visualize 2045

A long-range transportation plan for the National Capital Region

Executive Summary

National Capital Region
Transportation Planning Board

This summary of the 2022 update to Visualize 2045, the TPB's long-range transportation plan, approved June 15, 2022, highlights components of the complete plan. An overview of the plan's chapters and content is shown in Figure 2. Find out more online at Visualize2045.org.

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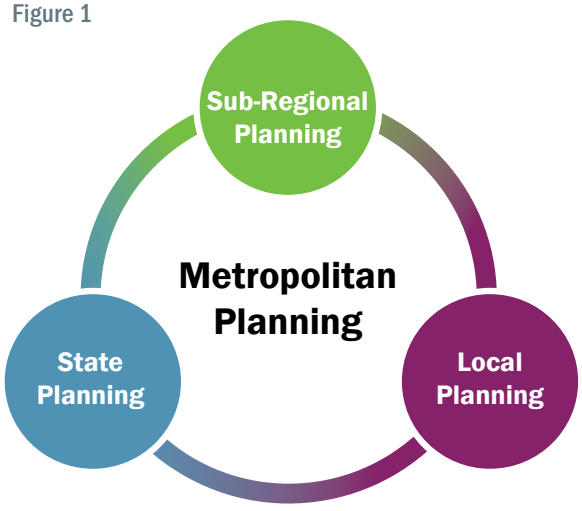
About the TPB

The National Capital Region Transportation Planning Board (TPB) is the designated Metropolitan Planning Organization (MPO) for the Washington region. The TPB is housed at and staffed by the Metropolitan Washington Council of Governments (COG). As the region's MPO, the TPB is responsible for conducting the federally mandated transportation planning process for the metropolitan area, which includes developing and updating the regional long-range transportation plan, known as Visualize 2045, and the Transportation Improvement Program (TIP). The TPB's membership is made up of representatives from the District of Columbia, Maryland, and Virginia departments of transportation, the Washington Metropolitan Area Transit Authority (WMATA), local governments, and state legislatures.

Figure 1



How Can You Use Visualize 2045?

Access information on:

- The TPB's role in setting goals and priorities for regional transportation
- Planning and project development; the plan's constrained element and projects highlighted through other TPB initiatives
- Historical context, current conditions, forecast regional growth, and transportation system performance
- Federal requirements
- "Voices of the Region" (perspectives from the region's residents)

VISUALIZING A BRIGHTER TRANSPORTATION FUTURE

visualize 2045
A long-range transportation plan for the National Capital Region

THE CHALLENGE

Metropolitan Washington is growing.

By 2045: The number of trips per day will grow from **18 million** to **21 million**, leaving roads congested and transit crowded.

We need real choices for how we get around.

By 2045: Average delay per trip ▲ **30%** | Total delay hours ▲ **48%**

Let's plan something better. Visualize 2045 is our region's plan for what we ***intend*** to do with existing funding ...

	Today	2045	
People	5.7 million	7.0 million	▲ 23%
Jobs	3.4 million	4.3 million	▲ 26%

THE SOLUTION

Expand choices for all travelers

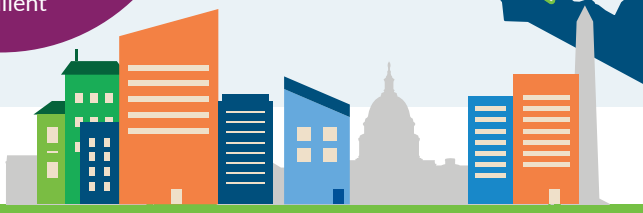
Maximize travel safety and efficiency

Protect natural and cultural resources, and mitigate climate change

Ensure our infrastructure lasts and is resilient

Contribute to a regional economy

Support equitable travel within our region and beyond



... and what we *aspire* to do by thinking regionally and acting locally:

Bring jobs and housing closer together, so it's easy to walk, bike, and take transit to work and play.

Expand bus rapid transit and transitways, offering the speed of rail at a fraction of the cost to build.

Move more people on Metrorail, because longer trains and more stations mean more on-time arrivals.

Increase telecommuting and other options for commuting, so you control your work-life balance.

Complete the National Capital Trail Network, an accessible "bicycle beltway" for recreation and commuting.

Improve walk and bike access to transit, so getting around your community is safer and easier.

Expand the express highway network, helping cars and buses get there faster.

Implement effective strategies to mitigate climate change and support resilient communities.

THE IMPACT

Shorter trips. More affordable travel options. More time with friends and family.

Source: TPB

About the Plan and TIP

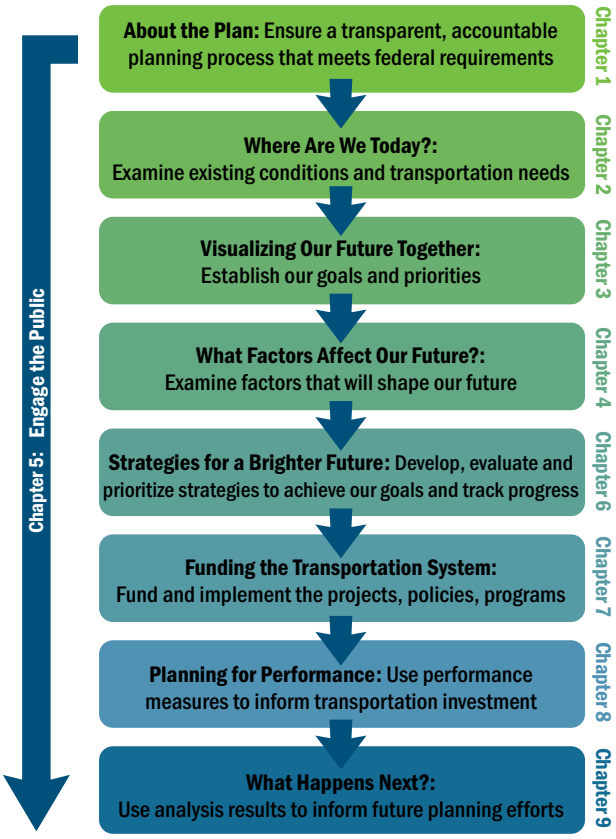
The plan describes how the TPB meets federal requirements for the plan and how the TPB and its many member jurisdictions and independent transit agencies work together to tackle challenges facing the region, gather public opinion, and through policies and investments in projects and programs, advance the most effective strategies to make progress on the region's goals today and in the future.

During the update of Visualize 2045, the region faced a global health crisis, a call for racial justice, and continued to face the challenges of adapting to a changing climate while continuing to work together to mitigate climate change impacts. The plan, and a series of related reports, examine these topics.

Federal laws require that the region's plan contain the region's collective long-term plans to fund, operate, maintain, and expand the transportation system within a minimum planning horizon of 20 years. The plan is updated at least once every four years. The plan must demonstrate that these projects and programs comply with regional air quality improvement goals. The array of federal requirements include compliance with performance-based planning rules, consideration of the ten federal planning factors, a Congestion Management Process must be conducted, public participation engagement, responses to concerns of non-discrimination and equity, and others. Appendix K to the plan contains a summary list of requirements and how the plan update fulfills them.

The federally required Transportation Improvement Program (TIP) provides the schedule for the next four years for distributing federal, state, and local funds for state and local transportation projects. The TIP represents an agency's intent to construct or implement projects and identifies the anticipated flow of federal funds and matching state or local contributions. TIP projects include those that are in the first four years of the plan plus other project types that use federal funding such as roadway and transit maintenance projects, and operational programs.

Figure 2: Visualize 2045 Update — Chapters



The Regional Planning Process and Project Development

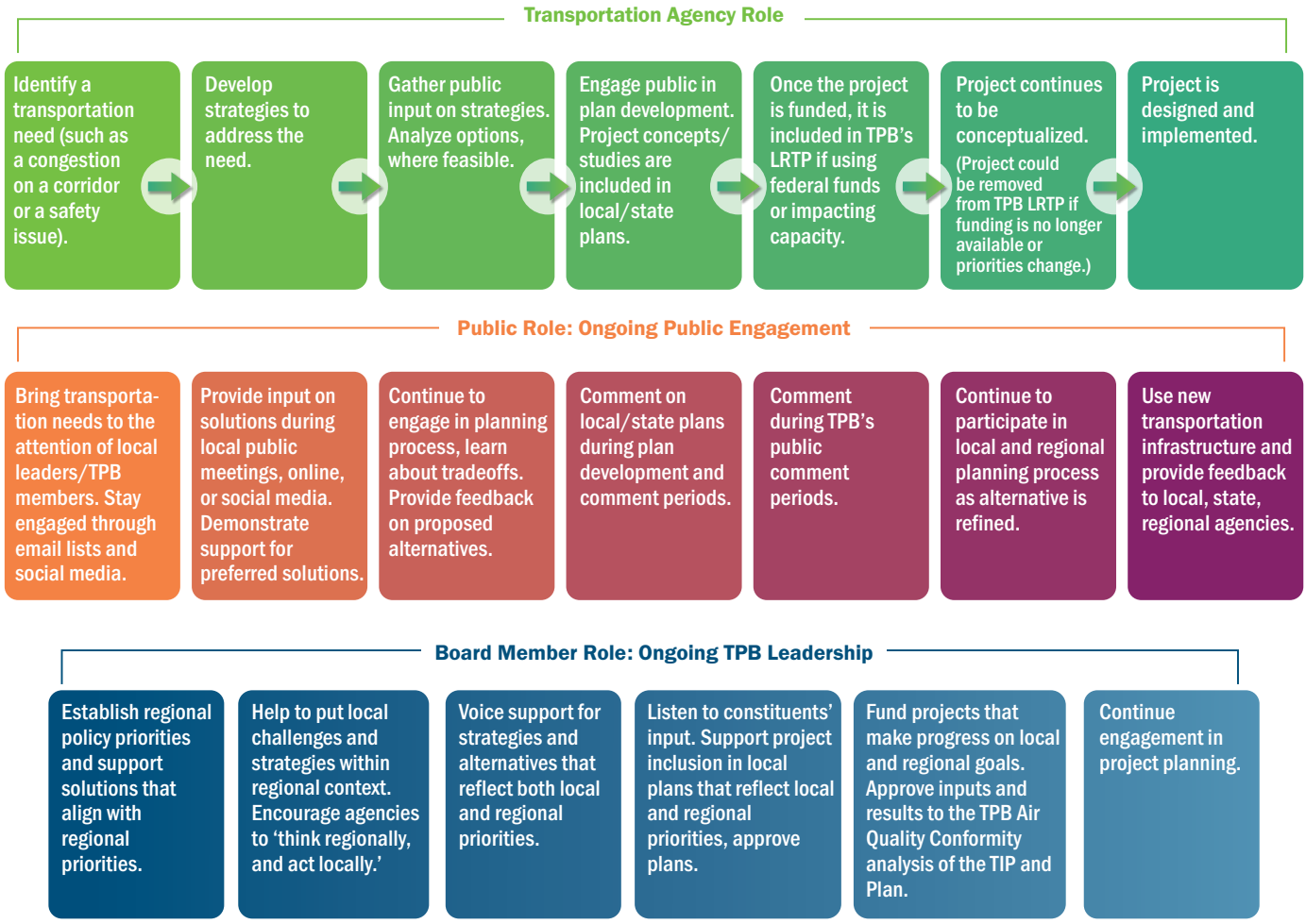
A lot of planning takes place before a project is included in the region's plan. Projects can take a long time—sometimes decades—to plan and develop. Projects in Visualize 2045 are typically developed at the state and local levels. Each state, locality, the District of Columbia, and WMATA control their own funding stream. Each jurisdiction has its own system for moving projects forward. New major WMATA capital projects such as stations or lines are built by the jurisdictions that the projects are in—in coordination with WMATA. Within each state, projects may be pursued for a variety of reasons and may have multiple sponsors.

The local projects that rise to regional significance (capital improvements that add or remove highway or transit capacity and therefore might affect future air quality) are included in the constrained element of this plan so long as sufficient revenue is available to pay for the projects. The constrained element is generally a list of projects that is a subset of all the transportation work in the region, limited by requirements related to the Air Quality Conformity analysis. Typically, the projects are regionally significant road and transit improvements, although these projects often include many other components, such as freight, bicycle, and pedestrian enhancements.

Projects do not have to be in the constrained element to be important to the region. Examples of activities not in the constrained element include studies and projects that do not yet have funding that will be required to be in the air quality analysis once they are funded. Also not included are standalone trail projects, locally-funded bicycle and pedestrian projects that do not repurpose an existing lane, or electric vehicle infrastructure.

The TPB's goals and the federal metropolitan planning requirements influence the types of projects that transportation agencies develop and submit to the TPB for inclusion in the Visualize 2045 update and the TIP. Figure 3 provides a simplified description of how the TPB and the public can influence projects as they are planned and developed, long before projects are submitted for inclusion in the plan.

Figure 3: The TPB and Public's Influence on Project Development

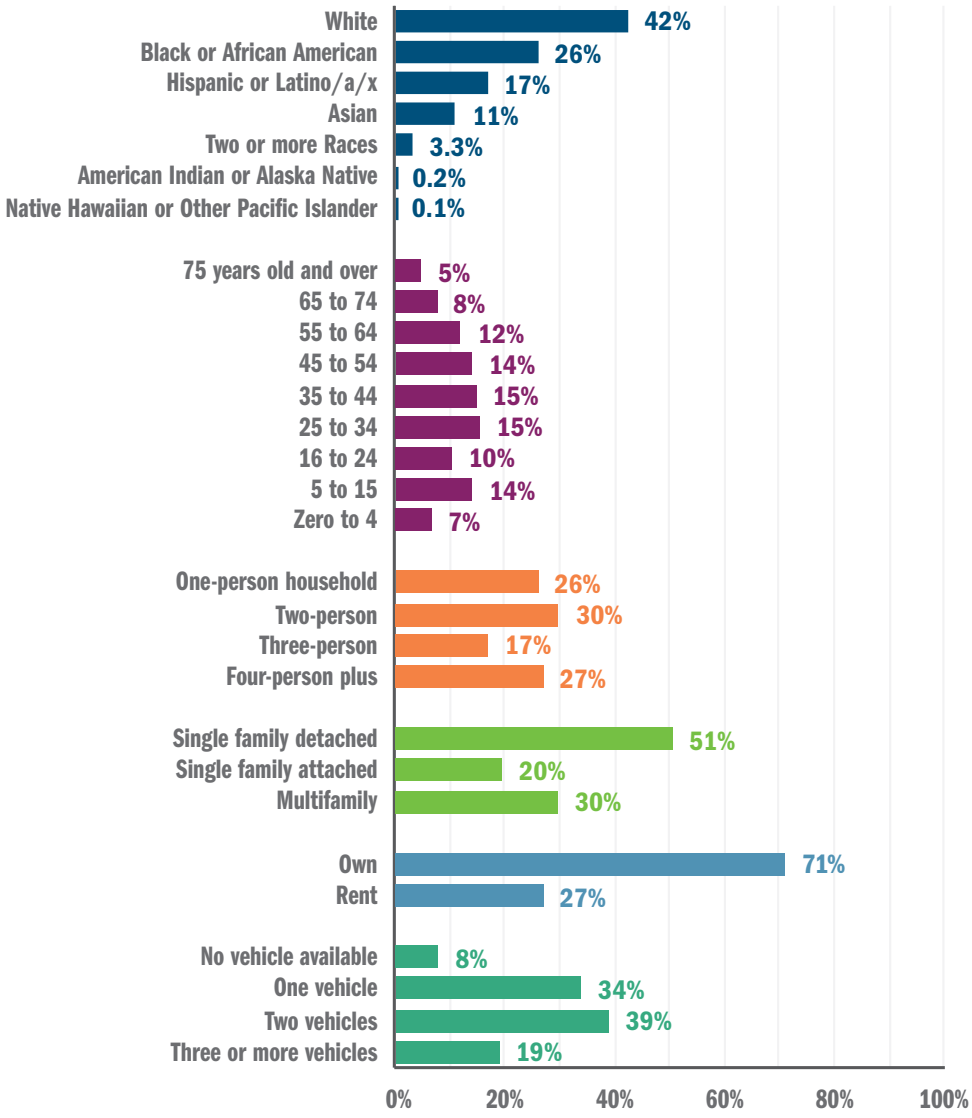


The National Capital Region

The National Capital Region comprises approximately 3,500 square miles and spans the spectrum of settlement patterns: urban, suburban, exurban, and rural. The region is one of the most affluent in the country, with an annual median household income of nearly $106,000 and a gross regional product of over $561 billion per year.[1]

This economic strength is due in large part to a consistently strong job market that is driven by the federal government and the robust service sector that recovered much of its job losses or could shift to telework in response to the COVID-19 pandemic. The difference in laws, government structures, and financial resources of Maryland, Virginia, and the District of Columbia creates a complex policy environment. The region's large size and range of development patterns lead to diverse transportation needs. For these reasons, regional transportation planning and decision-making must balance a wide array of needs and priorities.

Figure 4: Summary of Characteristics in the National Capital Region, Percent of Population (Source: U.S. Census Bureau, 2015 – 2019 American Community Survey 5-year estimates, 2017/2018 TPB Regional Travel Survey)



Recent Trends

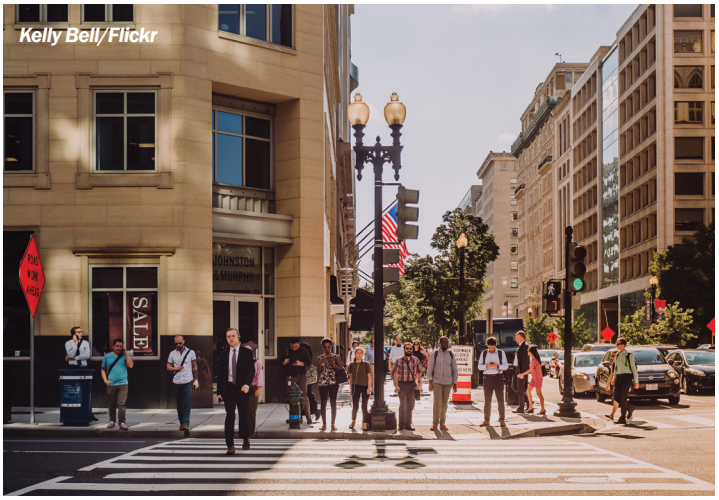
Over the past few decades, the National Capital Region's healthy economy has fueled consistently strong population and job growth, and that trend is expected to continue well into the future. Since 1970, the region's population has nearly doubled, and the total number of jobs in the region has grown at an even faster rate.[2]

According to the U.S. Census, from 2000 to 2020 the region steadily gained over one million residents from 4.4 to 5.6 million people. Total regional employment has grown by almost 284 thousand jobs from 2000 to 2020, although the recession of the late-2000s slowed the growth and resulted in reductions in regional employment for a few years.[3] More recently, the COVID-19 pandemic contributed to a loss of 371,000 jobs from March to April 2020, followed by a recovery of 318,000 jobs by October 2021.

1 U.S. Census Bureau, 2019 American Community Survey and Bureau of Economic Analysis
2 U.S. Census Bureau, as cited in 2014 Constrained Long-Range Plan
3 U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census for Employment and Wages, 2021

Forecast Growth

Where and how the region grows impacts the transportation options, congestion levels, and quality of life for the people in the region. According to the latest data from COG's Cooperative Forecasts, there are 5.7 million people living in the National Capital Region and, by 2045, that number is expected to increase to over 7 million, an increase of 23 percent from 2023 (Figure 5). The number of jobs in the region will grow from 3.4 million today to 4.3 million by 2045, an increase of 26 percent (Figure 6).



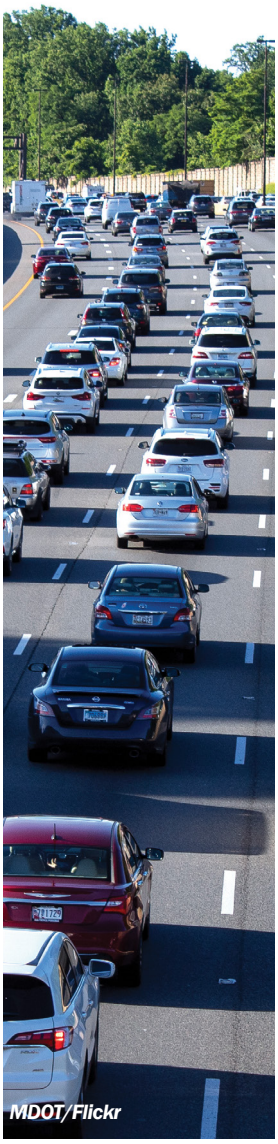


Figure 5: Forecast Population Growth in Millions, Today – 2045* (Source: MWCOG Cooperative Forecast Round 9.2)

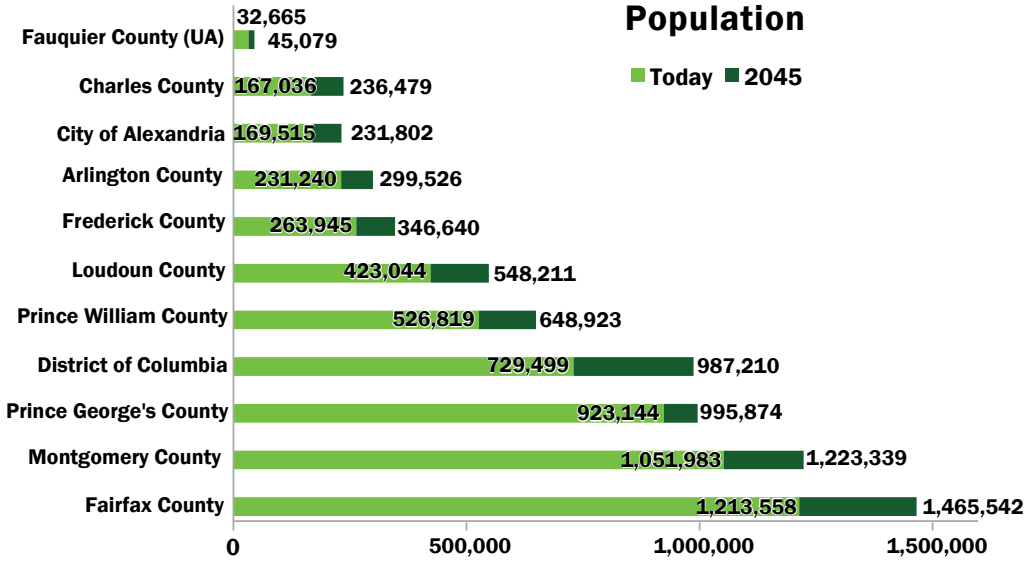
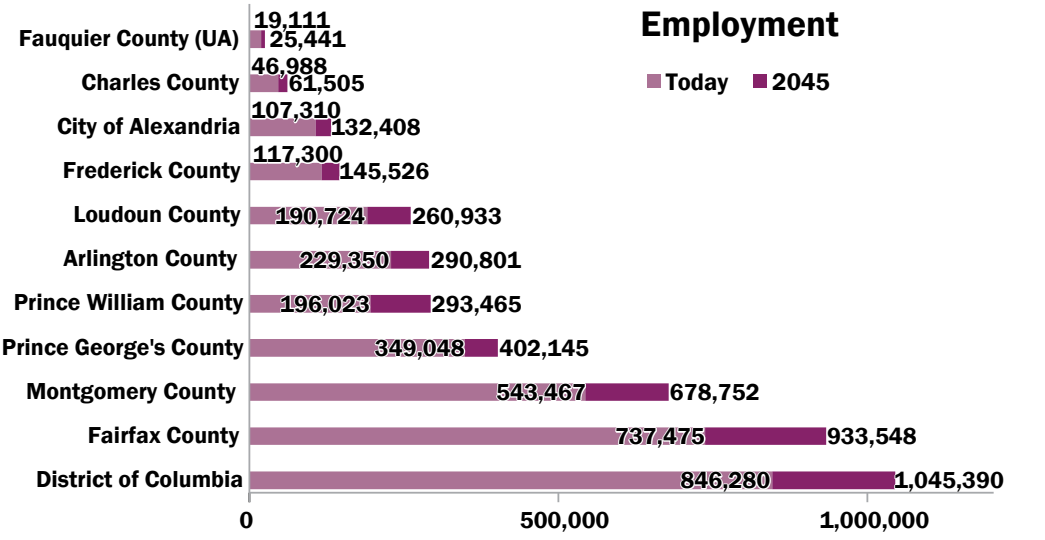


Figure 6: Forecast Employment Growth in Millions, Today – 2045* (Source: MWCOG Cooperative Forecast Round 9.2)



*Fairfax County data includes data for the cities of Fairfax and Falls Church. Prince William County data includes data for the cities Manassas & Manassas Park.

The Regional Transportation System

Planning for the future transportation system is built on the patterns of past growth, development, and infrastructure investment. When considering the total job and residential locations expected in 2045, about **80 percent** of those are already in place in the region. Visualize 2045 adds to and enhances the region's already extensive transportation network but to preserve past investments **about 28 percent** of funds go to system maintenance.

An integrated and extensive rail and bus transit system and a connected system of highways and priced toll lanes comprise the high-capacity backbone of the transportation system. In addition, extensive infrastructure for bicyclists and pedestrians, as well as provisions for bike sharing, ridehailing, and car-sharing services, allow for a wide range of options throughout the region.

Within its boundaries, the region is served by:

- **>17,000 lane miles of highways and major roads**, more than 500 miles of which are tolled lanes.
- **129 miles of Metrorail** and **91 Metrorail stations**.
- **173 miles of MARC and VRE commuter rail** and **39 commuter rail stations**.
- **37 miles of bus rapid transit, light rail, and streetcars**, with more to come.
- **800+ of miles of off-street paved trails** and paths for walking and biking.
- **400+ miles of bike lanes**.
- **>19,000 directional miles of important freight corridors** within the TPB's planning area carrying more than 300 million tons of goods annually.
- **Two Class I railroads**—CSX Transportation and the Norfolk Southern Corporation which **operate 250+ miles of mainline track** and carrying more than 47 million tons of local freight annually.
- **852** EV Charging Stations and **2,424** EV plugs.
- **15+ local and commuter bus systems** and about **10 paratransit service providers**.
- **Nine intercity train stations** and an estimated **14 intercity bus stations**.
- **Three major airports** with extensive domestic and international connections, **Ronald Reagan Washington National Airport** (**DCA**), **Baltimore/Washington International Thurgood Marshall Airport** (**BWI**), and **Washington Dulles International Airport** (**IAD**) that also carry significant levels of freight cargo.

Planning, building, operating, and maintaining this infrastructure is handled by a long list of public agencies that have oversight over different aspect of the process, as well as private companies providing transportation services. These include:

- The **Maryland Department of Transportation** (**MDOT**), the **Virginia Department of Transportation** (**VDOT**), the **Virginia Department of Rail and Public Transportation** (**DRPT**), and the **District Department of Transportation** (**DDOT**), which control major transportation planning and funding decisions in their respective jurisdictions.
- Other **regional transportation planning and funding agencies**, including the **Northern Virginia Transportation Authority** (**NVTA**) and the **Northern Virginia Transportation Commission** (**NVTC**).
- The **city and county governments** that make local decisions on transportation and land-use.
- The **Washington Metropolitan Area Transit Authority** (**WMATA**), with a service area of 1,500 square miles, providing Metrorail, Metrobus, and paratransit services.
- Dozens of **local bus, commuter bus, and paratransit operators** that serve specific cities and counties in the region.
- **Amtrak**, the national rail system, and the **MARC and VRE commuter rail systems**.
- Numerous **private taxi companies** and a growing number of **smartphone-based ridehailing applications**.
- Services such as **Uber** and **Lyft** that operate throughout the region.
- **Capital Bikeshare** and other **private companies that provide bicycles and scooters** for short-term rental.
- Multiple **car-share companies**, such as **car2go** and **Zipcar**, that allow short-term vehicle rental.
- Multiple **micromobility companies that offer shared scooters, bicycles, and e-bicycles** in many of the urban and denser suburban parts of the region.
- Numerous **firms of all types that depend on freight transportation** for their business.

Geoff Livingston/Flickr*

2017/2018 Regional Travel Survey: Trips and Mode Share

Through the RTS, the TPB monitors the regional totals for trips by type and mode. Approximately 17 million trips are taken per day on all modes of transportation for all purposes, including travel to work, school, medical appointments, and other destinations. Of those trips, 41 percent are people driving alone, 38 percent are in a vehicle with two or more people, 11 percent are by walking or biking, 6 percent are by bus or rail transit, and the remaining 5 percent use taxi/ridehail, school bus, and other services (Figure 7).[4]

Over the past 10 years, shares of single occupancy vehicle trips and carpool trips for all purposes have remained steady.

For commute trips, shares of single occupancy vehicle and carpool trips decreased while other modes such as bus transit, walk, bicycle, and taxi/ridehail increased. Following this trend, the share of single occupancy vehicle trips will likely continue to decline as additional transit services come online, as bicycle and pedestrian infrastructure continues to grow, and land-use policies push for the concentration of jobs and households in regional Activity Centers (Figure 8).

The TPB monitors the regional totals for trips by type and mode. As discussed in the previous section, land-use correlates with transportation options and mode choice.

Figure 7: Mode Share of All Types of Trips, 2017/2018 (Source: 2017/2018 TPB Regional Travel Survey)

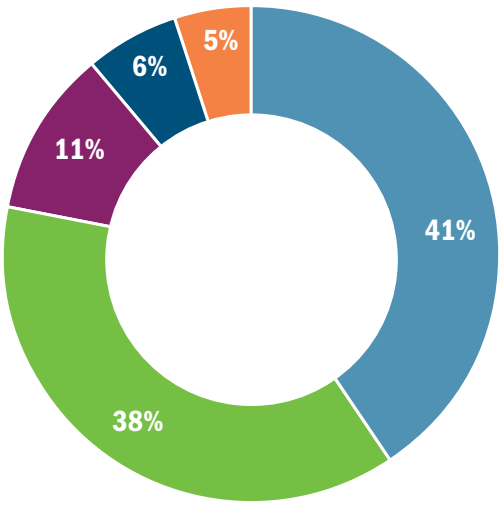
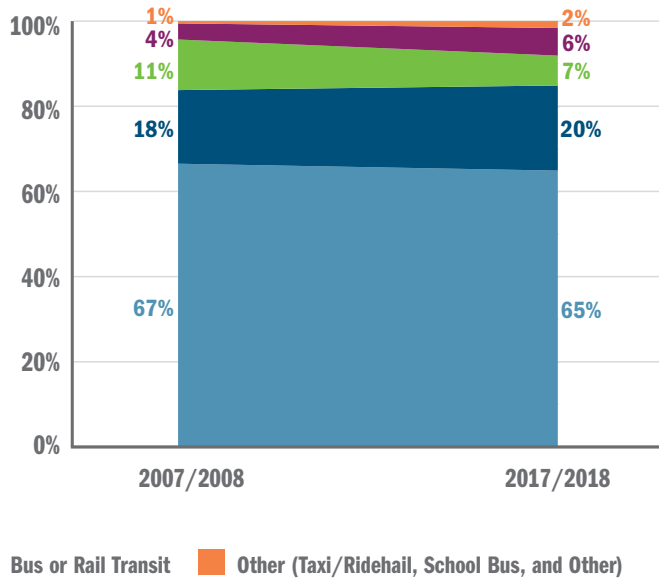


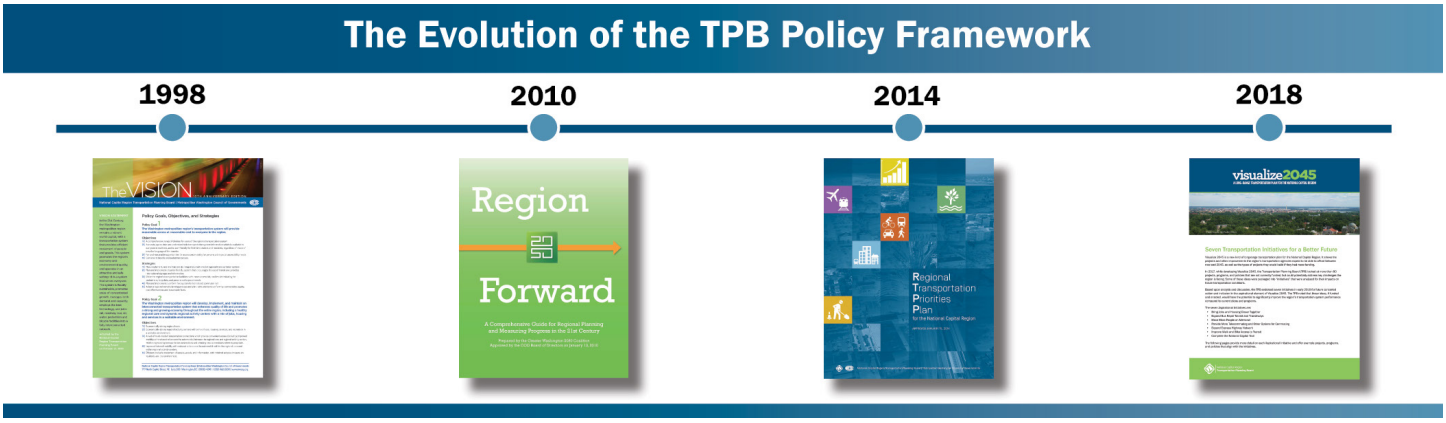
Figure 8: Change in Mode Share of Commute Trips, 2007/2008 – 2017/2018 (Source: 2007/2008 and 2017/2018 TPB Regional Travel Survey)



4 National Capital Region Transportation Planning Board, 2017/18 Regional Travel Survey; mwcog.org/transportation/data-and-tools/household-travel-survey/

The TPB Policy Framework

The TPB policy framework is a culmination of a more than 20-year evolution that began with a visioning process in 1998. This framework includes comprehensive strategies that promote a strong regional economy and help improve quality of life for all residents. The policy framework consists of the TPB Vision, the Region Forward vision adopted by COG, the Regional Transportation Priorities Plan, and the seven Aspirational Initiatives endorsed by the TPB in 2018. The policy framework also includes the priorities of equity, climate resiliency, and safety as documented in TPB resolutions and in this plan. See page 16 to read about the TPB's new climate goals and strategies.



The TPB Vision Statement and Goals (1998)

TPB Vision Statement

"In the 21st Century, the Washington metropolitan region remains a vibrant world capital, with a transportation system that provides efficient movement of people and goods. This system promotes the region's economy and environmental quality, and operates in an attractive and safe setting—it is a system that serves everyone. The system is fiscally sustainable, promotes areas of concentrated growth, manages both demand and capacity, employs the best technology, and joins rail, roadway, bus, air, water, pedestrian and bicycle facilities into a fully interconnected network."

The Vision Goals

1. The Washington metropolitan region's transportation system will provide reasonable access at reasonable cost to everyone in the region.
2. The Washington metropolitan region will develop, implement, and maintain an interconnected transportation system that enhances quality of life and promotes a strong and growing economy throughout the entire region, including a healthy regional core and dynamic regional Activity Centers with a mix of jobs, housing and services in a walkable environment.
3. The Washington metropolitan region's transportation system will give priority to management, performance, maintenance, and safety of all modes and facilities.
4. The Washington metropolitan region will use the best available technology to maximize system effectiveness.
5. The Washington metropolitan region will plan and develop a transportation system that enhances and protects the region's natural environmental quality, cultural and historic resources, and communities.
6. The Washington metropolitan region will achieve better interjurisdictional coordination of transportation and land-use planning.
7. The Washington metropolitan region will achieve an enhanced funding mechanism(s) for regional and local transportation system priorities that cannot be implemented with current and forecasted federal, state, and local funding.
8. The Washington metropolitan region will support options for international and inter-regional travel and commerce.

Region Forward (2010)

A Comprehensive Guide for Regional Planning and Measuring Progress in the 21st Century

COG developed Region Forward in 2010 to help guide local and regional decision-making and make the region more Prosperous, Accessible, Livable, and Sustainable. It identifies shared goal areas, one of which is transportation, and numerous objectives and targets for assessing progress toward achieving each of the goals.

- We seek a broad range of public and private transportation choices for our region which maximizes accessibility and affordability to everyone and minimizes reliance upon single occupancy use of the automobile.
- We seek a transportation system that maximizes community connectivity and walkability and minimizes ecological harm to the region and world beyond.
- We seek transit-oriented and mixed-use communities emerging in regional Activity Centers that will capture new employment and household growth.
- We seek a significant decrease in greenhouse gas emissions, with substantial reductions from the built environment and transportation sector.
- We seek a diversified, stable, and competitive economy, with a wide range of employment opportunities and a focus on sustainable economic development.
- We seek to minimize economic disparities and enhance the prosperity of each jurisdiction and the region as a whole through balanced growth and access to high-quality jobs for everyone.

THINK REGIONALLY, ACT LOCALLY

The region comes together through the TPB to establish shared regional policy goals. Local jurisdictions and agencies take action, making progress on local and regional goals by funding and implementing projects, programs and policies that move our region forward.

See the infographic on page 15 to learn more about the Aspirational Initiatives.

The Regional Transportation Priorities Plan (RTPP) (2014)

Priorities Identified in the RTPP:

1. **Meet Our Existing Obligations:** Funding for maintenance and state-of-good-repair needs should continue to be prioritized over system expansion.
2. **Strengthen Public Confidence and Ensure Fairness:** Efforts to increase accountability and address the needs of historically transportation-disadvantaged populations should be considered in all stages of project planning, design, and implementation.
3. **Move More People and Goods More Efficiently:** Improvements to the transportation system should seek to do more with less—to make more efficient use of existing infrastructure and promote greater use of more efficient travel modes for both people and goods.

RTPP Goals:

1. **Provide a comprehensive range of transportation options.**

2. **Promote a strong regional economy, including a healthy regional core and dynamic Activity Centers.**

3. **Ensure adequate system maintenance, preservation, and safety.**

4. **Maximize operational effectiveness and safety of the transportation system.**

5. **Enhance environmental quality, and protect natural and cultural resources.**

6. **Support inter-regional and international travel and commerce.**

TRANSPORTATION FACTORS THAT SHAPE OUR FUTURE

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By 2045, metropolitan Washington's transportation system is expected to handle 21 million daily trips. To ensure each one is safe, efficient, and accessible, our regional transportation plan not only addresses ongoing challenges like congestion and crowding but looks boldly to the future.

EQUITY

We need a transportation system that works for all people, regardless of income, race, age, gender, or ability.

ECONOMY

Our roads, transit systems, and trail networks connect our communities, support the movement of goods, and lead to a stronger regional economy.

TRAFFIC SAFETY

Everyone should be able to get around safely. Whether on foot or bike, in a car, or on a bus, we're working together to reduce fatalities and injuries so every trip is a safe one.

FUNDING

Most transportation funding goes to the upkeep of existing infrastructure. We're promoting strategies to keep pace with demand, enhance the system, and make the most of every dollar.

CLIMATE CHANGE AND THE ENVIRONMENT

To protect our climate and ecosystems, transportation solutions need to reduce emissions and environmental impacts. We need to ensure transportation options are resilient and reliable as extreme weather increases.

PUBLIC HEALTH

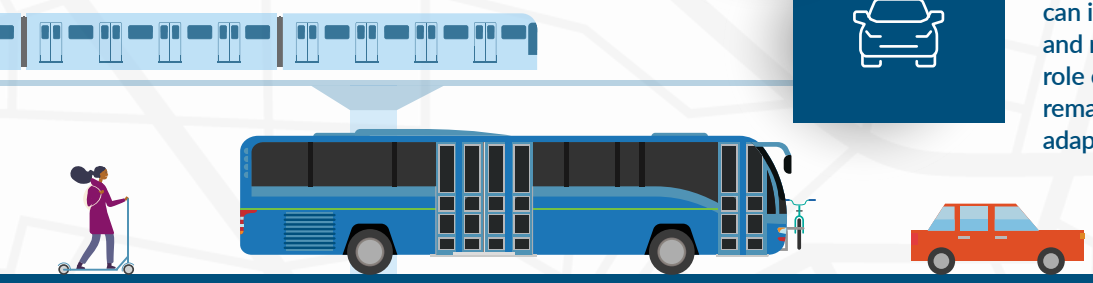
Clean air, traffic safety, and healthy neighborhoods are directly linked to transportation planning. Making it easier to walk, bike, and take transit reduces emissions and helps communities thrive, even when faced with crises such as the COVID-19 pandemic.

LAND USE

As our population grows, we're promoting strategies that bring together jobs, a range of housing options, services, and recreational opportunities in walkable environments served by transit and freight.

EMERGING TECHNOLOGIES

Advancements in transportation technology can improve efficiency, safety, and integration, and reduce greenhouse gases. However, the role of connected and automated vehicles remains uncertain. We need to anticipate and adapt to beneficial innovations.



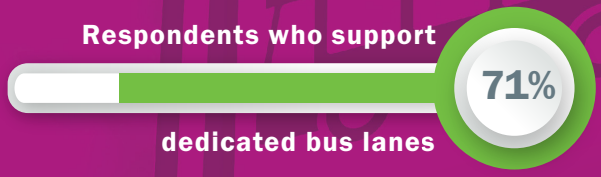
Public Participation

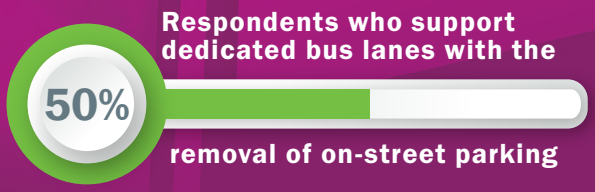
The TPB engaged thousands of the region's residents for the Visualize 2045 update. Through the Voices of the Region public outreach activities, which included a survey, focus groups, and a poster campaign, the region's residents had a variety of opportunities to offer their concerns for today and aspirations for tomorrow. The TPB also conducted two comment periods which included the opportunity to review the technical inputs for the Air Quality Conformity analysis and the results of the analysis, along with the draft update to Visualize 2045 and TIP. Throughout the plan, public opinion is incorporated in the forms of survey statistics, summaries, and direct quotes from the residents.

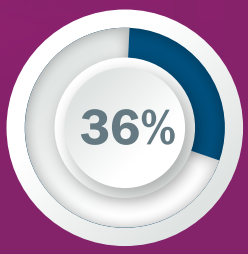
High-Level Findings from the Voices of the Region Outreach

There is wide support for TPB policies. By highlighting physical examples of actual projects, the TPB staff sought to raise awareness of the Aspirational Initiatives through the 'Aspiration to Implementation' activity in the summer of 2021. The activity was designed to "meet people where they are" and ask for feedback as they interact with projects that align with the Aspirational Initiatives. Out of more than 400 written comments about how these project types impact people's lives, the themes most frequently mentioned included time management, efficiency, convenience, travel options, access to jobs and school, family and quality of life, health and personal well-being, safety, connectivity, and the environment. These findings, and the survey findings shown in graphics, highlight the importance of policies to focus growth in Activity Centers and near High-Capacity Transit station areas, connect Activity Centers, and increase multimodal transportation options for people throughout the region.

Equity Considerations Take Many Forms. The outreach highlighted the needs of vulnerable populations, especially given the threats of COVID-19. The 2020 survey found that only 32 percent of essential workers said they were likely to telecommute during the pandemic compared to 82 percent of workers with 'non-essential' status. In the focus group discussions on equity, participants emphasized affordability, including the cost of riding the train and bus. Participants also spoke about time of day or geographic inequities in the availability of transportation services and how that impacts access to opportunities. People that rely on transit for their transportation described the challenge of infrequent bus services, particularly important for service workers who work night hours. In suburban areas, participants spoke about the lack of transit services and dependence on driving, noting concerns over toll prices.







36% of respondents would consider using a shared e-scooter or e-bike to take short trips (less than one mile) to transit or other destinations.

Congestion Concerns for Outer Suburbs

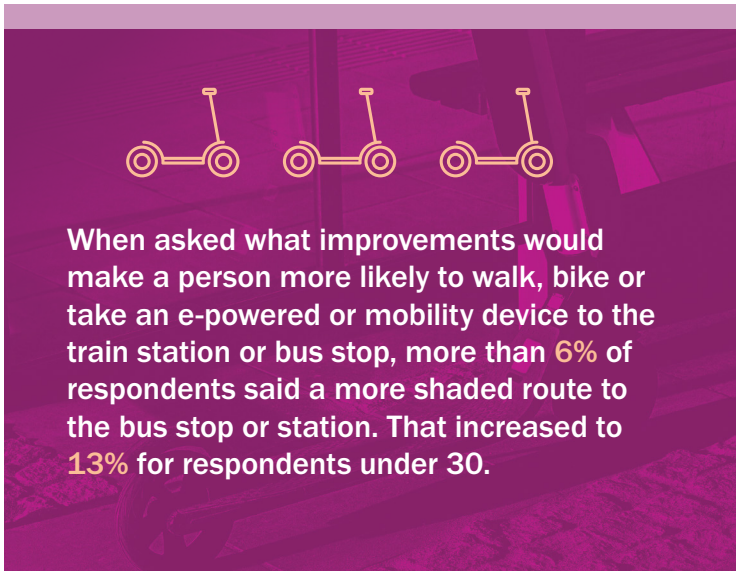
More than half of residents of the outer suburbs said congestion was a significant concern (54%), compared to (27%) of residents in the region's core.

Approximately 6 out of 10 respondents supported more or wider sidewalks and bike lanes (63%), even if it meant a reduction in parking availability.

Climate Change is a Reality that Needs to be Addressed. In the survey, 88 percent of respondents said they believe that human actions contribute to climate change, and 84 percent think elected officials should consider climate change when making decisions about transportation.

In the focus groups, many expressed an understanding that their individual travel choices have an impact on greenhouse gas emissions, but they also noted that environmentally friendly options are limited and often unavailable to all people or in all areas. In such conversations, participants tended to offer suggestions for improving the supply of options, including making transit more frequent and convenient, making housing close to transit more affordable, and improving electric vehicle infrastructure. Some participants were direct in saying that climate change was simply not a priority compared to more immediate concerns in their already challenging lives.

A Safe Transportation System is Essential. Participants in numerous focus group sessions said that walking and biking often feel like life-threatening activities. Participants from the outer suburbs spoke about feeling unsafe when they drive, particularly when encountering aggressive drivers or when driving on poorly lit roads. Others expressed concerns about personal safety while using transit. When considering emerging technologies, survey respondents indicated a top priority was that new technologies ensure safe interactions of driverless vehicles on the region's roadways with other cars and people biking and walking.



When asked what improvements would make a person more likely to walk, bike or take an e-powered or mobility device to the train station or bus stop, more than 6% of respondents said a more shaded route to the bus stop or station. That increased to 13% for respondents under 30.

Kelly Bell/Flickr

Strategies for a Brighter Future

The TPB conducts planning activities to consider numerous topics that impact transportation. It works through consensus building at the board level, examining information provided by its staff, its advisory- and sub committees, regional partners, and the public. The TPB identifies the most effective strategies, such as the 2018 endorsed initiatives, that the member jurisdictions and transit agencies implement based on their unique context. The choices the region makes about how to grow and invest are critical to ensure all elements of the transportation system work together to provide better travel options in the National Capital Region that are safe, efficient, and effective for all customers. Chapter 6 of the plan discusses the following topics, as directed by the TPB, equity considerations are included for all topics:

- **TPB Policy Priorities and Endorsed Strategies:** The Aspirational Initiatives: these seven TPB initiatives, when implemented will not only improve mobility, accessibility and air quality in the region but can also contribute to the region's greenhouse gas reduction and climate resiliency goals. Learn about these initiatives in the infographic on page 15.
- **Transportation Options:** The TPB conducts planning activities to support transportation demand management strategies, bicycling, walking, scooting, transit, and travel by vehicle. It even conducts limited planning activities for travel by air.
- **Strategies to Address the Future Factors and Federal Planning Factors:** the TPB conducts a wide range of planning activities to address the factors that affect the future of transportation including equity, climate, safety and more.

ASPIRATIONAL INITIATIVES FOR A BETTER TRANSPORTATION SYSTEM

visualize 2045
A long-range transportation plan for the National Capital Region

THE CHALLENGE

By 2045, metropolitan Washington will be home to 1.3 million more people and 1 million more jobs.

Available funding for transportation and the types of planned improvements can't do enough to prevent significant increases in congestion and travel delays.

Transportation Dollars

81% Maintenance and Operations

19% Improvement Projects

THE SOLUTION

TPB's Visualize 2045 plan prioritizes initiatives that make the most of every dollar, offering everyone in the region more options for where to live and how to get around. Here's how:

Concentrate land use in Activity Centers where housing, jobs, and transit are close to each other

Circulate people in Activity Centers via safe, accessible travel options for work and play

Connect Activity Centers via high-capacity regional transit and express highways

Aspirational Initiatives

- Bring jobs and housing closer together
- Increase telecommuting and other options for commuting
- Improve walk and bike access to transit
- Expand bus rapid transit and transitways
- Complete the National Capital Trail Network
- Move more people on Metrorail
- Expand the express highway network

THE IMPACT

Improved quality of life

- Vibrant, mixed-use communities
- More and affordable housing options
- More time with family and friends

More ways to get around

- Equitable, accessible, safe choices
- Shorter trips
- Options to walk, bike, drive, and take transit to work and play

Improved economic competitiveness

- More reliable and reduced travel times
- More efficient movement of goods
- Greater access to employment opportunities

Source: TPB

Photo by Amanda Farber

Considering Safety, Equity, and Climate in Planning

The update to Visualize 2045 includes a focus on safety, equity, and climate change, as these issues intersect with all other TPB planning activities and goals. The plan focused on the need for and benefits of integrated multisectoral planning; as the challenges we face in the region are connected, so are the solutions. A closer look at these topics and recent TPB activities:

Equity: The TPB has been long committed to ensuring transportation-disadvantaged populations are actively included in the planning process. The TPB proactively ensures that people with limited English skills and those with disabilities can fully participate in and benefit from TPB-related work. In 2020, the TPB approved a resolution reestablishing its commitment to equity and anti-racism. The TPB's equity resolution affirms that equity, as a foundational principle, will be woven throughout TPB's analyses, operations, procurement, programs, and priorities. The plan update reflects this commitment. Recent studies and analysis that look at equity across numerous planning areas can inform future policies, projects, and programs.

Safety: The improvement of safety for all modes is critical to a better quality of life for residents and visitors. Safety of all modes is considered in the planning process, in the projects that go into the financially constrained element of the long-range transportation plan, in PBPP measures and target requirements, and throughout other Visualize 2045 elements. The TPB has demonstrated its commitment to equitably reducing fatalities and serious injuries on the region's roadways and meeting regional-level transportation safety federal regulations that seek to increase the safety of the transportation system for motorized and non-motorized users. Following a TPB study on safety, the TPB endorsed a set of strategies to improve safety and initiated a Regional Roadway Safety Program that provides short-term consultant services to member jurisdictions to assist with planning or engineering projects that address roadway safety issues.

Climate Change: Climate change is real, largely caused by human activity, and is having a noticeable impact on the natural and built environment globally, including warming the atmosphere, ocean, and land. The changes are being driven by greenhouse gases (GHG) that are emitted from various activities, including the burning of fossil fuels. The TPB and COG have worked extensively with their member agencies and partners on approaches to mitigate climate change and prepare the region for impacts of climate change.

Since 2010, the TPB has estimated the changes in on-road GHG emissions due to motor vehicles using the roads in its LRTP. By 2045, the latest analysis shows that annual GHG emissions are forecasted to be nearly 18 percent below 2005 emissions levels, or 11 percent below 2023 emissions levels. Greenhouse gas emissions per capita are expected to decrease by 24 percent between 2023 and 2045. At its June 2022 meeting, the TPB adopted regional, voluntary, on-road transportation sector specific goals to reduce GHG emissions 50% below 2,005 levels by 2030 and 80% below 2,005 levels by 2050. The board also endorsed strategies to implement in support of this goal and additional strategies to further explore. This decision was informed in part by TPB and COG climate work, the findings of the TPB Climate Change Mitigation Study of 2021, TPB member considerations of the feasibility of each strategy, a TPB member survey, and board discussions.

The TPB endorsed the COG resilience goal of "becoming a Climate Ready Region and making significant progress to be a Climate Resilient Region by 2030." It also confirmed need to incorporate equity principles and expand education on climate change into its members' actions to reach climate mitigation and resiliency goals. In 2021, the TPB conducted a study to support regional planning for resilience and implementation of resilience actions items documented in the COG 2030 Climate and Energy and Action Plan.

Funding the Transportation System

How Do We Pay for Transportation?

Funding for the transportation system is provided by the federal, state, and local governments. But what is the source of funding? Generally, revenues for transportation are generated through a "user pay" system. Revenues typically come from sources such as fuel taxes, vehicle registration fees, transit fares, tolls, and other mechanisms, with additional revenues coming from general taxes.

Visualize 2045's Financial Plan

The financial analysis summarizes the revenues (Figure 9) for the constrained element of the long-range transportation plan for the period 2023 through 2045. There are five sources of revenue: federal, state, regional/local, private/other, and fares/tolls. The financial analysis forecasts the costs of operating, maintaining, and expanding the transportation system (Figure 10). Notably, only a fraction of the funds (19 percent) is for expansion of the region's highway and transit systems; most expenditures (81 percent) are to operate and maintain the system and fund state of good repair projects to repair or replace infrastructure including highway bridges, transit vehicles, and other assets. Together, balancing revenues and expenditures demonstrates fiscal constraint and the region's ability to pay for the long-range transportation plan.

Infrastructure Investment and Jobs Act (IIJA)

In November 2021, President Biden signed H.R. 3684, the Infrastructure Investment and Jobs Act (IIJA) into law. The IIJA is a $1.2 trillion infrastructure bill that reauthorizes the nation's surface transportation, drinking water, and wastewater legislation with significant additional funding for new programs in transportation and other sectors. The IIJA directs $284 billion towards all modes of transportation. The IIJA extends the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) through 2030 and provides $150M annually towards WMATA's Capital Program which is equally matched by the District of Columbia, Maryland, and Virginia. The IIJA increases funding levels of several existing federal programs and establishes new programs focused on mitigating the effects of and building resiliency in face of climate change.

These funds may provide the opportunity for some projects in the plan to be accelerated and might enable more projects to be added to future plans. The funding does not alter the project list for this Visualize 2045, as the project list was approved before the new bill was passed.

Figure 9: Revenues by Funding Source, Year of Expenditure Dollars [Billions] (Source: TPB Financial Analysis)

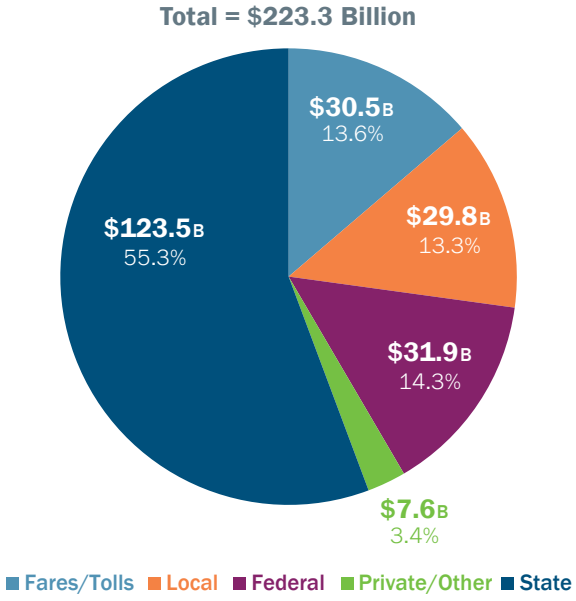
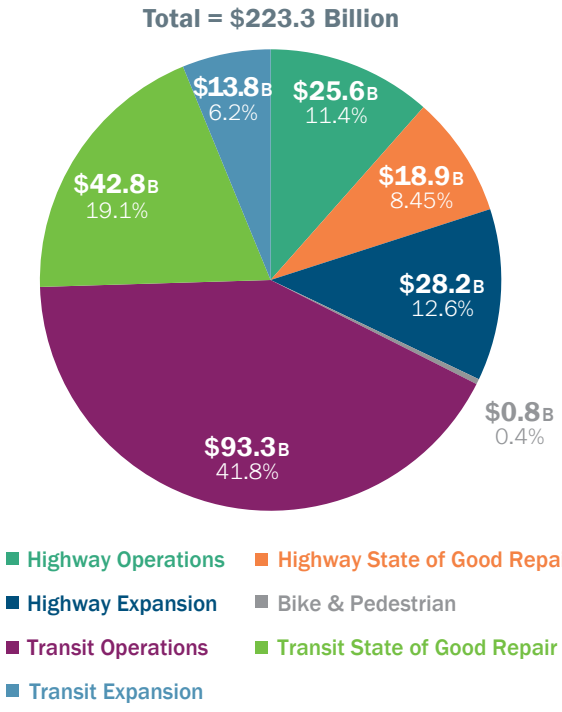


Figure 10: Expenditures by Type and Mode [Billions] (Source: TPB Financial Analysis)



Major Highway Projects

District of Columbia

Major Highways

1. I-295 (T5723): reconstruct interchange at Malcolm X Blvd, 2022 ***($215M)***

Local Roads

2. South Capitol St (T3423): convert to 6 lane Urban Blvd, incl. Frederick Douglass Bridge Reconstruction, 2025 ***($777M)***

3. Lane Reductions/Reconfigurations for Bicycle Lanes: various years

Maryland

Major Highways

4. I-70 (CE1187, CE2250): widen to 6 lanes with interchange at Meadow Rd, 2022, 2035 ***($176M)***

5. I-95/I-495 (T2894): interchange at Greenbelt Metro Sta, 2030 ***($124M)***

6. I-270, I-495 (T11582, T11583, T6432): bridge replacement and managed lanes construction, 2025, 2030 (study only for eastern section of I-495) ***($3.97B)***

7. US-1 (Baltimore Ave) (CE1202, T3108): reconstruct 4 lanes, 2023, 2035 ***($169M)***

8. US-15 (Frederick Fwy and Catoctin Mtn Hwy) (CE3566, CE3567): widen to 6 lanes with interchange at Biggs Ford Rd, 2030, 2040 ***($840M)***

9. US-29 (Columbia Pke) (CE1197, T3641): improve interchanges at Stewart Ln, Tech Rd/Industrial Pkwy, Musgrove Rd/Fairland Rd, Greencastle Rd, and Blackburn Rd, 2030, 2025, 2045 ***($738M)***

10. US-301 (Crain Hwy) (CE1004): widen to 6 lanes, 2045 ***($4.6B)***

11. US-301 (Governor Harry Nice 'Mac' Middleton Memorial Bridge) (T5527): replace with new 4-lane bridge, 2023 ***($636M)***

State Routes

12. MD-3 (Robert Crain Hwy) (T6394): widen to 6 lanes, 2035 ***($906M)***

13. MD-4 (Pennsylvania Ave) (CE1194, T3547): widen to 6 lanes with interchanges at Dowerhouse Rd, Westphalia Rd, and Suitland Pkwy, 2040 ***($750M)***

14. MD-5 (Branch Ave) (CE1196, T3469): upgrade, widen to 6 lanes including interchanges, 2030, 2035 ***($804M)***

15. MD-28 (Norbeck Rd) / MD-198 (Spencerville Rd) (T3476): reconstruct, widen portions to 4 lanes, 2045 ***($287M)***

16. MD-85 (Buckeystown Pke) (CE1210, T6483): widen to 4, 6 lanes, 2035 ***($230M)***

17. MD-97 (Georgia Ave) (CE2618): widen to 8 lanes, 2030 ***($104M)***

18. MD-97 (Brookeville Bypass) (T3106): construct 2 lane bypass, 2021 ***($44M)***

19. MD-117 (Clopper Rd) (CE1203): widen to 3, 4 lanes, 2030, 2035 ***($69M)***

20. MD-124 (Woodfield Rd) (CE3057): widen to 6 lanes, 2035 ***($120M)***

21. MD-197 (Collington Rd) (CE2253): widen to 4 lanes, 2030 ***($94M)***

22. MD-202 (Landover Rd) (CE1190): Largo Town Center Metro Access Improvement, reconstruct 6 lanes, 2045 ***($24M)***

23. MD-210 (Indian Head Hwy) (T6524, T4879): upgrade to 6 lanes and interchange improvement, 2040 ***($585M)***

24. MD-450 (Annapolis Rd) (CE1207): widen to 4 lanes, 2030 ***($67M)***

Local Roads

25. Middlebrook Rd Extended (CE1229): widen to 4 lanes, 2045 ***($16M)***

26. Montrose Pkwy East (T3703): construct 4 lanes, 2045 ***($120M)***

Virginia

Major Highways

27. I-66 HOT (Inside Beltway) (CE3484): revise operations from HOT 2+ to HOT 3+ during peak hours and bus service, 2022, 2040 ***($375M)***

28. I-66 HOT (Outside Beltway) (CE3448): widen/construct HOT lanes and bus service, 2021, 2022, 2040 ***($4.4B)***

29. I-66 (CE3484): Extend existing westbound acceleration/deceleration lane and add additional lane eastbound 2022, 2040 ***($59M)***

30. I-95/Fairfax County Parkway (CE2668): enhanced interchanges for BRAC, 2025 ***($57M)***

31. I-95 (T6682): add southbound auxiliary lane, 2022 ***($32M)***

Note: ***Numbers in this project listing correspond to the project maps in Chapter 7 of the full plan.***

32. I-95/I-495 (CE2147): reconstruct interchange at Van Dorn St, 2030 ***($40M)***

33. I-95 (T11510): construct HOT reversible ramps to access VA-642 (Opitz Rd), 2022 ***($60M)***

34. I-95 (CE3556): construct HOT lanes ramp south of Russel Rd, 2022 ***($16M)***

35. I-495 (CE2069, CE3186, CE3208): construct 4 HOT lanes with northbound shoulder lane and new ramps and interchanges at VA 267, 2025, 2030, 2045 ***($570M)***

36. I-495 Auxiliary Lanes (CE3272): construct 2 auxiliary lanes in both directions, 2030 ***($3M)***

37. Dulles Toll Rd (VA-267) (CE3151, CE3154): East-bound and west-bound Collector-Distributor Roads, 2035, 2036, 2037 ***($186M)***

38. Dulles Toll Rd (VA-267) (CE3152): interchange at New Boone Blvd Extension, 2037 ***($79M)***

39. Dulles Toll Rd (VA-267) (CE3153): interchange at Greensboro Drive/Tyco Rd, 2036 ***($28M)***

40. Dulles Access Rd (VA 267) (CE1965): widen to 6 lanes including interchange reconstruct at I-495, 2030 ***($400M)***

41. US-1 (Richmond Hwy) (CE1942): widen to 6 lanes, 2028 ***($415M)***

42. US-1 (Richmond Hwy) (CE3180): widen to 6 lanes, 2035 ***($204M)***

43. US-1 (Richmond Hwy) (CE3173): widen to 6 lanes, 2022 ***($125M)***

44. US-1 (Richmond Hwy) (CE2594): widen to 6 lanes, 2030 ***($127M)***

45. US-1 (Richmond Hwy) (CE3291): widen to 6 lanes, 2040 ***($58M)***

46. US-15 (James Madison Hwy) (T6693): widen to 4 lanes, 2030 ***($45M)***

47. US-15 (James Madison Hwy) (CE1803): widen to 4 lanes, 2040 ***($54M)***

48. US-15 (James Madison Hwy) (CE3738): widen to 4 lanes, 2026 ***($111M)***

49. US-29 (Lee Hwy) (T4794): widen to 5 lanes, completed ***($212M)***

50. US-29 (Lee Hwy) (CE1933): widen to 6 lanes, 2040 ***($130M)***

51. US-29 (Lee Hwy) (CE3474): widen to 6 lanes, 2024 ***($86M)***

52. US-50 North Collector Rd (CE3739): construct new 4-lane road, 2029 *($110M)*

53. US-50 (Arlington Blvd) (CE2182): widen to 6 lanes, 2035 ***($249M)***

State Routes

54. VA-7/US-15 Bypass (Harry Byrd Hwy) (CE1870): upgrade and widen to 6 lanes, 2040 ***($55M)***

55. VA-7 (Leesburg Pke) (CE3161): widen to 6 lanes, 2030 ***($71M)***

56. VA-7 (Leesburg Pke) (CE2105): widen to 6, 8 lanes, 2024, 2030 ***($314M)***

57. VA-7 (Leesburg Pke) (CE2175): widen to 6 lanes, 2030 ***($34M)***

58. VA-28 (Sully Rd) (CE1734): widen to 8 to 10 lanes, HOV in additional lanes during peak, 2021, 2025, 2040 ***($100M)***

59. VA-28 (Nokesville Rd) (CE2045): widen to 4 or 6 lanes, 2022, 2040 ***($71M)***

60. VA-123 (Chain Bridge Rd) (CE3376, CE3698): widen to 6, 8 lanes, 2030 ***($22M)***

61. VA-123 (Ox Rd) (CE1784, CE1856): widen to 6 lanes, 2030 ***($70M)***

62. VA-236 (Little River Tpke) (CE1760): widen to 6 lanes, 2030 ***($58M)***

63. VA-286 (Fairfax County Pkwy) (CE2106, T6694): widen to 6 lanes, 2030, 2035, 2040 ***($198M)***

64. VA-294 (Prince William Pkwy) (CE2718): widen to 6 lanes, 2040 ***($263M)***

65. Manassas Bypass (VA-234 Bypass) (CE1897): construct 4 lanes, 2040 ***(costs captured in other projects)***

66. Manassas Battlefield Bypass (CE3061): construct 4 lanes and close portions of US-29 (Lee Hwy) and VA-234 (Sudley Rd), 2030, 2040 ***($28M)***

67. VA 28 Manassas Bypass (CE1865): construct 4 lanes, 2025 ***($228M)***

Major HOT, HOV, and Toll Lane Projects*

*** HOT = High-Occupancy Toll Lanes. HOV = High-Occupancy Vehicle Lanes** *The projects and costs shown on this page are redundant to those included in the Highway Projects list on the previous pages.*

Maryland

1. I-270, I-495 (T11582, T11583, T6432): bridge replacement and managed lanes construction, 2025, 2030 (study only for eastern section of I-495) ***($3.4B)***

Virginia

2. I-66 HOT (Inside Beltway) (CE2096, CE3484): revise operations from HOT 2+ to HOT 3+ during peak hours and bus service, 2022, 2040 ***($375M)***

3. I-66 HOT (Outside Beltway) (CE3448): widen/construct HOT
lanes and bus service, 2021, 2022, 2040 ***($4.4B)***

4. I-495 (CE2069): construct 4 HOT lanes, 2025 ***($500M)***

5. I-95 (CE3697): construct HOT reversible ramps to access VA-642
(Opitz Rd), 2022 ***($60M)***

6. Dulles Toll Rd (VA-267) (CE3151, CE3154): Collector-Distributor Rd west-bound, 2035, 2037 ***($62M)***

7. Dulles Toll Rd (VA-267) (CE3151, CE3154): Collector-Distributor Rd east-bound, 2035, 2036 ***($124M)***

8. Dulles Toll Rd (VA-267) (CE3152): interchange at New Boone Blvd Extension, 2037 ***($79M)***

9. Dulles Toll Rd (VA-267) (CE3153): interchange at Greensboro Dr/Tyco Rd, 2036 ***($28M)***

State Routes

10. VA-28 (Sully Rd) HOV (CE1734): widen to 8-10 lanes, HOV in additional lanes during peak, 2021, 2025, 2040 ***($100M)***

Major Transit Projects

District of Columbia

1. DC Streetcar (CE3081,5754): 2026, 2040 ***($545M)***

2. DC Dedicated Bicycle Lane Network: various years, *not mapped* ***($800K)***

3. 16th St Bus Priority Improvements (6638):
2022 ***($2M)***

4. DDOT H and I street Bus-Only Lanes (part of T3212): ***($1.1 M)***

Maryland

5. Corridor Cities Transitway BRT (CE1649): from Shady Grove to COMSAT, 2035 ***($545M)***

6. North Bethesda Transitway BRT (CE3663): from Montgomery Mall to White Flint Metro, 2035 ***($115M)***

7. Veirs Mill Rd BRT (CE3103): from Wheaton Metro to Rockville Metro, 2030 ***($82M)***

8. Randolph Rd BRT (CE3662): from US-29 to MD-355, 2040 ***($102M)***

9. New Hampshire Ave. BRT (CE3672): from Takoma Metro to Colesville P&R, 2045 ***($285M)***

10. MD-355 BRT (T6396):
from Bethesda Metro to Clarksburg, 2030 ***($1B)***

11. MARC (CE3427): increase trip capacity and frequency along all commuter rail lines, 2029 ***($1B)***

12. Purple Line (CE2795): Bethesda
to New Carrollton, 2023 ***($2.7B)***

Virginia

13. Crystal City Transitway Northern and Southern Ext BRT (CE3521, CE3648): 2022, 2025, 2030 ***($52M)***

14. Metro Silver Line (Dulles Corridor Metrorail Project) (CE1981): Phase 2, 2022 ***($2.9B)***

15. Duke St Transitway (CE2932): King St Metro to Fairfax County line, 2027 ***($19M)***

16. Potomac Shores VRE Station (CE2831):
2022 ***($26M)***

17. Potomac Yard Metro Station (CE3013):
2022 ***($268M)***

18. US-1 BRT from Huntington Metro Station to Woodbridge (T6680): 2030 ***($504M)***

19. US-1 bus lanes and improved intersections (CE1942): 2035 ***($37M)***

20. West End Transitway (CE2930): Van Dorn St Metro to Pentagon Metro and to Landmark, 2026, 2035 ***($420M)***

21. VRE (CE2832, CE2420): 3rd and 4th track projects to reduce headways along the Manassas and Fredericksburg Lines, 2025, 2028, 2035 ***($105M)***

22. I-495 HOT Lane Express Bus Service: 2030 ***($254M)***

23. I-66 HOT Lane Enhanced Bus Service (CE3484, CE3448): 2025, 2040 ***($375M)***

24. Additional Long Bridge (T6727): railroad crossing with two-tracks and pedestrian/bike access, 2027 ***($1.9B)***

Note: *Numbers in this project listing correspond to the project maps in Chapter 7 of the full plan.*


Loudoun County

Planning for Performance

The TPB uses performance measures to provide quantifiable descriptions of the transportation system's performance and to strive for better outcomes. Through performance planning, the TPB considers how the region's transportation system will be managed and operated to inform decision-making. The TPB works with partners to compile regional transportation performance data to be able to evaluate how all the elements of the regional transportation system work together.

Performance-Based Planning and Programming (PBPP): The TPB coordinates the federally mandated process calling for states and MPOs to "transition to a performance driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of federal transportation funds."

The Congestion Management Process (CMP): The TPB conducts analyses and provides information for members' awareness of congestion trends and potential management strategies which are documented in the federally required CMP. The TPB's activities are documented as four major CMP components that are integral the region's LRTP including: monitoring and evaluating transportation system performance; defining and analyzing strategies; compiling project-specific congestion management information; implementing and assessing strategies.

The analysis and performance evaluation through the PBPP and CMP, as well as the TPB's regional evaluation of performance of the transportation system, inform the projects that are planned and programmed in the LRTP. The projects incorporated into the financially constrained element of the update to Visualize 2045 and the projects and programs that are programmed for funding in the TIP reflect the ongoing commitment of the TPB to achieving its goals.

Figure 11: Visualize 2045 and the CMP

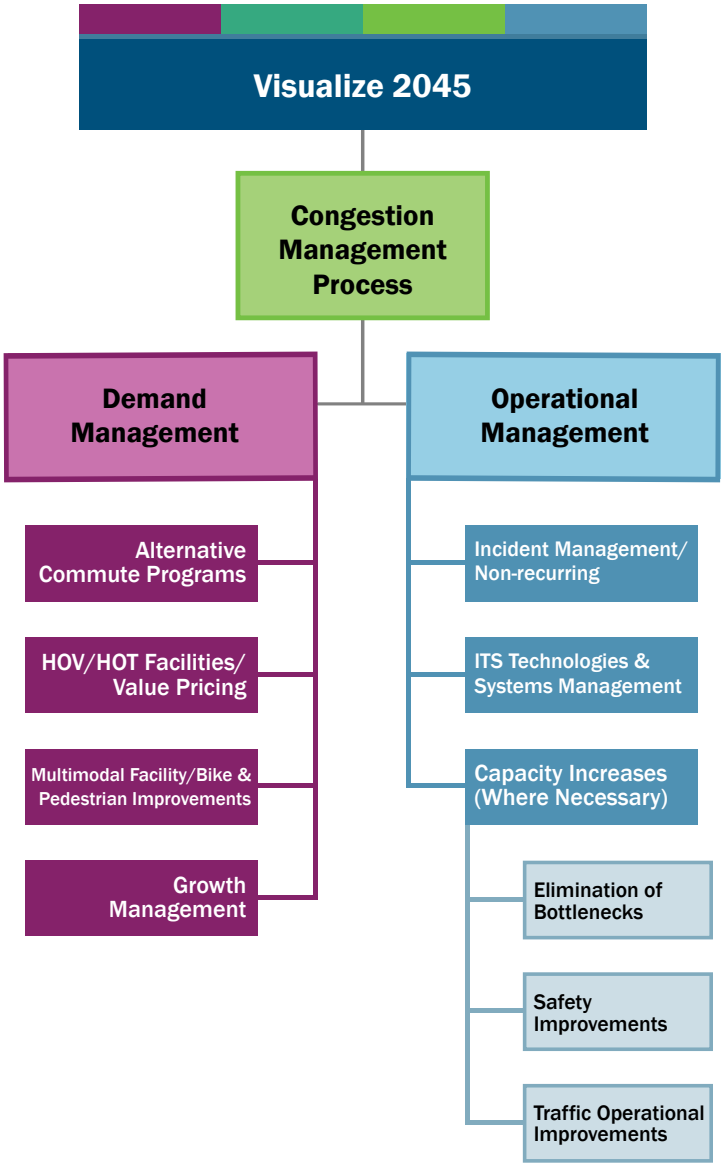
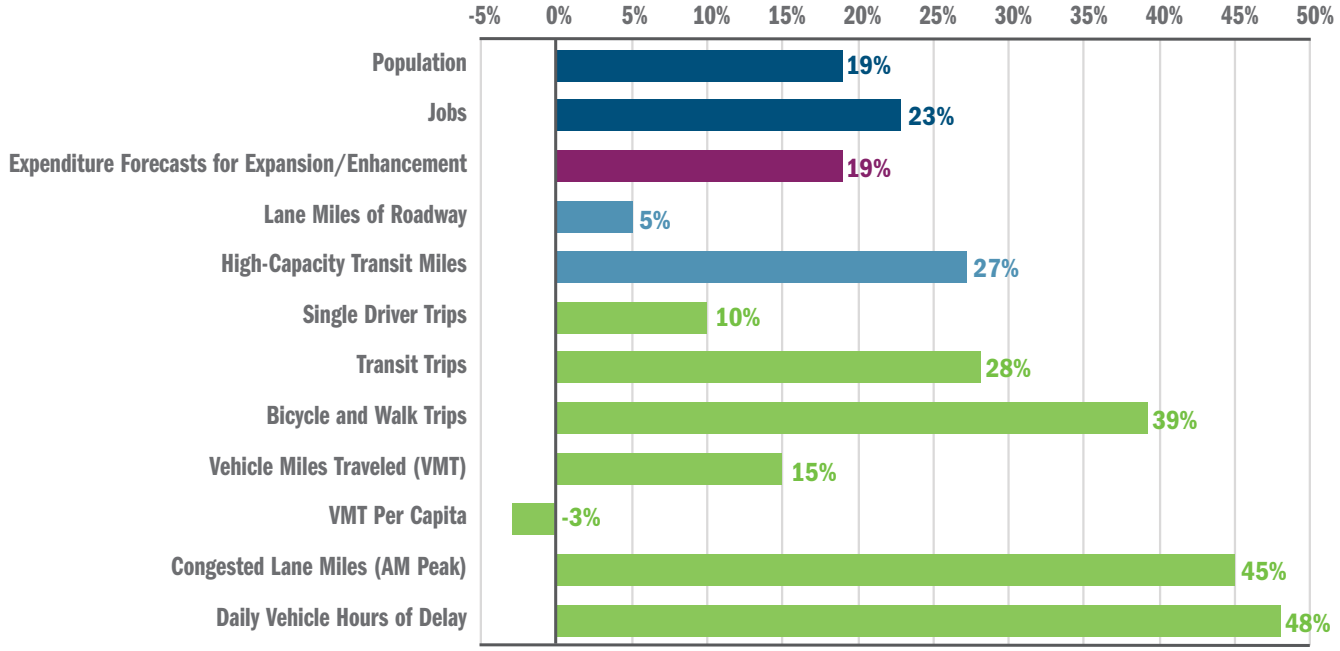


Figure 12: Plan, Invest, Evaluate [PBPP activities]

Figure 13: Performance Overview (*Travel Demand Model outputs present data for years 2023 and 2045, therefore percentage increases vary from other reporting in this plan that is based on COG Round 9.2 Cooperative Forecast with 2020 as the base year.*)



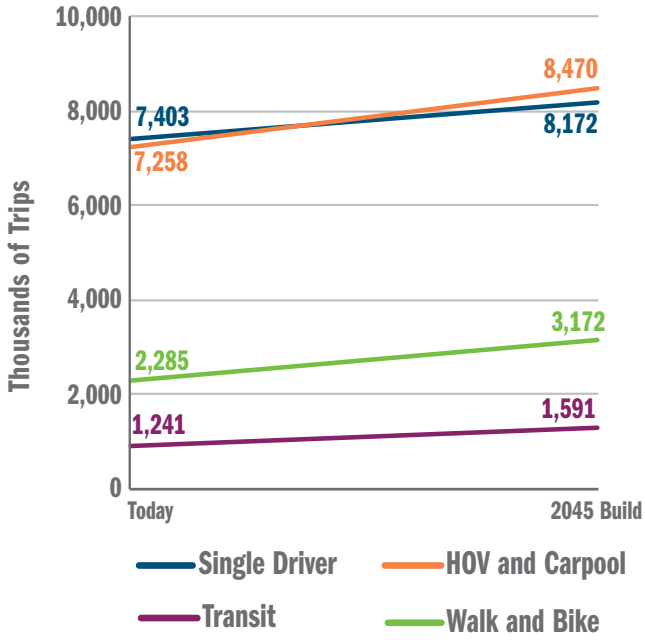
Regional Transportation System Performance: Forecast for 2045

The performance analysis of Visualize 2045 forecasts that the region will make progress on many of its goals, due in part to the inclusion of projects that align with the Aspirational Initiatives TPB calls on its members to advance.

People will have more and improved travel options in 2045 and that is reflected in the performance forecasts. The region will increase availability and use of High-Capacity Transit (HCT) and other "reliability-enhanced" modes (such as rail, bus rapid transit, walk and bike, and High Occupancy Toll and High Occupancy Vehicle lanes), decrease driving per person, and improve average access to jobs. Growth will likely continue to place heavy demands on the transportation network. While this growth is expected throughout the region, it will likely be focused in Activity Centers and HCT station areas, where 67 percent of jobs and 24 percent of residents are predicted to be located.

However, the region's financial obligations to maintain and operate the existing system limit the availability of funds for system expansions and enhancements, providing for an additional five percent in roadway miles and 27 percent increase in HCT miles compared to 2023.[5] Roadway and transit demand increases will likely place more stress on an already stressed transportation network, increasing delay and congestion and reducing auto-based job access for parts of the region (Figure 13).

Figure 14: All Trips by Mode, Today – 2045



5 High-Capacity Transit miles includes additional transit service mileage from Metrorail, light rail and streetcar, bus rapid transit, and commuter rail. While not included in this figure, commuter rail infrastructure improvements within existing transit service, like planned third and fourth tracks, are documented within this plan's project listings and TIP.

*Brian Gratwicke/Flickr**

Air Quality Conformity Summary

Transportation planning in the region is heavily influenced by air quality planning, which is a federal requirement. After the board approves the financially constrained element, it is tested to ensure that the plan's projects collectively contribute to the air quality improvement goals embodied in the Clean Air Act Amendments of 1990. Using models, TPB staff perform a series of tests to forecast how much air pollution will be generated between now and 2045 and how much the air will be improved by cleaner gasoline standards and other factors.

Federal law requires "conformity findings" in all metropolitan regions that are currently not in attainment of certain federal air quality standards ("non-attainment areas"). Since the Washington region is a non-attainment area for ground-level ozone, the TPB must demonstrate that future vehicle-related emissions of ozone-forming pollutants will, under the proposed constrained element plan, remain below the approved limits. The analysis found that forecasts of mobile emissions for VOC and NOx are within required budgets for all analysis years of the plan, therefore, it demonstrates that plan is consistent—"in conformity"—with emissions levels set forth in air quality plans adopted by the states. Learn more in Appendix C: Air Quality Conformity Analysis Summary. Emission reductions are the result of several factors, including transit improvement projects and ride sharing initiatives supported through federal Congestion Mitigation and Air Quality (CMAQ) Improvement Program funding.

What Happens Next

The update to Visualize 2045 includes many projects, programs, and policies that advance TPB policy priorities, including the Aspirational Initiatives. But there's more to do.

With challenges ahead, the region needs to prepare for the additional growth that we know is coming. As noted in COG's Region United planning framework, which builds on several of the Aspirational Initiatives and other TPB efforts, "it is clear that our region needs to take collaboration to the next level to address a variety of interconnected and urgent challenges more effectively, including housing supply and affordability, transportation accessibility and mobility, and climate change—as well as long-persisting racial inequities. And while these issues are daunting, there's also growing consensus: if the challenges are interconnected, so are the solutions."

While studies have informed solutions, the TPB and COG are focused on strategy implementation. Together, our region is bringing the slogan, 'Think Regionally, Act Locally' into action. Each jurisdiction and agency can take action by identifying the region's priority strategies that work best at the local level and where possible, take steps to accelerate delivery. How projects, programs, and policies are implemented also matters, COG and the TPB call for strategies to have an equity lens.

Recognizing that getting the most out of every dollar is necessary, planning and implementation activities can include considering how each investment can become an interconnected solution by examining opportunities to incorporate climate, land use, and other strategies into each solution.

Together, our region can continue to make headway on its goals as it establishes policies and makes investments in programs and projects for future generations.

When We Plan Together, We Prosper, Together.

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