could WMATA assist them in transitioning to use the underutilized Silver Spring garages? I also think there

	should be a better space for a pick-up/drop-off zone, such as formalizing the space that's already being used for that purpose underneath the overpass.
348	I do NOT agree with reducing the parking spaces. I use the lot to park and ride on the Metro. I live too far to walk to the Metro and this is the nearest metro to me. If you reduce the number of parking spaces, then I recommend changing the bus schedules so they come more frequently and adding bus services to Georgia Ave. I think the bus service should be increased with multiple buses. It is INSANE to only have one drop off. If you want to increase ridership and make this a public transit friendly locale, then there MUST be bus service to/from the Metro, especially if you reduce the number of parking spaces.
349	I think it makes sense to largely eliminate the parking lot and to make for a more efficient kiss and ride lane.
350	If you get rid of 144 spaces you will be effecting many people being able to park near the station. That is really a bummer. But I see the need for the buses to have a better turn around. Have you considered building a two story small garage in the remaining space allocated for parking? It would mean the loss of less than 144 spaces
351	I'm once again strongly let down by this plan. But since you clearly intend to proceed I request that for every mature tree you cut down you protect another 100 from ever being cut down and plant new trees 100 as well. Mature trees are critical to our future. Shame on you for cutting any of them down in the name of progress.
352	Hello, I am a resident of Takoma Park and I live five minutes by bike from the Takoma Metro Station. I'm writing in to express strong support for whatever parking configuration is most compatible with the largest, densest possible development on the Takoma site. As an unstably housed renter and young adult who worries that I won't be able to afford to start a family in the DMV due to its spiraling housing crisis, I am eager to see WMATA be a part of the solution by maximizing housing supply on its property. The parking lot is currently underutilized and many of the commuters who use it could instead access the station by Metrobus, walking, or drop-off options. I think it is a poor public policy choice to prioritize their desire for private vehicle storage over the pressing need for housing in the community. Thank you.
353	I am a resident and condo owner in Takoma Park, MD and I support development of the parking lot to include mixed use residential and commercial real estate.
354	If you add businesses and condos in this area, they should be required to have adequate parking to serve those who live there. While I understand this is designed to promote transit use, the reality is it will bring more cars as well and Takoma Park is already sorely lacking adequate parking.
355	While I support more transit-oriented development near this metro station, I feel that it should be done to preserve the existing daily parking spaces. It is a relatively small lot right now, with not many alternative parking options for daily commuters. Ride on bus options are currently very inconsistent and inconvenient, necessitating limited parking for some area commuters. While the lot has not been at capacity due to the impact of the pandemic, there has been a steady increase in use as people start to return to the office more frequently. As many people have hybrid work schedules, other lots that only offer monthly or weekly rates are not options (e.g. I commute two days per week, so a daily lot option near the metro is important). If this lot is removed, I will likely not use Metro at all--and drive into town for my commute, which is counter to the goals of this project.
356	As a 3-year resident of Takoma Park, I write to strongly support the development of metro's underutilized parking lot in Takoma DC. I fully support WMATA and EYA's vision of a vibrant multi-use neighborhood that will provide adequate parking for short-term metro use and catering to local residents using metro to attend events and outings down town, while allowing a large plot of land to be upgraded for a more productive use that will benefit the economy of Takoma Park MD and Takoma DC and provide much-needed housing in a time when that is in short supply. Green space near a bus loop never made sense and was never utilized. Since the construction of the Takoma metro station land-use policy decisions in both DC and Maryland have prevented significant redevelopment of many large plots of land, including this one. There is now ample research proving that the best environmental use of land around public transit is for housing and/or mixed-use construction, not an impervious parking lot that encourages more driving. Governments around the region are working to encourage the development of more housing, especially subsidized housing, around public transit nodes that were built with taxpayer support. The proposal creates the proper conditions to redevelop the land east of the station to build more housing, especially affordable housing. and appears to improve the transfer process for bus riders. The proposal will create the necessary conditions for Metro to earn far more revenue from its land at the Takoma Metro station than it currently receives through the operation of an underutilized parking lot. We all benefit from a financially healthy public transit system. The

	proposed redevelopment rightly balances the needs for transit-accessible housing, commuter access, bus transfers, and the preservation of open space. I enthusiastically support Metro's proposal!
357	Removing parking spaces decreases the utility of commuting via metro for many users. Takoma Station serves a community that is diverse and not necessarily within walking distance to metro. Condos only increase the ease of commute for those living in them! Keep the metro accessible to all!
358	Please do not eliminate so much parking for those of us driving to the metro and parking while at work. I do this 2-3 times per week, and having the ability to park supports my use of the metro because it allows me to pick up and transport my kids (and carpool kids) at the end of the day. Since more people have been coming back to downtown DC offices the lot is nearly full by late morning. There is no alternative where you can park this near the metro all day and pay online or with a card.
359	Focus on fixing the metro - lower crime, increase reliability. Stop taking on new projects until you get the baseline down.
360	I am a resident of Takoma Park and work downtown. The parking spots are vital to my commute daily and I hope consideration is given to spots who live locally, but are unable to walk to the metro stop.
361	Increased housing and density is great. Above ground parking is an eyesore and creates undue runoff. That said, there should be underground parking to account for the same number of spaces, many people purchased homes or moved to area with their transit plans in mind and this is pretty bait and switch for them. Also, the park of the building being on the far side is the metro and Carroll Ave is a shame. It's so nice to pull into takoma and see the trees, it is part of the character of the community. Please consider requiring the building to move the open space to the Carroll and metro sides of the building.
362	Love this idea. We live in Takoma only a few blocks from the metro station and are in full support of all aspects of this project. Looks great!
363	Removing the parking lot and replacing it with the grossly insufficient number of publicly available parking spaces essentially renders the entire metro stop inaccessible to the population who lives more than 1 mile from the metro station. Those within 1 mile of the station are exclusively high income and do not commute by metro anyway. It it an egregious example of overdevelopment, simultaneously eliminating crucial green space and public metro access . The scale of this enormous development should be reconsidered as it is out of touch with the needs of the community!
364	Go for it!
365	There has never been enough parking at this metro station. In addition, need a safe place for pick up / drop offs, ideally not far from accessible entrances. And secure bike storage.
366	I am fully supportive of the shift to make the Takoma Park metro station more oriented towards transit oriented development. As a metro rider, there is nothing more annoying than getting to a station and having to walk through a sea of parking lots before I can get to anything useful, like housing, restaurants, or office spaces. I believe we should provide as much density as possible on this site and reduce parking spaces to the highest degree available.
367	Fully support redevelopment (finally) of this space!
368	I disagree with this project. Having parking by the metro encourages people who live farther from the station to drive only to the station rather than all the way to their destination in DC.
369	I support this plan.
370	As a decade plus resident I am thrilled to see this project underway and whole heartedly support the plan to bring more biking, walking and public transit along with density for this urban community. It's long overdue. As a global resilient and equitable cities planner and practitioner and environmental advisor it's also great to see these steps as a professional in making cities better for all.
371	Please don't go forward with this development. The kiss and ride space and the parking are so useful to those of us with mobility issues and children/strollers. It's such a relief to be able to park there and easily get on the metro with the stroller and my child. As a person with long haul covid, I struggle with fatigue. I know I am not alone. The spaces and the green space next to it are a welcome departure from any other metro station layouts.
372	Please do not remove parking at the Takoma metro.
373	Estoy totalmente de acuerdo con esto. Pero mi unica sugerencia es que tiene que respetarse los arboles de este espacio. Es importante tener mas housing sin descuidar nuestros espacios verdes.
374	Yes, please! Please get this done ASAP
375	I like the plans and looking forward to having more neighbors and retail near the station

376	Anything is an improvement over the current situation. I know there are a lot of parking lot fans in TKPK but almost anything would be a better use of space.
377	I am not in favor of reducing the size of the Metro parking lot and bus depot to build more apartment buildings. That neighborhood has or will have hundreds of new apartments and condos. Those residents need the trees and green space in the area in and around the Metro parking lot to walk their dogs and relax. There is no Park land in that part of Takoma DC or Takoma Park, Md.
378	For any version of this work, I believe it is important to maintain at least 144 spaces of parking. I don't care if they are part of a garage of the new development or maintain the current design. Not sure why development can't have a commuter parking lot....
379	Will removing 144 parking spaces leave any parking spaces?
380	I'm in favor of development but it should also include parking for commuters.
381	This is a great proposal and as a Takom Park, MD resident I welcome any new housing development and enhanced mass transit. I am looking forward to better biking facilities and a better utilized space.
382	Anything Metro can do to increase density, walkability, and bikeability is extremely welcome! As a nearby resident when I come in to the station it is via Bike or occasionally bus. Further, ignore the NIMBYs who are anti development. Good mixed use housing and retail would be extremely welcome in the area. We need more affordable housing, and increasing the housing stock, particualrly with affordable homes, would be great for the area.
383	I'm in support of the project to redevelop the land adjacent to the metro, including the plan to streamline the bus stop, remove surface parking, and promote new housing. It would be great if there was still a place to do kiss-and-ride drop-offs in the new plan.
384	This development project is long overdue and we are thrilled to see it finally moving forward. Development of additional housing and retail near public transit will be good for Takoma / Takoma Park and the larger area.
385	I look forward to improving density and public transportation
386	Please make more daily parking available. Many of us need this access to get to work!
387	I am not officially designated disabled as I am able to work part-time and am trying to avoid the stigma as a professional. I really treasure a place to park near the Metro. I've worked most of my life to combat climate change and understand the issues related to the last mile of public transit. But a benign brain tumor I've had for the past 13 years makes riding a bus untenable, though I can tolerate car travel. I also use the parking when going to a restaurant in Old Town. I would have to take an Uber or Lyft to get downtown. And isn't the whole point of Metro to make it easy to use? Why do the Fort Totten and Silver Spring stations have plenty of parking, but we won't? I would be much happier with a mixed use plan that incorporates parking. And I think there are many people like me post-covid. People for whom a bus ride is exhausting and causes vertigo or other problems.
388	As a community member on the DC side of Takoma whose household uses Metro at least a few times weekly, and walks though the area for other amenities (shopping, food, recreation, etc...) weekly, I strongly support the proposed changes to the parking and bus bays at Takoma Station. First, the added retail and housing would be a wonderful addition for residents, and also help connect the DC and Maryland sides of Main Street Takoma where the current configuration leaves a large disconnect. Second, the surface parking is largely unused at the point and with Forest Glen just a 10 minute drive, there is ample parking for commuters who live outside of walking distance to a Metro to utilize the rail transportation. This proposal also includes more bus bays which would hopefully encourage WMATA to better implement bus service to this area. The current lines are spotty and run almost exclusively North/South, so I would hope the increase in bus bays would encourage more bus lines and frequency as well. Third, the current traffic pattern is unsafe, and adding a light at Carroll would be tremendously help.
389	please keep the trees/natural vegetation for the wildlife!!! i also worry that this project will make surrounding areas extra hot (please walk on carroll next to takoma central in the summer); please consider development without environmental impacts (ex. huge heat difference vs. tree-lined streets). what will be done to ensure these developments are eco-friendly as well as cost-effective? i live nearby and worry about construction noise/traffic/trash as well. thank you!
390	This seems like a well-conceived program. I would appreciate the retention of some surface parking for those with limited mobility or small children, but the current amount seems to exceed demand. Increasing bus service, particularly up to the Philadelphia/piney branch intersection, and toward takoma elementary, would also help mitigate demand for parking.
391	As a 2-year resident of Takoma DC, and a spouse of a 38-year resident of Washington DC, I fully support WMATA and EYA's vision of a vibrant multi-use neighborhood that allows for a large plot of land to be

	upgraded for a more productive use that will benefit the economy of the Takoma DC neighborhood and provide much-needed housing in a time when that is in short supply. Since the construction of the Takoma metro station land-use policy decisions in both DC and Maryland have prevented significant redevelopment of many large plots of land, including this one. There is now ample research proving that the best environmental use of land around public transit is for housing and/or mixed-use construction, not an impervious parking lot that encourages more driving. Driving has long and short term risks to neighborhood health and climate change. Governments around the region are working to encourage the development of more housing, especially subsidized housing, around public transit nodes that were built with taxpayer support. The proposal creates the proper conditions to redevelop land currently used in an inefficient manner to build more housing. The proposal will create the necessary conditions for Metro to earn far more revenue from its land at the Takoma Metro station than it currently receives through the operation of an underutilized parking lot. We all benefit from a financially healthy public transit system. Given the changes in financial health since COVID, the opportunity to increase revenue is a very important reason to move forward. Areas around transit need to have housing, mixed use space and create a haven for community. They should not be a parking area for vehicles, especially in 2023. I enthusiastically SUPPORT this project.
392	I am for this development and for the elimination of parking to allow for close in housing near transit. This lot is not for commuters anyway given the hours restriction. Please don't give in to people who rarely use the metro wanting to preserve a small amount of parking.
393	I support development as long as it's pedestrian friendly and not too dense.
394	It is really important to have cheap for free easy to access LONG TERM parking at the metro. The current parking situation is Great and while I support increasing housing in walkable areas there needs to be consideration to those who drive and commute into the city or those who use the metro for recreation. However these changes are made there needs to continue to be parking that costs no more than $7 a day and allows people to easily get to the metro. A decrease in parking will also be a huge decrease in ridership.
395	Having some parking at the stations is great, but also really welcome more mixed use and density. Please plan on keeping some parking...
396	I fully support denser housing by public transportation
397	As a 10-year resident of Takoma Park, I write to strongly support the development of metro's underutilized parking lot in Takoma DC. I fully support WMATA and EYA's vision of a vibrant multi-use neighborhood that will provide adequate parking for short-term metro use, while allowing a large plot of land to be upgraded for a more productive use that will benefit the economy of Takoma Park MD and Takoma DC and provide much-needed housing in a time when that is in short supply. Since the construction of the Takoma metro station land-use policy decisions in both DC and Maryland have prevented significant redevelopment of many large plots of land, including this one. There is now ample research proving that the best environmental use of land around public transit is for housing and/or mixed-use construction, not an impervious parking lot that encourages more driving. Governments around the region are working to encourage the development of more housing, especially subsidized housing, around public transit nodes that were built with taxpayer support. The proposal creates the proper conditions to redevelop the land east of the station to build more housing, especially affordable housing. and appears to improve the transfer process for bus riders. The proposal will create the necessary conditions for Metro to earn far more revenue from its land at the Takoma Metro station than it currently receives through the operation of an underutilized parking lot. We all benefit from a financially healthy public transit system. The proposed redevelopment rightly balances the needs for transit-accessible housing, commuter access, bus transfers, and the preservation of open space. I enthusiastically support Metro's proposal! -Alan Zibel (Philadelphia Avenue) Takoma Park Md
398	I don't think they should be removing parking spaces. There won't be enough spots to park.
399	I think that this is great and as a resident who lives in the area and regularly walks past this large mostly empty parking lot I am supportive of this plan.
400	I only support this project if it will address the lack of affordable housing in the city.
401	I am a resident of Takoma Park, Maryland, I live less than 1 mile from the Takoma Station, and I regularly use metro on my commute to work, so the proposed changes would significantly impact me. Given the negative neighborhood impact of almost completely eliminating parking at the metro station and adding new housing units without parking or services for them, I would oppose this project unless: 1) at least 20% of the proposed new housing units are set aside as affordable housing units for the long term, AND 2) the new apartment buildings have at least a couple of dozen parking spaces within the building, AND 3) the new apartment buildings have some retail space, community space, or other amenity that would help offset their impact on neighborhood resources. The map of the proposed new project layout does not include the Capital Bikeshare

	station at Takoma - please add that to the map/plan to ensure this neighborhood resource is preserved. If Metro is proposing to remove the Capital Bikeshare station, I would oppose the project, and that negative impact needs to be made clear. I understand Metro is in a tight financial situation for the foreseeable future and needs to earn money by developing vacant WMATA-owned land, so that need should be taken into account by the community. I also understand there is a large and growing shortage of affordable housing in the Takoma area, which is why I am requesting a substantial commitment to affordable housing be part of the development plan. I am disappointed in Metro that the public messaging on this project has not clearly explained the almost complete elimination of public parking at the station and size of the new building to be constructed, but instead emphasizes the minor change of "adding one bus stop." Please modify the public messaging, especially the summarized impacts, to make those impacts clear to the community. After accounting for handicapped parking spaces, there is likely to be less than 6 parking spaces at the station, correct?
402	I am struggling to complete this survey because I am unclear where the bus loop and Kiss & Ride would be relocated to, and how many Kiss and Ride spaces would remain after removing 144 of them. Also, I would like to know if WMATA has done its due diligence to understand how many folks are currently using the Kiss & Ride spaces and if it is being underutilized. I like the idea of having more transit-oriented development since I currently have to walk 15 minutes to the metro from my apartment and would like to see additional retail/services in the neighborhood. I also am in favor of actions that would decrease DC's carbon footprint through increasing ridership and enhancing bicycle/pedestrian access. I wonder if there could also be ways to enhance lighting near the metro stop. It feels very dark at night in the parking lot and on the surrounding streets near the Metro when I walk home on Cedar and Piney Branch.
403	Removing parking is a counter productive idea. If you make it harder to for people to park they will do the obvious. They will drive downtown and park there. This defeats the stated objective of increasing metro ridership!! Keep and expand the parking area.
404	I am in favor of the proposed changes. The proposed changes right-sizes the amount of parking at the station and brings much needed housing to the neighborhood. It will also better tie the neighborhood together and make walking and biking to the station safer for residents and visitors.
405	Removing 144 parking spots will leave VERY FEW parking spots. Where are cars supposed to park. Do NOT want to have to drive to Fort Totten. That's a long ways away along very busy roads. I OBJECT!!!!! strenuously And why wasn't the neighborhood informed of these plans? I didn't hear about the public hearing until the DAY OF (1/17). Way too late to participate.
406	While I understand the importance of housing, and I appreciate the addition of housing in the area, I am strongly against the removal of ALL parking from this area. My wife is among the residents within one mile of the area that uses this Metro regularly for her travel into the city for work. She has to go to the Metro before it's dark and has to often come back after dark, I will add that I am among those that use the Metro to move into downtown DC on a regular basis. Having NO parking at the Metro will impact any families that have to drive. The lack of parking at all is not appropriate as nearly ALL Metro stations within suburbs have some type of parking. I will add that this station is also used by buses on a regular basis - both coming from the city and then into Montgomery County. PLEASE do not remove ALL of the parking from this station.
407	I am writing to express my strong support for the proposed reduction in parking and reconfiguration of the bus bays at the Takoma Metro station. I live in Takoma Park MD, and commute downtown nearly every weekday by taking the RideOn bus and the red line. This project will benefit me personally on a daily basis- moving the bus bays closer to the station entrance will be convenient, the traffic light will increase safety, and the businesses that will eventually fill the new EYA building will surely sell items I want and need. However, even if these plans would not benefit me personally, prioritizing land use around transit for housing is the right thing to do for the climate, for housing affordability, and for reducing traffic congestion throughout our region. I am impressed and happy WMATA is finally aggressively pursuing the path of transit-oriented development, and I look forward to continuing to be a daily Metro rider. Sincerely, Ashley Evans Brookshier Carroll Ave Takoma Park MD
408	I am in favor of promoting mixed used development around the Takoma Station. I do feel the parking spaces are underutilized because they cannot be used for a full work day, so if they are being repurposed for transit oriented development that makes sense. As far as the bus loop, I wish that it could be redesigned so it's easier for pedestrians to access the Metro entrance on Carroll Ave.
409	We truly appreciate having the park and ride parking access at the Takoma Station. We use the parking lot there and take the red line multiple times per week. Parking revenues can be used for Transit operations and maintenance. Please keep the park and ride parking there intact. Thank you!

410	Dear WMATA, This plan for the Takoma metro station is a great use of your resources and will benefit the neighborhood, the region and the planet. It will provide much-needed housing in a prime location and provide WMATA with much-needed funds. I'm a commuter who lives about a mile from the Takoma station and use it regularly to get to my job in downtown Washington. I ride my bike and park it at the station. Sometimes on weekends my family uses the parking lot there if we are going to an event downtown. I understand this project will reduce the amount of available parking. That is fine -- this is prime real estate and should go toward a more valuable use than surface parking. Doubtless you're going to get vocal feedback from affluent nearby homeowners who will oppose this project. They may claim to speak on behalf of "the community"; please know that they speak only in their own narrow self-interest. I hope you move ahead with this project quickly. Sincerely, Andy Sullivan Silver Spring, MD
411	As a Takoma Park, MD resident who uses the ride on bus to connect to the metro, I am fully supportive of proposed changes to promote more public transit. The current parking lot and green space located at the metro seems like a missed opportunity for development that benefits Takoma, DC residents and Takoma Park, MD residents. It would be great to see housing and mixed use development there. Specifically, regarding the parking lot, it is often underutilized, especially since the pandemic. I never see it close to full and there are many transit options to get to the metro. As an occasional biker to the metro, it would also be good to see improvements to promote more cycling, including space to lock your bike and monitoring to deter individuals from stealing bikes. The lockers are there, but it seems like there could be a better technical solution.
412	The drastic reduction of parking availability will remove a useful and needed option for local residents. Please do not remove daily parking options at this station.
413	Hello, As a frequent metro rider (both train and bus) and Takoma Park resident, I want to commend you all for this development. It is about time that location and it 's ill-used parking lot was turned into housing that will revitalize that area, and lead to many more transit riders (helping the environment). I urge you all to not consider the few loud predominantly older white voices against this project who reside in the million dollar homes adjacent to the metro. It's time for forward thinking. And this development and changes to the parking and bus bay are exactly that. Cheers, Tom Di Liberto
414	Please do not reduce the number of parking spots and kiss and ride spots. These spots allow residents to take the metro instead of driving longer distances to their offices or other destinations. Reducing the parking spots and kiss and ride spots will have the impact of more people driving longer distances and fewer relying on metro. That is bad for the community and bad for the environment. Thank you. Julie Kashen Takoma Park, MD
415	As a resident of the neighborhood and frequent user of the transit station (primarily Metro, occasionally bus), I am very supportive of these plans. Land is so scarce for transit oriented development that the large, frequently empty lot surrounding Takoma station stands out as an egregious underutilization of a public asset. With young children, I have parked in the Kiss and Ride before to save the longish walk to the Metro for little legs, but I am happy to give up that privilege for a greener, denser, healthier, more active, and more equitable community. I am looking forward to seeing Takoma station become a real node and anchor for the community. It's a great neighborhood, full of vitality and passion -- removing the economically and socially inert parking lot at its core will only strengthen the neighborhood further. We'll be able to bring more residents and life to the community, creating the conditions for Takoma's vital small business sector to thrive. I applaud Metro for their efforts to optimize their land holdings for the benefit of DC residents and neighborhoods. The plans look thoughtful, safe, and community-forward. Kenan Fikri Piney Branch Road NW
416	Please consider those who bike and walk to and from this station. There aren't any bike lanes at the station, and there's a large hill up to the silver spring section of the MBT. And the parking lot cars enter the road right near the bottom of the hill and there's no stopping the cars coming down the hill. Makes me nervous when I ride my bike from the station up to the MBT.
417	I live on Cedar Sr very close to the project location and strongly support the project. The current bus loop and surface parking are an empty swath of our community that will be put to better use with housing and retail, while making the bus station easier to navigate. Next, think about adding a metro station entrance on the north side of the station...
418	Fantastic idea! As a commuter, transit oriented development is something I look for when moving somewhere. These options will reduce car dependency in the region, and provide shorter commute times to DC for those who live in Takoma. In addition to providing more walking access to local businesses, this seems like a win. Parking is essentially always a public liability and a waste of space, especially space that's empty most of the time.
419	Parking in the city of Takoma can be limited; it would be important to still have some parking available at the station.

420	My name is David Wiley and I support the planned changes. I live in a single-family home quite close-by--about a 10-minute walk from Takoma Metro. Although many people in a similar situation are opposed to higher density development, I support it, for environmental, economic, equity reasons, and because it makes for a more dynamic neighborhood. Although we occasionally park at Takoma Metro and will miss that, we're okay with that, as the development will benefit the larger community. Although local people should be justifiably proud of stopping the freeway a few decade ago, I submit that transit-oriented development is very different, and will advance many of the values that the prior freeway fighters hold dear. A request: to make up for the lawn and trees that will be lost, could an area of similar environmental value, which is located far from transit, be protected from development? Thanks for soliciting comments.
421	This makes no sense. There is very little available parking in the Takoma, DC and the Takoma Park, MD area, yet WMATA proposes to reduce the available parking at the Takoma Station by almost 90%. That will reduce Metro ridership. Moreover, the narrative accompanying the proposal falsely states that the project will not increase stormwater run-off. That fails to take into account the impacts of the construction within the footprint, which is part of the proposed change.
422	I support
423	I'm concerned about the lack of parking at the Metro.
424	I support the development of housing on the Takoma station property but oppose the loss of 144 "Kiss & Ride" parking spaces. My family relies on paid parking at the Takoma station for our daily Metrorail commutes to work downtown. Our home on the 1100 block of Jackson Ave. is too far to walk to Takoma station. Taking the bus adds 30+ minutes to our commute each way. Being able to park at the Takoma station means that my family only needs a single car. Parking is scarce near the station, and the closest paid lot (7000 Carroll Ave) is poorly managed and far less convenient than parking at the Metro. The Takoma Station, like Fort Totten and Silver Spring, is used by many car commuters and requires ample parking. Car commuting, while environmentally displeasing, is essential for a large portion of Takoma Park households. Certainly, the station site can be developed while still providing 50+ public parking spaces, e.g., in a parking deck built as part of the housing structure. Eliminating all but 14 spaces will disadvantage Takoma Park families like mine who do not live within walking distance of the Metro station. Moreover, I question the need for the massive housing development as presented in the proposed plan, given all the new condos / apartments recently built and under construction near the Takoma station. Parking in the Takoma station area, including downtown Takoma Park, is already meager. Adding more housing and loosing 144 commuter parking spaces would be unfair to both residents and businesses.
425	After reading all of the documents, I am in support of this plan. Having a legitimate parking lot near the metro station would be great, but I understand that Kiss and Ride is not to be that parking lot. Indeed, there are usually spots for overnight parking on the side streets. I don't have a car though, so that aspect of the plan is inapplicable to me. I agree that having more and accessible bus stops is a great idea, as well as a kiss and ride near the bus loop (that will be better than the situation I always see, which is people being dropped off right in front of the metro...which blocks traffic, pedestrians, and buses). I will miss the trees that are in the current park, but I appreciate that some can be re-planted and moved. A traffic signal is a good idea, especially with the updated bus loop, kiss and ride, and whatever building will be built next to the station. I live at Takoma Central and take the metro/bus very often. I realize this might be inconvenient during construction, but the end goal of having more development, an efficient use of the space, and especially a better bus loop will be worth it in the end. I hope the sidewalks will indeed be available and not blocked off. I have some concerns about the increased traffic that will occur after the full development occurs, but for this particular parking and bus bay change, I believe this is a solid plan.
426	I live at 6805 Laurel St. NW, in walking distance of Takoma Metro. Our family relies on metro to get to work and school. I am writing in full support of the proposed changes.
427	I am disabled and want to question and protest the elimination of the current 144 parking spaces at the Takoma Station metro, I am disabled and my wife cannot push my wheelchair from our home on Holly Avenue to the metro site. These parking places are NOT kiss and ride. There is hourly and daily parking available there. To tell us to drive to Ft Totten if we wish to access metro by car is ridiculous. Why should all Montgomery County residents who need parking to access metro lose these possibilities to park at Takoma station in order for NEW potential riders who MAY occupy the huge building planned for the site be allowed to park and ride while we who have used metro over the years are denied convenient access? This plan does not meet the goal of increasing metro ridership, particularly for disabled and elderly residents who rely on those parking places. ' There are also other issues with the proposed development: too large an increase in density(440 new condos???), no real environmental impact or transportation/road usage study, scale out of

	proportion to even NEW development in the rest of TKPK, loss of promised green space, etc. etc, This project needs to be rethought. Sincerely, John E Varnum, Holly Avenue, Takoma Park, MD
428	I am opposed to disturbing the green space.
429	The parking lot is kinda filled and at least 75% filled. I think reducing the majority will be affecting a lot of us.
430	I support improving bicycle access to the station and removing parking spots.
431	12, 13, 25 the bus services are so bad. Envest on map that actually works. The buses should not leave too early, they don't even stop.
432	I support the proposed changes and believe the space should be developed as quickly as possible.
433	I am a resident of Takoma DC, Metro rider, and frequent visitor to the area around the station. I am strongly in favor of the proposed changes. This project is the right thing to do from an environmental perspective and will bring additional resources and vibrancy to the neighborhood.
434	I understand some who live adjacent to this development have concerns about its size, increase traffic, and loss of the green space. I live about 1.5 miles away so am not affected direclty. I am generally in favor of transit-oriented development and the increase in people I think will help with the downtown Takoma economy. Something that has been a source of concern for the 20+ years I've lived in Takoma Park. This will likely divide the community. But we need more housing stock and I'd rather fill-in the urban landscape than have us build townhouses in Olney or towards Fredericksburg and incure the increase in car traffic.
435	Remove parking space in favor of TOD
436	If you're taking away that many parking spaces in an already parking constrained part of town, then there needs to be much more investment in local transportation options. I completely support the need to prioritize public transport over driving, but that doesn't happen simply by eliminating parking. Especially at a time where people already don't see Metro as a reliable option. There needs to be complementary investment in public transport access. This metro stop already has few buses that serve it, a situation that is much worse in off-peak hours. Of course, that is a joint metro/MoCo issue, made worse by the fact that MoCo RideOn buses don't even have trackers to show you where they actually are in their route. This is a long way to say that while I would prefer to increase my metro to car ratio, I am actually reducing it, with more days commuting by car than metro. And going downtown after hours is such a headache, especially to figure out getting home, that I have almost stopped using metro entirely. If metro is trying to win back customers, reducing access options - in this case parking - is counterproductive. Otherwise, I have no comments on the changes presented, and look forward to the space being better designed for traffic flows.
437	I think this is overall a strong idea to strengthen the immediate area surrounding the Takoma metro stop. I fully support removing parking for kiss and ride in favor of providing improved bus access immediately outside the station. I would strongly urge WMATA or the District government to ensure development on the site includes significant housing additions for low-income residents of the area, since this site has access to the local community business district and direct metro lines into the city. Please do as much as possible to not only preserve the trees and green space as buffer but to make the spaces welcoming as a park to the local community.
438	As an initial matter, I object to this proposed parking and bus bay changes at Takoma Station. The proposals removes well-used and necessary parking spots for daily commuters, which will further increase congestion and parking issues on Takoma's residential streets, making it difficult for residents to park. WMATA's response that parkers should go to Fort Totten must be rejected - this will only further hinder and remove options for Takoma DC and Takoma Park residents. WMATA claims the current parking is "Kiss-and-Ride" which is defined as a "brief stop to allow the dropping off and picking up of passengers." The parking lot at the Takoma Station is much more than that - it offers approximately 140 spaces for hourly and daily parking, including handicapped parking. WMATA does not take this into account. The information provided by WMATA at this point concerning the environmental and transportation impact is not supported by data, but rather loose claims that there will be no permanent transportation, stormwater or Air Quality and Noise impacts at the Takoma Metro station. WMATA is required to undertake a complete analysis of the site and proposed development and must do so prior to moving forward with any proposed plan.
439	Please reconsider removing the kiss and ride parking spots at the Takoma Metro. These parking spots allow commuters, families, and other people in the surrounding neighborhoods to use the metro to get to work, school, and local attractions. Without the kiss and ride parking stops, my family would likely end up driving more and using the metro less. They are crucial to me getting to work on time while also being able to drop and off and pick up my child from daycare. The parking lot is nearly full most days and is clearly being used. Many areas surrounding the metro are currently under development adding more housing and businesses already. Thank you for your consideration. Best, Aleena Oberthur 9002 Walden Rd, Silver Spring

440	I think this is a great idea, I hope there are varied commercial businesses and affordable housing as a part of this
441	As a resident of Takoma Park, I strongly support any parking and bus bay changes needed to facilitate the redevelopment of this site. Any changes that facilitate the construction of new housing and other transit-oriented development are welcome.
442	As a local resident of Takoma Park, MD, I would like to express my support for this initiative. I both walk and drive to the metro regularly, and believe that a better overall use of this space will be a significant improvement for our community, both on the MD and DC sides of Takoma, provide needed affordable and market rate transit-friendly housing options to our communities that are in desperate need of both, introduce additional resources and opportunities for community-appropriate commercial establishments, while maintaining an appropriate amount of parking options. I would support finding a solution to the balance of less parking, yet still access to folks in our community who cannot walk to the metro area, with the understanding that there is no need for the amount of parking that is currently there. I am willing to endure the discomfort of the construction and alternative access points that will likely come for the overall long-term benefit that this development promises to provide to our community.
443	I strongly support the proposed changes for Takoma Station. The current parking lot is under-utilized, and relocating the bus bays closer to the rail tracks would be an improvement both for neighbors and site utilization. The proposed development is appropriately sized for the location, especially when compared to other existing and planned buildings on adjacent blocks in Takoma. Any smaller building would be a missed opportunity to add housing near a public transit hub. It would also much better utilize the site and help activate this block in our community by adding new retail space that would help to bridge the existing Takoma retail corridor. In addition, the current green space is heavily underutilized. The plans to shift and preserve green space would be a significant public benefit. Thank you for the opportunity to comment.
444	I think this is a really bad idea. Takoma Park needs more parking spaces, not fewer. And the idea that we can build more residental units without creating more demand for parking is simply false. Even if new residents don't own a car, they will need parking for package delivery, meal delivery, and visitors. Please work with Takoma Park local government to increase parking and decrease residential units. Thank you.
445	It is a misstatement that the current 100 plus spaces are for short term kiss and ride and are not essential. This parking is important for the current neighborhood use both for full day trips via Metro as well as for use to visit local establishments. With the proposed development, there will be increased demand on parking with a denser population and more services. Removal of access to parking is not appropriate. The density is also not currently supported by the existing traffic patterns - there are backlogs of traffic at rush hour with the current population and usage. The addition of these housing units will increase the problem of traffic flow. Your plan does not make/recommend/guarantee means to address this for the neighborhood.
446	I am against the removal of the 160 Kiss & Ride spaces at the Takoma Metro Station as proposed in the Docket Materials. Since 2018, I have lived on the border between Takoma and Silver Spring. I am a government employee and my duties still require me to commute downtown to the National Mall on a regular basis. There is no employee parking at my work space so I rely on public transportation in the form of both buses and Metrorail, and would leave my car at home. Just like most aspects of our lives, I can tell that my original routine commute has been negatively impacted as a result pandemic. First, I've noticed a dramatic reduction in the frequency of Ride On buses that service my street in comparison to 2019. If you do catch one, and its heading for Silver Spring Metro, the 1 mile distance takes an embarrassing 20-25 minutes due to the frequency of stops, the congestion on Fenton Street, and the construction from the Purple Line project. I discovered that by just driving to Takoma Metro, parking for the day, and then taking the Metro, reduced my commute by 20-30 minutes. It also meant that on my return trip from work, I had immediate access to a vehicle to get me home, instead of potentially being stranded at Silver Spring, waiting for buses. Constantly checking live feeds of buses and trains when leaving my workplace, and gambling on which metro station and which bus in the moment would most efficiently get me home is something I tolerated in the pre-pandemic era, but no longer. I want to maintain the right of having a streamlined process to go to/from work. Please don't take one of the few "easy" things that I have in this new post-pandemic life. Isn't that the service that parking lots like Takoma's are supposed to provide to its residents? Furthermore, I would like to argue against what the author of the Environmental Evaluation says on page 20, Section 4.2.3: "With the reduction in capacity, customers seeking to park for longer durations will be directed to use the Park & Ride facilities at the Fort Totten Metro Station, which is only seven to ten minutes away by car and in the direction of travel for most commuters using the Takoma Metro Station". When I first began commuting back to my office, I actually thought that by driving to Fort Totten and parking there would be the more efficient new commute. I was

	greatly mistaken. Traffic along Blair Road during morning rush hour is HORRIFIC and extremely congested - taking me at least 20-30 minutes to get to the station. And, since you are only eliminating 1 stop from the route, it does not recoup the additional time it took to get there. I've actually experimented it myself. Driving from my home to Fort Totten, and taking the Metro into my workspace vs. driving from my home to Takoma and taking the train – the Takoma option has beaten the Fort Totten option by 10-15 minutes, easily! Also, before the pandemic, as someone who learned this the hard way, if you did not get to Fort Totten Metro parking station before 9am on a weekday, you did NOT get a parking spot. If this proposed plan goes through, and more people return the office, and Takoma riders are shuffled to Fort Totten, I am worried that too many people will be without access to parking and be forced to overpay at commercial lots.
447	The description of the current parking at the station in Tkpk is wrong. The approximately 140 parking places are NOT kids and ride. They are hourly and daily parking spots. The proposed development would eliminate all of these and leave no way fir Maryland residents who are unable to walk or bike to metro due to disability or age or because they are bringing babies or young children to use the metro. Directing them to use fort rotten is ludicrous. So my question is what can be done to provide parking so current users of metro. Not just those who may live in the proposed development can access metro in takoma park? I also have a question about the supposed environmental impact statement. It seems really inadequate. When will a real environmental impact statement be done?
448	Park n Rides offer a great opportunity to promote suburban riders, however when these spaces are removed it becomes difficult to make transit more attractive. Increasing service frequency and upgrading stations for service that doesn't serve or help connect commuters is not making transit more attractive. Transit should be attractive on multiple levels, by many measures and allow all members of the community access even if a route is not accessible to their doorstep. The last few miles or minutes is just an important as the greater distance.
449	I support removing the Kiss & Ride spaces to make way for transit-oriented development and more housing!
450	This looks like an excellent project. Removing parking for transit-oriented development is the exact type of project that the DC region desperately needs -- good for housing costs, good for multimodal transportation / lowering car usage, and good for city finances.
451	I support the proposed changes and the project. This project is long overdue and I would encourage WMATA and city leaders to aggressively go forward to complete this important "smart growth" project. Anthony R. Giancola, P. E. (Former WMATA Alternate board member 2007-2016) Cedar St. N. W. Washington DC 20012
452	I am in favor of changes that help make this a multi-use space. I am a regular rider of the Metro, a resident of the neighborhood and someone who also occasionally uses the existing parking lot both for pick ups ("kiss and ride") and parking my car for a few hours while I ride the Metro. I am comfortable with the changes to parking and the bus areas because they will allow more other uses of the space like retail and housing which will enhance our area. It will also feel safer to have residents and more activity around the station. I am confident that we will be able to utilize parking at the Silver Spring Metro if needed.
453	Dear WMATA, My name is Carter Dougherty and I am a resident of Takoma Park, MD, residing at 6 Crescent Place, a short walk away from the Takoma Metro. I am writing to encourage you to proceed with all due haste to approve the proposed parking and bus bay changes at Takoma Metro and pave the way for a redevelopment that has been long in coming, perhaps too long. I would like to add that you should not, by any means, overestimate any community opposition you do hear. You will no doubt hear from very vocal residents in Takoma Park who oppose this change, or seek to delay it through endless procedural hoops. This flavor of opposition to (re)development has been present here for awhile, but it has demonstrably little impact, beyond extending public meetings into the wee hours. You have a good plan, talented people to evaluate it, and momentum on your side. Don't lose it. And get those shovels in the ground. Sincerely, Carter Dougherty 6 Crescent Place Takoma Park, MD 20912
454	I am opposed to elimination of the 144 'kiss and ride' parking spaces. Obviously these spaces are not 'kiss and ride' and I do not appreciate Metro misleading the public. Currently all day parking is allowed, and before COVID it was limited to a few hours. These facts prove the representation is misleading. And to encourage parkers to park at Fort Totten is not a solution, there are much few spaces in their parking lot. I am now aware of Case 22-36, which shows that the parking spaces are to be sold for a 7-8 story apartment bldg. That means Metro will only be using the green space along Cedar Street for the increase in bus lanes, etc. The congestion on the roads around the metro, especially Carrol to Cedar is very dense due to all the apartment buildings built along Carrol and on Willow Ave. I cannot understand an environmental impact statement that would view this added congestion as not a problem, to stay the least. These plans are very disappointing. Going

	through questions on the rest of these pages is even misleading in not acknowledging the long term parking at Takoma. It's really insulting to the residents of the area not to acknowledge this fact.
455	Please remove parking and build more housing.
456	I support reconfiguration and redevelopment. I hope redevelopment makes the plaza in front of the Metro station look nicer with plantings and benches, since currently it is just empty space. I also hope redevelopment preserves as many existing trees as possible, and includes places for people from the community to sit and eat food they bring with them.
457	More dense development is needed than proposed. Specifically, a grocery store is badly needed in this very spot.
458	As a Takoma Park resident who uses this Metro frequently to commute downtown, I am in SUPPORT of the proposed plan. Takoma Metro is an urban station and housing density should be maximized around it. Residents who prefer to drive to Metro stations (rather than taking a bus) can easily get to Silver Spring or Fort Totten. Residents who live close to Takoma can walk or take one of the many buses that serve the stations.
459	This is a fantastic idea. This plan allows for dense, modern transit-oriented development on the most valuable parcel of land directly adjacent to the station, while still providing ample infrastructure for station users. This is a step in the right direction for a more sustainable and transit-oriented future in the D.C. area. I would strongly support Metro applying this concept to many of its other stations that are currently flanked by large parking lots. For example, stations like Branch Avenue, West Falls Church, and many others could have their facilities consolidated to make room for nearby development. Wiehle-Reston East is a great example of how to still provide station parking while also allowing for valuable development adjacent to the station.
460	Love the idea! Why would we need parking in DC when WMATA exists to get us places! If possible, can we get a bike lane or get the DC council to put on on carroll st?
461	I think removing all of the daily parking is going too far. A lot of people in Takoma Park and East Silver Spring use the daily parking if the Takoma station is too far of a walk from their home, and retaining at least some (maybe 25?) daily parking spaces would be worthwhile, maybe within the parking for the new residential development.
462	Love the project. Get rid of all the parking and put up and giant apartment building tower please! Transit works better when more people live closely.
463	Do it! Great change for all
464	Thanks to WMATA for the opportunity to comment. My family and I support this proposal. As a family with two small children who are regular users of the Takoma Station and the WMATA and RideOn buses that service it, we welcome these changes which will better reflect the needs of those who use the station most. We support the improvement and added capacity to the bus bay and the removal of underused parking, restrictions on which rendered it inaccessible for many working families anyway. We also regularly park at Fort Totten and can attest that this is a convenient and accessible option. Please move forward with the proposed plan. Gretchen Goldman Takoma Park, MD
465	What are the expected impacts of removing the 144 Kiss and Ride spaces and directing users to the FortTotten Kiss andRide? How many of the 144 spaces at Takoma are regularly used? Did you survey current users? (where they are coming from; via which route will they go to FTTotten?) How will this change impact road traffic on Blair Road? Thank you
466	I approve of the plan
467	I live on Maple Avenue in Takoma Park, MD roughly a half mile from the site location. As someone deeply motivated to see increased housing options and retail vibrancy in Takoma Park, I strongly support this project. Best, Dave Bend
468	Hello - I use the Takoma Metro parking lot to park and ride to and from the office in downtown DC multiple times a week. I live in Silver Spring and *must* drive in order to drop my children off at daycare before I head to work. My wife uses the same parking lot. We understand the value of developing livable communities near metro, but we *sincerely* hope that there's a path towards more parking spaces than the 8 or so that are proposed in the new plan. Parking and riding at metro is the only feasible path for us to get to and from work factoring in daycare dropoff. There is no way we can take a bus or other public transportation. But we vastly prefer to metro to work than drive. We hope there's a way to maintain some parking spots or offer pay to park options that are consistently available near Takoma Metro. Walkability is very important and something my wife and I support, but eliminating these parking spots doesn't change whether I drive to work - it just makes it more likely I drive all the way instead of driving to a metro station.

469	I'm excited about the new development here. It will be transit-oriented and higher density and is a very positive change. There are two suggestions I have regarding this process and the plan: 1. Although I welcome this change, I think the presentation of the loss of "kiss and ride" spots is misleading and should be corrected. There will be a loss of actual parking spots ("park and ride") on a larger scale than a loss of "kiss and ride." While the current parking lot is not set up for SmarTrip card use like most lots, there are parking spots for daytime parking that are used by people who ride the train elsewhere. I think it is okay to remove these because they are not widely used, but it will have a slight impact on convenience when going to events and things, and it should be fairly and accurately presented in the information WMATA shares. 2. I suggest narrowing the entrance/exit and perhaps making it only an exit at the driveway that will be closest to the Metro station (mostly for buses). It is currently uncomfortable and feels unsafe to cross that wide driveway now, with buses turning in and out, and it seems like it will be even more trafficked with this plan. A one-way directionality and/or a narrowing so it is not very wide for pedestrians to cross would help. Thank you.
470	I wholeheartedly approve of the repurposing of the current parking space at Takoma station into a more appropriate facility, be it green space, the new bus loop, or a new mixed-use development. The station is located in an extremely walkable area with adequate bus and cyclist connectivity. I do also think the community would not find it too big a loss to lose the current bus loop's green space. I am concerned, however, with the drastic reduction in Kiss & Ride spaces. Though a reduction is necessary, and warranted, it does seem excessive to reduce the number of spaces by 100.
471	The parking spaces at the Takoma Station are not kiss and ride spaces. I use those spaces to park my car daily so I can go to work on the metro. If you remove these spaces will there be other parking options? If the spaces are removed completely, this will affect hundreds of metro riders.
472	I strongly support the proposed development at Takoma Metro. The proposed plans preserve green space and add much needed transit accessible housing. The proposed building also replaces a severely underutilized parking lot. The only time I have seen the parking lot 1/2 full is for pickup/dropoff for the Summer at Sandy Springs bus (summer camp). Otherwise the parking lot is an eyesore. I hope that Metro has gathered information from ParkMobile to accurately estimate utilization and determine the number of commuter spots actually needed. Nothing beats objective data. The proposal should move forward taking these data into account.
473	I am who totally against the proposed changes. The parking lot has only recently started to be a functional lot dedicated to consumers. Prior to the pandemic the lot only allowed parking during very inconvenient times from 8:30-3. It also only allowed you to use quarters to pay for parking. Since the switch to ParkMobile parking has been a lot more convenient. However, removing the parking spaces would be a significant inconvenience. Parking in and around Takoma is scarce. Removing the parking lot would make it nearly impossible to find a convenient, reliable, safe, and affordable place to park. Please do not follow through and cater to developers who only care about the money they can make via overpriced housing. At the very least ensure that there is at least 90 spaces available for parking.
474	Please do no get rid of parking at Takoma Park. For those who argue that the lot is not used I would argue that the schedule that is currently displayed at the station discourages parking so that it is not used efficiently. The posted times are not commuter friendly-after 8:30am and before 3pm. It's as if the times are purposefully inconvenient so that the space is not used and developers can say that it can be put to better use. The times are horrible. Please help those in Takoma Park who do not live within walking distance be able to park at their local station to commute to work.
475	I am concerned that 16 parking spots for metro are insufficient. Have any usage studies been done. When I park there to go downtown, there are well over 16 cars there - even early in the morning. Can the plans include more daily parking for metro commuters. Not all people in Takoma Park live within a short walk to the metro. Those in Ward 6 are too far to walk and buses are unreliable. Parking at the metro has dramatically increased my quality of life as I have been required to return to the office post-pandemic.
476	I strongly support the plans to reformat the bus lanes and kiss & ride at Takoma Metro to make way for new housing. I live in the neighborhood and am a frequent (multiple times weekly) user of the Takoma Metro station. Updating the station in this way will better serve both me and the entire community. Additionally, I strongly support the installation of a traffic light at the entrance to the bus bay/kiss & ride. In the current configuration, this is a very frequently used crossing, and the lack of traffic control for drivers results in frequent dangerous near-collisions.
477	Looks good to me!
478	I use this parking lot consistently in order to take the metro to and from work and it is generally heavily used. If the parking lot was moved I would have to drive significantly farther in order to take the metro for work.

	Given that there isn't consistent bus service from many areas in Takoma Park & surrounding areas to the metro - WMATA should consider keeping the parking lot (or build a garage for metro rider use).
479	Please do not remove the 144 spots at the Takoma Park metro. There is very little parking available for those of us who don't live within walking distance. Many people use this parking to get downtown to work several times a week. It's been wonderful to have a no-stress available parking lot to get to work daily since the lot has opened for all-day parking. Those of us who live too far to walk (i.e., ward 6) need this parking lot to get downtown in an affordable way. More and more employers in DC are asking for workers to come back downtown. This will make it impossible and so expensive for many to get to work.
480	I support the proposed changes to the parking to allow for the proposed development.
481	I'm thrilled for there to be more housing near the metro, especially with a portion designated as affordable (though all rental housing lowers rents for all of us). The current parking lot is way too large and totally under-used, and not necessary at all, especially given how walkable, bikeable, and bus-connected this neighborhood is. I have no concerns about the bus bay redesign, nor the loss of green space. The loss of these cheap parking spaces will ultimately benefit EVERYONE in the community, far more so than leaving them as they are. Please proceed with these changes.
482	I would like to vocalize my full and enthusiastic support towards this proposal. The development of mixed-use housing near transit stops will reduce pressure on the local housing market, lower emissions, and increase Metro ridership.
483	I am most interested in the proposed traffic light as it will make walking near the metro station safer, especially for families with some children.
484	This proposal is ridiculous! There has been too much development around this Metro station over the past few years. A new apartment building is almost complete on the corner at Carroll Avenue, there are new apartments on Maple Street, a new over 55 complex on Maple, apartments above the retail block on Carroll where Busboys & Poets is. The community needs more green space and no new apartments that no one can afford.
485	I do not want the public parking to be eliminated. I use this three times a week to get to work. It is convenient, safe, and accessible for individuals that would like to use the metro. I happily drive the 24 minutes to park at Takoma for all my WMATA needs. This provides citizens in and around Takoma Park to have a easily place to park and ride the metro into DC and other places on the metro routes.
486	I agree on the removal of the parking spots. I also agree that some land should be sold to create convos or housing close to such high quality transit
487	I am a Ward 6 resident and I am writing here to support the proposed plans to develop on the WMATA Takoma Park station to remove the kiss & ride parking spaces. The proposed housing to be added would likely make up a large deficit of the missed riders from the parking spaces. Also, it is a great proposal to add much-needed housing in this otherwise exclusive and very expensive community. Transit-oriented development like this is critical to a sustainable WMATA and region as a whole. The housing is sorely needed and this is a win-win situation for the community and WMATA. Please approve the development plans. Thank you, Brian Goggin
488	This is a good idea to remove parking spaces for more bus options
489	Thank you for allowing the public to weigh in on this matter. As a resident of Takoma Park, Maryland who regularly uses the Takoma metro stop, I firmly oppose the near-total removal of all parking for commuters. It risks yet another pitfall for Metro and WMATA more generally. Almost everyone I know who commutes into DC for work from either Takoma Park or Silver Spring using the Takoma metro stop has to use their personal car to get to the station because of the myriad problems with the RideOn service, most notably its unreliability and the quality of its drivers. At a time when Metro continues to grapple with historically low ridership, creating another obstacle to using the mass transit system frankly does not make sense. If Metro wants to install a mixed-use development at the site, it should ensure that parking continues to be available at current levels for the general public. From what I can ascertain, just one-tenth of parking will be available -- 16 spots in the proposal compared to the 160 available now. Most weekdays see the current lot filled to near capacity. While the weekends see less use, it is still critical for many riders to be able to park at the metro to get into the district using metro.
490	I'm not sure what the parking lot utilization is at Takoma, but let it be clear that Transit-Oriented Development and better bus facilities are a much better use of WMATA's land at this location than the current uses. It's time for this project to move forward, and expanding the bus facilities to accomodate more local and regional service is essential to making this work while still providing more homes for people near transit.

491	I am in support of these changes because public transit users are the priority, and they should be given more space to de-incentivize car use.
492	It would be helpful to have more information about what the redevelopment plan is and what kinds of businesses will replace the parking, but overall it seems like a good idea, particularly if it promotes metro usage and does not create issues for the folks who currently rely on the Park & Ride.
493	I am in full support of removing parking for this proposed plan. I think that people tend to think small term but in the big picture, excessive parking is causing people to be more car dependent than they would be were parking slightly more difficult to find.
494	100% support this proposal, the highest and best use for areas next to stops is dense development like the housing proposed instead of this parking lot
495	I applaud metro's move to increase housing in close proximity to the station and reduce kids and ride parking spaces which take up a large footprint while not creating walkable TOD.
496	More TOD near existing metro stops is a huge step toward less car dependency. I'd love more bicycle parking near stations to be able to extend the walkable range of the station, and I'd love more capital bike share options at more metro stations to use in the destination end of a metro ride. Bus connections are important too. Let's ditch all parking except a few ADA spots, and redevelop the city for a better future!
497	Do the thing. Remove the parking. Make the land useful. Parking is a waste of precious resources.
498	Love it! I live biking distance and this sounds very helpful.
499	The most important thing in determining whether a transit network does or does not get decent ridership is land use within 1/2 mile of stations. This means you want dense mixed use with connections to other transit lines and not parking lots.
500	Get rid of parking and add transit oriented development.
501	Absolutely! Public transportation works best when it supports pedestrians. Not just drivers. Having these spaces removed will allow for more bus flow and require less people to take a car to the train station in the first place
502	More transit oriented development is always welcome! Hope that this plan moves forward!
503	I support the proposed changes, especially if they result in more transport oriented devolpment
504	I support the proposed changes. DC should be a published transportion town. NOT a car-centric stroad.
505	In favor of these proposed changes. Better transfers between bus and rail are essential to any transit system.
506	I think this is a good plan. Parking spaces always provide limited gains to transit, as 144 spaces would barely fill 2 cars of a metro train. I think it is much more valuable to have a stronger bus connection to the station to foster ridership through busses.
507	Kiss and ride parking has existed at the Takoma Metro Station for decades. I and fellow Taklma residents utilize these parking spots every day in order to enable further leverage public mass transit (metro) to commute into DC. Eliminating these parking spaces will result in me and other commuters in the area choosing to simply drive into the rest of the way into DC, undercutting WMATA's supposed goal of increasing utilization of public mass transit. As a decades long resident of Takoma who regularly uses the parking and metro access at Takoma Station, I strongly oppose the elimination of the kiss and ride parking spaces and urge WMATA to reconsider this ill-advised plan.
508	I am in favor of removing the parking and increasing connectivity for buses. Parking is not a great use of land around transit stations.
509	We need better options for parking to include payment options and more reasonable time limits.
510	I'm excited by the proposed plan to encourage people to use the metro, bus, bike, and walk. Hopefully this modernization will be well thought out to provide ease of use and ease of navigation as well as promote biking and pedestrian access. Will there be bike storage and bike trails? How about bike maintenance and repair facilities? It's also important these plans consider the environment in both design, construction, and use. Having park space, trees, seating, and more that allow people the space to relax comfortably, engage with the area businesses, and enhances the beauty of Takoma.
511	I love this idea. Taking away parking/kiss and ride spaces and replacing them with mixed use buildings will help shift metro usage away from mostly commuter riders to general, all day riders, which i think will help build a stronger ridership base. I would definitely benefit from this.
512	The existing parking lot and bus bay is a blight. It should be replaced with as many housing units as possible, with storefronts and a public space with trees and other greenery that can operate as a central square/meeting place for the Takoma neighborhood.

513	I approve of the changes generally. It seems as if bus capacity will be neutral or possibly be expanded. The kiss & ride capacity seems diminished, but perhaps the one lane will suffice. The only other requirements that should be upheld, in may opinion, are: -Required affordability of any potential residential units built on site, above and beyond DC inclusionary zoning. We should be accommodating the lowest AMI families and individuals possible. -Increase connectivity between the station and the DC neighborhood of Takoma on the other side of the tracks. This could be as simple as way finding, signs, and lighting the underpass of the Metro track bridge over Cedar Street NW. It could also involve facilitating a wider sidewalk under the overpass for pedestrians. -Maintaining and expanding bike and pedestrian connections throughout. -Overall, clearer signage and way finding around the station, including approaches from all directions.
514	As a resident of Takoma, I strongly support the proposal, which will enable the construction of very needed housing while also promoting transit-oriented development.
515	Very excited to have this development and really appreciate the hard work of ANC 4B to make sure that the development prioritizes affordable housing, environmental construction, and public transit options (like biking and bus). I look forward to having this in our community! Jaime Willis 20012
516	Hello, As a DC resident who lives close to and uses the Takoma stop daily, I am very excited for the new station development and appreciate all of the hard work that the WMATA team has put into bringing this project forward! I have a couple items that you may have already considered, but I think would be helpful for this project: 1. A significant portion of the nearby neighborhood (bounded by Fern, Piney Branch, Butternut, and Georgia) is classified as a food desert. There will apparently be a new Whole Foods in the Walter Reed development, but has WMATA considered urging the developer to make space for a grocery or market in the new development? Will restaurant spaces be considered? Link: http://food-deserts.com/food-deserts-in-washington-d-c/ 2. The Metropolitan Branch Trail (bike trail from Union Station to Silver Spring) is scheduled to run close to the Takoma station (from the east on Carrol to Cedar St to Eastern Ave), and your environmental evaluation notes that there are no bike lanes along those streets currently. Has WMATA considered or coordinated with DDOT on how it may better incorporate the trail into the station redesign to integrate safe multi-modal transportation options? It appears that a pedestrian network and accessible path will run through and on the edges of the project, but are those bike lanes? Specifically, could a protected bike lane be added along the outer edge of the project (Carrol, Cedar, and Eastern)? Link: https://www.capitaltrailscoalition.org/metropolitan-branch-trail/ 3. In keeping with DC's Vision Zero, Blair road between Piney Branch and Cedar, which leads to the station, has a very narrow sidewalk and I have personally witnessed many instances of pedestrians being put in danger by unsafe drivers along that road. Since WMATA has been able to get a new stoplight on Carrol, do you have the ability to influence changes to that road? The (hopefully) increased pedestrian traffic to the station will only increase the danger along this narrow sidewalk. 4. In keeping with DCs goal of adding 36,000 new housing units by 2025, is the project able to add more than the planned 430 units? Is there some community pushback or zoning regulations preventing this? As a local resident who cares about combating climate change and increasing housing affordability in the region, I would strongly support adding more housing units to the project. Thank you so much for taking the time to read my comments! Joe
517	This is exactly the sort of transit oriented development that the District and WMATA should be pursuing. Replacing underused parking spaces with much needed housing and new amenities for existing and new residents will bring significant benefits to the community, brining new housing units that can reduce displacement and attract new residents, reduce resident dependence on automobiles, boost Metro ridership, and enhance economic opportunities and activity in DC and Maryland. I am excited to see this redevelopment plan move forward and am entirely in support of the proposed changes. If anything I would want to see less parking for the proposed apartment building.
518	I am very happy to see the removal of parking spaces. Every parking spot that is removed represents an additional housing unit we can add to the area. We do not need cars but we need homes. I excited to see the Metro move away from building stations to large amounts of dedicated parking. Vehicle parking is counter productive for a municipal transportation system.
519	Please maximize the available space for the future mixed-use development and prioritize building as much housing as possible in this transit rich site. Please deprioritize competing objectives like parking, aesthetics, "green" space, community amenities etc. so that this site can do the most good to alleviate the housing crisis.
520	Concerned that there are no plans for en-route electric bus charging infrastructure. Implementing at least EV ready infrastructure in conjunction with this redesign is the most responsible use of long term financing to support stated goals of carbon emission reductions.

521	I oppose removing the kiss & ride parking spots. The neighborhoods surrounding the station are very hilly and have deficient sidewalk access, which makes it difficult to walk to the station from even a close distance. This is particularly true for those of us with small children who cannot safely ride a bus or use a stroller to walk up and down Van Buren to get to the metro station. If the kiss & ride spots are no longer available, they will make the use of public transportation an even less likely option.
522	The large open of area of grass and trees does not need to be removed.
523	Remove as much parking as possible, replace with people-oriented infrastructure
524	The new plan needs to incorporate significantly more single day parking spots. I drive and park at the Takoma Metro station 5 days of a week and typically see at least 40 to 60 other cars parked there in the morning and evening daily. Eliminating all daylong parking and only supplying a measly 16 kids and ride spaces will likely drive down ridership and contribute to traffic congestion. Metro should perform a months long study of post-pandemic usage of the Takoma Metro parking lot to get a better idea of the number of daylong parking spots that should be included in the redevelopment project and revise plans accordingly.
525	This is great. Build more housing.
526	I really like the proposals. I am very much in favor of removing parking spaces as it reduces dependence on cars and allows us to use the space in more efficient ways. This proposal should move forward to allow for transit-oriented development!!
527	I think this plan is great. I've dropped my wife of frequently at the current kiss and ride and always notice how empty the lot is, so it's great it's being used. Additionally, I like how there will now be something in this space which seems mostly unused whenever I walk past it.
528	Do not remove the parking spaces
529	I don't love these changes. with the additional restrictions around parking in that area, it would make it near impossible to drive to the metro and take the metro places, especially with young children where waiting for busses that also run very infrequently is not an option.
530	Some additional parking is needed. I moved near this station because of the parking lot and now you want to cater to people who live in a new apartment building. This is not fair. I do not have bus service to the station and it is too far to walk. In addition, the center area of the traffic circle should be driveable (wheels can go onto the circle island partially), at least partially, for buses and ambulances that need to make a U turn.
531	I support it wholeheartedly. My only concern is that there should be more housing. I would support DC adjusting the zoning to allow for more units.
532	Should provide more pick up and drop off space. Currently it's not usable
533	As a metro rider who frequently uses the kiss and ride parking spaces at Takoma, I am completely opposed to the proposed plan to remove 144 spaces. To leave only 16 spaces for rides to use is unacceptable. I ask that the planning committee, please reconsider this decision.
534	As a commuter who frequently uses the kids & ride spaces at Takoma Station, I am very taken aback as to how the new proposal aims to remove 144 parking spaces. Leaving only 16 spaces available for your valued customers is unacceptable. I am completely against the removal of that amount of parking spaces. I hope that you all will seriously take the concerns of the individuals you actually live and work in the Takoma community. Thank you!
535	I strongly endorse the proposed changes, including removal of parking spaces. The proposed changes will promote transit-oriented development, increase Metro ridership, enhance bicycle and pedestrian access to the station, and modernize transit facilities.
536	- Remove Kiss and ride - Remove any parking from the buildings - Restrict roads next to the station to bus only access - Add protected bicycle lanes on all the roads next to the stations - Widen sidewalks - Limit all the streets and roads next to the station to two lanes - Increase bus service
537	I think this plan makes sense, the 160 parking spot lot is a misuse of public land. On the other hand, metro helping along transit-oriented-development would help both the environment, as well as make financial sense.
538	I support the renovation plans, particularly moving the unnecessary parking spaces. I urge WMATA to move forward as quickly as possible to build desperately needed housing and commercial space for our community.
539	I park in this lot but agree it is better used for development, as long as it's dense enough to justify the lost spaces. Hopefully it will be many hundreds of units, and will transform the useless patch of grass into a useful park/plaza. I also support the traffic light. I have three suggestions: 1. Please further improve the pedestrian crossing at the Carroll Street entrance to the bus loop, where bus drivers are always courteous of pedestrians but passing car drivers are often not. Narrowing the crossing using paint and flexiposts was great, but let's

	take this opportunity to harden it with real curbs, bollards, and speed cushions (wide enough for buses to pass over unhindered). 2. At the pedestrian crosswalk over the entrance to the bus loop, where tons of people will be walking between the station and the new development, that crosswalk should be wider and it should use some kind of special paver/markings beyond the normal zebra stripes. This is not a normal crossing and the normal standards will not do for it. Ideally it should be a raised crosswalk, but I understand that's probably impractical with all the buses. Anything we can do shy of a raised crosswalk to remind everyone it's THE SIDEWALK, not just a driveway, would be good. Different colors, island refuges, a raised cushion at the car lane (if not bus lane), whatever and everything we can think of. Make it clear it's a pedestrian-first space, and everyone else is a guest. 3. Regarding the little circular island in the middle of the bus turn-around cul de sac in the northwest corner of the site: Please do not make this grass. It will just end up weeds. Flowers would be OK but it's a great opportunity for some kind of low-key public art that wouldn't need to be maintained as often as landscaping.
540	As a Takoma Park resident who rides the metro every weekday, I fully support redeveloping this area. However, I think the plans are missing one small, but vital, feature: a safe sidewalk along the northern boundary connecting Eastern Ave with the bus bays and metro entrances. As it is currently proposed, the many riders walking in from the residential area across Eastern Ave will end up walking in the active bus lanes to get to the buses/metro (like they currently do unsafely through the existing parking lot). This small change will make it safer for all of those individuals to access transit without sacrificing any bus bays or packing spots--just a few feet of grass. Please move forward with that one minor modification!
541	The 144 spaces that you propose to remove are *not* Kiss & Ride spaces, as you incorrectly state in this proposal. These are paid parking spaces that permit Takoma DC & Takoma Park MD residents, such as myself. to utilize the Takoma Metro for transit. For decades, these parking spaces were unused because they were limited to hours in the middle of the work day, preventing use by commuters with full-time day jobs. When Metro changed the policies, allowing expanded use of these spots to correspond with a 17-hour timeframe of work hours, this vital information was not effectively communicated to riders and potential riders. My Takoma Park neighbor of 20-years, who rides Metro every day, was astounded when I informed her that parking is permitted at the Takoma Metro. "When did they change that?!?" And if a *lawyer* didn't know about the rule change, I'm guessing lots of other people were unaware of this as well. Surely this lack of information contributed to the relatively moderate usage of this parking lot. Unfortunately, public transit options to this station are not a viable option. I tried for years to take RideOn bus to and from the Metrorail station, and finally gave up. They are too unreliable. To describe RideOn bus schedules as aspirational would be generous. And the operators consistently engage in unsafe behavior. I heard one RideOn operator tell a passenger that he used to work for Metro, but left because Metro had "too many rules." That does not inspire confidence in the safety of RideOn bus service. Equally troubling is the frequent practice of RideOn operators to leave stops before the scheduled time. This was particularly problematic in the evening, when on numerous occasions I was stranded at the Takoma Station because the last #14 bus left before the scheduled time. This happened with such frequency that I kept the RideOn service manager's phone number in my cell phone. WMATA does not provide bus service anywhere near our home, so that is not an option for our family. Unreliable and usafe RideOn service is a community problem. If we can't rely on RideOn to get us to the Metro, we must drive to the station. Or, as many of my neighbors do, drive downtown. Denying residents the use of paid parking at the Takoma station forces us to drive to our destination. That is bad for the environment, bad for our wallets and bad for Metro.
542	I suppose that these are necessary if development is to move forward. However, the view shown of what is supposed to be the current configuration of the site appears to me to be inaccurate. It shows far more parking than actually exists. The new plan that eliminates the existing park-like area directly on front of the station is more accurate in scale and scope, but doesn't seem to reflect how the removal of the existing parking spaces would affect the new configuration of bus bays and parking, which look like they would simply be in the same space in which they're currently located. And why more development when there is already too much empty office space in the DC area? Unless what is planned is residential this project shouldn't happen.
543	I support the redevelopment of these parking spaces into housing. I use the Takoma Metro stop multiple times a day, and even park there sometimes! But we desperately need more housing close to transit and I strongly support this development.
544	This project posting is very deceptive. Shame on Metro (first time I've ever said those words). The majority of these spaces are NOT Kiss and Ride, but paid, daily parking. Eliminating them will totally eliminate any convenient, affordable parking for this station, a major inconvenience for the many people who pay to use

	this lot every day. I have lived in this area for 30 years and park at the Takoma Metro lot at least several times a week, more so after the COVID pandemic. I am strongly against this proposed project. There are so many new apartment units recently and currently being built within a short walking distance of the Takoma Metro station. Is it really in the best interest of the neighborhood to eliminate a vital green space and much-needed parking? I don't think so. Thank you for considering my comments.
545	I agree
546	I agree with these changes
547	The proposed Takoma Metro plan is flawed for two reasons: 1. The elimination of parking will reduce the number of people who use the Metro. Elimination of parking will also force parking into the neighborhoods surrounding the metro station. 2. The proposed plans do not provide for enough space for the buses to pick up and drop off passengers. The current configuration is barely large enough to accommodate the buses to access the pickup and drop off locations, and if any scheduling errors occur where two buses are attempting to access the same location (a frequent occurrence), it will case a jam in the entire bus area.
548	Don't change anything. Leave the parking lots alone.
549	I need to be able to park at the Takoma stop 7 days a week because the buses in Takoma Park almost never come.
550	Please don't take away the parking spaces. Some parking is needed. We all can't take the ride on to the metro. Thank you
551	The large parking lot (aka Kiss and Ride) has long been an underutilized space. Parking lots need to go underground and Takoma Park could learn much from this approach.
552	This is a great project! The project bring brings bus passengers closer to the metro entrance, removes parking, upgrades the park, and adds more TOD. This will all help to drive ridership! I am excited to see this project move ahead quickly!
553	Without being provided the alternative layout of the space, I would rather keep the current layout. It's fine to add a drop-off bus stop, but the layout is already conducive to commuters who bus, bike, or walk in. The provided kiss and ride/ parking is reliably used for commuting purposes. If changes are being considered in regards to the parking- the policies around parking rules is the best place to start. Otherwise, it may benefit developers but the changes would create a less convenient infrastructure for commuters.
554	Looks great! More of this, please.
555	I prefer if there were more than 16 kiss and ride lots.
556	This project results in unacceptable elimination of green space by the metro station and adds 430 living units that will increase cars and congestion in an already congested residential neighborhood
557	I am appose to this
558	We need to consider not only those who need to park for the day but those who park temporarily to pick up family and loved ones. We need to consider benches with covers to keep those waiting out of rain and snow. We also need to consider placement of garbage cans around the loop to prevent liter.
559	Parking for cars at the Takoma stop provides critical access to metro trains in an area is poorly served by inconvenient bus routes. Without parking hundreds of daily commuters will forego public transportation for single occupancy vehicles. Please preserve daily parking spots to facilitate public transportation use.
560	I oppose the elimination of daylong parking at Takoma Metro. In early 2022, I was required to report to work in person and being able to park at Takoma station is the only way I've been able to do school drop off, aftercare pickup and make it to work on time. The $5 fee for parking is also affordable. The other changes seem fine but I honestly don't know what I'd do if all the parking was eliminated at the station.
561	Please don't do this to the neighborhood!
562	I already submitted comments with the expectation that I would be allowed to speak in person on the planned date of January 11. Ooopsie! You changed your collective minds. Possibly lost them. I am just so angry that, contrary to Metro's initiatives everywhere else in the region, you are deliberately REMOVING our ability to use the Metro--we who live in Takoma Park and over 1/2 mile from the station. From everything I can tell, my new option is to drive further to get to a different Metro Station, Fort Totten or Glenmont. But it would be just as easy to drive to my destination, so, in other words, WHY WOULD I USE METRO? Of course, I expect to to drive to my destination, spending more money and creating more emissions. . In what possible way does this increase the use of public transportation? I can hear you saying that I could take public transportation from the Takoma Station. No. I can't. There are never any taxis at the Takoma Station, and if you expect me to walk home after the last bus shows us at the Takoma Station (8:46 pm), you really have lost it. It is dark, it is hilly, it's a 20-minute walk, I have bad feet, and it is just a terrible option. I won't consider it. Is

	there a plan to increase bus frequency? Is there a plan to have buses go from the Takoma Station into Maryland until the last train of the day? No? I did not think so. You really do not care about public transportation. Don't pretend that you do.
563	This project is a really good idea and something I would really like to see done to our community. Don't have people come just to park and leave - make it a destination!
564	Don't change it we need it and the historic Takoma look
565	From what is listed, I don't see any purpose in removing the parking spaces.
566	I live in Takoma Park and I take Metro frequently, both to medical appointments in downtown DC and to events in DC at night. I park at the Takoma Station, particularly now, because tendinitis makes it difficult for me to walk. The only buses that travel near me are the Montgomery County Ride-on 14 and 24 that go up Piney Branch; and the 17 and F4 buses that travel down Philadelphia. Neither is available for late night transportation. It seems to me that the entire proposal is geared to removing people who are dependent on parking from the Metro system. I certainly will not use Metro in the evening if I can't park at the Takoma Station. Walking home at 11 p.m. is not an option I will consider. Are you going to improve the frequency of the buses and (more importantly) are you going to extend the bus hours to coincide with the last train for the night? If not, what exactly am I supposed to do?
567	Would like to see green space kept. Additional light on Carroll Avenue will significantly back up traffic - not recommended.
568	Metro should be ashamed of this proposed redesigned land grab. The unidentified contractors that are in partnership with Metro are only looking at Money and not the value of the community. The identified land area, especially the green space, has existed in the DC/Takoma community for decades. This entire area is being overrun with condo's, apartments, shops and stores that are destroying the quaint small town feel that makes Takoma and the historic DC area a place to raise families and being a close neighborhood. Takoma and the DC historical area are well known for its majestic trees and beautiful azaleas bushes. Bull dozing over the green space to build more concrete structures does not promote the tranquility and lushness of this area. Climate change is real. Maintaining and supporting green space is imperative to the health and future of the city and the world. Furthermore, the infrastructure in this surrounding area has not been touched or updated to support the newly developed buildings and structures already in the area. As for relocating and removing the bus loop and kiss/ride will not increase metro ridership. It is advisable to promote transit oriented development that includes bike ridership, walkable areas and more auto safety routes too make this area more user friendly.
569	How could we possibly agree to the changes without knowing where things will be moved to? I completely do not agree with any changes until there is clarity on why we need to make changes and how it will improve the experience of residents and travelers who use the station. We need to understand the impact of the changes and this proposed approach tells us nothing.
570	I support the conversion of the parking lot into mixed use development. I do not support the removal of the green park area. I do support the addition of a stop light at Carrol and Cedar.
571	I think that the proposed changes are wholly appropriate and long overdue. As someone who uses that station for my daily commute, the improved bus connectivity and bus amenities would be amazing. And it's exciting to see a more intentionally activated open space. The, perhaps the bigger issue on the table, the mix-use structure makes so much sense! It's right next to the Metro! And a hub for so many buses! Having more shops and housing right there seems like a no brainer. The things I would ask to be sure to be included in any final plan are the following: first, I want to make sure that the bike infrastructure is TOP NOTCH. Right now, there are a handful of bike racks, a Capital Bikeshare station that is always low on bikes or empty, and some longer-term storage options that are kind of inconspicuous to the uninitiated. I would love to see expanded bikeshare stalls and a more robust, secured bike parking facility for people who commute by bike regularly. Second, I would want to make sure that the public spaces around the new structures are ACTUALLY welcoming to the public. No fenced off night time hours, no hostile architecture to disincentivize sitting or sleeping, lots of ADA accessible seating, and good pedestrian scale lighting. And don't let anyone bully this into including a dog park! Thanks for taking the time to hear this.

To: WMATA
From: Jessica Landman, Takoma Park MD resident and Takoma Metro commuter

Subject: proposed Takoma Metro Station development by EYA, CaseNo.22-36.

I am writing regarding the proposed design for the Takoma Metro site, and the proposed elimination of Metro parking for the public's use. I oppose this action and urge WMATA to reconsider.

A better balance between the needs of transit users and development on this site is necessary; the site is not a fully-urban one. It but serves a semi-suburban location, for which the parking enables many people to access the metro and avoid taking cars into the city; indeed, when the Metro was first being built it was envisioned by the planners as a location where a 500-car garage should be built and the 140+/- lot was the compromise reached because of the semi-urban nature of neighborhood.

By doing away with the parking, which is heavily used today, you will be significantly reducing the community's transit access. That would contravene the Compact, which says that any 'improvements' to the metro system are supposed to be to increase ridership (see Compact Article II).

While more housing is also welcome, system overload will result in a detriment to transit accessibility at this location. Far more transit trips will be replaced by car trips as a result of this action than would be the case if you struck a better balance by setting a more appropriate limit to the size of the building and the number of parking spaces that remain available for transit users.

The arguments made by the Village of Takoma Park in their submission are very persuasive. Many people in Takoma Park and Takoma DC are able to age in place and still work or spend their entertainment dollars in DC by utilizing the Metro thanks to the availability of this parking lot. Retain the lot and build a reasonable quantity of housing above it: do not reduce the quality of public transit services for current residents.

Elimination of more than half of the spaces will deprive users of this safe alternative to driving downtown. Suggesting that they drive to an alternative, unfamiliar neighborhood, several miles away, to catch the Metro is unrealistic: moreover, it would do far less to limit air emissions.

Like many of my neighbors in Takoma Park, Md and Takoma, D.C, I have been pleased to see the infill development around the Metro at other privately-owned sites and would also welcome a well-designed project on the Takoma Metro site that was proportionate and provides affordable housing. The relocation of bus lanes closer to the Station is also a smart idea, and makes preservation of a green space more workable, which is also very welcome.

That being said, it is non-negotiable that whatever development occurs cannot be acceptable if it actually interferes with transit users' access or reduces ridership; providing ease of access should be the primary goal of any change, and the action that is now proposed will actually move us further away from that goal. It cannot be approved consistent with WMATA's own compact, and I urge you to reject this proposed parking plan.

Jessica Landman

Historic Takoma, Inc.
Preserving the Heritage of Takoma Park, MD and DC
www.historictakoma.org ❖ 301-270-2831

WMATA Hearing on Takoma Metro
Testimony Submitted on January 27, 2023
By Diana Kohn, President
Historic Takoma, Inc.
7328 Carroll Avenue
Takoma Park, MD 20912
301-270-2831

Thank you for the opportunity to comment on behalf of Historic Takoma, Inc., on the proposed plan for redevelopment of the Takoma Metro Station.

Historic Takoma is a membership-based, all-volunteer, 501(c)(3) non-profit organization founded to preserve the history and protect the unique architectural character of Takoma Park, District of Columbia, and Takoma Park, Maryland. As such, we endeavor to ensure that any new development enhances the livability of our community

Takoma Park residents in both DC and Maryland rely on Metrorail and Metrobus as well as Ride-On services at the station. We therefore want to ensure that it continues to be a well functioning transit station, and that it is safe and convenient for pedestrians, bikers and riders.

We have concerns about each of the four issues identified for comment in the Takoma Station proposal:

Proposed Traffic Light Addition
The proposed addition of a traffic light at the station entrance could help to ensure the safety of pedestrians and bikers coming from and leaving the station, but it could also increase traffic congestion around the station. It is unclear what the overall management plan is for how all these factors – cars, buses, pedestrians, bikers, and thru traffic will navigate not just the site, but the three residential streets that border the Metro site itself

The issue of traffic signals must be part of a larger overall traffic study as to how to manage safety and access. However, WMATA has delayed such a study and is asking for approval before local residents have a clear picture of the impact. Historic Takoma asserts such a study should be undertaken first before proceeding any further

Pedestrian and Bike Traffic Impact
The new proposed configuration will require that all pedestrians and bikers arriving at the station must cross the Kiss and Ride lane and the bus lanes to reach the entrance to the station itself

Pedestrians and bikers must be able to safely navigate this route. A well-functioning transit station must also include adequate space for bike storage and bike share.

Reimagining the Parking Lot

The proposed plan envisions eliminating the current 160 parking spaces and creating only drop-off/pick-up parking. Our observation is that the current parking lot is heavily used. We are concerned about the impact on neighborhood streets when drivers can no longer park at the station. Our experience is that Metro users will inevitably seek to park on neighborhood streets (despite permit regulations). In addition, we are concerned that this change makes no provision for handicap-accessible parking.

Bus Bays

We see several factors which need to be taken into account with this new arrangement of bus bays. Where will buses idle while awaiting the start of their next cycle? Currently buses routinely idle off-site on Cedar Street/Avenue. We have an opportunity to solve the problem by ensuring enough bus bays for increased demand for bus access in the future. It is unclear whether the new plan ensures sufficient space for this idling to take place on the Metro site itself Any new plan should ensure the continued access of Ride-On buses to the Metro site and the capacity for possible expansion. Planning for the future is also a hallmark of a well-functioning station.

Storm Water

In addition to the four issues discussed above, we are concerned about stormwater runnoff Currently stormwater runoff from the large paved area that makes up the parking lot, the Kiss and Ride, and the bus turn around and bays is a problem for the houses on Eastern Avenue. WMATA should take care to design the proposed station to correct this problem. We see no mention of it in the proposed plan.

Traffic Planning and Management

The proposed changes to the Takoma Station will have significant impacts on traffic flow on many adjacent streets. We urge WMATA to conduct a comprehensive traffic study that addresses all aspects of the proposed station changes on the adjacent streets and neighborhoods. These proposed plans should not move forward until the traffic study is completed and reviewed by the public.

Like WMATA, Historic Takoma wants to ensure the best possible transit-oriented solutions that will improve the livability of our unique Takoma Park DC and MD communities – now and in the future.

City of Takoma Park

Office of the City Council
Phone: 301-891-7230
TalishaS@takomaparkmd.gov
Fax: 301-270-8794

7500 Maple Avenue
Takoma Park, MD 20912
www.takomaparkmd.gov

Talisha Searcy, Mayor

January 27, 2023

Dear Washington Metropolitan Area Transit Authority (WMATA),

Thank you for the opportunity to provide comments on Metro's proposed changes to parking and bus facilities at Takoma Station. The City of Takoma Park has made it a priority to ensure a livable community for all of its residents which includes providing a range of safe, high quality, affordable, and stable housing options that are equitably available in neighborhoods throughout the community. The development at Takoma Station, specifically the affordable housing component, aligns with this goal. More dense development at transit sites also supports the City's climate action goals to reduce impacts on greenhouse emissions from transportation as well as buildings. Thus, the Council continues to believe, as was stated in the City's 2013 resolution on the project, (Resolution 2013-68), that the project has enormous potential to be a signature project for the City of Takoma Park as much as for the District of Columbia.

Per the guidance provided during the WMATA public hearing on Tuesday, January 17, 2023, the City of Takoma Park's questions/comments are limited to the proposed changes noted in the document materials. The City of Takoma Park would like to submit the following questions/comments for the record.

***Parking*:** The proposed plan reduces the number of long-term non-commuter parking spaces from 160 to 16 15-minute Kiss & Ride spaces. Although parking at the Takoma Metro station was not intended to be long-term commuter parking, a number of residents, especially senior citizens and individuals with disabilities, use the parking spaces to access the Metro. WMATA currently offers parking for several hours which residents use for short-term daily parking. The City of Takoma Park would like to know:

- Will the development project include daily parking for metro riders? If so, how many spaces will be available?
- Will WMATA make a recommendation to the District of Columbia regarding the number of parking spaces needed for inclusion in the development project based on current use of short-term parking at Takoma Station?
- For parking that will be available as part of the development project, what is the anticipated price for users?
- Elimination of parking could disproportionately impact Metro access for seniors, individuals with disabilities, households without support networks, and those in need of financial resources. What equity considerations regarding the current use of the parking lot did WMATA consider and how does it plan to mitigate them?

Stormwater Management: The Environment Evaluation notes that WMATA will follow DC requirements for stormwater management with the proposed change in the layout of its property. However, the City of Takoma Park wants to stress the importance of WMATA adhering to stormwater management requirements as City residents who reside in properties that border the development are currently experiencing flooding due to stormwater issues. We would like to be assured that the current situation for these residents will not be made worse, especially as climate change impacts increase over time. The City of Takoma Park would like to know:

- How will WMATA manage cross-jurisdiction stormwater impacts from its altered layout during construction and in the long term? The City of Takoma Park is willing to work with WMATA to identify ways to mitigate stormwater impacts on the City of Takoma Park border.

Traffic: Pedestrian and bicyclist safety is critically important. The proposal includes adding a traffic signal on Carroll Street NW at the bus loop and Kiss & Ride entrance. The City of Takoma Park would like to know:

- Has there been a traffic study conducted by WMATA to assess the impact of adding this new traffic signal, and when is it available for review?
- Did WMATA consider the future development (i.e. resident parking, traffic flow) when determining placement of the new traffic signal? If not, will the developer be responsible for conducting traffic studies to address potential future traffic flow concerns?

The City of Takoma Park appreciates the modifications WMATA and your development partner EYA have made to the design based on feedback from the City of Takoma Park. Moreover, we

appreciate WMATA's willingness to meet with the City and look forward to engaging with you and EYA to ensure that this valuable project meets the needs of both the residents of the City of Takoma Park and the District of Columbia.

Sincerely,

Talisha Searcy, Mayor
on behalf of the City of Takoma Park City Council

Councilmember Shana Fulcher
Councilmember Cindy Dyballa
Councilmember Randy Gibson
Councilmember Terry Seamens
Councilmember Cara Honzack
Councilmember Jason Smith

This photo shows the daily parking rate for the 144 spots Metro proposes to eliminate. It's a PARKING area not a drop off area contrary Metro's erroneous Evaluation.



Here's the photo showing that the 144 spaces are for Daily Parking not drop off parking as stated in the Metro Environmental Evaluation.



Steven Ney, Esq

Redevelopment of Takoma Metro Without Retaining Public Parking is Not in the Public Interest

As a long-term community resident and user of the Takoma Metro parking lot and kiss and ride since 1996, I oppose the redevelopment of that Metro station without retaining adequate public parking capacity. This public parking is a community resource that is available, at modest cost, to everyone, helping to ensure equitable access to Metro. Elimination of this parking will only benefit wealthy developers and the privileged few who can afford to purchase the new, expensive housing to be built on that spot.

1. Parking and Redevelopment Can and Should Co-Exist. The original plan approved by Metro for the EYA redevelopment included the retention of very significant public parking. This feature MUST be restored. Eliminating this parking only benefits the developer and the few who can buy these expensive new housing units at the expense of the public at large. Retaining parking while building transit oriented development serves the community best.

2. Elimination Exacerbates Metro's Last Mile Problem. Metro is only useful if the community can access it. The area's bus system is incomplete, leaving many islands with no or poor service (I'm served by the limited hours Ride On route 19). Moreover, our buses are unreliable.

3. Metro's Parking Demand Studies are Grossly Flawed. The materials supporting the elimination of parking at Takoma Metro cite (i) low demand at Takoma, and (ii) excess space at Fort Totten. According to the materials, this was determined in September 2021. However, 2021 was during the height of COVID when a very large number of people where not going downtown. Prior to COVID, the Fort Totten lot was completely full every time I took the train by, and the Takoma lot was heavily used, particularly the portion of the lot that provided longer term parking (under Park Mobile, up to 15 hours). The 7 hour portion of the lot (8:30 to 3:30 weekdays) was robustly used as well.

4. Weekend Access. The Takoma Metro lot is routinely used by families and tourists on weekends. Unlike the numerous Metro riders that I regularly see leap over the fare gates without bothering to pay, this group of users nearly always pays its fares.

5. Hybrid Work Environment Requires Flexible Parking Arrangements. The newly developing hybrid work environment involves people going to the office downtown for partial days or on unusual schedules. Supporting this new work model requires flexible parking arrangements to be available. Otherwise, people will drive to the office or use ride share services and Metro will lose these customers.

In sum, the redevelopment of Takoma Metro can (i) be transit focused, and (ii) preserve meaningful parking options for the community. The original approved proposal proves this point. Removing the parking damages the community at large and lines the pockets of a private developer.

Douglas Pelley, Silver Spring MD

RE: the Proposed Parking and Bus Bay Changes at Takoma Station.
I'm especially concerned with the proposal to take away existing paid parking spaces from the surrounding communities that have relied on these parking spots for years. I urge you to leave the existing number of paid parking spots for use by Metro commuters in any new development on this site. NOTE: Most of these spaces have been designated as PARKING spots NOT "Kiss and Ride" spots for over 30 years that I've lived here.

- The Plan Developers have misidentified the approximately 160 current paid parking spots as "Kiss and Ride" spaces. In fact, there are currently and historically only a handful of spaces *identified as "Kiss and Ride."* The rest of the spaces are identified as Paid Parking Spots – with meters and signed instruction regarding-hours-of-operation. The vast majority of the historical parking spots have been heavily used during daytime hours prior to the Pandemic and now with the Pandemic in the background parking spots are filling up again (NOTE: parking has been and still is available for multiple hours during weekdays as well as in the evenings and on the weekends). Also, note that several of the 160 parking spots are designated "Handicapped." Unfortunately the proposed plan doesn't even address the needs of the "Handicapped" nor our growing"Senior" population (65+ years old) that would like to stay in the neighborhood to "Retire in Place."

- Until the Pandemic, these paid parking spots were used by local DC and MD residents – the lot was full or almost full during daylight hours as well as evenings and weekends. Please note that the handful of handicapped spots were most often FULL.

- Much of the data in the Proposal was based on ParkMobile meter transaction records available since 2020 (p. 9 of the Report). Please note that the study period was at the height of the pandemic when many workplaces, stores, restaurants, etc. in DC were closed and tele-working, tele-medicine, tele-recreation, and take out pick-up and delivery had replaced Metro trips to brick-and-mortar workplaces and recreational activities.

- No current and projected traffic and parking studies were presented. In addition to the over 400+ units proposed by EYA for construction at the Metro site, there are hundreds of apartment and condo units both under construction and proposed. Parking and Transportation studies must be done and/or updated to meet current conditions of vastly increased housing units adjacent to the Takoma Metro.

- No studies were done to back up the assumption that current Takoma, DC and Takoma Park, MD residents will drive all the way to Fort Totten to use the Metro – once they're driving that far, some will surely drive to downtown DC theaters, restaurants, workplaces instead – thus Metro would be losing potential riders and DC would be gaining more traffic. From some parts of Takoma and Takoma Park, driving to Fort Totten would take 15-20 minutes (or more in rush hour) -- an additional burden for those with disabilities or for senior citizens.

- Many of the Metro planners assume that everyone can either easily walk to Metro, ride a bike to Metro, or find a bus close to where they live that runs often enough and on weekends and nights. For example, one of the Ride-on buses (the 14) that goes from the Metro to a stop near my house runs infrequently on weekdays, stops running in the early evening – and has no service on Sundays. The other Ride-on near my house (the 24) only has inbound AM service from 5:25am until 8:30am and outbound PM service from 3:50PM-8:10PM. No service is available on the weekends. Do we expect senior citizens who often have multiple chronic illnesses and are taking multiple meds – some of which affect vision, hearing, balance, etc. – to ride a bike through heavy traffic to the metro?

- Some of the EYA proposals have discussed providing parking for rental units in their proposed high-rise buildings. If the goal is to serve transportation needs, why provide parking for housing and/or retail establishments as opposed to Metro riders? Needs of Metro riders should be paramount. Otherwise, Metro riders may revert to their cars – surely not what we want to see in the era of severe climate change and declining Metro revenues.

- Many people in the neighborhoods surrounding the Takoma Metro rely on being able to park at Takoma Station for numerous reasons:
    1. They are disabled or partially-disabled
    2. They are injured or have one or more chronic illness that are not disabling, but would make it difficult to walk or ride a bike to the station – here are but a few examples:
        i. Sciatica
        ii. Recent knee, foot, or hip surgery
        iii. Recovering from an infectious or non-infections disease and fatigued
        iv. Carrying heavy items (or not-so-heavy)
        v. Carrying a baby or having 2 or more small children in hand
        vi. etc.
    3. There are security concerns about walking to and from METRO, especially during nighttime hours, given the rise of assaults, armed robberies, etc.

Safety at the transportation hub for Metro riders in the form of Metro parking for riders should take precedence to EYA building a larger number of housing units -- parking priority should go to meet the goals of transit users.

The developers should NOT take away our current METRO parking to build an oversized apartment building. Rather, they need to continue to include parking for area residents who utilize Metro, especially the disabled and elderly (over 65 – Smart Card for Seniors users) – this should be a priority over providing parking spaces for their apartment buildings and retail shops). KEEP THE EXISTING NUMBER OF PARKING SPACES FOR METRO USERS AT THE TAKOMA STATION – after all its primary mission is as a Transportation Hub.

Thank you for your consideration,
Carol Mermey
Takoma Park, MD

January 23, 2023

Re: Proposed Elimination of 144 parking spaces at the Takoma Metro

Dear Metro:

I am writing on behalf of the Village of Takoma Park, a non-profit organization in Takoma Park dedicated to providing intergenerational support to seniors and persons with disabilities who wish to live actively in the Takoma Park community. We have more than 200 members and support from many other members of the community. Takoma Park is approximately 55 % African-American or people of color.

We strongly oppose the elimination of 144 parking spots at the Takoma Metro

A stated purpose of Metro's proposal is to "increase Metro ridership". We believe eliminating these 144 parking spaces will have the opposite effect. It will drive people to stay in their cars and away from using Metro when they cannot park there.

Members of the Village of Takoma Park and other residents of Takoma Park are elderly or are people with disabilities. We are attempting to help people live well in the community, to age in place. To achieve that laudable purpose we make frequent use of these parking spots at the Metro to go downtown and to other destinations.

Metro's Environmental Evaluation asserts that the 144 spaces being eliminated are KISS and RIDE SPACES (page 9) and that they not being used for "their intended purpose" (page 20). Both of these statements are flatly wrong.

First, those 144 spaces are officially designated by Metro for "DAILY PARKING- $4.70 MAXIMUM RATE- 5 AM to 2AM." See photo attached. They are not temporary drop off spaces. (In a separate area there are 17 drop-off spaces in Section A with a sign stating "15 Minute Parking-Driver Attended Waiting Only". See photo attached)

Second, Metro's Evaluation itself confirms that the 144 parking places are being used for their intended purpose. They enable people to park in the designated spaces so they can take the Metro, not to drop someone off. As the Evaluation notes, 88% of the parking spaces are used by people for more than two hours (page 9). In other words, they are parking exactly as intended by Metro.

These 144 parking places have been used for more than 40 years. Removing them will deprive the residents of this urban-suburban area, many of whom elderly and/or people with disabilities, of a significant benefit they rely upon so they can use Metro.

In addition, it is critical that the ----handicapped parking spaces be maintained for persons with disabilities can access the Metro system.

Thanks for your consideration.

Steven Ney
Board Member
Village of Takoma Park

cc.

Marc Elrich, Montgomer County Executive
Kate Stewart, Member, Montgomery County Council
Talisha Searcy, Mayor of Takoma Park
Randy Gibson, Member, City Council of Takoma Park

Government of the District of Columbia
Advisory Neighborhood Commission 4B

By Electronic Mail

January 23, 2023

Anthony J. Hood, Chair
District of Columbia Zoning Commission
441 4th Street, NW, Suite 200S
Washington, DC 20001

RE: Supporting and Providing Additional Feedback on Application of TM Associates, LLC, and Washington Metropolitan Area Transit Authority for Consolidated Approval of Planned Unit Development and Map Amendment at Takoma Metrorail Station (ZC Case #22-36)

Dear Chair Hood:

TM Associates, LLC (EYA Multifamily, the Developer) and the Washington Metropolitan Area Transit Authority (WMATA) have applied to the Zoning Commission for consideration of a consolidated Planned Unit Development and Zoning Map Amendment to develop a new multifamily mixed-used development on the parking lot of the Takoma Metrorail Station (Lot 806 in Square 3351, Lots 820, 822, 823, 829, 831, 839-841, and 845-851 in Square 3352, and Lots 811-813 in Square 3353) under Case #22-36 and rezone the property to the MU-5A zone, as noticed to Advisory Neighborhood Commission 4B on April 21, 2022. The Developer seeks to construct 430-440 residential units, 15-18,000 square feet of ground-floor retail, a new transit zone adjacent to the Metrorail station for buses, and a 1.8 acre park and plaza. This project is known as the “Takoma Station Development.”

The Takoma Station Development site is located within Advisory Neighborhood Commission 4B, Single Member District 4B04, the Takoma Park Historic District, and the Rock Creek East planning area. As part of their application, the Developer has met with the Commission’s Housing Justice Committee (March 2, 2022) and the Commission (April 25, 2022, June 27, 2022, and November 28, 2022), as well as participated in three joint public Single Member District meetings hosted by the Commissioner for Single Member District 4B04, Evan Yeats, the Commissioner for Single Member District 4B02, Erin Palmer, and the former Commissioner for Single Member District 4B07, Geoff Bromaghim, who collectively represent the area including and around the Takoma Station Development site.

This Letter supplements the Commission's prior actions on this project and incorporates them here by reference. *See* Letter: Providing Feedback on the Proposed Planned Unit Development at the Takoma Metro Station (June 27, 2022); Letter: Supporting Affordable Housing in High-Needs Areas Tax Abatement for Takoma Metro Station Development (May 23, 2022).

Advisory Neighborhood Commission 4B is supportive of efforts to bring new housing to transit accessible areas, including adjacent to the Takoma Metrorail Station. For example, the Commission has supported numerous efforts to provide new housing around the Station, with a particular emphasis on affordable housing. *See* Resolution 4B-22-1006, Supporting Application for Map Amendment for Elm Gardens, 7050 Eastern Avenue, NW (Oct. 24, 2022); Resolution 4B-20-1107, Supporting the Preliminary Design for 6928 Maple Street, NW (Nov. 23, 2020); Resolution 4B-20-0905, Supporting the Provision of DHCD Funding for 218 Vine Street NW (Sept. 28, 2020); Resolution 4B-20-0410, Supporting Proposed Design for 300-308 Carroll Street NW (Apr. 27, 2020); Resolution 4B-19-0606, Supporting Proposed Design for 218 Cedar Street NW (June 24, 2019).

Advisory Neighborhood Commission 4B has previously provided feedback on the land use of this area through the drafting process of an updated Comprehensive Plan for the District, stating: "the Commission generally supports increased density around the Takoma Metro Station and other high-quality transit corridors, in part because individuals of all income levels should have access to robust public transit options. The Commission believes that any effort to increase density, particularly on publicly-owned land, should maximize affordable housing, including deeply affordable housing, including through affordable housing set-asides that capture a significant portion of the value provided through any re-zoning. In addition, the Commission believes that any development of these sites should require developer efforts to mitigate transportation and infrastructure impacts on surrounding communities, including mechanisms for stormwater impact mitigation and for increased transit service to ensure livability for existing neighborhoods." Resolution 4B-20-0104, Providing Feedback on Proposed Changes to the Comprehensive Plan (Jan. 27, 2020).

Advisory Neighborhood Commission 4B believes "that the affordable housing crisis requires the District to use every tool available to ensure affordable housing" and that "the increased supply of housing – while important – will not alone solve the affordable housing crisis, particularly as related to extremely-low and very low-income households, and must be accompanied by active and robust City goals and policies to ensure affordability, including affordability for extremely low- and very low-income households, in relation to increased supply." Resolution 4B-20-0104, Providing Feedback on Proposed Changes to the Comprehensive Plan (Jan. 27, 2020).

The District of Columbia government, through Mayor's Order 2019-036, has set a goal of 36,000 new housing units by 2025, of which 12,000 are to be affordable to households earning below 80 percent of area median income. The Rock Creek East planning area includes a goal of 1,500 new affordable housing units and has only produced 57.9% of that goal so far. The approximately 70 affordable units as part of this Planned Unit Development would meet more than 11% of that remaining goal. The Commission has previously "oppose[d] any design

changes … that will reduce the number of units in [a] project to ensure that the community meets the[se] goals." Resolution 4B-22-1007, Supporting Construction of an Apartment Building at 7050 Eastern Avenue, NW (HPA 22-487) (Oct. 24, 2022).

Advisory Neighborhood Commission 4B acknowledges the Applicant's Exhibit I ("Applicant's Response to ANC 4B Conditions in Support of Application") and provides the following additional feedback in support of the Commission's housing and affordable housing goals:

- The current Planned Unit Development is significantly improved from the plan proposed by the Developer in 2005 and approved through the WMATA compact hearing process by offering almost twice as much public area recreational and green space, twice as much housing, and three times as much affordable housing, as well as better bicycle and pedestrian facilities and improved connections to neighborhood businesses and retail in Takoma, Washington, DC and Takoma Park, Maryland.

- The Developer's application is reflective of extensive engagement with both the community and the Commission. The design and proffered amenities have iteratively improved through that process and are aligned with community priorities and the Commission's extensive feedback. The Commission looks forward to the ongoing engagement around the public spaces as part of this project, as provided in the Developer's application. The changes to the project since the Commission's Letter of June 27, 2022 have been relatively minor and in-line with the Commission's goals.

- The Developer's application is responsive to the feedback provided in the Commission's June 27, 2022, Letter. The Commission requests that the Zoning Commission order specifically include the requirement that the Developer engage in ongoing efforts (not just efforts via the initial application or cycle) to seek participation in the Tax Abatements for Affordable Housing in High-Needs Areas (HANTA) program offered by the Department of Housing and Community Development (until granted or no longer applicable) that will increase the percentage of residential square footage dedicated to income-restricted affordable housing to at least 33%. If the tax abatement is granted, the Developer should seek to maximize the number of units provided at 30% of Area Median Income and maximize the number of additional affordable three bedroom units. *See* Letter: Supporting Affordable Housing in High-Needs Areas Tax Abatement for Takoma Metro Station Development (May 23, 2022). This requirement would ensure the project is aligned with the Commission's goals of maximizing affordable housing to every extent possible.

- The Commission appreciates the prominent placemaking and signage in the current renderings and plans and requests that the Developer and the Zoning Commission preserve them in future revisions.

With these conditions and those already agreed upon by the Developer, Advisory Neighborhood Commission 4B is strongly supportive of the consolidated application for a Planned Unit

Development and Map Amendment and believes it meets the standards of Chapter 3 of Subtitle X and Chapter 3 of Subtitle Z of the Zoning Regulations because it will provide substantial public benefits and will advance important goals and policies of the District of Columbia. For those reasons, the Commission requests the application be approved.

Advisory Neighborhood Commission 4B, at a duly noticed public meeting, with a quorum being the “majority of the total number of commissioner positions currently filled in Commission 4B,” at its January 23, 2023, meeting voted with 10 Yeas, 0 Nays, and 0 Abstentions to send this letter.

The Commission also voted with 10 Yeas, 0 Nays, and 0 Abstentions to appoint the Commissioner for Single Member District 4B04, Evan Yeats, the Commissioner for Single Member District 4B02, Erin Palmer, the Commissioner for Single Member District 4B08, Alison Brooks, or any member of the Executive Committee in their absence, to be authorized to communicate this letter and represent the Commission in communication with the Zoning Commission or any DC government entity regarding this matter.

Sincerely,

Evan Yeats, ANC 4B01 Commissioner
Erin Palmer, ANC 4B02 Commissioner
Alison Brooks, ANC 4B08 Commissioner

cc: Janeese Lewis-George, Councilmember, Ward 4
Washington Metropolitan Area Transit Authority

Thank you for allowing me to testify this evening. My name is Evan Yeats and I am the Advisory Neighborhood Commissioner for Single Member District 4B04 - the area that contains the Takoma Metro Station and the proposed project. This is my third term representing the area surrounding the Metro station and I am authorized to speak on behalf of the Commission by our Resolutions 4B-20-0403 (April 27, 2020) and 4B-21-0602 (June 28, 2021), and our letters providing feedback on the development of May 23, 2022 and June 27, 2022 (among others). All of the cited letters and resolutions passed unanimously and I will submit them to the record.

The Commission is in support of the reconfiguration of the WMATA operations that are considered as part of this project. The Commission has worked extensively on this proposal for the previous year and has grounded our support and feedback in at least seven public meetings on this proposal with extensive community participation. These plans are extensively improved over the 2005 proposal - including three times as much affordable housing and twice as much community-serving park space, in part due to this feedback process.

Right now, the Takoma Metro Station - as currently configured and maintained by Metro - is not a community-serving space. The inability of Metro to adequately maintain the lighting and grounds, the lack of community-serving features in the open space and the inability of local groups, including the Commission, to permit the space for functions means even the most attractive portion of the space remains a hole in the middle of the “downtown” of our community. (See Resolution 4B-21-0602) The proposed plans, thanks in part to the feedback of the Commission, much more strongly connects our community and offers usable recreation and park space that will be permanently open to the community and a retail plaza that will better connect the two spines of our local business district.

The surface parking lot adjacent to the Metro is both an eyesore and environmentally unfriendly. Maintaining an oversized impervious surface directly adjacent to the Metro separates our neighborhoods from transit, creates problems with runoff and encourages additional traffic on our local streets furthering local pollution and a global climate crisis. The current lot is underpriced and is still underutilized. Our Commission has found that private parking lots near the Metro are generally severely underutilized and the Metro lot is no exception. It is also asking my neighbors to bear the burden of congestion, traffic safety injuries and deaths, and pollution in service of commuters, a proposition which I wholeheartedly reject.

The reconfigured bus loop will better serve transit users such as my constituents. The proposed improved bike storage station will replace unsightly and inefficient bike storage solutions and fulfill a Metro plan that was first presented to our community in 2020. (See Resolution 4B-20-0403) The pathway will improve access to the station for bicyclists and pedestrians. The reconfiguration of the intersection of the bus loop and Carroll Street NW will improve the pedestrian experience and narrow the roadway to slow vehicle speeds. (See Resolution 4B-19-0603)

Finally, Advisory Neighborhood Commission 4B is supportive of efforts to bring new housing to transit accessible areas, including adjacent to the Takoma Metrorail Station. For example, the

Commission has supported numerous efforts to provide new housing around the Station, with a particular emphasis on affordable housing. *See* Resolution 4B-22-1006, Supporting Application for Map Amendment for Elm Gardens, 7050 Eastern Avenue, NW (Oct. 24, 2022); Resolution 4B-20-1107, Supporting the Preliminary Design for 6928 Maple Street, NW (Nov. 23, 2020); Resolution 4B-20-0905, Supporting the Provision of DHCD Funding for 218 Vine Street NW (Sept. 28, 2020); Resolution 4B-20-0410, Supporting Proposed Design for 300-308 Carroll Street NW (Apr. 27, 2020); Resolution 4B-19-0606, Supporting Proposed Design for 218 Cedar Street NW (June 24, 2019).

Advisory Neighborhood Commission 4B has previously provided feedback on the land use of this area through the drafting process of an updated Comprehensive Plan for the District, stating: “the Commission generally supports increased density around the Takoma Metro Station and other high-quality transit corridors, in part because individuals of all income levels should have access to robust public transit options.” Resolution 4B-20-0104, Providing Feedback on Proposed Changes to the Comprehensive Plan (Jan. 27, 2020).

The District of Columbia government, through Mayor’s Order 2019-036, has set a goal of 36,000 new housing units by 2025, of which 12,000 are to be affordable to households earning below 80 percent of area median income. The Rock Creek East planning area, in which this site resides, has a goal of 1,500 new affordable housing units and has only produced 57.9% of that goal so far. The approximately 70 affordable units as part of this Planned Unit Development are beyond what is required by the District’s Inclusionary Zoning program and would meet more than 11% of that remaining goal. These proposed units also include rare deeply affordable family-sized units (three bedroom units for those earning below 30% of Median Family Income). The Commission has previously “oppose[d] any design changes … that will reduce the number of units in [a] project to ensure that the community meets the[se] goals,” and are working with the Developer to participate in a District of Columbia tax abatement program that could allow the doubling of the number of affordable units in this development and help us continue our work for housing for all in our community.

I urge the Board of Directors to approve the reconfiguration of the Takoma Metrorail Station and defer to the judgment of the elected body and residents most impacted by the decision - those of Advisory Neighborhood Commission 4B.

Government of the District of Columbia
Advisory Neighborhood Commission 4B

By Electronic Mail

June 27, 2022

Anthony J. Hood, Chair
District of Columbia Zoning Commission
441 4th Street, NW, Suite 200S
Washington, DC 20001

RE: Providing Feedback on the Proposed Planned Unit Development at the Takoma Metro Station

Dear Chair Hood:

EYA Multifamily, LLC (the Developer) has been selected by the Washington Metropolitan Area Transit Authority (WMATA) to develop a new multifamily development on the parking lot of the Takoma Metrorail Station. The Developer notified the Commission on April 21, 2022, of their intent to file for a Planned Unit Development for Lot 806 in Square 3351, Lots 820, 822, 823, 829, 831, 839-841, and 845-851 in Square 3352, and Lots 811-813 in Square 3353 and seek to rezone it to the MU-5A zone. The Developer seeks to construct a mixed-use building providing approximately 410 residential units, 10,000-20,000 square feet of ground-floor retail, a new transit zone adjacent to the Metrorail station for buses, and a 1.5-2-acre park (the "Takoma Station Development").

The Takoma Station Development site is located within Advisory Neighborhood Commission 4B, Single Member District 4B01, and within the Rock Creek East planning area. As part of their application, the Developer has met with the Commission's Housing Justice Committee (March 2, 2022) and the Commission (April 25, 2022, and June 27, 2022), as well as participated in three joint public Single Member District meetings hosted by the Commissioners for 4B01, 4B02 and 4B07.

Advisory Neighborhood Commission 4B is generally supportive of efforts to bring new housing to transit accessible areas, including adjacent to the Takoma Metrorail Station. The Commission has supported numerous efforts to bring new housing to the area, with a particular emphasis on affordable housing. *See* Resolution 4B-19-0606, Supporting Proposed Design for 218 Cedar Street NW (June 24, 2019); Resolution 4B-20-0410, Supporting Proposed Design for 300-308

Carroll Street NW (April 27, 2020); Resolution 4B-20-0905, Supporting the Provision of DHCD Funding for 218 Vine Street NW (September 28, 2020); Resolution 4B-20-1107, Supporting the Preliminary Design for 6928 Maple Street, NW (November 23, 2020).

Advisory Neighborhood Commission 4B has previously provided feedback on the land use of this area through the drafting process of an updated Comprehensive Plan, stating: "the Commission generally supports increased density around the Takoma Metro Station and other high-quality transit corridors, in part because individuals of all income levels should have access to robust public transit options. The Commission believes that any effort to increase density, particularly on publicly-owned land, should maximize affordable housing, including deeply affordable housing, including through affordable housing set-asides that capture a significant portion of the value provided through any re-zoning. In addition, the Commission believes that any development of these sites should require developer efforts to mitigate transportation and infrastructure impacts on surrounding communities, including mechanisms for stormwater impact mitigation and for increased transit service to ensure livability for existing neighborhoods." *See* Resolution 4B-20-0104, Providing Feedback on Proposed Changes to the Comprehensive Plan (January 27, 2020).

Advisory Neighborhood Commission 4B believes "that the affordable housing crisis requires the District to use every tool available to ensure affordable housing" and that "the increased supply of housing – while important – will not alone solve the affordable housing crisis, particularly as related to extremely-low and very low-income households, and must be accompanied by active and robust City goals and policies to ensure affordability, including affordability for extremely low- and very low-income households, in relation to increased supply." *See* Resolution 4B-20-0104, Providing Feedback on Proposed Changes to the Comprehensive Plan (January 27, 2020).

With those goals in mind, Advisory Neighborhood Commission 4B requests that the Planned Unit Development order for the proposed Takoma Station Development be approved with the following conditions:

- That the Developer provide at least 15% of the square footage of the residential development as income-restricted affordable housing, including at least 3% affordable at 30% of Area Median Income and 12% affordable at 60% of Area Median Income.

- That the Developer provide as many three bedroom ("family-sized") affordable units as possible, and as many at the 30% of Area Median Income affordability level as possible.

- That the Developer continue to seek participation (until granted or no longer applicable) in the Tax Abatements for Affordable Housing in High-Needs Areas (HANTA) program offered by the Department of Housing and Community Development that will increase the percentage of square footage dedicated to income-restricted affordable housing to at least 33% of residential square footage. If the tax abatement is granted, the Developer should seek to maximize the number of units provided at the 30% of Area Median

Income levels and maximize the number of additional affordable three bedroom units. *See* Letter re: Supporting Affordable Housing in High-Needs Areas Tax Abatement for Takoma Metro Station Development (May 23, 2022).

- That the Developer provide at least 1.8 acres of public open space maintained by the Developer as part of the project and continue to work with the Commission and the community in ensuring the best uses for that space.

- That the proposed retail transit plaza be designed to facilitate movement through the site to the community and to other businesses and provide wayfinding signage that encourages patronizing local businesses, exploring the broader Takoma community, and connecting local businesses on both sides of the Metro station. The Developer shall seek feedback and input on this signage from the Old Takoma Business Association/Main Street Takoma, which could also include historical information about the neighborhood and community "kiosks" to share flyers and information regarding community events.

- That the proposed passive recreational "park" space include, at a minimum, lighting, benches, trash cans, water fountains, attractive landscaping, and a recreational component and that these amenities be available to the public and not designed in any way to limit use.

- That the Developer work with the community and the Commission to identify the best high-quality recreational component for the "park" space – such as a playground, splash pad, fit lot, and/or community gathering place and then construct it.

- That the Developer enter into an easement permanently ensuring that the park space be open and available to the public in perpetuity with operating hours from at least dawn until dusk daily and limiting closures for private or restricted events to no more than four hours every month.

- That the Developer work with the community and the Commission to identify and create public art projects as part of the development as required by DC law with a particular emphasis on art from local women and people of color and participatory or playable art.

- That sidewalks or trails or multiuse paths on all sides of the proposed development, but particularly on Carroll Street, NW, be at least 15 feet wide if possible, to match the width of sidewalks East of the development on Carroll Street, NW and provide a safe and low-stress pedestrian experience.

- That the Developer provide no more residential parking spaces than .33 spaces per residential unit and the Commission would support lower parking provisions in exchange for increasing the number of affordable units and deeply affordable units.

- That the Developer provide short-term retail parking that is open to the public with operating hours that begin at least 30 minutes prior to the opening of the Takoma Metrorail station and conclude no earlier than one hour after the closing of the Takoma Metrorail station of between 20 and 70 spaces and that includes ample accessible parking.

- That the Developer seek to preserve as many healthy trees on the site as possible and preserve every heritage tree on the site, including through relocation, if necessary.

- That the Developer provide a shared multiuse path to ensure Metro access that is at least 12 feet wide to traverse the proposed park space and work with the District Department of Transportation to ensure the proposed shared use path is routed to minimize the impact on trees.

- That the Developer work with the District Department of Transportation to permanently implement through hardening the traffic calming and pedestrian safety measures at the Takoma Metrorail entrance – including through curb extensions, pedestrian refuges, and bump outs that seek to minimize pedestrian crossing distances. *See* Resolution 4B-19-0603 Supporting Pedestrian Safety Improvements by the Takoma Metro Station (June 24, 2019).

- That the Developer seek to maximize safety for vulnerable road users and pedestrians throughout the project and surrounding areas through the use of physical traffic engineering to include, where possible, roadway narrowing, chicanes or chokers, raised or textured crosswalks, pedestrian refuge islands, and curb bumpouts to tighten turning radii and shorten crossing distances. The Developer shall implement such measures via permanent infrastructure *(i.e*., through concrete construction, not through paint or flexposts), wherever possible and permitted by the District Department of Transportation and WMATA.

- That the Developer construct the building and grounds to be accessible to persons with disabilities including elevator access and accessible residential units in the building, accessible parking in the short term and residential parking facilities, and curb cuts and ramps for outdoor amenities.

- That the Developer and WMATA replace the current 104 bike racks with the same number of outdoor bike racks and that the 30 “unattractive, inefficient, and dated plastic bike storage boxes” be replaced with a modern bike storage facility similar to the one proposed by WMATA in 2020 and presented to the Commission as part of HPA 20-221. *See* Resolution 4B-20-0403 Supporting Construction of a Bike Storage Facility at East Entrance to Takoma Metrorail Station (HPA 20-221) (April 27, 2020).

- That the Developer provide substantial stormwater mitigation through the integration of bioretention, bioswales, roof runoff recapture and reuse, and permeable pavement, as

well as permanent maintenance of these features, and work with the Commission on possible educational opportunities around stormwater mitigation.

- That the Developer install solar panels on all unobstructed flat roof surfaces.

Advisory Neighborhood Commission 4B, at a duly noticed public meeting, with a quorum being the “majority of the total number of commissioner positions currently filled in Commission 4B,” at its June 27, 2022, meeting voted with 6 Yeas, 0 Nays, and 0 Abstentions to send this letter.

The Commission also voted with 6 Yeas, 0 Nays, and 0 Abstentions to appoint the Commissioner for Single Member District 4B01, Evan Yeats, the Commissioner for Single Member District 4B02, Erin Palmer, and the Commissioner for Single Member District 4B07, Geoff Bromaghim, or any member of the Executive Committee in their absence, to be authorized to communicate this letter and represent Advisory Neighborhood Commission 4B in communication with your any DC government entity regarding this matter.

Sincerely,

Evan Yeats, ANC 4B01 Commissioner
Erin Palmer, ANC 4B02 Commissioner
Geoff Bromaghim, ANC 4B07 Commissioner

cc: Janeese Lewis-George, Councilmember, Ward 4

Government of the District of Columbia
Advisory Neighborhood Commission 4B

By Electronic Mail

May 23, 2022

Drew Hubbard, Interim Director
DC Department of Housing and Community Development
1800 Martin Luther King Avenue S.E.
Washington, DC 20020

RE: Supporting Affordable Housing in High-Needs Areas Tax Abatement for Takoma Metro Station Development

Dear Interim Director Hubbard:

Housing is a human right, and all District residents are entitled to safe, stable, and secure housing. *See* Letter re: Advisory Neighborhood Commission 4B FY2023 Budget Priorities (Apr. 25, 2022); Letter re: Advisory Neighborhood Commission 4B Fiscal Year 2022 Budget Priorities (Mar. 22, 2021)

To that end, Advisory Neighborhood Commission 4B has formed a Housing Justice Committee with an explicit goal to "maximize affordable housing" within the Commission area and that "[t]he Commission believes in doing our fair share regarding deeply affordable housing within our Commission boundaries." *See* Resolution 4B-20-0205, Establishing Housing Justice Committee (Feb. 24, 2020); Resolution 4B-22-0104, Reauthorizing Advisory Neighborhood Commission 4B's Housing Justice Committee (Jan. 24, 2022); Resolution 4B-20-1107, Supporting the Preliminary Design for 6928 Maple Street, NW (Nov. 23, 2020)

Advisory Neighborhood Commission 4B has also believes "that the affordable housing crisis requires the District to use every tool available to ensure affordable housing" and that "the increased supply of housing – while important – will not alone solve the affordable housing crisis, particularly as related to extremely-low and very low-income households, and must be accompanied by active and robust City goals and policies to ensure affordability, including affordability for extremely low- and very low-income households, in relation to increased supply." *See* Resolution 4B-20-0104, Providing Feedback on Proposed Changes to the Comprehensive Plan.

EYA Multifamily, LLC has been selected by the Washington Metropolitan Area Transit Authority to develop a new multifamily development on the parking lot of the Takoma Metrorail Station. On April 21, 2022 they notified the Commission of their intent to file for a Planned Unit Development for Lot 806 in Square 3351 and Lots 820, 822, 823, 829, 831, 839-841, and 845-851 in Square 3352, and Lots 811-813 in Square 3353 and seek to rezone it to the MU-5A zone to construct a mixed-use building providing approximately 350-380 residential units, 10,000 – 20,000 square feet of ground-floor retail, a new transit zone adjacent to the Metrorail station for buses, and a 1.5-2-acre park (the "Takoma Station Development"). This site is located within Advisory Neighborhood Commission 4B, Single Member District 4B01, and within the Rock Creek East planning area. As part of that application, they have met with the Commission's Housing Justice Committee (March 2, 2022) and the Commission (April 25, 2022) and three joint public Single Member District meetings hosted by the Commissioners for 4B01, 4B02 and 4B07.

The Tax Abatements for Affordable Housing in High-Needs Areas (HANTA) program offered by the Department of Housing and Community Development to "spur the development of new affordable housing units in the…Rock Creek East…planning area."

As currently envisioned, the Takoma Station Development would make 15% of units available as affordable and EYA Multifamily, LLC has committed to the Commission to having some of the units be both family-sized (three bedroom) and deeply affordable (for occupants making 30% of Area Median Income or less). However, with receipt of the HANTA tax abatement, EYA Multifamily has committed to ensuring that 33% of units are affordable in the Takoma Station Development, more than doubling the amount of affordable housing production on the site.
As part of the above-stated Commission goals of maximizing affordable housing within Commission area, Advisory Neighborhood Commission 4B supports the application of EYA Multifamily, LLC for the HANTA tax abatement program and urges the Department of Housing and Community Development to grant it to the Takoma Metro Station Development.

Advisory Neighborhood Commission 4B, at a duly noticed public meeting, with a quorum being the "majority of the total number of commissioner positions currently filled in Commission 4B," at its May 23, 2022, meeting voted with 8 Yeas, 0 Nays, and 0 Abstentions to send this letter.

The Commission also voted with 8 Yeas, 0 Nays, and 0 Abstentions to appoint the Commissioner for Single Member District 4B01, Evan Yeats, the Commissioner for Single Member District 4B02, Erin Palmer, and the Commissioner for Single Member District 4B07, Geoff Bromaghim, or any member of the Executive Committee in their absence, to be authorized to communicate this letter and represent Advisory Neighborhood Commission 4B in communication with your any DC government entity regarding this matter.

Sincerely,

Evan Yeats, ANC 4B01 Commissioner
Erin Palmer, ANC 4B02 Commissioner

Geoff Bromaghim, ANC 4B07 Commissioner

cc: John Falchichio, Deputy Mayor for Planning and Economic Development
Janeese Lewis-George, Councilmember, Ward 4

Government of the District of Columbia
Advisory Neighborhood Commission 4B

RESOLUTION #4B-21-0602

Requesting Functioning Lights at Takoma Metro Station
Adopted June 28, 2021

Advisory Neighborhood Commission (ANC) 4B takes note of the following:

- Public transit, including both rail and bus, is an essential method of transportation for both ANC 4B residents and visitors.

- Thousands of our constituents depend on the bus and Metrorail to get to work, school, healthcare appointments, grocery stores and more.

- Takoma Station is located within ANC 4B, Single Member District 4B01, and is served by Metrorail's Red Line as well as bus lines operated by Washington Metropolitan Area Transit Authority (WMATA) and Montgomery County's RideOn service. Takoma Metro Station and its environs are owned, operated and maintained by WMATA.

- The WMATA-owned "green space" adjacent to the Metro station is a community hub and open space utilized by the community as a gathering place and cut through.

- WMATA has repeatedly failed to adequately maintain the lighting in and around the station including around the accessible entrance, the bus stops and turnaround and the green space, sometimes with more than half of the light fixtures not functioning.

- The Commissioner for Single Member District has repeatedly contacted WMATA requesting repairs of the lighting both privately via email and publicly via Twitter since September 2020.

- ANC 4B constituents have also contacted WMATA and their respective Commissioners about the lighting at Takoma Station being poorly maintained or not functioning.

- Failure to maintain adequate lighting makes the Takoma Metro Station and its environs uninviting and less accessible.

RESOLVED:

- That Advisory Neighborhood Commission 4B urges the Washington Area Metropolitan Area Transit Authority (WMATA) to rapidly repair and adequately maintain the lighting at Takoma Metro Station.

FURTHER RESOLVED:

That the Commission designates Commissioner Evan Yeats, ANC 4B01, to represent the Commission in all matters relating to this resolution.

FURTHER RESOLVED:

That, in the event the designated representative Commissioner cannot carry out their representative duties for any reason, the Commission authorizes the Chair to designate another Commissioner to represent the Commission in all matter relating to this resolution.

FURTHER RESOLVED:

Consistent with DC Code § 1-309, only actions of the full Commission voting in a properly noticed public meeting have standing and carry great weight. The actions, positions, and opinions of individual commissioners, insofar as they may be contradictory to or otherwise inconsistent with the expressed position of the full Commission in a properly adopted resolution or letter, have no standing and cannot be considered as in any way associated with the Commission.

ADOPTED by voice vote at a regular public meeting (notice of which was properly given, and at which a quorum of seven members was present) on June 28, 2021, by a vote of 7 yes, 0 no, 0 abstentions.

Government of the District of Columbia
Advisory Neighborhood Commission 4B

RESOLUTION #4B-20-0403

Supporting Construction of a Bike Storage Facility at East Entrance to Takoma Metrorail Station (HPA 20-221)
Adopted April 27, 2020

Advisory Neighborhood Commission 4B (ANC 4B or the Commission) takes note of the following:

- The applicant (Washington Metropolitan Area Transit Authority or WMATA) has proposed the demolition of existing plastic bike storage "boxes" and replacement with a modern, attractive bike storage facility at the East Entrance of the Takoma Metrorail Station.

- The Takoma Metrorail Station, 327 Cedar Street, NW, falls within the boundaries of ANC 4B, Single Member District 4B01.

- 327 Cedar Street, NW, is within the Takoma Park Historic District, requiring the approval of the Historic Preservation Review Board for Construction (HPA 20-221).

- The Takoma Metrorail Station is a valuable multimodal transit hub and center of community activity for the broader Takoma and Northern Ward 4 community.

- The station is served by high frequency heavy rail, regional bus through WMATA, local buses through Montgomery County RideOn, bikeshare through Capital Bikeshare, scooter and bikeshare through several dockless providers, taxicabs through a designated stand, several pedestrian access points, and bike routes from both Maryland and the District of Columbia including the planned route of the Metropolitan Branch Trail.

- Approximately 5-9% of DC workers commute by bicycle and even more commute using both bicycle and train.

- Currently, bike commuters are served at the Takoma Metrorail station by exposed outdoor parking or unattractive, inefficient, and dated plastic bike storage boxes.

- Bicycle commuting is one of the most environmentally-friendly and low-impact methods of commuting in light of the global climate change crisis.

- If we don't preserve our planet against the catastrophic impact of climate change, we won't be able to historically preserve anything else.

- All of the construction of the Metrorail station and surrounding environs is from outside the period of significance for the Takoma Park Historic District and is significantly set apart from buildings of historic significance.

RESOLVED:

That Advisory Neighborhood Commission 4B supports the application to the Historic Preservation Review Board for construction of a bike storage facility at the East entrance of the Takoma Metrorail Station, 327 Cedar Street, NW.

FURTHER RESOLVED:

That the Commission believes that the bike storage facility will be an attractive and necessary community asset and urges WMATA to commence construction as soon as practicable.

FURTHER RESOLVED:

That the Commission designates Commissioner Evan Yeats, ANC 4B01, to represent the Commission in all matters relating to this resolution.

FURTHER RESOLVED:

That, in the event the designated representative Commissioner cannot carry out his representative duties for any reason, the Commission authorizes the Chair to designate another Commissioner to represent the Commission in all matter relating to this resolution.

FURTHER RESOLVED:

Consistent with DC Code § 1-309, only actions of the full Commission voting in a properly noticed public meeting have standing and carry great weight. The actions, positions and opinions of individual commissioners, insofar as they may be contradictory to or otherwise inconsistent with the expressed position

of the full Commission in a properly adopted resolution or letter, have no standing and cannot be considered as in any way associated with the Commission.

ADOPTED by a voice vote at a regular public meeting (notice of which was properly given, and at which a quorum of nine of nine members was present) on April 27, 2020 by a vote of 9 yes, 0 no, 0 abstain.

Government of the District of Columbia
Advisory Neighborhood Commission 4B

RESOLUTION #4B-19-0603
Supporting Pedestrian Safety Improvements by the Takoma Metro Station

Adopted June 24, 2019

Advisory Neighborhood Commission 4B (ANC 4B or the Commission) takes note of the following:

- The Takoma Metro Station and surrounding area is a critical transportation junction for ANC 4B and the surrounding area.
- Thousands of pedestrians access the Station, bus bays and surrounding businesses every day - with a heavily-used unsignalized crosswalk across Carroll Street, NWbeing a key part of that access.
- This crosswalk was previously raised, but has been allowed to deteriorate or been removed, creating a dangerous situation for pedestrians in this important area.

RESOLVED:

That Advisory Neighborhood Commission 4B supports the DC Department of Transportation's proposed interim safety measures for the crosswalk at Carroll Street, NW, by the Takoma Metro Station - including enhanced painting, flexpost bump outs and a larger pedestrian refuge.

FURTHER RESOLVED:

That the Commission requests the DC Department of Transportation immediately begin to study and implement more permanent safety measures (such as concrete curb extensions or restoration of the raised crosswalk) for this crosswalk, as well as the broader Takoma Metro Station area.

FURTHER RESOLVED:

That the Commission designates Commissioner Evan Yeats, ANC 4B01, to represent the Commission in all matters relating to this resolution.

FURTHER RESOLVED:

That, in the event the designated representative Commissioner cannot carry out his representative duties for any reason, the Commission authorizes the Chair to designate another Commissioner to represent the Commission in all matters relating to this resolution.

FURTHER RESOLVED:

Consistent with DC Code § 1-309, only actions of the full Commission voting in a properly noticed public meeting have standing and carry great weight. The actions, positions and opinions of individual commissioners, insofar as they may be contradictory to or otherwise inconsistent with the expressed position of the full Commission in a properly adopted resolution or letter, have no standing and cannot be considered as in any way associated with the Commission.

ADOPTED by a show of hands vote at a regular public meeting (notice of which was properly given, and at which a quorum of eight of nine members was present) on June 24, 2019, by a vote of 8 yes, 0 no, 0 abstain.

I testified at the public meeting at Takoma ES concerning the scope of the public meeting. WMATA limited the scope of the meeting to the relocation of the bus bays and elimination of the 144 PARKING SPACES. Referring to the 144 PARKING SPACES proposed for elimination as "Kiss and Ride" spaces is patently dishonest.. I do not expect public agencies to be dishonest. The incorrect referral to "Kiss and Ride" spaces is still on the WMATA website today weeks after public commenters pointed out the (in my view) intentional error. My other comment concerning the scope of the public meeting is that WMATA is [intentionally in my view] avoiding assessing the impacts of the ENTIRE project. Limiting WMATA's assessment to the impacts of moving the bus bays and parking and ignoring the proverbial elephant in the room, the BUILDING, is patently dishonest. Presenters at the public meeting and public commenters pointed out that there is no traffic study. If this was a Federal government project WMATA would be REQUIRED to conduct a traffic study prior to making ANY decision on selling the property, AND WMATA would be REQUIRED to assess ALL of the impacts of their decision to sell the property including, of course, the impacts of the building the property is being sold to build. Conducting a traffic study AFTER WMATA sells the property would be useless to inform WMATA's, and the public's decision making. WMATA should conduct a complete study of ALL of the impacts of WMATA's decision to sell the property. At present WMATA is assessing maybe ten percent of the impacts. Neither WMATA nor the public know anything about the impacts of selling the property on traffic, air quality, water quality, or anything else because WMATA has not assessed the impacts. WMATA telling the public that stormwater impacts of the building are not WMATA's responsibility is dishonest and deceptive, especially when my neighbors on Eastern Avenue already have stormwater accumulating on their lawns. If the Takoma Station land sale was a Federal government project, what WMATA is doing by piecemealing the impact assessment would not be legal. WMATA should step back from their decision making process, assess ALL of the potential impacts of selling the property, and allow WMATA and the public to make a fully informed decision concerning whether to sell the property, and to whom, and for what purpose. And WMATA arguing publicly that they are constrained by a contract and their hands are tied and they cannot assess all of the impacts of the decision to sell the property is also dishonest. If WMATA has a contract with a particular developer, the contract can and should be modified to allow WMATA to fully assess the impacts of WMATA's decision to sell the property. My point is that the public has an expectation of an honest and open decision making process, and we are not getting that with WMATA's current decision making process. That needs to change before any decision is made.

In re: Takoma Metro Station Proposed Parking and Bus Bay Changes

Dear WMATA Board of Directors,

Takoma for All (TFA) is a non-profit community organization composed of Maryland and Washington D.C. neighbors who advocate for a more vibrant, inclusive, and prosperous community. Our steering committee and members have thoroughly reviewed your proposed plans for the Takoma Metro Station and we are immensely supportive of the proposal.

The data is clear: the parking lot adjacent to the Takoma Metro Station has been chronically underutilized for the vast majority of its 40-year existence. The parking lot was probably overbuilt in 1978, because there was very little dense development around the station. While some moderate development has occurred around the station, intervening land-use policy decisions in both DC and Maryland in the form of historic districts have prevented significant redevelopment of many large plots of land.

The science is clear: transit policy is climate policy. The underutilized surface parking lot at the Takoma Metro Station has been a long-term mistake. While previous Metro leadership can be forgiven for building a parking lot during an era when little was known about climate change, there is now ample research proving that the best environmental use of land around public transit is for housing and/or mixed-use construction, not an impervious parking lot that encourages more driving.

We note here that Metro's public materials suggest that kiss/ride parking is decreasing from 160 to 16 spaces, but we believe that number is inaccurate. The proposed redevelopment plan by EYA shows 67 metered public parking spaces and 16 kiss/ride spaces. A few years ago, the Board approved a redevelopment plan that would have decreased the public parking to 87 short-term parking spaces and 21 kiss/ride spaces. So this new proposal isn't very different from the previously-approved proposal and makes logical sense based upon Metro's data.

Economic justice demands that governments develop and encourage the development of more housing, especially subsidized housing, around public transit nodes that were built with taxpayer funding. The proposal creates the proper conditions to redevelop the land east of the station to build more housing, especially affordable housing. Metro's proposal also appears to improve the transfer process for bus riders who are disproportionately Black, Indigenous, and people of color.

Finally, as specified in WMATA's Compact, the Board must consider many current and prospective conditions in the transit zone where this proposal is to be built. This proposal will create the necessary conditions for Metro to increasing the supply of market-rate and

subsidized housing. This proposal will also provide Metro to accrue more revenue from its land at the Takoma Metro station than it currently receives through operation of an underutilized parking lot. This proposal will also enhance the vitality and beauty of the area surrounding the Takoma Metro station. And finally, this proposal will not dislocate any local families or businesses.

In summary, the proposed redevelopment rightly balances the needs for transit-accessible housing, bus and limited commuter access, and curation of a programmed community space. We enthusiastically support Metro's proposal!

Sincerely,

Anthony Camilli
Lead Representative
Takoma For All
www.takomaforall.org
Facebook/Twitter: @takomaforall

From Barbara Berman
Takoma Park, MD

I totally depend on the parking spaces at the Takoma Metro because I can't use public transportation on a regular basis with the bad legs I have post-car accident in my late twenties. Losing them would mean I couldn't use Metro.

Fort Totten is not a safe Metro station, especially not for a single woman. It's also large and requires significant walking. Silver Spring is huge with major walking and confusion requirements and the parking lots of both of them plus Forest Glen are completely filled up after morning rush hour. Silver Spring and Forest Glen are at least 15 minutes away by car and Fort Totten is significantly more. Takoma Station is five minutes away by car, I can always find parking, and it's small so I don't have to walk far. You cannot park at Takoma Metro for more than seven hours, so that cuts out the commuter group. I've always been able to stretch that a little with my handicapped placard, so I got to take Metro to work when I had a job downtown.

There is so much traffic around Takoma Metro now that I can't imagine adding anything to that small, complicated, congested area that would improve it enough to counteract the added stress of more cars.

People who have never had mobility problems, have even average stamina, and have immune systems that are not troubled by standing around waiting for public transport in the rain/snow/pollution-heat aren't concerned about what happens to people who aren't lucky enough to share those blessings; but we are here and need to be taken into account. Physical problems don't just occur when we get older. Children, especially small ones, don't have stamina and can't walk far; neither can you if you have an accident or need surgery at any age; and asthma and allergies seem to manifest at birth nowadays so the highly polluted D.C. air and the spring and fall pollen counts knock out large numbers of people.

I don't use the handicapped spaces at the front of the Kiss and Ride Takoma because they are almost always full. That means they are needed! I go to the back row, put my handicapped placard in place on the rearview mirror, and get on Metro. Because I'm in the back, the meter readeers don't bother me, or the other four or five handicapped vehicles that are on the back row as well. We're out of the way. I don't know if this option would be available in another configuration. It works because the lot is small and we're not fighting commuter traffic, and it means as many handicapped vehicles can park there as necessary. Everyone gets to ride!

Dear Sir or Madam,

I am writing in support of the proposed changes accompanying development at the Takoma Metro station.

My family and I live less than a mile from the Takoma Metro. We access the station by walking, taking the bus, or using the kiss-and-ride. We often have our small children with us – in a few years they will be going to the station by themselves. In four years living here, we have never parked at the station.

The current design will make bus circulation easier and preserve the kiss-and-ride. More importantly, it will improve the station access area. The ground floor retail will put more eyes on the street and create safe places to wait near the station. As I anticipate sending my children on Metro trips by themselves, I will feel better knowing that the station is in a well-used area integrated into my community.

Thanks for your time,

Katrina Furth
Takoma Park

January 25, 2023

TO: WMATA BOARD MEMBERS & STAFF

RE: TESTIMONY ON PROPOSED CHANGES TO TAKOMA METRO SITE: SUFFICIENCY OF COMPACT PUBLIC HEARING, JANUARY 17, 2023

FROM: FRANCES E. PHIPPS, 7210 HOLLY AVE., TAKOMA PARK, MD.

SUMMARY OF ISSUES:

January 17, 2023 Public **Hearing does not meet Compact Requirements** for project analysis and impacts and is inadequate for Board Consideration. [The Compact is the legal organizing document for WMATA signed by D.C., Maryland, Virginia and the Federal Government.

1. WMATA is *the sole owner* of the Takoma Metro Site on January 17, 2023 and is responsible for preparation and publication of *"project"* analysis and impacts.
2. WMATA Staff did not comply with Compact requirements to *analyze the entire "project"* which will cause change to the site. Staff selectively ignored and would not allow public discussion of 80% of the change caused by WMATA's joint development partnership with EYA.
3. WMATA did not present an *adequate Environmental Analysis* of the proposed "project" and its changes.
4. WMATA did not present a *traffic/transportation analysis* of proposed changes of the "project" to public parking, handicapped access, the new traffic light nor access the impact on adjacent two lane streets and future level of service.
5. WMATA states, in its Environmental Evaluation, that the *Project will not substantially increase ridership.*
6. WMATA did not present a *Section 106 Analysis of Federal Transportation* spending on impacts to cultural resources as required by the use of Federal Funds which impact a historic resource.
7. WMATA did not *collaborate closely with local affected jurisdiction* of Takoma Park, Maryland.

The information and materials presented for the Public Hearing did not include the mandated requirements in the areas cited above. The result is that the public was not presented the information and analysis it is entitled to and is required by WMATA's own organizing charter and its Public Participation Plan, 2020-2023.

For these reasons, which will be detailed in this written testimony, the WMATA Board should direct staff to revisit these issues and ensure their results comply with all mandated requirements. Once this is obtained, a legitimate public hearing should be scheduled for comment.

1. WMATA IS SOLE OWNER OF THE TAKOMA METRO SITE:

The owner of the property/project is responsible for the analysis of changes to the site and the impacts of those changes.

The Application to the District of Columbia Zoning Commission for Review and Approval of a Consolidated Planned Unit Development and Amendment to the Zoning Map, November 28, 2022, prepared by "TM Associates, LLC and the Washington Metropolitan Area Transit Authority" states:

> "The Property is owned by WMATA and is located in the Takoma neighborhood of Ward 4." P.1

While it is the intent of WMATA to transfer ownership of a portion of the site to its joint development partner EYA, it had not done so at the time of the Public Hearing. WMATA therefore bears the burden of complying with its own regulations for analysis.

Conclusion: WMATA was solely responsible to meet the requirements of a Compact Public Hearing and WMATA'S Public Participation Plan 2020-2023 at its Hearing on January 17, 2023.

2. WMATA STAFF DID NOT ANALYZE THE ENTIRE PROJECT:

As the owner of the Property, WMATA is responsible for the analysis of changes and impacts of those changes. WMATA's Public Participation Plan 2020-2023 states that:

> "When a project is initiated, whether internally at Metro or externally adjacent to Metro, the *Project Owner or Manager must consider its impacts to customers and community members throughout the project's life cycle and the final product's lifespan.* The Project Owner or Manager is tasked with identifying whether or not the project triggers the Public Participation Plan, assessing the breadth and impacts of the project scope, and contacting Metro's Office of Content & Strategic Communications (CASC) to begin the intake process." P. 12.

Qualifying Projects of this requirement:

> "This includes any projects that require NEPA environmental evaluations and impact reports and/or amend the mass transit plan." P.12

The "Project Owner" in the case of changes at the Takoma Metro site, on the date of the public hearing, is WMATA. The materials prepared by the Project Owner, at the Public Hearing of January 17, 2023 did not address the "breath and impacts of the project scope" which includes the development of a +/- 90 foot high, mixed use building with 434 residential units and 16,000 square feet of retail. The project also provides for new private parking and eliminates all public, transit related parking. This will have a significant adverse impact on ridership from Montgomery County.

The selective and limited analysis provided in this hearing is in direct contrast to the two prior Compact Hearings for this site in 2007 and 2014. In those hearings, WMATA joined with its partner EYA and provided complete analysis in compliance with Compact requirements.

Conclusion: The public materials and the public process of the January 17, 2023 Hearing did not comply with WMATA's own requirements and practice of a Compact public hearing on the Takoma site and must be considered out of compliance with the Compact and its own Public Participation Plan.

3. WMATA DID NOT PROVIDE AN ADEQUATE ENVIRONMENTAL ANALYSIS:

WMATA's report, Environmental Evaluation, December 2022 states:

> "To support WMATA Compact requirements, specifically Section 14(c)(1), this Environmental Evaluation *describes the Project* and documents the potential effects of the Takoma Station facility modifications on the human and natural environment in terms of transportation, social, economic, and environmental factors." P.5

The above statement is incorrect. It is an assertion. WMATA does not describe the Project. Rather, it focuses on just approximately 25% of the Project which is the transit facilities and access *and ignores the approximately 75% of the Project which will have significant environmental impacts.*

However in Section 3.0 Project Description, WMATA states that it has "collaborated to develop a feasible site plan that is supported by the District's stakeholders and the local community." P.13 Weak though this is, it is the first time that WMATA materials acknowledge their involvement and thus their responsibility for analysis of the entire site. The next paragraph tries to shift this responsibility:

> "The developer proposes that the Project has defined zones for transit use, open space, and a residential building with approximately 430 units and around 16,000 square feet of retail." P.13

This is an accurate, summarized description of the Project which Compact requirements identify as needing to be analyzed. However, the materials provided for the Public Hearing of January 17, 2023 did not detail this Project. Staff ignored changes to approximately 75% of the site and provided a one page Environmental Analysis stating:

> "An Environmental Evaluation (EE) for the transit facility changes has been provided as part of the Docket. Likely Environmental impacts are summarized in the table below." P.8

The Table lists the issues of Transportation, Stormwater, and Air Quality. To no surprise, given the lack of professional or complete analysis, the Public Hearing materials concluded that there were "no permanent environmental impacts" in these three areas.

Conclusion: WMATA must prepare a complete environmental impact statement for the entire Project which meets professional standards.

4. WMATA DID NOT PROVIDE A TRAFFIC/TRANSPORTATION ANALYSIS:

The materials provided for the Public Hearing and the Environmental Evaluation did not provide an analysis of the proposed changes of the "Project" to public transit-oriented parking; to handicapped access; to the installation of a new traffic light, nor to any impact on the adjacent two lane streets and the

resulting level of service. WMATA has stated that there would be no enlargement of adjoining and contributing streets.

It is a fact that due to the proposed changes, there will no longer be any public transit-oriented parking provided on site. The only parking provided will be private residential and short term retail parking. The report justifies this elimination of public transit-oriented parking due to the findings of a parking survey that was carried out in October, 2021 – in the depth of Covid lockdowns. In spite of that constraint, the survey noted that 43% of the users at that time were long-term parkers of over 8 hours. WMATA proposes to eliminate this public transit-oriented parking in favor of private residential and retail parking. This will have an adverse impact on those transit ridership particularly arriving from Montgomery County.

The solution WMATA offers is for residents to drive to Fort Totten. This will have a major impact on elderly, the handicapped and on Montgomery County residents. Takoma Park Councilmember Jason Small of Ward 6, the most remote Ward from Metro, testified on January 17th that this would have an adverse impact on his constituents and he raised concerns about the safety issues at Fort Totten which needed to be addressed.

The possibility exists, that potential Metro riders who are directed to Fort Totten may decide to continue downtown, skipping metro altogether and reducing WMATA's ridership and revenue.

Conclusion: WMATA must consider if the provision of private parking and the elimination of public transit-oriented parking serves the mission of the agency. It should work with the two jurisdictions which border the site and develop a transit and transportation analysis which identifies impacts and their mitigation

5. WMATA STATES PROJECT WILL NOT SUBSTANTIALLY INCREASE RIDERSHIP:

The goal of all Metro improvements is to increase use of the metro transit system, as stated in COMPACT, Article II- Purpose and Functions.

However, the Environmental Evaluation in "Project Impacts", 4.2 Transportation, 4.2.1 Metrorail states:

> "*Any increase in ridership* at the Metro station due to residential and employment opportunities associated with the development *is not expected to be substantial enough* to cause any significant impact on Metrorail operations." P.19

Conclusion: WMATA must state clearly that the goal of any changes is to incorporate those aspects which increase Metro ridership and reject those elements of the Project which result in decreasing ridership. It needs to rethink its approach to parking and access.

6. WMATA DID NOT CARRY OUT A SECTION 106 ANALYSIS:

Section 106 of the National Historic Preservation Act is a law which requires examining the use of Federal funds in a manner which may create adverse impacts on historic properties and cultural resources. WMATA will be using Federal funds on the proposed changes to the Takoma Metro Station.

In its reports and public statements WMATA has never acknowledges that the site itself is located on Historic District land and is located within a Historic District. This District includes the directly adjacent neighborhoods of Takoma Park, Md. and Takoma, D.C. There is also one Historic Category III National structure, the Cady Lee Mansion which is on the other end of the same block as the Metro site.

While the emphasis of Section 106 is on a historic structure or structures, there is increasing acknowledgement that the context of the total cultural resource is important. One method used by Jurisdictions in accessing impact is to define an *Area of Potential Effects* which provides all parties with a basis for understanding the geographic extent of anticipated impact of a proposed project.

The construction of a massive, ninety foot high structure – almost twice the height and size of surrounding new development – with 434 residential units, parking and retail space as well as bus and kiss and ride facilities will have a significant and adverse impact on the small scale (one and two story) historic residential properties in the District and in Maryland facing this development from approximately 100' away. It will dominate the line of sight and over shadow its surrounding structures. It may affect sunlight and shadow. It will increase light pollution, particularly at night. It may adversely affect the quality of life as well as property values. But most significantly, it is out of all proportion to the surrounding commercial and residential neighborhoods.

The WMATA COMPACT requires that:

> "The Board, in preparation, revision, alteration or amendment of a mass transit plan, shall
> (1) Consider data with respect to current and prospective conditions in the Zone, including, without limitation, land use, population, economic factors affecting development plans, goals or objectives for the development of the Zone and the separate political subdivisions, transit demands generated by such development, travel patterns, existing and proposed transportation and transit facilities, impact of transit plans on the dislocation of families and businesses, *preservation of the beauty and dignity* of the Nation's Capital, *factors affecting environmental amenities and aesthetics* and financial resources;" p.7

Conclusion: WMATA must meet the requirements of a Section 106 analysis regarding impacts on the directly adjacent Historic District and its Compact requirement to consider the preservation of beauty and aesthetics.

7. WMATA DID NOT COLLABORATE WITH LOCAL AFFECTED JURISDICTION:

The Public Participation Plan 2022-2023 identifies as its Goal Two: Collaboration, and states:

> "*Ensure local jurisdiction partners* and Metro Board members are engaged with, and included in, outreach activities when their communities are affected." P.3

Additionally, the Public Participation Plan identifies in Appendix A, P. 50, the public participation requirements of DOT Ss 5307 grant funds stating:

> "c) Publish a proposed program of projects in a way that affected citizens, private transportation providers, and *local elected officials* have the opportunity to examine the proposed program and submit comments on the proposed program and the performance of the recipient."

In spite of the fact that Takoma Park will bear the greatest impact of the proposed changes to the Takoma Metro site that is on its border, WMATA has not provided a public briefing, much less a hearing, to the Mayor and Council and the community.

Conclusion: WMATA must engage actively with the Takoma Park officials and citizens as well as with the Montgomery County Park and Planning Commission, and the Montgomery County Board members.

IN CONCLUSION: Many in Takoma Park, Md and Takoma, D.C would welcome a well-designed project with a structure on the Takoma Metro site which respects the historic aspects of the surrounding District and provides affordable housing. Most would agree that the site should ensure that increasing ridership and providing ease of access should be the primary goal of any change. Many applaud the relocation of bus lanes closer to the Station and approve of locating a green buffer adjacent to Eastern Avenue.

However, there are significant concerns about the proposed height and density of the brutalist designed residential structure and about the impact of exchanging public parking for private parking. A Compact Public Hearing, which complies with the requirements listed above, and provides professional and complete analysis of these issues, their impacts and how to mitigate them, would go a long way toward addressing these community concerns.

For these reasons, I believe that the WMATA Board must direct staff to revisit these issues and ensure their results comply with Compact and Public Participations requirements and those of its Federal funding sources. It would be inappropriate for the Board to receive and act on staff work which does not meet these requirements. A public hearing, which is in compliance with the Agency's own rules, should be scheduled for comment once these analyses have been completed.

Respectfully submitted,

Frances E. Phipps, [frances.phipps@verizon.net]

Testimony at WMATA Public Hearing:
Proposed Changes to Transit Facilities, Docket 23-01, Hearing No. 645
January 17, 2023
Takoma Elementary School, 7010 Piney Branch Road, WDC

My name is Christine Simpson. I live on Cedar Avenue in Takoma Park, MD, about 2 blocks from the Takoma Metro Station.

I want to share some of my concerns with your proposed changes.

1. Eliminating Parking Spaces

WMATA proposes to remove 144 of – what they call - Kiss and Ride -- spaces. First, I believe there is a terminology problem here. Most of us USERS understand “Kiss and Ride spaces” to mean spaces for picking up and dropping off riders.

We USERS of the lot also know that there are some 150 metered parking spaces which neighbors use if they must drive to Metro and then park, while taking the train into town for an appointment, a movie, or play...

Sometimes my husband and I will park there – for example -- to go to a baseball game. Or, we might do this if we're going out to dinner and the weather is bad or we're worried about crime as we walk home at night. Others might drive to the station because it is too far to walk or they're not well enough to walk.

In short, it's a terrible idea to eliminate these 150 metered spaces. More people will simply drive to their destinations -- which is the opposite of what we all should be doing and the opposite of what WMATA should be trying to encourage.

2. Bus Bay – only one "alighting" addition

The plan calls for adding only one bus bay and only for getting off (alighting). At one point in the past, the Takoma Transportation Study suggested that an additional 3 bus bays (for a total of 12) would be necessary for the Station. Is WMATA allowing enough space for future growth?

3. New Traffic Signal on Carroll, new Driveway on Cedar

A new traffic signal is proposed on Carroll at the current bus loop entrance. Also, a new driveway will be opened onto Cedar to allow entry for residents of the new building, along with retail customers, and loading vehicles. In the past, the many of the intersections surrounding the Metro station were defined as "failing." Will a new driveway and a new traffic signal further add to this congestion, slowing down buses trying to access the site?

4. Combining bus and private vehicular traffic

WMATA proposes to have buses and private vehicles enter the station at what is now the buses-only entrance on Carroll. Also, residents of the new building will be able to drive their vehicles into the site at Eastern Ave., along with buses. At one time, the Takoma Central District Plan, considered the combining of bus and car traffic at Metro sites to be inherently dangerous. Has something changed?

5. Pedestrians crossing traffic lanes

WMATA has proposed various new pedestrian routes through the development. In Figure 7 of the Environmental Evaluation, it appears that walkers from neighborhoods to the northwest of the site (e.g., Holly Avenue, Piney Branch Road) will be directed to cross in the center of the bus and Kiss and Ride lanes. Mixing of pedestrians with buses and private vehicles in the center of the development is unsafe.

6. Development-Related Concerns

While I know this hearing is focused on transit changes at the station – and I hope I have addressed some– WMATA's "Environmental Evaluation" document that accompanied the public notice of this hearing does contain some statements that concern the development that I believe should be noted.

On page 13, the WMATA document states: "The building design, location, and orientation address neighbor concerns about its compatibility with the neighborhood."

I disagree and I think WMATA may be getting ahead of itself here.

I and many other Takoma Park, Maryland neighbors continue to have serious concerns about the compatibility of the proposed structure's height and massing with the existing neighborhood.

Also on page 21 of WMATA's "Environmental Evaluation," WMATA states that the current zoning of the site is MU-4. However, it fails to mention that on November 28, WMATA and the developer together filed an application with the DC Zoning Commission for a Planned Unit Development and Amendment to Zoning Map (Case No. 22-36). The application includes a request to change the zoning at the site to MU-5A, which would allow for an increase in the height from that allowed by the current zoning of MU-4. Why was this not mentioned?

****

In sum, we the taxpayers, helped fund the original development of the Takoma Metro Station, and we continue to support it with our tax dollars and Metro fares. We expect you, WMATA, as public stewards, to protect these precious facilities for public transit so that we, the public, can access them, now and in the future.

Thank you.

COUNCIL OF THE DISTRICT OF COLUMBIA
JOHN A. WILSON BUILDING
1350 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

JANEESE LEWIS GEORGE
Ward 4 Councilmember
Chair of the Committee on
Facilities and Family Services

COMMITTEE MEMBER
Committee on Transportation and the Environment
Committee on Executive Administration and Labor
Committee on Public Works and Operations

January 27, 2023

Randy Clarke
General Manager, Washington Metropolitan Area Transit Authority (WMATA)
300 7th St SW
Washington, DC 20024

Dear General Manager Clarke:

As the Ward 4 Councilmember, I write to **express my strong support** for WMATA's proposed changes to the transit facilities at the Takoma Metro Station (Docket R23-01). Having reviewed the environmental report and general plans for changes to the facilities, as well as monitoring public comment at the recent public hearing held at Takoma Elementary on January 17, I believe this project will confer significant benefits to the surrounding community. Please associate my comments with the position of ANC 4B, including Chair Alison Brooks (4B08), Commissioner Evan Yeats (4B04), Commissioner Erin Palmer (4B02), and former Commissioner Geoff Bromaghim in support of this proposal. As the Advisory Neighborhood Commission for this area, ANC 4B has conducted an extensive community engagement and public input process to ensure that residents' voices are heard and shape this proposal for the better.

The planned Takoma Station Development will enhance the affordability and livability of Takoma Park. The new development, which will replace an under-utilized surface parking lot, includes over 400 units of new residential housing, at least 62 of which will be affordable and six which will be three-bedroom units affordable at the "extremely low-income" level for households earning less than 30% of the area median income. At a time when our community, the District, and the entire DC region are facing a housing affordability crisis that is driving widespread displacement, these new proposed housing units – especially deeply affordable and family-sized apartments – are desperately needed. Importantly, the developer has an application to the Department of Housing and Community Development (DHCD)'s HANTA tax abatement program that could significantly increase the number of affordable units at the Takoma Metro Station Development, particularly the number of deeply affordable and multibedroom units. I am urging DHCD to grant the abatement in order to accomplish this goal.

Further, the development includes new retail space, safer pedestrian facilities, modern bike storage, and improved bus-route accessibility that will improve the value and function of the site. The proposal also includes expanded green space for the public – an amenity of immeasurable value in our urban environment. I also appreciate the consideration of the project's impacts on stormwater management, sustainability through solar energy, and environmental justice. Further, I concur with the designers that the plan is consistent with the District's Comprehensive Plan, especially that the Takoma Metrorail station is a key location for transit-oriented mixed-use development.

Thank you for the opportunity to share my support for this proposal and thank you for your ongoing work to improve transit accessibility and development in Ward 4 and throughout the region.

Sincerely,



Janeese Lewis George
Ward Councilmember
Chair, Committee on Facilities & Family Services

Statement Regarding Proposed Changes to Transit Facilities at the Takoma Metro Station, Docket R23-01

The description of current parking at the Takoma Metro station is highly inaccurate. WMATA should postpone this hearing pending a proper description of the design, regulation, and intended use of the current parking at the Takoma Metro station. To do otherwise is to continue to confuse the public about this major proposed change in a vital community service through the elimination of hourly and daily parking altogether. Some specific points of error in the document:

1. The document refers to the current park lot as having 144 Kiss and Ride spaces. This is also prominently noted on the flyers posted in the parking lot announcing the public hearing. *In fact these spaces are for hourly and daily parking and have been for some time.* The signage throughout the lot is clear on this fact. This misrepresentation prevents the public from understanding the fundamental change that WMATA envisions: Eliminating hourly and daily parking at the Takoma Metro station altogether.

2. At other points in the document the description is fully confusing, e.g. page 7 refers to "160 Kiss and Ride spaces, which are comprised of 151 metered spaces." Page 9 says that "The Takoma Metro Station does not have any Park & Ride facilities" It clearly does have park and ride spaces (137 by my count including 6 for handicapped and 2 for motorcycles) that can be used for any length of time up to 21 hours (no overnight parking is allowed). It currently has only five that would be considered Kiss and Ride (15 minute standing permitted only)

3. Page 20 incorrectly states that the proposed Kiss and Ride spaces will be closer to the Metro entrance. In fact the current kiss and ride drop off is closer to the Metro station via the elevator access to the platform, particularly important for handicapped. Also unlike the proposed layout there is no need to walk across traffic once exiting a car.

4. The document incorrectly notes that the metering system only accepts quarters and $1 dollar coins. In fact the modern metering system installed by Metro a while back accepts credit cards as well.

5. The document incorrectly identifies a 7-11 store across the street from the project. In fact the building was razed at least two years ago.

6. WMATA's inaccuracies regarding parking at the Takoma Metro station also extends to the WMATA website that notes that there are 58 metered spaces but no daily parking.

In sum, there is no way for the community to properly assess and therefore contribute their views on proposed changes without a proper description of the current use of the site.

Peter Feiden

Takoma Park, Md.

Testimony Received at January 17, 2023 Public Hearing

The transcript was computer generated and may contain mistranslations.

Jason Small
Thank you. My name is Jason Small. I am the representative from Ward six to the Takoma Park City Council and I am happy to be providing my first official testimony as a member of that body to this hearing. I would like to say to begin with that I'm a longtime advocate for both fair and affordable housing. I know the buzzwords of affirmatively furthering fair housing and all the other things that could possibly signal to someone that that is the case. I began working on these things probably right around the time that WMATA began thinking about transit oriented development and I also have professional experience working with WMATA on their transit oriented development plan in the, primarily in the phase two rollout, which included some places along the orange and blue lines in Maryland. I'd just like to say that as a representative of award that has largely been in transportation locked since the beginning of the Metro, that it is my burden to say that there is some degree of concern among the constituents that I served that the number of parking spaces that have been kept for long-term parking may be too small.

There are some concerns about whether or not the study was done during a covid or pandemic peak and whether or not that might have affected the overall analysis of available parking and there were some other concerns that I feel that it would be obvious to raise. With regard to the issue, if you live where we live, then you are aware that it is a traffic and or commuting difficulty to go anywhere during the appropriate times of any rush hour. The bus is, as currently running in the area, are not quite as reliable as they possibly could or should be, and so it makes for a stressful commute. Generally. Adding to that pressure by having people go to Fort Totton is perhaps for some people not as significant an issue, but for the people who live in Ward six, it would add approximately 15 minutes to your daily commute and if the purpose of commuting and being on Metro is to avoid the stress associated with commuting, it is a decent enough concern of my constituents that I felt it appropriate to raise here.

In addition to that unpleasantly, I have been asked to express some degree of concern about the overall safety and efficacy of parking at Fort Totten. The if you are a regular user of that place, then you know that they're often at least the perception of really interesting public safety issues and so it is one of those things that additionally gives people in the ward concern. I think the last thing I would like to say about that is that those things being said, the people that I spoke to in advance of coming here are unreservedly in favor of transit oriented development and they're unre observably in favor of WMATA and the private developer developing their land in the District of Columbia. We are well aware of the need for affordable housing all over and we are well aware of the prospects for density and increasing opportunity as opposed to disquiet among immediately adjacent neighborhoods. The manner in which we were asked, I was asked to present today was directly related to attaching the parking issues to larger issues of design or concern about density. I do not share those concerns. I do share the concerns of the residents award six concerning the number of available long-term parking spaces. Thank you. Okay.

Evan Yates
Good evening and thank you in particular to Deputy Mayor Babers for allowing me to speak tonight. My name is Evan Yates. I'm the advisory neighborhood commissioner for single member to depict four B zero four. That's the area that contains the Takoma Metro station and this proposed project, this is my third term representing the area surrounding the Metro station and I'm authorized to speak on behalf of commission four B by our resolutions of April, 2020. June 28th, 2021 are letters of May 23rd, 2022. In June 27th, 2022, all of the cited letters and resolutions passed unanimously and I'll submit them to the record. The commission is in support of the reconfiguration of WADA operations that are considered as

part of this project. The commission has worked extensively on this proposal for the previous year and has grounded our support in feedback in at least seven public meetings on this proposal with extensive community participation.

These plans are extensively improved over the previous proposal, including three times as much affordable housing and twice as much community serving park space in part due to that feedback process. Right now, the Takoma Metro Station as currently configured and maintained by Metro is not a community serving space. The inability of Metro to adequately maintain the lighting and grounds the lack of community serving features in the open space and the inability of local groups including the commission to permit the space for functions means even the most attractive portions of the space remain a whole in the middle of the downtown of our community. The proposed plans, thanks in part to the feedback of the commission, much more strongly connect our community and offer usable recreation and park space that will permanently open the community and a retail plaza that will better connect the two spines of our local business district.

The surface parking lot adjacent to Metro is both an eyesore and environmentally unfriendly. Maintaining an oversized impervious surface directly adjacent to transit separates our neighborhoods from their transit services, creates problems with runoff and encourages additional traffic on our local streets, furthering local pollution and a global climate crisis. The current lot is underpriced and is still underutilized. The commission has found that private parking lots near the Metro are generally underutilized and this Metro lot is no exception. It is also asking my neighbors to bear the burden of congestion, traffic, safety injuries and deaths and pollution in the service of commuters from other communities. A proposition I wholeheartedly reject. I will also note that while outside the scope of this hearing, the proposed development includes 67 public parking spaces that people will be able to pay to use. I'm also as four B, represents part of the Fort Totten community, deeply disappointed by the characterizations of the Fort Totten Metro station, which is an asset to our community and our commission area.

The reconfigured bus loop will better serve transit users including permanently ensconcing the existing a lighting behavior that we see in riders today. The improved bike storage station will replace an unsightly and inefficient bike storage boxes and fulfill a Metro plan that was first presented to our community in 2020. The shared use pathway will improve access to the station for bicyclists and pedestrians. The reconfiguration of the intersection of the bus loop and Carol Streets Northwest will improve the pedestrian experience and narrow the roadway to slow vehicle speeds and remove the onsite of the Im permanent in intended to be temporary flex post solutions for safety at that intersection. Finally, advisory Neighborhood Commission four B is supportive of efforts to bring new housing to transit accessible areas including adjacent to the Takoma Metro station. We recognize it's outside the scope of this hearing, but we've supported numerous efforts with a particular emphasis on affordable housing.

We previously provided feedback on the land use of this area through the drafting process of the updated comprehensive plan of the District of Columbia and stated that we generally support increased density around Takoma Metro Station and other high quality transit corridors in part because individuals of all income levels should have access to robust public transit options. The District of Columbia government through the mayor's order has set a goal of 36,000 news housing units by 2025 of which 12,000 are to be affordable. The household's earning below 80% of area median income. The Rock Creek East Planning area of which this site resides has a goal of 1500 new affordable housing units and is only produced about 58% of that goal so far. The approximately 70 affordable units as part of this

development are beyond what is required by the district's inclusionary zoning program and would meet more than 11% of that remaining goal.

These proposed units also include rare, deeply affordable, family sized three bedroom accessible to people earning less than 30% of medium family income. We have proposed design changes that will reduce the number of units in a project so that our community can meet these goals and are working with the developer to participate in a tax abatement program that could allow the doubling of the number of affordable units in this developed and continue our work to allow housing for all in this community. I urge the board of directors to improve the reconfiguration of the Takoma Metro Station and defer to the judgment of the elected body and residents most impacted by the decision. Those of Advisory Neighborhood Commission four V. Thank you.

Ilana Perus
Hi, my name is Ilana Perus and I'm a resident of Takoma Park. I've lived in Takoma Park for 24 years in three different places. I support the changes to the Takoma Park Metro. The proposed changes, I believe it will knit our neighborhoods of Takoma, DC and Takoma Park, Maryland back together. It will make the safe, the space safer for people walking and biking Viking to the station. It will allow us to build more housing, new housing and affordable housing to support our community and our local small businesses and it will create the opportunity to have the civic plaza and the park that people have spoken about. I believe that this new configuration will also help protect our neighbors from the bus fumes, the bus bays and the noise by putting them between the building and the Metro station.

The new development proposes short-term parking with it next to its retail space and will be open for short-term Metro users, which I think is great and this brings us also in line with other Metro stations like Cleveland Park or other areas that are surrounded by apartment buildings and have housing behind that so that we are more of an urban Metro stop with a way to support all of our businesses and the people in the neighborhood. I believe this gives us an opportunity to really build one strong Takoma and I support these changes. Thank you for the opportunity to comment you.

Cheryl Cort
Good evening. My name is Cheryl Cort. I'm with a nonprofit called Coalition for Smarter Growth. We're the leading nonprofit in the DC region, including suburban Maryland, dedicated to making the case for smart growth. Our mission is to promote walkable, inclusive and transit-oriented communities and the land use and transportation policies, investments needed to make those communities flourish. We're excited to be testifying in support of the proposed changes to the transit facilities at the Takoma Metro Station. I've, I've been working on reconfiguring the, the Metro station and adding housing and complimentary uses since 2000, so I'm excited to to be here again today to talk about it. After reviewing a number of plans over a long period, I'm happy to say that we, you know, on the one hand we missed the opportunity over 20 years to build housing opportunities at this Metro station and build a better Metro station, but today I'm, I think that these are really fantastic plans and, and can create a much more dynamic Metro station and safer and more comfortable space. In terms of the changes, I think the 10 bus base, which is adding a new bus bay re the reconfigure, refi reconfiguration along the train embankment with, with the, the bus loop connecting still from Eastern and Carroll makes a lot of sense and bus space will now face an apartment building and also be connected to a civic plaza and retail, which will create more comfort and sense of safety for bus riders who are waiting for a Metro station.

We, we support the, the reconfiguration overall of the site in order to accommodate a significant

amount of housing, housing and affordable housing, which will add riders and more opportunities for low-income riders to live close to Metro and a bus hub. The Civic plaza for the, the ground floor with ground floor retail is a benefit to transit riders as well, adding the conveniences and, and meeting spaces and a an enhanced pedestrian environment. The 16 pickup and drop-off spaces are placed in close proximity to the Metro entrance, which makes, makes sense and, and we support this approach rather than maintaining the 160 kiss and rides spaces. We note too that the plan is for 67 retail parking spaces, which along with adjacent street parking, which might more appropriately serve a number of the, the, the parking demand that's now taken up at the, the Metro parking lot and in fact maybe one model is at the Rhode Island Avenue Metro Station. There's shared parking between residence retail and Metro Parkers and that might be a model to look at. We appreciate the green space buffers proposed and the 1.8 acres of open space and we are excited about enhancing the walk and bike facilities and traffic coming in the area. We hope to see expanded bike parking and, and we wanna see bike parking inside the fair gates. Thank you.

Sabrina Eaton
Hi there. I wanted to thank you all for holding the hearing and coming out here today and listening to residents of the area. My name is Sabrina Eaton and I live across the street from the Takoma Metro Station. I would like to share several concerns I have about the proposed changes to its facilities and how they'll impact neighbors and the surrounding community. It is wrong to describe the parking you're eliminating as Kiss and Ride for $4 and 70 cents. People can use an app to park there from 5:00 AM through 2:00 AM that's all day commuter parking and the lot is often packed. WMATA is supposed to be a transit agency and this plan would deny access to customers who drive to the Takoma station. The plan should retain more parking spaces for Metro users and ensure handicapped parking access to the station elevator for those who need it.

I was also shocked there hasn't been a traffic study to analyze the impact of the proposed changes on surrounding streets. The traffic lights you want to install at the Carroll Street Northwest entrance of the Metro station could have a disastrous effect on the nearby Blair Road, Cedar Street, fourth Street Northwest intersection, a frequent site of accidents that's rated an F by DC's Transportation Department. It is foolhardy to proceed with that traffic light without analyzing its effect on surrounding streets and factoring traffic from the apartments proposed on the site as well as all the other apartment buildings that are under construction in that area. Also, your environmental study falsely claims that there's no flooding issues currently in the area. Runoff from your current bus ingress and egress creates a waterfall on my property during heavy downfalls flood waters from Wilma's property knocked over retaining wall on my property in 2021 that cost thousands of dollars to replace. Please use the Metro station reconfiguration to correct those problems and stop claiming they don't exist. Thank you very much.

Anthony Camilli
Takoma for All is a non-profit community organization composed of Maryland and Washington D.C. neighbors who advocate for a more vibrant, inclusive, and prosperous community. Our steering committee and members have thoroughly reviewed your proposed plans for the Takoma Metro Station and we are immensely supportive of the proposal.

The data is clear: the parking lot adjacent to the Takoma Metro Station has been chronically underutilized for the vast majority of its 40-year existence. The parking lot was probably overbuilt in 1978, because there was very little dense development around the station. While some moderate

development has occurred around the station, intervening land-use policy decisions in both DC and Maryland in the form of historic districts have prevented significant redevelopment of many large plots of land.

The science is clear: transit policy is climate policy. The underutilized surface parking lot at the Takoma Metro Station has been a long-term mistake. While previous Metro leadership can be forgiven for building a parking lot during an era when little was known about climate change, there is now ample research proving that the best environmental use of land around public transit is for housing and/or mixed-use construction, not an impervious parking lot that encourages more driving.

We note here that Metro's public materials suggest that kiss/ride parking is decreasing from 160 to 16 spaces, but we believe that number is inaccurate. The proposed redevelopment plan by EYA shows 67 metered public parking spaces and 16 kiss/ride spaces. A few years ago, the Board approved a redevelopment plan that would have decreased the public parking to 87 short-term parking spaces and 21 kiss/ride spaces. So this new proposal isn't very different from the previously-approved proposal and makes logical sense based upon Metro's data.

Economic justice demands that governments develop and encourage the development of more housing, especially subsidized housing, around public transit nodes that were built with taxpayer funding. The proposal creates the proper conditions to redevelop the land east of the station to build more housing, especially affordable housing. Metro's proposal also appears to improve the transfer process for bus riders who are disproportionately Black, Indigenous, and people of color.

Finally, as specified in WMATA's Compact, the Board must consider many current and prospective conditions in the transit zone where this proposal is to be built. This proposal will create the necessary conditions for Metro to increasing the supply of market-rate andsubsidized housing. This proposal will also provide Metro to accrue more revenue from its land at the Takoma Metro station than it currently receives through operation of an underutilized parking lot. This proposal will also enhance the vitality and beauty of the area surrounding the Takoma Metro station. And finally, this proposal will not dislocate any local families or businesses.

In summary, the proposed redevelopment rightly balances the needs for transit-accessible housing, bus and limited commuter access, and curation of a programmed community space. We enthusiastically support Metro's proposal!

Jim Sebastian
Good evening. Thank you for the opportunity to speak. My name's Jim Sebastian, I live on Baltimore Avenue and Takoma Park Maryland. Lot of good points have been made already. Not a lot new to say, but I just wanna say I do support the proposed changes as well as the development, the new housing, the affordable housing, the open space, as well as the new retail on the issue of parking. I agree with earlier speakers, it's not an issue of kissing ride, it's really more pickup and drop off. I think the new plan provides adequate pickup and dropoff space to the extent people need to park for longer. There will be the 67 spaces in the, in their, in the development. It is my understanding, I've lived here about 30 years, but it's my understanding it was critical that in the development of the parking and the continued maintenance of the parking, we did not want to have all day commuter parking at the Takoma station.

Whether you, you agree with that or not, that was, that was kind of a, a tenant for many years and I

think that still makes, makes some sense. I did want to get more detail on the bike parking. I, I think we need to maintain the parking we have, make it more secure closer to the entrance, possibly even bring the bike parking on the other side of the Metro entrance gate. Make sure that the capital bike share station is at least maintained as current size or perhaps increased, also located near the station in. Then of course make sure the bicycle and pedestrian access getting to the front of the station is, is good. In terms of the signal at Carroll, I think that is probably mainly a pedestrian safety issue where people are trying to get to the station now and if it's installed it can be synchronized with the other two signals, not maybe there's another type of crossing that could be considered, but that's all I got from tonight. Thank you.

Michael Hernandez
Hi. Thank you for holding this session. My name is Michael Hernandez. I am here in my own personal capacity as a resident of Takoma Park. Like many people in Takoma Park, I use Metro to commute into the district during the weekdays and on the weekends. That has of course took a little bit of a dip in 2020, but it's returned to almost pre pandemic norms for me and like many residents in Takoma Park, I rely upon the MoveOn bus system to get to Metro when I don't have access to parking, as was the case prior to the pandemic that resulted in majors impediments for me to use the Metro because I would frequently be left getting to Metro late because MoveOn is unreliable. Now, while I agree with many of the points made by prior speakers here, I do have to raise concerns about the near total elimination of longer term parking in the new facility and I would just, I prepared five questions for Metro, but since during this public hearing we're not gonna be taking questions. I will just pose them as statements and that is first, why take a Maximus position on the parking at the Metro 16 short term spots replacing 6 160 longer term parking spots doesn't make a lot of sense to me. It seems like we could have some kind of negotiated middle ground rather than just mixing nearly all of it.

The next point, I know that in the conversations with Steven prior to this meeting, you are working on improving bus service and I would simply strongly recommend to the board that they commit to ensuring that if this plan goes forward, the bus service particularly MoveOn, be improved. Now, we did talk a little bit about how Metro's going to encourage people to use the Port Totten station for longer term parking and I'm just wondering what kind of environmental system has been done for that new plan. What would the environmental impacts be of people who would normally travel a mile, a mile and a half via car instead traveling, maybe double the distance to get to Fort Totten and the last point, how has Metro determined that this new housing will significantly add to ridership? Most people have not returned to the office full-time. That's simply a fact that's born out by the numbers that Stephen put forward here. Pre pandemic levels of 5,000, 6,000 rider now being in 2,500, what data does Metro have to ensure or or to, to assess that the people who will be moving into this new housing will be more likely to use Metro. Thank you.

Sarah Green
Hello, my name is Sarah Green and I've lived on Piney Branch Road for 47 years. I was in the room, the first public hearing we had at a church of, I guess it was promised Land Baptist Church I think. Anyway, we the first public hearing that was in 1998, so we've been here a long time. We've been doing this a long time and one of, one of the things that that has always bothered me about the way Metro is dealing with this. We went to many public hearings and we spoke at several Metro board meetings and what is happening is you've divided the process between what the development is going to look like and what the public, what the Metro service is going to be like, and I think that's a very poor way of, of looking at this.

We should be looking at the entire proposal as a package. You're putting development there, you're changing mass transit space. It's supposed to work and I, I think it's a very poor process, so I I wanna comment on that. The other thing I wanna comment on is there has been no traffic study. My neighbor, Sabrina Eaton, just mentioned that there's no traffic study. I, I didn't realize that, I assume there would be some kind of traffic study. Again, bad public policy. Last thing I wanna say is that I heard another speaker talk about this as an urban Metro station. We're not an urban Metro station. I'm sorry, I mean this is not Cleveland Park, it is not DuPont Circle. We are a suburban area, we are a historic district. We have always been proud of that. I guess people disagree with that, but that's, that's just not the way the characterization of our community. I talk to people all the time who say, oh, to comma, oh, I just, I, it's the historic, just the low scale. This is, this is not to describe us as an urban district and to ask for changes reflective of that as an urban district, I believe is, is not accurate, but again, people will disagree. Anyway, thank you very much for the opportunity to speak. I value the Metro station. I value the community and I'd, I'd like to see something that's well designed and in the public interest. Thanks again.

Cliff Schwartz
Good evening. My name is Cliff Schwartz and I'm an 18 year homeowner in Takoma Park. These are my five points. Number one, I agree with the points made by council members small number two, regarding parking going from 160 to only 16 two hour spots. This will not encourage people who already live in Takoma and Takoma Park to use mass transit if they can't park for more than a reasonable duration. Three, a two hour time limit makes little sense. What is the rationale for a two hour max limit if a rider will be using the Metro to go into DC or Bethesda, for example. Number four, this will hurt or adversely affect senior citizens and people with disabilities who do not want to go all the way to Fort Totten and deal with that parking lot for all of the issues already mentioned. And five, in summary, this will encourage many more people to drive cars in the face of our dire need to reduce our carbon footprint and reduce global warming. Thank you.

Christine Simpson
My name is Christine Simpson. I live on Cedar Avenue in Takoma Park, Maryland, about two blocks from the Takoma Metro Station. I wanna share some of my concerns with your proposed changes. WMATA proposes to remove 144 of what they call the kiss and ride spaces. First, I believe there's a terminology problem here. Most of US users of BLO understand that KISS and ride spaces means spaces for picking up and dropping off riders. We users of ALO also know that there are about 150 meter spaces, which neighbors use sometimes if they must drive to the Metro and then park while taking the train into town for a movie or play or whatever. Sometimes my husband and I will park there, for example, to go to a baseball game or we might park there for going out to dinner and the weather's bad or we're worried about crime as we might walk home at night.

Others might drive to the station because it's too far to walk or they're not well enough to walk. I think it's a terrible idea to eliminate these metered spaces. People will simply drive to their destinations as the previous speaker said, which is the opposite of what we should all be doing and the opposite of what WMATA should be encouraging. The plans also call for the addition of only one bus bay to for a total of 10 and it would only be a bus base for getting off for a lighting at one point in the past. The Takoma transportation study has suggested that an additional three bus base for a total of 12 would be necessary for the station. This WMATA allowing enough space for future bus growth. WMATA proposes to have buses and private vehicles enter the station at what is now the buses only entrance on Carroll

and and also on Eastern.

At one time the Takoma Central District Plan considered the combining of bus and car traffic at the Takoma Metro site to be inherently dangerous. Has something changed? While I know this is here, this hearing is focused on, WMATA is focused on transit changes at the station. I hope I've addressed some WMATA environmental evaluation, which is the document that accompanies the public notice of this hearing contains and also admits some statements that do concern the future development at the site. I think they, they should be pointed out on page 13, the WMATA document states that the building design, location and orientation address neighbor concerns about its compatibility with the neighborhood. I disagree and I believe that I and many other Takoma Park, Maryland neighbors continue to have serious concerns about the compatibility of the proposed structure with the existing neighborhood. I also wanna point out that on page 21 that this environmental evaluation WMATA states that the current zoning of the site is MU four N use four.

However, it fails to mention that on November 28th, WMATA and the developer jointly filed an application to change the zoning at the site to MU five A, which would allow for a significantly greater height. I don't understand why this was not mentioned in some, we the taxpayers help to fund the original development of the Takoma Metro Station. We continue to support it with our tax dollars and Metro fairs. We expect you WMATA, as public stewards to protect these precious facilities for public transit so that we the public can access them now and in the future. Thank you for the time.

Barbara Rosen Black
Good evening. My name is Barbara Rosen Black. I moved to Takoma Park about 18 years ago, partly because I value and use public transportation. I use the Takoma parking lot as a safe and user-friendly place to leave my car to the five minute drive home. Fort Totten parking is not a safe nearby alternative, especially for older residents such as myself. It is large and isolated and at night I believe that expecting senior citizens to use Fort Totten parking discriminates against us. Thank you.

Peter Fadden
Good evening. I'm Peter Fadden. I live on Eastern Avenue, which is across the street from the Takoma Metro Station. I'm gonna limit myself mostly to the report itself because I find it very limited and inaccurate. The description of the current parking of the Takoma Metro Station is highly inaccurate. Some specific points of error in the document. The document refers as noted by others to 144 kiss and ride spaces and up here I notice that the number is one 60. This is also prominently noted on the flyers posted in the parking lot announcing this public hearing. In fact, these spaces are for hourly and dearly parking and have been for some time. The signage throughout the lot is clear on this fact. This misrepresentation prevents the public from understanding the fundamental change that WMATA envisions, which is eliminating entirely hourly and daily parking and dedicated handicap parking at the Takoma Metro Station altogether.

At other points in the document, the description is fully confusing. Page seven refers to a quote, 160 kissing ride spaces, which are comprised of 151 metered spaces. It's not clear to me how you pay order to stop and kiss and leave. It clearly does have park and ride spaces. Page nine says it doesn't and these can be used up for 21 hours. Page 20 incorrectly states that the proposed kiss and ride spaces will be closer to the Metro entrance, which is not true. The current kiss and ride is closer to the, to the platform via the elevator. The document incorrectly notes that the meter metering system only accepts quarters and $1 coins. In fact, it accepts credit cards. It's a modern system put in two or three years ago that

people are familiar with by now. Has nothing to do with the old meters that were still there, but presumably that's what's being described here.

Small point, the seven 11 across the street has been gone for three years and this inaccuracy extends to the description of the station on the WMATA website, which refers to it as having 58 metered spaces but no daily parking. So my suggestion is that WMATA go back to the drawing board and better describe this. This is an important point because the posters themselves referred to the change being contemplated as we rule of 144 kissing ride spaces and if I didn't know better and I were a parker, I would assume that this has absolutely nothing to do with me. So it's taken some education for our community in Takoma Park in Takoma, DC to even understand what's being contemplated here. And if I hadn't by curiosity across the street and read the poster, we could print this big, I would have never known how totally inaccurate the description was. One final point to tell people to go down to Fort Totten is to just add to the traffic, the congestion and the pollution. And I don't think too many people would want to do that. Thank you.

Diana Cone
Thank you. I'm Diana Cone, president of the historic Takoma, which represents both Takoma, Maryland, Takoma Park, Maryland, and Takoma, DC And I'm seconding some of what you just heard from Peter and others ahead of him. We, this site sits both in right on the border of Maryland and DC and it has ramifications for people on both sides. And so I would like to make sure that WMATA considers both st both residents on both sides as stakeholders. The second point I'd like to make is that the, the traffic study is mentioned as a future event, the Future project for WMATA and the situation presented by, in particular the new traffic light at the underpass strikes, strikes me as creating a whole set of bottlenecks that need to be carefully looked at.

Consider that you will have buses coming in and out right under the underpass at Carroll. You will have the right, the kiss and ride cars coming out. You have through traffic constantly going past the station pedestrians and then about 3,300 yards away you have another traffic light at Carroll and Cedar. And that creates a, has the real potential to create major congestion on the boundaries of this site and would make the flow of traffic virtually impossible. And if Guo wants to find a, create a feasible plan for that will be supported by the entire community, both sides, including the drivers driving through the, the, the intersections, the residents, the new residence in whatever. All the new developments around these things need to be carefully considered going forward and that will allow for a balance between density and congestion.

Anita Morrison
Hi, I wanna thank you for this opportunity to speak. My name is Anita Morrison and I'm an urban economist with an office one block from the Takoma Metro Station. I support the proposed changes to the Metro station parking and bus days because it allows for the creation of badly needed, affordable and market rate housing, place making improvements and an upgrade in these facilities for pedestrians and bikes. So my practice includes a focus on affordable housing, so I understand just how badly the Takoma community needs affordable housing units, particularly family sized units with three bedrooms. These larger units are hard to find even at market rents, so they will be particularly valuable in addressing a serious need. Their location at the Takoma station will provide easy transportation to jobs as compared with other locations, not well served by transit.

Access to good jobs is often a difficult barrier for workers trying to improve their economic status. The

civic plaza with retail spaces adjacent to the Metro station will help enliven the area and better integrated into the Takoma community

Having watched how little use the current green space has gotten over the past decade, I expect the newly configured space with public art will be a big improvement.

I recognize that the development requires a reduction in the number of public parking spaces, but I believe that's a beneficial trade off. Coupled with better bike access and sidewalks, the parking restrictions will encourage more people to access the Metro via bus, bike and foot. So overall, the enhanced public realm with quality mixed income housing development will provide a long-term benefit to the Takoma community. One that is long overdue. Thank you.

No Name Provided
Hello, this is student at school near Takoma Metro Station Sky and we support the changes to the Takoma Metro Station. We would like, we think that the changes will make the area safer and more comfortable for the children that go to dci. It also will help their maybe be more like the 50 40, 54, 52 and 90 and 59. These students are always really packed and it's hard to get space, but the number of students are not recognized or counted. Those students don't recognized carded. Those students, they like don't care. Their kids are free card care would like that. Those changes like that don't affect the students because the buses are already really crowded. You would like that the amount of students speak into consideration while make these changes. Thank you.

Robert Lanson
Yes. My name is Robert Lanson. I live on Cedar Avenue in Takoma, Clark. About two blocks from here. My question has to do with the scope of this hearing. You'd mentioned previously that the size and configuration of the building is outside of the scope of this hearing and other commenters have commented that Metro should be analyzing the entire scope of the project, not just buses. A lot of people came here not to figure out how you're going to move buses from one place to another, but how this building is going to work and you haven't explained that or accepted public comments on it. I think that is irresponsible and you should be analyzing the entire project from start to finish in one hearing before call to see. Thank you.

John Gelle
Hi. I wasn't planning to speak. My name is John Gelle. This is my first time attending one of these meetings. I'm a resident of Takoma Park and I was pleasantly surprised to see so many folks who were here to support the project. I have a two year old son and I would love for him to grow up in a world where parking wasn't the biggest concern for a lot of folks. Many, many colleges have mentioned the climate crisis. There's also a housing crisis and a homelessness crisis that we face in this city. And study after study has shown that increasing the amount of housing, not just affordable but all housing is the best way to deal with the homelessness crisis that is present in DC and Montgomery County.

One of the speakers said that they were here at the first, one of the first meetings about this project in 1998. And to me that is really telling that this has been going on for 25 years and yet we still have a parking lot there part, you know, impervious space. And I really hope that those who are here opposing the project and I'm sure that they are, are bringing their concerns here in good faith and not in just an effort to delay and delay the project as has been happening for a very, very long time. So I urge Metro to, you know, take these comments into a, into consideration, but to try to move forward where

possible because I know many of my neighbors agree that the development would be a really great thing for our community. Thank you.

Celine Berth
Thank you so much. My name is Celine Berth. I live in Takoma Park. I'm sorry that I'm late. I've got little kids and that time came first, but we got that outta the way. So glad to be here. I'm really glad that WMATA is looking at this project. I think it's an excellent improvement to our community and as an economist, I wanna just say one thing about sort of zooming out and looking at the big picture for transit. One of my big concerns as we move into a Zoom world, we've got half of the folks here on Zoom, is that transit systems will have a hard time paying to maintain the level of service that we've been accustomed to over the last 30, 50 years. And adding more housing directly adjacent to transit stations is an excellent way to sort of push against that headwind, be able to maintain the ridership capacity and keep the service we're used to. We can't just assume that Metro will be able to run as many trains with as many conductors at as many hours as you know, kind of what we grew up with and being able to have more riders in that pool. Some of them will be working from home, but some of them will be taking Metro and helping to keep that service for all of us because for transit congestion works backwards. The more people use it, the better the service gets. So thank you so much and thank you for your time.

APPENDIX F: ENVIRONMENTAL EVALUATION

Takoma Metro Station
Reconfigure Transit Facilities and Access

Washington Metropolitan Area Transit Authority (WMATA)
Environmental Evaluation

December 2022

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1.0 INTRODUCTION

WMATA proposes changes to the Takoma Metro Station ("Metro Station" or "Takoma Station") to enable a joint development project ("Project"). Because the Project includes a modification of Metro Station facilities and facility access, this Environmental Evaluation has been prepared to assess the potential effects of this action.

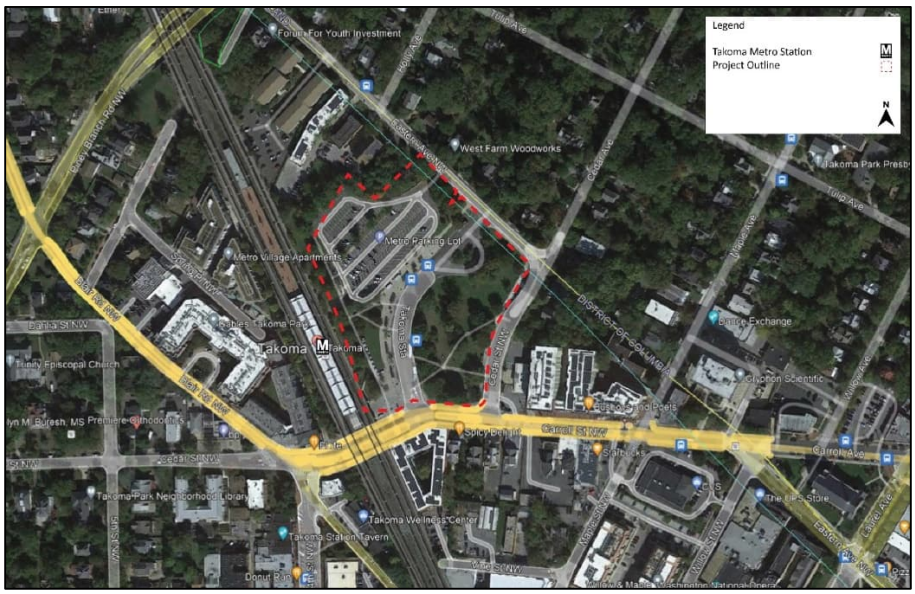
The Project includes the following modifications of WMATA facilities:

- Relocation of the bus loop and Kiss & Ride
- Addition of one alighting bus stop
- Removal of 144 Kiss & Ride spaces
- Addition of a traffic signal on Carroll Street NW at the WMATA bus loop and Kiss & Ride entrance

To support WMATA Compact requirements, specifically Section 14(c)(1), this Environmental Evaluation describes the Project and documents the potential effects of the Takoma Station facility modifications on the human and natural environment in terms of transportation, social, economic, and environmental factors.

The project area (see project location, or "Project Site") is a 6.7-acre, WMATA-owned parcel on the east side of the Takoma Station platform. The Project Site is in Washington, DC and borders Montgomery County, Maryland and the City of Takoma Park on the east. The project location is shown in Figure 1.

Figure 1. Project Location Map



Source: Google Earth

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2.0 EXISTING SITE DESCRIPTION

The Takoma Metro Station is a station on the east leg of WMATA's Red Line and is located between the Silver Spring and Fort Totten stations. There are no Park & Ride parking spaces, and there are 160 Kiss & Ride spaces, which are comprised of 151 metered spaces, six ADA spaces (non-metered), and three motorcycle spaces (non-metered). Meters accept only quarters and $1 coins.

Several local bus services serve the Metro Station including Metrobus and Montgomery County Ride On.

The Metro Station can be accessed from Carroll Street NW and Eastern Avenue NW. To access the Kiss & Ride spaces, visitors must use Eastern Avenue NW. The bus loop provides two-way bus traffic between Carroll Street NW and Eastern Avenue NW. Seven bike racks are located near the station entrance, and sixty bike lockers are located along the bus loop.

The primary entrance to the Metro Station is through a plaza at the corner of Carroll Street NW and the bus loop. There is elevator-access to the platform across from the Kiss & Ride lot.

An overview of the existing transportation facilities (Figure 2) is in the subsections that follow.

Figure 2. Existing Transportation Facilities



2.1 Metrobus and Other Local Bus Providers

Eight Metrobus routes and eight Ride On routes come to the Takoma Metro Station. The station has nine bus bays, six on the west side of the bus loop and three on the east side. The bus bays are sawtooth, and only authorized vehicles are allowed in the bus loop.

See Table 1 for a summary of the local bus service.

Table 1. Local Bus Summary Table

Operator	Route	Termini	Approx. Weekday Headway (minutes)	Span of Service
Metrobus	52	L'Enfant Plaza Metro Station	20-30	4 trips on Saturday Sundays
Metrobus	54	L'Enfant Plaza Metro Station	15-30	Monday through Sunday
Metrobus	59	Federal Triangle Metro Station	15	Weekdays Peak Periods
Metrobus	62	Georgia Avenue – Petworth Metro Station	15-25	Monday through Sunday
Metrobus	63	Federal Triangle Metro Station	8-15 Weekdays 30 Weekends	Weekdays Peak Periods Weekends Day Time
Metrobus	F1	Cheverly Metro Station	25-60	Weekdays
Metrobus	F2	Cheverly Metro Station	25-60	Weekday Evenings Weekend Day Time
Metrobus	K2	Fort Totten Metro Station	20	Weekday Peak Periods
Ride On	12	Silver Spring Metro Station	15-30	Monday through Sunday
Ride On	13	Silver Spring Metro Station	15-30	Weekday Peak Periods
Ride On	14	Silver Spring Metro Station	30	Weekdays and Saturday
Ride On	16	Silver Spring Metro Station	15-30	Monday through Sunday
Ride On	18	Langley Park	30	Monday through Sunday

Operator	Route	Termini	Approx. Weekday Headway (minutes)	Span of Service
Ride On	18	Silver Spring Metro Station	30	Weekdays and Saturday
Ride On	24	Hillandale	20-30	Weekday PM Peak
Ride On	25	Langley Park	15-30	Weekday Peak Periods

Source: Takoma Station.pdf (wmata.com)

2.2 Park & Ride

Takoma Metro Station does not have any Park & Ride facilities.

2.3 Kiss & Ride

The Takoma Metro Station has 160 Kiss & Ride parking spaces that are meant to support short-term pick-up and drop-off activities for customers riding Metro. These facilities reside in a single parking lot located east of the Metrorail tracks and just north of the bus loop. Within the 160 K&R spaces there are 151 metered spaces, six ADA (non-metered) spaces, and three motorcycle (non-metered) spaces.

Utilization or parking demand rates for Kiss & Ride facilities are derived from two data sources:

- ParkMobile parking meter transaction records (available since installation in 2020)
- Customer surveys on modes of transport used to access Metrorail stations (last produced in 2016)

The parking meter data shows that only 107.4 customers used the Kiss & Ride facility throughout an average weekday when adjusting the available data to pre-COVID ridership rates. Of these Kiss & Ride users only 3 percent parked for a duration of less than 15 minutes, which is typically considered to be the maximum duration or dwell time for a pick-up/drop-off parking facility. The data additionally shows that 59 percent of users are parking for an extended time period, exceeding four hours or more, and that there is a significant amount of daily and overnight parking occurring, which is not the intended primary use for the Kiss & Ride facility.

Alternatively, the customer survey data identified that 10 percent of rail customers were dropped-off at the station and 6 percent were picked-up. When applying this access and egress mode split data to pre-COVID Metrorail ridership rates, the morning and evening peak hour Kiss & Ride usage (8:00 AM-9:00 AM and 5:00 PM-6:00 PM) could approach 137 and 84 customers, respectively. These volumes could create demand for up to 11 parking spaces after considering

average parking dwell times and an 85 percent peak usage factor to represent the busiest 15-minutes of the peak hour.

Table 2. Kiss & Ride Meter Transactions by Dwell Time

Parking Duration	Average Weekday Parking Meter Transactions October 2021		Average Weekday Parking Meter Transactions Adjusted to Pre-COVID Ridership Rates (2015-2019)
Less than 15 minutes	1.3	(3%)	3.4
15 minutes to 1 hour	3.0	(8%)	8.2
1 to 2 hours	2.5	(6%)	6.8
2 to 4 hours	9.5	(24%)	26.0
4 to 8 hours	6.0	(15%)	16.4
8 to 12 hours	2.5*	(6%)	6.8
More than 12 hours	14.5	(37%)	39.7
Total	39.3	(100%)	107.4

**Typographical error identified and corrected May 4, 2023*

Table 3. Kiss & Ride Parking Demand Analysis

Factors	Drop-Off	Pick-Up
Average Weekday Peak Hour Rail Trips (1) [A]	1,228 entries	965 exits
Access Mode Share (2) [B]	10%	6%
Average Parking Duration/Dwell Times (3) [C]	1.5 minutes	6 minutes
Peak Usage Factor [D]	85%	85%
Max K&R Parking Space Demand (4)	4 spaces	7 Spaces

(1) Based on 2019 ridership data
(2) Based on 2016 Travel Trends customer survey
(3) Based on industry best practices for pick-up/drop-off facilities provided by parking consultants
*(4) Formula = (A*B) / C / D*

2.4 Bicycle and Pedestrian Access

There are sidewalks on both sides of Carroll Street NW, Cedar Street NW, and Eastern Avenue NW. The sidewalks continue into the station area from Carroll Street NW. On the west (or station side) of the bus loop, the sidewalk continues to Eastern Avenue NW. On the other side of the bus loop, the sidewalk ends past the final bus bay.

There are no bicycle lanes on Carroll Street NW, Cedar Street NW, or Eastern Avenue NW.

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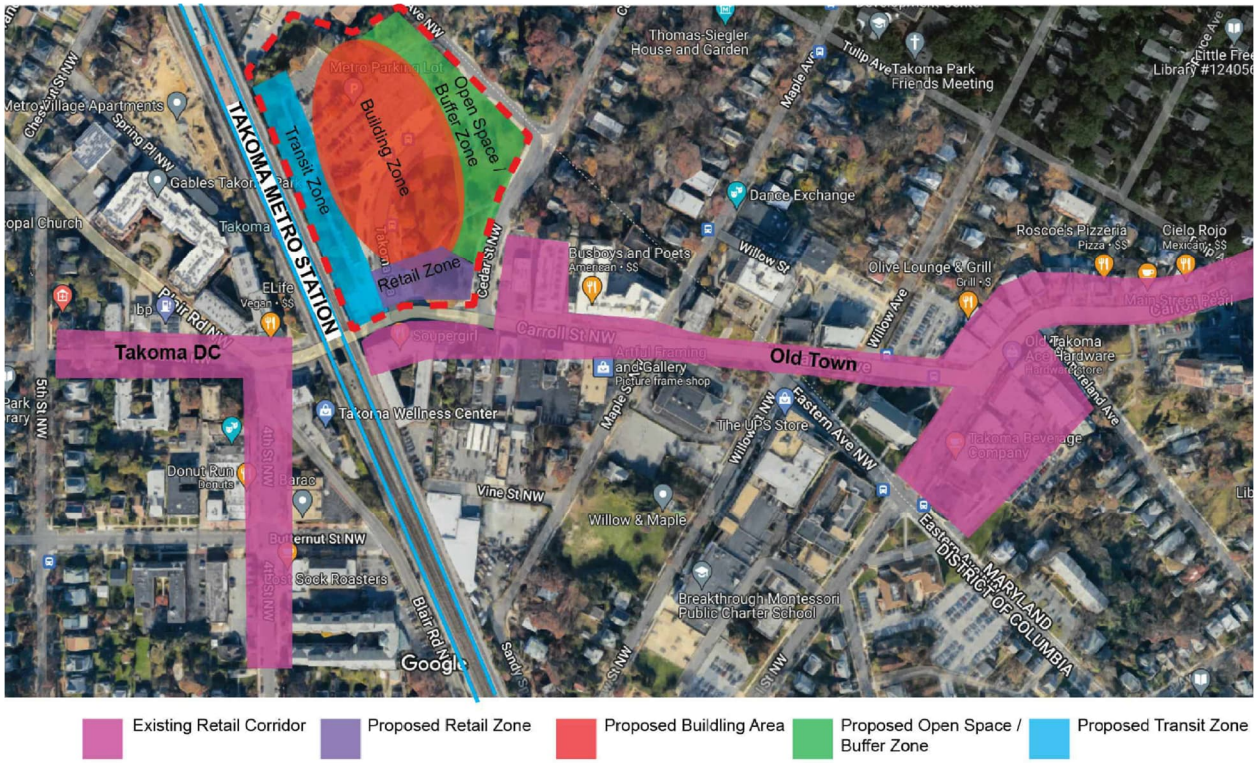
3.0 PROJECT DESCRIPTION

WMATA executed a joint development agreement with EYA Development (EYA) in 2005 and together have collaborated to develop a feasible site plan that is supported by the District's stakeholders and the local community ("the Project").

The developer proposes that the Project has defined zones for transit use, open space, and a residential building with approximately 430 units and around 16,000 square feet of retail. These zones are shown in context to the Project and its surrounding neighborhood in Figure 3. Metro's uses are consolidated into one portion of site, close to the Metro entrances, thereby improving the customer experience. The currently underutilized open space will be transformed into a neighborhood amenity.

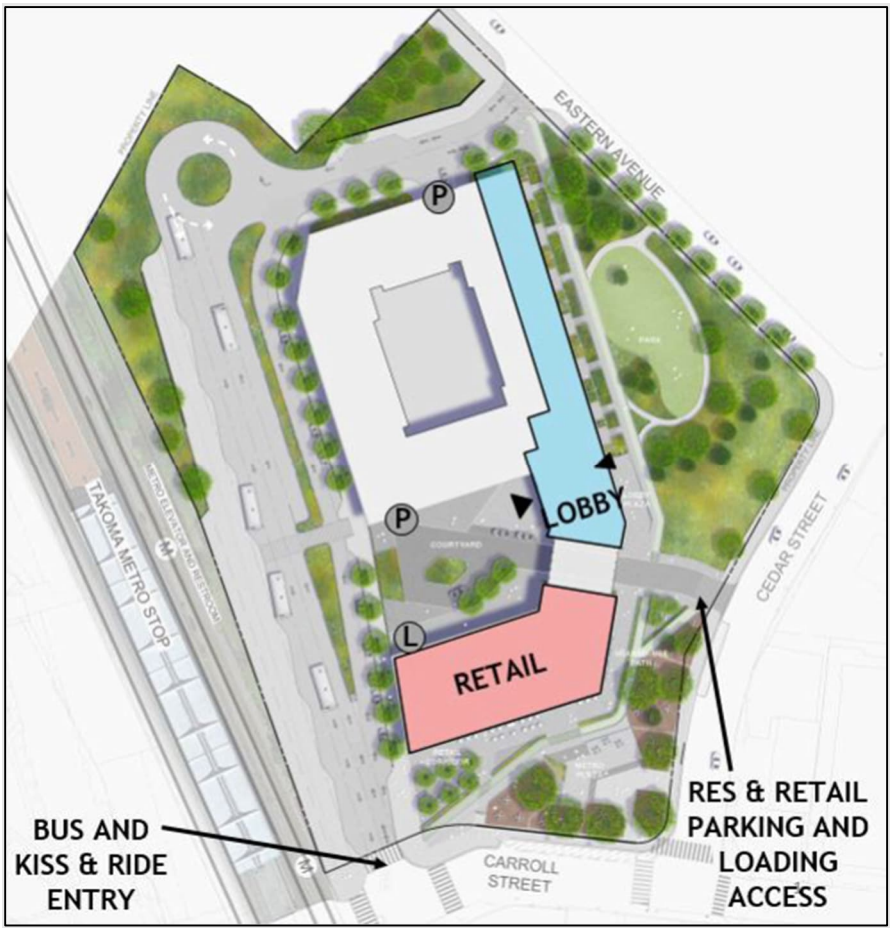
The proposed two-acre open space has two zones: 1) a passive recreational space along Eastern Avenue NW and 2) an activated retail and transit plaza facing Carroll Street. The building design, location, and orientation address neighbor concerns about its compatibility with the neighborhood. The landscaped open space provides a buffer between the building and existing single-family homes, and the building's design decreases in height closer to Eastern Avenue NW.

Figure 3. Site Context



The Project's site plan, shown in Error! Reference source not found., is consistent with the District's future land use vision for the area and is further elaborated in Sections 4.3 and 4.4. The Project will help the Metro Station become part of Takoma's retail corridor, which currently extends on both sides of the station, but is deficient directly in front of the station area.

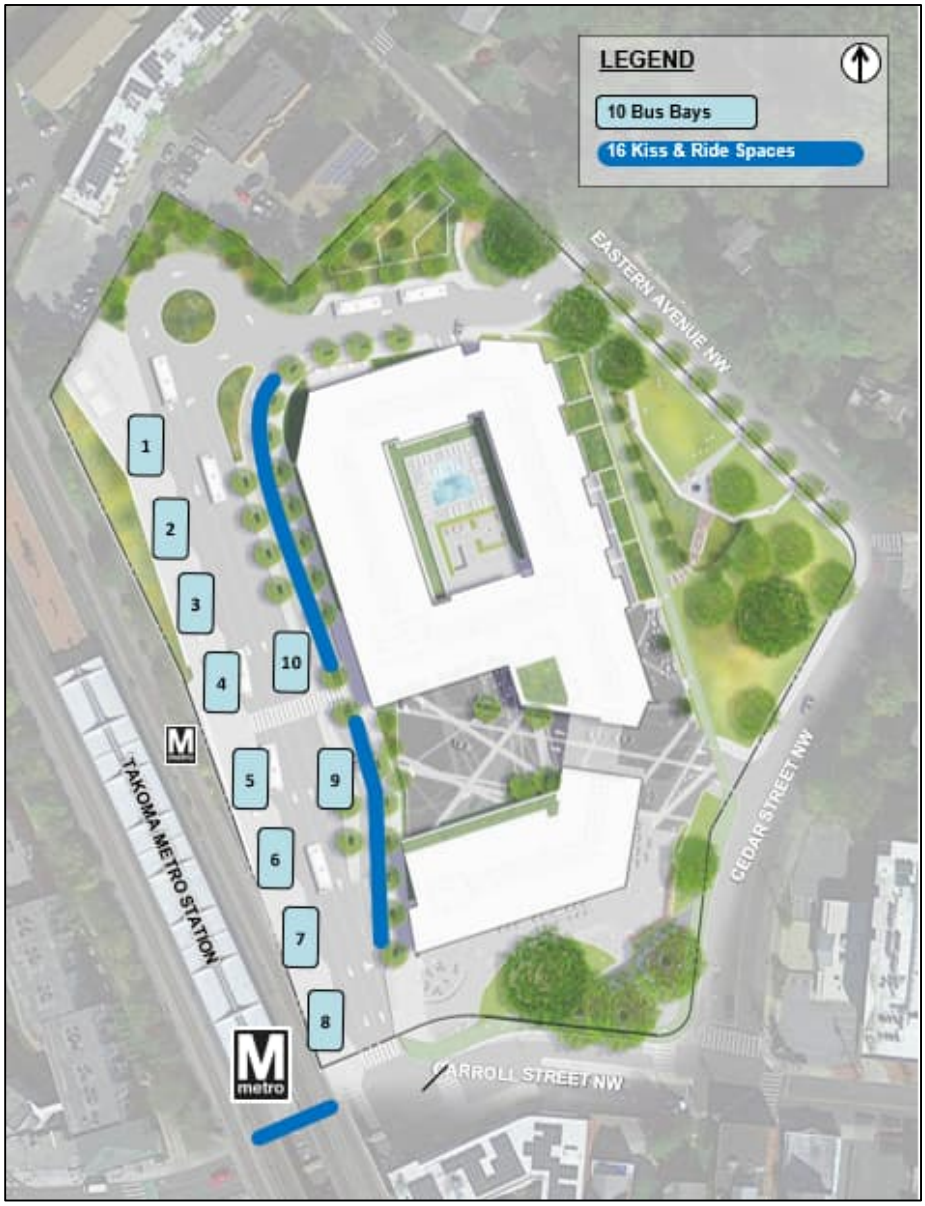
Figure 4. Project Site Plan



The Project includes the following modifications of WMATA facilities (See Figure 5):

- Relocation of the bus loop and Kiss & Ride
- Addition of one alighting bus stop
- Removal of 144 Kiss & Ride spaces
- Addition of a traffic signal on Carroll Street NW at the WMATA bus loop and Kiss & Ride entrance

Figure 5. Modifications to WMATA Facilities



3.1 Modifications to Bus Loop

The proposed bus loop will be reconfigured and relocated to be adjacent to the Metro Station. The bus loop will follow the orientation of the Metrorail tracks, rather than curving away from the station entrance as it does today. Buses will continue to enter the bus loop from Carroll Street NW (northbound) or from Eastern Avenue NW (southbound), depending on the bus route.

The southbound bus loop includes eight bus bays adjacent to the Metro Station entry and the northbound bus loop includes two bus bays. This will provide one more bus bay than is currently at the site.

3.2 Modifications to Kiss & Ride

The proposed Kiss & Ride facility will be removed and relocated adjacent to the reconstructed bus loop and closer to the Metrorail station entrance than the lot that exists today. The future design will consist of 16 total curbside parking spaces that reflects the peak hour parking demand analysis described in Section 2.3 with a 50 percent growth factor applied to accommodate future increases in pick-up and drop-off rates. Approximately 14 Kiss & Ride spaces will be provided in tandem along the building's west curb line, directly to the east of the reconfigured bus loop. About two Kiss & Ride spaces will be provided in tandem on Carroll Street NW as shown in Figure 5. The Kiss & Ride spaces can be accessed from Carroll Street NW and drivers must exit at Eastern Avenue NW. There will be no Kiss & Ride access from Eastern Avenue NW.

3.3 Modifications to Roadway Access

The alignments of the roadways adjacent to the Takoma Metro Station – Eastern Avenue NW, Cedar Street NW, and Carroll Street NW – will not change. There will be the addition of a traffic signal on Carroll Street NW at the WMATA bus loop and Kiss & Ride entrance

The bus loop will maintain access to and from Carroll Street NW and Eastern Avenue NW. Kiss & Ride spaces will no longer be accessible from Eastern Avenue NW as the entry to the Kiss & Ride zone has been consolidated to one entry on Carroll Street NW with an exit on Eastern Avenue NW.

Residential parking, retail parking, and loading will occur at a proposed driveway off Cedar Street NW. Access to residential parking will also be allowed off Eastern Avenue NW at the same roadway entrance as the bus loop. Figure 6 depicts the site plan with vehicular circulation.

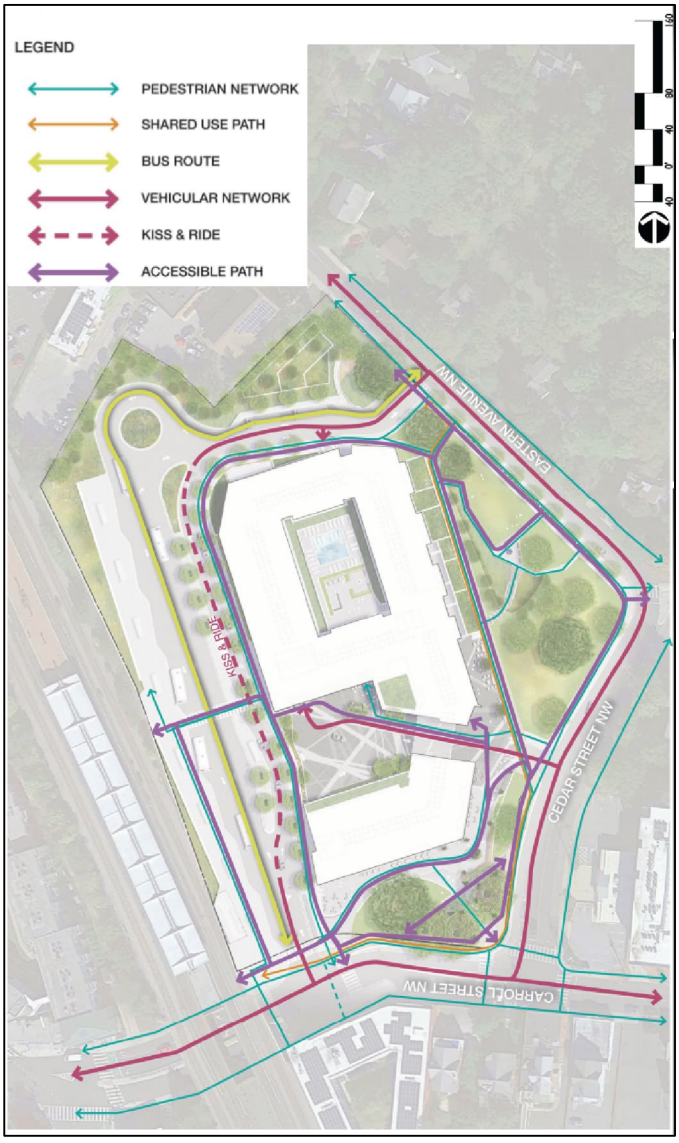
Figure 6. Proposed Site Circulation



3.4 Modifications to Bicycle and Pedestrian Access

As part of the Project, a shared-use path integrated with the open space on the east side of the building is proposed. This path will efficiently take people through the space around Eastern Avenue NW, Cedar Street NW, and Carroll Street NW, ending/beginning at the corner across from the Metro Station entrance at Carroll Street NW, see Figure 7. The existing sidewalks along Eastern Avenue NW, Cedar Street NW, and Carroll Street NW will remain.

Figure 7. Shared-Use Path and Sidewalk Location



3.5 Stormwater Management and Drainage Improvements

The existing 3' diameter storm drain that currently runs through the site will be rerouted to allow for the placement of the new building. Various bioretention facilities will be installed on site to meet the District's Department of Energy and Environment's (DOEE) stormwater management requirements.

WMATA facilities will not be impacted by the drainage improvements or utility relocations.

4.0 PROJECT IMPACTS

This section evaluates the potential environmental effects of the Project elements of specific to WMATA's interests and as described in Section 3.

4.1 Land Acquisitions, Displacements, and Dispositions

WMATA will convey a portion of its property to its joint developer for residential and retail development, which will require relocation and/or modification of some WMATA facilities as described in Section 3. It will not be necessary for non-WMATA land--that is, land that is privately-owned by others—to be acquired. The WMATA property used for housing and retail development will be conveyed fee simple to the Developer.

4.2 Transportation

4.2.1 Metrorail

The Project will improve station access and not be changing Metrorail service. Any increase in ridership at the Metro station due to residential and employment opportunities associated with the development is not expected to be substantial enough to cause any significant impact on Metrorail operations.

During construction there may be some disruptions to pedestrian access to station, however interim operations plans will be developed to maintain access to the station.

4.2.2 Local Bus Routes

The Project will provide an improved busway configuration with additional capacity and safer passenger access. Local bus service will not change. All routes accessing the bus bays may experience a marginal increase in ridership from people traveling to and from the residential and retail uses associated with the Project. No permanent impact to bus operations is anticipated.

Changes to the location of the bus loop within the site will improve customer safety and have minimal impact on bus travel times. During construction there may be some disruptions to bus operations and pedestrian access to the bus bays. Interim operations plans will be developed to maintain access to the buses and the station.

4.2.3 Kiss & Ride Spaces

The number of Kiss & Ride spaces available at Takoma Metro Station will be reduced from 160 spaces to approximately 16 spaces to align with pick-up and drop-off parking demand rates.

Analysis of parking demand at Takoma Metro Station, described in Section 2.3, identified that pick-up and drop-off parking demand for the Kiss & Ride facility is much lower than the existing

facility capacity and that most users were daily or overnight parking in the facility, which was not its intended use.

With the reduction in capacity, customers seeking to park for longer durations will be directed to use the Park & Ride facilities at the Fort Totten Metro Station, which is only seven to ten minutes away by car and in the direction of travel for most commuters using the Takoma Metro Station.

4.2.4 Pedestrian and Bicycle Access

The existing sidewalks along Eastern Avenue NW, Cedar Street NW, and Carroll Street NW will remain. There will be improved pedestrian and bike infrastructure with the development of a shared-use path integrated with the open space on the east side of the building. More information can be found in Section 3.4.

During construction there may be disruptions to bicycle and pedestrian access. Interim operations plans will be developed so that bicycle and pedestrian station access to the station remains during construction.

4.2.5 Traffic

The Developer has initiated a traffic study, and once the residential parameters for the Project are finalized, the Developer will coordinate with the District Department of Transportation (DDOT) to confirm the study parameters and prepare the required Comprehensive Transportation Review. Traffic count data is being collecting, and the Developer is preparing a draft scoping form.

The Project will maintain and enhance WMATA customer access to and through the site in three ways:

- Relocate the bus bays closer to the Metro entrance
- Move Kiss & Ride spaces closer to the Metro entrance
- Enhance pedestrian safety with modernized crosswalks

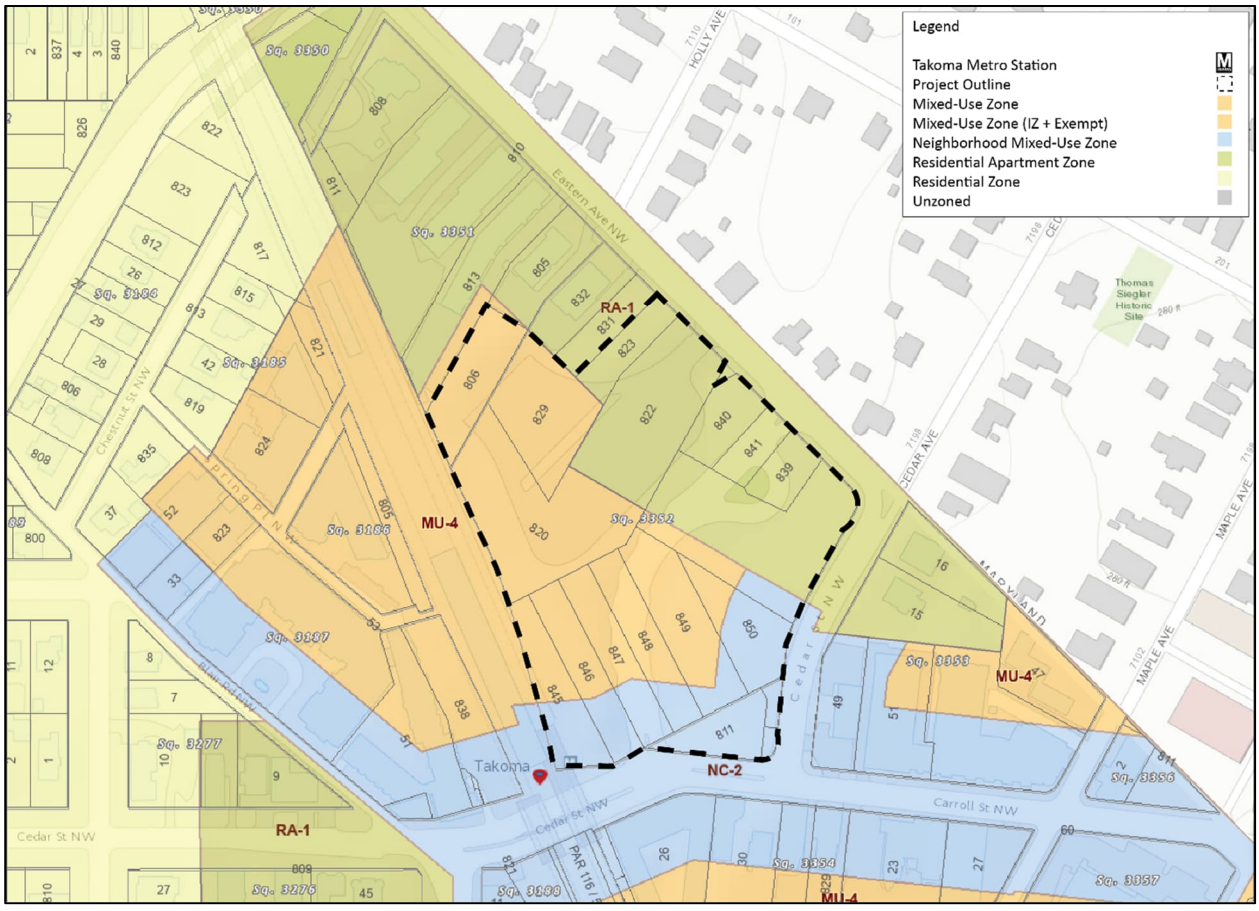
The Project also proposes a new traffic signal at the WMATA bus loop and Kiss & Ride entrance and Carroll Street NW.

During construction there may be disruptions to vehicular traffic. Maintenance of traffic plans will be developed to maintain station access during construction.

4.3 Zoning and Land Use

Based on the District of Columbia Office of Zoning (DCOZ) *Official Zoning Map*, the Project site is zoned NC-2, MU-4, and RA-1. DCOZ defines NC-2 as Neighborhood Mixed-Use Zone, MU-4 as Mixed-Use Zone, and RA-1 as Residential Apartment. The NC-2 zone allows for stable mixed-use areas permitting a range of commercial and multiple dwelling unit residential development in defined neighborhood commercial areas. The MU-4 District allows for mixed-use developments permitting a broad range of commercial, institutional, and multiple dwelling unit residential development at varying densities. The RA-1 District allows for areas predominantly developed with low- to moderate-density development, including detached dwellings, rowhouses, and low-rise apartments. Figure 8 shows the existing zoning classifications around the station area.

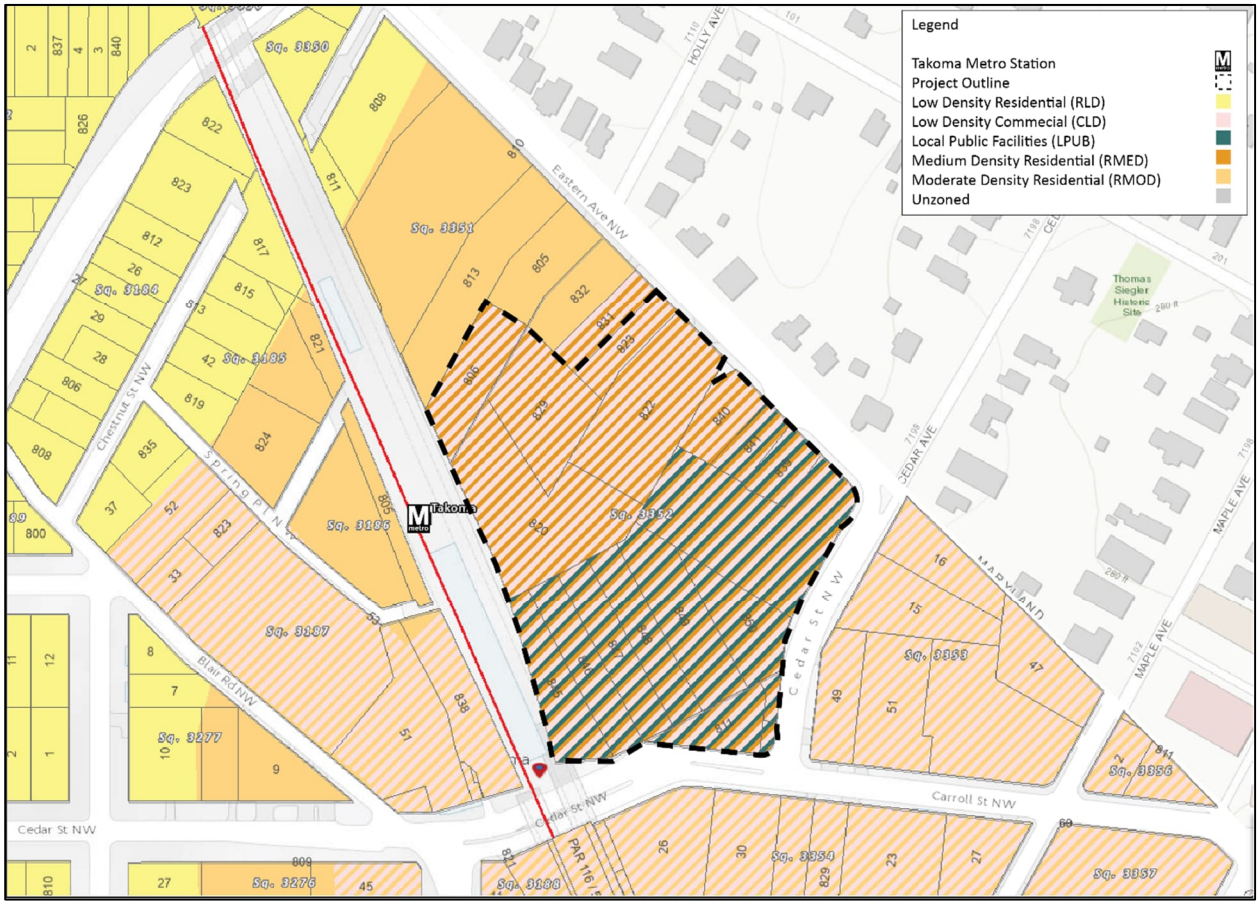
Figure 8. Existing Zoning Map



Source: DC Office of Zoning

According to the D.C. Office of Planning (DCOP) *Existing Land Use Map*, the existing land use of the parcel(s) containing much of the Project is Transport, Communication, Utilities, which currently includes the Kiss & Ride lot. However, the DCOP 2021 Comprehensive Plan features a *Future Land Use Map* that provides a generalized view of how land in the District is intended to be used (see Figure 9). The future land use of the parcel(s) containing much of the Project is intended to be used as a mix of Low Density Commercial (CLD), where retail, office, and service businesses are the predominant uses; Medium Density Residential (RMED), where mid-rise apartment buildings are the predominant use, and Local Public Facilities (LPUB), which includes land and facilities occupied and used by colleges and universities, large private schools, hospitals, religious organizations, and similar institutions.

Figure 9. Future Land Use Map



Source: DC Office of Zoning

4.4 Planning Consistency

Table 4 identifies applicable local plans and evaluates the Project's consistency with them.

Table 4. Land Use and Transportation Plans

Plan	Description	Author	Date	Inconsistencies
District of Columbia Comprehensive Plan	Identifies the Takoma Metrorail station as one of the key locations for targeted transit-oriented development that will maximize regional accessibility and mobility. Some of the listed principles of transit-oriented development includes mixed uses, diverse housing types, pedestrian-friendly design, programmed open public spaces, higher density, strong transit connections, and bicycle & pedestrian connectivity.	DCOP	2021	None
District of Columbia Comprehensive Plan Future Land Use Map	Places the Takoma Metrorail station in a mixed land use district combining Medium Density Residential with Local Public Facilities. The area immediately surrounding the parcel consists of Moderate Density Residential and Low Density Commercial.	DCOP	2022	None
District of Columbia Comprehensive Plan Rock Creek East Area Element	The detailed small area plan for the 7.4 square mile section of northern Washington, DC identifies the Takoma Metrorail station as a key location for transit-oriented mixed-use development. It discusses the need for economic growth and affordable housing near the station accompanied by improved transit and bike facilities in the surrounding area to increase access to the Metrorail system.	DCOP	2022	None
District of Columbia Bicycle Master Plan	Identifies the correlation between the proximity to a Metrorail station and the number of commuters using bicycles, making the argument that Metrorail stations should improve on-site and surrounding bicycle infrastructure to encourage multimodal commutes. While the plan from 2005 is almost two decades old, the city is currently working on an updated version.	DDOT	2005	None

Plan	Description	Author	Date	Inconsistencies
Thrive Montgomery 2050 – General Plan Update	Promotes Transit-Oriented Development and encourages the concept of "15-Minute Living," a nuanced approach to mixed-use development that includes area-specific investment into uses that maximize local access to essential programming. The plan also outlines the need for transit, bicycle, and pedestrian infrastructure around Metrorail stations to reduce the County's dependency on automobiles.	Montgomery County Office of Planning and Development	2021	None
Montgomery County Bicycle Master Plan	Outlines the approach to implement a comprehensive network of low-stress bicycle facilities that connects people to critical locations like Metrorail stations in order to create a more equitable system of sustainable transportation facilities.	Montgomery County Office of Planning and Development	2018	None

4.5 Neighborhoods and Community Facilities

The Project is in a residential and commercial area of Washington, DC, bound on the north by Eastern Avenue NW and apartment buildings followed by single-family homes, on the east by Cedar Street NW followed by a 7-Eleven and the Takoma Central mixed-use development, on the south by Cedar Street NW/Carroll Avenue NW followed by retail businesses and the Elevation 314 mixed-use development, and on the west by the Takoma Metro Station followed by several apartment complexes.

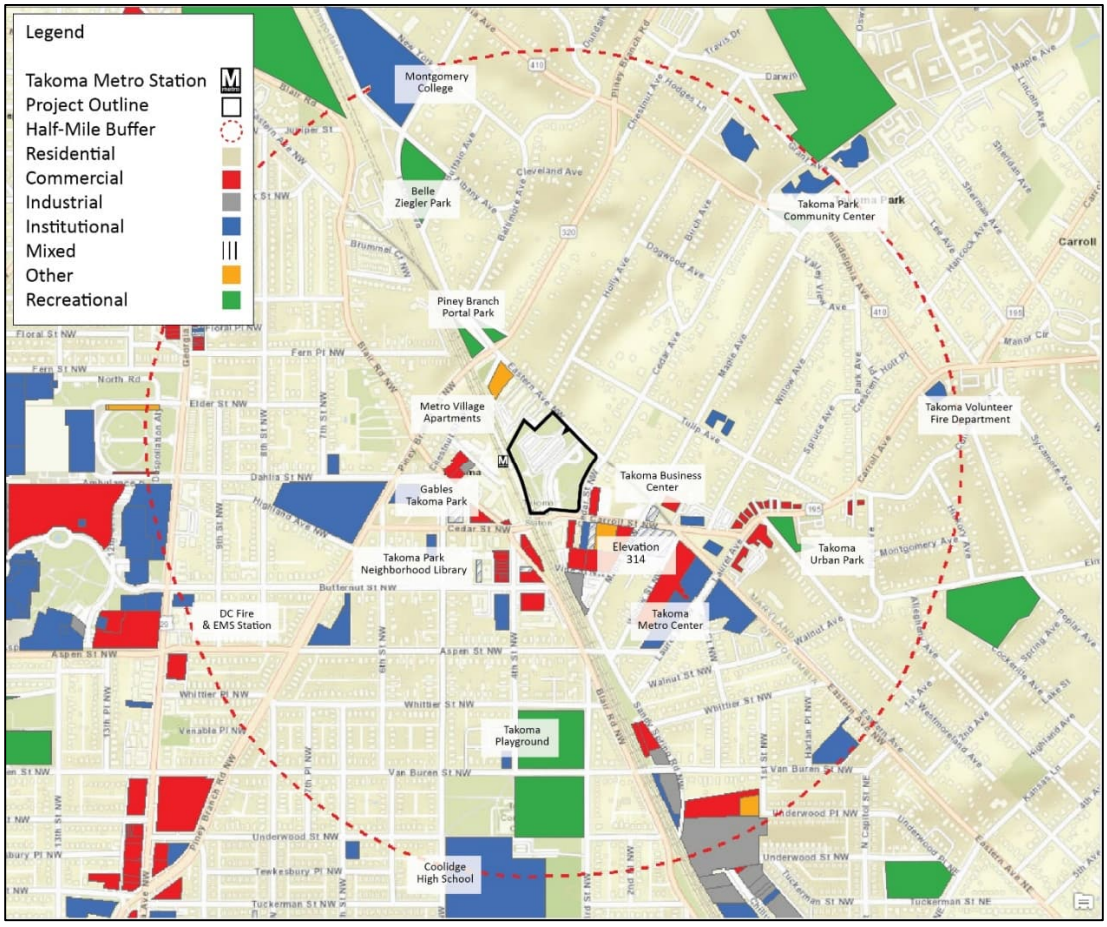
Adjacent transportation infrastructure—such as the Takoma Metro Station Kiss & Ride lot — separate the Project from existing community facilities.

Within a half-mile of the Project are the Takoma and Lamond Riggs residential neighborhoods to the southwest and the City of Takoma Park, Maryland to the northeast. There are also the following neighborhood/community facilities:

- Takoma Urban Park, Takoma Playground, and Belle Ziegler Park
- Montgomery College Takoma Park/Silver Spring Campus
- Takoma Park Community Center/Sam Abbot Citizen's Center

Figure 10 shows the station area in relation to the surrounding neighborhoods and community facilities.

Figure 10. Neighborhood and Community Map



4.6 Environmental Justice Populations

This section identifies minority and low-income populations (collectively "Environmental Justice Populations") in the Project area and assesses the potential for any disproportionately high and adverse impacts to those identified populations. Fourteen Census block groups were identified within the half mile study area.

4.6.1 Identification of Environmental Justice Populations

A half-mile radius around the Project area ("Census Project Study Area") was determined to be the appropriate study area boundary to analyze the presence of Environmental Justice Populations; all U.S. Census block groups and any portions of block groups that fell within the half-mile boundary of the project site were included. The study area with block groups identified are shown in Figure 11. Takoma Park, Montgomery County, and Washington, DC were selected as comparison areas for the Environmental Justice analysis. Minority populations were then analyzed at the Census block group level using demographic data from the U.S.

Census Bureau's Decennial Census (2020). Since low-income data was not available at the block group level, Median Household Incomes were identified to compare the block groups.

Figure 11. Study Area with Block Groups

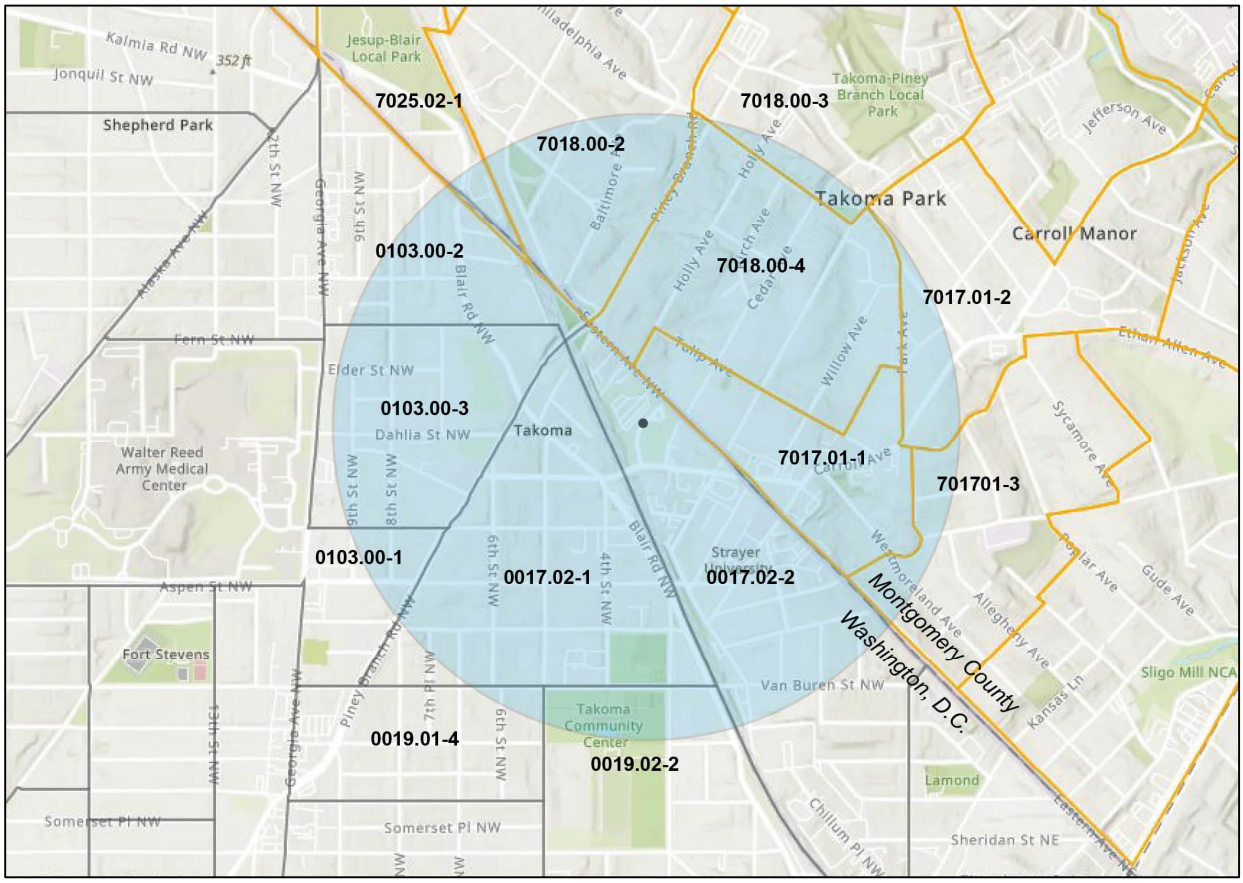


Table 5 lists the percentages of minority residents in each of the block groups in the half-mile Census Project Study Area, and compares the total to Takoma Park, Montgomery County, and Washington, DC. The percentage of minority residents within the Census Project Study Area (62.7%) was higher than any of the comparison locations (56.4% of Takoma Park, 40.6% of Montgomery County, and 33.6% of Washington, DC).

Table 3 also identifies the Median Household Income for each of the block groups in the half-mile Census Project Study Area, and compares the average of the Census Project Study Area to Washington, DC. The average Median Household Income of the Census Project Study Area groups was higher than the Median Household Income of Washington, DC; however, eight of the fourteen block groups in the Census Project Study Area had Median Household Incomes below that of Washington, DC.

Household Income data was not available for Census Tract 7017.01, Block Group 1.

Table 5. Minority Population and Median Household Income by Block Group

Census Tract (Block Group)	Total Population	Minority Population	Percent (%)	Median Household Income (MHI)	Percent of DC MHI (%)
0017.02 (1)	1,599	964	60.3%	$ 133,906	147.4%
0017.02 (2)	1,757	1,207	68.7%	$ 96,250	106.0%
0019.01 (4)	895	701	78.3%	$ 41,336	45.5%
0019.02 (2)	790	607	76.8%	$ 76,964	84.7%
0103.00 (1)	765	615	80.4%	$ 92,212	101.5%
0103.00 (2)	1,458	1,268	87.0%	$ 104,821	115.4%
0103.00 (3)	1,381	1,076	77.9%	$ 76,688	84.4%
7017.01 (1)	726	308	42.4%	*N/A*	*N/A*
7017.01 (2)	1,862	937	50.3%	$ 75,694	83.3%
7017.01 (3)	936	213	22.8%	$ 174,107	191.7%
7018.00 (2)	976	341	34.9%	$ 174,063	191.6%
7018.00 (3)	1,215	1,014	83.5%	$ 62,371	68.7%
7018.00 (4)	958	205	21.4%	$ 196,413	216.2%
7025.02 (1)	1,731	1,226	70.8%	$ 68,722	75.7%
Census Project Study Area Total	17,049	10,682	62.7%	$ 105,657	116.3%
City of Takoma Park	17,629	9,946	56.4%	$ 83,919	92.4%
Montgomery County	1,062,061	431,424	40.6%	$ 111,812	123.1%
Washington, DC	689,545	231,762	33.6%	$ 90,842	*N/A*

Table 6 provides a breakdown of the minority groups present within the Census Project Study Area. The largest minority group within the Census Project Study Area is Black / African American (39.8%), higher than Takoma Park (31.9%) and Montgomery County (18.6%), but lower than Washington, DC (41.4%). The second largest minority group within the Census Project Study Area is Hispanic or Latino (17.7%), higher than Takoma Park (15.7%) and Washington, DC (11.3%), but lower than Montgomery County (20.5%). The remaining minority groups in Census Project Study Area (American Indian / Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Two or More Races, and Other Races) altogether make up 14.5% of the population.

Table 6. Minority Population by Group

Minority Group	Census Project Study Area		Takoma Park		Montgomery County		Washington, DC	
	Number	% of Total Pop.	Number	% of Total Pop.	Number	% of Total Pop.	Number	% of Total Pop.
Black / African American	6,792	39.8%	5,621	31.9%	197,077	18.6%	285,810	41.4%
American Indian / Alaska Native	82	0.5%	116	0.7%	7,036	0.7%	3,193	0.5%
Asian	608	3.6%	816	4.6%	163,507	15.4%	33,545	4.9%
Native Hawaiian or Other Pacific Islander	12	0.1%	10	0.1%	610	0.1%	432	0.1%
Two or More Races	1,748	10.3%	1,973	11.2%	119,262	11.2%	56,077	8.1%
Hispanic or Latino	3,016	17.7%	2,764	15.7%	217,409	20.5%	77,652	11.3%
Other	1,294	7.6%	1,410	8.0%	116,786	11.0%	37,294	5.4%
Minority Total	13,552	79.5%	12,710	72.1%	821,687	77.4%	494,003	71.6%

4.6.2 Assessment of Disproportionately High and Adverse Impacts

There is no anticipated human environmental impact, including health, economic, and social, on the identified minority and low-income populations within the project study area. No adverse impacts to neighborhoods, community facilities, air quality, noise, vibration, or traffic are anticipated as a result of the Project. Considering these factors, the joint development project would not have "disproportionately high and adverse effects" on Environmental Justice Populations.

4.7 Cultural Resources

The Project site currently has no above-ground historic structures, and the ground has been substantially disturbed during site development for the original Metro station facilities.

4.8 Public Parklands

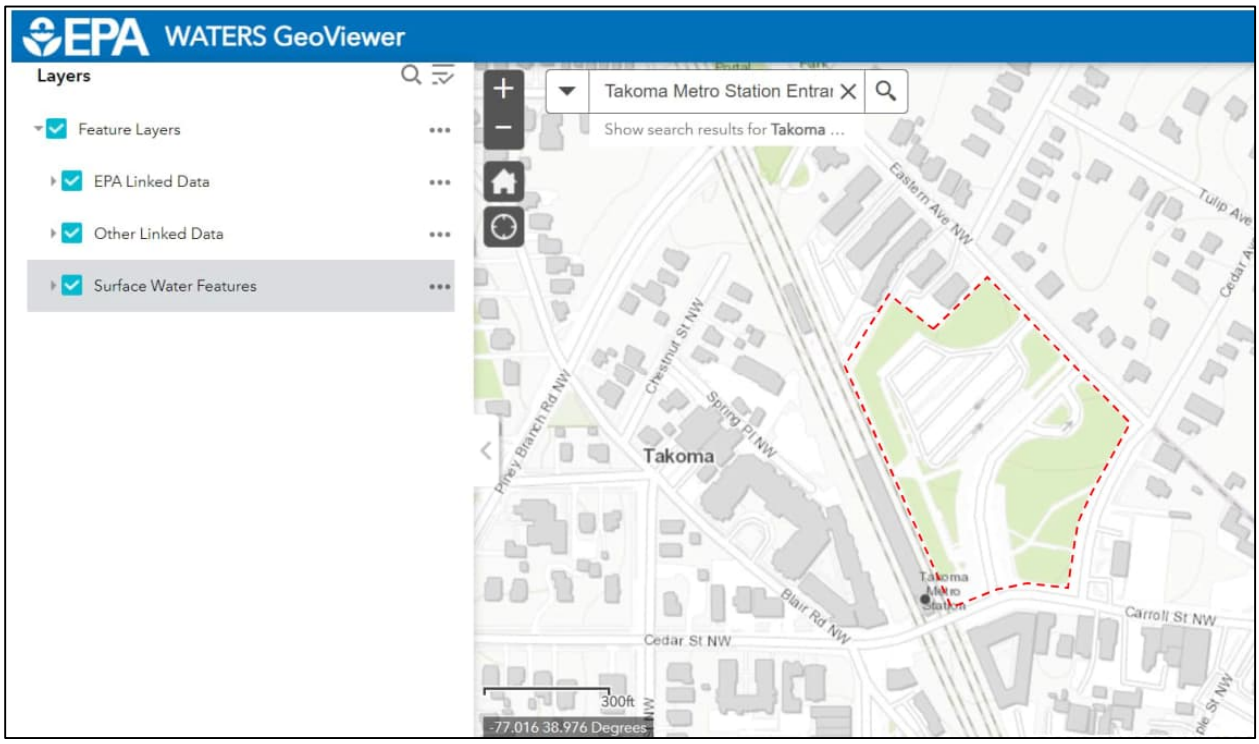
The following public parklands are located within a half-mile of the study area: Piney Branch Portal Park, Belle Ziegler Park, portions of Jesup Blair Park, Takoma Urban Park, and Takoma

Playground. No parks or recreation areas would be impacted by the Project. Refer to Figure 10 for the location of public parklands in proximity to the Takoma Metro Station.

4.9 Wetland and Waters of the U.S.

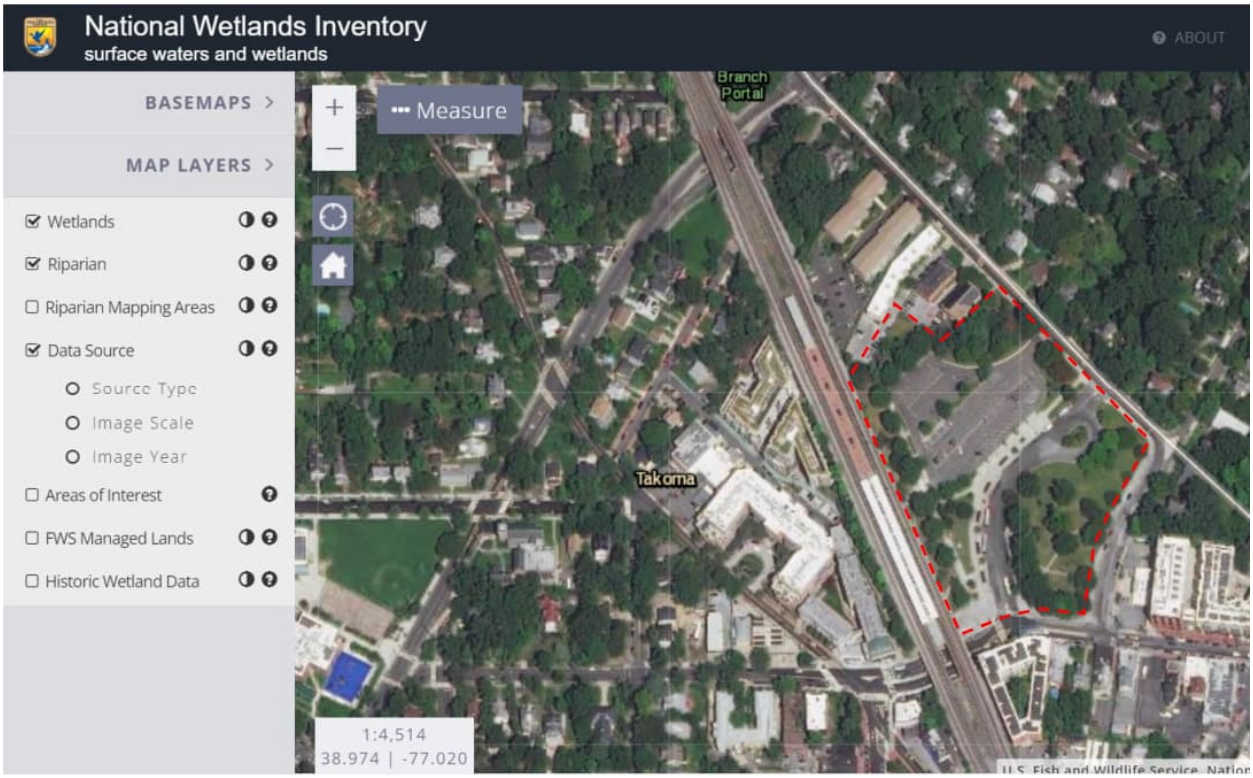
The project area does not anticipate encountering any wetland or Waters of the US in the study site, as there has not been any identification of body of water. See Figure 12 and Figure 13.

Figure 12. EPA WATERS GeoViewer Results



Source: EPA WATERS Inventory

Figure 13. National Wetlands Inventory Map



Source: US Fish and Wildlife Wetlands Inventory

4.9.1 County and State Water Regulation Buffers

The District of Columbia has many urban wetlands that are located within 500 feet or less of urban development. The DC Wetland Program Plan provides a framework and direction for the Department of Energy and Environment to build, strengthen, and improve the ability of the district to protect and conserve its wetlands.

However, there is no body of water at or adjacent to the Project site. Therefore, no impact is expected.

4.10 Floodplains

The effective Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") shows that there are no floodplains present within the Project area. The Project area is classified as an area of minimal flood hazard. See Figure 14.

Figure 14. National Flood Hazard Map



4.11 Water Quality

No water quality facilities are present for the existing site. Redevelopment for the project will be needed to install various bioretention facilities in order to retain and treat the 1.2-inch storm event to meet the District's Department of Energy and Environments Stormwater Management requirements for water quality.

State and federal laws set annual or seasonal standards with quantifiable criteria to protect a water body, depending on its designated use. MDE uses these standards to ensure that water is useable for drinking water, swimming, fishing, industry, and agriculture. The standards are also used by permitting agencies to regulate discharges into water bodies.

The Clean Water Act requires local water quality standards to have three components:

- goals for each water body based on designated uses
- criteria to protect the designated uses
- an anti-degradation policy that maintains high quality waters.

The existing 3' diameter storm drain that currently runs through the site will be rerouted for the placement of the new building. The facilities at WMATA will be impacted by installing the various bioretention facilities, as mentioned above by the District's Department of Energy and Environments Stormwater Management. This will follow the requirements desired for the new bus bays, kiss & ride roadway alignment, and new building.

There will be no permanent impacts resulting from the changes to the transit facilities and total transit facility impervious areas will be reduced. During construction there may be minor construction-related sediment or erosion risk. To minimize the impact, the team will employ District of Columbia construction operations controls.

4.12 Air Quality

The Project site is located in Washington, DC, which is part of the EPA-defined Metropolitan Washington Air Quality Designation Area. The Greater Metropolitan Washington area is currently designated as a nonattainment area for 8-hour ozone (O3) and annual average particulate matter less than 2.5 microns (PM2.5). The Metropolitan Washington area is in attainment for all other pollutants including carbon monoxide (CO), particulate matter less than 10 microns (PM10), nitrogen dioxide (NO2), sulfur dioxide (SO2), and lead (Pb).

No impact is anticipated by the Project.

The site will abide with WMATA's clean air framework by following the goal of reducing its transportation-related carbon footprint. During the construction phase, air monitoring stations will be set up around the perimeter of the project site to take measurements of the air with the intent of limiting debris and dust from leaving the site area.

There will be no permanent impacts resulting from the changes to the transit facilities. During construction there may be construction-related dust associated with equipment and operation. To minimize the impact, the team will employ dust-mitigation measures including wetting soils and cleaning equipment.

4.13 Forest Stands

The Project is not anticipated to affect any forest stands. A tree inventory and assessment were conducted on June 15, 2022, by Wetland Studies & Solutions Inc. Of the 142 trees that were recorded, 65 are identified as Special Trees under DC code and 4 are Heritage Trees.

Of the four Heritage Trees, two Heritage Trees will remain in place/as-is, one will be relocated to a new location on the site within the new park, and WMATA/EYA has a permit to remove the heritage tree that sits where the new WMATA bus lane will be located. An arborist will create a plan using best practices for relocating the one heritage tree as well as protecting the other trees during construction.

Of the 65 Special Trees onsite, there are 31 that are in either fair, poor, or dead condition. The team is consulting with an arborist to design the park in a way that preserves as many trees as possible. The final tree plan will be shared once the design is finalized.

During construction there will be limited access to the on-site open space. However, once complete, the underutilized open space will be transformed into a neighborhood amenity.

4.14 Threatened and Endangered Species

No impact to federally protected species or habitat is expected as a result of the Project.

An official species list of potential threatened and endangered species from the USFWS IPaC online application was reviewed for the project area. The Northern Long-eared Bat (NLEB) and the Hay's Spring Amphipod were the only species identified in the official species list for the Project area. No critical habitats were identified.

4.15 Utilities

The Project is not anticipated to affect utilities that serve the Metro Station and adjacent neighborhoods, including water, sewer, electric, and natural gas services.

4.16 Safety and Security

WMATA would be responsible for the provision of police and/or security presence at WMATA-operated facilities during operating hours. Because WMATA is currently responsible for providing safety and security services at the Takoma Metro Station, no significant impact on WMATA-operated facilities or operations is expected.

The new development will be professionally managed with controlled access and adequate lighting in and throughout the premises.

4.17 Hazardous and Contaminated Materials

Hazardous and contaminated materials include oil and other hazardous substances that present an imminent and substantial danger to public health and the environment. Federal laws that regulate hazardous and contaminated materials include:

- Comprehensive Environmental Response, Compensation, and Liability Act;
- Resource Conservation and Recovery Act;

- Toxic Substances Control Act;
- Clean Water Act; and
- Clean Air Act.

A Phase I Environmental Site Assessment (ESA) was prepared on October 28, 2021 for the Project consistent with the requirements of the American Society of Testing and Materials (ASTM) E1527-13, Standard Practice for Environmental Site Assessments: Phase I ESA Process and EPA Standards and Practices for All Appropriate Inquiries contained in CFR Part 312.

The Phase I ESA identified the following recognized environmental conditions (REC) at the site:

- The property was improved with a gas station between the 1920s and 1960s and former on-site investigations have detected petroleum contamination in its vicinity. Therefore, this historical use is considered to be a REC for the subject property.
- The property maintained at least two gasoline tanks (not associated with the former gas station) and were located in the southwestern corner of the property. These historical Underground Storage Tanks (UST) with no additional regulatory data are considered to be RECs for the subject property.
- Several gas stations and other UST facilities were historically located to the south of the subject property. One of these properties was identified on the Leaky Underground Storage Tank database with a documented release. Former on-site investigations have detected petroleum contamination along the southern property boundary, and therefore, these historical facilities are considered to be a REC for the subject property.

The Developer is solely responsible for any permits or other documentation required related to hazardous and contaminated materials.

4.18 Noise and Vibration

No impact on existing noise-sensitive receptors is anticipated.

If the Project is constructed, the existing Metrobus and Metrorail transit operations would continue to operate as they do today with no increase in service anticipated. The Metrorail tracks would continue to function as they do now, and the existing bus routes would continue to serve the Metro station although they would do so from the proposed relocated bus loop.

The Developer is responsible for quantifying and mitigating noise and vibration impacts from the Project on the private development project. The Developer is also responsible for constructing the joint development in a manner that mitigates potential noise and vibration

impacts from rail, mass transit, and station-related sources to the Project's new residences and commercial uses.

There will be no permanent impacts resulting from the changes to the transit facilities. The project will generate typical noise levels related to construction processes and will abide by Washington, DC noise ordinances. Mitigation activities could include minimizing night-time work and utilizing noise control measures. Once the project is complete no unusual noise generation anticipated by the development.

4.19 Secondary and Cumulative Impacts

4.19.1 Secondary Impacts

No adverse secondary impacts are anticipated as a result of the Project. Secondary impacts of the project would result from the increase in permanent residents and workers at the Project site. The joint development's housing, and commercial uses would increase the overall employee and resident population of the area and would contribute to a marginal increase in economic activity in the project vicinity, including demand for goods, services, and housing.

4.19.2 Cumulative Impacts

No adverse cumulative impacts are anticipated as a result of the Project and the activities undertaken in the Project would contribute minimal incremental effects to natural resource socioeconomic, and transit conditions.

4.20 Construction Impacts

Construction of the Project will not close the Metro Station to passengers at any time. During construction, all modes of access would be maintained. The Developer will need to prepare and submit a maintenance of traffic plan to WMATA for approval.

The project will be phased to minimize the impact on WMATA operations. The project will begin by installing the new utilities and bus loop prior to decommissioning the existing infrastructure so that WMATA operations will remain in service. During construction of the multifamily building, adequate safety features will be installed around the site to protect pedestrians/vehicles accessing the WMATA bus lanes and metro station.

Construction dust and noise may be a concern to surrounding neighborhoods. The Developer and the contractor will be responsible for ensuring that all construction activities adhere to air quality and noise control regulations as established Washington, DC noise ordinance and WMATA design criteria.

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5.0 PUBLIC INVOLVEMENT

WMATA and Washington, DC will keep the public informed about the Project through public outreach. A public hearing in accordance with the WMATA Compact will be scheduled for January 17th, 2022 at 6:30PM. The hearing will provide the public with the opportunity to comment. Notice of the public hearing will be published in the *Washington Post* as required by the WMATA Compact. The project webpage includes information about the project, the public hearing presentation, an opportunity to provide feedback, and a link to a dedicated project webpage in Spanish.

The subject of this hearing will be the following:

- Relocation of the bus loop and Kiss & Ride
- Addition of one alighting bus stop
- Removal of 144 Kiss & Ride spaces
- Addition of a traffic signal on Carroll Street NW at the WMATA bus loop and Kiss & Ride Entrance

A public hearing staff report summarizing comments received at the hearing with staff responses will be released for public review and comment. The staff report will be made available online and in hard copy at WMATA headquarters and libraries in the project vicinity.

WMATA will collect comments from the public through the following ways:

- Online at wmata.com/plans and projects
- Written comments mailed to: Office of the Secretary, Washington Metropolitan Area Transit Authority, 300 7th Street, NW, Washington, DC 20024
- A public hearing by telephone

All comments must be received by 5pm on January 27th, 2022 to be included in the public record.

6.0 REFERENCES

Government of the District of Columbia Office of Zoning. Official Zoning Map. *Washington, DC* (2016) DCOZ

Government of the District of Columbia Office of Zoning. DC Zoning Handbook. *Washington, DC* Neighborhood Mixed-Use – DC Zoning Handbook

Government of the District of Columbia Office of Zoning. Existing Land Use Maps. (2005) *Washington, DC* map_03.pdf (dc.gov)

Government of the District of Columbia Office of Planning. Comprehensive Plan Future Land Use Map Proposed Amendments. (2021) 2021CompPlanLandUse.pdf (dc.gov)

Open Data DC Existing Land Use. (2022) *Washington, DC* Existing Land Use | Existing Land Use | Open Data DC

Open Data DC Future Land Use. (2021) *Washington, DC* Future Land Use | Open Data DC

Washington Metropolitan Area Transit Authority. Takoma Metro Station Rider Guide. (2022) *Washington, DC* Takoma | WMATA

Government of the District of Columbia Office of Planning. Comprehensive Plan. (2021) *Washington, DC* Comprehensive Plan | op (dc.gov)

Government of the District of Columbia Office of Planning. Comprehensive Plan: Rock Creek East Area Element. (2021) *Washington, DC* 22_RCE.pdf (dc.gov)

District Department of Transportation. District of Columbia Bicycle Master Plan. (2005) *Washington, DC* Bicycle Master Plan 2005 (dc.gov)

Montgomery County Planning, Housing, and Economic Development Committee. Thrive Montgomery 2050 Draft. (2021) *Montgomery County* Planning, Housing, and Economic Development Committee Draft - October 25, 2021 (montgomeryplanning.org)

Montgomery County Planning Department. Thrive Montgomery 2050 Draft. (2018) *Montgomery County* Montgomery County Bicycle Master Plan (montgomeryplanning.org)

Open Data DC Census Block Groups in 2020. (2020) *Washington, DC* Census Bureau Maps

IPaC information for Planning and Consultation https://ipac.ecosphere.fws.gov/location/EUFLDWNANNFVFENMBEGZT6HJPQ/resources

District of Columbia Wetland Program Plan wetland-program-plan_dc-doee_final.pdf (epa.gov)

APPENDIX G: CONCEPT DRAWINGS



Proposed Parking and Bus Bay Changes at Takoma Station

N

EASTERN AVENUE NW

CEDAR STREET NW

CARROLL STREET NW

Takoma Metro Station

1
2
3
4
5
6
7
8
9
10

	CURRENTLY	PROPOSED
KISS & RIDE SPACES	160	16
BUS BAYS	9	10

metro

APPENDIX H: NOTICE OF PUBLIC HEARING STAFF REPORT

Draft Public Hearing Staff Report
Docket R23-01: Proposed Changes to Transit Facilities at Takoma Metro Station

PUBLIC HEARING REPORT AVAILABLE FOR INSPECTION

Notice is hereby given that the Draft Public Hearing Staff Report on proposed changes to the transit facilities at Takoma Metro Station is available for review and comment starting on April 11, 2023. The document addresses comments on the proposal received at the public hearing held on January 17, 2023, as well as comments received during the public comment period.

This comment period on the Draft Public Hearing Staff Report is your opportunity to make sure your comments were accurately characterized in the Staff Report and send clarification if desired. Comments on the Draft Public Hearing Staff Report will be accepted until 5 p.m. on Friday, April 21, 2023.

The report is available online at https://www.wmata.com/initiatives/plans/takoma-joint-development.cfm, and during business hours at:

WMATA
Office of the Board Corporate Secretary
300 7th Street, SW
Washington, DC 20024
(202) 962-2511
(Please call in advance to coordinate)

HOW TO SUBMIT WRITTEN COMMENTS ON THE DRAFT PUBLIC HEARING REPORT

Written statements and exhibits must be received by **5 p.m. on Friday, April 21, 2023**, and may be emailed to WMATAHearingReport@wmata.com, or mailed to the Office of the Secretary, SECT 2E, Washington Metropolitan Area Transit Authority, P.O. Box 44390, Washington, D.C. 20026-4390. Please reference "Takoma Metro Station" in your submission. All comments received become a part of the public record, which may be made available to the public and may be posted, without change, to wmata.com, including any personal information provided.

APPENDIX I: COMMENTS RECEIVED ON THE PUBLIC HEARING STAFF REPORT

As a constituent who took the time to read and respond to Metro's report, the Metro staff report issued today seems to me wildly misrepresentative of the actual statistical results regarding the removal of daily commuter parking spaces.

A full 50% of respondents use the parking spaces and 233 out of 292 respondents object to the removal of daily commuter parking spaces. That is nearly an 80% objection rate, yet your comments listed as "representative" show support for removal when that is clearly not representative of the vast majority of responses.

The responses were clear: The community this station serves does not want daily commuter parking eliminated.

Further as this project always has, the report lists the lot as "Kiss & Ride" which it is not. This parking lot is daily commuter parking.

It's hard to understand how Metro could justify removing parking when 80% of respondents oppose it and a full 50% of station users utilize it.

This proposed decision will inevitably further Metro's decline in ridership and encourage more single occupancy vehicle commutes by eliminating parking. As you're well aware, commuter parking can solve the first/last mile problem and increase ridership on public transportation.

There's no reason for the parking spaces to be permanently eliminated. One can build both housing and commuter parking.

Please revise the report so that it accurately represents the responses of station users.

Best,

Scott Keiner
Metro Commuter & Daily Parking User

From: Stephanie Smilay

I don't see my specific comments anywhere in the report.

I don't have a copy of what I sent, but this is their essence:

Takoma Park Maryland residents who live further than a half a mile from the Takoma Station either drive or take RideOn to get to the Metro (generally). At least I do. I live alone and "Kiss and Ride" is not an option. You will "work with" RideOn" on the reliability of the buses, but there is no way to enforce it, nor does it appear to be part of the plan.

RideOn buses are unlike WMATA buses. They are designed for commuters, meaning that they are relatively infrequent and they do NOT provide transportation after early evening hours. As a result, Maryland residents who get to the Takoma Station after the last RideOn bus at 8:30 or so will have to walk home (I'm female and 65 and I don't consider that particularly safe). Your plan will force many of us to drive 20 minutes to Fort Totten if we are committed to taking Metro. With 144 Metro riders being forced out of Takoma, I fully expect Fort Totten to fill up on a regular basis, again, forcing people like me to drive downtown and park in a garage. You don't even consider the loss of Metro ridership that will occur entirely due to the plan.

This plan makes life much worse for Maryland residents without giving them anything in return.

Hello there

I am deeply frustrated and dismayed at the fact that despite substantial feedback and commentary on the need to maintain more than 16 parking spots, there are no suggested changes to this plan to accommodate the need for commuter parking spots.

The report cites the Environmental Assessment with regards to studying the parking usage. However, this report was done back in 2019. It simply must be updated to reflect the current usage patterns. There was a very MAJOR change to the parking rules back in 2020. You can now park in the spots using the Park Mobile app to pay $5 for up to 17 hours. Back in 2019 when the Environmental Assessment was conducted, the max time that anyone could park there was 4 hours (coin meters only). Obviously, this meant that back before this change, not many people were using it to commute to work for an 8 hour workday. Anecdotally, I can tell you, and anyone can go and observe for yourself - that most weekdays the lot is nearly full with commuter parkers, going to work downtown - for a long period of time from 7-12 hours.

Moreover, the report does not attempt to explain any of the nuance of the purpose of the remaining 16 spots or any other spots for retail use. At the hearing, someone mentioned that even those 16 spots that were going to remain, would NOT be for all day commuter parking. They would be capped at 4 hours again. Is this true? Someone also mentioned there would be some retail spots that have a max of 2 hours. Is this true? I would really like to see what WMATA will allow for these 16 spots - will they be all day commuter parking? Or will they be for a true "Kiss & Ride" purpose - i.e., a person dropping off another person, the driver always remaining in the car? There needs to be much more detail on this point as there are many different understandings and mis-understandings about the rules related to these spots. It has caused great confusion and WMATA needs to provide clarity. Simply calling something "Kiss & Ride" does not help with the general public's understanding. I had hoped that this report would have clarified these questions and made it clear the real purpose for each of these types of parking spaces.

Thank you for your consideration
Elizabeth M. Adams
Takoma Park, MD

I saw the plan for the Takoma Station. Where is the parking!?! Several of us park here every day and commute to work on the Metro.

Hopefully your team has developed options for us. Very interested in your solution.

Thank you,

Greg Alligood

Hi WMATA team,

I wanted to write in with a brief comment in response to the staff report that was recently published. My understanding from page 22 of the report is that the vast majority of comments on the topic of parking spaces was in favor of keeping a reasonable number of spaces available.

I feel that the current proposal to reduce the number of spaces from 144 to 16 is overly draconian, and will result in effectively no parking availability at the Takoma Metro Station during most points in the week. Our family makes regular use of this parting option in support of our Metro ridership, and would like to continue doing so in the future. This proposal makes it less likely that we will be able to regularly use Metro for our commuting needs. I hope WMATA will consider increasing the planned number of spaces to something meaningfully more than 16 (perhaps a compromise like 60-80).

Thank you for your time and consideration,

David Lowe

Thank you for sending the staff's draft final report for comment. I am extremely disappointed that the staff did not recognize and accommodate the concerns of a large number of commenters that significant public parking needs to be retained at the Takoma Metro station. As noted in my prior comment and as reflected in the original design for the Takoma redevelopment, it is absolutely possible to have both redevelopment and parking. The conclusion that the existing parking lot is underutilized is incorrect as a factual matter. Presently, the lot is very full every Tuesday, Wednesday and Thursday. Go check for yourself. It is well used on Mondays and Fridays as well, but to a lesser degree since hybrid work schedules are common now. Because the parking utilization study was performed by Metro during the Covid pandemic, its conclusions are wrong and based on highly unusual, temporary conditions. Every public Metro parking lot, including the lot at Fort Totten and at the lot at Forest Glen, was completely empty during the height of the pandemic when the study was done on utilization at Takoma, The pandemic is officially over and the lot is again heavily utilized on weekdays--like it has been for decades. Because the staff's conclusion to proceed with its plan without change is based on a factual error, its decision to eliminate the parking is arbitrary and capricious and subject to court challenge. The staff's decision, if finalized, will benefit the wealthy few at the expense of the public at large. I'm deeply disappointed.

Respectfully submitted,

Douglas Pelley
Silver Spring MD

Not allowing any parking for citizens not living in the new apartment building next to the Station is against WAMATAs goal to increase ridership.

The new building is a gift to the developer and is not in accordance with the Historic Preservation goal of the city of Washington DC

Gertrud W Mergner MD Professor Emerita The George Washington University

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Hi, I am a resident of Takoma Park living on Maple Avenue, within easy walking distance of the proposed development.

I encourage decision-makers to ensure parking spots for Metro riders, not only for development residents and kiss and ride. I also encourage decision-makers to assess the facade and proportion of the proposed development in context of the local surroundings, to ensure the development adds to the local character and does not fully replace it.

I am in favor of more housing, more affordable housing in particular, and more commercial space, as well as less green space to accommodate these important aims. I do hope that attention is paid to the important topics of parking and the visual impact of the development.

Thank you,
Jessica Mowles

Re: Takoma Metro Station development and parking elimination

Elimination of all transit oriented parking is not consistent with WMATA's basic mission which is to increase transit ridership. Ridding the station of all parking will cause many to not consider Metro for transit. If they do, I live on an unzoned adjacent street that will not be able to handle any additional park and walk riders.

The current design is large, brutal and overwhelming, and inconsistent with the historic nature of the rest of the area around it. The historic designation of the area immediately surrounding it, along with the current commercial spaces near it, are of a very different character and design than the proposed development.

There has been no traffic assessment, no consideration of parking for Metro access. All in all, a bad design for the space.

Yours,
Mary Naden
Takoma Park, MD

To whom it may concern:

I am writing to express my strong opposition to eliminating public parking at the Takoma metro station. My family and I are Takoma Park residents who rely on this parking to facilitate use of the metro system. Many of our friends and neighbors also rely on this parking. It was one of the reasons we chose to live where we do. Without it, it will be more difficult for us to access the metro system and we will be more likely to rely on our car contributing to greenhouse gases, pollution and increased traffic in the city. I strongly encourage WMTA to retain public parking at Takoma Metro Station.

Sincerely,
Amanda Perkins
Carroll Ave
Takoma Park, MD

Gentlemen:

My name is Steven SIlverman. My wife and I live at [removed]. This is two blocks from the Takoma Park Metro station. Please consider these comments in your determinations as to a plan and development of that site.

I agree that the site should be developed. I further agree that population-dense development proximate to public transportation hubs is a good and proper idea.

I, however, have certain questions regarding the proposed plan. I note that the staff report recommends removing all public parking at the site. It characterizes existing parking as “Kiss and Ride”. This is not correct. he site is used for computers who park for extended periods in order to use Metro. You should not be making determinations based on mischaracterizations of this type. I think that some public parking for Metro use is beneficial — witness the current extent of use — and should not be dismissed as a possibility based on an erroneous mischaracterization.

I also note that no traffic study appears to have been done to date. This seems like putting the cart before the horse. Metro’s overall responsibility is to be consistent with a number of objectives, and overall traffic/transport flow is surely one of them. I see no finding related to this core objective. I am not sure why Metro/WMATA would jeopardize the legality of a project of this magnitude by not making proper findings.

Steven SIlverman
takoma park MD 20912

Having read through all the comments, I'm concerned that the draft report reads as very skewed in favor of removing most, if not all, paid commuter parking from the Takoma Park metro station. I encourage you to read all the comments in full as those written by people who regularly use the paid commuter parking spaces provide a realistic picture of how that space is actually utilized. I live approximately 3 miles from the Takoma Park metro station and I park there 3 or 4 times a week to commute into DC where I work for the federal government. The parking lot is nearly full on Tuesdays, Wednesday and Thursdays, so comments saying the parking lot is underutilized are just not true. If those comments are based on the October, 2021 parking analysis, that analysis is flawed as it was conducted during the pandemic when most office buildings were closed. As more and more people return to work, the parking lot is being well utilized most weekdays.

I'm also concerned that the draft report continues to describe the Takoma metro parking lot as a "kiss and ride" when in fact it provides all-day paid parking for people who commute into the city. I would really like someone to explain to me how eliminating 160 spaces and replacing them with maybe 16 spaces somewhere in the new development will increase metro ridership for anyone who does not live within walking distance of the Takoma Park metro station. The Fort Totten metro is a 20 minute drive from my home when there is no traffic and can take 45 minutes to an hour during rush hour. If these spaces are eliminated at Takoma Park, I will likely quit using the metro and reduce the number of days I commute to DC, which, I imagine, is not what Mayor Bowser had in mind when she encouraged federal workers to return to the office. Metro should be doing everything it can to encourage more ridership - and not just by people who live within walking distance of a metro station.

Jennifer Levings

Dear WMATA,

I'm writing to express support for the proposed changes at the Takoma Metro Station. The changes would provide needed housing close to high-occupancy transit. It makes sense to better utilize this urban land for the purpose of higher-density housing and commercial uses that will benefit the surrounding area and region.

I am supportive of removing the parking spaces as proposed, but it should be offset with more frequent and reliable RideOn service to/from the Metro station.

Finally, although I am supportive of the proposed changes, I am frustrated that WMATA continues to refer to the parking spaces currently at the station as "Kiss-n-Ride." Unlike other Kiss-n-Ride spots, most are available for daytime parking while using the Metro. Presumably, the Kiss-n-Ride spots that WMATA says would be available in the updated plan would be actually Kiss-n-Ride spots simply for picking up and dropping off. This type of unnecessarily misleading wording breeds mistrust rather than a sense of collaboration. Please update your wording.

Thank you for the opportunity to provide public comments as part of your planning process.

Sincerely,
Kacy Kostiuk
Takoma Park, MD 20912

WMATA must restore the public parking that the proposed development plans to eliminate. While including 230 private parking spaces, it removes public parking!! The mission of WMATA is to encourage use of public transit, but the proposed plan discourages Metro use. The suggestion that Takoma residents drive to Fort Totten to park is ridiculous. First of all, there isn't enough space there for more cars, and second, to fight through traffic to get to Fort Totten—most people will end up driving to their destination, which is counter to Metro's stated purpose. Many of us moved here decades ago precisely for the convenience of having Metro access. The proposed design favors the developers at the expense of residents. There must be a compromise.

Second, the size and scale of the proposed structure are incompatible with the surrounding community. It is vastly larger than any existing structure. It must be scaled down, public parking restored.

Nina Falk
Takoma Park, Md. 20912

This is a response to Metro's conclusory statement rejecting the many objections to removing almost all of the parking spaces at Takoma Metro.

Metro states:

> The proposed change to remove 144 Kiss & Ride spaces in the surface lot is based on an evaluation of current and future parking demand for the Takoma Station as detailed in the Environmental Evaluation… (page 23)

Metro's response is wrong because it is based on a faulty premise.

Metro continues to assert, erroneously, that the 144 parking lot spaces are "Kiss and Ride" and assumes these parking spots are for dropping off or picking up. (See pages 12, 18 and 22, calling the spots "short term" parking.)

Metro apparently has not been to the site. The 144 spaces have multiple signs announcing "Daily Parking", not "Kiss and Ride." The parking meters are not for 10 minutes: to the contrary they allow for all day parking even in excess of 12 hours.

Metro's own Environmental Evaluation found that 88% of people park there in excess of two hours, not to drop people off. Thus, Metro's intended purpose and use of the spaces for the last FOUR DECADES has been to enable people to park so they could use mass transit. And that's what they've done and continue to do. They park there to take the Metro.

Rather than misstating the facts, it would be more straightforward if Metro were to simply state its preordained conclusion that it no longer wants commuters to park at the Metro—which has enabled EXPANDED use of mass transit-- and just approve the development in order to generate more tax revenue.

In short, how can we trust Metro's analysis if it cannot get the facts right?

Sincerely,
Steven Ney
Board Member of the Village of Takoma Park

It is so outrageous what is happening. Thanks for these insights, Steve!
Regards,
Susan Rogers

On Sat, Apr 15, 2023 at 3:11 PM, Steven Ney wrote:

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In short, how can we trust Metro's analysis if it cannot get the facts right?

Sincerely,

Steven Ney
Board Member of the Village of Takoma Park

I encourage the plan for the Takoma Metro site to retain some parking. I believe removing it will put more cars on the roads and increase illegal parking in the neighborhoods. Personally I will be much less likely to take Metro if parking is removed.
Yours,

Julia Misplon
Takoma Park, MD 20912

I am writing to support the plan for development at the Takoma Station, and in particular I am AGAINST adding a parking lot.

I support removing the parking because there are other locations already best suited for parking like at Ft. Totten or Forest Glen.

The space is much better used for housing and shops so as to promote less dependence on cars, make lives of the new residents happier by having easier access to walking distance shops, and transit options.

Best,
Damian Kostiuk

Dear WMATA,
I oppose the proposed changes to the parking and Kiss and Ride at Takoma Metro. The suggestion to park at Fort Totten is not acceptable to me. The loss of green space js also not acceptable.

Sincerely
Catherine Carr
Takoma Park

I am very concerned about what is being proposed at the Takoma Metro Site. You all are taking away trees and making way for huge stormwater issues for the neighborhoods near the site. This building is not considering low-income house and it's not even slated to be a green building.

Please reconsider.

Kindly,
Rev. Julia Jarvis

To Whom it May Concern

I am writing to express my deepest concern regarding the proposed development at the Takoma Metro site, (DC Zoning Case 22-36).

Takoma Metro station is nestled amid small apartment buildings and adjacent to historically designated residential neighborhoods of single-family houses. Currently the proposed building's mass and height far exceeds any other nearby buildings by adding 500,000 square feet and 424 new residental units. This monster of a building will have an incredible adverse impact on the viability, attractiveness, and character of the Takoma Park area.

Additionally, the proposed building calls for the removal of all public parking spaces for Metro users. This is a recipe for disaster as increased traffic congestion and overflow parking will impact onto the adjacent neighborhoods. As far as I know, there is not one traffic study being conducted at this time.

Of greater concern is the removal of over one hundred trees on the site. Not only does the plan greatly reduce the green space currently surrounding the station, but the new plan can also potentially overwhelm the Takoma Park storm water system that empties into Sligo Creek.

Before any further progrress of this project WMATA must:

- Meet all environmental requirements such as storm water impacts, protection of heritage trees, limiting light and air pollution and meet minimum Leed certification.
- Minimize traffic, pedestrian and parking impacts on adjacent neighborhoods and streets in the vicinity.
- Create a design that is compatible with nearby commercial structures and residential neighborhoods and the historically designated land.
- Provide short-term parking for transit users.

Thank you,

Karen Fishman

Takoma Park, MD. 20912

I support the Takoma Station proposals. I sometimes use the parking at Takoma but the benefits of the new plan outweigh the convenience it offers to people like me who have other options if the parking spaces aren't available.

Lawrence Hurley
Silver Spring 20910

Hi,

I live in the Takoma Park area and use the metro regularly. I strongly support converting the parking lot into housing and hope the city moves forward with the plan quickly to help reduce our housing crisis.

Best,

Gil Landau

Dear WMATA Board Members,

I am writing to urge you to reconsider the proposal to remove the parking lot at Takoma Metro Station. As a regular user of this station, I believe that the parking lot is an essential resource for many commuters who rely partially on personal vehicles for transportation.

Removing the parking lot would create significant inconvenience and hardship for those who rely on it to access the metro station. Many individuals, particularly those with disabilities or who live in areas with limited public transportation options, depend on the parking lot to access the station and commute to work, school, and other important destinations.

I understand that there are concerns about promoting sustainable transportation options and reducing the environmental impact of automobile use. To that end, I believe that the convenient commuter parking increases the WMATA ridership from this area.

I urge you to consider the significant impact that the removal of the parking lot would have on many individuals and businesses in the area. Please keep the parking lot at Takoma Metro Station open and accessible to those who need it.

Sincerely,

Megan Anderson

Dear WMATA,

Please account for stormwater management in your planning for the EYA development and, if possible, find a way to retain some handicapped parking spaces. However, in general this seems like a good site for a high density development that will bring needed housing to the Takoma area. I support the development.

Thank you,
Jason

Jason Peckenpaugh
Takoma Park, MD 20912

Hello WMATA Officials,

The metro is one of the biggest public goods DC has to offer to its residents. It just makes sense to turn some parking near the Takoma Metro Station for one of the top metro systems to be turned into housing. For me personally, it has been great to live in walking distance of the metro and I believe more people deserve to have that privilege(even better if there housing is right next to the metro). Being able to easily ride the metro is good for people's bank accounts and good for the environment.

Thank you for your time,
John Watkins.

I am so disappointed in these new plans. Removing the kiss and ride parking will make the metro even harder to access for those living nearby. Please reconsider and prioritize the locals who use the metro to get to work each day

Sasha Alvarenga

Good Morning,

I'm writing to reiterate my support for the proposed changes to the Takoma Metro parking and bus bay. I strongly support this kind of transit oriented development and honestly think that it should probably be larger to better take advantage of the transit resources. As someone who once upon a time looked for places to live in the Takoma area that would allow more non-car living at a reasonable price, it was very disappointing to see what was available, or rather what wasn't available. This won't be a panacea to the Takoma area or DC metro region but it's a very good step and utilizes otherwise underused land for a great benefit. Honestly, just needs more people to live near the train and more busses to connect people to them.

Best
Patrick Mauro

I have somewhat limited mobility (walk with cane due to arthritis) and do not live within reasonable walking distance of Takoma Metro. Waiting for buses is difficult for me, so being able to park at the Metro helps when I need to go to DC, especially to avoid waiting after dark. Many older people in Takoma Park have similar challenges. Please don't take away our Metro parking!

Terri Robl

Hi WMATA,

I oppose the significant parking spot reduction planned for the Takoma Metro Station. For someone like me who lives too far away to walk, plus cannot rely on buses given there is not practical and actual real-time tracking of every bus, the need to drive to a station and have some certainty on parking is critical. For the times that I have parked in the past year, there have been well more than 16 cars parked. I applaud creating more affordable housing but believe a public garage should be added to the plans to keep parking at a sufficient level.

Best,
J Miller
Takoma Park

Dear friends at WMATA,

I live in Takoma Park, just three blocks from the Takoma metro. As a regular user of the metro to get to and from work, I'm well aware of the parking spaces outside the metro station.

I'm writing to express deep concerns over the likely impact of your eliminating the public parking at the station, all 150 spaces if I'm correct. I live close enough to the metro so that I don't park there, but many of my friends who live farther from the station do use the parking space. Several of them are elderly. I believe that some folks at WMATA have suggested that people can simply drive to Fort Totten to park, but I'd ask you to drive from Takoma Park to Fort Totten in rush hour. It is a nightmare.

I'm also quite worried that your plan will increase parking by people on our street, Tulip Ave, as metro riders seek alternative parking. Another nightmare. We use Tulip for parking often because we have a shared driveway with neighbors at [removed].

Overall, our neighbors and we are concerned about many aspects of your proposed giant new housing structure at a moment when hundreds of new housing units have been built in recent years. The traffic nightmares have just begun, and you are proposing to add to them.

I suggest you vastly scale down the plans.

Thank you, John Cavanagh

--
John Cavanagh
Takoma Park, MD 20912

These comments are submitted with respect to proposed changes at the Takoma Metro Station in response to WMATA's draft staff report released April 11, 2023.

WMATA acknowledges in its draft staff report that “most people” felt that some sort of long-term commuter parking was needed at the station. Indeed, according to the report, 80% of all parking commenters (233 of 292) thought so.

And yet, the staff does not alter its original proposal to eliminate all 160 parking spaces - 144 hourly and daily, 6 handicapped, 5 Kiss & Ride (Kiss & Ride is where driver waits in vehicle), 3 motorcycle, and 2 WMATA reserved. It sticks with its original proposal to replace these 160 spaces with 16 drop-off/pick-up only spaces. (Note that two of the 16 are not even on site but on Carroll Street, under the Metro tracks.)

At the same time that WMATA removes these *public* spaces for Station access, WMATA’s development partner EYA proposes offering 230 new *private* parking spaces to its residential and commercial tenants. WMATA staff admits that Metro does not own or operate the spaces, but implies that those who need to park at Takoma for access to the transit system can share the retail parking spaces (originally proposed to be 67 spaces of the 230) with EYA’s retail tenants. This swap of public for private spaces is unfair and contrary to public policy.

WMATA seems to base its elimination of Metro parking on the notion that the lot is “underutilized.” But this is incorrect. From February to March, I was part of a small group that counted the parked cars at the Takoma Station parking lot. A full lot was 150 cars (hourly, daily, and handicapped). We learned that on Tuesdays, Wednesdays, and Thursdays, in all day parts, the lot was 63% to 95% full (95 to 142 cars). Well more than the 16 drop-off/pick-up spaces that we are being offered.

Staff seems to cling to the idea that Takoma drivers should park at Ft. Totten. Aside from the fact that such an idea just adds to traffic and pollution, our group learned that there are sometimes not enough open spaces at Ft. Totten to accommodate the cars at Takoma. Specifically, on some Tuesdays, Wednesdays and Thursdays, we drove from Takoma to Ft. Totten to see if enough empty spaces were available contemporaneously to accommodate the cars parked at Takoma. On six of seven days, there were insufficient spaces at Ft. Totten.

In short, WMATA’s plan to eliminate heavily-used hourly, daily, and handicapped spaces at Takoma Station and replace them with only 16 Kiss & Ride spaces (drop-off/pick-up) is based on staff’s misunderstanding of the facts. If approved, this plan will deny access to the transit system by those who must currently access the station by car – many of whom live in Takoma Park, Maryland, within the Transit Zone. Metro patrons may need to park and ride for a number of reasons: age, health, disability, fear of crime, lack of access to a bus. Not all of us can walk, take a scooter, or bike to get there.

In amending a mass transit plan, the Board is required to consider data with respect to current conditions in the Transit Zone. The staff has failed to provide the board with accurate parking data. The WMATA Board should reject the proposal to eliminate hourly, daily, and handicapped parking at the Takoma Metro Station.

Respectfully submitted,
Christine Simpson
Takoma Park, MD

Although I've seen some of my neighbors expressing concern about the elimination of parking spaces at Takoma Metro to make way for a new housing development, I am in support of building more housing near the metro station. Doing so would be good for the environment because it will allow more people to live nearby and utilize metro, and create more housing and retail options for Takoma residents. If people are driving into Takoma to take the metro, there are other options, such as buses, bikes, etc.

Loren Kajikawa

Please do not continue with the current plan. Parking is already too limited at Takoma Metro Station, it would make more sense to have a percentage of Kiss and Ride parking spots converted to daily parking for more revenue, more convenience, and less service disruption. There are already sufficient housing opportunities in this downtown area.

Sincerely,
Ruth CG

Dear WMATA,

I am writing to express my opposition to the plans to remove public parking spots at the Takoma Park metro station and to the development plans more generally.

I am a long-time Takoma Park resident. I regularly commute to DC for work/personal and I live driving distance from the Takoma Park Metro Station, like many other residents. If the public parking spots were taken away, it would be really challenging to find parking in order to take the metro, and I would explore non-Metro options for getting to DC.

Reducing publicly available parking at the metro station would not help with the retention of metro riders - it would hinder it. I urge you to cancel any plans to strip local residents of public parking, which makes it feasible for them to ride Metro.

Also, when WMATA makes it difficult for residents to ride metro, people find other ways to get to where they need to go, which increases congestion on the roads and pollution in our area.

Thanks,
Tatyana Delgado

Hello,

My name is Brian Goggin and I am a resident and homeowner in the District of Columbia and a regular WMATA rider. I firmly support building as much housing as possible to replace the parking spaces at the WMATA parking lot next to the Takoma Park metro station. It is imperative that WMATA and all public agencies do everything they can to build as much housing as possible near their stations. It is a housing affordability imperative. It is also a climate sustainability imperative. I support the current proposal by EYA and WMATA to build more housing at this site. Please follow through with this proposal.

Thank you for your time.

Brian Goggin
Washington, DC 20024

To whom it may concern
As we are aging, we will not be able to walk to the station and would need to drive and park there. Please be considerate of the local people Thank you Marie Mackler

---

Gentlepeople:

I have submitted comments previously; however, I continue to be concerned about the following:

1. The proposed development is NOT in scale or in character with the surrounding development -- e.g., higher than other new development.
2. The storm water and sewer water impact of the proposed development on homes in Takoma Park, MD.
3. The likely increased traffic congestion around the proposed development - traffic flow appears questionable.
4. The two levels of above ground parking -- why not underground?

Respectfully submitted,
Joy Markowitz
Takoma Park, MD 20912

Dear WMATA committee considering the Takoma Park Metro parking lot construction,

We understand that housing will be going into the park and lot where today we park regularly when heading into DC on Metro. We do not expect to stop progress in providing housing density, but hope that a public parking lot or garage to fit more than a few cars can be made part of the plan. We also hope that some of the old trees lining the park can be preserved; we were just there on Sunday remarking on how beautiful they are.

Parking at the Takoma Park Metro lot, whether paid parking on a weekday or free parking on weekends, has made riding Metro into the city a pleasant part of life for those of us in Takoma Park or just over the border in Silver Spring. We feel that parking in Silver Spring's lots is unpleasant and, with rising crime rates, feels more dangerous than it used to be. We are able-bodied and fortunate to have some flexibility in getting from car to train, but we know many older neighbors are distressed at how much more difficult this will be for them. Taking a bus to the Metro is not always an option; where we live, the two Ride-On buses don't even run on Sundays, so if we were dependent on public transportation to get to Metro, we'd be less likely to ride at all.

Thank you for hearing our voices and considering all options before making your final decisions. We hope you will find ways to accommodate all parties, to some extent.

Maura and Richard Allen

Silver Spring, MD 20901

I am writing to register several objections to the planned development.

I) The size and scale are WAY out of line with the surrounding neighborhood. It is also much larger and higher than recent and ongoing development projects on Carroll and Cedar Streets.

2) As a disabled person who cannot walk to the metro I protest the planned abolition of ALL metro parking. The 140-50 parking places currently at the station are NOT kiss and ride spaces. They allow for hourly and daily parking, The 67 retail spots will not make up for the loss of those parking places. I wonder in fact if the ADA might have something to say about the restriction of parking for disabled metro riders. The Suggestion that we use Ft Totten is Ludicrous. And there are not enough parking spaces there even if one were to go there by car,park,and then take metro, The plan effectively will shut out many current metro users in DC and MD.

3)There will be serious environmental impacts of adding the occupants of 440 units and parking spaces for many of them. The assertion that there will be no environmental impact is ridiculous.

4)Stormwater runoff will come to MD where Montgomery County residents will face increased taxes to deal with it. So,as it stands we will lose all metro parking and gain stormwater. Not a good deal.

5) Traffic: the area around the station is already being impacted by the occupants of the nearly 2000 new units that have been constructed or are under construction, The planned development will make TKPK a nightmare to traverse. The way the project is designed, it will also be unsafe for pedestrians.

6)Serious studies of parking and environmental issues including stormwater issues need to be done before this project is approved.

7) The argument is made that we need more density around metro sites. TKPK MD is already THE Densest area of Montgomery County MD. It also has a good deal of lower income,rent controlled housing. If more density is desired, perhaps the developer could be persuaded to locate some of the planned units where one story businesses currently exist across from the metro site. Why not share the wealth (of problems) with the DC community whose representatives seem to support this development?

I look forward to hearing about revised plans that will take these objections into account.

Sincerely,

Dr.Sharon L Wolchik
Takoma Park, MD

I am writing in regards to the plan to eliminate parking from the Takoma metro station. I am a Takoma Park resident and I rely on this parking lot for my commute to downtown DC, because there is no good connection from my home to the Metro bus or rail system. I work a shift later in the day and when I go to the station, the lot is typically almost full, so there is clearly a need for this parking. While building more housing is a worthwhile goal, it should not come at the expense of commuters who are keeping more cars off the streets of DC.

Thanks,
Cicely Wedgeworth

To whom it may concern,

I am vehemently against the plan to eliminate parking and the green space near the Takoma Metro stop. The impact on the residential parking would be abhorrent. We have limited parking and commuters would glut the already limited parking on the street. Additionally, with the new construction at the former 711 site and on Willow street there will be no parking options in the community. Even if you must scale down the parking lot completely removing it isn't an option. We desperately need both the existing green space and the parking lot! The impact on the environment and community if removed would be devastating.

Please reconsider your plans and have full community investment as you move forward.

Respectfully,
Diane Powell, Ph. D.
Resident of Aspen St NW

Hi,

I'm writing to say that I support building high density housing near the Takoma Metro Station. Transit oriented housing is environmentally friendly, encourages more public transit use, and is a better use of infill space than the current parking lot. As a DC resident and frequent red line user, I am looking forward to seeing my new neighbors on the train.

Best,
Neha Singh

I am writing to express my concerns about the proposed development at the Takoma Metro Station. I live one block from the Metro, in Takoma Park, Maryland. I have studied the proposed development plans and have identified several serious problems which I feel must be addressed before any development proceeds.

1)The lack of commuter parking - If WMATA allows this project to proceed as envisioned, the Takoma Metro will become one of the few (if not the only) metro stations in the entire system to offer commuters no parking. The solution is not to have people drive 15 minutes farther to Ft. Totten to park. If a commuter has to drive another 15 minutes, they will probably just drive straight downtown. Commuter parking at the Takoma Metro will reduce carbon emissions from increased traffic to Ft. Totten and downtown and help boost ridership on the Metro overall.

2)The massive scale of the project - The proposed development is just too big. Surrounding condos and apartment buildings are all between three and five stories tall. The proposed development would be eight stories tall, with an additional 18 feet or so on the roof to accommodate various structural needs. The size of the building will destroy the nature of the neighborhood, which is very small-scale and residential. I support a more modest approach of 3-5 stories. Putting proposed parking for the development underground would help reduce the proposed height of the development.

3)Traffic congestion - The traffic around the Metro is already highly congested. The proposed development would only make that worse. I expect air quality in Takoma Park will deteriorate significantly if this development proceeds, as so much congestion will lead to idling vehicles that will emit substantial air pollution. Any gains you might hope to achieve from people using the Metro will be offset by the increased air pollution generated by all the vehicles accommodated by the development. I strongly request that Metro conduct a traffic study that specifically analyses the consequences of such a massive development before proceeding.

4)Stormwater runoff - As the project is conceived, it appears that it will create a significant stormwater runoff problem in my neighborhood. Again, scaling down the project to reduce the amount of hardscape would help alleviate the problem.

I appeal to WMATA to conduct a traffic congestion study and a more accurate stormwater impact assessment before proceeding with this development. I strongly urge WMATA to scale back the size of this development, as well. It is simply too big and will cause too many problems.

Thank you.

Diane MacEachern
Takoma Park MD 20912

I am a Takoma Park, Maryland resident who frequently uses Takoma Metro and the DC businesses adjacent to it, as well as those in Takoma Park Old Town.

I agree with previous commenters that making any changes to bus bays and eliminating parking at the Takoma Metro station makes no sense without first having a complete development project in place and doing the appropriate impact studies. A piecemeal approach is both illogical and irresponsible to nearby residents and businesses.

I am frankly appalled that WMATA is even considering this proposal, and I urge the Board in the strongest terms to vote "No". The Board has a responsibility to ensure that the Metro property is developed in a way that benefits everyone who calls Takoma Park home, both in the short term and for the future.

Lea Chartock
Sligo Mill Road
Takoma Park, MD

Dear WMATA,

We are grateful that our voices will be heard today.

We have serious concerns about the impact the development plans for the Takoma Metro Green Space will have on our Takoma Park community.

Of particular concern to us is that the WMATA staff has endorsed going forward with WMATA's plan to eliminate all Metro parking at the station, except for a few spaces to drop off and pick up, despite submitted comments opposing the elimination of those spaces. Instead, WMATA is permitting the developer to convert these public spaces to private use for the benefit of its new tenants - a total of 230 private parking spaces! Shouldn't WMATA be encouraging development that promotes use of public transportation, rather than discouraging use of the Metro system? The retention of many current spaces for public parking, and the inclusion of bike racks and spaces for more Zip cars for the new residents would better meet the goals of WMATA and the community.

While many of our friends and most neighbors who live close usually walk to the station, if someone is ill, travelling with elderly friends, or concerned about crime (especially for coming home alone after dark), they may drive and park before riding the Metro. So our close-in neighbors are very concerned that Metro will be eliminating all of this parking. They feel that their only choice would then be to drive to their destination. And they wonder how can this be in the public interest? WMATA should not be discouraging patrons from using the Metro system.

The case against eliminating all Metro parking at the station is even more concerning to us in Ward 6! Since we in Ward 6 live further away from the station, folks in our neighborhood will not be able to drive to the station, park at the Metro and go into DC or to other destinations. This would virtually eliminate our option of easily using public transportation – certainly this couldn't be WMATA's goal!!

We are also concerned about the size and scale of the proposed building. It is significantly larger (in terms of square footage and height) than any other nearby multiunit building and its design is incompatible with the single family homes that face it across the street in Takoma Park, MD., and on the other side of the metro in Takoma DC. Development can happen, but should incorporate some of the scale and features of the surrounding environment. There is no need for the building to be an eyesore in the community.

Moreover, it seems incredible that a development of this size will not damage the heritage trees on the site, as some reports claim. The green space is a treasured buffer between the Metro station and the Maryland residential area. WMATA had reportedly promised to keep it as such when the Metro was built. Unfortunately, this promise does not seem to have been put in writing. We urge WMATA be reminded of this promise, and urge that the green space be preserved with as little change as possible for the benefit of the new residents of the proposed building as well as for the existing residents in Maryland and Takoma, DC. Paths through green space should be maintained, not eliminated, for all community residents walking between the metro and our homes and businesses.

We also have concerns about environmental impact. The size and mass of the proposed building will be reducing the site's green space from about 53% to 26%. The amount of impervious surface will increase significantly, from the current 47% to about 74%. Although the new building's address will be in DC, apparently the greatly increased stormwater and sewage from it will flow into Takoma Park, Maryland, into and along Sligo Creek. We are extremely concerned about the environmental impact the District development will have on our city's environment.

We endorse the inclusion of low-income housing, and urge a written commitment from the developer about how many units will be included, rather than simply leaving it to the builders' discretion or a promise that they "may" include such housing.

We hope by voicing these concerns to WMATA by the April 21 deadline our concerns will be noted and acted on. Thank you for listening. We truly believe acting on our concerns will allow WMATA to fully enhance both Metro ridership and the surrounding community.

We would greatly appreciate your attention to this matter.
Sincerely yours,

Gail W. Redd
Charles R. Redd
Takoma Park, MD 20912

re: Docket R23-01 - Proposed Changes to Transit Facilities at Takoma Metro Station

I have reviewed the draft staff report.

I don't see how the transit needs of current users at Takoma are served by so drastically altering the space available for parking, bus use, and pedestrian and bicycle access to the station. As well, many new residential units have been built or are under construction in the adjacent streets which will add hundreds of users to an already congested area.

I live in Takoma Park, MD, approximately .8 miles from the station. Prior to March 2020 I generally walked to and from the station to commute to work downtown. Occasionally I would take a Ride-On bus to get there. I have since retired, but still use Metro at least once a week, both weekdays and weekends. On weekends when parking in the lot there is free, I will park there, otherwise I access the station on foot.

The plan removes 144 Kiss and Ride spaces (it seems the whole lot is "Kiss and Ride" even though the signs allow for paid longer term parking), and ostensibly adds one bus bay while reducing the whole roadway area that currently exists for buses to wait when they are in between runs (not at a marked boarding bay). It also adds a traffic signal at Carroll St. NW, which is very close to an existing signal at a congested intersection with 4th St. and Blair Rd. converging in an irregular geometry forced by the train tracks embankment.

Prior to the ongoing construction at the corner of Cedar and Carroll, Metro and Ride-on buses often used the curb lane along Cedar to wait, in addition to the loop at the end of the bus bay zone.

With current traffic patterns, on foot I can navigate the congested roads and sidewalks along Carroll Ave. between Laurel Avenue and 4th St. NW on the other side of the train underpass. It's harder in bad weather as there are multiple poles and uneven sidewalks in the narrow spaces. I'm careful and use the marked crosswalks. But driving in that area is difficult, no matter which direction I'm traveling, and I can only imagine how hard it is for the bus drivers, not to mention bicyclists. Since the UPS Store opened on Willow St. NW at the corner with Eastern, their trucks double park and clog up that street -- the same happens with the trucks servicing the restaurant at the corner of Maple and Carroll.

Customers for the businesses in Old Town Takoma cruise the residential streets in Takoma Park looking for parking, further congesting the area.

Please reconsider this plan to allow for improved access to the station while taking a holistic look at transit and traffic in the whole radius of the station, including both DC and the Maryland residents in the area.

Elaine Feister
Takoma Park, MD 20912



I am writing to express my vehement opposition to the proposed changes to parking at the Takoma Park Metro. To remove 144 public parking spaces currently actively used by regular Metro users (see attached photo of the full lot on a recent weekday) will undoubtedly diminish and discourage Metro use. Undoubtedly many of these commuters, denied a convenient place to park close to their stop, will simply drive into the city.

To remove this public parking access and replace it with private parking for the new proposed apartments at this site is completely counter to the idea of providing housing close to public transportation to encourage its use. Instead this would promote commuting by car by the new residents, while discouraging public transportation use by those already committed to using the Metro.

This plan also dramatically decreases green space and removes mature trees from the site, which will increase carbon dioxide and worsen air quality in the area, at a time when it is critical that we do just the opposite to lessen the dangerous impacts of climate change! Once this green space is gone, we will never get it and its positive contribution to air quality back again.

That the proposed development is utterly out of keeping with the historic architecture facing the Metro development, is the subject for a different discussion.

Please rethink the proposed parking changes so as to promote, rather than reduce, public parking access to the Takoma Park Metro station. The current plan is completely contrary to the concept of transit-oriented development!

Lucinda Leach
Takoma Park, MD 20912

Please do not get rid of the Takoma Metro Station parking. It is an excellent and well-used park-and-ride. Parking could be incorporated into the new development which could be a benefit to all. More accessibility for transit users and transit access for everyone, more people to support local businesses, less impact on the surrounding arterials in the neighborhood!

Thank you,
Bronwen Keiner
WMATA rider and Takoma Park resident

Dear WMATA:

Thank you for this opportunity to share my comments. I will keep them brief but they are serious and reflect my deep analysis of the proposed project not only as a Takoma Park resident but also as a development economist who was employed by the US Treasury Department to assess proposed World Bank projects around the world.

1. The plan removes all public metered parking at the Takoma station (about 150 spots which, versus what the proposal states, is NOT Kiss & Ride). This public metered parking that is currently heavily used (vs what a survey for 30 days in July, during vacation time, might show) and is needed. Instead, 230 private parking spaces would be added but not for the public, *only* for residential and commercial tenants. As such, the proposed plan contradicts WMATA's own public transit goals. Moreover, the alternatives proposed for the public -- such as driving to Fort Totten or parking on local streets -- are hardly viable or efficient options: Fort Totten is *not* nearby or an easy, un-congested drive, and the plan fails to mention that local street parking is by permit only.
2. A traffic study has not been conducted.
3. An environmental impact study has not been conducted. An environmental impact study must, among other things, include
    - the impact on environment/climate change from the removal of public parking at the Takoma Station and the likely increase in single-car driving to Fort Totten or, more likely, to the person's final destination,
    - the impact on emissions/climate change from more cars driving around to look for parking on local nearby streets,
    - the impact of the project on storm-water runoff.
    - the impact of the cutting of mature and heritage trees.
4. Not only an economic impact study, but a serious true economic impact study of the entire project that internalizes all costs and benefits, rather than just focusing on one piece (parking and bus) of the much bigger project without (as detailed above).There has not even been a serious economic impact assessment of the the costs and benefits of even the proposed piece of the larger project.

THE ABOVE ARE SERIOUS DEFICITS IN THE PROPOSAL AND SERIOUS FLAWS. THE WMATA REVIEW PROCESS HAS BEEN INCOMPLETE, AS DETAILED ABOVE. Unless these deficits are corrected, this is a case headed for the courts.

To provide more detail on my assessment: I am assessing this project as someone who lives near the metro, whose street congestion will be affected by the proposed lack of public parking at the metro site as well as the additional private parking at the site, and whose air quality will also be affected. I also write as someone with a disability who sometimes has to park at the metro and especially in inclement weather and/or when I will be returning after dark. I am also assessing this project as a professional -- a development economist who was employed by the US Treasury Department to assess proposed World Bank projects around the world. We would never have allowed a project review such as the current one to proceed.

Thank you for taking the above seriously.

Respectfully yours,
Dr. Robin Broad / Takoma Park, MD.

Dear Metro Board:

My husband and I are long-time residents of Takoma Park, MD. We are both past 70. We are disturbed by the plan to remove most of the parking available at the Metro Station. We use the Metro often to ride into D.C. for museums and other destinations. The ride to the train takes us five minutes. When we return, often after dark, the walk to our car takes about two minutes, no matter where it is parked. That feels safe and possible for us.

It had been suggested that we could simply drive to Fort Totten and park at the lot there to board the train. We tried that trip. It took us over ten minutes to drive there, and the walk from the train exit back to our car took a full five minutes. That is daunting when it is dark out and the station is deserted. That would not be safe or desirable for us. The switch from Takoma Station to Fort Totten Station would add 16 minutes round trip to our travels, and feel unsafe after dark. Those of us who are older, and those citizens who have disabilities would be harmed by the proposed plan.

The mission of WAMATA is to provide safe, convenient, and accessible travel options for those of us living in D.C., Maryland, and Virginia. Your mission is not to build housing. While I appreciate the need for affordable housing, that goal must not be accomplished at the cost of dangerous and inconvenient travel for those of us using transportation.

Sincerely,
Barbara Rosenblatt

To Whom it May Concern:

I am a resident of Takoma Washington DC
Last night I attended a meeting regarding the proposed development of the Takoma metro bus and parking area.

The mixed use proposal has many positive features.
However, it seems absurd to me to reduce the parking or interfere with the parking for Takoma metro users. The fundamental purpose of this area is to enhance and promote metro use.
IF you are going ahead with this project, in my opinion, the parking space numbers for metro riders NEEDS TO BE MAINTAINED or expanded. Reducing metro parking or asking riders to go to another metro station is fundamentally contrary to the purpose of the Metro.
Further, if there is a cost for parking now, that cost should be maintained at the current levels in the future. Again, same principles apply.

Thank you for considering this input regarding the Takoma multiuse development.

Steven Diamond
Washington DC 20012

The report and the background analysis is far deficient. In addition, the notification process was totally inaccurate and the actual proposed changes were never mentioned. Following these new comments I am repeating the comments I submitted prior to the January hearing.

1. Despite repeated attempts to have WMATA accurately describe the proposed elimination of all hourly, daily, and handicapped parking at the station, no action or acknowledgement of this egregious error of fact was acknowledged, much less corrected.

My comments of January and presumably those of others did not lead to any clarification.

At the hearing the inaccurate description of the parking lot as having 144 kiss and ride spaces, and no mention of any other type of parking spaces, was repeated. There was no opportunity for hearing participants to request a correction or clarification of information that was obviously erroneous.

This staff report continues with the erroneous facts.

I am forwarding comments to the Inspector General with regard to the fact that the actual changes to parking contemplated were never part of the notification, were never acknowledged at the hearing, and related inaccurate facts pertinent to the parking lot were never corrected. .

2. Your description of the parking lot as underused is inaccurate. I and others in the community spent several weeks taking daily parking counts. We found that the parking lot is consistently over 90 percent occupied during the middle of the week (Tuesday through Thursday). Around noon it is absolutely full with cars circling in vain to find a space. At the ends of the work week it typically is 60-75 percent occupied. This is the case while ridership on the METRO system, while climbing is still around only half of that pre-Covid.

3. The data presented on parking is fundamentally suspect. It appears to be based on parking toll collections. There seems to be virtually no enforcement of the parking payments as I have not seen evidence of ticketing in literally years. As we know, in the absence of enforcement compliance falls. Only through direct counting of parked vehicles, such as what we have done, can METRO know the usage of the parking lot.

4. We have also surveyed available parking at the Fort Totten Station, the recommended alternative lot, and concluded that there is not enough parking to accommodate current parkers at the Takoma Metro station.

5. The environmental analysis is far insufficient. Most egregious is that it fails to take into account the air pollution caused by the hundreds of daily trips through congested North Capitol Street/Blair Road to the Fort Totten station as a result of the elimination of all daily, hourly, and handicapped parking at the Takoma station.

Earlier comments are repeated below.

Statement Regarding Proposed Changes to Transit Facilities at the Takoma Metro Station, Docket R23-01

The description of current parking at the Takoma Metro station is highly inaccurate. WMATA should postpone this hearing pending a proper description of the design, regulation, and intended use of the current parking at the Takoma Metro station. To do otherwise is to continue to confuse the public about this major proposed change in a vital community service through the elimination of hourly and daily parking altogether. Some specific points of error in the document:

1. The document refers to the current park lot as having 144 Kiss and Ride spaces. This is also prominently noted on the flyers posted in the parking lot announcing the public hearing. *In fact these spaces are for hourly and daily parking and have been for some time.* The signage throughout the lot is clear on this fact. This misrepresentation prevents the public from understanding the fundamental change that WMATA envisions: Eliminating hourly and daily parking at the Takoma Metro station altogether.

2. At other points in the document the description is fully confusing, e.g. page 7 refers to "160 Kiss and Ride spaces, which are comprised of 151 metered spaces." Page 9 says that "The Takoma Metro Station does not have any Park & Ride facilities" It clearly does have park and ride spaces (137 by my count including 6 for handicapped and 2 for motorcycles) that can be used for any length of time up to 21 hours (no overnight parking is allowed). It currently has only five that would be considered Kiss and Ride (15 minute standing permitted only)

3. Page 20 incorrectly states that the proposed Kiss and Ride spaces will be closer to the Metro entrance. In fact the current kiss and ride drop off is closer to the Metro station via the elevator access to the platform, particularly important for handicapped. Also unlike the proposed layout there is no need to walk across traffic once exiting a car.

4. The document incorrectly notes that the metering system only accepts quarters and $1 dollar coins. In fact the modern metering system installed by Metro a while back accepts credit cards as well.

5. The document incorrectly identifies a 7-11 store across the street from the project. In fact the building was razed at least two years ago.

6. WMATA's inaccuracies regarding parking at the Takoma Metro station also extends to the WMATA website that notes that there are 58 metered spaces but no daily parking.

In sum, there is no way for the community to properly assess and therefore contribute their views on proposed changes without a proper description of the current use of the site.

Peter Feiden

Dear WMATA: As a resident, Metro user and Council Member in Takoma Park I would like to provide comments regarding the Hearing Report. First, I submit that the impact of the proposed development will be disproportionately felt by Takoma Park, Maryland and its residents. We, therefore, have a vested interest and responsibility to comment on and influence this multijurisdictional project.

The major impacts that deserve additional study include parking, scale, traffic and environmental impacts. 1) Reduced parking opportunities at the site will likely force non use, extra vehicle miles traveled to destination or stations and attempts to park in neighborhoods. 2) The scale of the project is out of character and overwhelming to the surrounding neighborhood, 3) Traffic impacts, expected to be significant will be especially felt in Takoma Park and are not adequately addressed and need further study and 4) Environmental impacts especially stormwater (exacerbated by Climate Change) will disproportionately impact Takoma Park and mitigation efforts at site are not clearly articulated.

In the interest of good cross jurisdictional relations, good business practices and good science I urge you to research the above issues more carefully and confer with Takoma Park and Montgomery County, Maryland officials before moving the project forward.

Thank you for your serious consideration of these comments.

Randy Gibson

Hello,
I am a resident in ANC4B and write in support of the proposed EYA development, Takoma Station, with one caveat:
The parking should be greatly reduced, even eliminated.

Any parking at this site is counterproductive to the environmental good that building at this density is intended to provide.
Those opposed to the development have a valid point that traffic congestion is already untenable in the vicinity. The resident parking, however minimal by historic standards, is far too much for the environmental crisis we are facing head-on. Furthermore, any amount of parking beyond the barest minimum validates the naysayers in their opposition to the project.

Despite serious concerns about whether the surrounding streets can handle the traffic, the developer is desirous of ample parking as a way to:
-juice up early demand ("sign now and grab a parking spot before they're gone! Only $50K and $50 per month maintenance fee!"
-maximize the pool of buyers/renters (to include those who don't really care about proximity to metro).

These are not valid reasons to provide parking where alternative modes are at their absolute maximum.

Further, residents' rights to zone parking street parking should be withheld from this development. That was done at the Brooks at the Parks at Walter Reed, a full six blocks from the metro, so it certainly should be implemented here where they can just walk out the door to the full range of transportation alternatives.

This site can lead the way to a sustainable future, but not if it views parking as business as usual. We no longer have the luxury to indulge that mindset.

Louise D. Brodnitz, AIA

Please consider these comments in response to WMATA's draft staff report of April 11, 2023.

I strongly oppose the elimination of the approximately 150 parking spaces at the Takoma Station, as well as losing public land that should be reserved for evolving future modes of mass transit. These valuable public resources should not be disposed of in a way that diminishes the present and future value of creating wider access to public transportation.

I believe there is enough space at the Takoma Station site to create a vibrant and attractive mixed-use building and also a parking facility that accommodates those who need to drive a short distance to their Metro station, especially patrons with mobility challenges, those avoiding bad weather, and those who do not feel safe walking the few or many blocks they live from the station.

Some have promoted the view that the parking lot is not used very much, and there are many visual and written mischaracterizations being disseminated. Even though the metered and non-metered spaces have been labeled in confusing ways by WMATA, Metro riders have been nearly filling the lot during the midweek days. Below is a picture I took on Tuesday afternoon, April 18, when the lot was about 90% full.

Thank you for giving us this opportunity to comment. I hope you will take these objections to WMATA's development proposal seriously.

John Lorenz
Takoma Park, MD



We are long-time residents of Takoma Park and have lived about 3 blocks from the station since the mid-60s - long before Metro came here.

We oppose the present plan now under consideration for the following reasons:

1) Its size and height are not in proportion with the existing nearby buildings, both old and new, in the immediate vicinity. Since the EYA project was first proposed, the local population density has already been increased by the construction of nearby housing and commercial buildings in the immediate area.

2) Traffic on the nearby streets is already heavy: if this project is built, local streets will be overwhelmed.

3) The loss of parking spaces at Metro will be devastating to people who are not close enough to reach the station by walking.

4) Finally, one of our major concerns is the environmental impact that such a development would have by destroying the present park-like area. And we will add that this green space was originally created at the time the station was built to serve in perpetuity as a buffer surrounding the station.

Thank you for your consideration of our comments.

Paul Marth
Rita Marth
Takoma Park, MD 20912

Hello -

I live in Takoma Park Maryland and I am writing to express my strong support for the development project at the Takoma Metro station. I am very happy that the development is transit focused with generally few parking spaces. I am glad it includes low income housing, and that it includes some larger units for families. Please don't let the critics deter you. The city needs more transit oriented housing.

Thank you Beth Hisle-Gorman (Carroll ave Takoma Park)

Dear WMATA,

I am writing to oppose two key components of the planned development at Takoma Station:

1) Elimination of the 150 current parking spaces at Takoma Station would be a disaster. Currently, the lot is used at 64% to 94% of capacity on Tuesdays, Wednesdays and Thursdays. In other words, 95 to 142 spaces are occupied. There are not enough empty spaces at Fort Totten to accommodate all of these commuters if the Takoma parking lot is eliminated. Moreover, many people will choose to drive the extra 15 minutes to downtown DC rather than park at Fort Totten anyway. This runs counter to WMATA's mission of growing transit usage. The Takoma spaces are needed and used for all sorts of purposes -- not just commuters but people going into DC on evenings and weekends. For example, when my wife and I go into town for a sporting event or a play, we'll drive all the way to DC if we can't park at Takoma due to the risk of crime walking home at 11:00 pm.

2) The building size is grossly out of proportion to the neighborhood, even included the recent intense development around the metro Station.
It's too tall and the footprint is too large. You are letting the developer's profit goals supercede WMATA's mission.

Change the project to restore the current level of parking at Takoma Station and reduce the building's height and mass, and you will have a project worth supporting. Please exert your authority to do so.

Thank you.

Bruce Kozarsky

Takoma Park MD 20912

Comments in regard to the proposed changes at the Takoma Metro Station as outlined in WMATA's draft staff report released April 11, 2023.

In this plan, WMATA proposes to eliminate 144 Kiss and Ride spaces at Takoma Station. The number of spaces listed and the designation of them as Kiss and Ride are both incorrect. The lot has 14 hourly, 130 daily, 6 handicapped spaces, 3 motorcycle spaces, 5 Kiss and Ride (where the driver remains in car), and 2 WMATA staff spaces. This equals 160 total spaces. Of these, 150 are for hourly, daily, and handicapped public parking at the Metro.

These 150 spaces were never meant to be only "Kiss and Ride" spaces – "passenger pick-up and drop-off areas located adjacent to a Stop or Station." Rather they are meant to be spaces where drivers can park while using the Metro. There are many who count on the ability to park there, removing these spaces will greatly impact their ability and likelihood to use Metro. It also will mean it is the only station between Brookland and Glenmont that does not have public parking associated with a Metro site – a signal that such parking is considered by WMATA as an important aspect of Metro stations.

The importance of these spaces is reflected in the public's response to the WMATA survey regarding the Takoma Station. In the report it states, "Most people (233 comments) felt that some sort of long-term commuter parking was needed at the station, and 40 commenters expressed the need for accessible spaces for people with disabilities or limited mobility. Nineteen comments were that expecting customers to park at another station or to take the bus to the Metro station would not be feasible. Also, doubts were expressed about the lot's reported utilization."

The doubts regarding the lot's utilization reflect the reality of how the station is used. WMATA erroneously based its estimate of the usage on ParkMobile parking meter transactions and customer surveys. It is well known that there is very little enforcement of parking at Takoma Station, thus it does not make sense to rely on the meters to determine parking use. Customer surveys are also not reliable sources, there is no way to ascertain whether people are accurately reporting their use. And using surveys produced in 2016 (page 194 of the report) cannot possibly give an accurate sense of the usage in 2023.

To get an accurate sense of the parking at Takoma Station, a small group spent a month counting the cars parked each day at the Metro. The data shows that WMATA's assumptions about the use of the lot – and the numbers they use to back this up – are wrong, in fact, they are not even close to the reality. The Takoma Station parking lot is actually used a great deal, particularly on Tuesdays, Wednesdays, and Thursdays – when it ranges from 63% to 94% of capacity. Even on the weekends, the parking lot is used, often between 30%-43% of capacity. And on special weekends, such as during the Cherry Festival, parking is almost 100%. (Because pictures are often worth a thousand words, I have attached a picture of the lot on Tuesday, April 18th at 1:30. The picture shows just of two of the rows -- on that day 138 of the 150 spaces were used.)



The concerns expressed in the survey about the long-term parking options at Ft. Totten were also well founded. We discovered that on many days, Ft. Totten does not have the spaces to accommodate the drivers from Takoma Station. For instance, on one Thursday, there were 116 cars parked at Takoma Station and only 54 spaces available at Ft. Totten.

It is important to note that the data was collected from February 19 to March 18, 2023 - when Metro ridership is only at 50% of pre-Covid ridership.

These numbers, and the comments of those in the survey (see quote above) point to the importance of these spaces for the usage of the Metro station. In addition to those who use the Metro lot for work, there are those who use the lot because they do not live close enough to walk, have mobility issues or do not have easy access to buses. Others use the parking lot to get to doctor appointments, meetings, family outings, or use it in the evening to avoid the escalating crime in our area.

Eliminating these 150 public parking spaces for private spaces for residents makes it difficult for the public to access and use the Metro, it denigrates an important public service. Under the proposed development, it is likely that many who currently use the lot will end up driving to their destinations - adding to the environmental impact and reducing Metro use.

The staff report does not accurately depict the usage of the parking lot. It fails to take into consideration the importance of the lot for Metro use and denigrates a public service. For all these reasons, the WMATA board should reject the proposal and its elimination of public parking at the Takoma Metro Station.

Thank you for your attention to this important matter for the public and for WMATA.

Sincerely,
Megan Scribner
Takoma Park, MD

WMATA:
I want to take this opportunity to comment on and express my concerns about the proposed development at the Takoma Park Metro.
I support development of the site. I support increasing the housing supply, including affordable housing, and recognize that METRO may need the income that will come to METRO from this development.
But i strongly believe that the proposed development is significantly too large:
1. It is way out of scale with the surrounding community in which all but one building is only two or three stories tall;
2. I think that this METRO proposal, particularly in light of other developments that are already underway, will overwhelm the streets to and from the METRO station and thru Old Town Takoma Park (these streets are all only one lane in each direction;
3. I think this METRO proposal will also overwhelm the parking that is available for individuals that want to use the Old Town Takoma businesses;
3. I do not think that it provides sufficient parking spaces either for retail and residents, and, of course, it has totally eliminated parking for persons wanting to drive to this Metro station and then Metro downtown or elsewhere.

In light of the above I am very concerned and recommend the following:
1. that the proposed change in zoning (I believe to M5) to allow this proposed approximately 8 story building that is also huge in square feet - it being over 5X as large as the next largest building (the Takoma Business Center) is in appropriate and should be limited to M4;
2. that there be a comprehensive Environmental Impact study; and
3. that there be a comprehensive Traffic study, including the need for parking spaces (for Metro, for residents and for the retail);
4. that parking be increased by building additional parking levels underground.

Thank you for your careful consideration of this comment.
Elliott Andalman
Takoma Park MD 20912

I am writing to urge you to reconsider and revise some particularly problematic aspects of your Metro Site plan, as discussed below, to allow for commuter parking; make it compatible with the surrounding area, perform the necessary environmental studies and then make sure they are followed; and increase the number of affordable units, and provide egalitarian distribution of all the units.

First, the plan fails to meet the WMATA mission, and accompanying requirements, for a fully-functioning transit center: the fact that it removes all the existing commuter parking means that residents outside of walking distance or an easy bus ride, or who are disabled, will no longer have access to the Takoma stop; a purported Fort Totten alternative is completely impractical, both because that parking lot is often full, and also because the commute to that station for many residents currently using Takoma would be onerous:

Second, the massive building proposed is not compatible with the surrounding area in terms of size, scale, and design, including the most recent constructions;

Third, as a Takoma Park resident, I (and my fellow residents) are gravely concerned about the potential environmental impacts of this project, including stormwater management, the protection of mature and heritage trees, sunlight access for surrounding homes, reliance on renewable and/or sustainable energy. At the very least, stormwater and and other environmental studies are needed BEFORE any further action is taken; and

Fourth, despite claims to the contrary, this project will not provide for truly affordable housing, both because of the small portion of apartments that are dedicated as affordable, as well as the small sizes of the apartments allocated as affordable.

In sum, I urge you to revise the plan to allow for commuter parking; modify the size of the project to make it compatible with the surrounding area, perform the necessary environmental studies and then make sure they are followed; and increase the number of affordable units, and provide egalitarian distribution of all the units.

Thank you very much,
Miriam Szapiro

We live on Holly Ave and are extremely concerned about the development at the Takoma Metro Station. There are too many unknowns and missing pieces to go ahead with the current plan. We want a plan that covers the following points.

A plan that meets all environmental requirements such as stormwater impacts, protection of heritage trees, limiting light and air pollution and meeting all minimum Leed certification.

A plan that minimizes traffic, pedestrian, and parking impacts on adjacent neighborhoods and streets in the vicinity.

A design that is compatible with nearby commercial structures and residential neighborhoods and the historically designated land.

A design that provides parking for transit users of the Metro arriving from both DC and Maryland.

We are deeply disappointed with the current plan and the lack of assessment of important components.

Thank you,

Lisa Weber and Bill LeFurgy
Takoma Park, MD 20912

I write to urge WMATA to reconsider eliminating public and commuter parking at the Takoma Station. I am a long-time resident of Takoma Park. I retired in 2014 and then I used the lot to attend events and return home safely after dark. More importantly, I strongly hope you will consider the humanitarian benefit to families with young children who use the metro to take their children to schools and day care. In addition, please carefully consider the traffic and safety impact that the loss of parking will promote. I hope WMATA will closely study the implications such action will have on the surrounding community and families.

Thank you,
Susan Page
Takoma Park, MD 20912

Dear WMATA:

I strongly support the plan before WMATA for the development of DC Takoma metro station as articulated in the public hearing report. I appreciate the process you have used to get diverse input from stakeholders especially those that may be typically underrepresented and challenged by the hearing process including non-English speakers. I am a Takoma Park MD resident living about a mile from the station and almost daily user of the Takoma metro station. This is the best opportunity for having a fully functional WMATA station with increased ridership as well as increased housing and businesses. Increased density and use of mass transit is a win for the environment also. It is exciting what is happening in DC around the Takoma metro station and old Walter Reed campus with hopefully one day spillover into Takoma MD. Good luck on finally re-developing this underutilized space for the benefit of all. Best wishes,

Troy Jacobs

Flower Ave

Takoma Park MD 20912

Good afternoon,

I am writing to protest the elimination of parking at Takoma Metro Station. Parking near metro stations is already limited, and eliminating all parking at Takoma will only put more strain on nearby stations, such as Silver Spring, Forest Glen, and Hyattsville. For many that are equidistant between Forest Glen, Silver Spring, and Takoma, Takoma is the preference as it's closer to downtown and cuts 10-15 minutes off going to Forest Glen. With unreliable bus schedules, having someplace to park near Takoma is a necessity for local metro users.

Thank you for your consideration.

Best regards,

Blair Coward

Silver Spring, MD

I have been a life time long term Takoma park and now newly DC resident off by Missouri avenue. Developments are a part of a great changing factor of any place – but to take away the only parking to the metro for another high rise takes away yet another part from Takomas historic feature.
I am against taking away the only parking to Takoma metro plan. Please re-consider!!!
Thank you.

Best
Karen Gomez

Dear WMATA:

I strongly support the plan before WMATA for the development of DC Takoma metro station as articulated in the public hearing report. I appreciate the process you have used to get diverse input from stakeholders especially those that may be typically underrepresented and by including non-English speakers. I am a Takoma Park, MD resident living about a mile from the station, and a frequent user of the metro. This is the best opportunity for having a fully functional WMATA station with increased ridership as well as increased housing and businesses. Increased density and use of mass transit is a win for the environment also. It is exciting what is happening in DC around the Takoma metro station. Good luck on finally re-developing this underutilized space for the benefit of all.

Best wishes,

Kawsar Talaat,
Takoma Park, MD.

Dear Metro:

Your proposal to build housing at the Takoma Park metro site is just too massive. In a county (and city) known for valuing green space, this proposal as currently configured will destroy a huge area of open green space and also will leave no public parking spots for Metro users.

Housing development at this site should be less monolithic and more in keeping with the surrounding community. It should preserve significantly more green space than the current proposal, and it should also preserve at least some metro parking. Thanks.

Jeannine Anderson
Takoma Park, MD 20912

First, I'm deeply concerned about WMATA's plan to eliminate public and commuter parking at the Takoma metro station.
Why the report refers to the current parking spots as "kiss-and-ride" is a mystery - and certainly misleading, as is the claim that the lot is underused. Even now, with metro ridership not yet back to what it was prior to the pandemic,
the several - and careful - counts done by residents over the past several weeks show that the lot is frequently nearly full, especially during the day midweek - Tuesday through Thursday.

For elderly and disabled residents, elimination of public parking would be a disaster. Others lack convenient bus access. People with young children may find it necessary to drive to the parking lot even if they live relatively close by.

Additionally, the recommendation that Takoma Park (and Takoma DC) residents drive to Fort Totten to park is, again, not based in reality, as the Fort Totten lot is generally nearly fall, without the capacity to absorb significant numbers of additional cars. - People living within a few blocks of the Takoma metro station will undoubtedly see drivers looking for spaces in their neighborhoods, residential permit parking or not.

Second, prior to selling its property to the developer, the Washington Area Metropolitan Transit Authority owes it local residents to commission a thorough traffic study - rather than leave this to EYA to do farther down the road.
Just one example: traffic leading from the Takoma Park commercial center along Carroll St. towards the underpass is already often significantly backed up. Before any decision is made to install an additional traffic light near the metro, shouldn't there be a comprehensive assessment of the whole area around the metro station, including the entrances for multiple modes of transportation to and from the site.

The property WMATA plans to turn over to the developer is public land intended to serve the public good. Before effectively privatizing this important property, shouldn't it go without saying that our transit authority should do a comprehensive assessment to insure that this important transit center works for people using it - whether they come by car, bus, walking, bicycling now and into the future.

While the planned development is situated within the District of Columbia, it's essential that WMATA staff listen to, respect, and engage with residents and elected officials on the Maryland side, who will be most directly impacted by future changes.
Now, while the property is still in public ownership.

Thank you for your consideration.

— Susan Schreiber
Takoma Park, MD 20912

To whom it may concern,

I own the residence at [removed] and frequently walk through the area of the Takoma Station to catch the subway or patronize various businesses along the Carroll Ave commercial corridor, particularly Busboys and Poets, CVS, and Takoma Beverage Company, among others.

The scale of the concept development seems like the work of a madman who clearly has no empathy for pedestrians or bikers, or for people who simply want to catch the subway if coming from the Takoma Park MD side. So much traffic would be funnelled onto that site through a single street and all those vehicles will be a hazard for anyone trying to get to the other side on foot, not to mention that it will be a serious discouragement to anyone wishing to get to the commercial areas where I love to shop.

The area can certainly stand some residential development but the concept now on the table is vandalism of a very pleasant place to live and shop. Proponents should be ashamed of themselves. They cannot be people who will need to experience this scourge.

Sincerely,

Stephen Whitney
Washington DC 20011

I don't believe my comments were accurately captured in the report. I want to make clear that I am against the current plan to eliminate all long-term parking and replace it with 16 kiss and ride parking spots. In my original comment, I suggested that Metro track the number of people who use long-term parking for at least a month and ensure that the new development has enough long-term parking to accommodate current numbers. I was trying to see if there was a reasonable compromise; however, I do not want my suggestion to be construed as neutral about Metro's parking plans. If the choice is either 16 kiss and ride spots or 144 "kiss-and-ride" spots (many of which are actually dedicated to daily short- or long-term parking), then I choose the latter.

Metro's failure to respond to my suggestion or take into account current parking usage is arbitrary and capricious.

The report also misrepresents the survey results showing usage of the parking lot pre- and post-pandemic included in Appendix E. The report states that short-term parking at kiss-and-ride spaces is down (from 55% to 44%) after the pandemic (see page 11). But the actual survey in Appendix E has short-term usage about the same prior to and after the pandemic (45% vs 44%). Overlooking the inadequacy of the term "short-term parking" (i.e., I'm not sure if there was a definition provided in the survey or if there was anyway to gauge respondent's understanding of this term), it's worth noting that in a survey of 554 people, more than 240 people reported using "kiss-and-ride" spots for "short-term parking" in the past 30 days. A more appropriate follow-up would be to gauge how frequently those respondents used the lot for those purposes within the last 30 days, not plowing ahead with this ill-informed plan. It would be arbitrary and capricious for Metro to proceed with these plans without explaining how a measly 16 kiss-and-ride parking spots will appropriately accommodate demand for commuter/long-term/short-term parking, which has either remained consistent throughout the pandemic or is back to pre-pandemic levels.

The Environmental Evaluation is based on parking lot usage from the height of the pandemic and *still* shows that of the 107 average people who used Kiss and Ride spots, a whopping 59% used them for four or more hours daily. Without providing any reasons, the Environmental Evaluation states that such usage is not the intended primary use of the parking lot, which is the very definition of arbitrariness and capriciousness.

Unless Metro is able to better justify it's plans to eliminate 90% of the kiss-and-ride spots (a supermajority of which are currently used for daily commuter/short-term/long-term parking), I oppose this plan as arbitrary and capricious.

Sincerely,

Adaku

I wanted to add an amendment to also oppose the proposal for daily commuters to use Fort Totten station. Part of the reason I use Takoma Metro parking is because my child's school is less than a two-minute drive from the station and it's conveniently located so I can get to work on time and *just* make aftercare pickup. If I am forced to park at Fort Totten, I will have to look for Before Care options at an additional cost to ensure I get to work on time and will either have to incur late fees for aftercare pick up or have my work performance suffer to leave work early. Metro's failure to take into account the needs of working parents (who make up a majority of the neighborhood) is arbitrary and capricious.

Dear WMATA,

Thank you for giving me the opportunity to make a written comment.

My name is Paul Schwartz and I live [removed], WDC 20012. I have lived in the neighborhood for over 22 years in a 43 unit condominium that is just a few blocks from the proposed development. Many of my neighbors have either one car or none and choose to walk, bike, bus or Metro around town.

I think that this development, in the aggregate, is an appropriate use for the Takoma Metro site. I understand the concerns about change, scale, traffic, shade, the tree canopy, parking etc. that Historic Takoma has brought up over the past 25 years. Despite my neighbors' claims, I too want air and water concerns to be taken seriously in the development.

There are two issues that I am most ardent about:

- Make this development as dense as possible so that more people can live right on top of the Metro
- Make more of the units affordable and make them even more deeply affordable

As a lifetime environmental justice worker, I understand the threat of climate change and its intersection with justice. It is time to do more of just this type of development and not to give in to the 25 year campaign of dely that seeks to shut down this development.

I am looking forward to sending in a more complete set of comments going forward.

Onward,

Paul Schwartz

TESTIMONY

"Takoma Metro Station" / Docket R23-01
Submitted April 21, 2023

My name is Nancy Abbott Young. I'm the last surviving member who sat on the original *"Citizens Advisory Board on the Takoma Metro Stop Impact Plan"* of the Maryland-National Capitol Park & Planning Commission (MNCPPC). I raised my voice against development at the Takoma Metro site in the early 1970s, and again in 2007 and 2014, and I continue to do so now.

Before WMATA could even break ground to open a subway station in Takoma Park (1975), it had to abide by the expressed opinion of the local community in *both* the District of Columbia and Maryland.

Our MNCPPC advisory committee took a united stand on behalf of the community against residential and commercial development at the transit site. Instead, we stood in favor of establishing a large protected green space at the site, a park to be maintained in perpetuity. In doing so, we were solidly in sync with the citizens and ANC on the DC side.

Please recall that many citizens of Takoma Park, under the banner of the Save Takoma Park Committee, had been united in defeating the North Central Freeway and had led the way for federal Highway Funds to be leveraged to build the Metro Subway system instead.

The MNCPPC advisory committee was instructed to review various proposals for Limited, Intermediate, or Maximum development at the Takoma Metro site and to advise MNCPPC accordingly. We recommended the Limited Growth plan, which called for *"No change in land use … no intensification of residential land use."*

Our recommendation was decisively adopted by the Montgomery Planning Board Staff, the City of Takoma Park and the Montgomery County Council.

For a half century since, the Takoma Metro site has remained as originally conceived and agreed upon by all local jurisdictions: A "no build" green zone that serves as a protective buffer area between the busy activities of the transit area and the adjacent community.

Now WMATA, in its latest iteration of financial desperation stemming from years of mismanagement and neglect, is looking to overturn its original covenants with the community and attempt once again parley this valuable piece of land into a short-sighted real estate venture. This environmentally disastrous plan from EYA calls for a massively outsized 430 - 440 unit multi-residential and commercial complex that clearly puts the station at odds with the scale and nature of the surrounding community.

"Smart growth"? "Transit-oriented development"? "Affordable housing"? In reality, this super-sized EYA plan offers little of these. These are simply public relations buzz words intended to exploit the future of a unique community and irrevocably reduce its last-remaining urban green space.

This rental housing will end up being far less affordable than is being touted in the current narrative. Rents will go up (as is currently being demonstrated outside of the City of Takoma Park MD). Tenants will soon tire of living inside the vortex of the daily congestion produced by this high volume of buses, cars, and pedestrians moving at cross-purposes in their pathway. By night, they'll be serenaded by freight trains moving hazardous waste.

Most importantly, this EYA / WMATA housing development plan runs counter to WMATA's inherent mission to increase and serve its own mass transit ridership. If the basic concept of this project was truly "transit-oriented," the commuter parking for subway riders would not have been eliminated. Further, there would be no special parking accommodations made for the benefit of drivers who chose to live atop a mass transit site. By this EYA / WMATA plan, public commuter parking has been sacrificed to private residential parking. Ironically, this comes at a time when we are increasingly concerned about air quality and preventing climate disruption in the greater Metropolitan area.

Combine all this with the additional issues around building mass, street traffic patterns, public safety, and stormwater and sewage and it's easy to see why the basic concept of this plan is all wrong for this location. (Even apart from the visual eyesore produced by this humungous and overly-ambitions design, which is such an architectural disappointment compared to many of EYA's other residential projects.) There's nothing "smart" about the growth proposed in this misbegotten site strategy. It's a shame that WMATA seems so desperately willing to put this outsized and destructive EYA blueprint into play.

WMATA'S PRIMARY MISSION IS MASS TRANSIT NOT HOUSING

The current iteration of the ongoing effort to develop the Takoma METRO site seems to promote the narrative that providing "affordable housing" should be given preference above WMATA's primary mission. WMATA's mission is not to promote private housing, it is to promote public transportation and to serve the subway system's current and future ridership. WMATA land is public land, not private, and if there is to be any development at the Metro stop, it must first and foremost support WMATA's mandate to promote public transportation.

The FTA, to which WMATA is held accountable, has repeatedly made its position clear. In a letter in 2007, FTA Commissioner James S. Simpson clarified its requirements to MD Rep. Chris Van Hollen: *"While WMATA is not directly expending FTA funds, it is proposing to utilize property purchased in part with FTA funds for a joint development purpose. One of the legal requirements*

described in this guidance is that the project must enhance the effectiveness of public transportation and relate physically or functionally to the transit facility. Further, the improvement must provide a fair share of revenue for public transportation that will be used for public transportation.'"

Unfortunately, WMATA is slow to learn from its mistakes. EYA / WMATA's proposed development plan of 2023 remains as inconsistent with its basic mission as its previous proposals of 2007 and 2014.

The proposed plan basically eliminates all designated Metro parking at the Takoma Station, which would render Takoma the only Metro stop without parking on the Red Line between Brookland and Glenmont. This will have a major impact on daily ridership by Marylanders and is counter to the original agreements regarding the necessity of local stations encouraging local public transportation services while also maintaining local character. Further, Ft. Totten and Silver Spring do not have enough spaces to accommodate those parking at Takoma Station on heavy use days. The result is that commuters will conclude they may as well avoid the hassle and just drive directly to their destinations.

Clearly, the elimination of workable transit-oriented parking for Metro users to make way for a massive multi-residential real estate venture is not consistent with WMATA's basic mission to increase and protect transit ridership.

Ironically, the proposed EYA / WMATA plan not only eliminates parking for subway commuters, it also provides 230 parking spaces for private residential and commercial tenants. The plan runs counter to environmental planning to reduce the growing impacts of climate disruption and clearly privileges the private automobile at the expense of the public transportation needs of the community. Such a scheme accommodating the private automobile at this level has absolutely no place in "transit-oriented development."

The plan to eliminate transit-oriented parking for daily users and the handicapped, the loss of parking revenue, the confusion about "kiss & ride" drop-offs, the frustration of local riders whom the Takoma stop was clearly meant to service, and the privileging of parking for private residents will all impact public support for Metro. WMATA should take heed about its public image in this regard.

EYA and WMATA have had decades to get it right but they continue to fail the riding public as well as the greater Takoma community which will experience first hand the blowback of WMATA'S errors with its approval of this inherently flawed development plan.

"AFFORDABLE" HOUSING?

While previous EYA / WMATA proposals in years past emphasized the narrative of "smart development" and "transit-oriented development," this year's spin centers on "affordable housing".

This is a subject near and dear to my heart. I live in a multi-residential building with over 300 units in downtown Silver Spring within walking distance of the Metro station. It was wonderful at the beginning but soon enough things change in these massive rental buildings. The benefits of "location, location" are outweighed by skyrocketing rents. (Renters in Silver Spring and DC don't have the luxury of rent control as do the renters in Takoma Park MD). Silver Spring is becoming increasingly congested and cars compete with pedestrians on every corner. Despite the veneer of "affordable housing," the quality of life within walking distance of the Metro station has plummeted.

I predict with confidence that renters who might initially chose to live at the proposed EYA / WMATA complex at the Takoma station will quickly become disenchanted with increasing traffic congestion, numerous public safety issues, increasing rents, and the incessant noise that comes with living near freight railroad tracks. What may seem initially "affordable" will eventually become unbearable and the renter population at that site will turn over rapidly. In a few years, building occupancy will become every bit as shifting and transient as that in downtown Silver Spring.

Furthermore, Takoma Park already has the highest concentration of renters in Montgomery County. It has stringent housing code enforcement and unlike the rest of the County, it actually has rent stabilization. "Affordability" may be an issue in TP but it is far worse outside of TP in other parts of the county and region. Can other places with "green space" not do their fair share to boost affordable housing stock, especially much needed larger units with 2-3 bedrooms? As much as I believe in the concept of "affordability" firsthand, I really don't understand why Takoma Park needs to bear this burden for Montgomery County and Washington DC at such a level of sacrifice. Takoma Park's small green space at the Metro site is not the one and only place to solve the metropolitan area's growing concerns about affordable housing. Once gone, it can never be gotten back.

I'm sadly confident that others will agree with me in the future when they face the reality of the mammoth concrete fiasco proposed for Takoma Park and try to navigate their way to the Metro station past and through the monolithic eyesore that is cynically being proposed for the site by EYA / WMATA in 2023.

WHERE'S THE TRAFFIC STUDY?

Anyone with common sense would ask about for a serious and current Traffic Study. Buses, cars, bikes, and pedestrians will all be trying to navigate one small and dangerous space. Pedestrians will include commuters, handicapped persons, the elderly and people trying to navigate with strollers and luggage. This is particularly egregious for those many commuters who wish to enter the station from Eastern Avenue and North Takoma who will be confronted with a difficult and irritating walk around the massively proposed building.

Buses have to rush to meet schedules. Then they idle accordingly. "Kiss & Ride" spots are a constant source of back-ups and pull-outs. Bicyclists weave in and out of lanes and sidewalks. New traffic signals, new driveways, traffic congestion at the intersections and on narrow streets (and don't even think about widening them!) combine to produce a dense and dangerous admixture of cars, buses, and pedestrians. Everyone is trying simultaneously to navigate an overcrowded multi-use space, everyone is racing to meet their personal deadlines.

Surely the City and interested parties have already demanded a comprehensive traffic study to identify the impact that this proposed EYA / WMATA complex will have on Takoma Park's local roads and neighborhood streets?

WHERE'S THE ENVIRONMENTAL IMPACT STUDY?

Surely the interested parties have already demanded and produced a detailed, thorough, and recent environmental impact study regarding storm drain flooding, increased impervious surface areas, sewer capacity, impacts on Sligo Creek, air quality, sunlight levels, renewable energy concerns, the protection of mature and heritage trees, and the inevitable impacts of a dense residential development as they relate to Montgomery County's stated goals and timetable to reduce the impacts of global warming? If not, why not? WMATA has limited its scope of concern to bus lanes and Kiss & Ride. That doesn't begin to address the immediate need for a big picture analysis regarding the environmental consequences of this proposal.

THE BUILDING MASS,
INCOMPATIBLE NEIGHBORHOOD DESIGN,
& DRASTICALLY REDUCED GREEN SPACE

The EYA / WMATA project is immense. It is a "big box" visual with design that looks brutalist compared to the existing neighborhood. The scale is completely inconsistent with the residential housing next to it and the adjacent commercial area. The proposed development is nearly 6 times larger than the existing

Takoma Business Center! It is 7-9 stories high (rather than the 3-5 stories commonly seen at Ft. Totten and Brookland, and far more massive.

Takoma Park is already one of the densest areas on the County. The EYA site plan shows a drastic elimination of green space. Why does EYA / WMATA propose to build such an outlandishly designed project right in the middle of a residential area characterized by its human scale buildings and its historic nature? The brutalist design of the proposed buildings are in jarring contrast to the historically preserved homes and retail shops that surround it. A huge complex of 430 - 440 residential units is not only hard to look at when passing by; it is also difficult to enjoy when passing through. And living in these massive projects is not much fun either.

THE JURISDICTIONAL RESPONSIBILITIES OF THE CITY OF TAKOMA PARK AND MONTGOMERY COUNTY MD

The City of Takoma Park is now and has always been a party to any proposed development plans for the Takoma Metro Site. This is codified in the Compact. It has established precedent in the original processes established by WMATA for the Takoma site by way of the involvement of the City of Takoma Park, MNCPPC, the Montgomery County Planning Staff, and the Montgomery County Council.

Though the station site is in Washington DC, Maryland was always a primary part of the originating process. Attention was paid to ensuring consistency with regard to zoning, commercial development, historic preservation issues, and other relevant aspects of public planning not only in DC but in the adjacent jurisdictions of Maryland as well. WMATA's own "Public Participation Plan 2020-2023" makes the case for standing on the part of the City of Takoma Park.

The elected officials of the City must weigh in, as their predecessors have always done, as an interested party on behalf of their constituents who will bear the brunt of development in their front yards, streets, and pocket books. The City needs to take a closer look at this proposal. Elected officials and staff need to wake up to the enormity of this development plan and assert their responsibility regarding the significant traffic impacts of the proposal as well as the environmental impacts due to the massive scale and scope of the buildings. The City needs to assure that any plans for the station will be in sync with its own plans, including the recent "Takoma Park Minor Master Plan Amendment." Takoma Park also needs to enlist the involvement of another stakeholder and partner in the "WMATA Transit Zone": *Montgomery County*. As WMATA considers amending its mass transit plan as proposed in this development plan, it is now required to review "*current and prospective conditions in the Zone."* Both the City of Takoma Park and Montgomery County need to formally be a part of that important review process.

CONCLUSION — WMATA NEEDS TO GO BACK TO ITS PRIMARY RESPONSIBILITY: MASS TRANSIT

WMATA needs to address questions of height and density, compliance with master planning, cross-jurisdictional impacts, increased traffic, pedestrian safety, and prior guarantees on urban park preservation. It needs to work not just with Washington DC but with the Maryland side as well. Most of all, WMATA needs to turn its gaze inward and return to its original mission – providing an inexpensive and efficient public alternative to the private automobile … the mission for which it may recall, it became the happy beneficiary of the diverted Highway Trust Fund monies at its inception.

This is public land, bought with public money, for a public purpose. Yet it is being privatized by WMATA, its intended steward, for private gain under the current catch phrase of "affordable housing" and without regard to the historical compact it shares with not only Washington DC but with Takoma Park and the Maryland side of the map as well. The business model of EYA is private profit. The business of WMATA is public transportation, protection of public land taken from private owners into the public domain, and not least, stewardship of the public trust. EYA and WMATA are not in the same business and don't share the same mission.

Projects like the proposed EYA plan for Takoma negatively impact the adjacent communities while offering no increased value for the Metro ridership. They usurp existing community covenants, render financial benefits that are far too short-sighted and meager, and they create an illusion of "smart growth" and "affordable housing." that in a few years' time will turn out to have been mistaken. Designs like this one wrongly sacrifice rare and valuable green space exactly at the time of intensifying global warming. (It is 90 degrees today in April and the grass and trees at the Takoma Metro site are doing us a great service … but if the EYA plan goes forward, the natural benefit from this green buffer parkland will be lost forever.)

The sun rose on Metro in Takoma in 1975. As the sun sets today, who is defending the original covenant that WMATA made with the citizens of both Maryland and DC? More importantly, who is protecting WMATA's original mission, for which it receives both funding and oversight … the mission to provide inexpensive and accessible mass transportation to the public as a reliable daily alternative to the private automobile?

In forty more years' time, when future generations live in the wall-to-wall concrete structures like this one proposed for Takoma Park by EYA; when they gasp for air while crossing treeless lots; when they pay yet another fare hike; when they wait yet another 15 minutes for their delayed train; when they stand on the platform and wonder what happened to the oxygen and the climate … then this little plot

of contested acreage bounded by Eastern and Cedar and Carroll will tell the truth of who we were and what we stood for back then, in 2023 … when we still possessed one last, rapidly vanishing, opportunity to make a difference in fiercely promoting mass transit and reducing climate catastrophe for the future.

In the decades since the station opened in 1985, generations of residents, planners, WMATA commissioners, and entrepreneurs have come and gone. My generation fought hard to preserve Takoma Park for you, a new generation of residents, planners, and commuters.

What will you leave for the next generation?

Testimony submitted by:
Nancy Abbott Young
8811 Colesville Road
Silver Spring, MD 20910
(nancyabbottyoung@gmail.com)

April 21, 2023

TO: WMATA BOARD MEMBERS & STAFF
Don Drummer; Paul Wiedefield; Michael Goldman; Paul C. Smedberg
cc. Rene Febles, Inspector General

RE: LEGAL INSUFFICIENCY OF COMPACT PUBLIC HEARING, JANUARY 17, 2023
PROPOSED CHANGES TO TAKOMA METRO SITE

FROM: FRANCES E. PHIPPS, 7210 HOLLY AVE., TAKOMA PARK, MD.

SUMMARY OF ISSUES:

January 17, 2023 Public **Hearing does not meet Compact Requirements or Public Participation Plan, 2020-2023** for project analysis and impacts and is inadequate for Board Consideration.

1. WMATA Staff did not comply with clear Public Participation requirements to *analyze the entire "project"* which will cause change to the site. Staff selectively ignored and would not allow public discussion of 80% of the change caused by WMATA's joint development partnership with EYA.
2. The owner of the site is responsible for an analysis of the entire "project." WMATA is *the sole owner* of the Takoma Metro Site on January 17, 2023 the date of the Public Hearing and is responsible for preparation and publication of *"project"* analysis and impacts. WMATA remains the sole owner as of April 21, 2023.
3. WMATA did not present an *adequate Environmental Analysis* of the proposed "project" and its changes.
4. WMATA did not present a *traffic/transportation analysis* of proposed changes of the "project" to public parking, handicapped access, the new traffic light nor access the impact on adjacent two lane streets and future level of service.
5. WMATA states, in its Environmental Evaluation, that the *Project will not substantially increase ridership* in opposition to WMATA's fundamental purpose to "plan, develop, finance and cause to be operated *improved transit facilities…"* Compact, p.1-2.
6. WMATA did not present a *Section 106 Analysis of Federal Transportation* spending on impacts to cultural resources as required by the use of Federal Funds which impact a historic resource.
7. WMATA did not *collaborate closely with local affected jurisdiction* of Takoma Park, Maryland.

The information and materials presented for the Public Hearing did not include the mandated requirements in the areas cited above. The result is that the public was not presented the information and analysis it is entitled to and is required by WMATA's own organizing charter and its Public Participation Plan, 2020-2023.

For these reasons, which will be detailed in this written testimony, the WMATA Board should direct staff to revisit these issues and ensure their results comply with all mandated requirements. Once this is obtained, a legitimate public hearing should be scheduled for comment.

1. WMATA STAFF DID NOT ANALYZE THE ENTIRE PROJECT:

As the owner of the Property, WMATA is responsible for the analysis of changes and impacts of those changes. WMATA's Public Participation Plan 2020-2023 states that:

> "When a project is initiated, whether internally at Metro or externally adjacent to Metro, the *Project Owner or Manager must consider its impacts to customers and community members throughout the project's life cycle and the final product's lifespan.* The Project Owner or Manager is tasked with identifying whether or not the project triggers the Public Participation Plan**, assessing the breadth and impacts of the project scope**, and contacting Metro's Office of Content & Strategic Communications (CASC) to begin the intake process." P. 12.

Qualifying Projects of this requirement:

> "This includes any projects that require NEPA environmental evaluations and impact reports and/or amend the mass transit plan." P.12

The "Project Owner" in the case of changes at the Takoma Metro site, on the date of the public hearing, is WMATA. The materials prepared by the Project Owner, at the Public Hearing of January 17, 2023 did not address the "breath and impacts of the project scope" which includes the development of a +/- 90 foot high, mixed use building of 500,000 square feet with 434 residential units and 16,000 square feet of retail. The project also provides for new private parking and eliminates all public, transit related parking. This will have a significant adverse impact on ridership from Montgomery County.

2. WMATA IS SOLE OWNER OF THE TAKOMA METRO SITE:

The owner of the property/project is responsible for the analysis of changes to the site and the impacts of those changes.

The Application to the District of Columbia Zoning Commission for Review and Approval of a Consolidated Planned Unit Development and Amendment to the Zoning Map, November 28, 2022, prepared by "TM Associates, LLC and the Washington Metropolitan Area Transit Authority" states:

> "The Property is owned by WMATA and is located in the Takoma neighborhood of Ward 4." P.1

While it is the intent of WMATA to transfer ownership of a portion of the site to its joint development partner EYA, it had not done so at the time of the Public Hearing. WMATA therefore bears the burden of complying with its own regulations for analysis.

Conclusion: WMATA was solely responsible to meet the requirements of a Compact Public Hearing and WMATA'S Public Participation Plan 2020-2023 at its Hearing on January 17, 2023.

The selective and limited analysis provided in this hearing is in direct contrast to the two prior Compact Hearings for this site in 2007 and 2014. In those hearings, WMATA joined with its partner EYA and provided complete analysis in compliance with Compact requirements.

Conclusion: The public materials and the public process of the January 17, 2023 Hearing did not comply with WMATA's own requirements and practice of a Compact public hearing on the Takoma site and must be considered out of compliance with the Compact and its own Public Participation Plan.

3. WMATA DID NOT PROVIDE AN ADEQUATE ENVIRONMENTAL ANALYSIS:

WMATA's report, Environmental Evaluation, December 2022 states:

> "To support WMATA Compact requirements, specifically Section 14(c)(1), this Environmental Evaluation *describes the Project* and documents the potential effects of the Takoma Station facility modifications on the human and natural environment in terms of transportation, social, economic, and environmental factors." P.5

The above statement is incorrect. WMATA does not describe the Project. Rather, it focuses on just approximately 25% of the Project which is the transit facilities and access *and ignores the approximately 75% of the Project which will have significant environmental impacts.*

However in Section 3.0 Project Description, WMATA states that it has "collaborated to develop a feasible site plan that is supported by the District's stakeholders and the local community." P.13 Weak though this is, it is the first time that WMATA materials acknowledge their involvement and their responsibility for analysis of the entire site. The next paragraph tries to shift this responsibility to the developer. As convenient as that might be, the reality is that WMATA is responsible for this analysis.

> "The developer proposes that the Project has defined zones for transit use, open space, and a residential building with approximately 430 units and around 16,000 square feet of retail." P.13

This is an accurate, summarized description of the Project which Compact requirements identify as needing to be analyzed. However, the materials provided for the Public Hearing of January 17, 2023 did not detail this Project. Staff ignored changes to approximately 75% of the site and provided a one page Environmental Analysis stating:

> "An Environmental Evaluation (EE) for the transit facility changes has been provided as part of the Docket. Likely Environmental impacts are summarized in the table below." P.8

The Table lists the issues of Transportation, Stormwater, and Air Quality. However, due to the lack of professional or complete analysis, the Public Hearing materials concluded that there were **"no permanent environmental impacts"** in the areas of transportation, stormwater or air quality.

Conclusion: WMATA must prepare a complete environmental impact statement for the entire Project which meets professional standards.

4. WMATA DID NOT PROVIDE A TRAFFIC/TRANSPORTATION ANALYSIS:

The materials provided for the Public Hearing and the Environmental Evaluation did not provide an analysis of the proposed changes of the "Project" to public transit-oriented parking; to handicapped access; to the installation of a new traffic light, nor to any impact on the adjacent two lane streets and the resulting level of service. WMATA has stated that there would be no enlargement of adjoining and contributing streets.

It is a fact that due to the proposed changes, there will no longer be any public transit-oriented parking provided on site. The project removes the 150 public parking spaces for Metro uses and replaces them with 230 private spaces for residents and shoppers in the new structure. The report justifies this elimination of public transit-oriented parking due to the findings of a parking survey that was carried out in October, 2021 – in the depth of Covid lockdowns. In spite of that constraint, the survey noted that 43% of the users at that time were long-term parkers of over 8 hours. WMATA proposes to eliminate this public transit-oriented parking in favor of private residential and retail parking. This will have an adverse impact on those transit ridership particularly arriving from Montgomery County.

The solution WMATA offers is for residents to drive to Fort Totten. This will have a major impact on elderly, the handicapped and on Montgomery County residents. Takoma Park Councilmember Jason Small of Ward 6, the most remote Ward from Metro, testified on January 17th that this would have an adverse impact on his constituents and he raised concerns about the safety issues at Fort Totten which needed to be addressed.

Additionally, the possibility exists, that potential Metro riders who are directed to Fort Totten may decide to continue downtown, skipping Metro altogether and reducing WMATA's ridership and revenue.

Conclusion: WMATA must consider if the provision of private parking and the elimination of public transit-oriented parking serves the mission of the agency. It should work with the two jurisdictions which border the site and develop a transit and transportation analysis which identifies impacts and their mitigation

5. WMATA STATES PROJECT WILL NOT SUBSTANTIALLY INCREASE RIDERSHIP:

The goal of all Metro improvements is to increase use of the metro transit system, as stated in COMPACT, Article II- Purpose and Functions.

However, the Environmental Evaluation in "Project Impacts", 4.2 Transportation, 4.2.1 Metrorail states:

> "*Any increase in ridership* at the Metro station due to residential and employment opportunities associated with the development *is not expected to be substantial enough* to cause any significant impact on Metrorail operations." P.19

In a 2007 letter to Md. Representative Chris Van Hollen, FTA Commissioner James S. Simpson clarified WMATA's mission: "One of the legal requirements described in this guidance is that the

project must enhance the effectiveness of public transportation and relate physically or functionally to the transit facility."

Conclusion: WMATA must state clearly that the goal of any changes is to incorporate those aspects which increase Metro ridership and reject those elements of the Project which result in decreasing ridership. It needs to rethink its approach to parking and access.

6. WMATA DID NOT CARRY OUT A SECTION 106 ANALYSIS:

Section 106 of the National Historic Preservation Act is a law which requires examining the use of Federal funds in a manner which may create adverse impacts on historic properties and cultural resources. WMATA used Federal funds provided by FTA to purchase property with FTA funds.

In its reports and public statements WMATA has never acknowledges that the site itself is located on Historic District land and is located within a Historic District. This Historic District includes the directly adjacent neighborhoods of Takoma Park, Md. and Takoma, D.C. There is also one Historic Category III National structure, the Cady Lee Mansion which is on the other end of the same block as the Metro site.

While the emphasis of Section 106 is on a historic structure or structures, there is increasing acknowledgement that the context of the total cultural resource is important. One method used by Jurisdictions in accessing impact is to define an *Area of Potential Effects* which provides all parties with a basis for understanding the geographic extent of anticipated impact of a proposed project.

The construction of a massive, ninety foot high structure – almost twice the height and size of surrounding new development – with 434 residential units, parking and retail space as well as bus and kiss and ride facilities will have a significant and adverse impact on the small scale (one and two story) historic residential properties in the District and in Maryland facing this development from approximately 100' away. It will dominate the line of sight and over shadow its surrounding structures. It may affect sunlight and shadow. It will increase light pollution, particularly at night. It may adversely affect the quality of life as well as property values. But most significantly, it is out of all proportion to the surrounding commercial and residential neighborhoods.

The WMATA COMPACT requires that:

> "The Board, in preparation, revision, alteration or amendment of a mass transit plan, shall
> (1) Consider data with respect to current and prospective conditions in the Zone, including, without limitation, land use, population, economic factors affecting development plans, goals or objectives for the development of the Zone and the separate political subdivisions, transit demands generated by such development, travel patterns, existing and proposed transportation and transit facilities, impact of transit plans on the dislocation of families and businesses, *preservation of the beauty and dignity* of the Nation's Capital, *factors affecting environmental amenities and aesthetics* and financial resources;" p.7

Conclusion: WMATA must meet the requirements of a Section 106 analysis regarding impacts on the directly adjacent Historic District and its Compact requirement to consider the preservation of beauty and aesthetics.

7. WMATA DID NOT COLLABORATE WITH LOCAL AFFECTED JURISDICTION:

The Public Participation Plan 2022-2023 identifies as its Goal Two: Collaboration, and states:

> "*Ensure local jurisdiction partners* and Metro Board members are engaged with, and included in, outreach activities when their communities are affected." P.3

Additionally, the Public Participation Plan identifies in Appendix A, P. 50, the public participation requirements of DOT Ss 5307 grant funds stating:

> "c) Publish a proposed program of projects in a way that affected citizens, private transportation providers, and *local elected officials* have the opportunity to examine the proposed program and submit comments on the proposed program and the performance of the recipient."

In spite of the fact that Takoma Park is within the Transit Zone and will bear the greatest impact of the proposed changes to the Takoma Metro site that is on its border, WMATA has not provided a public briefing, much less a hearing, to the Mayor and Council and the community.

Conclusion: WMATA must engage actively with the Takoma Park officials and citizens as well as with the Montgomery County Park and Planning Commission, and the Montgomery County Board members.

IN CONCLUSION: Many in Takoma Park, Md and Takoma, D.C would welcome a well-designed project with a structure on the Takoma Metro site which respects the historic aspects of the surrounding District and provides affordable housing. Most would agree that the site should ensure that increasing ridership and providing ease of access should be the primary goal of any change. Many applaud the relocation of bus lanes closer to the Station and approve of locating a green buffer adjacent to Eastern Avenue.

However, there are significant concerns about the proposed height and density of the brutalist designed residential structure and about the impact of exchanging public parking for private parking. A Compact Public Hearing, which complies with the requirements listed above, and provides professional and complete analysis of these issues, their impacts and how to mitigate them, would go a long way toward addressing these community concerns.

For these reasons, I believe that the WMATA Board must direct staff to revisit these issues and ensure their results comply with Compact and Public Participations requirements and those of its Federal funding sources. It would be inappropriate for the Board to receive and act on staff work which does not meet these requirements. A public hearing, which is in compliance with the Agency's own rules, should be scheduled for comment once these analyses have been completed.

Respectfully submitted,

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APPENDIX J: Comprehensive Transportation Review

Comprehensive Transportation Review

Takoma Metro Multifamily Development

Washington, DC

April 26, 2023

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Executive Summary

This report presents a Comprehensive Transportation Review (CTR) in support of the Takoma Metro Multifamily PUD (the "Project").

The purpose of this CTR is to evaluate whether the Project will result in a detrimental impact to the transportation network surrounding the site. This evaluation is based on a technical comparison of Existing Conditions, Background Conditions, and Total Future Conditions.

This report concludes that the Project will not have a detrimental impact to the surrounding transportation network assuming the proposed site design elements are implemented.

Proposed Project

The Project site is bounded by Eastern Avenue NW to the northeast, Cedar Street NW to the east, Carroll Street NW to the south, and the Takoma Metro station to the west.

The existing site is currently improved with a WMATA Metro parking/kiss-and-ride lot, bus loop, and green space. The Project proposes to redevelop the existing site into a mixed-use development with approximately 440 multifamily residential units, 17,650 square feet of ground-floor retail space, and 230 garage parking spaces. As part of the Project, the WMATA facilities will be reconfigured within the remaining WMATA area adjacent to the Metro station.

Site Layout

The Project will occupy the northern portion of the site, with primary vehicular and loading access provided from a new curb cut on Cedar Street connecting a curbless driveway into the site. An additional garage access point will be provided from the WMATA bus-loop entrance from Eastern Avenue.

The WMATA Metro station vehicular circulation will be reconfigured to allow for inbound and outbound bus access from Eastern Avenue and Carroll Street via a new internal roadway separating the Project from the Metro station. Kiss-and-ride service will be accommodated via inbound movements from Carroll Street that will become median divided from the bus-loop once internal to the site. Kiss-and-ride vehicles will exit the site via Eastern Avenue. No WMATA or Metro station parking will be provided with the reconfigured layout.

A new traffic signal is proposed at the Carroll Street intersection with the WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

The Project also includes a proposal to provide kiss-and-ride spaces along Carroll Street beneath the bridge.

Multimodal Overview

Trip Generation

The Project is expected to generate new trips within the surrounding transportation network across all transportation modes during the morning and afternoon peak hours. However, with the Project's proposed Transportation Demand Management (TDM) plan, the resulting new trips generated by the Project will not have a detrimental impact on the area transportation network. The multimodal trip generation for the Project, without reductions taken for existing uses to be removed, is as follows:

	AM Peak Hour	PM Peak Hour
Vehicle Trips	115	136
Transit Trips	102	146
Bicycle Trips	15	21
Pedestrian Trips	30	63

Transit

The Project is located at the Takoma Metro station on the Red Line and is served by several local bus routes.

The Project is expected to generate a manageable amount of transit trips, and the existing service can accommodate these new trips.

Pedestrian

The site is surrounded by a generally adequate pedestrian network. Despite some incidences of missing sidewalks, curb ramps, and crosswalks on minor streets near the project site, there are generally adequate pedestrian facilities along primary walking routes between the site and major local destinations.

The Project is expected to generate a manageable amount of pedestrian trips, and the existing and proposed pedestrian facilities can accommodate these new trips.

Further, the Project will include upgrading pedestrian infrastructure along portions of the site perimeter on Eastern Avenue, Cedar Street and Carroll Street, as well as internal

pedestrian facilities. A bike and pedestrian pathway will also be provided through the site connecting Eastern Avenue with Cedar Street and Carroll Street.

Bicycle

The site is located 0.1 miles from the protected bike lanes on Piney Branch Road NW and the bike trail along Takoma Avenue and Fenton Street in Takoma Park. The site is also adjacent to the future extension of the Metropolitan Branch Trail which is expected to open in 2024. Using these facilities, bicyclists have access to several other regional bicycle facilities.

The Project will include long-term bicycle parking inside the building and short-term bicycle parking along the building perimeter and in a publicly accessible area within the garage that meets or exceeds zoning requirements. The Project will also provide a shared use path along its southern and eastern sides which will connect with the Metropolitan Branch Trail extension.

The Project is expected to generate a manageable amount of bicycle trips, which can be accommodated both by existing nearby bicycle facilities and the shared use path proposed within the Project which will connect with the existing bike network.

Vehicular

The project is accessible via Carroll Street NW, a minor arterial, and Eastern Avenue NW and Cedar Street NW, collectors, which connect the site to principal arterials such as Georgia Avenue NW, Missouri Avenue NW, and New Hampshire Avenue NW which becomes a designated major highway in Montgomery County, Maryland. These principal arterials and highways connect with expressways within the District and Maryland such as the Capital Beltway (I-495), the Anacostia Freeway (DC-295), the Southeast Freeway (I-695), and the Southwest Freeway (I-395). These expressways connect with other regional Interstates.

To determine the Project's impact on the transportation network, future conditions were analyzed with and without the Project based on the number of trips the Project is expected to generate. Intersection analyses were performed to obtain the average delay and queue a vehicle will experience. These average delays and queues were compared to the acceptable levels of delay set by DDOT standards as well as existing and background queues to determine if the Project will negatively impact the study area.

The analysis concluded that two (2) of the 11 intersections studied (Blair Road & Cedar Street NW, and Cedar Street & Carroll Street NW) meet DDOT's delay- or queuing-related thresholds for potential mitigation.

Potential improvements were identified that would reduce delays below background conditions, including signal timing adjustments at the intersections; however, the Project's impacts at these locations are proposed to be mitigated via the Project's robust TDM plan that will encourage non-auto modes of travel for site users.

Further, it should be noted that a primary driver of the Cedar Street and Carroll Street NW intersection's increased delay under background future conditions with the Metro reconfiguration is that we have added additional bus and kiss-and-ride traffic to the road network to represent full potential kiss-and-ride use based on historical WMATA Metro usage data for pre-covid conditions.

Safety Recommendations

A qualitative review of the crash data available through the DDOT-maintained and publicly-available "Crashes in DC" database was performed to identify study intersections in which conditions for vehicles, pedestrians, and bicyclists can be improved.

Based on a review of facilities in the area and crash data, one (1) intersection was identified for DDOT to evaluate further. Recommendations for these intersections, **presented for DDOT's consideration and not for the Applicant to complete as part of the Project, are summarized below:**

Blair Road and Cedar Street NW

DDOT should consider performing a safety audit at this intersection as part of DDOT's Traffic Safety Assessment program to further evaluate the extent of safety issues and determine if any action is needed.

Transportation Demand Management (TDM) Plan

Per the DDOT CTR guidelines, the goal of implementing TDM measures is to reduce the number of single occupancy vehicles and vehicle ownership within the District. The promotion of various programs and existing infrastructure includes maximizing the use of transit, bicycle, and pedestrian facilities. DDOT has outlined expectations for TDM measures in the CTR guidelines, and this Project is proposing to implement a TDM plan consistent with these guidelines, as discussed in the Project Design section of this report.

Loading Management Plan (LMP)

Per DDOT scoping comments, this report includes a Loading Management Plan (LMP), whose goals are to maintain a safe environment for all users of the site, loading area, streets, and nearby intersections, minimize undesirable impacts to pedestrians and to employees, reduce conflicts between truck traffic using the loading facilities and other street users, and ensure smooth operation of the loading facilities through appropriate levels of management and schedule operations.

Summary

This report concludes that the Project will not have a detrimental impact on the surrounding transportation network assuming the proposed site design elements are implemented.

The Project has several positive design elements that minimize potential transportation impacts, including:

- The Project's proximity to transit service and bicycle infrastructure, located at the Takoma Metro Station;
- The Project's location within in a generally adequate pedestrian network along major walking routes;
- The Project's loading facilities, which maintain loading activity within private property and provide loading circulation that ensures head-in/head-out truck movements are performed from the public roadway network;
- The inclusion of secure long-term bicycle parking spaces that meet zoning requirements;
- The inclusion of short-term bicycle parking spaces along the frontage of the site that meet zoning requirements;
- The inclusion of a shared use path connecting to nearby bicycle facilities;
- The inclusion of extensive pedestrian improvements around the property and at the Carroll Street intersection with the WMATA bus-loop, including signalization, curb extensions and installation of the missing crosswalk on the east leg of Carroll Street;
- A Loading Management Plan (LMP) that facilities safe and orderly loading operations; and
- A TDM plan that reduces the demand of single-occupancy, private vehicles during peak period travel times and shifts single-occupancy vehicular demand to off-peak periods.

Introduction

This report is a Comprehensive Transportation Review (CTR) for the Project, prepared in accordance with DDOT guidelines. The site, shown in Figure 1 and Figure 2, includes Square 3352 and Lots 806, 811, 812, 813, 820, 822, 823, 829, 831, 839, 840, 841, 846, 847, 848, 849, 850, 851 in the Takoma neighborhood of Washington, DC. The site is currently zoned a mixture of MU-4, NC-2, RA-1, with MU-5A zoning proposed.

The Project site is currently improved with a Metro parking/kiss-and-ride lot, bus loop, and green space. The proposed Project will reconfigure the existing WMATA facilities and develop the northern portion of the site into a mixed-use development with approximately 440 multifamily residential units, 17,650 square feet of ground-floor retail space, and 230 below-grade parking spaces.

Purpose of Study

The purpose of this report is to:

- Review the transportation elements of the Project and demonstrate that it conforms to DDOT's general policies of promoting non-automobile modes of travel;
- Provide information to DDOT and other agencies on how the Project will impact the local transportation network, accomplishing this by identifying the potential trips generated by the Project on all major modes of travel and where these trips will be distributed on the network;
- Determine whether the Project will lead to adverse impacts on the local transportation network; and
- Propose design elements and Transportation Demand Management (TDM) measures as necessary to mitigate any potential adverse impacts to the transportation network.

Project Summary

The Project site is bounded by Eastern Avenue NW to the northeast, Cedar Street NW to the east, Carroll Street NW to the south, and the Takoma Metro station to the west.

The existing site is currently improved with a Metro parking/kiss-and-ride lot, bus loop, and green space. The Project proposes to develop the northern portion of the site into a mixed-use development with approximately 440 multifamily residential units and 17,650 square feet of ground-floor retail space.

Additionally, the proposed Project includes the removal of one driveway (the current bus access driveway at Eastern Avenue) and the addition of one driveway (from Cedar Street between Carroll Street and Eastern Avenue). The proposed project also includes relocating the existing bus loop and consolidating it with the kiss-and-ride function and providing additional kiss-and-ride capacity beneath the bridge on Carroll Street. The Project includes approximately 230 parking spaces in a garage to serve retail and residential uses. No WMATA parking would be provided with the site reconfiguration.

Pedestrian access to the Project's residential component is to be located via the lobby on the Cedar Street side of the Project. Pedestrian access to the Project's retail component is to be located via several retail entrances on the Carroll Street side of the Project.

Bicycle access to the Project will be provided at the short-term bicycle racks around the perimeter of the site and within a publicly accessible area within the garage, as well as the long-term bicycle parking spaces in the garage accessed from the new internal curbless driveway with internal turnaround off Cedar Street. As requested by DDOT, all long-term residential bike parking will be provided in Level 1.

The Project is located 0.1 miles from the protected bike lanes on Piney Branch Road NW and the bike trail along Takoma Avenue and Fenton Street in Takoma Park. The site is also adjacent to the future extension of the Metropolitan Branch Trail which is expected to open in 2024.

The Project will meet zoning requirements by providing at least 149 long-term bicycle parking spaces inside the building and at least 27 short-term bicycle parking spaces on exterior racks along the site's frontage and in a publicly accessible area within the garage.

Primary vehicular access to the parking garage will occur from a new internal driveway/turnaround accessed from Cedar Street NW and an additional garage access will be provided from the relocated bus loop on the Eastern Avenue side of the site. Additionally, the Project will include a curbside lay-by area on its Carroll Street frontage which will accommodate either curbside parking or pick-up/drop-off activity, or a combination of both, with the ultimate curbside use to be determined during the Public Space process.

Loading and deliveries will occur from the new internal driveway/turnaround accessed from Cedar Street. The proposed loading facilities will accommodate the Project's loading needs, maintain loading activity within private property, and provide loading circulation that ensures head-in/head-out truck movements are performed from the public roadway network.

The following curb cut modifications will occur with the Project:

- One (1) existing curb cut removed on Eastern Avenue (serving the former bus loop);
- One (1) new curb cut on Cedar Street (serving the new internal driveway/turnaround). This curb cut will include an apron ramping up to a curbless driveway; and
- Reconstruction and relocation of the two (2) existing curb cuts to remain on Eastern Avenue and Carroll Street.

A new traffic signal is proposed at the Carroll Street intersection with the relocated bus-loop/WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

Contents of Study

This report contains nine (9) chapters as follows:

- Study Area Overview
  This chapter reviews the transportation characteristics of the area surrounding the Project.
- Project Design
  This chapter reviews the transportation components of the Project, including site access and circulation, loading and trash operations, parking, and bicycle and pedestrian facilities.
- Travel Demand Assumptions
  This chapter outlines the travel demand and projected trip generation of the Project.
- Traffic Operations
  This chapter provides a summary of the existing roadway facilities and an analysis of the existing and future roadway capacity in the study area. This section highlights the vehicular impacts of the Project and presents mitigation measures for minimizing impacts, as needed.
- Transit Facilities
  This chapter summarizes the existing and future transit service adjacent to the site and reviews how the Project's transit demand will be accommodated.
- Pedestrian Facilities
  This chapter summarizes existing pedestrian access to the site, reviews walking routes to and from the Project, and reviews how the Project's pedestrian demand will be accommodated.
- Bicycle Facilities
  This chapter summarizes existing and future bicycle access to the site and reviews how the Project's bicycle demand will be accommodated.
- Safety Analysis
  This chapter summarizes the potential safety impacts of the Project. This includes a qualitative review of existing and proposed safety features surrounding the site.
- Summary and Conclusions
  This chapter presents overall findings and conclusions.

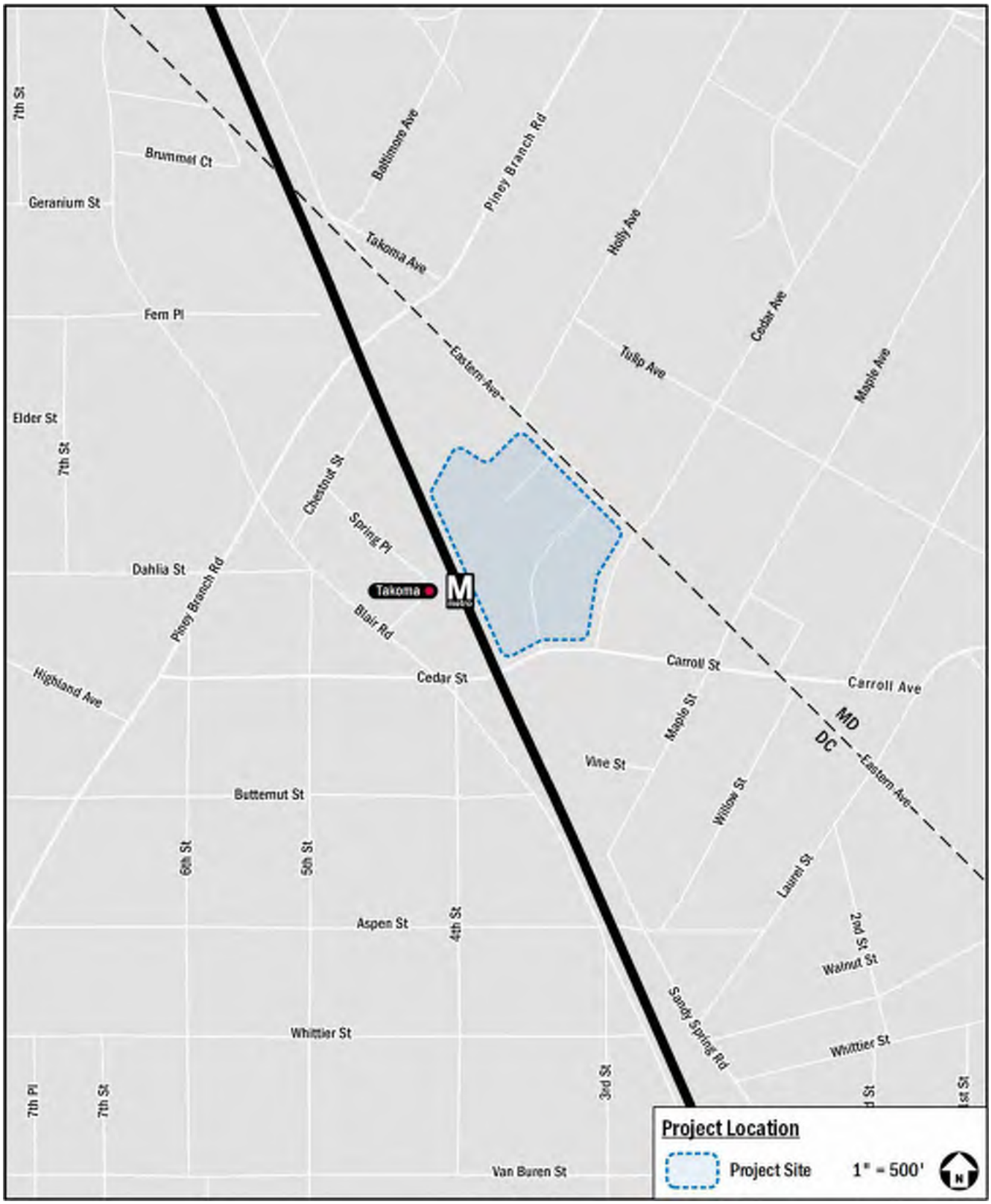


Figure 1: Project Location

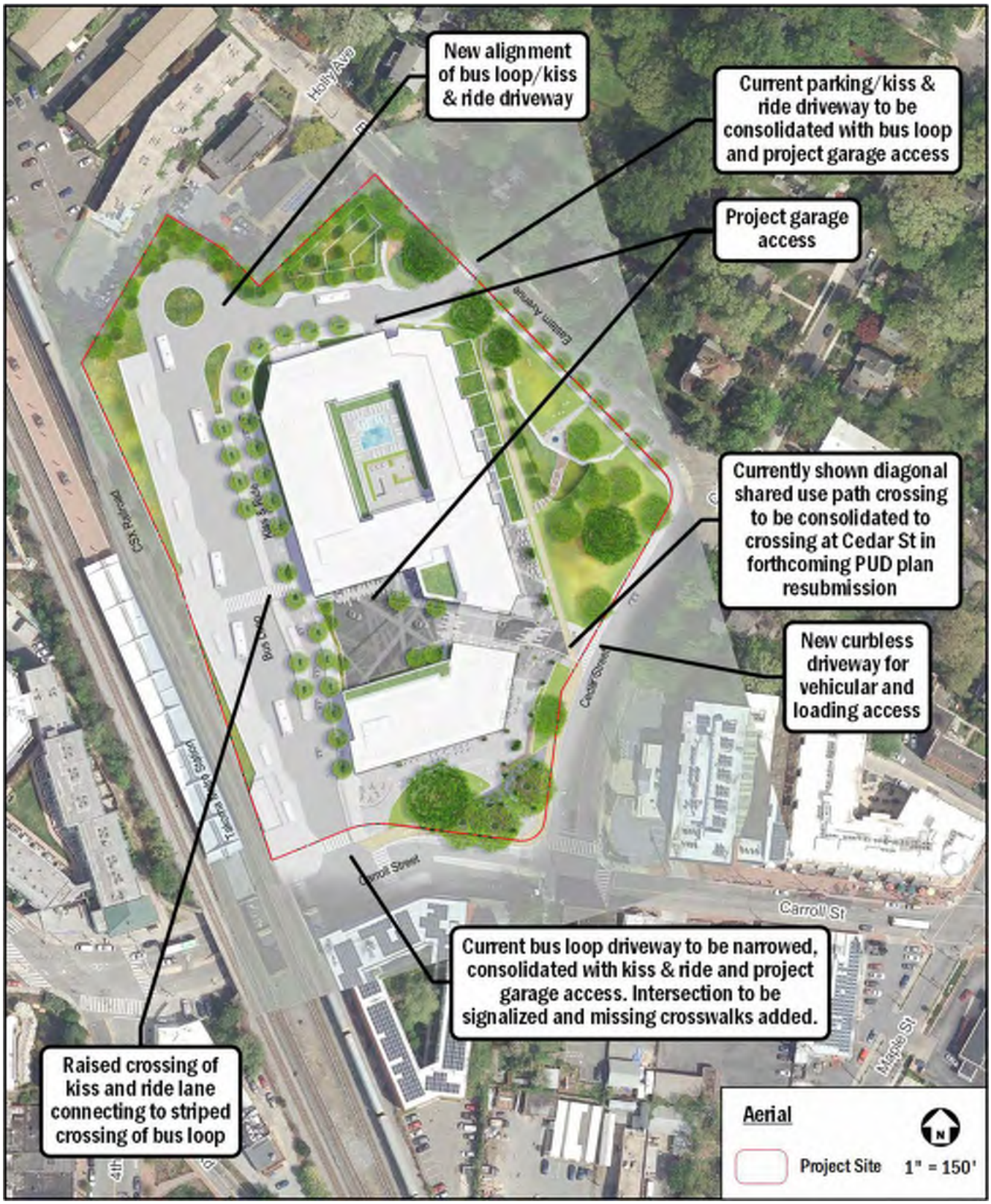


Figure 2: Site Aerial

Study Area Overview

This chapter reviews the major transportation characteristics of the study area and of future local and regional projects.

This chapter concludes:

- The site is surrounded by an extensive regional and local transportation system connecting it to the rest of the District and surrounding areas;
- The site is served by bus and rail transit providing service to local and regional destinations;
- The site is accessible to several shared mobility options, including car-sharing, Capital Bikeshare, and personal mobility devices;
- There are several on- and off-street bicycle facilities near the site, with several nearby bicycle improvements planned or proposed;
- The existing pedestrian infrastructure surrounding the site provides a mostly adequate walking environment; and
- There are several nearby District-wide and local planning initiatives whose goals are supported by the Project.

Major Transportation Features

Overview of Regional Access

As shown in Figure 3, the site has ample access to regional vehicular and transit options that connect the site to destinations within the District, Maryland, and Virginia.

The site is accessible via Carroll Street NW, a minor arterial, and Eastern Avenue NW and Cedar Street NW, collectors, which connect the site to principal arterials such as Georgia Avenue NW, Missouri Avenue NW, and New Hampshire Avenue NW which becomes a designated major highway in Montgomery County, Maryland. These principal arterials and highways connect with expressways within the District and Maryland such as the Capital Beltway (I-495), the Anacostia Freeway (DC-295), the Southeast Freeway (I-695), and the Southwest Freeway (I-395). These expressways connect with other regional Interstates.

The site is located adjacent to the Takoma station on the Red Line, which travels between the Glenmont and Shady Grove stations by way of downtown Washington, DC.

Overall, the site has ample access to regional roadways and transit options, allowing convenient travel between the site and regional destinations.

Overview of Local Access

There are a variety of major local transportation facilities near the site that serve vehicular, transit, walking, and cycling trips, as shown on Figure 4.

Primary vehicular access to the parking garage will occur from a new internal curbless driveway with internal turnaround accessed from Cedar Street. Additional access to the lower parking level will be provided via an access to the relocated WMATA bus loop on the Eastern Avenue side of the site. Additionally, the Project will include a curbside lay-by area on its Carroll Street frontage which will accommodate either curbside parking or pick-up/drop-off activity, or a combination of both, with the ultimate curbside use to be determined during the Public Space process.

Loading access will be provided from the new internal curbless driveway with turnaround accessed from Cedar Street that will allow for head-in and head-out maneuvers to and from the public street network.

For local transit trips, Metrorail, Metrobus and Montgomery County Ride-On provide transit service immediately adjacent to the Project at the Takoma Metro Station. As shown in Figure 4, there are several bus routes stopping within a half-mile of the site. These bus routes connect the site to areas throughout Washington, DC and Maryland, including several Metro stations where transfers can be made to reach further areas in the District, Maryland, and Virginia. A detailed review of all bus routes and transit stops within a half-mile walk of the site is provided in the Transit Facilities chapter of this report.

For bicycle trips, the site is located 0.1 miles from the protected bike lanes on Piney Branch Road NW and the bike trail along Takoma Avenue and Fenton Street in Takoma Park. The site is also adjacent to the future extension of the Metropolitan Branch Trail which is expected to open in 2024. Using these facilities, bicyclists have access to several other regional bicycle facilities. To accommodate bicyclists, the Project will provide on-site bicycle facilities as discussed in detail in the Project Design chapter. A detailed review of existing and proposed bicycle facilities and connectivity is provided in the Bicycle Facilities chapter of this report.

Anticipated pedestrian routes such as those to transit stops, schools, and community amenities, provide adequate pedestrian facilities; however, there are some sidewalks nearby that do not meet DDOT width standards some street segments missing sidewalks altogether, and several missing curb ramps and crosswalks at minor intersections. The nearby CSX and Metrorail tracks also form a pedestrian connectivity barrier in the area where one must travel south to Carroll Street or north to Piney Branch Road to cross to/from the west. A detailed review of existing and future pedestrian access and infrastructure is provided in the Pedestrian Facilities chapter of this report.

The Project includes improving the pedestrian network around and within the site with improved sidewalks around portions of the site perimeter and signalization, addition of curb extensions and completion of the missing crosswalk at the Carroll Street intersection with the relocated bus loop.

Carsharing

Two (2) carsharing companies provide service in the District: Zipcar and Free2Move. Both services are private companies that provide registered users access to a variety of automobiles. Of these, Zipcar has designated spaces for their vehicles. The nearest Zipcar location to the site is located near the intersection of Maple Street and Vine Street NW, approximately 0.1 miles southeast of the site.

Carsharing is also provided by Free2Move, which provides point-to-point carsharing. Free2Move currently has a fleet located within areas of the District and Arlington County. Free2Move vehicles may park in any non-restricted metered curbside parking space or Residential Parking Permit (RPP) location in any zone throughout the defined “Home Area”. Members do not have to pay the meters or pay stations. Free2Move does not have permanent designated spaces for their vehicles; however, availability is tracked through their website and mobile phone application, which provides an additional option for car-sharing patrons.

Bikeshare and Shared Mobility

The Capital Bikeshare program provides an additional bicycle option for residents, staff, and visitors of the Project. The program has placed over 600 bikeshare stations across the Washington, DC metropolitan area with over 5,000 bicycles in the fleet.

In addition to Capital Bikeshare, eight (8) electric-assist scooter (e-scooter) and electric-assist bicycle (e-bike) companies provide Personal Mobility Device (PMD) service in the District: Bird, Lime, Lyft, Razor, Skip, Spin, Helbiz, and JUMP. These PMDs are provided by private companies that give registered users access to a variety of e-scooter and e-bike options. These devices are used through each company-specific mobile phone application. Many PMDs do not have designated stations where pick-up/drop-off activities occur like with Capital Bikeshare; instead, many PMDs are parked in public space, most commonly in the “furniture zone” (the portion of sidewalk between where people walk and the curb, often where other street signs, street furniture, trees, parking meters, etc. are found). Currently, PMD pilot/demonstration programs are underway in Arlington County, the District, Fairfax County, the City of Alexandria, and Montgomery County.

Walk Score and Bike Score

Walkscore.com is a website that provides scores and rankings for walking, biking, and transit conditions within neighborhoods of the District. Based on this website, the site has a walk score of 79 (or “Very Walkable”), a transit score of 73 (or “Excellent Transit”), and a bike score of 79 (or “Very Bikeable”). The following conclusions can be made based on the data obtained from Walkscore.com:

- The site is located in a very walkable location where most errands can be accomplished on foot;
- The site is located in an area where transit is convenient for most trips; and
- The site is located in a very bikeable area where biking is convenient for most trips.

The Project will directly improve the neighborhood’s pedestrian and bike accessibility by ensuring sidewalks on the Project site meet DDOT standards, improving the Carroll Street intersection with the bus loop, by providing a new shared use path along the Project’s southern and eastern sides, and by providing new short- and long-term bicycle parking facilities.

Future Projects

There are several District initiatives located in the vicinity of the site. These planned and proposed projects are summarized below.

Planning Documents

The following is a review of District-wide or neighborhood-level planning documents which relate to the Project.

MoveDC

MoveDC is the District's long-range transportation plan which provides a framework of goals and policies that will guide transportation decisions in the District over a 25-year period. The *MoveDC* plan is oriented around the goals of safety, mobility, management and operations, enjoyable spaces, equity, project delivery, and sustainability.

Included in *MoveDC* are Mobility Priority Network maps for bicycles, surface transit, and freight. These maps do not identify specific projects or improvements, but are intended to guide future decisions about which projects will be selected and developed. The Mobility Priority Network maps identify the following improvement areas near the Project:

- Bicycle improvements on Eastern Avenue NW, Alaska Avenue NW, Kalmia Road NW; Dahlia Street NW, Aspen Street NW, 3rd Street NW, and Kansas Avenue NW; and
- Transit priority treatments on Georgia Avenue NW.

Vision Zero Action Plan

DDOT's *Vision Zero Action Plan* is the implementation strategy of DC's Vision Zero Initiative, which commits to reaching zero fatalities and serious injuries to travelers of DC's transportation system by the year 2024. The *Action Plan* is based on DC interagency workgroups, public input, local transportation data and crash statistics, and national and international best practices. Workgroups identified the guiding themes for the *Vision Zero Action Plan* and the goals of the DC government. The *Action Plan* focuses on the following themes:

- Create Safe Streets
- Protect Vulnerable Users
- Prevent Dangerous Driving
- Be Transparent and Responsive

Strategies within each theme assign lead and supporting agencies responsible for the planning and implementation of each program. The plan also calls for partners external to District government to ensure accountability and aid in implementation.

While the *Vision Zero Action Plan* does not propose any location-specific actions that relate to the Project, the Project supports DC's overall Vision Zero goals by providing new short- and long-term bicycle parking facilities and by ensuring sidewalks along the Project's perimeter meet DDOT standards and provide a safe, attractive pedestrian experience.

Capital Bikeshare Development Plan

DDOT's *Capital Bikeshare Development Plan* was originally released in 2016 to guide the continued growth of Capital Bikeshare in the District of Columbia. The most recent update of the *Development Plan* was released in 2020 and includes the following:

- A proposed station at Blair Street and Geranium Street, 0.5 miles from the Project; and
- A proposed station at 9th Street and Butternut Street NW, 0.5 miles from the site Project.

Rock Creek East I Livability Study

The study was undertaken by DDOT to investigate opportunities to improve the daily quality of life of residents, patrons, and employees that commute to, from, or through the study area. To meet this goal, DDOT analyzed the local street network and identified actions which could be taken to increase safety and improve connectivity and accessibility. The study was finalized in December 2020. The study goals included:

- Development of a comprehensive approach to traffic calming and operational improvements for all users living in and visiting the area;
- Identifying specific issues that impact safety and comfort of multimodal users while also accommodating freight and delivery needs;
- Designing cost-effective and measurable improvements that benefit all users;
- Reducing vehicle speeds where problems have been measured or observed;
- Emphasizing safety and access improvements around neighborhood facilities including, but not limited to schools, churches, parks recreation centers, and other key community facilities; and
- Enhancing comfort and livability for residents and visitors to the project areas.

The study recommends improvements for pedestrians (visibility, sidewalks), bicyclists (additional facilities and bikeshare locations), transit users (making bus stops more accessible), and overall safety (signal optimization reviews).

In direct relation to the Project study area, the Rock Creek East I Livability Study recommends roadway safety improvements at the intersection of Piney Branch Road and Eastern Avenue NW,

some of which have already been implemented. These improvements include bike lanes on Piney Branch Road NW, high-visibility crosswalks with a pedestrian refuge median, and curb bulb-outs with planting areas.

Metropolitan Branch Trail extension

When completed, the Metropolitan Branch Trail (MBT), will be an eight-mile trail that runs from Union Station in the District of Columbia to Silver Spring in Maryland. Following the Metropolitan Branch Line of the Baltimore and Ohio (B&O) Railroad, the trail passes through numerous vibrant and historic neighborhoods as well as connecting to the National Mall. The latest section being designed connects the Fort Totten Metro Station to the Takoma neighborhood. This section of the MBT will provide pedestrians and bicyclists with a convenient and safe on- and off-street route while traveling between Fort Totten and Takoma area. The section is anticipated to be constructed by summer 2024.

Planned Developments

There are eight (8) planned development projects identified in the vicinity of the Project. For the purpose of this analysis and consistent with DDOT and industry standards, only approved or planned developments expected to be completed prior to the Project with an origin/destination within the study are included. Developments were included based on their proximity to the Project and whether their site-generated volumes would impact the study area intersections. It is noted that additional sites are located in the area that could be redeveloped; however, only sites with current development approvals/plans were considered.

Figure 5 shows the location of the background development projects considered in relation to the Project. The projects are described below.

Fern Street Townhomes

This development will include 140 townhomes and condominiums along Fern Street NW. This development was analyzed using ITE *Trip Generation*, 11th Edition and is expected to generate 30 peak hour trips in the morning and 36 peak hour trips in the afternoon. This development is expected open in 2023.

The Hartley

This development includes 323 residential units, a 42,000 square foot grocer, and 18,000 square feet of additional retail. The development also includes 300 underground parking spaces. This development was analyzed using ITE *Trip Generation*, 11th Edition and is expected to generate 148 peak hour trips in the morning and 329 peak hour trips in the afternoon. This development is now open but was still under construction when traffic count data was collected.

Kite House

This development is located at 1000 Butternut Street NW and includes 109 residential units. This development was analyzed using the ITE *Trip Generation*, 11th Edition and is expected to generate 16 peak hour trips in the morning and 19 peak hour trips in the afternoon. This development is now open but was still under construction when traffic count data was collected.

Reynard

This development will include 345 residential units between The Parks Marketplace and Great Lawn. This development was analyzed using ITE *Trip Generation*, 11th Edition and is expected to generate 63 peak hour trips in the morning and 61 peak hour trips in the afternoon. This development is currently under construction and is expected to open before the Takoma Metro Multifamily Project.

Aspen Square at The Parks

The development will include approximately 50 townhouses along Aspen Street between 14th Place and Luzon Avenue NW. This development was analyzed using ITE *Trip Generation*, 11th Edition and is expected to generate 17 peak hour trips in the morning and 19 peak hour trips in the afternoon. This development is expected open in 2023.

The Arbor at Takoma

This development located at 218 Cedar Street NW includes 36 residential units, and 9,182 square feet of commercial space. This development was analyzed using ITE *Trip Generation*, 11th Edition and is expected to generate 10 peak hour trips in the morning and 29 peak hour trips in the afternoon. This development is now open but was still under construction when traffic count data was collected.

Gilbert & Wood

This development will include 19,605 square feet of retail and 10,000 square feet of office space. This development was analyzed using ITE *Trip Generation*, 11th Edition and is expected to generate 20 peak hour trips in the morning and 57 peak hour trips in the afternoon. An opening year for this development is not known; it was included in this analysis to provide a conservatively high estimate of background development traffic.

225 Vine Street

This planned matter-of-right development is expected to include 28 residential units. This development was analyzed using ITE *Trip Generation*, 11th Edition and is expected to generate no peak hour trips in the morning and three (3) peak hour trips in the afternoon. An opening year for this development is not known; it was included in this analysis to provide a conservatively high estimate of background development traffic.

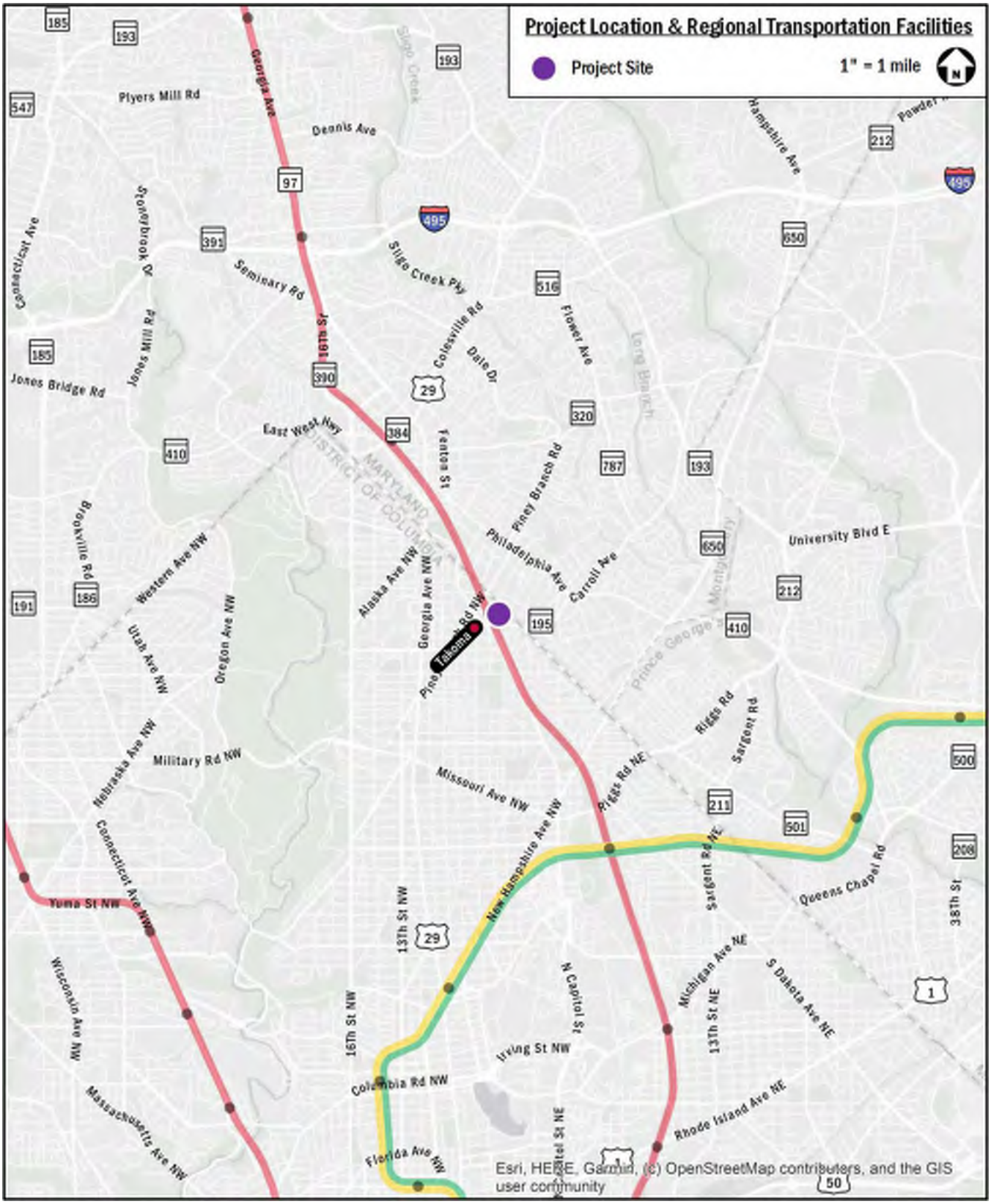


Figure 3: Major Regional Transportation Facilities

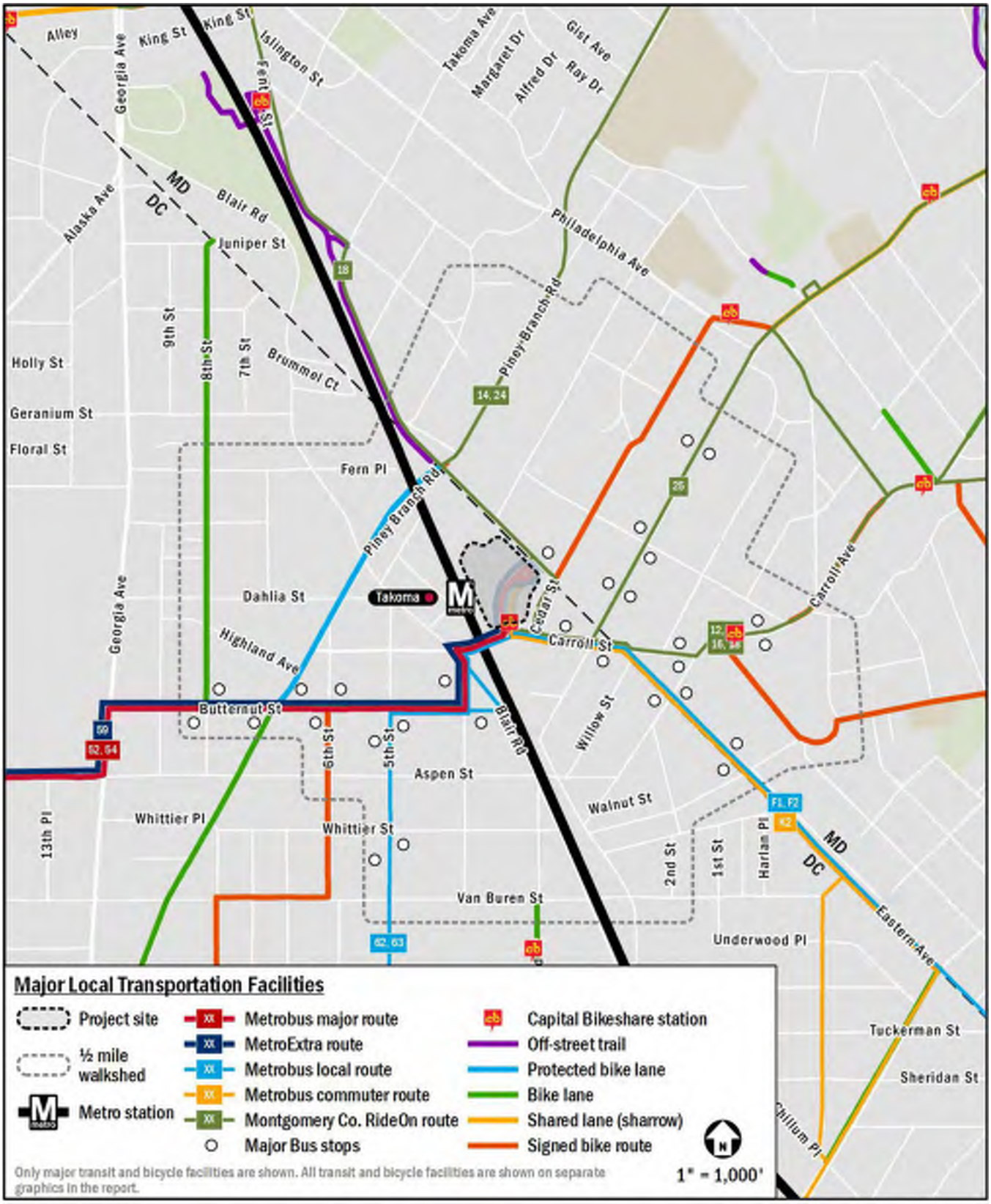


Figure 4: Existing Major Local Transportation Facilities



Figure 5: Background Developments

Project Design

This section reviews the transportation components of the Project, including the proposed site plan and access points. It includes descriptions of the Project's vehicular access, pick-up/drop-off operations, parking, and pedestrian and bicycle accommodations.

The Project is generally bounded by bounded by Eastern Avenue NW to the northeast, Cedar Street NW to the east, Carroll Street NW to the south, and the Takoma Metro station to the west.

The existing site is currently improved with a Metro parking/kiss-and-ride lot, bus loop, and green space. The Project proposes to reconfigure the WMATA metro station and bus facilities and develop the northern portion of the site with a mixed-use development with approximately 440 multifamily residential units and 17,650 square feet of ground-floor retail space.

Additionally, the proposed Project includes the removal of one driveway (the current bus access driveway at Eastern Avenue NW) and the addition of one driveway (from Cedar Street NW between Carroll Street and Eastern Avenue). The proposed project also includes relocating the existing bus loop and consolidating it with the kiss-and-ride function.

The residential building and retail uses will be served by approximately 230 parking spaces in a garage.

The Project also includes a new traffic signal at the Carroll Street intersection with the reconfigured bus-loop/WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

Detailed site plans are shown on Figure 6 and Figure 7, and Figure 8.

Site Access and Circulation

Pedestrian Access

Pedestrian access to the Project's residential component is to be located via the lobby on the Cedar Street side of the Project. Pedestrian access to the Project's retail component is to be located via several retail entrances on the Carroll Street side of the Project.

Pedestrian access to the Project is shown on Figure 6 and Figure 7.

Bicycle Access

Bicycle access to the Project will be provided at the short-term bicycle racks around the perimeter of the site and in a publicly accessible area within the garage, and the long-term bicycle parking spaces in the garage accessed from the new internal driveway/turnaround off Cedar Street. As requested by DDOT, all residential long term bike parking will be provided on Level 1.

The Project is located 0.1 miles from the protected bike lanes on Piney Branch Road NW and the bike trail along Takoma Avenue and Fenton Street in Takoma Park. The site is also adjacent to the future extension of the Metropolitan Branch Trail which is expected to open in 2024.

The Project will meet zoning requirements by providing at least 149 long-term bicycle parking spaces inside the building and at least 27 short-term bicycle parking spaces on exterior racks along the site's frontage and in a publicly accessible area within the garage.[1]

The long-term bicycle spaces will adhere to Subtitle C § 805.9 of DC's zoning requirements, as well as DDOT's *Bike Parking Guide*, which stipulate that long-term spaces be located indoors in a parking garage or bike storage room, and that at least 75 long-term spaces (50% of the total) be placed horizontally on the floor or ground, without bicycles being suspended. Additionally, at least eight (8) of the long-term spaces (5% of the total) will be 10' x 3' spaces to accommodate cargo/tandem bikes, and at least 15 of the long-term spaces (10% of the total) will include electrical outlets for e-bikes and scooters. The exact location of the short-term bicycle parking spaces around the site perimeter is still to be determined.

The locations of these facilities are shown on Figure 7 and Figure 8.

[1] Bike parking totals assume a development program of 440 dwelling units and 17,650 SF of retail. Final bike parking totals may be adjusted based on the ZR16 requirements for the final development program.

Vehicular Access

Vehicular access to the parking garage will occur from a new internal curbless driveway with turnaround accessed from Cedar Street NW. Additional access to the lower parking level will be provided from the relocated bus-loop on the Eastern Avenue side of the site.

The following curb cut modifications will occur with the Project:

- One (1) existing curb cut removed on Eastern Avenue (serving the former bus loop);
- One (1) new curb cut on Cedar Street (serving the new internal driveway/turnaround). This curb cut will include an apron ramping up to a curbless driveway; and
- Reconstruction and relocation of the two (2) existing curb cuts to remain on Eastern Avenue and Carroll Street.

Figure 6 and Figure 7, and Figure 8 show the locations of the vehicular access points for the parking garage.

Proposed Traffic Signal

A new traffic signal is proposed at the Carroll Street intersection with the relocated bus-loop/WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

Signal warrants were performed at this intersection using methodologies prescribed in the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD). Of the eight (8) warrants outlined in the MUTCD, Warrant 3 (Peak Hour) and Warrant 4 (Pedestrian Peak Hour Volume) were performed for this analysis. These warrants are included in the Technical Attachments.

The Peak Hour warrant was not met based on Total Future traffic volumes.

The Pedestrian Peak Hour Warrant was not met based on Total Future traffic volumes and existing pedestrian volumes collected in May 2022. However, it is noted that adjusting the May 2022 pedestrian volumes based on growth to pre-pandemic levels and the addition of site-generated pedestrian volumes would trigger this warrant. As shown in Table 1, system-wide WMATA rail ridership was at 36% of pre-pandemic levels in May 2022 when traffic and pedestrian counts were collected. Growing the May 2022 volumes accordingly, as well as adding in estimated site-generated pedestrian trips would result in 239 and 213 pedestrian trips at the west leg of the intersection in the AM and PM peak hours, respectively. Using these volumes would place pedestrian volumes substantially closer to the Pedestrian Peak Hour Warrant threshold.

In addition to better accommodating pedestrian volumes, a traffic signal would allow for more efficient bus operations, particularly for left turns into and out of the bus loop.

Given the high volume of pedestrians, entering Kiss-and-Ride traffic and two-way bus traffic, a traffic signal is needed to facilitate Metro station traffic at this location.

Table 1: Estimated Pedestrian Trips at West Leg of Carroll Street and Bus Loop Intersection

	AM Peak Hour	PM Peak Hour
Existing pedestrians using west leg of intersection	84	73
Growth to pre-pandemic levels [1]	149	130
Site-generated pedestrians [2]	6	10
Total Estimated Pedestrians	**239**	**213**

[1] Based on WMATA Metro Ridership Snapshot from May, which says rail ridership was at 36% of pre-pandemic levels on weekdays.
[2] Based on pedestrian trip generation outlined in Table 4, routed based on the site trip distributions shown in Figures 20 and 21, and assuming 50% of pedestrians traveling through this intersection used the crosswalk on the west leg.

Pick-up/Drop-off Access

Pick-up/drop-off access will occur from the new internal curbless driveway with turnaround accessed from Cedar Street NW. A new layby PUDO zone is being added along the driveway adjacent to the residential lobby. This update will be reflected in a forthcoming PUD plan resubmission. Additionally, the Project will include a curbside lay-by area on its Carroll Street frontage which will accommodate either curbside parking or pick-up/drop-off activity, or a combination of both, with the ultimate curbside use to be determined during the Public Space process. Pick-up/drop-off access is shown on Figure 6 and Figure 7.

Loading and Trash

Loading

The proposed loading facilities will accommodate all loading activity and delivery demand for the Project without any detrimental impact to the surrounding transportation network. DDOT standards stipulate that truck movements be accommodated without back-in movements through public space. The Project has been designed to accommodate all loading activity and associated backing maneuvers within the

site. Truck turning diagrams using AutoTURN are provided in the Technical Attachments.

Loading and deliveries will occur in two (2) internal loading areas. The residential loading area will contain one (1) 12' x 30' loading berth and one (1) 10' x 20' service/delivery space. The retail loading area will contain one (1) 12' x 30' loading berth. Therefore, the Project will be serviced by a total of two (2) 12' x 30' loading berths and one (1) 10' x 20' service/delivery space, exceeding zoning requirements for the Project. Access to both loading areas will be provided from the new internal curbless driveway with turnaround accessed from Cedar Street NW.

Near the site, Eastern Avenue, Georgia Avenue, and Blair Road are designated as truck and bus through routes, and truck restrictions are in place along Aspen Street, Dahlia Street, and Blair Road north of Piney Branch Road.

A Loading Management Plan (LMP) is included in a later section of this report.

Loading access and circulation is shown on Figure 6 and Figure 7.

Trash

Trash for the Project will be accommodated using trash receptacles within the loading areas. No trash will be stored in public space or within the alleys or private driveways.

Parking

The Project proposes 230 parking spaces within a garage.

The Project's baseline ZR16 requirement is 164 parking spaces. Accounting for the Project's proximity to Metrorail, ZR16 11C702 allows for a reduction of 50%, reducing the ZR16 required parking for the site to approximately 82 spaces.

The Project's proposed parking supply of 230 spaces is 66 spaces greater than the baseline ZR16 requirement (before reductions) of 164 spaces. Since the Project does not exceed the baseline ZR16 requirement (before reductions) by greater than double or by greater than 100 spaces, no mitigation is required to comply with ZR16 regulations for parking.

Based on the Project's location less than ¼ mile from Metrorail the Project's DDOT-preferred parking maximum is 128 spaces. The Project's proposed parking supply of 230 spaces is 80% higher than the DDOT-preferred maximum. Therefore, enhanced/additional TDM commitments are included as part of the Project's proposed TDM plan.

The Project proposes to provide a minimum of five (5) of the 230 provided parking spaces with electric vehicle (EV) stations.

The parking garage's location and access points within the Project are shown on Figure 6, Figure 7, and Figure 8.

Curbside Management

Existing curbside designations within two (2) blocks of the Project are shown on Figure 9.

The Project is proposing curbside changes along portions of Carroll Street at the site frontage and below the bridge. These changes include either parking or a pick-up/drop-off zone along the site frontage along the westbound side of Carroll Street and kiss-and-ride spaces along the westbound side beneath the bridge.

All proposed changes are subject to Public Space Committee approval.

Bicycle Facilities

The Project will meet or exceed 2016 Zoning Regulations requirements for long-term and short-term bicycle parking. Per the Zoning Regulations, the Project is required to provide bicycle facilities using the rates listed in Table 2.

Further, per Subtitle C § 802.2, "after the first fifty (50) bicycle parking spaces are provided for a use, additional spaces are required at one-half (0.5) the ratio specified in Subtitle C § 802.1."

The Project will meet or exceed zoning requirements by providing at least 149 long-term bicycle parking spaces. All residential long term bike parking will be located inside a bike room on Level 1, and at least 27 short-term bicycle parking spaces on exterior racks along the Project's frontage and in a publicly accessible area within the garage. The exact location of the short-term bicycle parking spaces is still to be determined. The long-term bicycle spaces will adhere to Subtitle C § 805.9 of DC's zoning requirements, as well as DDOT's Bike Parking Guide, which stipulate that long-term spaces be located indoors in a parking garage or bike storage room, and that at least 50% of required long-term spaces be placed horizontally on the floor or ground, without bicycles being suspended.

In addition to long- and short-term bike parking, the Project will provide a shared use path along the Project's southern and eastern sides, which will connect with the Metropolitan Branch Trail extension.

Table 2: Bike Parking Requirements

Land Use	Size	ZR16 Bicycle Parking Rate		ZR16-required Bicycle Parking Spaces [1]		DCMR 18-1214 Calculation [2]	DCMR 18-1214 Requirement	Proposed Bicycle Parking Spaces	
		Long Term	Short Term	Long Term	Short Term	Long Term	Long Term	Long Term	Short Term
Residential	440 DU	1 per 3 du's	1 per 20 du's	98	22	1 per 3 du's	146.67	147	22
Retail	17,650 SF	1 per 10,000 sf	1 per 3,500 sf	2	5	N/A	N/A	2	5
Total				**100**	**27**		**146.67 (147)**	**149**	**27**

[1] Rate applied at 50% after first 50 spaces per ZR16 11C802.2
[2] No 50% reduction after first 50 spaces

Pedestrian Facilities

The Project will include a reconfiguration of the bus loop/driveway serving the Takoma Metro station, as well as reconfigure the open space on the Project site. These reconfigurations will include sidewalks along the perimeter of the site, as well as internal walkways and a shared use path through the site which will improve the porosity of the overall pedestrian network in the Project area.

A new traffic signal is proposed at the Carroll Street intersection with the relocated bus-loop/WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

Transportation Demand Management

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce travel demand or to redistribute demand to other times or spaces. TDM elements typically focus on reducing the demand of single-occupancy, private vehicles during peak period travel times or on shifting single-occupancy vehicular demand to off-peak periods.

The development does trigger intersection mitigation at one location, and the proposed parking supply exceeds DDOT's preferred parking maximums. Per the DDOT CTR guidelines, where a development's proposed parking supply is greater than 25% higher than DDOT's preferred maximum parking and intersection mitigation is triggered, strategies and methodologies of the Enhanced Plus Plan highlighted in DDOT's CTR guidance can be adopted to mitigate project impacts. The following is a list of TDM strategies the Applicant proposes for the Project, including Enhanced and Enhanced Plus components.

Overall Project

- Unbundle the cost of vehicle parking from the lease or purchase agreement for each residential unit or commercial lease and charge a minimum rate based on the average market rate within a quarter mile. Only hourly, daily, weekly or monthly rates will be charged. Free parking, validation, or discounted rates will not be offered.
- Identify Transportation Coordinators for the planning, construction, and operations phases of development. The Transportation Coordinators will act as points of contact with DDOT, goDCgo, and Zoning Enforcement and will provide their contact information to goDCgo.
- Transportation Coordinator will conduct an annual commuter survey of building employees and residents on-site, and report TDM activities and data collection efforts to goDCgo once per year for three years.
- Transportation Coordinator will develop, distribute, and market various transportation alternatives and options to residents, employees and [customers, patrons, attendees], including promoting transportation events (i.e., Bike to Work Day, National Walking Day, Car Free Day) on property website and in any internal building newsletters or communications for three years.
- Transportation Coordinator will subscribe to goDCgo's residential newsletter and receive TDM training from goDCgo to learn about the transportation conditions for this project and available options for implementing the TDM Plan

- Provide residents and employees who wish to carpool with detailed carpooling information and will be referred to other carpool matching services sponsored by the Metropolitan Washington Council of Governments (MWCOG) or other comparable service if MWCOG does not offer this in the future.
- Offer a SmarTrip card and one (1) complimentary Capital Bikeshare coupon good for a free ride to every new resident or employee for the initial lease up period of the building operations.
- Provide at least 27 short- and 149 long-term bicycle parking spaces.
- Long-term bicycle storage rooms will accommodate non-traditional sized bikes including cargo, tandem, and kids bikes, with a minimum 5% of spaces (8 for this project) being designed for longer cargo/tandem bikes (10' by 3'), a minimum of 10% of spaces (15 for this project) will be designed with electrical outlets for the charging of electric bikes and scooters, and a minimum of 50% of spaces (75 for this project) will be placed horizontally on the floor. There will be no fee to the residents or employees for usage of the bicycle storage room and strollers will be permitted to be stored in the bicycle storage room.
- Install a minimum of five (5) electric vehicle (EV) charging stations.
- Following the issuance of a Certificate of Occupancy for the Project, the Transportation Coordinator will submit documentation summarizing compliance with the transportation and TDM conditions of the Order (including, if made available, any written confirmation from the Office of the Zoning Administrator) to the Office of Zoning for inclusion in the IZIS case record of the case.
- Following the issuance of a Certificate of Occupancy for the Project, the Transportation Coordinator will submit a letter to the Zoning Administrator, DDOT, and goDCgo every five (5) years (as measured from the final Certificate of Occupancy for the Project) summarizing continued substantial compliance with the transportation and TDM conditions in the Order, unless no longer applicable as confirmed by DDOT. If such letter is not submitted on a timely basis, the building shall have sixty (60) days from date of notice from the Zoning Administrator, DDOT, or goDCgo to prepare and submit such letter.
- Install a Transportation Information Center Display (electronic screen) within the building amenities containing information related to local transportation alternatives. At a minimum the display should include information about nearby Metrorail stations and schedules, Metrobus stops and schedules, car-sharing locations, and nearby Capital Bikeshare locations indicating the availability of bicycles.
- Additional short- and long-term bicycle parking spaces above ZR16 requirements. (Will provide 27 short-term and 149 long-term spaces, exceeding ZR16 requirements of 27 short-term and 100 long-term spaces.)
- Provide a bicycle repair station in the long-term bicycle parking storage room.
- Hold a transportation event for residents, customers, employees, and members of the community once per year for a total of three (3) years. Examples include resident social, walking tour of local transportation options, goDCgo lobby event, transportation fair, WABA Everyday Bicycling seminar, bicycle safety/information class, bicycle repair event, etc.).
- Collect parking demand and trip generation data, annually, for three (3) years after building opening and report this information to DDOT's Planning and Sustainability Division (PSD).

Residential

- Provide welcome packets to all new residents that should, at a minimum, include the Metrorail pocket guide, brochures of local bus lines (Circulator and Metrobus), carpool and vanpool information, CaBi coupon or rack card, Guaranteed Ride Home (GRH) brochure, and the most recent DC Bike Map. Brochures can be ordered from DDOT's goDCgo program by emailing info@godcgo.com.
- Post all transportation and TDM commitments on building website, publicize availability, and allow the public to see what has been promised.

- Provide one (1) collapsible shopping cart (utility cart) for every 50 residential units, for a total of nine (9), to encourage residents to walk to the grocery store and run errands.

Retail

- Post "getting here" information in a visible and prominent location on the website with a focus on non-automotive travel modes. Also, links will be provided to goDCgo.com, CommuterConnections.com, transit agencies around the metropolitan area, and instructions for [customers, attendees, patrons] discouraging parking on-street in Residential Permit Parking (RPP) zones.
- Transportation Coordinator will demonstrate to goDCgo that tenants with 20 or more employees are in compliance with the DC Commuter Benefits Law to participate in one of the three transportation benefits outlined in the law (employee-paid pre-tax benefit, employer-paid direct benefit, or shuttle service), as well as any other commuter benefits related laws that may be implemented in the future such as the Parking Cash-Out Law.
- Provide at least one (1) locker for use by employees.
- Coordinate with [BID, WMATA, ANC] on a way finding plan along walking routes to the property from the Takoma Metro station.

The following additional pedestrian and safety improvements are proposed by the Applicant, subject to DDOT approval.

- Realign and reconfigure the Carroll Street and WMATA bus loop intersection to include the following pedestrian safety improvements:
    - Concrete curb extensions on the northwest corner to replace the existing striping and flex-posts;
    - Expanded concrete median divider on Carroll Street to replace the existing striping and flex-posts;
    - Concrete curb extensions on the south curb of the intersection to replace the existing striping and flex-posts; and
    - New crosswalk on the eastern leg of the intersection, which currently lacks a crosswalk.
- Provide a new mid-block raised pedestrian crossing across the realigned kiss-and-ride lane connecting to a striped crossing of the new bus loop, connecting the Project with the Takoma Metro station entrance.
- Install a traffic signal at the Carroll Street intersection with the realigned bus loop, including pedestrian phasing/signals.

Loading Management Plan

As requested by DDOT during the scoping process, the following Loading Management Plan (LMP) is proposed to be implemented with the Project. The goals of this plan are to maintain a safe environment for all users of the site, loading area, streets, and nearby intersections, minimize undesirable impacts to pedestrians and to employees, reduce conflicts between truck traffic using the loading facilities and other street users, and ensure smooth operation of the loading facilities through appropriate levels of management and schedule operations. The components of the LMP that will be implemented for the life of the Project are as follows:

- A loading dock manager will be designated by the building management who will be on duty during delivery hours. The dock manager will be responsible for coordinating with vendors and tenants to schedule deliveries and will work with the community and neighbors to resolve any conflicts should they arise.
- A lease provision will require all tenants to use only the loading area for all deliveries and move-in and move-out activities.
- All tenants will be required to schedule deliveries that utilize the loading area (any loading operation conducted using a truck 20-feet in length or larger).
- The dock manager will schedule deliveries using the berths such that the dock's capacity is not exceeded. In the event that an unscheduled delivery vehicle arrives while the dock is full, that driver will be directed to return at a later time when a berth will be available so as to not compromise safety or impede the functionality of the internal site driveway or of Cedar Street NW.
- The dock manager will schedule residential loading activities so as not to conflict with retail deliveries.

- The dock manager will monitor inbound and outbound truck maneuvers and will ensure that trucks accessing the loading dock do not block vehicular, bike, or pedestrian traffic within the site driveway except during those times when a truck is actively entering or exiting a loading berth.
- Service vehicle/truck traffic interfacing with traffic on Cedar Street NW and the internal site driveway will be monitored during peak periods and management measures will be taken if necessary to reduce conflicts between truck and vehicular movements.
- The dock manager will monitor the timing of the retail and residential deliveries to see if any adjustments need to be made to ensure any conflicts with the retail loading and residential loading activities are minimized.
- Trucks using the loading dock will not be allowed to idle and must follow all District guidelines for heavy vehicle operation including but not limited to DCMR 20 – Chapter 9, Section 900 (Engine Idling), the goDCgo Motorcoach Operators Guide, and the primary access routes shown on the DDOT Truck and Bus Route Map (godcgo.com/freight). The dock manager will also distribute flyer materials, such as the MWCOG Turn Your Engine Off brochure and others from DDOT and goDCgo, to drivers as needed to encourage compliance with idling laws. The dock manager will also post these materials and other relevant notices in a prominent location within the loading area.
- The dock manager will be responsible for disseminating suggested truck routing maps to the building's tenants and to drivers from delivery services that frequently utilize the development's loading dock as well as notifying all drivers of any access or egress restrictions.

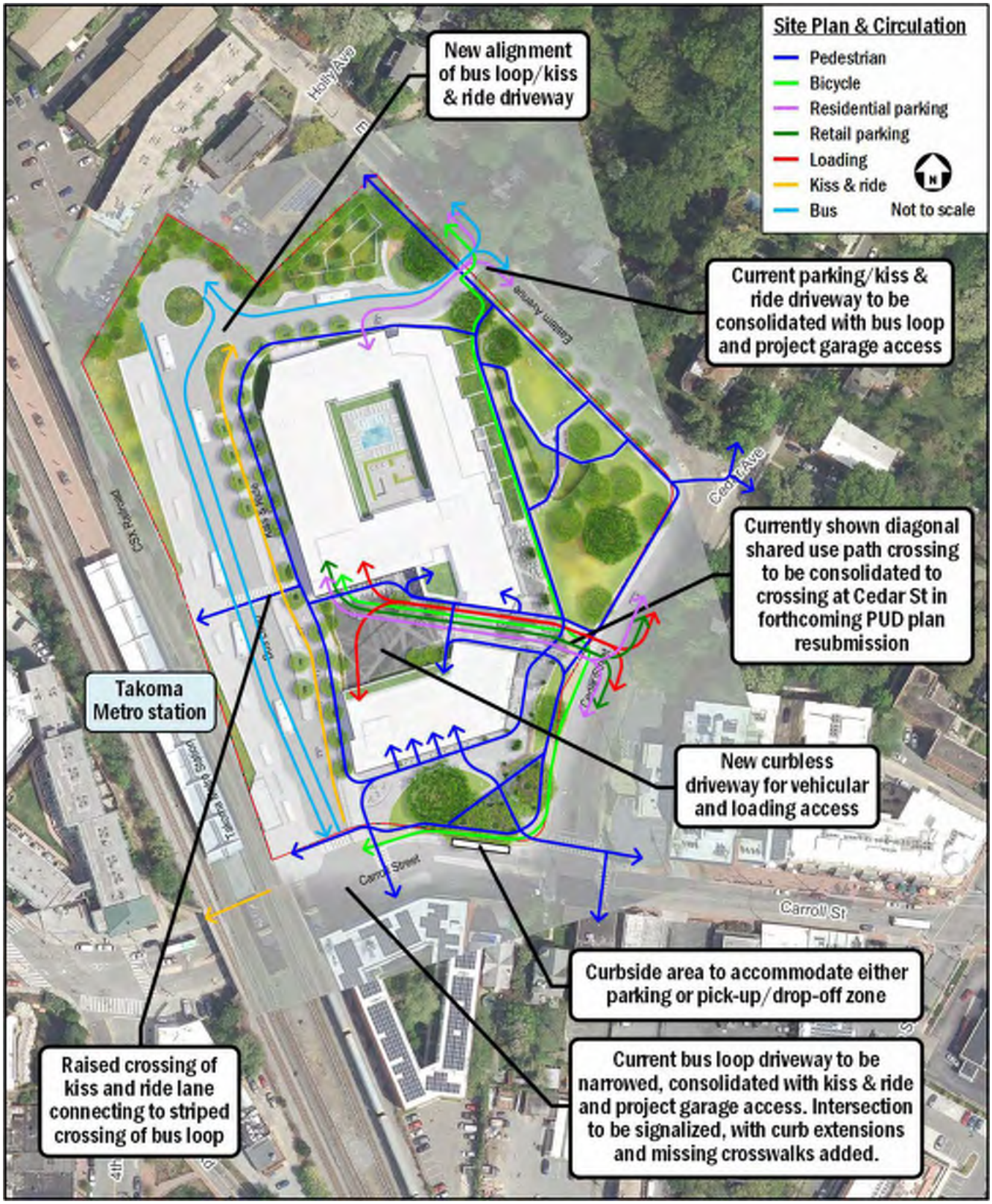


Figure 6: Proposed Site Access and Circulation Plan (Overall)

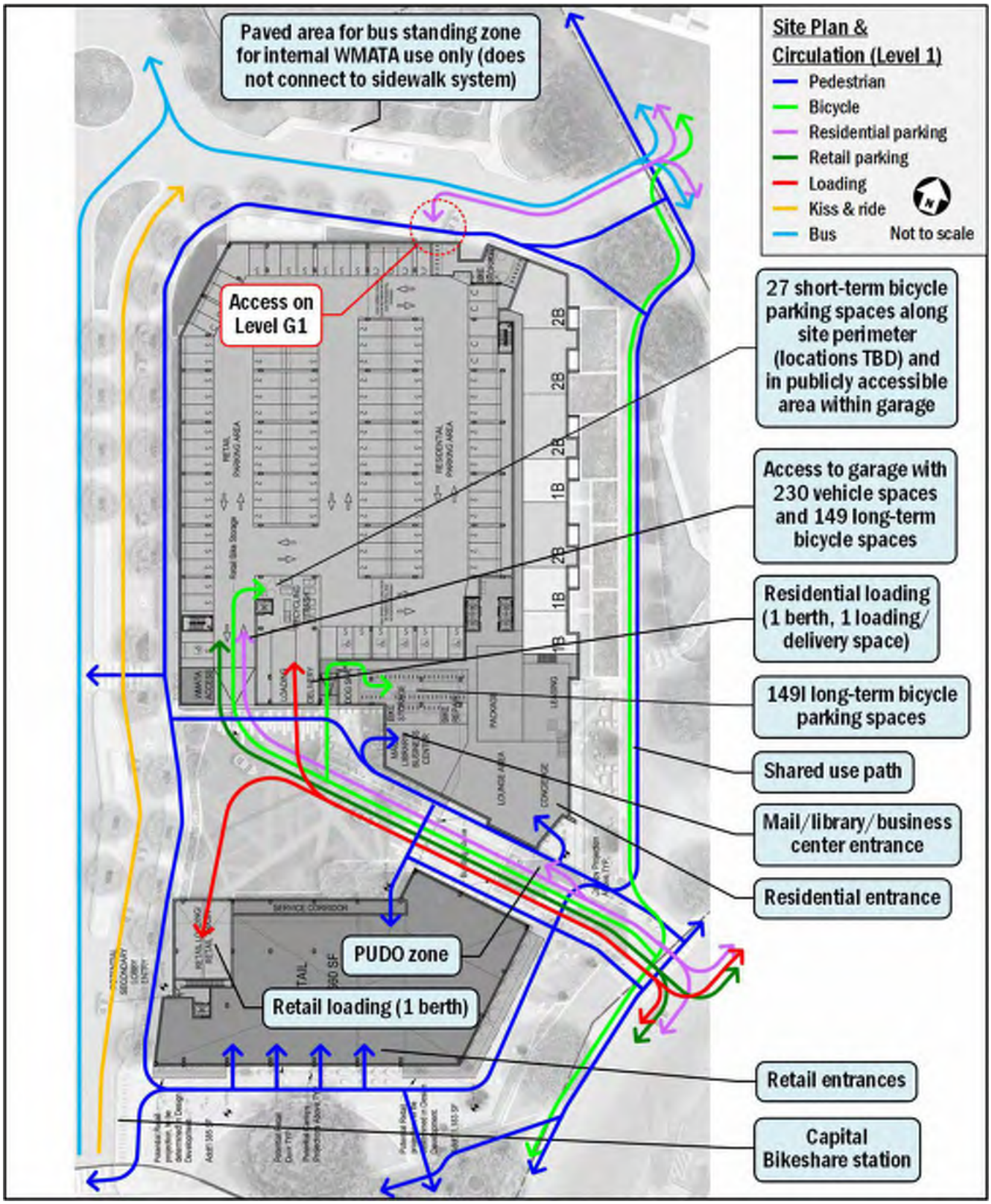


Figure 7: Proposed Site Access and Circulation Plan (Level 1)

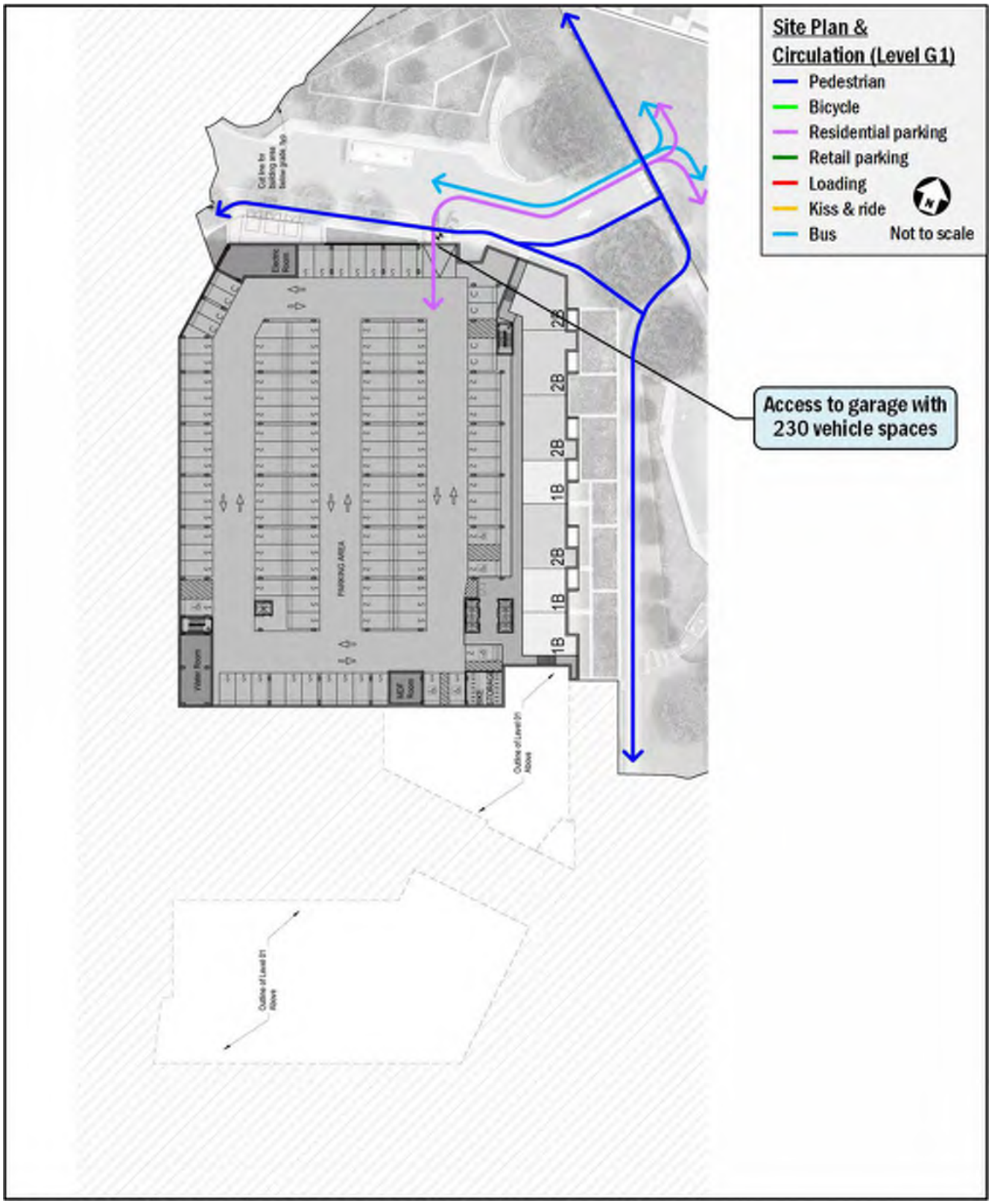


Figure 8: Proposed Site Access and Circulation Plan (Level G1)

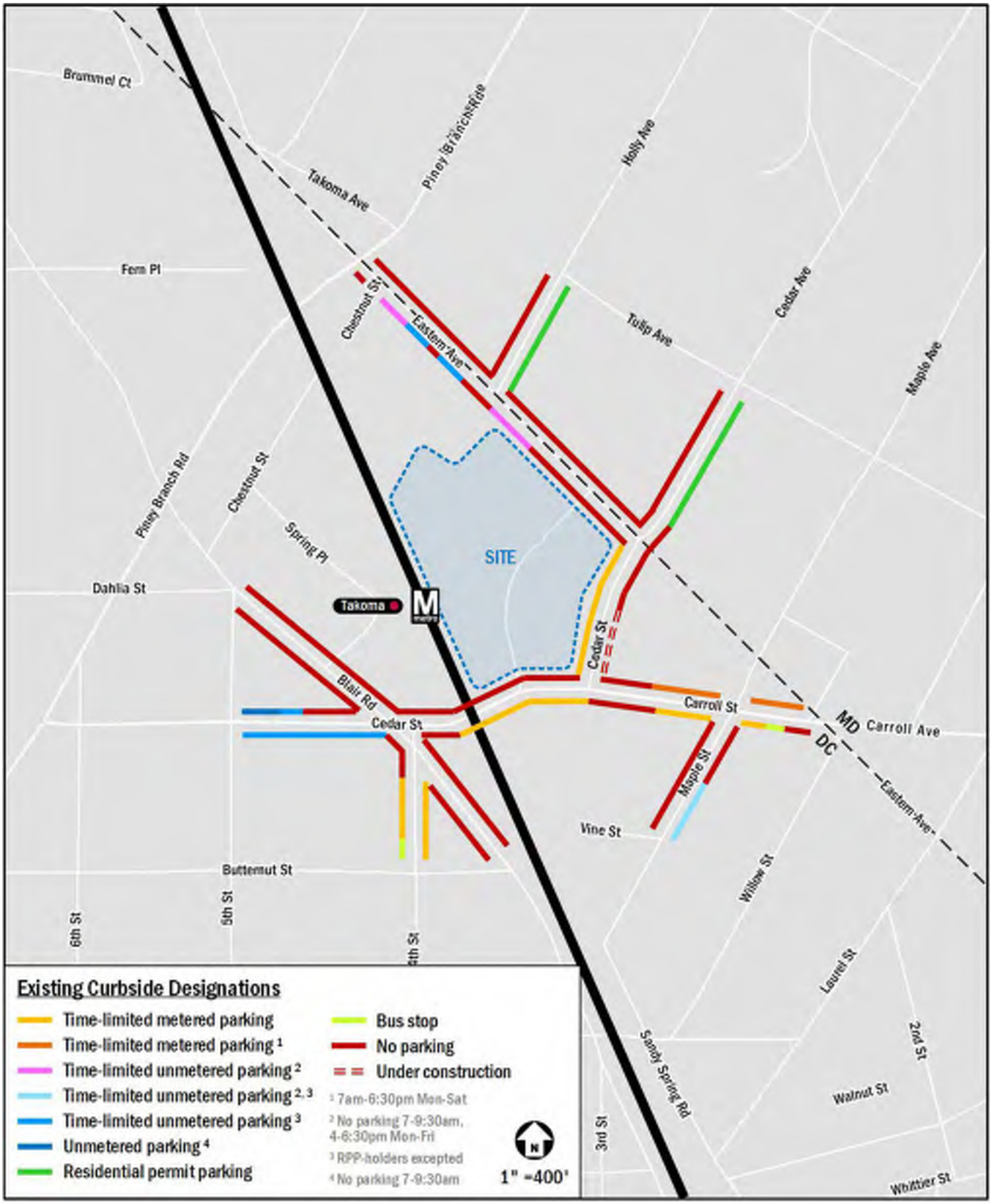


Figure 9: Existing Curbside Designations

Travel Demand Assumptions

This section outlines the transportation demand for the Project. It summarizes the projected trip generation of the Project by mode, which forms the basis for the sections that follow. These assumptions were vetted and approved by DDOT as a part of the scoping process for the study.

Traditionally, weekday peak hour trip generation is calculated based on the methodology outlined in the Institute of Transportation Engineers' (ITE) *Trip Generation*, 11th Edition. This methodology was supplemented to account for the urban nature of the Project (ITE *Trip Generation* provides data for non-urban, low transit use sites) and to generate trips for multiple modes, as vetted and approved by DDOT.

Proposed Site Trip Generation

Multi-modal trip generation was calculated using ITE Trip Generation 10th Edition rates for Land Use 221, *Multifamily Housing (Mid-Rise) (3-10 floors)* and Land Use 822, *Strip Retail Plaza (<40k)*.

Trips were split into different modes using assumptions derived from census data for people that currently live or work near the Project, WMATA ridership survey data, and the proposed parking supply. A summary of the mode split assumptions is provided in Table 3.

Table 3: Mode Split Assumptions

Land Use	Mode			
	Drive	Transit	Bike	Walk
Residential	55%	35%	5%	5%
Retail	35%	35%	5%	25%

A summary of the multimodal trip generation for the Project is provided in Table 4 for the AM and PM peak hours. The Project is expected to generate 115 vehicular trips (33 in, 82 out) during the AM peak hour, and 136 vehicular trips (78 in, 58 out) during the PM peak hour. Detailed calculations are included in the Technical Attachments.

Table 4: Multimodal Trip Generation

Mode	Land Use	Size	Mode Split	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Auto (veh/hr)	Residential	440 du	55%	24	76	100	58	37	95
	Retail	17,650 sf	35%	9	6	15	20	21	41
	Total			**33**	**82**	**115**	**78**	**58**	**136**
Transit (ppl/hr)	Residential	440 du	35%	18	57	75	43	28	71
	Retail	17,650 sf	35%	16	11	27	37	38	75
	Total			**34**	**68**	**102**	**80**	**66**	**146**
Bike (ppl/hr)	Residential	440 du	5%	3	8	11	6	4	10
	Retail	17,650 sf	5%	2	2	4	5	6	11
	Total			**5**	**10**	**15**	**11**	**10**	**21**
Walk (ppl/hr)	Residential	440 du	5%	3	8	11	6	4	10
	Retail	17,650 sf	25%	12	7	19	27	26	53
	Total			**15**	**15**	**30**	**33**	**30**	**63**

Traffic Operations

This chapter provides a summary of an analysis of the existing and future roadway capacity surrounding the Project. Included is an analysis of potential vehicular impacts of the Project.

The purpose of the capacity analysis is to:

- Determine the existing capacity of the study area roadways;
- Determine the overall impact of the Project on the study area roadways; and
- Discuss any potential improvements to accommodate the additional vehicular trips.

This analysis was performed by determining the traffic volumes and roadway capacity for Existing Conditions, Background (no-build) Conditions, and Total Future (build) Conditions. (An additional Background Interim Conditions scenario was included in the analysis for reference only. The Background Conditions which are the basis for the comparison with Total Future Conditions are noted as such in the Traffic Volume Assumptions section of this chapter.) The capacity analysis focuses on the weekday AM and PM commuter peak hours.

This chapter concludes:

- Under Existing Conditions, two (2) study intersections have one or more approaches operating with unacceptable delay, and five (5) study intersections have one or more lane group that exceeds the given storage length.
- Under Background Conditions, three (3) study intersections have one or more approaches operating with unacceptable delay, and five (5) study intersections have one or more lane group that exceeds the given storage length.
- Under Total Future Conditions, three (3) study intersections have one or more approaches operating with unacceptable delay, and five (5) study intersections have one or more lane group that exceeds the given storage length.
- Two (2) study intersections meet DDOT thresholds for mitigation as a result of the proposed development.
- **Overall, this report concludes that the Project will not have a detrimental impact to the surrounding vehicular network with the implementation of all recommended site design elements and Transportation Demand Management (TDM) measures.**

Study Area, Scope, & Methodology

This section outlines the vehicular trips generated in the study area along the vehicular access routes and defines the analysis assumptions.

The scope of the analysis contained within this report was discussed with and agreed upon by DDOT. The general methodology of the analysis follows national and DDOT guidelines on the preparation of transportation impact evaluations of site development. The approved scope is included in the Technical Attachments.

Capacity Analysis Scenarios

The vehicular capacity analyses were performed to determine whether the Project will lead to adverse impacts on traffic operations. A review of potential impacts to other modes is outlined later in this report. This is accomplished by comparing two (2) future scenarios:

- Without the Project (referred to as the Background Conditions); and
- With the Project approved and constructed (referred to as the Total Future conditions).

Specifically, the roadway capacity analysis examines the following scenarios:

- Existing Conditions (2022 Existing Conditions);
- Future Conditions without Metro Station Volume Adjustments or the Project (2027 Background Interim Conditions);
- Future Conditions with Metro Station Volume Adjustments and without the Project (2027 Background Conditions); and
- Future Conditions with Metro Station Volume Adjustments and the Project (2027 Total Future Conditions).

Study Area

The study area of the analysis is a set of intersections where detailed capacity analyses were performed for the scenarios listed above. The set of intersections decided upon during the study scoping process with DDOT are those intersections most likely to have potential impacts or require changes to traffic operations to accommodate the Project. Although it is possible that impacts will occur outside of the study area, those impacts are neither significant enough to be considered a material adverse impact nor worthy of mitigation measures.

Based on the projected future trip generation and the location of the Project access points, the following intersections were selected:

1. Piney Branch Road & Eastern Avenue NW
2. Eastern Avenue NW & Holly Avenue
3. Eastern Avenue NW & Kiss-and-Ride/Relocated Metro Station Driveway
4. Eastern Avenue NW & Removed Metro Station Driveway
5. Eastern Avenue & Cedar Street NW/Cedar Avenue
6. Cedar Street NW & Site Driveway
7. Blair Road & Cedar Street NW
8. Blair Road & 4th Street NW
9. Cedar Street NW & Metro Station Driveway
10. Cedar Street & Carroll Street NW
11. Maple Street & Carroll Street NW

Figure 10 shows a map of the study area intersections.

Geometry and Operations Assumptions

The following section reviews the roadway geometry and operations assumptions made and the methodologies used in the roadway capacity analyses.

2022 Existing Geometry and Operations Assumptions

Gorove Slade made observations and confirmed the existing lane configurations and traffic controls at the intersections within the study area. Existing signal timings and offsets were obtained from DDOT.

The lane configurations and traffic controls for the Existing Conditions are shown on Figure 11.

2027 Background Interim Geometry and Operations Assumptions

The configurations and traffic controls for the 2027 Background Interim Conditions were based on those for the 2022 Existing Conditions with the addition of background improvements.

Following national and DDOT methodologies, a background improvement must meet the following criteria to be incorporated into the analysis:

- Be funded; and
- Have a construction completion date prior or close to the Project.

Based on these criteria, the following improvement was identified for this analysis:

- Metropolitan Branch Trail Extension

The lane configurations and traffic controls for the Background Interim Conditions, which are the same as those of the Existing Conditions, are shown on Figure 11.

2027 Background and 2027 Total Future Geometry and Operations Assumptions

The configurations and traffic controls for the 2027 Background and 2027 Total Future Conditions were based on those for the 2027 Background Interim Conditions with the inclusion of Project-related driveway reconfigurations and alterations at the Carroll Street intersection with the relocated bus-loop.

The Project includes the removal of the current bus access driveway at Eastern Avenue NW and the addition of a new site driveway along Cedar Street NW between Carroll Street and Eastern Avenue. The two other existing site driveways (one connecting to Eastern Avenue NW and one connecting to Carroll Street NW) will be retained but reconstructed with the Project. The Project also includes relocating the right-of-way of the existing bus loop and consolidating it with the Metro station's kiss-and-ride function.

The Carroll Street intersection with the relocated bus-loop was assumed to be signalized with the Project.

The lane configurations and traffic controls for the Background and Total Future Conditions are shown on Figure 12.

Traffic Volume Assumptions

The following section reviews the traffic volume assumptions and methodologies used in the roadway capacity analyses.

2022 Existing Traffic Volumes

The existing traffic volumes are comprised of turning movement count data collected on Thursday, May 19, 2022. The results of these traffic counts are included in the Technical Attachments. For all intersections, the individual morning and afternoon peak hours were used.

The 2022 Existing peak hour traffic volumes are shown in Figure 13.

2027 Background Interim Traffic Volumes (without Metro Station Volume Adjustments or the Project)

Traffic projections for the 2027 Background Interim Conditions consist of the 2022 Existing volumes with the following additions:

- The addition of traffic generated by developments expected to be completed prior to the Project (known as background developments); and
- The addition of inherent growth on the roadway (representing regional traffic growth).

Volumes Generated by Background Developments

Following national and DDOT methodologies, a background development must meet the following criteria to be incorporated into the analysis:

- Be located in the study area, defined as having an origin or destination point within the cluster of study area intersections;
- Have entitlements; and
- Have a construction completion date prior or close to the future analysis year of 2027.

Based on these criteria, and as discussed with and agreed upon by DDOT, eight (8) developments were considered and determined to meet the above criteria. These developments include the following:

1. Fern Street Townhomes
2. The Hartley
3. Kite House
4. Reynard
5. Aspen Square at The Parks
6. The Arbor at Takoma
7. Gilbert & Wood
8. 225 Vine Street

The locations of these developments are shown in Figure 5.

Trip generation for the background developments is based on ITE *Trip Generation,* 11th Edition. The mode splits and trip distribution assumptions for these developments were based on their respective transportation studies where available, or on the same assumptions as the Takoma Metro Multifamily Project. In the case of the Gilbert & Wood and 225 Vine Street developments, auto mode splits were increased 10% from those of the Takoma Metro Multifamily Project due to their increased distance from Metrorail. The available transportation studies are included in the Technical Attachments.

A summary of the trip generation for the background developments is shown in Table 5 and the combined background projects peak hour volumes are shown in Figure 14.

Volumes Generated by Regional Traffic Growth

While background developments represent local traffic changes, regional traffic growth is typically accounted for using growth rates. The growth rates used in this analysis are based on MWCOG's currently adopted regional transportation model, comparing the difference between the year 2022 and 2027 model scenarios. The growth rates observed in this model served as a basis for analysis assumptions, and a conservative 0.10 percent annual growth rate was applied to roadways where a decline in volumes were observed. The applied growth rates are shown in Table 6. The traffic volumes generated by the inherent growth along the network between 2022 and 2027 are shown on Figure 15.

The existing peak hour volumes presented in Figure 13 were combined with the background projects' peak hour volumes shown in Figure 14 and the background growth peak hour volumes shown in Figure 15 to establish the 2027 Background Interim traffic volumes. The traffic volumes for the 2027 Background Interim Conditions are shown in Figure 16.

The Background Interim Conditions are included in this analysis for reference only, and are not the basis for comparison with Total Future Conditions.

2027 Background Traffic Volumes (with Metro Station Volume Adjustments and without the Project)

The 2027 Total Future traffic volumes consist of the following:

- Existing volumes, shown on Figure 13;

- Traffic generated by background developments, shown on Figure 14;
- Inherent growth on study area roadways, shown on Figure 15;
- Existing kiss & ride traffic removed and rerouted per the new Metro station driveway configuration, shown on Figure 17; and
- Existing bus traffic removed and rerouted per the new Metro station driveway configuration, shown on Figure 18.
- **To provide a conservatively high traffic estimate, we have added additional bus and kiss-and-ride traffic to the road network to represent full potential kiss-and-ride use based on historical WMATA metro usage data for pre-covid conditions.**

The existing peak hour volumes presented in Figure 13 were combined with the background projects' peak hour volumes shown in Figure 14, the background growth peak hour volumes shown in Figure 15, the removed/rerouted kiss & ride volumes shown on Figure 17, and the removed/rerouted bus volumes shown on Figure 18 to establish the 2027 Background traffic volumes. The traffic volumes for the 2027 Background Conditions are shown in Figure 19.

The Background Conditions are the basis for comparison with Total Future Conditions.

2027 Total Future Traffic Volumes (with Metro Station Volume Adjustments and the Project)

The 2027 Total Future traffic volumes consist of the following:

- Existing volumes, shown on Figure 13;
- Traffic generated by background developments, shown on Figure 14;
- Inherent growth on study area roadways, shown on Figure 15;
- Existing kiss & ride traffic removed and rerouted per the new Metro station driveway configuration, shown on Figure 17; and
- Existing bus traffic removed and rerouted per the new Metro station driveway configuration, shown on Figure 18; and
- Site-generated volumes, shown on Figure 22.

Site-Generated Volumes

Trip distribution for the site-generated trips was determined based on: (1) Census Transportation Planning Products (CTPP) Traffic Analysis Zone (TAZ) data, (2) existing and future travel patterns in the study area, and (3) previously approved methodologies employed in approved studies in the vicinity of the Project.

Based on this review and the site access locations, the site-generated trips were distributed through the study area intersections. Trip distribution assumptions and specific routings were analyzed for inbound and outbound trips, and for the residential and retail portions of the Project. Inbound and outbound distribution assumptions for the Project are provided in Figure 20 and Figure 21, respectively.

Site-generated peak hour volumes are shown in Figure 22.

The traffic volumes for the 2027 Total Future Conditions are shown on Figure 23.

Table 5: Summary of Background Developments Trip Generation

Development	Trip Generation Source	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Fern Street Townhomes	ITE *Trip Gen.*, 11th Ed.	8	22	30	23	13	36
The Hartley	ITE *Trip Gen.*, 11th Ed.	67	81	148	170	159	329
Kite House	ITE *Trip Gen.*, 11th Ed.	3	13	16	12	7	19
Reynard	ITE *Trip Gen.*, 11th Ed.	14	49	63	37	24	61
Aspen Square at The Parks	ITE *Trip Gen.*, 11th Ed.	4	13	17	12	7	19
The Arbor at Takoma	ITE *Trip Gen.*, 11th Ed.	5	5	10	15	14	29
Gilbert & Wood	ITE *Trip Gen.*, 11th Ed.	12	8	20	29	28	57
225 Vine Street	ITE *Trip Gen.*, 11th Ed.	0	0	0	2	1	3
Total		**113**	**191**	**304**	**298**	**252**	**550**

Table 6: Applied Annual and Total Growth Rates

Roadway	Dir.	Proposed Annual Growth Rate Between 2022 and 2027		Proposed Total Growth Between 2022 and 2027	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Carroll St/Cedar St NW	EB	0.10%	0.10%	0.50%	0.50%
	WB	0.10%	0.10%	0.50%	0.50%
Piney Branch Rd NW	NB	0.40%	0.50%	2.02%	2.53%
	SB	0.50%	0.20%	2.53%	1.00%
Eastern Ave/Cedar St NW	NB	0.10%	2.00%	0.50%	10.41%
	SB	2.00%	0.10%	10.41%	0.50%
Blair Rd NW	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.50%	0.10%	2.53%	0.50%
5th St NW	NB	1.30%	0.50%	6.67%	2.53%
	SB	0.50%	0.10%	2.53%	0.50%
4th St NW [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Butternut St NW [1]	EB	0.10%	0.10%	0.50%	0.50%
	WB	0.10%	0.10%	0.50%	0.50%
Maple St NW [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Holly Ave [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Cedar Ave [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%

[1] AADT and/or MWCOG data is not available for this street; therefore a conservative 0.1% growth rate per year was used.

Vehicular Analysis Results

Intersection Capacity Analysis

Intersection capacity analyses were performed for existing, background and total future scenarios outlined previously at the intersections contained within the study area during the AM and PM peak hours. *Synchro* version 11 was used to analyze the study intersections based on the Highway Capacity Manual (HCM) 2000 methodology.

The results of the capacity analyses are expressed in level of service (LOS) and delay (seconds per vehicle) for each approach. A LOS grade is a letter grade based on the average delay (in seconds) experienced by motorists traveling through an intersection. LOS results range from "A" being the best to "F" being the worst. LOS D is typically used as the acceptable LOS threshold in the District; although LOS E or F is sometimes accepted in urbanized areas if vehicular improvements would be a detriment to safety or non-auto modes of transportation.

The LOS capacity analyses were based on: (1) the intersection peak hour traffic volumes; (2) the lane use and traffic controls; and (3) the HCM methodologies (using *Synchro* software). The average delay of each approach and LOS is shown for all intersections in addition to the overall average delay and intersection LOS grade. Detailed LOS descriptions and the analysis worksheets are contained in the Technical Attachments.

Table 7 shows the results of the capacity analyses, including LOS and average delay per vehicle (in seconds) for the 2022 Existing, 2027 Background Interim, 2027 Background, and 2027 Total Future scenarios. Table 8 shows a comparison of the volume to capacity (v/c) ratios, while Table 9 shows a comparison of queuing results.

Intersection Capacity Under Existing Conditions

As shown in Table 7, two (2) of the study intersections operate at unacceptable conditions or have one or more approaches operating at unacceptable levels during Existing Conditions:

- Blair Road & Cedar Street NW
  - Eastbound (PM)
- Cedar Street & Carroll Street NW
  - Southbound (AM)

Intersection Capacity Under Background Interim Conditions

As shown in Table 7, two (2) of the study intersections operate at unacceptable conditions or have one or more approaches operating at unacceptable levels during Background Conditions:

- Blair Road & Cedar Street NW
  - Eastbound (PM)
- Cedar Street & Carroll Street NW
  - Southbound (AM)

Intersection Capacity Under Background Conditions

As shown in Table 7, three (3) of the study intersections operate at unacceptable conditions or have one or more approaches operating at unacceptable levels during Background Conditions:

- Blair Road & Cedar Street NW
  - Eastbound (PM)
- Blair Road & 4th Street NW
  - Northwestbound (AM)
- Cedar Street & Carroll Street NW
  - Overall (AM)
  - Southbound (AM)

Intersection Capacity Under Future Conditions

As shown in Table 7, three (3) of the study intersections operate at unacceptable conditions or have one or more approaches operating at unacceptable levels during Future Conditions:

- Blair Road & Cedar Street NW
  - Eastbound (PM)
- Blair Road & 4th Street NW
  - Northwestbound (AM)
- Cedar Street & Carroll Street NW
  - Overall (AM)
  - Southbound (AM)
  - It should be noted that a primary driver of this intersection's increased delay under background future conditions with the Metro reconfiguration is that we have added additional bus and kiss-and-ride traffic to the road network to represent full potential kiss-and-ride use based on historical WMATA metro usage data for pre-covid conditions.

Queuing Analysis

In addition to the capacity analyses presented above, a queuing analysis was performed at each of the study intersections. The queuing analysis was performed using *Synchro* software. The 50th percentile and 95th percentile maximum queue lengths are shown for each lane group at the study area's signalized intersections. The 50th percentile maximum queue is the maximum back of queue on a typical cycle. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. For unsignalized intersections, the 95th percentile queue is reported for each lane group (including free-flowing left turns and stop-controlled movements) based on the HCM calculations.

Table 9 shows the queuing results for the study intersections, including 50th and 95th percentile queues for the 2022 Existing, 2027 Background Interim, 2027 Background, and 2027 Total Future scenarios.

Queuing Under Existing Conditions

As shown in Table 9, five (5) of the study intersections have one or more lane group that exceeds the given storage length during Existing Conditions:

- Piney Branch Road & Eastern Avenue NW
  - Eastbound right (AM, PM)
  - Westbound right (AM, PM)
  - Southbound thru (AM, PM)
- Blair Road & Cedar Street NW
  - Westbound thru (AM)
- Blair Road & 4th Street NW
  - Northwestbound thru (AM, PM)
- Cedar Street & Carroll Street NW
  - Eastbound left/thru (PM)
- Carroll Street & Maple Street NW
  - Westbound left/thru/right (AM, PM)

Queuing Under Background Interim Conditions

As shown in Table 9, five (5) of the study intersections have one or more lane group that exceeds the given storage length during Background Interim Conditions:

- Piney Branch Road & Eastern Avenue NW
  - Eastbound right (AM, PM)
  - Westbound right (AM, PM)
  - Southbound thru (AM, PM)
- Blair Road & Cedar Street NW
  - Westbound thru (AM)
- Blair Road & 4th Street NW
  - Northwestbound thru (AM, PM)
- Cedar Street & Carroll Street NW
  - Eastbound left/thru (PM)
- Carroll Street & Maple Street NW
  - Westbound left/thru/right (AM, PM)

Queuing Under Background Conditions

As shown in Table 9, five (5) of the study intersections have one or more lane group that exceeds the given storage length during Background Interim Conditions:

- Piney Branch Road & Eastern Avenue NW
  - Eastbound right (AM, PM)
  - Westbound right (AM, PM)
  - Southbound left (AM)
  - Southbound thru (AM, PM)
- Blair Road & 4th Street NW
  - Northwestbound thru (AM, PM)
- Cedar Street NW & Metro Station Driveway
  - Westbound thru/right (AM, PM)
- Cedar Street & Carroll Street NW
  - Eastbound left/thru (PM)
- Carroll Street & Maple Street NW
  - Westbound left/thru/right (AM, PM)

Queuing Under Future Conditions

As shown in Table 9, five (5) of the study intersections have one or more lane group that exceeds the given storage length during Future Conditions:

- Piney Branch Road & Eastern Avenue NW
  - Eastbound right (AM, PM)
  - Westbound right (AM, PM)
  - Southbound left (AM)
  - Southbound thru (AM, PM)
- Blair Road & 4th Street NW
  - Northwestbound thru (AM, PM)
- Cedar Street NW & Metro Station Driveway
  - Westbound thru/right (AM, PM)
- Cedar Street & Carroll Street NW
  - Eastbound left/thru (PM)
- Carroll Street & Maple Street NW
  - Westbound left/thru/right (AM, PM)

Mitigation Measures

Based on DDOT standards, the Project is considered to have an impact at an intersection within the study area if any of the following conditions are met:

- The capacity analyses show a LOS E or F at an intersection or along an approach in Future conditions with the Project where one does not exist in Background Conditions;
- There is an increase in delay at any approach or overall intersection operating under LOS E or F of greater than five (5) percent when compared to Background Conditions;
- A 95th percentile queue exceeds storage along an approach in Future Conditions with the Project where it does not in Background Conditions; or
- There is an increase in the 95th percentile queue by more than 150 feet along an approach in that exceeds storage in Background Conditions.

Based on these criteria, there are impacts to two (2) intersections as a result of the Project. These intersections are:

- Blair Road and Cedar Street NW (PM)
- Cedar Street and Carroll Street NW (AM)

Potential mitigation measures were tested at these intersections, including signal timing adjustments.

Further, it should be noted that a primary driver of the Cedar Street and Carroll Street NW intersection's increased delay under background future conditions with the site reconfiguration is that we have added additional bus and kiss-and-ride traffic to the road network to represent full potential kiss-and-ride use based on historical WMATA metro usage data for pre-covid conditions.

Blair Road and Cedar Street NW

The eastbound approach of Cedar Street NW, which operates at LOS E in Background Conditions, is projected to experience an increase in delay of more than five (5) percent in Total Future Conditions during the PM peak hour, bringing its delay to LOS F in Total Future Conditions.

Signal timing adjustments were tested at this intersection. The results of this analysis indicate that it would reduce delays to levels below those observed in Background Conditions.

Mitigation at this intersection is proposed via the Project's robust TDM Plan, which includes the Base Plan as well as components from the "Enhanced" and "Enhanced Plus" categories.

The potential signal timing adjustments for this intersection can be found in the Technical Attachments.

Cedar Street and Carroll Street NW

The southbound approach of Cedar Street NW, which operates at LOS F in Background Conditions, is projected to experience an increase in delay of more than five (5) percent in Total Future Conditions during the AM peak hour. Similarly, overall delay at the intersection is projected to experience an increase in delay of more than five (5) percent in Total Future Conditions during the AM peak hour.

Signal timing adjustments were tested at this intersection. The results of this analysis indicate that it would reduce delays to levels below those observed in Background Conditions.

Mitigation at this intersection is proposed via the Project's robust TDM Plan, which includes the Base Plan as well as components from the "Enhanced" and "Enhanced Plus" categories.

The potential signal timing adjustments for this intersection can be found in the Technical Attachments.

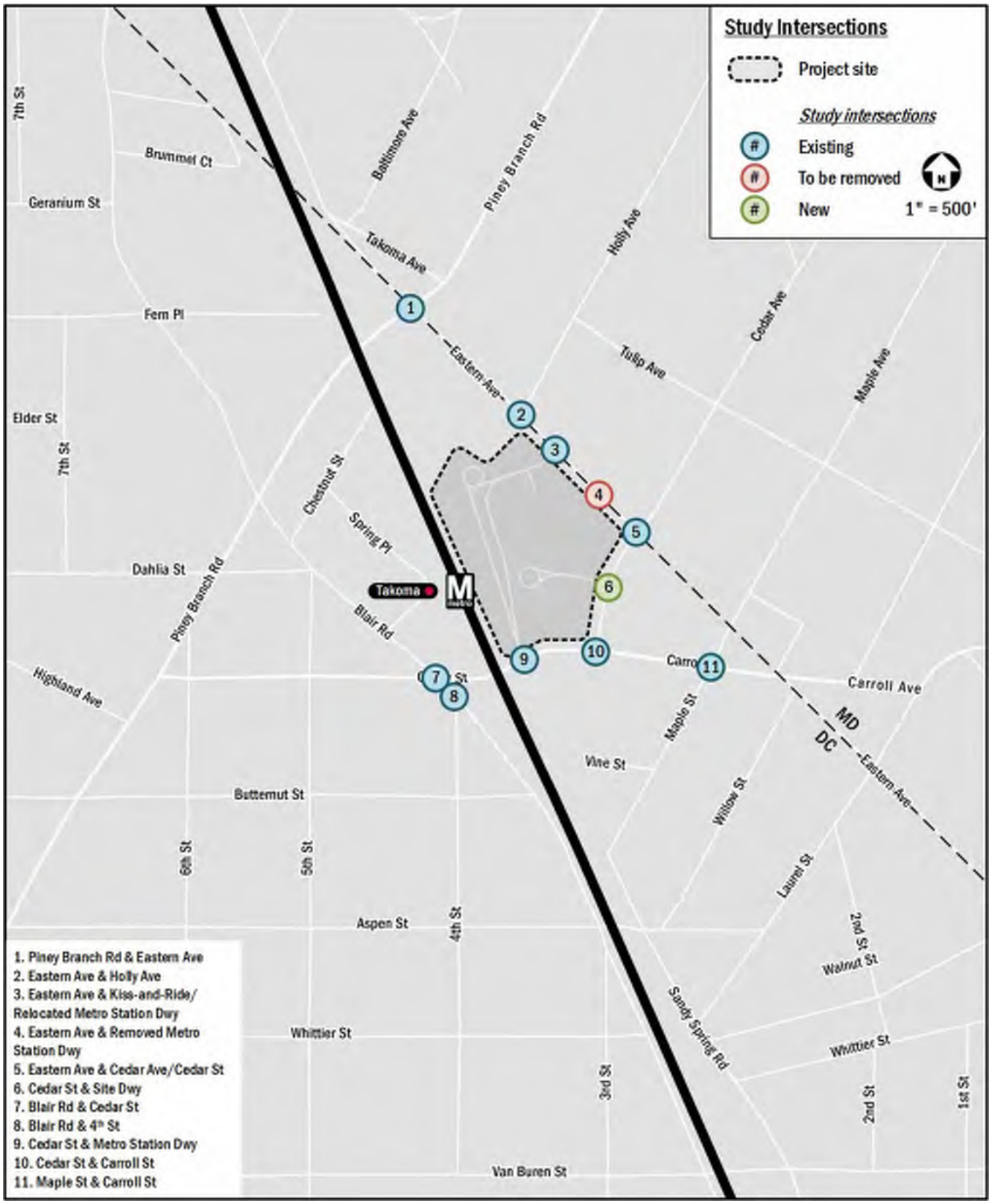


Figure 10: Study Area Intersections

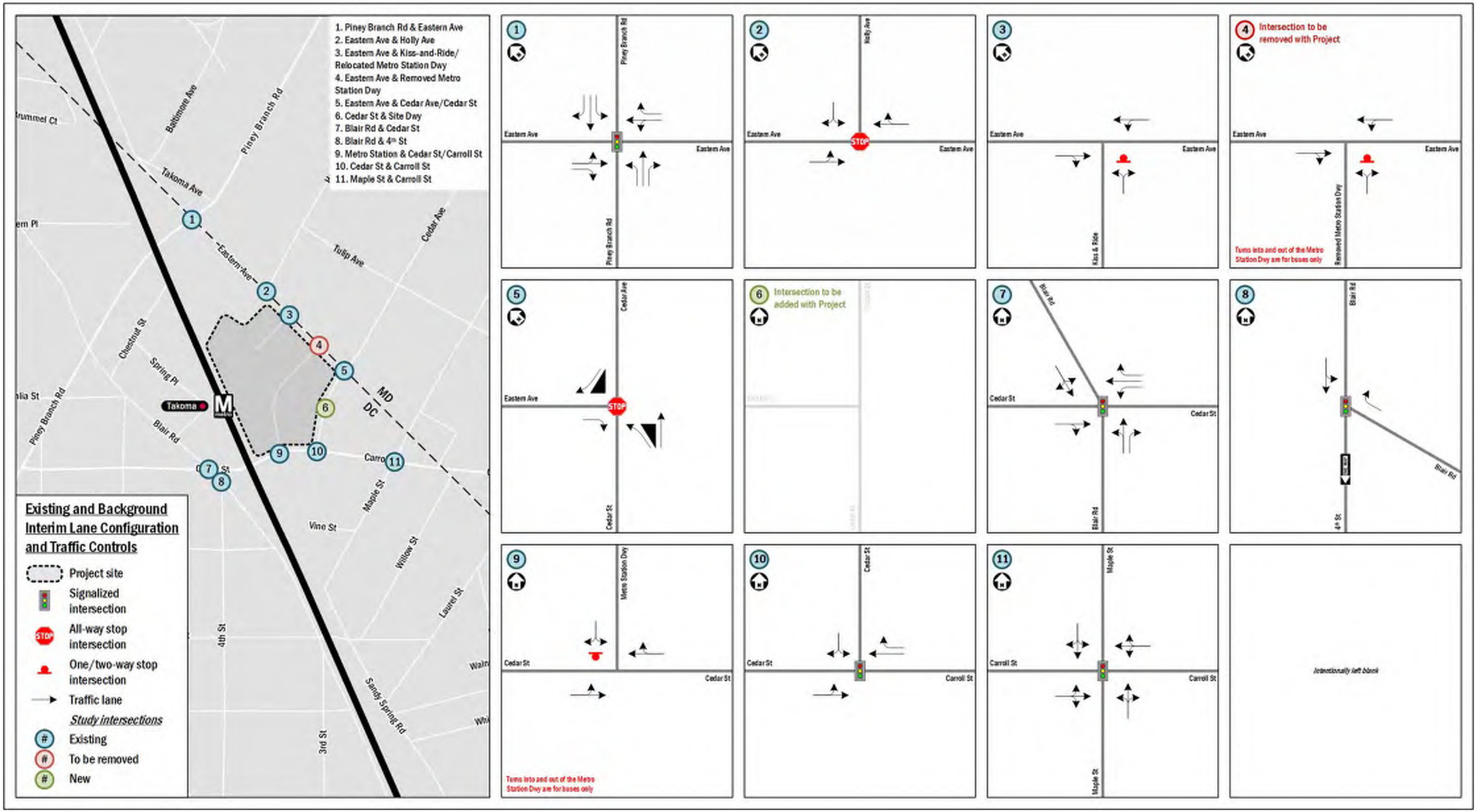


Figure 11: Existing and Background Interim Lane Configurations and Traffic Controls

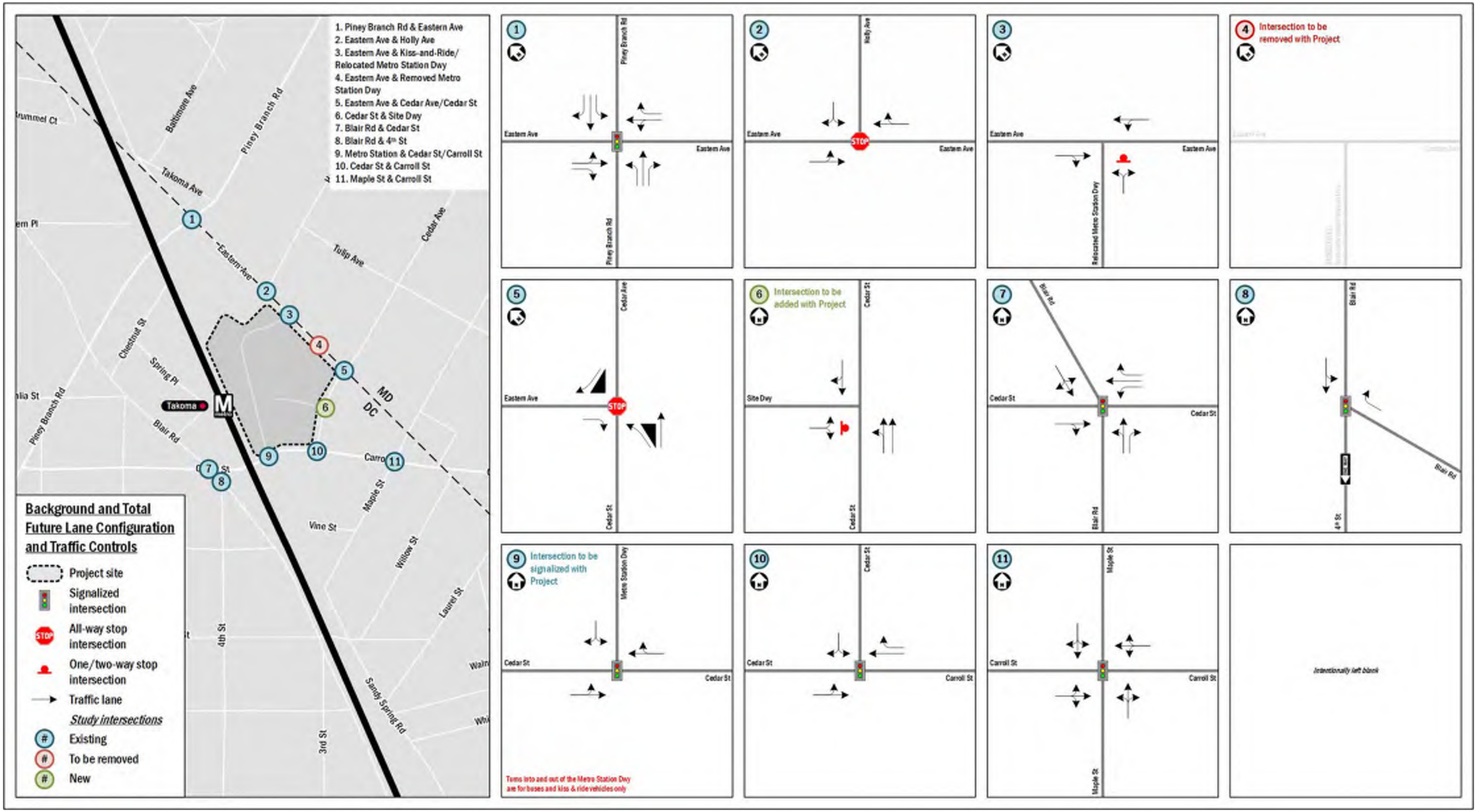


Figure 12: Background and Total Future Lane Configurations and Traffic Controls

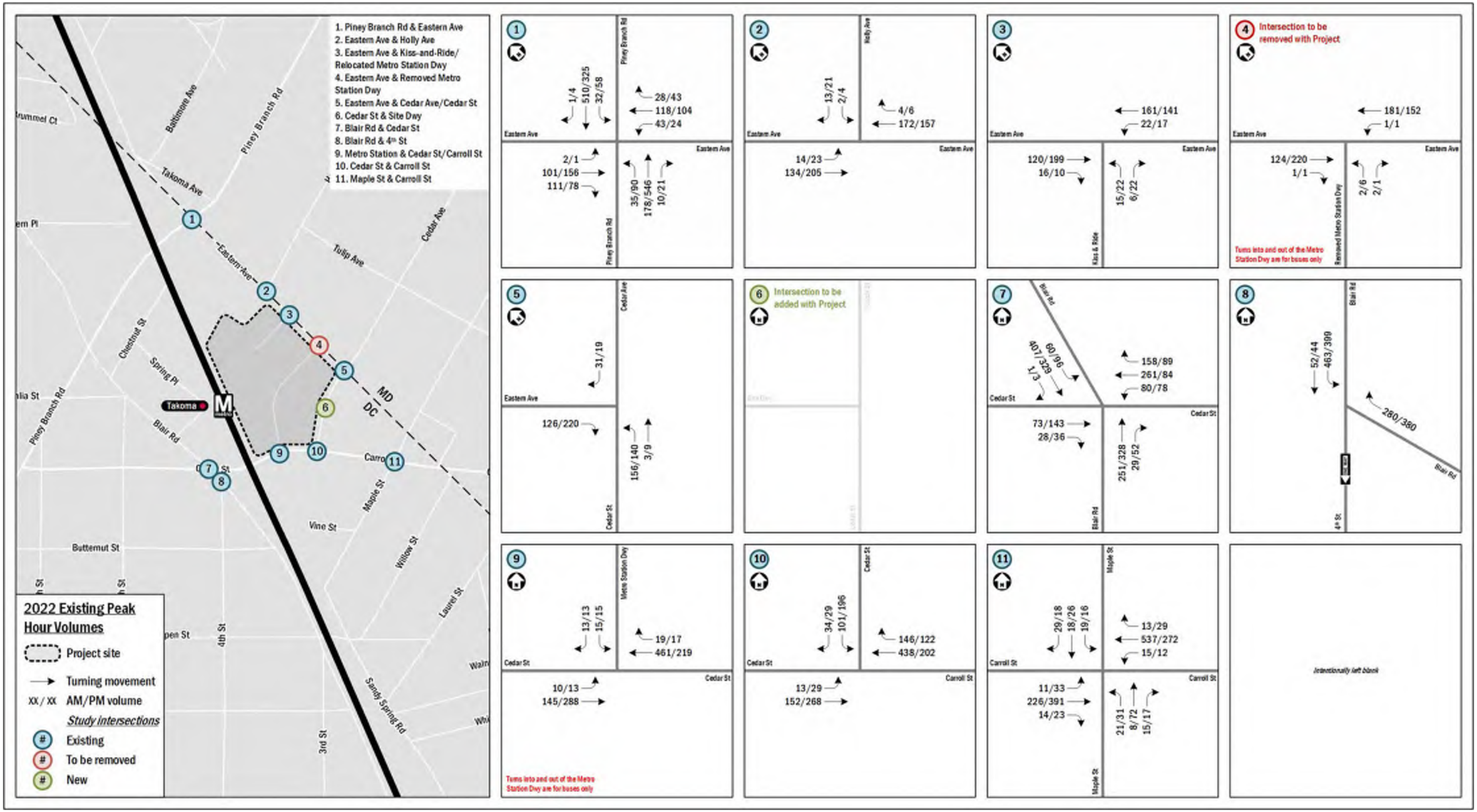


Figure 13: 2022 Existing Peak Hour Volumes

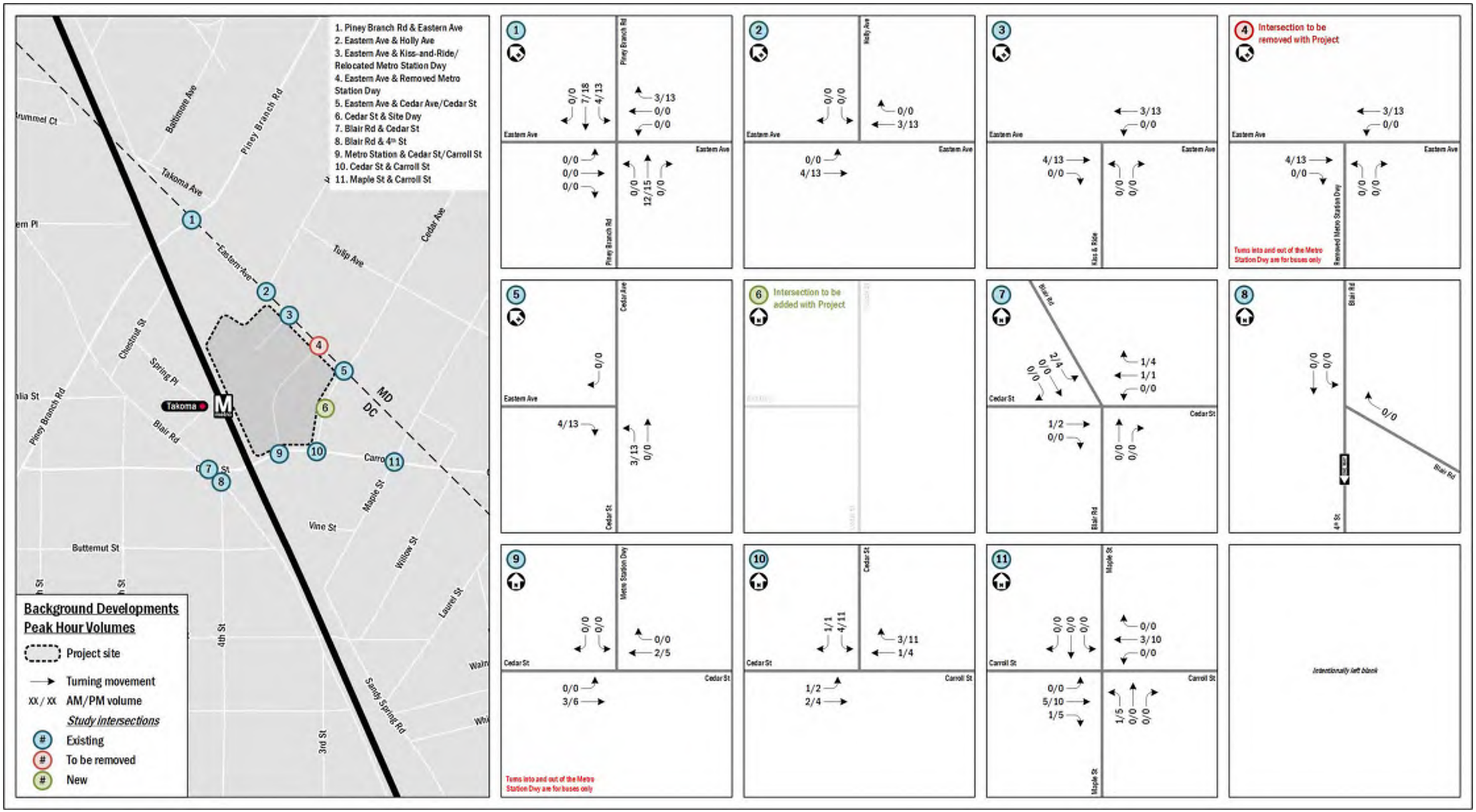


Figure 14: Background Developments Peak Hour Volumes

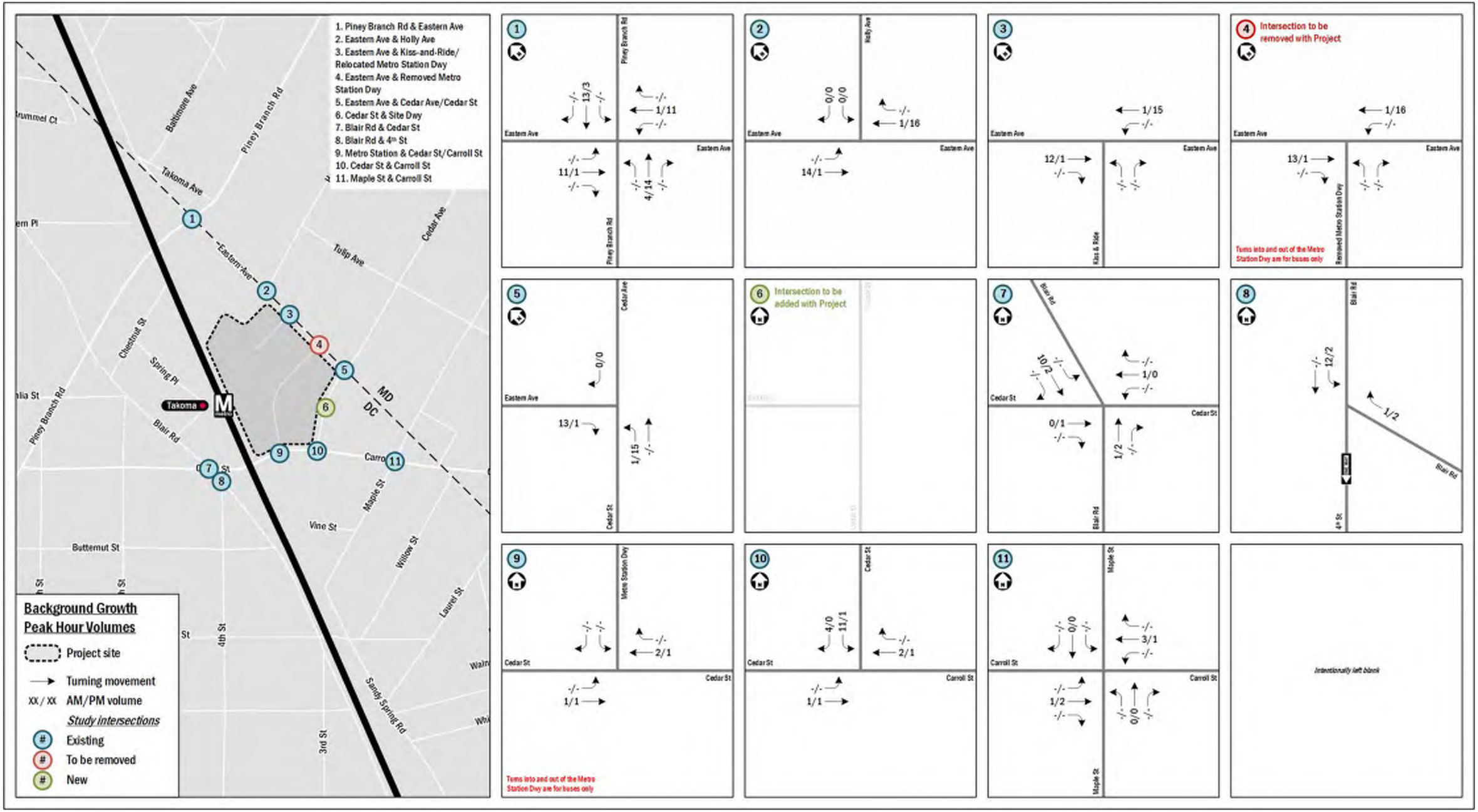


Figure 15: Background Growth Peak Hour Volumes

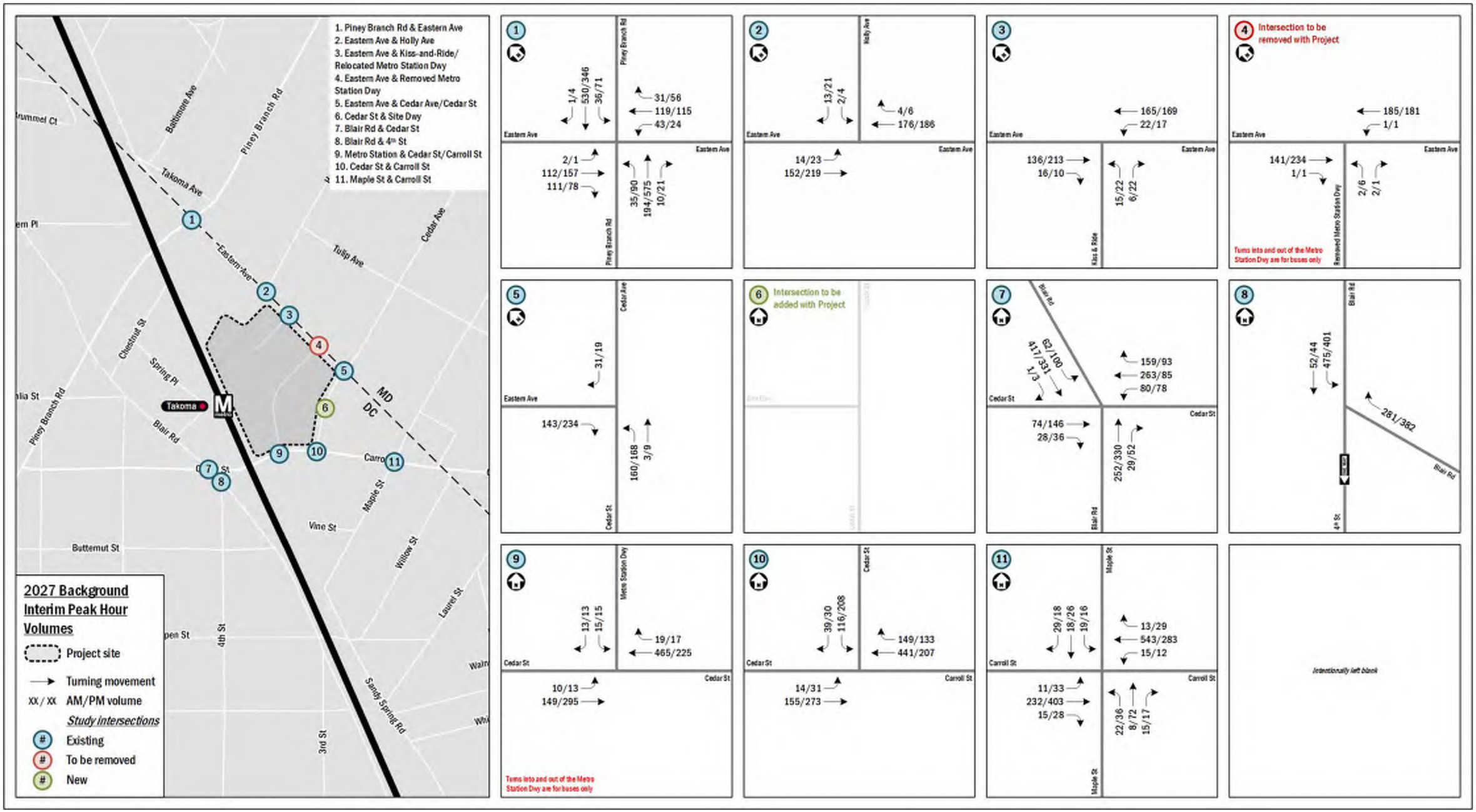


Figure 16: 2027 Background Interim Peak Hour Volumes

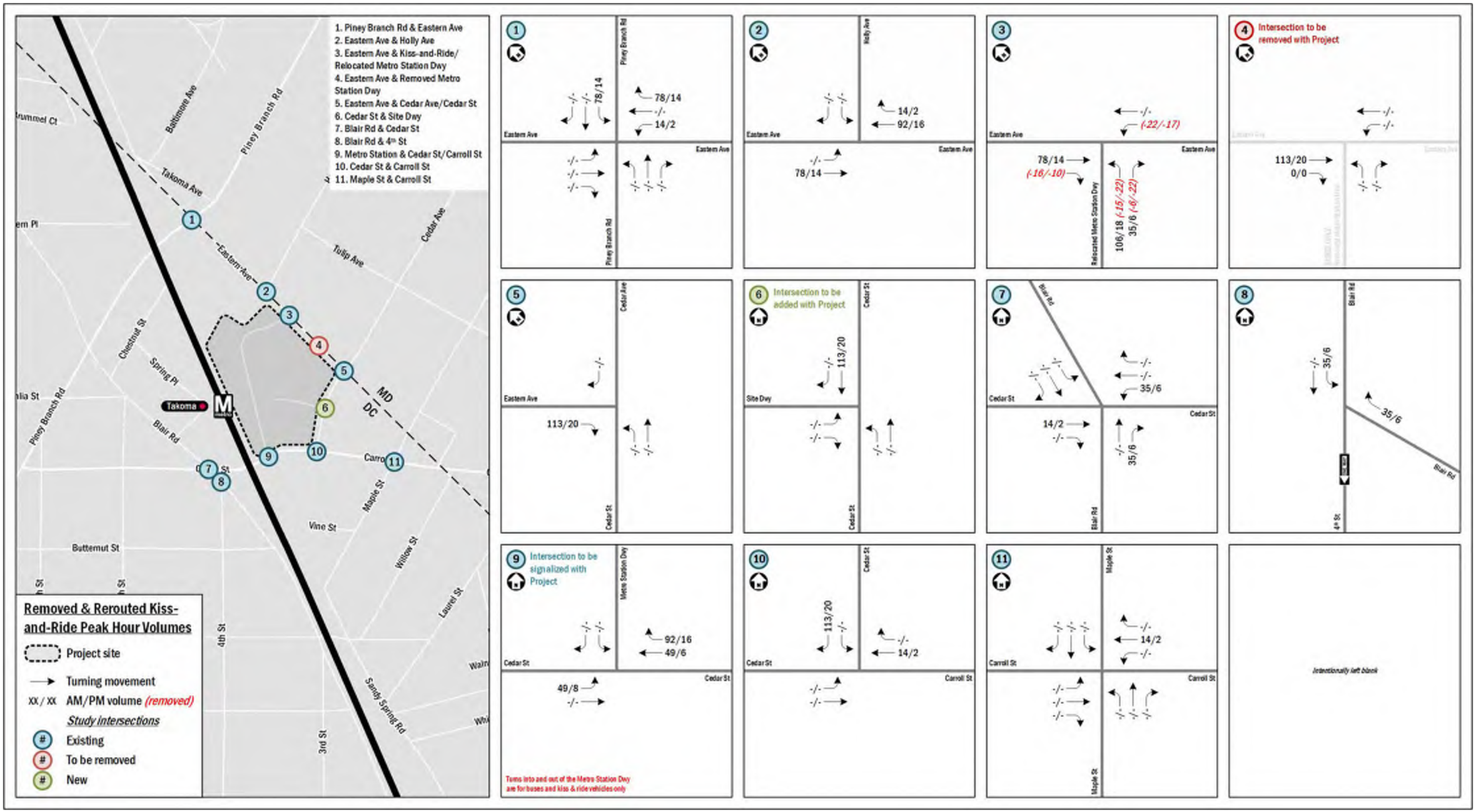


Figure 17: Removed/Rerouted Kiss-and-Ride Peak Hour Volumes

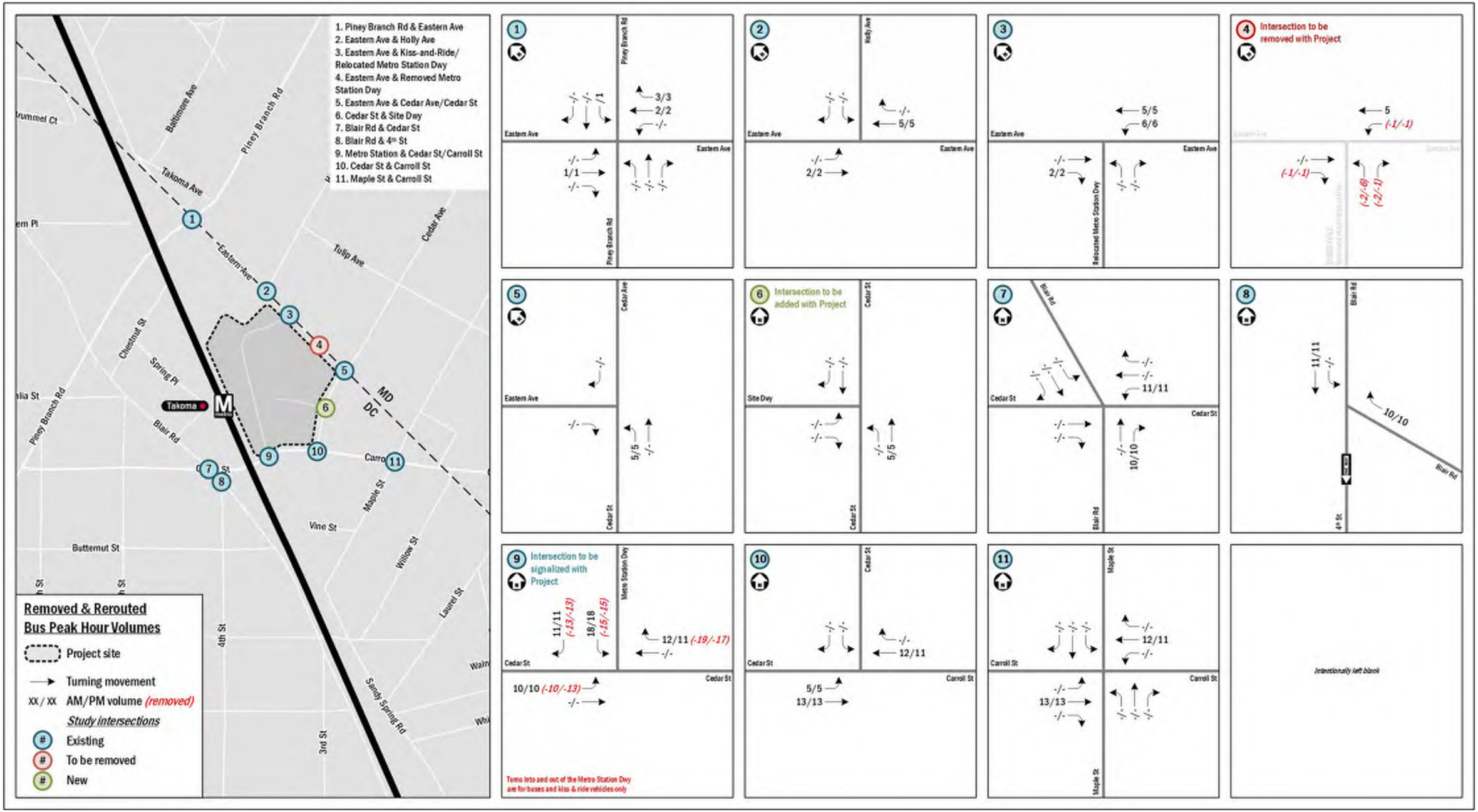


Figure 18: Removed/Rerouted Bus Peak Hour Volumes

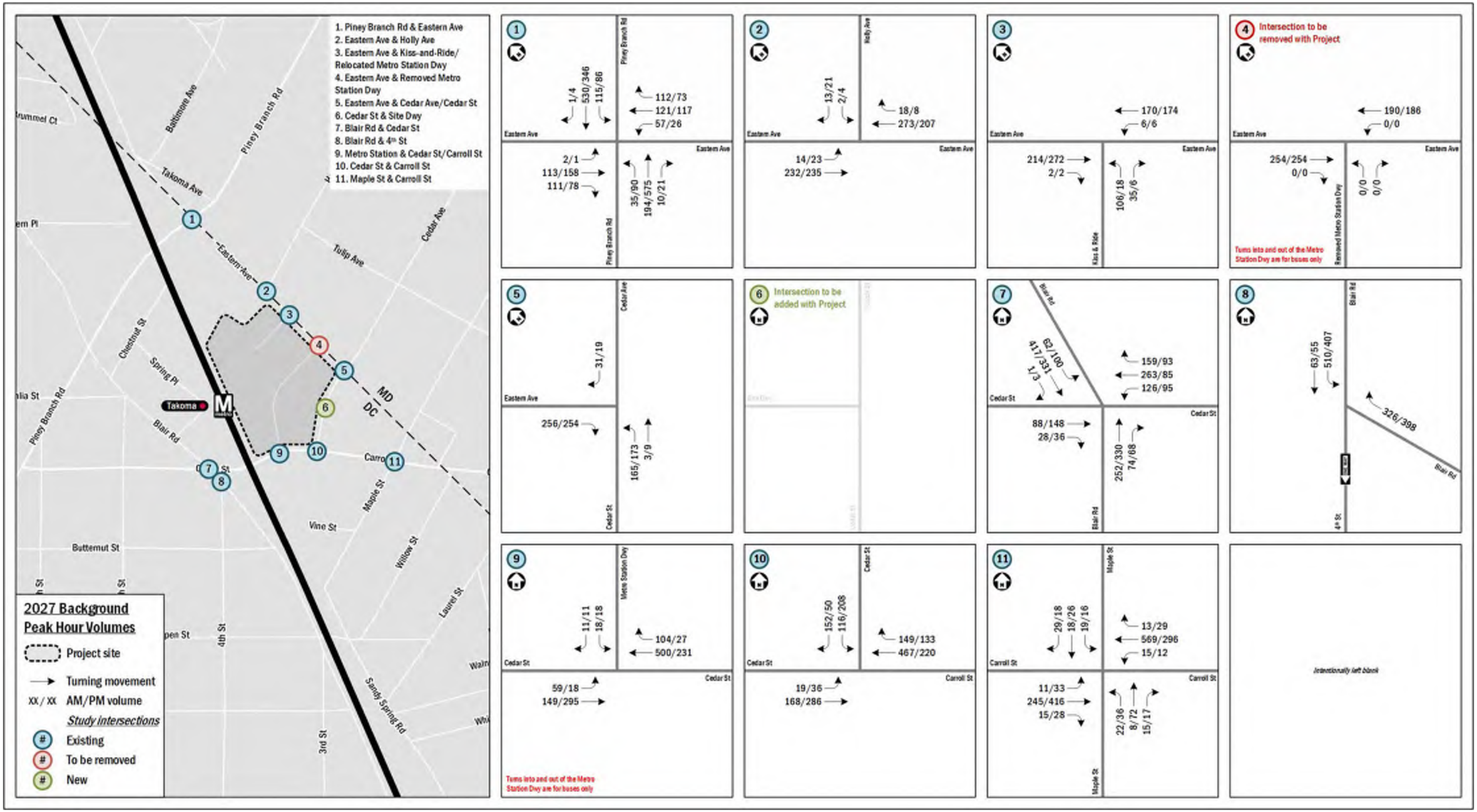


Figure 19: 2027 Background Peak Hour Volumes



Figure 20: Inbound Trip Distribution



Figure 21: Outbound Trip Distribution

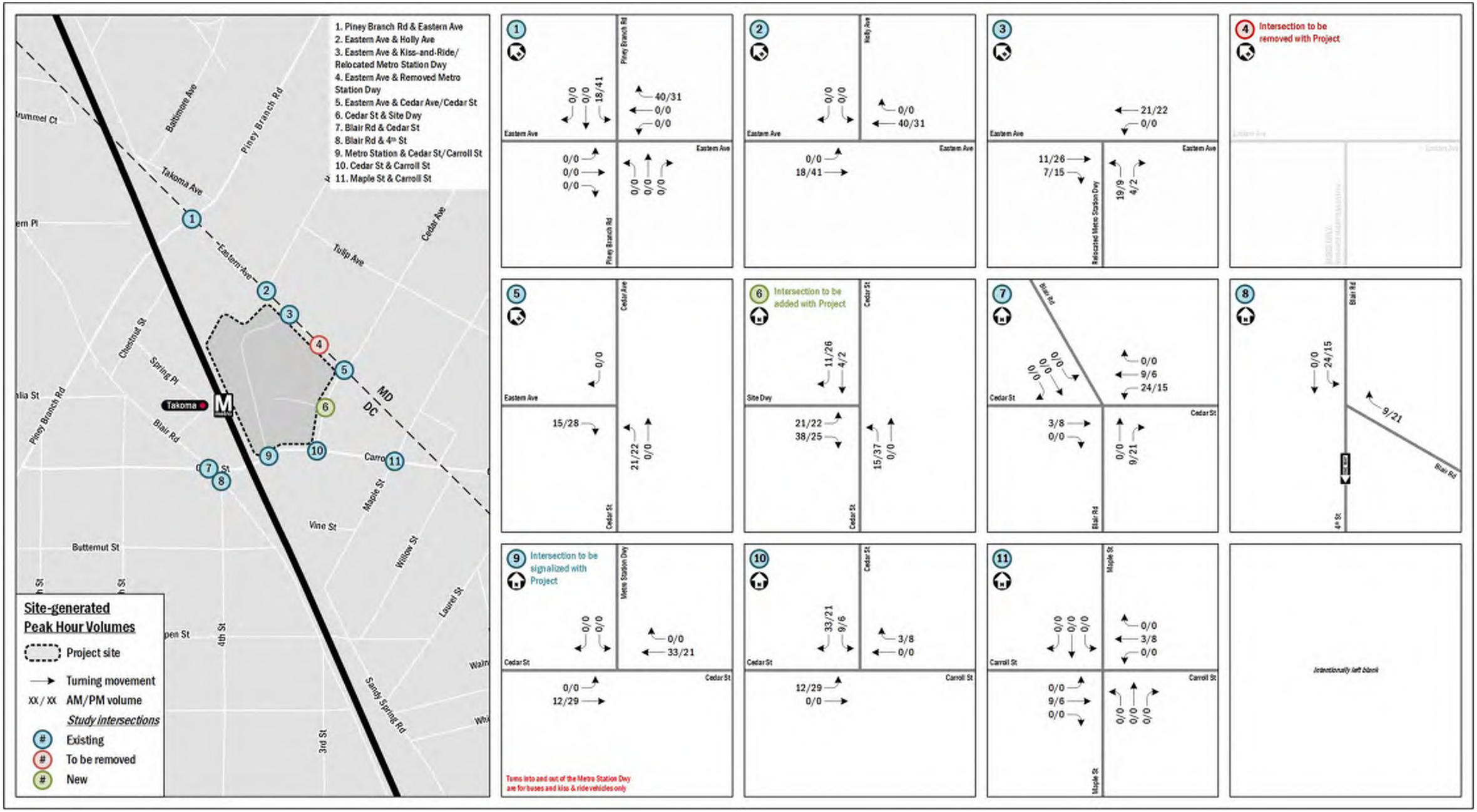


Figure 22: Site-Generated Peak Hour Volumes

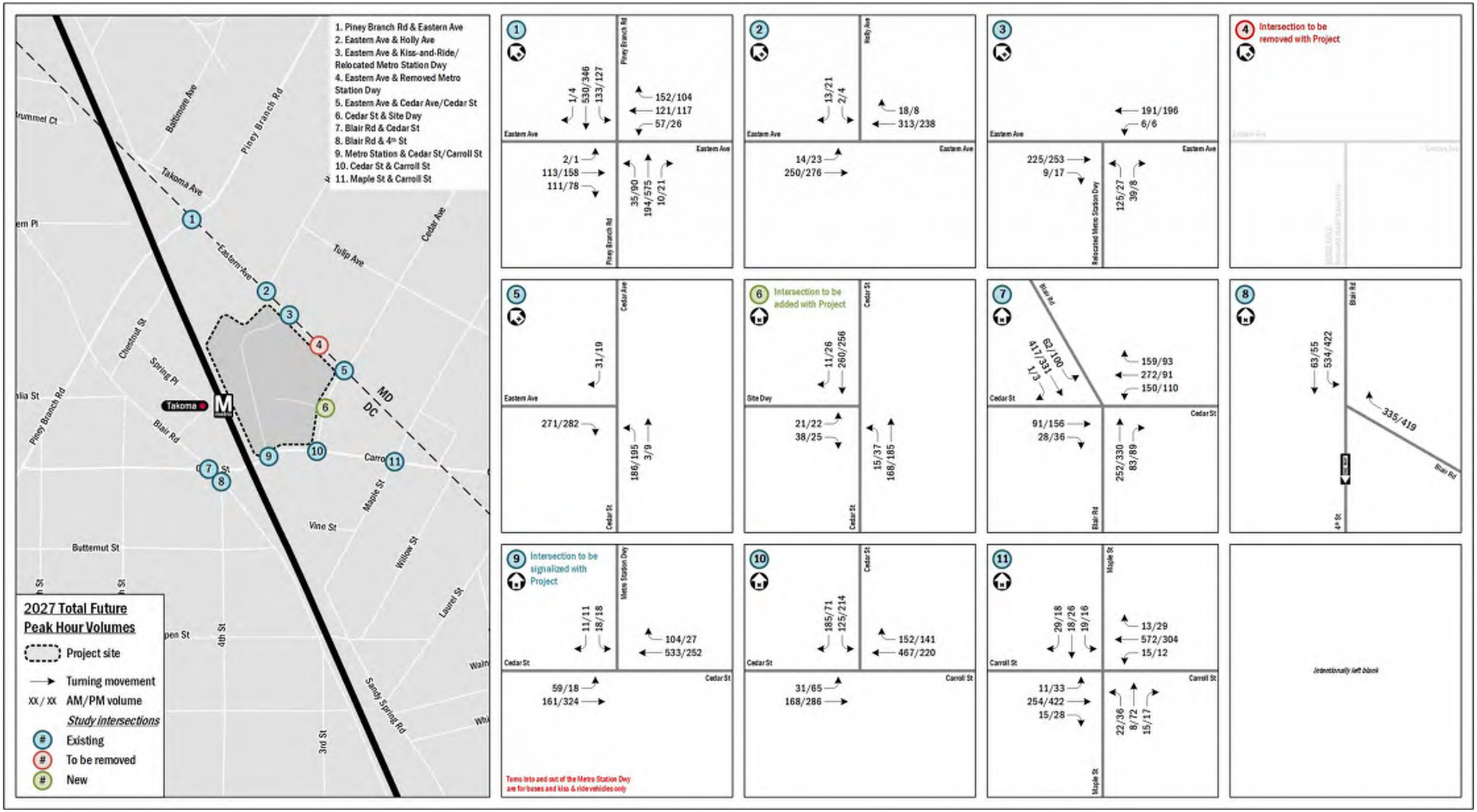


Figure 23: 2027 Total Future Peak Hour Volumes

Table 7: LOS Comparison

	Intersection and Approach	Existing (2022)				Background Interim (2027)				Background (2027)				Future (2027)				Future (2027) with Mitigations			
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*	
		Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS
1.	**Piney Branch Rd & Eastern Ave**																				
	Overall	**23.0**	**C**	**18.7**	**B**	**23.2**	**C**	**19.3**	**B**	**23.7**	**C**	**19.6**	**B**	**24.1**	**C**	**20.1**	**C**	**-**	**-**	**-**	**-**
	Eastbound	33.1	C	44.0	D	33.3	C	44.1	D	33.3	C	44.2	D	33.3	C	44.2	D	-	-	-	-
	Westbound	34.5	C	42.3	D	34.5	C	42.9	D	35.6	D	43.4	D	36.5	D	44.2	D	-	-	-	-
	Northbound	16.7	B	9.1	A	16.9	B	9.8	A	16.9	B	9.8	A	16.9	B	9.9	A	-	-	-	-
	Southbound	17.5	B	9.3	A	18.0	B	9.7	A	17.4	B	9.9	A	17.3	B	10.5	B	-	-	-	-
2.	**Eastern Ave & Holly Ave**																				
	Eastbound	8.2	A	8.9	A	8.4	A	9.1	A	9.5	A	9.3	A	9.8	A	9.9	A	-	-	-	-
	Westbound	8.4	A	8.4	A	8.5	A	8.7	A	9.9	A	9.0	A	10.6	B	9.4	A	-	-	-	-
	Southbound	7.3	A	7.6	A	7.3	A	7.7	A	7.8	A	7.8	A	7.9	A	7.9	A	-	-	-	-
3.	**Eastern Ave & Kiss-and-Ride/Relocated Metro Station Dwy**																				
	Eastbound	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		-	-	-	-
	Westbound	1.0		1.0		1.0		0.8		0.3		0.3		0.3		0.3		-	-	-	-
	Northbound	10.5	B	10.9	B	10.6	B	11.2	B	12.9	B	11.5	B	13.9	B	12.3	B	-	-	-	-
4.	**Eastern Ave & Metro Station Dwy**																				
	Eastbound	0.0		0.0		0.0		0.0		-	-	-	-	-	-	-	-	-	-	-	-
	Westbound	0.0		0.1		0.0		0.0		-	-	-	-	-	-	-	-	-	-	-	-
	Northbound	11.3	B	13.0	B	11.6	B	13.5	B	-	-	-	-	-	-	-	-	-	-	-	-
5.	**Eastern Ave & Cedar St/Cedar Ave**																				
	Eastbound	7.6	A	8.0	A	7.7	A	8.3	A	8.7	A	8.5	A	9.0	A	9.0	A	-	-	-	-
	Northbound	8.9	A	8.9	A	9.1	A	9.4	A	9.7	A	9.6	A	10.2	B	10.2	B	-	-	-	-
	Southbound	6.3	A	6.3	A	6.3	A	6.3	A	6.3	A	6.3	A	6.3	A	6.3	A	-	-	-	-
6.	**Cedar St & Site Dwy**																				
	Eastbound	-	-	-	-	-	-	-	-	0.0	A	0.0	A	11.3	B	11.7	B	-	-	-	-
	Northbound	-	-	-	-	-	-	-	-	0.0		0.0		0.7		1.4		-	-	-	-
	Southbound	-	-	-	-	-	-	-	-	0.0		0.0		0.0		0.0		-	-	-	-
7.	**Blair Rd & Cedar St**																			***Signal timing adjustments tested***	
	Overall	**35.1**	**D**	**31.4**	**C**	**35.8**	**D**	**32.8**	**C**	**30.1**	**C**	**38.3**	**D**	**31.2**	**C**	**39.7**	**D**	**-**	**-**	***41.2***	***D***
	Eastbound	46.8	D	75.7	E	47.0	D	77.6	E	48.6	D	78.9	E	48.9	D	83.9	F	-	-	*69.3*	*E*
	Westbound	45.0	D	24.3	C	44.5	D	24.3	C	28.6	C	50.7	D	31.5	C	53.2	D	-	-	*51.2*	*D*
	Northbound	7.3	A	6.6	A	7.3	A	6.6	A	9.8	A	7.1	A	10.2	B	7.7	A	-	-	*7.7*	*A*

	Intersection and Approach	Existing (2022)				Background Interim (2027)				Background (2027)				Future (2027)				Future (2027) with Mitigations			
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*	
		Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS	Del.	LOS
	Southbound	38.8	D	39.0	D	41.0	D	42.0	D	41.2	D	42.0	D	41.2	D	42.0	D	-	-	*54.2*	*D*
8.	**Blair Rd & 4th St**																				
	Overall	**18.2**	**B**	**22.7**	**C**	**18.1**	**B**	**22.9**	**C**	**21.7**	**C**	**24.1**	**C**	**22.3**	**C**	**26.5**	**C**	**-**	-	-	-
	Southeastbound	2.1	A	2.3	A	2.2	A	2.3	A	2.2	A	2.3	A	2.3	A	2.2	A	-	-	-	-
	Northwestbound	47.2	D	46.6	D	47.4	D	46.9	D	55.0	E	49.5	D	57.2	E	54.1	D	-	-	-	-
9.	**Cedar St & Metro Station Dwy**																				
	Overall	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**26.3**	**C**	**24.8**	**C**	**27.0**	**C**	**26.0**	**C**	**-**	-	-	-
	Eastbound	0.7		0.6		0.7		0.5		8.8	A	10.1	B	9.3	A	10.6	B	-	-	-	-
	Westbound	0.0		0.0		0.0		0.0		31.2	C	41.6	D	32.2	C	44.0	D	-	-	-	-
	Southbound	23.3	C	17.4	C	23.5	C	17.5	C	48.3	D	34.0	C	48.3	D	34.0	C	-	-	-	-
10.	**Cedar St & Carroll St**																	***Signal timing adjustments tested***			
	Overall	**13.5**	**B**	**21.3**	**C**	**15.9**	**B**	**22.0**	**C**	**63.9**	**E**	**23.0**	**C**	**95.6**	**F**	**25.3**	**C**	***36.7***	***D***	**-**	-
	Eastbound	2.0	A	12.3	B	2.0	A	12.3	B	1.9	A	12.6	B	1.9	A	13.9	B	*8.8*	*A*	-	-
	Westbound	5.7	A	13.8	B	5.7	A	14.2	B	5.7	A	14.1	B	5.6	A	14.3	B	*19.3*	*B*	-	-
	Southbound	61.7	E	44.1	D	69.7	E	45.4	D	241.1	F	48.2	D	335.1	F	53.3	D	*89.5*	*F*	-	-
11.	**Carroll St & Maple St**																				
	Overall	**13.2**	**B**	**18.3**	**B**	**13.2**	**B**	**18.5**	**B**	**13.7**	**B**	**21.8**	**C**	**13.7**	**B**	**21.9**	**C**	**-**	-	-	-
	Eastbound	6.7	A	7.9	A	6.3	A	8.1	A	6.3	A	15.1	B	6.4	A	15.4	B	-	-	-	-
	Westbound	10.5	B	17.5	B	10.7	B	17.8	B	11.8	B	18.1	B	12.0	B	18.3	B	-	-	-	-
	Northbound	40.8	D	47.1	D	40.9	D	47.9	D	40.9	D	47.9	D	40.9	D	47.9	D	-	-	-	-
	Southbound	42.0	D	41.9	D	42.0	D	41.9	D	42.0	D	41.9	D	42.0	D	41.9	D	-	-	-	-

Table 8: Volume to Capacity (v/c) Ratio Comparison

	Intersection and Movement	Existing (2022)		Background Interim (2027)		Background (2027)		Future (2027)		Future (2027) with Mitigations	
		AM Peak	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*
		v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c
1.	**Piney Branch Rd & Eastern Ave**										
	Eastbound Left Thru	0.24	0.49	0.26	0.49	0.26	0.49	0.26	0.49	-	-
	Eastbound Right	0.32	0.30	0.32	0.30	0.32	0.30	0.32	0.30	-	-
	Westbound Left Thru	0.40	0.42	0.40	0.45	0.46	0.46	0.46	0.46	-	-
	Westbound Right	0.08	0.16	0.09	0.21	0.31	0.27	0.41	0.39	-	-
	Northbound Left	0.13	0.20	0.13	0.20	0.13	0.20	0.13	0.20	-	-

	Intersection and Movement	Existing (2022)		Background Interim (2027)		Background (2027)		Future (2027)		Future (2027) with Mitigations	
		AM Peak	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*
		v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c
	Northbound Thru	0.29	0.66	0.32	0.69	0.32	0.69	0.32	0.69	-	-
	Northbound Right	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03	-	-
	Southbound Left	0.06	0.15	0.06	0.19	0.20	0.23	0.24	0.35	-	-
	Southbound Thru	0.57	0.31	0.59	0.33	0.59	0.33	0.59	0.33	-	-
	Southbound Right	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-
2.	**Eastern Ave & Holly Ave**										
	Eastbound Left Thru	-	-	-	-	-	-	-	-	-	-
	Westbound Thru Right	-	-	-	-	-	-	-	-	-	-
	Southbound Left Right	-	-	-	-	-	-	-	-	-	-
3.	**Eastern Ave & Kiss-and-Ride/Relocated Metro Station Dwy**										
	Eastbound Thru Right	0.09	0.14	0.10	0.15	0.14	0.15	0.15	0.18	-	-
	Westbound Left Thru	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	-	-
	Northbound Left Right	0.03	0.08	0.03	0.08	0.25	0.05	0.31	0.07	-	-
4.	**Eastern Ave & Metro Station Dwy**										
	Eastbound Thru Right	0.08	0.14	0.09	0.15	-	-	-	-	-	-
	Westbound Left Thru	0.00	0.00	0.00	0.00	-	-	-	-	-	-
	Northbound Left Right	0.01	0.02	0.01	0.02	-	-	-	-	-	-
5.	**Eastern Ave & Cedar St/Cedar Ave**										
	Eastbound Right	-	-	-	-	-	-	-	-	-	-
	Northbound Left	-	-	-	-	-	-	-	-	-	-
	Northbound Thru	-	-	-	-	-	-	-	-	-	-
	Southbound Right	-	-	-	-	-	-	-	-	-	-
6.	**Cedar St & Site Dwy**										
	Eastbound Left Right	-	-	-	-	0.00	0.00	0.10	0.09	-	-
	Northbound Left Thru	-	-	-	-	0.00	0.00	0.01	0.03	-	-
	Northbound Thru	-	-	-	-	0.07	0.08	0.07	0.08	-	-
	Southbound Thru Right	-	-	-	-	0.17	0.17	0.18	0.18	-	-
7.	**Blair Rd & Cedar St**										***Signal timing adjust-ments tested***
	Eastbound Thru Right	0.41	0.84	0.41	0.86	0.47	0.87	0.48	0.90	-	0.82
	Westbound Left	0.27	0.35	0.27	0.35	0.43	0.43	0.52	0.51	-	0.48
	Westbound Thru	0.61	0.21	0.62	0.21	0.62	0.21	0.64	0.23	-	0.21
	Westbound Right	0.55	0.31	0.56	0.32	0.56	0.32	0.56	0.32	-	0.31

Intersection and Movement	Existing (2022)		Background Interim (2027)		Background (2027)		Future (2027)		Future (2027) with Mitigations	
	AM Peak	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*	*AM Peak*	*PM Peak*
	v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c	v/c
Northbound Thru	0.62	0.64	0.62	0.65	0.62	0.65	0.62	0.65	-	0.65
Northbound Right	0.07	0.10	0.07	0.10	0.17	0.14	0.19	0.18	-	0.18
Southbound Left Thru Right	0.76	0.81	0.78	0.84	0.78	0.84	0.78	0.84	-	0.89
8. Blair Rd & 4th St										
Southeastbound Left Thru	0.46	0.41	0.47	0.41	0.52	0.43	0.54	0.44	-	-
Northwestbound Thru	0.70	0.79	0.70	0.79	0.81	0.82	0.84	0.87	-	-
9. Cedar St & Metro Station Dwy									***Signal timing adjust-ments tested***	
Eastbound Left Thru	0.01	0.02	0.01	0.02	0.24	0.37	0.26	0.40	0.26	-
Westbound Thru Right	0.29	0.16	0.30	0.16	0.74	0.48	0.77	0.52	0.77	-
Southbound Left Right	0.13	0.10	0.13	0.10	0.27	0.16	0.27	0.16	0.27	-
10. Cedar St & Carroll St										
Eastbound Left Thru	0.19	0.41	0.19	0.42	0.22	0.45	0.24	0.51	-	-
Westbound Thru	0.49	0.35	0.50	0.35	0.53	0.38	0.53	0.38	-	-
Westbound Right	0.27	0.38	0.27	0.41	0.27	0.41	0.28	0.43	-	-
Southbound Left Right	0.65	0.60	0.75	0.63	1.36	0.69	1.58	0.77	-	-
11. Carroll St & Maple St										
Eastbound Left Thru Right	0.28	0.48	0.29	0.50	0.30	0.51	0.31	0.52	-	-
Westbound Left Thru Right	0.68	0.38	0.69	0.39	0.72	0.40	0.73	0.41	-	-
Northbound Left Thru Right	0.19	0.44	0.19	0.47	0.15	0.46	0.15	0.46	-	-
Southbound Left Thru Right	0.27	0.24	0.27	0.24	0.21	0.20	0.21	0.20	-	-

Table 9: 50th & 95th Percentile Queuing Comparison (in feet)

Intersection and Lane Group	Stor. Lgth. (ft)	Existing (2022)				Background Interim (2027)				Background (2027)				Future (2027)				Future (2027) with Mitigations			
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*	
		50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
1. Piney Branch Rd & Eastern Ave																					
Eastbound Left Thru	300	65	113	115	186	72	124	115	187	73	125	116	189	73	125	116	189	-	-	-	-
Eastbound Right	25	72	126	54	103	72	126	54	103	72	126	54	103	72	126	54	103	-	-	-	-
Westbound Left Thru	410	107	174	92	156	107	175	101	168	121	194	104	172	121	194	104	172	-	-	-	-
Westbound Right	25	16	40	29	63	19	44	38	78	72	126	50	97	101	168	74	131	-	-	-	-
Northbound Left	100	12	m24	12	m21	12	m24	13	m22	12	m24	13	m22	12	m24	13	m22	-	-	-	-

Intersection and Lane Group	Stor. Lgth. (ft)	Existing (2022)				Background Interim (2027)				Background (2027)				Future (2027)				Future (2027) with Mitigations			
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*	
		50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
Northbound Thru	800	59	m85	77	m128	65	m93	87	m141	65	m92	87	m141	65	m92	87	m141	-	-	-	-
Northbound Right	800	3	m9	3	m5	3	m9	3	m5	3	m9	3	m5	3	m9	3	m5	-	-	-	-
Southbound Left	60	11	25	15	31	12	28	19	36	41	71	23	42	49	81	35	60	-	-	-	-
Southbound Thru	80	253	358	104	151	268	379	113	163	268	379	113	163	268	379	113	163	-	-	-	-
Southbound Right	80	0	3	1	5	0	3	1	5	0	3	1	5	0	3	1	5	-	-	-	-
2. Eastern Ave & Holly Ave																					
Eastbound Left Thru	410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Westbound Thru Right	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southbound Left Right	320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Eastern Ave & Kiss-and-Ride/Relocated Metro Station Dwy																					
Eastbound Thru Right	180	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-
Westbound Left Thru	100	-	1	-	1	-	1	-	1	-	0	-	0	-	0	-	0	-	-	-	-
Northbound Left Right	100	-	3	-	6	-	3	-	6	-	25	-	4	-	32	-	6	-	-	-	-
4. Eastern Ave & Metro Station Dwy																					
Eastbound Thru Right	130	-	0	-	0	-	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-
Westbound Left Thru	180	-	0	-	0	-	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-
Northbound Left Right	550	-	1	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
5. Eastern Ave & Cedar St/Cedar Ave																					
Eastbound Right	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northbound Left	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northbound Thru	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southbound Right	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. Cedar St & Site Dwy																					
Eastbound Left Right	100	-	-	-	-	-	-	-	-	-	0	-	0	-	8	-	7	-	-	-	-
Northbound Left Thru	180	-	-	-	-	-	-	-	-	-	0	-	0	-	1	-	3	-	-	-	-
Northbound Thru	180	-	-	-	-	-	-	-	-	-	0	-	0	-	0	-	0	-	-	-	-
Southbound Thru Right	190	-	-	-	-	-	-	-	-	-	0	-	0	-	0	-	0	-	-	-	-
7. Blair Rd & Cedar St																				***Signal timing adjustments tested***	
Eastbound Thru Right	390	74	131	120	#260	75	132	122	#264	86	146	124	#267	89	150	129	#282	-	-	128	#263
Westbound Left	250	46	m87	42	m71	46	m87	42	m69	40	m86	58	111	55	m105	69	126	-	-	69	126
Westbound Thru	250	176	279	46	m75	178	m279	46	m73	110	m237	51	101	125	m238	57	110	-	-	57	109
Westbound Right	250	40	112	23	m54	40	m112	24	m39	2	m35	28	64	3	m25	27	63	-	-	27	63

Intersection and Lane Group	Stor. Lgth. (ft)	Existing (2022)				Background Interim (2027)				Background (2027)				Future (2027)				Future (2027) with Mitigations			
		AM Peak		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*	
		50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
Northbound Thru	50	0	0	0	m2	0	0	0	m2	0	m2	0	m2	0	m2	0	m2	-	-	0	m2
Northbound Right	50	0	m0	0	m0	0	m0	0	m0	0	m0	0	m0	0	m0	0	m0	-	-	0	m0
Southbound Left Thru Right	450	212	370	200	m264	257	402	208	m268	257	401	208	m268	257	401	208	m268	-	-	228	m283
8. Blair Rd & 4th St																					
Southeastbound Left Thru	50	0	0	27	m28	0	0	27	m28	0	0	26	m27	0	0	26	m27	-	-	-	-
Northwestbound Thru	290	215	322	292	#434	216	323	294	#452	261	#414	312	#482	271	#432	336	#524	-	-	-	-
9 Cedar St & Metro Station Dwy																		***Signal timing adjustments tested***			
Eastbound Left Thru	250	-	1	-	1	-	1	-	1	63	m102	137	m208	69	m110	165	m220	69	m110	-	-
Westbound Thru Right	130	-	0	-	0	-	0	-	0	455	m504	230	317	471	m494	247	m333	350	531	-	-
Southbound Left Right	550	-	11	-	8	-	11	-	8	13	44	12	39	13	44	12	39	13	44	-	-
10. Cedar St & Carroll St																					
Eastbound Left Thru	130	18	m21	115	m157	18	m21	119	m159	18	19	117	152	15	19	133	173	-	-	-	-
Westbound Thru	320	94	130	55	95	93	132	58	101	98	135	63	106	97	135	62	105	-	-	-	-
Westbound Right	100	19	m32	36	79	19	m33	43	93	18	m29	41	87	19	m29	45	97	-	-	-	-
Southbound Left Right	180	103	#185	161	251	121	#228	172	265	~284	#456	190	291	~356	#540	217	#350	-	-	-	-
11. Carroll St & Maple St																					
Eastbound Left Thru Right	320	58	83	164	221	56	m78	173	235	51	m72	232	108	51	m73	245	112	-	-	-	-
Westbound Left Thru Right	150	233	349	190	m175	236	355	197	m182	253	377	206	m189	255	379	211	m194	-	-	-	-
Northbound Left Thru Right	380	21	56	79	142	21	57	83	148	21	57	83	148	21	57	83	148	-	-	-	-
Southbound Left Thru Right	760	29	73	29	70	29	73	29	70	29	73	29	70	29	73	29	70	-	-	-	-

Transit Facilities

This chapter discusses the existing and proposed transit facilities near the Project and evaluates the overall transit impacts of the Project.

This chapter concludes that:

- The Project is well-served by existing transit;
- The Project is located at the Takoma Metro station;
- The Project is served by seven (7) Metrobus and seven (7) Montgomery Country Ride-On routes; and
- The Project is expected to generate a manageable amount of transit trips that existing transit service is capable of handling.

Existing Transit Service

The study area is served by Metrorail, Metrobus and Montgomery County Ride-On. Combined, these transit services provide local and regional transit connections and link the Project with residential, employment, commercial, and cultural destinations throughout the region. Figure 24 identifies the transit routes, stations, and stops in the study area.

The 10-, 20-, and 30-minute distances accessible by transit (or "transitsheds") for the site are shown in Figure 25.

The Project is located adjacent to the Takoma Metro station served by the Red Line. The Red Line travels between the Glenmont and Shady Grove stations, both in Montgomery County, Maryland, by way of downtown Washington, DC.

As of November 2022, Red Line trains run every 10 minutes on weekdays and weekends.

The Project is also served by seven (7) Metrobus and seven (7) Montgomery County Ride-On routes. These bus routes connect the Project to many areas of the region, as well as several Metro stations. Table 10 shows a summary of the bus route information for the routes that serve the Project, including service hours, headway, and distance to the nearest bus stop.

Table 11 shows WMATA's recommended amenities for each type of bus stop. Table 12 shows a detailed inventory of the amenities appearing at each bus stop within the transit study area.

Planned Transit Service

MoveDC Transit Priority Network

The Transit Priority Network in the approved *MoveDC* 2021 update, the District's multimodal long-range transportation plan, proposes transit priority infrastructure such as dedicated transit lanes, better transit stops, and/or special treatments for buses at intersections along designated corridors. Specific treatments along given streets or route paths are not proposed but rather prioritized as part of the long-range plan. Transit priority corridors proposed near the proposed project include:

- Georgia Avenue NW for its entire length within the District of Columbia.

Site-Generated Transit Impacts

The proposed development is projected to generate 102 transit trips (34 inbound, 68 outbound) during the AM peak hour and 146 transit trips (80 inbound, 66 outbound) during the PM peak hour.

It is expected that existing transit service can accommodate these new site-generated trips.

Table 10: Local Bus Route Information

Route Number	Route Name	Service Hours at Stop Closest to Site			Headway (minutes)	Walking Distance to Nearest Stop
		Weekdays	Saturdays	Sundays		
WMATA Routes						
52, 54	14th Street Line	5:19am-1:51am	5:44am-1:50am	6:34am-1:50am	12-30	<0.1 mi (2 min)
62, 63	Takoma-Petworth Line	5:09am-12:00am	5:30am-11:57pm	5:30am-11:57pm	15-25	<0.1 mi (2 min)
F1, F2	Chillum Road Line	5:40am-9:45pm	6:30am-7:36pm	7:30am-7:30pm	55-65	<0.1 mi (2 min)
K2	Takoma-Fort Totten Line	5:58am-9:08am, 3:19pm-7:00pm	--	--	22	0.3 mi (6 min)
Montgomery County Ride-On Routes						
12	Silver Spring-Takoma	5:21am-12:58am	6:05am-12:57am	6:04am-12:57am	15-40	<0.1 mi (2 min)
13	Silver Spring-Takoma	7:04am-8:57am, 4:33pm-7:26pm	--	--	30-35	<0.1 mi (2 min)
14	Silver Spring-Takoma	5:57am-9:29pm	7:25am-7:29pm	--	45	<0.1 mi (2 min)
16	Silver Spring-Takoma	5:41am-1:43am	6:13am-1:42am	6:13am-1:42am	15-40	<0.1 mi (2 min)
18	Silver Spring-Langley Park	6:35am-11:55pm	6:30am-10:15pm	7:15am-8:00pm	45-55	<0.1 mi (2 min)
24	Hillandale-Takoma	5:45am-8:57am, 3:50pm-8:10pm	--	--	35	<0.1 mi (2 min)
25	Takoma-Langley Park	5:17am-8:42pm	--	--	35-45	<0.1 mi (2 min)

Table 11: WMATA Recommended Bus Stop Amenities

Amenity	Basic Stop		Enhanced Stop	Transit Center Stop
	< 50 daily boardings	≥ 50 daily boardings		
Bus stop flag	●	●	●	●
Route map and schedule	●	●	●	●
5’ x 8’ landing pad	●	●	●	●
40’/60’ x 8’ landing pad			●	●
4’ sidewalk	●	●	●	●
Bench		●	●	●
Shelter		●	●	●
Lighting (on shelter or within 30’ if overhead)	Recommended for stops with early morning and evening service		●	●
Dynamic information signage	Contingent on presence of shelter			
Trash and recycling receptacles	Recommended where surrounding uses may generate trash			

Source: 2019 WMATA *Bus Stop Amenity Reference Guide*

Table 12: Bus Stop Inventory

Location	Stop ID	Routes Served	Amenities								
			Bus stop flag	Route map & sched-ule	Land-ing pad	Side-walk	Bench	Shel-ter	Dy-namic info sign	Light-ing	Trash Recp.
WMATA Stops											
4th St & Butternut St NW (SB)	1002825	52, 54, 62, 63	●	●	●	●				●	●
5th St & Butternut St NW (NB)	1002819	62, 63	●		●	●				●	●
5th St & Butternut St NW (SB)	1002818	62, 63	●		●	●				●	●
5th St & Whittier St NW (NB)	1002795	62, 63	●		●	●				●	●
5th St & Whittier St NW (SB)	1002794	62, 63	●		●	●				●	●
Butternut St & 4th St NW (EB)	1003932	52, 54, 62, 63	●	●	●	●				●	
Butternut St & 6th St NW (EB)	1003254	52, 54	●	●	●	●				●	●
Butternut St & 6th St NW (WB)	1003255	52, 54	●	●	●	●				●	●
Butternut St & 8th St NW (EB)	1003252	52,54	●	●	●	●					●
Butternut St & 8th St NW (WB)	1002822	52, 54	●	●	●	●					●
Butternut St & Piney Branch Rd NW (EB)	1002821	52,54	●	●	●	●				●	●
Butternut St & Piney Branch Rd NW (WB)	1003256	52, 54	●	●	●	●					●
Eastern Ave & Laurel St NW (NB)	2001138	F1, F2, K2	●	●	●	●				●	●
Eastern Ave & Laurel St NW (SB)	1002827	F1, F2, K2	●	●	●	●					●
Eastern Ave & Walnut St NW (NB)	2001137	F1, F2, K2	●	●	●	●				●	
Eastern Ave & Walnut St NW (SB)	1002812	F1, F2, K2	●	●	●	●					●
Montgomery County Ride-On Stops											
Carroll Ave & Laurel Ave (EB)	20744	12, 13, 16, 18	●	●	●	●	●			●	●
Carroll Ave & Maple Ave (EB)	20742	12, 13, 16, 18	●		●	●					
Carroll Ave & Maple Ave (WB)	20806	12, 13, 16, 18, 25	●		●	●				●	●
Carroll Ave & Tulip Ave (EB)	20746	12, 13, 16, 18	●	●	●	●	●	●			●
Carroll Ave & Tulip Ave (WB)	20802	12, 13, 16, 18	●		●	●	●			●	●
Carroll Ave & Willow Ave (WB)	20804	12, 13, 16, 18	●		●	●	●			●	●
Eastern Ave & Holly Ave (NB)	21858	14, 18, 24	●		●	●					
Maple Ave & Austin Pl (NB)	23844	25	●		●	●					
Maple Ave & Austin Pl (SB)	23866	25	●		●	●					

Location	Stop ID	Routes Served	Amenities								
			Bus stop flag	Route map & sched-ule	Land-ing pad	Side-walk	Bench	Shel-ter	Dy-namic info sign	Light-ing	Trash Recp.
Maple Ave & Carroll Ave (NB)	23840	25	●		●	●				●	
Maple Ave & Carroll Ave (SB)	23870	25	●		●	●					
Maple Ave & Tulip Ave (NB)	23842	25	●			●					
Maple Ave & Tulip Ave (SB)	23868	25	●		●	●					

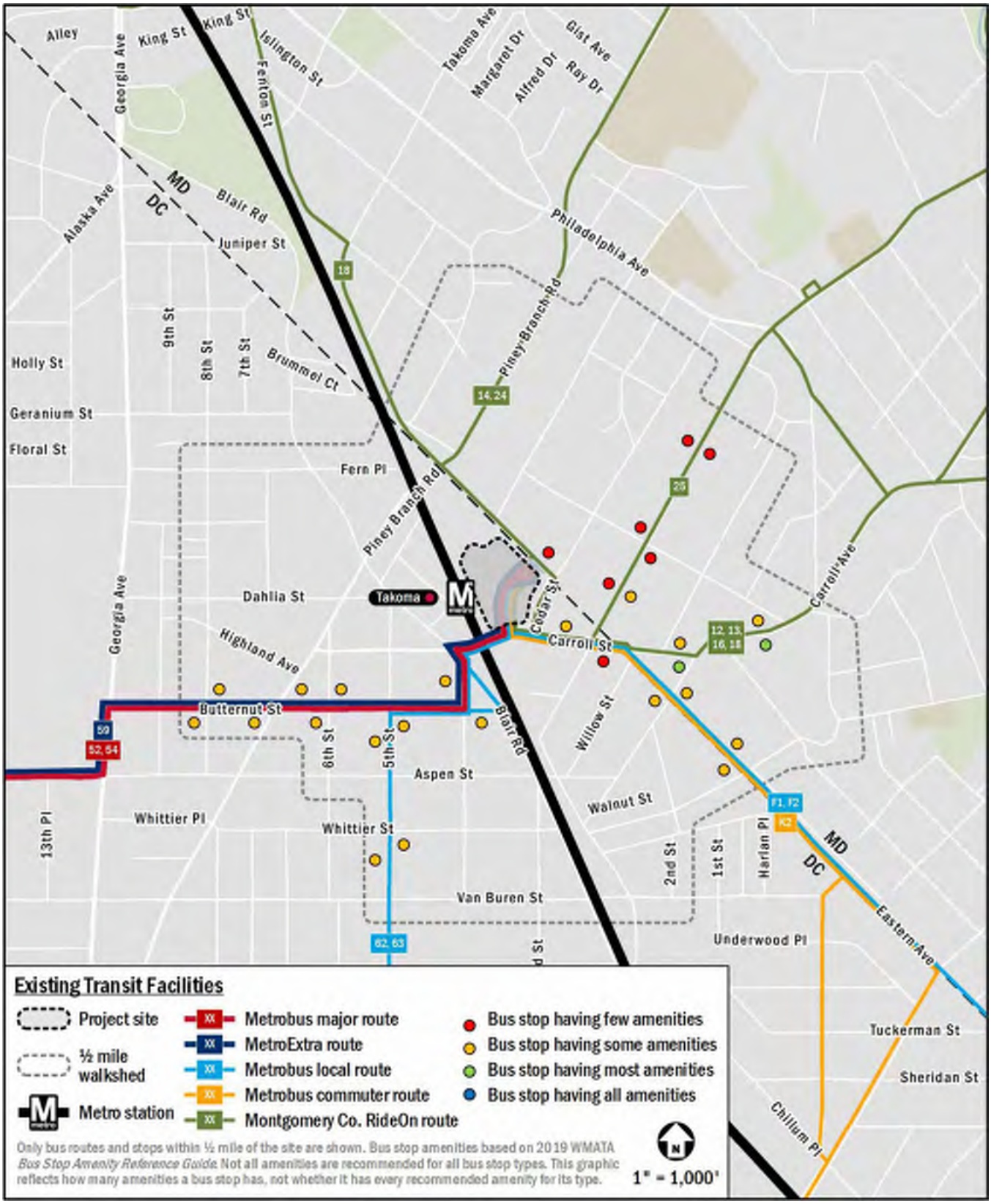


Figure 24: Existing Transit Facilities

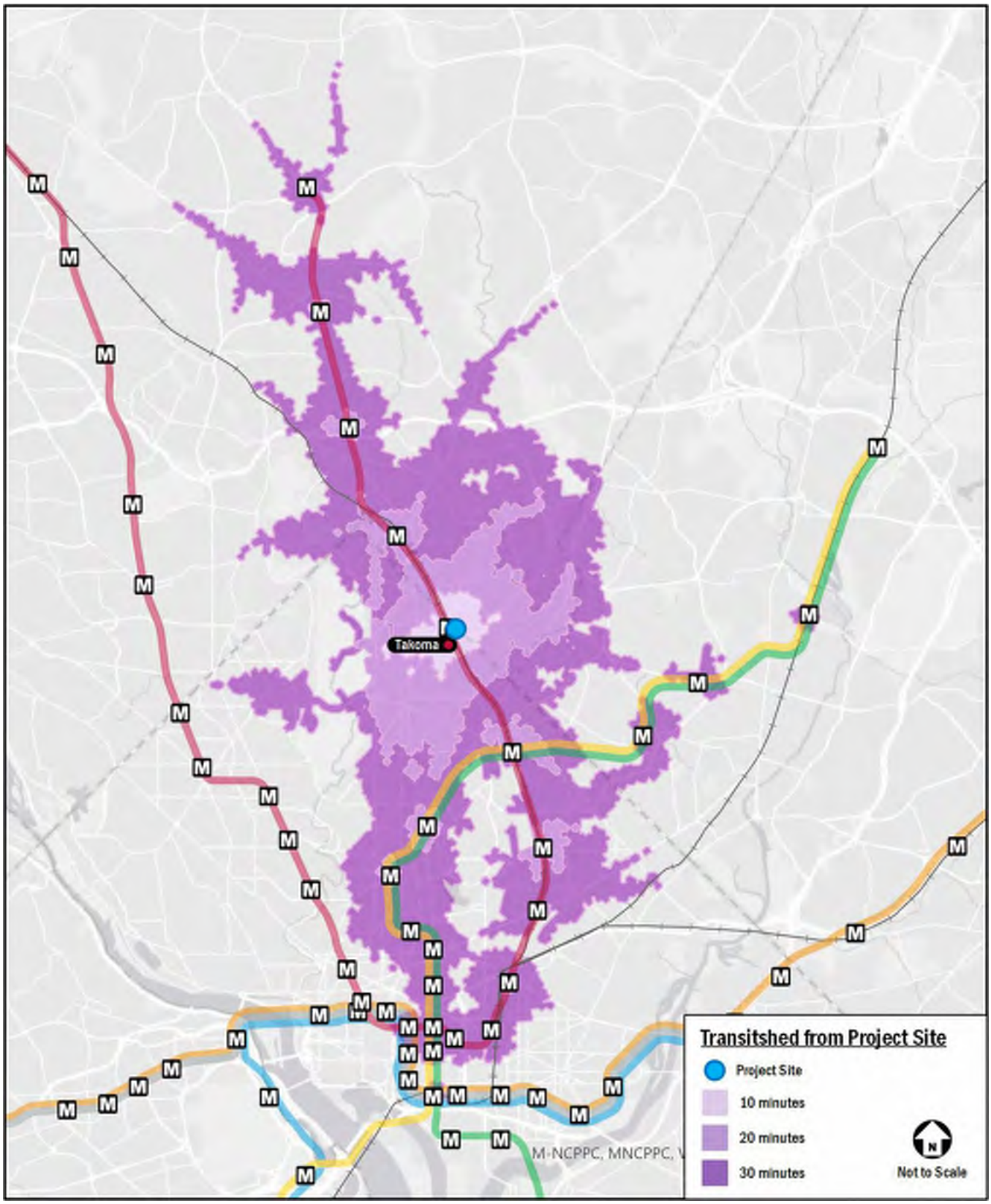


Figure 25: Transitshed from project site

Pedestrian Facilities

This chapter summarizes existing pedestrian access to the Project and reviews the impacts of the Project on the pedestrian network.

The following conclusions are reached within this chapter:

- There is generally a quality, connective pedestrian network surrounding the site, despite some instances of sidewalks not meeting width requirements, as well as non-compliant curb ramps and crosswalks; and
- The Project is expected to generate pedestrian trips to and from nearby destinations, and the pedestrian facilities surrounding the Project can accommodate these new trips.
- A new traffic signal is proposed at the Carroll Street intersection with the relocated bus-loop/WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

Pedestrian Study Area

Pedestrian facilities within a quarter-mile of the Project were evaluated. There are several sidewalks within the study area that do not meet minimum width requirements, as well as missing or non-compliant crosswalks and curb ramps at minor intersections. Despite these shortcomings, there is generally an adequate, well-connected pedestrian network surrounding the Project.

The 10-, 20-, and 30-minute walksheds for the project site are shown in Figure 26.

Existing Pedestrian Infrastructure

A detailed inventory of the existing pedestrian facilities within the study area is shown on Figure 27. Sidewalks, crosswalks, and curb ramps were evaluated based on the guidelines set forth by DDOT's *Design and Engineering Manual* (2019) in addition to Americans with Disabilities Act (ADA) standards. These facilities are shown within their respective land use types based on DC's Zoning Regulations of 2016, which determines which of DDOT's sidewalk width requirements apply. The sidewalk width requirements are determined using the DC's Zoning Regulations of 2016. These sidewalk width requirements are shown in Table 13.

Table 13: DDOT Sidewalk Width Requirements

Street Type	Curb Walk	Tree/Fur-nishing Zone	Sidewalk Unobstructed Clear Width	Total Minimum Sidewalk Width
Low to Moderate Density Residential	None	4 - 6 feet	6 feet	10 feet
High Density Residential or Light Commercial	1 foot	4 - 8 feet	8 feet	13 feet
Central DC and Commercial Areas	1 - 2 feet	4 - 10 feet	10 feet	16 feet

Source: DDOT *Design and Engineering Manual*

Sidewalks

As shown on Figure 27, the pedestrian study area includes streets within the "Low to Moderate Density Residential" and "High Density Residential or Light Commercial" categories of sidewalk width requirements. There are some sidewalks that do not meet DDOT's minimum width requirements. In some of these cases, the sidewalk meets the width requirement of a lower intensity land use, but not its applicable land use. There are missing sidewalks near residential neighborhoods near the project.

Curb ramps

ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks are not desired but where they are present, a 48" clear space is required outside active vehicle traffic lanes and within marked crossings. As shown on Figure 27, there are some intersections near the Project that are missing a curb ramp and/or crosswalk on one or more leg.

Crosswalks

DDOT's *Design and Engineering Manual* (2019) requires crosswalks at all intersections or mid-block locations controlled by vehicular and/or pedestrian traffic signals or all-way stop signs. Additionally, high-visibility crosswalks are required at all uncontrolled crosswalks and all crosswalks (including signalized or stop-controlled crosswalks) leading to a block with a school, within a designated school zone area, along a designated school

walking route, on blocks adjacent to a Metro station, in areas with moderate to high pedestrian volumes, and in locations with high frequencies of conflicts with pedestrians and turning vehicles.

As shown on Figure 27, there are several instances near the Project where crosswalks are non-compliant or not present.

Connectivity Barriers

As shown in Figure 27, the Metrorail tracks immediately west of the Project form a barrier to pedestrian connectivity in the area. There is a pedestrian crossing of the tracks on Cedar Street NW immediately south of the Project, but crossings throughout the neighborhood are otherwise limited.

Proposed Pedestrian Infrastructure

The Project will include a reconfiguration of the bus loop/driveway serving the Takoma Metro station, as well as reconfigure the open space on the Project site. These reconfigurations will include upgraded sidewalks along the most of the perimeter of the site, internal walkways traversing the open space, and a shared use path through the site which will improve the porosity of the overall pedestrian network in the Project area. In addition to providing function and connectivity, the Project's pedestrian infrastructure will include attractive landscaping and paving materials which will improve the overall pedestrian experience both for site users and for people walking through the site to the Metro station.

A new traffic signal is proposed at the Carroll Street intersection with the relocated bus-loop/WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

Site-Generated Pedestrian Impacts

The proposed development is projected to generate 30 pedestrian trips (15 inbound, 15 outbound) during the AM peak hour and 63 pedestrian trips (33 inbound, 30 outbound) during the PM peak hour.

The origins and destinations of these pedestrian trips are likely to be:

- Commuting to/from work
- Retail and restaurant locations; and
- Neighborhood destinations such as libraries and parks.

In addition to these trips, the transit trips generated by the Project will also generate pedestrian demand between the Project and nearby bus stops. It is expected that existing pedestrian facilities can accommodate these new site-generated trips.

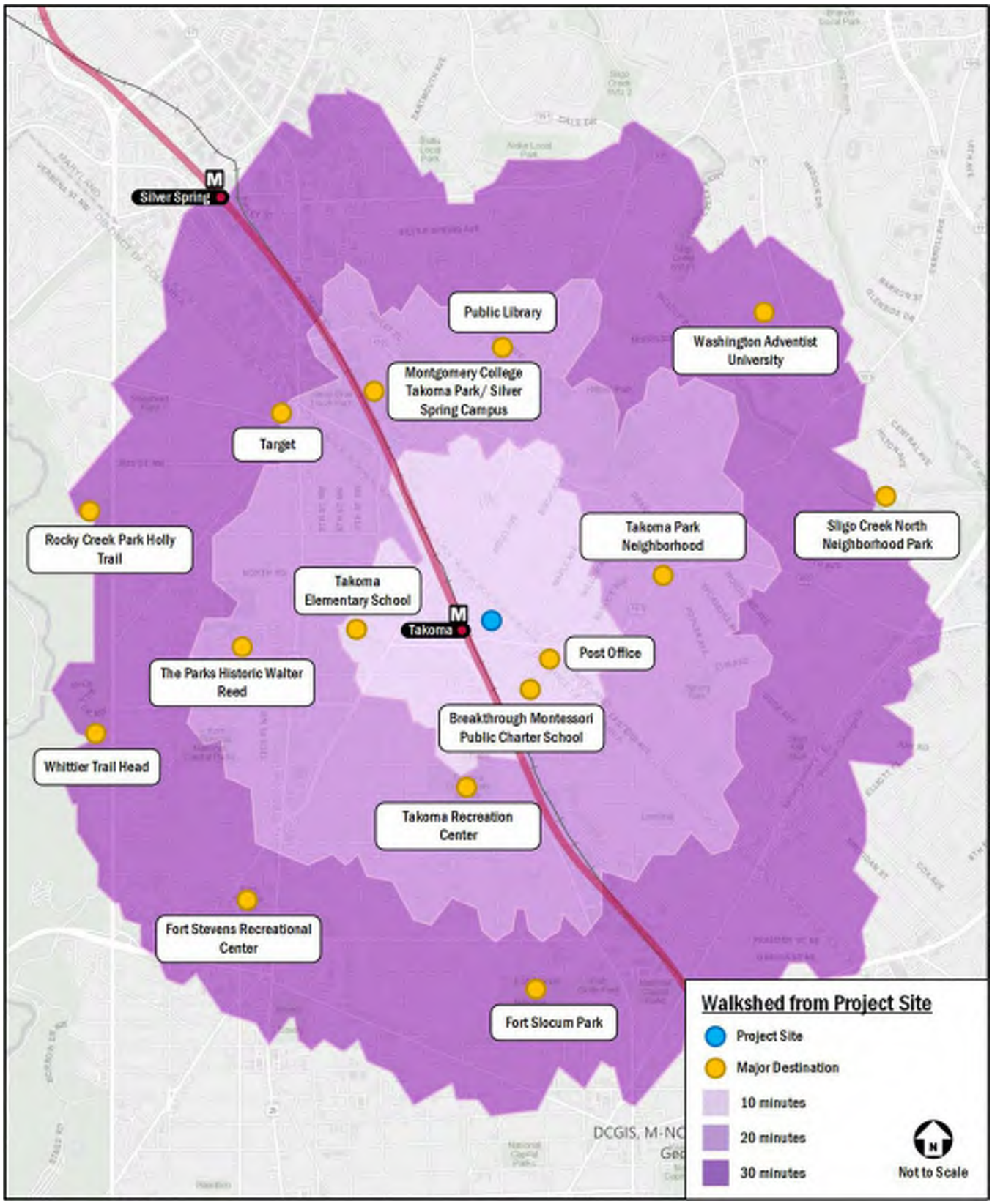


Figure 26: Walkshed from Project Site

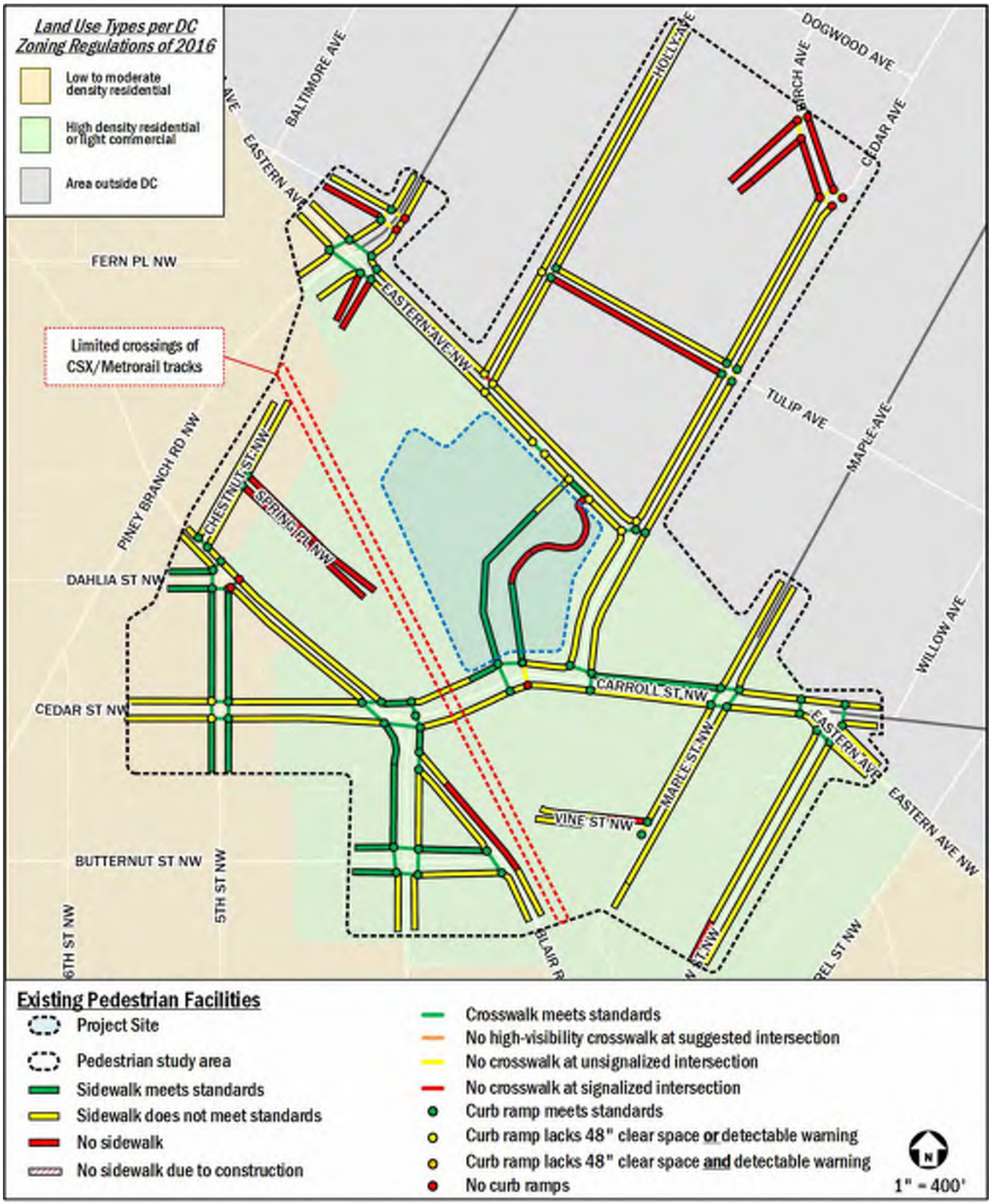


Figure 27: Existing Pedestrian Facilities

Bicycle Facilities

This chapter summarizes existing bicycle access to the Project and reviews the impacts of the Project on the bicycle network.

The following conclusions are reached within this chapter:

- The Project has access to several on- and off-street bicycle facilities within the study area;
- Several planned and proposed bicycle projects will improve bicycle access to the Project;
- The Project will include short- and long-term bicycle parking that meets zoning requirements; and
- The Project is expected to generate a manageable number of bicycle trips; therefore, site-generated bicycle trips can be accommodated on existing infrastructure.

Existing Bicycle Facilities

The Project is located adjacent to the protected bike lanes on Piney Branch Road NW, signed bike routes on Cedar Street NW, and 0.3 miles from bike lanes on Butternut Street NW, and 0.5 miles from bike lanes on 8th Street NW. Using these facilities, bicyclists have access to several other regional bicycle facilities, such as the Rock Creek Trail. The site is also adjacent to the future extension of the Metropolitan Branch Trail which is expected to open in 2024 Figure 28 illustrates existing bicycle facilities in the area.

The 10-, 20-, and 30-minute bikeable distances (or "bikesheds") from the site are shown in Figure 30.

Capital Bikeshare

In addition to personal bicycles, the Capital Bikeshare program provides an additional cycling options for residents, employees, and visitors of the Project. The program has placed over 600 bikeshare stations across the Washington, DC metropolitan area with over 5,000 bicycles in the fleet. The following Capital Bikeshare stations are within a half-mile of the Project:

- A 19-dock station at Takoma Metro Station, less than 0.1 miles south of the Project; and
- A 15-dock station at Carroll and Westmoreland Avenue NW, 0.4 miles east of the Project.

Figure 28 shows existing Capital Bikeshare locations in the area.

Shared Mobility

As of November 2022, micromobility service in the District is provided by eight (8) private dockless companies operating e-bikes and electric scooters (e-scooters). These include two (2) companies operating e-bikes (HelBiz and Jump) and six (6) companies operating e-scooters (Bird, Lime, Lyft, Razor, Skip, and Spin). These dockless vehicles are provided by private companies that give registered users access to a variety of e-bike and e-scooter options. These devices are used through each company-specific mobile phone application. Many dockless vehicles do not have designated stations where pick-up/drop-off activities occur like with Capital Bikeshare. They are typically parked in public space, most commonly in the "furniture zone" or the portion of the sidewalk between where people walk and the curb, often where other street signs, street furniture, trees, and parking meters are found. In addition to DDOT's program, dockless programs exist in Arlington County, Fairfax County, the City of Fairfax, the City of Alexandria, and Montgomery County.

Planned and Proposed Bicycle Facilities

There are several bicycle improvements near the Project that are planned and scheduled to open in the near future. These are shown on Figure 29.

MoveDC Bicycle Priority Network

As part of its ongoing update to the District's multimodal long-term transportation plan, *MoveDC*, DDOT has designated both funded and future planned improvements to the District's Bicycle Priority Network. Funded improvements are locations that currently have funding identified for construction within six (6) years. Metropolitan Branch Trail, an off-street trail is a funded improvement along Blair Road NW near the project site.

Additionally, DDOT has designated future planned improvements to the network that may be added in the future but currently do not have committed funding. These planned improvements are shown on Figure 29.

Montgomery County Bicycle Master Plan

Montgomery County's Bicycle Master Plan has identified several planned bicycle facilities immediately northeast of the Project in Takoma Park, Maryland. These planned improvements are shown on Figure 29.

Capital Bikeshare Development Plan

DDOT's Capital Bikeshare Development Plan was originally released in 2016 to guide the continued growth of Capital Bikeshare in the District of Columbia. The most recent update of the Development Plan was released in 2020 and proposed new Capital Bikeshare stations near the site, including at the following intersection(s):

- Germanium Street and Blair Road NW;
- Butternut Street and 9th Street NW;
- 7th Street and Van Buren Street NW; and
- Roxboro Place and 7th Street NW.

Site-Generated Bicycle Impacts

This section summarizes the impacts of the Project on bicycling conditions surrounding the Project.

On-site Bicycle Infrastructure

The Project will meet zoning requirements by providing at least 149 long-term bicycle parking spaces inside the building and at least 27 short-term bicycle parking spaces on exterior racks along the site's frontage and in a publicly accessible area within the garage. All residential long-term bike parking will be located in Level 1, as requested by DDOT.

The long-term bicycle spaces will adhere to Subtitle C § 805.9 of DC's zoning requirements, as well as DDOT's *Bike Parking Guide*, which stipulate that long-term spaces be located indoors in a parking garage or bike storage room, and that at least 50% of required long-term spaces (120 spaces) be placed horizontally on the floor or ground, without bicycles being suspended. Additionally, at least 12 of the long-term spaces (5% of the total) will be 10' x 3' spaces to accommodate cargo/tandem bikes, and at least 24 of the long-term spaces (10% of the total) will include electrical outlets for e-bikes and scooters.

In addition to long- and short-term bike parking, the Project will provide a shared use path along the Project's southern and eastern sides, which will connect with the Metropolitan Branch Trail extension.

Bicycle Trip Generation

The Project is projected to generate 15 bicycle trips (5 inbound, 10 outbound) during the AM peak hour and 21 bicycle trip (11 inbound, 10 outbound) during the PM peak hour.

It is expected that existing bicycle facilities can accommodate these new site-generated trips.

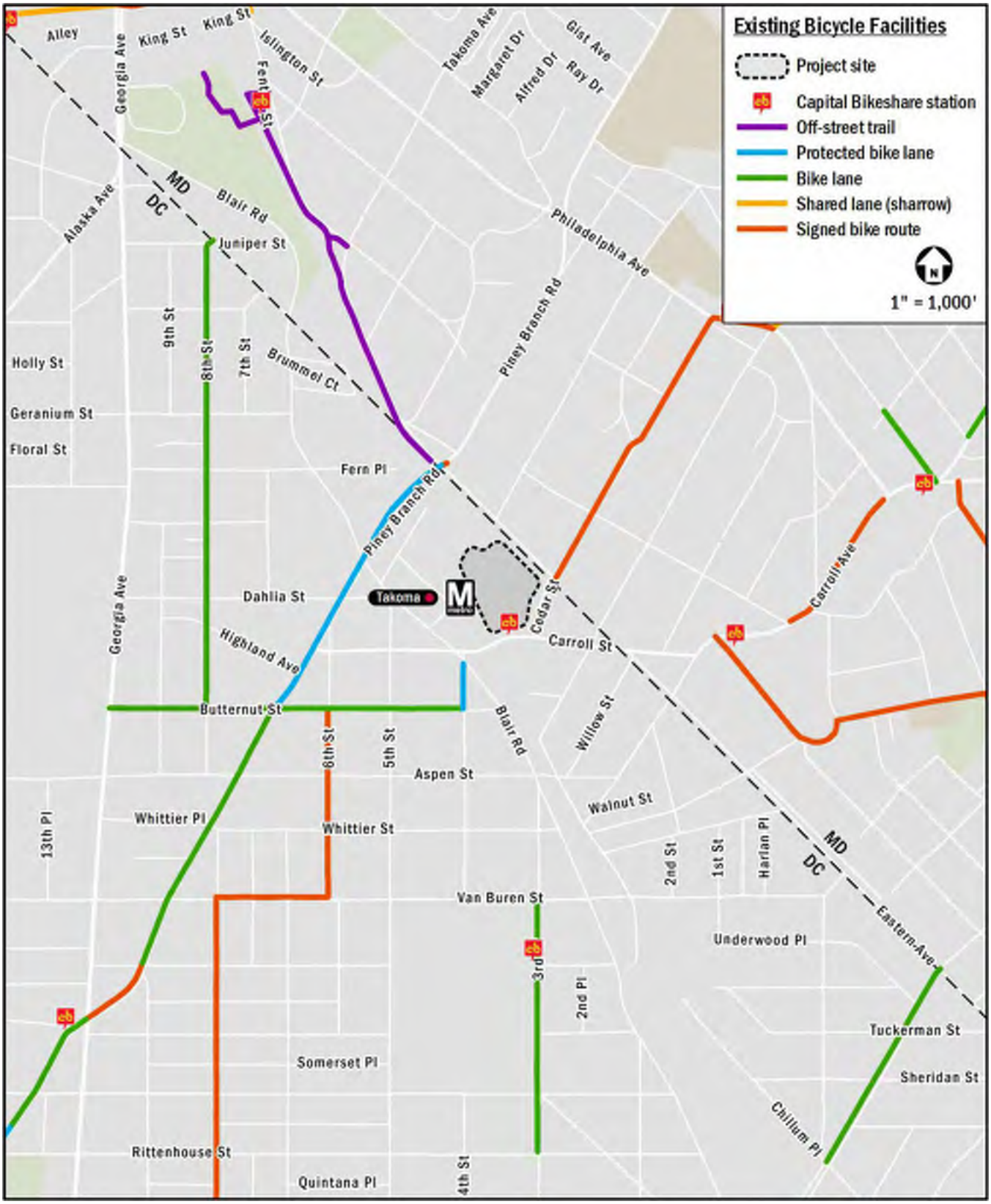


Figure 28: Existing Bicycle Facilities



Figure 29: Existing and Planned Bicycle Facilities

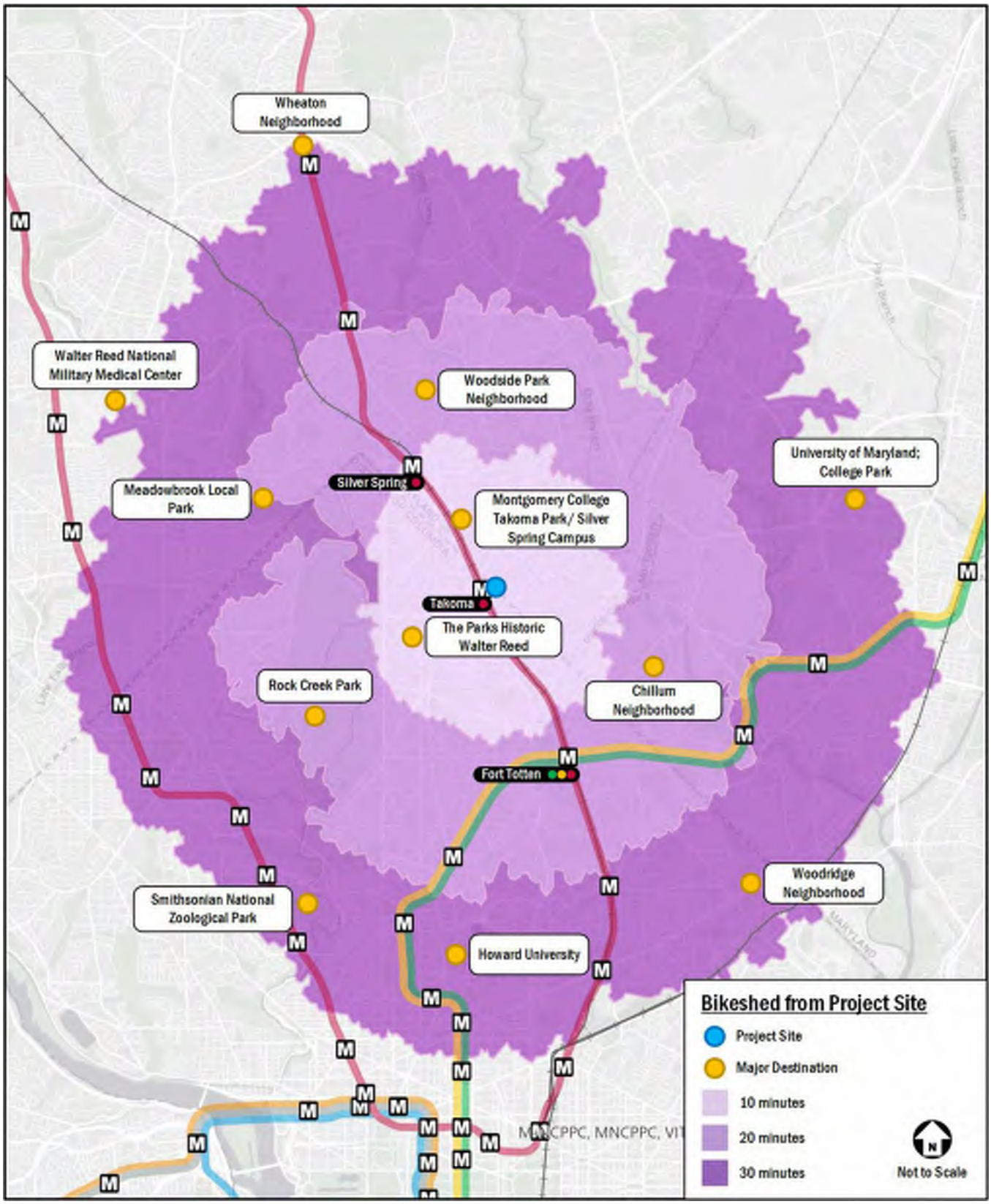


Figure 30: Bikeshed from Project site

Safety Analysis

This chapter reviews any vehicle, pedestrian, or bicycle conflicts at the study area intersections or street links within the study area. This review notes any intersections within the study area that have been identified by DDOT as high crash locations and makes recommendations to improve safety conditions. These recommendations are presented for DDOT's consideration, not for the Applicant to complete as part of the Project.

These analyses assess existing conditions at the nearby intersections and are not caused by the proposed Project. The results are for informational purposes to be reviewed by DDOT.

Summary of Safety Analysis

A safety analysis was performed to determine if there are any intersections that pose obvious conflicts with vehicles, pedestrians, or bicyclists. This was determined based on data included in DDOT's most recent *Traffic Safety Statistics Report* (2018-2020), *Vision Zero Action Plan*, and Open Data DC Vision Zero Safety data.

Based on available data, no study intersections have been identified by DDOT as a top 20 hazardous/high crash intersection. Additionally, a qualitive review of the crash data available through the DDOT-maintained and publicly available "Crashes in DC" database was performed to identify study intersections in which conditions for vehicles, pedestrians, and bicyclists can be improved.

Based on a review of facilities in the area and crash data, one (1) intersection were identified for further evaluation. The following section details the potential conflicts at the identified study area intersections.

Potential Impacts

This section reviews the intersections identified to pose potential conflicts to vehicles, pedestrians, or bicyclists.

Blair Road and Cedar Street NW

While this intersection was not identified in DDOT's *Traffic Safety Statistics Report* (2018-2020) as having comparatively high rates of crash frequency, the DDOT-maintained "Crashes in DC" database shows a moderate number of crashes at this intersection since 2017, as shown on Figure 31, including two (2) pedestrian-involved crashes, as shown on Figure 32.

This intersection operates as a four-legged, signalized intersection. High-visibility crosswalks are currently provided at every leg. Curb ramps that include detectable warnings per ADA standards are also provided on every corner.

This report recommends that DDOT perform a safety audit at this intersection as part of its Traffic Safety Assessment program to further evaluate the extent of safety issues and determine if any action is needed.

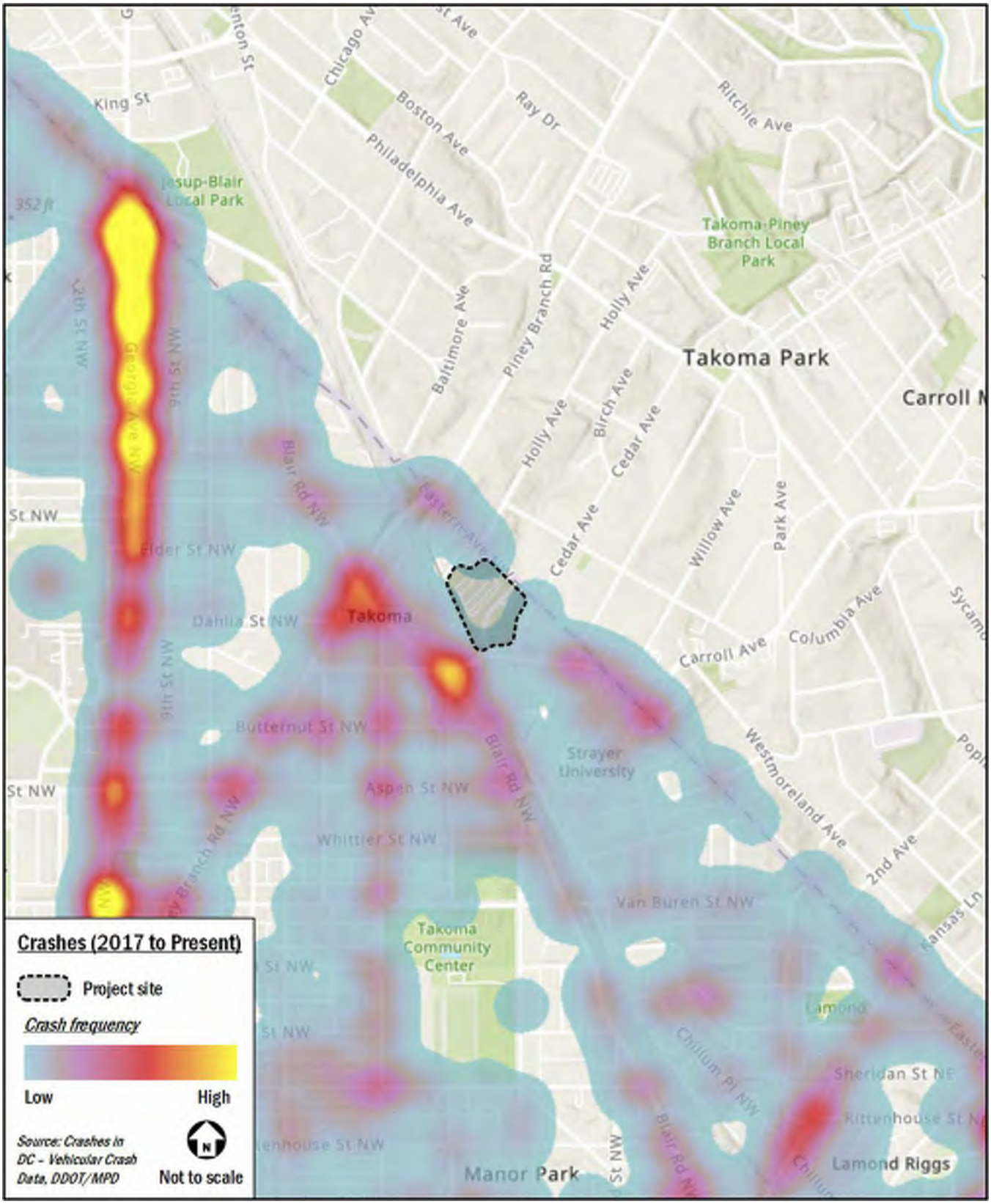


Figure 31: Crashes (2017 to present) (Only covers area within the District of Columbia)

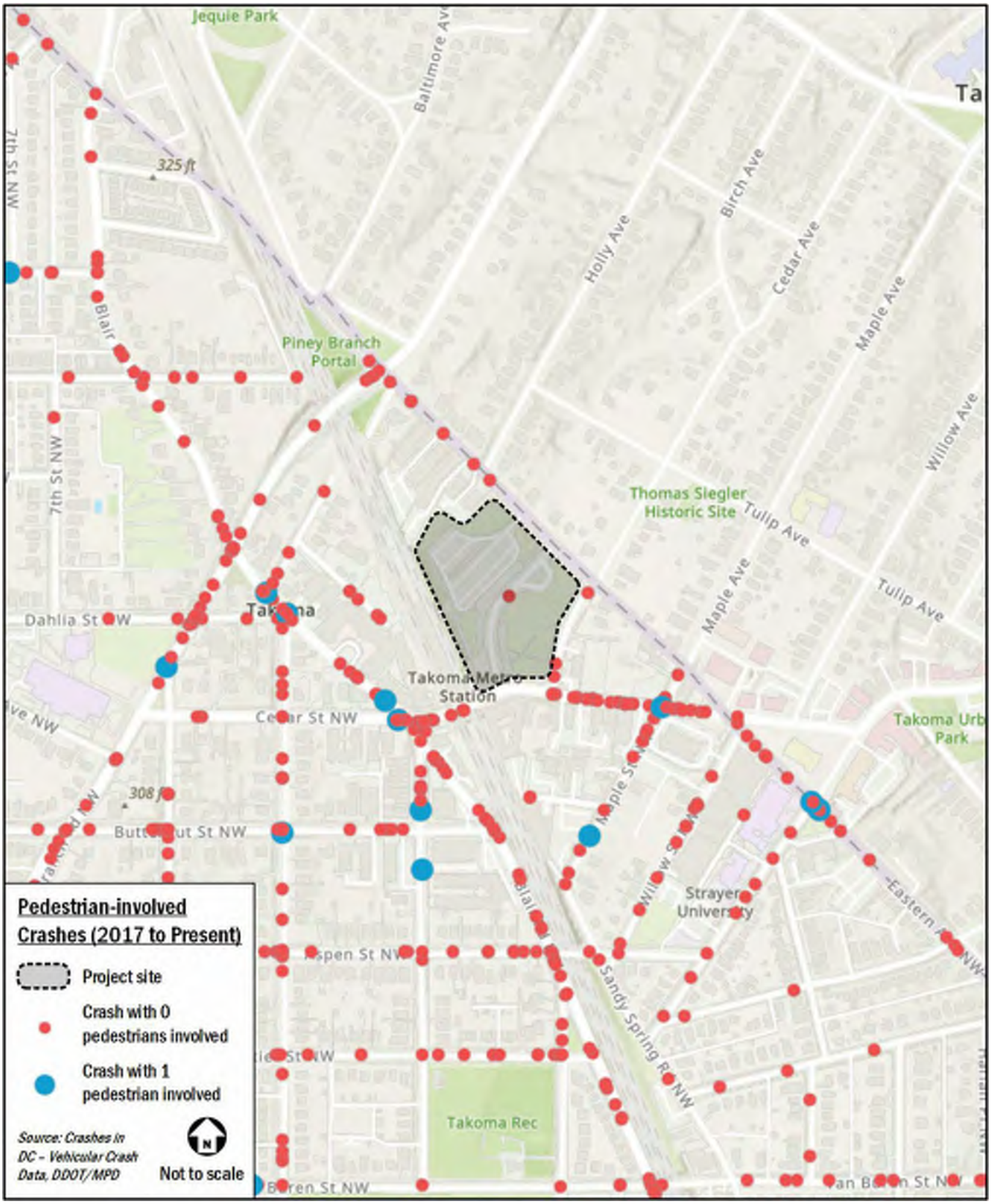


Figure 32: Pedestrian-involved Crashes (2017 to present)

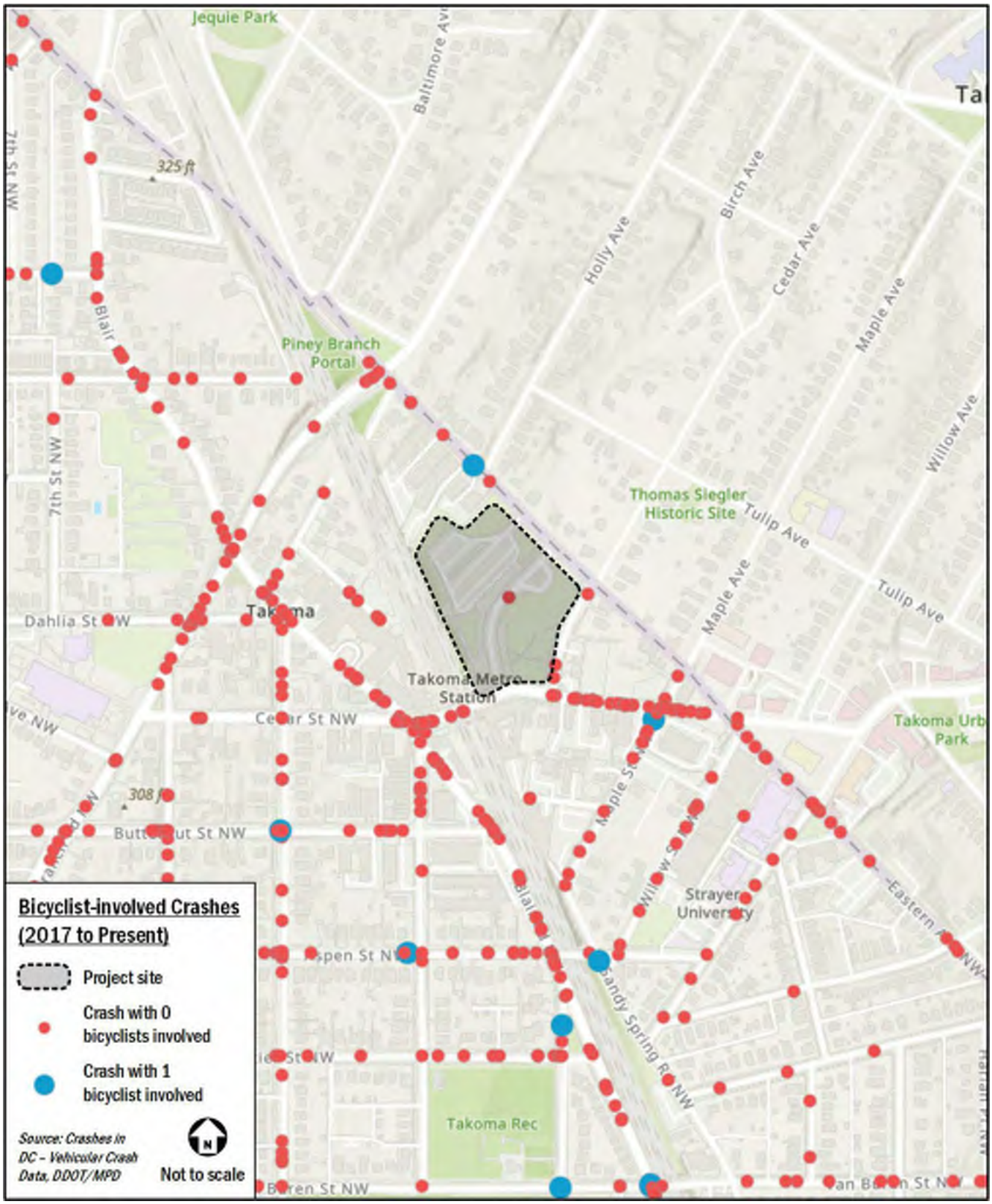


Figure 33: Bicycle-involved Crashes (2017 to present)

Summary and Conclusions

This report has presented a Comprehensive Transportation Review (CTR) in support of the Takoma Metro Multifamily PUD (the "Project").

The purpose of this CTR is to evaluate whether the Project will result in a detrimental impact to the transportation network surrounding the site. This evaluation is based on a technical comparison of Existing Conditions, Background Conditions, and Total Future Conditions.

This report concludes that the Project will not have a detrimental impact to the surrounding transportation network assuming the proposed site design elements are implemented.

Proposed Project

The Project site is bounded by Eastern Avenue NW to the northeast, Cedar Street NW to the east, Carroll Street NW to the south, and the Takoma Metro station to the west.

The existing site is currently improved with a WMATA Metro parking/kiss-and-ride lot, bus loop, and green space. The Project proposes to redevelop the existing site into a mixed-use development with approximately 440 multifamily residential units, 17,650 square feet of ground-floor retail space, and 230 garage parking spaces. As part of the Project, the WMATA facilities will be reconfigured within the remaining WMATA area adjacent to the Metro station.

Site Layout

The Project will occupy the northern portion of the site, with primary vehicular and loading access provided from a new curb cut on Cedar Street connecting a curbless driveway into the site. An additional garage access point will be provided from the WMATA bus-loop entrance from Eastern Avenue.

The WMATA Metro station vehicular circulation will be reconfigured to allow for inbound and outbound bus access from Eastern Avenue and Carroll Street via a new internal roadway separating the Project from the Metro station. Kiss-and-ride service will be accommodated via inbound movements from Carroll Street that will become median divided from the bus-loop once internal to the site. Kiss-and-ride vehicles will exit the site via Eastern Avenue. No WMATA or Metro station parking will be provided with the reconfigured layout.

A new traffic signal is proposed at the Carroll Street intersection with the WMATA access road. This traffic signal will allow for protected pedestrian movements and left turn movements at the intersection and will include new concrete curb extensions, addition of the missing crosswalk on the east leg of Carroll Street and other pedestrian improvements.

The Project also includes a proposal to provide kiss-and-ride spaces along Carroll Street beneath the bridge.

Multimodal Overview

Trip Generation

The Project is expected to generate new trips within the surrounding transportation network across all transportation modes during the morning and afternoon peak hours. However, with the Project's proposed Transportation Demand Management (TDM) plan, the resulting new trips generated by the Project will not have a detrimental impact on the area transportation network. The multimodal trip generation for the Project, without reductions taken for existing uses to be removed, is as follows:

	AM Peak Hour	PM Peak Hour
Vehicle Trips	115	136
Transit Trips	102	146
Bicycle Trips	15	21
Pedestrian Trips	30	63

Transit

The Project is located at the Takoma Metro station on the Red Line and is served by several local bus routes.

The Project is expected to generate a manageable amount of transit trips, and the existing service can accommodate these new trips.

Pedestrian

The site is surrounded by a generally adequate pedestrian network. Despite some incidences of missing sidewalks, curb ramps, and crosswalks on minor streets near the project site, there are generally adequate pedestrian facilities along primary walking routes between the site and major local destinations.

The Project is expected to generate a manageable amount of pedestrian trips, and the existing and proposed pedestrian facilities can accommodate these new trips.

Further, the Project will include upgrading pedestrian infrastructure along portions of the site perimeter on Eastern Avenue, Cedar Street and Carroll Street, as well as internal pedestrian facilities.

A bike and pedestrian pathway will also be provided through the site connecting Eastern Avenue with Cedar Street and Carroll Street.

Bicycle

The site is located 0.1 miles from the protected bike lanes on Piney Branch Road NW and the bike trail along Takoma Avenue and Fenton Street in Takoma Park. The site is also adjacent to the future extension of the Metropolitan Branch Trail which is expected to open in 2024. Using these facilities, bicyclists have access to several other regional bicycle facilities.

The Project will include long-term bicycle parking inside the building and short-term bicycle parking along the building perimeter that meets or exceeds zoning requirements. The Project will also provide a shared use path along its southern and eastern sides which will connect with the Metropolitan Branch Trail extension.

Additionally, bike parking and lockers will be available adjacent to the Project at the Takoma Metro station.

The Project is expected to generate a manageable amount of bicycle trips, and the existing bicycle facilities can accommodate these new trips.

Vehicular

The project is accessible via Carroll Street NW, a minor arterial, and Eastern Avenue NW and Cedar Street NW, collectors, which connect the site to principal arterials such as Georgia Avenue NW, Missouri Avenue NW, and New Hampshire Avenue NW which becomes a designated major highway in Montgomery County, Maryland. These principal arterials and highways connect with expressways within the District and Maryland such as the Capital Beltway (I-495), the Anacostia Freeway (DC-295), the Southeast Freeway (I-695), and the Southwest Freeway (I-395). These expressways connect with other regional Interstates.

To determine the Project's impact on the transportation network, future conditions were analyzed with and without the Project based on the number of trips the Project is expected to generate. Intersection analyses were performed to obtain the average delay and queue a vehicle will experience. These average delays and queues were compared to the acceptable levels of delay set by DDOT standards as well as existing and background queues to determine if the Project will negatively impact the study area.

The analysis concluded that one (1) of the 11 intersections studied (Cedar Street & Carroll Street NW) meets DDOT's delay- or queuing-related thresholds for potential mitigation.

A potential improvement was identified that would reduce delays below background conditions that includes signal timing adjustments at the intersection; however, the Project's impact at this location is proposed to be mitigated via the Project's robust TDM plan that will encourage non-auto modes of travel for site users.

Further, it should be noted that a primary driver of this intersection's increased delay under background future conditions with the Metro reconfiguration is that we have added additional bus and kiss-and-ride traffic to the road network to represent full potential kiss-and-ride use based on historical WMATA metro usage data for pre-covid conditions.

Safety Recommendations

A qualitative review of the crash data available through the DDOT-maintained and publicly-available "Crashes in DC" database was performed to identify study intersections in which conditions for vehicles, pedestrians, and bicyclists can be improved.

Based on a review of facilities in the area and crash data, one (1) intersection was identified for DDOT to evaluate further. Recommendations for these intersections, **presented for DDOT's consideration and not for the Applicant to complete as part of the Project, are summarized below:**

Blair Road and Cedar Street NW

DDOT should consider performing a safety audit at this intersection as part of DDOT's Traffic Safety Assessment program to further evaluate the extent of safety issues and determine if any action is needed.

Transportation Demand Management (TDM) Plan

Per the DDOT CTR guidelines, the goal of implementing TDM measures is to reduce the number of single occupancy vehicles and vehicle ownership within the District. The promotion of various programs and existing infrastructure includes maximizing the use of transit, bicycle, and pedestrian facilities. DDOT has outlined expectations for TDM measures in the CTR guidelines,

and this Project is proposing to implement a TDM plan consistent with these guidelines, as discussed in the Project Design section of this report.

Loading Management Plan (LMP)

Per DDOT scoping comments, this report includes a Loading Management Plan (LMP), whose goals are to maintain a safe environment for all users of the site, loading area, streets, and nearby intersections, minimize undesirable impacts to pedestrians and to employees, reduce conflicts between truck traffic using the loading facilities and other street users, and ensure smooth operation of the loading facilities through appropriate levels of management and schedule operations.

Summary

This report concludes that the Project will not have a detrimental impact on the surrounding transportation network assuming the proposed site design elements are implemented.

The Project has several positive design elements that minimize potential transportation impacts, including:

- The Project's proximity to transit service and bicycle infrastructure, located at the Takoma Metro Station;
- The Project's location within in a generally adequate pedestrian network along major walking routes;
- The Project's loading facilities, which maintain loading activity within private property and provide loading circulation that ensures head-in/head-out truck movements are performed from the public roadway network;
- The inclusion of secure long-term bicycle parking spaces that meet zoning requirements;
- The inclusion of short-term bicycle parking spaces along the frontage of the site that meet zoning requirements;
- The inclusion of a shared use path connecting to nearby bicycle facilities;
- The inclusion of extensive pedestrian improvements around the property and at the Carroll Street intersection with the WMATA bus-loop, including signalization, curb extensions and installation of the missing crosswalk on the east leg of Carroll Street;
- A Loading Management Plan (LMP) that facilities safe and orderly loading operations; and
- A TDM plan that reduces the demand of single-occupancy, private vehicles during peak period travel times and shifts single-occupancy vehicular demand to off-peak periods.

Transportation Technical Attachments

Takoma Metro Multifamily Development

Washington, DC

April 26, 2023

GOROVE SLADE
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B. Scoping Information

C. Vehicle Level of Service Definitions

D. Turning Movement Counts

E. Background Development Trip Generation Information

F. Vehicular Capacity Analysis Worksheets – 2022 Existing Conditions

G. Vehicular Capacity Analysis Worksheets – 2027 Background Interim Conditions

H. Vehicular Capacity Analysis Worksheets – 2027 Background Conditions

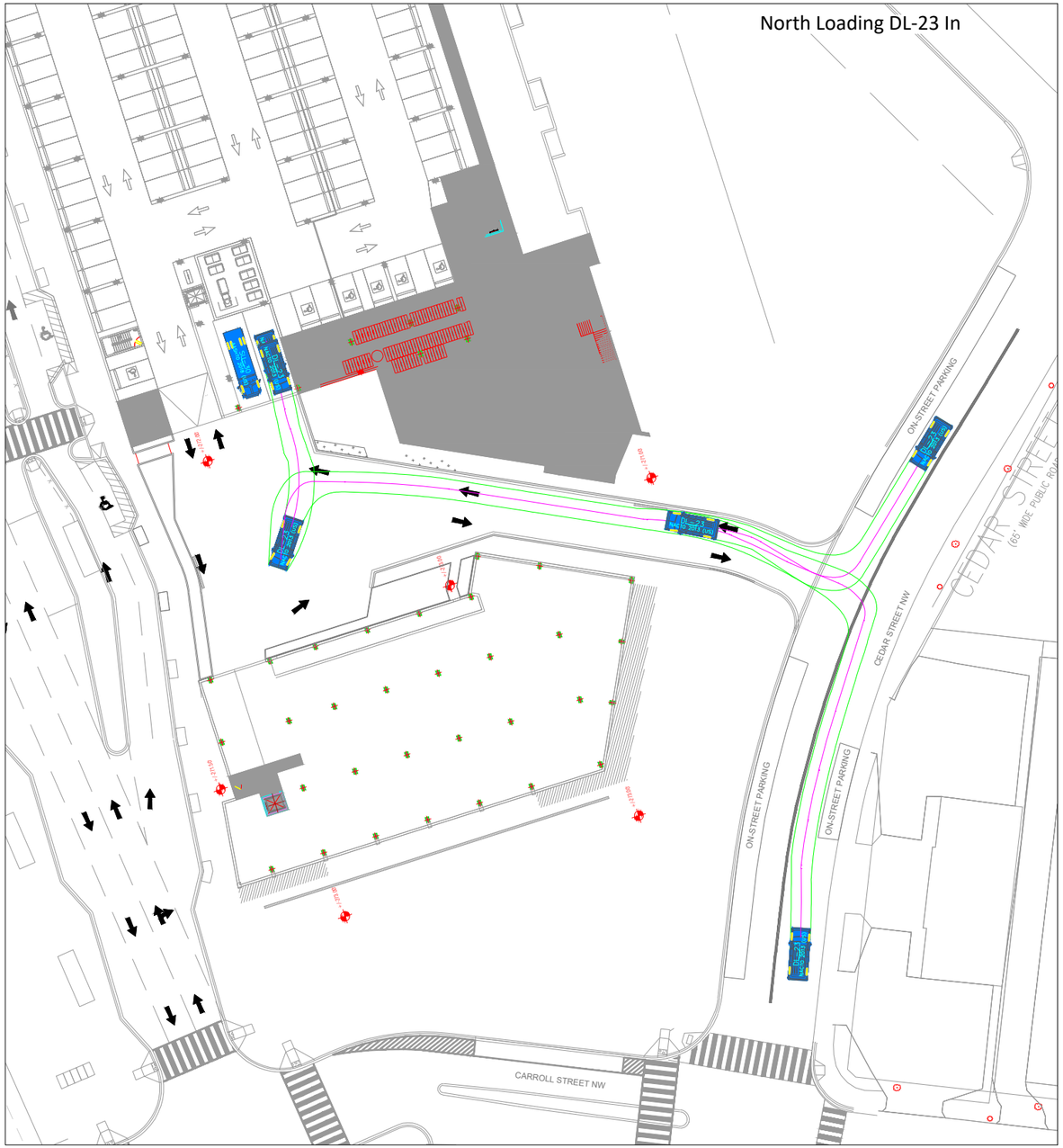
I. Vehicular Capacity Analysis Worksheets – 2027 Total Future Conditions

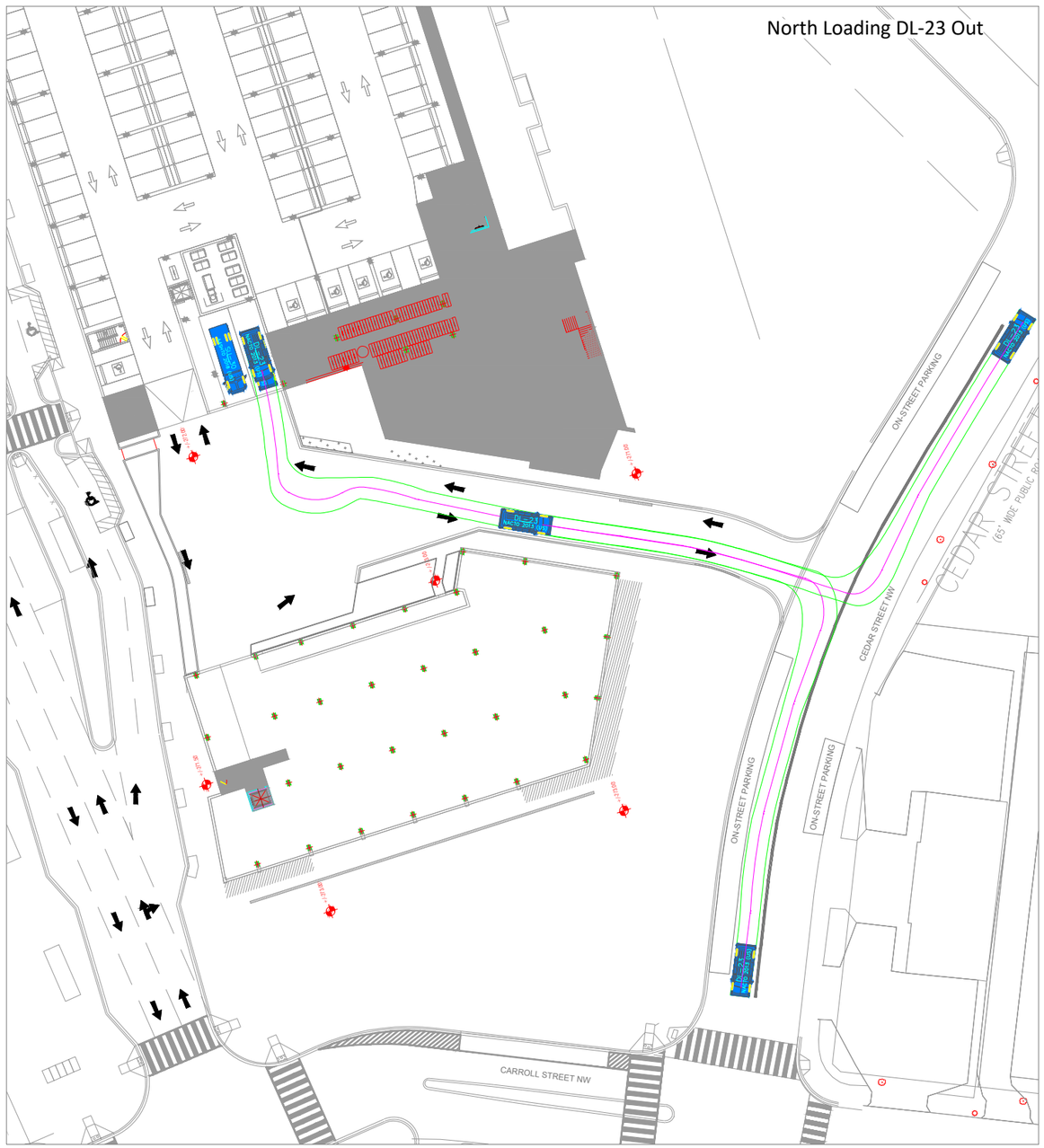
J. Vehicular Capacity Analysis Worksheets – 2027 Total Future Conditions with Mitigations

K. Potential Signal Timing Adjustments

L. MUTCD Signal Warrants

A. Truck Maneuvering Diagrams





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Takoma Loading AutoTurn: DL-23

February 6, 2023

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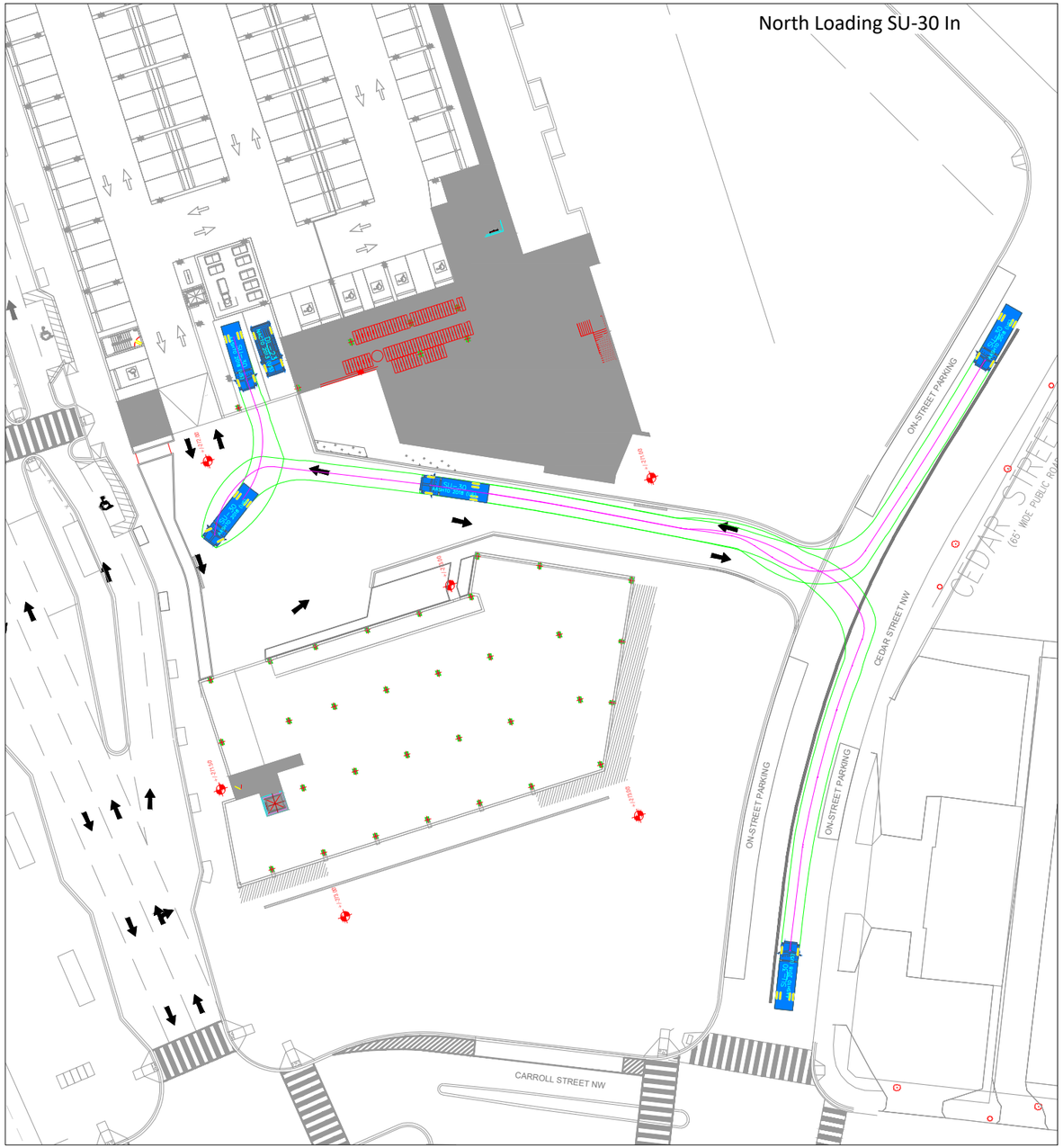
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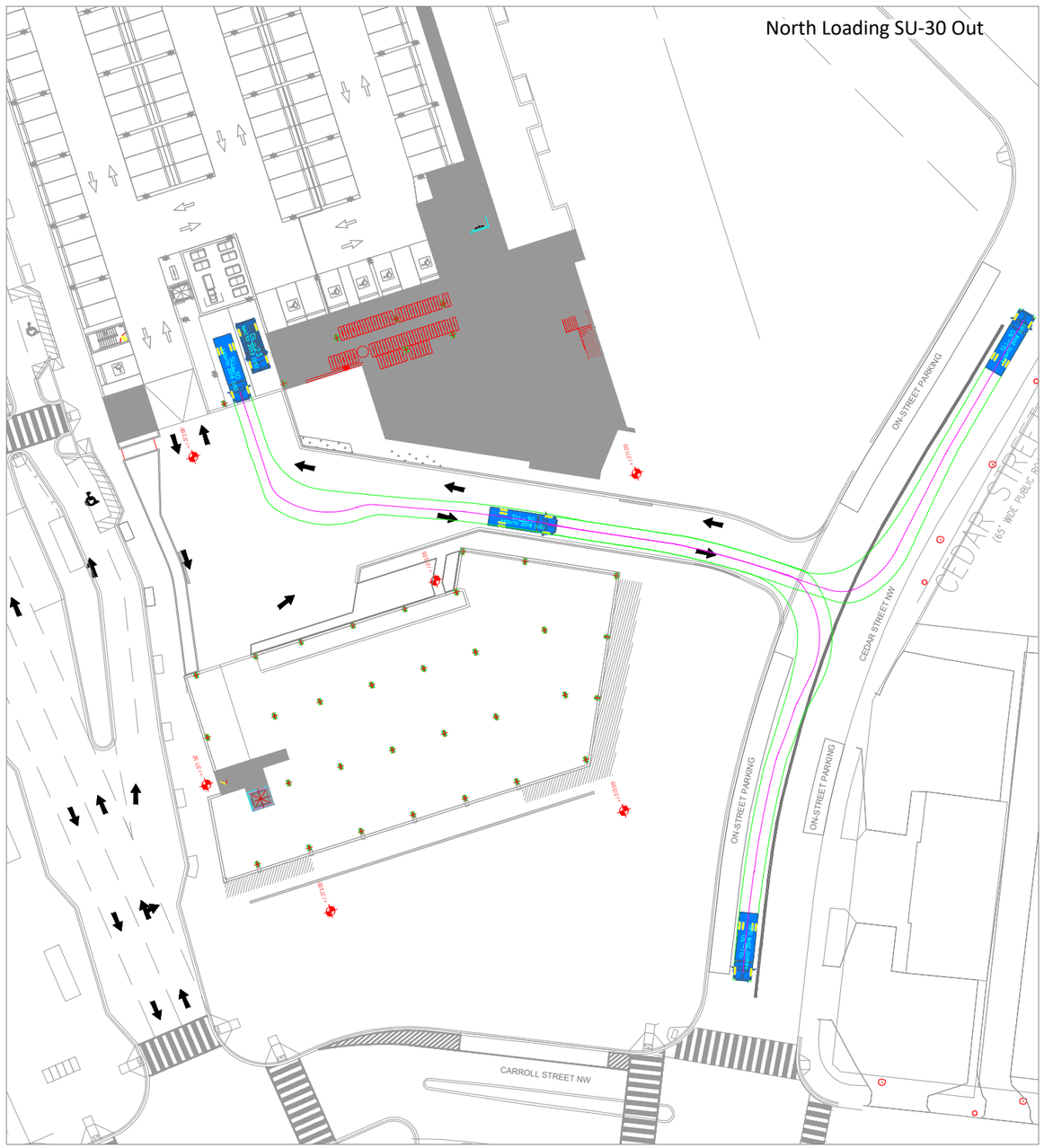
TRUCK MANEUVERING DIAGRAMS

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Takoma Loading AutoTurn: SU-30

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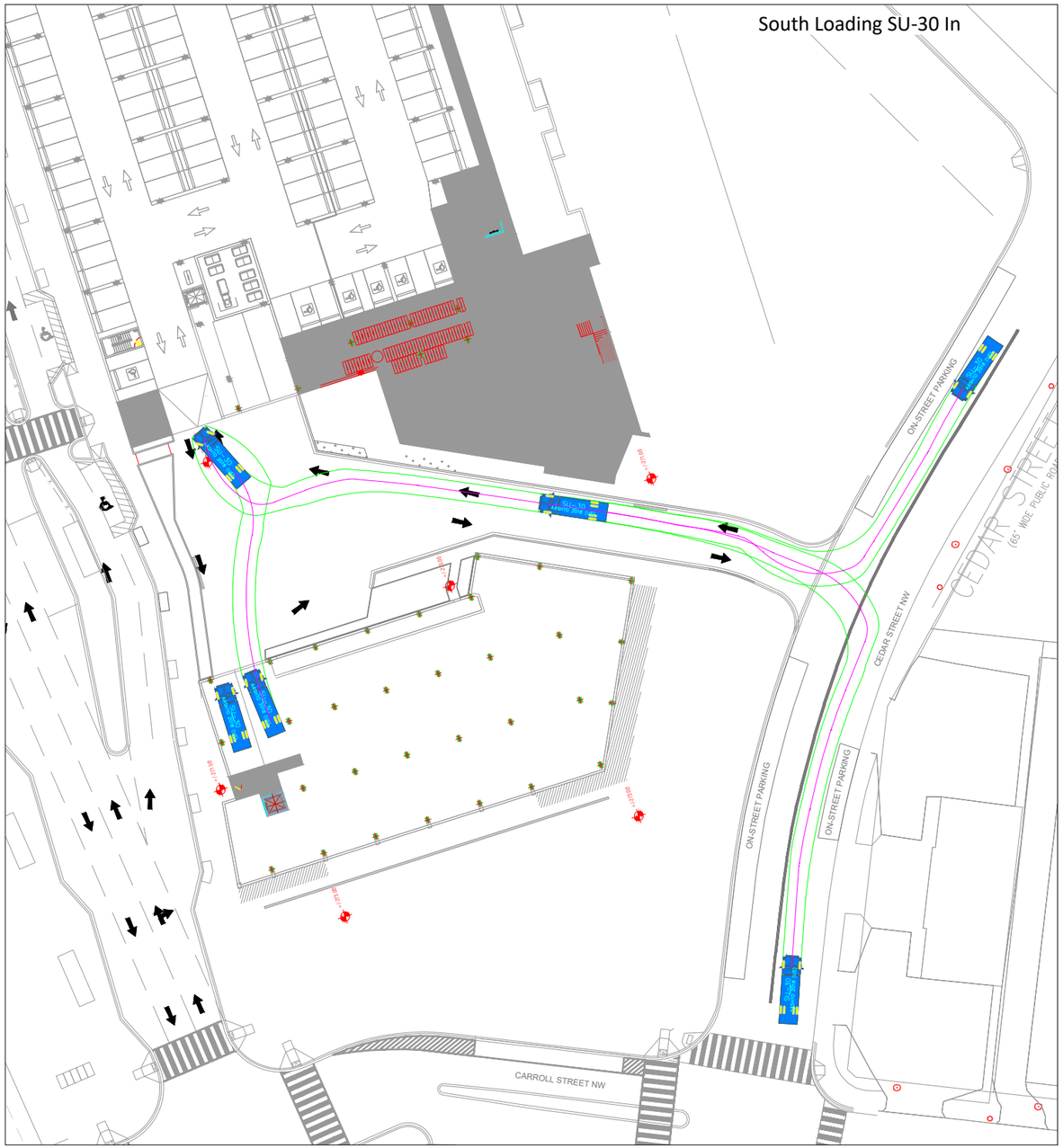
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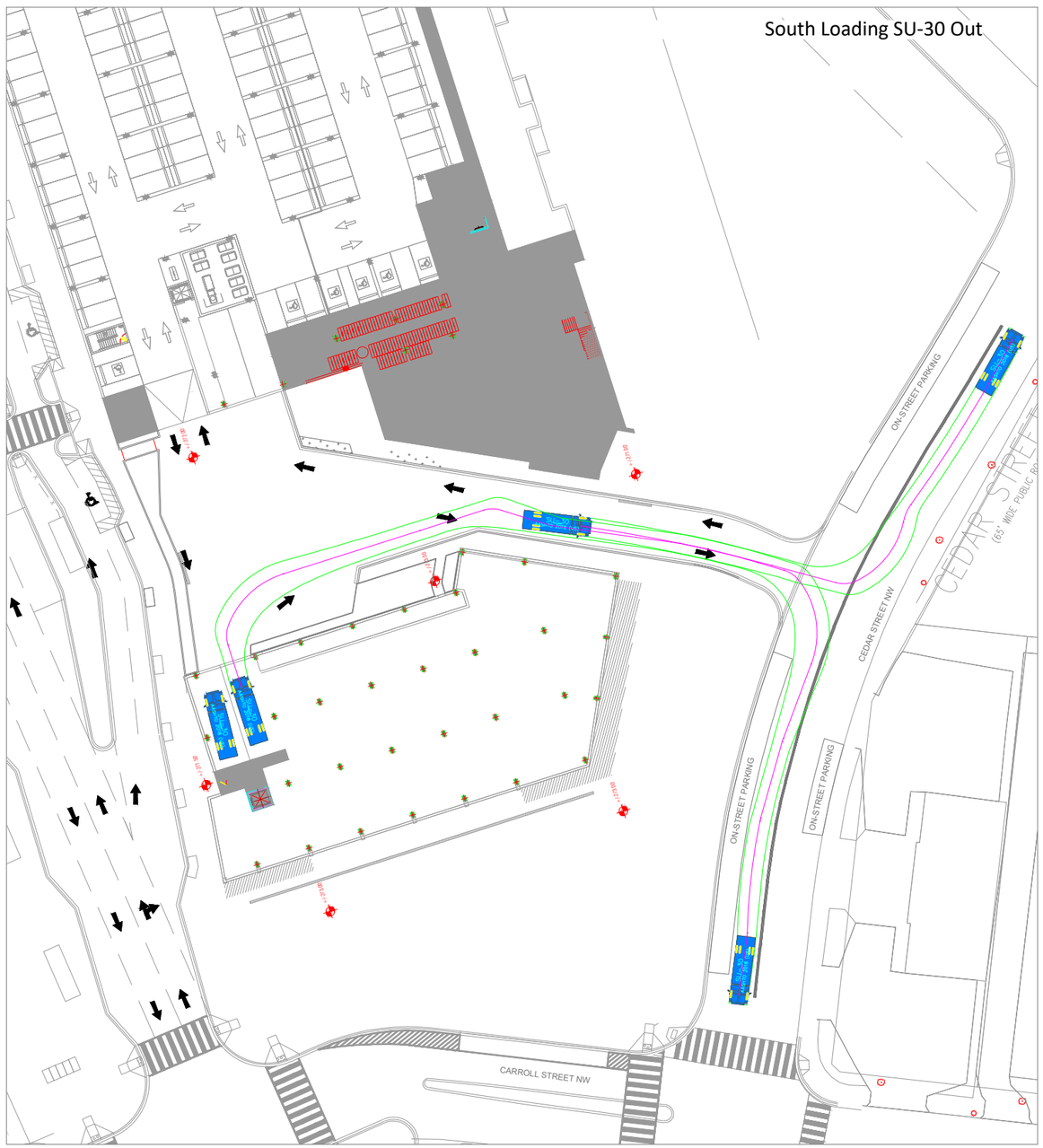
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Takoma Loading AutoTurn: SU-30
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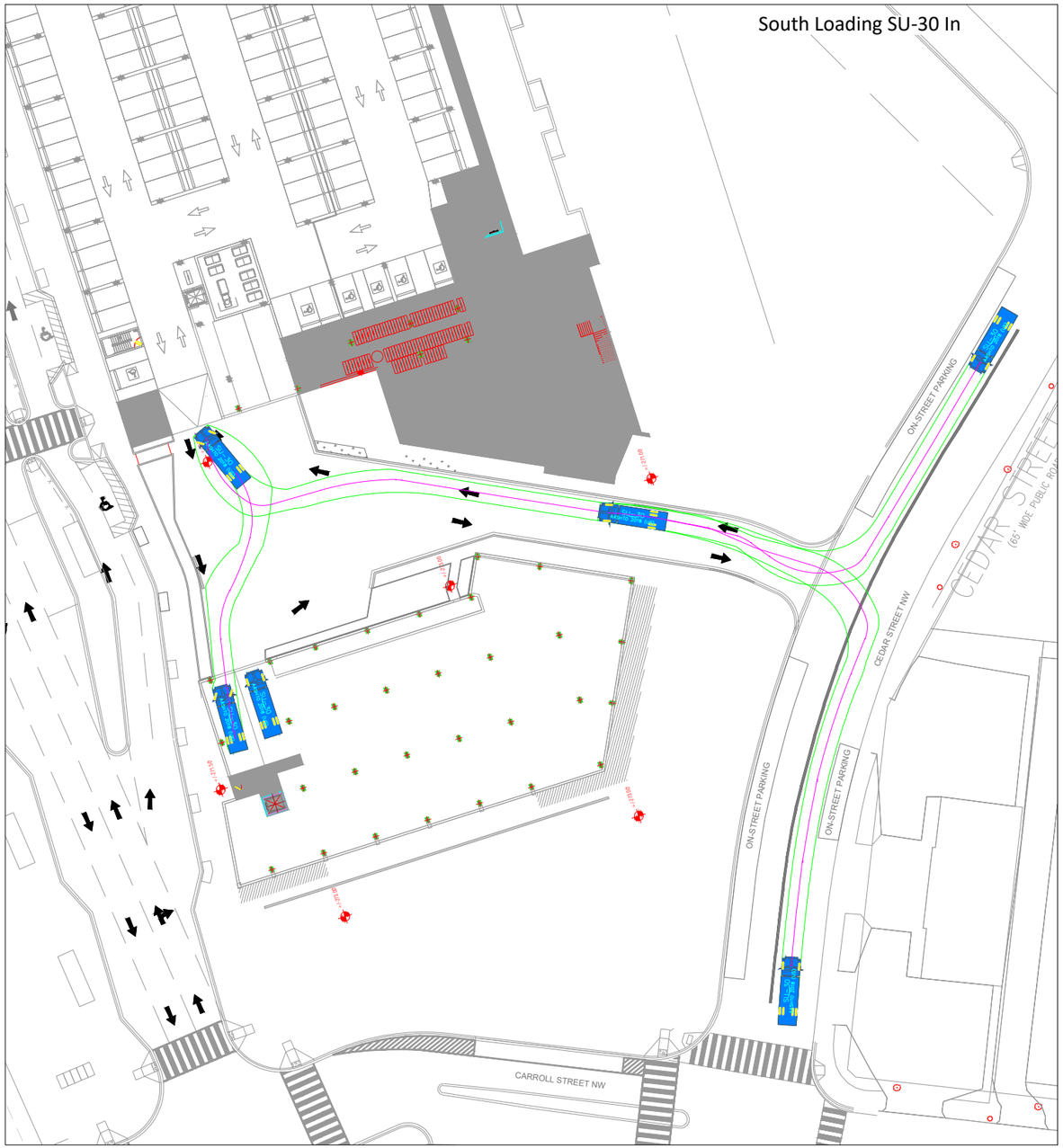
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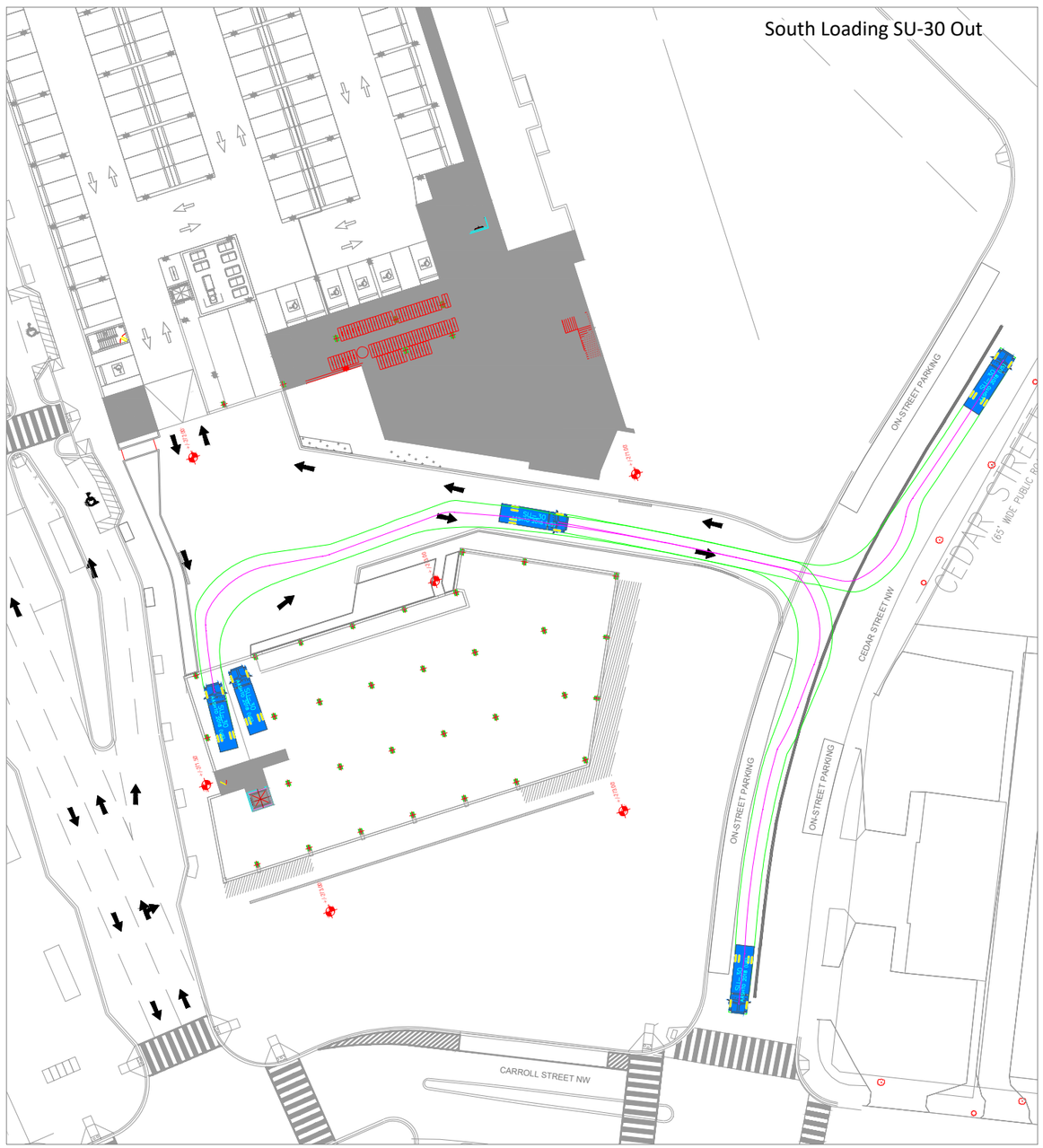
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Takoma Loading AutoTurn: SU-30
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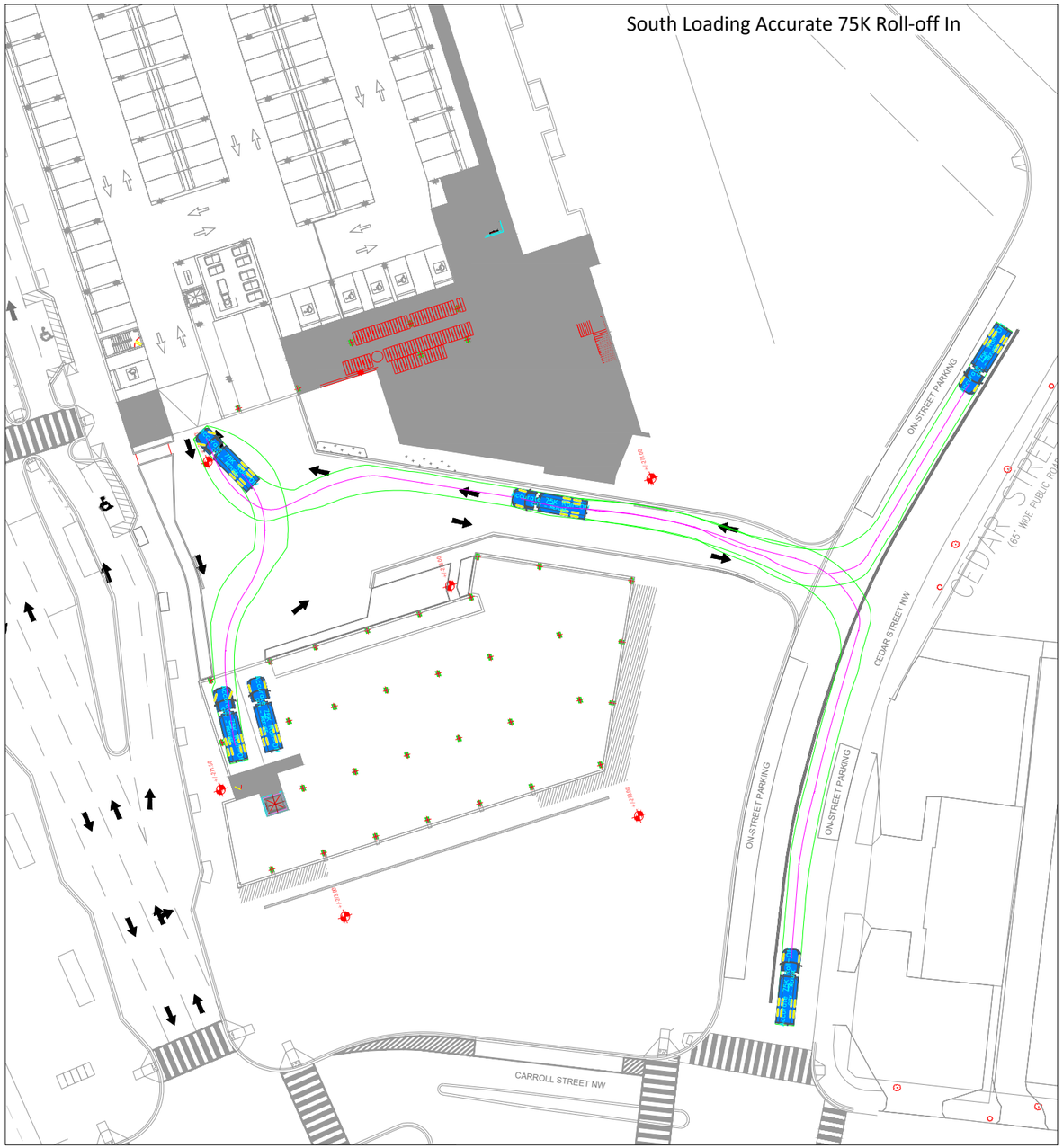
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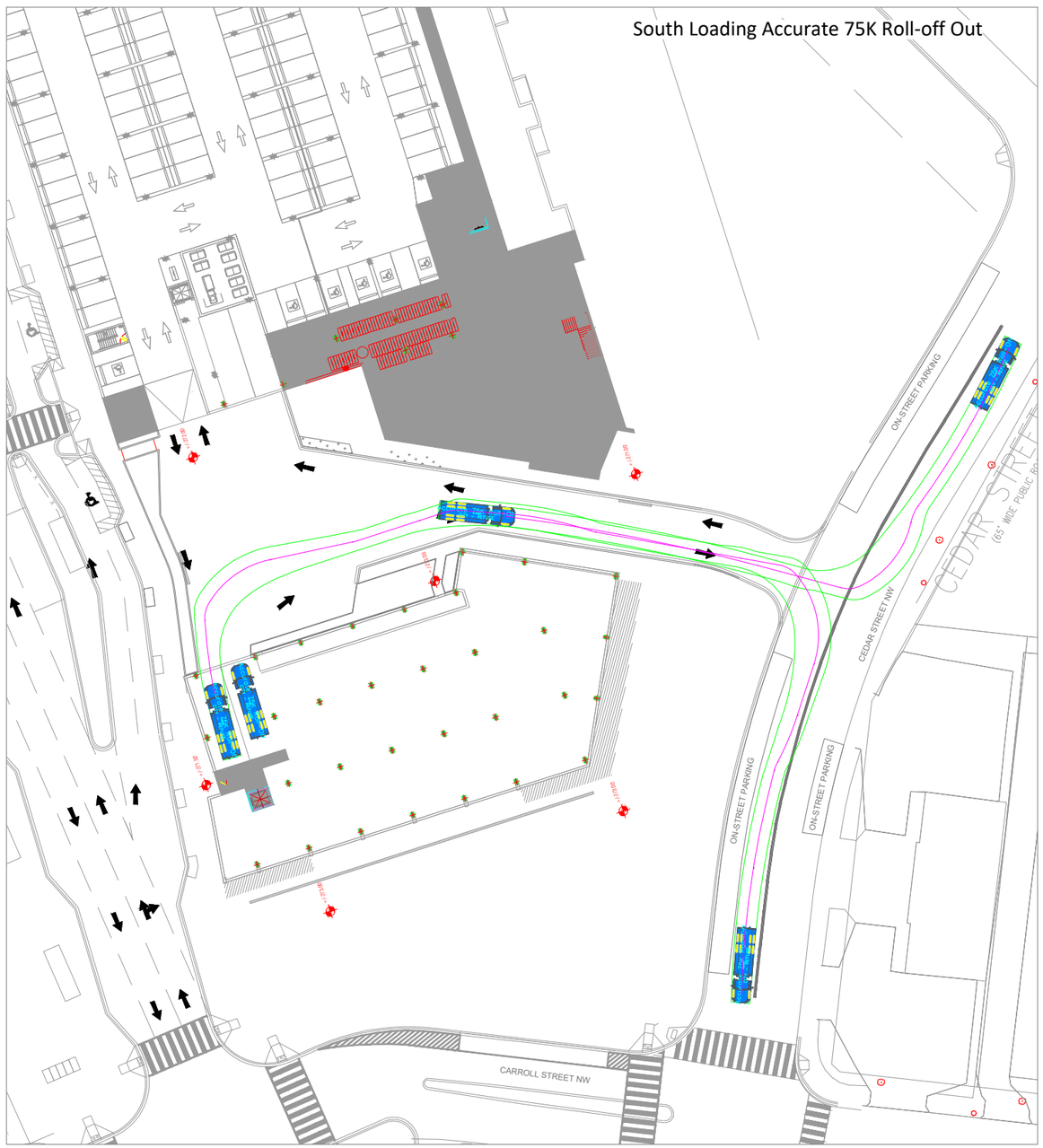
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Takoma Loading AutoTurn: 75K

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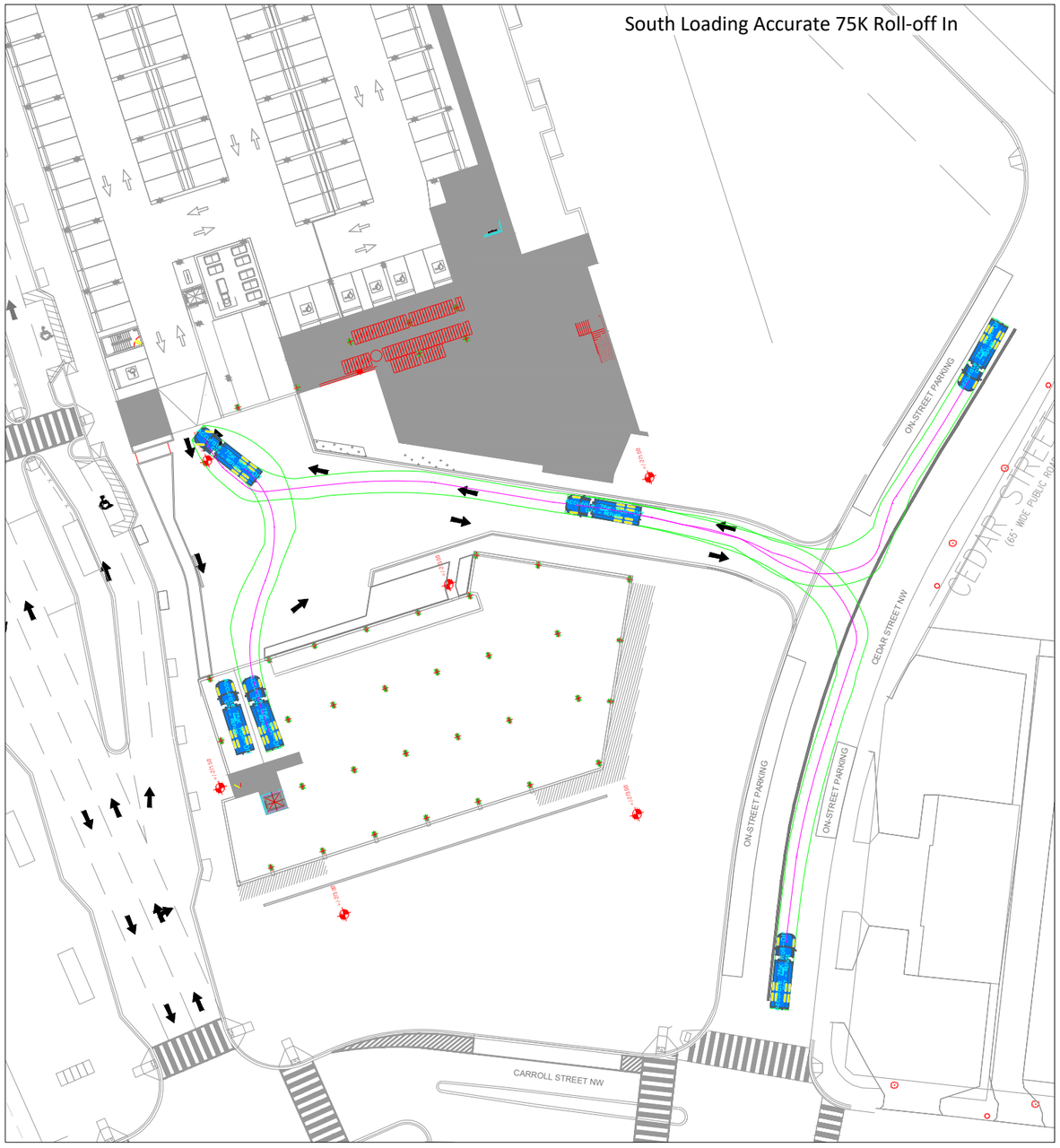
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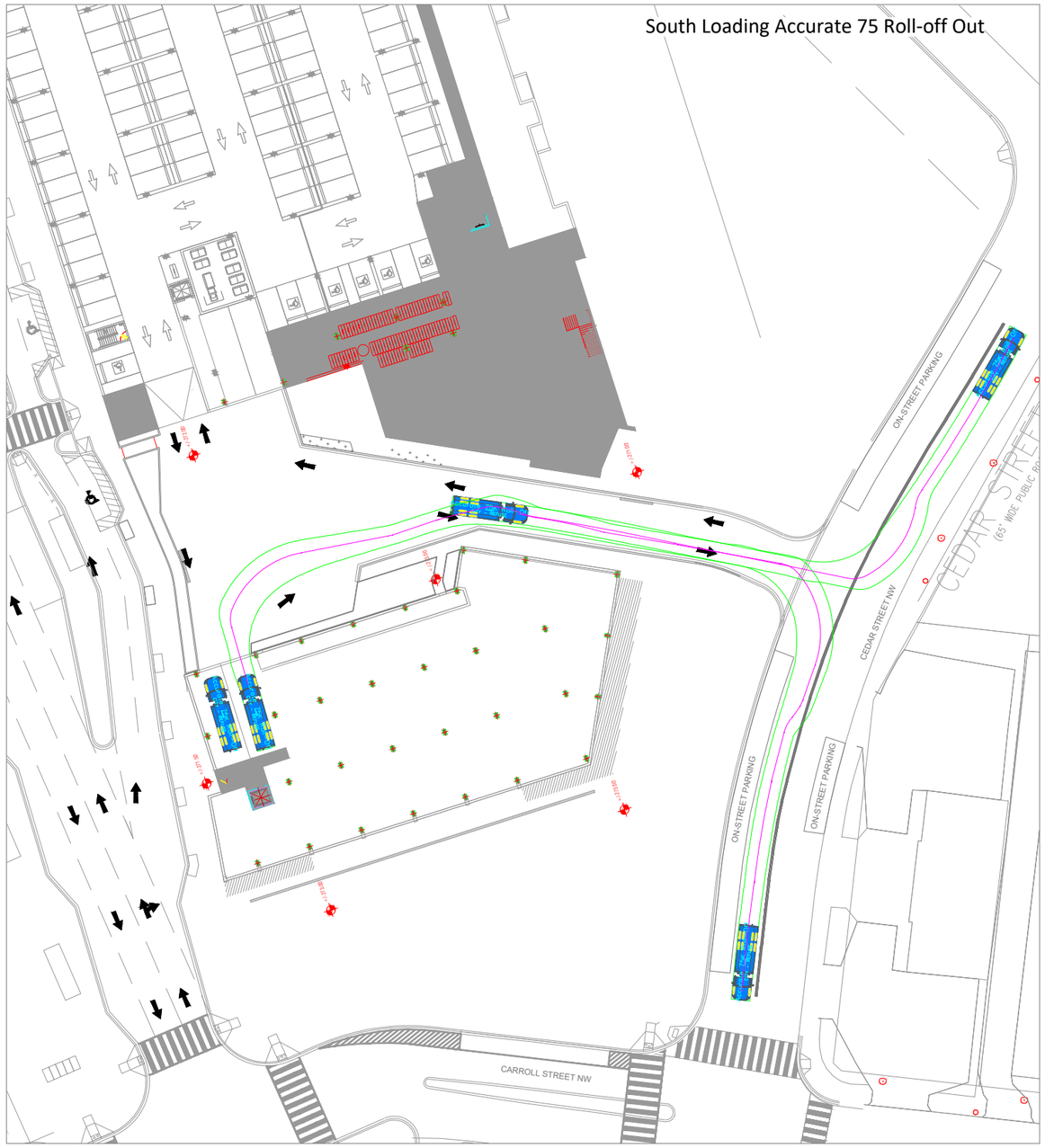
PROJECT NO. 2592-015

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South Loading Accurate 75K Roll-off In



South Loading Accurate 75 Roll-off Out



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Takoma Loading AutoTurn: 75K Roll-off

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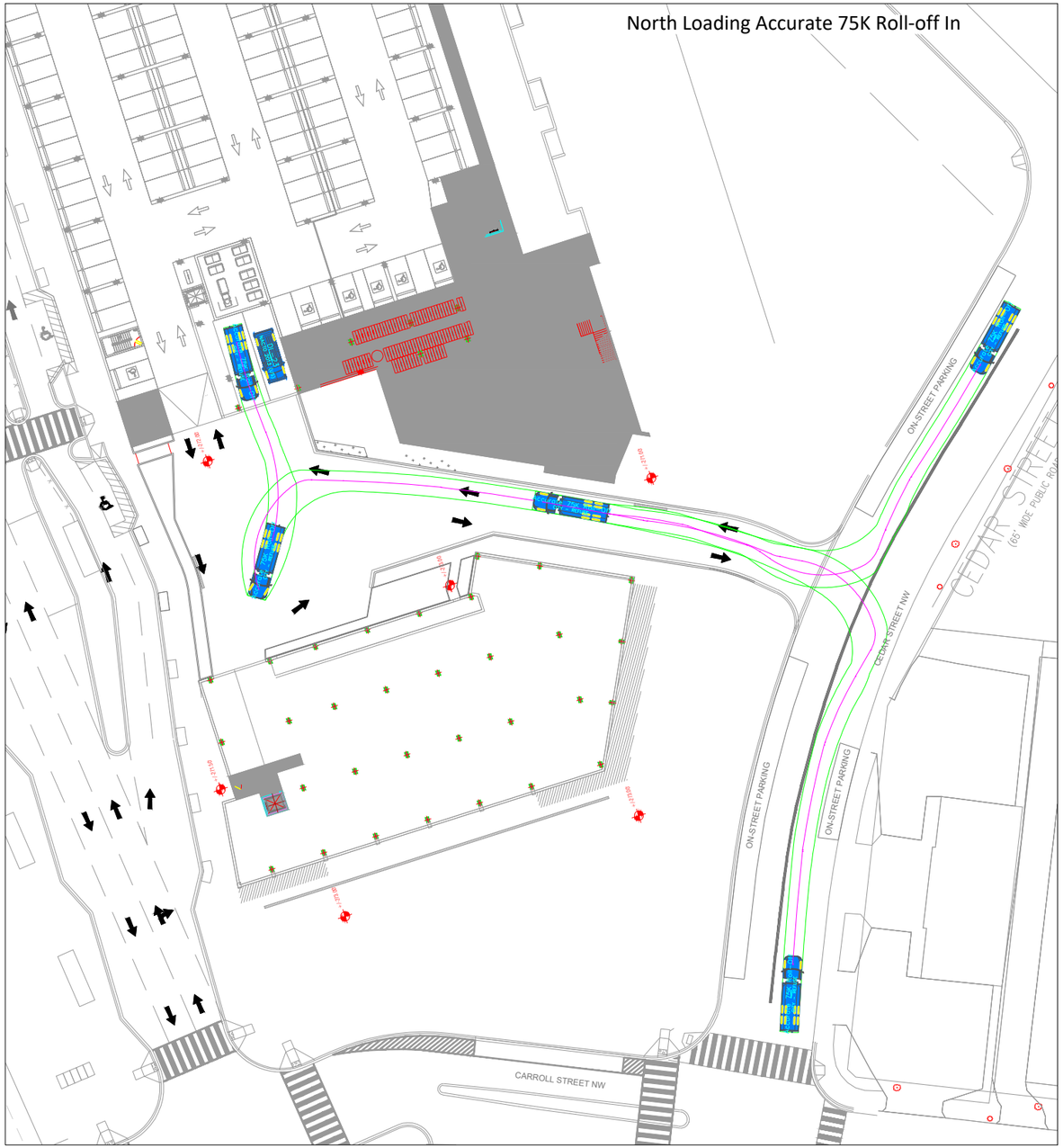
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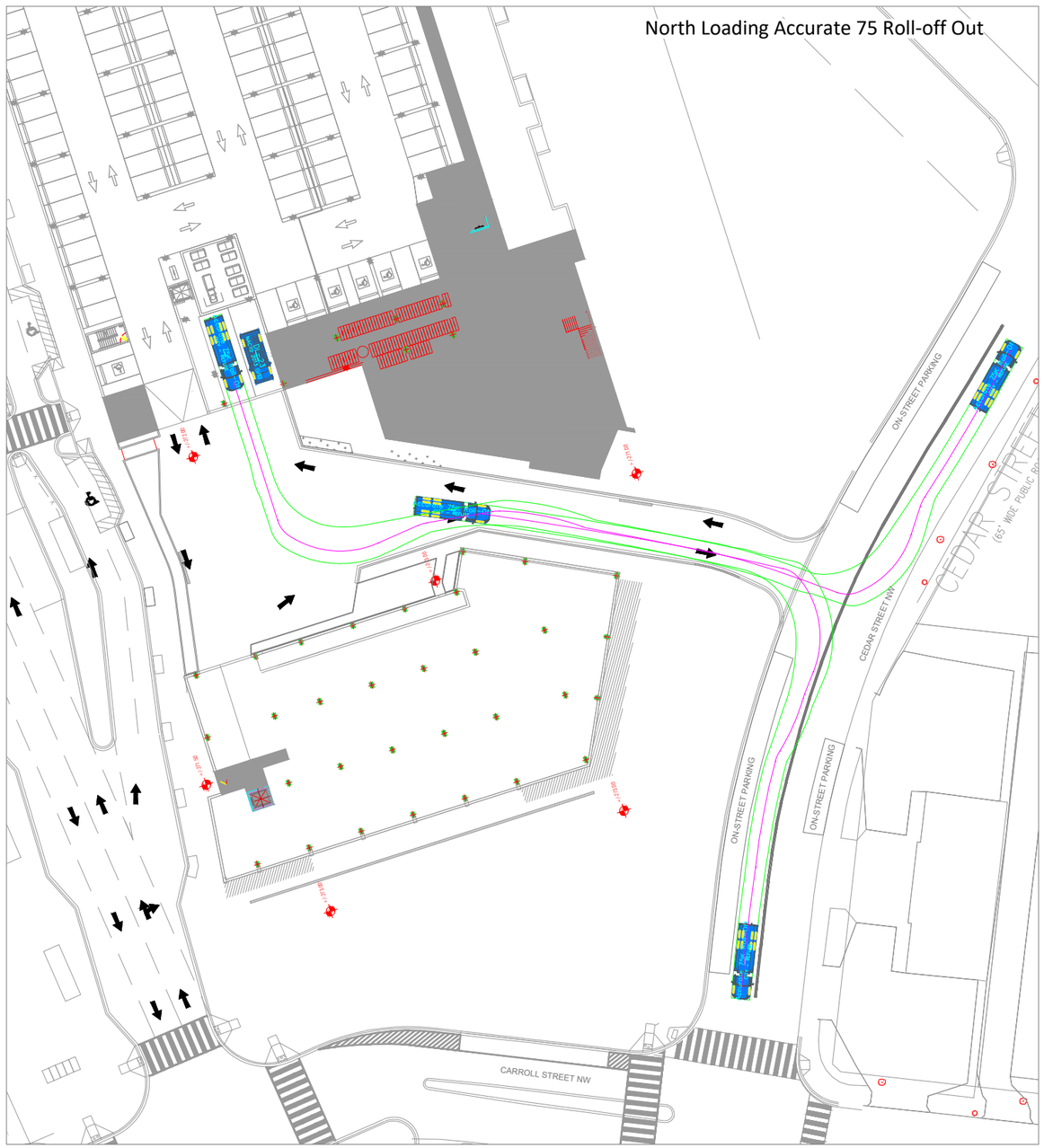
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Takoma Loading AutoTurn: 75K Roll-off

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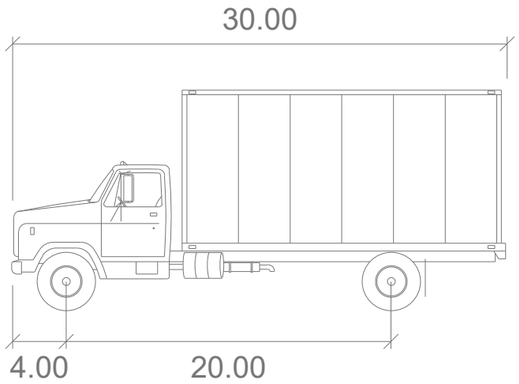
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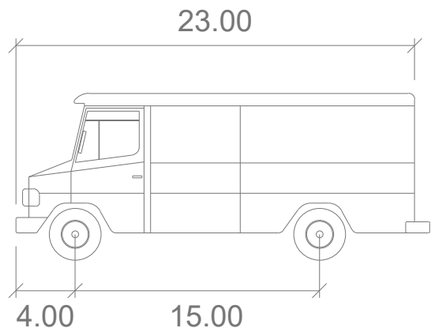
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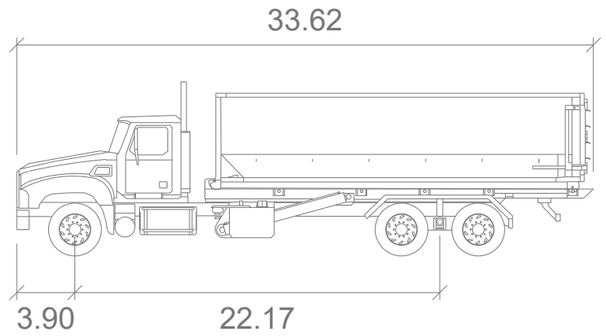
SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



DL-23

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 40.4



Accurate 75K Roll-Off

	feet
Width	: 8.17
Track	: 8.02
Lock to Lock Time	: 6.0
Steering Angle	: 32.7

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Takoma AutoTurn: Vehicle Profile

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Washington, DC

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SCALE: N.T.S

B. Scoping Information

District Department of Transportation (DDOT)
Comprehensive Transportation Review (CTR) Scoping Form

The purpose of the Comprehensive Transportation Review (CTR) study is to evaluate potential impacts to the transportation network that can be expected to result from an approved action by the Zoning Commission (ZC), Board of Zoning Adjustment (BZA), Public Space Committee (PSC), a Federal or District agency, or an operational change to the transportation network. The Scoping Form accompanies the *Guidance for Comprehensive Transportation Review* and provides the Applicant an opportunity to propose a scope of work to evaluate the potential transportation impacts of the project.

Directions: The *CTR Scoping Form* contains study elements that an Applicant is expected to complete to determine the scope of the analysis. An Applicant should fill out this *Scoping Form* with a proposed scope of analysis commensurate with the requested action and submit to DDOT in Word format for review and concurrence. Accordingly, not all elements and figures identified in the *Scoping Form* are required for every action, and there may be situations where additional analyses and figures may be necessary. The Applicant should fill out as many sections as possible and leave blank any sections that are not relevant to their project. Once a completed *Scoping Form* is submitted, DDOT will provide feedback on the initial proposed scope. DDOT's turnaround times are four (4) weeks for CTRs with a Traffic Impact Analysis (TIA) and three (3) weeks for all other lower tier studies. After the *Scoping Form* has been finalized and agreed to by DDOT, the Applicant is required to expand upon the elements outlined in this *Form* within the study and comply with all CTR requirements not specifically addressed in this *Form*.

Scoping Information
Date(s) Scoping Form Submitted to DDOT: 11/22/2022
DDOT Case Manager: Emma Blondin
Date(s) Scoping Form Comments Returned to Applicant: 4/18/2023
Date Scoping Form Finalized:

Project Overview	**Proposed Development Program**
Project Name: Takoma Metro Multifamily Development	**Use(s)**
Case Type & No. (ZC, BZA, PSC, etc.): PUD; ZC Case # TBD	**Residential (dwelling units):** 440
Applicant/Developer Name: EYA	**Retail (square feet):** 17,650
Transportation Consultant and Contact Info: Gorove Slade Associates, Inc., 1140 Connecticut Avenue NW, Suite 1010, Washington, DC 20036 Dan VanPelt, 202-540-1924, dbv@goroveslade.com Will Zeid, 571-466-6605, william.zeid@goroveslade.com	**Office (square feet):** N/A
Land Use Counsel and Contact Info: Paul Tummonds, 202-721-1157, PTummonds@goulstonstorrs.com Goulston & Storrs	**Hotel (rooms):** N/A

Site Street Address: Takoma Metro station (site bounded by Carroll St NW, Cedar St NW, Eastern Ave NW, Metro station)	**Other:** N/A
Site Square & Lot: Square 3352, Lots 806, 811, 812, 813, 820, 822, 823, 829, 831, 839, 840, 841, 846, 847, 848, 849, 850, 851	**# of Vehicle Parking Spaces:** 230
Current Zoning and/or Overlay District: Existing: MU-4, NC-2, RA-1 Proposed: MU-5A	**# of Carshare spaces:** TBD
Estimated Date of Hearing: TBD	**# of Electric Vehicle Stations:** 5
ANC/SMD No. & SMD Commissioner Name: 4B01; Evan Yeats	**Bicycle Parking Facilities**
OP Small Area Plan (if applicable):	**Long-term / Short-Term spaces:** Long term: at least 149 provided (149 required) Short term: at least 27 provided (27 required) Note: Bike parking totals shown in this form assume a 440 DU and 17,650 SF retail development program. The most recent PUD plans show only 434 DU's and thus a slightly lower bike parking count. The final bike parking counts will be determined by the final development program.
DDOT Livability Study (if applicable): Rock Creek East I Livability Study	**Showers / Lockers (non-residential):** Showers: 0 required (0 provided) Lockers: 1 required (1 provided)
Within ½ Mile of Metrorail or ¼ mile of Priority Bus/Streetcar?: Yes for both	**Loading Berths/Spaces:** Required: 1 loading berth and 1 service/delivery space Provided: 2 loading berths and 1 service/delivery space

Documents to be Submitted to DDOT: *Any action requiring a CTR or some other evaluation of on-site or off-site transportation facilities must submit one of the following documents to DDOT. It must be appropriately scoped for the specific action proposed and document all relevant site operations and transportation analyses.*

☒ **CTR Study** (100 or more total peak hour person trips OR 25 or more peak hour vehicle trips in peak direction, or as deemed necessary by DDOT)

☐ **TIA Component of CTR Study Triggered** (25 or more peak hour vehicle trips in peak direction, or as deemed necessary by DDOT)

☐ **Transportation Statement** (limited scope based on specifics of project OR if Low Impact Development Exemption from CTR and TIA is requested)

☐ **Standalone TIA** (project proposes a change to roadway capacity, operations, or directionality, has a site access challenge, or as deemed necessary by DDOT)

☐ **Other, specify:** _____

☐ Include PDF of report with appendices, traffic analysis files, and traffic counts in DDOT spreadsheet format (total size of all digital files under 15 MB, if possible)

Existing Site and Description of Action: *Describe the type(s) of regulatory approval(s) being requested and any background information on the project relevant to the requested action such as the existing uses, amount of vehicle parking, and other notable proposed changes on-site. Also note any other needed regulatory approvals outside of the zoning action discussed in this Form (e.g., Surveyor's Order for alley closure).*

The Applicant is seeking Zoning Commission approvals for a mixed use development at the Takoma Metro station site. The project site is generally bounded by Eastern Avenue NW to the northeast, Cedar Street NW to the east, Carroll Street NW to the south, and the Takoma Metro station to the west. The existing site is currently improved with a Metro parking/kiss-and-ride lot, bus loop, and green space.

The proposed project will redevelop the existing site into a mixed-use development with approximately 440 multifamily residential units and 17,650 square feet of ground-floor retail space.

The proposed project includes the removal of one driveway (the current bus access driveway at Eastern Avenue NW) and the addition of one new driveway (from Cedar Street NW between Carroll Street and Eastern Avenue). The two additional existing driveways will be reconstructed with the site reconfiguration. The proposed project also includes relocating the existing bus loop and consolidating it with the kiss-and-ride function. Approximately 230 parking spaces in a garage are proposed for the residential and retail components of the project.

The new driveway proposed on Cedar Street would be constructed as a curbless "woonerf" type facility to provide primary access to retail parking, residential parking and both retail and residential loading facilities. An additional connection to the residential parking would be provided from the internal drive south of the Eastern Avenue driveway intersection.

Prior Related Action(s), Conditions, and Commitments: *Note any prior approvals by ZC, BZA, or PSC (e.g., Campus Master Plan, First Stage PUD, student/faculty cap, etc.) for the site and list all relevant conditions and proffers still in effect from the previous approval and status of completion. Attach a copy of the Decision section from the previous Zoning Order if still in effect.*

N/A

Section 1: SITE DESIGN

DDOT reviews the site plan to evaluate consistency with DDOT's standards, policies, and approach to access as documented in the most recent Design and Engineering Manual (DEM). If the proposal for use of public space is found to be inconsistent with the agency approach, DDOT will note this regardless of its relevance to the action. It is DDOT's position that issues regarding public space be addressed at the earliest possible opportunity to ensure the highest quality project design and to minimize project delays and the need to re-design a site in the future.

CATEGORY & GUIDELINES	APPLICANT PROPOSAL	DDOT COMMENTS
Site Access and Connectivity Show site access points for all modes. Include proposed curb cut locations, curb cuts to be closed, access controls (e.g., right-in/out, signalized), sight distances and sight triangles from access points and new intersections, driveway widths and spacing, on- and off-site parking locations, inter-parcel connections, public/private status of driveways, alleys, and streets, and whether easements, dedications, or ROW closures are proposed. *See Section 1.1 of the CTR Guidelines for more detailed guidance.*	Site access points for vehicles, pedestrians, and bicyclists will be highlighted in the CTR. Access to the parking garage will occur from: • A new internal driveway/turnaround accessed from Cedar Street NW; and • A new driveway accessed from the relocated bus loop. Loading access will occur from the new internal driveway/turnaround accessed from Cedar Street NW. The following curb cut modifications will occur with the project: • One existing curb cut removed on Eastern Avenue NW (serving the former bus loop) • One new curb cut on Cedar Street NW (serving the new internal driveway/turnaround) • Reconstruction and relocation of the two existing curb cuts to remain on Eastern Avenue and Carroll Street Pedestrian access to the project will be provided as shown on the pedestrian connectivity diagram.	Shared bicycle/pedestrian facilities on Carrol and Cedar street must meet DDOT and AASHTO standards – a minimum of 10ft wide. Please include detailed design during public space permitting Response: 10' is the target width. However, there are existing trees being preserved adjacent to the shared use path that may prevent 10' at all locations. Detailed designs will be provided during the Public Space process. DDOT Concurs. Include pinch points in design documents. Note that 10' is the minimum – design constraints are understood, but if there are

	Bicycle access to the project will be at the short-term bicycle racks around the perimeter of the site, and the long-term bicycle parking spaces in the garage accessed from either the bus loop or the new internal driveway/turnaround off Cedar Street NW. Access to the loading area will be from the new internal driveway/turnaround off Cedar Street NW. Sight distances and sight triangles will be provided in the CTR. ☒ *Scoping Graphic: Project Location Map* ☒ *Scoping Graphic: Site Circulation Plan* ☒ *Scoping Graphic: Plat for Site's Square and Lot from Office of the Surveyor (if official plat not available, provide copy from SURDOCS)*	areas that can accommodate more than 10ft, please widen to 12 or 14. GS response: Acknowledged. The diagonal crossing of the shared-use path at the driveway off of Cedar Street could have improved sightlines and shorten the amount of time it takes to cross if the path were made perpendicular to the driveway. It could be worthwhile to make this a raised crossing or provide some visual indication to vehicles that they are crossing over a shared use path. Response: The diagonal crossing will be repositioned to minimize crossing distance. This will be reflected in the next PUD resubmission. DDOT Concurs. Include width of curb cut and proposed crossing in submission. Crossing should be designed as a continuation of the path – at grade and the same materials as the sidewalk rather than the driveway. GS response: Confirmed, the crosswalk will be consolidated perpendicular to the driveway at Cedar Street. Extend shared use path all the way north to the end of the property line along Eastern Avenue and extend sidewalk around bus turnaround on-site. Response: There is a heritage tree behind the existing retaining wall that cannot be removed or encroached upon. Therefore, the driveway and retaining wall will remain in the existing location and the sidewalk cannot be widened between there and the northwest property line. Understood – but pedestrian paths will need to be accommodated,

		either through a sidewalk or a safe pedestrian crossing. Pedestrian paths should be shown in the site plan/circulation diagram including how they get west of the site on Eastern Ave GS response: The paved area adjacent to the WMATA bus standing zone was requested by WMATA and is not intended for public use. Therefore, it will not connect to the existing sidewalk network. See attached revised site plans. The parking/loading/PUDO will create conflicts in the shared driveway at the center of the development. Please provide details on how this space will be designed for interactions between vehicles, loading, and cyclists. Provide more information on how the motor court is expected to operate and why a more circular design is not being pursued? Response: The PUD drawing L502 has been updated to provide additional safety measures for the internal driveway. This update includes 1.) decreased contrast between field and bands 2.) Illustrate flush curb with accent paving color 3.) Darker paving at vehicle section 4.) Identify pedestrian crossing locations 5.) Added bollards between pedestrian and vehicular areas. DDOT Concurs. We may have additionally comments once we receive these updated drawings. GS response: Acknowledged. Ensure the internal driveway to Cedar has sidewalks leading to the doors. Provide information about the pedestrian porosity through this space over to the kiss n ride crosswalk.

		Response: the current design includes pedestrian paths from Cedar Street into the building on both sides of the woonerf, which will be curbless with bollards, pavement transitions and defined crosswalk areas to separate pedestrians from other modes. Please see sheet L502 from PUD submission for information. DDOT Concurs – though the driveway should not be referred to as a woonerf, as the high volumes require separation of vehicles and pedestrians. GS response: Understood, we will not use the woonerf terminology. Provide details on circulation for vehicles.the circulation diagram does not show how vehicles will be exiting. Response: Circulation diagrams will be included in the CTR that show this. Additionally, vehicle circulation in the internal woonerf is diagramed on sheet L503 of the latest PUD resubmission. DDOT Concurs Can the crosswalks be raised at least through the kiss & ride? Response: WMATA expressed opposition to raised crossings within the bus loop. DDOT Concurs with the bus loop – the question was specific to the kiss & ride section. GS response: WMATA was opposed to a raised crossing on both the bus loop and kiss and ride, but we will coordinate with WMATA to try to add the raised crossing on only the kiss and ride.

Loading

Discuss and show the quantity and sizes of loading berths/delivery spaces, trash storage locations, on- and off-site loading locations, turnaround design, nearby commercial loading zones, and anticipated demand, operations, and routing of delivery and trash vehicles. Identify the sizes of trucks anticipated to serve the site and design vehicles to be used in truck turning diagrams. Provide truck turning diagrams in the body of the report not the appendix. Include a Loading Management Plan (LMP) if zoning relief, back-in loading, or curbside loading is proposed.

See Section 1.2 of the CTR Guidelines for more detailed guidance. A template LMP is provided in Appendix E.

The development will provide on-site loading facilities within the building. ZR16 loading requirements are shown below.

Land Use	Size	ZR16 required loading		Proposed loading	
		Berths	Service/delivery spaces	Berths	Service/delivery spaces
Residential	440 DU	1	1	1	1
Retail	17,650 SF	1	0	1	0
Total		**1** [1]	**1**	**2**	**1**

[1] Per Subtitle C § 902.2, the residential and retail uses may share their loading facilities.

Based on these requirements, the project is required to provide one (1) berth and one (1) service/delivery space. The Applicant is proposing to provide two (2) 12' x 30' berths and one (1) 10' x 20' service/delivery space.

Truck turning diagrams will be provided in the CTR.

☒ *Scoping Graphic: Location of loading area with internal building routing*

☐ *Scoping Graphic: Truck Turning Diagrams (to/from the site, alley, truck routes)*

Submit a loading management plan with your CTR

Response: Acknowledged.

The motor court has loading on both sides –design still needs to address potential conflicts between loading and vehicle parking access.

GS response: Loading conflicts will be addressed with the LMP to be detailed in the CTR.

Vehicle Parking

Identify all off-street parking locations (on- and off-site) and justify the amount of on-site vehicle parking, including a comparison to the number of spaces required by ZR16 and DDOT's Preferred Maximum rates (Figure 10). Provide parking calculations and parking ratios by land use, including any eligible ZR16 vehicle parking reductions (i.e., within ¼ mile of Priority Bus Route, within ½ mile of Metrorail Station, providing carshare spaces, located within a D zone, etc.). Confirm whether ZR16 TDM Measures will be required per Subtitle C § 707.3 for providing more than double the required amount of parking.

See Section 1.3 of the CTR Guidelines for more detailed guidance.

The project's baseline ZR16 requirement is 164 spaces. This requirement is reduced to 82 spaces with the 50 percent reduction that the project is eligible given its location adjacent to a Metro station, while its DDOT-preferred maximum is 128 spaces.

The proposed parking supply for the project is 230 parking spaces for the residential and retail uses. The proposed parking supply does not trigger zoning mitigation for excess parking.

Land Use	Size	DC Zoning Regulations (ZR16) [1]			DDOT-preferred maximum [2]		Proposed spaces
		Calculation	Spaces	With 50% Reduction	Calculation	Spaces	
Residential	440 DU	1 per 3 units in excess of 4 units	145	-	0.25 per unit	110	163
Retail	17,650 SF	1.33 per Ksf in excess of 3 Ksf	19	-	1.00 per Ksf	18	67
Total			**164**	**82**		**128**	**230**

[1] Includes 50% reduction for being within ½ mile of Metro station
[2] Rate for developments less than ¼ mile from Metrorail

☒ *Scoping Table: Parking Calculations with Comparison to ZR16 and DDOT's Preferred Maximum Vehicle Parking (Figure 10)*

☐ *Scoping Graphic: Off-Street Parking Locations (both on- and off-site)*

This is very overparked for a development at a metro station and bus hub. CTR Guidelines state sites within 1/8 mile of a Metro Station should start with 0 parking and make a case for providing any. DDOT strongly encourages the applicant to take the 50% reduction for parking spaces. If the parking ratio is not improved either by reducing parking or increase size of building, physical mitigations will be required.

Response: Significant TDM commitments and physical transportation improvements will be proposed with the project.

DDOT would like to see either reduced parking, increase units, or reassigning parking spaces for other uses (visitor parking, ADA parking, additional bicycle parking, car share). It is noted that both OP and WMATA share the concern regarding the development being over parked.

GS response: The Applicant is providing substantial pedestrian improvements and a robust TDM

		plan that offsets the parking ratio. These mitigations will be outlined in detail in the CTR. Provide detail on how the proposed spaces will be programmed. With the 163 spaces for residential, the residential auto mode share will need to be increased to accommodate the over parking. How will the parking be designed to discourage additional queuing and kiss and ride through the parking garage? Response: The mode share has been increased, as requested. We have coordinated with WMATA to propose an adequate amount of kiss-and-ride space. The residential portion of the garage will be access-restricted to residents only. The retail portion will be paid parking at market rate. DDOT Concurs The significant amount of parking will also create conflicts in the shared driveway at the center of the development. Please provide details on how this space will be designed for interactions between vehicles, loading, and cyclists. Response: See previous response. The center court has been updated and includes better delineation of paths. DDOT Concurs
Bicycle Parking Identify the locations of proposed bicycle parking and justify the amount of long- and short-term spaces proposed. Provide a calculation of the number of spaces required by ZR16, as well as showers and lockers for non-residential uses, and ensure they are designed appropriately into the project. *See Section 1.4 and Appendix F of the CTR Guidelines, and the latest DDOT*	The project's ZR16 bike parking requirement is 149 long-term spaces and 27 short-term spaces as shown below. The development will meet ZR16 short-term requirements by providing 27 short term bicycle parking spaces along the site perimeter. The location of these spaces will be noted in the CTR if that data is available. The development will exceed ZR16 long-term requirements by providing at least 149 long-term bicycle parking spaces. The location of these spaces will be noted in the CTR if that data is available.	Confirm the existing 10 bicycle parking racks near the metro entrance will remain where they are Response: The total number of bike racks in the Metro entrance will not be reduced. WMATA is considering relocating and/or replacing these spaces with other types of bike parking in that general location as close to the entrance as possible.

Bike Parking Guide, for more detailed design guidance.

Land Use	Size	ZR16 Bicycle Parking Rate		ZR16-required Bicycle Parking Spaces [1]		DCMR 18-1214 Calculation [2]	DCMR 18-1214 Requirement	Proposed Bicycle Parking Spaces	
		Long Term	Short Term	Long Term	Short Term	Long Term	Long Term	Long Term	Short Term
Residential	440 DU	1 per 3 du's	1 per 20 du's	98	22	1 per 3 du's	146.67	147	22
Retail	17,650 SF	1 per 10,000 sf	1 per 3,500 sf	2	5	N/A	N/A	2	5
Total				**100**	**27**		**146.67 (147)**	**149**	**27**

[1] Rate applied at 50% after first 50 spaces per ZR16 11C802.2
[2] No 50% reduction after first 50 spaces

ZR16 requires 0 showers and one (1) locker for the project. One (1) locker will be provided but its location is still being determined.

Land Use	Size	ZR16 shower and locker rates		ZR16 required showers and lockers		Proposed showers and lockers	
		Shower	Locker	Shower	Locker	Shower	Locker
Retail	16,635 sf	2 for first 25,000 sf + 2 per each additional 50,000 sf up to 6 max	0.6 per required long-term bicycle parking space for non-residential uses	0	1	0	1
Total				**0**	**1**	**0**	**1**

☐ *Scoping Graphic: Locations of internal bicycle parking spaces, routing to these spaces, and related support facilities including locker rooms, showers, storage areas, and service repair rooms*

DDOT Concurs

How are the long-term bicycle rooms divided? They should all be in one location on the ground floor (not G1, but level 1) Is the bike room with an entrance via the loading circle on the ground floor?

Response: The small bike parking area in the garage will be to accommodate the small retail long-term requirement. The primary residential bike parking room will be located on Level 1 with access from the woonerf. A secondary residential bike room will be provided on G1 to accommodate overflow bike parking demand.

DDOT Concurs. Zoning required long-term bicycle parking for residential should all be accommodated in the main room on Level 1.

GS response: All zoning-required long-term bike parking will be located in the main bike room on Level 1. Some of the short-term bicycle parking will also be located in a publicly accessible area within the garage, near the long-term bike room. Please see attached revised site plan.

Streetscape and Public Realm

Provide a conceptual layout of the streetscape and public realm including at minimum: curb cuts, vaults, sidewalk widths, street trees, grade changes, building projections, short-term bicycle parking, and any existing bus stops. Also provide the permit tracking numbers and PSC hearing date, if known, for any approved public space designs. Note any non-compliant public space elements requiring a DCRA code modification or PSC approval.

See Section 1.5 of the CTR Guidelines for more detailed guidance. A summary of public space best practices and DDOT

A conceptual layout will be provided in the CTR. Detailed layouts will be included in site plans submitted with the Application as part of the Zoning process.

☐ *Scoping Graphic: Preliminary Public Space Concept*

Developer is responsible for payment for replacement of existing 19-dock Capital Bikeshare station and four-dock expansion. This will cost approximately $92,000.

Response: The current intent is to reuse the CaBi station equipment. Upon completion of the project, the site will continue to have a CaBi station. The developer will work with CaBi and WMATA on maintenance or replacement of the existing station.

The existing station is in need of replacement (it is one of the oldest

standards are also documented in the DEM, Public Realm Design Manual, and corridor Streetscape Guidelines (if applicable).		CaBi stations) and expansion due to increased demand by this development. Work with DDOT on replacement of existing station. GS response: Acknowledged. Shared bicycle/pedestrian facilities on Carrol and Cedar street must meet DDOT and AASHTO standards – a minimum of 10ft wide. Please include detailed design during public space permitting Response: see previous response regarding the pedestrian path. DDOT Concurs Include the curb extensions and proposed roadway modifications in the site plan. Response: Acknowledged. DDOT Concurs Because of the excess parking and therefore increased vehicle access to the site, the vehicle paths and pedestrian/cyclist paths in the site should be clearly distinguished. Response: These updates are reflected on Sheet L502 and L503 of the latest PUD plans. DDOT Concurs Provide pedestrian connection along back side of bus loop to connect to eastern ave Response: WMATA does not want this area to be publicly accessible. This area is only meant for buses to temporarily stop between routes. Understood – but this will result in pedestrians crossing at an unmarked location. Please include a means for pedestrians to access Eastern Avenue from the north end of the bus loop (may require an additional pedestrian crossing)

		GS response: See previous response regarding the WMATA bus standing zone.
Sustainable Transportation Elements Identify all sustainable transportation elements, such as electric vehicle (EV) charging stations and carshare spaces proposed to be included in the project. Electrical conduit should be installed in parking garage so that additional EV stations can be provided later. DDOT recommends 1 per 50 vehicle spaces be served by an EV station. Note that District regulations for EV infrastructure is fast evolving and additional requirements may go into effect. *See Section 1.6 of the CTR Guidelines for more detailed guidance.*	Sustainable transportation elements will be identified as part of the CTR. Section 1.6 of the DDOT CTR guidelines recommends that one (1) out of every 50 spaces be served by an EV charging station. Therefore, five (5) of the 230 proposed parking spaces will have an EV charging station.	
Heritage, Special, and Street Trees Heritage Trees are defined as having a circumference of 100 inches or more. They are protected by District law and must be preserved if deemed non-hazardous by Urban Forestry Division (UFD). Special Trees are between 44 inches and 99.99 inches in circumference and may be removed with a permit. Note whether there are existing Heritage Trees on-site or in adjacent public space. The presence of Heritage Trees will impact site design since they may not be cut down. Conduct an inventory of existing and missing street trees within a 2-block radius of the site. Provide a screenshot from UFD's map of existing and missing street trees. *See Section 1.7 of the CTR Guidelines for more detailed guidance.*	There are four (4) Heritage Trees on-site. Two will remain, one will be relocated, and one will be removed per a previously approved special tree removal permit application #38839. The location of these Heritage Trees is shown in the scoping attachments. The scoping attachments also include a screenshot of the street tree inventory for the area surrounding the site using DC UFD mapping layer of Street Trees in Washington, DC.	The CTR Scoping Form calls out 4 Heritage Trees on the property, however, it does not mention other trees on the site some of which may be Special (i.e. >14" diameter) in size. Please have the applicant contact DDOT Arborists Joel Conlon (joel.conlon@dc.gov) and John O'Neill (john.oneill@dc.gov) to discuss next steps and requirements regarding tree preservation, tree relocation and tree removal. They can also refer to the DDOT UFD website for more information on the preservation, relocation and removal processes – DDOT Urban Forestry (arcgis.com) Response: The applicant is coordinating with UFD.

Section 2: MULTI-MODAL TRIP GENERATION

CATEGORY & GUIDELINES	APPLICANT PROPOSAL	DDOT COMMENTS

Mode Split

Provide mode split assumptions with sources and justification. Adjustments to mode split assumptions may be made, as appropriate, if the number of vehicle parking spaces proposed is significantly lower or higher than expected for the context of the neighborhood.

The agreed upon mode split assumptions may not be revised between scoping and CTR submission without amending the scoping form and receiving DDOT concurrence.

See Section 2.1 of the CTR Guidelines for acceptable data sources and methodologies.

We propose the following mode split assumptions. The proposed mode split is primarily derived from WMATA ridership survey and mode split for similar land use in the area, as well as the proposed parking supply. A detailed breakdown of these assumptions is included in the scoping form attachments.

Land Use	Mode			
	Drive	Transit	Bike	Walk
Residential	55%	35%	5%	5%
Retail	35%	35%	5%	25%

☒ *Scoping Table: Mode Split Assumptions by Land Use*

Residential auto share seems low. Considering the site is in proximity of Maryland, and that the O-D graphics in the scoping attachments shows a majority of O-Ds lie in MoCo and PG County, a greater number of driving commuters is expected. The site also provides excessive parking spaces that may lead to increased auto mode share. **Increase Auto mode share to 55%**

Response: We have updated the mode split, as requested.

DDOT Concurs

Trip Calculations

Provide site-generated person trip estimates, utilizing the most recent version of ITE *Trip Generation Manual* or another agreed upon methodology such as manual doorway or driveway counts at similar facilities. Estimates must be provided by mode, type of trip, land use, and development phase during weekday AM and PM commuter peaks, Saturday mid-day peak, and daily totals. CTR must also include existing site trip generation based on observed counts. Include estimates for the transit, bicycle, walk, and automobile modes.

The agreed upon trip generation methodology may not be revised between scoping and CTR submission without amending the scoping form and receiving DDOT concurrence. Consult the DDOT Case Manager if site plan, development program, land uses, or density changes significantly.

See Section 2.2 of the CTR Guidelines for guidance on auto occupancy rates, acceptable trip reductions, and other methodologies.

Multi-modal trip generation was calculated using ITE *Trip Generation* 11th Edition rates for land use 221 (Multifamily Housing Mid-Rise 3-10 floors) and land use 822 (Strip Retail Plaza) using the corresponding proposed sizes. The ITE trip generation for the proposed project is shown below and included in the attachments.

Mode	Land Use	Size	Mode Split	AM Peak Hour			PM Peak Hour			Weekday Total
				In	Out	Total	In	Out	Total	
Auto (veh/hr)	Residential	440 du	55%	24	76	100	58	37	95	1,129
	Retail	17,650 sf	35%	9	6	15	20	21	41	341
	Total			**33**	**82**	**115**	**78**	**58**	**136**	**1,470**
Transit (ppl/hr)	Residential	440 du	35%	18	57	75	43	28	71	847
	Retail	17,650 sf	35%	16	11	27	37	38	75	621
	Total			**34**	**68**	**102**	**80**	**66**	**146**	**1,468**
Bike (ppl/hr)	Residential	440 du	5%	3	8	11	6	4	10	121
	Retail	17,650 sf	5%	2	2	4	5	6	11	89
	Total			**5**	**10**	**15**	**11**	**10**	**21**	**210**
Walk (ppl/hr)	Residential	440 du	5%	3	8	11	6	4	10	121
	Retail	17,650 sf	25%	12	7	19	27	26	53	444
	Total			**15**	**15**	**30**	**33**	**30**	**63**	**565**

☒ *Scoping Table: Multi-Modal Trip Gen Summary (with mode split and applicable reductions, as appropriate)*

Update trip generation estimates to reflect mode share changes

Response: The trip generation has been updated.

DDOT Concurs

Section 3: MULTI-MODAL NETWORK EVALUATION

A multi-modal network evaluation is required in the CTR or Transportation Statement if the project generates 100 or more total person trips (combined inbound and outbound) OR 25 or more vehicle trips in the peak direction (highest of inbound or outbound) during any peak hour period. Existing site traffic, pass-by, TDM, internal capture or other reductions may not be taken in the

calculation to determine if the project meets these thresholds. However, the reductions may be applied in the analysis, as appropriate, if a study is triggered. Multi-modal analyses in this section are required in all CTRs, unless otherwise specified. A Transportation Statement may only require some of the following sections depending on the specifics of the project and zoning action.

Requirement for a CTR may be waived if site is within ½ mile from Metrorail or ¼ mile from Priority Transit, total vehicle parking supply is below the max amount for its distance to transit (see Figure 10), site has a maximum of 100 parking spaces, a Baseline TDM Plan is implemented, site access and loading design are acceptable, an off-site safety or non-auto improvement is constructed, and long-term bike parking requirements are exceeded. Additional criteria may be found in the Low Impact Development Exemption section of the *CTR Guidelines*.

CATEGORY & GUIDELINES	APPLICANT PROPOSAL	DDOT COMMENTS
Strategic Planning Elements List any relevant planning efforts and demonstrate how the proposed action is consistent with District-wide planning documents, as well as localized studies. Note in any recommendations from these documents relevant to the development proposal. *See Section 3.1 of CTR Guidelines for a list of strategic planning documents. Details on additional relevant plans and studies may be provided by the DDOT Case Manager.*	The CTR will consider the following relevant planning efforts: • MoveDC and its relevant modal elements • Rock Creek East I Livability Study • District of Columbia Comprehensive Plan • Vision Zero Action Plan • Capital Bikeshare Development Plan	DDOT concurs. Response: Acknowledged.
Pedestrian Network Evaluate the condition of the existing pedestrian network and forecast the project's impact. Evaluation must include, at a minimum, critical walking routes, sidewalk widths, network completeness, and whether facilities meet DDOT and ADA standards. Study area will include, at a minimum, all roadway segments and multi-use trails within a ¼ mile radius from the site, with a focus on connectivity to Metrorail, transit stops, schools, and activity centers, and other neighborhood amenities. *See Section 3.2 of the CTR Guidelines for more detailed guidance.*	The study will review pedestrian walking routes to and from the site along with an assessment of facilities along these walking routes and on all pedestrian facilities within ¼ mile of the site following section 3.2 of DDOT's CTR guidelines. The assessment will qualitatively evaluate whether facilities meet DDOT and ADA standards. ☒ *Scoping Graphic: Pedestrian Study Area with Walking Routes to Transit, Schools, Activity Centers, and Neighborhood Amenities*	DDOT concurs. Response: Acknowledged.
Bicycle Network Evaluate the condition of the existing bicycle network and forecast the project's impact, including to Capital Bikeshare (CaBi). Evaluation must include, at a minimum, bicycle network completeness, types of facilities, and adequacy of CaBi locations and availability. Study area will include, at a	A review of existing and planned bicycle facilities serving the site within a ½ mile will be included with an assessment of connections between the site and major facilities, including a qualitative review of how cyclists going to and from the site will access major facilities (paths, bike lanes, etc.). The review of bicycle facilities will follow DDOT's CTR guidelines found in section 3.3.1.	All of the Cabi stations are missing from the map, including at the project site. The legend shows that CaBi should be a part of this map. The future MBT Alignment isn't quite accurate, there are no plans for an alignment on 3rd St. The trail will go from Blair Rd to Whittier St

minimum, all roadway segments and multi-use trails within a ½ mile radius from the site, with a focus on connectivity to Metrorail, transit stops, schools, major activity centers, and other bicycle trails or facilities. Look for opportunities to convert traditional bike lanes to protected bike lanes. *See Section 3.3 of the CTR Guidelines for more detailed guidance.*	☒ *Scoping Graphic: Bicycle Study Area with Bicycling Routes to Transit, Schools, Activity Centers, and Other Bicycle Facilities and Trails*	and then north on 4th St. A separate bike lane connection will connect Blair Rd via 4th St and Van Buren St. Response: The updated figures are attached and will be included in the CTR. DDOT Concurs
Transit Network Evaluate, at a minimum, existing transit stop locations, adjacent bus routes and Metro headways, planned transit improvements, and an assessment of existing transit stop conditions (e.g., ADA compliance, bus shelters, benches, wayfinding, etc.). Study area is 1.0 mile for Metrorail stations and ½ mile for Streetcar, Circulator, and buses. *See Section 3.4 of the CTR Guidelines for more detailed guidance.*	The study will discuss transit routes and schedules, including headway and span of service for Metrorail stations within one (1) mile of the site and for WMATA bus stops within ½ mile of the site. The study will evaluate the sufficiency of the identified services and access to those services from a qualitative standpoint. Additionally, transit stop locations will be evaluated. Any planned transit improvements will be included in the report. This study will not include a quantitative study of boarding and alighting volumes at specific transit stops. All transit network evaluations will follow guidance as outlined in section 3.4 of DDOT's CTR guidelines. ☒ *Scoping Graphic: Transit Study Area with Adjacent Routes and Stations* ☒ *Scoping Graphic: Screenshots from DDOT Transit Maps Showing Where the Site Falls within Buffers from Metrorail and Priority Transit (Figures 11 and 12)*	DDOT concurs. Response: Acknowledged.
Safety Analysis Qualitatively evaluate safety conditions at intersections and along blocks within the vehicle study area using professional expertise. This might identify geometric design issues, missing critical signage or restrictions, or unforeseen pedestrian desire lines, for example. Perform a review of DDOT Vision Action Plan. Note whether any study intersections have been identified by DDOT as high crash locations, if any safety studies have been previously conducted, and discuss the recommendations. *See Section 3.5 of the CTR Guidelines for more detailed guidance.*	A qualitative evaluation of safety conditions within the proposed study area will be included in the CTR following the guidance set forth in section 3.6 of DDOT's CTR guidelines.	DDOT concurs. Response: Acknowledged.
Curbside Management Propose a preliminary curbside management plan that is consistent with current DDOT policies and practices. Curbside signage / restrictions reset with new development and the Applicant is responsible for installing meters if required. The curbside management plan must delineate existing and proposed on-street parking	A curbside management plan will be provided in the CTR, including existing and proposed curbside designations within two (2) blocks of the site. ☐ *Scoping Graphic: Existing Curbside Designations (minimum 2 block radius of site)*	DDOT concurs. Response: Acknowledged.

designations/restrictions, including but not limited to pick-up/drop-off zones, loading zones, multi-space meters, RPP, and net change in number of on-street spaces as a result of the proposal. *See Section 3.6 of the CTR Guidelines for more detailed guidance.*		
Pick-Up and Drop-Off Plan Required for all new and existing schools and daycares with 20 or more students. May also be required for churches, hotels, or any other use expected to have significant pick-up/drop-off operations, as necessary. The plan will identify pick-up/drop-off locations and demonstrate adequate circulation so that the flow of bicycles and vehicles on adjacent street is not impeded and queueing does not occur through the pedestrian realm. *See Section 3.6.4 of the CTR Guidelines for more detailed guidance.*	A pick-up and drop-off plan is not necessary. The intensity of the residential/retail development program is not expected to have significant pick-up and drop-off operations. WMATA PUDO for Kiss and Ride will occur adjacent to the new bus loop.	Where is PUDO for the residential building proposed… kiss n ride, withing motor court, or curbside on Cedar? In previous meetings, we've discussed all these options but it's not clear which is being proposed. Response: PUDO is proposed within the internal court along the woonerf. Include a diagram with PUDO location and circulation. GS response: A designated PUDO area/layby will be provided along the driveway as shown on the attached revised site plan. Additional details will be provided with the CTR.
On-Street Parking Occupancy Study This analysis is required if relief from 5 or more on-site vehicle parking spaces is being requested. It may also be required as part of a zoning or permitting case if DDOT has concerns about site-generated vehicles parking in adjacent residential neighborhoods. *See Section 3.6.5 of the CTR Guidelines for more detailed guidance on study periods and analysis requirements.*	Zoning relief for parking is not being sought, therefore this section is not applicable. ☐ *Scoping Graphic: Study Area and Block Faces*	DDOT concurs. N/A Response: Acknowledged.
Parking Garage/Drive-Thru Queuing Analysis If site contains 150 or more vehicle parking spaces AND direct access to a public street OR site contains a drive-thru, evaluate on-site vehicle queueing demand and provide analysis demonstrating parking entrance/ramps or drive aisle can properly process vehicles without queuing onto public streets.	The proposed garage does have direct access to a public street; therefore this section is not applicable.	DDOT concurs. N/A Response: Acknowledged.

See Section 1.3.4 of CTR Guidelines for more detailed guidance.		
Motorcoaches Propose methodology for data collection and analysis. Describe and show the parking locations, anticipated demand, existing areas on- and off-site for loading and unloading (and desired loading times restrictions, if any), and potential routes to and from designated truck routes. If on-street motorcoach parking is proposed, a plan for installation of signage and meters is required, subject to DDOT approval. This section is typically only required for uses that generate significant tourist activity (hotels, museums, cruises, concerts, etc.). *See Section 3.7 of the CTR Guidelines for more detailed guidance.*	No motorcoach activity is anticipated to occur at the proposed development; therefore this section is not applicable.	DDOT concurs. N/A Response: Acknowledged.

Section 4: TRAFFIC IMPACT ANALYSIS (TIA)

The TIA component of a CTR is required when a development generates 25 or more vehicle trips in the peak direction (higher of either inbound or outbound vehicles) during any of the critical peak hour periods, after mode split is applied. Existing site traffic, pass-by, TDM, internal capture or other reductions may not be applied when calculating whether a TIA is required. However, trip reductions may be used in the multi-modal trip generation summary and assignment of trips within the TIA, as appropriate and agreed to by DDOT. A standalone TIA may also be required if the project proposes a change to roadway capacity, operations, or directionality; has a site access challenge; or as otherwise deemed necessary by DDOT.

CATEGORY & GUIDELINES	APPLICANT PROPOSAL	DDOT COMMENTS
TIA Study Area and Data Collection Identify study intersections commensurate with the impact of the proposed project and the travel demand it will generate. Study area must include all major signalized and unsignalized intersections, intersections expected to realize large numbers of new traffic, and intersections that may experience changing traffic patterns. *See Sections 4.1 and 4.2 of the CTR Guidelines for more detailed guidance on study intersection selection and TMC count periods.*	We propose the following study intersections: 1. Piney Branch Rd & Eastern Ave 2. Eastern Ave & Holly Ave 3. Eastern Ave & Metro Station/Site Dwy 4. Eastern Ave & Removed Bus Access 5. Eastern Ave & Cedar Ave/Cedar St 6. Cedar St & Site Dwy 7. Blair Rd & 4th St & Cedar St 8. Metro Station & Cedar St/Carroll St 9. Cedar St & Carroll St 10. Maple St & Carroll St ☒ *Scoping Graphic: Proposed Study Intersections* ☒ *Will provide hard copies of TMCs in CTR appendix and electronic copies in DDOT spreadsheet format at time of submission.*	DDOT concurs. Response: Acknowledged.

TIA Study Scenarios Propose an appropriate set of scenarios to analyze. These commonly include Existing, Background (No Build), Total Future, and Future with Mitigation. Note the anticipated build-out year and project phasing. *See Section 4.3 of CTR Guidelines for guidance on study scenarios.*	We propose to include the following scenarios following section 4.3 of DDOT's CTR guidelines: • Existing Conditions (2022 Existing Conditions) • 2027 Future Conditions without the project (2027 Background Conditions) • 2027 Future Conditions with the project (2027 Total Future Conditions) o *2027 Mitigated Future Conditions with the project (2027 Mitigated Total Future Conditions), as necessary*	Update to 2023 for Existing Conditions or has data already been collected in 2022? Response: Data was collected in 2022.
TIA Methodology Propose an appropriate methodology for the capacity analysis including the type of software program to be used. Per DEM 38.3.5.1, HCM methodology will be used to determine Level of Service (LOS), v/c, and vehicle queue lengths. LOS must be reported by intersection approach and v/c by lane group. DDOT prefers Synchro 9 or newer software for capacity and queueing analyses. *See Section 4.4 of the CTR Guidelines for more detailed guidance. DDOT's required standard Synchro and SimTraffic inputs/settings are provided in Appendix H.*	Capacity analyses will be performed using Highway Capacity Manual (HCM) methodologies using an industry recognized software package. We propose performing the analysis in Synchro 10 and reporting the results in delay and LOS using HCM 2000 methodologies. We propose to analyze the weekday morning and afternoon commuter peak hours, using the system peaks at all study area intersections. Synchro files will be obtained from DDOT for use in the vehicular capacity analysis. Signal timings for the study area intersections will be obtained from DDOT. Field visits will be performed to update existing geometric information into the Synchro models, and update Synchro files with current traffic signal timing plans. We will apply this methodology to the following analysis scenarios: • Existing Conditions (2022 Existing Conditions) • 2027 Future Conditions without the project (2027 Background Conditions) • 2027 Future Conditions with the project (2027 Total Future Conditions) o *2027 Mitigated Future Conditions with the project (2027 Mitigated Total Future Conditions), as necessary* The capacity analysis results will show the average delay, v/c, and the resulting LOS for each approach and for the overall intersection (where available), as well as the queuing results obtained from Synchro 10 for the average and 95th percentile queue for each lane group. • We will highlight all LOS E or LOS F conditions per intersection and approach. • We will propose mitigation measures at intersections or approaches that degrade to an LOS E or F as a result of the development, or intersections or approaches operating under LOS E or F under background conditions that observe an increase in delay of greater than 5 percent, when compared to background scenario. • We will highlight all locations where the 95th percentile queue length exceeds the length of storage. We will note where the proposed project causes the 95th percentile queue length to exceed the available capacity of a lane group when it does not in the background scenario. • We will propose mitigation measures at intersections where the proposed project causes any 95th percentile queue lengths that exceed the available capacity to experience an increase in length of greater than 150 feet along any lane group. An assessment of feasibility given the existing ROW at each location will be given for each mitigation measure. ☒ *Will provide copies of Synchro, SimTraffic, and other analysis software printouts in study appendix and electronic copies of analysis files at time of CTR submission.*	DDOT concurs. Response: Acknowledged.
Transportation Network Improvements List and map all roadway, transit, bicycle, and pedestrian projects funded by DDOT or WMATA, or proffered by others, in the vicinity of the study area and expected to open for public use	From the District Government: • Metropolitan Branch Trail extension (expected completion 2024) ☒ *Scoping Graphic: Locations of Background Transportation Network Improvements and Anticipated Completion Years*	How is this trail being accommodated by the project? Response: The Applicant met with DDOT to confirm that the MBT will not route through or adjacent to the property. The alignment will be south and west of the tracks.

prior to the proposal's anticipated build-out year. Review the STIP, CLRP, and proffers/commitments for other nearby developments. *See Section 4.5 of the CTR Guidelines for more detailed guidance.*		DDOT Concurs
Background Development / Local Growth List and map developments to be analyzed as local background growth. This will include known matter-of-right and zoning-approved developments within ¼ mile of site and others more than ¼ mile from site if their traffic is distributed through study intersections. Document the portions of developments anticipated to open by the projected build-out year. *See Section 4.6.1 of the CTR Guidelines for more detailed guidance.*	We will consider the following background developments: 1. Fern Street Townhomes 2. The Hartley 3. Kite House 4. Reynard 5. Aspen Street Townhomes 6. 218 Cedar Street 7. Gilbert & Wood ☒ *Scoping Graphic: Background Development Projects Near Study Area* ☐ *Scoping Table: Completion Amounts/Portions Occupied of Background Developments*	DDOT concurs. Response: Acknowledged.
Regional Traffic Growth Propose a methodology to account for growth in regional travel demand passing through the study area. An appropriate methodology could include reviewing historic AADT traffic counts, MWCOG model growth rates, data from other planning studies, or recently conducted nearby CTRs. These sources should only be used as a guide. Generally, maximum annually compounding growth rates of 0.5% in peak direction and 2.0% in non-peak direction are acceptable. Adjustments to the rates may be necessary depending on the amount of traffic assumed from local background developments or if there were recent changes to the transportation network. *See Section 4.6.2 of the CTR Guidelines for more detailed guidance.*	We propose to examine volumes contained in the MWCOG regional model, as well as historical DDOT AADTs (where available), to develop an average annual growth rate for study area roadways following section 4.6.2 of DDOT's CTR guidelines. A summary of COG model volumes and trends for the study area are attached to this scoping form. This methodology accounts for all future projects and developments in the COG model and allows for district growth rates by direction and time of day. We based growth rates between 2022 (existing conditions) and 2027 (project completion) on the differences between the year 2022 and 2027 COG model scenarios. Where the COG model showed negative or minimal growth, we assumed a conservative 0.1% per year minimum growth. Maximum growth rates of 0.5% in the peak direction and 2.0% in the non-peak direction were used. Proposed growth rates for each roadway for the 2022-2027 period are shown below.	Growth rate calculation information is missing or not properly shown on multiple sheets in the Attachments, e.g., Pages 30, 32, 38, 40, 45 Response: These pages were extraneous (showing that AADT and/or MWCOG data was not available for the selected roadway) and have been removed in the updated attachments. DDOT Concurs

Roadway	Dir.	Proposed Annual Growth Rate Between 2022 and 2027		Proposed Total Growth Between 2022 and 2027	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Carroll St/Cedar St NW	EB	0.10%	0.10%	0.50%	0.50%
	WB	0.10%	0.10%	0.50%	0.50%
Piney Branch Rd NW	NB	0.40%	0.50%	2.02%	2.53%
	SB	0.50%	0.20%	2.53%	1.00%
Eastern Ave/Cedar St NW	NB	0.10%	2.00%	0.50%	10.41%
	SB	2.00%	0.10%	10.41%	0.50%
Blair Rd NW	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.50%	0.10%	2.53%	0.50%
5th St NW	NB	1.30%	0.50%	6.67%	2.53%
	SB	0.50%	0.10%	2.53%	0.50%
4th St NW [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Butternut St NW [1]	EB	0.10%	0.10%	0.50%	0.50%
	WB	0.10%	0.10%	0.50%	0.50%
Maple St NW [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Holly Ave [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Cedar Ave [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%

[1] AADT and/or MWCOG data is not available for this street; therefore a conservative 0.1% growth rate per year was used.

☒ *Scoping Table and Graphic: Projected Regional Growth Assumptions (dependent on methodology), Show Growth rates by Road, Direction, and Time of Day*

Trip Distribution

Provide sources and justification for proposed percentage distribution of site-generated trips. Additionally, document proposed pass-by distributions and the re-routing of existing or future vehicles based on any changes to the transportation network. Percentage distributions must be shown turning at intersections throughout the transportation network and at site driveways and garage

Trip distribution for the site was determined based on CTPP TAZ flow data. Attached to this scoping form are figures depicting the CTPP TAZ flow data for:

- Residents of the project TAZ commuting by vehicle to other TAZs
- Employees working in the project TAZ commuting by vehicle from other TAZs

The resulting proposed trip distributions are illustrated on the attached graphics. Also shown in the attached graphics are local residential and retail trip distributions within the site area to the two site driveways.

☒ *Scoping Graphic(s): Percentage Distribution by Land Use, Direction, Time of Day (must be shown turning at intersections and driveways)*

DDOT concurs.

Response: Acknowledged.

entrances to ensure appropriate routing assumptions. The agreed upon trip distribution methodology may not be revised between scoping and CTR submission without amending this scoping form and receiving concurrence by DDOT Case Manager. *See Section 4.7 of the CTR Guidelines for more detailed guidance.*		

Section 5: MITIGATION

The completed CTR must detail all proposed mitigations. The purpose of discussing mitigation at the scoping stage is to highlight DDOT's Significant Impact Policy, DDOT's approach to mitigation, and to give the Applicant an opportunity to gain initial feedback on potential mitigations that are under consideration. Any mitigation strategies discussed and included in the *Scoping Form* are considered non-binding until formally evaluated in the study and committed to in documentation submitted as part of the case record.

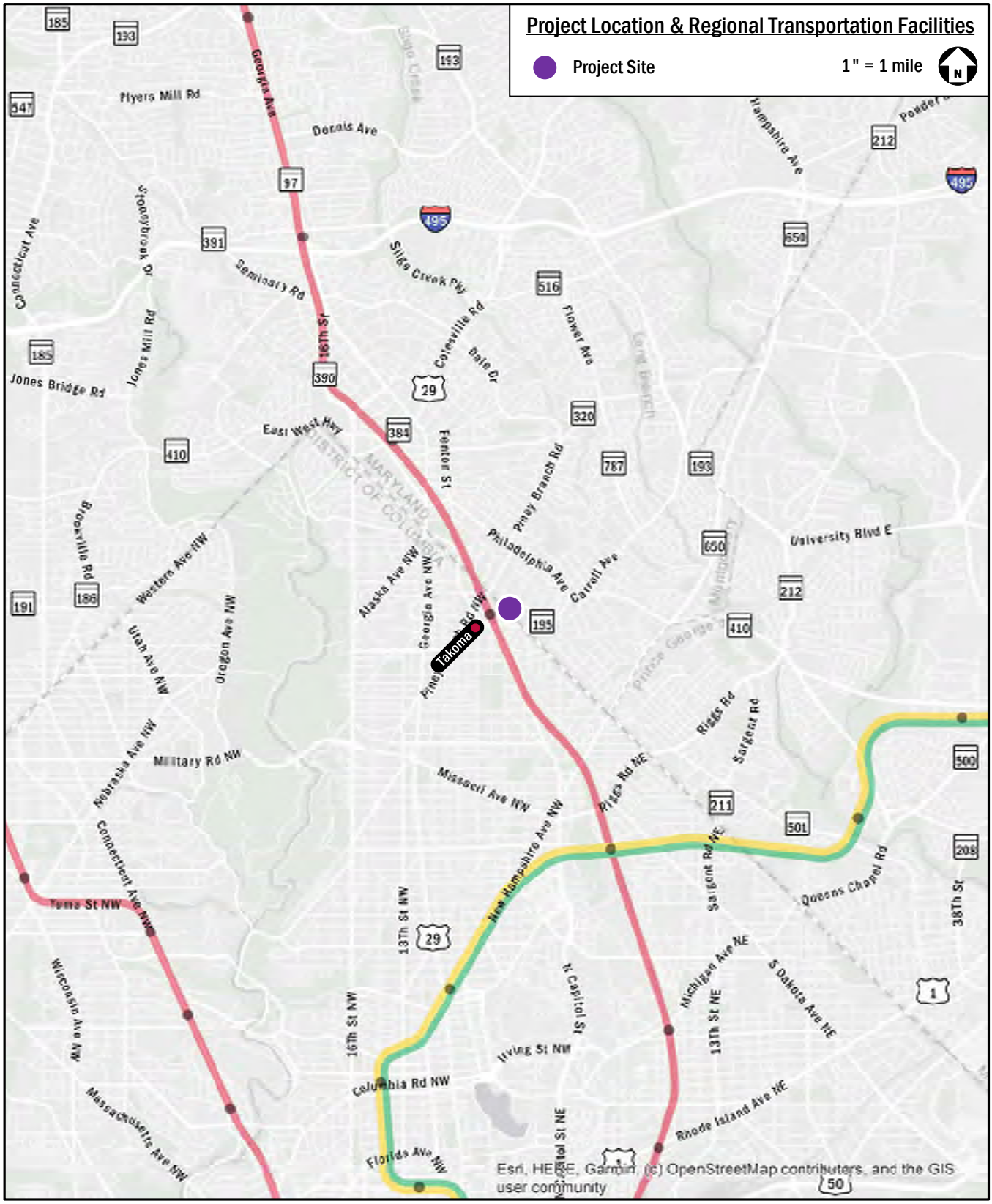
CATEGORY & GUIDELINES	APPLICANT PROPOSAL	DDOT COMMENTS
DDOT Significant Impact Policy DDOT has two primary impact mitigation tests for development projects: 1) off-street vehicle parking supply, and 2) capacity impacts at intersections. *See Section 5.1 of the CTR Guidelines for detailed policies and metrics for each of the two impact tests.*	☒ *The Applicant acknowledges DDOT's Significant Impact Policy in Section 5.1 of the CTR Guidelines.* ☒ *The study will comply with all other policies in the CTR Guidelines not explicitly documented in the Applicant Proposal or DDOT Comments columns.* ☒ *The study will include all of the required graphics, tables, and deliverables for the relevant sections determined during scoping, as shown in Figure 7 of the CTR Guidelines.*	DDOT concurs. Response: Acknowledged.
DDOT's Approach to Mitigation DDOT's approach to mitigation prioritizes (in order of preference) optimal site design, reducing vehicle parking, implementing TDM strategies, making non-automotive network improvements, and making a monetary contribution to DDOT's Mitigation Fund for non-auto improvements, before considering options that increase roadway capacity or alter roadway operations. *See Section 5.2 and Figure 18 of the CTR Guidelines for more detailed guidance on mitigation selection.*	☒ *The Applicant acknowledges DDOT's approach to mitigation in Section 5.2 of the CTR Guidelines.*	DDOT concurs. Response: Acknowledged.

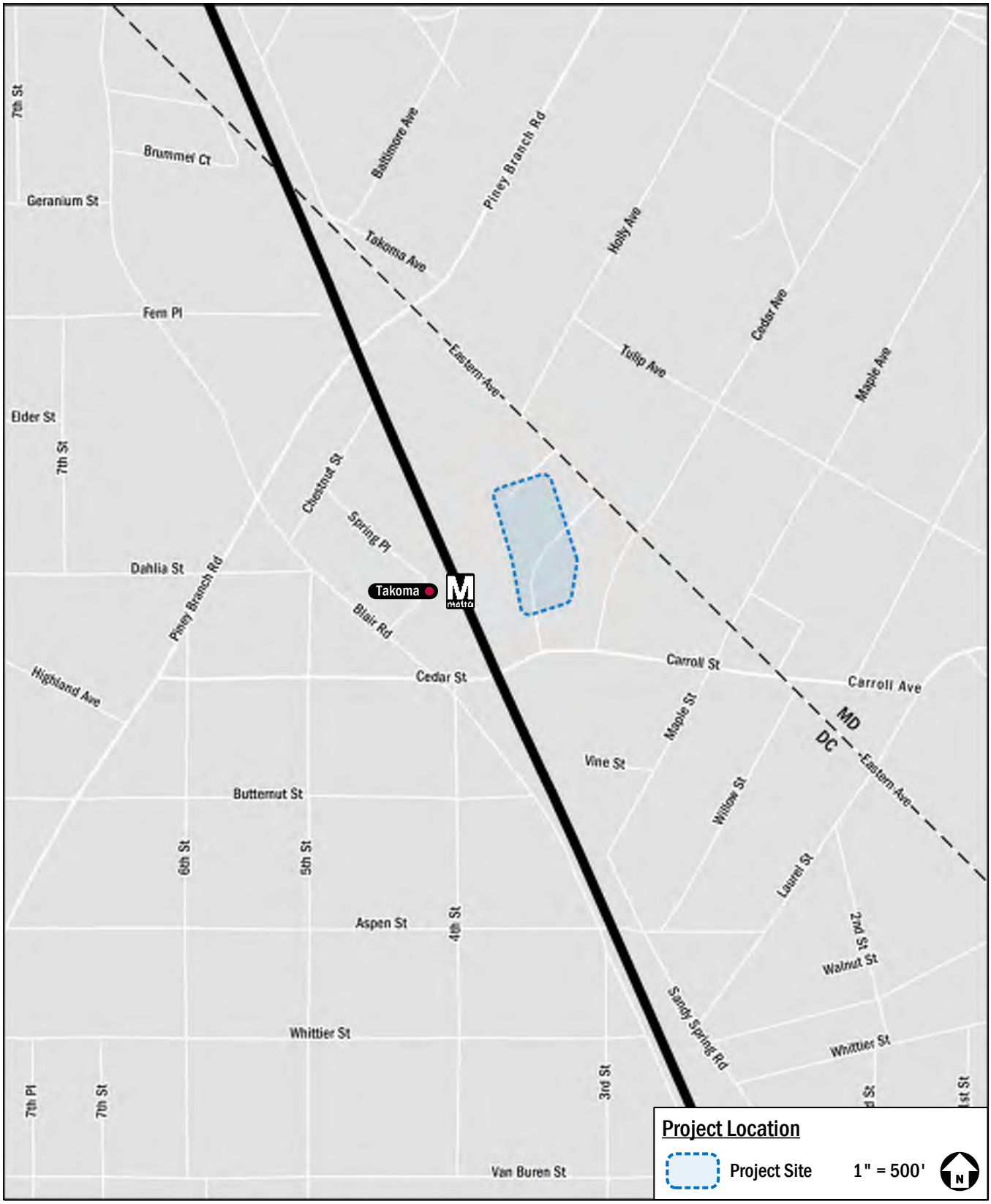
Transportation Demand Management (TDM) A TDM Plan is typically required to offset site-generated impacts to the transportation network or in situations where a site provides more parking than DDOT determines is practical for the use and surrounding context. Document all existing TDM strategies being implemented on-site (even outside of a formal TDM Plan) and those being proposed and committed to by the Applicant. Elements of the TDM Plan included in CTR must be broken down by land use and user. *See Section 5.3 of the CTR Guidelines for more detailed guidance. Sample TDM plans by land use and tier can be found in Appendix C.*	☒ *The study will include at least a Baseline TDM Plan. The TDM plan will increase to depending on the parking supply and other impacts identified in the study.*	Developer is responsible for payment for replacement of existing 19-dock Capital Bikeshare station and four-dock expansion. This will cost approximately $92,000. Response: See previous response regarding the CaBi Station. See DDOT's previous response
Performance Monitoring Plan (PMP) DDOT may require a PMP in situations where anticipated vehicle trips are large in magnitude, unpredictable, or necessitate a vehicle trip cap. Typically, this is required for campus plans, schools, or large developments expected to have a significant amount of single occupancy vehicle trips. Document any existing performance monitoring Plans in effect and any proposed changes. *See Section 5.4 of the CTR Guidelines for more detailed guidance. Sample PMPs can be found in Appendix D.*	Acknowledged.	DDOT acknowledged. Response: Acknowledged.
Roadway Operational and Geometric Changes Describe all proposed roadway operational and geometric changes in CTR with supporting analysis and warrants in the study appendix. Detail must be provided on any ROW implications of proposed mitigations. Note any preliminary ideas being considered. *See Section 5.7 of the CTR Guidelines for more detailed guidance.*	The proposed project includes the following roadway changes: • Realigning the bus loop around the project building and adding kiss & ride and project garage access functions to it • Slightly shifting the current parking/kiss & ride driveway on Eastern Avenue NW to serve as access to the new bus loop and secondary residential garage access • Removing the current bus loop driveway at Eastern Avenue NW • Narrowing and relocating the current bus loop driveway at Carroll Street NW and consolidating it with kiss & ride access. This intersection is proposed to be signalized • Adding a new site driveway from Cedar Street NW that will provide access to loading facilities and residential/retail garage • Modifications to Carroll Street to include curb extensions, new curbside parking, high visibility crosswalks, concrete medians and a new kiss and Ride along eastbound Carroll Street beneath the bridge	How is the removed Metro parking lot being compensated and how is the proposed kiss-and-ride operations going to work? Response: The Kiss-and-Ride will be separated from the bus loop with physical median and signage. That will be operated and maintained by WMATA. Additionally, WMATA has determined that on-site parking is not required for this station and will not be replaced. To note, the existing WMATA vehicle spaces onsite are classified as kiss-n-ride

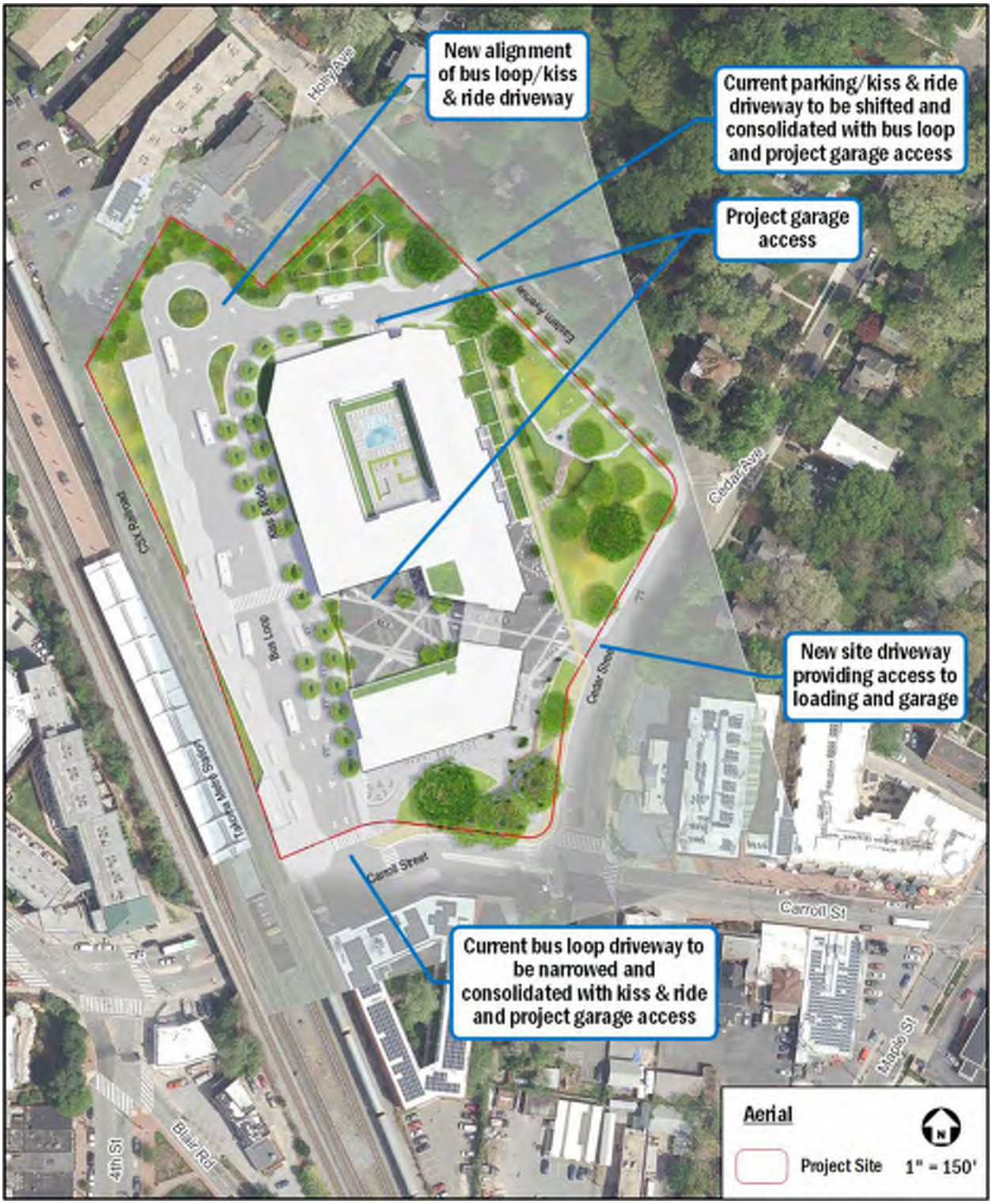
	These proposed roadway changes are shown on the aerial and site circulation exhibits in the attachments.	and only meant for pick up and drop off, not long term parking. Will retail spaces require validation or limited time use? GS response: Parking will not be time-limited, but the price will escalate with increased duration. Retail parking will not be validated, but will be pay-to-park at market rate. Proposed signalization at Carroll St & Driveway is less than 300 feet from the adjacent traffic signal at Carroll St and Cedar St, which violates DEM guidelines. Detailed signal warrant analysis should be conducted in the report and signal timing plan should be proposed. DDOT will further evaluate the proposed signalization. Response: Peak Hour warrants for signalization will be included in the CTR. DDOT Concurs Provide more detailed drawing or graphic showing the changes to Carroll Street, including the locations of new curbside parking, and new kiss and ride. Why is the new kiss and ride provided beneath the bridge? Response: This information will be provided in the CTR. The kiss-and-ride beneath the bridge was required by WMATA to meet their design requirements for the minimum number of kiss-and-ride spaces and to account for the fact that it is currently happening and can be appropriately accommodated as proposed. DDOT Concurs

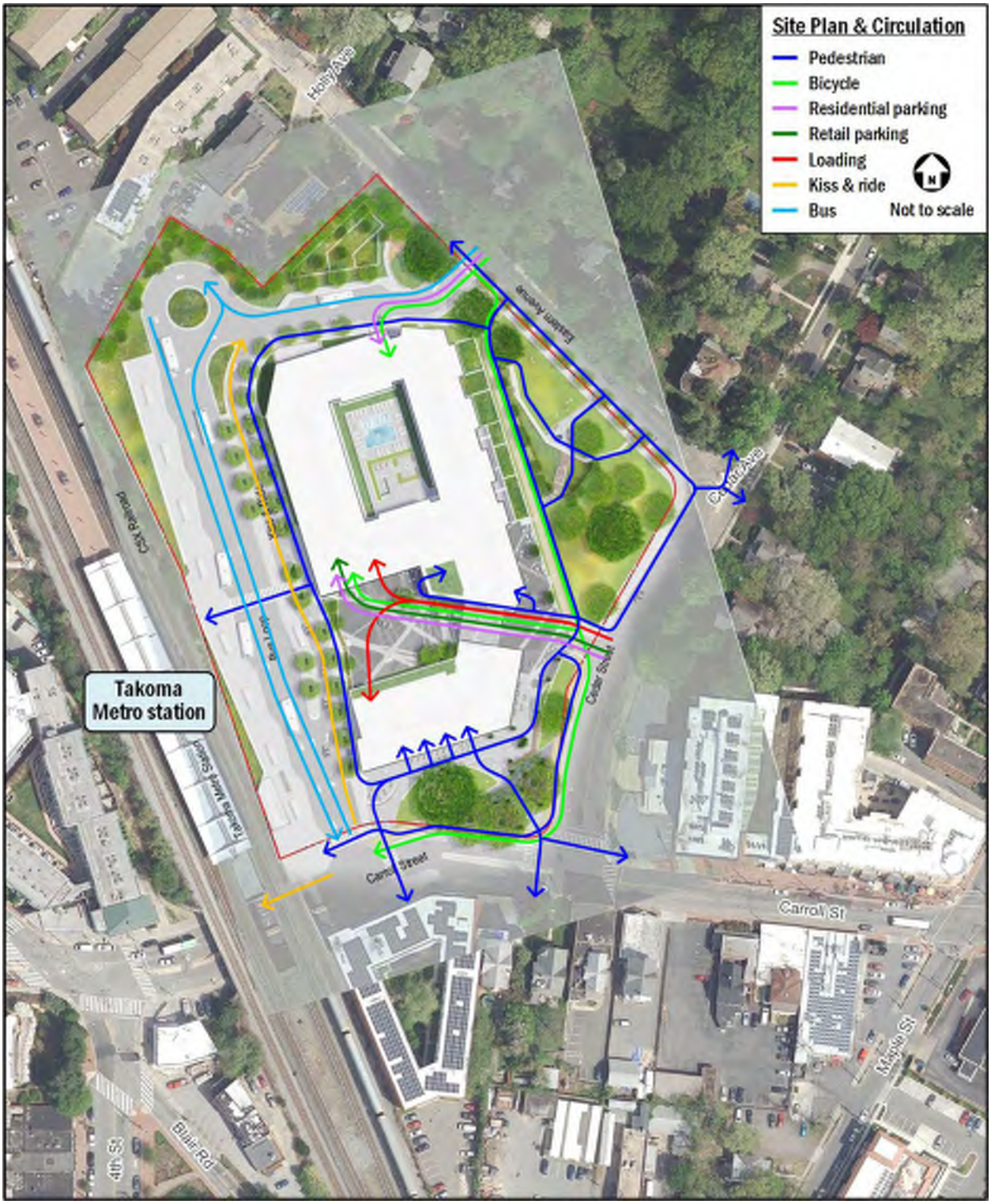
Section 6: ADDITIONAL TOPICS FOR DISCUSSION DURING SCOPING

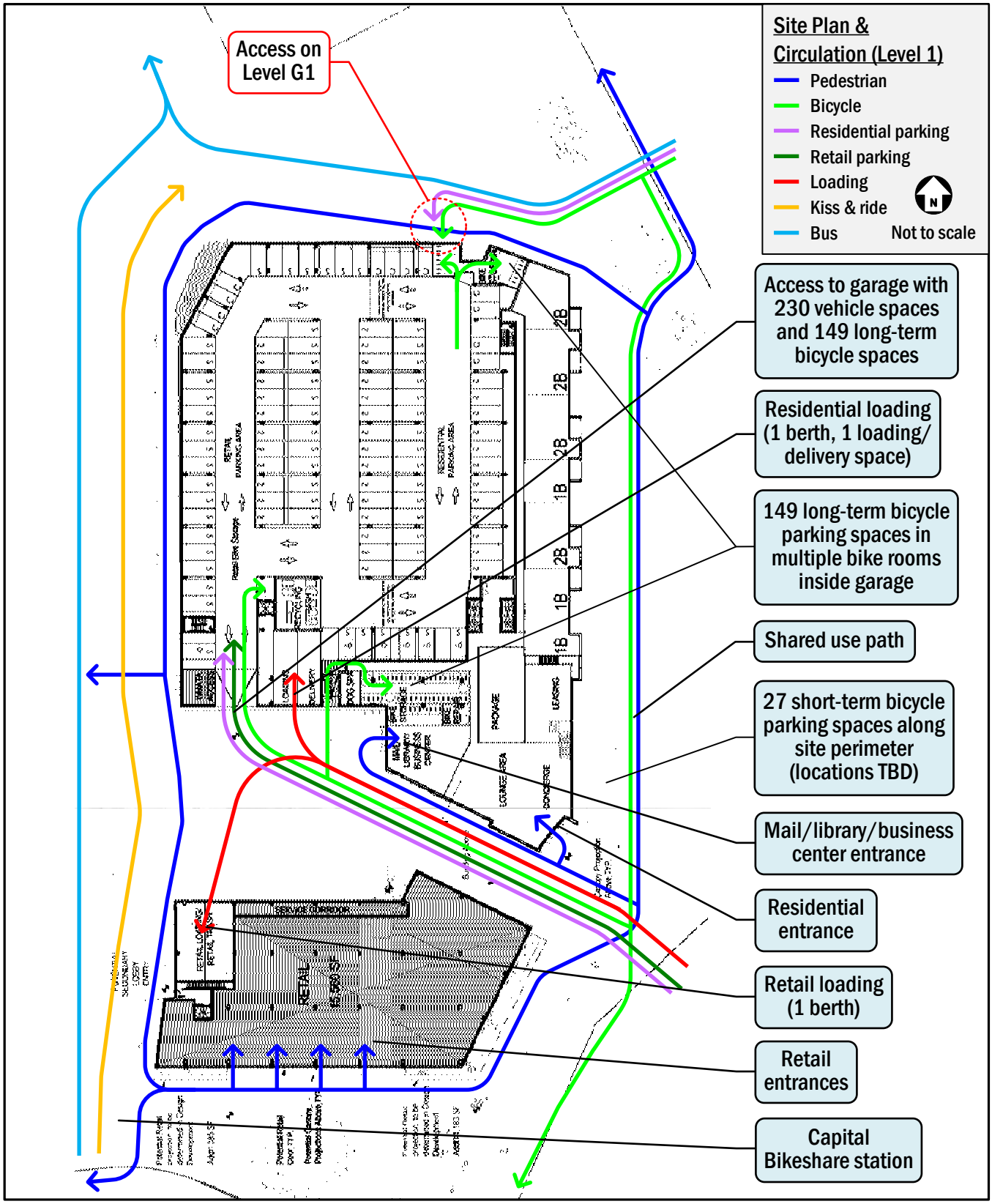
CATEGORY & GUIDELINES	APPLICANT PROPOSAL	DDOT COMMENTS
ANC Discussions and Feedback Provide an update on the status of Community Benefits Agreement (CBA), any on-going ANC discussions/meetings, and any concerns expressed by the community. DDOT can provide ideas and a feasibility check for transportation items to be included in the CBA.	ANC discussions are ongoing. The applicant has also engaged the neighbors to the north of the DC-MD line. Some feedback received to date includes the desire for modification/removal of the traffic diverter at Cedar Avenue/Eastern Avenue and bike lanes along Eastern Avenue.	DDOT appreciates the update. Response: Acknowledged.
Miscellaneous Items for Discussion Any relevant on-going conversations with DOEE, SHPO, DMPED, GSA, NPS, neighboring jurisdictions, Historic Preservation, etc.? Seeking direction on other types of analyses such as traffic calming, TOPP, TMP, IMR/IJR, etc.? Anything unusual proposed not covered under other sections, such as air-rights, right-of-way actions, removal from Highway Plan, removal of BRLs, or construction under or close to a bridge?		N/A Response: Acknowledged.

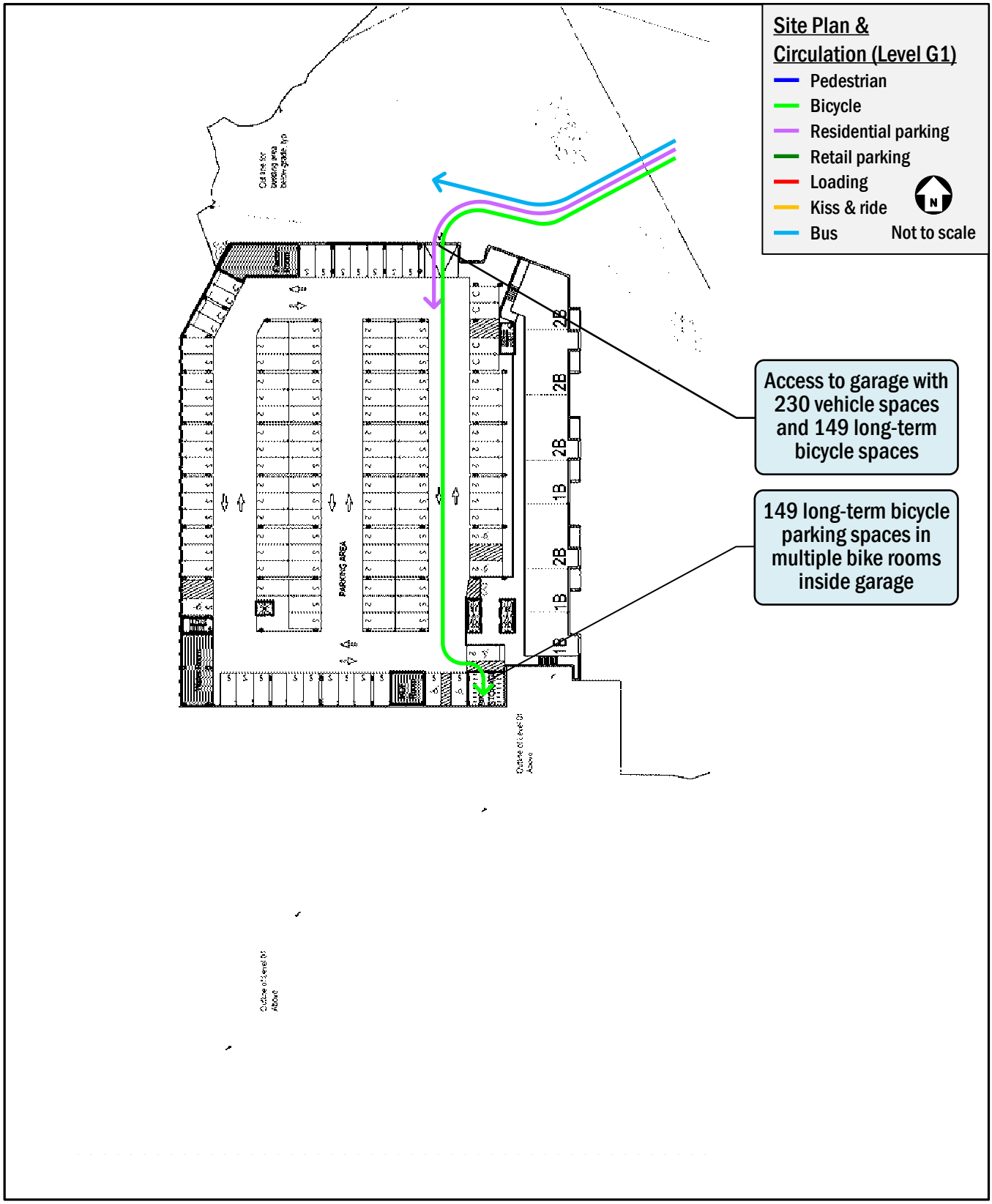

Project Location & Regional Transportation Facilities
Project Site
1" = 1 mile
N
Takoma
Georgia Ave
Dennis Ave
Flyers Mill Rd
16th St
Sligo Creek Pky
Colesville Rd
Dale Dr
Flower Ave
Seminary Rd
Jones Bridge Rd
Jones Mill Rd
Connecticut Ave
East West Hwy
Piney Branch Rd
Philadelphia Ave
Carroll Ave
Alaska Ave NW
Georgia Ave NW
Western Ave NW
Oregon Ave NW
Utah Ave NW
Nebraska Ave NW
Military Rd NW
Missouri Ave NW
Rigg Rd NE
Riggs Rd
Sargent Rd
Sargent Rd NE
New Hampshire Ave NW
Queens Chapel Rd
38th St
Tuna St NW
Connecticut Ave NW
13th St NW
16th St NW
Wisconsin Ave NW
Massachusetts Ave NW
Columbia Rd NW
Irving St NW
N Capitol St
Michigan Ave NE
13th St NE
S Dakota Ave NE
Rhode Island Ave NE
Florida Ave NW
Bladensburg Rd NE
University Blvd E
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

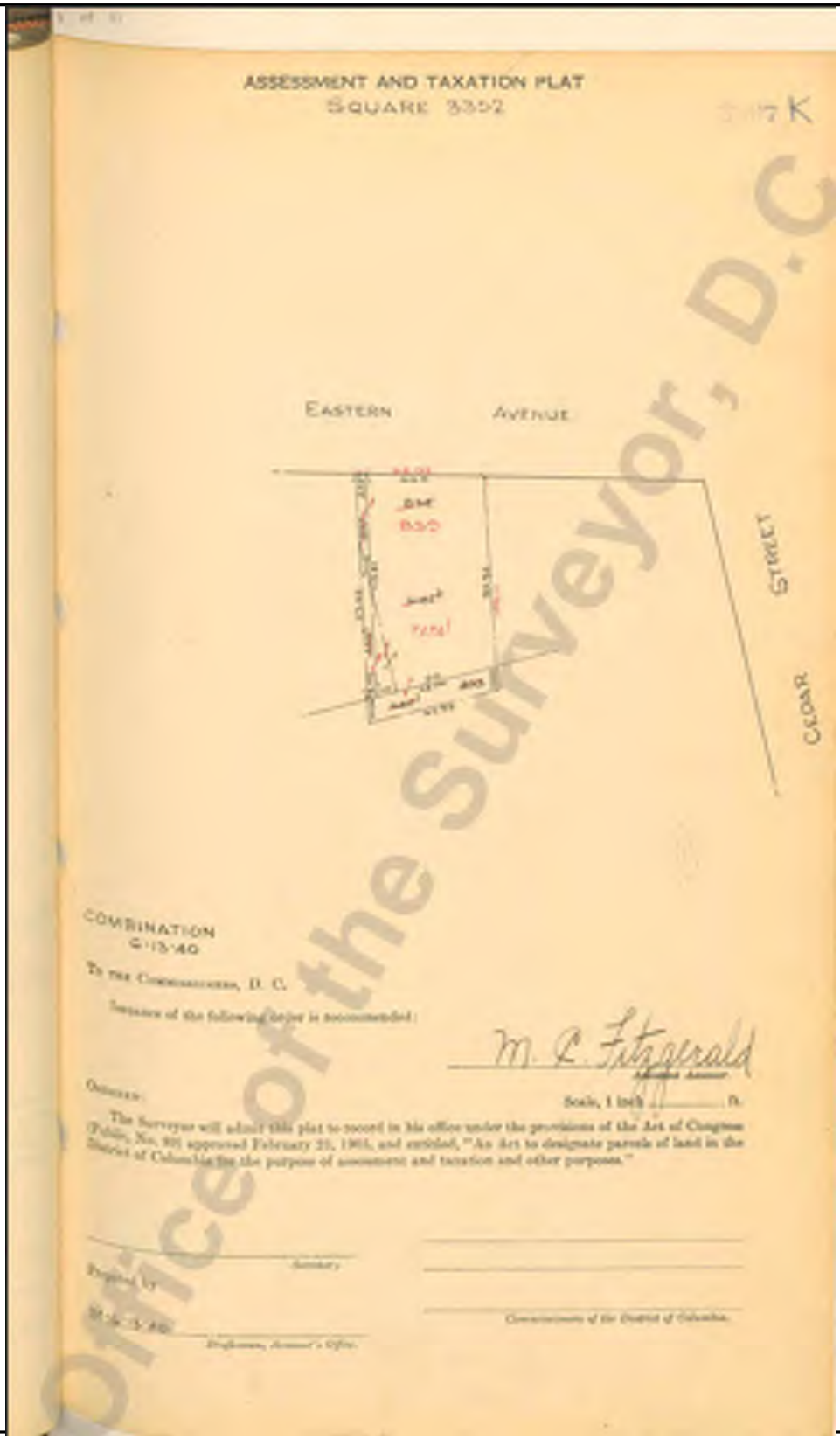

7th St
Brummel Ct
Geranium St
Baltimore Ave
Piney Branch Rd
Takoma Ave
Holly Ave
Fern Pl
Tulip Ave
Cedar Ave
Maple Ave
Eastern Ave
Elder St
7th St
Chestnut St
Spring Pl
Dahlia St
Takoma
Piney Branch Rd
Blair Rd
Highland Ave
Cedar St
Carroll St
Carroll Ave
MD
DC
Eastern Ave
Maple St
Vine St
Willow St
Butternut St
6th St
5th St
Laurel St
Aspen St
4th St
2nd St
Walnut St
Sandy Spring Rd
Whittier St
Whittier St
7th Pl
7th St
3rd St
Van Buren St
Project Location
Project Site
1" = 500'
N


New alignment of bus loop/kiss & ride driveway
Current parking/kiss & ride driveway to be shifted and consolidated with bus loop and project garage access
Project garage access
New site driveway providing access to loading and garage
Current bus loop driveway to be narrowed and consolidated with kiss & ride and project garage access
Holly Ave
Cedar Ave
Bus Loop
Kiss & Ride
Carroll Street
Carroll St
Maple St
4th St
Blair Rd
Aerial
Project Site
1" = 150'


Site Plan & Circulation
Pedestrian
Bicycle
Residential parking
Retail parking
Loading
Kiss & ride
Bus
Not to scale
Takoma Metro station
Holly Ave
Eastern Avenue
Cedar Street
Carroll Street
Maple St
Blair Rd
4th St


Site Plan & Circulation (Level 1)
Pedestrian
Bicycle
Residential parking
Retail parking
Loading
Kiss & ride
Bus
N
Not to scale
Access on Level G1
Access to garage with 230 vehicle spaces and 149 long-term bicycle spaces
Residential loading (1 berth, 1 loading/ delivery space)
149 long-term bicycle parking spaces in multiple bike rooms inside garage
Shared use path
27 short-term bicycle parking spaces along site perimeter (locations TBD)
Mail/library/business center entrance
Residential entrance
Retail loading (1 berth)
Retail entrances
Capital Bikeshare station


Site Plan & Circulation (Level G1)
Pedestrian
Bicycle
Residential parking
Retail parking
Loading
Kiss & ride
Bus
N
Not to scale
Access to garage with 230 vehicle spaces and 149 long-term bicycle spaces
149 long-term bicycle parking spaces in multiple bike rooms inside garage
PARKING AREA
2B
2B
2B
1B
2B
1B
1B



ASSESSMENT AND TAXATION PLAT
SQUARE 3352

EASTERN AVENUE

CEDAR STREET

COMBINATION
C-13-40

To the Commissioners, D. C.

Issuance of the following order is recommended:

M. C. Fitzgerald
Assistant Assessor

Scale, 1 inch = ... ft.

ORDERED:

The Surveyor will admit this plat to record in his office under the provisions of the Act of Congress (Public, No. 301 approved February 23, 1905, and entitled, "An Act to designate parcels of land in the District of Columbia for the purpose of assessment and taxation and other purposes."

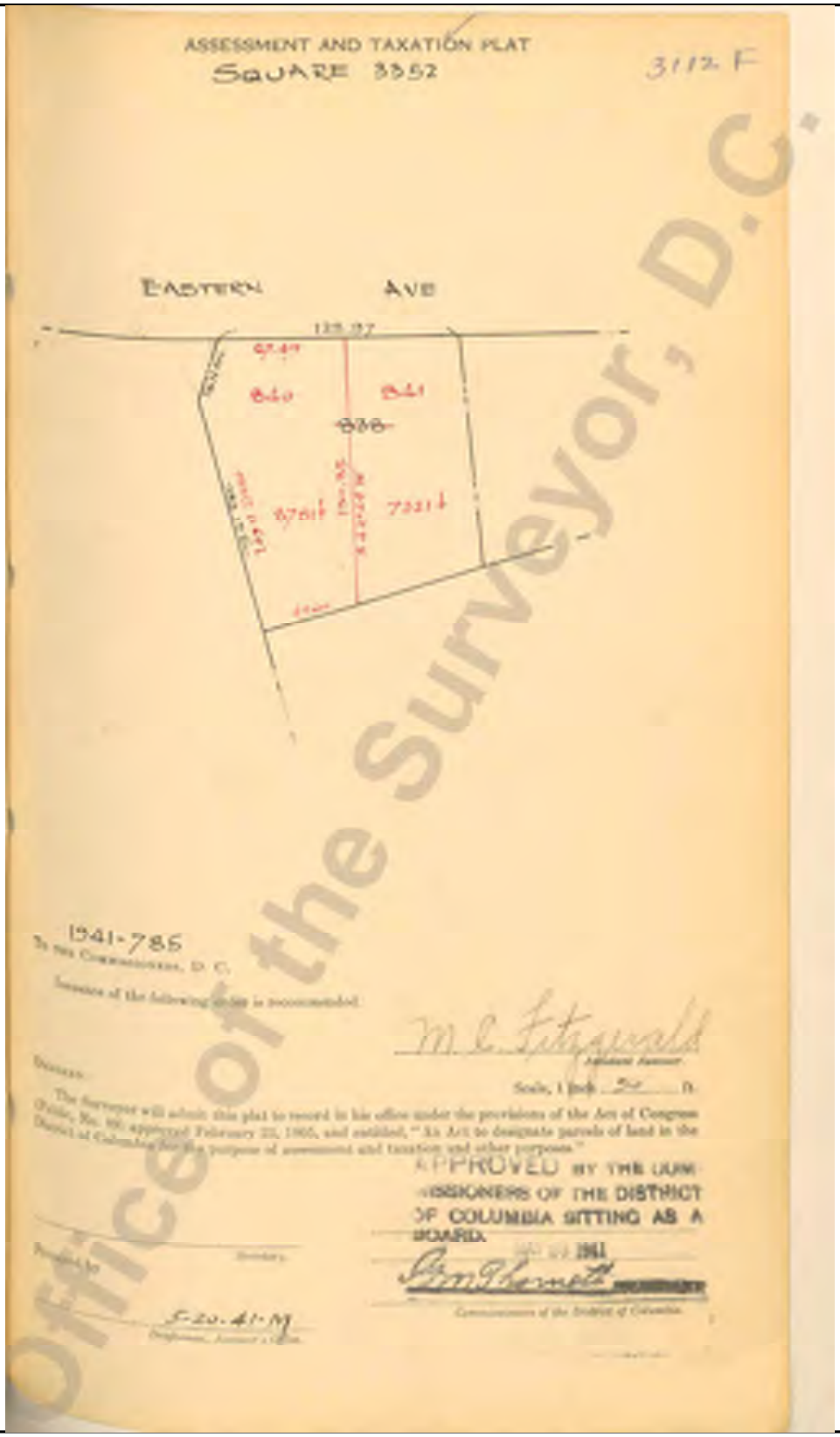
Secretary

Prepared by

Draftsman, Assessor's Office

Commissioners of the District of Columbia

Office of the Surveyor, D.C.



ASSESSMENT AND TAXATION PLAT
SQUARE 3552

3112 F

EASTERN AVE

135.37

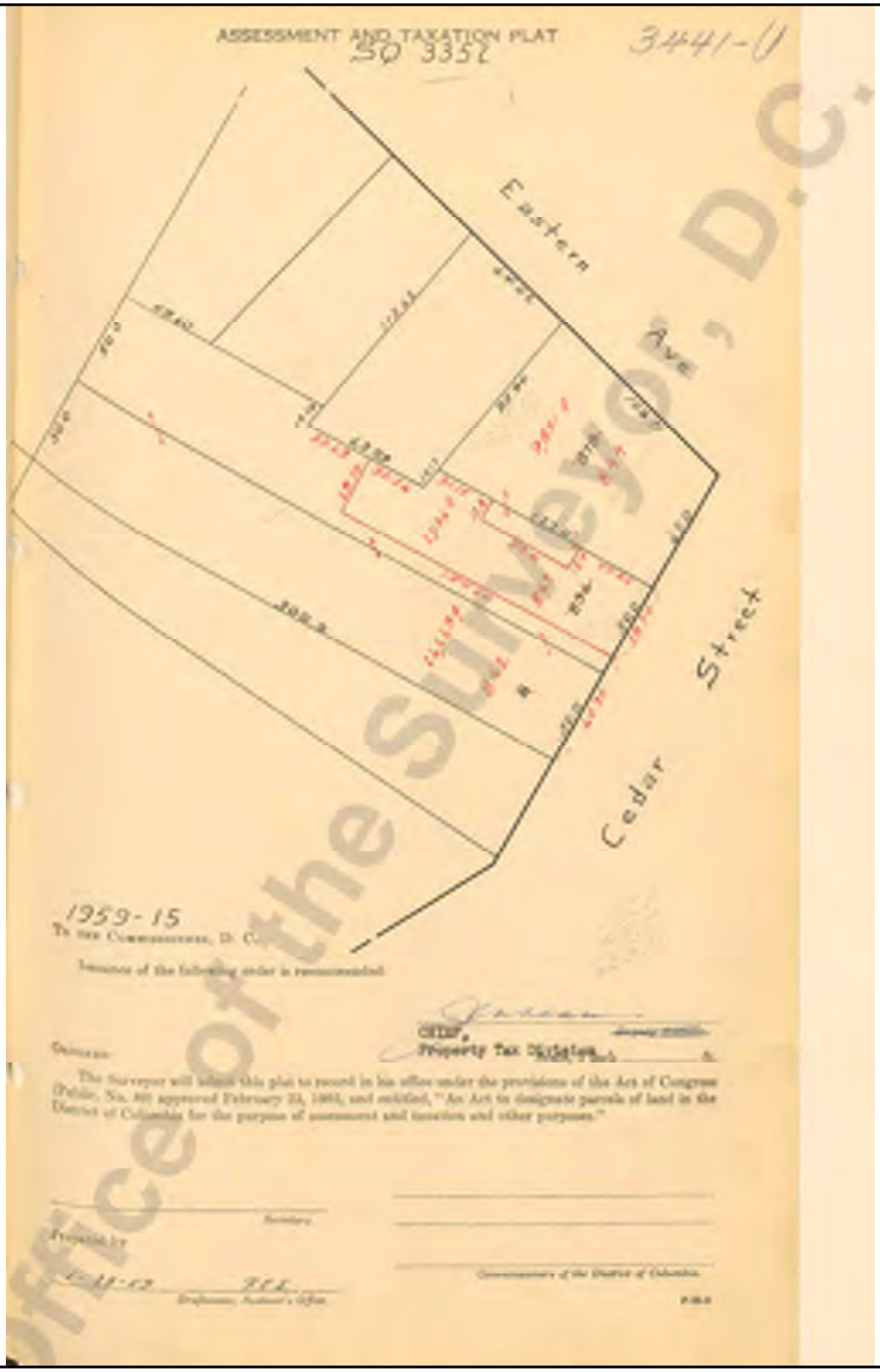
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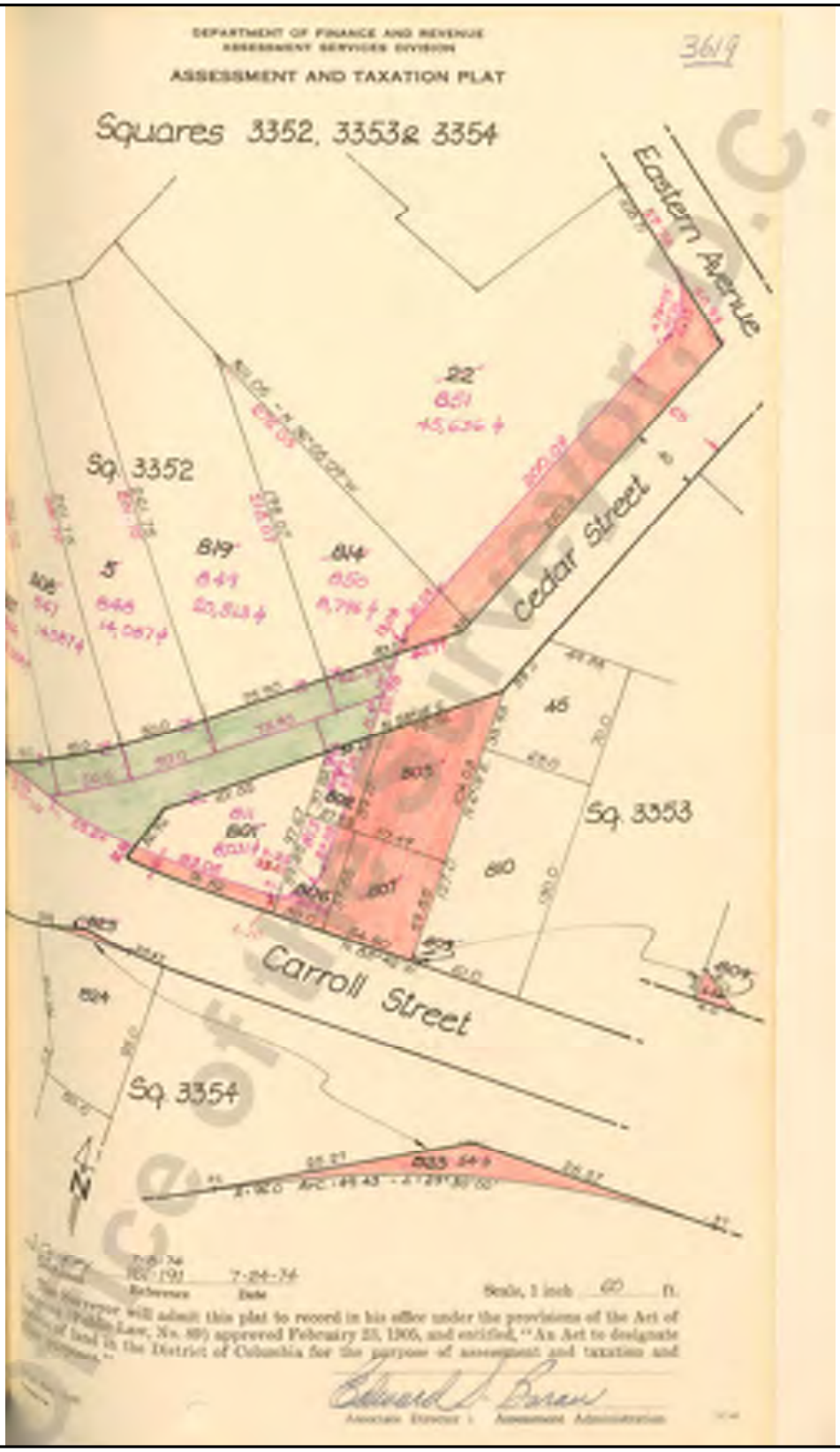
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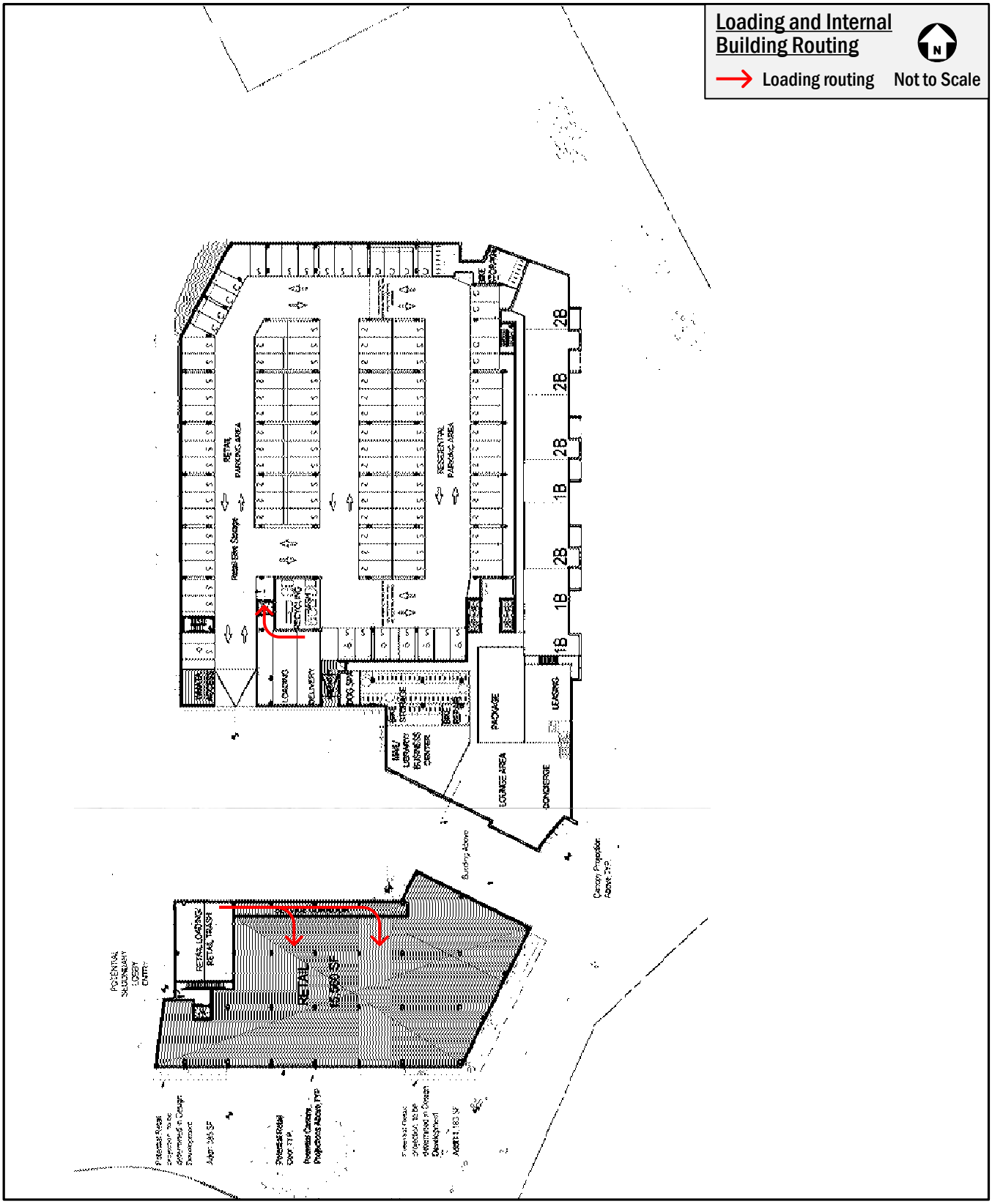
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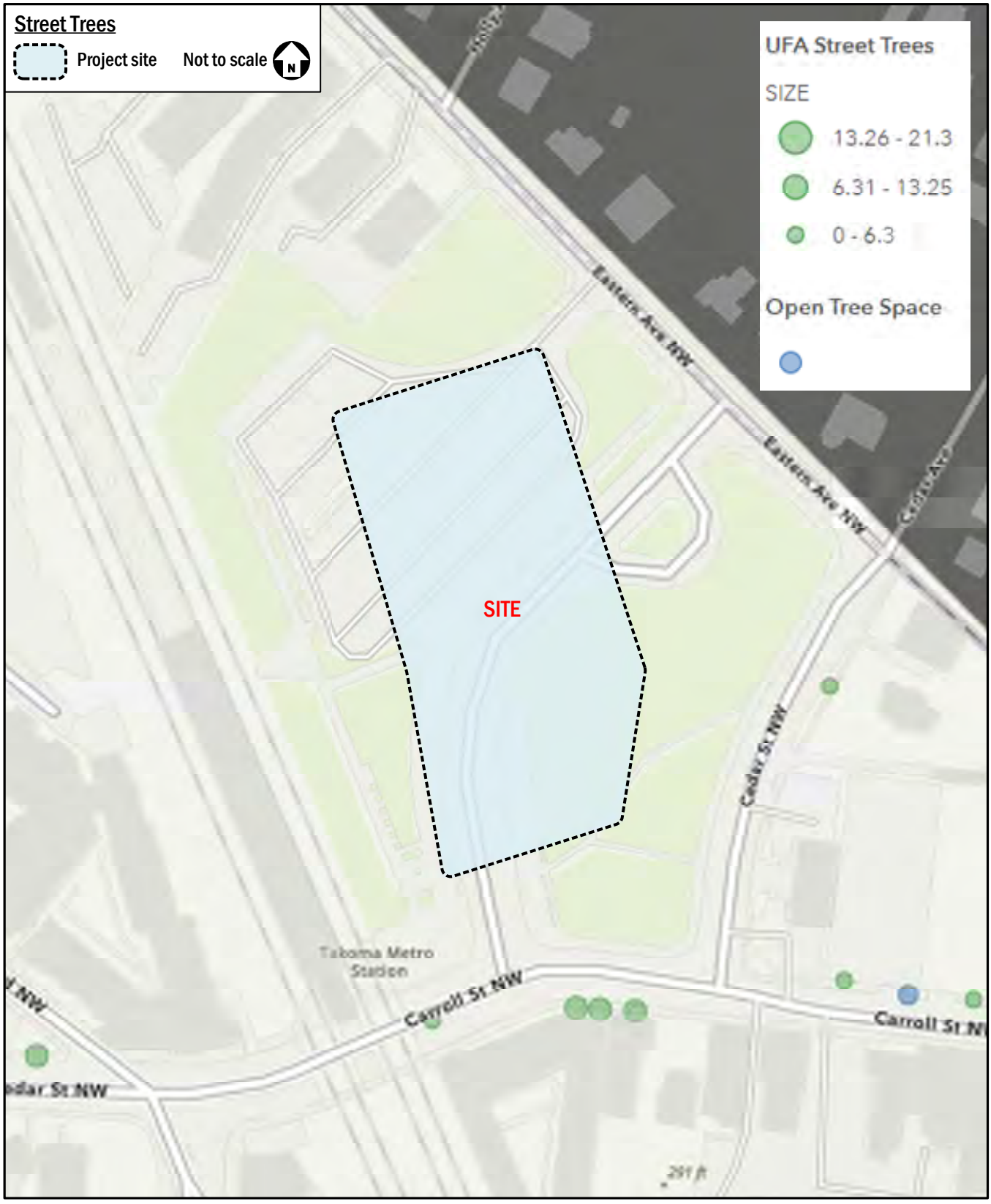
1941-785

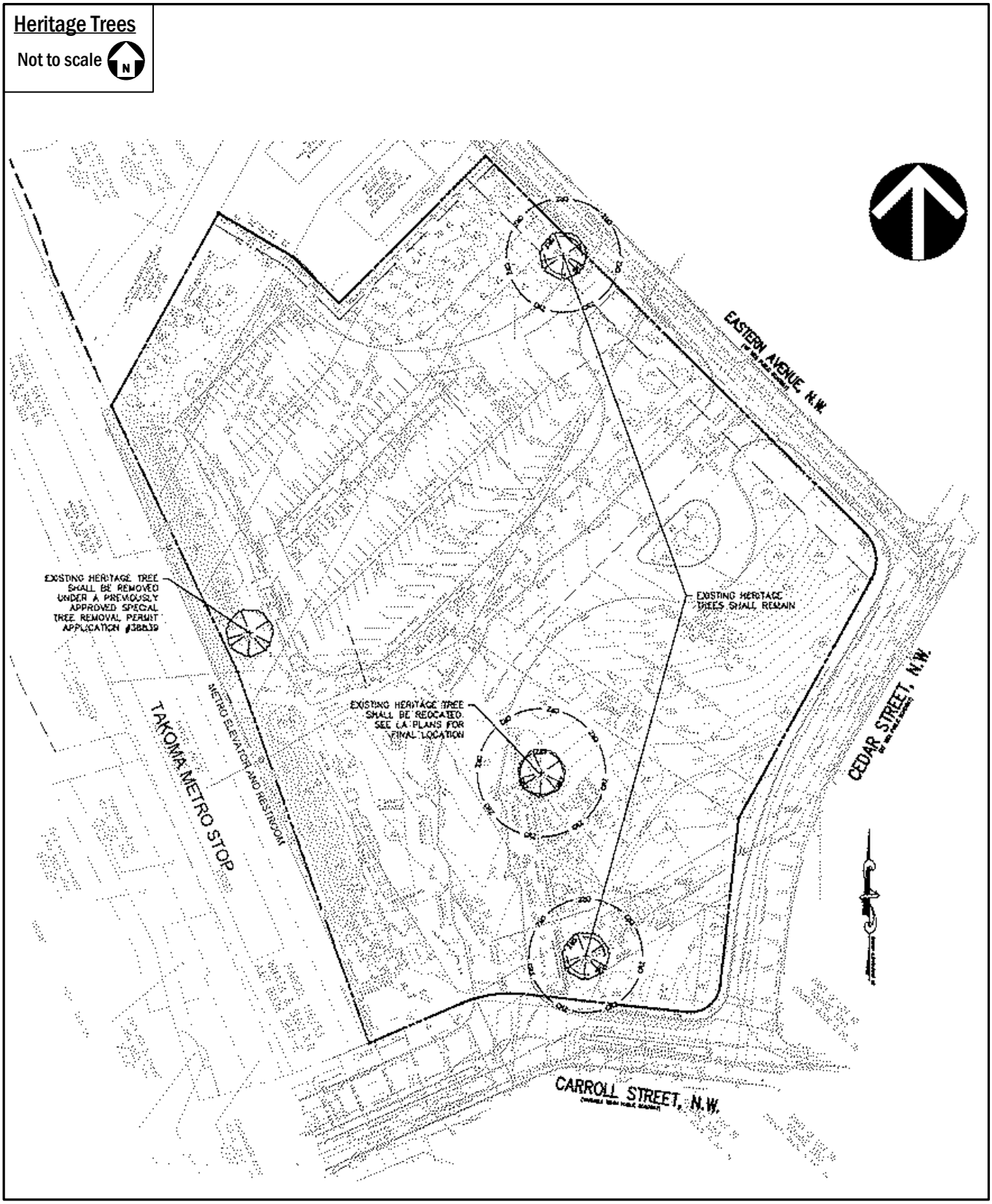
Office of the Surveyor, D.C.


ASSESSMENT AND TAXATION PLAT
SQ 3352
3441-U
Eastern Ave
Cedar Street
1959-15
Property Tax Division
The Surveyor will submit this plat to record in his office under the provisions of the Act of Congress (Public, No. 80) approved February 23, 1905, and entitled, "An Act to designate parcels of land in the District of Columbia for the purpose of assessment and taxation and other purposes."
Secretary
Commissioners of the District of Columbia
Office of the Surveyor, D.C.


DEPARTMENT OF FINANCE AND REVENUE
ASSESSMENT SERVICES DIVISION
ASSESSMENT AND TAXATION PLAT
Squares 3352, 3353 & 3354
Eastern Avenue
Cedar Street
Carroll Street
Sq. 3352
Sq. 3353
Sq. 3354
22
45
60
819
814
803
802
801
824
823
Scale, 1 inch 60 ft.
7-24-74
7-24-74


Loading and Internal Building Routing
Loading routing
Not to Scale
N
RETAIL LOADING
RETAIL TRASH
RETAIL
LOUNGE AREA
LEASING
2B
1B


Street Trees
Project site
Not to scale
N
UFA Street Trees
SIZE
13.26 - 21.3
6.31 - 13.25
0 - 6.3
Open Tree Space
SITE
Eastern Ave NW
Cedar St NW
Tacoma Metro Station
Carroll St NW
Carroll St N
291 ft


Heritage Trees
Not to scale
N
EASTERN AVENUE, N.W.
EXISTING HERITAGE TREE SHALL BE REMOVED UNDER A PREVIOUSLY APPROVED SPECIAL TREE REMOVAL PERMIT APPLICATION #18839
EXISTING HERITAGE TREES SHALL REMAIN
EXISTING HERITAGE TREE SHALL BE RELOCATED. SEE L.A. PLANS FOR FINAL LOCATION
TAKOMA METRO STOP
METRO ELEVATOR AND RESTROOM
CEDAR STREET, N.W.
CARROLL STREET, N.W.

Mode Split Assumptions - Takoma Metro Station Development

Residential Component

Pertinent Mode Split data from other sources:

Information Source	Mode						
	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
Census Tract 17.02 Residents	31%	8%	42%	-	5%	12%	2%
CTPP - TAZ Residents (TAZ 20250)	43%	0%	46%	2%	1%	8%	0%
State of the Commute 2016 (of District residents)	35%	4%	42%	16%		3%	
WMATA Ridership Survey Table 9 (average for *Friendship Heights Station Area*)	55%		35%	10%		---	
WMATA Ridership Survey Table 10 (CBD avg)	18%		56%	26%		---	
WMATA Ridership Survey Table 10 (Suburban-Inside the Beltway avg)	39%		49%	14%		---	

Mode Split assumed in TIS:

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Residential Mode Split [1]	55%	35%	5%	5%	---

[1] Residential mode split based on project's census data, parking supply, and direct adjacency to a Metro station. Census data shows approximately 1.2 vehicles per household for this TAZ, which is made up primarily of single family homes further from Metrorail. Conversely, it is expected the proposed project will attract residents because of its adjacency to a Metro station, thereby further reducing its commuter peak hour driving mode split compared to the rest of the TAZ.

Retail Component

Pertinent Mode Split data from other sources:

Information Source	Mode						
	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
CTPP - TAZ Employees (TAZ 20250)	58%	6%	24%	1%	4%	7%	0%
CTPP - adjacent TAZ Employees (TAZ 10123)	33%	6%	0%	1%	7%	53%	0%
WMATA Ridership Survey Table 15 (average for *Retail Sites*)	36%		37%	27%		---	

Mode Split assumed in TIS:

Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Retail Mode Split [2]	35%	35%	5%	25%	---

[2] Retail mode split based on project's TAZ and adjacent TAZ census data, parking supply, and direct adjacency to a Metro station. The proposed Project's retail is expected to be primarily neighborhood-serving, hence the walking mode split assumption.

Residential Trip Generation

440 du

Step 1: Base trip generation using ITEs' *Trip Generation*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Apartments	221	440 du	42 veh/hr	140 veh/hr	182 veh/hr	105 veh/hr	67 veh/hr	172 veh/hr	2052 veh
		Calculation Details:	*23%*	*77%*	*=0.44X/1000-11.61*	*61%*	*39%*	*=0.39X+0.34*	*=4.77X/1000-46.46*

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Apartments	1.18 ppl/veh	50 ppl/hr	165 ppl/hr	215 ppl/hr	124 ppl/hr	79 ppl/hr	203 ppl/hr	2421 ppl

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Apartments	Auto	55%	28 ppl/hr	90 ppl/hr	118 ppl/hr	68 ppl/hr	44 ppl/hr	112 ppl/hr	1332 ppl
Apartments	Transit	35%	18 ppl/hr	57 ppl/hr	75 ppl/hr	43 ppl/hr	28 ppl/hr	71 ppl/hr	847 ppl
Apartments	Bike	5%	3 ppl/hr	8 ppl/hr	11 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr	121 ppl
Apartments	Walk	5%	3 ppl/hr	8 ppl/hr	11 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr	121 ppl

Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Apartments	1.18 ppl/veh	24 veh/hr	76 veh/hr	100 veh/hr	58 veh/hr	37 veh/hr	95 veh/hr	1129 veh

Trip Gen Summary for Residential

Mode	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	Total
Auto	24 veh/hr	76 veh/hr	100 veh/hr	58 veh/hr	37 veh/hr	95 veh/hr	1129 veh
Transit	18 ppl/hr	57 ppl/hr	75 ppl/hr	43 ppl/hr	28 ppl/hr	71 ppl/hr	847 ppl
Bike	3 ppl/hr	8 ppl/hr	11 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr	121 ppl
Walk	3 ppl/hr	8 ppl/hr	11 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr	121 ppl

Retail Trip Generation

17,650 sf

Step 1: Base trip generation using ITEs' *Trip Generation*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Retail	822	17,650 sf	25 veh/hr	17 veh/hr	42 veh/hr	59 veh/hr	58 veh/hr	117 veh/hr	975 veh
		Calculation Details:	*60%*	*40%*	*Ln(T)=0.66Ln(X/1000)+1.84*	*50%*	*50%*	*Ln(T)=0.71Ln(X/1000)+2.72*	*42.2(X/1000)+229.6*

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Retail	1.82 ppl/veh	46 ppl/hr	30 ppl/hr	76 ppl/hr	107 ppl/hr	106 ppl/hr	213 ppl/hr	1775 ppl

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	Total
Retail	Auto	35%	16 ppl/hr	11 ppl/hr	27 ppl/hr	37 ppl/hr	38 ppl/hr	75 ppl/hr	621 ppl
Retail	Transit	35%	16 ppl/hr	11 ppl/hr	27 ppl/hr	37 ppl/hr	38 ppl/hr	75 ppl/hr	621 ppl
Retail	Bike	5%	2 ppl/hr	2 ppl/hr	4 ppl/hr	5 ppl/hr	6 ppl/hr	11 ppl/hr	89 ppl
Retail	Walk	25%	12 ppl/hr	7 ppl/hr	19 ppl/hr	27 ppl/hr	26 ppl/hr	53 ppl/hr	444 ppl

Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	Total
Retail	1.82 ppl/veh	9 veh/hr	6 veh/hr	15 veh/hr	20 veh/hr	21 veh/hr	41 veh/hr	341 veh

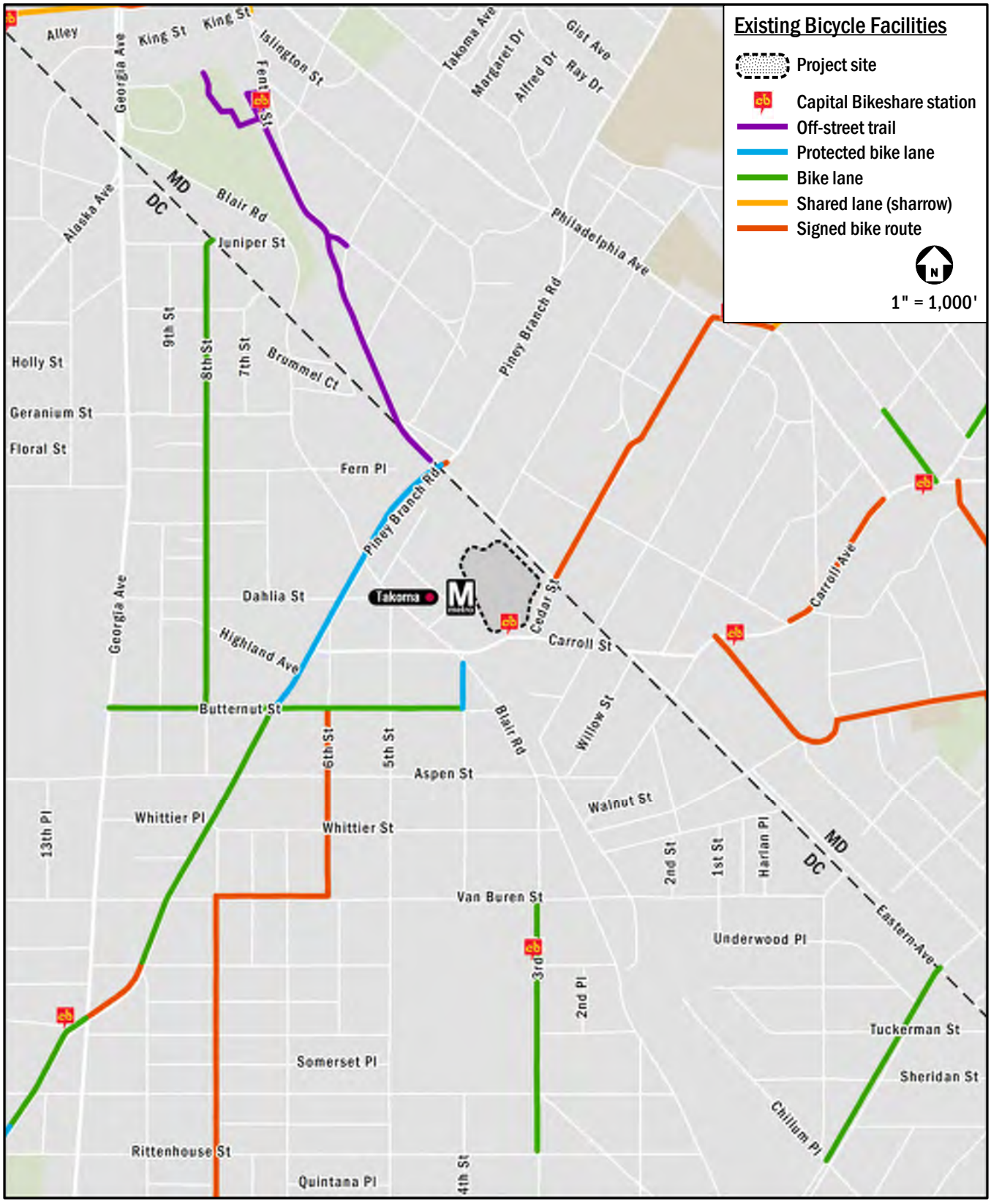
Trip Gen Summary for Retail

Mode	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	Total
Auto	9 veh/hr	6 veh/hr	15 veh/hr	20 veh/hr	21 veh/hr	41 veh/hr	341 veh
Transit	16 ppl/hr	11 ppl/hr	27 ppl/hr	37 ppl/hr	38 ppl/hr	75 ppl/hr	621 ppl
Bike	2 ppl/hr	2 ppl/hr	4 ppl/hr	5 ppl/hr	6 ppl/hr	11 ppl/hr	89 ppl
Walk	12 ppl/hr	7 ppl/hr	19 ppl/hr	27 ppl/hr	26 ppl/hr	53 ppl/hr	444 ppl

Multimodal Trip Generation Summary

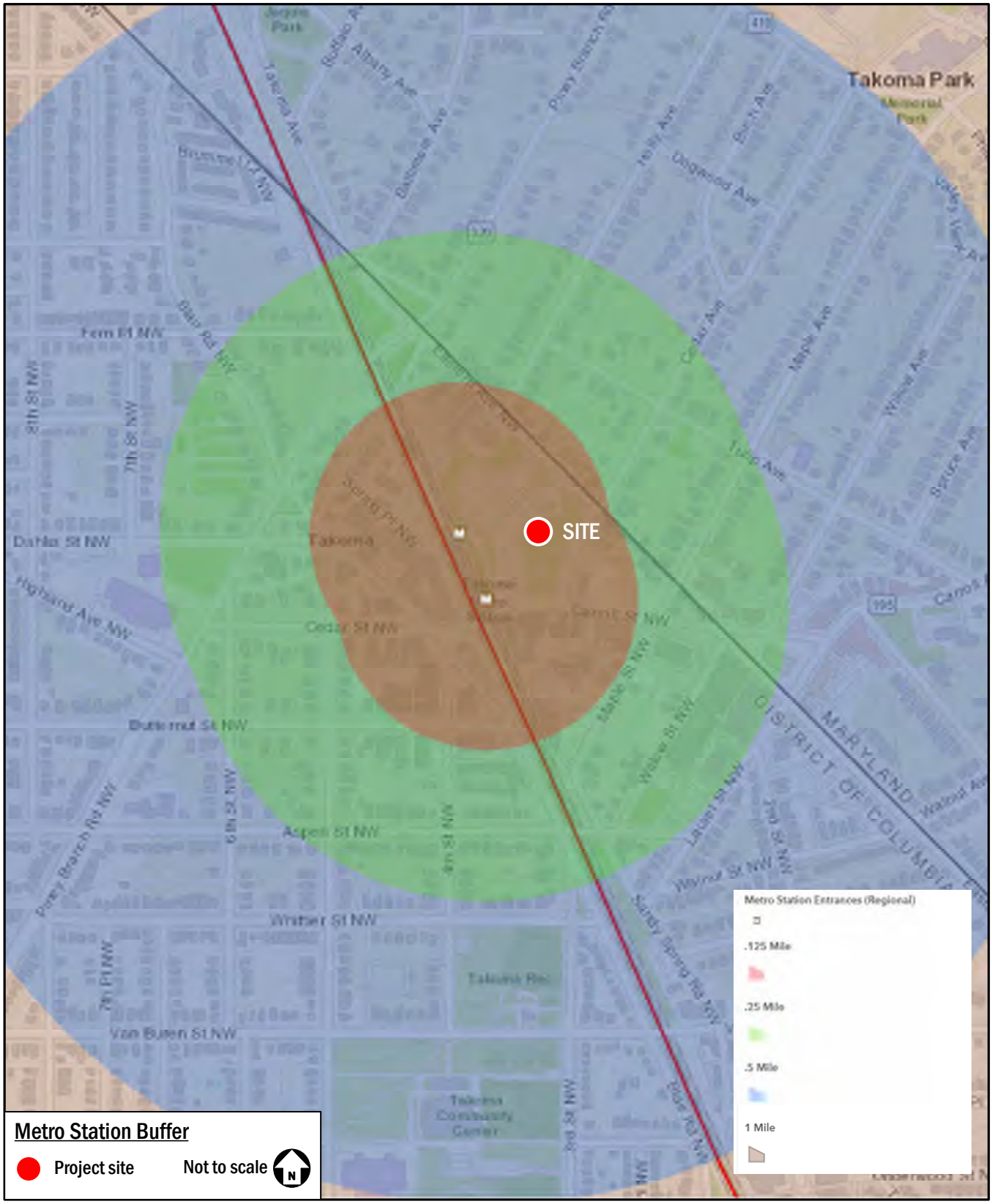
Mode	Land Use	Size	Mode Split	AM Peak Hour			PM Peak Hour			Weekday Total
				In	Out	Total	In	Out	Total	
Auto (veh/hr)	Residential	440 du	55%	24	76	100	58	37	95	1,129
	Retail	17,650 sf	35%	9	6	15	20	21	41	341
	Total			**33**	**82**	**115**	**78**	**58**	**136**	**1,470**
Transit (ppl/hr)	Residential	440 du	35%	18	57	75	43	28	71	847
	Retail	17,650 sf	35%	16	11	27	37	38	75	621
	Total			**34**	**68**	**102**	**80**	**66**	**146**	**1,468**
Bike (ppl/hr)	Residential	440 du	5%	3	8	11	6	4	10	121
	Retail	17,650 sf	5%	2	2	4	5	6	11	89
	Total			**5**	**10**	**15**	**11**	**10**	**21**	**210**
Walk (ppl/hr)	Residential	440 du	5%	3	8	11	6	4	10	121
	Retail	17,650 sf	25%	12	7	19	27	26	53	444
	Total			**15**	**15**	**30**	**33**	**30**	**63**	**565**

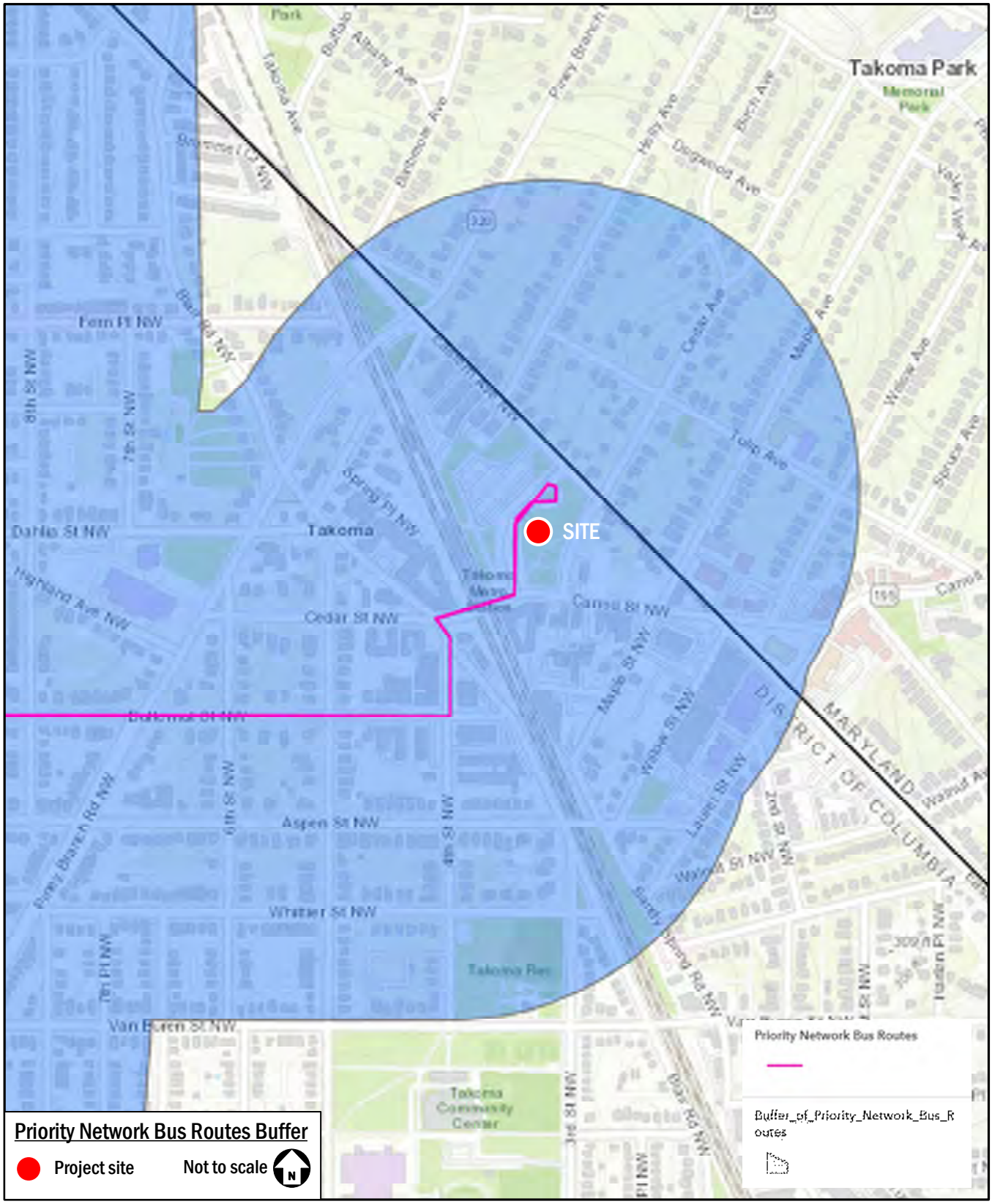

7th St
Brummer Ct
Geranium St
Baltimore Ave
Piney Branch Rd
Takoma Ave
Holly Ave
Fern Pl
Eastern Ave
Tulip Ave
Cedar Ave
Maple Ave
Elder St
7th St
Chestnut St
Spring Pl
Dahlia St
Piney Branch Rd
Blair Rd
Highland Ave
Cedar St
Carroll St
Carroll Ave
MD
DC
Eastern Ave
Maple St
Vine St
Willow St
Butternut St
6th St
5th St
Laurel St
Aspen St
4th St
2nd St
Walnut St
Sandy Spring Rd
Whittier St
Whittier St
7th Pl
7th St
3rd St
Van Buren St
Pedestrian Study Area
Project site
Pedestrian study area
N
1" = 500'

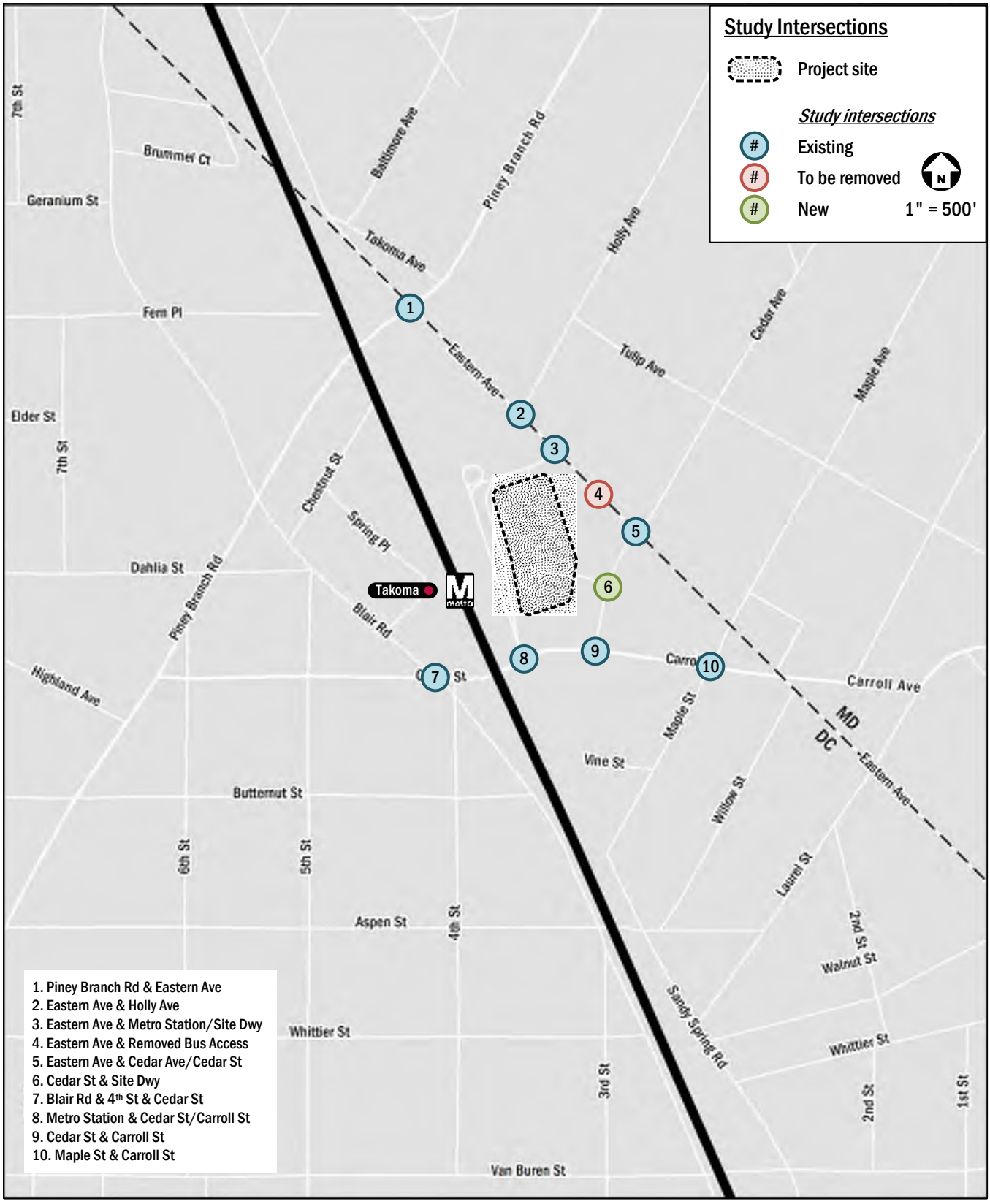

Existing Bicycle Facilities
Project site
Capital Bikeshare station
Off-street trail
Protected bike lane
Bike lane
Shared lane (sharrow)
Signed bike route
N
1" = 1,000'
Takoma
MD
DC
Alley
King St
Georgia Ave
Islington St
Fenton St
Takoma Ave
Margaret Dr
Alfred Dr
Gist Ave
Ray Dr
Alaska Ave
Blair Rd
Juniper St
Philadelphia Ave
Piney Branch Rd
9th St
8th St
7th St
Brummel Ct
Holly St
Geranium St
Floral St
Fern Pl
Dahlia St
Highland Ave
Cedar St
Carroll St
Carroll Ave
Butternut St
6th St
5th St
Aspen St
Willow St
Walnut St
Whittier Pl
Whittier St
13th Pl
2nd St
1st St
Harian Pl
Van Buren St
3rd St
2nd Pl
Underwood Pl
Eastern Ave
Tuckerman St
Sheridan St
Chillum Pl
Somerset Pl
Rittenhouse St
Quintana Pl
4th St

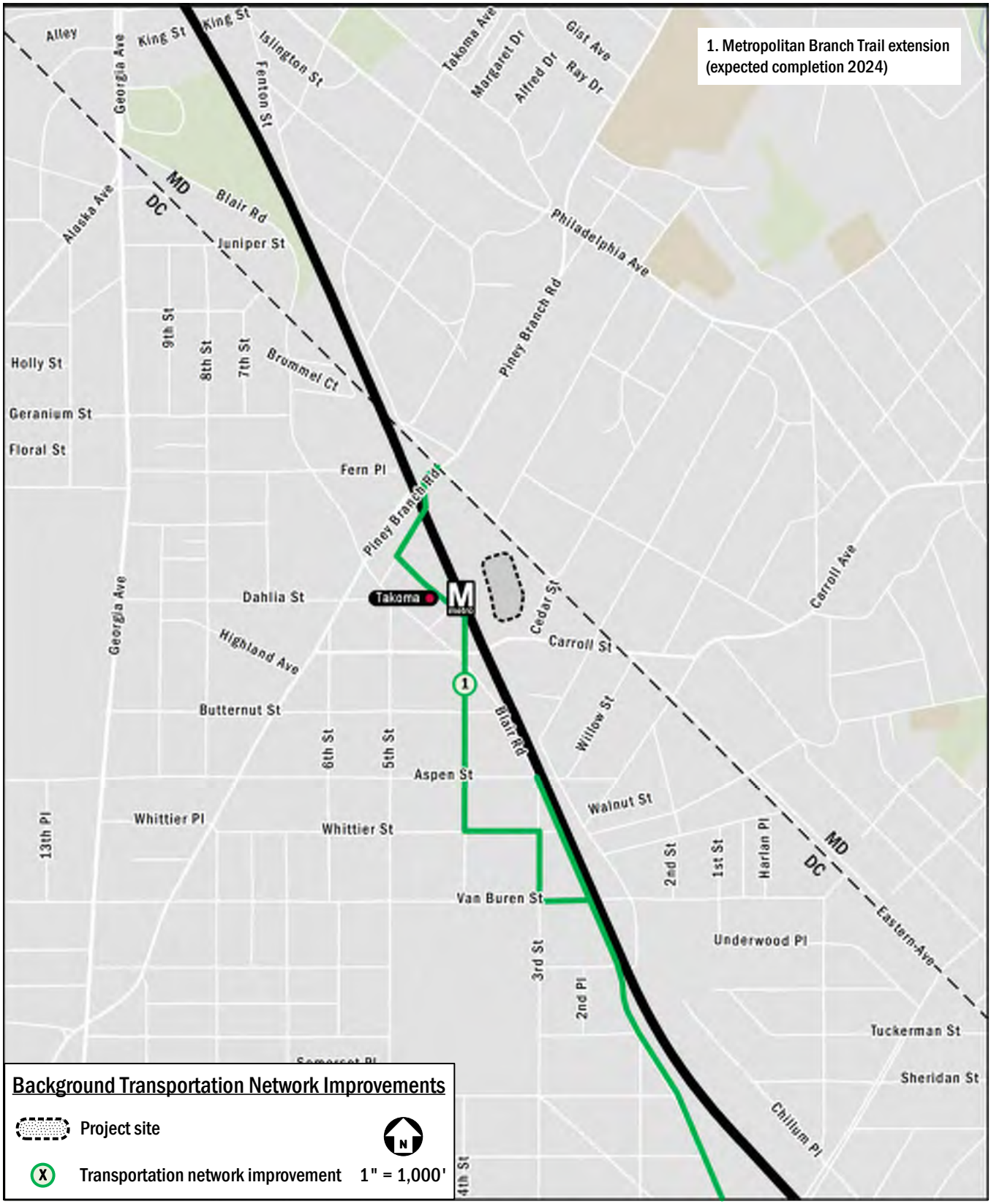

Existing and Planned Bicycle Facilities
Project site
Existing facility
Funded improvement
Future planned improvement
Off-street trail
Sidepath
Protected bike lane
Bike lane
Shared lane (sharrow)
Signed bike route
Existing Capital Bikeshare station
Planned or proposed Capital Bikeshare station
1" = 1,000'
N
Alley
King St
Georgia Ave
Islington St
Fenton St
Alaska Ave
MD
DC
Blair Rd
Juniper St
9th St
8th St
7th St
Brummel Ct
Holly St
Geranium St
Floral St
Fern Pl
Piney Branch Rd
Takoma
Dahlia St
Highland Ave
Butternut St
6th St
5th St
Aspen St
Whittier Pl
Whittier St
13th Pl
Somerset Pl
Rittenhouse St
Quintana Pl
4th St
Van Buren St
3rd
2nd Pl
Cedar St
Carroll St
Willow St
Walnut St
2nd St
1st St
Harian Pl
Underwood Pl
Eastern Ave
Metropolitan Branch Trail
Tuckerman St
Sheridan St
Chillum Pl
Carroll Ave


Alley
King St
Georgia Ave
Fenton St
Islington St
Takoma Ave
Margaret Dr
Alfred Dr
Gist Ave
Ray Dr
Alaska Ave
MD
DC
Blair Rd
Juniper St
18
Philadelphia Ave
Piney Branch Rd
9th St
8th St
7th St
Brummel Ct
Holly St
Geranium St
Floral St
14, 24
Fern Pl
25
Dahlia St
Takoma
Cedar St
Carroll Ave
Carroll St
12, 13, 16, 18
Highland Ave
Butternut St
59
52, 54
6th St
5th St
Blair Rd
Willow St
Aspen St
Walnut St
F1, F2
K2
Whittier Pl
Whittier St
2nd St
1st St
Harlan Pl
Van Buren St
62, 63
3rd St
2nd Pl
Underwood Pl
Eastern Ave
Tuckerman St
Sheridan St
Chillum Pl
4th St
Existing Transit Facilities
Project site
½ mile walkshed
Metro station
Metrobus major route
MetroExtra route
Metrobus local route
Metrobus commuter route
Montgomery Co. RideOn route
Bus stop
N
Only bus routes and stops within ½ mile from the site are shown.
1" = 1,000'


Takoma Park
SITE
Takoma
Metro Station Entrances (Regional)
.125 Mile
.25 Mile
.5 Mile
1 Mile
Metro Station Buffer
Project site
Not to scale
N


Takoma Park
Memorial Park
Takoma
SITE
Fern Pl NW
Dahlia St NW
Highland Ave NW
Cedar St NW
Aspen St NW
Whittier St NW
Van Buren St NW
Takoma Community Center
Takoma Rec
Priority Network Bus Routes
Buffer_of_Priority_Network_Bus_Routes
Priority Network Bus Routes Buffer
Project site
Not to scale
N


Study Intersections
Project site
Study intersections
Existing
To be removed
New
1" = 500'
N
1. Piney Branch Rd & Eastern Ave
2. Eastern Ave & Holly Ave
3. Eastern Ave & Metro Station/Site Dwy
4. Eastern Ave & Removed Bus Access
5. Eastern Ave & Cedar Ave/Cedar St
6. Cedar St & Site Dwy
7. Blair Rd & 4th St & Cedar St
8. Metro Station & Cedar St/Carroll St
9. Cedar St & Carroll St
10. Maple St & Carroll St
Takoma
Metro
MD
DC
Eastern Ave
Piney Branch Rd
Takoma Ave
Fern Pl
Brummer Ct
Geranium St
Elder St
7th St
Dahlia St
Highland Ave
Butternut St
Aspen St
Whittier St
Van Buren St
Spring Pl
Chestnut St
Blair Rd
Baltimore Ave
Holly Ave
Tulip Ave
Cedar Ave
Maple Ave
Carroll Ave
Vine St
Maple St
Willow St
Laurel St
Walnut St
Sandy Spring Rd
6th St
5th St
4th St
3rd St
2nd St
1st St


1. Metropolitan Branch Trail extension (expected completion 2024)
Background Transportation Network Improvements
Project site
Transportation network improvement
1" = 1,000'
N
Takoma
Alley
King St
Georgia Ave
Fenton St
Islington St
Takoma Ave
Margaret Dr
Alfred Dr
Gist Ave
Ray Dr
MD
DC
Blair Rd
Juniper St
Alaska Ave
Philadelphia Ave
Piney Branch Rd
9th St
8th St
7th St
Brommel Ct
Holly St
Geranium St
Floral St
Fern Pl
Piney Branch Rd
Dahlia St
Cedar St
Carroll St
Carroll Ave
Highland Ave
Butternut St
6th St
5th St
Aspen St
Willow St
Walnut St
Whittier Pl
Whittier St
13th Pl
2nd St
1st St
Harlan Pl
Van Buren St
Underwood Pl
3rd St
2nd Pl
Eastern Ave
Tuckerman St
Sheridan St
Chillum Pl
4th St

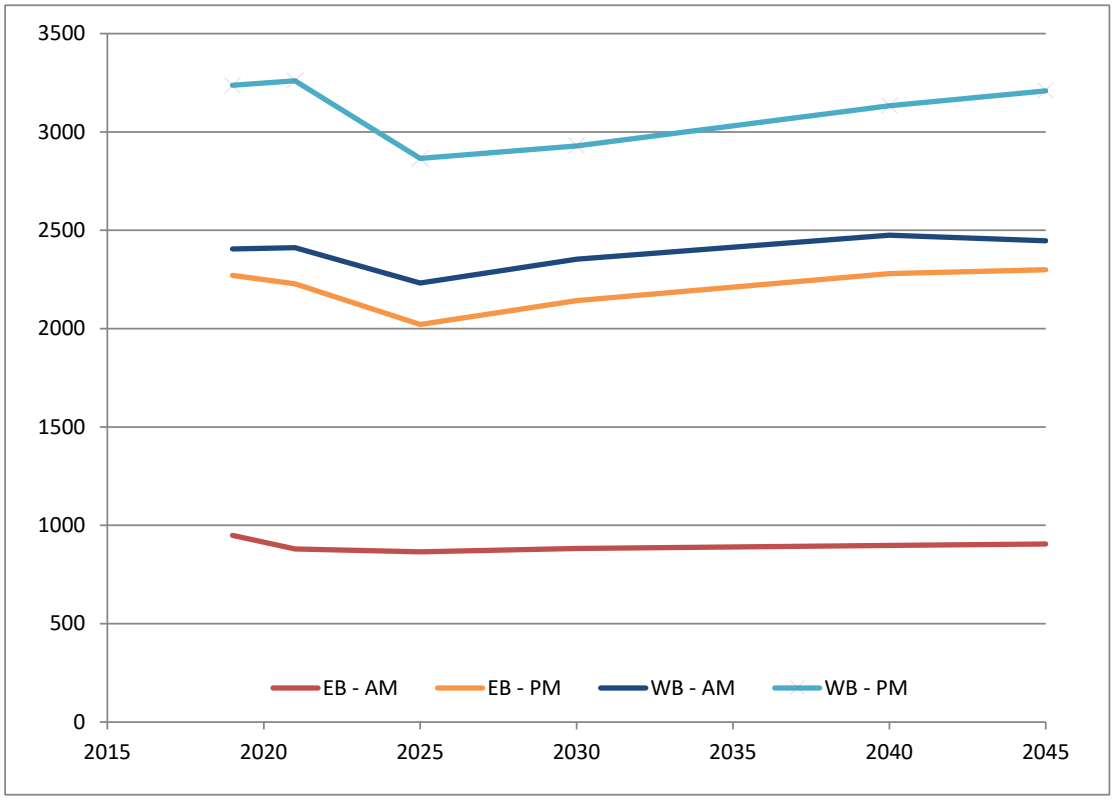

1. Fern Street Townhomes
2. The Hartley
3. Kite House
4. Reynard
5. Aspen Street Townhomes
6. 218 Cedar Street
7. Gilbert & Wood
Alley
King St
Georgia Ave
Fenton St
Islington St
Takoma Ave
Margaret Dr
Alfred Dr
Gist Ave
Ray Dr
MD
DC
Blair Rd
Alaska Ave
Juniper St
Philadelphia Ave
Piney Branch Rd
9th St
8th St
7th St
Brummel Ct
Holly St
Geranium St
Floral St
Fern Pl
Dahlia St
Takoma
Cedar St
Carroll St
Carroll Ave
Highland Ave
Butternut St
6th St
5th St
Aspen St
Willow St
Walnut St
Whittier Pl
Whittier St
13th Pl
Harlan Pl
2nd St
1st St
Van Buren St
Underwood Pl
3rd St
2nd Pl
Eastern Ave
Tuckerman St
Sheridan St
Chillum Pl
4th St
Background Developments
Project site
Background development
1" = 1,000'
N

Growth Rate Information & Assumptions

Carroll St btwn Blair St and Eastern Ave

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
EB - AM	949	880	865	882	898	905
EB - PM	2271	2228	2021	2142	2280	2299
WB - AM	2405	2412	2232	2353	2475	2447
WB - PM	3237	3260	2865	2929	3133	3209



Year of data collection: 2022
Project completion date: 2027

Direction/Period	Growth per year between 2021 & 2027
EB - AM	-0.43%
EB - PM	-2.41%
WB - AM	-1.92%
WB - PM	-3.18%

Growth Rate Information & Assumptions

Carroll St btwn Blair St and Eastern Ave

Historical DDOT AADTs in thousands

Location	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Carroll St	11.0	11.1	11.0	11.0			9.0	9.0	10.0	10.0

Growth per year since:	2010	2013	2016
	-0.9%	-1.4%	2.7%

Proposed Growth Rates for Use in Study:

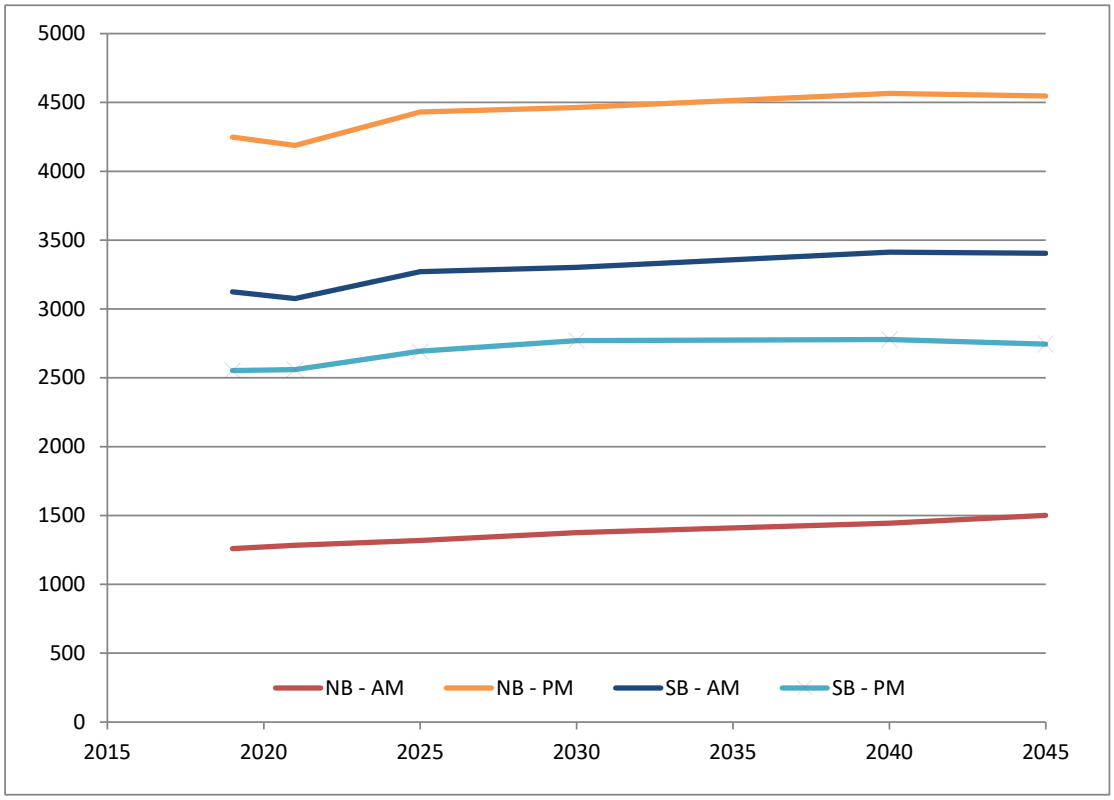
Direction/Period	Per year btwn 2022 & 2027	Total btwn 2022 & 2027
EB - AM	0.10%	0.50%
EB - PM	0.10%	0.50%
WB - AM	0.10%	0.50%
WB - PM	0.10%	0.50%

Growth Rate Information & Assumptions

Piney Branch Rd north of Eastern Ave

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	1259	1284	1319	1376	1444	1501
NB - PM	4248	4187	4431	4463	4565	4547
SB - AM	3124	3076	3271	3302	3412	3404
SB - PM	2553	2560	2693	2770	2778	2744



Year of data collection: 2022
Project completion date: 2027

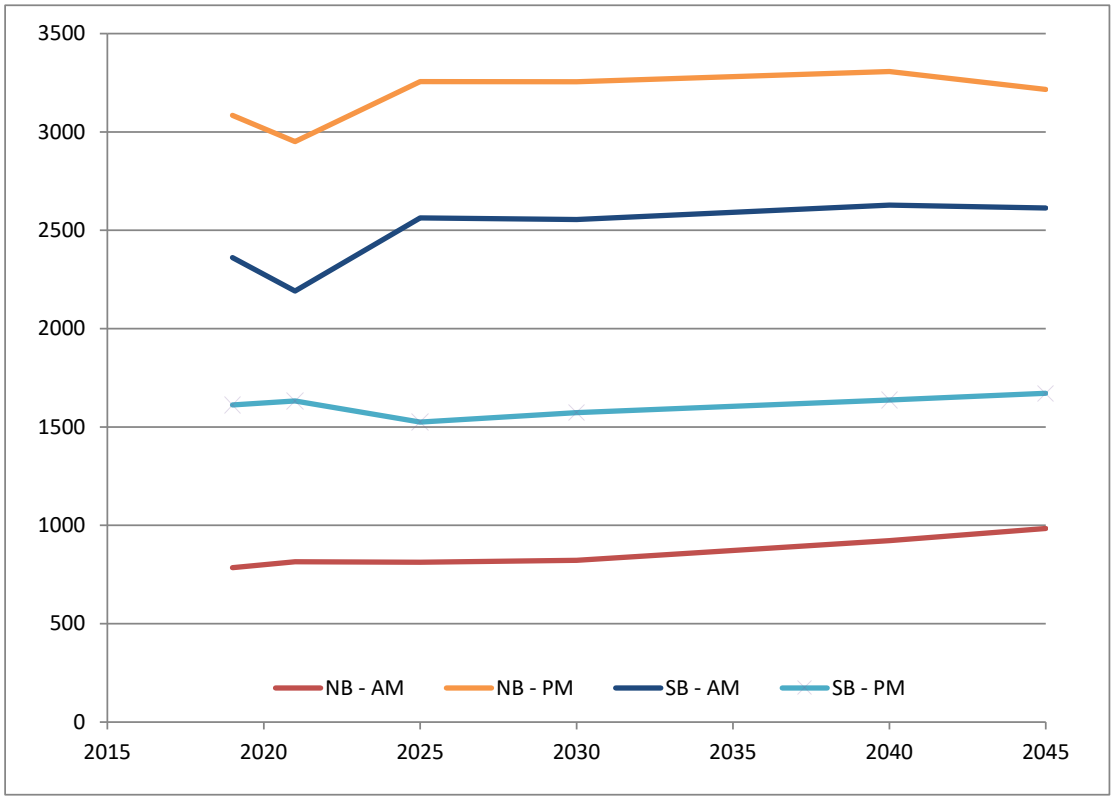
Direction/Period	Growth per year between 2021 & 2027
NB - AM	0.67%
NB - PM	1.43%
SB - AM	1.55%
SB - PM	1.27%

Growth Rate Information & Assumptions

Piney Branch Rd south of Eastern Ave

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	785	815	812	822	922	984
NB - PM	3084	2951	3256	3255	3307	3216
SB - AM	2361	2191	2563	2555	2628	2613
SB - PM	1612	1632	1525	1573	1637	1671



Year of data collection: 2022
Project completion date: 2027

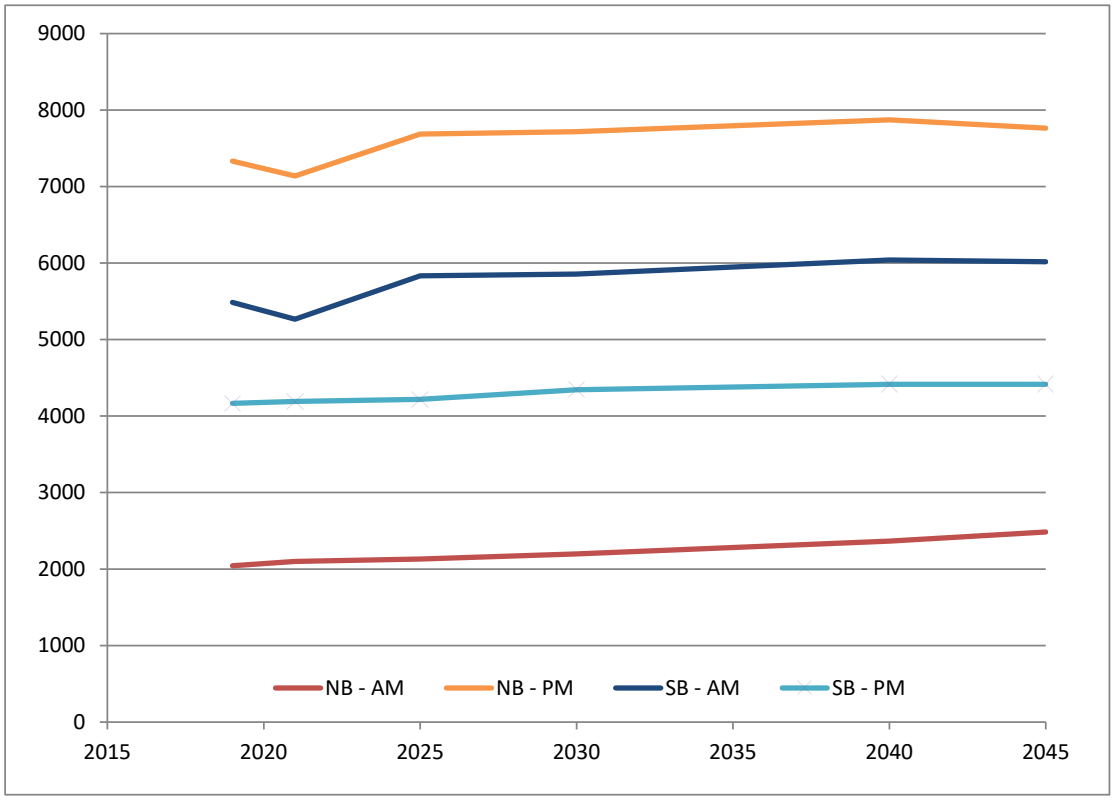
Direction/Period	Growth per year between 2021 & 2027
NB - AM	-0.09%
NB - PM	2.49%
SB - AM	4.00%
SB - PM	-1.68%

Growth Rate Information & Assumptions

Piney Branch Rd aggregate

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	2044	2099	2131	2198	2366	2485
NB - PM	7332	7138	7687	7718	7872	7763
SB - AM	5485	5267	5834	5857	6040	6017
SB - PM	4165	4192	4218	4343	4415	4415



Year of data collection: 2022
Project completion date: 2027

Direction/Period	Growth per year between 2021 & 2027
NB - AM	0.38%
NB - PM	1.87%
SB - AM	2.59%
SB - PM	0.15%

Growth Rate Information & Assumptions

Piney Branch Rd aggregate

Historical DDOT AADTs in thousands

Location	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Piney Branch Rd	15.0	15.1	15.0	15.0	12.1	12.5	13.0	13.0	13.0	13.0

Growth per year since:	2010	2013	2016
	-1.4%	-2.0%	0.0%

Proposed Growth Rates for Use in Study:

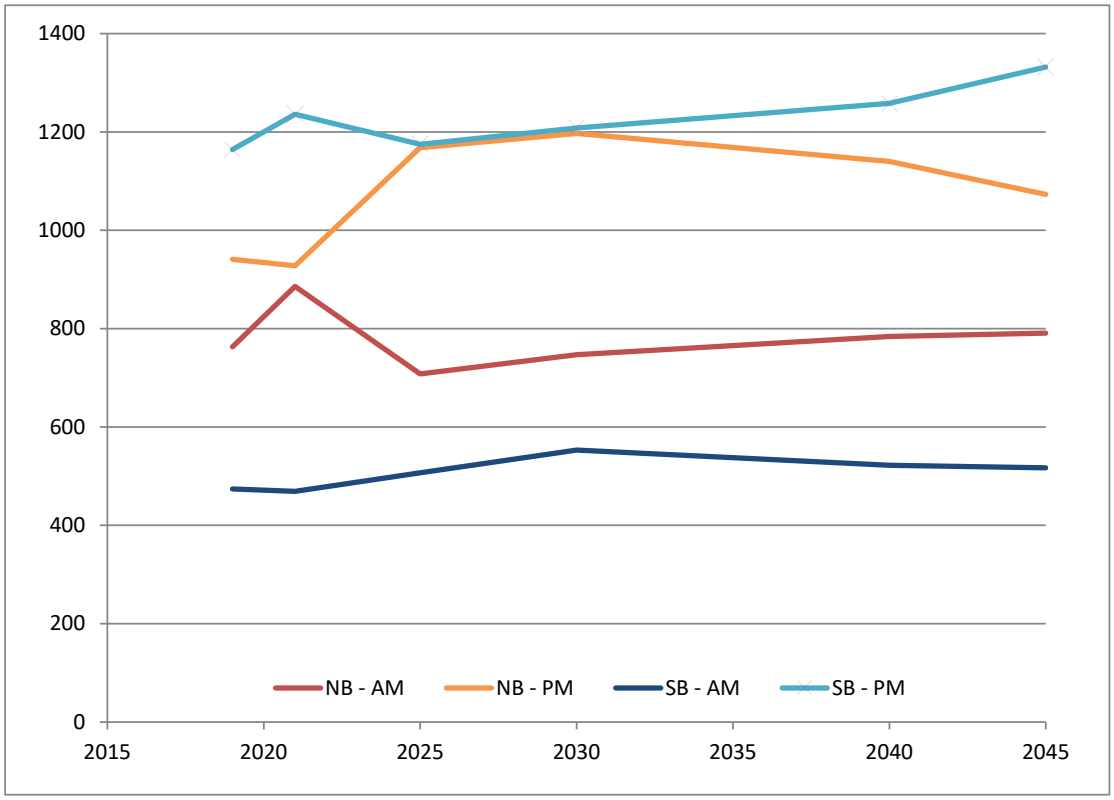
Direction/Period	Per year btwn 2022 & 2027	Total btwn 2022 & 2027
NB - AM	0.40%	2.02%
NB - PM	0.50%	2.53%
SB - AM	0.50%	2.53%
SB - PM	0.20%	1.00%

Growth Rate Information & Assumptions

Eastern Ave/Cedar Street

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	763	886	708	747	784	791
NB - PM	941	928	1168	1197	1140	1073
SB - AM	474	469	507	553	522	517
SB - PM	1164	1236	1175	1208	1258	1332



Year of data collection: 2022
Project completion date: 2027

Direction/Period	Growth per year between 2021 & 2027
NB - AM	-5.45%
NB - PM	5.92%
SB - AM	1.97%
SB - PM	-1.26%

Growth Rate Information & Assumptions

Eastern Ave/Cedar Street

Historical DDOT AADTs in thousands

Location	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Eastern Ave	6.8	6.9	6.8	6.8	7.0	7.2	5.0	5.0	5.0	5.0

Growth per year since:	2010	2013	2016
	-3.0%	-4.3%	0.0%

Proposed Growth Rates for Use in Study:

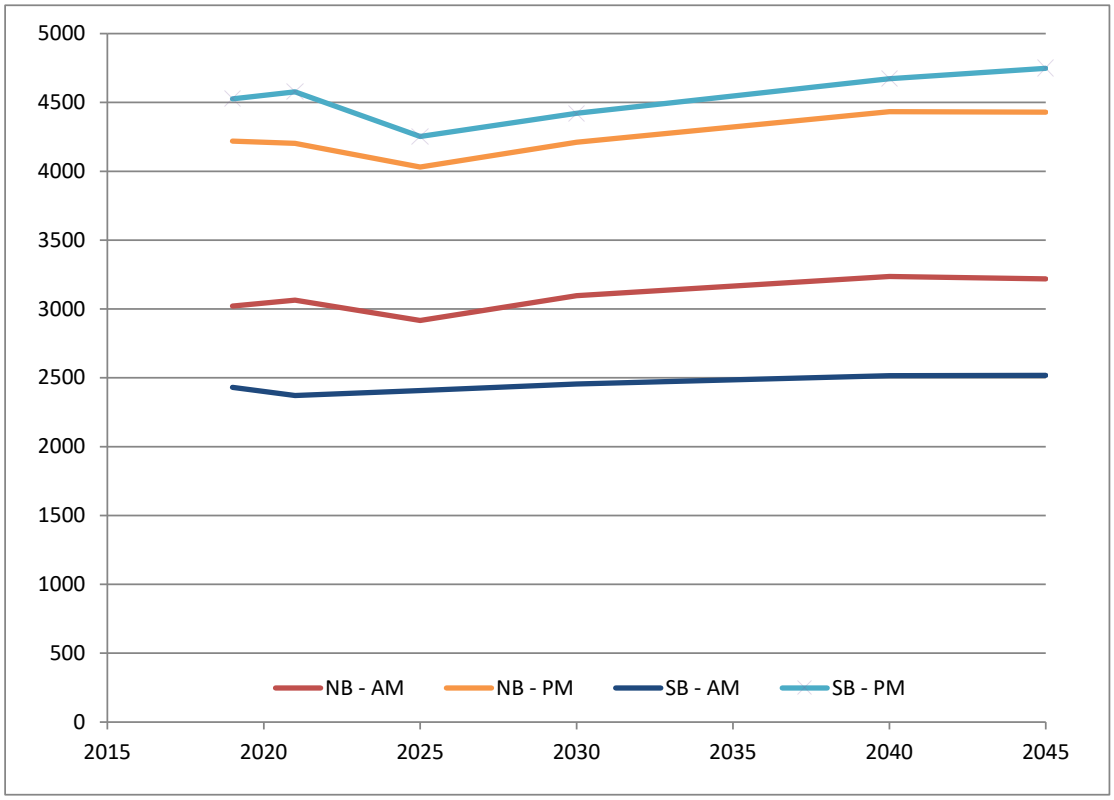
Direction/Period	Per year btwn 2022 & 2027	Total btwn 2022 & 2027
NB - AM	0.10%	0.50%
NB - PM	2.00%	10.41%
SB - AM	2.00%	10.41%
SB - PM	0.10%	0.50%

Growth Rate Information & Assumptions

Blair Rd north of Cedar St

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	3021	3064	2916	3097	3236	3218
NB - PM	4219	4203	4031	4211	4433	4430
SB - AM	2431	2371	2408	2455	2515	2518
SB - PM	4526	4577	4253	4421	4672	4748



Year of data collection: 2022
Project completion date: 2027

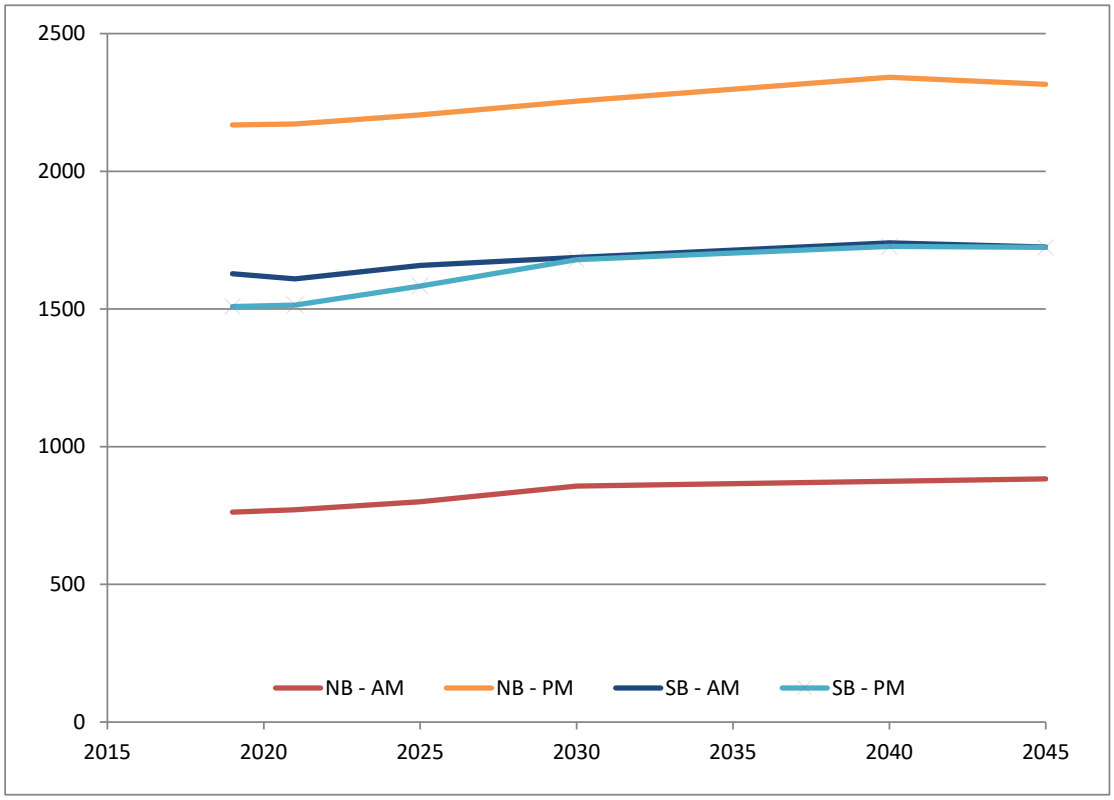
Direction/Period	Growth per year between 2021 & 2027
NB - AM	-1.23%
NB - PM	-1.04%
SB - AM	0.39%
SB - PM	-1.82%

Growth Rate Information & Assumptions

Blair Rd south of Cedar St

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	762	771	800	857	874	883
NB - PM	2168	2172	2205	2255	2341	2316
SB - AM	1628	1609	1658	1687	1740	1725
SB - PM	1509	1514	1583	1679	1727	1724



Year of data collection: 2022
Project completion date: 2027

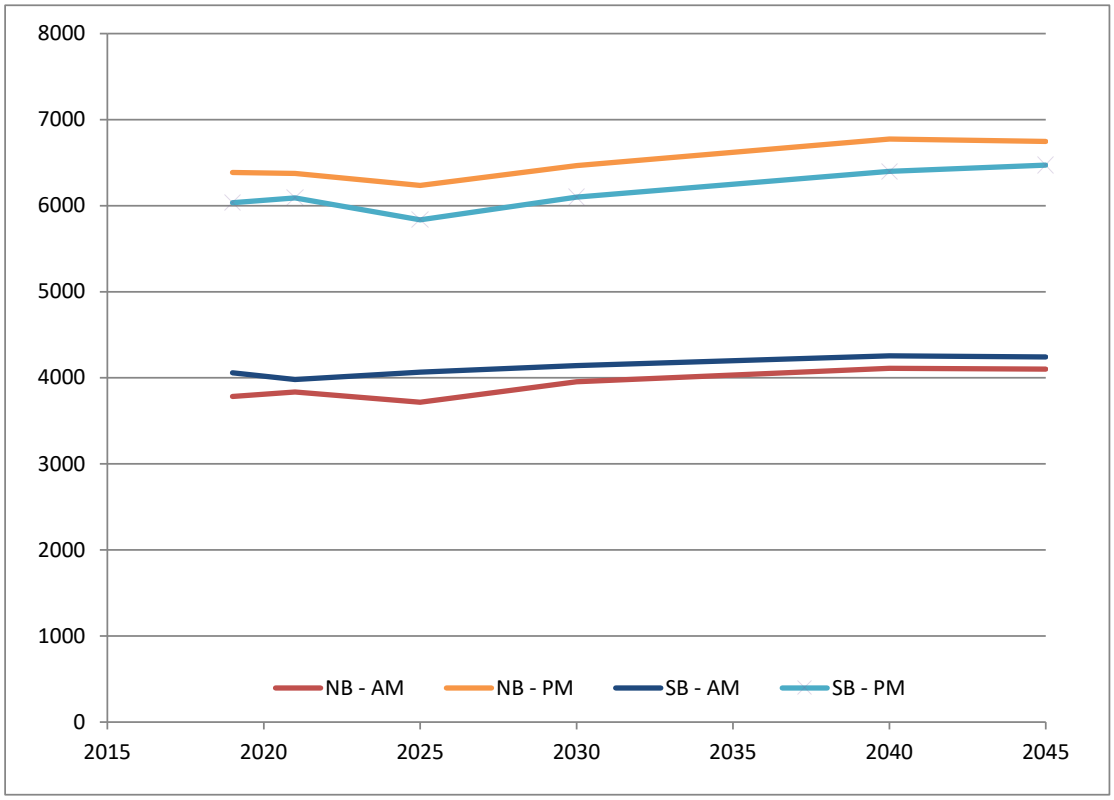
Direction/Period	Growth per year between 2021 & 2027
NB - AM	0.93%
NB - PM	0.38%
SB - AM	0.75%
SB - PM	1.12%

Growth Rate Information & Assumptions

Blair Rd aggregate

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	3783	3835	3716	3954	4110	4101
NB - PM	6387	6375	6236	6466	6774	6746
SB - AM	4059	3980	4066	4142	4255	4243
SB - PM	6035	6091	5836	6100	6399	6472



Year of data collection: 2022
Project completion date: 2027

Direction/Period	Growth per year between 2021 & 2027
NB - AM	-0.78%
NB - PM	-0.55%
SB - AM	0.54%
SB - PM	-1.06%

Growth Rate Information & Assumptions

Blair Rd aggregate

Historical DDOT AADTs in thousands

Location	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Blair Rd	15.2	15.3	15.2	15.2			11.0	11.0	11.0	11.0

Growth per year since:	2010	2013	2016
	-3.2%	-4.5%	0.0%

Proposed Growth Rates for Use in Study:

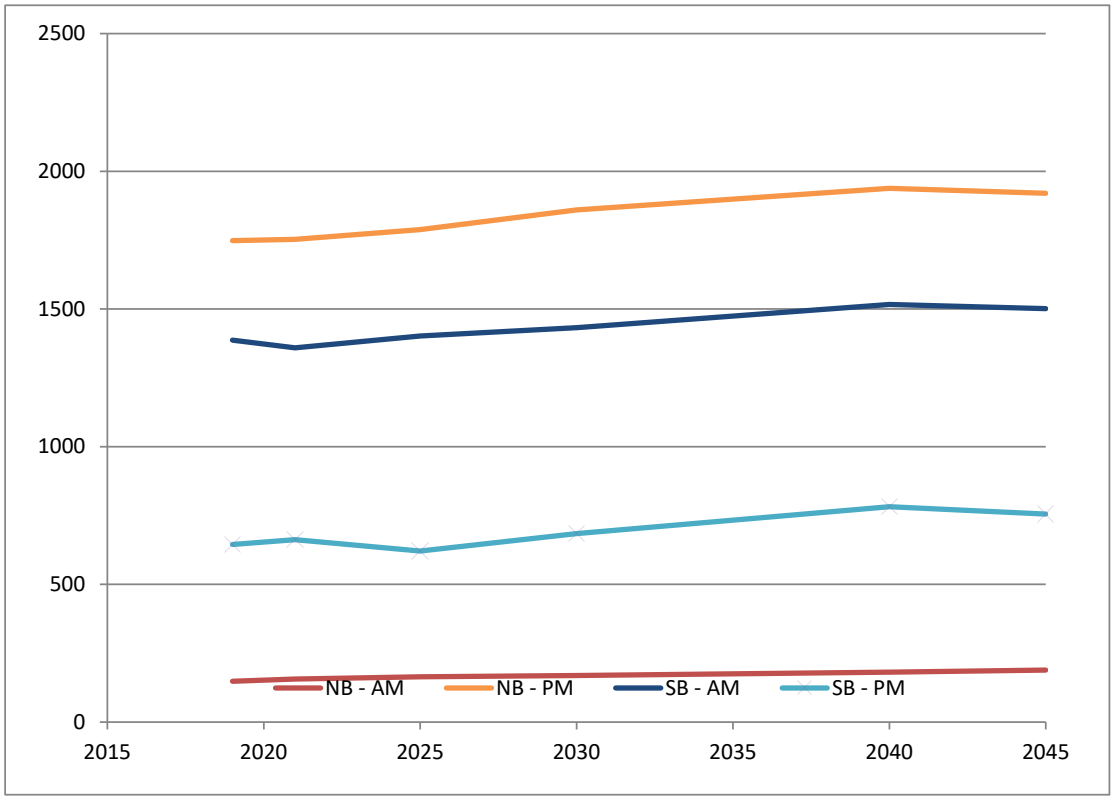
Direction/Period	Per year btwn 2022 & 2027	Total btwn 2022 & 2027
NB - AM	0.10%	0.50%
NB - PM	0.10%	0.50%
SB - AM	0.50%	2.53%
SB - PM	0.10%	0.50%

Growth Rate Information & Assumptions

5th St

MWCOG Model Volumes (v2.4)

Direction/Period	2019	2021	2025	2030	2040	2045
NB - AM	148	156	164	169	181	189
NB - PM	1748	1753	1788	1860	1938	1920
SB - AM	1387	1359	1402	1432	1516	1501
SB - PM	645	662	621	684	782	755



Year of data collection: 2022
Project completion date: 2027

Direction/Period	Growth per year between 2021 & 2027
NB - AM	1.26%
NB - PM	0.50%
SB - AM	0.78%
SB - PM	-1.59%

Growth Rate Information & Assumptions

5th St

Historical DDOT AADTs in thousands

Location	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
5th St	-	-	-	-	-	-	3.0	4.0	4.0	4.0

Growth per year since:	2010	2013	2016
	-	-	7.5%

Proposed Growth Rates for Use in Study:

Direction/Period	Per year btwn 2022 & 2027	Total btwn 2022 & 2027
NB - AM	1.30%	6.67%
NB - PM	0.50%	2.53%
SB - AM	0.50%	2.53%
SB - PM	0.10%	0.50%

Growth Rate Information & Assumptions

4th St

Historical DDOT AADTs in thousands

Location	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
4th St	1.6	1.6	1.6	1.1	1.1	1.2	-	-	1.0	1.0

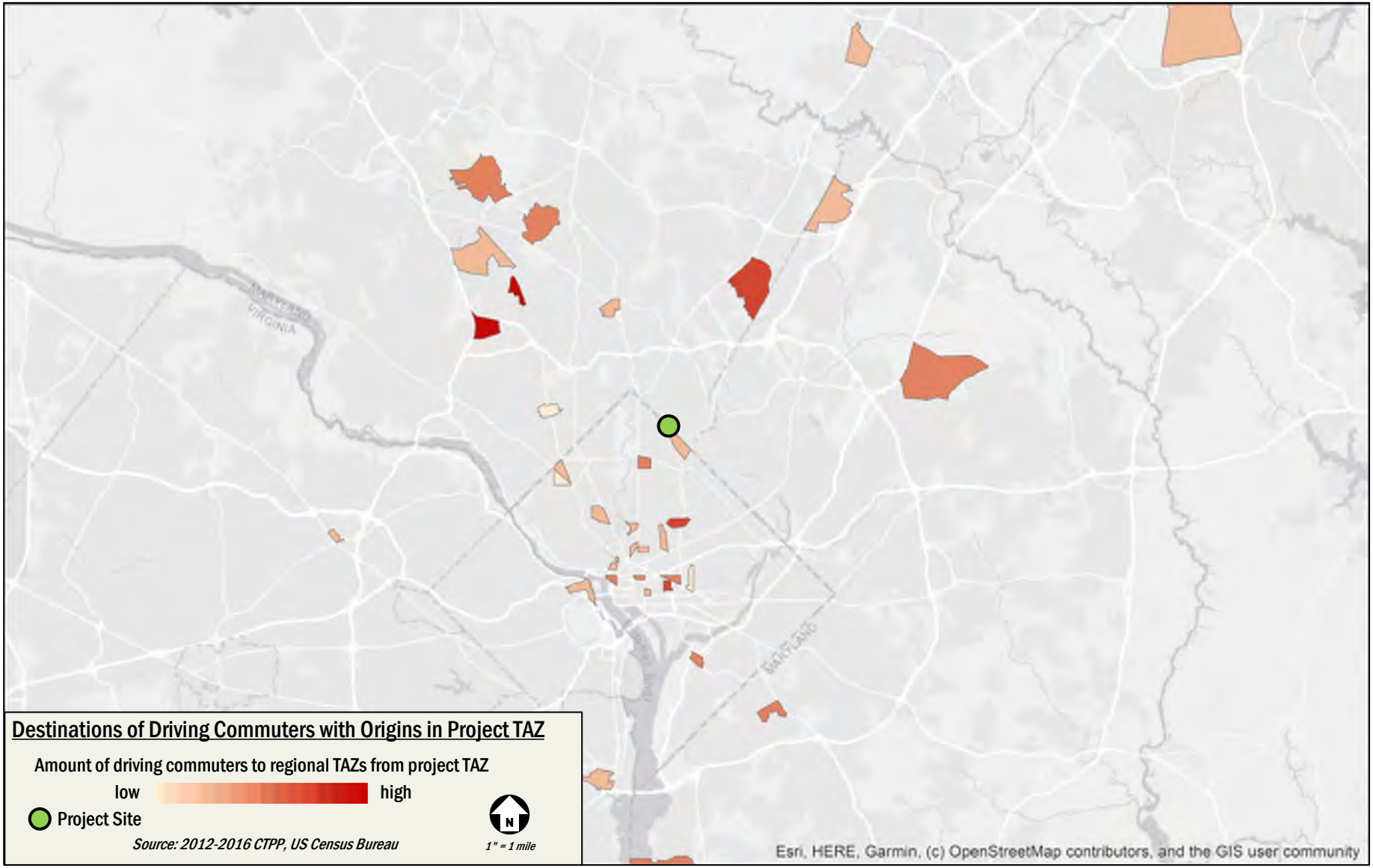
Growth per year since:	2010	2013	2016
	-4.6%	-1.4%	-

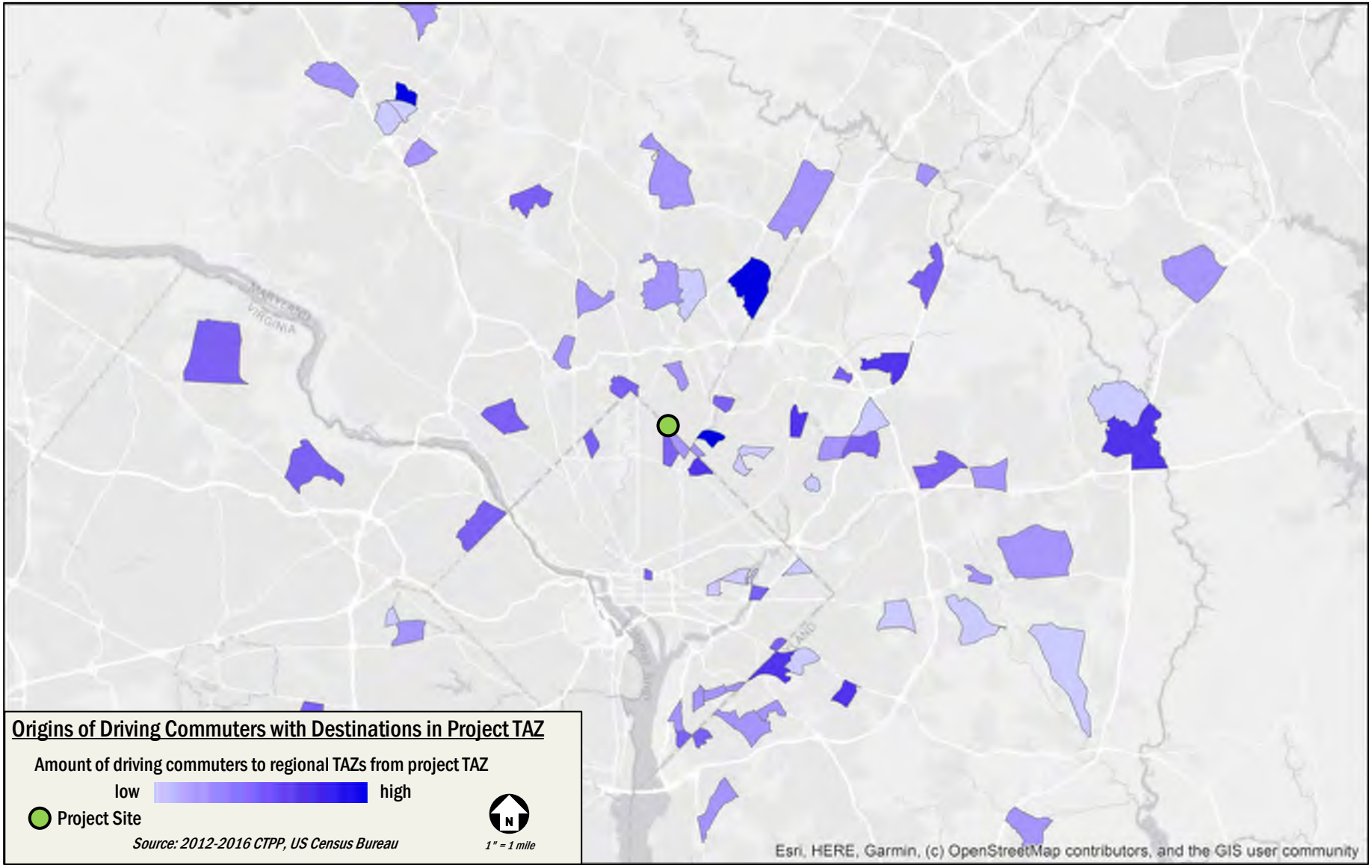
Proposed Growth Rates for Use in Study:

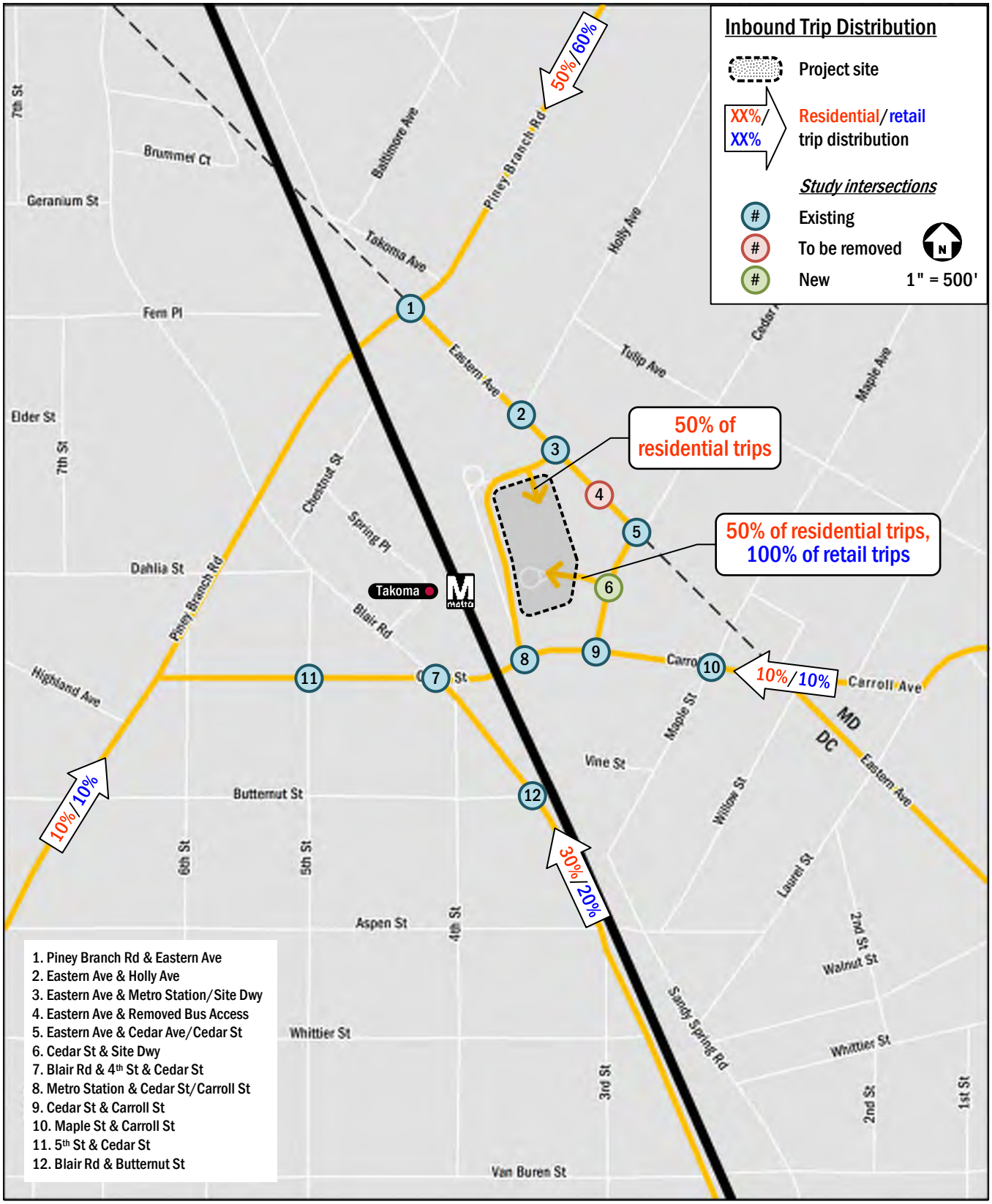
Direction/Period	Per year btwn 2022 & 2027	Total btwn 2022 & 2027
NB - AM	0.10%	0.50%
NB - PM	0.10%	0.50%
SB - AM	0.10%	0.50%
SB - PM	0.10%	0.50%

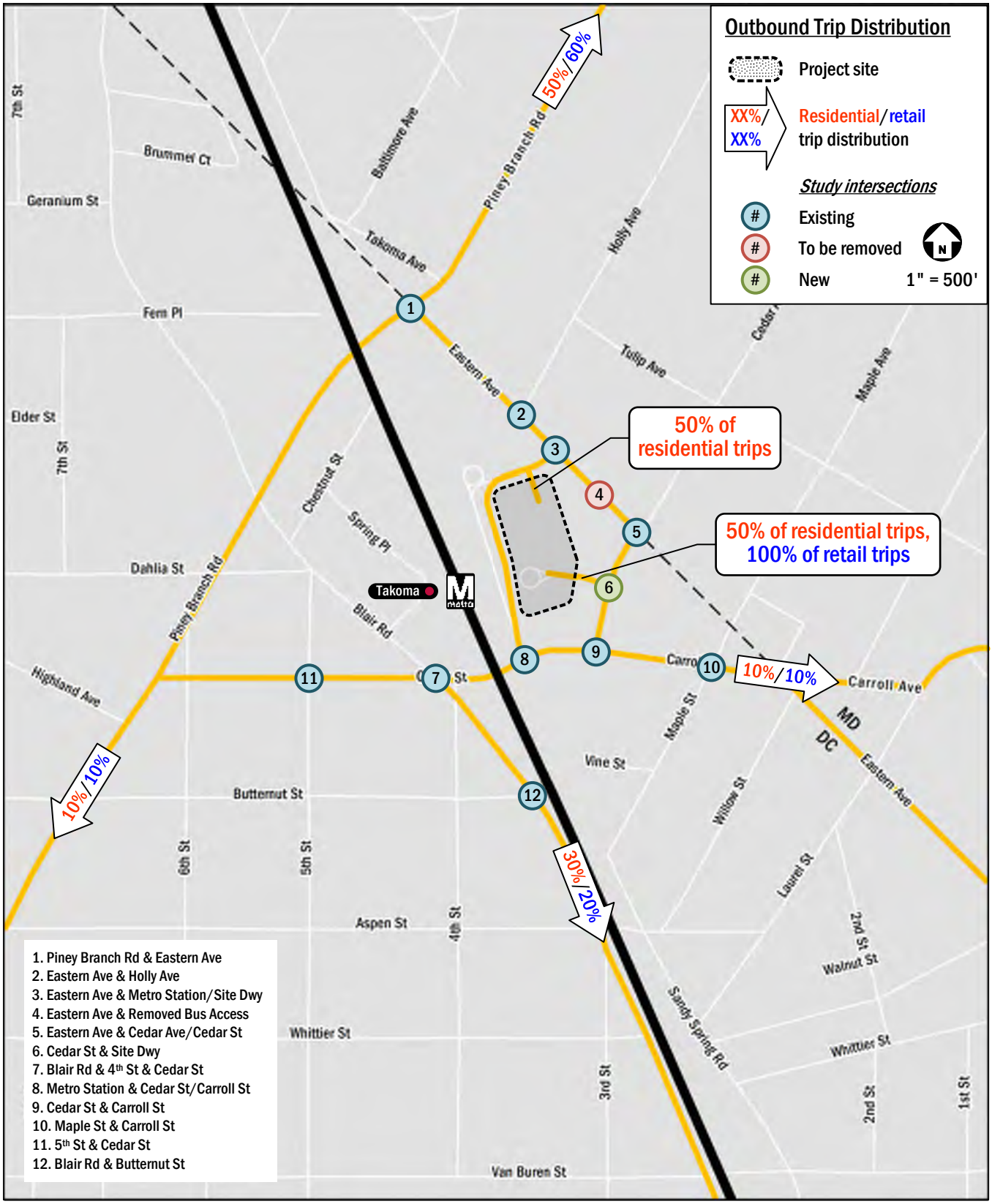
Roadway	Dir.	Proposed Annual Growth Rate Between 2022 and 2026		Proposed Total Growth Between 2022 and 2026	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Carroll St/Cedar St NW	EB	0.10%	0.10%	0.50%	0.50%
	WB	0.10%	0.10%	0.50%	0.50%
Piney Branch Rd NW	NB	0.40%	0.50%	2.02%	2.53%
	SB	0.50%	0.20%	2.53%	1.00%
Eastern Ave/Cedar St NW	NB	0.10%	2.00%	0.50%	10.41%
	SB	2.00%	0.10%	10.41%	0.50%
Blair Rd NW	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.50%	0.10%	2.53%	0.50%
5th St NW	NB	1.30%	0.50%	6.67%	2.53%
	SB	0.50%	0.10%	2.53%	0.50%
4th St NW [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Butternut St NW [1]	EB	0.10%	0.10%	0.50%	0.50%
	WB	0.10%	0.10%	0.50%	0.50%
Maple St NW [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Holly Ave [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%
Cedar Ave [1]	NB	0.10%	0.10%	0.50%	0.50%
	SB	0.10%	0.10%	0.50%	0.50%

[1] AADT and/or MWCOG data is not available for this street; therefore a conservative 0.1% growth rate per year was used.


Destinations of Driving Commuters with Origins in Project TAZ
Amount of driving commuters to regional TAZs from project TAZ
low
high
Project Site
Source: 2012-2016 CTPP, US Census Bureau
N
1" = 1 mile
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Origins of Driving Commuters with Destinations in Project TAZ
Amount of driving commuters to regional TAZs from project TAZ
low
high
Project Site
Source: 2012-2016 CTPP, US Census Bureau
1" = 1 mile
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Inbound Trip Distribution
Project site
XX%/ XX%
Residential/retail trip distribution
Study intersections
Existing
To be removed
New
1" = 500'
50%/60%
10%/10%
30%/20%
50% of residential trips
50% of residential trips, 100% of retail trips
10%/10%
1. Piney Branch Rd & Eastern Ave
2. Eastern Ave & Holly Ave
3. Eastern Ave & Metro Station/Site Dwy
4. Eastern Ave & Removed Bus Access
5. Eastern Ave & Cedar Ave/Cedar St
6. Cedar St & Site Dwy
7. Blair Rd & 4th St & Cedar St
8. Metro Station & Cedar St/Carroll St
9. Cedar St & Carroll St
10. Maple St & Carroll St
11. 5th St & Cedar St
12. Blair Rd & Butternut St
Takoma
Metro
Piney Branch Rd
Eastern Ave
Carroll Ave
Blair Rd
Butternut St
Aspen St
Whittier St
Van Buren St
Vine St
Maple St
Willow St
Laurel St
Walnut St
Sandy Spring Rd
Tulip Ave
Holly Ave
Baltimore Ave
Takoma Ave
Fern Pl
Geranium St
Brunmer Ct
Elder St
Dahlia St
Highland Ave
Spring Pl
Chestnut St
Maple Ave
MD
DC
7th St
6th St
5th St
4th St
3rd St
2nd St
1st St


Outbound Trip Distribution
Project site
XX%/ XX%
Residential/retail trip distribution
Study intersections
Existing
To be removed
New
1" = 500'
50%/60%
10%/10%
30%/20%
10%/10%
50% of residential trips
50% of residential trips, 100% of retail trips
1. Piney Branch Rd & Eastern Ave
2. Eastern Ave & Holly Ave
3. Eastern Ave & Metro Station/Site Dwy
4. Eastern Ave & Removed Bus Access
5. Eastern Ave & Cedar Ave/Cedar St
6. Cedar St & Site Dwy
7. Blair Rd & 4th St & Cedar St
8. Metro Station & Cedar St/Carroll St
9. Cedar St & Carroll St
10. Maple St & Carroll St
11. 5th St & Cedar St
12. Blair Rd & Butternut St
Takoma
Piney Branch Rd
Eastern Ave
Carroll Ave
Blair Rd
Butternut St
Aspen St
Whittier St
Van Buren St
Vine St
Dahlia St
Highland Ave
Elder St
Fern Pl
Geranium St
Brunner Ct
Takoma Ave
Baltimore Ave
Holly Ave
Tulip Ave
Maple Ave
Chestnut St
Spring Pl
Maple St
Willow St
Laurel St
Sandy Spring Rd
MD
DC

C. Vehicle Level of Service Definitions

A. Level of Service Definitions

All capacity analyses are based on the procedures specified by the Transportation Research Board, Special Report 209: Highway Capacity Manual (HCM), 2000. Levels of service (LOS) range from A to F. A brief description of each level of service for signalized and unsignalized intersections is provided below.

Signalized Intersections

Level of service is based upon the traffic volume present in each lane on the roadway, the capacity of each lane at the intersection and the delay associated with each directional movement. The levels of service for signalized intersections are defined below:

- **LOS A** describes operations with very low average delay per vehicle, i.e., less than 10.0 seconds. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop. Short signal cycle lengths may also contribute to low delay.

- **LOS B** describes operations with average delay in the range of 10.1 to 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

- **LOS C** describes operations with delay in the range of 20.1 to 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level although many still pass through the intersection without stopping. This is generally considered the lower end of the range of the acceptable level of service in rural areas.

- **LOS D** describes operations with delay in the range of 35.1 to 55.0 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and/or high traffic volumes as compared to the roadway capacity. Many vehicles are required to stop and the number of vehicles that do not have to stop declines. Individual signal cycle failures, where all waiting vehicles do not clear the intersection during a single green time, are noticeable. This is generally considered the lower end of the range of the acceptable level of service in urban areas.

- **LOS E** describes operations with delay in the range of 55.1 to 80.0 seconds per vehicle. These higher delay values generally indicate poor progression, long cycle lengths, and high traffic volumes. Individual cycle failures are frequent occurrences. LOS E has been set as the limit of acceptable conditions.

- **LOS F** describes operations with average delay in excess of 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation, i.e., when traffic arrives at a flow rate that exceeds the capacity of the intersection. It may also occur at high volumes with many individual cycle failures. Poor progression and long cycle lengths may also contribute to such delays.

Unsignalized Intersections

At an unsignalized intersection, the major street through traffic and right turns are assumed to operate unimpeded and therefore receive no level of service rating. The level of service for the minor street and the major street left turn traffic is dependent on the volume and capacity of the available lanes, and, the number and frequency of acceptable gaps in the major street traffic to make a conflicting turn.

The level of service grade is provided for each conflicting movement at an unsignalized intersection and is based on the total average delay experienced by each vehicle. The delay includes the time it takes a vehicle to move from the back of a queue through the intersection.

The unsignalized intersection level of service analysis does not account for variations in driver behavior or the effects of nearby traffic signals. Therefore, the results from this analysis usually indicate worse levels of service than may be experienced in the field. The unsignalized intersection level of service descriptions are provided below:

- **LOS A** describes operations where there is very little to no conflicting traffic for a minor side street movement, i.e., an average total delay of less than 10.0 seconds per vehicle.
- **LOS B** describes operations with average total delay in the range of 10.1 to 15.0 seconds per vehicle.
- **LOS C** describes operations with average total delay in the range of 15.1 to 25.0 second per vehicle.
- **LOS D** describes operations with average total delay in the range of 25.1 to 35.0 seconds per vehicle.
- **LOS E** describes operations with average total delay in the range of 35.1 to 50.0 seconds per vehicle.
- **LOS F** describes operations with average total delay of 50 seconds per vehicle. LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through or enter a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queuing on the minor approaches. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal driver behavior.

D. Turning Movement Counts

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

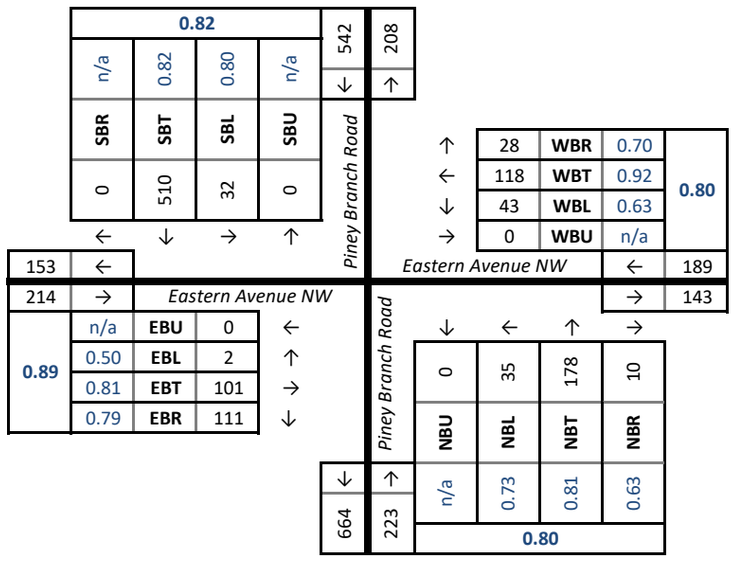
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:30 AM to 08:30 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Piney Branch Road & Eastern Avenue NW

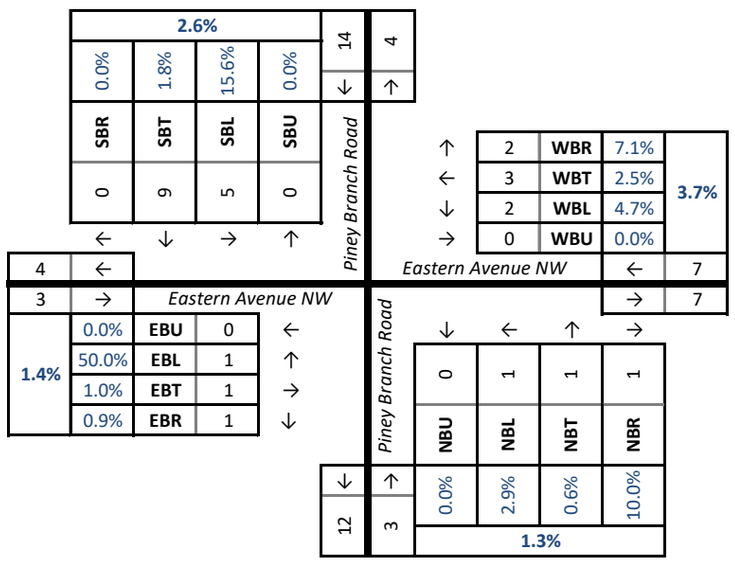
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Piney Branch Road					Eastern Avenue NW					Piney Branch Road					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	8	131	1	1	0	3	11	1	0	0	4	28	1	4	0	0	5	8	1
06:45 AM	to 07:00 AM	0	8	138	0	0	0	3	15	2	0	0	2	35	2	3	0	0	8	9	0
07:00 AM	to 07:15 AM	0	5	139	0	0	0	6	14	7	0	0	7	41	2	3	0	1	10	12	0
07:15 AM	to 07:30 AM	0	10	143	0	2	0	4	23	11	0	0	4	44	4	1	0	0	17	15	0
07:30 AM	to 07:45 AM	0	10	155	0	3	0	5	28	6	0	0	2	32	4	1	0	0	23	24	1
07:45 AM	to 08:00 AM	0	5	112	0	5	0	17	32	10	0	0	11	42	0	2	0	1	25	24	0
08:00 AM	to 08:15 AM	0	8	108	0	2	0	10	27	8	0	0	10	49	3	8	0	1	31	28	4
08:15 AM	to 08:30 AM	0	9	135	0	3	0	11	31	4	0	0	12	55	3	4	0	0	22	35	2
08:30 AM	to 08:45 AM	0	14	117	0	3	0	7	17	11	0	0	5	74	4	2	0	0	16	12	1
08:45 AM	to 09:00 AM	0	14	122	0	3	0	6	27	12	0	1	10	66	3	2	0	0	16	9	2
09:00 AM	to 09:15 AM	0	10	109	0	1	0	4	26	10	0	0	4	67	4	3	0	0	10	15	0
09:15 AM	to 09:30 AM	0	8	131	0	2	0	6	17	9	0	0	8	49	5	3	0	0	17	16	0
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		542				13	189				0	223				15	214				7
07:30 AM	to 08:30 AM	0	32	510	0		0	43	118	28		0	35	178	10		0	2	101	111	
Peak Hour Factor (PHF)	Overall **0.92**	U n/a	Left 0.80	Thru 0.82	Right n/a	**SB 0.82**	U n/a	Left 0.63	Thru 0.92	Right 0.70	**WB 0.80**	U n/a	Left 0.73	Thru 0.81	Right 0.63	**NB 0.80**	U n/a	Left 0.50	Thru 0.81	Right 0.79	**EB 0.89**

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



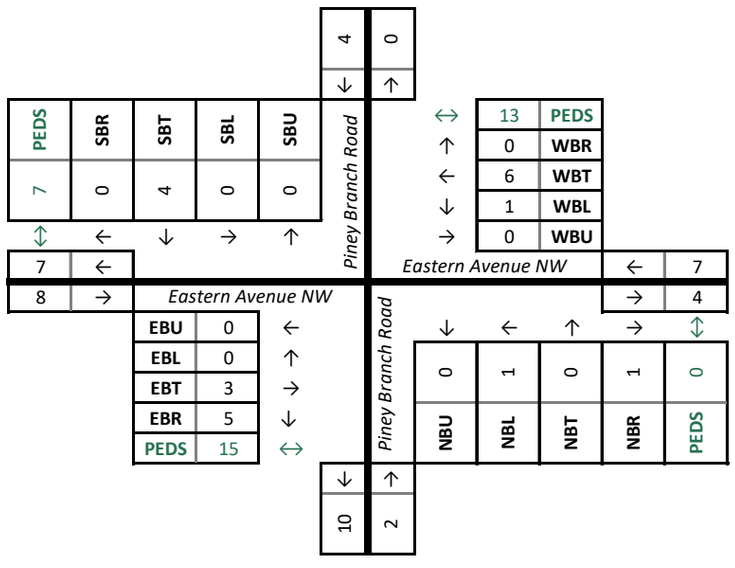
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Piney Branch Road				Eastern Avenue NW				Piney Branch Road				Eastern Avenue NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM	to 06:45 AM	0	1	3	0	0	0	1	1	0	0	1	0	0	0	2	0
06:45 AM	to 07:00 AM	0	2	8	0	0	0	0	0	0	0	1	0	0	0	1	0
07:00 AM	to 07:15 AM	0	0	4	0	0	1	1	1	0	0	1	0	0	0	0	0
07:15 AM	to 07:30 AM	0	0	6	0	0	0	1	2	0	0	1	1	0	0	4	0
07:30 AM	to 07:45 AM	0	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0
07:45 AM	to 08:00 AM	0	0	4	0	0	0	2	1	0	0	0	0	0	1	0	0
08:00 AM	to 08:15 AM	0	1	4	0	0	1	1	1	0	0	0	0	0	0	1	1
08:15 AM	to 08:30 AM	0	2	0	0	0	1	0	0	0	1	0	1	0	0	0	0
08:30 AM	to 08:45 AM	0	0	2	0	0	0	2	1	0	0	0	0	0	0	1	1
08:45 AM	to 09:00 AM	0	2	2	0	0	0	2	0	0	0	1	0	0	0	1	0
09:00 AM	to 09:15 AM	0	0	3	0	0	0	1	1	0	0	4	0	0	0	0	0
09:15 AM	to 09:30 AM	0	0	5	0	0	1	0	0	0	1	3	0	0	0	0	0
09:30 AM	to 09:45 AM																
09:45 AM	to 10:00 AM																
10:00 AM	to 10:15 AM																
10:15 AM	to 10:30 AM																
10:30 AM	to 10:45 AM																
10:45 AM	to 11:00 AM																
11:00 AM	to 11:15 AM																
11:15 AM	to 11:30 AM																
SYSTEM PEAK HR (VEH.)		14				7				3				3			
07:30 AM	to 08:30 AM	0	5	9	0	0	2	3	2	0	1	1	1	0	1	1	1
Heavy Vehicle % (PHV):		0.0%	15.6%	1.8%	0.0% **2.6%**	0.0%	4.7%	2.5%	7.1% **3.7%**	0.0%	2.9%	0.6%	10.0% **1.3%**	0.0%	50.0%	1.0%	0.9% **1.4%**
INT. PEAK HR (HV ONLY)		24				8				5				7			
06:30 AM	to 07:30 AM	0	3	21	0	0	1	3	4	0	0	4	1	0	0	7	0
Heavy Vehicle % (PHV):		0.0%	9.7%	3.8%	0.0% **4.1%**	0.0%	6.3%	4.8%	19.0% **8.0%**	0.0%	0.0%	2.7%	11.1% **2.9%**	0.0%	0.0%	17.5%	0.0% **8.2%**

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Piney Branch Road				Eastern Avenue NW				Piney Branch Road				Eastern Avenue NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM	to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:45 AM	to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
07:00 AM	to 07:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:15 AM	to 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:30 AM	to 07:45 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	4
07:45 AM	to 08:00 AM	0	0	2	0	0	1	3	0	0	0	0	1	0	0	2	0
08:00 AM	to 08:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	to 08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0
08:30 AM	to 08:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:45 AM	to 09:00 AM	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0
09:00 AM	to 09:15 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
09:15 AM	to 09:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
09:30 AM	to 09:45 AM																
09:45 AM	to 10:00 AM																
10:00 AM	to 10:15 AM																
10:15 AM	to 10:30 AM																
10:30 AM	to 10:45 AM																
10:45 AM	to 11:00 AM																
11:00 AM	to 11:15 AM																
11:15 AM	to 11:30 AM																
SYSTEM PEAK HR (VEH.)		4				7				2				8			
07:30 AM	to 08:30 AM	0	0	4	0	0	1	6	0	0	1	0	1	0	0	3	5
INT. PEAK HR (BIKES)		3				5				2				11			
07:00 AM	to 08:00 AM	0	0	3	0	0	1	4	0	0	1	0	1	0	0	3	8

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

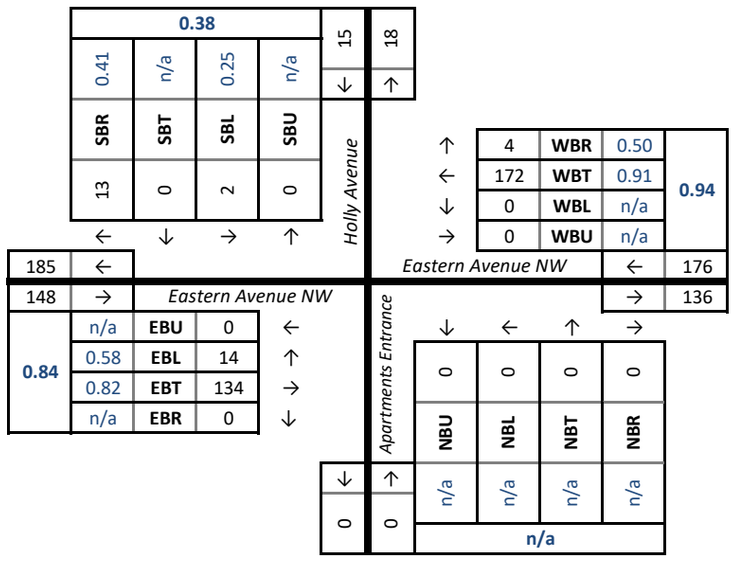
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:45 AM to 08:45 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Holly Avenue/Apartments Entrance & Eastern Avenue NW

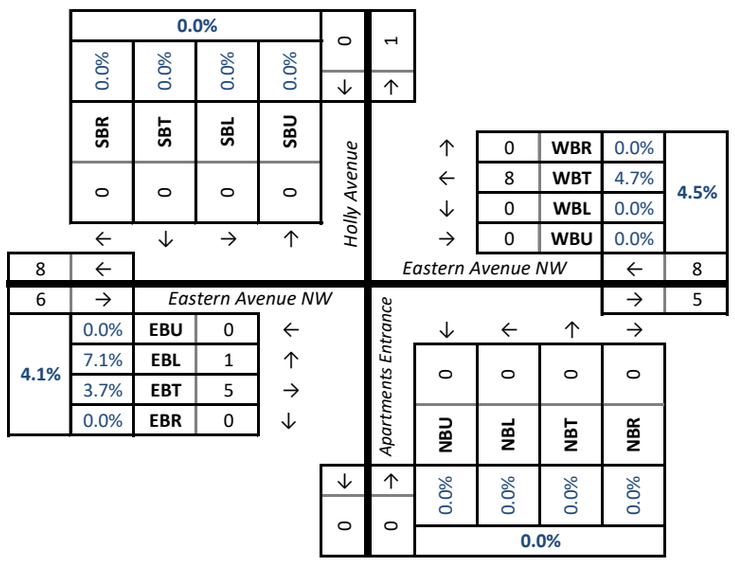
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Holly Avenue					Eastern Avenue NW					Apartments Entrance					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	0	0	1	1	0	0	12	0	0	0	0	0	1	3	0	0	11	0	0
06:45 AM	to 07:00 AM	0	0	0	1	0	0	0	17	1	0	0	0	0	0	2	0	1	19	0	0
07:00 AM	to 07:15 AM	0	0	0	1	1	0	0	29	1	2	0	0	0	1	2	0	0	17	0	0
07:15 AM	to 07:30 AM	0	1	0	2	2	0	0	30	1	3	0	0	0	0	2	0	0	32	0	3
07:30 AM	to 07:45 AM	0	0	0	2	2	0	0	41	1	4	0	0	0	0	2	0	5	24	0	0
07:45 AM	to 08:00 AM	0	2	0	8	0	0	0	47	0	2	0	0	0	0	3	0	0	37	0	0
08:00 AM	to 08:15 AM	0	0	0	1	2	0	0	44	1	1	0	0	0	0	11	0	6	32	0	0
08:15 AM	to 08:30 AM	0	0	0	2	0	0	0	40	2	2	0	0	0	0	4	0	3	41	0	0
08:30 AM	to 08:45 AM	0	0	0	7	1	0	0	34	1	3	0	0	0	0	4	0	2	31	0	0
08:45 AM	to 09:00 AM	0	1	0	6	2	0	0	37	1	2	0	1	0	0	3	0	6	25	0	0
09:00 AM	to 09:15 AM	0	1	0	1	1	0	0	32	1	0	0	0	0	0	6	0	6	15	0	0
09:15 AM	to 09:30 AM	0	0	0	4	0	0	0	22	1	4	0	0	0	0	6	1	1	28	0	1
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		15				4	176				9	0				20	148				0
07:30 AM	to 08:30 AM	0	2	0	13		0	0	172	4		0	0	0	0		0	14	134	0	
Peak Hour Factor (PHF)	Overall 0.90	U n/a	Left 0.25	Thru n/a	Right 0.41	SB 0.38	U n/a	Left n/a	Thru 0.91	Right 0.50	WB 0.94	U n/a	Left n/a	Thru n/a	Right n/a	NB n/a	U n/a	Left 0.58	Thru 0.82	Right n/a	EB 0.84

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



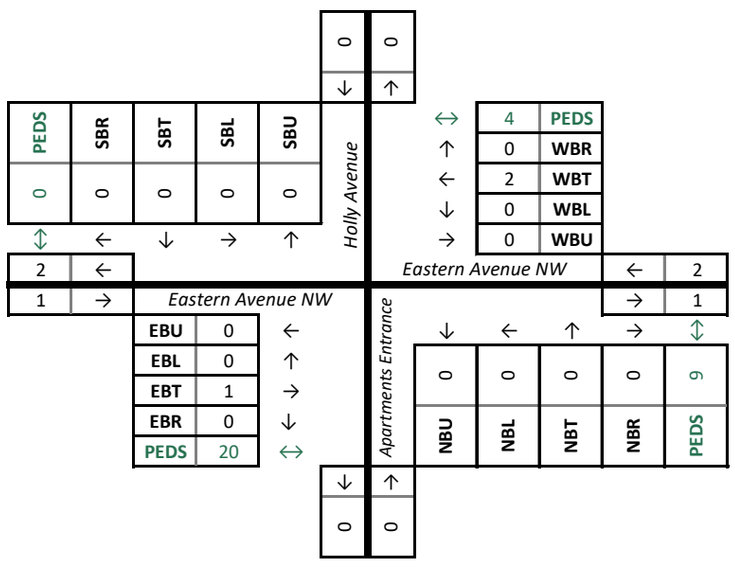
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Holly Avenue				Eastern Avenue NW				Apartments Entrance				Eastern Avenue NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM	to 06:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0
06:45 AM	to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
07:00 AM	to 07:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
07:15 AM	to 07:30 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0
07:30 AM	to 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
07:45 AM	to 08:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
08:00 AM	to 08:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	1	1	0
08:15 AM	to 08:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
08:30 AM	to 08:45 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	1	0
08:45 AM	to 09:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	0
09:00 AM	to 09:15 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0
09:15 AM	to 09:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
09:30 AM	to 09:45 AM																
09:45 AM	to 10:00 AM																
10:00 AM	to 10:15 AM																
10:15 AM	to 10:30 AM																
10:30 AM	to 10:45 AM																
10:45 AM	to 11:00 AM																
11:00 AM	to 11:15 AM																
11:15 AM	to 11:30 AM																
SYSTEM PEAK HR (VEH.)		0				8				0				6			
07:30 AM	to 08:30 AM	0	0	0	0	0	0	8	0	0	0	0	0	0	1	5	0
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	3.7%	0.0%
		0.0%				**4.5%**				**0.0%**				**4.1%**			
INT. PEAK HR (HV ONLY)		0				8				0				12			
06:30 AM	to 07:30 AM	0	0	0	0	0	0	8	0	0	0	0	0	0	0	12	0
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.2%	0.0%
		0.0%				**8.8%**				**0.0%**				**15.0%**			

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Holly Avenue				Eastern Avenue NW				Apartments Entrance				Eastern Avenue NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM	to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
06:45 AM	to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	to 07:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
07:15 AM	to 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	to 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	to 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
08:00 AM	to 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	to 08:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
08:30 AM	to 08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	to 09:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0
09:00 AM	to 09:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
09:15 AM	to 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	to 09:45 AM																
09:45 AM	to 10:00 AM																
10:00 AM	to 10:15 AM																
10:15 AM	to 10:30 AM																
10:30 AM	to 10:45 AM																
10:45 AM	to 11:00 AM																
11:00 AM	to 11:15 AM																
11:15 AM	to 11:30 AM																
SYSTEM PEAK HR (VEH.)		0				2				0				1			
07:30 AM	to 08:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
INT. PEAK HR (BIKES)		1				3				0				4			
08:15 AM	to 09:15 AM	0	0	0	1	0	0	3	0	0	0	0	0	0	2	2	0

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

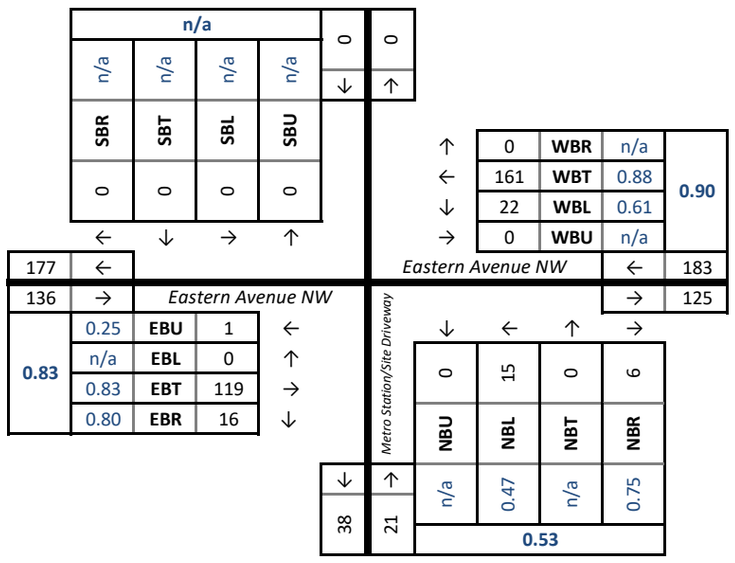
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:45 AM to 08:45 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. /Metro Station/Site Driveway & Eastern Avenue NW

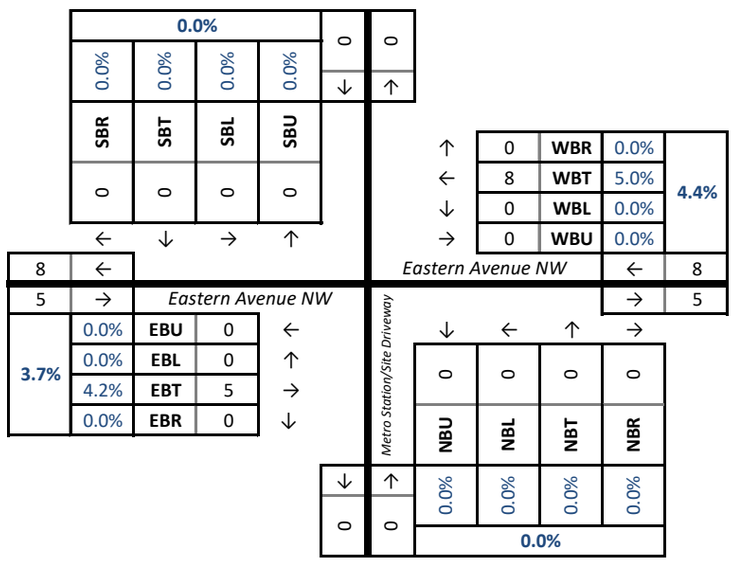
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Metro Station/Site Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	0	0	0	0	0	5	12	0	0	0	0	0	0	1	0	0	10	2	0
06:45 AM	to 07:00 AM	0	0	0	0	0	0	9	17	0	0	0	1	0	1	1	0	0	14	5	0
07:00 AM	to 07:15 AM	0	0	0	0	0	0	4	24	0	0	0	6	0	2	1	0	0	14	4	1
07:15 AM	to 07:30 AM	0	0	0	0	0	0	8	26	0	0	0	5	0	1	3	0	0	24	9	1
07:30 AM	to 07:45 AM	0	0	0	0	0	0	2	41	0	0	0	1	0	2	3	0	0	22	2	0
07:45 AM	to 08:00 AM	0	0	0	0	0	0	5	46	0	0	0	1	0	1	1	0	0	34	5	0
08:00 AM	to 08:15 AM	0	0	0	0	0	0	9	37	0	0	0	8	0	2	1	0	0	27	5	1
08:15 AM	to 08:30 AM	0	0	0	0	0	0	6	37	0	0	0	5	0	1	5	1	0	36	4	0
08:30 AM	to 08:45 AM	0	0	0	0	0	0	4	26	0	0	0	9	0	2	6	0	0	22	9	0
08:45 AM	to 09:00 AM	0	0	0	0	0	0	3	34	0	0	0	4	0	2	1	0	0	23	3	0
09:00 AM	to 09:15 AM	0	0	0	0	0	0	4	32	0	1	0	1	0	2	3	0	0	14	2	0
09:15 AM	to 09:30 AM	0	0	0	0	0	0	5	20	0	0	0	3	0	3	3	0	0	25	3	0
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		0				0	183				0	21				10	136				1
07:30 AM	to 08:30 AM	0	0	0	0		0	22	161	0		0	15	0	6		1	0	119	16	
Peak Hour Factor (PHF)	Overall 0.92	U n/a	Left n/a	Thru n/a	Right n/a	SB n/a	U n/a	Left 0.61	Thru 0.88	Right n/a	WB 0.90	U n/a	Left 0.47	Thru n/a	Right 0.75	NB 0.53	U 0.25	Left n/a	Thru 0.83	Right 0.80	EB 0.83

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



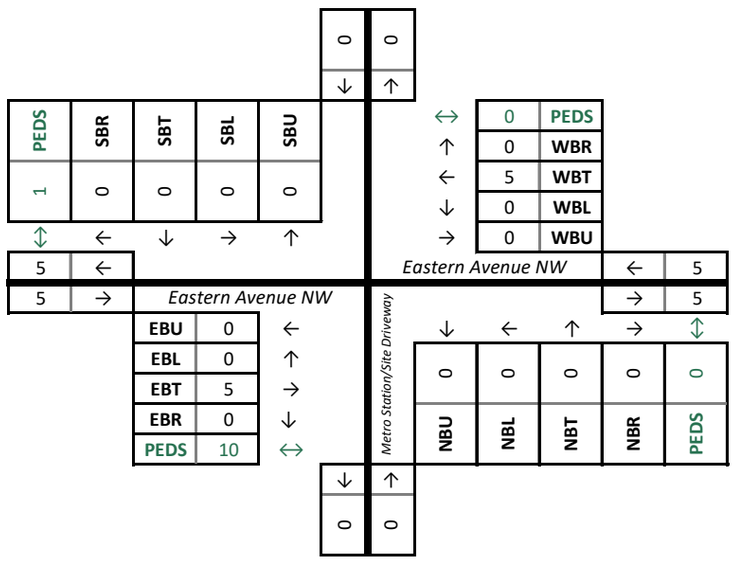
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Metro Station/Site Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	4	0	
06:45 AM	to 07:00 AM	0	0	0	0		0	1	0	0		0	0	0	0		0	0	2	0	
07:00 AM	to 07:15 AM	0	0	0	0		0	0	2	0		0	2	0	0		0	0	1	0	
07:15 AM	to 07:30 AM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	5	0	
07:30 AM	to 07:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	0	0	
08:00 AM	to 08:15 AM	0	0	0	0		0	0	4	0		0	0	0	0		0	0	1	0	
08:15 AM	to 08:30 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	2	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	1	0	
08:45 AM	to 09:00 AM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	2	0	
09:00 AM	to 09:15 AM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	1	0	
09:15 AM	to 09:30 AM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		0					8					0					5				
07:30 AM	to 08:30 AM	0	0	0	0		0	0	8	0		0	0	0	0		0	0	5	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	3.7%
INT. PEAK HR (HV ONLY)		0					7					2					12				
06:30 AM	to 07:30 AM	0	0	0	0		0	1	6	0		0	2	0	0		0	0	12	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	7.6%	0.0%	6.7%	0.0%	16.7%	0.0%	0.0%	12.5%	0.0%	0.0%	19.4%	0.0%	14.6%

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Metro Station/Site Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	0	
06:45 AM	to 07:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0	
07:00 AM	to 07:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	1	
07:15 AM	to 07:30 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	0	1	
07:30 AM	to 07:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	2	0	
08:00 AM	to 08:15 AM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	0	0	
08:15 AM	to 08:30 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	3	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
08:45 AM	to 09:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	3	0	
09:00 AM	to 09:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
09:15 AM	to 09:30 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		0					5					0					5				
07:30 AM	to 08:30 AM	0	0	0	0		0	0	5	0		0	0	0	0		0	0	5	0	
INT. PEAK HR (BIKES)		0					5					0					5				
07:30 AM	to 08:30 AM	0	0	0	0		0	0	5	0		0	0	0	0		0	0	5	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

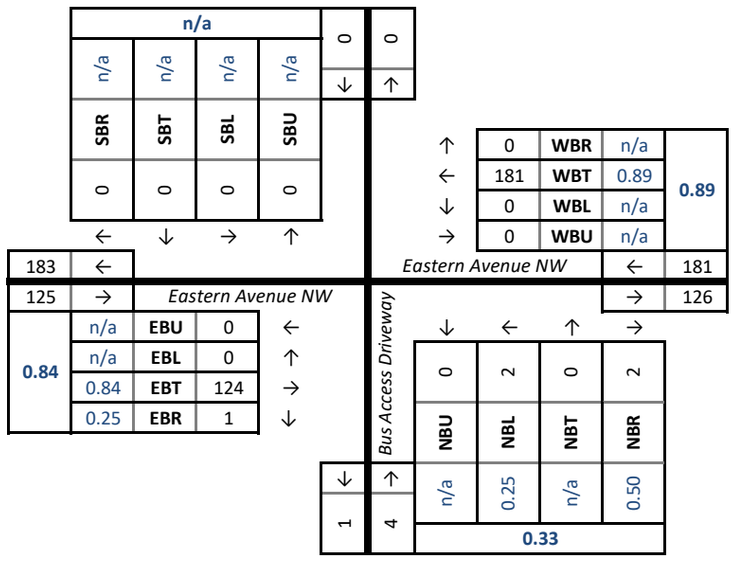
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:30 AM to 08:30 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. /Bus Access Driveway & Eastern Avenue NW

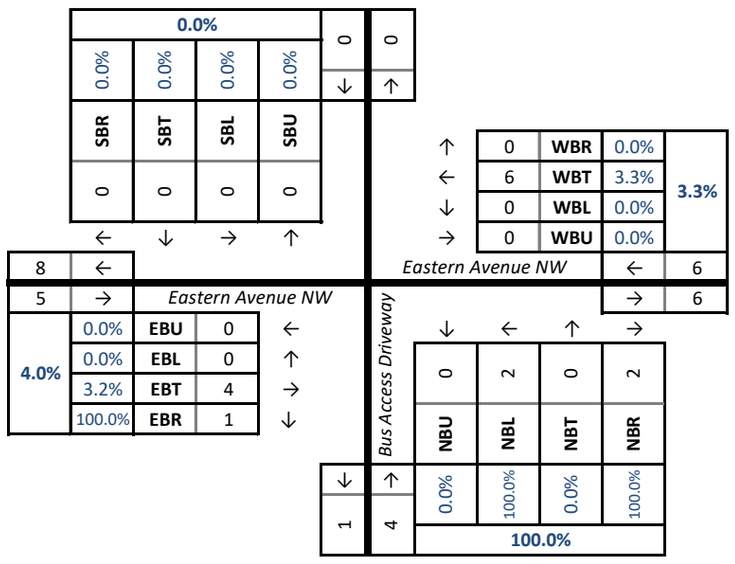
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Bus Access Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	0	0	0	0	0	0	15	0	1	0	2	0	1	3	0	0	8	2	0
06:45 AM	to 07:00 AM	0	0	0	0	0	0	0	26	0	0	0	0	0	1	1	0	0	15	0	0
07:00 AM	to 07:15 AM	0	0	0	0	0	0	0	28	0	0	0	0	0	2	2	0	0	16	0	0
07:15 AM	to 07:30 AM	0	0	0	0	0	0	0	32	0	0	0	2	0	0	1	0	0	24	1	0
07:30 AM	to 07:45 AM	0	0	0	0	0	0	0	43	0	0	0	0	0	1	2	0	0	24	0	0
07:45 AM	to 08:00 AM	0	0	0	0	0	0	0	51	0	0	0	0	0	0	1	0	0	35	0	0
08:00 AM	to 08:15 AM	0	0	0	0	0	0	0	44	0	0	0	2	0	1	1	0	0	28	1	1
08:15 AM	to 08:30 AM	0	0	0	0	0	0	0	43	0	0	0	0	0	0	3	0	0	37	0	0
08:30 AM	to 08:45 AM	0	0	0	0	0	0	0	28	0	0	0	2	0	0	4	0	0	24	0	0
08:45 AM	to 09:00 AM	0	0	0	0	0	0	0	35	0	0	0	2	0	2	1	0	0	24	1	1
09:00 AM	to 09:15 AM	0	0	0	0	0	0	0	34	0	0	0	2	0	0	4	0	0	15	1	0
09:15 AM	to 09:30 AM	0	0	0	0	0	0	0	24	0	0	0	1	0	1	1	1	0	26	1	0
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		0				0	181				0	4				7	125				1
07:30 AM	to 08:30 AM	0	0	0	0		0	0	181	0		0	2	0	2		0	0	124	1	
Peak Hour Factor (PHF)	Overall **0.90**	U n/a	Left n/a	Thru n/a	Right n/a	**SB n/a**	U n/a	Left n/a	Thru 0.89	Right n/a	**WB 0.89**	U n/a	Left 0.25	Thru n/a	Right 0.50	**NB 0.33**	U n/a	Left n/a	Thru 0.84	Right 0.25	**EB 0.84**

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



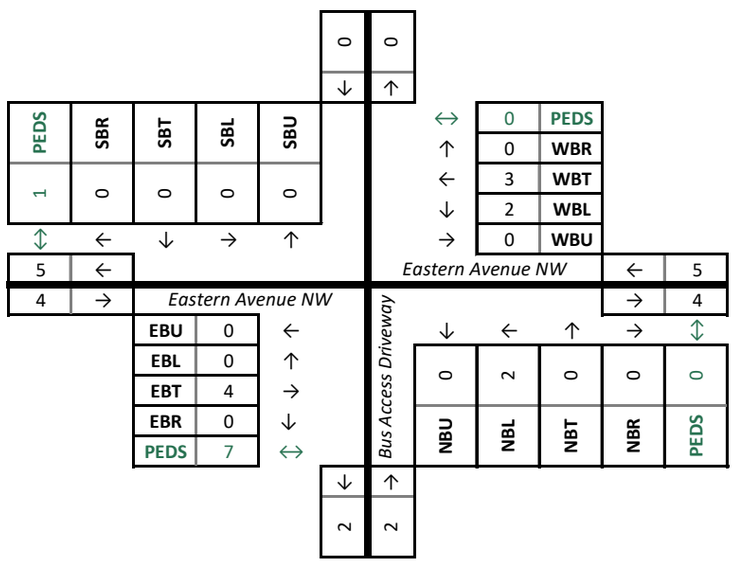
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Bus Access Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	0	0		0	0	0	0		0	2	0	1		0	0	2	2	
06:45 AM	to 07:00 AM	0	0	0	0		0	0	0	0		0	0	0	1		0	0	2	0	
07:00 AM	to 07:15 AM	0	0	0	0		0	0	2	0		0	0	0	2		0	0	1	0	
07:15 AM	to 07:30 AM	0	0	0	0		0	0	1	0		0	2	0	0		0	0	4	1	
07:30 AM	to 07:45 AM	0	0	0	0		0	0	0	0		0	0	0	1		0	0	2	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	0	0	
08:00 AM	to 08:15 AM	0	0	0	0		0	0	2	0		0	2	0	1		0	0	0	1	
08:15 AM	to 08:30 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	2	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	0	1	0		0	1	0	0		0	0	1	0	
08:45 AM	to 09:00 AM	0	0	0	0		0	0	1	0		0	2	0	2		0	0	1	1	
09:00 AM	to 09:15 AM	0	0	0	0		0	0	2	0		0	1	0	0		0	0	1	0	
09:15 AM	to 09:30 AM	0	0	0	0		0	0	2	0		0	0	0	1		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		0					6					4					5				
07:30 AM	to 08:30 AM	0	0	0	0		0	0	6	0		0	2	0	2		0	0	4	1	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	3.3%	0.0%	**3.3%**	0.0%	100.0%	0.0%	100.0%	**100.0%**	0.0%	0.0%	3.2%	100.0%	**4.0%**
INT. PEAK HR (HV ONLY)		0					3					8					12				
06:30 AM	to 07:30 AM	0	0	0	0		0	0	3	0		0	4	0	4		0	0	9	3	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	3.0%	0.0%	**3.0%**	0.0%	100.0%	0.0%	100.0%	**100.0%**	0.0%	0.0%	14.3%	100.0%	**18.2%**

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Bus Access Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1	
06:45 AM	to 07:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:00 AM	to 07:15 AM	0	0	0	0		0	1	0	0		0	0	0	0		0	0	1	0	
07:15 AM	to 07:30 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	0	0	
07:30 AM	to 07:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	2	0	
08:00 AM	to 08:15 AM	0	0	0	0		0	1	1	0		0	2	0	0		0	0	0	0	
08:15 AM	to 08:30 AM	0	0	0	0		0	1	1	0		0	0	0	0		0	0	2	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	1	0	0		0	0	0	0		0	0	0	0	
08:45 AM	to 09:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	1	
09:00 AM	to 09:15 AM	0	0	0	0		0	1	0	0		0	0	0	0		0	0	0	0	
09:15 AM	to 09:30 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		0					5					2					4				
07:30 AM	to 08:30 AM	0	0	0	0		0	2	3	0		0	2	0	0		0	0	4	0	
INT. PEAK HR (BIKES)		0					6					2					4				
07:45 AM	to 08:45 AM	0	0	0	0		0	3	3	0		0	2	0	0		0	0	4	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:30 AM to 08:30 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Cedar Avenue & /Eastern Avenue NW

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Cedar Avenue										Cedar Avenue					Eastern Avenue NW				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM to 06:45 AM	0	0	2	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	9	2
06:45 AM to 07:00 AM	0	0	1	4	2	0	0	0	0	0	0	22	2	0	0	0	0	0	16	4
07:00 AM to 07:15 AM	0	0	0	3	0	0	0	0	0	0	0	25	0	0	0	0	0	0	18	3
07:15 AM to 07:30 AM	0	0	1	1	5	0	0	0	0	0	0	31	0	0	0	0	0	0	24	8
07:30 AM to 07:45 AM	0	0	4	6	1	0	0	0	0	0	0	37	1	0	0	0	0	0	25	5
07:45 AM to 08:00 AM	0	0	1	6	2	0	0	0	0	0	1	45	0	0	0	0	0	0	35	7
08:00 AM to 08:15 AM	0	0	0	7	4	0	0	0	0	0	0	37	0	0	0	0	0	0	29	6
08:15 AM to 08:30 AM	0	0	0	7	1	0	0	0	0	0	0	36	2	0	0	0	0	0	37	7
08:30 AM to 08:45 AM	0	0	2	6	3	0	0	0	0	0	0	22	3	0	0	0	0	0	24	8
08:45 AM to 09:00 AM	0	0	2	4	1	0	0	0	0	0	0	31	2	0	0	0	0	0	26	2
09:00 AM to 09:15 AM	0	0	2	4	1	0	0	0	0	0	0	30	1	0	0	0	0	0	15	4
09:15 AM to 09:30 AM	0	0	1	4	5	0	0	0	0	0	1	20	0	0	0	0	0	0	27	9
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
SYSTEM PEAK HR (VEH.)	31				8	0				0	159				0	126				25
07:30 AM to 08:30 AM	0	0	5	26		0	0	0	0		1	155	3	0		0	0	0	126	
Peak Hour Factor (PHF) Overall **0.90**	U n/a	Left n/a	Thru 0.31	Right 0.93	**SB 0.78**	U n/a	Left n/a	Thru n/a	Right n/a	**WB n/a**	U 0.25	Left 0.86	Thru 0.38	Right n/a	**NB 0.86**	U n/a	Left n/a	Thru n/a	Right 0.85	**EB 0.85**

HEAVY VEHICLES (FHWA 4+)

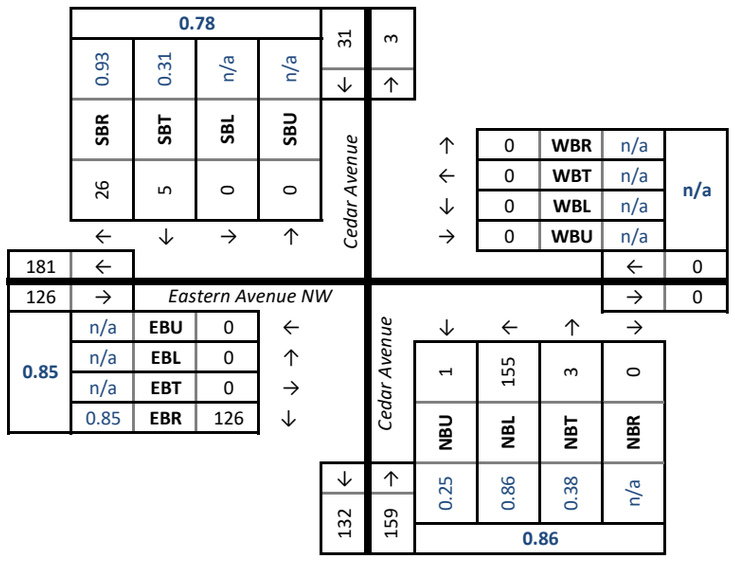
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Cedar Avenue								Cedar Avenue				Eastern Avenue NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
06:45 AM to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:00 AM to 07:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3
07:15 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
07:30 AM to 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:45 AM to 08:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
08:00 AM to 08:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1
08:15 AM to 08:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
08:30 AM to 08:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
08:45 AM to 09:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
09:00 AM to 09:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
09:15 AM to 09:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	1				0				5				6			
07:30 AM to 08:30 AM	0	0	0	1	0	0	0	0	0	5	0	0	0	0	0	6
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	3.8% **3.2%**	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	3.2%	0.0%	0.0% **3.1%**	0.0%	0.0%	0.0%	4.8% **4.8%**
INT. PEAK HR (HV ONLY)	0				0				3				13			
06:30 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	13
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	3.2%	0.0%	0.0% **3.2%**	0.0%	0.0%	0.0%	19.4% **19.4%**

BICYCLES

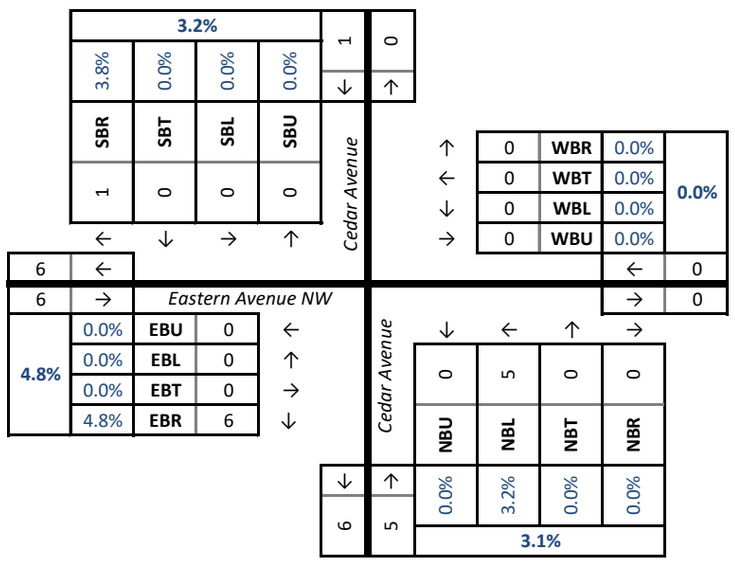
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Cedar Avenue								Cedar Avenue				Eastern Avenue NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45 AM to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
07:15 AM to 07:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM to 07:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM to 08:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:00 AM to 08:15 AM	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0
08:15 AM to 08:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM to 08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
09:00 AM to 09:15 AM	0	0	2	0	0	0	0	0	0	1	0	0	0	1	0	0
09:15 AM to 09:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	6				0				3				2			
07:30 AM to 08:30 AM	0	0	4	2	0	0	0	0	0	2	1	0	0	0	0	2
INT. PEAK HR (BIKES)	5				0				3				3			
07:00 AM to 08:00 AM	0	0	4	1	0	0	0	0	0	2	1	0	0	0	0	3

DATA COLLECTION NOTES :

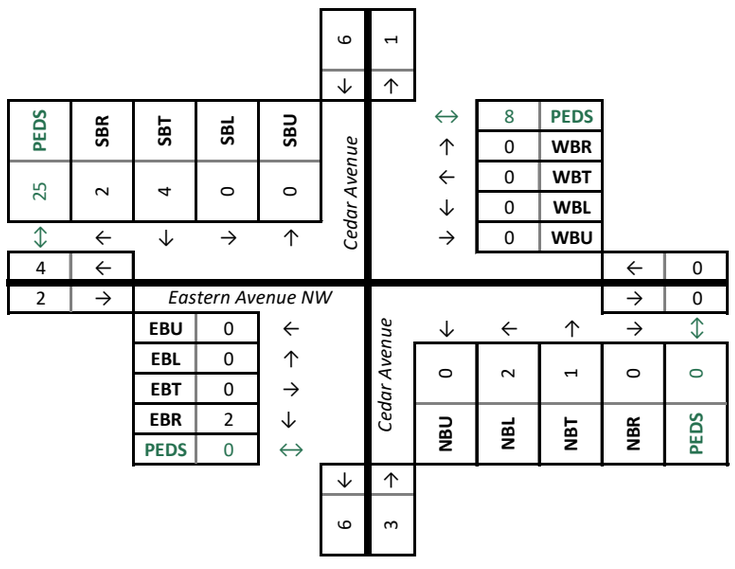
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

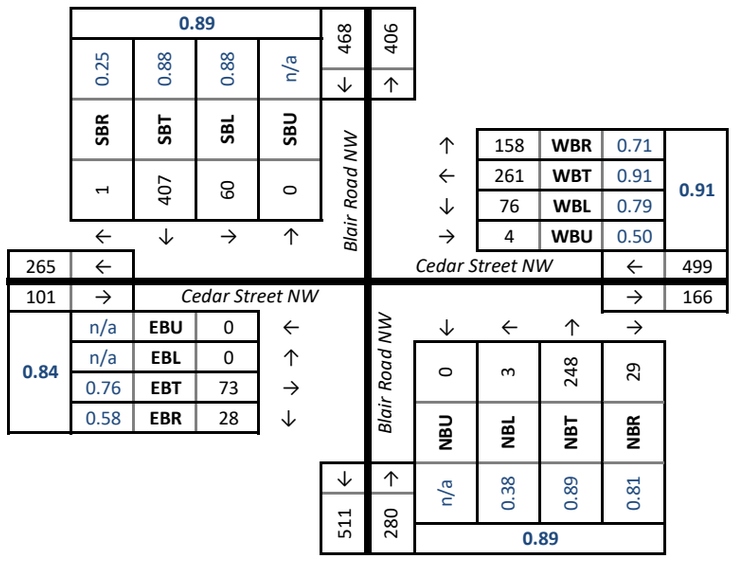
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:30 AM to 08:30 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Blair Road NW & Cedar Street NW

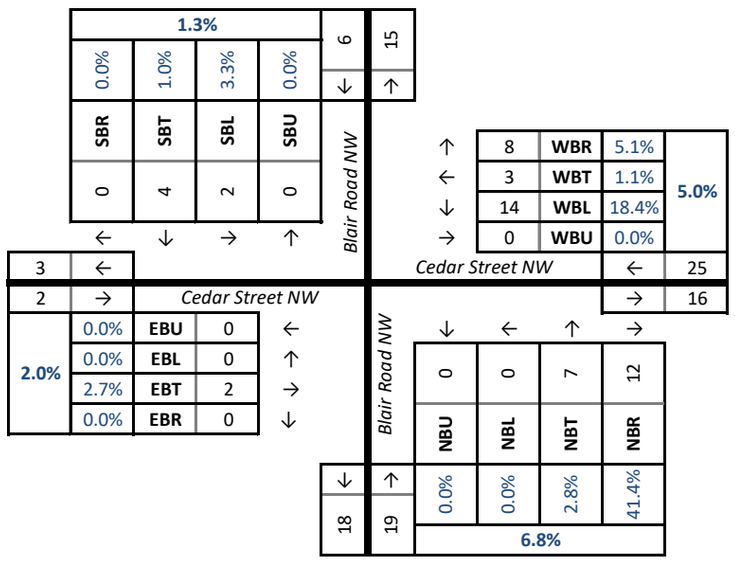
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Blair Road NW					Cedar Street NW					Blair Road NW					Cedar Street NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	12	65	0	3	0	6	20	27	3	0	0	37	8	2	0	0	8	5	1
06:45 AM	to 07:00 AM	0	11	57	0	7	2	11	30	24	6	0	0	42	2	5	0	0	7	2	2
07:00 AM	to 07:15 AM	0	19	73	0	11	0	12	27	37	7	0	0	50	5	2	0	1	12	3	0
07:15 AM	to 07:30 AM	0	15	85	0	14	0	14	34	33	3	0	0	54	7	1	0	0	9	9	4
07:30 AM	to 07:45 AM	0	12	108	0	30	1	17	63	56	12	0	2	70	7	3	0	0	24	6	3
07:45 AM	to 08:00 AM	0	16	84	0	23	2	15	64	44	15	0	0	53	7	5	0	0	14	12	3
08:00 AM	to 08:15 AM	0	17	100	0	15	0	20	62	32	34	0	1	58	9	6	0	0	15	4	3
08:15 AM	to 08:30 AM	0	15	115	1	35	1	24	72	26	16	0	0	67	6	1	0	0	20	6	6
08:30 AM	to 08:45 AM	0	27	77	1	28	2	26	52	40	33	0	0	55	11	0	0	0	23	10	3
08:45 AM	to 09:00 AM	0	18	78	0	22	1	12	31	48	30	0	1	59	5	3	0	0	21	5	4
09:00 AM	to 09:15 AM	0	13	70	0	19	2	8	21	27	35	0	1	61	7	1	0	0	14	6	7
09:15 AM	to 09:30 AM	0	18	81	0	18	1	15	35	35	20	0	1	50	6	2	0	0	21	11	2
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		468				103	499				77	280				15	101				15
07:30 AM	to 08:30 AM	0	60	407	1		4	76	261	158		0	3	248	29		0	0	73	28	
Peak Hour Factor (PHF)	Overall **0.92**	U n/a	Left 0.88	Thru 0.88	Right 0.25	**SB 0.89**	U 0.50	Left 0.79	Thru 0.91	Right 0.71	**WB 0.91**	U n/a	Left 0.38	Thru 0.89	Right 0.81	**NB 0.89**	U n/a	Left n/a	Thru 0.76	Right 0.58	**EB 0.84**

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



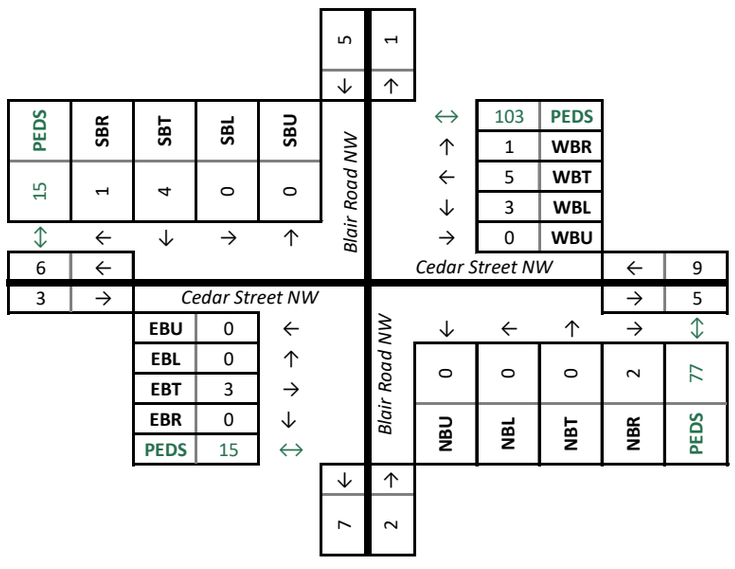
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Blair Road NW					Cedar Street NW					Blair Road NW					Cedar Street NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	1	0		0	4	0	1		0	0	4	3		0	0	0	1	
06:45 AM	to 07:00 AM	0	0	1	0		0	3	1	0		0	0	4	1		0	0	0	0	
07:00 AM	to 07:15 AM	0	1	2	0		0	4	1	2		0	0	2	2		0	0	0	0	
07:15 AM	to 07:30 AM	0	0	1	0		0	5	3	1		0	0	1	3		0	0	0	0	
07:30 AM	to 07:45 AM	0	0	1	0		0	5	1	2		0	0	3	3		0	0	0	0	
07:45 AM	to 08:00 AM	0	1	0	0		0	2	1	2		0	0	0	2		0	0	0	0	
08:00 AM	to 08:15 AM	0	0	1	0		0	4	1	2		0	0	3	5		0	0	0	0	
08:15 AM	to 08:30 AM	0	1	2	0		0	3	0	2		0	0	1	2		0	0	2	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	5	1	1		0	0	0	5		0	0	0	0	
08:45 AM	to 09:00 AM	0	0	2	0		0	2	2	1		0	0	2	2		0	0	0	0	
09:00 AM	to 09:15 AM	0	1	2	0		0	3	0	1		0	0	1	4		0	0	1	0	
09:15 AM	to 09:30 AM	0	0	2	0		0	2	0	1		0	0	0	3		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		6					25					19					2				
07:30 AM	to 08:30 AM	0	2	4	0		0	14	3	8		0	0	7	12		0	0	2	0	
Heavy Vehicle % (PHV):		0.0%	3.3%	1.0%	0.0%	**1.3%**	0.0%	18.4%	1.1%	5.1%	**5.0%**	0.0%	0.0%	2.8%	41.4%	**6.8%**	0.0%	0.0%	2.7%	0.0%	**2.0%**
INT. PEAK HR (HV ONLY)		6					28					19					0				
06:45 AM	to 07:45 AM	0	1	5	0		0	17	6	5		0	0	10	9		0	0	0	0	
Heavy Vehicle % (PHV):		0.0%	1.8%	1.5%	0.0%	**1.6%**	0.0%	31.5%	3.9%	3.3%	**7.8%**	0.0%	0.0%	4.6%	42.9%	**7.9%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Blair Road NW					Cedar Street NW					Blair Road NW					Cedar Street NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	0	0		0	1	0	0		0	0	0	1		0	0	1	0	
06:45 AM	to 07:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:00 AM	to 07:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:15 AM	to 07:30 AM	0	0	1	0		0	1	2	0		0	0	0	0		0	0	1	0	
07:30 AM	to 07:45 AM	0	0	1	0		0	0	1	0		0	0	0	1		0	0	0	0	
07:45 AM	to 08:00 AM	0	0	1	0		0	1	1	0		0	0	0	0		0	0	1	0	
08:00 AM	to 08:15 AM	0	0	1	1		0	1	1	0		0	0	0	0		0	0	0	0	
08:15 AM	to 08:30 AM	0	0	1	0		0	1	2	1		0	0	0	1		0	0	2	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	0	0	0		0	0	0	1		0	0	1	0	
08:45 AM	to 09:00 AM	0	0	0	0		0	0	0	0		0	0	0	2		0	0	1	1	
09:00 AM	to 09:15 AM	0	0	0	0		0	1	0	0		0	0	0	0		0	0	1	0	
09:15 AM	to 09:30 AM	0	0	0	0		0	0	1	1		0	0	0	0		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		5					9					2					3				
07:30 AM	to 08:30 AM	0	0	4	1		0	3	5	1		0	0	0	2		0	0	3	0	
INT. PEAK HR (BIKES)		5					9					2					3				
07:30 AM	to 08:30 AM	0	0	4	1		0	3	5	1		0	0	0	2		0	0	3	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

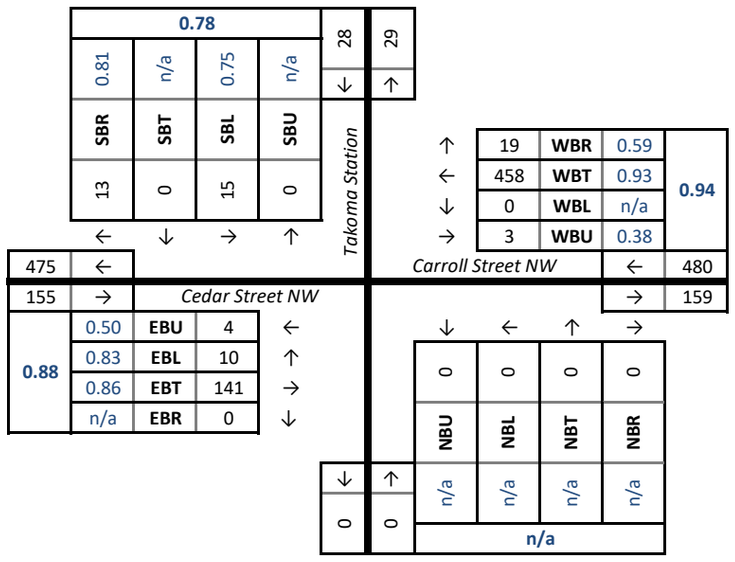
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:45 AM to 08:45 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Takoma Station/ & Carroll Street NW/Cedar Street NW

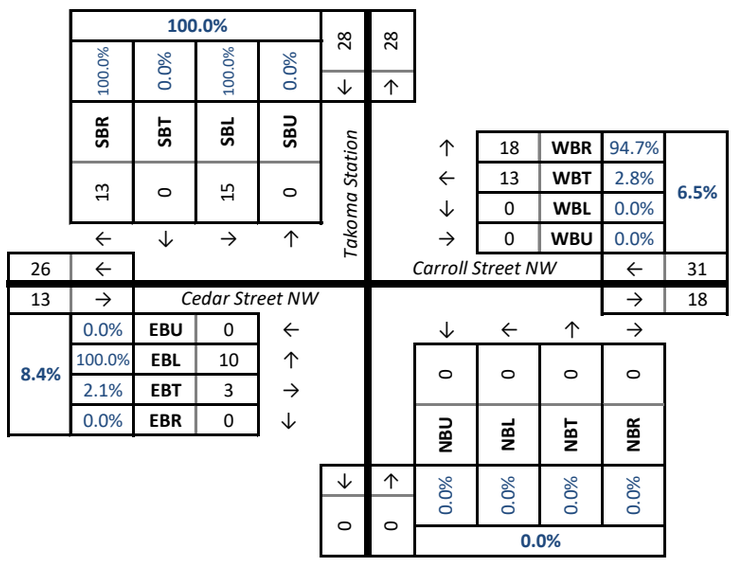
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Takoma Station					Carroll Street NW										Cedar Street NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	4	0	3	40	0	0	56	9	0	0	0	0	0	0	0	3	22	0	2
06:45 AM	to 07:00 AM	0	5	0	3	25	1	0	65	6	1	0	0	0	0	0	0	1	19	0	15
07:00 AM	to 07:15 AM	0	1	0	4	29	1	0	73	5	0	0	0	0	0	0	1	2	31	0	10
07:15 AM	to 07:30 AM	0	6	0	4	38	2	0	92	11	0	0	0	0	0	0	0	3	29	0	16
07:30 AM	to 07:45 AM	0	5	0	4	24	0	0	115	4	0	0	0	0	0	0	2	3	28	0	17
07:45 AM	to 08:00 AM	0	1	0	2	39	1	0	123	3	0	0	0	0	0	0	0	2	35	0	17
08:00 AM	to 08:15 AM	0	4	0	4	38	2	0	107	4	0	0	0	0	0	0	1	3	37	0	27
08:15 AM	to 08:30 AM	0	5	0	3	57	0	0	113	8	1	0	0	0	0	0	1	2	41	0	23
08:30 AM	to 08:45 AM	0	4	0	3	42	0	0	119	5	1	0	0	0	0	0	1	5	57	0	15
08:45 AM	to 09:00 AM	0	4	0	2	34	0	0	83	8	3	0	0	0	0	0	0	2	44	0	9
09:00 AM	to 09:15 AM	0	3	0	1	7	1	0	26	1	1	0	0	0	0	0	0	2	20	0	4
09:15 AM	to 09:30 AM	0	5	0	2	27	0	0	76	5	0	0	0	0	0	0	1	2	45	0	14
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		28				158	480				1	0				0	155				84
07:30 AM	to 08:30 AM	0	15	0	13		3	0	458	19		0	0	0	0		4	10	141	0	
Peak Hour Factor (PHF)	Overall **0.96**	U n/a	Left 0.75	Thru n/a	Right 0.81	**SB 0.78**	U 0.38	Left n/a	Thru 0.93	Right 0.59	**WB 0.94**	U n/a	Left n/a	Thru n/a	Right n/a	**NB n/a**	U 0.50	Left 0.83	Thru 0.86	Right n/a	**EB 0.88**

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



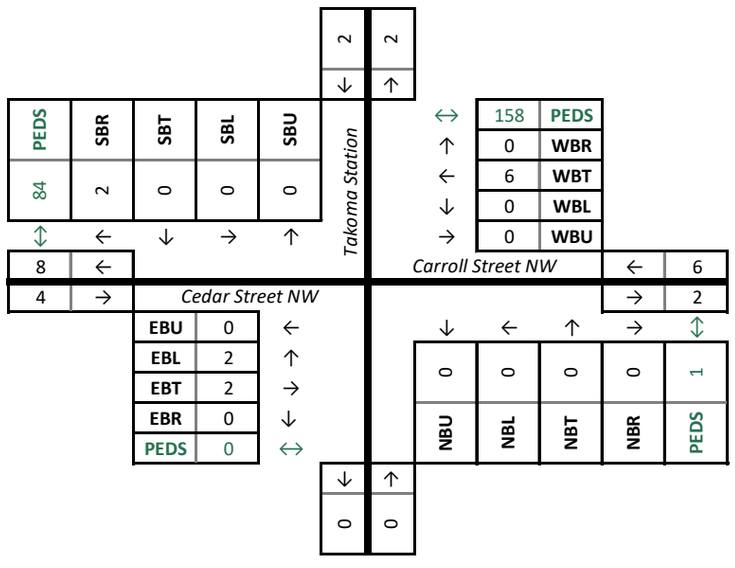
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Takoma Station					Carroll Street NW										Cedar Street NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	3	0	2		0	0	2	9		0	0	0	0		0	2	1	0	
06:45 AM	to 07:00 AM	0	5	0	3		0	0	2	6		0	0	0	0		0	1	0	0	
07:00 AM	to 07:15 AM	0	1	0	4		0	0	4	5		0	0	0	0		0	2	1	0	
07:15 AM	to 07:30 AM	0	6	0	4		0	0	3	11		0	0	0	0		0	3	0	0	
07:30 AM	to 07:45 AM	0	5	0	4		0	0	3	4		0	0	0	0		0	3	0	0	
07:45 AM	to 08:00 AM	0	1	0	2		0	0	4	3		0	0	0	0		0	2	1	0	
08:00 AM	to 08:15 AM	0	4	0	4		0	0	3	4		0	0	0	0		0	3	1	0	
08:15 AM	to 08:30 AM	0	5	0	3		0	0	3	7		0	0	0	0		0	2	1	0	
08:30 AM	to 08:45 AM	0	4	0	3		0	0	3	3		0	0	0	0		1	5	0	0	
08:45 AM	to 09:00 AM	0	4	0	2		0	0	3	8		0	0	0	0		0	2	0	0	
09:00 AM	to 09:15 AM	0	3	0	2		0	0	1	1		0	0	0	0		0	2	1	0	
09:15 AM	to 09:30 AM	0	5	0	2		0	0	1	5		0	0	0	0		0	2	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		28					31					0					13				
07:30 AM	to 08:30 AM	0	15	0	13		0	0	13	18		0	0	0	0		0	10	3	0	
Heavy Vehicle % (PHV):		0.0%	100.0%	0.0%	100.0%	**100.0%**	0.0%	0.0%	2.8%	94.7%	**6.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	2.1%	0.0%	**8.4%**
INT. PEAK HR (HV ONLY)		28					42					0					10				
06:30 AM	to 07:30 AM	0	15	0	13		0	0	11	31		0	0	0	0		0	8	2	0	
Heavy Vehicle % (PHV):		0.0%	93.8%	0.0%	92.9%	**93.3%**	0.0%	0.0%	3.8%	100.0%	**13.1%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	88.9%	2.0%	0.0%	**9.0%**

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Takoma Station					Carroll Street NW										Cedar Street NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	0	1		0	0	1	1		0	0	0	0		0	0	0	0	
06:45 AM	to 07:00 AM	0	0	0	1		0	0	0	0		0	0	0	0		0	1	0	0	
07:00 AM	to 07:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:15 AM	to 07:30 AM	0	1	0	1		0	0	1	0		0	0	0	0		0	0	0	0	
07:30 AM	to 07:45 AM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	0	0	
07:45 AM	to 08:00 AM	0	0	0	1		0	0	0	0		0	0	0	0		0	0	1	0	
08:00 AM	to 08:15 AM	0	0	0	1		0	0	1	0		0	0	0	0		0	1	0	0	
08:15 AM	to 08:30 AM	0	0	0	0		0	0	2	0		0	0	0	0		0	1	1	0	
08:30 AM	to 08:45 AM	0	0	0	1		0	0	1	0		0	0	0	0		0	2	0	0	
08:45 AM	to 09:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	4	0	
09:00 AM	to 09:15 AM	0	0	0	1		0	0	1	0		0	0	0	0		0	0	0	0	
09:15 AM	to 09:30 AM	0	1	0	0		0	0	3	0		0	0	0	0		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		2					6					0					4				
07:30 AM	to 08:30 AM	0	0	0	2		0	0	6	0		0	0	0	0		0	2	2	0	
INT. PEAK HR (BIKES)		2					4					0					9				
08:00 AM	to 09:00 AM	0	0	0	2		0	0	4	0		0	0	0	0		0	4	5	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

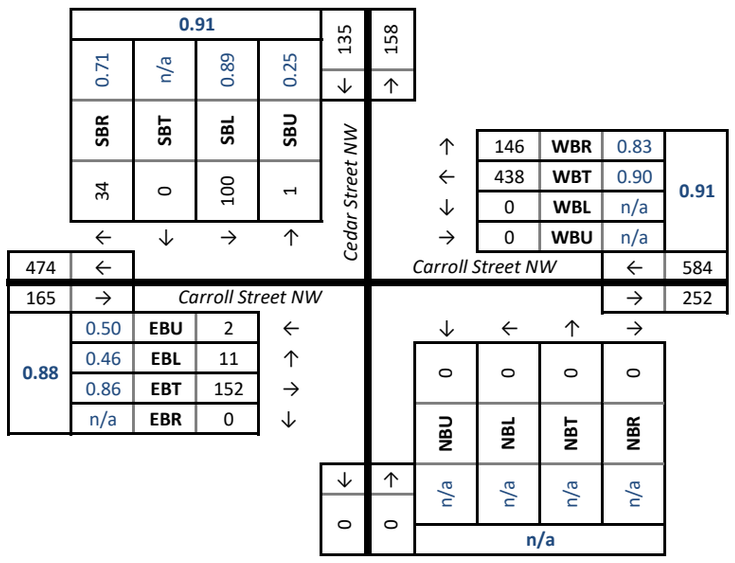
Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:45 AM to 08:45 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Cedar Street NW/ & Carroll Street NW

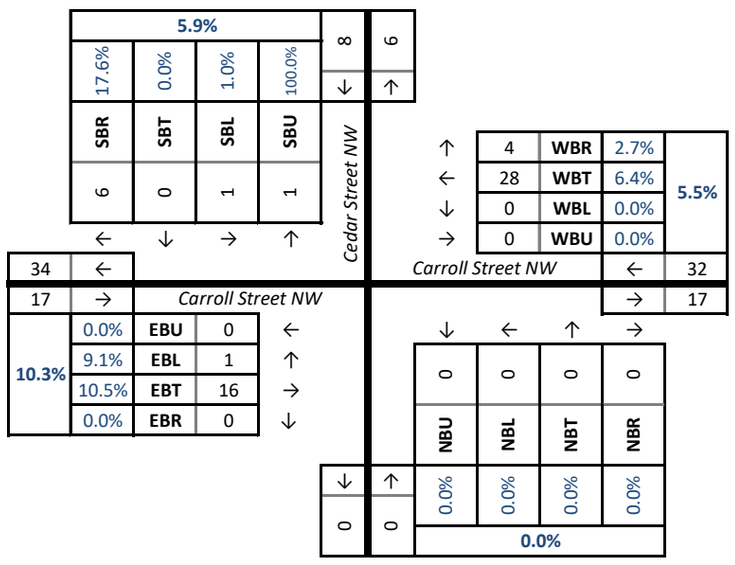
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Street NW					Carroll Street NW										Carroll Street NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM	to 06:45 AM	0	8	0	6	6	0	0	57	14	1	0	0	0	0	0	1	5	23	0	0
06:45 AM	to 07:00 AM	0	11	0	5	18	0	0	68	21	9	0	0	0	0	0	1	3	20	0	0
07:00 AM	to 07:15 AM	0	13	0	5	15	0	0	69	24	2	0	0	0	0	0	0	3	28	0	1
07:15 AM	to 07:30 AM	0	15	0	7	9	0	0	93	31	1	0	0	0	0	0	0	2	30	0	0
07:30 AM	to 07:45 AM	0	24	0	12	14	0	0	106	39	4	0	0	0	0	0	0	3	34	0	1
07:45 AM	to 08:00 AM	0	25	0	6	37	0	0	116	44	4	0	0	0	0	0	0	6	34	0	0
08:00 AM	to 08:15 AM	1	28	0	8	12	0	0	95	28	3	0	0	0	0	0	1	2	44	0	4
08:15 AM	to 08:30 AM	0	23	0	8	26	0	0	121	35	1	0	0	0	0	0	1	0	40	0	0
08:30 AM	to 08:45 AM	0	19	0	7	36	0	0	108	21	1	0	0	0	0	0	2	4	59	0	2
08:45 AM	to 09:00 AM	0	23	0	5	22	0	0	88	33	0	0	0	0	0	0	0	2	46	0	0
09:00 AM	to 09:15 AM	0	20	0	0	16	0	0	59	26	3	0	0	0	0	0	2	1	33	0	0
09:15 AM	to 09:30 AM	0	21	0	8	22	0	0	77	20	3	0	0	0	0	0	2	3	45	0	2
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		135				89	584				12	0				0	165				5
07:30 AM	to 08:30 AM	1	100	0	34		0	0	438	146		0	0	0	0		2	11	152	0	
Peak Hour Factor (PHF)	Overall 0.96	U 0.25	Left 0.89	Thru n/a	Right 0.71	**SB 0.91**	U n/a	Left n/a	Thru 0.90	Right 0.83	**WB 0.91**	U n/a	Left n/a	Thru n/a	Right n/a	**NB n/a**	U 0.50	Left 0.46	Thru 0.86	Right n/a	**EB 0.88**

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



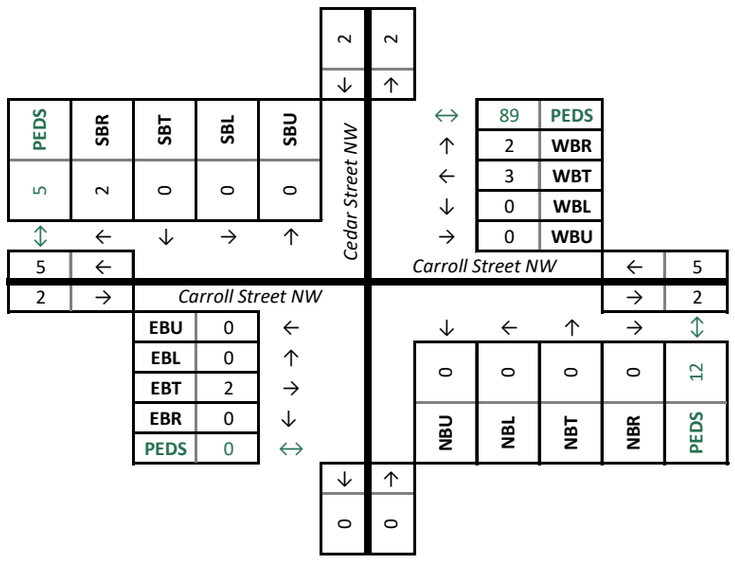
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Street NW					Carroll Street NW										Carroll Street NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	1	0	3		0	0	8	1		0	0	0	0		0	0	4	0	
06:45 AM	to 07:00 AM	0	2	0	2		0	0	6	2		0	0	0	0		0	0	5	0	
07:00 AM	to 07:15 AM	0	1	0	1		0	0	6	2		0	0	0	0		0	0	2	0	
07:15 AM	to 07:30 AM	0	0	0	3		0	0	10	0		0	0	0	0		0	0	4	0	
07:30 AM	to 07:45 AM	0	0	0	3		0	0	5	1		0	0	0	0		0	0	7	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	8	3		0	0	0	0		0	0	1	0	
08:00 AM	to 08:15 AM	1	1	0	1		0	0	7	0		0	0	0	0		0	1	3	0	
08:15 AM	to 08:30 AM	0	0	0	2		0	0	8	0		0	0	0	0		0	0	5	0	
08:30 AM	to 08:45 AM	0	1	0	0		0	0	7	0		0	0	0	0		0	0	3	0	
08:45 AM	to 09:00 AM	0	1	0	3		0	0	7	0		0	0	0	0		0	0	5	0	
09:00 AM	to 09:15 AM	0	0	0	0		0	0	4	0		0	0	0	0		0	0	6	0	
09:15 AM	to 09:30 AM	0	0	0	1		0	0	5	0		0	0	0	0		0	0	5	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		8					32					0					17				
07:30 AM	to 08:30 AM	1	1	0	6		0	0	28	4		0	0	0	0		0	1	16	0	
Heavy Vehicle % (PHV):		100.0%	1.0%	0.0%	17.6%	**5.9%**	0.0%	0.0%	6.4%	2.7%	**5.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	9.1%	10.5%	0.0%	**10.3%**
INT. PEAK HR (HV ONLY)		13					35					0					15				
06:30 AM	to 07:30 AM	0	4	0	9		0	0	30	5		0	0	0	0		0	0	15	0	
Heavy Vehicle % (PHV):		0.0%	8.5%	0.0%	39.1%	**18.6%**	0.0%	0.0%	10.5%	5.6%	**9.3%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	14.9%	0.0%	**12.9%**

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Street NW					Carroll Street NW										Carroll Street NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	1	0	0		0	0	1	0		0	0	0	0		0	0	0	0	
06:45 AM	to 07:00 AM	0	1	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:00 AM	to 07:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:15 AM	to 07:30 AM	0	0	0	1		0	0	2	0		0	0	0	0		0	0	0	0	
07:30 AM	to 07:45 AM	0	0	0	2		0	0	0	0		0	0	0	0		0	0	0	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	0	1		0	0	0	0		0	0	1	0	
08:00 AM	to 08:15 AM	0	0	0	0		0	0	1	1		0	0	0	0		0	0	0	0	
08:15 AM	to 08:30 AM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	1	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	0	0	
08:45 AM	to 09:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	3	0	
09:00 AM	to 09:15 AM	0	0	0	0		0	0	1	1		0	0	0	0		0	0	0	0	
09:15 AM	to 09:30 AM	0	0	0	2		0	0	2	0		0	0	0	0		0	0	0	0	
09:30 AM	to 09:45 AM																				
09:45 AM	to 10:00 AM																				
10:00 AM	to 10:15 AM																				
10:15 AM	to 10:30 AM																				
10:30 AM	to 10:45 AM																				
10:45 AM	to 11:00 AM																				
11:00 AM	to 11:15 AM																				
11:15 AM	to 11:30 AM																				
SYSTEM PEAK HR (VEH.)		2					5					0					2				
07:30 AM	to 08:30 AM	0	0	0	2		0	0	3	2		0	0	0	0		0	0	2	0	
INT. PEAK HR (BIKES)		2					5					0					3				
08:30 AM	to 09:30 AM	0	0	0	2		0	0	4	1		0	0	0	0		0	0	3	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developn
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 08:00 AM to 09:00 AM
System Peak Hour (all vehicles): 07:30 AM to 08:30 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Maple Street NW & Carroll Street NW

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Maple Street NW					Carroll Street NW					Maple Street NW					Carroll Street NW				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM to 06:45 AM	0	0	5	2	3	0	7	68	0	0	0	1	0	0	3	0	2	23	2	0
06:45 AM to 07:00 AM	0	2	4	6	11	0	2	74	3	1	0	4	1	5	5	0	3	27	5	6
07:00 AM to 07:15 AM	0	1	4	6	8	0	5	91	1	1	0	3	1	1	1	0	0	32	1	2
07:15 AM to 07:30 AM	0	3	2	13	6	0	5	83	0	0	0	8	0	2	4	0	1	43	1	4
07:30 AM to 07:45 AM	0	5	5	9	8	0	5	133	0	3	0	2	1	2	2	1	3	45	3	6
07:45 AM to 08:00 AM	0	5	2	3	14	0	1	144	3	4	0	7	1	4	3	0	2	56	5	3
08:00 AM to 08:15 AM	0	1	7	8	7	0	5	125	5	1	0	2	1	5	5	0	1	62	2	2
08:15 AM to 08:30 AM	0	8	4	9	19	0	4	135	5	2	0	10	5	4	2	0	4	63	4	8
08:30 AM to 08:45 AM	0	2	7	5	17	0	7	100	4	3	0	16	6	5	5	0	2	68	2	3
08:45 AM to 09:00 AM	0	6	8	4	12	0	3	117	9	7	0	8	7	3	1	0	2	69	2	12
09:00 AM to 09:15 AM	0	3	2	8	10	0	4	69	6	3	0	7	7	7	5	0	5	47	3	1
09:15 AM to 09:30 AM	0	9	1	4	8	0	3	84	4	0	0	9	3	3	3	0	0	63	3	5
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
SYSTEM PEAK HR (VEH.)	66				48	565				10	44				12	251				19
07:30 AM to 08:30 AM	0	19	18	29		0	15	537	13		0	21	8	15		1	10	226	14	
Peak Hour Factor (PHF) Overall **0.91**	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	n/a	0.59	0.64	0.81	**0.79**	n/a	0.75	0.93	0.65	**0.95**	n/a	0.53	0.40	0.75	**0.58**	0.25	0.63	0.90	0.70	**0.88**

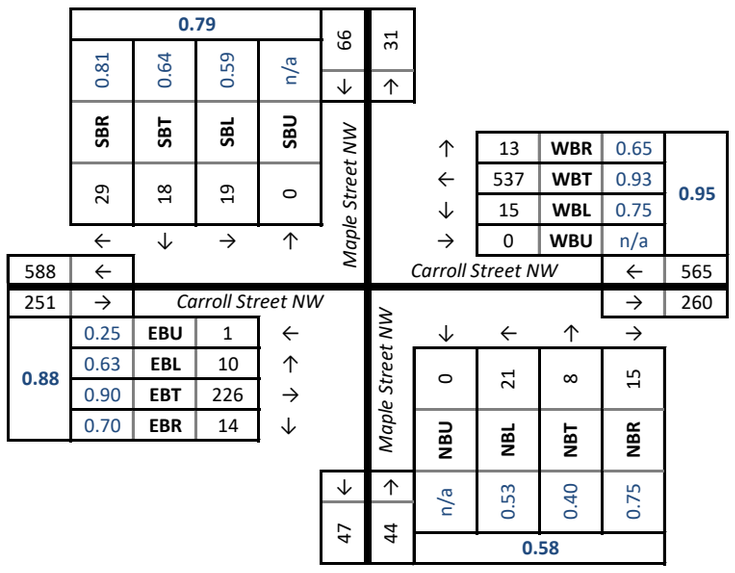
HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Maple Street NW				Carroll Street NW				Maple Street NW				Carroll Street NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	7	0
06:45 AM to 07:00 AM	0	0	0	1	0	1	5	0	0	0	0	0	0	1	4	0
07:00 AM to 07:15 AM	0	0	0	0	0	0	10	0	0	1	0	0	0	0	4	0
07:15 AM to 07:30 AM	0	0	0	1	0	0	7	0	0	0	0	0	0	0	3	0
07:30 AM to 07:45 AM	0	0	0	1	0	1	4	0	0	0	0	0	0	1	5	0
07:45 AM to 08:00 AM	0	0	0	0	0	0	9	0	0	1	0	0	0	0	3	0
08:00 AM to 08:15 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	5	0
08:15 AM to 08:30 AM	0	1	0	1	0	1	6	0	0	0	0	1	0	1	4	0
08:30 AM to 08:45 AM	0	0	0	0	0	1	4	0	0	1	0	0	0	0	4	0
08:45 AM to 09:00 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	6	0
09:00 AM to 09:15 AM	0	0	0	2	0	1	4	0	0	0	0	0	0	2	5	1
09:15 AM to 09:30 AM	0	1	0	0	0	0	5	0	0	0	0	0	0	0	5	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	3				27				2				19			
07:30 AM to 08:30 AM	0	1	0	2	0	2	25	0	0	1	0	1	0	2	17	0
Heavy Vehicle % (PHV):	0.0%	5.3%	0.0%	6.9% **4.5%**	0.0%	13.3%	4.7%	0.0% **4.8%**	0.0%	4.8%	0.0%	6.7% **4.5%**	0.0%	20.0%	7.5%	0.0% **7.6%**
INT. PEAK HR (HV ONLY)	2				29				1				19			
06:30 AM to 07:30 AM	0	0	0	2	0	1	28	0	0	1	0	0	0	1	18	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	7.4% **4.2%**	0.0%	5.3%	8.9%	0.0% **8.6%**	0.0%	6.3%	0.0%	0.0% **3.8%**	0.0%	16.7%	14.4%	0.0% **13.6%**

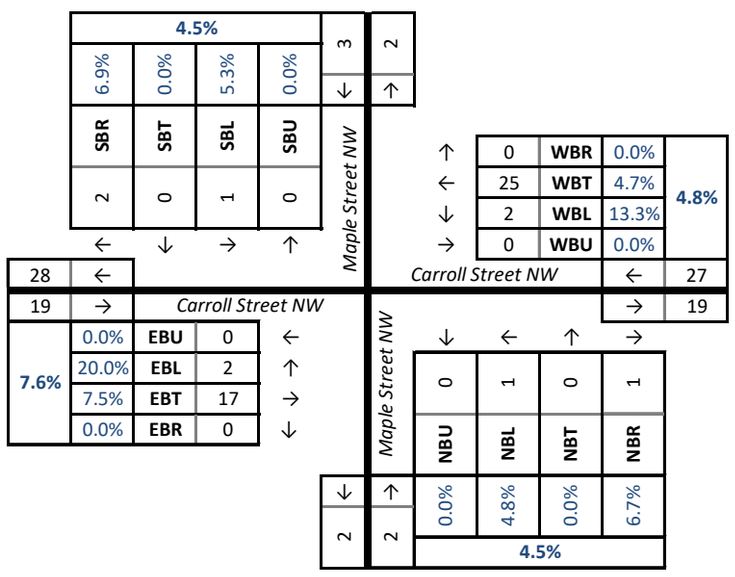
BICYCLES

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Maple Street NW				Carroll Street NW				Maple Street NW				Carroll Street NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
07:15 AM to 07:30 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
07:30 AM to 07:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:45 AM to 08:00 AM	0	0	2	0	0	0	0	0	0	1	1	0	0	0	1	0
08:00 AM to 08:15 AM	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0
08:15 AM to 08:30 AM	0	1	2	0	0	0	1	0	0	0	1	1	0	0	1	0
08:30 AM to 08:45 AM	0	0	3	1	0	0	0	0	0	0	1	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	1	1	0	0	0	0	0	0	1	0	0	0	3	0
09:00 AM to 09:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
09:15 AM to 09:30 AM	0	0	2	0	0	1	3	0	0	0	0	0	0	0	1	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	7				3				4				2			
07:30 AM to 08:30 AM	0	1	5	1	0	0	3	0	0	1	2	1	0	0	2	0
INT. PEAK HR (BIKES)	11				2				4				4			
08:00 AM to 09:00 AM	0	1	7	3	0	0	2	0	0	0	3	1	0	0	4	0

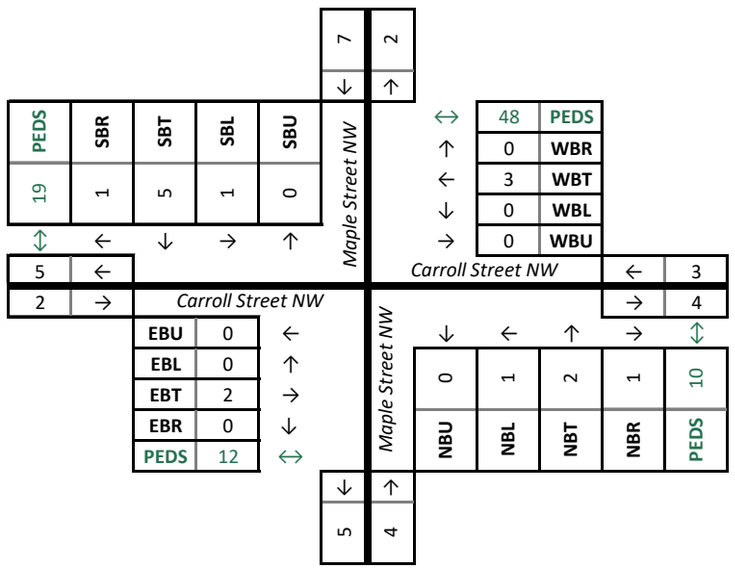
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

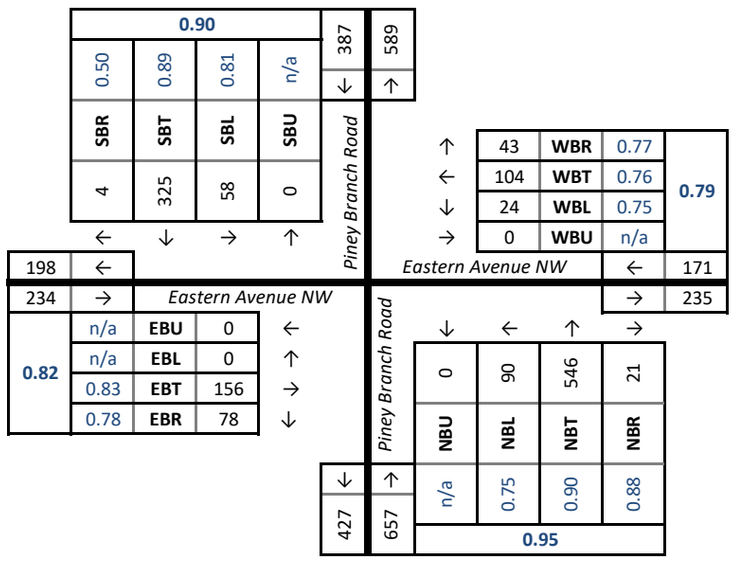
Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 05:00 PM to 06:00 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Piney Branch Road & Eastern Avenue NW

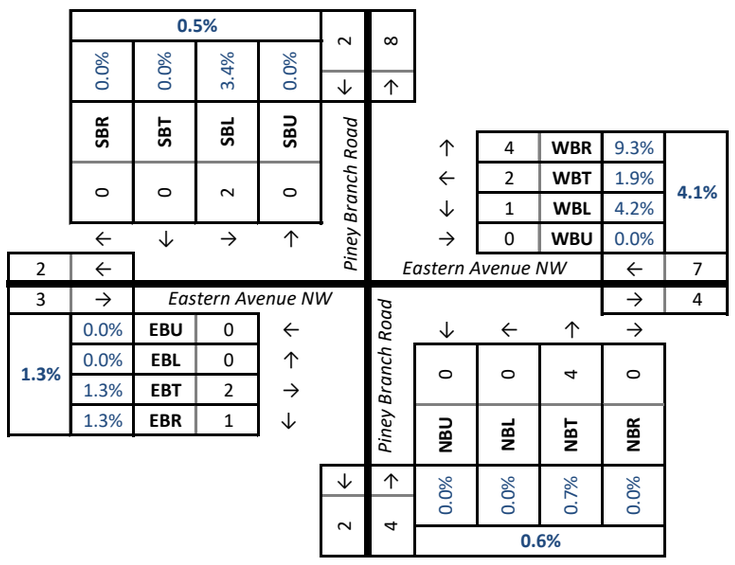
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Piney Branch Road					Eastern Avenue NW					Piney Branch Road					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM	to 04:15 PM	0	15	60	0	0	0	2	24	8	0	0	23	153	6	1	0	0	49	9	1
04:15 PM	to 04:30 PM	0	14	71	1	4	0	9	18	8	0	0	40	123	8	1	0	2	46	19	0
04:30 PM	to 04:45 PM	0	8	83	0	1	0	5	29	12	0	0	30	119	4	4	0	0	33	17	0
04:45 PM	to 05:00 PM	0	10	91	0	2	0	4	27	13	1	0	20	117	6	4	0	0	43	25	0
05:00 PM	to 05:15 PM	0	18	89	1	2	0	6	34	14	0	0	25	142	4	3	0	0	37	18	1
05:15 PM	to 05:30 PM	0	18	69	2	7	0	6	19	8	0	0	15	151	5	1	0	0	47	24	3
05:30 PM	to 05:45 PM	0	12	76	1	4	0	8	24	8	0	0	30	136	6	6	0	0	29	11	0
05:45 PM	to 06:00 PM	1	16	103	0	3	0	5	26	14	0	1	20	144	2	5	0	0	27	13	2
06:00 PM	to 06:15 PM	0	10	76	0	4	0	6	33	16	1	0	10	127	6	3	0	2	38	24	1
06:15 PM	to 06:30 PM	0	12	75	1	6	0	3	16	6	0	0	14	129	10	4	0	0	32	19	3
06:30 PM	to 06:45 PM	0	12	85	1	4	0	4	15	9	1	0	9	145	5	4	0	1	32	18	4
06:45 PM	to 07:00 PM	0	11	90	0	4	0	6	24	14	1	0	19	139	4	6	0	1	34	12	2
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		387				15	171				1	657				14	234				4
04:45 PM	to 05:45 PM	0	58	325	4		0	24	104	43		0	90	546	21		0	0	156	78	
Peak Hour Factor (PHF)	Overall	U	Left	Thru	Right	SB	U	Left	Thru	Right	WB	U	Left	Thru	Right	NB	U	Left	Thru	Right	EB
	0.93	n/a	0.81	0.89	0.50	0.90	n/a	0.75	0.76	0.77	0.79	n/a	0.75	0.90	0.88	0.95	n/a	n/a	0.83	0.78	0.82

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



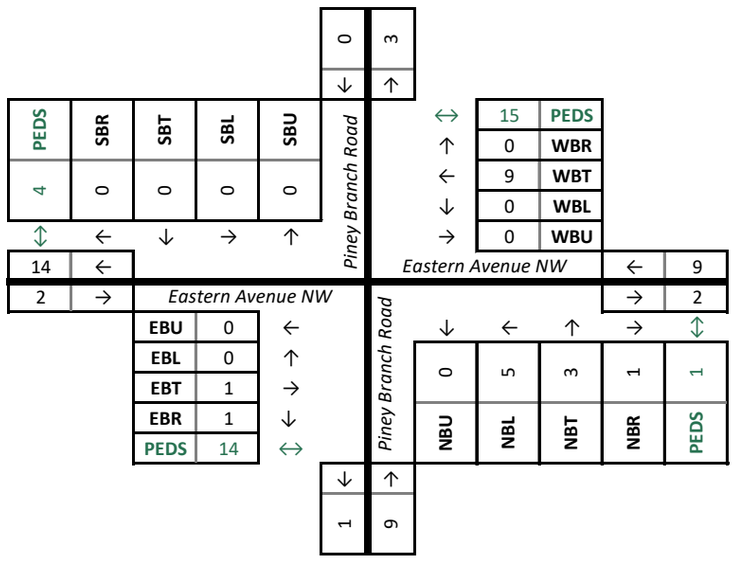
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Piney Branch Road				Eastern Avenue NW				Piney Branch Road				Eastern Avenue NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM	to 04:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
04:15 PM	to 04:30 PM	0	1	1	0	0	0	1	2	0	0	2	1	0	1	1	0
04:30 PM	to 04:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
04:45 PM	to 05:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:00 PM	to 05:15 PM	0	1	0	0	0	0	0	2	0	0	1	0	0	0	1	0
05:15 PM	to 05:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
05:30 PM	to 05:45 PM	0	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0
05:45 PM	to 06:00 PM	0	0	0	0	0	0	0	1	0	0	3	0	0	0	1	0
06:00 PM	to 06:15 PM	0	1	0	0	0	0	1	2	0	0	2	1	0	0	0	0
06:15 PM	to 06:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	to 06:45 PM	0	1	0	0	0	0	2	0	0	0	1	0	0	0	1	0
06:45 PM	to 07:00 PM	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0
07:00 PM	to 07:15 PM																
07:15 PM	to 07:30 PM																
07:30 PM	to 07:45 PM																
07:45 PM	to 08:00 PM																
08:00 PM	to 08:15 PM																
08:15 PM	to 08:30 PM																
08:30 PM	to 08:45 PM																
08:45 PM	to 09:00 PM																
SYSTEM PEAK HR (VEH.)		2				7				4				3			
04:45 PM	to 05:45 PM	0	2	0	0	0	1	2	4	0	0	4	0	0	0	2	1
Heavy Vehicle % (PHV):		0.0%	3.4%	0.0%	0.0%	0.0%	4.2%	1.9%	9.3%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	1.3%	1.3%
		0.5%				**4.1%**				**0.6%**				**1.3%**			
INT. PEAK HR (HV ONLY)		4				7				5				4			
04:15 PM	to 05:15 PM	0	2	2	0	0	0	2	5	0	0	4	1	0	1	2	1
Heavy Vehicle % (PHV):		0.0%	4.0%	0.6%	0.0%	0.0%	0.0%	1.9%	10.6%	0.0%	0.0%	0.8%	4.5%	0.0%	50.0%	1.3%	1.3%
		1.0%				**3.9%**				**0.8%**				**1.7%**			

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Piney Branch Road				Eastern Avenue NW				Piney Branch Road				Eastern Avenue NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM	to 04:15 PM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0
04:15 PM	to 04:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1
04:30 PM	to 04:45 PM	0	0	0	0	0	0	0	1	0	2	0	1	0	0	2	0
04:45 PM	to 05:00 PM	0	0	0	0	0	0	4	0	0	0	1	0	0	0	1	1
05:00 PM	to 05:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
05:15 PM	to 05:30 PM	0	0	0	0	0	0	3	0	0	2	1	0	0	0	0	0
05:30 PM	to 05:45 PM	0	0	0	0	0	0	2	0	0	1	1	1	0	0	0	0
05:45 PM	to 06:00 PM	0	0	1	0	0	0	1	0	0	3	0	0	0	0	1	1
06:00 PM	to 06:15 PM	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0
06:15 PM	to 06:30 PM	0	0	0	0	0	1	3	0	0	1	2	1	0	0	2	1
06:30 PM	to 06:45 PM	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0
06:45 PM	to 07:00 PM	0	0	0	0	0	0	2	0	0	0	0	2	0	0	1	0
07:00 PM	to 07:15 PM																
07:15 PM	to 07:30 PM																
07:30 PM	to 07:45 PM																
07:45 PM	to 08:00 PM																
08:00 PM	to 08:15 PM																
08:15 PM	to 08:30 PM																
08:30 PM	to 08:45 PM																
08:45 PM	to 09:00 PM																
SYSTEM PEAK HR (VEH.)		0				9				9				2			
04:45 PM	to 05:45 PM	0	0	0	0	0	0	9	0	0	5	3	1	0	0	1	1
INT. PEAK HR (BIKES)		2				8				12				6			
05:30 PM	to 06:30 PM	0	0	2	0	0	1	7	0	0	6	4	2	0	0	4	2

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Holly Avenue/Apartments Entrance & Eastern Avenue NW

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Holly Avenue					Eastern Avenue NW					Apartments Entrance					Eastern Avenue NW				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM	0	2	0	3	0	0	0	34	1	0	0	0	0	1	1	0	5	68	0	2
04:15 PM to 04:30 PM	0	0	0	3	2	0	0	31	0	2	0	0	0	0	2	0	5	61	0	1
04:30 PM to 04:45 PM	0	0	0	7	0	0	1	37	0	3	0	0	0	1	5	0	5	41	0	0
04:45 PM to 05:00 PM	0	1	0	4	3	0	0	41	2	2	0	0	0	0	6	0	6	55	0	0
05:00 PM to 05:15 PM	0	2	0	6	1	0	0	55	2	1	0	0	0	0	2	0	5	44	0	0
05:15 PM to 05:30 PM	0	0	0	6	6	0	0	20	1	3	0	0	0	0	9	0	8	67	1	0
05:30 PM to 05:45 PM	0	1	0	5	0	0	0	41	1	1	0	1	0	0	6	0	4	39	1	0
05:45 PM to 06:00 PM	0	2	0	4	2	0	0	40	2	6	0	1	0	0	8	0	5	44	0	0
06:00 PM to 06:15 PM	0	1	0	3	3	0	0	47	3	1	0	0	0	0	6	0	5	45	0	0
06:15 PM to 06:30 PM	0	1	0	2	2	0	0	21	0	0	0	0	0	0	6	0	16	42	0	3
06:30 PM to 06:45 PM	0	2	0	2	1	0	0	30	2	1	0	1	0	0	4	0	5	43	0	0
06:45 PM to 07:00 PM	0	0	0	4	0	0	0	34	1	1	0	0	0	0	2	0	4	46	0	0
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	25				10	163				7	1				23	230				0
04:45 PM to 05:45 PM	0	4	0	21		0	0	157	6		0	1	0	0		0	23	205	2	
Peak Hour Factor (PHF) Overall **0.92**	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	n/a	0.50	n/a	0.88	**0.78**	n/a	n/a	0.71	0.75	**0.71**	n/a	0.25	n/a	n/a	**0.25**	n/a	0.72	0.76	0.50	**0.76**

HEAVY VEHICLES (FHWA 4+)

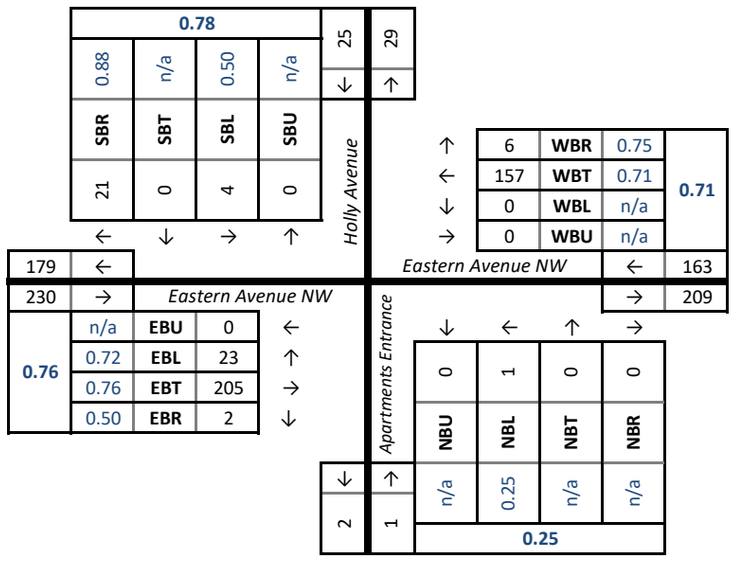
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Holly Avenue				Eastern Avenue NW				Apartments Entrance				Eastern Avenue NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	1	2	0
04:30 PM to 04:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
04:45 PM to 05:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
05:00 PM to 05:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
05:15 PM to 05:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:30 PM to 05:45 PM	0	0	0	1	0	0	4	0	0	0	0	0	0	0	1	0
05:45 PM to 06:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
06:15 PM to 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM to 06:45 PM	0	1	0	0	0	0	3	0	0	0	0	0	0	0	2	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)	1				8				0				3			
04:45 PM to 05:45 PM	0	0	0	1	0	0	8	0	0	0	0	0	0	0	3	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%
	4.0%				**4.9%**				**0.0%**				**1.3%**			
INT. PEAK HR (HV ONLY)	1				8				0				5			
05:15 PM to 06:15 PM	0	0	0	1	0	0	8	0	0	0	0	0	0	0	5	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%
	4.5%				**5.2%**				**0.0%**				**2.3%**			

BICYCLES

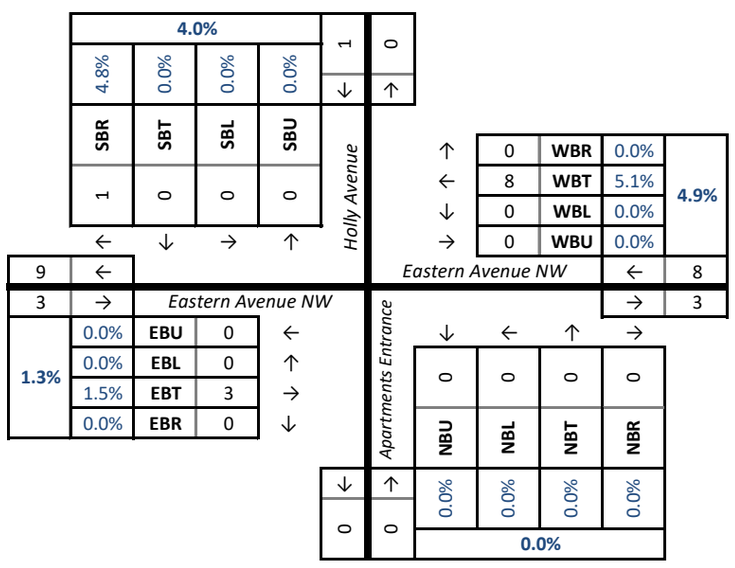
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Holly Avenue				Eastern Avenue NW				Apartments Entrance				Eastern Avenue NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM to 04:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
04:45 PM to 05:00 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0
05:00 PM to 05:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0
05:15 PM to 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM to 05:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
05:45 PM to 06:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
06:15 PM to 06:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
06:30 PM to 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)	2				5				0				3			
04:45 PM to 05:45 PM	0	0	0	2	0	0	5	0	0	0	0	0	0	1	2	0
INT. PEAK HR (BIKES)	0				8				0				2			
04:00 PM to 05:00 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	1	1	0

DATA COLLECTION NOTES :

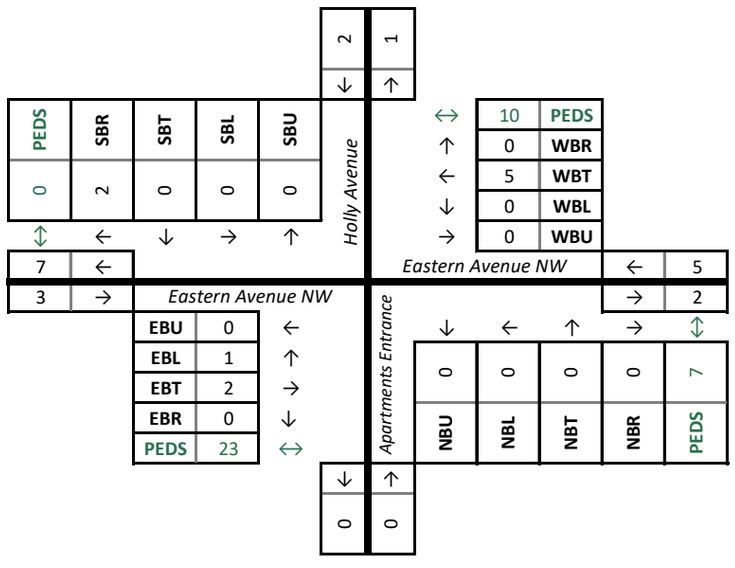
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

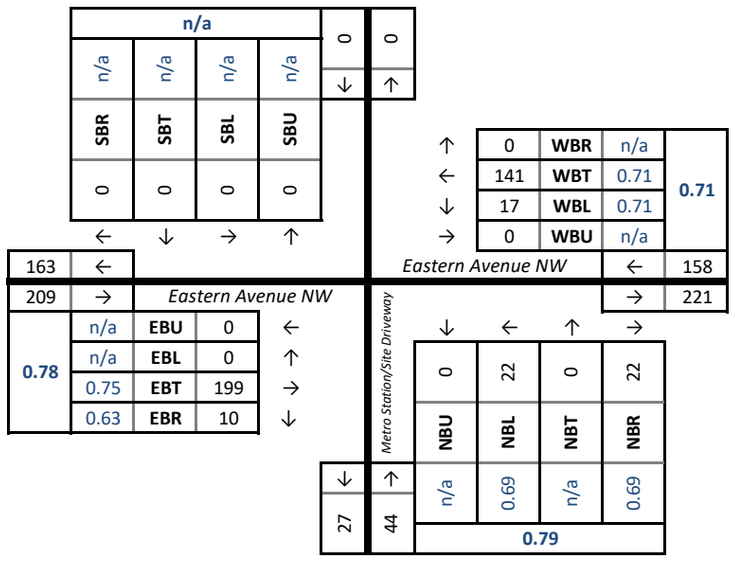
Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. /Metro Station/Site Driveway & Eastern Avenue NW

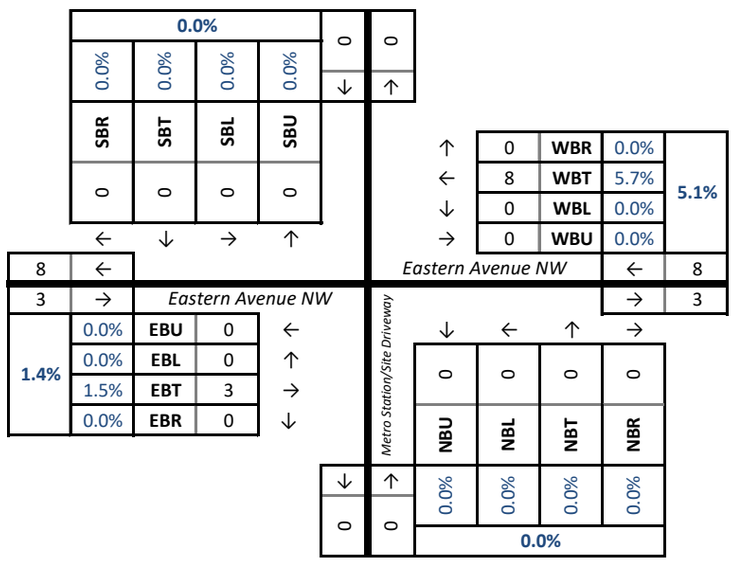
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Metro Station/Site Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM	to 04:15 PM	0	0	0	0	0	0	2	28	0	0	0	7	0	5	1	0	0	64	7	0
04:15 PM	to 04:30 PM	0	0	0	0	0	0	1	25	0	1	0	6	0	3	4	0	0	54	7	2
04:30 PM	to 04:45 PM	0	0	0	0	0	0	4	29	0	0	0	9	0	9	5	0	0	38	4	0
04:45 PM	to 05:00 PM	0	0	0	0	0	0	1	35	0	0	0	8	0	6	4	0	0	52	4	0
05:00 PM	to 05:15 PM	0	0	0	0	0	0	6	50	0	0	0	7	0	6	2	0	0	42	4	2
05:15 PM	to 05:30 PM	0	0	0	0	0	0	4	18	0	0	0	3	0	2	4	0	0	66	1	1
05:30 PM	to 05:45 PM	0	0	0	0	0	0	6	38	0	0	0	4	0	8	4	0	0	39	1	0
05:45 PM	to 06:00 PM	0	0	0	0	0	0	3	35	0	0	0	7	0	1	6	0	0	41	5	1
06:00 PM	to 06:15 PM	0	0	0	0	0	0	3	44	0	2	0	6	0	5	2	1	0	45	0	2
06:15 PM	to 06:30 PM	0	0	0	0	0	0	2	20	0	0	0	1	0	1	2	0	0	42	1	0
06:30 PM	to 06:45 PM	0	0	0	0	0	0	2	27	0	0	0	5	0	6	2	0	0	41	4	1
06:45 PM	to 07:00 PM	0	0	0	0	0	0	2	32	0	0	0	3	0	1	2	0	0	45	1	0
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		0				0	158				0	44				14	209				3
04:45 PM	to 05:45 PM	0	0	0	0		0	17	141	0		0	22	0	22		0	0	199	10	
Peak Hour Factor (PHF)	Overall 0.89	U n/a	Left n/a	Thru n/a	Right n/a	SB n/a	U n/a	Left 0.71	Thru 0.71	Right n/a	WB 0.71	U n/a	Left 0.69	Thru n/a	Right 0.69	NB 0.79	U n/a	Left n/a	Thru 0.75	Right 0.63	EB 0.78

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



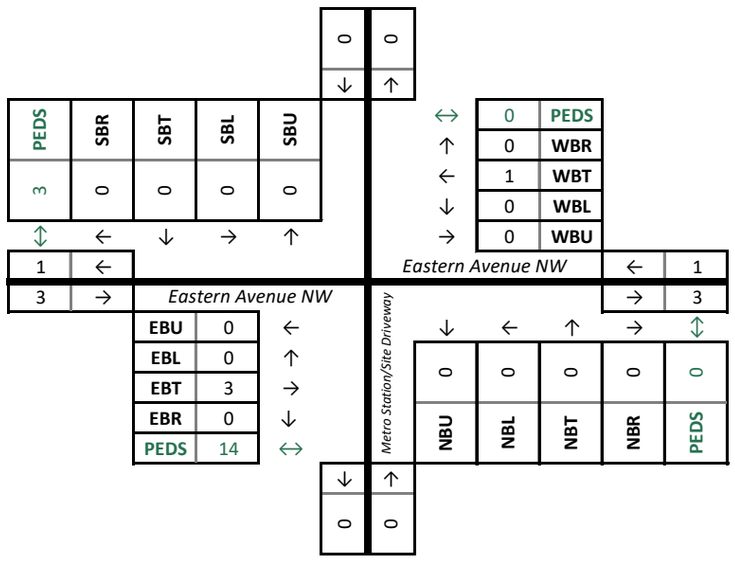
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Metro Station/Site Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM	to 04:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	0	
04:15 PM	to 04:30 PM	0	0	0	0		0	0	2	0		0	1	0	0		0	0	2	0	
04:30 PM	to 04:45 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	0	0	
04:45 PM	to 05:00 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	0	0	
05:00 PM	to 05:15 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	2	0	
05:15 PM	to 05:30 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	0	0	
05:30 PM	to 05:45 PM	0	0	0	0		0	0	4	0		0	0	0	0		0	0	1	0	
05:45 PM	to 06:00 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	2	0	
06:00 PM	to 06:15 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	2	0	
06:15 PM	to 06:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:30 PM	to 06:45 PM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	3	0	
06:45 PM	to 07:00 PM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	0	0	
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		0					8					0					3				
04:45 PM	to 05:45 PM	0	0	0	0		0	0	8	0		0	0	0	0		0	0	3	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	1.4%
INT. PEAK HR (HV ONLY)		0					8					0					5				
05:15 PM	to 06:15 PM	0	0	0	0		0	0	8	0		0	0	0	0		0	0	5	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	2.5%

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Metro Station/Site Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM	to 04:15 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	0	0	
04:15 PM	to 04:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
04:30 PM	to 04:45 PM	0	0	0	0		0	0	1	0		0	3	0	0		0	0	2	0	
04:45 PM	to 05:00 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	0	0	
05:00 PM	to 05:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0	
05:15 PM	to 05:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0	
05:30 PM	to 05:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	1	0	
05:45 PM	to 06:00 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	2	0	
06:00 PM	to 06:15 PM	0	0	0	0		0	0	2	0		0	1	0	0		0	0	2	0	
06:15 PM	to 06:30 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	0	0	
06:30 PM	to 06:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	0	
06:45 PM	to 07:00 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	1	0	
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		0					1					0					3				
04:45 PM	to 05:45 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	3	0	
INT. PEAK HR (BIKES)		0					4					1					6				
05:45 PM	to 06:45 PM	0	0	0	0		0	0	4	0		0	1	0	0		0	0	6	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

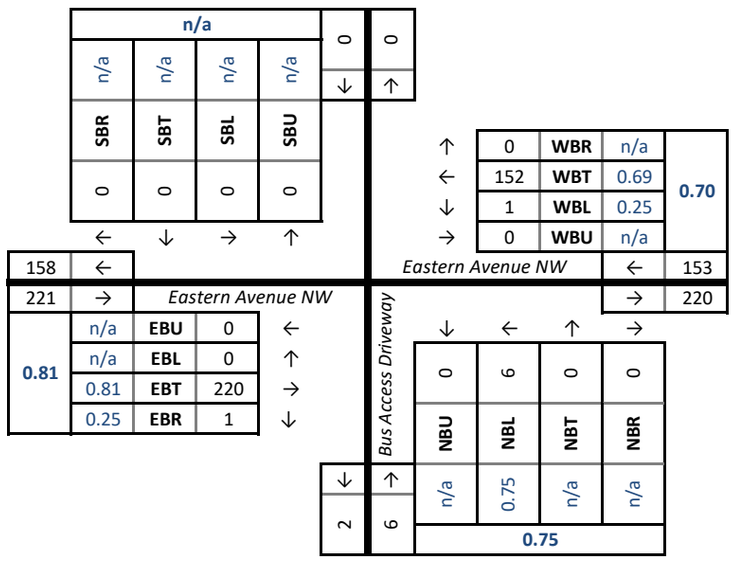
Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. /Bus Access Driveway & Eastern Avenue NW

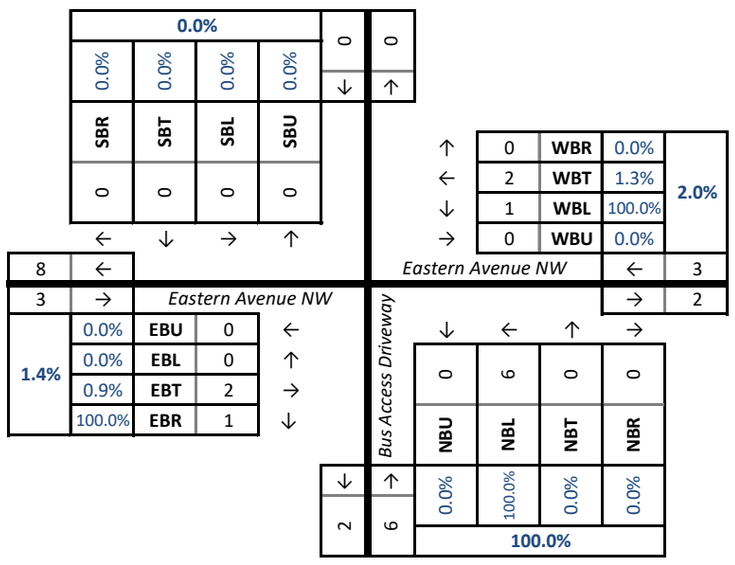
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Bus Access Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM		0	0	0	0	0	0	0	30	0	0	0	0	0	0	1	0	0	68	1	0
04:15 PM to 04:30 PM		0	0	0	0	0	0	0	24	0	0	0	2	0	0	1	0	0	56	1	1
04:30 PM to 04:45 PM		0	0	0	0	0	1	0	32	0	1	0	1	0	0	5	0	0	47	0	0
04:45 PM to 05:00 PM		0	0	0	0	0	0	1	34	0	0	0	2	0	0	1	0	0	58	0	0
05:00 PM to 05:15 PM		0	0	0	0	0	0	0	55	0	0	0	1	0	0	2	0	0	47	1	0
05:15 PM to 05:30 PM		0	0	0	0	0	0	0	21	0	0	0	1	0	0	1	0	0	68	0	0
05:30 PM to 05:45 PM		0	0	0	0	0	0	0	42	0	0	0	2	0	0	3	0	0	47	0	1
05:45 PM to 06:00 PM		0	0	0	0	0	0	0	37	0	0	0	1	0	0	6	0	0	41	1	0
06:00 PM to 06:15 PM		0	0	0	0	0	0	0	45	0	0	0	2	0	2	2	0	0	49	1	0
06:15 PM to 06:30 PM		0	0	0	0	0	1	0	22	0	0	0	0	0	0	1	0	0	43	0	1
06:30 PM to 06:45 PM		0	0	0	0	0	0	0	26	0	1	0	3	0	0	4	0	0	45	2	0
06:45 PM to 07:00 PM		0	0	0	0	0	0	0	31	0	0	0	3	0	0	0	0	0	46	0	0
07:00 PM to 07:15 PM																					
07:15 PM to 07:30 PM																					
07:30 PM to 07:45 PM																					
07:45 PM to 08:00 PM																					
08:00 PM to 08:15 PM																					
08:15 PM to 08:30 PM																					
08:30 PM to 08:45 PM																					
08:45 PM to 09:00 PM																					
SYSTEM PEAK HR (VEH.)		0				0	153				0	6				7	221				1
04:45 PM to 05:45 PM		0	0	0	0		0	1	152	0		0	6	0	0		0	0	220	1	
Peak Hour Factor (PHF)	Overall 0.91	U n/a	Left n/a	Thru n/a	Right n/a	SB n/a	U n/a	Left 0.25	Thru 0.69	Right n/a	WB 0.70	U n/a	Left 0.75	Thru n/a	Right n/a	NB 0.75	U n/a	Left n/a	Thru 0.81	Right 0.25	EB 0.81

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



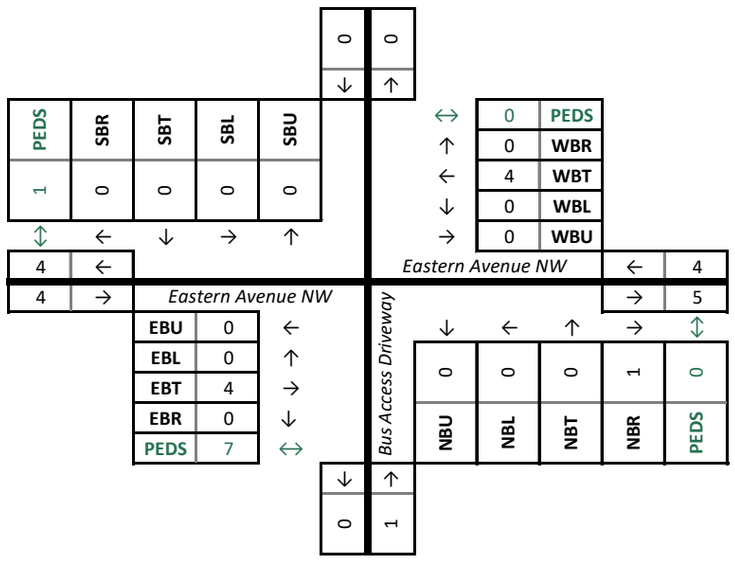
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:						Eastern Avenue NW					Bus Access Driveway					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM to 04:15 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	0	
04:15 PM to 04:30 PM		0	0	0	0		0	0	0	0		0	2	0	0		0	0	1	1	
04:30 PM to 04:45 PM		0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	0	
04:45 PM to 05:00 PM		0	0	0	0		0	1	0	0		0	2	0	0		0	0	0	0	
05:00 PM to 05:15 PM		0	0	0	0		0	0	0	0		0	1	0	0		0	0	1	1	
05:15 PM to 05:30 PM		0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	0	
05:30 PM to 05:45 PM		0	0	0	0		0	0	2	0		0	2	0	0		0	0	1	0	
05:45 PM to 06:00 PM		0	0	0	0		0	0	0	0		0	1	0	0		0	0	1	1	
06:00 PM to 06:15 PM		0	0	0	0		0	0	0	0		0	2	0	2		0	0	1	1	
06:15 PM to 06:30 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:30 PM to 06:45 PM		0	0	0	0		0	0	0	0		0	3	0	0		0	0	2	1	
06:45 PM to 07:00 PM		0	0	0	0		0	0	0	0		0	3	0	0		0	0	0	0	
07:00 PM to 07:15 PM																					
07:15 PM to 07:30 PM																					
07:30 PM to 07:45 PM																					
07:45 PM to 08:00 PM																					
08:00 PM to 08:15 PM																					
08:15 PM to 08:30 PM																					
08:30 PM to 08:45 PM																					
08:45 PM to 09:00 PM																					
SYSTEM PEAK HR (VEH.)		0					3					6					3				
04:45 PM to 05:45 PM		0	0	0	0		0	1	2	0		0	6	0	0		0	0	2	1	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	1.3%	0.0%	2.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.9%	100.0%	1.4%
INT. PEAK HR (HV ONLY)		0					2					8					5				
05:15 PM to 06:15 PM		0	0	0	0		0	0	2	0		0	6	0	2		0	0	3	2	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	1.4%	0.0%	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	1.5%	100.0%	2.4%

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:					Eastern Avenue NW				Bus Access Driveway				Eastern Avenue NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM		0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
04:15 PM to 04:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM to 04:45 PM		0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0
04:45 PM to 05:00 PM		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:00 PM to 05:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:15 PM to 05:30 PM		0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0
05:30 PM to 05:45 PM		0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
05:45 PM to 06:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00 PM to 06:15 PM		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
06:15 PM to 06:30 PM		0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
06:30 PM to 06:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45 PM to 07:00 PM		0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
07:00 PM to 07:15 PM																	
07:15 PM to 07:30 PM																	
07:30 PM to 07:45 PM																	
07:45 PM to 08:00 PM																	
08:00 PM to 08:15 PM																	
08:15 PM to 08:30 PM																	
08:30 PM to 08:45 PM																	
08:45 PM to 09:00 PM																	
SYSTEM PEAK HR (VEH.)		0				4				1				4			
04:45 PM to 05:45 PM		0	0	0	0	0	0	4	0	0	0	0	1	0	0	4	0
INT. PEAK HR (BIKES)		0				4				1				6			
05:15 PM to 06:15 PM		0	0	0	0	0	0	4	0	0	0	0	1	0	0	3	3

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

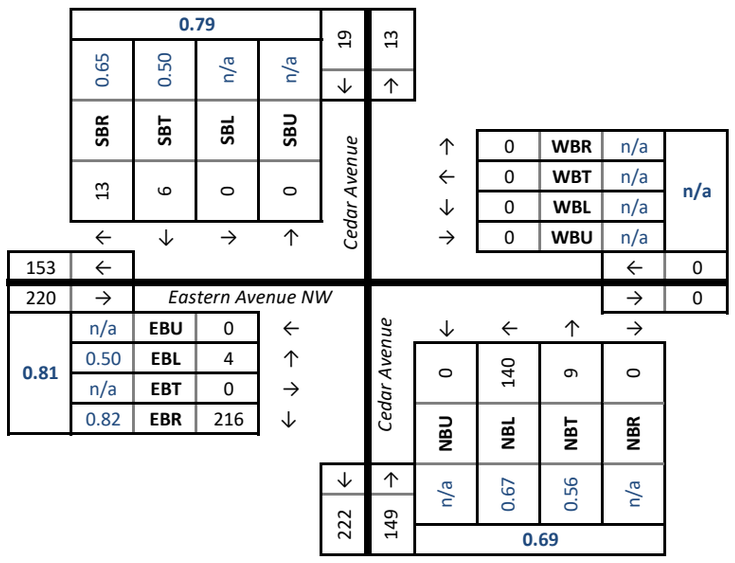
Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Cedar Avenue & /Eastern Avenue NW

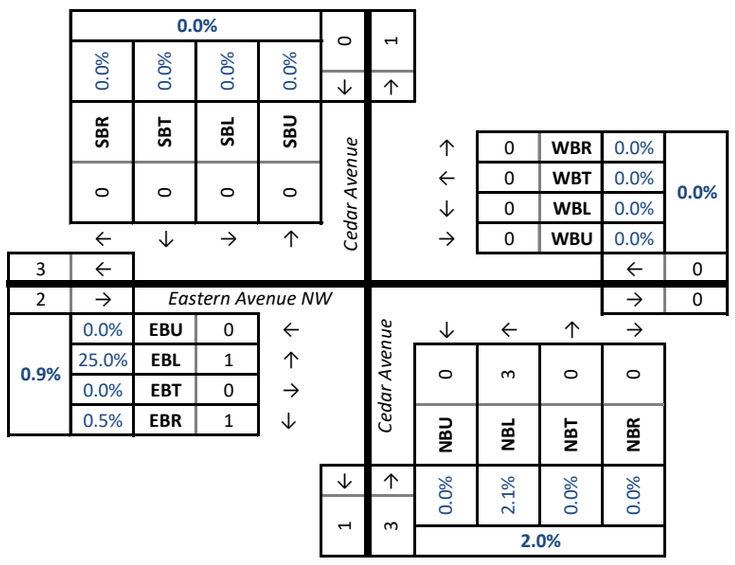
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Avenue										Cedar Avenue					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM		0	0	0	2	1	0	0	0	0	0	0	28	5	0	0	0	2	0	66	1
04:15 PM to 04:30 PM		0	0	1	0	1	0	0	0	0	0	0	24	2	0	0	0	0	0	56	6
04:30 PM to 04:45 PM		0	0	1	2	1	0	0	0	0	0	0	31	3	0	0	0	3	0	45	8
04:45 PM to 05:00 PM		0	0	3	2	5	0	0	0	0	0	0	33	1	0	0	0	0	0	58	4
05:00 PM to 05:15 PM		0	0	1	3	1	0	0	0	0	0	0	52	2	0	0	0	0	0	47	9
05:15 PM to 05:30 PM		0	0	1	5	4	0	0	0	0	0	0	16	4	0	0	0	2	0	66	4
05:30 PM to 05:45 PM		0	0	1	3	6	0	0	0	0	0	0	39	2	0	0	0	2	0	45	8
05:45 PM to 06:00 PM		0	0	1	4	3	0	0	0	0	0	0	33	6	0	0	0	1	0	40	8
06:00 PM to 06:15 PM		0	0	0	3	4	0	0	0	0	0	1	42	5	0	0	0	0	0	51	7
06:15 PM to 06:30 PM		0	0	4	1	3	0	0	0	0	0	0	22	3	0	0	0	0	0	44	7
06:30 PM to 06:45 PM		0	0	0	2	2	0	0	0	0	0	0	24	1	0	0	0	1	0	44	4
06:45 PM to 07:00 PM		0	0	1	1	1	0	0	0	0	0	0	30	1	0	0	0	1	0	45	6
07:00 PM to 07:15 PM																					
07:15 PM to 07:30 PM																					
07:30 PM to 07:45 PM																					
07:45 PM to 08:00 PM																					
08:00 PM to 08:15 PM																					
08:15 PM to 08:30 PM																					
08:30 PM to 08:45 PM																					
08:45 PM to 09:00 PM																					
SYSTEM PEAK HR (VEH.)		19				16	0				0	149				0	220				25
04:45 PM to 05:45 PM		0	0	6	13		0	0	0	0		0	140	9	0		0	4	0	216	
Peak Hour Factor (PHF)	Overall 0.92	U n/a	Left n/a	Thru 0.50	Right 0.65	SB 0.79	U n/a	Left n/a	Thru n/a	Right n/a	WB n/a	U n/a	Left 0.67	Thru 0.56	Right n/a	NB 0.69	U n/a	Left 0.50	Thru n/a	Right 0.82	EB 0.81

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



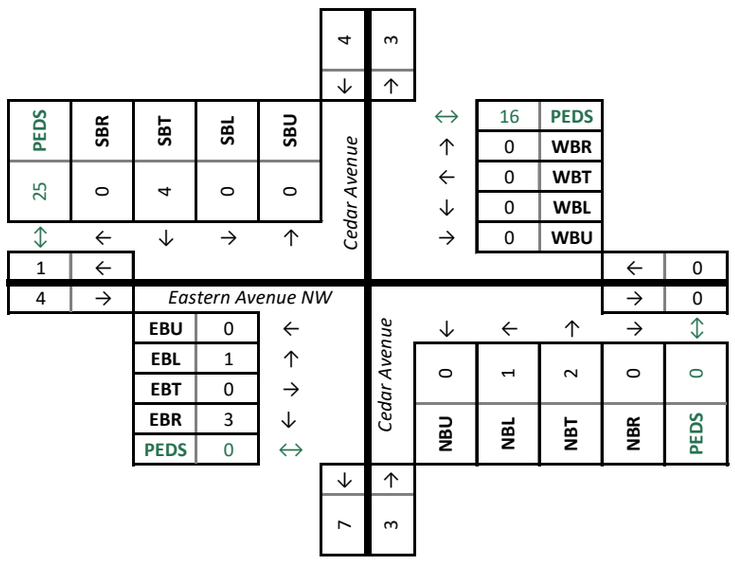
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Avenue										Cedar Avenue					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM to 04:15 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	2	
04:15 PM to 04:30 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1	
04:30 PM to 04:45 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
04:45 PM to 05:00 PM		0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	0	
05:00 PM to 05:15 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1	
05:15 PM to 05:30 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
05:30 PM to 05:45 PM		0	0	0	0		0	0	0	0		0	2	0	0		0	1	0	0	
05:45 PM to 06:00 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	1	0	0	
06:00 PM to 06:15 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	3	
06:15 PM to 06:30 PM		0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
06:30 PM to 06:45 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	1	0	1	
06:45 PM to 07:00 PM		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:00 PM to 07:15 PM																					
07:15 PM to 07:30 PM																					
07:30 PM to 07:45 PM																					
07:45 PM to 08:00 PM																					
08:00 PM to 08:15 PM																					
08:15 PM to 08:30 PM																					
08:30 PM to 08:45 PM																					
08:45 PM to 09:00 PM																					
SYSTEM PEAK HR (VEH.)		0					0					3					2				
04:45 PM to 05:45 PM		0	0	0	0		0	0	0	0		0	3	0	0		0	1	0	1	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	2.0%	0.0%	25.0%	0.0%	0.5%	0.9%
INT. PEAK HR (HV ONLY)		0					0					3					5				
05:30 PM to 06:30 PM		0	0	0	0		0	0	0	0		0	2	1	0		0	2	0	3	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	6.3%	0.0%	2.0%	0.0%	66.7%	0.0%	1.7%	2.7%

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Avenue										Cedar Avenue					Eastern Avenue NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM to 04:15 PM		0	0	1	1		0	0	0	0		0	2	6	0		0	0	0	0	
04:15 PM to 04:30 PM		0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
04:30 PM to 04:45 PM		0	0	0	0		0	0	0	0		0	1	1	0		0	1	0	0	
04:45 PM to 05:00 PM		0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
05:00 PM to 05:15 PM		0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	1	
05:15 PM to 05:30 PM		0	0	2	0		0	0	0	0		0	0	0	0		0	1	0	1	
05:30 PM to 05:45 PM		0	0	1	0		0	0	0	0		0	1	1	0		0	0	0	1	
05:45 PM to 06:00 PM		0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	0	
06:00 PM to 06:15 PM		0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:15 PM to 06:30 PM		0	0	0	0		0	0	0	0		0	3	0	0		0	1	0	1	
06:30 PM to 06:45 PM		0	0	0	0		0	0	0	0		0	0	1	0		0	1	0	0	
06:45 PM to 07:00 PM		0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	1	
07:00 PM to 07:15 PM																					
07:15 PM to 07:30 PM																					
07:30 PM to 07:45 PM																					
07:45 PM to 08:00 PM																					
08:00 PM to 08:15 PM																					
08:15 PM to 08:30 PM																					
08:30 PM to 08:45 PM																					
08:45 PM to 09:00 PM																					
SYSTEM PEAK HR (VEH.)		4					0					3					4				
04:45 PM to 05:45 PM		0	0	4	0		0	0	0	0		0	1	2	0		0	1	0	3	
INT. PEAK HR (BIKES)		3					0					12					1				
04:00 PM to 05:00 PM		0	0	2	1		0	0	0	0		0	3	9	0		0	1	0	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

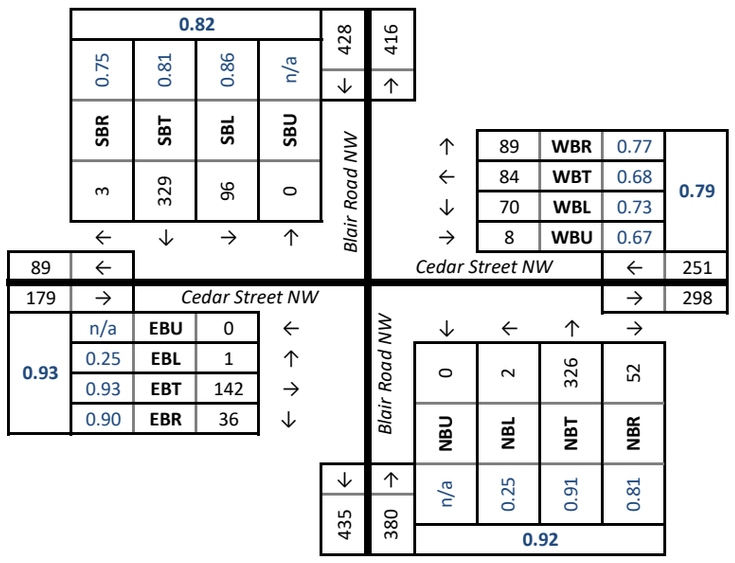
Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

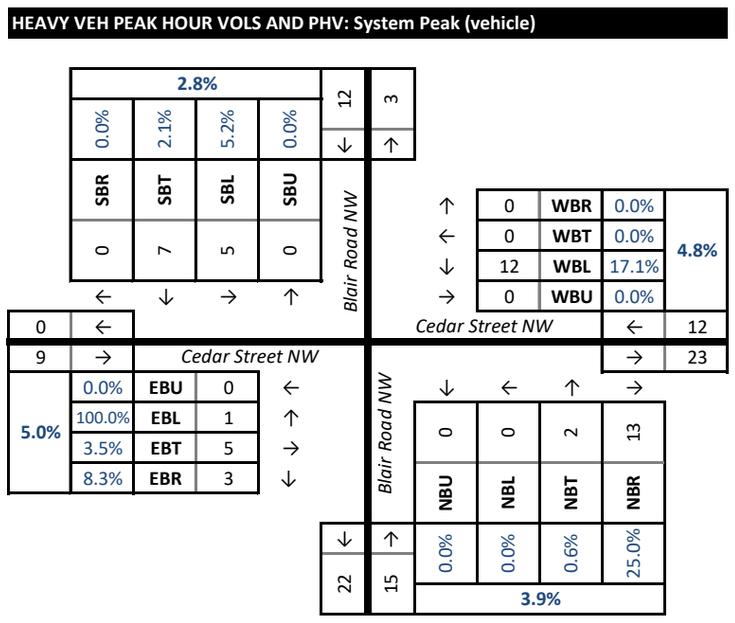
Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: **1. Blair Road NW & Cedar Street NW**

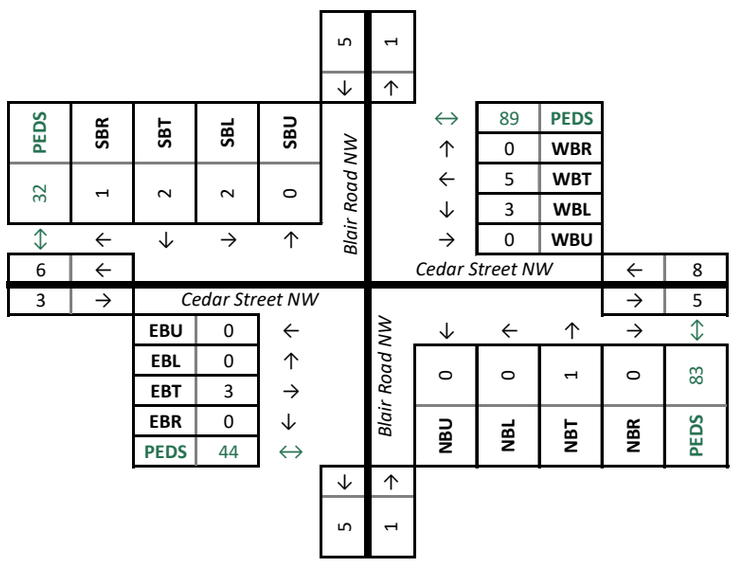
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Blair Road NW					Cedar Street NW					Blair Road NW					Cedar Street NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM	to 04:15 PM	0	32	55	1	41	4	16	20	22	36	0	1	70	9	41	0	0	38	10	18
04:15 PM	to 04:30 PM	0	24	81	0	22	2	12	13	12	21	0	2	89	9	21	0	1	21	9	3
04:30 PM	to 04:45 PM	0	27	74	0	15	3	13	20	22	23	0	0	78	13	22	0	0	32	5	4
04:45 PM	to 05:00 PM	0	25	79	0	19	2	24	31	22	13	0	0	90	13	12	0	1	31	8	9
05:00 PM	to 05:15 PM	0	18	80	1	29	2	18	17	21	28	0	0	78	11	13	0	0	36	9	11
05:15 PM	to 05:30 PM	0	28	102	1	17	3	16	16	17	19	0	0	84	12	12	0	0	38	10	8
05:30 PM	to 05:45 PM	0	25	68	1	24	1	12	20	29	23	0	2	74	16	7	0	0	37	9	4
05:45 PM	to 06:00 PM	0	22	78	0	29	1	9	17	24	38	0	1	69	14	9	0	0	28	2	5
06:00 PM	to 06:15 PM	0	28	72	0	24	2	10	19	25	20	0	1	83	12	5	0	0	26	4	9
06:15 PM	to 06:30 PM	0	23	86	0	20	1	17	20	27	26	0	0	71	15	7	0	0	20	9	4
06:30 PM	to 06:45 PM	0	27	77	0	13	5	11	12	18	24	0	1	76	6	4	0	0	21	5	5
06:45 PM	to 07:00 PM	0	13	95	3	14	3	15	17	25	19	0	0	69	9	12	0	0	23	9	12
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		428				89	251				83	380				44	179				32
04:45 PM	to 05:45 PM	0	96	329	3		8	70	84	89		0	2	326	52		0	1	142	36	
Peak Hour Factor (PHF)	Overall	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	0.95	n/a	0.86	0.81	0.75	**0.82**	0.67	0.73	0.68	0.77	**0.79**	n/a	0.25	0.91	0.81	**0.92**	n/a	0.25	0.93	0.90	**0.93**



HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Blair Road NW				Cedar Street NW				Blair Road NW				Cedar Street NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM	to 04:15 PM	0	1	1	0	0	4	1	0	0	0	1	2	0	0	1	1
04:15 PM	to 04:30 PM	0	1	2	0	0	2	0	0	0	0	0	2	0	0	0	1
04:30 PM	to 04:45 PM	0	0	0	0	0	3	1	0	0	0	1	3	0	0	0	1
04:45 PM	to 05:00 PM	0	3	2	0	0	2	0	0	0	0	1	4	0	1	2	0
05:00 PM	to 05:15 PM	0	0	1	0	0	5	0	0	0	0	0	4	0	0	0	2
05:15 PM	to 05:30 PM	0	2	3	0	0	3	0	0	0	0	1	1	0	0	1	1
05:30 PM	to 05:45 PM	0	0	1	0	0	2	0	0	0	0	0	4	0	0	2	0
05:45 PM	to 06:00 PM	0	1	1	0	0	3	0	1	0	0	1	2	0	0	0	0
06:00 PM	to 06:15 PM	0	0	1	0	0	1	0	0	0	0	3	3	0	0	0	0
06:15 PM	to 06:30 PM	0	0	1	0	0	2	0	0	0	0	0	5	0	0	1	0
06:30 PM	to 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0
06:45 PM	to 07:00 PM	0	0	1	0	0	3	0	0	0	0	0	2	0	0	1	0
07:00 PM	to 07:15 PM																
07:15 PM	to 07:30 PM																
07:30 PM	to 07:45 PM																
07:45 PM	to 08:00 PM																
08:00 PM	to 08:15 PM																
08:15 PM	to 08:30 PM																
08:30 PM	to 08:45 PM																
08:45 PM	to 09:00 PM																
SYSTEM PEAK HR (VEH.)		12				12				15				9			
04:45 PM	to 05:45 PM	0	5	7	0	0	12	0	0	0	0	2	13	0	1	5	3
Heavy Vehicle % (PHV):		0.0%	5.2%	2.1%	0.0%	0.0%	17.1%	0.0%	0.0%	0.0%	0.0%	0.6%	25.0%	0.0%	100.0%	3.5%	8.3%
		2.8%				**4.8%**				**3.9%**				**5.0%**			
INT. PEAK HR (HV ONLY)		11				14				15				8			
04:30 PM	to 05:30 PM	0	5	6	0	0	13	1	0	0	0	3	12	0	1	3	4
Heavy Vehicle % (PHV):		0.0%	5.1%	1.8%	0.0%	0.0%	18.3%	1.2%	0.0%	0.0%	0.0%	0.9%	24.5%	0.0%	100.0%	2.2%	12.5%
		2.5%				**5.7%**				**4.0%**				**4.7%**			



BICYCLES	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Blair Road NW				Cedar Street NW				Blair Road NW				Cedar Street NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM	to 04:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0
04:15 PM	to 04:30 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0
04:30 PM	to 04:45 PM	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0
04:45 PM	to 05:00 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
05:00 PM	to 05:15 PM	0	1	1	0	0	1	3	0	0	0	0	0	0	0	0	0
05:15 PM	to 05:30 PM	0	1	0	1	0	2	1	0	0	0	0	0	0	0	1	0
05:30 PM	to 05:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
05:45 PM	to 06:00 PM	0	0	0	0	0	1	0	0	0	0	1	1	0	0	2	0
06:00 PM	to 06:15 PM	0	1	0	0	0	1	1	0	0	2	2	0	0	0	1	0
06:15 PM	to 06:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
06:30 PM	to 06:45 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	0
06:45 PM	to 07:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:00 PM	to 07:15 PM																
07:15 PM	to 07:30 PM																
07:30 PM	to 07:45 PM																
07:45 PM	to 08:00 PM																
08:00 PM	to 08:15 PM																
08:15 PM	to 08:30 PM																
08:30 PM	to 08:45 PM																
08:45 PM	to 09:00 PM																
SYSTEM PEAK HR (VEH.)		5				8				1				3			
04:45 PM	to 05:45 PM	0	2	2	1	0	3	5	0	0	0	1	0	0	0	3	0
INT. PEAK HR (BIKES)		4				6				6				6			
05:15 PM	to 06:15 PM	0	2	1	1	0	4	2	0	0	2	3	1	0	0	6	0



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

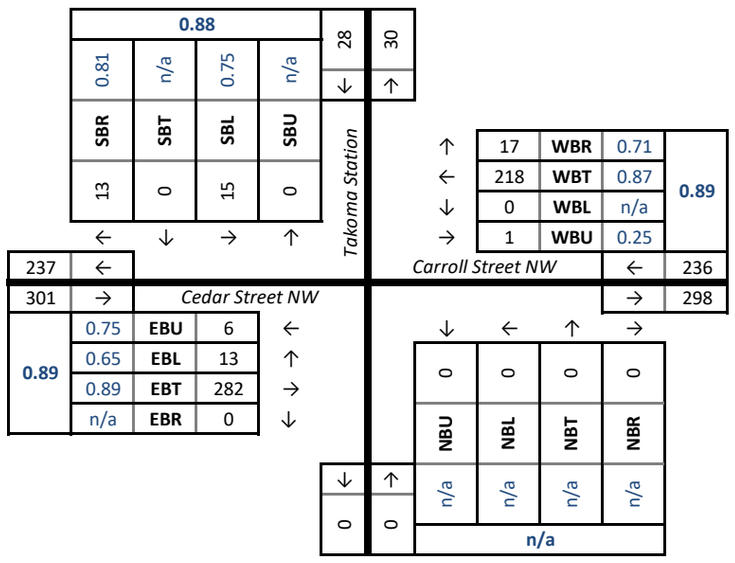
Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Takoma Station/ & Carroll Street NW/Cedar Street NW

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Takoma Station					Carroll Street NW										Cedar Street NW				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM	0	4	0	4	39	2	0	56	4	0	0	0	0	0	0	0	1	77	0	23
04:15 PM to 04:30 PM	0	4	0	2	44	0	0	36	7	0	0	0	0	0	0	2	2	57	0	23
04:30 PM to 04:45 PM	0	5	0	3	31	0	0	62	5	0	0	0	0	0	0	3	2	78	0	25
04:45 PM to 05:00 PM	0	4	0	3	33	0	0	61	3	1	0	0	0	0	0	1	5	60	0	14
05:00 PM to 05:15 PM	0	3	0	4	37	1	0	51	5	1	0	0	0	0	0	1	3	67	0	30
05:15 PM to 05:30 PM	0	3	0	3	35	0	0	43	6	0	0	0	0	0	0	2	1	76	0	15
05:30 PM to 05:45 PM	0	5	0	3	55	0	0	63	3	1	0	0	0	0	0	2	4	79	0	14
05:45 PM to 06:00 PM	0	4	0	2	36	0	0	42	6	2	0	0	0	0	0	1	2	60	0	27
06:00 PM to 06:15 PM	0	5	0	1	42	1	0	55	7	0	0	0	0	0	0	2	4	58	0	12
06:15 PM to 06:30 PM	0	6	0	2	30	0	0	58	3	0	0	0	0	0	0	2	3	54	0	8
06:30 PM to 06:45 PM	0	5	0	3	29	0	0	53	6	0	0	0	0	0	0	0	3	53	0	13
06:45 PM to 07:00 PM	0	3	0	1	34	0	0	38	4	0	0	0	0	0	0	1	3	45	0	7
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	28				160	236				3	0				0	301				73
04:45 PM to 05:45 PM	0	15	0	13		1	0	218	17		0	0	0	0		6	13	282	0	
Peak Hour Factor (PHF) Overall **0.89**	U n/a	Left 0.75	Thru n/a	Right 0.81	**SB 0.88**	U 0.25	Left n/a	Thru 0.87	Right 0.71	**WB 0.89**	U n/a	Left n/a	Thru n/a	Right n/a	**NB n/a**	U 0.75	Left 0.65	Thru 0.89	Right n/a	**EB 0.89**

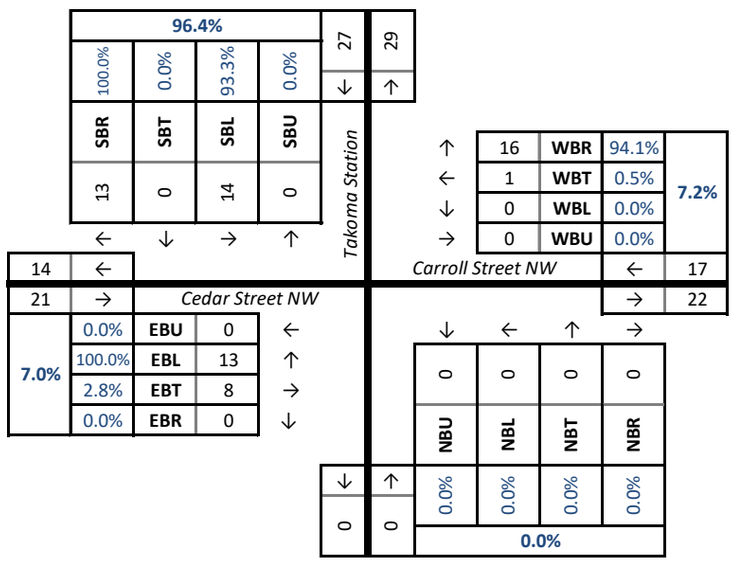
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Takoma Station					Carroll Street NW										Cedar Street NW				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM to 04:15 PM	0	4	0	3		0	0	1	4		0	0	0	0		0	1	1	0	
04:15 PM to 04:30 PM	0	4	0	2		0	0	0	7		0	0	0	0		0	2	1	0	
04:30 PM to 04:45 PM	0	5	0	3		0	0	1	5		0	0	0	0		1	2	2	0	
04:45 PM to 05:00 PM	0	4	0	3		0	0	0	3		0	0	0	0		0	5	3	0	
05:00 PM to 05:15 PM	0	3	0	4		0	0	0	5		0	0	0	0		0	3	2	0	
05:15 PM to 05:30 PM	0	3	0	3		0	0	0	5		0	0	0	0		0	1	1	0	
05:30 PM to 05:45 PM	0	4	0	3		0	0	1	3		0	0	0	0		0	4	2	0	
05:45 PM to 06:00 PM	0	4	0	2		0	0	0	6		0	0	0	0		0	2	1	0	
06:00 PM to 06:15 PM	0	5	0	1		0	0	0	7		0	0	0	0		0	4	0	0	
06:15 PM to 06:30 PM	0	6	0	2		0	0	0	3		0	0	0	0		0	3	2	0	
06:30 PM to 06:45 PM	0	5	0	2		0	0	0	6		0	0	0	0		0	3	1	0	
06:45 PM to 07:00 PM	0	3	0	1		0	0	0	3		0	0	0	0		0	3	1	0	
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	27					17					0					21				
04:45 PM to 05:45 PM	0	14	0	13		0	0	1	16		0	0	0	0		0	13	8	0	
Heavy Vehicle % (PHV):	0.0%	93.3%	0.0%	100.0%	**96.4%**	0.0%	0.0%	0.5%	94.1%	**7.2%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	2.8%	0.0%	**7.0%**
INT. PEAK HR (HV ONLY)	28					21					0					21				
04:15 PM to 05:15 PM	0	16	0	12		0	0	1	20		0	0	0	0		1	12	8	0	
Heavy Vehicle % (PHV):	0.0%	100.0%	0.0%	100.0%	**100.0%**	0.0%	0.0%	0.5%	100.0%	**9.1%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	14.3%	100.0%	3.1%	0.0%	**7.5%**

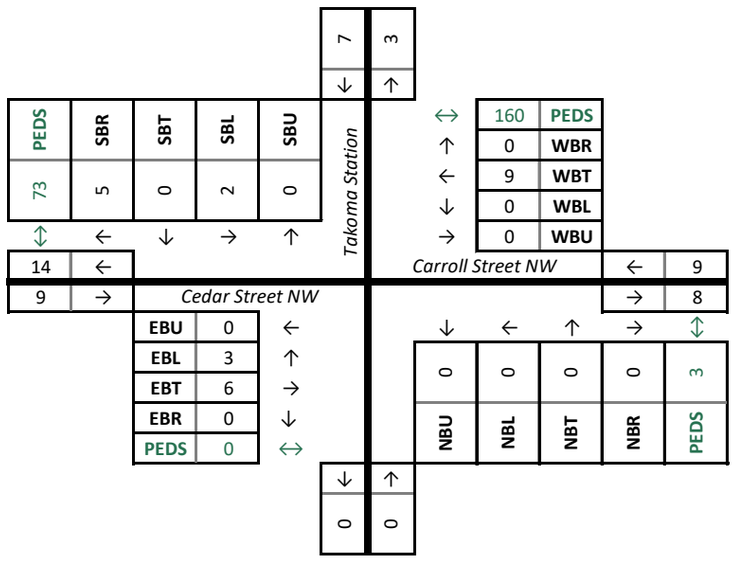
HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Takoma Station					Carroll Street NW										Cedar Street NW				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM to 04:15 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	2	2	0	
04:15 PM to 04:30 PM	0	0	0	0		0	0	1	1		0	0	0	0		0	1	0	0	
04:30 PM to 04:45 PM	0	0	0	2		0	0	1	0		0	0	0	0		0	1	0	0	
04:45 PM to 05:00 PM	0	1	0	2		0	0	2	0		0	0	0	0		0	0	0	0	
05:00 PM to 05:15 PM	0	0	0	0		0	0	5	0		0	0	0	0		0	0	0	0	
05:15 PM to 05:30 PM	0	0	0	3		0	0	1	0		0	0	0	0		0	2	2	0	
05:30 PM to 05:45 PM	0	1	0	0		0	0	1	0		0	0	0	0		0	1	4	0	
05:45 PM to 06:00 PM	0	0	0	1		0	0	2	0		0	0	0	0		0	1	0	0	
06:00 PM to 06:15 PM	0	2	0	1		0	0	2	0		0	0	0	0		0	0	5	0	
06:15 PM to 06:30 PM	0	1	0	0		0	0	0	0		0	0	0	0		0	0	1	0	
06:30 PM to 06:45 PM	0	0	0	1		0	0	0	0		0	0	0	0		0	0	4	0	
06:45 PM to 07:00 PM	0	0	0	1		0	0	2	0		0	0	0	0		0	0	2	0	
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	7					9					0					9				
04:45 PM to 05:45 PM	0	2	0	5		0	0	9	0		0	0	0	0		0	3	6	0	
INT. PEAK HR (BIKES)	8					6					0					15				
05:15 PM to 06:15 PM	0	3	0	5		0	0	6	0		0	0	0	0		0	4	11	0	

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developm
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

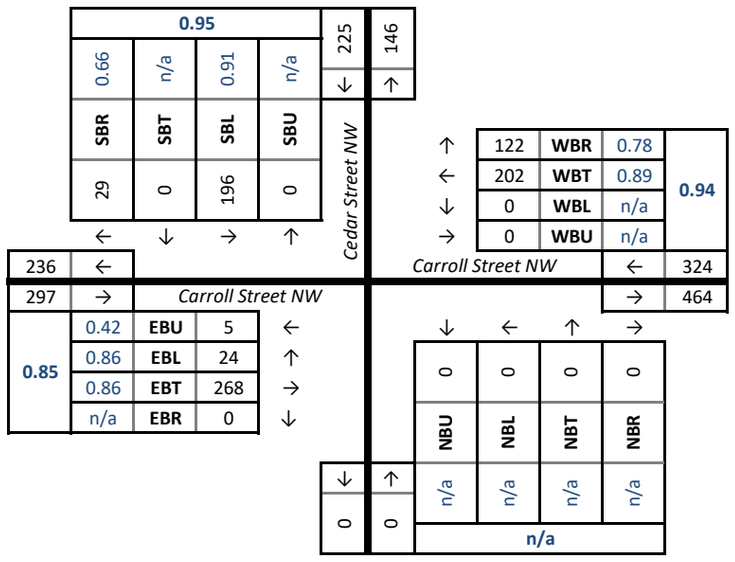
Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:45 PM to 05:45 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Cedar Street NW/ & Carroll Street NW

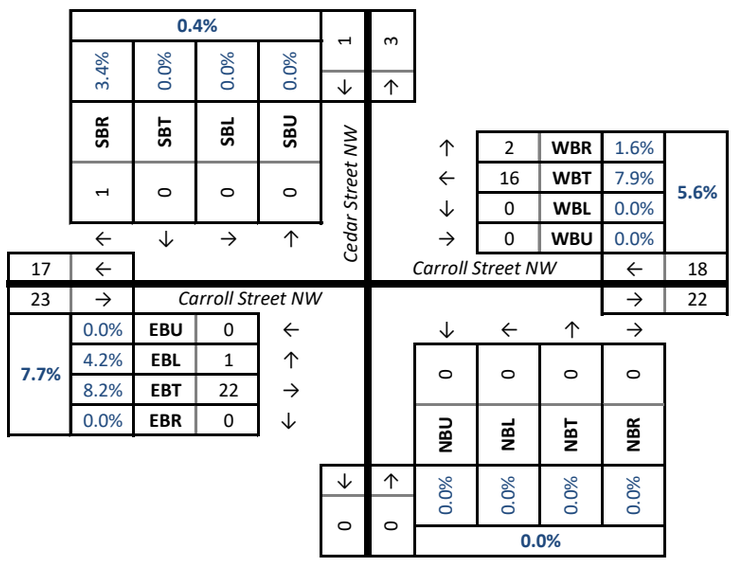
ALL VEHICLES	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Street NW					Carroll Street NW										Carroll Street NW				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM	to 04:15 PM	0	57	0	8	28	0	0	53	27	15	0	0	0	0	0	2	5	84	0	6
04:15 PM	to 04:30 PM	0	47	0	5	31	0	0	37	21	7	0	0	0	0	0	0	3	57	0	0
04:30 PM	to 04:45 PM	0	45	0	4	32	0	0	55	27	11	0	0	0	0	0	1	9	69	0	0
04:45 PM	to 05:00 PM	0	46	0	9	27	0	0	57	29	4	0	0	0	0	0	1	7	55	0	1
05:00 PM	to 05:15 PM	0	43	0	11	32	0	0	41	39	4	0	0	0	0	0	0	6	58	0	0
05:15 PM	to 05:30 PM	0	54	0	3	21	0	0	54	24	2	0	0	0	0	0	1	5	77	0	2
05:30 PM	to 05:45 PM	0	53	0	6	39	0	0	50	30	8	0	0	0	0	0	3	6	78	0	1
05:45 PM	to 06:00 PM	0	27	0	1	27	0	0	52	34	3	0	0	0	0	0	0	9	62	0	0
06:00 PM	to 06:15 PM	0	46	0	9	33	0	0	50	35	2	0	0	0	0	0	0	5	57	0	2
06:15 PM	to 06:30 PM	0	35	0	9	21	0	0	55	26	2	0	0	0	0	0	1	4	59	0	0
06:30 PM	to 06:45 PM	0	41	0	7	36	0	0	43	25	4	0	0	0	0	0	0	1	53	0	1
06:45 PM	to 07:00 PM	0	37	0	0	23	0	0	49	36	2	0	0	0	0	0	1	3	49	0	3
07:00 PM	to 07:15 PM																				
07:15 PM	to 07:30 PM																				
07:30 PM	to 07:45 PM																				
07:45 PM	to 08:00 PM																				
08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		225				119	324				18	0				0	297				4
04:45 PM	to 05:45 PM	0	196	0	29		0	0	202	122		0	0	0	0		5	24	268	0	
Peak Hour Factor (PHF)	Overall 0.94	U n/a	Left 0.91	Thru n/a	Right 0.66	SB 0.95	U n/a	Left n/a	Thru 0.89	Right 0.78	WB 0.94	U n/a	Left n/a	Thru n/a	Right n/a	NB n/a	U 0.42	Left 0.86	Thru 0.86	Right n/a	EB 0.85

VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



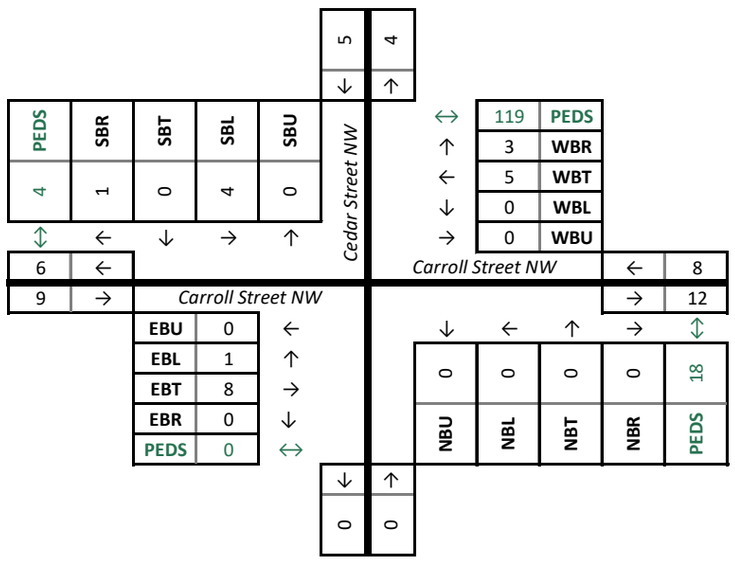
HEAVY VEHICLES (FHWA 4+)	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Cedar Street NW					Carroll Street NW										Carroll Street NW				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM	to 04:15 PM	0	1	0	1		0	0	4	0		0	0	0	0		0	0	5	0	
04:15 PM	to 04:30 PM	0	0	0	1		0	0	6	0		0	0	0	0		0	0	5	0	
04:30 PM	to 04:45 PM	0	0	0	0		0	0	6	0		0	0	0	0		0	0	6	0	
04:45 PM	to 05:00 PM	0	0	0	0		0	0	3	1		0	0	0	0		0	0	8	0	
05:00 PM	to 05:15 PM	0	0	0	1		0	0	3	0		0	0	0	0		0	0	3	0	
05:15 PM	to 05:30 PM	0	0	0	0		0	0	6	0		0	0	0	0		0	0	7	0	
05:30 PM	to 05:45 PM	0	0	0	0		0	0	4	1		0	0	0	0		0	1	4	0	
05:45 PM	to 06:00 PM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	6	0	
06:00 PM	to 06:15 PM	0	0	0	2		0	0	6	0		0	0	0	0		0	0	4	0	
06:15 PM	to 06:30 PM	0	0	0	0		0	0	3	1		0	0	0	0		0	0	9	0	
06:30 PM	to 06:45 PM	0	0	0	2		0	0	4	0		0	0	0	0		0	0	5	0	
06:45 PM	to 07:00 PM	0	0	0	0		0	0	4	0		0	0	0	0		0	0	5	0	
07:00 PM	to 07:15 PM																				
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08:00 PM	to 08:15 PM																				
08:15 PM	to 08:30 PM																				
08:30 PM	to 08:45 PM																				
08:45 PM	to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		1					18					0					23				
04:45 PM	to 05:45 PM	0	0	0	1		0	0	16	2		0	0	0	0		0	1	22	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	3.4%	0.4%	0.0%	0.0%	7.9%	1.6%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	8.2%	0.0%	7.7%
INT. PEAK HR (HV ONLY)		3					20					0					24				
04:00 PM	to 05:00 PM	0	1	0	2		0	0	19	1		0	0	0	0		0	0	24	0	
Heavy Vehicle % (PHV):		0.0%	0.5%	0.0%	7.7%	1.4%	0.0%	0.0%	9.4%	1.0%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	8.2%

HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Cedar Street NW				Carroll Street NW								Carroll Street NW			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM	to 04:15 PM	0	0	0	1	0	0	0	2	0	0	0	0	0	2	1	0
04:15 PM	to 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	to 04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:45 PM	to 05:00 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	1	0
05:00 PM	to 05:15 PM	0	3	0	0	0	0	2	0	0	0	0	0	0	0	2	0
05:15 PM	to 05:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0
05:30 PM	to 05:45 PM	0	1	0	0	0	0	1	1	0	0	0	0	0	1	3	0
05:45 PM	to 06:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
06:00 PM	to 06:15 PM	0	1	0	0	0	0	2	1	0	0	0	0	0	1	4	0
06:15 PM	to 06:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0
06:30 PM	to 06:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
06:45 PM	to 07:00 PM	0	0	0	0	0	0	2	1	0	0	0	0	0	1	1	0
07:00 PM	to 07:15 PM																
07:15 PM	to 07:30 PM																
07:30 PM	to 07:45 PM																
07:45 PM	to 08:00 PM																
08:00 PM	to 08:15 PM																
08:15 PM	to 08:30 PM																
08:30 PM	to 08:45 PM																
08:45 PM	to 09:00 PM																
SYSTEM PEAK HR (VEH.)		5				8				0				9			
04:45 PM	to 05:45 PM	0	4	0	1	0	0	5	3	0	0	0	0	0	1	8	0
INT. PEAK HR (BIKES)		5				8				0				9			
04:45 PM	to 05:45 PM	0	4	0	1	0	0	5	3	0	0	0	0	0	1	8	0

PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Takoma Metro Multifamily Developn
Project # : 2592-015
Location Washington DC
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, May 19, 2022
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 04:00 PM to 05:00 PM
System Peak Hour (all vehicles): 04:45 PM to 05:45 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Maple Street NW & Carroll Street NW

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Maple Street NW					Carroll Street NW					Maple Street NW					Carroll Street NW				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM	0	6	5	8	12	0	1	66	7	12	0	8	17	9	5	0	3	132	4	5
04:15 PM to 04:30 PM	0	5	4	3	17	0	1	47	4	3	0	7	16	6	12	0	8	106	2	5
04:30 PM to 04:45 PM	0	2	6	6	29	0	4	78	10	4	0	7	23	9	9	0	6	93	10	6
04:45 PM to 05:00 PM	0	2	9	3	30	0	5	78	6	8	0	5	16	2	16	0	9	95	5	8
05:00 PM to 05:15 PM	0	5	5	7	27	0	1	71	8	12	0	13	25	7	24	0	4	90	3	23
05:15 PM to 05:30 PM	0	6	6	5	19	0	3	54	9	7	0	6	16	5	15	0	10	105	9	7
05:30 PM to 05:45 PM	0	3	6	3	18	0	3	69	6	10	0	7	15	3	16	0	10	101	6	14
05:45 PM to 06:00 PM	0	7	4	3	53	0	2	71	9	15	0	9	14	7	14	0	4	102	6	19
06:00 PM to 06:15 PM	0	5	7	6	42	0	5	74	9	8	0	9	18	5	16	0	7	83	5	9
06:15 PM to 06:30 PM	0	5	7	5	20	0	2	66	9	9	0	9	11	8	17	0	8	79	8	12
06:30 PM to 06:45 PM	0	4	5	4	42	0	3	62	8	8	0	8	12	7	10	0	6	86	5	15
06:45 PM to 07:00 PM	0	0	9	7	37	0	4	62	3	7	0	5	11	7	6	0	3	86	1	14
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	60				94	313				37	120				71	447				52
04:45 PM to 05:45 PM	0	16	26	18		0	12	272	29		0	31	72	17		0	33	391	23	
Peak Hour Factor (PHF) Overall **0.98**	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	n/a	0.67	0.72	0.64	**0.88**	n/a	0.60	0.87	0.81	**0.88**	n/a	0.60	0.72	0.61	**0.67**	n/a	0.83	0.93	0.64	**0.90**

HEAVY VEHICLES (FHWA 4+)

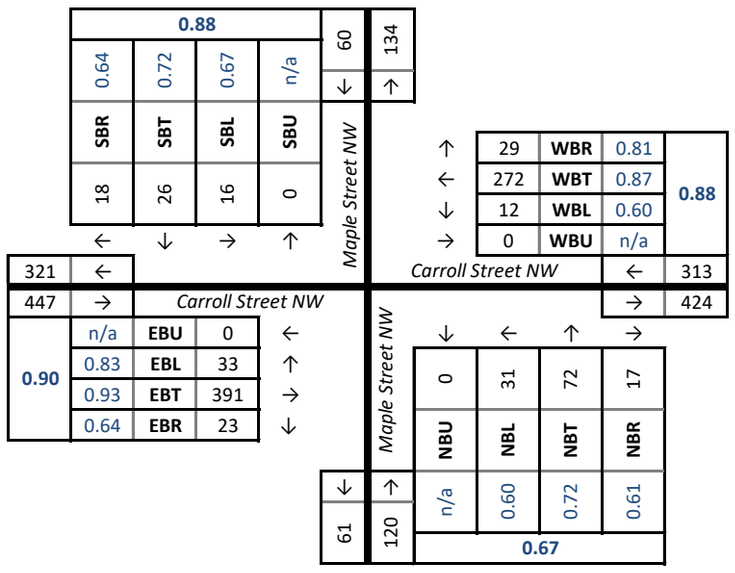
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Maple Street NW				Carroll Street NW				Maple Street NW				Carroll Street NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0
04:15 PM to 04:30 PM	0	1	1	1	0	0	5	0	0	0	0	0	0	0	5	0
04:30 PM to 04:45 PM	0	0	0	1	0	0	5	0	0	0	0	0	0	1	5	0
04:45 PM to 05:00 PM	0	0	0	0	0	1	4	0	0	0	0	0	0	1	7	0
05:00 PM to 05:15 PM	0	0	0	0	0	0	5	1	0	0	0	0	0	0	3	0
05:15 PM to 05:30 PM	0	1	0	1	0	0	3	1	0	0	0	0	0	0	4	0
05:30 PM to 05:45 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	1	4	0
05:45 PM to 06:00 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	6	0
06:00 PM to 06:15 PM	0	0	0	1	0	0	5	0	0	0	0	0	0	0	4	0
06:15 PM to 06:30 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	1	8	0
06:30 PM to 06:45 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	4	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	6	1
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)	2				19				0				20			
04:45 PM to 05:45 PM	0	1	0	1	0	1	16	2	0	0	0	0	0	2	18	0
Heavy Vehicle % (PHV):	0.0%	6.3%	0.0%	5.6% **3.3%**	0.0%	8.3%	5.9%	6.9% **6.1%**	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	6.1%	4.6%	0.0% **4.5%**
INT. PEAK HR (HV ONLY)	4				20				0				24			
04:00 PM to 05:00 PM	0	1	1	2	0	1	19	0	0	0	0	0	0	2	22	0
Heavy Vehicle % (PHV):	0.0%	6.7%	4.2%	10.0% **6.8%**	0.0%	9.1%	7.1%	0.0% **6.5%**	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	7.7%	5.2%	0.0% **5.1%**

BICYCLES

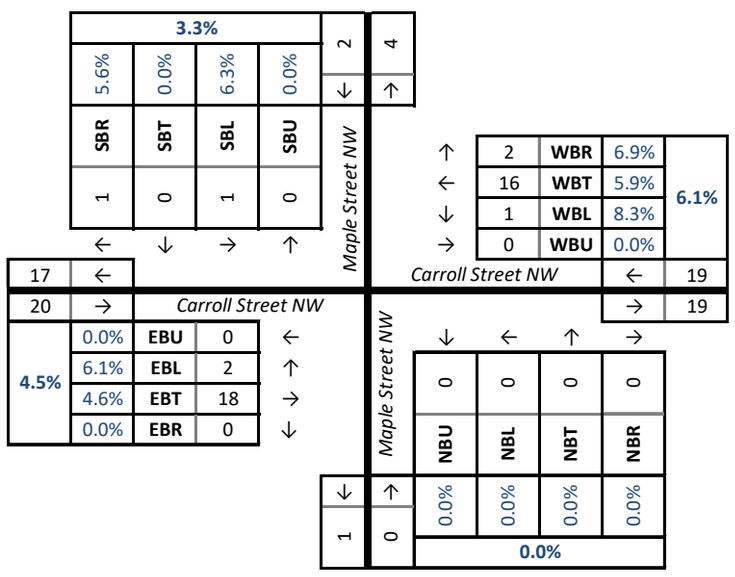
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Maple Street NW				Carroll Street NW				Maple Street NW				Carroll Street NW			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0
04:15 PM to 04:30 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
04:30 PM to 04:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
04:45 PM to 05:00 PM	0	0	0	2	0	1	2	0	0	0	0	0	0	0	1	0
05:00 PM to 05:15 PM	0	0	1	0	0	0	1	1	0	1	0	0	0	1	3	0
05:15 PM to 05:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	3	0
05:30 PM to 05:45 PM	0	0	1	1	0	0	1	0	0	0	5	0	0	4	0	1
05:45 PM to 06:00 PM	0	0	5	0	0	0	1	0	0	0	1	0	0	1	0	0
06:00 PM to 06:15 PM	0	0	0	1	0	0	1	0	0	0	2	1	0	1	3	0
06:15 PM to 06:30 PM	0	1	1	0	0	1	1	1	0	1	2	0	0	0	1	1
06:30 PM to 06:45 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	1	2	0
06:45 PM to 07:00 PM	0	0	0	1	0	0	1	0	0	0	3	0	0	0	2	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)	6				6				7				13			
04:45 PM to 05:45 PM	0	0	3	3	0	1	4	1	0	2	5	0	0	5	7	1
INT. PEAK HR (BIKES)	10				6				12				12			
05:30 PM to 06:30 PM	0	1	7	2	0	1	4	1	0	1	10	1	0	6	4	2

DATA COLLECTION NOTES :

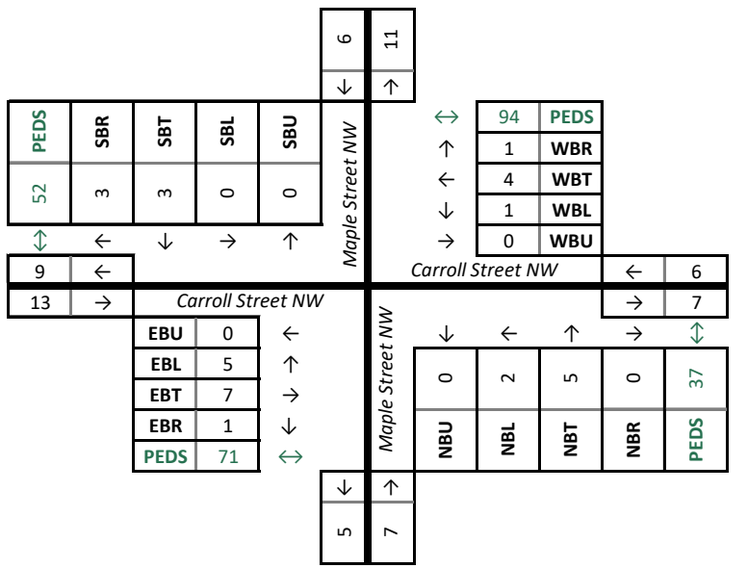
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



E. Background Development Trip Generation Information

Excerpt from Children's National at Walter Reed CTR
(ZC Case No. 19-24, Exhibit No. 18A)

TRIP GENERATION

This chapter outlines the Project's transportation demand. It summarizes the projected trip generation of the Project by mode, which forms the basis for the chapters that follow. These assumptions were vetted and approved by DDOT as a part of the scoping process for the study.

Traditionally, weekday peak hour trip generation is calculated based on the methodology outlined in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. This methodology was supplemented to account for the urban nature of the Project (the *Trip Generation Manual* provides data for non-urban, low transit use Sites) and to generate trips for multiple modes, as vetted and approved by DDOT.

Trip generation for the R&D, institutional, clinical office, and laboratory space was calculated based on ITE land use 760, Research and Development Center. Trip generation for the residential component of the CNRIC development was calculated based on ITE land use 221, Multifamily Housing (Mid-Rise). Trip generation for the outpatient/ambulatory clinic space component of the CNRIC development was calculated based on ITE land use 630, clinic. While the conference space component of the CNRIC development that is analyzed in this report is anticipated to be support space to the CNRIC Phase I auditorium, as a conservative measure trip generation for the conference space was calculated using Zoning Regulation parking guidelines for entertainment, assembly and performing arts uses which require two (2) parking spaces for every 1,000 square feet and supplemented with the directional split of ITE land use 444, movie theater.

Trips were split into different modes using assumptions derived from census data for the residents that currently live near the Site, WMATA ridership survey data, and projected developments surrounding the study area. A summary of the mode split assumptions is provided in Table 3, and a summary of the multimodal trip generation for the Project, based on ITE, is provided in Table 4 for both peak hours. Detailed calculations are included in the Technical Attachments.

Table 3: CNRIC Mode Split Assumptions

Land Use	Mode			
	Drive	Transit	Bike	Walk
Residential	45%	45%	1%	9%
Non-Residential (Clinical Office, R&D Visitors, etc.)	55%	35%	5%	5%
Event	60%	35%	1%	4%

The Project is expected to generate new trips on the surrounding transportation network across all modes. The AM peak hour trip generation is projected to include 316 vehicles/hour, 246 transit riders/hour, 32 bicycle trips/hour, and 36 walking trips/hour. The PM peak hour trip generation is projected to include 331 vehicles/hour, 258 transit riders/hour, 33 bicycle trips/hour, and 37 walking trips/hour.

Table 4: ITE Multi-Modal Trip Generation Summary

Mode	AM Peak Hour			PM Peak Hour			Weekday
	In	Out	Total	In	Out	Total	Total
Auto	242 veh/hr	74 veh/hr	316 veh/hr	87 veh/hr	244 veh/hr	331 veh/hr	5817 veh
Transit	186 ppl/hr	60 ppl/hr	246 ppl/hr	73 ppl/hr	185 ppl/hr	258 ppl/hr	4433 ppl
Bike	24 ppl/hr	8 ppl/hr	32 ppl/hr	7 ppl/hr	26 ppl/hr	33 ppl/hr	610 ppl
Walk	27 ppl/hr	9 ppl/hr	36 ppl/hr	10 ppl/hr	27 ppl/hr	37 ppl/hr	640 ppl

Excerpt from Children's National at Walter Reed CTR (ZC Case No. 19-24, Exhibit No. 18A)

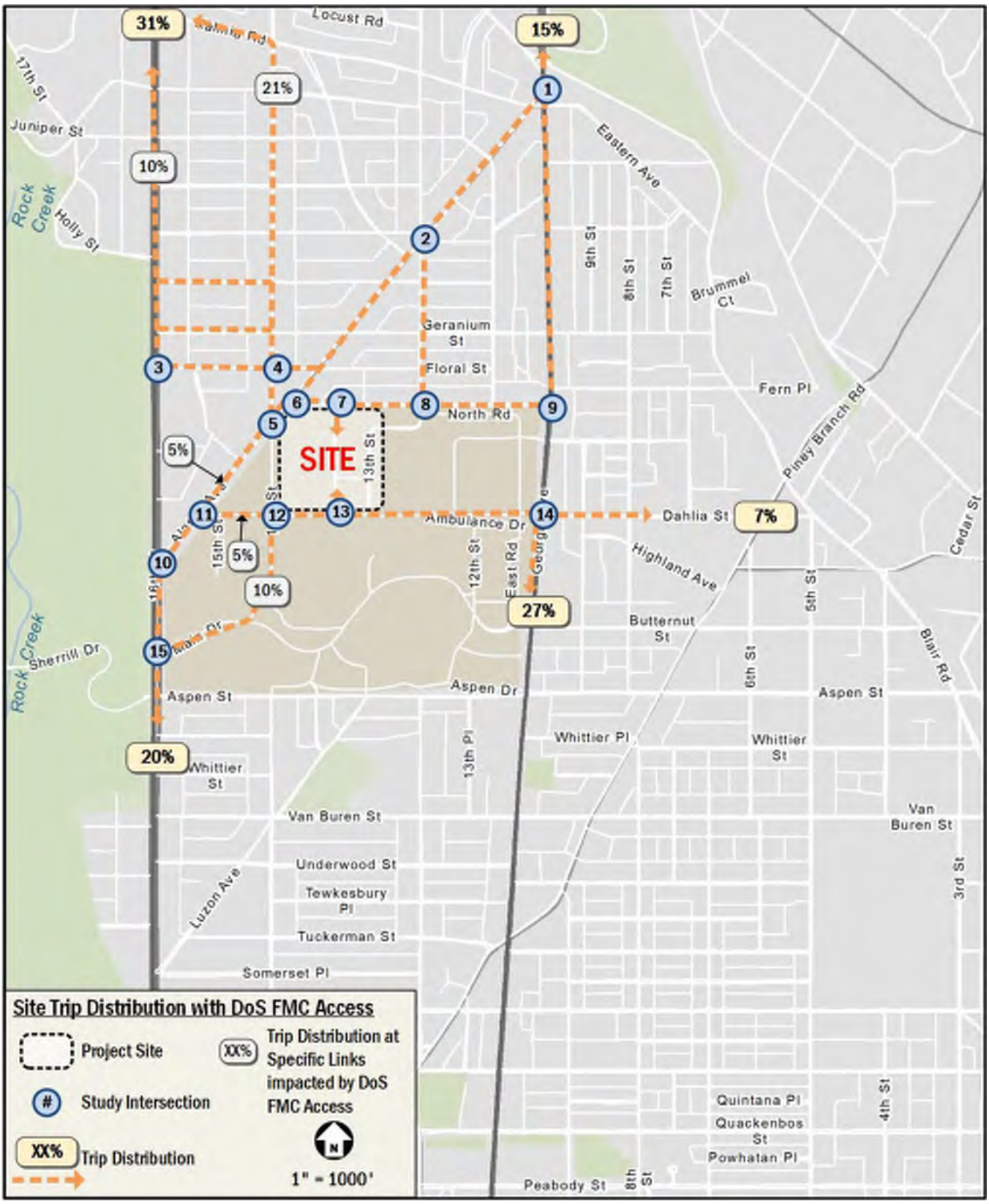


Figure 20: Site Trip Distribution with DoS FMC Access

GOROVE / SLADE

1140 Connecticut Avenue NW
Suite 600
Washington, DC 20036
202.296.8625

TECHNICAL MEMORANDUM

To: Samson Cheng Square 134

From: Vinay Varadarajan, PE
Katie Wagner, PE, PTOE
Erwin N. Andres

Date: March 13, 2020

Subject: 218 Cedar Street, NW Redevelopment Loading Management Plan

INTRODUCTION

This memorandum presents a Loading Management Plan for the proposed redevelopment at 218 Cedar Street, NW in Washington, DC. An existing convenience store with surface parking lot is slated for redevelopment as a mixed-use property. Loading for the proposed redevelopment is located at the northern portion of the property, accessible from Cedar Street. The loading spaces include one (1) 30-foot loading berth.

PROJECT DESCRIPTION

The subject property is located at 218 Cedar Street in the Takoma neighborhood of Northwest, DC. The Applicant is redeveloping the existing convenience store and surface lot into a mixed-use building featuring 36 condominium units and approximately 9,182 square feet of ground-floor retail. The property is located on a rectangular parcel and is bordered by residential properties to the north, a mixed-use development at 255 Carroll Street to the east, Cedar Street to the west, and Carroll Street to the south, as seen in Figure 1. Existing vehicular access to the property surface lot is from three (3) curb cuts: one (1) on Carroll Street and two (2) on Cedar Street. The redevelopment plans call for the existing curb cut on Carroll Street to be removed, with all vehicular access taking place from the two (2) 24-foot curb cuts on Cedar Street. Adjacent to the loading area will be the entrance to the parking garage, which is access controlled and will feature 10 parking spaces, with seven (7) spaces managed through an electronic lift system.

ZONING REQUIREMENTS

Per DC Zoning requirements, a retail development between 5,000 and 20,000 square feet GFA is required to provide one (1) loading berth. The residential portion of the development is exempt from providing loading. A loading area has been created for the proposed development to include one (1) 30-foot loading berths along the northern portion of the property, meeting zoning requirements. As shown in the attached turning maneuvers, the 30-foot trucks may use Cedar Street to reach the loading berth. The loading area has been designed such that vehicles are able to access the loading area using back-in and back-out maneuvers.

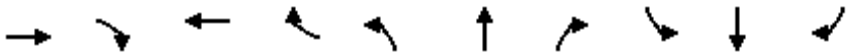
F. Vehicular Capacity Analysis Worksheets – 2022 Existing Conditions

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

12/05/2022



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	112	121	175	30	38	193	11	35	554	1
v/c Ratio	0.24	0.32	0.40	0.08	0.13	0.29	0.02	0.06	0.57	0.00
Control Delay	32.7	34.7	36.0	30.2	16.4	17.2	15.4	11.0	18.4	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	34.7	36.0	30.2	16.4	17.2	15.4	11.0	18.4	10.0
Queue Length 50th (ft)	65	72	107	16	12	59	3	11	253	0
Queue Length 95th (ft)	113	126	174	40	m24	m85	m9	25	358	3
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	474	379	442	399	296	660	561	624	978	784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.32	0.40	0.08	0.13	0.29	0.02	0.06	0.57	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022

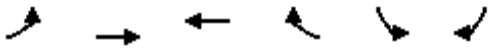
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	101	111	43	118	28	35	178	10	32	510	1
Future Volume (vph)	2	101	111	43	118	28	35	178	10	32	510	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	0.98	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1544	1232		1592	1297	1543	1651	1403	1593	1677	1345
Flt Permitted		1.00	1.00		0.89	1.00	0.46	1.00	1.00	0.53	1.00	1.00
Satd. Flow (perm)		1539	1232		1435	1297	742	1651	1403	889	1677	1345
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	110	121	47	128	30	38	193	11	35	554	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	112	121	0	175	30	38	193	11	35	554	1
Confl. Peds. (#/hr)	13		15	15		13	7					7
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		35.0	35.0		35.0	35.0	46.0	46.0	46.0	68.0	68.0	68.0
Effective Green, g (s)		37.0	37.0		37.0	37.0	48.0	48.0	48.0	70.0	70.0	70.0
Actuated g/C Ratio		0.31	0.31		0.31	0.31	0.40	0.40	0.40	0.58	0.58	0.58
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		474	379		442	399	296	660	561	624	978	784
v/s Ratio Prot								0.12		0.01	c0.33	
v/s Ratio Perm		0.07	0.10		c0.12	0.02	0.05		0.01	0.02		0.00
v/c Ratio		0.24	0.32		0.40	0.08	0.13	0.29	0.02	0.06	0.57	0.00
Uniform Delay, d1		31.0	31.8		32.7	29.4	22.8	24.5	21.8	11.0	15.6	10.4
Progression Factor		1.00	1.00		1.00	1.00	0.66	0.65	0.70	1.00	1.00	1.00
Incremental Delay, d2		1.2	2.2		2.6	0.4	0.8	1.0	0.1	0.2	2.4	0.0
Delay (s)		32.1	34.0		35.3	29.8	15.9	16.9	15.2	11.1	17.9	10.4
Level of Service		C	C		D	C	B	B	B	B	B	B
Approach Delay (s)		33.1			34.5			16.7			17.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	14	134	172	4	2	13
Future Volume (vph)	14	134	172	4	2	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	149	191	4	2	14

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	165	195	16
Volume Left (vph)	16	0	2
Volume Right (vph)	0	4	14
Hadj (s)	0.09	0.07	-0.50
Departure Headway (s)	4.2	4.2	4.2
Degree Utilization, x	0.19	0.23	0.02
Capacity (veh/h)	841	852	788
Control Delay (s)	8.2	8.4	7.3
Approach Delay (s)	8.2	8.4	7.3
Approach LOS	A	A	A

Intersection Summary			
Delay	8.3		
Level of Service	A		
Intersection Capacity Utilization	30.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
3: Kiss and Ride & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	120	16	22	161	15	6
Future Volume (Veh/h)	120	16	22	161	15	6
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	130	17	24	175	16	7
Pedestrians	1				10	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			157		372	148
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			157		372	148
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		97	99
cM capacity (veh/h)			1399		616	896

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	147	199	23
Volume Left	0	24	16
Volume Right	17	0	7
cSH	1700	1399	681
Volume to Capacity	0.09	0.02	0.03
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	1.0	10.5
Lane LOS		A	B
Approach Delay (s)	0.0	1.0	10.5
Approach LOS			B

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
4: Metro Station Dwy & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022



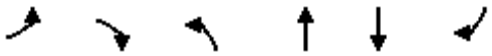
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	124	1	1	181	2	2
Future Volume (Veh/h)	124	1	1	181	2	2
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	138	1	1	201	2	2
Pedestrians	1				7	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			146		350	146
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			146		350	146
tC, single (s)			4.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			2.2		4.4	4.2
p0 queue free %			100		100	100
cM capacity (veh/h)			1422		487	693

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	139	202	4
Volume Left	0	1	2
Volume Right	1	0	2
cSH	1700	1422	572
Volume to Capacity	0.08	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	11.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.0	11.3
Approach LOS			B

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		21.5%	ICU Level of Service
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	126	156	3	0	31
Future Volume (vph)	0	126	156	3	0	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	140	173	3	0	34

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	140	173	3	34
Volume Left (vph)	0	173	0	0
Volume Right (vph)	140	0	0	34
Hadj (s)	-0.52	0.55	0.05	-0.55
Departure Headway (s)	3.9	5.3	4.8	3.2
Degree Utilization, x	0.15	0.26	0.00	0.03
Capacity (veh/h)	886	655	717	1121
Control Delay (s)	7.6	9.0	6.7	6.3
Approach Delay (s)	7.6	8.9		6.3
Approach LOS	A	A		A

Intersection Summary				
Delay	8.1			
Level of Service	A			
Intersection Capacity Utilization	25.7%	ICU Level of Service		A
Analysis Period (min)	15			

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/05/2022



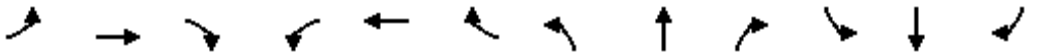
Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	109	87	284	172	273	32	508
v/c Ratio	0.41	0.27	0.61	0.55	0.62	0.07	0.76
Control Delay	47.6	24.1	31.6	15.0	4.8	0.2	32.0
Queue Delay	0.0	0.0	0.0	0.0	0.3	3.7	0.1
Total Delay	47.6	24.1	31.6	15.0	5.1	3.9	32.1
Queue Length 50th (ft)	74	46	176	40	0	0	212
Queue Length 95th (ft)	131	m87	279	112	0	m0	370
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	266	328	462	311	439	464	670
Starvation Cap Reductn	0	0	0	0	17	379	0
Spillback Cap Reductn	0	0	0	0	0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.27	0.61	0.55	0.65	0.38	0.76

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	73	28	80	261	158	0	251	29	60	407	1
Future Volume (vph)	0	73	28	80	261	158	0	251	29	60	407	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.98		1.00	1.00	0.45		1.00	0.86		1.00	
Flpb, ped/bikes		1.00		0.97	1.00	1.00		1.00	1.00		1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1389		1424	1543	592		1424	1037		1641	
Flt Permitted		1.00		0.68	1.00	1.00		1.00	1.00		0.92	
Satd. Flow (perm)		1389		1020	1543	592		1424	1037		1523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	79	30	87	284	172	0	273	32	65	442	1
RTOR Reduction (vph)	0	0	0	0	0	120	0	0	22	0	0	0
Lane Group Flow (vph)	0	109	0	87	284	52	0	273	10	0	508	0
Confl. Peds. (#/hr)	103		15	15		103	15		77	77		15
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	7%	7%	7%	1%	1%	1%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		21.0		34.0	34.0	34.0		35.0	35.0		44.0	
Effective Green, g (s)		23.0		36.0	36.0	36.0		37.0	37.0		48.0	
Actuated g/C Ratio		0.19		0.30	0.30	0.30		0.31	0.31		0.40	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		266		329	462	177		439	319		620	
v/s Ratio Prot		0.08		0.02	c0.18			0.19			c0.08	
v/s Ratio Perm				0.06		0.09			0.01		c0.25	
v/c Ratio		0.41		0.26	0.61	0.29		0.62	0.03		0.82	
Uniform Delay, d1		42.5		32.3	36.0	32.2		35.5	29.0		32.1	
Progression Factor		0.99		0.68	0.71	2.33		0.00	1.00		0.90	
Incremental Delay, d2		4.6		1.8	5.5	3.8		4.6	0.1		9.8	
Delay (s)		46.8		23.6	31.0	78.9		4.8	29.1		38.8	
Level of Service		D		C	C	E		A	C		D	
Approach Delay (s)		46.8			45.0			7.3			38.8	
Approach LOS		D			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	35.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
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Lane Group	SET	NWT
Lane Group Flow (vph)	560	311
v/c Ratio	0.46	0.70
Control Delay	1.9	48.1
Queue Delay	1.3	0.0
Total Delay	3.2	48.1
Queue Length 50th (ft)	0	215
Queue Length 95th (ft)	0	322
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1207	445
Starvation Cap Reductn	425	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.72	0.70

Intersection Summary

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/05/2022



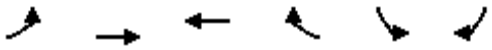
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	463	52	0	280
Future Volume (vph)	0	0	463	52	0	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1505			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1505			1574
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.90
Adj. Flow (vph)	0	0	503	57	0	311
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	556	0	0	311
Confl. Peds. (#/hr)		77				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			32.0
Effective Green, g (s)			94.0			34.0
Actuated g/C Ratio			0.78			0.28
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1178			445
v/s Ratio Prot			c0.37			c0.20
v/s Ratio Perm						
v/c Ratio			0.47			0.70
Uniform Delay, d1			4.5			38.4
Progression Factor			0.25			1.00
Incremental Delay, d2			1.0			8.8
Delay (s)			2.1			47.2
Level of Service			A			D
Approach Delay (s)	0.0		2.1			47.2
Approach LOS	A		A			D

Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	145	461	19	15	13
Future Volume (Veh/h)	10	145	461	19	15	13
Sign Control		Free	Free		Stop	
Grade		6%	4%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	151	480	20	16	14
Pedestrians		84	1		158	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		7	0		13	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		312	206			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	658				820	732
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	497				690	585
tC, single (s)	4.2				7.4	7.2
tC, 2 stage (s)						
tF (s)	2.3				4.4	4.2
p0 queue free %	99				92	94
cM capacity (veh/h)	756				211	249

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	161	500	30
Volume Left	10	0	16
Volume Right	0	20	14
cSH	756	1700	227
Volume to Capacity	0.01	0.29	0.13
Queue Length 95th (ft)	1	0	11
Control Delay (s)	0.7	0.0	23.3
Lane LOS	A		C
Approach Delay (s)	0.7	0.0	23.3
Approach LOS			C

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/05/2022



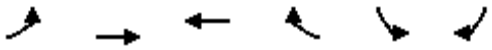
Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	172	456	152	140
v/c Ratio	0.19	0.49	0.27	0.65
Control Delay	2.0	6.2	4.6	62.7
Queue Delay	0.0	0.8	0.0	0.0
Total Delay	2.0	7.0	4.6	62.7
Queue Length 50th (ft)	18	94	19	103
Queue Length 95th (ft)	m21	130	m32	#185
Internal Link Dist (ft)	126	337		365
Turn Bay Length (ft)			125	
Base Capacity (vph)	907	925	566	215
Starvation Cap Reductn	0	214	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.19	0.64	0.27	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	152	438	146	101	34
Future Volume (vph)	13	152	438	146	101	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.78	0.99	
Flpb, ped/bikes		0.99	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.97	
Flt Protected		1.00	1.00	1.00	0.96	
Satd. Flow (prot)		1255	1521	932	1358	
Flt Permitted		0.97	1.00	1.00	0.96	
Satd. Flow (perm)		1218	1521	932	1358	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	14	158	456	152	105	35
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	172	456	152	140	0
Confl. Peds. (#/hr)	89			89	12	5
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	10%	10%	6%	6%	6%	6%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		87.0	71.0	71.0	17.0	
Effective Green, g (s)		89.0	73.0	73.0	19.0	
Actuated g/C Ratio		0.74	0.61	0.61	0.16	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		907	925	566	215	
v/s Ratio Prot		c0.02	c0.30		c0.10	
v/s Ratio Perm		0.12		0.16		
v/c Ratio		0.19	0.49	0.27	0.65	
Uniform Delay, d1		4.7	13.1	11.0	47.4	
Progression Factor		0.33	0.36	0.33	1.00	
Incremental Delay, d2		0.4	1.4	0.9	14.3	
Delay (s)		2.0	6.1	4.5	61.7	
Level of Service		A	A	A	E	
Approach Delay (s)		2.0	5.7		61.7	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/05/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	275	620	48	73
v/c Ratio	0.28	0.68	0.19	0.27
Control Delay	6.8	10.9	31.3	29.1
Queue Delay	0.7	2.1	0.0	0.0
Total Delay	7.4	13.0	31.3	29.1
Queue Length 50th (ft)	58	233	21	29
Queue Length 95th (ft)	83	349	56	73
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	977	906	255	266
Starvation Cap Reductn	410	158	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.49	0.83	0.19	0.27

Intersection Summary

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/05/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	226	14	15	537	13	21	8	15	19	18	29
Future Volume (vph)	11	226	14	15	537	13	21	8	15	19	18	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			0.99			0.98			0.94	
Flpb, ped/bikes		1.00			1.00			0.97			0.99	
Frt		0.99			1.00			0.95			0.94	
Flt Protected		1.00			1.00			0.98			0.99	
Satd. Flow (prot)		1467			1338			1374			1302	
Flt Permitted		0.97			0.99			0.86			0.92	
Satd. Flow (perm)		1427			1326			1214			1214	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	12	248	15	16	590	14	23	9	16	21	20	32
RTOR Reduction (vph)	0	2	0	0	1	0	0	13	0	0	23	0
Lane Group Flow (vph)	0	273	0	0	619	0	0	35	0	0	50	0
Confl. Peds. (#/hr)	48		12	12		48	19		10	10		19
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		975			906			242			242	
v/s Ratio Prot												
v/s Ratio Perm		0.19			c0.47			0.03			c0.04	
v/c Ratio		0.28			0.68			0.15			0.21	
Uniform Delay, d1		7.4			11.3			39.6			40.0	
Progression Factor		0.81			0.64			1.00			1.00	
Incremental Delay, d2		0.7			3.3			1.3			1.9	
Delay (s)		6.7			10.5			40.8			42.0	
Level of Service		A			B			D			D	
Approach Delay (s)		6.7			10.5			40.8			42.0	
Approach LOS		A			B			D			D	

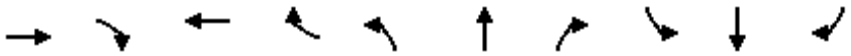
Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

12/05/2022



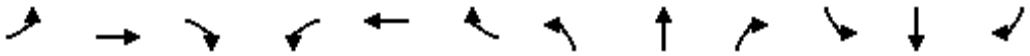
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	169	84	138	46	97	587	23	62	349	4
v/c Ratio	0.49	0.30	0.42	0.16	0.20	0.66	0.03	0.15	0.31	0.00
Control Delay	46.0	42.3	44.3	39.3	8.1	9.5	8.1	7.8	9.2	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	42.3	44.3	39.3	8.1	9.5	8.1	7.8	9.2	6.8
Queue Length 50th (ft)	115	54	92	29	12	77	3	15	104	1
Queue Length 95th (ft)	186	103	156	63	m21	m128	m5	31	151	5
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	347	277	332	289	487	894	741	416	1140	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.30	0.42	0.16	0.20	0.66	0.03	0.15	0.31	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022



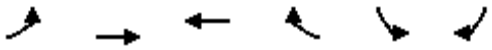
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	156	78	24	104	43	90	546	21	58	325	4
Future Volume (vph)	1	156	78	24	104	43	90	546	21	58	325	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		0.99	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1546	1233		1605	1288	1549	1651	1368	1624	1710	1394
Flt Permitted		1.00	1.00		0.91	1.00	0.55	1.00	1.00	0.27	1.00	1.00
Satd. Flow (perm)		1544	1233		1479	1288	900	1651	1368	465	1710	1394
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	168	84	26	112	46	97	587	23	62	349	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	169	84	0	138	46	97	587	23	62	349	4
Confl. Peds. (#/hr)	15		14	14		15	4		1	1		4
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		25.0	25.0		25.0	25.0	63.0	63.0	63.0	78.0	78.0	78.0
Effective Green, g (s)		27.0	27.0		27.0	27.0	65.0	65.0	65.0	80.0	80.0	80.0
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.54	0.54	0.54	0.67	0.67	0.67
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		347	277		332	289	487	894	741	416	1140	929
v/s Ratio Prot								c0.36		0.01	c0.20	
v/s Ratio Perm		c0.11	0.07		0.09	0.04	0.11		0.02	0.09		0.00
v/c Ratio		0.49	0.30		0.42	0.16	0.20	0.66	0.03	0.15	0.31	0.00
Uniform Delay, d1		40.5	38.7		39.8	37.4	14.1	19.6	12.8	10.1	8.4	6.7
Progression Factor		1.00	1.00		1.00	1.00	0.52	0.38	0.62	1.00	1.00	1.00
Incremental Delay, d2		4.8	2.8		3.8	1.2	0.4	1.8	0.0	0.8	0.7	0.0
Delay (s)		45.3	41.5		43.6	38.6	7.8	9.3	8.0	10.9	9.1	6.7
Level of Service		D	D		D	D	A	A	A	B	A	A
Approach Delay (s)		44.0			42.3			9.1			9.3	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	23	205	157	6	4	21
Future Volume (vph)	23	205	157	6	4	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	223	171	7	4	23

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	248	178	27
Volume Left (vph)	25	0	4
Volume Right (vph)	0	7	23
Hadj (s)	0.04	0.06	-0.41
Departure Headway (s)	4.2	4.3	4.4
Degree Utilization, x	0.29	0.21	0.03
Capacity (veh/h)	848	829	742
Control Delay (s)	8.9	8.4	7.6
Approach Delay (s)	8.9	8.4	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.6		
Level of Service	A		
Intersection Capacity Utilization	37.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
3: Kiss and Ride & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	199	10	17	141	22	22
Future Volume (Veh/h)	199	10	17	141	22	22
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	224	11	19	158	25	25
Pedestrians	3				14	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			249		442	244
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			249		442	244
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		96	97
cM capacity (veh/h)			1284		560	791

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	235	177	50
Volume Left	0	19	25
Volume Right	11	0	25
cSH	1700	1284	656
Volume to Capacity	0.14	0.01	0.08
Queue Length 95th (ft)	0	1	6
Control Delay (s)	0.0	1.0	10.9
Lane LOS		A	B
Approach Delay (s)	0.0	1.0	10.9
Approach LOS			B

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
4: Metro Station Dwy & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022



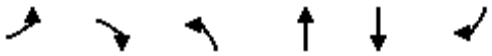
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	220	1	1	152	6	1
Future Volume (Veh/h)	220	1	1	152	6	1
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	242	1	1	167	7	1
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			243		412	242
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			243		412	242
tC, single (s)			4.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			2.2		4.4	4.2
p0 queue free %			100		98	100
cM capacity (veh/h)			1323		445	606

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	243	168	8
Volume Left	0	1	7
Volume Right	1	0	1
cSH	1700	1323	461
Volume to Capacity	0.14	0.00	0.02
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.1	13.0
Lane LOS		A	B
Approach Delay (s)	0.0	0.1	13.0
Approach LOS			B

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	22.9%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	220	140	9	0	19
Future Volume (vph)	0	220	140	9	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	239	152	10	0	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	239	152	10	21
Volume Left (vph)	0	152	0	0
Volume Right (vph)	239	0	0	21
Hadj (s)	-0.58	0.53	0.03	-0.60
Departure Headway (s)	3.8	5.5	5.0	3.2
Degree Utilization, x	0.25	0.23	0.01	0.02
Capacity (veh/h)	917	626	684	1121
Control Delay (s)	8.0	9.0	6.9	6.3
Approach Delay (s)	8.0	8.9		6.3
Approach LOS	A	A		A

Intersection Summary			
Delay	8.3		
Level of Service	A		
Intersection Capacity Utilization	24.4%	ICU Level of Service	A
Analysis Period (min)	15		

Queues

7: Blair Rd & Cedar St

Takoma Metro Multifamily Development

12/05/2022



Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	189	82	88	94	345	55	450
v/c Ratio	0.84	0.35	0.21	0.31	0.64	0.10	0.81
Control Delay	76.8	21.5	15.2	5.7	3.7	0.2	31.6
Queue Delay	0.0	0.0	0.0	0.0	1.2	4.8	0.1
Total Delay	76.8	21.5	15.2	5.7	4.9	5.1	31.7
Queue Length 50th (ft)	120	42	46	23	0	0	200
Queue Length 95th (ft)	#260	m71	m75	m54	m2	m0	m264
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	224	236	424	307	537	528	553
Starvation Cap Reductn	0	0	0	0	65	419	0
Spillback Cap Reductn	0	0	0	0	0	0	2
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.35	0.21	0.31	0.73	0.50	0.82

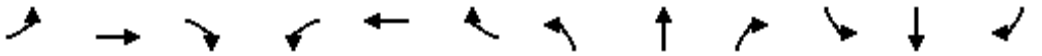
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	143	36	78	84	89	0	328	52	96	329	3
Future Volume (vph)	0	143	36	78	84	89	0	328	52	96	329	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.97		1.00	1.00	0.47		1.00	0.87		1.00	
Flpb, ped/bikes		1.00		0.96	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1344		1400	1543	615		1465	1081		1597	
Flt Permitted		1.00		0.50	1.00	1.00		1.00	1.00		0.71	
Satd. Flow (perm)		1344		734	1543	615		1465	1081		1150	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	151	38	82	88	94	0	345	55	101	346	3
RTOR Reduction (vph)	0	0	0	0	0	68	0	0	35	0	0	0
Lane Group Flow (vph)	0	189	0	82	88	26	0	345	20	0	450	0
Confl. Peds. (#/hr)	89		44	44		89	32		83	83		32
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	3%	3%	3%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		18.0		31.0	31.0	31.0		42.0	42.0		47.0	
Effective Green, g (s)		20.0		33.0	33.0	33.0		44.0	44.0		51.0	
Actuated g/C Ratio		0.17		0.28	0.28	0.28		0.37	0.37		0.42	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		224		240	424	169		537	396		514	
v/s Ratio Prot		c0.14		c0.02	0.06			0.24			c0.05	
v/s Ratio Perm				0.07		0.04			0.02		c0.32	
v/c Ratio		0.84		0.34	0.21	0.15		0.64	0.05		0.88	
Uniform Delay, d1		48.5		39.2	33.4	32.9		31.5	24.5		31.6	
Progression Factor		0.95		0.47	0.42	1.00		0.01	1.00		0.92	
Incremental Delay, d2		29.5		3.7	1.1	1.8		3.5	0.1		10.0	
Delay (s)		75.7		22.3	15.0	34.8		3.7	24.7		39.0	
Level of Service		E		C	B	C		A	C		D	
Approach Delay (s)		75.7			24.3			6.6			39.0	
Approach LOS		E			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/05/2022

Lane Group	SET	NWT
Lane Group Flow (vph)	492	422
v/c Ratio	0.41	0.79
Control Delay	2.0	47.5
Queue Delay	2.4	0.0
Total Delay	4.4	47.5
Queue Length 50th (ft)	27	292
Queue Length 95th (ft)	m28	#434
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1208	537
Starvation Cap Reductn	566	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.77	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/05/2022



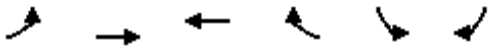
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	399	44	0	380
Future Volume (vph)	0	0	399	44	0	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1506			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1506			1574
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	443	49	0	422
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	488	0	0	422
Confl. Peds. (#/hr)		83				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			39.0
Effective Green, g (s)			94.0			41.0
Actuated g/C Ratio			0.78			0.34
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1179			537
v/s Ratio Prot			c0.32			c0.27
v/s Ratio Perm						
v/c Ratio			0.41			0.79
Uniform Delay, d1			4.2			35.5
Progression Factor			0.37			1.00
Incremental Delay, d2			0.8			11.0
Delay (s)			2.3			46.6
Level of Service			A			D
Approach Delay (s)	0.0		2.3			46.6
Approach LOS	A		A			D

Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	288	219	17	15	13
Future Volume (Veh/h)	13	288	219	17	15	13
Sign Control		Free	Free		Stop	
Grade		6%	4%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	15	324	246	19	17	15
Pedestrians		73	3		160	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		6	0		13	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		312	206			
pX, platoon unblocked	0.91				0.95	0.91
vC, conflicting volume	425				772	488
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	322				559	391
tC, single (s)	4.2				7.4	7.2
tC, 2 stage (s)						
tF (s)	2.3				4.4	4.2
p0 queue free %	98				94	96
cM capacity (veh/h)	957				292	367

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	339	265	32
Volume Left	15	0	17
Volume Right	0	19	15
cSH	957	1700	323
Volume to Capacity	0.02	0.16	0.10
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.6	0.0	17.4
Lane LOS	A		C
Approach Delay (s)	0.6	0.0	17.4
Approach LOS			C

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/05/2022



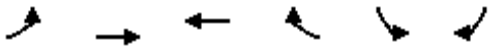
Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	316	215	130	240
v/c Ratio	0.41	0.35	0.38	0.60
Control Delay	12.6	13.4	15.4	45.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.6	13.4	15.4	45.0
Queue Length 50th (ft)	115	55	36	161
Queue Length 95th (ft)	m157	95	79	251
Internal Link Dist (ft)	126	337		365
Turn Bay Length (ft)			125	
Base Capacity (vph)	777	621	345	402
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.41	0.35	0.38	0.60

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	29	268	202	122	196	29
Future Volume (vph)	29	268	202	122	196	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.71	0.99	
Flpb, ped/bikes		0.98	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.98	
Flt Protected		1.00	1.00	1.00	0.96	
Satd. Flow (prot)		1263	1521	847	1465	
Flt Permitted		0.97	1.00	1.00	0.96	
Satd. Flow (perm)		1228	1521	847	1465	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	31	285	215	130	209	31
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	316	215	130	240	0
Confl. Peds. (#/hr)	119			119	18	4
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	8%	8%	6%	6%	0%	0%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		73.0	47.0	47.0	31.0	
Effective Green, g (s)		75.0	49.0	49.0	33.0	
Actuated g/C Ratio		0.62	0.41	0.41	0.28	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		773	621	345	402	
v/s Ratio Prot		c0.07	0.14		c0.16	
v/s Ratio Perm		c0.18		0.15		
v/c Ratio		0.41	0.35	0.38	0.60	
Uniform Delay, d1		11.3	24.5	24.8	37.7	
Progression Factor		0.97	0.48	0.48	1.00	
Incremental Delay, d2		1.3	1.5	3.0	6.4	
Delay (s)		12.3	13.2	15.0	44.1	
Level of Service		B	B	B	D	
Approach Delay (s)		12.3	13.8		44.1	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/05/2022

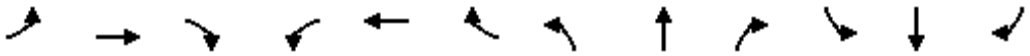
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	456	320	122	61
v/c Ratio	0.48	0.38	0.44	0.24
Control Delay	8.1	17.5	45.9	33.8
Queue Delay	0.8	11.8	0.0	0.0
Total Delay	8.8	29.2	45.9	33.8
Queue Length 50th (ft)	164	190	79	29
Queue Length 95th (ft)	221	m175	142	70
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	956	843	275	254
Starvation Cap Reductn	233	492	0	0
Spillback Cap Reductn	78	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.63	0.91	0.44	0.24

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/05/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	391	23	12	272	29	31	72	17	16	26	18
Future Volume (vph)	33	391	23	12	272	29	31	72	17	16	26	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.98			0.95			0.97			0.92	
Flpb, ped/bikes		0.98			0.99			0.95			0.97	
Frt		0.99			0.99			0.98			0.96	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1454			1251			1463			1300	
Flt Permitted		0.96			0.98			0.91			0.92	
Satd. Flow (perm)		1397			1230			1354			1206	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	34	399	23	12	278	30	32	73	17	16	27	18
RTOR Reduction (vph)	0	2	0	0	3	0	0	5	0	0	13	0
Lane Group Flow (vph)	0	454	0	0	317	0	0	117	0	0	48	0
Confl. Peds. (#/hr)	94		71	71		94	52		37	37		52
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	0%	0%	0%	3%	3%	3%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		954			840			270			241	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.26			c0.09			0.04	
v/c Ratio		0.48			0.38			0.43			0.20	
Uniform Delay, d1		8.9			8.1			42.1			40.0	
Progression Factor		0.72			2.14			1.00			1.00	
Incremental Delay, d2		1.5			0.1			5.0			1.9	
Delay (s)		7.9			17.5			47.1			41.9	
Level of Service		A			B			D			D	
Approach Delay (s)		7.9			17.5			47.1			41.9	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

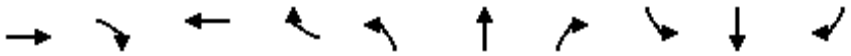
G. Vehicular Capacity Analysis Worksheets – 2027 Background Interim Conditions

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

12/14/2022



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	124	121	176	34	38	211	11	39	576	1
v/c Ratio	0.26	0.32	0.40	0.09	0.13	0.32	0.02	0.06	0.59	0.00
Control Delay	33.1	34.7	36.1	30.4	16.4	17.4	15.4	11.0	19.0	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	34.7	36.1	30.4	16.4	17.4	15.4	11.0	19.0	10.0
Queue Length 50th (ft)	72	72	107	19	12	65	3	12	268	0
Queue Length 95th (ft)	124	126	175	44	m24	m93	m9	28	379	3
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	474	379	441	399	291	660	561	610	978	784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.32	0.40	0.09	0.13	0.32	0.02	0.06	0.59	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022

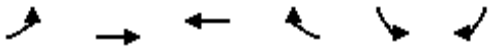
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	112	111	43	119	31	35	194	10	36	530	1
Future Volume (vph)	2	112	111	43	119	31	35	194	10	36	530	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	0.98	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1545	1232		1592	1297	1544	1651	1403	1593	1677	1345
Flt Permitted		1.00	1.00		0.89	1.00	0.45	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)		1540	1232		1431	1297	727	1651	1403	857	1677	1345
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	122	121	47	129	34	38	211	11	39	576	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	124	121	0	176	34	38	211	11	39	576	1
Confl. Peds. (#/hr)	13		15	15		13	7					7
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		35.0	35.0		35.0	35.0	46.0	46.0	46.0	68.0	68.0	68.0
Effective Green, g (s)		37.0	37.0		37.0	37.0	48.0	48.0	48.0	70.0	70.0	70.0
Actuated g/C Ratio		0.31	0.31		0.31	0.31	0.40	0.40	0.40	0.58	0.58	0.58
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		474	379		441	399	290	660	561	610	978	784
v/s Ratio Prot								0.13		0.01	c0.34	
v/s Ratio Perm		0.08	0.10		c0.12	0.03	0.05		0.01	0.03		0.00
v/c Ratio		0.26	0.32		0.40	0.09	0.13	0.32	0.02	0.06	0.59	0.00
Uniform Delay, d1		31.2	31.8		32.7	29.5	22.8	24.8	21.8	11.1	15.9	10.4
Progression Factor		1.00	1.00		1.00	1.00	0.66	0.64	0.70	1.00	1.00	1.00
Incremental Delay, d2		1.3	2.2		2.7	0.4	0.9	1.2	0.1	0.2	2.6	0.0
Delay (s)		32.6	34.0		35.4	29.9	15.9	17.1	15.2	11.3	18.5	10.4
Level of Service		C	C		D	C	B	B	B	B	B	B
Approach Delay (s)		33.3			34.5			16.9			18.0	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	14	152	176	4	2	13
Future Volume (vph)	14	152	176	4	2	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	169	196	4	2	14

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	185	200	16
Volume Left (vph)	16	0	2
Volume Right (vph)	0	4	14
Hadj (s)	0.09	0.07	-0.50
Departure Headway (s)	4.2	4.2	4.2
Degree Utilization, x	0.22	0.23	0.02
Capacity (veh/h)	840	848	775
Control Delay (s)	8.4	8.5	7.3
Approach Delay (s)	8.4	8.5	7.3
Approach LOS	A	A	A

Intersection Summary			
Delay	8.4		
Level of Service	A		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Kiss and Ride & Eastern Ave — 12/14/2022



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	136	16	22	165	15	6
Future Volume (Veh/h)	136	16	22	165	15	6
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	148	17	24	179	16	7
Pedestrians	1				10	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			175		394	166
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			175		394	166
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		97	99
cM capacity (veh/h)			1378		598	876

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	165	203	23
Volume Left	0	24	16
Volume Right	17	0	7
cSH	1700	1378	662
Volume to Capacity	0.10	0.02	0.03
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	1.0	10.6
Lane LOS		A	B
Approach Delay (s)	0.0	1.0	10.6
Approach LOS			B

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
4: Metro Station Dwy & Eastern Ave — 12/14/2022



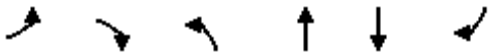
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	141	1	1	185	2	2
Future Volume (Veh/h)	141	1	1	185	2	2
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	157	1	1	206	2	2
Pedestrians	1				7	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			165		374	164
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			165		374	164
tC, single (s)			4.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			2.2		4.4	4.2
p0 queue free %			100		100	100
cM capacity (veh/h)			1399		469	674

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	158	207	4
Volume Left	0	1	2
Volume Right	1	0	2
cSH	1700	1399	553
Volume to Capacity	0.09	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	11.6
Lane LOS		A	B
Approach Delay (s)	0.0	0.0	11.6
Approach LOS			B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	21.7%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	143	160	3	0	31
Future Volume (vph)	0	143	160	3	0	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	159	178	3	0	34

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	159	178	3	34
Volume Left (vph)	0	178	0	0
Volume Right (vph)	159	0	0	34
Hadj (s)	-0.52	0.55	0.05	-0.55
Departure Headway (s)	3.9	5.4	4.9	3.2
Degree Utilization, x	0.17	0.27	0.00	0.03
Capacity (veh/h)	883	648	710	1121
Control Delay (s)	7.7	9.1	6.7	6.3
Approach Delay (s)	7.7	9.1		6.3
Approach LOS	A	A		A

Intersection Summary			
Delay	8.2		
Level of Service	A		
Intersection Capacity Utilization	26.0%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/14/2022



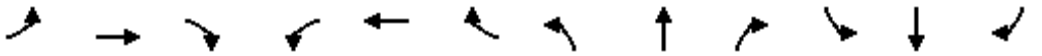
Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	110	87	286	173	274	32	521
v/c Ratio	0.41	0.27	0.62	0.56	0.62	0.07	0.78
Control Delay	47.8	24.4	31.9	15.0	4.8	0.2	33.3
Queue Delay	0.0	0.0	0.0	0.0	0.3	3.8	0.1
Total Delay	47.8	24.4	31.9	15.0	5.1	4.0	33.5
Queue Length 50th (ft)	75	46	178	40	0	0	257
Queue Length 95th (ft)	132	m87	m279	m112	0	m0	402
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	266	327	462	311	439	464	666
Starvation Cap Reductn	0	0	0	0	17	380	0
Spillback Cap Reductn	0	0	0	0	0	0	6
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.27	0.62	0.56	0.65	0.38	0.79

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	74	28	80	263	159	0	252	29	62	417	1
Future Volume (vph)	0	74	28	80	263	159	0	252	29	62	417	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.98		1.00	1.00	0.45		1.00	0.86		1.00	
Flpb, ped/bikes		1.00		0.97	1.00	1.00		1.00	1.00		1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1389		1424	1543	592		1424	1037		1641	
Flt Permitted		1.00		0.68	1.00	1.00		1.00	1.00		0.91	
Satd. Flow (perm)		1389		1018	1543	592		1424	1037		1507	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	80	30	87	286	173	0	274	32	67	453	1
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	22	0	0	0
Lane Group Flow (vph)	0	110	0	87	286	52	0	274	10	0	521	0
Confl. Peds. (#/hr)	103		15	15		103	15		77	77		15
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	7%	7%	7%	1%	1%	1%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		21.0		34.0	34.0	34.0		35.0	35.0		44.0	
Effective Green, g (s)		23.0		36.0	36.0	36.0		37.0	37.0		48.0	
Actuated g/C Ratio		0.19		0.30	0.30	0.30		0.31	0.31		0.40	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		266		329	462	177		439	319		615	
v/s Ratio Prot		0.08		0.02	c0.19			0.19			c0.08	
v/s Ratio Perm				0.06		0.09			0.01		c0.26	
v/c Ratio		0.41		0.26	0.62	0.29		0.62	0.03		0.85	
Uniform Delay, d1		42.6		32.4	36.1	32.2		35.5	29.0		32.7	
Progression Factor		0.99		0.68	0.71	2.26		0.00	1.00		0.90	
Incremental Delay, d2		4.6		1.8	5.6	3.8		4.7	0.1		11.5	
Delay (s)		47.0		23.9	31.3	76.7		4.8	29.1		41.0	
Level of Service		D		C	C	E		A	C		D	
Approach Delay (s)		47.0			44.5			7.3			41.0	
Approach LOS		D			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	35.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/14/2022

Lane Group	SET	NWT
Lane Group Flow (vph)	573	312
v/c Ratio	0.47	0.70
Control Delay	2.0	48.2
Queue Delay	1.5	0.0
Total Delay	3.4	48.2
Queue Length 50th (ft)	0	216
Queue Length 95th (ft)	0	323
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1208	445
Starvation Cap Reductn	428	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.73	0.70

Intersection Summary

HCM Signalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
8: 4th St & Blair Rd — 12/14/2022



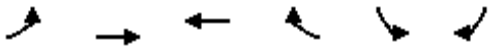
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	475	52	0	281
Future Volume (vph)	0	0	475	52	0	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1506			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1506			1574
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.90
Adj. Flow (vph)	0	0	516	57	0	312
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	569	0	0	312
Confl. Peds. (#/hr)		77				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			32.0
Effective Green, g (s)			94.0			34.0
Actuated g/C Ratio			0.78			0.28
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1179			445
v/s Ratio Prot			c0.38			c0.20
v/s Ratio Perm						
v/c Ratio			0.48			0.70
Uniform Delay, d1			4.5			38.5
Progression Factor			0.26			1.00
Incremental Delay, d2			1.0			8.9
Delay (s)			2.2			47.4
Level of Service			A			D
Approach Delay (s)	0.0		2.2			47.4
Approach LOS	A		A			D

Intersection Summary			
HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	149	465	19	15	13
Future Volume (Veh/h)	10	149	465	19	15	13
Sign Control		Free	Free		Stop	
Grade		6%	4%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	155	484	20	16	14
Pedestrians		84	1		158	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		7	0		13	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		312	206			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	662				828	736
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	499				698	588
tC, single (s)	4.2				7.4	7.2
tC, 2 stage (s)						
tF (s)	2.3				4.4	4.2
p0 queue free %	99				92	94
cM capacity (veh/h)	752				208	247

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	165	504	30
Volume Left	10	0	16
Volume Right	0	20	14
cSH	752	1700	225
Volume to Capacity	0.01	0.30	0.13
Queue Length 95th (ft)	1	0	11
Control Delay (s)	0.7	0.0	23.5
Lane LOS	A		C
Approach Delay (s)	0.7	0.0	23.5
Approach LOS			C

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



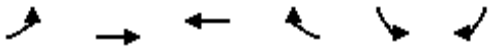
Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	176	459	155	162
v/c Ratio	0.19	0.50	0.27	0.75
Control Delay	2.0	6.2	4.7	70.6
Queue Delay	0.0	0.8	0.0	0.0
Total Delay	2.0	7.1	4.7	70.6
Queue Length 50th (ft)	18	93	19	121
Queue Length 95th (ft)	m21	132	m33	#228
Internal Link Dist (ft)	126	337		365
Turn Bay Length (ft)			125	
Base Capacity (vph)	905	925	566	215
Starvation Cap Reductn	0	216	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.19	0.65	0.27	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	155	441	149	116	39
Future Volume (vph)	14	155	441	149	116	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.78	0.99	
Flpb, ped/bikes		0.99	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.97	
Flt Protected		1.00	1.00	1.00	0.96	
Satd. Flow (prot)		1254	1521	932	1358	
Flt Permitted		0.96	1.00	1.00	0.96	
Satd. Flow (perm)		1214	1521	932	1358	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	15	161	459	155	121	41
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	176	459	155	162	0
Confl. Peds. (#/hr)	89			89	12	5
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	10%	10%	6%	6%	6%	6%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		87.0	71.0	71.0	17.0	
Effective Green, g (s)		89.0	73.0	73.0	19.0	
Actuated g/C Ratio		0.74	0.61	0.61	0.16	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		904	925	566	215	
v/s Ratio Prot		c0.02	c0.30		c0.12	
v/s Ratio Perm		0.12		0.17		
v/c Ratio		0.19	0.50	0.27	0.75	
Uniform Delay, d1		4.7	13.2	11.0	48.3	
Progression Factor		0.33	0.35	0.33	1.00	
Incremental Delay, d2		0.4	1.4	0.9	21.4	
Delay (s)		2.0	6.1	4.6	69.7	
Level of Service		A	A	A	E	
Approach Delay (s)		2.0	5.7		69.7	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022

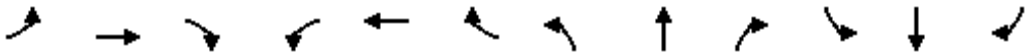
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	283	627	49	73
v/c Ratio	0.29	0.69	0.19	0.27
Control Delay	6.3	11.2	31.5	29.1
Queue Delay	0.7	2.1	0.0	0.0
Total Delay	7.1	13.3	31.5	29.1
Queue Length 50th (ft)	56	236	21	29
Queue Length 95th (ft)	m78	355	57	73
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	977	906	254	266
Starvation Cap Reductn	412	154	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.50	0.83	0.19	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	232	15	15	543	13	22	8	15	19	18	29
Future Volume (vph)	11	232	15	15	543	13	22	8	15	19	18	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			0.99			0.98			0.94	
Flpb, ped/bikes		1.00			1.00			0.97			0.99	
Frt		0.99			1.00			0.96			0.94	
Flt Protected		1.00			1.00			0.98			0.99	
Satd. Flow (prot)		1466			1339			1374			1302	
Flt Permitted		0.97			0.99			0.86			0.92	
Satd. Flow (perm)		1428			1326			1209			1214	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	12	255	16	16	597	14	24	9	16	21	20	32
RTOR Reduction (vph)	0	2	0	0	1	0	0	13	0	0	23	0
Lane Group Flow (vph)	0	281	0	0	626	0	0	36	0	0	50	0
Confl. Peds. (#/hr)	48		12	12		48	19		10	10		19
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		975			906			241			242	
v/s Ratio Prot												
v/s Ratio Perm		0.20			c0.47			0.03			c0.04	
v/c Ratio		0.29			0.69			0.15			0.21	
Uniform Delay, d1		7.5			11.4			39.6			40.0	
Progression Factor		0.75			0.64			1.00			1.00	
Incremental Delay, d2		0.7			3.4			1.3			1.9	
Delay (s)		6.3			10.7			40.9			42.0	
Level of Service		A			B			D			D	
Approach Delay (s)		6.3			10.7			40.9			42.0	
Approach LOS		A			B			D			D	

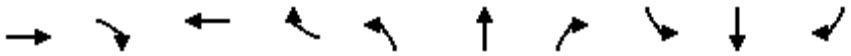
Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

12/14/2022



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	170	84	150	60	97	618	23	76	372	4
v/c Ratio	0.49	0.30	0.45	0.21	0.20	0.69	0.03	0.19	0.33	0.00
Control Delay	46.1	42.3	45.1	40.1	8.4	10.5	8.3	8.2	9.5	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.1	42.3	45.1	40.1	8.4	10.5	8.3	8.2	9.5	6.8
Queue Length 50th (ft)	115	54	101	38	13	87	3	19	113	1
Queue Length 95th (ft)	187	103	168	78	m22	m141	m5	36	163	5
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	347	277	335	289	477	894	741	395	1140	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.30	0.45	0.21	0.20	0.69	0.03	0.19	0.33	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022

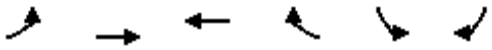
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	157	78	24	115	56	90	575	21	71	346	4
Future Volume (vph)	1	157	78	24	115	56	90	575	21	71	346	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1546	1233		1606	1288	1549	1651	1368	1624	1710	1394
Flt Permitted		1.00	1.00		0.92	1.00	0.54	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		1544	1233		1490	1288	881	1651	1368	429	1710	1394
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	169	84	26	124	60	97	618	23	76	372	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	170	84	0	150	60	97	618	23	76	372	4
Confl. Peds. (#/hr)	15		14	14		15	4		1	1		4
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		25.0	25.0		25.0	25.0	63.0	63.0	63.0	78.0	78.0	78.0
Effective Green, g (s)		27.0	27.0		27.0	27.0	65.0	65.0	65.0	80.0	80.0	80.0
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.54	0.54	0.54	0.67	0.67	0.67
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		347	277		335	289	477	894	741	395	1140	929
v/s Ratio Prot								c0.37		0.02	c0.22	
v/s Ratio Perm		c0.11	0.07		0.10	0.05	0.11		0.02	0.11		0.00
v/c Ratio		0.49	0.30		0.45	0.21	0.20	0.69	0.03	0.19	0.33	0.00
Uniform Delay, d1		40.5	38.7		40.1	37.8	14.2	20.1	12.8	10.8	8.5	6.7
Progression Factor		1.00	1.00		1.00	1.00	0.54	0.39	0.63	1.00	1.00	1.00
Incremental Delay, d2		4.9	2.8		4.3	1.6	0.5	2.3	0.0	1.1	0.8	0.0
Delay (s)		45.4	41.5		44.4	39.4	8.2	10.2	8.2	11.9	9.3	6.7
Level of Service		D	D		D	D	A	B	A	B	A	A
Approach Delay (s)		44.1			42.9			9.8			9.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	23	219	186	6	4	21
Future Volume (vph)	23	219	186	6	4	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	238	202	7	4	23

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	263	209	27
Volume Left (vph)	25	0	4
Volume Right (vph)	0	7	23
Hadj (s)	0.04	0.06	-0.41
Departure Headway (s)	4.2	4.3	4.5
Degree Utilization, x	0.31	0.25	0.03
Capacity (veh/h)	841	816	721
Control Delay (s)	9.1	8.7	7.7
Approach Delay (s)	9.1	8.7	7.7
Approach LOS	A	A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Kiss and Ride & Eastern Ave — 12/14/2022



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	213	10	17	169	22	22
Future Volume (Veh/h)	213	10	17	169	22	22
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	239	11	19	190	25	25
Pedestrians	3				14	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			264		490	258
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			264		490	258
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		95	97
cM capacity (veh/h)			1268		526	776

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	250	209	50
Volume Left	0	19	25
Volume Right	11	0	25
cSH	1700	1268	627
Volume to Capacity	0.15	0.01	0.08
Queue Length 95th (ft)	0	1	6
Control Delay (s)	0.0	0.8	11.2
Lane LOS		A	B
Approach Delay (s)	0.0	0.8	11.2
Approach LOS			B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
4: Metro Station Dwy & Eastern Ave — 12/14/2022



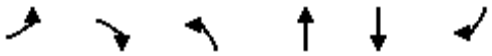
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	234	1	1	181	6	1
Future Volume (Veh/h)	234	1	1	181	6	1
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	257	1	1	199	7	1
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			258		460	258
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			258		460	258
tC, single (s)			4.1		7.4	7.2
tC, 2 stage (s)						
tF (s)			2.2		4.4	4.2
p0 queue free %			100		98	100
cM capacity (veh/h)			1307		415	593

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	258	200	8
Volume Left	0	1	7
Volume Right	1	0	1
cSH	1700	1307	431
Volume to Capacity	0.15	0.00	0.02
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	13.5
Lane LOS		A	B
Approach Delay (s)	0.0	0.0	13.5
Approach LOS			B

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	23.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	234	168	9	0	19
Future Volume (vph)	0	234	168	9	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	254	183	10	0	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	254	183	10	21
Volume Left (vph)	0	183	0	0
Volume Right (vph)	254	0	0	21
Hadj (s)	-0.58	0.53	0.03	-0.60
Departure Headway (s)	3.9	5.6	5.1	3.2
Degree Utilization, x	0.27	0.28	0.01	0.02
Capacity (veh/h)	892	622	678	1121
Control Delay (s)	8.3	9.6	6.9	6.3
Approach Delay (s)	8.3	9.4		6.3
Approach LOS	A	A		A

Intersection Summary			
Delay	8.7		
Level of Service	A		
Intersection Capacity Utilization	26.1%	ICU Level of Service	A
Analysis Period (min)	15		

Queues

7: Blair Rd & Cedar St

Takoma Metro Multifamily Development

12/14/2022



Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	192	82	89	98	347	55	456
v/c Ratio	0.86	0.35	0.21	0.32	0.65	0.10	0.84
Control Delay	78.6	21.3	14.8	5.9	3.7	0.2	33.5
Queue Delay	0.0	0.0	0.0	0.0	1.3	4.8	0.1
Total Delay	78.6	21.3	14.8	5.9	5.0	5.1	33.6
Queue Length 50th (ft)	122	42	46	24	0	0	208
Queue Length 95th (ft)	#264	m69	m73	m39	m2	m0	m268
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	224	234	424	307	537	528	544
Starvation Cap Reductn	0	0	0	0	65	419	0
Spillback Cap Reductn	0	0	0	0	0	0	1
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.35	0.21	0.32	0.74	0.50	0.84

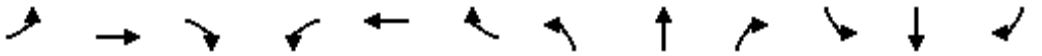
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	146	36	78	85	93	0	330	52	100	331	3
Future Volume (vph)	0	146	36	78	85	93	0	330	52	100	331	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.97		1.00	1.00	0.47		1.00	0.87		1.00	
Flpb, ped/bikes		1.00		0.96	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1346		1402	1543	615		1465	1081		1597	
Flt Permitted		1.00		0.49	1.00	1.00		1.00	1.00		0.70	
Satd. Flow (perm)		1346		725	1543	615		1465	1081		1129	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	154	38	82	89	98	0	347	55	105	348	3
RTOR Reduction (vph)	0	0	0	0	0	71	0	0	35	0	0	0
Lane Group Flow (vph)	0	192	0	82	89	27	0	347	20	0	456	0
Confl. Peds. (#/hr)	89		44	44		89	32		83	83		32
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	3%	3%	3%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		18.0		31.0	31.0	31.0		42.0	42.0		47.0	
Effective Green, g (s)		20.0		33.0	33.0	33.0		44.0	44.0		51.0	
Actuated g/C Ratio		0.17		0.28	0.28	0.28		0.37	0.37		0.42	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		224		238	424	169		537	396		507	
v/s Ratio Prot		c0.14		c0.02	0.06			0.24			c0.05	
v/s Ratio Perm				0.07		0.04			0.02		c0.33	
v/c Ratio		0.86		0.34	0.21	0.16		0.65	0.05		0.90	
Uniform Delay, d1		48.6		39.4	33.5	33.0		31.5	24.5		32.1	
Progression Factor		0.95		0.47	0.40	1.00		0.01	1.00		0.93	
Incremental Delay, d2		31.3		3.8	1.1	1.9		3.5	0.1		12.0	
Delay (s)		77.6		22.1	14.6	34.9		3.7	24.7		42.0	
Level of Service		E		C	B	C		A	C		D	
Approach Delay (s)		77.6			24.3			6.6			42.0	
Approach LOS		E			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/14/2022

Lane Group	SET	NWT
Lane Group Flow (vph)	495	424
v/c Ratio	0.41	0.79
Control Delay	2.0	47.8
Queue Delay	2.6	0.0
Total Delay	4.7	47.8
Queue Length 50th (ft)	27	294
Queue Length 95th (ft)	m28	#452
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1208	537
Starvation Cap Reductn	574	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.78	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/14/2022

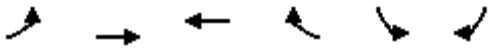
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	401	44	0	382
Future Volume (vph)	0	0	401	44	0	382
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1506			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1506			1574
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	446	49	0	424
RTOR Reduction (vph)	0	0	3	0	0	0
Lane Group Flow (vph)	0	0	492	0	0	424
Confl. Peds. (#/hr)		83				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			39.0
Effective Green, g (s)			94.0			41.0
Actuated g/C Ratio			0.78			0.34
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1179			537
v/s Ratio Prot			c0.33			c0.27
v/s Ratio Perm						
v/c Ratio			0.42			0.79
Uniform Delay, d1			4.2			35.6
Progression Factor			0.37			1.00
Incremental Delay, d2			0.7			11.2
Delay (s)			2.3			46.9
Level of Service			A			D
Approach Delay (s)	0.0		2.3			46.9
Approach LOS	A		A			D

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	295	225	17	15	13
Future Volume (Veh/h)	13	295	225	17	15	13
Sign Control		Free	Free		Stop	
Grade		6%	4%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	15	331	253	19	17	15
Pedestrians		73	3		160	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		6	0		13	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		312	206			
pX, platoon unblocked	0.91				0.95	0.91
vC, conflicting volume	432				786	496
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	326				564	396
tC, single (s)	4.2				7.4	7.2
tC, 2 stage (s)						
tF (s)	2.3				4.4	4.2
p0 queue free %	98				94	96
cM capacity (veh/h)	951				290	363

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	346	272	32
Volume Left	15	0	17
Volume Right	0	19	15
cSH	951	1700	320
Volume to Capacity	0.02	0.16	0.10
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.5	0.0	17.5
Lane LOS	A		C
Approach Delay (s)	0.5	0.0	17.5
Approach LOS			C

Intersection Summary			
Average Delay		1.2	
Intersection Capacity Utilization		48.2%	ICU Level of Service A
Analysis Period (min)		15	

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



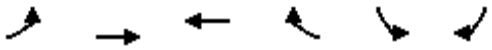
Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	323	220	141	253
v/c Ratio	0.42	0.35	0.41	0.63
Control Delay	12.7	13.5	16.2	46.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.7	13.5	16.2	46.3
Queue Length 50th (ft)	119	58	43	172
Queue Length 95th (ft)	m159	101	93	265
Internal Link Dist (ft)	126	337		365
Turn Bay Length (ft)			125	
Base Capacity (vph)	775	621	345	402
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.42	0.35	0.41	0.63

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	31	273	207	133	208	30
Future Volume (vph)	31	273	207	133	208	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.71	0.99	
Flpb, ped/bikes		0.98	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.98	
Flt Protected		0.99	1.00	1.00	0.96	
Satd. Flow (prot)		1262	1521	847	1465	
Flt Permitted		0.96	1.00	1.00	0.96	
Satd. Flow (perm)		1224	1521	847	1465	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	33	290	220	141	221	32
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	323	220	141	253	0
Confl. Peds. (#/hr)	119			119	18	4
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	8%	8%	6%	6%	0%	0%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		73.0	47.0	47.0	31.0	
Effective Green, g (s)		75.0	49.0	49.0	33.0	
Actuated g/C Ratio		0.62	0.41	0.41	0.28	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		771	621	345	402	
v/s Ratio Prot		c0.08	0.14		c0.17	
v/s Ratio Perm		c0.18		0.17		
v/c Ratio		0.42	0.35	0.41	0.63	
Uniform Delay, d1		11.4	24.6	25.2	38.1	
Progression Factor		0.96	0.48	0.49	1.00	
Incremental Delay, d2		1.3	1.5	3.4	7.3	
Delay (s)		12.3	13.2	15.7	45.4	
Level of Service		B	B	B	D	
Approach Delay (s)		12.3	14.2		45.4	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	22.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022

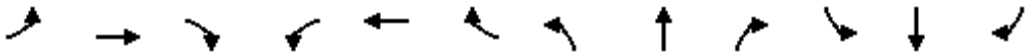
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	474	331	127	61
v/c Ratio	0.50	0.39	0.47	0.24
Control Delay	8.2	17.8	46.9	33.8
Queue Delay	0.8	13.9	0.0	0.0
Total Delay	9.0	31.7	46.9	33.8
Queue Length 50th (ft)	173	197	83	29
Queue Length 95th (ft)	235	m182	148	70
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	952	845	270	254
Starvation Cap Reductn	222	490	0	0
Spillback Cap Reductn	11	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.65	0.93	0.47	0.24

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	403	28	12	283	29	36	72	17	16	26	18
Future Volume (vph)	33	403	28	12	283	29	36	72	17	16	26	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.97			0.95			0.97			0.92	
Flpb, ped/bikes		0.98			1.00			0.94			0.97	
Frt		0.99			0.99			0.98			0.96	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1446			1255			1455			1301	
Flt Permitted		0.96			0.98			0.90			0.91	
Satd. Flow (perm)		1391			1233			1330			1206	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	34	411	29	12	289	30	37	73	17	16	27	18
RTOR Reduction (vph)	0	2	0	0	3	0	0	5	0	0	13	0
Lane Group Flow (vph)	0	472	0	0	328	0	0	122	0	0	48	0
Confl. Peds. (#/hr)	94		71	71		94	52		37	37		52
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	0%	0%	0%	3%	3%	3%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		950			842			266			241	
v/s Ratio Prot												
v/s Ratio Perm		c0.34			0.27			c0.09			0.04	
v/c Ratio		0.50			0.39			0.46			0.20	
Uniform Delay, d1		9.1			8.2			42.3			40.0	
Progression Factor		0.71			2.15			1.00			1.00	
Incremental Delay, d2		1.6			0.1			5.6			1.9	
Delay (s)		8.1			17.8			47.9			41.9	
Level of Service		A			B			D			D	
Approach Delay (s)		8.1			17.8			47.9			41.9	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

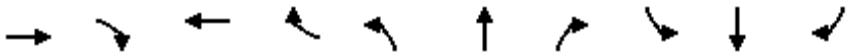
H. Vehicular Capacity Analysis Worksheets – 2027 Background Conditions

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

12/14/2022



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	125	121	194	122	38	211	11	125	576	1
v/c Ratio	0.26	0.32	0.46	0.31	0.13	0.32	0.02	0.20	0.59	0.00
Control Delay	33.1	34.7	37.6	34.3	16.4	17.4	15.4	12.2	19.0	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	34.7	37.6	34.3	16.4	17.4	15.4	12.2	19.0	10.0
Queue Length 50th (ft)	73	72	121	72	12	65	3	41	268	0
Queue Length 95th (ft)	125	126	194	126	m24	m92	m9	71	379	3
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	474	379	426	399	291	660	561	610	978	784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.32	0.46	0.31	0.13	0.32	0.02	0.20	0.59	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022

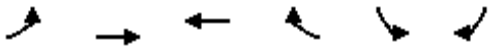
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	113	111	57	121	112	35	194	10	115	530	1
Future Volume (vph)	2	113	111	57	121	112	35	194	10	115	530	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	0.98	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1545	1232		1585	1297	1544	1651	1403	1593	1677	1345
Flt Permitted		1.00	1.00		0.86	1.00	0.45	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)		1540	1232		1382	1297	727	1651	1403	857	1677	1345
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	123	121	62	132	122	38	211	11	125	576	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	125	121	0	194	122	38	211	11	125	576	1
Confl. Peds. (#/hr)	13		15	15		13	7					7
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		35.0	35.0		35.0	35.0	46.0	46.0	46.0	68.0	68.0	68.0
Effective Green, g (s)		37.0	37.0		37.0	37.0	48.0	48.0	48.0	70.0	70.0	70.0
Actuated g/C Ratio		0.31	0.31		0.31	0.31	0.40	0.40	0.40	0.58	0.58	0.58
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		474	379		426	399	290	660	561	610	978	784
v/s Ratio Prot								0.13		0.03	c0.34	
v/s Ratio Perm		0.08	0.10		c0.14	0.09	0.05		0.01	0.09		0.00
v/c Ratio		0.26	0.32		0.46	0.31	0.13	0.32	0.02	0.20	0.59	0.00
Uniform Delay, d1		31.2	31.8		33.4	31.7	22.8	24.8	21.8	11.7	15.9	10.4
Progression Factor		1.00	1.00		1.00	1.00	0.66	0.64	0.70	1.00	1.00	1.00
Incremental Delay, d2		1.4	2.2		3.5	2.0	0.9	1.2	0.1	0.8	2.6	0.0
Delay (s)		32.6	34.0		36.9	33.7	15.9	17.1	15.2	12.5	18.5	10.4
Level of Service		C	C		D	C	B	B	B	B	B	B
Approach Delay (s)		33.3			35.6			16.9			17.4	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	14	232	273	18	2	13
Future Volume (vph)	14	232	273	18	2	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	258	303	20	2	14

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	274	323	16
Volume Left (vph)	16	0	2
Volume Right (vph)	0	20	14
Hadj (s)	0.08	0.05	-0.50
Departure Headway (s)	4.3	4.3	4.7
Degree Utilization, x	0.33	0.38	0.02
Capacity (veh/h)	815	825	677
Control Delay (s)	9.5	9.9	7.8
Approach Delay (s)	9.5	9.9	7.8
Approach LOS	A	A	A

Intersection Summary				
Delay	9.6			
Level of Service	A			
Intersection Capacity Utilization	36.3%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Relocated Metro Station Dwy & Eastern Ave — 12/14/2022



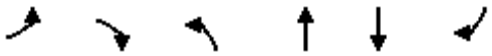
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	214	2	6	170	106	35
Future Volume (Veh/h)	214	2	6	170	106	35
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	233	2	7	185	115	38
Pedestrians	1				10	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			245		444	244
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			245		444	244
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		80	95
cM capacity (veh/h)			1299		567	793

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	235	192	153
Volume Left	0	7	115
Volume Right	2	0	38
cSH	1700	1299	610
Volume to Capacity	0.14	0.01	0.25
Queue Length 95th (ft)	0	0	25
Control Delay (s)	0.0	0.3	12.9
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	12.9
Approach LOS			B

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022



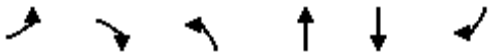
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	256	165	3	0	31
Future Volume (vph)	0	256	165	3	0	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	284	183	3	0	34

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	284	183	3	34
Volume Left (vph)	0	183	0	0
Volume Right (vph)	284	0	0	34
Hadj (s)	-0.52	0.55	0.05	-0.55
Departure Headway (s)	3.9	5.7	5.2	3.2
Degree Utilization, x	0.31	0.29	0.00	0.03
Capacity (veh/h)	880	610	664	1121
Control Delay (s)	8.7	9.7	7.0	6.3
Approach Delay (s)	8.7	9.7		6.3
Approach LOS	A	A		A

Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	26.3%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Cedar St & Site Dwy

Takoma Metro Multifamily Development
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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	168	256	6
Future Volume (Veh/h)	0	0	0	168	256	6
Sign Control	Stop			Free	Free	
Grade	0%			0%	4%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	187	284	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				227		
pX, platoon unblocked						
vC, conflicting volume	381	288	291			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	381	288	291			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	594	709	1268			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	62	125	291
Volume Left	0	0	0	0
Volume Right	0	0	0	7
cSH	1700	1268	1700	1700
Volume to Capacity	0.00	0.00	0.07	0.17
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	17.2%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/14/2022



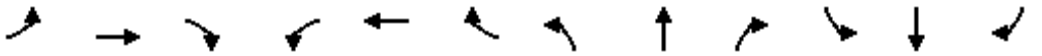
Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	126	137	286	173	274	80	521
v/c Ratio	0.47	0.43	0.62	0.56	0.62	0.17	0.78
Control Delay	49.5	28.1	29.4	8.4	3.9	0.4	33.5
Queue Delay	0.0	0.0	5.0	2.3	2.0	5.1	0.1
Total Delay	49.5	28.1	34.4	10.7	6.0	5.6	33.6
Queue Length 50th (ft)	86	40	110	2	0	0	257
Queue Length 95th (ft)	146	m86	m237	m35	m2	m0	401
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	268	316	462	311	439	464	666
Starvation Cap Reductn	0	0	116	58	69	327	0
Spillback Cap Reductn	0	0	0	0	0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.43	0.83	0.68	0.74	0.58	0.79

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	88	28	126	263	159	0	252	74	62	417	1
Future Volume (vph)	0	88	28	126	263	159	0	252	74	62	417	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.98		1.00	1.00	0.45		1.00	0.86		1.00	
Flpb, ped/bikes		1.00		0.97	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1400		1428	1543	592		1424	1037		1641	
Flt Permitted		1.00		0.65	1.00	1.00		1.00	1.00		0.91	
Satd. Flow (perm)		1400		971	1543	592		1424	1037		1507	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	96	30	137	286	173	0	274	80	67	453	1
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	55	0	0	0
Lane Group Flow (vph)	0	126	0	137	286	52	0	274	25	0	521	0
Confl. Peds. (#/hr)	103		15	15		103	15		77	77		15
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	7%	7%	7%	1%	1%	1%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		21.0		34.0	34.0	34.0		35.0	35.0		44.0	
Effective Green, g (s)		23.0		36.0	36.0	36.0		37.0	37.0		48.0	
Actuated g/C Ratio		0.19		0.30	0.30	0.30		0.31	0.31		0.40	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		268		317	462	177		439	319		615	
v/s Ratio Prot		0.09		0.03	c0.19			0.19			c0.08	
v/s Ratio Perm				0.10		0.09			0.02		c0.26	
v/c Ratio		0.47		0.43	0.62	0.29		0.62	0.08		0.85	
Uniform Delay, d1		43.1		35.0	36.1	32.2		35.5	29.4		32.7	
Progression Factor		0.99		0.70	0.67	0.80		0.01	1.00		0.91	
Incremental Delay, d2		5.8		3.2	4.6	3.2		3.7	0.3		11.5	
Delay (s)		48.6		27.8	28.9	28.8		3.9	29.7		41.2	
Level of Service		D		C	C	C		A	C		D	
Approach Delay (s)		48.6			28.6			9.8			41.2	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/14/2022

Lane Group	SET	NWT
Lane Group Flow (vph)	622	362
v/c Ratio	0.52	0.81
Control Delay	2.0	55.9
Queue Delay	1.0	0.0
Total Delay	3.0	55.9
Queue Length 50th (ft)	0	261
Queue Length 95th (ft)	0	#414
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1206	445
Starvation Cap Reductn	330	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.71	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/14/2022

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	510	63	0	326
Future Volume (vph)	0	0	510	63	0	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1503			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1503			1574
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.90
Adj. Flow (vph)	0	0	554	68	0	362
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	618	0	0	362
Confl. Peds. (#/hr)		77				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			32.0
Effective Green, g (s)			94.0			34.0
Actuated g/C Ratio			0.78			0.28
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1177			445
v/s Ratio Prot			c0.41			c0.23
v/s Ratio Perm						
v/c Ratio			0.53			0.81
Uniform Delay, d1			4.8			40.0
Progression Factor			0.22			1.00
Incremental Delay, d2			1.2			15.0
Delay (s)			2.2			55.0
Level of Service			A			E
Approach Delay (s)	0.0		2.2			55.0
Approach LOS	A		A			E

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/14/2022



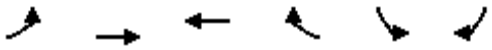
Lane Group	EBT	WBT	SBL
Lane Group Flow (vph)	216	629	30
v/c Ratio	0.24	0.74	0.27
Control Delay	9.2	31.9	38.6
Queue Delay	0.7	52.3	0.0
Total Delay	9.9	84.3	38.6
Queue Length 50th (ft)	63	455	13
Queue Length 95th (ft)	m102	m504	44
Internal Link Dist (ft)	232	126	98
Turn Bay Length (ft)			
Base Capacity (vph)	893	851	112
Starvation Cap Reductn	415	309	0
Spillback Cap Reductn	0	37	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	1.16	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	59	149	500	104	18	11
Future Volume (vph)	59	149	500	104	18	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		6%	4%		0%	
Total Lost time (s)		3.0	4.0		3.0	
Lane Util. Factor		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.91		0.83	
Flpb, ped/bikes		1.00	1.00		1.00	
Frt		1.00	0.98		0.95	
Flt Protected		0.99	1.00		0.97	
Satd. Flow (prot)		1514	1389		652	
Flt Permitted		0.75	1.00		0.97	
Satd. Flow (perm)		1157	1389		652	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	61	155	521	108	19	11
RTOR Reduction (vph)	0	0	6	0	9	0
Lane Group Flow (vph)	0	216	623	0	21	0
Confl. Peds. (#/hr)	158			158	1	84
Heavy Vehicles (%)	8%	8%	7%	7%	100%	100%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Actuated Green, G (s)		87.0	71.0		17.0	
Effective Green, g (s)		89.0	73.0		19.0	
Actuated g/C Ratio		0.74	0.61		0.16	
Clearance Time (s)		5.0	6.0		5.0	
Lane Grp Cap (vph)		893	844		103	
v/s Ratio Prot		c0.02	c0.45		c0.03	
v/s Ratio Perm		0.16				
v/c Ratio		0.24	0.74		0.20	
Uniform Delay, d1		4.9	16.7		43.9	
Progression Factor		1.69	1.64		1.00	
Incremental Delay, d2		0.6	3.9		4.4	
Delay (s)		8.8	31.2		48.3	
Level of Service		A	C		D	
Approach Delay (s)		8.8	31.2		48.3	
Approach LOS		A	C		D	

Intersection Summary			
HCM 2000 Control Delay	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	195	486	155	279
v/c Ratio	0.22	0.53	0.27	1.36
Control Delay	2.0	6.3	4.5	229.6
Queue Delay	1.7	0.9	0.0	0.0
Total Delay	3.7	7.2	4.5	229.6
Queue Length 50th (ft)	18	98	18	~284
Queue Length 95th (ft)	19	135	m29	#456
Internal Link Dist (ft)	126	337		147
Turn Bay Length (ft)			125	
Base Capacity (vph)	890	925	566	205
Starvation Cap Reductn	537	210	0	0
Spillback Cap Reductn	0	170	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.55	0.68	0.27	1.36

Intersection Summary

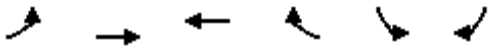
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	168	467	149	116	152
Future Volume (vph)	19	168	467	149	116	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.78	0.97	
Flpb, ped/bikes		0.99	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.92	
Flt Protected		0.99	1.00	1.00	0.98	
Satd. Flow (prot)		1253	1521	932	1299	
Flt Permitted		0.95	1.00	1.00	0.98	
Satd. Flow (perm)		1193	1521	932	1299	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	20	175	486	155	121	158
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	195	486	155	279	0
Confl. Peds. (#/hr)	89			89	12	5
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	10%	10%	6%	6%	6%	6%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		87.0	71.0	71.0	17.0	
Effective Green, g (s)		89.0	73.0	73.0	19.0	
Actuated g/C Ratio		0.74	0.61	0.61	0.16	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		890	925	566	205	
v/s Ratio Prot		c0.02	c0.32		c0.21	
v/s Ratio Perm		0.14		0.17		
v/c Ratio		0.22	0.53	0.27	1.36	
Uniform Delay, d1		4.8	13.5	11.0	50.5	
Progression Factor		0.29	0.34	0.31	1.00	
Incremental Delay, d2		0.6	1.5	0.9	190.6	
Delay (s)		1.9	6.1	4.3	241.1	
Level of Service		A	A	A	F	
Approach Delay (s)		1.9	5.7		241.1	
Approach LOS		A	A		F	

Intersection Summary			
HCM 2000 Control Delay	63.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022

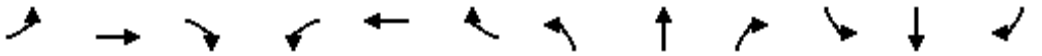
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	297	655	49	73
v/c Ratio	0.30	0.72	0.19	0.27
Control Delay	6.3	12.4	31.5	29.1
Queue Delay	0.7	2.4	0.0	0.0
Total Delay	7.0	14.8	31.5	29.1
Queue Length 50th (ft)	51	253	21	29
Queue Length 95th (ft)	m72	377	57	73
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	980	906	254	266
Starvation Cap Reductn	400	140	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.51	0.86	0.19	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	245	15	15	569	13	22	8	15	19	18	29
Future Volume (vph)	11	245	15	15	569	13	22	8	15	19	18	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			0.99			0.98			0.94	
Flpb, ped/bikes		1.00			1.00			0.97			0.99	
Frt		0.99			1.00			0.96			0.94	
Flt Protected		1.00			1.00			0.98			0.99	
Satd. Flow (prot)		1471			1339			1374			1302	
Flt Permitted		0.97			0.99			0.86			0.92	
Satd. Flow (perm)		1432			1327			1209			1214	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	12	269	16	16	625	14	24	9	16	21	20	32
RTOR Reduction (vph)	0	2	0	0	1	0	0	13	0	0	23	0
Lane Group Flow (vph)	0	295	0	0	654	0	0	36	0	0	50	0
Confl. Peds. (#/hr)	48		12	12		48	19		10	10		19
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		978			906			241			242	
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.49			0.03			c0.04	
v/c Ratio		0.30			0.72			0.15			0.21	
Uniform Delay, d1		7.6			11.9			39.6			40.0	
Progression Factor		0.75			0.65			1.00			1.00	
Incremental Delay, d2		0.6			4.1			1.3			1.9	
Delay (s)		6.3			11.8			40.9			42.0	
Level of Service		A			B			D			D	
Approach Delay (s)		6.3			11.8			40.9			42.0	
Approach LOS		A			B			D			D	

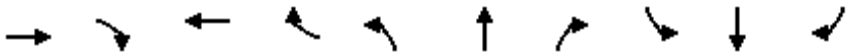
Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

12/14/2022



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	171	84	154	78	97	618	23	92	372	4
v/c Ratio	0.49	0.30	0.46	0.27	0.20	0.69	0.03	0.23	0.33	0.00
Control Delay	46.2	42.3	45.5	41.4	8.4	10.4	8.2	8.5	9.5	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.2	42.3	45.5	41.4	8.4	10.4	8.2	8.5	9.5	6.8
Queue Length 50th (ft)	116	54	104	50	13	87	3	23	113	1
Queue Length 95th (ft)	189	103	172	97	m22	m141	m5	42	163	5
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	347	277	333	289	477	894	741	395	1140	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.30	0.46	0.27	0.20	0.69	0.03	0.23	0.33	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022

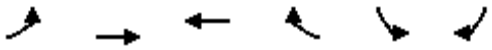
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	158	78	26	117	73	90	575	21	86	346	4
Future Volume (vph)	1	158	78	26	117	73	90	575	21	86	346	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1546	1233		1605	1288	1549	1651	1368	1624	1710	1394
Flt Permitted		1.00	1.00		0.91	1.00	0.54	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		1544	1233		1481	1288	881	1651	1368	429	1710	1394
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	170	84	28	126	78	97	618	23	92	372	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	171	84	0	154	78	97	618	23	92	372	4
Confl. Peds. (#/hr)	15		14	14		15	4		1	1		4
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		25.0	25.0		25.0	25.0	63.0	63.0	63.0	78.0	78.0	78.0
Effective Green, g (s)		27.0	27.0		27.0	27.0	65.0	65.0	65.0	80.0	80.0	80.0
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.54	0.54	0.54	0.67	0.67	0.67
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		347	277		333	289	477	894	741	395	1140	929
v/s Ratio Prot								c0.37		0.02	c0.22	
v/s Ratio Perm		c0.11	0.07		0.10	0.06	0.11		0.02	0.13		0.00
v/c Ratio		0.49	0.30		0.46	0.27	0.20	0.69	0.03	0.23	0.33	0.00
Uniform Delay, d1		40.5	38.7		40.2	38.4	14.2	20.1	12.8	11.0	8.5	6.7
Progression Factor		1.00	1.00		1.00	1.00	0.54	0.39	0.63	1.00	1.00	1.00
Incremental Delay, d2		4.9	2.8		4.6	2.3	0.5	2.3	0.0	1.4	0.8	0.0
Delay (s)		45.5	41.5		44.8	40.7	8.2	10.2	8.1	12.4	9.3	6.7
Level of Service		D	D		D	D	A	B	A	B	A	A
Approach Delay (s)		44.2			43.4			9.8			9.9	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	23	235	207	8	4	21
Future Volume (vph)	23	235	207	8	4	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	255	225	9	4	23

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	280	234	27
Volume Left (vph)	25	0	4
Volume Right (vph)	0	9	23
Hadj (s)	0.03	0.06	-0.41
Departure Headway (s)	4.2	4.3	4.6
Degree Utilization, x	0.33	0.28	0.03
Capacity (veh/h)	835	813	703
Control Delay (s)	9.3	9.0	7.8
Approach Delay (s)	9.3	9.0	7.8
Approach LOS	A	A	A

Intersection Summary			
Delay	9.1		
Level of Service	A		
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Relocated Metro Station Dwy & Eastern Ave — 12/14/2022



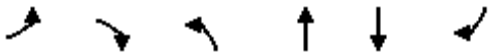
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	227	2	6	174	18	6
Future Volume (Veh/h)	227	2	6	174	18	6
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	255	2	7	196	20	7
Pedestrians	3				14	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			271		483	270
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			271		483	270
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		96	99
cM capacity (veh/h)			1260		535	765

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	257	203	27
Volume Left	0	7	20
Volume Right	2	0	7
cSH	1700	1260	581
Volume to Capacity	0.15	0.01	0.05
Queue Length 95th (ft)	0	0	4
Control Delay (s)	0.0	0.3	11.5
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	11.5
Approach LOS			B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	25.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
12/14/2022



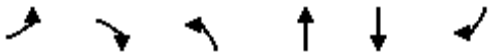
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	254	173	9	0	19
Future Volume (vph)	0	254	173	9	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	276	188	10	0	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	276	188	10	21
Volume Left (vph)	0	188	0	0
Volume Right (vph)	276	0	0	21
Hadj (s)	-0.58	0.53	0.03	-0.60
Departure Headway (s)	3.9	5.6	5.1	3.2
Degree Utilization, x	0.30	0.29	0.01	0.02
Capacity (veh/h)	888	615	670	1121
Control Delay (s)	8.5	9.7	7.0	6.3
Approach Delay (s)	8.5	9.6		6.3
Approach LOS	A	A		A

Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	26.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Cedar St & Site Dwy

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	185	254	0
Future Volume (Veh/h)	0	0	0	185	254	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	4%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	206	282	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				229		
pX, platoon unblocked						
vC, conflicting volume	385	282	282			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	385	282	282			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	591	715	1277			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	69	137	282
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1277	1700	1700
Volume to Capacity	0.00	0.00	0.08	0.17
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	16.7%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/14/2022



Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	194	100	89	98	347	72	456
v/c Ratio	0.87	0.43	0.21	0.32	0.65	0.14	0.84
Control Delay	80.0	61.6	54.1	13.0	3.4	0.3	33.5
Queue Delay	2.0	0.0	0.0	0.0	1.8	5.2	0.1
Total Delay	82.0	61.6	54.1	13.0	5.3	5.5	33.6
Queue Length 50th (ft)	124	58	51	28	0	0	208
Queue Length 95th (ft)	#267	111	101	64	m2	m0	m268
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	224	233	424	307	537	528	544
Starvation Cap Reductn	0	0	0	0	81	401	0
Spillback Cap Reductn	5	0	0	0	0	6	1
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.43	0.21	0.32	0.76	0.57	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
12/14/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	148	36	95	85	93	0	330	68	100	331	3
Future Volume (vph)	0	148	36	95	85	93	0	330	68	100	331	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.97		1.00	1.00	0.47		1.00	0.87		1.00	
Flpb, ped/bikes		1.00		0.96	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1346		1403	1543	615		1465	1081		1597	
Flt Permitted		1.00		0.49	1.00	1.00		1.00	1.00		0.70	
Satd. Flow (perm)		1346		719	1543	615		1465	1081		1129	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	156	38	100	89	98	0	347	72	105	348	3
RTOR Reduction (vph)	0	0	0	0	0	71	0	0	46	0	0	0
Lane Group Flow (vph)	0	194	0	100	89	27	0	347	26	0	456	0
Confl. Peds. (#/hr)	89		44	44		89	32		83	83		32
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	3%	3%	3%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		18.0		31.0	31.0	31.0		42.0	42.0		47.0	
Effective Green, g (s)		20.0		33.0	33.0	33.0		44.0	44.0		51.0	
Actuated g/C Ratio		0.17		0.28	0.28	0.28		0.37	0.37		0.42	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		224		237	424	169		537	396		507	
v/s Ratio Prot		c0.14		c0.02	0.06			0.24			c0.05	
v/s Ratio Perm				0.09		0.04			0.02		c0.33	
v/c Ratio		0.87		0.42	0.21	0.16		0.65	0.07		0.90	
Uniform Delay, d1		48.7		40.4	33.5	33.0		31.5	24.7		32.1	
Progression Factor		0.95		1.46	1.56	1.00		0.01	1.00		0.93	
Incremental Delay, d2		32.6		5.0	1.0	1.8		3.2	0.2		12.0	
Delay (s)		78.9		63.9	53.2	34.8		3.4	24.8		42.0	
Level of Service		E		E	D	C		A	C		D	
Approach Delay (s)		78.9			50.7			7.1			42.0	
Approach LOS		E			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/14/2022

Lane Group	SET	NWT
Lane Group Flow (vph)	513	442
v/c Ratio	0.43	0.82
Control Delay	2.0	50.5
Queue Delay	2.3	0.0
Total Delay	4.3	50.5
Queue Length 50th (ft)	26	312
Queue Length 95th (ft)	m27	#482
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1204	537
Starvation Cap Reductn	537	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.77	0.82

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
12/14/2022

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	407	55	0	398
Future Volume (vph)	0	0	407	55	0	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.98			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1501			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1501			1574
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	452	61	0	442
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	509	0	0	442
Confl. Peds. (#/hr)		83				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			39.0
Effective Green, g (s)			94.0			41.0
Actuated g/C Ratio			0.78			0.34
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1175			537
v/s Ratio Prot			c0.34			c0.28
v/s Ratio Perm						
v/c Ratio			0.43			0.82
Uniform Delay, d1			4.3			36.2
Progression Factor			0.34			1.00
Incremental Delay, d2			0.8			13.4
Delay (s)			2.3			49.5
Level of Service			A			D
Approach Delay (s)	0.0		2.3			49.5
Approach LOS	A		A			D

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/14/2022



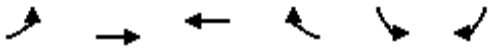
Lane Group	EBT	WBT	SBL
Lane Group Flow (vph)	351	290	32
v/c Ratio	0.37	0.48	0.16
Control Delay	10.4	41.7	25.9
Queue Delay	3.2	67.7	0.1
Total Delay	13.6	109.4	26.1
Queue Length 50th (ft)	137	230	12
Queue Length 95th (ft)	m208	317	39
Internal Link Dist (ft)	232	126	98
Turn Bay Length (ft)			
Base Capacity (vph)	948	598	195
Starvation Cap Reductn	485	432	0
Spillback Cap Reductn	37	0	20
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.76	1.75	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	295	231	27	18	11
Future Volume (vph)	18	295	231	27	18	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		6%	4%		0%	
Total Lost time (s)		3.0	4.0		3.0	
Lane Util. Factor		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		0.85	
Flpb, ped/bikes		0.99	1.00		1.00	
Frt		1.00	0.99		0.95	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		1525	1458		680	
Flt Permitted		0.98	1.00		0.97	
Satd. Flow (perm)		1504	1458		680	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	20	331	260	30	20	12
RTOR Reduction (vph)	0	0	4	0	9	0
Lane Group Flow (vph)	0	351	286	0	23	0
Confl. Peds. (#/hr)	160			160	3	73
Heavy Vehicles (%)	7%	7%	7%	7%	96%	96%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Actuated Green, G (s)		73.0	47.0		31.0	
Effective Green, g (s)		75.0	49.0		33.0	
Actuated g/C Ratio		0.62	0.41		0.28	
Clearance Time (s)		5.0	6.0		5.0	
Lane Grp Cap (vph)		943	595		187	
v/s Ratio Prot		c0.07	c0.20		c0.03	
v/s Ratio Perm		0.16				
v/c Ratio		0.37	0.48		0.12	
Uniform Delay, d1		11.0	26.1		32.7	
Progression Factor		0.85	1.49		1.00	
Incremental Delay, d2		0.8	2.6		1.4	
Delay (s)		10.1	41.6		34.0	
Level of Service		B	D		C	
Approach Delay (s)		10.1	41.6		34.0	
Approach LOS		B	D		C	

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022

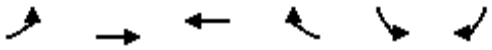


Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	342	234	141	274
v/c Ratio	0.44	0.38	0.41	0.69
Control Delay	13.1	13.6	15.8	49.1
Queue Delay	5.6	72.9	0.0	0.0
Total Delay	18.6	86.5	15.8	49.1
Queue Length 50th (ft)	117	63	41	190
Queue Length 95th (ft)	152	106	87	291
Internal Link Dist (ft)	126	337		149
Turn Bay Length (ft)			125	
Base Capacity (vph)	770	621	345	399
Starvation Cap Reductn	360	0	0	0
Spillback Cap Reductn	0	493	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.83	1.83	0.41	0.69

Intersection Summary

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	286	220	133	208	50
Future Volume (vph)	36	286	220	133	208	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.71	0.99	
Flpb, ped/bikes		0.98	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.97	
Flt Protected		0.99	1.00	1.00	0.96	
Satd. Flow (prot)		1261	1521	847	1452	
Flt Permitted		0.96	1.00	1.00	0.96	
Satd. Flow (perm)		1214	1521	847	1452	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	38	304	234	141	221	53
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	342	234	141	274	0
Confl. Peds. (#/hr)	119			119	18	4
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	8%	8%	6%	6%	0%	0%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		73.0	47.0	47.0	31.0	
Effective Green, g (s)		75.0	49.0	49.0	33.0	
Actuated g/C Ratio		0.62	0.41	0.41	0.28	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		767	621	345	399	
v/s Ratio Prot		c0.08	0.15		c0.19	
v/s Ratio Perm		c0.20		0.17		
v/c Ratio		0.45	0.38	0.41	0.69	
Uniform Delay, d1		11.7	24.8	25.2	38.9	
Progression Factor		0.93	0.47	0.48	1.00	
Incremental Delay, d2		1.8	1.6	3.3	9.3	
Delay (s)		12.6	13.4	15.4	48.2	
Level of Service		B	B	B	D	
Approach Delay (s)		12.6	14.1		48.2	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022

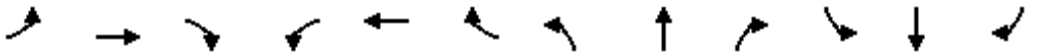
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	487	344	127	61
v/c Ratio	0.51	0.41	0.47	0.24
Control Delay	15.4	18.2	46.9	33.8
Queue Delay	0.8	17.3	0.0	0.0
Total Delay	16.2	35.5	46.9	33.8
Queue Length 50th (ft)	232	206	83	29
Queue Length 95th (ft)	108	m189	148	70
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	954	847	270	254
Starvation Cap Reductn	208	488	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.65	0.96	0.47	0.24

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
12/14/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	416	28	12	296	29	36	72	17	16	26	18
Future Volume (vph)	33	416	28	12	296	29	36	72	17	16	26	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.97			0.96			0.97			0.92	
Flpb, ped/bikes		0.98			1.00			0.94			0.97	
Frt		0.99			0.99			0.98			0.96	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1450			1258			1455			1301	
Flt Permitted		0.96			0.98			0.90			0.91	
Satd. Flow (perm)		1394			1237			1330			1206	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	34	424	29	12	302	30	37	73	17	16	27	18
RTOR Reduction (vph)	0	2	0	0	3	0	0	5	0	0	13	0
Lane Group Flow (vph)	0	485	0	0	341	0	0	122	0	0	48	0
Confl. Peds. (#/hr)	94		71	71		94	52		37	37		52
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	0%	0%	0%	3%	3%	3%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		952			845			266			241	
v/s Ratio Prot												
v/s Ratio Perm		c0.35			0.28			c0.09			0.04	
v/c Ratio		0.51			0.40			0.46			0.20	
Uniform Delay, d1		9.2			8.3			42.3			40.0	
Progression Factor		1.45			2.16			1.00			1.00	
Incremental Delay, d2		1.7			0.1			5.6			1.9	
Delay (s)		15.1			18.1			47.9			41.9	
Level of Service		B			B			D			D	
Approach Delay (s)		15.1			18.1			47.9			41.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

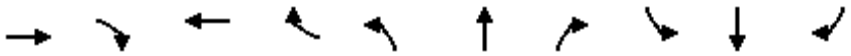
I. Vehicular Capacity Analysis Worksheets – 2027 Total Future Conditions

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

04/12/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	125	121	194	165	38	211	11	145	576	1
v/c Ratio	0.26	0.32	0.46	0.41	0.13	0.32	0.02	0.24	0.59	0.00
Control Delay	33.1	34.7	37.6	36.8	16.4	17.4	15.4	12.6	19.0	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	34.7	37.6	36.8	16.4	17.4	15.4	12.6	19.0	10.0
Queue Length 50th (ft)	73	72	121	101	12	65	3	49	268	0
Queue Length 95th (ft)	125	126	194	168	m24	m92	m9	81	379	3
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	474	379	426	399	291	660	561	610	978	784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.32	0.46	0.41	0.13	0.32	0.02	0.24	0.59	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
04/12/2023

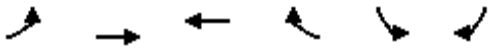
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	113	111	57	121	152	35	194	10	133	530	1
Future Volume (vph)	2	113	111	57	121	152	35	194	10	133	530	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	0.98	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1545	1232		1585	1297	1544	1651	1403	1593	1677	1345
Flt Permitted		1.00	1.00		0.86	1.00	0.45	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)		1540	1232		1382	1297	727	1651	1403	857	1677	1345
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	123	121	62	132	165	38	211	11	145	576	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	125	121	0	194	165	38	211	11	145	576	1
Confl. Peds. (#/hr)	13		15	15		13	7					7
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		35.0	35.0		35.0	35.0	46.0	46.0	46.0	68.0	68.0	68.0
Effective Green, g (s)		37.0	37.0		37.0	37.0	48.0	48.0	48.0	70.0	70.0	70.0
Actuated g/C Ratio		0.31	0.31		0.31	0.31	0.40	0.40	0.40	0.58	0.58	0.58
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		474	379		426	399	290	660	561	610	978	784
v/s Ratio Prot								0.13		0.04	c0.34	
v/s Ratio Perm		0.08	0.10		c0.14	0.13	0.05		0.01	0.10		0.00
v/c Ratio		0.26	0.32		0.46	0.41	0.13	0.32	0.02	0.24	0.59	0.00
Uniform Delay, d1		31.2	31.8		33.4	32.9	22.8	24.8	21.8	11.9	15.9	10.4
Progression Factor		1.00	1.00		1.00	1.00	0.66	0.64	0.70	1.00	1.00	1.00
Incremental Delay, d2		1.4	2.2		3.5	3.1	0.9	1.2	0.1	0.9	2.6	0.0
Delay (s)		32.6	34.0		36.9	36.0	15.9	17.1	15.2	12.8	18.5	10.4
Level of Service		C	C		D	D	B	B	B	B	B	B
Approach Delay (s)		33.3			36.5			16.9			17.3	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	14	250	313	18	2	13
Future Volume (vph)	14	250	313	18	2	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	278	348	20	2	14

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	294	368	16
Volume Left (vph)	16	0	2
Volume Right (vph)	0	20	14
Hadj (s)	0.08	0.05	-0.50
Departure Headway (s)	4.4	4.3	4.8
Degree Utilization, x	0.36	0.44	0.02
Capacity (veh/h)	806	821	643
Control Delay (s)	9.8	10.6	7.9
Approach Delay (s)	9.8	10.6	7.9
Approach LOS	A	B	A

Intersection Summary			
Delay	10.2		
Level of Service	B		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Relocated Metro Station Dwy & Eastern Ave — 04/12/2023



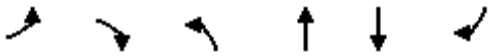
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	225	9	6	191	125	39
Future Volume (Veh/h)	225	9	6	191	125	39
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	245	10	7	208	136	42
Pedestrians	1				10	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			265		483	260
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			265		483	260
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		75	95
cM capacity (veh/h)			1277		538	777

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	255	215	178
Volume Left	0	7	136
Volume Right	10	0	42
cSH	1700	1277	580
Volume to Capacity	0.15	0.01	0.31
Queue Length 95th (ft)	0	0	32
Control Delay (s)	0.0	0.3	13.9
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	13.9
Approach LOS			B

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	33.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
04/12/2023



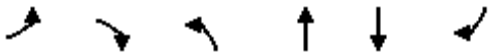
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	271	186	3	0	31
Future Volume (vph)	0	271	186	3	0	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	301	207	3	0	34

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	301	207	3	34
Volume Left (vph)	0	207	0	0
Volume Right (vph)	301	0	0	34
Hadj (s)	-0.52	0.55	0.05	-0.55
Departure Headway (s)	4.0	5.7	5.2	3.2
Degree Utilization, x	0.33	0.33	0.00	0.03
Capacity (veh/h)	862	605	658	1121
Control Delay (s)	9.0	10.3	7.0	6.3
Approach Delay (s)	9.0	10.2		6.3
Approach LOS	A	B		A

Intersection Summary			
Delay	9.3		
Level of Service	A		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Cedar St & Site Dwy

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	38	15	168	260	11
Future Volume (Veh/h)	21	38	15	168	260	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	4%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	23	42	17	187	289	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				227		
pX, platoon unblocked						
vC, conflicting volume	422	295	301			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	422	295	301			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	94	99			
cM capacity (veh/h)	552	701	1257			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	65	79	125	301
Volume Left	23	17	0	0
Volume Right	42	0	0	12
cSH	640	1257	1700	1700
Volume to Capacity	0.10	0.01	0.07	0.18
Queue Length 95th (ft)	8	1	0	0
Control Delay (s)	11.3	1.8	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.3	0.7		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	26.3%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/12/2023



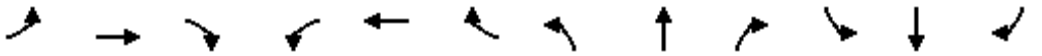
Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	129	163	296	173	274	90	521
v/c Ratio	0.48	0.52	0.64	0.56	0.62	0.19	0.78
Control Delay	49.7	31.5	31.5	8.6	3.7	0.5	33.5
Queue Delay	0.0	0.3	6.3	2.4	2.5	5.5	0.1
Total Delay	49.7	31.9	37.8	11.0	6.2	6.0	33.6
Queue Length 50th (ft)	89	55	125	3	0	0	257
Queue Length 95th (ft)	150	m105	m238	m25	m2	m0	401
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	268	314	462	311	439	464	666
Starvation Cap Reductn	0	16	117	59	78	318	0
Spillback Cap Reductn	0	0	0	0	0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.55	0.86	0.69	0.76	0.62	0.79

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	91	28	150	272	159	0	252	83	62	417	1
Future Volume (vph)	0	91	28	150	272	159	0	252	83	62	417	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.98		1.00	1.00	0.45		1.00	0.86		1.00	
Flpb, ped/bikes		1.00		0.98	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1402		1429	1543	592		1424	1037		1641	
Flt Permitted		1.00		0.64	1.00	1.00		1.00	1.00		0.91	
Satd. Flow (perm)		1402		962	1543	592		1424	1037		1507	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	99	30	163	296	173	0	274	90	67	453	1
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	62	0	0	0
Lane Group Flow (vph)	0	129	0	163	296	52	0	274	28	0	521	0
Confl. Peds. (#/hr)	103		15	15		103	15		77	77		15
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	7%	7%	7%	1%	1%	1%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		21.0		34.0	34.0	34.0		35.0	35.0		44.0	
Effective Green, g (s)		23.0		36.0	36.0	36.0		37.0	37.0		48.0	
Actuated g/C Ratio		0.19		0.30	0.30	0.30		0.31	0.31		0.40	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		268		315	462	177		439	319		615	
v/s Ratio Prot		0.09		0.03	c0.19			0.19			c0.08	
v/s Ratio Perm				0.12		0.09			0.03		c0.26	
v/c Ratio		0.48		0.52	0.64	0.29		0.62	0.09		0.85	
Uniform Delay, d1		43.2		36.3	36.4	32.2		35.5	29.5		32.7	
Progression Factor		0.99		0.74	0.72	0.93		0.01	1.00		0.91	
Incremental Delay, d2		6.0		4.3	4.8	3.0		3.5	0.3		11.5	
Delay (s)		48.9		31.1	30.9	33.0		3.7	29.8		41.2	
Level of Service		D		C	C	C		A	C		D	
Approach Delay (s)		48.9			31.5			10.2			41.2	
Approach LOS		D			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
04/12/2023

Lane Group	SET	NWT
Lane Group Flow (vph)	648	372
v/c Ratio	0.54	0.84
Control Delay	2.1	58.0
Queue Delay	0.9	0.0
Total Delay	3.0	58.0
Queue Length 50th (ft)	0	271
Queue Length 95th (ft)	0	#432
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1207	445
Starvation Cap Reductn	294	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.71	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
04/12/2023



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	534	63	0	335
Future Volume (vph)	0	0	534	63	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1504			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1504			1574
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.90
Adj. Flow (vph)	0	0	580	68	0	372
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	644	0	0	372
Confl. Peds. (#/hr)		77				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			32.0
Effective Green, g (s)			94.0			34.0
Actuated g/C Ratio			0.78			0.28
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1178			445
v/s Ratio Prot			c0.43			c0.24
v/s Ratio Perm						
v/c Ratio			0.55			0.84
Uniform Delay, d1			4.9			40.4
Progression Factor			0.20			1.00
Incremental Delay, d2			1.3			16.8
Delay (s)			2.3			57.2
Level of Service			A			E
Approach Delay (s)	0.0		2.3			57.2
Approach LOS	A		A			E

Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/12/2023



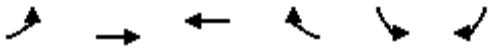
Lane Group	EBT	WBT	SBL
Lane Group Flow (vph)	229	663	30
v/c Ratio	0.26	0.77	0.27
Control Delay	9.7	33.2	38.6
Queue Delay	0.8	51.9	0.0
Total Delay	10.5	85.1	38.6
Queue Length 50th (ft)	69	471	13
Queue Length 95th (ft)	m110	m494	44
Internal Link Dist (ft)	232	126	98
Turn Bay Length (ft)			
Base Capacity (vph)	876	856	112
Starvation Cap Reductn	393	309	0
Spillback Cap Reductn	0	47	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.47	1.21	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	59	161	533	104	18	11
Future Volume (vph)	59	161	533	104	18	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		6%	4%		0%	
Total Lost time (s)		3.0	4.0		3.0	
Lane Util. Factor		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.91		0.83	
Flpb, ped/bikes		1.00	1.00		1.00	
Frt		1.00	0.98		0.95	
Flt Protected		0.99	1.00		0.97	
Satd. Flow (prot)		1516	1398		652	
Flt Permitted		0.73	1.00		0.97	
Satd. Flow (perm)		1129	1398		652	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	61	168	555	108	19	11
RTOR Reduction (vph)	0	0	6	0	9	0
Lane Group Flow (vph)	0	229	657	0	21	0
Confl. Peds. (#/hr)	158			158	1	84
Heavy Vehicles (%)	8%	8%	7%	7%	100%	100%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Actuated Green, G (s)		87.0	71.0		17.0	
Effective Green, g (s)		89.0	73.0		19.0	
Actuated g/C Ratio		0.74	0.61		0.16	
Clearance Time (s)		5.0	6.0		5.0	
Lane Grp Cap (vph)		876	850		103	
v/s Ratio Prot		c0.03	c0.47		c0.03	
v/s Ratio Perm		0.17				
v/c Ratio		0.26	0.77		0.20	
Uniform Delay, d1		5.0	17.4		43.9	
Progression Factor		1.75	1.64		1.00	
Incremental Delay, d2		0.7	3.7		4.4	
Delay (s)		9.3	32.2		48.3	
Level of Service		A	C		D	
Approach Delay (s)		9.3	32.2		48.3	
Approach LOS		A	C		D	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	207	486	158	323
v/c Ratio	0.24	0.53	0.28	1.58
Control Delay	1.9	6.2	4.5	318.7
Queue Delay	1.7	1.0	0.0	0.0
Total Delay	3.7	7.1	4.5	318.7
Queue Length 50th (ft)	15	97	19	~356
Queue Length 95th (ft)	19	135	m29	#540
Internal Link Dist (ft)	126	337		147
Turn Bay Length (ft)			125	
Base Capacity (vph)	854	925	566	204
Starvation Cap Reductn	490	212	0	0
Spillback Cap Reductn	0	191	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.57	0.68	0.28	1.58

Intersection Summary

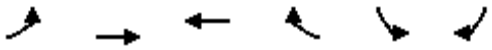
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	31	168	467	152	125	185
Future Volume (vph)	31	168	467	152	125	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.78	0.97	
Flpb, ped/bikes		0.99	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.92	
Flt Protected		0.99	1.00	1.00	0.98	
Satd. Flow (prot)		1246	1521	932	1293	
Flt Permitted		0.91	1.00	1.00	0.98	
Satd. Flow (perm)		1137	1521	932	1293	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	32	175	486	158	130	193
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	207	486	158	323	0
Confl. Peds. (#/hr)	89			89	12	5
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	10%	10%	6%	6%	6%	6%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		87.0	71.0	71.0	17.0	
Effective Green, g (s)		89.0	73.0	73.0	19.0	
Actuated g/C Ratio		0.74	0.61	0.61	0.16	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		854	925	566	204	
v/s Ratio Prot		c0.02	c0.32		c0.25	
v/s Ratio Perm		0.16		0.17		
v/c Ratio		0.24	0.53	0.28	1.58	
Uniform Delay, d1		4.9	13.5	11.1	50.5	
Progression Factor		0.25	0.33	0.31	1.00	
Incremental Delay, d2		0.7	1.5	0.9	284.6	
Delay (s)		1.9	6.0	4.3	335.1	
Level of Service		A	A	A	F	
Approach Delay (s)		1.9	5.6		335.1	
Approach LOS		A	A		F	

Intersection Summary			
HCM 2000 Control Delay	95.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
04/12/2023

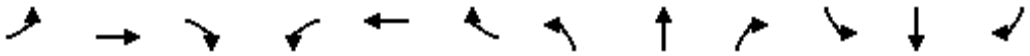
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	307	659	49	73
v/c Ratio	0.31	0.73	0.19	0.27
Control Delay	6.4	12.5	31.5	29.1
Queue Delay	0.8	2.4	0.0	0.0
Total Delay	7.2	15.0	31.5	29.1
Queue Length 50th (ft)	51	255	21	29
Queue Length 95th (ft)	m73	379	57	73
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	980	906	254	266
Starvation Cap Reductn	400	138	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.53	0.86	0.19	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	254	15	15	572	13	22	8	15	19	18	29
Future Volume (vph)	11	254	15	15	572	13	22	8	15	19	18	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			0.99			0.98			0.94	
Flpb, ped/bikes		1.00			1.00			0.97			0.99	
Frt		0.99			1.00			0.96			0.94	
Flt Protected		1.00			1.00			0.98			0.99	
Satd. Flow (prot)		1472			1340			1374			1302	
Flt Permitted		0.97			0.99			0.86			0.92	
Satd. Flow (perm)		1434			1327			1209			1214	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	12	279	16	16	629	14	24	9	16	21	20	32
RTOR Reduction (vph)	0	2	0	0	1	0	0	13	0	0	23	0
Lane Group Flow (vph)	0	305	0	0	658	0	0	36	0	0	50	0
Confl. Peds. (#/hr)	48		12	12		48	19		10	10		19
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		979			906			241			242	
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.50			0.03			c0.04	
v/c Ratio		0.31			0.73			0.15			0.21	
Uniform Delay, d1		7.6			12.0			39.6			40.0	
Progression Factor		0.77			0.66			1.00			1.00	
Incremental Delay, d2		0.5			4.2			1.3			1.9	
Delay (s)		6.4			12.0			40.9			42.0	
Level of Service		A			B			D			D	
Approach Delay (s)		6.4			12.0			40.9			42.0	
Approach LOS		A			B			D			D	

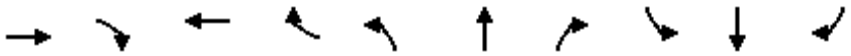
Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

04/12/2023



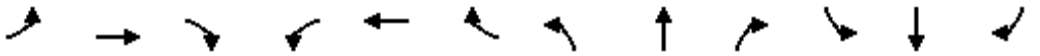
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	171	84	154	112	97	618	23	137	372	4
v/c Ratio	0.49	0.30	0.46	0.39	0.20	0.69	0.03	0.35	0.33	0.00
Control Delay	46.2	42.3	45.5	44.2	8.5	10.5	8.2	9.8	9.5	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.2	42.3	45.5	44.2	8.5	10.5	8.2	9.8	9.5	6.8
Queue Length 50th (ft)	116	54	104	74	13	87	3	35	113	1
Queue Length 95th (ft)	189	103	172	131	m22	m141	m5	60	163	5
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	347	277	333	289	477	894	741	395	1140	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.30	0.46	0.39	0.20	0.69	0.03	0.35	0.33	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
04/12/2023



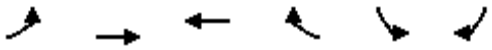
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	158	78	26	117	104	90	575	21	127	346	4
Future Volume (vph)	1	158	78	26	117	104	90	575	21	127	346	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1546	1233		1605	1288	1549	1651	1368	1624	1710	1394
Flt Permitted		1.00	1.00		0.91	1.00	0.54	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		1544	1233		1481	1288	881	1651	1368	429	1710	1394
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	170	84	28	126	112	97	618	23	137	372	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	171	84	0	154	112	97	618	23	137	372	4
Confl. Peds. (#/hr)	15		14	14		15	4		1	1		4
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		25.0	25.0		25.0	25.0	63.0	63.0	63.0	78.0	78.0	78.0
Effective Green, g (s)		27.0	27.0		27.0	27.0	65.0	65.0	65.0	80.0	80.0	80.0
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.54	0.54	0.54	0.67	0.67	0.67
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		347	277		333	289	477	894	741	395	1140	929
v/s Ratio Prot								c0.37		0.03	c0.22	
v/s Ratio Perm		c0.11	0.07		0.10	0.09	0.11		0.02	0.20		0.00
v/c Ratio		0.49	0.30		0.46	0.39	0.20	0.69	0.03	0.35	0.33	0.00
Uniform Delay, d1		40.5	38.7		40.2	39.5	14.2	20.1	12.8	11.5	8.5	6.7
Progression Factor		1.00	1.00		1.00	1.00	0.54	0.39	0.63	1.00	1.00	1.00
Incremental Delay, d2		4.9	2.8		4.6	3.9	0.5	2.3	0.0	2.4	0.8	0.0
Delay (s)		45.5	41.5		44.8	43.4	8.2	10.2	8.1	13.9	9.3	6.7
Level of Service		D	D		D	D	A	B	A	B	A	A
Approach Delay (s)		44.2			44.2			9.9			10.5	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	23	276	238	8	4	21
Future Volume (vph)	23	276	238	8	4	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	300	259	9	4	23

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	325	268	27
Volume Left (vph)	25	0	4
Volume Right (vph)	0	9	23
Hadj (s)	0.03	0.06	-0.41
Departure Headway (s)	4.3	4.4	4.8
Degree Utilization, x	0.39	0.32	0.04
Capacity (veh/h)	828	804	668
Control Delay (s)	9.9	9.4	7.9
Approach Delay (s)	9.9	9.4	7.9
Approach LOS	A	A	A

Intersection Summary			
Delay	9.6		
Level of Service	A		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Relocated Metro Station Dwy & Eastern Ave — 04/12/2023



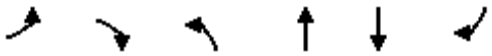
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	253	17	6	196	27	8
Future Volume (Veh/h)	253	17	6	196	27	8
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	284	19	7	220	30	9
Pedestrians	3				14	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			317		544	308
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			317		544	308
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		94	99
cM capacity (veh/h)			1212		493	729

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	303	227	39
Volume Left	0	7	30
Volume Right	19	0	9
cSH	1700	1212	533
Volume to Capacity	0.18	0.01	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.3	12.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	12.3
Approach LOS			B

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	26.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
04/12/2023



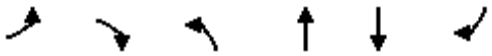
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	282	195	9	0	19
Future Volume (vph)	0	282	195	9	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	307	212	10	0	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	307	212	10	21
Volume Left (vph)	0	212	0	0
Volume Right (vph)	307	0	0	21
Hadj (s)	-0.58	0.53	0.03	-0.60
Departure Headway (s)	4.0	5.7	5.2	3.2
Degree Utilization, x	0.34	0.34	0.01	0.02
Capacity (veh/h)	870	607	660	1121
Control Delay (s)	9.0	10.3	7.1	6.3
Approach Delay (s)	9.0	10.2		6.3
Approach LOS	A	B		A

Intersection Summary			
Delay	9.4		
Level of Service	A		
Intersection Capacity Utilization	27.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Cedar St & Site Dwy

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	25	37	185	256	26
Future Volume (Veh/h)	22	25	37	185	256	26
Sign Control	Stop			Free	Free	
Grade	0%			0%	4%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	24	28	41	206	284	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				229		
pX, platoon unblocked						
vC, conflicting volume	484	298	313			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	484	298	313			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	96	97			
cM capacity (veh/h)	495	698	1244			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	52	110	137	313
Volume Left	24	41	0	0
Volume Right	28	0	0	29
cSH	587	1244	1700	1700
Volume to Capacity	0.09	0.03	0.08	0.18
Queue Length 95th (ft)	7	3	0	0
Control Delay (s)	11.7	3.2	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.7	1.4		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/12/2023



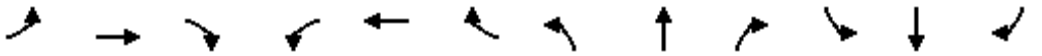
Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	202	116	96	98	347	94	456
v/c Ratio	0.90	0.51	0.23	0.32	0.65	0.18	0.84
Control Delay	84.9	65.7	55.4	13.2	3.0	0.3	33.5
Queue Delay	6.0	0.0	0.0	0.0	2.9	5.9	0.1
Total Delay	90.9	65.7	55.4	13.2	5.9	6.2	33.6
Queue Length 50th (ft)	129	69	57	27	0	0	208
Queue Length 95th (ft)	#282	126	110	63	m2	m0	m268
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	225	228	424	307	537	528	544
Starvation Cap Reductn	0	0	0	0	103	380	0
Spillback Cap Reductn	10	0	0	0	0	7	1
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.51	0.23	0.32	0.80	0.64	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	156	36	110	91	93	0	330	89	100	331	3
Future Volume (vph)	0	156	36	110	91	93	0	330	89	100	331	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.97		1.00	1.00	0.47		1.00	0.87		1.00	
Flpb, ped/bikes		1.00		0.96	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1350		1407	1543	615		1465	1081		1597	
Flt Permitted		1.00		0.47	1.00	1.00		1.00	1.00		0.70	
Satd. Flow (perm)		1350		696	1543	615		1465	1081		1129	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	164	38	116	96	98	0	347	94	105	348	3
RTOR Reduction (vph)	0	0	0	0	0	71	0	0	60	0	0	0
Lane Group Flow (vph)	0	202	0	116	96	27	0	347	34	0	456	0
Confl. Peds. (#/hr)	89		44	44		89	32		83	83		32
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	3%	3%	3%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		18.0		31.0	31.0	31.0		42.0	42.0		47.0	
Effective Green, g (s)		20.0		33.0	33.0	33.0		44.0	44.0		51.0	
Actuated g/C Ratio		0.17		0.28	0.28	0.28		0.37	0.37		0.42	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		225		232	424	169		537	396		507	
v/s Ratio Prot		c0.15		c0.03	0.06			0.24			c0.05	
v/s Ratio Perm				0.11		0.04			0.03		c0.33	
v/c Ratio		0.90		0.50	0.23	0.16		0.65	0.09		0.90	
Uniform Delay, d1		49.0		41.7	33.6	33.0		31.5	24.9		32.1	
Progression Factor		0.95		1.46	1.59	1.00		0.01	1.00		0.93	
Incremental Delay, d2		37.4		6.7	1.1	1.8		2.8	0.2		12.0	
Delay (s)		83.9		67.7	54.5	34.8		3.0	25.1		42.0	
Level of Service		F		E	D	C		A	C		D	
Approach Delay (s)		83.9			53.2			7.7			42.0	
Approach LOS		F			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
04/12/2023



Lane Group	SET	NWT
Lane Group Flow (vph)	530	466
v/c Ratio	0.44	0.87
Control Delay	2.0	55.0
Queue Delay	2.1	0.0
Total Delay	4.1	55.0
Queue Length 50th (ft)	26	336
Queue Length 95th (ft)	m27	#524
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1204	537
Starvation Cap Reductn	509	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.76	0.87

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
04/12/2023



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	422	55	0	419
Future Volume (vph)	0	0	422	55	0	419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.98			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1502			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1502			1574
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	469	61	0	466
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	526	0	0	466
Confl. Peds. (#/hr)		83				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			39.0
Effective Green, g (s)			94.0			41.0
Actuated g/C Ratio			0.78			0.34
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1176			537
v/s Ratio Prot			c0.35			c0.30
v/s Ratio Perm						
v/c Ratio			0.45			0.87
Uniform Delay, d1			4.3			37.0
Progression Factor			0.33			1.00
Incremental Delay, d2			0.8			17.1
Delay (s)			2.2			54.1
Level of Service			A			D
Approach Delay (s)	0.0		2.2			54.1
Approach LOS	A		A			D

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/12/2023



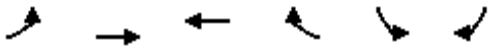
Lane Group	EBT	WBT	SBL
Lane Group Flow (vph)	384	313	32
v/c Ratio	0.40	0.52	0.16
Control Delay	10.9	44.3	25.9
Queue Delay	3.4	67.1	0.2
Total Delay	14.3	111.4	26.2
Queue Length 50th (ft)	165	247	12
Queue Length 95th (ft)	m220	m333	39
Internal Link Dist (ft)	232	126	98
Turn Bay Length (ft)			
Base Capacity (vph)	949	601	195
Starvation Cap Reductn	458	431	0
Spillback Cap Reductn	65	0	31
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.78	1.84	0.20

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	324	252	27	18	11
Future Volume (vph)	18	324	252	27	18	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		6%	4%		0%	
Total Lost time (s)		3.0	4.0		3.0	
Lane Util. Factor		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.95		0.85	
Flpb, ped/bikes		0.99	1.00		1.00	
Frt		1.00	0.99		0.95	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		1529	1466		680	
Flt Permitted		0.98	1.00		0.97	
Satd. Flow (perm)		1509	1466		680	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	20	364	283	30	20	12
RTOR Reduction (vph)	0	0	3	0	9	0
Lane Group Flow (vph)	0	384	310	0	23	0
Confl. Peds. (#/hr)	160			160	3	73
Heavy Vehicles (%)	7%	7%	7%	7%	96%	96%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Actuated Green, G (s)		73.0	47.0		31.0	
Effective Green, g (s)		75.0	49.0		33.0	
Actuated g/C Ratio		0.62	0.41		0.28	
Clearance Time (s)		5.0	6.0		5.0	
Lane Grp Cap (vph)		946	598		187	
v/s Ratio Prot		c0.07	c0.21		c0.03	
v/s Ratio Perm		0.18				
v/c Ratio		0.41	0.52		0.12	
Uniform Delay, d1		11.3	26.6		32.7	
Progression Factor		0.85	1.54		1.00	
Incremental Delay, d2		1.0	2.9		1.4	
Delay (s)		10.6	44.0		34.0	
Level of Service		B	D		C	
Approach Delay (s)		10.6	44.0		34.0	
Approach LOS		B	D		C	

Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



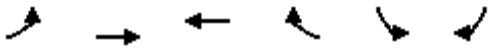
Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	373	234	150	304
v/c Ratio	0.51	0.38	0.43	0.77
Control Delay	14.5	13.5	16.4	54.3
Queue Delay	6.2	67.5	0.0	0.0
Total Delay	20.7	81.0	16.4	54.3
Queue Length 50th (ft)	133	62	45	217
Queue Length 95th (ft)	173	105	97	#350
Internal Link Dist (ft)	126	337		149
Turn Bay Length (ft)			125	
Base Capacity (vph)	737	621	345	396
Starvation Cap Reductn	304	0	0	0
Spillback Cap Reductn	0	450	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.86	1.37	0.43	0.77

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	286	220	141	214	71
Future Volume (vph)	65	286	220	141	214	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.71	0.99	
Flpb, ped/bikes		0.97	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.97	
Flt Protected		0.99	1.00	1.00	0.96	
Satd. Flow (prot)		1244	1521	847	1442	
Flt Permitted		0.91	1.00	1.00	0.96	
Satd. Flow (perm)		1142	1521	847	1442	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	304	234	150	228	76
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	373	234	150	304	0
Confl. Peds. (#/hr)	119			119	18	4
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	8%	8%	6%	6%	0%	0%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		73.0	47.0	47.0	31.0	
Effective Green, g (s)		75.0	49.0	49.0	33.0	
Actuated g/C Ratio		0.62	0.41	0.41	0.28	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		732	621	345	396	
v/s Ratio Prot		c0.09	0.15		c0.21	
v/s Ratio Perm		c0.22		0.18		
v/c Ratio		0.51	0.38	0.43	0.77	
Uniform Delay, d1		12.4	24.8	25.5	40.0	
Progression Factor		0.93	0.47	0.48	1.00	
Incremental Delay, d2		2.4	1.6	3.7	13.3	
Delay (s)		13.9	13.3	15.9	53.3	
Level of Service		B	B	B	D	
Approach Delay (s)		13.9	14.3		53.3	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
04/12/2023

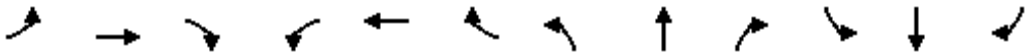
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	494	352	127	61
v/c Ratio	0.52	0.42	0.47	0.24
Control Delay	15.8	18.4	46.9	33.8
Queue Delay	0.9	20.2	0.0	0.0
Total Delay	16.6	38.6	46.9	33.8
Queue Length 50th (ft)	245	211	83	29
Queue Length 95th (ft)	112	m194	148	70
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	955	848	270	254
Starvation Cap Reductn	216	487	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.67	0.98	0.47	0.24

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	422	28	12	304	29	36	72	17	16	26	18
Future Volume (vph)	33	422	28	12	304	29	36	72	17	16	26	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.97			0.96			0.97			0.92	
Flpb, ped/bikes		0.98			1.00			0.94			0.97	
Frt		0.99			0.99			0.98			0.96	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1451			1260			1455			1301	
Flt Permitted		0.96			0.98			0.90			0.91	
Satd. Flow (perm)		1395			1239			1330			1206	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	34	431	29	12	310	30	37	73	17	16	27	18
RTOR Reduction (vph)	0	2	0	0	3	0	0	5	0	0	13	0
Lane Group Flow (vph)	0	492	0	0	349	0	0	122	0	0	48	0
Confl. Peds. (#/hr)	94		71	71		94	52		37	37		52
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	0%	0%	0%	3%	3%	3%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		953			846			266			241	
v/s Ratio Prot												
v/s Ratio Perm		c0.35			0.28			c0.09			0.04	
v/c Ratio		0.52			0.41			0.46			0.20	
Uniform Delay, d1		9.3			8.4			42.3			40.0	
Progression Factor		1.49			2.17			1.00			1.00	
Incremental Delay, d2		1.6			0.1			5.6			1.9	
Delay (s)		15.4			18.3			47.9			41.9	
Level of Service		B			B			D			D	
Approach Delay (s)		15.4			18.3			47.9			41.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

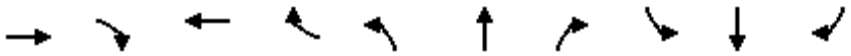
J. Vehicular Capacity Analysis Worksheets – 2027 Total Future Conditions with Mitigations

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

04/12/2023



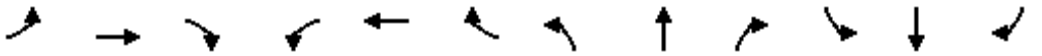
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	125	121	194	165	38	211	11	145	576	1
v/c Ratio	0.26	0.32	0.46	0.41	0.13	0.32	0.02	0.24	0.59	0.00
Control Delay	33.1	34.7	37.6	36.8	16.4	17.4	15.4	12.6	19.0	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	34.7	37.6	36.8	16.4	17.4	15.4	12.6	19.0	10.0
Queue Length 50th (ft)	73	72	121	101	12	65	3	49	268	0
Queue Length 95th (ft)	125	126	194	168	m24	m93	m9	81	379	3
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	474	379	426	399	291	660	561	610	978	784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.32	0.46	0.41	0.13	0.32	0.02	0.24	0.59	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
04/12/2023



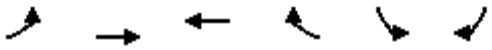
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	113	111	57	121	152	35	194	10	133	530	1
Future Volume (vph)	2	113	111	57	121	152	35	194	10	133	530	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	0.98	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1545	1232		1585	1297	1544	1651	1403	1593	1677	1345
Flt Permitted		1.00	1.00		0.86	1.00	0.45	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)		1540	1232		1382	1297	727	1651	1403	857	1677	1345
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	123	121	62	132	165	38	211	11	145	576	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	125	121	0	194	165	38	211	11	145	576	1
Confl. Peds. (#/hr)	13		15	15		13	7					7
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		35.0	35.0		35.0	35.0	46.0	46.0	46.0	68.0	68.0	68.0
Effective Green, g (s)		37.0	37.0		37.0	37.0	48.0	48.0	48.0	70.0	70.0	70.0
Actuated g/C Ratio		0.31	0.31		0.31	0.31	0.40	0.40	0.40	0.58	0.58	0.58
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		474	379		426	399	290	660	561	610	978	784
v/s Ratio Prot								0.13		0.04	c0.34	
v/s Ratio Perm		0.08	0.10		c0.14	0.13	0.05		0.01	0.10		0.00
v/c Ratio		0.26	0.32		0.46	0.41	0.13	0.32	0.02	0.24	0.59	0.00
Uniform Delay, d1		31.2	31.8		33.4	32.9	22.8	24.8	21.8	11.9	15.9	10.4
Progression Factor		1.00	1.00		1.00	1.00	0.66	0.64	0.70	1.00	1.00	1.00
Incremental Delay, d2		1.4	2.2		3.5	3.1	0.9	1.2	0.1	0.9	2.6	0.0
Delay (s)		32.6	34.0		36.9	36.0	15.9	17.1	15.2	12.8	18.5	10.4
Level of Service		C	C		D	D	B	B	B	B	B	B
Approach Delay (s)		33.3			36.5			16.9			17.3	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	14	250	313	18	2	13
Future Volume (vph)	14	250	313	18	2	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	278	348	20	2	14

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	294	368	16
Volume Left (vph)	16	0	2
Volume Right (vph)	0	20	14
Hadj (s)	0.08	0.05	-0.50
Departure Headway (s)	4.4	4.3	4.8
Degree Utilization, x	0.36	0.44	0.02
Capacity (veh/h)	806	821	643
Control Delay (s)	9.8	10.6	7.9
Approach Delay (s)	9.8	10.6	7.9
Approach LOS	A	B	A

Intersection Summary			
Delay	10.2		
Level of Service	B		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Relocated Metro Station Dwy & Eastern Ave — 04/12/2023



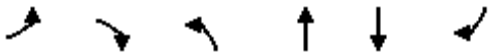
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	225	9	6	191	125	39
Future Volume (Veh/h)	225	9	6	191	125	39
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	245	10	7	208	136	42
Pedestrians	1				10	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			265		483	260
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			265		483	260
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		75	95
cM capacity (veh/h)			1277		538	777

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	255	215	178
Volume Left	0	7	136
Volume Right	10	0	42
cSH	1700	1277	580
Volume to Capacity	0.15	0.01	0.31
Queue Length 95th (ft)	0	0	32
Control Delay (s)	0.0	0.3	13.9
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	13.9
Approach LOS			B

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	33.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
04/12/2023



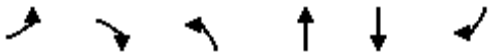
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	271	186	3	0	31
Future Volume (vph)	0	271	186	3	0	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	301	207	3	0	34

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	301	207	3	34
Volume Left (vph)	0	207	0	0
Volume Right (vph)	301	0	0	34
Hadj (s)	-0.52	0.55	0.05	-0.55
Departure Headway (s)	4.0	5.7	5.2	3.2
Degree Utilization, x	0.33	0.33	0.00	0.03
Capacity (veh/h)	862	605	658	1121
Control Delay (s)	9.0	10.3	7.0	6.3
Approach Delay (s)	9.0	10.2		6.3
Approach LOS	A	B		A

Intersection Summary			
Delay	9.3		
Level of Service	A		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Cedar St & Site Dwy

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	38	15	168	260	11
Future Volume (Veh/h)	21	38	15	168	260	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	4%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	23	42	17	187	289	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				227		
pX, platoon unblocked						
vC, conflicting volume	422	295	301			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	422	295	301			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	94	99			
cM capacity (veh/h)	552	701	1257			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	65	79	125	301
Volume Left	23	17	0	0
Volume Right	42	0	0	12
cSH	640	1257	1700	1700
Volume to Capacity	0.10	0.01	0.07	0.18
Queue Length 95th (ft)	8	1	0	0
Control Delay (s)	11.3	1.8	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.3	0.7		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	26.3%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/12/2023



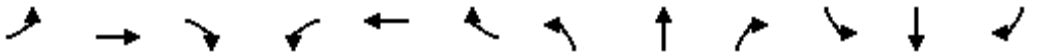
Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	129	163	296	173	274	90	521
v/c Ratio	0.48	0.52	0.64	0.56	0.62	0.19	0.78
Control Delay	49.7	33.4	33.8	8.6	3.7	0.5	33.5
Queue Delay	0.0	0.3	6.3	2.4	2.5	5.5	0.1
Total Delay	49.7	33.8	40.1	11.0	6.2	6.0	33.6
Queue Length 50th (ft)	89	54	124	0	0	0	257
Queue Length 95th (ft)	150	m105	m239	m36	m2	m0	401
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	268	314	462	311	439	464	666
Starvation Cap Reductn	0	16	117	59	78	318	0
Spillback Cap Reductn	0	0	0	0	0	0	5
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.55	0.86	0.69	0.76	0.62	0.79

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	91	28	150	272	159	0	252	83	62	417	1
Future Volume (vph)	0	91	28	150	272	159	0	252	83	62	417	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.98		1.00	1.00	0.45		1.00	0.86		1.00	
Flpb, ped/bikes		1.00		0.98	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1402		1429	1543	592		1424	1037		1641	
Flt Permitted		1.00		0.64	1.00	1.00		1.00	1.00		0.91	
Satd. Flow (perm)		1402		962	1543	592		1424	1037		1507	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	99	30	163	296	173	0	274	90	67	453	1
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	62	0	0	0
Lane Group Flow (vph)	0	129	0	163	296	52	0	274	28	0	521	0
Confl. Peds. (#/hr)	103		15	15		103	15		77	77		15
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	7%	7%	7%	1%	1%	1%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		21.0		34.0	34.0	34.0		35.0	35.0		44.0	
Effective Green, g (s)		23.0		36.0	36.0	36.0		37.0	37.0		48.0	
Actuated g/C Ratio		0.19		0.30	0.30	0.30		0.31	0.31		0.40	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		268		315	462	177		439	319		615	
v/s Ratio Prot		0.09		0.03	c0.19			0.19			c0.08	
v/s Ratio Perm				0.12		0.09			0.03		c0.26	
v/c Ratio		0.48		0.52	0.64	0.29		0.62	0.09		0.85	
Uniform Delay, d1		43.2		36.3	36.4	32.2		35.5	29.5		32.7	
Progression Factor		0.99		0.79	0.78	0.92		0.01	1.00		0.91	
Incremental Delay, d2		6.0		4.3	4.8	3.0		3.5	0.3		11.5	
Delay (s)		48.9		33.0	33.1	32.8		3.7	29.8		41.2	
Level of Service		D		C	C	C		A	C		D	
Approach Delay (s)		48.9			33.0			10.2			41.2	
Approach LOS		D			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
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Lane Group	SET	NWT
Lane Group Flow (vph)	648	372
v/c Ratio	0.54	0.84
Control Delay	2.1	58.0
Queue Delay	0.9	0.0
Total Delay	3.0	58.0
Queue Length 50th (ft)	0	271
Queue Length 95th (ft)	0	#432
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1207	445
Starvation Cap Reductn	294	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.71	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
04/12/2023



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	534	63	0	335
Future Volume (vph)	0	0	534	63	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1504			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1504			1574
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.90
Adj. Flow (vph)	0	0	580	68	0	372
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	644	0	0	372
Confl. Peds. (#/hr)		77				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			32.0
Effective Green, g (s)			94.0			34.0
Actuated g/C Ratio			0.78			0.28
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1178			445
v/s Ratio Prot			c0.43			c0.24
v/s Ratio Perm						
v/c Ratio			0.55			0.84
Uniform Delay, d1			4.9			40.4
Progression Factor			0.20			1.00
Incremental Delay, d2			1.3			16.8
Delay (s)			2.3			57.2
Level of Service			A			E
Approach Delay (s)	0.0		2.3			57.2
Approach LOS	A		A			E

Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/12/2023



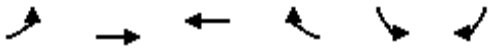
Lane Group	EBT	WBT	SBL
Lane Group Flow (vph)	229	663	30
v/c Ratio	0.26	0.77	0.27
Control Delay	9.7	24.8	38.6
Queue Delay	0.8	52.4	0.0
Total Delay	10.5	77.1	38.6
Queue Length 50th (ft)	69	350	13
Queue Length 95th (ft)	m110	531	44
Internal Link Dist (ft)	232	126	98
Turn Bay Length (ft)			
Base Capacity (vph)	876	856	112
Starvation Cap Reductn	393	338	0
Spillback Cap Reductn	0	47	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.47	1.28	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	59	161	533	104	18	11
Future Volume (vph)	59	161	533	104	18	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		6%	4%		0%	
Total Lost time (s)		3.0	4.0		3.0	
Lane Util. Factor		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.91		0.83	
Flpb, ped/bikes		1.00	1.00		1.00	
Frt		1.00	0.98		0.95	
Flt Protected		0.99	1.00		0.97	
Satd. Flow (prot)		1516	1398		652	
Flt Permitted		0.73	1.00		0.97	
Satd. Flow (perm)		1129	1398		652	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	61	168	555	108	19	11
RTOR Reduction (vph)	0	0	6	0	9	0
Lane Group Flow (vph)	0	229	657	0	21	0
Confl. Peds. (#/hr)	158			158	1	84
Heavy Vehicles (%)	8%	8%	7%	7%	100%	100%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Actuated Green, G (s)		87.0	71.0		17.0	
Effective Green, g (s)		89.0	73.0		19.0	
Actuated g/C Ratio		0.74	0.61		0.16	
Clearance Time (s)		5.0	6.0		5.0	
Lane Grp Cap (vph)		876	850		103	
v/s Ratio Prot		c0.03	c0.47		c0.03	
v/s Ratio Perm		0.17				
v/c Ratio		0.26	0.77		0.20	
Uniform Delay, d1		5.0	17.4		43.9	
Progression Factor		1.75	1.00		1.00	
Incremental Delay, d2		0.7	6.8		4.4	
Delay (s)		9.3	24.1		48.3	
Level of Service		A	C		D	
Approach Delay (s)		9.3	24.1		48.3	
Approach LOS		A	C		D	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	207	486	158	323
v/c Ratio	0.29	0.64	0.32	1.02
Control Delay	9.1	21.4	15.6	91.6
Queue Delay	3.1	2.2	0.0	0.0
Total Delay	12.3	23.5	15.6	91.6
Queue Length 50th (ft)	48	194	51	~190
Queue Length 95th (ft)	84	303	95	#359
Internal Link Dist (ft)	126	337		147
Turn Bay Length (ft)			125	
Base Capacity (vph)	722	760	497	317
Starvation Cap Reductn	412	153	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.67	0.80	0.32	1.02

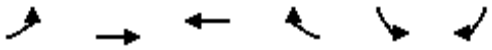
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	31	168	467	152	125	185
Future Volume (vph)	31	168	467	152	125	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.83	0.98	
Flpb, ped/bikes		0.99	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.92	
Flt Protected		0.99	1.00	1.00	0.98	
Satd. Flow (prot)		1249	1521	994	1298	
Flt Permitted		0.91	1.00	1.00	0.98	
Satd. Flow (perm)		1147	1521	994	1298	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	32	175	486	158	130	193
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	207	486	158	323	0
Confl. Peds. (#/hr)	89			89	12	5
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	10%	10%	6%	6%	6%	6%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		54.0	43.0	43.0	20.0	
Effective Green, g (s)		56.0	45.0	45.0	22.0	
Actuated g/C Ratio		0.62	0.50	0.50	0.24	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		721	760	497	317	
v/s Ratio Prot		c0.02	c0.32		c0.25	
v/s Ratio Perm		0.16		0.16		
v/c Ratio		0.29	0.64	0.32	1.02	
Uniform Delay, d1		7.8	16.5	13.4	34.0	
Progression Factor		1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.0	4.1	1.7	55.5	
Delay (s)		8.8	20.6	15.1	89.5	
Level of Service		A	C	B	F	
Approach Delay (s)		8.8	19.3		89.5	
Approach LOS		A	B		F	

Intersection Summary			
HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

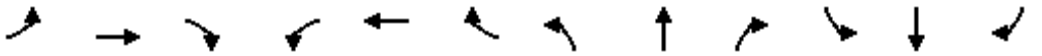
Takoma Metro Multifamily Development
04/12/2023

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	307	659	49	73
v/c Ratio	0.31	0.73	0.19	0.27
Control Delay	8.5	12.5	31.5	29.1
Queue Delay	1.1	2.4	0.0	0.0
Total Delay	9.6	15.0	31.5	29.1
Queue Length 50th (ft)	85	255	21	29
Queue Length 95th (ft)	130	379	57	73
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	980	906	254	266
Starvation Cap Reductn	446	138	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.57	0.86	0.19	0.27

Intersection Summary

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
04/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	254	15	15	572	13	22	8	15	19	18	29
Future Volume (vph)	11	254	15	15	572	13	22	8	15	19	18	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			0.99			0.98			0.94	
Flpb, ped/bikes		1.00			1.00			0.97			0.99	
Frt		0.99			1.00			0.96			0.94	
Flt Protected		1.00			1.00			0.98			0.99	
Satd. Flow (prot)		1472			1340			1374			1302	
Flt Permitted		0.97			0.99			0.86			0.92	
Satd. Flow (perm)		1434			1327			1209			1214	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	12	279	16	16	629	14	24	9	16	21	20	32
RTOR Reduction (vph)	0	2	0	0	1	0	0	13	0	0	23	0
Lane Group Flow (vph)	0	305	0	0	658	0	0	36	0	0	50	0
Confl. Peds. (#/hr)	48		12	12		48	19		10	10		19
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		979			906			241			242	
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.50			0.03			c0.04	
v/c Ratio		0.31			0.73			0.15			0.21	
Uniform Delay, d1		7.6			12.0			39.6			40.0	
Progression Factor		1.00			0.66			1.00			1.00	
Incremental Delay, d2		0.8			4.2			1.3			1.9	
Delay (s)		8.5			12.0			40.9			42.0	
Level of Service		A			B			D			D	
Approach Delay (s)		8.5			12.0			40.9			42.0	
Approach LOS		A			B			D			D	

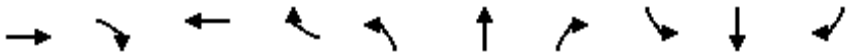
Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues

1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development

04/24/2023



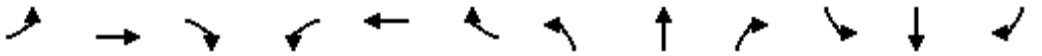
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	171	84	154	112	97	618	23	137	372	4
v/c Ratio	0.49	0.30	0.46	0.39	0.20	0.69	0.03	0.35	0.33	0.00
Control Delay	46.2	42.3	45.5	44.2	8.4	10.4	8.2	9.8	9.5	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.2	42.3	45.5	44.2	8.4	10.4	8.2	9.8	9.5	6.8
Queue Length 50th (ft)	116	54	104	74	13	87	3	35	113	1
Queue Length 95th (ft)	189	103	172	131	m22	m141	m5	60	163	5
Internal Link Dist (ft)	325		429			793			351	
Turn Bay Length (ft)		25		25	120		420	70		70
Base Capacity (vph)	347	277	333	289	477	894	741	395	1140	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.30	0.46	0.39	0.20	0.69	0.03	0.35	0.33	0.00

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
1: Piney Branch Rd & Eastern Ave

Takoma Metro Multifamily Development
04/24/2023



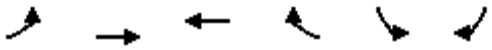
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	158	78	26	117	104	90	575	21	127	346	4
Future Volume (vph)	1	158	78	26	117	104	90	575	21	127	346	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			2%			5%			-2%	
Total Lost time (s)		6.0	6.0		6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.94		1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1546	1233		1605	1288	1549	1651	1368	1624	1710	1394
Flt Permitted		1.00	1.00		0.91	1.00	0.54	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		1544	1233		1481	1288	881	1651	1368	429	1710	1394
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	170	84	28	126	112	97	618	23	137	372	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	171	84	0	154	112	97	618	23	137	372	4
Confl. Peds. (#/hr)	15		14	14		15	4		1	1		4
Confl. Bikes (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Parking (#/hr)	0	0	0									
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8			4			6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Actuated Green, G (s)		25.0	25.0		25.0	25.0	63.0	63.0	63.0	78.0	78.0	78.0
Effective Green, g (s)		27.0	27.0		27.0	27.0	65.0	65.0	65.0	80.0	80.0	80.0
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.54	0.54	0.54	0.67	0.67	0.67
Clearance Time (s)		8.0	8.0		8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Grp Cap (vph)		347	277		333	289	477	894	741	395	1140	929
v/s Ratio Prot								c0.37		0.03	c0.22	
v/s Ratio Perm		c0.11	0.07		0.10	0.09	0.11		0.02	0.20		0.00
v/c Ratio		0.49	0.30		0.46	0.39	0.20	0.69	0.03	0.35	0.33	0.00
Uniform Delay, d1		40.5	38.7		40.2	39.5	14.2	20.1	12.8	11.5	8.5	6.7
Progression Factor		1.00	1.00		1.00	1.00	0.54	0.39	0.63	1.00	1.00	1.00
Incremental Delay, d2		4.9	2.8		4.6	3.9	0.5	2.3	0.0	2.4	0.8	0.0
Delay (s)		45.5	41.5		44.8	43.4	8.2	10.2	8.1	13.9	9.3	6.7
Level of Service		D	D		D	D	A	B	A	B	A	A
Approach Delay (s)		44.2			44.2			9.8			10.5	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Eastern Ave & Holly Ave

Takoma Metro Multifamily Development
04/24/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	23	276	238	8	4	21
Future Volume (vph)	23	276	238	8	4	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	300	259	9	4	23

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	325	268	27
Volume Left (vph)	25	0	4
Volume Right (vph)	0	9	23
Hadj (s)	0.03	0.06	-0.41
Departure Headway (s)	4.3	4.4	4.8
Degree Utilization, x	0.39	0.32	0.04
Capacity (veh/h)	828	804	668
Control Delay (s)	9.9	9.4	7.9
Approach Delay (s)	9.9	9.4	7.9
Approach LOS	A	A	A

Intersection Summary			
Delay	9.6		
Level of Service	A		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Takoma Metro Multifamily Development
3: Relocated Metro Station Dwy & Eastern Ave — 04/24/2023



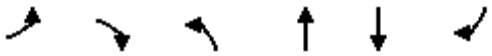
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	253	17	6	196	27	8
Future Volume (Veh/h)	253	17	6	196	27	8
Sign Control	Free			Free	Stop	
Grade	0%			2%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	284	19	7	220	30	9
Pedestrians	3				14	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			317		544	308
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			317		544	308
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		94	99
cM capacity (veh/h)			1212		493	729

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	303	227	39
Volume Left	0	7	30
Volume Right	19	0	9
cSH	1700	1212	533
Volume to Capacity	0.18	0.01	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.3	12.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	12.3
Approach LOS			B

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	26.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
5: Cedar St/Cedar Ave & Eastern Ave

Takoma Metro Multifamily Development
04/24/2023



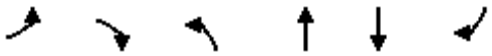
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	0	282	195	9	0	19
Future Volume (vph)	0	282	195	9	0	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	307	212	10	0	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total (vph)	307	212	10	21
Volume Left (vph)	0	212	0	0
Volume Right (vph)	307	0	0	21
Hadj (s)	-0.58	0.53	0.03	-0.60
Departure Headway (s)	4.0	5.7	5.2	3.2
Degree Utilization, x	0.34	0.34	0.01	0.02
Capacity (veh/h)	870	607	660	1121
Control Delay (s)	9.0	10.3	7.1	6.3
Approach Delay (s)	9.0	10.2		6.3
Approach LOS	A	B		A

Intersection Summary			
Delay	9.4		
Level of Service	A		
Intersection Capacity Utilization	27.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Cedar St & Site Dwy

Takoma Metro Multifamily Development
04/24/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	25	37	185	256	26
Future Volume (Veh/h)	22	25	37	185	256	26
Sign Control	Stop			Free	Free	
Grade	0%			0%	4%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	24	28	41	206	284	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				229		
pX, platoon unblocked						
vC, conflicting volume	484	298	313			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	484	298	313			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	96	97			
cM capacity (veh/h)	495	698	1244			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	52	110	137	313
Volume Left	24	41	0	0
Volume Right	28	0	0	29
cSH	587	1244	1700	1700
Volume to Capacity	0.09	0.03	0.08	0.18
Queue Length 95th (ft)	7	3	0	0
Control Delay (s)	11.7	3.2	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.7	1.4		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/24/2023



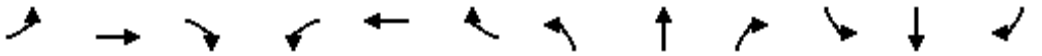
Lane Group	EBT	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	202	116	96	98	347	94	456
v/c Ratio	0.82	0.48	0.21	0.31	0.65	0.18	0.89
Control Delay	70.3	62.7	53.8	13.1	3.0	0.3	41.3
Queue Delay	1.6	0.0	0.0	0.0	2.9	5.9	0.1
Total Delay	71.9	62.7	53.8	13.1	5.9	6.2	41.4
Queue Length 50th (ft)	128	69	57	27	0	0	228
Queue Length 95th (ft)	#263	126	109	63	m2	m0	m283
Internal Link Dist (ft)	452		232		39		909
Turn Bay Length (ft)		220		180			
Base Capacity (vph)	247	244	450	314	537	528	513
Starvation Cap Reductn	0	0	0	0	103	380	0
Spillback Cap Reductn	7	0	0	0	0	6	1
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.48	0.21	0.31	0.80	0.64	0.89

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
7: Blair Rd & Cedar St

Takoma Metro Multifamily Development
04/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	156	36	110	91	93	0	330	89	100	331	3
Future Volume (vph)	0	156	36	110	91	93	0	330	89	100	331	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	12	12	12	11	11	11
Grade (%)		-2%			4%			2%			-2%	
Total Lost time (s)		6.0		5.0	5.0	5.0		8.0	8.0		4.0	
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		0.97		1.00	1.00	0.47		1.00	0.87		1.00	
Flpb, ped/bikes		1.00		0.96	1.00	1.00		1.00	1.00		1.00	
Frt		0.97		1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00	1.00		1.00	1.00		0.99	
Satd. Flow (prot)		1350		1404	1543	615		1465	1081		1597	
Flt Permitted		1.00		0.49	1.00	1.00		1.00	1.00		0.69	
Satd. Flow (perm)		1350		720	1543	615		1465	1081		1118	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	164	38	116	96	98	0	347	94	105	348	3
RTOR Reduction (vph)	0	0	0	0	0	69	0	0	60	0	0	0
Lane Group Flow (vph)	0	202	0	116	96	29	0	347	34	0	456	0
Confl. Peds. (#/hr)	89		44	44		89	32		83	83		32
Confl. Bikes (#/hr)			4			4			1			1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	3%	3%	3%
Parking (#/hr)	0	0	0				0	0	0			
Turn Type		NA		pm+pt	NA	Perm		NA	Perm	D.P+P	NA	
Protected Phases		6		5	2			11		3	3 11	
Permitted Phases				2		2			11	11		
Actuated Green, G (s)		20.0		33.0	33.0	33.0		42.0	42.0		45.0	
Effective Green, g (s)		22.0		35.0	35.0	35.0		44.0	44.0		49.0	
Actuated g/C Ratio		0.18		0.29	0.29	0.29		0.37	0.37		0.41	
Clearance Time (s)		8.0		7.0	7.0	7.0		10.0	10.0			
Lane Grp Cap (vph)		247		249	450	179		537	396		476	
v/s Ratio Prot		c0.15		c0.03	0.06			0.24			c0.04	
v/s Ratio Perm				0.11		0.05			0.03		c0.35	
v/c Ratio		0.82		0.47	0.21	0.16		0.65	0.09		0.96	
Uniform Delay, d1		47.1		39.7	32.1	31.6		31.5	24.9		34.5	
Progression Factor		0.95		1.50	1.62	1.00		0.01	1.00		0.99	
Incremental Delay, d2		24.4		5.5	1.0	1.7		2.8	0.2		20.1	
Delay (s)		69.3		65.0	52.9	33.3		3.0	25.1		54.2	
Level of Service		E		E	D	C		A	C		D	
Approach Delay (s)		69.3			51.2			7.7			54.2	
Approach LOS		E			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Queues
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
04/24/2023

Lane Group	SET	NWT
Lane Group Flow (vph)	530	466
v/c Ratio	0.44	0.87
Control Delay	2.1	55.0
Queue Delay	2.4	0.0
Total Delay	4.5	55.0
Queue Length 50th (ft)	26	336
Queue Length 95th (ft)	m28	#524
Internal Link Dist (ft)	39	263
Turn Bay Length (ft)		
Base Capacity (vph)	1204	537
Starvation Cap Reductn	525	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.78	0.87

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: 4th St & Blair Rd

Takoma Metro Multifamily Development
04/24/2023



Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	0	422	55	0	419
Future Volume (vph)	0	0	422	55	0	419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Grade (%)	2%		2%			2%
Total Lost time (s)			5.0			11.0
Lane Util. Factor			1.00			1.00
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			0.98			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			1502			1574
Flt Permitted			1.00			1.00
Satd. Flow (perm)			1502			1574
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	469	61	0	466
RTOR Reduction (vph)	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	526	0	0	466
Confl. Peds. (#/hr)		83				
Confl. Bikes (#/hr)		1		2		
Heavy Vehicles (%)	0%	0%	7%	7%	4%	4%
Turn Type			NA			NA
Protected Phases			2 3 13			7
Permitted Phases						
Actuated Green, G (s)			96.0			39.0
Effective Green, g (s)			94.0			41.0
Actuated g/C Ratio			0.78			0.34
Clearance Time (s)						13.0
Lane Grp Cap (vph)			1176			537
v/s Ratio Prot			c0.35			c0.30
v/s Ratio Perm						
v/c Ratio			0.45			0.87
Uniform Delay, d1			4.3			37.0
Progression Factor			0.36			1.00
Incremental Delay, d2			0.8			17.1
Delay (s)			2.4			54.1
Level of Service			A			D
Approach Delay (s)	0.0		2.4			54.1
Approach LOS	A		A			D

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	35.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/24/2023



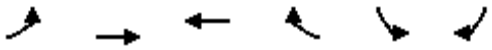
Lane Group	EBT	WBT	SBL
Lane Group Flow (vph)	384	313	32
v/c Ratio	0.40	0.52	0.16
Control Delay	10.4	44.3	25.9
Queue Delay	3.3	67.1	0.2
Total Delay	13.8	111.4	26.2
Queue Length 50th (ft)	144	247	12
Queue Length 95th (ft)	m218	m333	39
Internal Link Dist (ft)	232	126	98
Turn Bay Length (ft)			
Base Capacity (vph)	949	601	195
Starvation Cap Reductn	456	431	0
Spillback Cap Reductn	94	0	31
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.78	1.84	0.20

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cedar St & Metro Station Dwy

Takoma Metro Multifamily Development
04/24/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	324	252	27	18	11
Future Volume (vph)	18	324	252	27	18	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		6%	4%		0%	
Total Lost time (s)		3.0	4.0		3.0	
Lane Util. Factor		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.95		0.85	
Flpb, ped/bikes		0.99	1.00		1.00	
Frt		1.00	0.99		0.95	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		1529	1466		680	
Flt Permitted		0.98	1.00		0.97	
Satd. Flow (perm)		1509	1466		680	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	20	364	283	30	20	12
RTOR Reduction (vph)	0	0	3	0	9	0
Lane Group Flow (vph)	0	384	310	0	23	0
Confl. Peds. (#/hr)	160			160	3	73
Heavy Vehicles (%)	7%	7%	7%	7%	96%	96%
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Actuated Green, G (s)		73.0	47.0		31.0	
Effective Green, g (s)		75.0	49.0		33.0	
Actuated g/C Ratio		0.62	0.41		0.28	
Clearance Time (s)		5.0	6.0		5.0	
Lane Grp Cap (vph)		946	598		187	
v/s Ratio Prot		c0.07	c0.21		c0.03	
v/s Ratio Perm		0.18				
v/c Ratio		0.41	0.52		0.12	
Uniform Delay, d1		11.3	26.6		32.7	
Progression Factor		0.81	1.54		1.00	
Incremental Delay, d2		1.0	2.9		1.4	
Delay (s)		10.2	44.0		34.0	
Level of Service		B	D		C	
Approach Delay (s)		10.2	44.0		34.0	
Approach LOS		B	D		C	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/24/2023



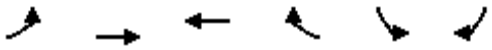
Lane Group	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	373	234	150	304
v/c Ratio	0.51	0.38	0.43	0.77
Control Delay	15.2	13.5	16.4	54.3
Queue Delay	6.2	67.5	0.0	0.0
Total Delay	21.4	81.0	16.4	54.3
Queue Length 50th (ft)	143	62	45	217
Queue Length 95th (ft)	182	105	97	#350
Internal Link Dist (ft)	126	337		149
Turn Bay Length (ft)			125	
Base Capacity (vph)	737	621	345	396
Starvation Cap Reductn	304	0	0	0
Spillback Cap Reductn	0	450	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.86	1.37	0.43	0.77

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
10: Cedar St & Carroll St

Takoma Metro Multifamily Development
04/24/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	286	220	141	214	71
Future Volume (vph)	65	286	220	141	214	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	8	10	10
Grade (%)		6%	-2%		4%	
Total Lost time (s)		3.0	4.0	4.0	3.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.71	0.99	
Flpb, ped/bikes		0.97	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	0.97	
Flt Protected		0.99	1.00	1.00	0.96	
Satd. Flow (prot)		1244	1521	847	1442	
Flt Permitted		0.91	1.00	1.00	0.96	
Satd. Flow (perm)		1142	1521	847	1442	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	304	234	150	228	76
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	373	234	150	304	0
Confl. Peds. (#/hr)	119			119	18	4
Confl. Bikes (#/hr)				9		
Heavy Vehicles (%)	8%	8%	6%	6%	0%	0%
Parking (#/hr)	0	0				
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)		73.0	47.0	47.0	31.0	
Effective Green, g (s)		75.0	49.0	49.0	33.0	
Actuated g/C Ratio		0.62	0.41	0.41	0.28	
Clearance Time (s)		5.0	6.0	6.0	5.0	
Lane Grp Cap (vph)		732	621	345	396	
v/s Ratio Prot		c0.09	0.15		c0.21	
v/s Ratio Perm		c0.22		0.18		
v/c Ratio		0.51	0.38	0.43	0.77	
Uniform Delay, d1		12.4	24.8	25.5	40.0	
Progression Factor		0.98	0.47	0.48	1.00	
Incremental Delay, d2		2.4	1.6	3.7	13.3	
Delay (s)		14.5	13.3	15.9	53.3	
Level of Service		B	B	B	D	
Approach Delay (s)		14.5	14.3		53.3	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Queues
11: Maple St & Carroll St

Takoma Metro Multifamily Development
04/24/2023

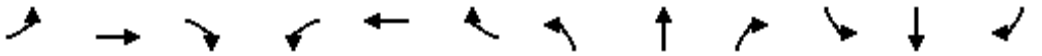
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	494	352	127	61
v/c Ratio	0.52	0.42	0.47	0.24
Control Delay	15.1	18.4	46.9	33.8
Queue Delay	0.9	20.2	0.0	0.0
Total Delay	16.0	38.6	46.9	33.8
Queue Length 50th (ft)	239	211	83	29
Queue Length 95th (ft)	106	m194	148	70
Internal Link Dist (ft)	337	218	497	725
Turn Bay Length (ft)				
Base Capacity (vph)	955	848	270	254
Starvation Cap Reductn	216	487	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.67	0.98	0.47	0.24

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
11: Maple St & Carroll St

Takoma Metro Multifamily Development
04/24/2023



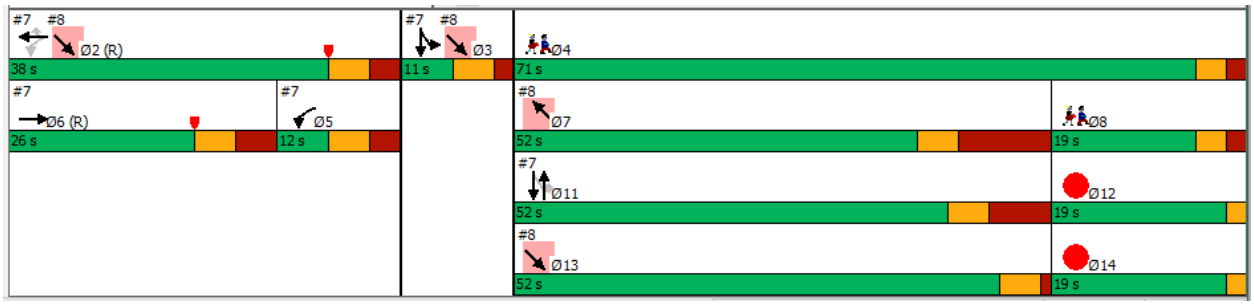
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	422	28	12	304	29	36	72	17	16	26	18
Future Volume (vph)	33	422	28	12	304	29	36	72	17	16	26	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	11	11	11	10	10	10
Grade (%)		-2%			2%			2%			2%	
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.97			0.96			0.97			0.92	
Flpb, ped/bikes		0.98			1.00			0.94			0.97	
Frt		0.99			0.99			0.98			0.96	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1451			1260			1455			1301	
Flt Permitted		0.96			0.98			0.90			0.91	
Satd. Flow (perm)		1395			1239			1330			1206	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	34	431	29	12	310	30	37	73	17	16	27	18
RTOR Reduction (vph)	0	2	0	0	3	0	0	5	0	0	13	0
Lane Group Flow (vph)	0	492	0	0	349	0	0	122	0	0	48	0
Confl. Peds. (#/hr)	94		71	71		94	52		37	37		52
Confl. Bikes (#/hr)						7			2			13
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	0%	0%	0%	3%	3%	3%
Parking (#/hr)				0	0	0						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		80.0			80.0			22.0			22.0	
Effective Green, g (s)		82.0			82.0			24.0			24.0	
Actuated g/C Ratio		0.68			0.68			0.20			0.20	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		953			846			266			241	
v/s Ratio Prot												
v/s Ratio Perm		c0.35			0.28			c0.09			0.04	
v/c Ratio		0.52			0.41			0.46			0.20	
Uniform Delay, d1		9.3			8.4			42.3			40.0	
Progression Factor		1.42			2.17			1.00			1.00	
Incremental Delay, d2		1.6			0.1			5.6			1.9	
Delay (s)		14.8			18.3			47.9			41.9	
Level of Service		B			B			D			D	
Approach Delay (s)		14.8			18.3			47.9			41.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

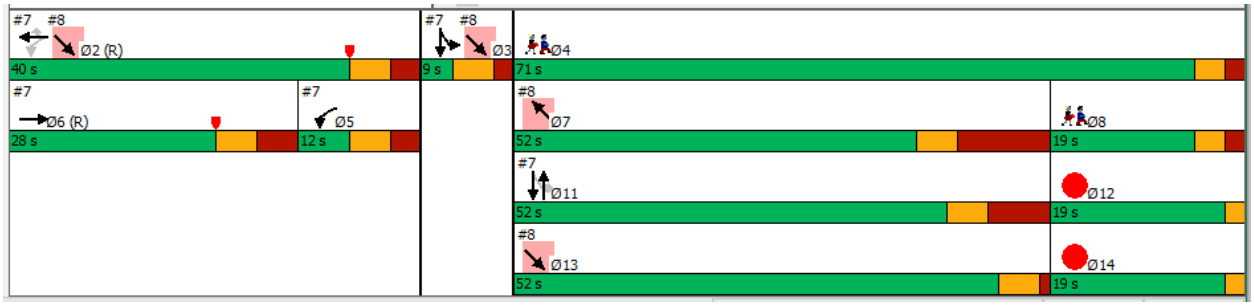
K. Potential Signal Timing Adjustments

Potential Signal Timing Adjustment at Blair Street and Cedar Street NW (PM)

Existing Signal Timing (PM)



Potential Signal Timing (PM)

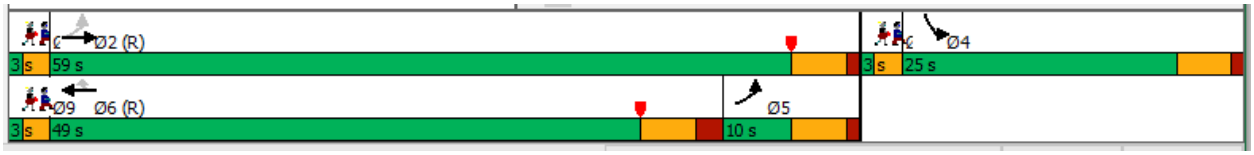


Potential Signal Timing Adjustment at Cedar Street and Carroll Street NW (AM)

Existing Signal Timing (AM)



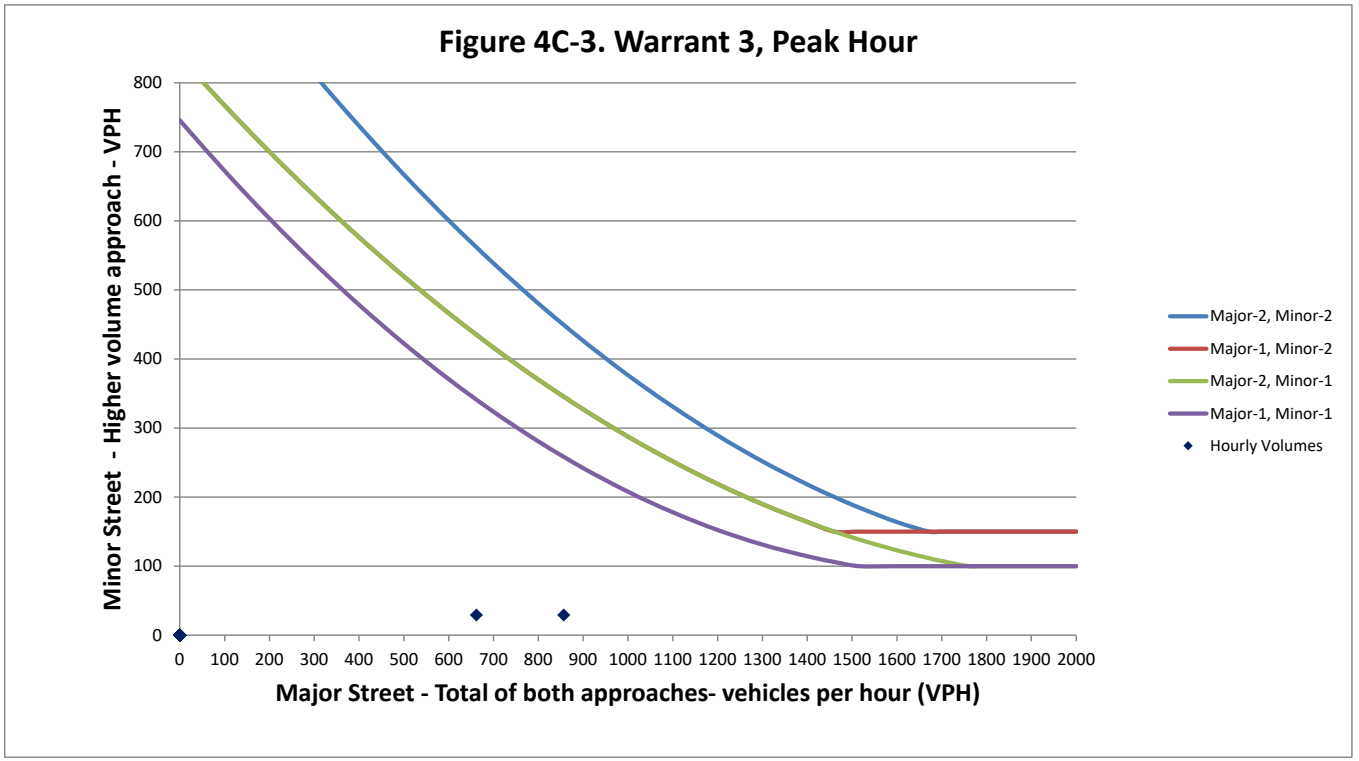
Potential Signal Timing (AM)



L. MUTCD Signal Warrants

Peak Hour

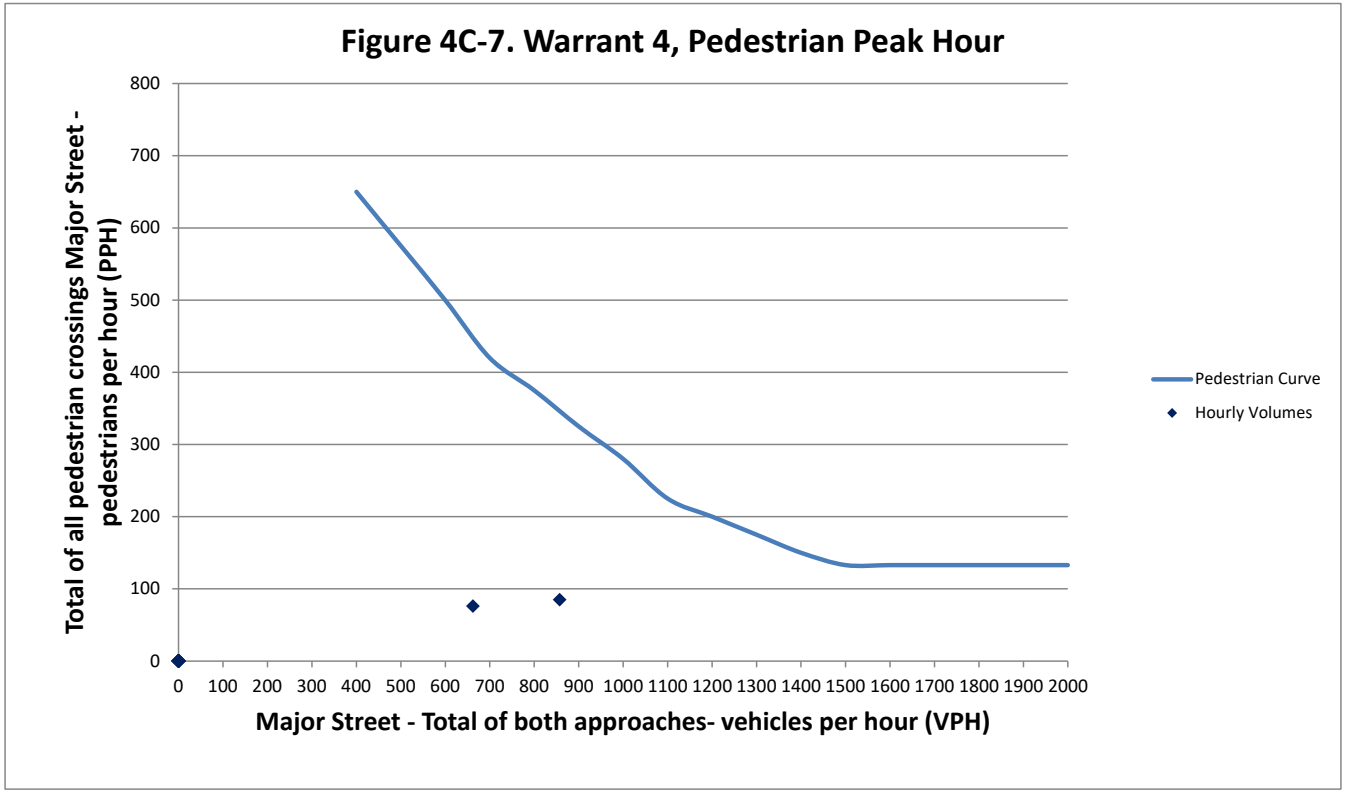
Input		
Time	Major Street Volume	Minor Street Volume
12:30 - 1:30	0	0
1:30 - 2:30	0	0
2:30 - 3:30	0	0
3:30 - 4:30	0	0
4:30 - 5:30	0	0
5:30 - 6:30	0	0
6:30 - 7:30	0	0
7:30 - 8:30	857	29
8:30 - 9:30	0	0
9:30 - 10:30	0	0
10:30 - 11:30	0	0
11:30 - 12:30	0	0
12:45 - 1:45	0	0
1:45 - 2:45	0	0
2:45 - 3:45	0	0
3:45 - 4:45	0	0
4:45 - 5:45	662	29
5:45 - 6:45	0	0
6:45 - 7:45	0	0
7:45 - 8:45	0	0
8:45 - 9:45	0	0
9:45 - 10:45	0	0
10:45 - 11:45	0	0
10:45 - 11:45	0	0
11:45 - 12:45	0	0



Standard: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

Peak Hour Pedestrian Volume

	Input	
	Major Street Volume	Pedestrian Volume
12:30 - 1:30	0	0
1:30 - 2:30	0	0
2:30 - 3:30	0	0
3:30 - 4:30	0	0
4:30 - 5:30	0	0
5:30 - 6:30	0	0
6:30 - 7:30	0	0
7:30 - 8:30	857	85
8:30 - 9:30	0	0
9:30 - 10:30	0	0
10:30 - 11:30	0	0
11:30 - 12:30	0	0
12:45 - 1:45	0	0
1:45 - 2:45	0	0
2:45 - 3:45	0	0
3:45 - 4:45	0	0
4:45 - 5:45	662	76
5:45 - 6:45	0	0
6:45 - 7:45	0	0
7:45 - 8:45	0	0
8:45 - 9:45	0	0
9:45 - 10:45	0	0
10:45 - 11:45	0	0
10:45 - 11:45	0	0
11:45 - 12:45	0	0



Standard: For 1 hour (any four consecutive 15-minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) falls above the curve in Figure 4C-7.