



The District of Columbia's

Multimodal Long-Range Transportation Plan December 2021





"moveDC reflects our commitment to not only provide excellent transportation facilities and services, but to deliver them in a manner that addresses structural injustices and inequities."

Mayor Muriel Bowser

# A Message From Mayor Muriel Bowser

Dear Washingtonians:

Washington, DC is growing, and we owe it to our current and future residents to provide a transportation system that is safe, sustainable, and equitable.

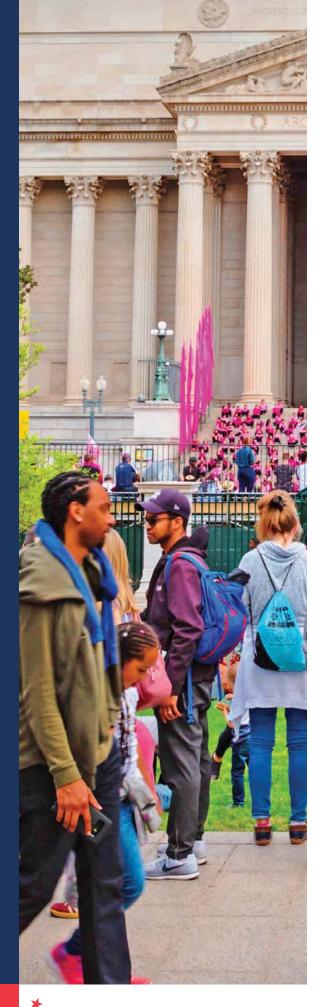
DDOT is preparing for this bright future: in addition to delivering complex projects like the beautiful new Frederick Douglass Memorial Bridge, we have launched environmentally sustainable transportation options like the DC Streetcar, and we have transformed the DC Circulator into the best way to connect and access our diverse and beautiful neighborhoods. Our goal is to make transit more efficient with projects that create dedicated space for buses like our Car Free Lanes and the K Street Transitway, the first such project that will help buses move quicker through the downtown core. Along the way, with the help of federal and community stakeholders and partners, we have made Washington, DC into one of the nation's most bicycle-friendly cities. But we are not done yet! Our Vision Zero initiative brings together engineering, education, and enforcement resources from across District government to create safe streets for everyone.

moveDC is our long-range transportation plan, built on a framework of goals: safety, equity, mobility, project delivery, management and operations, sustainability, and enjoyable spaces. It reflects our commitment to not only provide excellent transportation facilities and services, but to deliver them in a manner that addresses structural injustices and inequities. moveDC's goals, policies, and strategies put this commitment into practice by making equity an explicit component in the prioritization and delivery of both projects and services, just as equity is a critical framework of our transportation infrastructure.

The moveDC planning process was inclusive, with participation from hundreds of residents and stakeholders from every ward of the District. Now, let's moveDC together.

Sincerely,

Muriel Bowser, Mayor



# Acknowledgments

The development of the moveDC 2021 update would not have been possible without the involvement of the people of the District of Columbia. Our special thanks to the thousands of residents, business owners, and employees who shared their thoughts, suggestions, and ideas with the study team through the surveys, interactive mapping tools, town halls, emails, and telephone calls. Thank you!

DDOT would like to thank the District of Columbia agency staff who provided valuable insights and feedback that made the plan stronger and ensured its alignment with other District initiatives and policies.

DDOT would also like to thank the moveDC Working Group whose willing participation and informed input shaped the plan and grounded it with their knowledge and experience.

DDOT would also like to thank the consultant team that supported DDOT in the preparation of the moveDC 2021 update: RK&K, Kimley-Horn and Associates, Foursquare ITP, Tina Boyd & Associates, Toole Design Group, and Cityfi.

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# Executive Summary

moveDC 2021 is the long-range transportation plan for the District of Columbia. Under Mayor Bowser's leadership, moveDC 2021 establishes goals, policies, strategies, and metrics for the District Department of Transportation (DDOT) to invest in transportation facilities and programs that address the needs of Washingtonians across all eight wards.

moveDC 2021 provides an overarching framework of goals and policies that will guide transportation decisions in the District of Columbia over a 25-year period. It identifies a series of strategies to achieve the goals and policies, and tools to identify needs and priorities for different modes of transportation. The importance of equity in DDOT's actions and policies is underscored, and consideration of equity is embedded in the plan.

The development of moveDC 2021 began with a study of the transportation context in the District: the existing transportation network and the factors that will influence the outcomes of the plan. Next, the plan looks to the future by identifying goals, policies, and strategies. Mobility Priority Networks show where DDOT will invest in safety and mobility improvements for specific modes.

#### GOALS

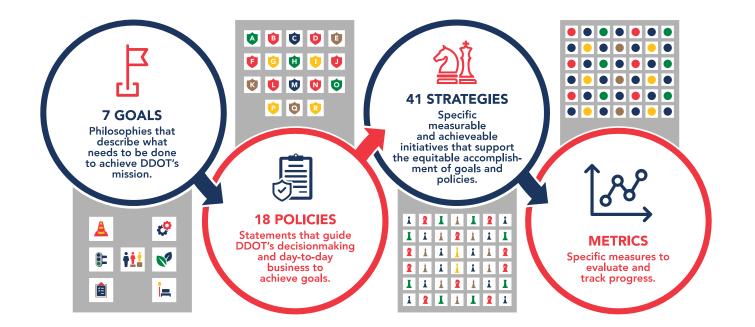
The goals provide an overarching vision of what DDOT desires to achieve with implementation of the moveDC 2021 update. The plan identifies goals for each of the following seven topics: safety, equity, mobility, management and operations, project delivery, sustainability, and enjoyable spaces.

#### POLICIES

moveDC has 18 policies that define how the goals will be achieved. These policies provide direction for DDOT by guiding decision-making and day-to-day business.

#### **STRATEGIES**

The 41 strategies in the plan are specific actions that DDOT will take to accomplish the policies and support the achievement of the goals. moveDC is a 25-year plan, but the strategies represent discreet actions that DDOT can take in pursuit of these goals and policies.







The full implementation of the moveDC plan will result in better multimodal access across the District, achieving the plan's key elements and goals while elevating and advancing transportation equity.

#### **MOBILITY PRIORITY NETWORKS**

DDOT studied how pedestrians, transit, bicycles, freight, and vehicles move through the District, as well as how curb space is used and managed. Pedestrians should have safe, comfortable sidewalks on every street. Buses, bicycles, and freight benefit from defined networks within the overall transportation system to provide safety, efficiency, connectivity, and access. Mapping these networks reveals where there are gaps in the existing networks preventing safe, efficient, and connected travel — helping DDOT target where improvements are needed. The Mobility Priority Networks are not a list of projects, but rather a vision for a connected network to be built out over the 25-year life of the plan. DDOT will use the networks to guide future decisions about which projects will be selected and subsequently implemented.

#### **IMPLEMENTATION OF THE PLAN**

DDOT has refined its process for selecting and prioritizing projects and programs for funding in the Statewide Transportation Improvement Program (STIP). This process will ensure that the allocation of local and federal budgets aligns with moveDC. The selection and prioritization process uses the policies, strategies, metrics, Mobility Priority Networks, and an Equity Assessment Tool. Phased implementation steps have been identified for each strategy — most of which DDOT can advance in the near term — and others which will require more time and resources.

#### **MONITORING OUTCOMES**

moveDC is performance-based and uses quantifiable metrics and time frames to guide planning, project development, maintenance, and operations decisions. Performance metrics for each strategy have been established to indicate progress or lack of progress of our goals. In addition, during future plan updates, policies and strategies will be modernized and refined based on performance and lessons learned.

The full implementation of the moveDC plan will result in better multimodal access across the District, achieving the plan's key elements and goals while elevating and advancing transportation equity.



#### DDOT: WHO WE ARE AND WHAT WE DO

DDOT was established by *The District Department of Transportation Establishment Act of 2002* as a cabinet-level agency responsible for the management of transportation infrastructure and operations. Every day more than 1,000 members of the DDOT team work to ensure that the District's transportation infrastructure is safe, reliable, and easy to navigate for residents, commuters, and visitors.

DDOT provides safe, attractive, and convenient pedestrian amenities and public spaces, including sidewalks, tree boxes, and crosswalks; supports bicyclists and pedestrians through the design and construction of safe and convenient facilities, lanes, and trails; provides transit services and ensures that transit vehicles are able to move quickly and efficiently on District streets; manages the traffic signals; and supports the efficient movement of deliveries that are the lifeblood of businesses in the District. DDOT also maintains the bridges, roads, sidewalks, alleys, tunnels, and streetlights in the District.

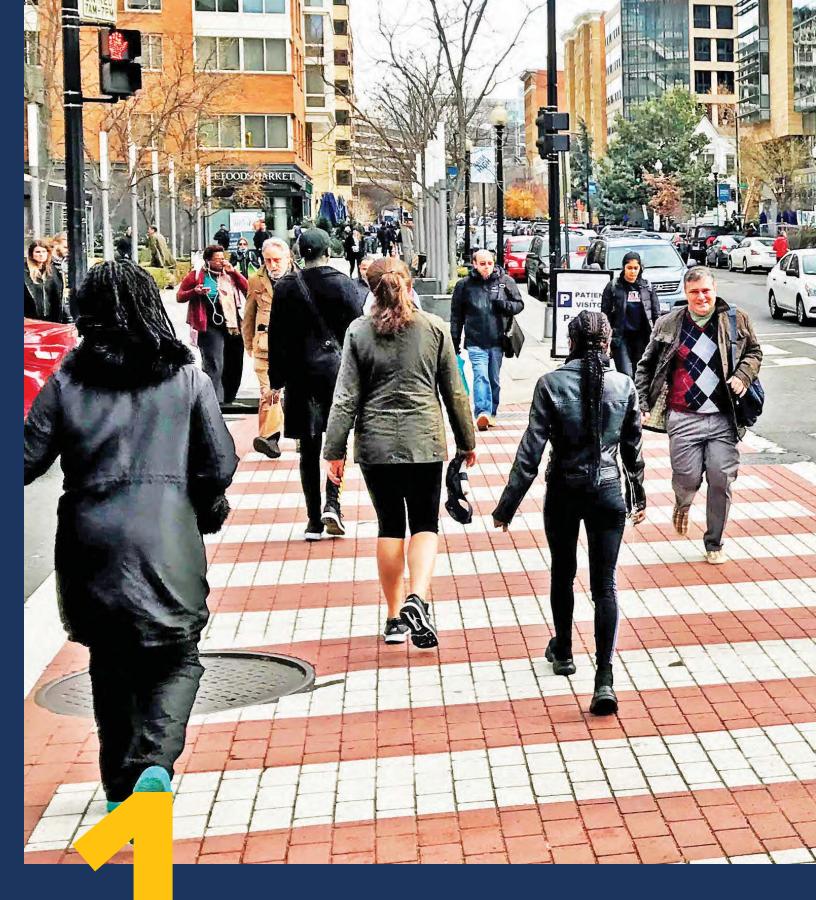
DDOT's vision is that DDOT will continue to be a national leader in creating safety and mobility solutions for the existing and emerging transportation opportunities within our community. DDOT will prioritize building safer infrastructure across all eight wards, utilize innovative technologies and strategies to reduce congestion and greenhouse gas emissions, and expand our transit systems to connect residents to economic opportunities.

DDOT's mission is to equitably deliver a safe, sustainable, and reliable multimodal transportation network for all District residents and visitors. This update of moveDC, DDOT's long-range plan, will help us accomplish our mission and bring our vision to reality.



**DDOT maintains:** 

- 95 miles of bicycle lanes
- 60 miles of trails
- 1,407 miles of sidewalks
- 190,000 public trees
- 1,040 miles of roadways
- **350** miles of alleys
- **237** bridges
- 15 tunnels
- 🌱 75,000 streetlights
- **8** 1,700 traffic signals



# **Building the Plan**



#### WHY CREATE A LONG-RANGE TRANSPORTATION PLAN?

A long-range transportation plan plays an important role in determining the existing conditions and future needs of a transportation system. moveDC sets the direction of planning efforts and programming investments for the District of Columbia. Developing and implementing a long-range plan requires DDOT to look beyond day-to-day activities and issues and instead use goals, policies, and metrics to guide decisions about investments.

Importantly, a long-range plan is a living document, updated and revised periodically. Changes in the economy, technology, demographics, physical development, the natural world, and societal values can all be factors that require changes or modifications to the plan. Adding to these, needs related to safety, congestion, and climate change have become increasingly important.

moveDC defines the agency's goals, identifies its needs, and includes a series of strategies to address those needs and a process to prioritize them. Throughout the development of the plan, stakeholder involvement and public input have been solicited to help guide priorities. DDOT must prioritize its transportation needs and investments across all travel modes and facilities and spend transportation dollars wisely, and this plan will guide decision-making and the prioritization of future funding.

#### **Federal Planning Requirements**

In its statewide planning rule, the U.S. Department of Transportation requires that each state prepare a longrange statewide transportation plan for the development and implementation of the multimodal transportation system, including transit, highway, bicycle, pedestrian, and accessible transportation. This plan must identify how the transportation system will meet the state's economic, transportation, development, and sustainability goals among others — for a minimum 20-year planning horizon.

The table on the next page shows moveDC's compliance with the federal requirements. DDOT is a state Department of Transportation, and as such, receives a direct annual apportionment of Federal Highway Administration (FHWA) funds. Therefore, a long-range plan is required of DDOT. However, the District of Columbia is obviously quite different from other states, being fully urbanized and having only one centralized government.

The District of Columbia Statewide Transportation Improvement Plan (STIP) is another federally-required planning element. The STIP is a multi-year listing of all phases of the surface transportation projects to be built with federal funding or of regional significance during the



#### Federal Requirements for a Long-Range Statewide Transportation Plan

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Requirement:	Status and Notes:
Statewide Transportation Plan (STP) should have a minimum 20-year forecast period that provides for the development and implementation of the multimodal transportation system and considers and includes elements and connections across all modes.	moveDC's forecast year is 2045, more than 20 years in the future.
STP should include capital, operations, and management strategies, investments, procedures, and other measures aimed at preservation and most efficient use of the existing transportation system.	moveDC includes goals, strategies, implementation steps, and metrics that will both preserve and expand the multimodal transportation system.
STP should reference, summarize, or contain any applicable short-range planning studies; strategic planning and/or policy studies; transportation needs studies; management systems reports; emergency relief and disaster preparedness plans; and any statements of policies, goals, and objectives on issues relevant to STP.	Current DDOT and District plans were reviewed for consistency with moveDC goals, policies, and strategies; strategies reference associated studies, policies, and plans.
STP should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects contained in the Strategic Highway Safety Plan required by 23 U.S.C. 148.	DDOT follows a safety planning process in compliance with federal requirements; moveDC includes safety provisions that are consistent with DDOT's safety plans and programs.
The long-range statewide transportation plan should include a security element that incorporates or summarizes the priorities, goals, or projects set forth in other transit safety and security planning and review processes, plans, and programs as appropriate.	DDOT follows a security planning process that complies with federal requirements; the development of moveDC included coordination with DDOT security groups.
STP should be developed in cooperation with the affected metropolitan planning organizations (MPOs).	The National Capital Region Transportation Planning Board was included in a stakeholder group that provided input on the draft plan, and the MPO technical committee was briefed on the process.
STP should be developed in consultation with state, tribal, and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation. This requires comparison of transportation plans to state and tribal conservation plans or maps and inventories of natural or historic resources, if available.	The process to develop moveDC included extensive consultation with the District's government agencies. As a fully urbanized jurisdiction, there are no other agencies with independent responsibility for land use management or tribal conservation plans.
STP should be published online.	moveDC is available online.
The state should evaluate, revise, and periodically update the STP.	DDOT will regularly evaluate and update moveDC.
Copies of any new or amended STP documents should be provided to the FHWA and the FTA.	DDOT will transmit moveDC to the FHWA and the FTA.

four-year period of the STIP. The projects in the STIP must be consistent with moveDC. The STIP is updated every two years, so STIPs overlap, allowing for adjustment and redirection. The projects selected for the STIP will enable DDOT to achieve the goals of moveDC.

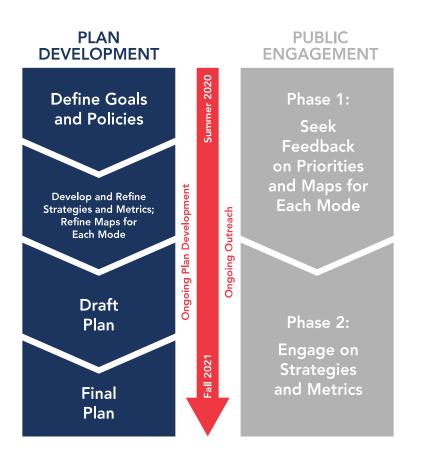
Recent federal transportation laws have established requirements for performance measures to ensure states are investing transportation funds in projects that collectively will contribute towards the achievement of national goals. DDOT and its sister agencies in the District have been working on implementing these requirements by setting performance targets and developing Transportation Performance Management (TPM) plans to achieve them. Both moveDC and the STIP work together and are aligned to support performance-based planning by establishing metrics and targets in the areas of safety, asset management, system performance, and more.

#### HOW MOVEDC RELATES TO OTHER DISTRICT AND DDOT PLANS

The goals and policies of moveDC work in concert with DDOT's vision and other District of Columbia and DDOT plans. DDOT reviewed existing plans and policies to determine how moveDC will support and amplify District goals and specific DDOT plans. DDOT reviewed the following plans:

Age-Friendly DC 2023 Strategic Plan	Capital Bikeshare Development Plan
Alley Closing Policy	DDOT District Mobility
Carbon Free DC	DDOT Freight Plan
DC Comprehensive Plan, Transportation Element	DDOT moveDC 2014
DC State Rail Plan	DDOT Public Involvement Plan
DDOT 2010 Sustainability Plan	DDOT Transportation Asset Management Plan
DDOT Agency Performance Plan and Accountability Report	DDOT Vision Zero Action Plan
DDOT Complete Streets Policy	Resilient DC
DDOT Curbside Management Overview	Sustainable DC 2.0
DDOT Curbside Management Study	DC Circulator Transit Development Plan





**Above:** Diagram illustrating the update process DDOT used to develop moveDC 2021.



The process for updating moveDC began with the definition of goals and policies, followed by the development of strategies and performance metrics.

#### MOVEDC UPDATE PROCESS

moveDC 2021 is an update of moveDC 2014, and it will be updated approximately every five years to reflect changing transportation needs and priorities. The process for this update of the plan began with the definition of goals and policies, followed by the development of strategies and performance metrics. DDOT shared these with the public and stakeholders in two rounds of public meetings, asking each time for input and suggestions.

#### Engaging the Public and Stakeholders

The purpose of public engagement for moveDC was to expand community and stakeholder understanding of the issues addressed by the plan, solicit ideas for how to guide and prioritize future transportation investments, and learn about community values to inform future transportation investments.

The primary audiences for this engagement were District residents and DDOT stakeholders, but also people who work in, visit, or travel through the District. The elements of the plan — the goals, policies, and strategies; the approach to equity; and the Mobility Priority Networks — were developed in draft form and shared with the public and stakeholders for their input.

DDOT attended many Advisory Neighborhood Commission (ANC), advocacy, and community group meetings and leveraged those relationships by asking groups to share information about the plan and the moveDC engagement opportunities.

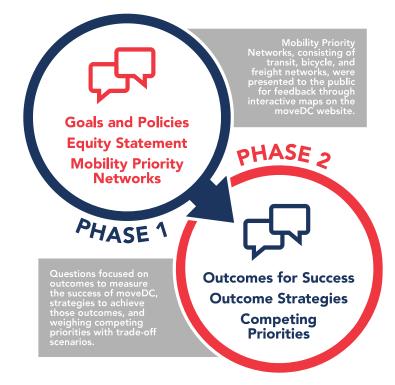
Thousands of flyers, posters, and yard signs about the plan and the surveys (in English and Spanish) were distributed at venues that were still open despite COVID-19: bus stops, grocery stores, food distribution sites, recreation centers, schools, libraries, places of worship, and District of Columbia Housing Authority (DCHA) multifamily sites.

DDOT used social media and online news platforms to increase awareness of the moveDC engagement process. DDOT and partners such as the Mayor's Office posted on Facebook, Twitter, Instagram, and YouTube to encourage people to take the surveys and participate in the planning process. A digital advertising campaign ran ads on social media platforms and local online radio stations.

DDOT used online surveys (in English and Spanish) and interactive maps on the project website as the primary means of gathering public input, but also collected comments and suggestions through the following tools:

- A project phone line with telephone office hours where residents could call and talk to DDOT staff about the plan, take the surveys over the phone, or simply leave a message.
- Four virtual town halls to provide information about the plan and allow the public to ask questions of DDOT staff. American Sign Language (ASL) interpreters were provided at all town halls. For those unable to attend at the scheduled times, videos of the presentations (in English and Spanish) were posted on the website.
- Email

moveDC had two phases of public engagement in which input was sought on the following:





**COVID-19** impacted traditional communications with the public. The moveDC team held online virtual meetings and used social media, emails, digital media ads, and the project website for an online presence, as well as attended ANC meetings. **DDOT** partnered with advocacy groups to distribute posters, yard signs, and flyers throughout the **District to inform** the public about the surveys and town halls.





## What We Heard From You:

"Safety has to be the top priority for transportation in the District."

#### PHASE 1

The goals shared for feedback were safety, mobility, sustainability, management and operations, project delivery, and enjoyable spaces. In general, the public placed the highest importance on safety, mobility, and sustainability as moveDC goals (in that order), although there was broad support for the other goals as well. The draft moveDC policies also received very high levels of support. In addition to dozens of comments provided by email, voicemail, and telephone office hours, more than 7,000 open-ended comments were provided through the survey.

Improved safety, particularly for pedestrians and bicyclists, was a key theme in the open-ended comments, alongside the need for safe, reliable, and high-quality public transit and other non-single-occupancy-vehicle travel modes for residents. For more information about the Phase 1 engagement, see the Phase 1 Engagement Summary Report.

The overall level of participation in the survey (4,279 responses) was higher than anticipated given the constraints. However, despite the moveDC team's targeted efforts to inform residents of Wards 7 and 8 and low-income residents about the survey, nonwhite and lower-income individuals were underrepresented as part of the total survey sample. Lower-income individuals generally face more barriers to participate in planning processes. This was particularly true during moveDC 2021 engagement, given the economic and health struggles that have been exacerbated for many people during the COVID-19 pandemic. For this reason, DDOT has looked particularly closely at the responses provided by nonwhite and lower-income individuals, as well as individuals who do not have private vehicle access, to ensure their perspectives are considered.

#### PHASE 2

Phase 2 used the same engagement tools and forums as used in Phase 1 with the exception of the interactive maps. The quantity of informational materials distributed was doubled in Phase 2 in response to public requests and in an effort to increase engagement in specific wards. Because of lower participation rates in Wards 7 and 8 in Phase 1, distribution of informational materials was proactively targeted to those wards. This approach was successful: 5,498 surveys were submitted during the Phase 2 engagement and the number of respondents from Wards 7 and 8 almost doubled, from 216 in Phase 1 to 417 in Phase 2.

However, while the share of nonwhite respondents increased from Phase 1 to Phase 2, the overall participation in Phase 2 still did not reflect the demographics of District residents, particularly with respect to race and income. Relative to the District overall, survey respondents were still much more likely to be white, more likely to have a household income of \$50,000 or higher, and generally more likely to live in central parts of the District.

The Phase 2 survey asked participants to select outcomes that would indicate the success of moveDC, identify their preferred strategy to achieve those outcomes, and weigh competing priorities in a series of trade-off questions. The most commonly selected outcomes were: improving safety, enhancing the built environment, and improving existing infrastructure. In general, respondents favored strategies and trade-offs that deemphasized driving private vehicles. This is consistent with feedback received in the Phase 1 survey, where the public most highly prioritized improvements related to transit, walking, and bicycling.

In addition to dozens of comments provided by email, voicemail, and telephone office hours, thousands of open-ended comments were provided through the survey. The need for improved safety particularly for pedestrians and bicyclists — was a key theme in the open-ended comments, alongside the need for safe, reliable, and high-quality public transit and other non-single-occupancy-vehicle travel modes for residents. For more information about the Phase 2 engagement, see the Phase 2 Engagement Summary Report.

#### EQUITY

Concurrent with the moveDC update, a special working group within DDOT focused on developing an equity statement for the agency. DDOT adopted the equity statement shown at right, and it is incorporated into moveDC to ensure equity is central to DDOT's work as described in the mission.

### **DDOT'S EQUITY STATEMENT**

DDOT recognizes that there are inequities in transportation policy, planning, and project delivery in Washington, D.C. Deep-rooted structural injustices and inequities have contributed to the disparate access to safe, affordable, and efficient transportation that provides access to economic opportunities, housing, and services for communities across the District. DDOT also acknowledges these inequities have disproportionately and negatively impacted environmental and health outcomes in our under-resourced communities.

Through our organizational framework, DDOT is committed to elevating and advancing transportation equity by evaluating our policies, planning, and community engagement and project delivery to ensure public investments in transportation justly benefit all residents, visitors, and commuters. Additionally, DDOT values how diversity within our department helps shape the work we produce. To that end, DDOT will continue to recruit, hire, and retain a workforce that reflects the diversity of the District at all levels of the organization.

DDOT recognizes its shared responsibility to acknowledge and prevent transportation inequities while explicitly upholding antiracist and antidiscriminatory practices. In honoring this commitment, we will continue to listen, learn, and strive towards equity, inclusion, and access in response to the needs of communities across the District.

#### **DEFINING EQUITY**

Transportation equity is the shared and just distribution of benefits and burdens when planning for and investing in transportation infrastructure and services. Just distribution means investing in the communities and areas that are in the greatest need that include, but are not limited to:

- People of color
- People with low income
- People living with disabilities
- LGBTQ+ people
- Individuals who identify as female
- Youth and older adults
- Residents at risk of displacement
- People experiencing homelessness or housing insecurity
- Immigrant and refugee communities
- People with limited English proficiency and literacy





**DDOT's** maintenance requirements are already changing as rainstorms are more intense and stormwater management is becoming more challenging. As the sea levels rise, they affect the Potomac and Anacostia **Rivers**, which are projected to rise 40 inches by 2080.

#### The Role of Equity in moveDC

DDOT adopted the equity statement to complement the department's mission and vision. DDOT has made equity one of the moveDC goals and has committed to incorporating equity into moveDC in three ways:

**Inclusive Engagement:** Everyone living and working in communities across the District must be included in DDOT's decision-making. moveDC 2021 emphasizes community engagement in an effort to:

- Expand resident and stakeholder understanding of the issues and opportunities addressed by the plan
- Solicit meaningful feedback from residents and users of the transportation network
- Build support for subsequent actions and investment

Participatory planning extends beyond the process and into the plan itself. The goals and policies in the moveDC 2021 update support and encourage inclusive engagement through implementation of moveDC projects and programs.

**Goals and Policies:** DDOT has identified policies and strategies in the moveDC 2021 update that can promote more equitable outcomes. Chapter 3 presents the policies and strategies and identifies those that support equity.

**Performance Measurement:** DDOT's performance will be measured by the extent to which equitable outcomes have been achieved in communities that have historically lacked transportation investments.

#### **SUSTAINABILITY**

Sustainable DC 2.0 is the District's plan for the long-term health of its citizens and the environment. It has two overarching goals that provide guidance for moveDC's planning:

- Reduce greenhouse gas emissions from all local sources to put us on track to eliminate emissions by 2050
- Advance physical adaptation and human preparedness to increase the District's resilience to climate change

Transportation generates 21 percent of DC's greenhouse gases (GHG), second only to buildings. moveDC provides strategies to reach Sustainable DC's target of 60 percent GHG reduction by 2032. These strategies have the dual effect of addressing the climate crisis and reducing transportation inequities in underserved communities:

• Build an efficient, safe, and convenient transportation system that is available to everyone

- Invest in public transit, walking, and bicycle infrastructure and center the community in building a more resilient system
- Implement policies that prioritize righting past injustices

Creating a sustainable transportation system also requires strategies for resiliency to adapt to the changing climate. moveDC includes a focus on maintaining transportation infrastructure in a state of good repair.

DDOT's maintenance requirements are already changing as rainstorms are more intense and stormwater management is becoming more challenging. As the sea levels rise, they affect the Potomac and Anacostia Rivers, which are projected to rise 40 inches by 2080.



Transportation Conditions and Context

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#### WHERE WE ARE IN 2021

A long-range plan requires an understanding of the existing conditions in the District. As part of the development of moveDC, DDOT created a Snapshot of existing conditions to serve as a baseline for the moveDC 2021 update. The Snapshot compiles a wide array of data into a story about existing conditions, including current issues and challenges, trends, and the state of transportation in the District. This chapter presents some of the key findings from the Snapshot. To see the full Snapshot, go to the moveDC website.

#### **Population and Job Growth**

Since 2014, there has been widespread growth in the District of Columbia in jobs, population, and housing.

With this growth comes the need for more and enhanced mobility options. Over the next 25 years, the District is projected to add more than 250,000 residents, 90,000 housing units, and almost 200,000 jobs. Areas in the Southeast and Northeast quadrants of the District and Northwest quadrant east of Rock Creek Park are projected to have the greatest population density increases.

There is a higher rate of population growth around Metrorail stations, particularly near the Columbia Heights and Stadium-Armory Stations. The central business district, southwestern parts of the District, and the Navy Yard will experience the highest increases in employment density. The Navy Yard and the areas around the Union Station, NoMa, and Rhode Island Avenue Metrorail Stations are forecast to experience an increase in both employment and population density in the next 25 years. The District added more than 100,000 residents since 2010 and expects to add 250,000 more by 2045.

Projected Population and Job Growth in the District, 2020 to 2045





The long-term impact of COVID-19 is unknown: travel has decreased by nearly 90 percent on Metrorail and by nearly 60 percent on Metrobus. (Source: WMATA)



As early as March 2020, the number of Uber trips declined by 60 to 70 percent in US cities hard-hit by COVID-19.



In April 2020 the number of scooter trips across the country was down nearly 100 percent from April 2019.



Capital Bikeshare trips were down 56 percent year-over-year between March and May 2020.



In March 2020 transit trips were down by nearly 90 percent on Metrorail and by nearly 60 percent on Metrobus.

This growth will require increasing the use of non-auto modes to maintain mobility for District residents and employees. Implementation of the moveDC strategies is key to achieving this.

#### **Transportation Network**

The following section looks at some of the key features of the District's transportation network and how they provide mobility to the District's residents, employees, and visitors. In moveDC, mobility is defined as having a way to get where you need to go safely and reliably.

Many different modes of transportation move people and goods in the District. Elements of the District of Columbia's transportation network include public transit; interstates and local roads; passenger and freight rail; and active transportation networks for walking, bicycling, and rolling.

Major features of the District's transportation infrastructure include:

- 7.26 miles of dedicated bus lane corridors, both existing and under construction
- 6 Metrorail lines serving 40 Metrorail stations in the District



- 95 miles of bicycle lanes
- 1,407 miles of sidewalks
- 2.4-mile DC Streetcar with eight stops
- Union Station, serving 37 million users annually on eight modes



1,040 miles of streets



237 bridges

Nearly half of all Metrorail stations are in the District. The District's dedicated bus lanes on Georgia Avenue and H and I Streets NW cover about 2 miles; five additional bus lanes are planned to be implemented over the next several years.

Furthermore, the District's bicycle lanes and trails are within walking distance (one quarter-mile) of more than 80 percent of the population and 90 percent of jobs. About 15 miles of interstate highways traverse the District,



including I-66, I-95, I-295, I-395, I-495, and I-695. The District maintains a 75-mile network of critical urban freight corridors.

#### **Transportation Factors**

A factor is a circumstance, fact, or influence that contributes to a result or outcome. The following transportation factors play a role in determining the outcomes of moveDC. These factors are incorporated in the strategies and performance metrics in moveDC.

#### TRAVEL CHOICE

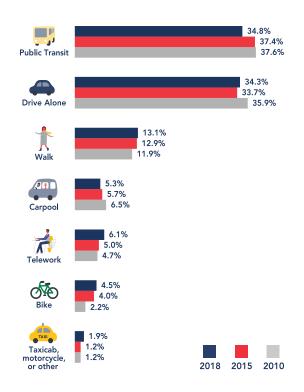
As part of DDOT's climate adaptation strategy to meet Sustainable DC's goals, DDOT has a goal of shifting to 75 percent non-auto commuter trips by District residents by 2032. In 2018, 66 percent of commuter trips by District residents were by non-auto modes. To achieve this goal, DDOT must prioritize transit, keep speeds safe for pedestrians and bicyclists, and address network gaps while supporting economic vitality. Reaching the 75 percent goal appears to be within reach, given trends in travel choices in recent years as well as the impacts from the COVID-19 pandemic on telework.

Over the last decade, driving alone and public transit have been the most popular ways to commute to work, with each mode currently having a share of more than 34 percent. However, both of these modes as well as carpooling have lost share during the same time period because walking, working from home, bicycling, taxiing, and other modes have gradually increased. Telework accelerated during the COVID-19 pandemic and can reasonably be expected to increase over pre-pandemic levels after the pandemic ends.

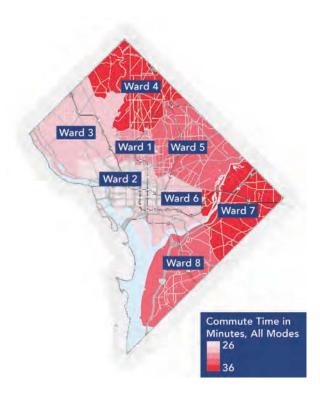
#### **COMMUTE TIMES**

The average commute time of District residents is 32 minutes, but it varies by how one travels as well as where the trip begins and ends. The average commute time varies by ward between 26 and 36 minutes. Ward 2 has the shortest average commute time of 26 minutes, while Ward 7 has the longest average commute time of 36 minutes. By comparison, the regional average is 35 minutes, the third highest in the country.<sup>1</sup>

People walking in the District have the shortest commute times, which is not surprising since people will usually choose to walk only if they have a short commute. Those taking transit have the longest commute times.



Above: Commute mode share in the District from 2010 to 2018. Source: US Census 2018 American Community Survey (ACS) 5-Year Estimates.



Above: Average commute time for all wards in the District. Source: US Census 2018 American Community Survey (ACS) 5-Year Estimates.

US Census, 2018 American Community Survey 5-Year Estimates

#### **BUS TRANSIT RIDERSHIP**

Nationwide and in the District, bus ridership is in decline as it competes with ridehailing services, carshare, scootershare, and increased urban congestion. Since 2014, transit ridership in 2019 declined by 13 percent for Metrorail and 22 percent for Metrobus. Even before the COVID-19 pandemic, teleworking was also on the rise (an increase of 1.3 percent between 2010 and 2019), reducing the need for traditional commuting.

Transit mode share decreased over the last decade by 3 percent while walking, bicycling, teleworking, taxis, and taxi-like service increased in mode share. Despite these trends, bus transit remains a critical piece of the mobility fabric in the District, with nearly as many people in the region riding the bus every day as ride Metrorail and commuter rail. Reaching moveDC's goal for non-auto travel will require successful implementation and operation of improved bus transit. One of the main reasons people give for not using bus transit is slow travel speeds.

#### TRAVEL TIME RELIABILITY

Unreliability in travel time can be a bigger problem than recurring congestion. When planning trips, travelers build in extra time to account for disruptions like roadway conditions, weather, construction, crashes, and special events. This variability in trip time is measured by the planning time index (PTI).

A score of 1 means the trip time is consistently the same from day to day, while higher scores mean the variation from day to day is greater and more time needs to be built into trips to be sure you arrive on time. A value of 2, for example, means that for a 30-minute trip in light



Above: Average commute time by mode in the District in 2018. Source: US Census 2018 American Community Survey (ACS) 5-Year Estimates, Mean Travel Time to Work (Minutes).

### Planning Time Index (PTI) in the Weekday AM Peak by TMC Segment



traffic, 60 minutes should be planned. The distribution of weekday PTI scores in the AM peak period are relatively even and range between 1 and 1.25 on most roads in the District. Exceptions are sections of I-295, I-395, and New York Avenue NE where the score is higher.

#### **HIGH-FREQUENCY TRANSIT**

Transit is most useful and attractive when it is within convenient walking distance and operates at high frequency. Convenient walking distance is defined as a halfmile walk from Metrorail station entrances and a quartermile walk from bus stops. These are the distances most people are willing to travel to reach these services. High frequency is defined as an average of one train every five minutes or better and one bus every ten minutes or better.

During peak periods (weekday mornings and evenings), 70 percent of the District's population and 80 percent of the District's jobs are within walking distance to highfrequency Metrobus and DC Circulator routes, but only 32 percent of the District's population and 67 percent of the District's jobs are within walking distance to highfrequency Metrorail service. This data underscores the significance of moveDC's bus priority program, as no new Metrorail stations are planned in the foreseeable future.

#### **BICYCLIST COMFORT**

Bicyclists are sensitive to traffic conditions and infrastructure and are likely to choose bicycling for transportation only if their trip can be completed on streets at or below their individual stress comfort level. To understand how comfortable streets feel to bicyclists they are rated by "stress levels" for bicycling ranging from LTS 1, a low speed and low volume street, to LTS 4, a street comfortable only for advanced bicyclists.

The scoring of streets considers factors including the presence of on-street parking, presence of bicycle lanes, street width, and the number of traffic lanes, speed limits, crash rates, and signalized intersections. This information helps bicyclists plan the best route to their destination and helps decisionmakers improve network connectivity.

#### PEDESTRIAN FRIENDLINESS

How attractive an area is to pedestrians depends on street network design, sidewalk availability, and how easy it is to get to the buildings on the street. An area deemed "most walkable" has a small, short blocks in a connected grid pattern, with sidewalks on both sides of each street, buildings that are close to the street, and intersections that are comfortable and easy to cross. There are areas across the District that could be improved to increase pedestrian friendliness.



Bicycle Levels of Traffic Stress (LTS) are defined as:

LTS 1: the level of traffic stress that most children can tolerate.

LTS 2: the level that the mainstream adult population would tolerate.

LTS 3: the level tolerated by bicyclists who are "enthused and confident" but prefer a dedicated facility for riding.

LTS 4: the level tolerated only by those characterized as "strong and fearless."

#### **VEHICLE CRASHES**

In 2015, the District launched the Vision Zero program and established the goal of zero fatalities and serious injuries from vehicle collisions by the year 2024. From 2016 to 2019, vehicle collisions in the District have increased by less than 1 percent<sup>2</sup>.

However, since the beginning of the pandemic, reported crashes have declined steeply, while their severity went up. This has led to a dramatic increase of fatalities in 2020 and in 2021 to-date. In 2018, there were 36 traffic-related fatalities, which dropped to 27 in 2019, but rose again to 37 in 2020<sup>3</sup>. This increase occurred across the country in 2020.

Preliminary data from the National Safety Council show an 8 percent increase nationwide over 2019, in a year where people drove significantly less frequently because of the pandemic. The increase in the rate of death is the highest estimated year-over-year jump that NSC has calculated since 1924 — 96 years<sup>4</sup>. DDOT is studying crashes and traffic patterns under COVID-19 closely to gain an understanding about traffic safety that may be applicable once the long-term effects of the pandemic have passed.

The Vision Zero Action Plan relies upon a holistic set of tools from the disciplines of engineering, evaluation, law enforcement, and education. The Vision Zero initiatives focus on high-injury corridors and prioritize funding to those locations.

DC Open Data, Crash Data 1970-2020
 DC Vision Zero Crash Data Analysis

4 Motor Vehicle Deaths in 2020 Estimated to be Highest in 13 Years, Despite

**Dramatic Drops in Miles Driven,** National Safety Council, Retrieved May 10, 2021

What We Heard From You:

"Don't forget about safety for motorcycles!"

High-Injury Corridors in the District

> High-Injury Corridors Water Parks Institutions Metrorail Station Metrorail

#### **Transportation Conditions and Context**

M-M-

M M

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The map on the previous page shows the highest-ranking crash corridors in the District, based on injury crashes by ward, as well as corridors identified in the Vision Zero Action Plan. These corridors represent at least 20 percent of all crashes with injuries in each ward, as well as over half of all fatalities since 2017.

# TRANSPORTATION NEEDS AND DISPARITIES

Defining and visualizing transportation needs will help DDOT prioritize investments and projects, improve and strengthen areas with the greatest needs, and target disparate system outcomes to provide a more equitable transportation network. This map and its underlying data will help hold DDOT accountable for making progress on improvements over time and will be used as a tool by DDOT project managers to reference as they plan and design projects.

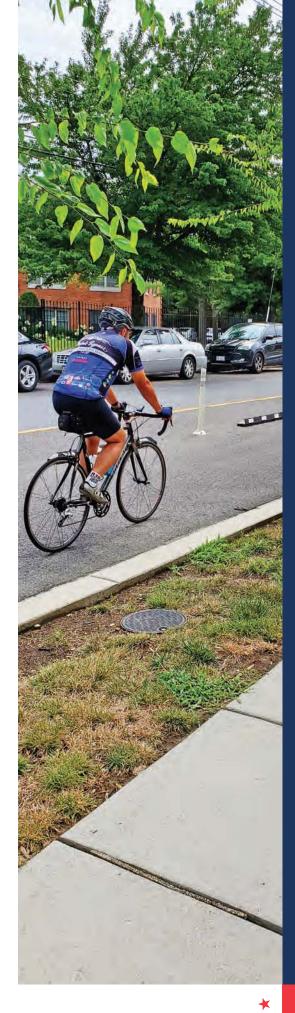
As DDOT works to implement projects that address these needs — especially those that benefit historically underresourced communities in areas of the greatest need — the location and distribution of improvements will vary. Safety improvements (i.e., redesigned intersections or protected bicycle lanes) are likely to occur directly in the areas that need them most. However, improving accessibility to jobs and destinations for an area might entail improvements outside that specific area, such as adding bus lanes to congested streets in the District core that serve bus routes originating from other areas of the District. Through the pursuit of continued improvements over time, DDOT expects improvements in the areas of greatest need shown on this map.

An awareness and understanding of these transportation needs and how they impact under-resourced communities is a critical component of DDOT's equity statement and the agency's commitment to elevating and advancing transportation equity by evaluating our policies, planning, community engagement, and project delivery to ensure that public investments in transportation justly benefit residents.

Understanding the inequities in transportation policies, planning, and project delivery in the District is a multi-step process, first identifying and mapping levels of transportation need, and secondly mapping the locations of concentrations of historically under-resourced communities, and then layering the two maps together.

#### **Transportation Needs**

DDOT analyzed the transportation network to identify where there is need for improvement. DDOT used proximity to frequent transit, access to jobs and destinations, and safety risks to identify where transportation improvements are needed.



#### **PROXIMITY TO FREQUENT TRANSIT**

**Below:** Diagram of the three elements analyzed together to determine transportation needs.

- Access to Rail: Areas within a half-mile walking distance of rail stations with train frequencies of five minutes or better during peak and midday
- Access to Bus: areas within a quarter-mile walking distance of bus stops with bus frequencies of ten minutes or better during peak and midday

#### ACCESS TO JOBS AND DESTINATIONS

Access to jobs and destinations<sup>5</sup> that can be reached:

- Within a 20-minute walk
- Within a 30-minute bicycle ride on low-stress streets
- Within a 30-minute bus ride
- Within a 30-minute train ride
- Within a 45-minute train and bus ride (that involves a transfer from one to the other)
- Within a 45-minute drive

#### **SAFETY RISKS**

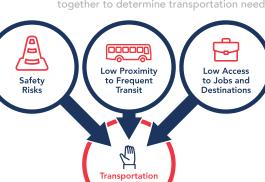
- High-stress/low-comfort bicycling routes
- Sidewalk gaps

23

Vision Zero high-crash corridors

The resulting map combines these three inputs and presents the overall levels of transportation needs across the District. The areas of greatest need for improved transit service, better access to jobs and destinations, and safer streets are shown in dark purple on the map.

5 Destinations include the following: grocery stores, supermarkets, big box stores, hospitals, health clinics, high schools, colleges and universities, senior centers, recreation centers, community centers, social security offices, libraries, city hall, post offices, and pharmacies



Needs

Areas of Transportation Need

Transportation Needs Index



**Note:** peach-colored areas are institutional land uses.

## Concentrations of Historically Under-Resourced Communities

The second step was mapping the areas with higher concentrations of historically underresourced communities — people of color, lowincome households, and persons with disabilities — and layering that information onto the map of transportation needs.

Comparison of the locations of the higher levels of needs and the areas of historically under-resourced communities shows how they coincide. Approximately 150,000 District residents live in areas with the greatest need. Of these 150,000 residents:

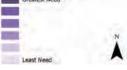
- 81 percent are people of color (compared with 64 percent Districtwide)
- 24 percent are lowincome residents (compared with 19 percent Districtwide)
- 14 percent are persons with disabilities (compared with 11 percent Districtwide)

The layered map reveals that when looking at the overall percentage of District residents, there are higher percentages of historically underresourced communities in the areas with the greatest needs. These maps provide compelling evidence of why consideration of equity in all DDOT does is so important.

This map is a tool DDOT will use to ensure it is making investments and improvements to address transportation needs in areas with concentrations of historically under-resourced communities. In these areas DDOT will be intentional and inclusive as it conducts community engagement, planning, design, and construction for projects that advance moveDC. There are higher percentages of historically under-resourced communities in areas with the greatest transportation needs.

Historically Under-Resourced Communities Within Areas of Transportation Need

> High Density of People of Color High Density of Low-Income Residents High Density of Persons with Disabilities Transportation Needs Index



**Note:** peach-colored areas are institutional land uses.





In 2015 DDOT committed to Vision Zero, Mayor Bowser's initiative to eliminate traffic fatalities and serious injuries on District streets through the effective use of engineering, enforcement, education, and data analysis.

#### **CORE DDOT FUNCTIONS**

DDOT has responsibilities that are constants in its dayto-day activities. These core responsibilities — safety, management and operations, and project delivery — are three of the moveDC goals. These constants relate to every mode in the District.

#### Safety

Promoting and increasing the safety of the public and of DDOT employees are of paramount importance to DDOT. DDOT promotes the safety of the traveling public by offering safety programs and information to District residents.

In 2015 DDOT committed to **Vision Zero**, Mayor Bowser's initiative to eliminate traffic fatalities and serious injuries on District streets through the effective use of engineering, enforcement, education, and data analysis. Working closely with community members to identify problems as well as using data on past crashes, Vision Zero focuses on managing speeds and conflict points and promoting safer modes of travel, such as transit, walking, and bicycling.

However, challenges remain in DDOT's road safety program. Vulnerable road users such as pedestrians and bicyclists remain overrepresented in traffic fatalities and severe injuries, and some of the District's most at-risk populations for other types of violence are also suffering disproportionately from traffic deaths and injuries.

The **Highway Safety Improvement Program** is a core federal aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. DDOT reports annually on the progress being made to improve safety.

Safety is at the core of every activity performed at DDOT. DDOT reviews all transportation planning and engineering studies, traffic control plans, and design plans at all stages of design and construction, and safety is integrated into all tasks and activities performed by DDOT.

The **Safe Routes to School (SRTS)** program improves safety for students who walk and bicycle to school, encourages students and their parents to walk and bicycle to school, boosts student physical activity, reduces fuel consumption, and reduces pollution and traffic congestion near schools.

SRTS partners with District schools to develop plans to provide safety for student walkers and bicyclists. DDOT also constructs sidewalks and offers bicycle education under this program.

#### **Management and Operations**

Among DDOT's ongoing responsibilities is maintaining DDOT facilities and equipment in a state of good repair and ensuring that bridges, pavement, and tunnels meet federal requirements.

Keeping the roads, bridges, tunnels, and all of DDOT's other facilities in a state of good repair is essential to providing the services that make up DDOT's mission. It is also important from a budget perspective: DDOT's infrastructure includes 237 bridges, more than 1,000 miles of pavement, and numerous other transportation assets.

Much of DDOT's capital budget for the next six years is committed to replacing or rehabilitating bridges and aging infrastructure. Keeping DDOT's existing assets in good repair is the foundation of a safe, connected, multimodal system.

#### **Project Delivery**

DDOT also manages projects across all eight wards of the District. Capital projects are typically more infrastructureheavy and larger in scale and scope, such as street reconstruction, streetscape projects, bridge replacement and rehabilitation, and trail projects.

At any given time, DDOT is actively constructing or designing multiple capital projects across the District. Each capital project is unique, with varying needs, geographies, levels of engineering, and budgets.

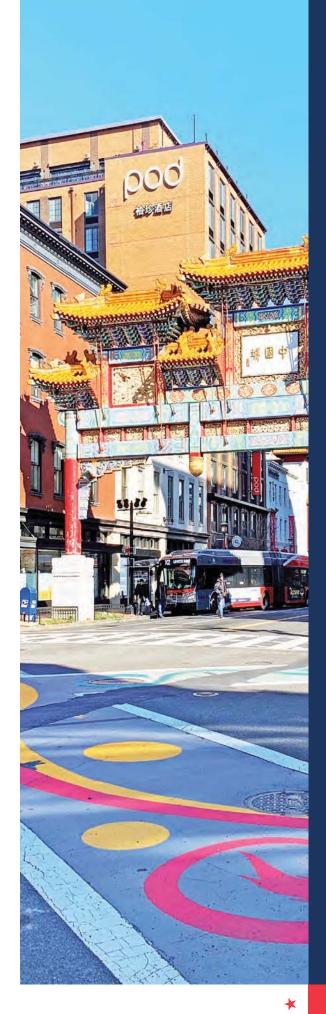
It is important to consider what types of new capital projects to pursue and add to the transportation network, and DDOT will continue to evaluate and prioritize projects in ways that best align with moveDC goals and seek to advance the modal priority networks.

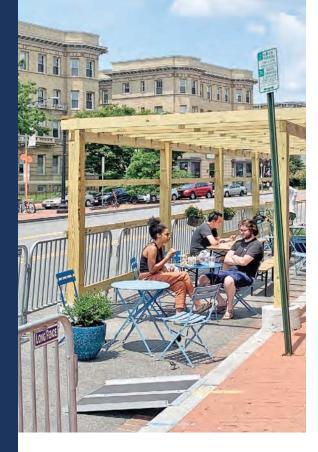
#### **EMERGING DDOT FUNCTIONS**

#### **DDOT Responses to COVID-19**

The COVID-19 pandemic had a dramatic impact on the District. DDOT adopted several policies and initiatives to adapt to the rapidly-changing transportation environment, keep District residents healthy and safe, and support local businesses.

• Three **Car Free Lanes** in high-traffic corridors supported improved efficiency in bus travel and created space for bicyclists, particularly as the region returned to work following the COVID-19 pandemic. This pilot project of dedicated red car free lanes allowed WMATA and DC Circulator buses to operate more efficiently, helping reduce passenger crowding and maintaining safe







There is a great demand for flexible uses of our streets and sidewalks to support public life and economic activity, not simply to move and store vehicles. distancing on buses. Bicyclists were also permitted to use car free lanes.

- **Streateries** permitted outdoor seating with physical distancing and other public health safety measures. Restaurants could apply to use expanded sidewalk space, alleys, parking lanes, and travel lanes for table seating.
- A Sidewalk Extension Plan supported social distancing for pedestrians near grocery stores and other essential businesses by allowing use of the curb lane for walking or bicycling during the pandemic.
- Temporary Permits for Restaurant Pick-Up and Drop-Off Zones allowed residents and commercial drivers to use the curb lane for easy access to restaurants and eateries that were still offering delivery or carryout services during the pandemic.

The initiatives listed above were undertaken as quickresponse efforts in the midst of a pandemic. Many were experimental in nature, and as such, DDOT and other stakeholders learned a great deal about what worked well and what could be improved.

As of the publication of this plan, DDOT is continuing to evaluate these initiatives and determine how they can be carried forward. One thing is clear: there is a great demand for flexible uses of our streets and sidewalks to support public life and economic activity, not simply to move and store vehicles.

While moveDC is a long-term plan, in the short term DDOT will be incorporating these lessons learned to prepare for a transportation system that can flexibly accommodate a greater range of uses for public space.

#### Green Infrastructure

Green infrastructure is the living network that connects landscape areas, natural areas, and waterways. In urban areas, green infrastructure captures rainfall, cools buildings and pavement, and creates natural pathways for wildlife. It includes low impact development techniques, which mimic nature to capture and treat stormwater as close to the source as possible.

Green infrastructure practices for streets include:

- Bioretention (rain gardens)
- Street trees
- Landscaped areas
- Permeable pavement
- Removal of unnecessary pavement

Through its green infrastructure investments, DDOT aims to provide multiple benefits to residents. DDOT is installing

green infrastructure as part of construction projects and in retrofit projects to reduce stormwater runoff in more areas of the city.

Green street and green alley projects utilize green infrastructure techniques and may be constructed where watershed and infrastructure improvements are prioritized.

These efforts include incorporating safety into stormwater retrofits. Project examples include bioretention facilities that provide traffic calming and improved pedestrian connections while reducing stormwater runoff and pollution.

#### **Autonomous Vehicles**

Autonomous vehicles are no longer part of the distant future — they are being tested in cities and states across the country. They will have an impact on DDOT's operations, infrastructure, and planning. Estimates of how soon autonomous vehicles will be here vary, and their infrastructure needs will change as the percentage of vehicles on the road that are automated grows. DDOT will track this emerging technology so that it is prepared to accommodate autonomous vehicles.



# Looking to 2045: Goals, Policies, Strategies, and Metrics

3

DDOT has established a framework of goals, policies, and strategies for moveDC 2021. The goals provide an overarching vision of what DDOT desires to achieve through implementation of the moveDC 2021 update. The policies and strategies are the tools by which the goals will be realized.

Each strategy has metrics that will allow DDOT to see if the strategies are having the desired outcomes and leading to the achievement of the goals.

#### Example:

Design transportation infrastructure to improve safety for all, especially for vulnerable roadway users.

**GOALS** Philosophies that describe what needs to be done to achieve DDOT's mission.

#### **Example:**

**Example:** 

Safety

## **STRATEGIES**

Specific measurable and achieveable initiatives that support the equitable accomplishment of goals and policies.

Implement a minimum of 20 intersection improvements per year. **POLICIES** Statements that guide

DDOT's decisionmaking and day-to-day business to achieve goals.

**METRICS** 

**Specific measures to** 

evaluate and

track progress.

#### Example:

Number of intersections redesigned, with improved turn phasing, and that eliminated dual turns.

30





DDOT will advance transportation equity by evaluating its policies, planning, community engagement, and project delivery to ensure public investments in transportation justly benefit all residents, visitors, and commuters.

#### GOALS

moveDC 2021 has a goal for each of the following subjects: safety, equity, mobility, project delivery, management and operations, sustainability, and enjoyable spaces. Each goal is defined with a goal statement:



#### Safety

DDOT will design and manage a transportation network that offers safe and secure travel choices for all users, in accordance with Mayor Bowser's Vision Zero initiatives.



#### Equity

DDOT will advance transportation equity by evaluating its policies, planning, community engagement, and project delivery to ensure public investments in transportation justly benefit all residents, visitors, and commuters.



#### Mobility

DDOT will increase system reliability, improve accessibility and manage congestion through coordination, communications, and mobility options, providing safe and affordable travel choices for all users and trips.



#### **Project Delivery**

DDOT will complete projects on-time and onbudget while engaging and communicating with the community.



## Management and Operations (State of Good Repair)

DDOT will ensure the state of good repair for existing assets by investing in maintenance and operations to address the greatest mobility needs.



#### Sustainability

DDOT will manage and promote a transportation network that supports economic vitality and opportunity, reduces emissions, and strengthens resilience in the face of climate change, especially in historically under-resourced neighborhoods that may experience greater impacts.



#### **Enjoyable Spaces**

Public spaces and transportation systems managed by DDOT will be accessible, safe, and welcoming to residents, visitors, and commuters.



#### POLICIES

DDOT has established 18 policies that provide direction on how the goals will be achieved. These actionoriented policies will guide decision-making and day-to-day business. The table below lists the policies and their applicable goals. Many of the policies are relevant to more than one of the goals.

		,		ity	Project Delivery	Management and Operations	Sustainability	able is
		Safety	Equity	Mobility	Proje	Mana and Q	Susta	Enjoyable Spaces
	Policy Statements:		† <u>†1</u>	:	:	¢°		i=
A	Evaluate the prioritization of policies, programs, services, and capital projects from the standpoint of greater equity.		✓					
в	Engage the community in the definition and progress of projects, programs, and policies.		✓		✓			
с	Consider lifecycle costs in the development of new transportation investments.	✓			$\checkmark$	$\checkmark$		
D	Establish a performance-based approach to resource allocation and budgeting that aligns to the vision and goals of moveDC.		✓		✓	$\checkmark$		
E	Maintain and modernize existing assets in an equitable way across the District.		✓			$\checkmark$		
F	Integrate safety best practices into all phases of project development: planning, design, engineering, construction, and operations.	✓			✓	$\checkmark$		
G	Design infrastructure to improve safety for all, focusing especially on our most vulnerable roadway users.	✓	✓					
н	Design and manage public space and the space along the roadway to be people-focused, promoting livability and public health by improving accessibility, sustainability, safety, and placemaking.	✓	✓				✓	✓
ï	Permit and program social, cultural, commercial, and flexible use of public space to improve the quality of life for current and future residents.		✓				✓	✓
J	Integrate and expand the bicycle and pedestrian network to ensure safe, connected, and more equitable infrastructure for all users.	✓	✓	✓			✓	✓
к	Prioritize transportation infrastructure climate adaptation.	$\checkmark$				$\checkmark$	$\checkmark$	
L	Implement congestion management tools to support accessible, reliable, sustainable, efficient, and affordable movement throughout the District.		✓	✓			✓	
м	Increase accessibility and efficient delivery of goods and movement of people through curbside management and roadway management.	✓		✓				
N	Improve economic equity and accessibility through safe, efficient, integrated, and affordable transit options.	✓	✓	✓			✓	
0	Improve bus speeds and reliability through strategic transit priority treatments.		✓	✓			$\checkmark$	
Ρ	Reduce citywide greenhouse gas emissions 50 percent by 2032 (compared to 2006 baseline) and reduce greenhouse gas emissions from transportation by 60 percent by 2032 (compared to 2006 baseline).						✓	✓
α	Promote partnerships and programs such as travel demand management to achieve 75 percent non-auto mode commute trips by 2032.			✓			$\checkmark$	
R	Adapt policies to ensure equitable service, privacy protections, and data-driven decision-making as technology and new transportation services arise.		✓	✓	✓	✓		

#### Looking to 2045: Goals, Policies, Strategies, and Metrics





moveDC is a 25-year plan, but the strategies represent discreet actions that DDOT can take in pursuit of these goals and policies.

Most of these will be undertaken in the next five years.

## **STRATEGIES AND METRICS**

DDOT has developed a list of 41 strategies. These strategies are specific actions that DDOT will take to accomplish its policies and support the achievement of its goals. moveDC is a 25-year plan, but the strategies represent discreet actions that DDOT can take in pursuit of these goals and policies. Most of these will be undertaken in the next five years.

The strategies are listed in the following pages and organized by the policies to which they relate. Each strategy is shown as follows:



For each strategy there is a time frame and steps for its implementation, as well as metrics to monitor progress. Implementation step icons refer to the following timelines:

- Less Than 1 Year 1.2 1 to 2 Years
- 3-5 3 to 5 Years
- 5 More Than 5 Years
- Continuous

Please note that the order of policies and strategies does not indicate priority or importance.

## Strategy #1: ENSURE EQUITY IN DDOT PROJECTS

Develop and implement an equity assessment tool for DDOT projects. Modify the scope of work for projects that contribute to inequity.

#### **Implementation Steps**

- Create and implement an equity assessment tool
- 1-2 Integrate equity assessment into the project scoping process
- Track, monitor, and report transportation needs, including proximity to frequent transit, access to jobs and destinations, and safety risks

#### **Metrics**

• Number of projects assessed for equity

#### Goals Addressed:



#### This is Associated with Policy A:

Consider equity in DDOT actions

#### What It Means for You:

 Transportation spending allocated to historically under-resourced communities and to those with the greatest needs



# Strategy #2: RECRUIT AND PROMOTE DDOT STAFF THAT ARE REPRESENTATIVE OF THE DISTRICT'S POPULATION

Through human resources strategies, increase the diversity of employees who are hired, promoted, and offered career development opportunities. Develop an implementation plan with targets and track progress towards targets.

#### **Implementation Steps**

- Define baseline diversity metrics and establish targets
- 1-2 Develop an implementation plan; develop a tracking system
- Implement strategies from the implementation plan

#### **Metrics**

• Race, gender, and ethnicity of DDOT staff, tracked by level within the organization

#### Goals Addressed:



#### This is Associated with Policy A:

Consider equity in DDOT actions

#### What It Means for You:

- DDOT will have a better understanding of unique contexts and challenges among District communities
- Greater diversity of thought and experiences applied to how DDOT does business





#### This is Associated with Policy B:

Engage the community

What It Means for You:

- Increased transparency and accountability
- Ability to track progress of projects and initiatives

**Related Programs:** 

#### **District Transportation Access Portal**



# Strategy #3: SHARE PROJECT PROGRESS ON DDOT'S WEBSITE TO INCREASE ACCOUNTABILITY

# Complete a data inventory and develop dashboards for the public.

#### **Implementation Steps**

- 1-2 Inventory existing data for projects, programs, and policies
  - Create dashboards on website
- Maintain dashboards with up-to-date data; ensure consistent appearance and terminology in dashboards

#### Metrics

- Number and percentage of projects and programs with dashboards
- Number of dashboards created

#### **Goals Addressed:**

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#### This is Associated with Policy B:

Engage the community

#### What It Means for You:

- Multiple ways to engage with DDOT on projects
- More opportunity to collaborate with DDOT and share feedback on projects

#### **Related Programs:**

DDOT Public Involvement Plan



## Strategy #4: ENSURE INCLUSIVITY IN DDOT COMMUNITY OUTREACH EFFORTS

# Develop and implement inclusive public outreach formats and use metrics to track performance.

#### **Implementation Steps**

- Incorporate checklist into required documentation
- 1-2 Develop toolbox of inclusive outreach formats, including how to identify impacted community groups; develop performance metrics
- Implement inclusive outreach strategies

#### **Metrics**

- Number of opportunities for engagement
- Number of people engaged
- Comparison of demographics of those engaged to demographics of potentially impacted community

# Strategy #5: CONSIDER LIFECYCLE COSTS AND BENEFITS IN PROJECT DISCUSSIONS

# Consider lifecycle costs and maintenance requirements in the project planning process.

#### **Implementation Steps**



- Establish a threshold
- 1-2 Create a lifecycle checklist and framework; fully integrate into the decision-making process prior to the FY 2024 budget formulation
- Incorporate lifecycle checklist and framework in budget formulation processes; coordinate and prepare for projects that overlap different administrations

#### **Metrics**

Strategy completion

#### **Goals Addressed:**



#### This is Associated with Policy C:

Consider lifecycle costs in new investments

#### What It Means for You:

- Better conditions of existing and future infrastructure
- Smarter use of DDOT funding

#### **Related Programs:**

Transportation Asset Management Plan



# Strategy #6: IMPLEMENT MOVEDC THROUGH THE STIP PROCESS

# Use the moveDC performance metrics to develop the Statewide Transportation Improvement Program (STIP).

#### **Implementation Steps**

- Develop selection criteria
- 1-2 Incorporate selection criteria into the STIP
- Employ metrics in project selection and use before/after data to know if the selected project types are effective

#### Metrics

• Strategy completion

#### **Goals Addressed:**



#### This is Associated with Policy D:

Use a performance-based approach to budgeting

#### What It Means for You:

- Coordinated transportation planning to achieve moveDC goals, policies, and strategies in future projects
- A more defined process to select projects for funding

#### **Related Programs:**

#### DDOT STIP



# Goals Addressed:

#### This is Associated with Policy D:

Use a performance-based approach to budgeting

#### What It Means for You:

- More effective DDOT projects
- More efficient use of DDOT resources



# Strategy #7: TRACK THE EFFECTIVENESS OF DDOT PROJECTS

For applicable projects, identify and collect the data that will be used to compare results before and after project implementation. Create a database to manage the data.

#### **Implementation Steps**

- Define type of projects requiring collection of before and after data
- 1-2 Develop an evaluation plan and reporting template
- 3-5 Establish a database/data platform to manage project evaluation data
- Evaluate all implemented projects; provide data to database; coordinate with different DDOT groups to update database

#### **Metrics**

- Number of projects conducting evaluations
- Number of projects providing data to the data platform

#### **Goals Addressed:**

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#### This is Associated with Policy D:

Use a performance-based approach to budgeting

#### What It Means for You:

- Better management and tracking of data
- Improved effectiveness of DDOT projects
- More efficient use of DDOT resources



## Strategy #8: IMPROVE AGENCY DATA MANAGEMENT AND ACCESSIBILITY

Establish a standard process for data and knowledge management that includes a data inventory to improve the accessibility of data agencywide.

#### **Implementation Steps**

- 1-2 Develop a playbook to focus future investment in areas of high priority and need
- **3-5** Implement investments and develop a standard process for planning, collection, storage, and sharing of data
- Revisit and update data governance structure and processes

#### Metrics

Strategy completion

# Strategy #9: MAINTAIN A DATABASE OF ASSET CONDITIONS

Establish a process to determine which assets need condition assessments and perform the assessments. Maintain an asset condition GIS database to track repair and funding needs. Use condition assessments for budget formulation.

#### Implementation Steps

- Determine assets that require condition assessments
- 1-2 Define metrics and targets for assessing asset conditions for various assets; create a GIS-based asset conditions database to track and monitor the conditions of key assets
- 3-5 Complete condition assessments of all applicable assets
- Conduct regular assessments and track metrics annually; each fiscal year, develop a plan for funding to maintain all assets in a state of good repair; update GIS-based asset condition database

#### **Metrics**

- Number of assets that require condition assessments
- Percent of assets in a state of good repair by ward

#### Goals Addressed:



#### This is Associated with Policy E:

Maintain and modernize existing assets

#### What It Means for You:

- Better conditions of streets, sidewalks, crosswalks, bus stops, curb ramps, and more across all eight wards
- Routine maintenance so infrastructure does not fall into disrepair before it is improved



# Strategy #10: MODERNIZE TRAFFIC SIGNALS TO IMPROVE SAFETY AND MAXIMIZE SYSTEM EFFICIENCY

Develop and implement a plan to modernize traffic signals, controllers, traffic network, and management technology systems to improve safety and maximize system efficiency.

#### **Implementation Steps**

- Conduct feasibility study
- 1-2 Develop implementation plan
- 3-5 Complete updates to traffic signals, controllers, and management technology
- Implement signal improvement projects; track, monitor, and report; coordinate between departments

#### **Metrics**

- Number and percent of signals upgraded
- Number of traffic controllers upgraded
- Geographic distribution of signal upgrades

#### **Goals Addressed:**



#### This is Associated with Policy E:

Maintain and modernize existing assets

#### What It Means for You:

- Better conditions of existing and future infrastructure
- Smarter use of DDOT funding



# Goals Addressed:

#### This is Associated with Policy F:

Integrate safety best practices in project development

#### What It Means for You:

- Safer streets and sidewalks for pedestrians and bicyclists
- Fewer conflicts between different modes
- Potential replacement of travel lanes or on-street parking with transit or active transportation improvements



# Strategy #11: USE COMPLETE STREETS PRINCIPLES TO MAKE STREETS AND SIDEWALKS SAFER FOR ALL USERS

Develop a standard operating procedure to incorporate Complete Streets and other safety standards during project delivery.

#### **Implementation Steps**

- 1-2 Define standard operating procedures (SOPs) and create qualitative Complete Streets scoring tool
- 3-5 Fully integrate SOPs into the review process
- Implement complete street projects

#### Metrics

- Number of Complete Streets projects implemented
- Score of projects

#### **Goals Addressed:**

#### This is Associated with Policy F:

Integrate safety best practices in project development

#### What It Means for You:

- Safer streets
- More equitable enforcement with automated equipment
- Increased awareness and information through transparent reporting of data

#### **Related Programs:**

#### DC StreetSafe



## Strategy #12: EXPAND AUTOMATED ENFORCEMENT OF TRAFFIC LAWS

Expand the Automated Traffic Enforcement (ATE) Program and improve the placement of enforcement assets to enhance safety. Track and report on trends in violations at enforcement sites and the effectiveness of rotating resources.

#### **Implementation Steps**

- Develop a rotational program for cameras and include in Vision Zero 2.0
- 1-2 Start testing and implementing the rotational program; create agency cooperation agreements for bus enforcement; implement ATE expansion
- 3-5 Conduct a systemic review of all cameras locations for performance and need
- Implement ATE projects; track, monitor, and report MOEs

#### **Metrics**

- Number enforcement cameras by type
- Percent change in speeds over the speed limit
- Percent change in stop sign violations
- Agency agreements (yes or no) for bus enforcement program

# Strategy #13: UPDATE DESIGN AND ENGINEERING GUIDELINES REGULARLY

#### Update the Design and Engineering Manual (DEM).

#### **Implementation Steps**

- 1-2 Create interdisciplinary cross-divisional committee
- Conduct DEM update every two years starting in 2021

#### Metrics

Strategy completion

#### **Goals Addressed:**



#### This is Associated with Policy G:

Design infrastructure to improve safety for all users

#### What It Means for You:

- Relevant and up-to-date guidelines for transportation planning, design, and construction
- Best practices and standards embedded into ongoing and future DDOT projects
- Perspectives from different disciplines that see and use streets differently



# Strategy #14: DEVELOP NEW WAYS TO MEASURE THE EFFECTIVENESS OF DIFFERENT MODES IN PROJECTS

Develop policy and methodology to assess multimodal alternatives in project development, including the development of bicycle and pedestrian measures of effectiveness (MOEs).

#### **Implementation Steps**

- Assess how LOS/PFI is currently being used to make decisions
- 1-2 Develop an approach for assessment of multimodal alternatives; develop MOEs to monitor progress
- Track, monitor, and report MOEs; use before and after project data to evaluate new MOEs

#### **Metrics**

Strategy completion

#### **Goals Addressed:**



#### This is Associated with Policy G:

Design infrastructure to improve safety for all users

#### What It Means for You:

 Evaluation of different modes of transportation in DDOT projects



#### **Goals Addressed:**

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#### This is Associated with Policy G:

Design infrastructure to improve safety for all users

#### What It Means for You:

- Increased safety on streets and sidewalks for vulnerable roadway users
- More equal distribution of street space



## Strategy #15: IMPLEMENT ROAD DIETS TO MAKE STREETS SAFER

# Assess which streets could benefit from a road diet, prioritizing streets with proven safety issues.

#### **Implementation Steps**

- Develop criteria and assess streets that could benefit from a road diet
- 1-2 Begin implementing road diets
- Implement road diets; track, monitor, and report

#### Metrics

• Number of lane miles repurposed by road diet by repurposed type

#### **Goals Addressed:**

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#### This is Associated with Policy G:

Design infrastructure to improve safety for all users

#### What It Means for You:

- Increased safety and visibility of pedestrians at intersections and on sidewalks
- Reduced risk of crashes
- Slower vehicle maneuvers and reduced conflicts with pedestrians

#### **Related Programs:**

#### Vision Zero

## Strategy #16: MAKE INTERSECTIONS SAFER FOR PEDESTRIANS

Implement at least 20 intersection safety improvements per year including sidewalk improvements, Leading Pedestrian Intervals (LPIs), improved turn phasing, elimination of dual turns, and redesign of complex intersections.

#### **Implementation Steps**

- Identify intersections for initial implementation
- 1-2 Begin implementing intersection improvements
- Implement intersection improvement projects; track, monitor, and report

#### Metrics

- Number of intersection improvements implemented by type
- Number of crashes by severity at sites with improvements

# Strategy #17: **INCREASE PUBLIC ART ON STREETS** AND SIDEWALKS, ESPECIALLY ART THAT **IMPROVES SAFETY**

Continue the Arts in the Right-of-Way program, implementing at least one art installation per year with priority given to those locations where the art installations also act as a safety improvement (for example, painted curb extensions).

#### **Implementation Steps**

- Identify and prioritize initial candidate locations to **41** implement Arts in the Right-of-Way
- Begin implementing Arts in the Right-of-Way installations 1-2
  - Track, monitor, and report the number of Arts in the Rightof-Way implementations

#### **Metrics**

Number of Arts in the Right-of-Way installations

#### **Goals Addressed:**



#### This is Associated with Policy H:

Design public space to be peoplefocused

#### What It Means for You:

- More pleasant and interesting walks
- Increased pedestrian safety through unique art installations

#### **Related Programs:**

Arts in the Right-of-Way



## Strategy #18: EXPAND STREET TREE COVERAGE

Cover 40 percent of the District with a healthy tree canopy by 2032 to enhance sidewalks, walkability, and neighborhood amenities.

#### **Implementation Steps**

Develop initial baseline inventory of healthy tree canopy

- Develop plan to identify and prioritize projects to increase 1-2 healthy tree canopy; begin implementing the plan to increase healthy tree canopy projects
- 0 Implement projects; track, monitor, and report

#### **Metrics**

- Percent coverage of healthy tree canopy
- Number of trees planted





#### This is Associated with Policy H:

Design public space to be peoplefocused

#### What It Means for You:

- Lower summer temperatures in the District
- Better local air quality
- Reduced flooding on sidewalks and streets

#### **Related Programs:**

#### **Urban Forestry**

Sustainable DC 2.0





#### This is Associated with Policy I:

Permit social and commercial use of public space

#### What It Means for You:

- More pleasant and interesting walks through the District
- More amenities and activities for people in the public space
- Potential for temporary or permanent street closures



# Strategy #19: IMPROVE WALKABILITY AND PEDESTRIAN AMENITIES WITH MORE CAR FREE ZONES AND PLAZAS

Increase the people-focused use of the right-of-way and public space. Sponsor at least one event per year.

#### Implementation Steps

- Identify baseline
- 1-2
  - Develop approach and implement strategies
  - Track, monitor, and report the number of permits issued per year

#### Metrics

- Number of permits issued
- Linear feet and area of curb space allocated to people-focused rights-of-way
- Geographic distribution of permits

#### **Goals Addressed:**



#### This is Associated with Policy J:

Expand the bicycle and pedestrian network

#### What It Means for You:

- Identification of accessibility needs
- An accessible, connected, safe transportation network

#### **Related Programs:**

#### Vision Zero



# Strategy #20: MAINTAIN AND UPDATE THE AMERICANS WITH DISABILITIES ACT (ADA) TRANSITION PLAN

Update the action plan for DDOT's Americans with Disabilities (ADA) Transition Plan for annual ADA accessibility improvements to streets, sidewalks, and public spaces.

#### **Implementation Steps**

- 1-2 Update the action plan for DDOT's ADA Transition Plan
- Annual updates to the ADA Action Plan

#### Metrics

Strategy completion

# Strategy #21: INSTALL MORE PROTECTED BICYCLE LANES

# Complete 20 miles of protected bicycle lanes by FY 2022, after which install at least 5 miles annually.

#### **Implementation Steps**

- 1-2 Identify list of new protected bicycle lane projects; create dashboard on the number of protected bicycle lanes
- Implement new protected bicycle lane projects; track, monitor, and report; maintain dashboard

#### **Metrics**

- Number of miles of protected bicycle lanes and trails
- Number of miles that connect to or between existing low stress bicycle networks
- Average number of jobs and destinations accessible by bicycle within 30 minutes
- Percent change in usage counts
- Bicycle mode share (work and non-work trips)

#### Goals Addressed:



#### This is Associated with Policy J:

Expand the bicycle and pedestrian network

#### What It Means for You:

- Increased safety for bicyclists
- Improved connections between neighborhoods

#### **Related Programs:**

#### Vision Zero

**DDOT Bicycle Program** 



# Strategy #22: BUILD MORE TRAILS IN THE CAPITAL TRAILS NETWORK

Prioritize construction of the Capital Trails Network. Develop a method to measure the extent to which a project improves trail network connectivity. Include features in the design of trails that enhance the safety, comfort, and orientation of users (e.g. wayfinding, lights, and mile markers).

#### **Implementation Steps**

- 1-2 Include trails in capital program; create methodology to measure connectivity in trail network; define and identify critical gaps in network
- Implement new trail or trail connection projects

#### Metrics

- Number of miles of trails
- Number of critical gaps eliminated





#### This is Associated with Policy J:

Expand the bicycle and pedestrian network

#### What It Means for You:

- An equitable, connected multi-use trail network
- Healthy, low-stress access to open space and reliable transportation for people of all ages and abilities

#### **Related Programs:**

DDOT Trails Program

**Capital Trails Coalition** 



#### **Goals Addressed:**



#### This is Associated with Policy J:

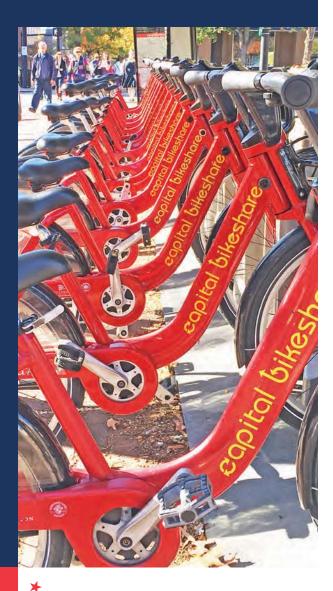
Expand the bicycle and pedestrian network

#### What It Means for You:

- Convenient bikeshare options in all wards and ability to make more trips by bicycle
- More equitable distribution of bikeshare stations and membership

#### **Related Programs:**

#### DDOT Bicycle Program



# Strategy #23: ADD MORE BIKESHARE STATIONS AND IMPLEMENT PROGRAMS TO INCREASE THEIR USE

Expand the Capital Bikeshare system to make it more accessible and develop programs to increase the number of people who use it.

#### Implementation Steps

- Create baseline of missing coverage and accessibility
- 1-2 Develop an implementation plan; develop metrics and dashboards to monitor performance; increase enrollment in Capital Bikeshare for all by 1 percent annually and engage in targeted outreach to women and minority communities
- 3-5 Introduce adaptive bicycle program; install new stations so that 90 percent of District residents live within a quartermile walk of a station
- Fully implement an adaptive bicycle rental program for District residents and ensure that 25 percent of the Capital Bikeshare fleet is electric bicycles
- Track, monitor, and report; install bikeshare stations in deficient areas; implement electric bicycles

#### Metrics

- Number of people enrolled (one time uses and memberships)
- Percent of fleet that are adaptive bicycles
- Number of new stations installed per year
- Percent of fleet that is electric
- Track geographic distribution of users by zip codes
- Percent of residents living within a quarter-mile walk of a bikeshare station
- Percent of jobs within a quarter-mile walk of a bikeshare station

# Strategy #24: IMPROVE RESILIENCY OF TRANSPORTATION INFRASTRUCTURE

Establish a partnership with the Department of Energy and Environment (DOEE) to develop guidelines and an action plan for improving the resilience of the District's transportation network and for increasing preparedness of new and existing transportation infrastructure.

#### **Implementation Steps**

- 1-2 Define assets at risk and create GIS inventory; develop guidelines and action plan for improving resiliency
- 3-5 Create dashboards to measure progress toward adaptation goals
- Maintain dashboards

#### Metrics

- Number of "at risk" assets reconstructed or improved
- Number of action plan steps accomplished
- Number of projects utilizing developed guidelines

#### Goals Addressed:



#### This is Associated with Policy K:

Prioritize climate adaptation

#### What It Means for You:

Less disruption to travel from natural events

#### **Related Programs:**

DDOT Climate Change Initiatives



# Strategy #25: DEVELOP A REGIONAL APPROACH TO CONGESTION MANAGEMENT

# Establish a working group with Virginia and Maryland to consider a regional approach to congestion.

#### **Implementation Steps**

**F5** Create a working coalition with Virginia and Maryland

#### Metrics

Strategy completion

#### **Goals Addressed:**



#### This is Associated with Policy L:

Partner regionally to use congestion management to facilitate sustainable movement of people

#### What It Means for You:

 Reduced congestion on regional roadways and improved predictability of travel times



# Goals Addressed:

#### This is Associated with Policy M:

Manage curb space and roadways for accessibility and efficiency

#### What It Means for You:

- Safer streets and fewer conflicts from double parking, deliveries, pick-ups and drop-offs, etc.
- More efficient and context-appropriate curb use

#### Related Programs:

DDOT Curbside Management Study



## Strategy #26: ADAPT CURBSIDE USES TO FIT NEIGHBORHOOD TYPE

Create a process to implement the curbside management hierarchy during project development based on typologies. Determine how to update the neighborhood curbside hierarchy typology.

#### **Implementation Steps**

- 1-2 Update neighborhood typology; assign curbside hierarchy
- 000 3-5
  - Implement curbside hierarchy
- ▶5 Evaluate

#### Metrics

Strategy completion

#### Goals Addressed:

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#### This is Associated with Policy M:

Manage curb space and roadways for accessibility and efficiency

#### What It Means for You:

- Lower prices for parking when demand is lower and higher prices when demand is higher
- More availability of parking spaces for those who need them most
- Fairer pricing for use of public assets

#### **Related Programs:**

#### ParkDC

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## Strategy #27: ESTABLISH FAIRER PARKING PRICING THAT IS RESPONSIVE TO DEMAND

Assess where demand-based parking policy will be most effective to balance curbside needs. Develop an implementation plan for the new policy.

#### **Implementation Steps**

- 1-2 Conduct assessment of demand-based parking policy
- 3-5 Develop an implementation plan for the new policy
- Implement demand-based parking projects; track, monitor, and report

#### Metrics

- Number of demand-based parking deployments
- Occupancy of demand-based parking

# Strategy #28: PROVIDE AND MAINTAIN SAFE ROUTES FOR TRUCKS

Create a checklist to ensure freight routes and goods movement are considered in transportation improvement projects on arterial or higher functional classification.

#### **Implementation Steps**

1-2 Develop checklist

#### Metrics

- Number of arterial or higher functional class projects that complete the checklist
- Percentage of arterial or higher functional class projects that complete the checklist

#### **Goals Addressed:**



#### This is Associated with Policy M:

Manage curb space and roadways for accessibility and efficiency

#### What It Means for You:

• Safe and efficient movement of goods throughout the District

#### **Related Programs:**

Commercial Vehicles Routes and Restrictions



## Strategy #29: INCREASE ACCESS TO SHARED MOBILITY

Ensure that all public space permits issued to private mobility operators require vehicle distribution throughout the District and offer incentives that encourage use by low-income residents.

#### **Implementation Steps**

1-2 Develop and update requirements for mobility providers; develop dashboards

• Maintain dashboards

#### Metrics

Strategy completion

#### **Goals Addressed:**



#### This is Associated with Policy N:

Improve equity and accessibility with affordable transit options

#### What It Means for You:

- Bicycle and scooter options near where you live and travel
- More ways to get to/from Metrorail stations and bus stops

#### **Related Programs:**

DDOT Micromobility Program



#### **Goals Addressed:**

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#### This is Associated with Policy N:

Improve equity and accessibility with affordable transit options

#### What It Means for You:

- If you don't currently have transit service at your home, school, or place of work, DDOT will look for ways to provide it
- Ability to travel to more jobs and opportunities in a 30-minute trip

#### **Related Programs:**

#### WMATA Bus Transformation Project



## Strategy #30: PROVIDE TRANSIT TO AREAS CURRENTLY WITHOUT IT

# Define and identify transit deserts and develop specific actions to improve access to jobs and opportunities.

#### **Implementation Steps**

- Identify criteria and identify areas with the greatest transportation needs and areas with higher concentrations of historically marginalized communities
- 1-2 Define specific project prioritization and planning steps to reduce transit service deserts
- Implement improvement projects; track, monitor, and report

#### Metrics

- Number of transit access improvement projects per year
- Percent of funding spent on transit access improvement projects per year
- Percent and percent of people with access to transit
- Number and percent of jobs and destinations accessible via transit

#### **Goals Addressed:**

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#### This is Associated with Policy N:

Improve equity and accessibility with affordable transit options

#### What It Means for You:

- Improved access to jobs and activity centers for residents of Wards 5 and 7
- Expanded streetcar service
- New and enhanced sidewalks and bicycle facilities
- Rehabilitated roadways and bridges crossing the Anacostia River, I-295, and CSX freight rail tracks

#### **Related Programs:**

DC Streetcar

# Strategy #31: IMPLEMENT THE PROGRAMMED STREETCAR EXPANSION

# Implement the programmed streetcar expansion to the Benning Road Metrorail Station.

#### **Implementation Steps**

- 1-2 Complete final design
- 3-5 Start construction
- ▶5 Streetcar opens for service

#### Metrics

Strategy completion



## Strategy #32: CREATE MORE DEDICATED BUS LANES

# Expand the transit priority network by building dedicated bus lanes.

#### **Implementation Steps**

- Document the existing transit priority network
- 1-2 Develop plan to expand the transit priority network
- 3-5 Implement a total of 25 lane-miles by FY 2025
- Track, monitor, and report

#### Metrics

- Number of lane miles of transit priority network
- Number of lane miles of transit priority network in areas with high transportation needs
- Percent change in bus transit ridership

#### **Goals Addressed:**



#### This is Associated with Policy O:

Improve bus speeds and reliability

#### What It Means for You:

- More reliable and on-time bus arrivals
- Faster bus trips

#### **Related Programs:**

DDOT Bus Priority Program



# Strategy #33: UPDATE DDOT FLEET AND DC CIRCULATOR BUSES TO BE ELECTRIC

#### Implement the DC Circulator electrification plan and electrify the District-owned bus fleet by 2027. Convert 50 percent of the DDOT fleet to electric by FY 2023.

#### **Implementation Steps**

- Conduct a cost/benefit analysis for a transition to an electric fleet
- 1-2 Create a fleet replacement program
- Implement the fleet replacement program

#### Metrics

- Percent of fleet that is electric buses
- Emissions reductions from fleet replacement

#### **Goals Addressed:**



#### This is Associated with Policy P:

Reduce greenhouse gas emissions from transportation by 60 percent by 2032

#### What It Means for You:

- Cleaner air and quieter streets
- More sustainable and responsible local bus network

#### **Related Programs:**

#### Sustainable DC 2.0



#### **Goals Addressed:**

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#### This is Associated with Policy P:

Reduce greenhouse gas emissions from transportation by 60 percent by 2032

#### What It Means for You:

- More electric vehicle chargers across the District
- Greater convenience for current and future electric vehicle owners

#### **Related Programs:**

#### Transportation Electrification Roadmap



## Strategy #34: SUPPORT ELECTRIC VEHICLE USE WITH MORE CHARGING FACILITIES

Determine the demand for electric chargers. Encourage developers to provide electric chargers where demand is identified. Allow electric chargers in the public right-of-way through a permit process.

#### **Implementation Steps**

- Document the number of electric vehicles and chargers in the District and surrounding jurisdictions
- 1-2 Assess the demand for electric charging stations; develop materials and conduct outreach to encourage developers to construct electric charging stations
- Track, monitor, and report; coordinate between DDOT and surrounding jurisdictions to share data

#### Metrics

- Number of electric vehicles
- Number of charging stations
- Average distance between charging stations
- Utilization/hours used for each charging station

#### Goals Addressed:

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#### This is Associated with Policy P:

Reduce greenhouse gas emissions from transportation by 60 percent by 2032

#### What It Means for You:

- Safer and more secure rail travel
- More trains through added rail capacity
- Economic growth and development

#### Related Programs:

#### State Rail Plan

## Strategy #35: UPDATE THE STATE RAIL PLAN

#### Update the state rail plan regularly.

#### **Implementation Steps**

- ▶5 Update the state rail plan in 2027
- Update the state rail plan every ten years after 2027

#### **Metrics**

Strategy completion

#### Strategy #36:

# FOSTER COMMUNITY PARTNERSHIPS TO INCREASE PROGRAMS THAT ENCOURAGE SUSTAINABLE TRANSPORTATION OPTIONS

Partner with employers, multifamily properties, schools, and hotels to increase sustainable transportation alternatives available to employees, residents, and visitors. Offer consultative services to educate and encourage partners and commuters about their transportation options.

#### **Implementation Steps**

 Partner with employers, multifamily properties, schools, and hotels to promote alternatives to single-occupancy vehicle travel; conduct educational webinars and transportation events

#### **Metrics**

- Number of partners by type (employers, multifamily properties, schools, and hotels)
- Number of webinars and events conducted

#### Goals Addressed:



#### This is Associated with Policy Q:

Achieve 75 percent non-auto commute trips by 2032

#### What It Means for You:

- Incentives to use different modes
- Better understanding of transportation options

#### **Related Programs:**

#### goDCgo



## Strategy #37: INCREASE AWARENESS OF THE DISTRICT'S REQUIRED COMMUTER BENEFITS AMONG EMPLOYERS

# Educate and guide employers with 20 or more employees on compliance with the DC Commuter Benefits Law.

#### **Implementation Steps**

Guide up to 300 employers with 20 or more employees each year

#### **Metrics**

- Number of eligible employers participating
- Percentage of eligible employers compliant (target 100 percent)
- Percentage of employees participating in the transportation benefits program
- Mode shift to walking, bicycling, and transit
- Reduction in single-occupancy vehicle (SOV) travel, reduction in vehicle miles traveled (VMT), emissions savings, energy savings

#### **Goals Addressed:**



#### This is Associated with Policy Q:

Achieve 75 percent non-auto commute trips by 2032

#### What It Means for You:

- Incentives for a variety of commuting options
- Transportation subsidies

#### **Related Programs:**

#### goDCgo



# **Goals Addressed:**

#### This is Associated with Policy R:

Ensure equity, privacy, and data-driven decision-making for new transportation services

#### What It Means for You:

- Safe and deliberate accommodation of automated vehicles (AVs)
- Clear guidance for vendors



# Strategy #38: STUDY HOW NEW VEHICLE TECHNOLOGIES AFFECT THE TRANSPORTATION SYSTEM

Investigate and monitor the impacts of new motorized vehicle technologies on transit use and vehicle miles traveled (VMT).

#### **Implementation Steps**

- 1-2 Implement automated vehicle (AV) testing program; develop draft rulemaking for pilots of emerging technology, including new vehicle technology
- 3-5 Conduct investigation of infrastructure requirements for new vehicle technologies
- O Collect and analyze data provided by AV vendors testing on District roadways towards better understanding of technology and current infrastructure limitations

#### **Metrics**

Strategy completion

#### **Goals Addressed:**

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#### This is Associated with Policy R:

Ensure equity, privacy, and data-driven decision-making for new transportation services

#### What It Means for You:

 Access to mobility technologies across the District



## Strategy #39: **ENSURE EQUITABLE ADOPTION OF** MOBILITY TECHNOLOGIES

Adopt mobility technologies and partner with the providers only when they can be deployed equitably and address the defined needs of the community.

#### **Implementation Steps**

- Determine a process for identifying community needs
- Monitor the deployment to ensure that needs are being met; confirm that mobility providers are meeting equitable distribution requirements

#### **Metrics**

Strategy completion

# Strategy #40: ENHANCE DDOT'S TECHNOLOGY VETTING PROGRAM

Utilize DDOT's emerging technology pilot vetting program and enhance the program's consideration of equity and accessibility.

#### **Implementation Steps**

- 1-2 Update vetting program criteria to reflect moveDC goals
- 3-5 Establish a monitoring program to evaluate metrics
- Champion pilot projects through procurement and implementation processes

#### Metrics

- Number of emerging technology pilots implemented
- Before/after impacts of pilot implementation
- Number of emerging technology pilots procured for full-scale implementation

#### **Goals Addressed:**



#### This is Associated with Policy R:

Ensure equity, privacy, and data-driven decision-making for new transportation services

#### What It Means for You:

- Better information about pilot projects and how they are chosen
- Equitable distribution of pilot projects



# Strategy #41: CREATE AND PUBLISH A DATA PRIVACY AND SHARING POLICY

Develop a policy outlining DDOT's commitment to protecting the privacy and security of data obtained from mobility providers.

#### **Implementation Steps**

Develop commitment and make it available on the website within twelve months of the completion of moveDC

#### Metrics

Strategy completion





#### This is Associated with Policy R:

Ensure equity, privacy, and data-driven decision-making for new transportation services

#### What It Means for You:

 Enhanced privacy and security of your personal data

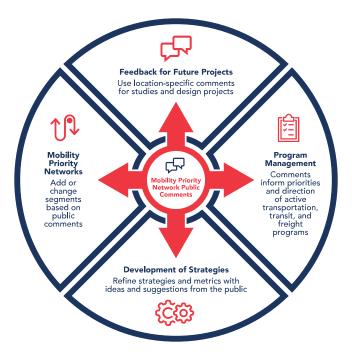




Looking to 2045: Expanding the Multimodal Network DDOT studied how pedestrians, transit, bicycles, freight, and vehicles move through the District as well as how curb space is used and managed. DDOT created Mobility Priority Network maps for bicycles, surface transit, and freight; and highlighted policies and needs for pedestrians, curbside management, and general vehicle traffic. The sections below describe the methods and outcomes of each analysis.

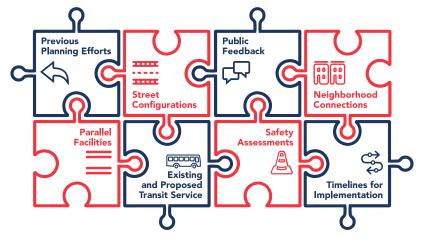
DDOT solicited public feedback on the draft transit, bicycle, and freight networks through interactive maps on the moveDC website and through the online surveys.

Public feedback was an important component to refining the Mobility Priority Networks and identifying needs for the other modes, but not the only one. The moveDC team analyzed segments of streets that received a high number of comments, and DDOT also considered the factors outlined below in determining changes to the networks. The most common reasons that a segment that received many comments was not added to the Mobility Priority Network were (a) the segment is part of another Mobility Priority Network or (b) a more suitable facility is already included on a parallel corridor.



Above: Diagram depicting how public comments were analyzed and incorporated into the plan.

#### Other factors considered included:



#### How DDOT Will Use the Mobility Priority Networks

The Mobility Priority Networks are longer term visions of what DDOT will strive to achieve. While these maps and the information they provide do not identify specific projects or improvements, DDOT will use them to guide future decisions about which projects will be selected and then developed.

The Mobility Priority Network maps also show where there are overlapping priorities between different modes. In some cases, streets have been prioritized for more than one mode. Streets are limited by their widths and must serve multiple modes of travel within that width. When there are overlaps, the more detailed planning and design

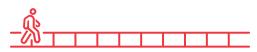
# WHAT IS A MOBILITY PRIORITY NETWORK?

Buses, bicycles, and freight benefit from a defined network within the overall transportation system to provide safety, efficiency, connectivity, and access.

Mapping these networks reveals where there are gaps in the networks to safe, efficient, and connected travel, such as an absence of bicycle facilities, helping DDOT target where improvements need to be added. These networks show where DDOT will invest in safety and mobility improvements for those three modes.

Not all streets can include dedicated space for every mode, and buses, trucks, and bicycles will continue to operate on streets that are not part of the priority networks.

Mobility Priority Networks are not a list of projects, but rather a vision for a connected network to be built out over the 25-year life of the plan.



There are 1,407 miles of sidewalks in the District.



An average District resident can reach 32,269 jobs and 117 destinations such as grocery stores, hospitals, and schools, in a 20-minute walk.



In 2018, 13 percent of District residents walked to work, a number that has been steadily increasing in the past decade.



What We Heard From You:

"Pedestrian safety must come first. For every crash that results in a death, there are far more injuries that result in a disability, many permanent." process that comes before constructing projects is the appropriate time to assess and determine solutions for how to accommodate each mode safely and efficiently. Some potential ways to address these overlaps are:

- Providing dedicated lanes for one mode and other priority treatments for the other mode(s)
- Identifying a parallel or alternate corridor or street that provides adequate needs
- Repurposing existing travel lanes or parking lanes for a new use



## **PEDESTRIANS**

The ability of pedestrians to move safely, efficiently, and comfortably in the District is an important outcome of moveDC. The goal for pedestrian infrastructure is to have a safe, connected sidewalk on every street in the District. Pedestrian improvements are needed where there are:

- Missing sidewalks along District streets
- Sidewalks in poor condition
- Sidewalks that do not meet the accessibility requirements of the ADA

The Pedestrian Friendliness Index Map, shown in the Snapshot, approximates how comfortable it is to walk in a given area. As described previously, an area deemed "most walkable" has a connected street grid with sidewalks, buildings set close to the street, and intersections and blocks that are comfortable for pedestrians.

#### **Existing DDOT Programs**

DDOT's Vision Zero Initiative has set the goal of reaching zero fatalities and serious injuries to travelers on our transportation system through more effective use of data, education, enforcement, and engineering.

DDOT will continue to improve the condition of sidewalks and make them more accessible for persons with disabilities. The latest condition and ADA accessibility map can be found online.

#### moveDC Pedestrian Strategies

Using the information from the sidewalk gap map, the Pedestrian Friendliness Index, and public input, DDOT developed a series of strategies that will benefit pedestrians by improving safety, particularly at intersections, and creating a more attractive walking environment:

- #9: Maintain a database of asset conditions
- **#11:** Use Complete Streets principles to make streets and sidewalks safer for all users
- **#14:** Develop new ways to measure the effectiveness of different modes in projects
- **#15:** Implement road diets to make streets safer
- #16: Make intersections safer for pedestrians
- **#17:** Increase public art on streets and sidewalks, especially art that improves safety
- **#18:** Expand street tree coverage
- **#19:** Improve walkability and pedestrian amenities with more car free zones and plazas
- **#20:** Maintain and update the ADA transition plan
- #22: Build more trails in the Capital Trails Network



## TRANSIT

The Transit Priority Network shows streets where DDOT will help transit vehicles move more efficiently, improving travel times and reliability for passengers. The Transit Mobility Priority Network will be implemented using dedicated transit lanes, better transit stops, special treatments for buses at intersections, and other actions.

The network map was developed in response to where transit is used most, where there is the greatest demand for travel, and where transit demand is expected to grow in the future. This map does not specify what treatment will be made on a given street, nor does it reflect specific transit routes or modes (i.e., Metrobus vs. DC Circulator vs. DC Streetcar).

#### **Existing DDOT Programs**

In 2019, almost as many District residents rode Metrobus as Metrorail each day. The District is prioritizing bus transit as an attractive alternative transportation mode to the private car. The **DDOT Bus Priority Program** will streamline delivery of projects that improve bus service in the District, with a goal of faster delivery timelines and improved coordination.

To support those efforts, DDOT developed a toolbox of potential bus priority treatments that can be consistently applied to improve the speed and reliability of bus service



A road diet is when a travel lane is reused for another purpose to make the roadway safer for vulnerable users, such as bicyclists and pedestrians. The space can be used for a bus lane, bicycle lane, green space, or wider sidewalks.



What We Heard From You:

"Please prioritize more bus lanes like those being built on 14th, 16th, and K Streets." and create safer interactions with other modes. The creation of dedicated bus lanes, the use of transit signal priority, and other tools, such as providing real-time travel information, can make traveling by bus faster, more convenient, and more reliable. Bus transit is a costeffective public transit option that will allow DDOT to serve more District travelers.

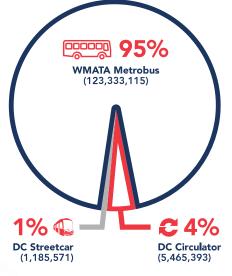
DDOT's **DC Circulator** provides simple and affordable bus transit to residents, commuters, and visitors around the nation's capital. The low-fare and no fare service attracts close to five million trips per year.

The **DC Streetcar** connects Union Station and H Street NE with free, convenient service that provides access to shopping, restaurants, entertainment, healthcare, residential properties, and other services.

#### moveDC Transit Strategies

The following strategies will be used to improve transit service in the District. The benefits will mean faster and more reliable transit, transit vehicles with zero emissions, better maintained transit infrastructure, and better access to transit in areas that do not have access today.

- **#9:** Maintain a database of asset conditions
- **#11:** Use Complete Streets principles to make streets and sidewalks safer for all users
- #14: Develop new ways to measure the effectiveness of different modes in projects
- **#15:** Implement road diets to make streets safer
- **#30:** Provide transit to areas currently without it
- **#31:** Implement the programmed streetcar expansion
- **#32:** Create more dedicated bus lanes



**Above:** Chart of bus and streetcar ridership in the District in 2019.



- **#33:** Update DDOT fleet and DC Circulator buses to be electric
- **#36:** Foster community partnerships to increase sustainable transportation options
- **#37:** Increase awareness of the District's required commuter benefits among employers



The Bicycle Priority Network includes streets that have bicycle facilities today and streets that are proposed to have them in the future. The network includes the bicycle priority routes from DDOT's prior long-range planning work, plus more recent planning efforts to identify gaps and expand access.

DDOT's vision is a Districtwide network of connected bicycle routes that serve all residential areas, providing low-stress routes that are safe, comfortable, and inviting for all bicyclists, from children to seniors. The bicycle network is also used by the shared devices that make up micromobility — e-scooters and e-bicycles.

DDOT, as a state DOT, follows federal requirements for transportation facilities planning and design, along with national best practices established by the Federal Highway Administration (FHWA)<sup>6</sup>, and National Association of City Transportation Officials (NACTO)<sup>7</sup>. In developing moveDC, DDOT did not conduct project-level planning for the priority network maps. However, DDOT will adhere to federal requirements and national best practices throughout the project development process and is committed to creating a Districtwide bicycle network.

- Any bicycle facilities planned for principal arterials will be fully-protected facilities (per NACTO/FHWA guidance).
- Any bicycle facilities planned for minor arterial streets will be fully-protected facilities (per NACTO/FHWA guidance).
- On a collector street, depending on conditions (including traffic volumes, speeds, and width of right-of-way), the facility may be a protected bicycle lane or cycletrack. Other facilities are also suitable, such as a standard or advisory bicycle lane, a buffered bicycle lane, a contraflow bicycle lane, or a neighborhood bikeway with traffic calming (per NACTO/FHWA guidance).

6

- **Bikeway Selection Guide,** Federal Highway Administration, February 2019
- 7 Urban Bikeway Design Guide, National Association of City Transportation Officials



There are 155 miles of recreational trails and bicycle lanes in the District.

In 2018 4.5 percent of commuters bicycled to work, more than double what it was in 2010.

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More than 5 million dockless bicycle and scooter trips were taken in the District in 2019.



What We Heard From You:

"The bus network is our most undervalued asset in the city! We need a road network that prioritizes buses, especially downtown and in other gridlocked areas of the city."  On a local street, bicycle facilities will be a neighborhood bikeway, an advisory bicycle lane, or a contraflow bicycle lane. Any of these facility types would typically include traffic calming (per NACTO/FHWA guidance).

The following elements are shown on the Bicycle Priority Network:

- Existing on-street bicycle facilities and trails
- Funded improvements<sup>8</sup> for on-street facilities and trails (these are locations that currently have funding identified for construction within six years. This includes DDOT's
  20 X 22 Initiative and projects included in the FY 2021 STIP as of October 2020)
- Future planned improvements for on-street facilities and trails (these are locations for which bicycle priority may be added in the future, but funding has not been committed)

#### **Existing DDOT Programs**

DDOT has a well-established and very successful bicycle program, committed to providing safe and convenient bicycle access throughout the District. Evidence of the program's efforts is visible on the 95 miles of bicycle lanes and 60 miles of trails across the District and in the recognition as one of the top 10 most bicycle-friendly cities in the United States.

DDOT's Bicycle Master Plan was prepared as a guide to establishing highquality bicycle facilities and programs. The continued expansion of the bicycle network, Capital Bikeshare, and bicycle

Funding designation is as of January 2021 from the FY 2021 STIP and is subject to change

# What We Heard From You:

"Safe infrastructure for bicyclists is crucial for more sustainable transportation in the District."

**Bicycle Priority** 

Network



Future Planned Improvement

Looking to 2045: Expanding the Multimodal Network

parking reflects the importance of this mode of travel to many of the District's residents.

DDOT's Bicycle Lane Program has built 95 miles of bicycle lanes in the District since 2001. 20 X 22 is DDOT's plan to build 20 miles of new protected bicycle lanes over three years (by 2022). This ambitious plan substantially expands the network of protected bicycle lanes and trails and will allow more people to access a safer and lower-stress bicycling experience.

#### moveDC Bicycle Strategies

The following strategies will serve and protect bicyclists of all ages and levels of confidence. The benefits for District residents will be safer bicycling in the District, more bicycle lanes, and more bikeshare stations.

- #9: Maintain a database of asset conditions
- **#11:** Use Complete Streets principles to make streets and sidewalks safer for all users
- **#14:** Develop new ways to measure the effectiveness of different modes in projects
- **#15:** Implement road diets to make streets safer
- #21: Install more protected bicycle lanes
- #22: Build more trails in the Capital Trails Network
- **#23:** Add more bikeshare stations and implement programs to increase their use
- #29: Increase access to shared mobility
- **#36:** Foster community partnerships to increase sustainable transportation options



## FREIGHT

The efficient movement of goods by rail and truck is essential to supporting the District's economic vitality. Freight rail lines owned by Norfolk Southern and CSX Transportation run through the District fully separated from roadways. Commercial trucks on District streets are essential, providing goods and services to thousands of District residents and businesses every day.

DDOT ensures that commercial vehicles traveling in the District move efficiently and safely while minimizing community impacts. The District expects freight traffic to grow by 74 percent between 2011 and 2040, and to see more small freight and delivery vehicles on city streets<sup>9</sup>.



<sup>2020</sup> DDOT Freight Plan Addendum, DDOT





DDOT's Bicycle Lane Program has built 95 miles of bicycle lanes in the District since 2001. 20 X 22 is DDOT's plan to build 20 miles of new protected bicycle lanes over three years (by 2022). The Freight Priority Network, developed in 2010, consists of interstates and routes designated as bus or truck routes based on engineering analysis and public engagement. Freight priority infrastructure such as shared truck/bus lanes, street designs that accommodate large vehicles, optimized signal timing, and curbside loading can help improve truck travel time, reliability, safety, and emissions in the District.

#### **Existing DDOT Programs**

Designated citywide truck and bus routes should be used as long as possible until trucks reach their final destination. DOT provides an interactive map of routes required for oversize or overweight vehicles, which is available for the general trucking industry.

DDOT has developed a Truck Route Trip Planner Tool to generate required routes for oversized or overweight vehicles traveling through the District via its permitting system; the tool can also generate recommended routes for all large vehicles in the District.

#### moveDC Freight Strategies

These strategies will benefit freight movement and deliveries with a thoughtfully-designed freight network and designated curbside delivery locations.

- **#9:** Maintain a database of asset conditions
- #10: Modernize traffic signals to improve safety and maximize system efficiency
- **#26:** Adapt curbside uses to fit neighborhood type
- **#28:** Provide and maintain safe routes for trucks

# Did You Know?

Trucks carry nearly 99 percent of the goods destined to and generated by the District.

**Freight Priority** 

Network

N

Freight Priority Network

Looking to 2045: Expanding the Multimodal Network



## **CURBSIDE MANAGEMENT**

The space on the street by the curb is used for loading and unloading passengers and goods, e-scooter and bicycle parking, vending, vehicle parking, and sometimes for parklets and outdoor dining.

The emergence of mobile technology-based private for-hire vehicle companies, the increase in retail and food deliveries during the COVID-19 pandemic, and the rapid expansion of online shopping and resulting deliveries have increased the demand for this curbside space. Managing the use of curb space provides:

- Safer streets and fewer conflicts from double parking, deliveries, pick-ups and drop-offs, etc.
- More efficient and context-appropriate curb use
- Fairer parking pricing that is responsive to demand

#### **Existing DDOT Programs**

In 2017, DDOT formed a new Parking and Ground Transportation Division (PGTD). PGTD has created a curbside management process and hierarchy that establishes priorities for uses of the curb based on the type of neighborhood and adjacent land uses.

This hierarchy will help DDOT assess where demand-based parking policy will be most effective to balance competing curbside needs, which balances the demand for curb space based on adjacent land uses and traffic operations in a given corridor.

ParkDC manages and regulates the District's curbside and parking assets and programs. These efforts and related programs are managed by PGTD and include several innovations in curbside management practices for residential parking (and permits), meters, parking signs, new curbside programs, and more.

Pick-Up/Drop-Off (PUDO) Zones were established in 2017 under the Connecticut Avenue Nightlife Restriction pilot program in conjunction with the Golden Triangle Business Improvement District, aimed at mitigating illegal and unsafe passenger loading and ridehailing in high activity nightlife locations. Underpriced and unrestricted street parking in these areas led to limited parking turnover in the nighttime hours, leaving little to no curbside space for safe passenger loading. Since then, the program has evolved into its current form and pilot program (launched in 2018) with the following objectives: Public Parking in the District by the Numbers:

- 20,000 Metered Parking Spaces
- 150,000 Residential Permit Parking Spaces
- 1,400 Loading Zone
  Spaces
- 600 Diplomatic
  Spaces
- 300 Motorcycle Spaces
- 6 Electric Vehicle Charging Spaces
- 230,000 All Other Spaces

# **Parking Assets:**

- 10,500 Parking Meters
- 150,000 Parking Signs
- 450 Parking Occupancy Sensors

The current PUDO Zone network includes 30 locations with 47 individual zones across the District, with seven new locations pending installation.



What We Heard From You:

"It is absolutely imperative we make better use of our curbs than for storing automobiles."

- Facilitate safe and efficient movement of people and goods to and from the curbside with special care to protect pedestrians and other vulnerable users;
- Reduce curbside turnover time, decrease queue lengths, and increase trip completion; and
- Make space for all modes to interact with the curbside while improving throughput.

Motorcoach Parking, launched by PGTD in 2018, established new on-street metered parking zones for tour buses in response to DDOT's 2011 Motorcoach Action Plan. Several tour bus parking zones are in place at tourist-generating locations across the District, and PGTD continues to research and evaluate locations for new tour bus parking zones, especially as land previously dedicated to parking is redeveloped into other uses.

Performance Parking Zones, located in central business or stadium areas with high levels of parking activity, implement demand-based parking rates to encourage parking turnover.

The goals of these zones are to encourage regular parking turnover in busy commercial areas, promote the use of transportation modes other than driving, regulate resident parking in residential zones, and decrease motor vehicle congestion.

There are currently three active performance parking zones in the District: the Penn Quarter/Chinatown Zone, Stadium Zone, and H Street NE Zone.

Off-Sidewalk Parking Corrals are being installed by DDOT across all eight wards of the District in order to accommodate the parking needs for shared bicycles and scooters and keep sidewalks clear for pedestrians. These areas are primarily on-street and provide a designated area where both shared and private dockless scooters and bicycles can be stored safely.

#### moveDC Curbside Strategies

The following strategies will make District streets safer by reducing double parking and delivery trucks stopping in travel lanes. Parking prices will vary by the level of demand, helping to keep parking spaces available. Chargers or the growing number of electric vehicles will be located where they are needed.

- #26: Adapt curbside uses to fit neighborhood type
- **#27:** Establish fairer parking pricing that is responsive to demand
- **#34:** Support electric vehicle use with more charging facilities

# TRANSPORTATION DEMAND MANAGEMENT

DDOT's Transportation Demand Management (TDM) Program is a set of strategies and programs that address congestion by balancing the transportation supply with pedestrian, bicycle, and transit facilities in roadway rightsof-way, and sponsoring alternative modal options (including the DC Circulator and Capital Bikeshare).

These strategies will counter the transportation impacts of the rapid growth of residential, commercial, and retail development in the District.

#### **Existing DDOT Programs**

goDCgo is a DDOT initiative that encourages the use of sustainable transportation such as transit, walking, bicycling, and carpooling. It is an online resource for transportation information and options. It provides free consulting services to businesses and employers with the goal of decreasing traffic congestion, improving air quality, and improving quality of life in the Washington D.C. area.

Commuters who do not live and work within a walkable distance from transit face the challenge known as the "first mile/last mile." goDCgo has worked to solve the first mile/last mile problem by encouraging commuters to use such options as Capital Bikeshare, dockless bicycles and scooters, carsharing, and carpooling services.

#### moveDC TDM Strategies

The following strategies support TDM by encouraging use of transportation modes other than private vehicles.

- **#11:** Use Complete Streets principles to make streets and sidewalks safer for all users
- **#14:** Develop new ways to measure the effectiveness of different modes in projects
- #16: Make intersections safer for pedestrians
- **#17:** Increase public art on streets and sidewalks, especially art that improves safety
- #21: Install more protected bicycle lanes
- **#23:** Add more bikeshare stations and implement programs to increase their use
- **#29:** Increase access to shared mobility
- **#30:** Provide transit to areas currently without it
- **#36:** Foster community partnerships to increase sustainable transportation options

# What We Heard From You:

"Streateries are a wonderful innovation!"



goDCgo has helped more than 40,000 people choose sustainable transportation options when commuting to work, which means 518,000 fewer pounds of pollution and 43,000 fewer cars on our roads.

# What We Heard From You:

"We need policies and incentives that support a wide range of transportation options."



What We Heard From You:

"Some roads should be optimized to move automobiles and buses through quickly and efficiently without unnecessary stops at every light."

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- **#37:** Increase awareness among employers of the District's required commuter benefits
- #39: Ensure equitable adoption of mobility technologies



Not all areas of the District have access to high frequency transit, and the current transit network isn't reliable in all areas or at all times and days. While the District is working hard to invest in more transportation choices across all neighborhoods, many District residents and commuters rely on private vehicles either as their primary mode or travel or to supplement transit, bicycling, and walking. This is particularly true for commuters: more than 34 percent of the commute trips by District residents are made in passenger vehicles.

District residents expressed concerns about congestion and speeding in corridors used by regional commuters. The planning time index discussed earlier reveals how much travel time is affected by congestion.

#### **Existing DDOT Programs**

DC StreetSafe Automated Traffic Enforcement (ATE) curtails unsafe and aggressive driving. ATE cameras are installed to reduce speeding, failure to yield, and running red lights or stop signs, which are some of the most prevalent dangerous driving behaviors.

Live DC Metro Area traffic cameras and interactive map help drivers plan their trips by showing traffic conditions in real time.

Traffic Management oversees and maintains traffic signals, pavement markings, and street signs. DDOT keeps the traffic signals running and vehicles moving on the District's 1,040 miles of roadway. Pavement markings include crosswalk lines, turn arrows, lane dividers, and bicycle lanes. All of these, signals, markings, and signs, help to keep roadway users safe.

Roadway Operations Patrol is a state safety service patrol team that helps move disabled vehicles and vehicles involved in incidents off the road quickly.

The Traffic Management Center monitors the transportation system to take action to alleviate congestion via real-time coordination with other District agencies, Roadway Operations Patrol dispatch, messaging to the public, and signal timing adjustments.



#### moveDC Vehicle Strategies

moveDC has a number of strategies to improve travel for vehicles. These range from developing roadway condition assessments to installing sophisticated traffic signals that can respond to real-time traffic conditions.

The following strategies address the conditions for vehicles on District roads including congestion, parking, roadway conditions, and emerging technologies.

- **#9:** Maintain a database of asset conditions
- **#10:** Modernize traffic signals to improve safety and maximize system efficiency
- **#12:** Expand automated enforcement of traffic laws
- **#25:** Develop a regional approach to congestion management
- **#27:** Establish fairer parking pricing that is responsive to demand
- **#34:** Support electric vehicle use with more charging facilities

# What We Heard From You:

"While you improve the situation for bicyclists, please don't forget the thousands of us who live in the District and need a car to get to work in VA and MD."



What We Heard From You:

"Find ways to get drivers to slow down and prevent an unsafe condition before it even happens."



Achieving the goals, policies, strategies, and Mobility Priority Networks of moveDC will require continual investment and commitment from city leaders as well as support from local and regional partners. The return on the District's investment will be the achievement of the moveDC goals:

- Safety: Safe and secure travel choices for all users
- Equity: A more equitable transportation network
- **Mobility:** Improved reliability of and accessibility to all modes
- **Project Delivery:** Development of projects with community input and their delivery on-time and on-budget
- Management and Operations: Addressing the greatest needs
- **Sustainability:** Economic vitality and opportunity, reduced emissions, and strengthened resilience
- **Enjoyable Spaces:** Public spaces that are accessible, safe, and welcoming

The full implementation of the moveDC plan will result in better multimodal access across the District, achieving the plan's goals while elevating and advancing transportation equity across the District.

# PROJECT SELECTION CRITERIA AND PRIORITIZATION

DDOT and partner agencies will not be able to advance all the moveDC strategies at once but should look to advance these efforts over time. While moveDC does not identify specific projects, current and future DDOT projects will work to achieve the goals and policies included in moveDC.

DDOT is improving its process to select and prioritize projects and programs for funding outlined in the Statewide Transportation Improvement Program (STIP) and ensuring that the local budget aligns with moveDC.

This process will integrate the equity assessment tool that DDOT identified as a moveDC strategy to maximize equitable outcomes of projects and programs. The development of project selection criteria and a prioritization process provides many benefits to DDOT's resource allocation practices, including:

- Helping to prioritize resource allocation and guide decision-making
- Providing a standard framework for how to assess and select projects against organizational goals
- Ensuring investments are in line with DDOT's mission and mayoral priorities



Above: Diagram of moveDC's role in the project selection and prioritization process.



moveDC lays the foundation for project implementation, which is advanced through resource allocation and project delivery.



**Above:** Diagram of the various elements used to inform and develop the District's STIP.



The STIP is the key tool used to implement moveDC and includes federally-funded and regionallysignificant transportation investments. DDOT takes the lead in preparing the STIP in cooperation with local and regional transportation agencies. Under the current process, DDOT staff review a list of projects and coordinate with the executive leadership to determine the priority of projects based on the values and goals set forward in moveDC and by elected officials.

Using policies, strategies, metrics, and the Mobility Priority Networks from moveDC 2021, and the equity assessment, DDOT is refining this approach to outline a more intentional set of project selection criteria. The criteria will enhance the existing DDOT budget formulation process that guide DDOT's transportation investments.

# STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

The STIP is a federally-required multi-year listing of all upcoming projects that will be funded with federal dollars. The most recent STIP was approved in October 2020 for Fiscal Years 2021 to 2024. The STIP is regularly revised to reflect the District's evolving needs.

The STIP is the key tool used to implement moveDC and includes federally-funded and regionally-significant transportation investments. DDOT takes the lead in preparing the STIP in cooperation with other local and regional transportation agencies<sup>10</sup> and public input.

- DDOT identifies programs and projects to be funded with federal dollars. This includes projects currently being funded and new projects identified through the moveDC Mobility Priority Networks, through engagement with the public, or based on asset condition.
- DDOT evaluates and prioritizes all projects to develop a draft list that best aligns with federal funding program requirements, mayoral priorities, and the moveDC goals.
- After considering public input, DDOT finalizes the list for approval in the District's budget. Ultimately, the Federal Highway Administration and the Federal Transit Administration approve the STIP for federal funding and implementation.

# PARTNERS

DDOT does not have the sole responsibility for the implementation of all the strategies included in moveDC. For example, strategies such as regional congestion management require coordination with neighboring states, and bus improvements require coordination with other transit service providers. Land use and transportation

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The STIP includes all transportation agencies in the District of Columbia: DDOT, Washington Metropolitan Area Transit Authority (WMATA), Eastern Federal Lands Highway Division, and the Transportation Planning Board

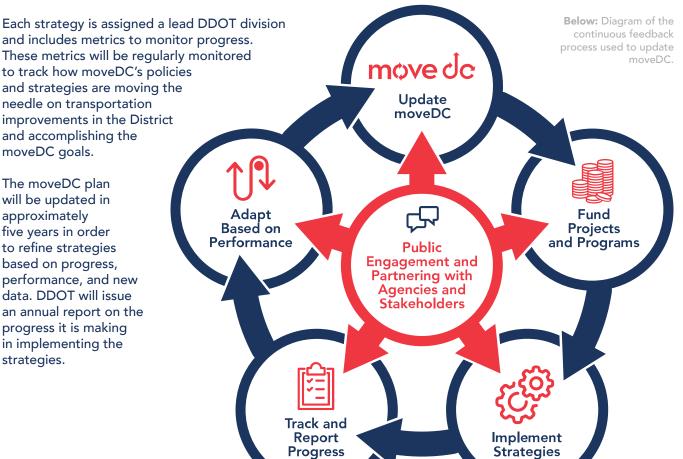
planning are closely linked, and implementation of the Mobility Priority Networks will support the District's planned growth areas, minimizing the impacts of new development and promoting affordability.

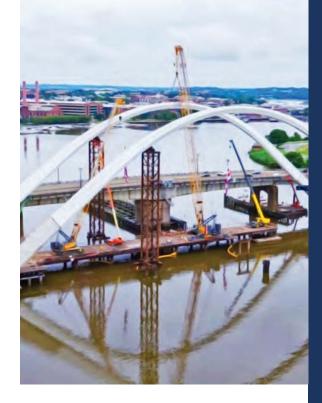
For most strategies, DDOT will be the lead agency, but DDOT will also work with other District agencies such as the Office of Planning, and with stakeholders outside of District government, including WMATA, the National Park Service, the Metropolitan Washington Council of Governments, neighboring jurisdictions, and other partners in the region.

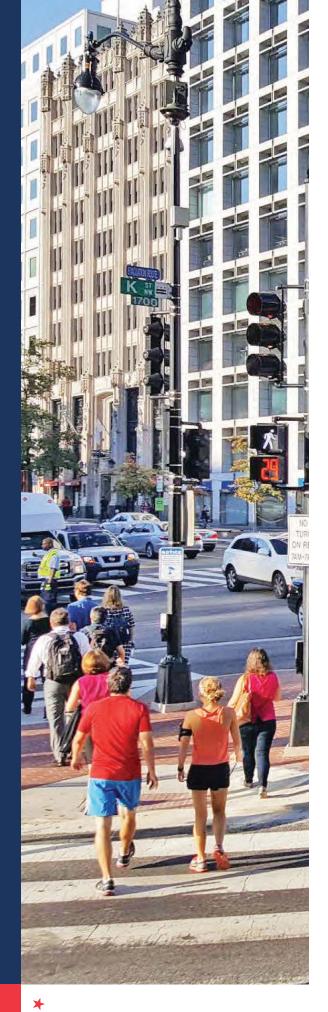
In some instances, DDOT will act in a support role to another District, non-District, or non-governmental agency or organization, and implementation may be at the discretion of those partner agencies.

# IMPLEMENTATION AND MONITORING OUTCOMES

The strategies in moveDC 2021 include phased implementation steps, most of which DDOT can advance in the near term, while others which will require more time and resources.







# Glossary

# AMERICANS WITH DISABILITIES ACT (ADA)

A civil rights statute that prohibits discrimination against people who have disabilities. Compliance with ADA requires that DDOT make all reasonable modifications to policies and programs to ensure that people with disabilities have an equal opportunity to enjoy all District programs, services, and activities.

# ASSET

The physical infrastructure of a transportation network, such as streets, pavements, bridges, buses, streetcars, traffic signals, streetlights, etc.

# **AUTONOMOUS VEHICLE**

A driverless vehicle that can operate itself and perform necessary functions without any human intervention through the ability to sense its surroundings.

# **BICYCLE FACILITY**

A street or path which in some manner is specifically designated and/or designed for the use of bicycles or for shared use by bicycles and other transportation modes.

# **COMPLETE STREET**

A street designed and operated to enable safe use and support mobility for all users. Those include people of all ages and abilities, regardless of whether they are traveling as drivers, pedestrians, bicyclists, public transit riders, or via any other means of transportation.

# **CONGESTION MANAGEMENT**

A way of harnessing the market to reduce the waste associated with traffic congestion. Congestion management works by shifting some rush hour highway travel to other transportation modes or to off-peak periods, taking advantage of the fact that the majority of rush hour drivers on a typical urban highway are not commuters.

# **CONNECTED STREET GRID**

An interconnected web of streets that provides a more direct path of travel to public transit and final destinations,

and the ensuant shorter travel distances favor nonmotorized modes.

# **CURBSIDE MANAGEMENT**

A process to inventory, optimize, allocate, and manage curb space to maximize mobility and access for the wide variety of curb demands.

# **DOCKLESS BICYCLE**

A bicycle share system that does not required a docking station. Dockless bicycles can be located and unlocked using a smartphone app.

# **HIGH FREQUENCY TRANSIT**

Transit routes that offer an average of one train every five minutes or better or one bus every ten minutes or better.

# LEADING PEDESTRIAN INTERVAL (LPI)

A crosswalk signal configured to give pedestrians a three to seven second head start when entering an intersection, with a corresponding green signal in the same direction of travel.

# **MICROMOBILITY**

Shared dockless bicycles, e-bicycles, and e-scooters.

# MODE

The way in which passengers and/or goods can be transported; for example: vehicles, bicycles, buses, trains, or walking.

# **MODAL SPLIT**

The percentage of travelers using a particular type of transportation or number of trips using that type.

# **MEASURE OF EFFECTIVENESS (MOE)**

An evaluation of changes in system behavior, capacity or capability, and operational environments of a transportation network.

# **MULTIMODAL**

Involving several transportation modes.





# **PEAK PERIOD**

The time of heaviest use, usually during the morning and evening commute periods ("rush hours").

# **PEDESTRIAN AMENITY**

Sidewalks, trails, crosswalks, pedestrian signals, etc.

# **PROTECTED BICYCLE LANE**

Bicycle lanes that have physical separation between motor vehicle travel and the bicycle lane. This can be a row of parked cars, a concrete curb, or flex posts and wheel stops.

# RIDESHARING

A service that arranges one-time shared rides on very short notice, usually arranged through a mobile app.

# **ROAD DIET**

A roadway reconfiguration that involves narrowing or eliminating travel lanes to calm traffic and increase safety of all roadway users. The space gained can be repurposed for other uses or travel modes.

# STANDARD OPERATING PROCEDURE (SOP)

An established procedure to be followed in carrying out a given operation or in a given situation.

# STATEWIDE TRANSPORTATION IMPROVEMENT PLAN (STIP)

A federally-required multi-year listing of all phases of the surface transportation projects to be built with federal funding or of regional significance during the four-year period of the STIP.

# TRANSPORTATION DEMAND MANAGEMENT (TDM)

A general term for strategies that result in more efficient use of transportation resources. These strategies include education, incentives, and disincentives to reduce the need for vehicle trips (e.g., telework, compressed work weeks, walking, bicycling), the distance of trips (e.g., shop close to home, home delivery); and to shift to higher-occupancy modes like transit and other forms of ridesharing.

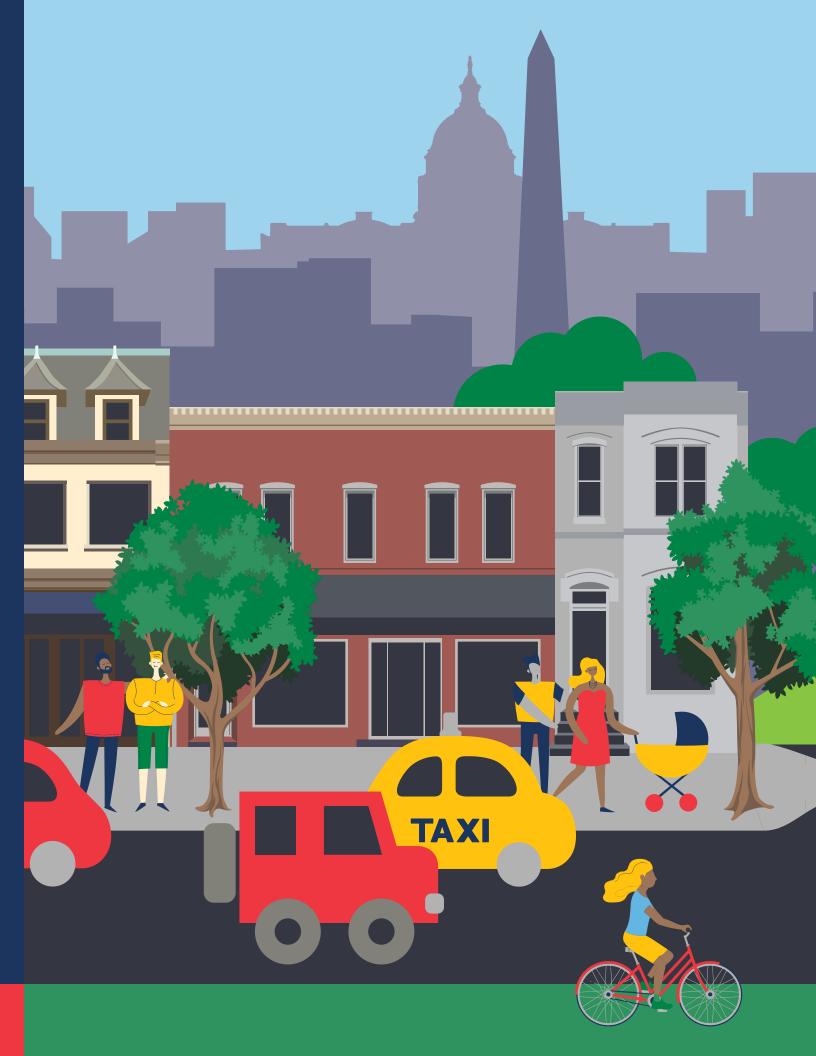
# **TRANSPORTATION INFRASTRUCTURE**

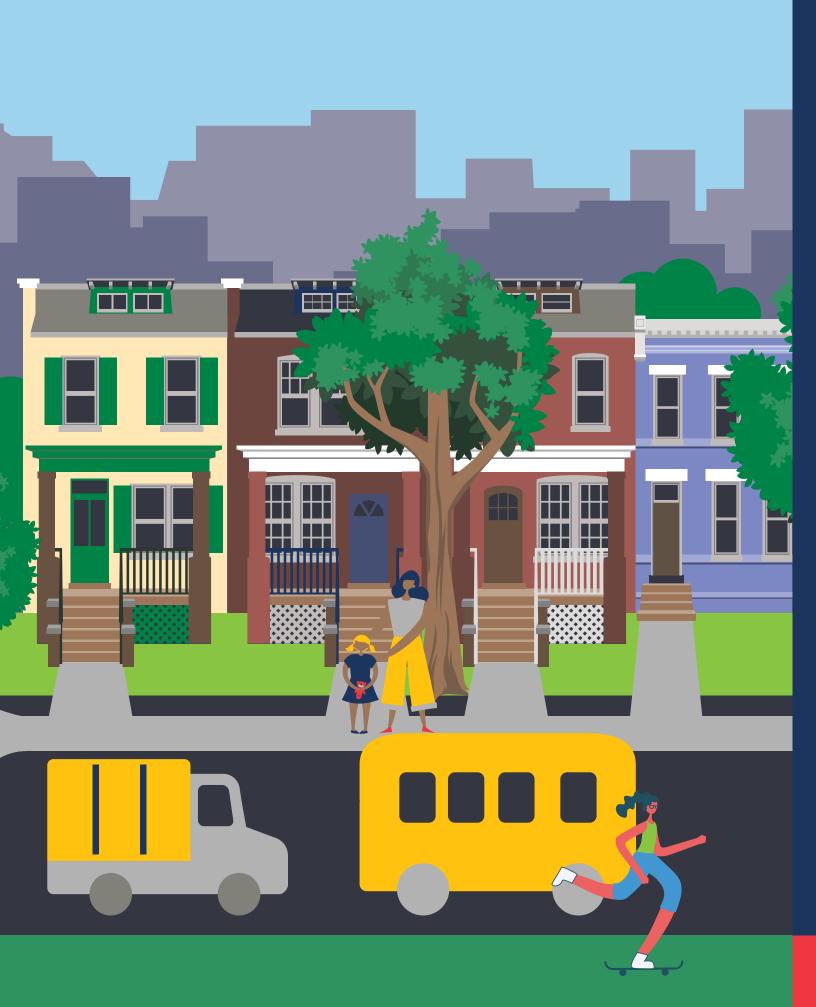
Built installations such as streets, sidewalks, railroads, transit facilities, trails, bridges, and tunnels.

# **VISION ZERO INITIATIVE**

A DDOT initiative to eliminate fatalities and serious injuries to travelers of our transportation system by 2024 through more effective use of data, education, enforcement, and engineering.









District Department of Transportation Policy, Planning, and Sustainability Administration 250 M Street, SE Washington, DC 20003

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