

**Franconia-Springfield Metro Station  
Frontier Drive Extension**

**Washington Metropolitan Area Transit Authority  
(WMATA)  
Environmental Evaluation**

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**June 2022**

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## **1.0 INTRODUCTION**

WMATA proposes changes to the Franconia-Springfield Metro Station (“Metro Station”), also known as the Franconia-Springfield Transit Center and the Joe Alexander Transportation Center, to accommodate the Frontier Drive Extension and Braided Ramps Project (“Project”). Because the Project includes a modification of Metro Station facilities and station access, this Environmental Evaluation has been prepared to assess the potential effects of this action.

The Project includes the following modifications of WMATA facilities:

- Two new signalized intersections
- Reconfigured access to parking garage
- Add three more bus bays for a total of 15
- Add new bus layover facility
- Eliminate pick-up/drop-off area
- Allows through-traffic to Springfield Center Drive and Loisdale Road, which provides new access to WMATA station from the General Services Administration (GSA) warehouse

To support WMATA Compact requirements, specifically Section 14(c)(1), this Environmental Evaluation describes the Project and documents the potential effects of the Metro Station facility modifications on the human and natural environment in terms of transportation, social, economic, and environmental factors. This Environmental Evaluation only assesses impacts where changes to the Metro facilities are proposed.

The analysis on impacts presented in the Environmental Evaluation is drawn from the Environmental Assessment (EA) for the entire Frontier Drive Extension and Braided Ramps Project prepared by the Virginia Department of Transportation (VDOT) pursuant to the National Environmental Policy Act of 1969 (NEPA) and in accordance with Federal Highway Administration (FHWA) regulations for implementing NEPA (23 CFR 771). VDOT must submit the EA to FHWA and receive a Finding of No Significant Impact (FONSI) before the Project can advance to right-of-way acquisition and construction.

The Frontier Drive Extension and Braided Ramps project is a series of proposed transportation improvements adjacent to WMATA’s Franconia-Springfield Metro Station. The improvements include modifying the existing interchange of Frontier Drive (Route 2677) and Franconia-Springfield Parkway (Route 289) and extending Frontier Drive from its southern terminus at the Metro Station south to Loisdale Road (Route 789).

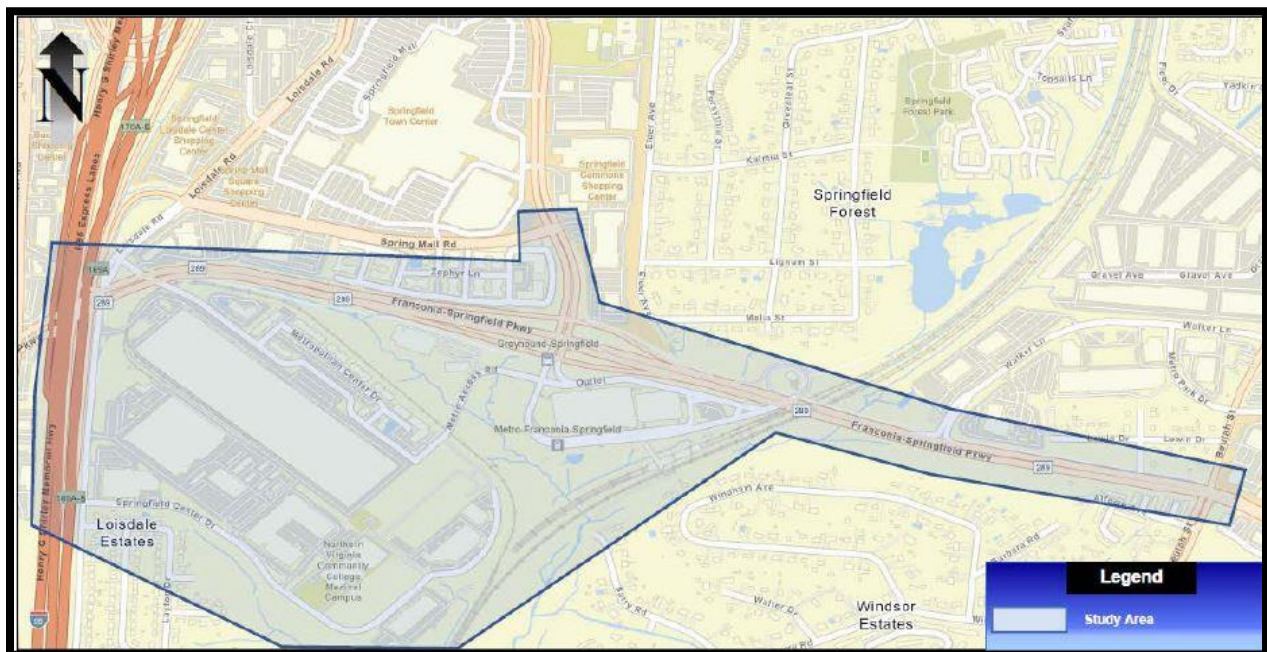
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Of specific interest to WMATA are the changes to the access and circulation in the vicinity of the Metro Station, including the extension of Frontier Drive to Springfield Center Drive

The project area (see project location, or “Project Site” in Figure 1) is in the immediate vicinity of the Franconia-Springfield Metro Station, which is southeast of I-95/I-395/I-495 interchange in Fairfax County, Virginia. Immediately north of the Metro station is the newly renovated Springfield Mall—one of the largest retail submarkets in the County. Southwest of the Metro Station is the new Transportation Security Administration headquarters (opened in 2020) and the GSA warehouse. Extending Frontier Drive will improve accessibility between those sites and the Metro Station. The project location is shown in Figure 1.

Figure 1. Project Location Map





## 2.0 EXISTING SITE DESCRIPTION

The Franconia-Springfield Metro Station is a major transit hub and is the last Metrorail station on WMATA's Blue Line. It has a commuter-parking garage with approximately 5,100 parking spaces.

Several local and regional bus services serve the Metro Station including Fairfax Connector, Potomac and Rappahannock Transportation Commission ("PRTC") OmniRide Metro Express, Greyhound, and BestBus. The station is also served by Virginia Railway Express ("VRE").

The Metro Station can be accessed from two directions. The primary entrance is located off Frontier Drive and provides access to the Park & Ride garage, Kiss & Ride parking, and the bus loop. The second entrance is accessed via Franconia-Springfield Parkway and comes in at the east side of the Metro Station. However, it is necessary to drive to Frontier Drive to access the parking, pick-up/drop-off, and bus loop facilities. The Metrorail and VRE platforms are accessed by pedestrian bridges.

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

No Metrobuses come to the Franconia-Springfield Metro Station. However, the Fairfax Connector operates many routes that serve the Metro Station. PRTC's OmniRide Prince William Metro Express offers connecting service between Dale City, Woodbridge, and the Metro

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Station. The station has 12 bus bays labeled A through M (with no bus bay labeled I). They are saw tooth and in a dedicated bus lane.

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
Fairfax Connector	231	Van Dorn St Metro Station (Counterclockwise)	30-60	Weekdays
Fairfax Connector	232	Van Dorn St Metro Station (Clockwise)	30-60	Weekdays
Fairfax Connector	301	Huntington Metro Station	30-60	Weekdays Peak Periods
Fairfax Connector	305	Newington Forest – Silverbrook Road	30-60	Weekdays Peak Periods
Fairfax Connector	308	Franconia-Springfield – Mt Vernon Hospital	30-45	Monday Through Saturday
Fairfax Connector	310	Franconia Road – Rolling Valley (WB)	20-60	Monday Through Sunday
Fairfax Connector	310	Franconia Road – Rolling Valley (EB)	20-60	Monday Through Sunday
Fairfax Connector	321	Greater Springfield Circulator (Counterclockwise)	30-60	Monday Through Sunday
Fairfax Connector	322	Greater Springfield Circulator (Clockwise)	30-60	Monday Through Sunday
Fairfax Connector	334	Newington Circulator	25-60	Weekdays
Fairfax Connector	335	Fort Belvoir “The Eagle”	20-35	Weekdays Peak Periods

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Operator	Route	Termini	Approx. Weekday Headway (minutes)	Span of Service
Fairfax Connector	340	Patriot Ridge – Saratoga	50	Weekdays Off-Peak Periods
Fairfax Connector	341	Boston Boulevard – Saratoga	20-30	Weekdays Peak Periods
Fairfax Connector	350	Springfield Business Circulators	15-20	Weekdays
Fairfax Connector	351	Springfield Business Circulators	15	Weekdays Peak Periods
Fairfax Connector	371	Lorton Park & Rid	30-50	Monday Through Saturday
Fairfax Connector	372	Lorton Park & Ride	30	Weekdays Peak Periods
Fairfax Connector	373	Laurel Crest	30	Weekdays Peak Periods
Fairfax Connector	401	Backlick – Gallows Northbound	10-30	Monday Through Sunday
	402	Backlick – Gallows Southbound	15-30	Monday Through Sunday
Fairfax Connector	494	Lorton – Springfield – Tysons	25-60	Weekdays

## 2.2 Regional Bus Providers

Greyhound and BestBus provide regional bus service from the Franconia-Springfield Metro Station. Greyhound provides service to many locations including New York City, Richmond, Philadelphia, Roanoke, and Charlotte. BestBus provides service to New York City's Penn Station. The number of trips per day varies.

## 2.3 VRE

VRE provides weekday directional commuter rail service travelling northbound to Washington, DC and southbound to Fredericksburg during AM and PM peak periods. There are seven northbound trips from Franconia-Springfield in the morning, and eight southbound trips in the afternoon/evening. In the northbound direction, the first train leaves at 6:13AM and the last train leaves at 8:53AM. In the southbound direction, the first train arrives at 1:34PM and the last train arrives at 7:24PM.

## 2.4 Park & Ride

Approximately 5,069 all day commuter parking spaces are available for public use at the Franconia-Springfield Metro Station. The spaces are contained in two parking garages: West Garage and East Garage. The three-year (2017-2019) average annual weekday peak occupancy is 2,586 (51%). The three-year (2017-2019) average annual mid-week (Tuesday to Thursday) peak occupancy is 2,452 (48%).

Combined, the garages have eight different entrances and exits, which are shown in Figure 3. Table 2 lists the garage entrance/exit, the peak time, and peak count of vehicles entering/exiting. Entrances 1 and 2 have the highest entering usage, and exit 6 has the highest departing usage.

*Table 2. Garage Entry and Exit Peak Time and Count*

		In/Out	Peak Time	Peak Count
<b><u>West Garage</u></b>				
1	Northwest Entrance	In	7:30AM	88
2	Southwest Entrance	In	7:00AM	82
3	South Entrance/Exit	In	7:30AM	18
		Out	6:30PM	26
6	East Exit	Out	5:30PM	89
7	North Entrance/Exit	In	7:45AM	74
		Out	5:30PM	75
<b><u>East Garage</u></b>				
4a	Short-Term Parking Exit	Out	4:30PM	23
4b	Short-Term Parking Entrance	In	6:00PM	25
5	East Entrance/Exit	In	7:30AM	10
		Out	6:30PM	52

*Figure 3. Existing Parking Garage Entrances/Exits*



## **2.5 Kiss & Ride and Metered Spaces**

WMATA operates 110 Kiss & Ride spaces. 85 are in the East Garage and 25 in the surface lot.

## **2.6 Bicycle and Pedestrian Access**

There are on-street bicycle lanes on Frontier Drive north of the ramps to/from eastbound Franconia-Springfield Parkway. They do not continue into the Metro Station. There is a sidewalk on the west side of Frontier Drive, and it continues past the bus bays and Metro/VRE platform entrances. The sidewalk ends as the road turns into an on-ramp from the Franconia-Springfield Parkway. North of the parking garage, there are sidewalks on both sides of the street.

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## **3.0 PROJECT DESCRIPTION**

Changes to the Franconia-Springfield Metro Station facilities are needed to accommodate the Frontier Drive Extension and Braided Ramps Project (“Project”). The Project components of specific interest to WMATA are the changes to the access and circulation in the vicinity of the Metro Station, including the extension of Frontier Drive to Springfield Center Drive.

The Project includes the following modifications of WMATA facilities:

- Two new signalized intersections
- Reconfigured access to parking garage
- Add three more bus bays for a total of 15
- Add new bus layover facility
- Eliminate pick-up/drop-off area
- Allows through-traffic to Springfield Center Drive and Loisdale Road, which provides new access to WMATA station from the General Services Administration (GSA) warehouse

The Project will provide improved access to the existing GSA warehouse complex, support the growth anticipated by the expansion of the GSA warehouse complex, and help fulfill Fairfax County’s goal of converting the warehouse area into an active, mixed-use employment, retail and residential center.

VDOT, in collaboration with WMATA, is planning a series of transportation improvements in the area around the Metro Station. They include improving the existing interchange of Frontier Drive (Route 2677) and Franconia-Springfield Parkway (Route 289) and extending Frontier Drive from its southern terminus at the Franconia-Springfield Metro Station south to Springfield Center Drive and continuing to Loisdale Road (Route 789). Extending Frontier Drive to connect with Springfield Center Drive and the GSA warehouse complex will require building over Long Branch.

### **3.1 Modifications to Parking Facilities**

No modifications to the parking garages are planned. However, modifications to the garages’ eight entrances and exits are proposed. These modifications will impact how drivers access the garages and what directions they can go once they leave the garage. The modifications are described in detail in Section 4.2.1, Project Impacts, Transportation, Parking.

### **3.2 Modifications to Bus Loop**

Three new bus bays are proposed west of the existing bus bays and additional bus layover areas are proposed along the median between the bus loop and the access road.

Bicycle and pedestrian facilities will be upgraded throughout the Metro Station site, including widening of the existing bus bay platform area to allow easier passage of bicyclists through the station area.

A new bus layover lot west of Frontier Drive and south of Franconia-Springfield Parkway is identified as a future project by VDOT.

### **3.3 Modifications to Roadway Access**

The proposed Franconia-Springfield Metro Station improvements include changes to the site circulation for automobiles, buses, pedestrians, and bicyclists as well as changes required due to the conversion of Frontier Drive from a dedicated Metro Station access roadway to a through roadway. All existing access to Frontier Drive or the Franconia-Springfield Parkway is maintained.

The section of Frontier Drive between the Franconia-Springfield Parkway and the reconfigured Metro Station entrance includes two southbound through lanes, three southbound left turn lanes into the Metro Station and/or parking structure entrances and one dedicated left turn lane for buses, a raised median, two northbound through lanes, turn lanes providing access to the parking structure and to the ramp to the eastbound Parkway. A new traffic signal will be provided at the modified Metro Station entrance (at the west side of site), and the movements described above are handled by a jug handle intersection configuration.

A proposed signalized intersection at the east end of the Metro Station will connect the circulation roadways to the existing loop ramp and proposed braided ramps, which provides a connection from the Metro Station to Frontier Drive north of the Parkway without passing through the existing diamond interchange, and a direct connection from the Metro Station to the westbound Parkway. A direct connection from the Metro Station to the eastbound Parkway is also provided.

The proposed extension of Frontier Drive from its current terminus at the Metro Station south to Loisdale Road includes new roadway, a new bridge over Long Branch, and the reconstruction of portions of the existing privately owned Springfield Center Drive as an upgraded VDOT-maintained roadway. The proposed typical section for the Frontier Drive extension includes two 12' lanes in each direction, an 11' raised median, a 10' urban (concrete) shared use path along the southbound side and a 10' asphalt shared use path along the northbound side.

Access to existing facilities to remain will be provided, and the vertical profile of the extension will follow the existing grade to the extent feasible to limit impacts to adjacent parcels.



### **3.4 Modifications to Bicycle and Pedestrian Access**

Bicycle and pedestrian facilities will be provided on each on each side of the Frontier Drive extension, the access road to, and through the Metro Station. Bicycle and pedestrian facilities will be upgraded throughout the Metro Station site, including widening the existing bus bay platform area to allow easier passage of bicyclists through the station area.

### **3.5 Stormwater Management and Drainage Improvements**

In addition to the roadway and bridge over Long Branch, drainage improvements will be provided and utilities will be relocated as required. Stormwater Management (“SWM”) will be provided for the overall project due to the increase in impervious surface area, and the SWM design will include changes to the existing VDOT SWM facility located south of existing Springfield Center Drive. WMATA facilities will not be impacted by the drainage improvements or utilities relocations.

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## 4.0 PROJECT IMPACTS

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

### 4.1 Land Acquisitions, Displacements, and Dispositions

No displacements are required for the WMATA-specific project elements. The WMATA parking garage will remain although access may be modified. The existing bus loop will remain and be expanded.

WMATA property will be conveyed fee simple for only the right-of-way portion needed for the Frontier Drive extension. Transit facilities Metro Station, including Metrorail, bus loop, etc., would remain within WMATA's control.

### 4.2 Transportation

#### 4.2.1 Parking

The WMATA parking capacity remains the same. The future development at the GSA warehouse complex will not increase demand for the parking at the Franconia-Springfield Metro Station.

Modifications to the internal vehicular circulation at the Metro Station will change how the different parking garage entrances and exits operate. The changes are summarized below in Table 3 , and Figure 4 shows the garage access points. The identifying numbers on the table align with the numbers on the graphic.

Figure 5 shows the changes to the Kiss & Ride Facilities.

Table 3. Summary of Existing and Proposed Garage Access Points

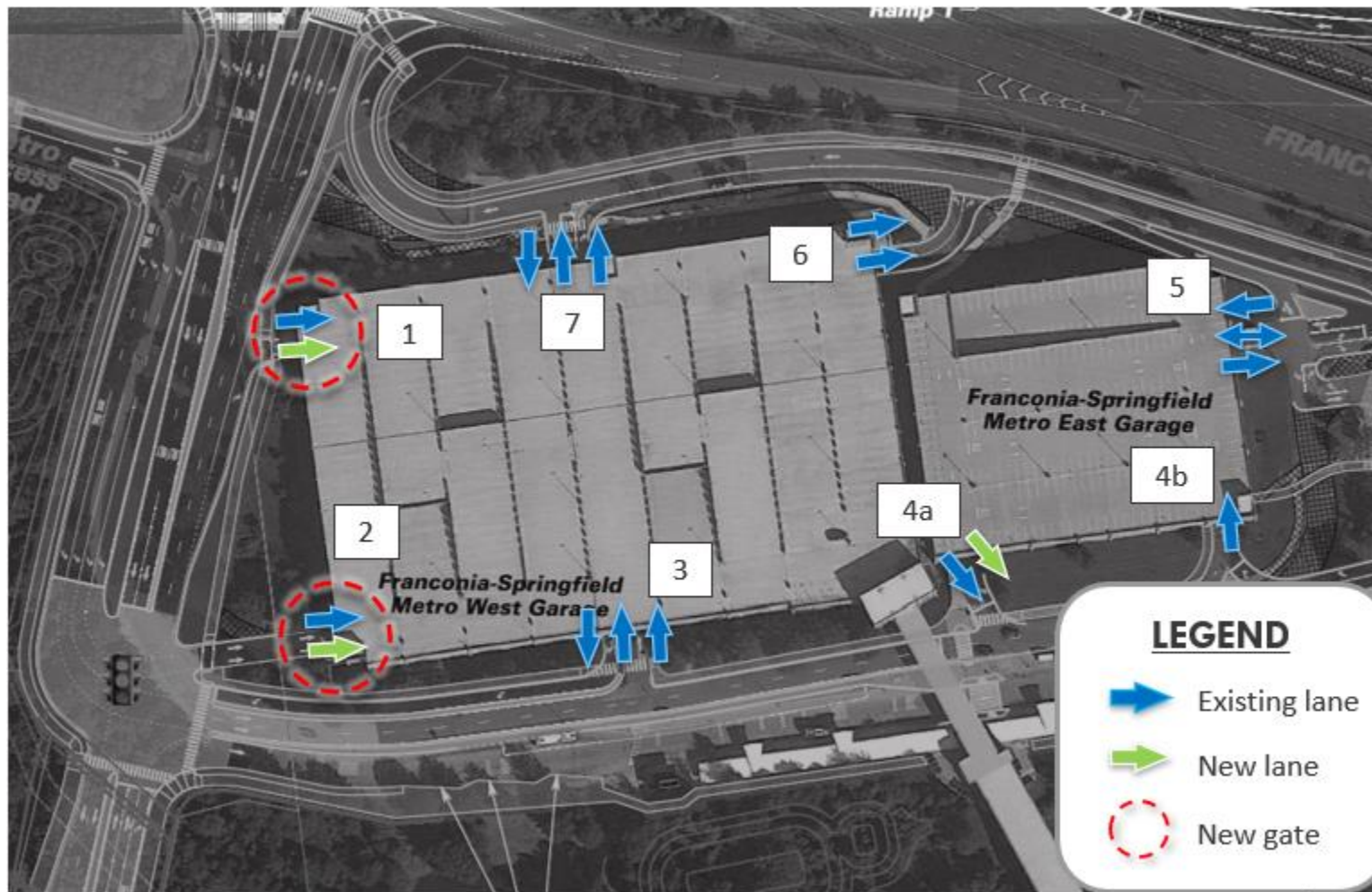
		Existing Conditions	Proposed Conditions
<b>West Garage</b>			
1	Northwest Entrance	<ul style="list-style-type: none"> <li>• One entrance lane</li> <li>• From Frontier Drive southbound</li> </ul>	<ul style="list-style-type: none"> <li>• Two entrance lanes</li> <li>• From Frontier Drive northbound</li> <li>• From Frontier Drive southbound will require U-turn</li> </ul>
2	Southwest Entrance	<ul style="list-style-type: none"> <li>• One entrance lane</li> <li>• From Frontier Drive southbound</li> </ul>	<ul style="list-style-type: none"> <li>• Two entrance lanes</li> <li>• From Frontier Drive southbound, far-left turn at new intersection</li> <li>• From Frontier Drive northbound</li> </ul>
3	South Entrance/Exit	<ul style="list-style-type: none"> <li>• One entrance, one exit, and one reversible lane</li> <li>• From Frontier Drive</li> <li>• Exit provides only access to Springfield-Franconia Parkway West ramp</li> </ul>	<ul style="list-style-type: none"> <li>• two entrance lanes and one exit lane</li> <li>• From Frontier Drive</li> <li>• Exit westbound to Frontier Drive only</li> </ul>
6	East Exit	<ul style="list-style-type: none"> <li>• Two exit lanes</li> <li>• Northbound on Frontier Drive and eastbound Springfield-Franconia Parkway</li> </ul>	<ul style="list-style-type: none"> <li>• Two exit lanes</li> <li>• One exit toward Franconia-Springfield Parkway West ramp</li> <li>• One exit toward Franconia-Springfield Parkway East ramp</li> </ul>
7	North Entrance/Exit	<ul style="list-style-type: none"> <li>• One entrance lane, two exit lanes</li> <li>• Entrance primarily serves vehicles coming from westbound Franconia-Springfield Parkway</li> <li>• Exit to northbound Frontier Drive and eastbound Springfield-Franconia Parkway</li> </ul>	<ul style="list-style-type: none"> <li>• One entrance lane, two exit lanes</li> <li>• Entrance primarily serves vehicles coming from westbound Franconia-Springfield Parkway</li> <li>• One exit toward Franconia-Springfield Parkway West ramp</li> </ul>

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			<ul style="list-style-type: none"> <li>• One exit toward Franconia-Springfield Parkway East ramp</li> </ul>
<b><u>East Garage</u></b>			
4a	Short-Term Parking Exit	<ul style="list-style-type: none"> <li>• One exit lane</li> <li>• Toward Frontier Drive by going around the garages</li> </ul>	<ul style="list-style-type: none"> <li>• Two exit lanes</li> <li>• Exit westbound; access to all points at traffic light</li> </ul>
4b	Short-Term Parking Entrance	<ul style="list-style-type: none"> <li>• One entrance lane</li> <li>• From Frontier Drive</li> </ul>	<ul style="list-style-type: none"> <li>• One entrance lane</li> <li>• Can enter from either east or west</li> </ul>
5	East Entrance/Exit	<ul style="list-style-type: none"> <li>• One entrance, one exit, and one reversible lane</li> <li>• Entrance and exit access to/from all directions</li> </ul>	<ul style="list-style-type: none"> <li>• One entrance, one exit, and one reversible lane</li> <li>• Entrance primarily used by vehicles traveling westbound on Franconia-Springfield Parkway</li> <li>•</li> </ul>

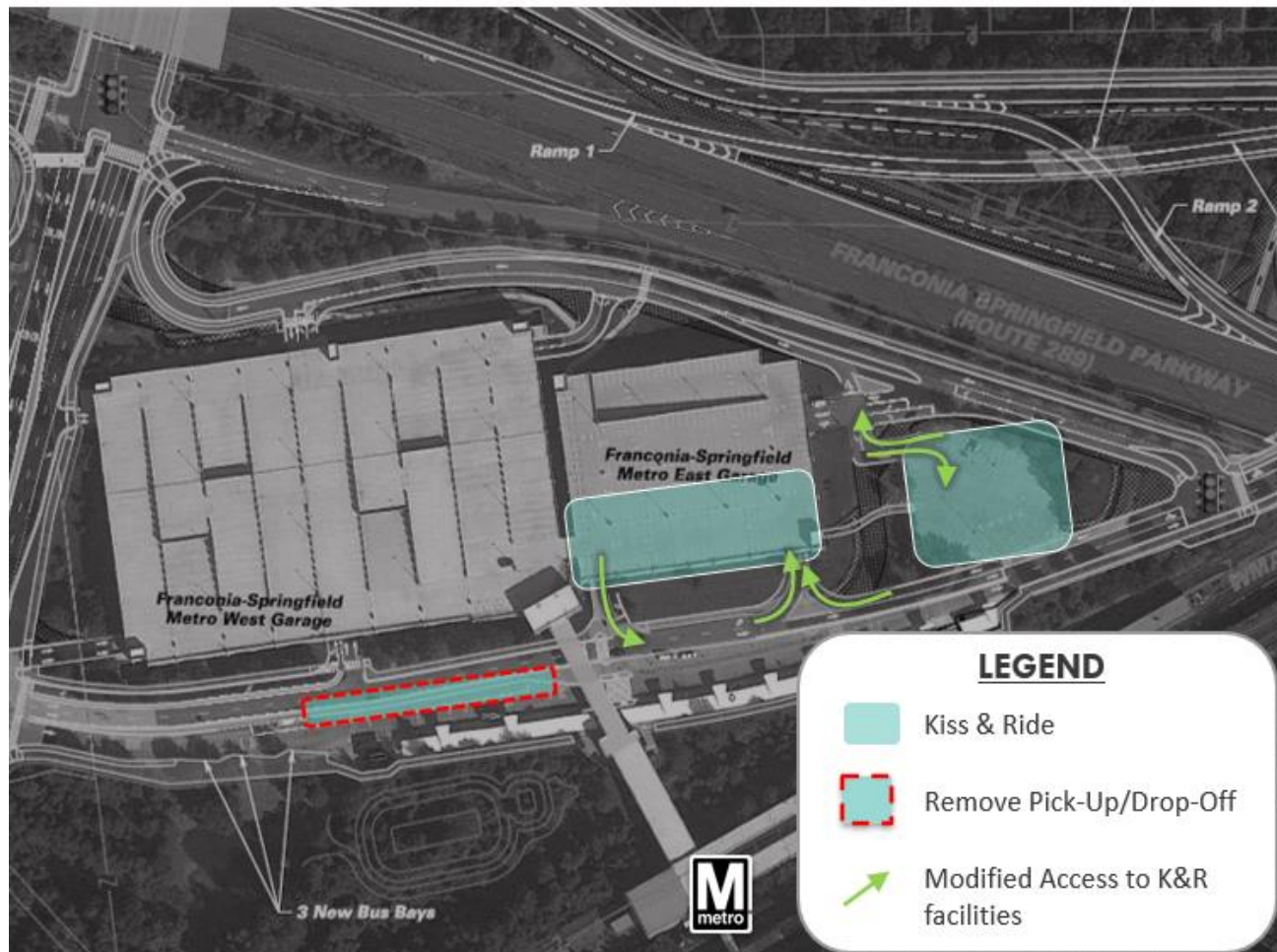
Figure 4. Future Parking Garage Entrances/Exits



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*Figure 5. Changes to Kiss & Ride Facilities*





## **4.2.2 Traffic**

The Environmental Analysis prepared by VDOT included a capacity analysis of the Project. The results are for Design Year 2043 and include all the proposed transportation improvements, not just those related to the Franconia-Springfield Metro Station. The future traffic demand calculations included buildout of the GSA site.

The analysis assumes that signal timings are optimized to reflect new signals and changes in traffic demand and lane configurations. A threshold of LOS of 'D' or better was established as "acceptable" per the "Framework Document," which was prepared prior to starting the traffic and safety analysis. The document was reviewed and approved by appropriate key personnel from VDOT before work began.

The Project assumes traffic signalization at the intersections of Frontier Drive Extension and Station Access Road and Station Access Road and Metro East Garage. Based upon the analysis results, all intersections at the Franconia-Springfield Metro Station would operate with acceptable overall LOS of 'D' or better.

Modifying the circulation to and through the Metro Station will change how users access the parking garages. There will be a traffic light at the new intersection at Frontier Drive, and it will be necessary to make a U-turn to access garage entrance 1 (the Northwest entrance of the West Garage.) These are two of the most-heavily used entrances today, and changes to which entrances users use to enter the garages when the modifications occur are expected.

## **4.2.3 Metrorail**

The Project will not be changing Metrorail service. Any increase in ridership at the Metro station due to new employment or residential opportunities associated with the conversion/expansion of the GSA warehouse complex is not expected to be large enough to cause any significant impact on Metrorail operations. An increase in ridership due to the proposed employment uses nearby could make better use of existing Metrorail capacity because of the potential for reverse commute rides.

## **4.2.4 Local Bus Routes**

The Project will not be changing Local Bus service. All routes accessing the bus bays may experience a marginal increase in ridership from people traveling to and from the employment and residential uses associated with the conversion/expansion of the GSA warehouse complex. No permanent impact to bus operations is anticipated.

Changes to internal circulation will require recirculating buses to travel further. Rather than only travel around the existing parking structure, recirculating buses will need to go under Franconia-Springfield, Parkway, travel parallel to it, and then turn left onto Frontier Drive.

Buses turning into the Metro Station will now have an intersection with a traffic light when before the roadway was dedicated for transit users.

#### **4.2.5 Regional Bus Routes**

The Project will not be changing Regional Bus service. Greyhound and BestBus would continue to operate from the Metro station, with buses continuing to use the bus bays in the bus loop to pick up and drop off passengers. No permanent impact to Greyhound or BestBus operations is anticipated.

Changes to internal circulation will require recirculating buses to travel further. Rather than only travel around the existing parking structure, recirculating buses will need to go under Franconia-Springfield, Parkway, travel parallel to it, and then turn left onto Frontier Drive. Buses turning into the Metro Station will now have an intersection with a traffic light when before the roadway was dedicated for transit users.

#### **4.2.6 VRE**

The Project will not be changing VRE service. VRE may experience a slight increase in ridership as a result of people traveling to and from the employment and residential uses associated with the conversion/expansion of the GSA warehouse complex. No material impact to VRE facilities or operations is anticipated.

#### **4.2.7 Pedestrian and Bicycle Access**

The larger project area has a network of Shared Use Paths (SUP) for pedestrian and bicycle use. The Project will provide more SUPs and sidewalks throughout the project area, which will provide increased connectivity and accessibility between land uses. Bicycle and pedestrian improvements along Frontier Drive will better connect the existing infrastructure to and through the Franconia-Springfield Metro Station and will replace current high-stress shared roadway connections with lower stress shared use paths and formal bike lanes.

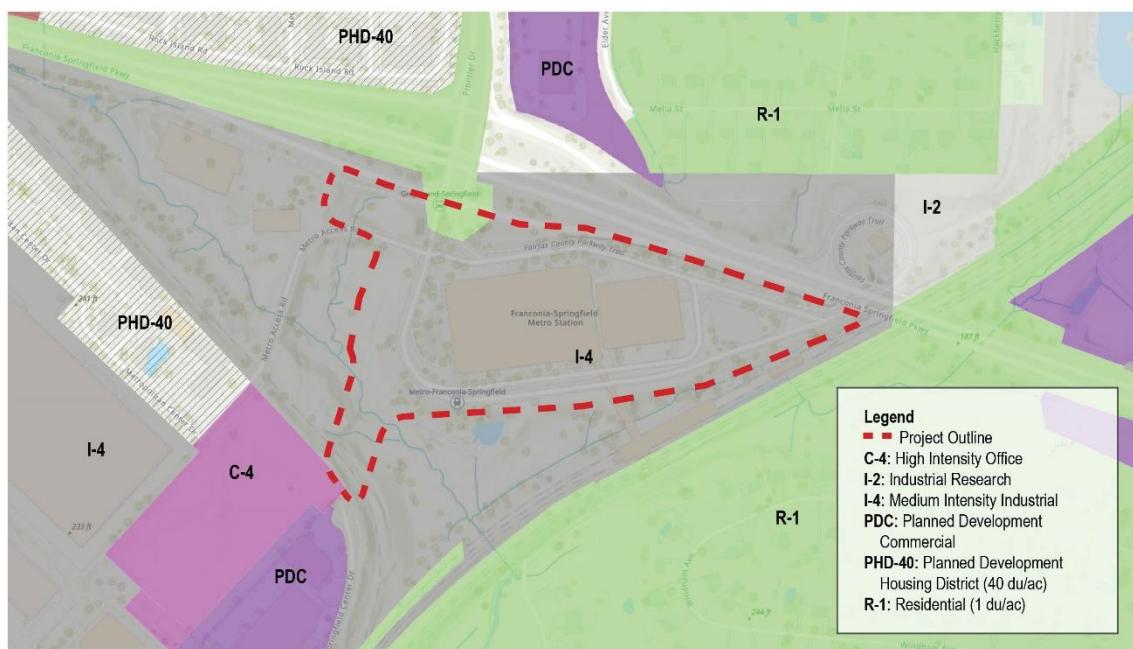
The Project will increase pedestrian and bicycle access facilities. Bicycle and pedestrian facilities will be provided on each on each side of the Frontier Drive extension and the access road to and through the Metro Station. Bicycle and pedestrian facilities will be upgraded throughout the Metro Station site, including widening the existing bus bay platform area to allow easier passage of bicyclists through the station area.

However, because the internal station roadways are currently one-way and will be modified to two-way in some portions, there will be increased complexity for pedestrians and cyclists crossing from one side of the roadway to another.

### 4.3 Land Use and Zoning

Based on the Fairfax County Zoning District Analyzer, the Franconia-Springfield Metro Station is zoned I-4. The Fairfax County Zoning Ordinance defines I-4 as Medium Intensity Industrial District. The I-4 District allows for a wide range of industrial uses including scientific research, development and training, office, medium-intensity production of goods, and related supply and non-residential activities. All of the WMATA-related improvements are within the I-4 district. Figure 6 shows the existing zoning around the station area.

*Figure 6. Existing Zoning Map*



Source: Fairfax County Zoning District Analyzer

According to the Fairfax County General Parcel Report, the existing land use of the parcel containing much of the Project—including the Frontier Road extension and future bus layover area—is Public Facilities, which includes police stations; the WMATA District 2 police facility is in the northwest corner of the site. The parcel directly to its east, which contains the Franconia-Springfield Metro Station, is designated for rail rapid transit, right-of-way, terminals and maintenance. Figure 7 shows the current land use around the station area.

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*Figure 7. Existing Land Use Map*



Source: Fairfax County Jade

#### 4.4 Planning Consistency

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

*Table 4. Land Use and Transportation Plan*

Plan	Description	Author	Date	Inconsistencies
Concept for Future Development Map	Identifies the Franconia-Springfield Station property as one of 11 existing Metrorail stations, and one of 10 Transit Station Areas (“TSAs”) in the County. TSAs promote a land use pattern that supports Metrorail by encouraging a mix of uses in a compact, pedestrian-friendly urban form within walking distance of the rail station.	Fairfax County	2012	None
Fairfax County Comprehensive Land Use Plan Map	Identifies the baseline land use recommendation for the station as “ <i>Public Facilities, Governmental and Institutional</i>	Fairfax County	2018	None

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Plan	Description	Author	Date	Inconsistencies
– Baseline Recommendations	<i>Uses,”</i> and as a Metrorail station. For the adjacent land with the proposed Frontier Drive extension, the map identifies the land use as “ <i>Private Open Space.</i> ” The Comprehensive Plan map indicates the primary land use recommendation should be consulted in conjunction with the Area IV Plan for more detailed recommendations than generally illustrated on the map.			
Fairfax County Comprehensive Plan, 2017 Edition, Area IV, Springfield Planning District, Franconia-Springfield Transit Station Area	Identifies transportation recommendations in the Franconia-Springfield TSA, including greater access to transit resources and a road network expansion that includes the proposed Frontier Drive segment to increase access to the Metrorail station	Fairfax County	2021	None
Countywide Trails Plan map	Identifies the County’s planned, but not yet built, trail system. Recommendations include a Majority Regional Trail System along the southern side of the Franconia Springfield Parkway and multiple major paved trails (asphalt or concrete), which are eight feet (or more) in width along Frontier drive and the northern side of Franconia Springfield Parkway.	Fairfax County	2018	None
Fairfax County Bicycle Master Plan Map	Identifies the existing and planned bicycle facilities countywide with the following recommended improvements: <ul style="list-style-type: none"> <li>- A shared use path along the Frontier Drive extension south of the station</li> <li>- A bike lane along the Frontier Drive extension south of the station</li> </ul>	Fairfax County	2019	None

## 4.5 Neighborhoods and Community Facilities

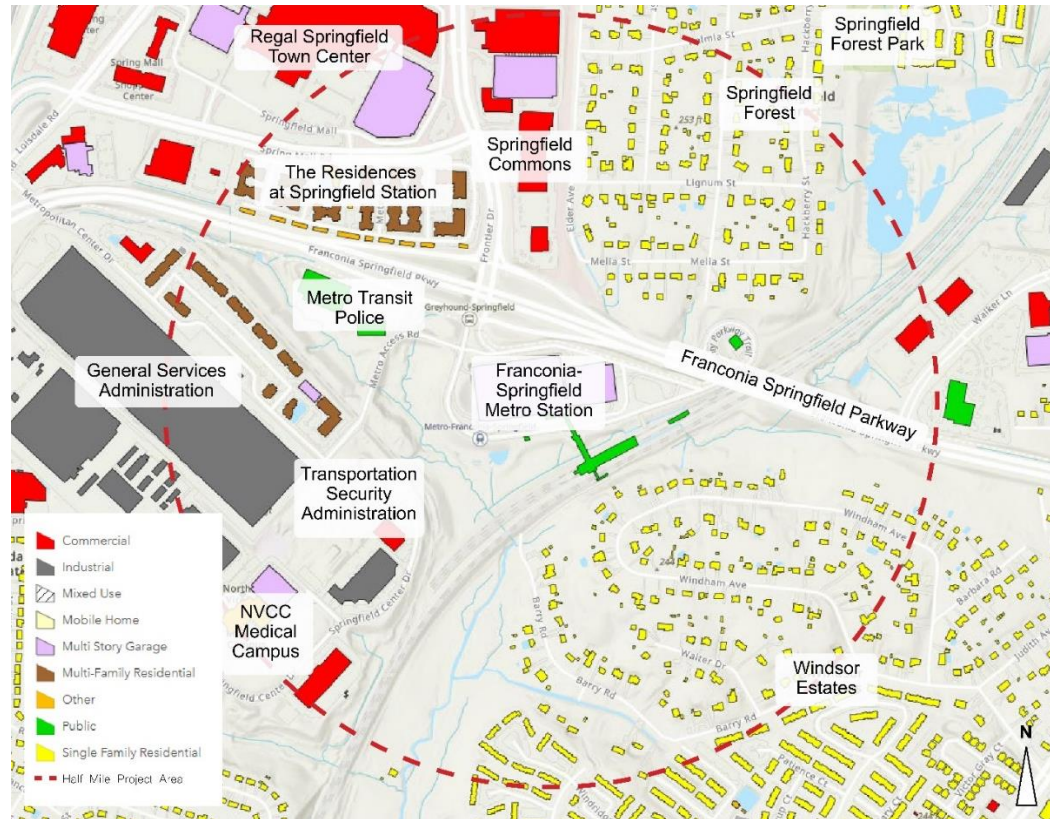
Adjacent transportation infrastructure—such as Springfield Parkway—separate the Project site from existing residential areas and community facilities (see Figure 8). Within a half-mile of the Project are the Springfield Forest and Windsor Estates residential neighborhoods in addition to the following community facilities:

- Two shopping centers: Springfield Commons Shopping Center and Springfield Town Center
- The Residences at Springfield Station
- Several employment centers including the existing Transportation Security Administration and General Services Administration complex.
- Northern Virginia Community College Medical Campus
- Regional paved and unpaved trails

The proposed access improvements would not create a physical barrier within a neighborhood, isolate a portion of a neighborhood, or have a direct impact on a community facility or access to a community facility. Short-term construction activities are not anticipated to use local neighborhood streets (see section 4.19.2). Figure 8 is a map showing the station area in relation to the surrounding neighborhoods and community facilities.



*Figure 8. 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. Six 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 9. Fairfax County was 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 for these block groups, Median Household Incomes were identified to compare the block groups to the county overall.

**Franconia-Springfield Metro Station  
Frontier Drive Extension and Braided Ramps  
Environmental Evaluation**

*Figure 9. Study Area with Block Groups*

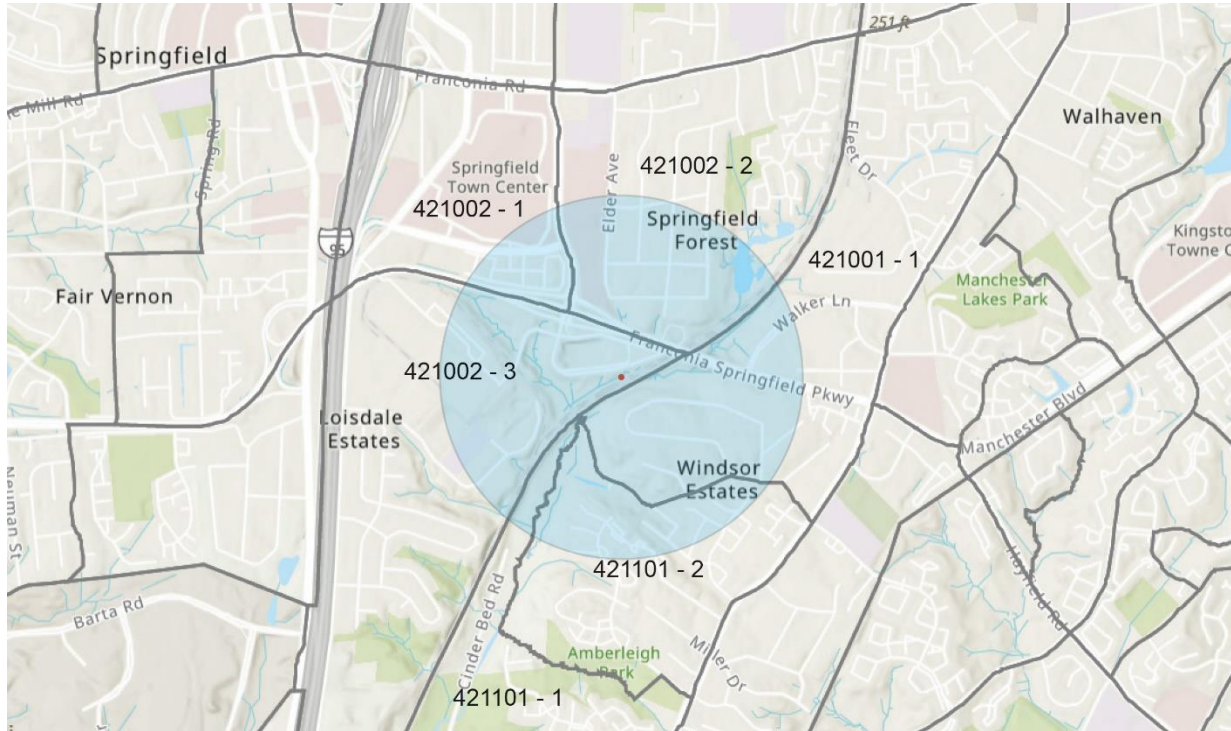


Table 5 lists the percentages of minority residents in the half-mile project study area in comparison to Fairfax County.

60% of the study area's population belongs to a minority group, which is lower than Fairfax County (51%). Two of the block groups in the study area had Median Household Incomes (MHI) higher than Fairfax County, and four of the block groups had MHI lower than the county.

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

Census Tract	Census Tract	Minority			Household Income	
		Total Population	Minority Population	Percent (%)	Median Household Income (MHI)	Percent (%) of Fairfax County MHI
421001	1	2,855	1,721	60%	\$115,268	90%
421002	1	1,091	563	52%	\$105,380	82%
421002	2	2,160	1,222	57%	\$166,797	130%
421002	3	2,097	1,680	80%	\$70,187	55%
421101	1	801	378	47%	\$136,302	107%
421101	2	2,638	1,462	55%	\$91,886	72%



<b>Census Project Study Area</b>	<b>11,642</b>	<b>7,026</b>	<b>60%</b>	<b>\$114,303</b>	<b>89%</b>
<b>Fairfax County</b>	1,150,309	581,296	51%	\$127,886	100%

Table 6 provides a breakdown of the minority groups present within the project study area. The largest minority group within the study area is Black / African American (19.2%), which is higher than Fairfax County (9.6%). The second largest minority group within the study area is Asian (19.2%). The remaining minority groups in study area (American Indian / Alaska Native, Native Hawaiian or Other Pacific Islander, Two or More Races, and Other Races) altogether make up 22.8% of the population.

*Table 6. Minority Population by Group*

Minority Group	Census Project Study Area		Fairfax County	
	# of Residents	% of Total Population	# of Residents	% of Total Population
<b>Black / African American</b>	2,234	19.2%	110,889	9.6%
<b>American Indian / Alaska Native</b>	71	0.6%	6,500	0.6%
<b>Asian</b>	2,230	19.2%	235,050	20.4%
<b>Native Hawaiian or Other Pacific Islander</b>	17	0.1%	873	0.1%
<b>Two or More Races</b>	1,306	11.2%	129,550	11.3%
<b>Other Races</b>	1,268	10.9%	98,434	8.60%
<b>Minority Total</b>	<b>7,126</b>	<b>61.2%</b>	<b>581,296</b>	<b>50.5%</b>

#### 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**

In September 2018, a Phase I cultural resources survey of the area of potential effect (APE) was completed for the larger transportation improvement project. In October 2021, a supplemental cultural resources survey was prepared. Within the area of the WMATA-specific projects there are two possible sites that could be potentially affected:

- Previously recorded Site 44FX0549; an approximately 2-acre Late Woodland Native-American site
- The Richmond, Fredericksburg & Potomac Railroad (500-0001).

Archaeological site 44FX0549 has been destroyed and is no longer extant. In addition, the Virginia Department of Historic Resources (VDHR) has determined that the Richmond, Fredericksburg & Potomac Railroad is potentially eligible for listing in the National Register of Historic Places (NRHP) under Criterion A: Event. On November 4, 2021, VDHR concurred with VDOT's recommendation that the Project has No Effect on historic properties.

## **4.8 Public Parklands**

No public parkland is located within a half-mile of the study area. No parks or recreation areas would be impacted by the Project.

## **4.9 Wetland and Waters of the U.S.**

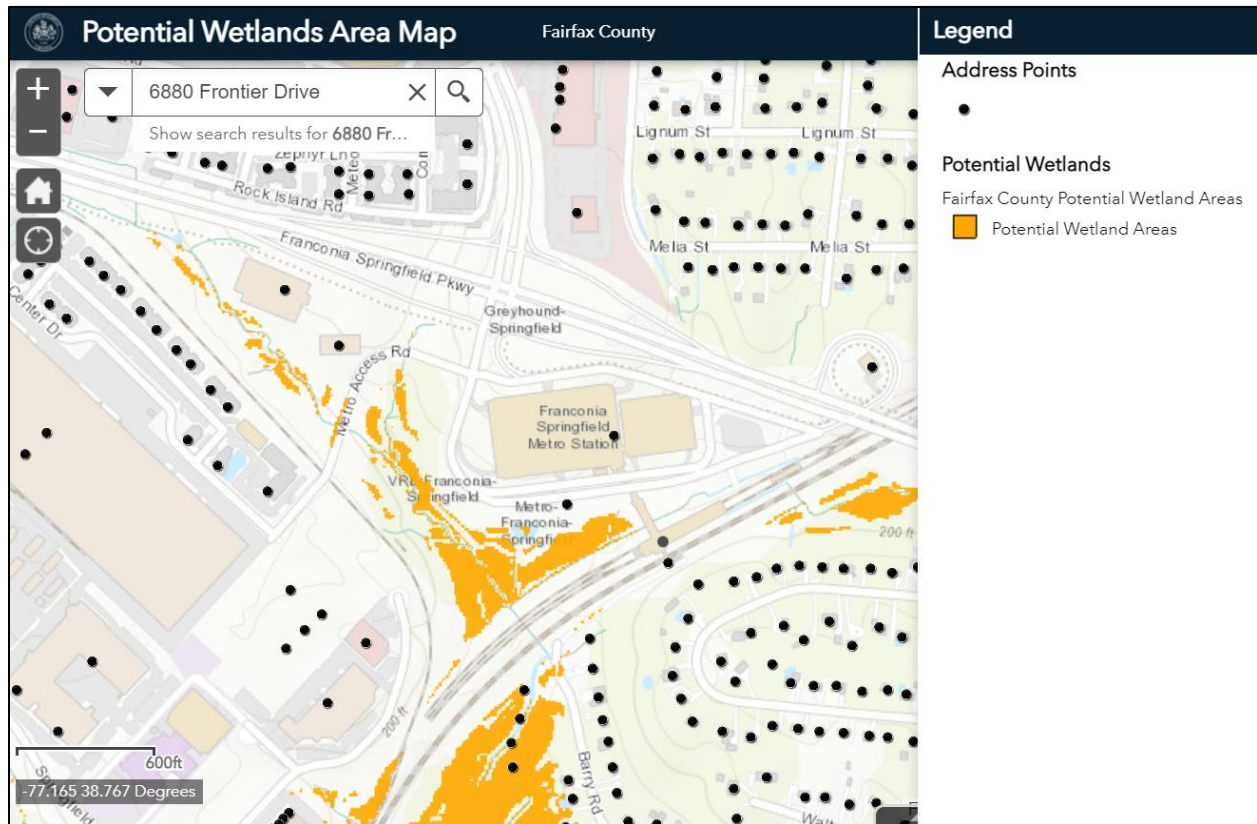
Wetlands and streams have been identified within the study area. A total of 1.4 acres of wetlands exist within the larger study area. The predominant wetland type is palustrine emergent wetlands. There are approximately 5,772 linear feet of perennial stream, 1,072 linear feet of intermittent stream, and 100 linear feet of ephemeral stream within the larger Project area.

Potential direct impacts to wetlands have been quantified using GIS and wetlands mapping. Approximately 0.17 acres of wetland would be impacted by the larger project. Total stream impacts account for 23.4 percent of the delineated streams within the study area. However, most of those impacts are associated with the larger Project and not the WMATA-specific Project elements.

Impacts that do arise would be minimized to the greatest extent practicable and mitigated in accordance with local, state, and federal regulations, including WMATA and Fairfax County stormwater requirements and applicable VDOT and Virginia Stormwater Management Program regulations. Erosion and Sediment Control design would be developed in future phases of study design. The project team would obtain the required permits.

Figure 10 shows the potential wetland areas around the station area.

Figure 10. Potential Wetland Area Map



Source: Fairfax County Potential Wetlands Area Map Viewer

#### 4.9.1 County and State Water Resource Buffers

A minimum 25-foot-wide wetland buffer is required by state and county regulation. No impacts to the wetland buffer by the WMATA-specific project elements are anticipated. Fairfax County's Watershed and Resource Protection Area (RPA) map (Figure 11) indicates that the project is within an RPA, which designates sensitive areas along streams with the intent to protect and improve the quality of waterways. Under Fairfax County's Chesapeake Bay Preservation Ordinance (Fairfax County Code of Ordinances, Article 5, §118-5-2), public roads and their associated structures are conditionally exempt from regulation. Given the exemption for public roads, as long as they necessary requirements are followed, the Project would be consistent with the Chesapeake Bay Preservation Act and state implementing Regulations.

*Figure 11. Fairfax County Resource Protection Area*



*Source: Fairfax County Watersheds and RPA mapping tool*

## **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 12.



Figure 12. National Flood Hazard Map



## 4.11 Water Quality

Approximately 748 linear feet of Long Branch is within the project study area. Long Branch is listed as impaired for recreation use due to the presence of bacteria.

The construction of the proposed improvements will result in more impervious surface area, potentially intensifying, stormwater runoff volumes into impaired surface waters. Short-term impacts during construction include increased sedimentation and turbidity downstream, and possible spills or non-point source pollutants entering groundwater or surface water through storm runoff.

Stormwater management measures, such as detention basins, vegetative controls, and other measures, would be implemented in accordance with federal, state, and local regulations to minimize potential water quality impacts. Low Impact Development techniques and practices

would be considered (to the extent feasible) to reduce stormwater runoff pollution and facilitate infiltration at the source. These measures would reduce or detain discharge volumes and remove sediments and other pollutants, thus avoiding substantial further degradation of water bodies in the project vicinity.

The Project is not expected to increase bacteria levels within Long Branch as sources typically include permitted point sources, sanitary sewer and septic systems, wildlife, and pets. The proposed project would not introduce or cause an increase in any of these sources.

All of the surface waters within the study area drain into the Potomac River and are part of the watershed of the Chesapeake Bay. Virginia's Chesapeake Bay Preservation Act of 1988 and Fairfax County's Chesapeake Bay Preservation Ordinance (Fairfax County, 2020) strives to protect local streams and the Chesapeake Bay from pollution due to land use and development. The Project would be constructed under a Construction General Permit and the project would become a part of VDOT's Municipal Separate Storm Sewer System (MS4), both of which take into consideration Total Maximum Daily Load (TMDL) requirements and require compliance with the applicable water quality requirements contained in the VSMP regulations.

Under Fairfax County's Chesapeake Bay Preservation Ordinance (Fairfax County Code of Ordinances, Article 5, §118-5-2), public roads and their associated structures are conditionally exempt from regulation, and as long as the necessary requirements are followed, the proposed Project would be consistent with the Chesapeake Bay Preservation Act and state implementing Regulations.

## **4.12 Air Quality**

The Project site is located in Fairfax County, which is part of the EPA-defined Metropolitan Washington Air Quality Designation Area. The Greater Metropolitan Washington area is currently designated as a marginal nonattainment area for 8-hour ozone (O<sub>3</sub>) and is in attainment with all other EPA National Ambient Air Quality Standards including carbon monoxide (CO), particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and 10 microns (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb).

No significant impact to WMATA facilities is anticipated by the Project and it is recommended

## **4.13 Forest Stands**

The Project is not anticipated to affect any forest stands. In addition, no specimen, champion, or historic trees are located on the site.

## 4.14 Threatened and Endangered Species

As part of the VDOT Environmental Assessment, the project team made an Information, Planning, and Conservation online system (IPaC) request to the United States Fish and Wildlife Service (USFWS). The official species list received from that request identified one federally listed species, the northern long-eared bat (*Myotis septentrionalis* or NLEB), to have the potential to occur within the study area. In addition, the USFWS IPaC response referenced the project's responsibility to comply with the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.).

The NLEB's winter habitat includes underground caves and cave-like structures such as abandoned or active mines, tunnels, and highway underpasses. These hibernacula typically have high humidity, minimal air currents, large passages with cracks and crevices of both live trees and snags. NLEBs most likely are not dependent on certain species of trees for roosts throughout their range; rather, the bats will use many tree species that form suitable cavities or retain bark opportunistically. NLEBs will also roost in manmade structures, such as barns and the undersides of bridges. NLEBs migrate between their winter hibernacula and summer habitat, typically between mid-March and mid-May in the spring, and mid-August and mid-October in the fall. They are considered a short-distance migrant, typically travelling 35 to 55 miles annually.

There are no known NLEB hibernacula near the study area. Wooded areas near the study area could potentially provide suitable summer roosting and foraging habitat for the species; however, there are no known occurrences of summer roosting or foraging NLEB within the study area (VDWR, 2021).

Tree removal associated with the entire Project may disturb summer roosting habitat for the NLEB. Findings contained within the USFWS Consistency Letter state the project may affect the NLEB; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) Rule adopted for this species at 50 CFR §17.40(o).

## 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 Franconia-Springfield Metro Station, no significant impact on WMATA-operated facilities or operations is expected.

## **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 in February 2017 and updated in December 2021 for the Project consistent with the requirements of the American Society of Testing and Materials (ASTM) ESA procedures. In December 2021 an Updated Phase II ESA was completed and identified the Franconia-Springfield Metro Station as a recognized environmental condition (REC) identified during the 2021 Phase I ESA, which had not been previously assessed.

The Virginia Underground Storage Tank (UST) environmental database identified the Metro Station because of the active 600-gallon UST on the south side of the parking garage that serves as a fueling source for an emergency generator.

Multiple drainage structures and associated pipe are proposed on this property as part of the Project, and the REC has the potential to pose adverse impacts to subsurface media that will likely be disturbed during installation of the Project drainage and roadway improvements.

The constituents of concern are petroleum-based. No residual-phase petroleum constituent concentrations were detected in soil samples up to 10-feet below ground service during the Phase II ESA investigation. Therefore, no special management provisions appear to apply to soil excavated proximal to the identified petroleum UST.

## **4.18 Noise and Vibration**

Existing noise sources within and adjacent to the Project area are dominated by motor vehicle traffic along Franconia-Springfield Parkway, Metrorail, and bus traffic. VDOT is responsible for quantifying and mitigating noise impacts from the Project and their State Noise Abatement Policy, or SNAP, is based on the Federal Highway Administration's regulations (23 CFR 772) and guidance for abatement of traffic and construction noise impacts.

A preliminary noise evaluation of the Project was conducted to identify noise sensitive receptors, predicted noise impacted receptors and noise abatement determination. No impact on existing noise-sensitive receptors is anticipated as a result of the WMATA-specific elements



of the Project. If the Project is constructed, the existing local bus and Metrorail transit operations will continue to operate as they do now, and no increase in service is anticipated. The Metrorail tracks will continue to function as they do now; the tracks will not be realigned nor will any new switches be constructed on the tracks as a result of the Project being built. The existing bus routes would continue to serve the Metro station as they do now.

Noise barriers north of Franconia-Springfield Parkway have been evaluated due to aspects of larger project and not the WMATA-specific elements. A final noise analysis will be performed during the final design phase of the Project to confirm the results of the preliminary noise evaluation.

## **4.19 Secondary and Cumulative Impacts**

### **4.19.1 Secondary Impacts**

No adverse secondary impacts are anticipated as a result of the Project. The improved access to the Metro Station and the GSA warehouse complex could generate increased development in a portion of the County where growth is desired and being planned for. The improved access could contribute 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 and socioeconomic conditions.

#### Transit

- No long-term adverse cumulative impacts to transit services or facilities are anticipated. Improved access to the station area from the GSA warehouse facility and increased employees at that site, may increase the number of passengers using the Franconia-Springfield Metro Station.

## **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. VDOT will need to prepare and submit a maintenance of traffic plan to WMATA for approval. Phased construction would allow WMATA to retain operations within the Park & Ride, bus loop, and Kiss & Ride facilities through temporary arrangements, as needed, on the portions of the property not under construction.

Construction noise may be a concern to surrounding neighborhoods. The presence of the rail and highway corridors and nearby office parks will serve as a buffer to mitigate the effect of

construction noise on nearby residences. VDOT and the contractor will be responsible for ensuring that all construction activities adhere to noise control regulations as established in the Fairfax County Noise Ordinance and WMATA design criteria.

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## 5.0 PUBLIC INVOLVEMENT

WMATA, VDOT, and Fairfax County will keep the public informed about the Project through public outreach. A public hearing in accordance with the WMATA Compact will be held in conjunction with VDOT's public hearing scheduled for July 12, 2022 at 7pm. 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 WMATA specific items of this hearing will be the following:

- Two new signalized intersections
- Reconfigured access to parking garage
- Add three more bus bays for a total of 15
- Add new bus layover facility
- Eliminate pick-up/drop-off area
- Allows through-traffic to Springfield Center Drive and Loisdale Road, which provides new access to WMATA station from the General Services Administration (GSA) warehouse

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](https://wmata.com/plans) and projects
- Written comments mailed to: Office of the Secretary, Washington Metropolitan Area Transit Authority, 600 Fifth Street, NW, Washington, DC 20001
- A public hearing by telephone

VDOT will also collect comments from the public and will share with WMATA the relevant comments. VDOT will collect comments in the following ways:

- Online during the virtual public meeting or at [viriniadot.org/FrontierDrive](https://viriniadot.org/FrontierDrive)
- By email to [Meetingcomments@vdot.virginia.gov](mailto:Meetingcomments@vdot.virginia.gov) (please reference "Frontier Drive Extension" in the subject line)
- Written comments mailed to Mr. Zamir Mirza, Virginia Department of Transportation, 4975 Alliance Drive, Fairfax, VA 22030

Since December 2017, VDOT has held four public information and homeowners association meetings with a total of 130 attendees. The public information meetings were advertised in the *Washington Post*, *Connection Newspapers*, and *El Tiempo Latino*, as well as social media, press releases, and mailers. Mailers for the public information meetings were sent to all businesses

that will be displaced except for the two businesses on the cell tower. These displacements are not associated with the WMATA-specific project improvements.

Additionally, the project has coordinated with 20 Fairfax County, Commonwealth of Virginia, and US government agencies.

## 6.0 REFERENCES

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Fairfax County GIS and Mapping Services  
[www.fairfaxcounty.gov/maps/](http://www.fairfaxcounty.gov/maps/)

Fairfax County Potential Wetlands Area Map Viewer  
<https://fairfaxcountygis.maps.arcgis.com/apps/webappviewer/index.html?id=f5aa6df69741413fb815c31565b4722f>

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