

When we invest in transit, our community thrives.

2024 Benefits of Transit Report



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Transit and the DMV thrive together.

The region strives to be an even better place to live, work, and visit—and transit helps us get there.

The DMV is the Nation's Capital, a world-class region, and a global economy. But it has many ambitious and visionary goals to be an even better place to live, work, and visit. Overall, the region wants healthy, walkable, vibrant communities; even easier and quicker travel around the region; easy and fast access to jobs and economic opportunities; cleaner air and massively reduced greenhouse gas emissions; equity and justice; tens of thousands of new housing units, particularly affordable housing; and an even stronger, but fairer, economy.

The region needs a world-class transit system to meet these goals, and Metro's Strategic Transformation Plan, *Your Metro, the Way Forward*, provides a roadmap—a North Star guiding us toward that future.

But our transit system faces a funding crisis that, left unchecked, threatens the very existence of transit.

Transit is incredibly beneficial to the people and businesses of the DMV. It delivers returns on investment many times greater than its cost, and it's fundamental to this region's success and plans for the future. But that future is at a crossroads. Metro, the region's primary transit provider, lacks the reliable, dedicated funding it needs to sustain the system into the future. Without sustainable, predictable, dedicated funding, Metro would have no choice but to severely cut service. And because the region's other transit services, from commuter rail to local buses, need Metro to function as an integrated network, those providers would see continuous reductions in ridership and revenue. The region would find itself stuck in a downward transit "death spiral."

Far from providing a world-class transit system that is key to the future the region says it wants, a transit death spiral would be nothing short of catastrophic—for the economy, the environment, the social fabric, and the region's competitiveness in the US and abroad.

The region wants to be...



Why do we need transit?



Transit is the region's great connector.

It crosses political boundaries and neighborhood lines. It gets people where they want go—work, school, shopping, healthcare, and fun—when they want to go, and at a far lower price than driving or ridesharing. It connects people to jobs and other economic opportunities, and it connects businesses to a broad and diverse labor pool. Transit is the greenest, cheapest, most efficient, and most equitable way to move large numbers of people.



Transit helps power the region's economy.

Because it provides easy movement and access to so many destinations, people and businesses tend to locate near rail stations and major bus stops. Transit attracts and encourages new development, which in turn generates new tax revenue, supports grassroots businesses, and attracts new residents and large employers from outside the region. When more people ride transit, we can also use land more efficiently, replacing parking lots and garages with housing, offices, retail, and other productive and income-generating uses.



Transit makes our communities healthier.

By reducing traffic and congestion, transit helps keep our air relatively clean and breathable, making it fundamental to the fight against climate change. It also makes it easier for people and goods to move around, so business and freight costs are lower than they would be without transit. Most people walk or bike to transit, which improves health in many ways. It's also far safer than driving or riding in cars, with 20 times fewer crashes and injuries.



Transit is key to equity in our region.

Transit makes sure that people who can't afford cars or choose not to drive can still get around and have access to opportunities. And because it enables people to live a car-free or car-lite life, transit saves them a lot of money they'd otherwise spend on owning and maintaining cars and paying for gas and parking. Transit stations and stops are also natural locations for affordable housing. Transit provides affordable mobility and access to opportunity, making it one of the most effective pathways out of poverty.

We can think about the benefits of transit in four categories.



Traffic & Congestion

Investing in transit reduces congestion. When people ride transit, it takes cars off the road. Fewer cars translates to faster trips, quicker deliveries, and less parking and road infrastructure that our region needs to build. This saves time and money for everyone.



Quality of Life

Investing in transit gets people where they want go, when they want to travel. Work, school, medical care, social outings, and other destinations are all accessible with transit—at a far lower cost than driving or ridesharing, which saves households thousands of dollars each year.



Jobs & Economy

Investing in transit drives the region's economy. It attracts development, connects people to jobs, creates opportunities for housing, supports businesses, and attracts new residents and large employers from outside the region.



Health & Environment

Investing in transit avoids greenhouse gases and dangerous pollutants from entering our air. Since many people walk or bike to transit, it also encourages physical activity that can decrease the risk of chronic diseases. And transit helps avoid serious or even deadly crashes from happening on our roads.

Investing in transit reduces congestion.

Even if you never step foot on transit, you still benefit. That’s because each trip that someone takes on transit reduces the number of cars on the road. With fewer cars on the road there’s less congestion, meaning faster trips, quicker deliveries, and less parking and road infrastructure that our region needs to build.



1.2m

 **Auto trips avoided each day by 2025.**

Transit keep cars off the road.

By 2025, transit will keep about 1.2 million cars off the road every day. When people choose to ride transit, it frees up space on our roads, allowing people who need to drive, make deliveries, or provide other essential services to move faster. What does 1.2 million cars look like? If we were to line them up in a row, they would stretch from Washington, DC to the northern tip of Alaska.

20-30

 **Minutes saved on many popular driving routes.**

Transit helps avoid massive traffic jams.

If everyone who rode transit drove instead, our region would be stuck in crippling traffic congestion. While this would affect nearly all our roads, drivers on the most popular, most congested corridors would bear the brunt of the burden. Driving on corridors like I-66, I-95, and New York Avenue during rush hour would take twice as long, adding 20-30 minutes to every trip. Even for people who only commute 3 days a week, that’s an extra 2-3 hours stuck in traffic each week.


\$27b

 **Avoided road construction costs.**

Transit helps avoid new road construction.

If people didn’t ride transit, we’d need to build massive amounts of new infrastructure. All those additional cars would need 1,300 miles of extra lanes—or even new roads—to move under comparable conditions to our roads today. The costs to build all these new lanes add up quickly, amounting to a \$27 billion investment. That’s more than the combined 2024 budgets of the District of Columbia, Arlington County, and Prince George’s County.

\$2b

 **Avoided parking construction costs.**

Transit cuts the need for parking.

Without transit, all the extra cars on the road would need a place to park—at their origin and each of their destinations. To accommodate all those cars, we’d need to build the equivalent of a 5-story parking garage the size of the National Mall. With transit, we drive less and use land more efficiently, reducing traffic and allowing us to replace big parking lots and garages with more housing, jobs, and businesses.

Investing in transit improves quality of life.

Transit is the region’s connective tissue. It gets people where they want go—work, school, medical care, social outings—when they want to travel at a far lower personal cost than driving or ridesharing. By saving people money, transit helps keep the region affordable, and by creating opportunities for new development near transit, transit enables us to build more housing.



\$2,800



Annual household savings from riding transit.

Transit saves everyone money.

Transit saves people and households money that they would otherwise have to spend on owning and maintaining cars, paying for gas and parking, and covering all the other costs that come from driving. Transit riders save about \$2,800 a year by not having to pay for rideshares, taxis, parking, and tolls. It costs around \$12,000 a year to own a car and an average of \$1,500 a year to ride Metro, so households that ride rather than drive save \$10,500 per year.

250k



Jobs accessible within an hour on transit.

Transit gets people to destinations.

Transit crosses political boundaries and neighborhood lines, and it offers people who can’t afford cars, or choose not to drive, access to jobs and other economic opportunities. In less than an hour, transit can get you to at least 9 hospitals, 12 grocery stores, 13 schools, and over 250,000 jobs—from anywhere in the DMV.

50%



Of new multifamily rental housing in Metro station areas.

Transit helps the region build more housing.

The region needs 320,000 more housing units by 2030, and 75% needs to be affordable. Transit stations and the connectivity they offer are a prime opportunity. For example, over 50 transit-oriented development projects totaling 16 million square feet have been built or planned around the NoMa–Gallaudet U station. In 2021 NoMa was the region’s fastest-growing neighborhood, accounting for 10% of all new apartments. Those projects grew the neighborhood’s population by 200% and Metro ridership by 100%.

\$30m



Annual freight and shipping savings from transit.

Transit speeds up deliveries and makes them cheaper.


Transit reduces congestion, which makes freight and deliveries cheaper and more reliable. This means that everything from a new mattress to a warm bowl of ramen has a better chance of showing up at your door on time. Transit also saves the region \$30 million a year in freight and shipping costs, which helps keep the cost of goods and services down for consumers.

Investing in transit builds the economy.

Transit drives the region’s economy by attracting and catalyzing development, connecting people to jobs and other economic opportunities, generating new tax revenue, creating new opportunities and markets for housing, supporting home-grown businesses, and attracting new residents and large employers from outside the region.



\$330b

 **Property value in Metro station areas.**

Transit stations attract people, jobs, and housing.

Metro station areas hold only 3% of the region’s land, but they make up about 30% of property value (\$330 billion), 30% of annual property tax revenue (\$3.2 billion), and 40% of jobs (960,000). Metro station areas have twice as many businesses, three times more jobs, and three times more property value than areas without Metro.

\$9.4b

 **Additional business output from transit.**

Transit investments pay dividends to the economy.

Having a healthy transit system helps workers get to jobs, reduces congestion, and allows goods to move faster. This enables businesses to operate more efficiently. More efficient businesses are more productive businesses, and having our high-performing transit system lets businesses churn out \$9.4 billion in additional outputs that wouldn’t be otherwise possible.

64k

 **Non-transit jobs enabled by having a transit system.**

Transit supports jobs across the region.

Over 1.7 million jobs are in walking distance of a Metro station or Metro bus stop—70% of the region’s jobs. The average person can reach over 250,000 jobs, within an hour train or bus ride, from anywhere in the region. Residents in Equity Focus Communities can ride transit to an additional 25,000 jobs within an hour. Transit also creates economic efficiencies that support 64,000 non-transit jobs. Without transit, traffic congestion would slow down the economy, and those jobs might not exist.

\$12.2b

 **Annual economic impact from Metro’s Joint Development.**

Transit is a focal point of growth and development.

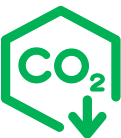
The Metro System created a frame that the region continues to build on. Metro station areas host 65% of new office development, 50% of new multifamily rental housing, and 25% of affordable housing. Metro’s 55 Joint Development projects at 30 stations have generated 17 million square feet of new development, \$4.6 billion in new property value, \$12.2 billion in annual economic impact, and \$194 million in annual tax revenues.

Investing in transit benefits health and the environment.

Transit keeps cars off the road, and it lets thousands of people in our region live a car-free or car-optional lifestyle. Transit buses and trains are also low- or zero-emission vehicles. This all adds up to transit avoiding greenhouse gases and unhealthy particulate matter from entering our air. Plus, when people walk, bike, or roll to transit, they benefit from increased physical activity, which can decrease the risk of chronic disease.



1.2m



Metric tons of greenhouse gases avoided by transit.

Transit plays a vital role in the fight against climate change.

Transit helps avoid 1.2 million metric tons of greenhouse gas emissions from entering our air every year. These gases are linked to rising temperatures and increasingly extreme weather that threaten our wellbeing. What does 1.2 million metric tons of greenhouse gases look like? It's the same as if all the households in Arlington County didn't use energy for an entire year.

8



Metric tons of fine particulate matter avoided by transit.

Transit avoids pollutants that threaten our health.

Transit avoids an additional 8 metric tons of fine particulate matter (PM 2.5) from poisoning the air every year. Exposure to PM 2.5 is associated with premature death, increased hospitalizations, respiratory diseases, and restricted activity days—where the air quality is so bad that it becomes dangerous to go outside.

\$950m



Annual traffic crash savings from transit.

Transit is 20 times safer than driving.

Because transit is so much safer than driving a car, the region avoids nearly 30 people killed and over 2,500 people injured in car crashes per year. Beyond avoided death and serious injury, having a healthy transit system also saves the region almost \$950 million per year in costs from traffic crashes.

30mins



Additional daily exercise from riding transit.

Transit is good for our bodies.

As transit riders, we're more active. Walking, biking, and rolling are part of every transit trip, even if it's just walking from your car to the train platform. This exercise adds up, and people who ride transit are likely to walk as much as 30 minutes more a day. Increased physical activity improves heart health and builds muscle. It also decreases the risk of heart disease, Type 2 diabetes, and some cancers.

What if transit goes away?

If the region is not able to find stable, full funding for Metro's long-term capital and operating needs, transit service would need to be severely reduced or even shut down entirely. The consequences of a region without transit, or even a significantly reduced transit network, would be both wide-ranging and catastrophic—for the economy, the environment, the social fabric, and our competitiveness here and abroad.

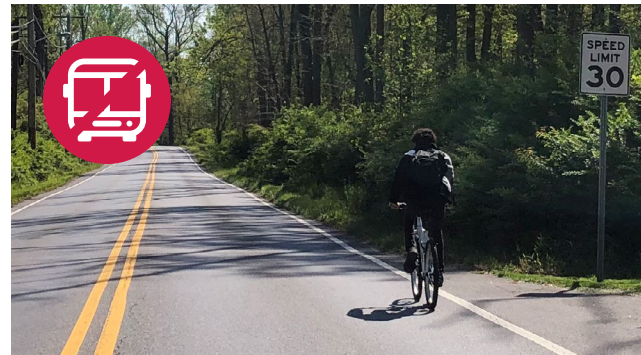


If transit goes away, we can expect...



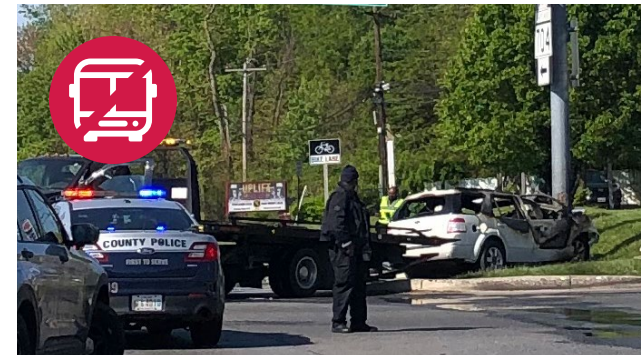
Crippling traffic and a shrinking economy.

By 2025, transit will keep about 1.2 million cars off the road every day. All those cars back on the road would mean that traffic would grind to a standstill. Trips would get longer and less reliable. Deliveries and freight would slow down. And without transit, it would be harder for workers to reach jobs. All told, the regional economy would begin to slow down, threatening jobs and tax revenues. With less tax revenues, it would be even more challenging for the region to spend the billions of dollars on additional road capacity that we would need to keep those 1.2 million extra cars moving.



Inequitable access to opportunities.

Transit riders are disproportionately people of color, people who speak English as a second language, other minorities, and/or low-income compared to the region as a whole. If transit stops running, many of those people will be stuck at home, only able to make the most necessary trips and paying a lot of money to do so. Others will buy cars, use rideshare, or join carpool groups, further adding to congested roadways. Some may even be forced to leave our region entirely.



Degraded health and environment.

With less transit comes less physical activity, since so many people walk or bike as part of their transit journeys. Declining physical activity has serious health and economic impacts. It leads to 234,000 premature deaths each year, and it increases the risk of cardiovascular disease, type 2 diabetes, and colon cancer. Almost ten percent of healthcare costs in the United States are the result of physical inactivity. If all the people who rode transit drove instead, traffic deaths and injuries would spike, and greenhouse gases and other air pollutants would increase.



A catastrophic transit “death spiral.”

If Metro and the region cannot fully fund transit's long-term capital and operating needs, it will trigger the beginning of a transit death spiral that will be nothing short of catastrophic for the region's residents and economy. Without adequate funding, we'd need to severely cut transit service. Some lines would stop running entirely. When service gets cut, fewer people ride transit. This decreases the amount of revenue we bring in, which forces us to raise fares, further cut service, or do both. This leads to more and more riders abandoning transit. Ultimately, transit's value to the region diminishes, and people are left with less access to opportunities and lower quality of life.

How did we measure the benefits of transit?

Our team applied transportation, economic, and environmental evaluation tools to quantify the benefits that transit brings to the region. Appendix A contains the full technical methodology.



Study Area

- District of Columbia
- Maryland
 - Montgomery County
 - Prince George’s County
- Virginia
 - Arlington County
 - Fairfax County
 - Loudoun County
 - City of Alexandria
 - City of Fairfax
 - City of Falls Church

Travel Demand Model

- Region with transit (“2025 Baseline” scenario)
- Region without transit (“2025 No Transit” scenario)



TREDIS

- Region with transit (“2025 Baseline” scenario)
- Region without transit (“2025 No Transit” scenario)



Other Tools & Data

- Remix Transit: Access to jobs and other needs
- US Census Bureau American Community Survey and Longitudinal Employer-Household Dynamics: Population and jobs near transit
- Municipal tax records: Property values and tax revenue



Transportation Impacts

- Number of trips
- Miles driven
- Traffic congestion
- Travel time changes
- Costs of new parking and road construction



Social Benefits

- Driving/vehicle costs
- Travel reliability
- Freight congestion
- Emissions
- Safety
- Tolls, fares, and parking costs



Economic Impacts

- Jobs supported
- Business output
- Value added (gross regional product)
- Labor income impacts

Study Area

When we refer to “the region,” we mean the Washington Metropolitan Area Transit Authority (WMATA) Compact Area consisting of the District of Columbia; Montgomery and Prince George’s counties in Maryland; and Arlington, Fairfax, and Loudoun counties, and the cities of Alexandria, Fairfax, and Falls Church in Virginia.

Travel Demand Model

Our process used the region’s travel demand model, which analyzes how people move around our region. We ran the 2025 model for two scenarios: one with transit, and one without transit. This helped us understand how much additional congestion could be attributed to the absence of transit. We adjusted the model’s transit ridership to account for COVID-19.

TREDIS

We also used an economic modeling tool called TREDIS that lets us estimate the social benefits and economic impacts of having a transit system by comparing scenarios with and without transit.

Other Tools & Data

We used Remix Transit to calculate the number of destinations that are accessible by transit in our region, and we also used Census and local tax data to understand socioeconomic conditions across the region and within the half-mile areas around Metro rail stations and bus stops.

