4 Policy and Planning Framework
Chinatown offers multimodal transportation options and is a popular destination for retail, dining, and entertainment.
CHAPTER 4: Policy and Planning Framework

I. Perspective

From the beginning of the moveDC planning process, the development of the District’s multimodal long-range transportation plan was about more than achieving transportation outcomes. Transportation plays a significant role in the city achieving its goals relating to shared prosperity, neighborhood vitality, environmental stewardship, and competitiveness.

In the District, the transportation system must strike a careful balance between serving the needs of its residents, a large non-D.C. workforce that arrives and departs each day, and the many people who visit the city. It must balance between serving residents and coordinating and connecting to infrastructure and policy at the regional level.

The transportation infrastructure plan and citywide multimodal policies presented in this chapter describe the recommended networks of facilities, services, and policies to achieve D.C.’s transportation goals and meet the broader goals described above. moveDC’s recommendations recognize how to use the infrastructure the city already has wisely and efficiently; target investment to benefit people’s mobility and quality of life; and use the transportation system to improve the environment.

The final policy and planning framework drew from the best ideas of each of the three transportation system approaches described in Chapter 3 and also worked to create connected modal networks Districtwide. Additional detail on policies, programs, and other initiatives are contained in the eight Modal Element chapters, each of which describes moveDC’s recommendations for one element—or piece—of the transportation system.

II. Policy Framework

Policies guide decisions about how to build, expand, operate, maintain, and progress the transportation system. The moveDC plan is built on infrastructure, service, and policy recommendations. The policies in this section are organized into the following broad categories, which together respond to moveDC’s vision and goals:

- Enhancing the multimodal system
- Prioritizing pedestrians
- Improving bicycling safety and convenience
- Maximizing transit value and opportunities
- Managing streets to expand person-carrying capacity and reliability
- Maximizing efficiency through transportation demand management
- Using placemaking to create a dynamic public realm
- Identifying sustainable funding strategies
- Proactively managing the transportation system
- Connecting transportation technology with users
A. ENHANCING THE MULTIMODAL SYSTEM

The multimodal street network will need to accommodate existing and future transportation demand for all users and all travel modes. The recommended policies in this section address the way in which the system can achieve greater multimodality. Policies that only pertain to a specific element and additional background information are included in each of moveDC’s Modal Elements. The following are recommended system-level policies addressing the District’s future transportation system.

Prioritize the needs of trips that start and/or end in the District over those that use D.C. as a through route.

The District needs to preserve existing capacity to ensure a balanced system that offers modal choice for residents and visitors within the district. This should guide priority over any trips that use D.C. as a through route.

The District’s Interstate highways, although designed primarily to offer access to and from central D.C., still carry traffic through the District and serve an important regional function. This function should be maintained and the Interstate highway system in the District should be kept in a state of good repair.

Plan for routes and stations to connect across transportation modes and jurisdictional boundaries.

DDOT should work with regional partners to ensure that projects—transit, bicycle, pedestrian, technology, and vehicular—that connect across the District boundary align and are consistent with adjoining jurisdictions’ plans. Transportation investments that connect with regional neighbors have the potential to enhance the function of the transportation system in the District of Columbia.

Using the same approach, all transit stations should be opportunities for multimodal connections, with walking and biking serving as easy beginnings or endings to any transit trip. Coordination among these project opportunities should be facilitated through the Metropolitan Washington Council of Governments and between the District and affected or adjoining jurisdictions.

Establish modal priorities on District streets.

Every non-local street should prioritize pedestrians, accommodate driving and local deliveries, and support one of the following modes:

- **B** Protected bicycle facilities
- **T** Dedicated high-capacity surface transit lane(s)
- **F** Dedicated freight routes
- A combination of these modes in simpler accommodation

Decisions on which modes will be prioritized on streets are illustrated in the moveDC plan and based on network connectivity, land use, and travel demand.

Allow flexible use of rights-of-way during non-peak periods.

Vehicular traffic volumes in the District are highest during weekday commute times. On weekends and during off-peak weekday periods (middays and evenings), traffic volumes are considerably lower and many streets have available capacity that can be repurposed for other uses including pedestrians, bicycles, and recreational space.

In addition to the many special events that use the District’s roads on a yearly basis, the District should work with citizen groups to identify locations and time periods where rights-of-way can be used for purposes other than vehicular travel. Weekend closures of Beach Drive in Rock Creek Park are already an example of this type of flexible use, as are street closures for neighborhood festivals.

Enhance transportation education at all levels.

Safer streets require users to understand their own responsibility to safely use the system. Safety education for the public and for owners, managers, and operators of the system can help achieve this goal.
For the public, educational materials should be integrated into school curricula and day-to-day communication. Information should be shared through regular programs and materials hosted and developed by the Department of Motor Vehicles (DMV). DDOT currently develops educational and awareness campaigns through National Highway Safety Transportation Administration (NHTSA) grants and through the region’s Street Smart campaign. DDOT should continue to support the promotion of transportation education in D.C. school curricula to further educate people on transportation.

For owners, managers, and operators, new information related to standard operating procedures, agency standards, laws, regulations, policies, and guidelines should be incorporated into regular and/or mandated training programs.

**Enforce the rules of the road for all users.**
The District supports a culture of safety for all modes, and encourages respect for all users by all users. DDOT should assist the Metropolitan Police Department (MPD) in providing effective enforcement of the laws for all users.

DDOT should continue to work together with MPD, the DMV, and the Department of Public Works to provide education and outreach regarding the rules of the road. Education related to newer laws pertaining to bicycles, pedestrians, or new facilities, also should be provided to those enforcing laws to ensure greater consistency and effectiveness.

**B. PRIORITIZING PEDESTRIANS**

Every trip starts and ends as a walking trip—even if another mode is used at some point in the trip. Pedestrian safety and mobility for people of all abilities and ages is essential to a successful multimodal transportation system. The following are recommended citywide policies for prioritizing pedestrians. More detailed infrastructure, policy, and program recommendations for pedestrians are included in the Pedestrian Element.

**Incorporate pedestrian priority into planning, policy, and programming.**
The District should adopt formal policy statements to confirm that pedestrians are the District’s highest transportation priority. Denver, Colorado, has taken recent steps in this direction. The Denver City Council declared pedestrian and bicycle safety top Council budget priorities. The D.C. Council could make a similar resolution. Ongoing DDOT policies, standards, and design guidelines can reinforce this priority.

**Create a pedestrian environment that accommodates people of all ages and abilities.**
The presence of sidewalks is critical to the safety of pedestrians because they provide an accessible travel path that is separated from traffic. Approximately 4% of the blocks in the District have missing sidewalks on one or both sides of the street.

The District should seek to have sidewalks on at least one side of every street and preferably on both sides of every street. All sidewalks should be constructed in conformance with the latest **ADA Accessibility Guidelines**, but also should strive to meet the more robust standards of universal design—the concept...
of designing facilities to be aesthetic and usable to everyone, regardless of age or ability. Sidewalks should strive to meet the Architectural and Transportation Barriers Compliance Board’s proposed Accessiblity Guidelines for Pedestrian Facilities in the Public Right-of-Way. Where sidewalks are not possible, streets should provide safe walking space within the roadway.

In coordination with providing a complete network of sidewalks, pedestrian crossings should be provided across all legs of an intersection unless a special exception can be clearly justified. As part of this recommendation, street trees should be considered a significant benefit to the walking environment (and offer a return to D.C.’s historic aesthetic) and should be included throughout the District. moveDC’s Sustainability and Livability Element provides recommendations on street trees and other elements that contribute to the creation of quality places in public spaces.

C. IMPROVING BICYCLING SAFETY AND CONVENIENCE

Bicycling expands the reach and capacity of the transportation network. The number of trips by bicycle has increased dramatically throughout the District in the past 5 years and can continue to grow with investments in facilities, education, enforcement, and encouragement. The following policies are recommended to help expand bicycling citywide. More detailed infrastructure, policy, and program recommendations for bicycles are included in the Bicycle Element.
CHAPTER 4: POLICY AND PLANNING FRAMEWORK

Update District of Columbia laws, regulations, and policy documents to address bicycle accommodation.

Some current D.C. laws, regulations, and policies regarding bicycles are outdated and do not reflect current bicycle safety requirements or needs. Changes should be made to the District’s Comprehensive Plan (District of Columbia Municipal Regulations [DCMR] Title 10), Zoning Ordinance (DCMR Title 11), Traffic and Parking Regulations (DCMR Title 18), and Open Space and Safety Regulations (DCMR Title 24) as well as the DDOT Design and Engineering Manual.

Use Bicycle Level of Service as a way to measure and prioritize bicycle investments on District streets.

Bicycle Level of Service (BLOS) rates on an alphabetical scale from A (best) to F (worst) how comfortable bicyclists feel while traveling on a roadway. DDOT should seek to improve at least one letter grade of BLOS for 5% of District lane miles per year, prioritizing streets currently operating at BLOS E or F.

D. MAXIMIZING TRANSIT VALUE AND OPPORTUNITIES

Transit is a critical element of the District’s transportation network. The city has a robust transit network; however, there are places that are difficult to reach by transit and times with limited service. The expansion of effective transit services Districtwide could have a tremendous impact on people’s quality of life, the quality of neighborhoods, competitiveness in the city, and the operation of the transportation system. The following are recommended to maximize the value and opportunity of transit citywide. More detailed infrastructure, policy, and program recommendations for transit are included in the Transit Element.

Provide “go anywhere, all day” transit.

The District’s transit network should allow residents, workers, and visitors the ability to travel anywhere in the District by transit in a convenient and reliable manner. By expanding and upgrading the District’s public transport network during the next 30 years, the system will provide excellent accessibility throughout much of the city, not just downtown. With this degree of accessibility, users will be able to use the transit system as much as they would use their car and be able to go anywhere in the District.

Further reduce the barriers to transit access in low-income neighborhoods.

When people opt to pay less to ride a slower transit service, they are sacrificing their time and ultimately the District’s potential for economic productivity. This is especially prevalent in low-income neighborhoods where travel times to education and job centers require significantly longer travel times by bus than by train. To increase transit access, the District should continue to reduce the cost of rail trips starting or ending at stations in low-income neighborhoods. Precedent programs to achieve this objective already exist. In the Anacostia Special Bus Fare program, the District funds discounted transfer for WMATA riders transferring from bus to rail using SmarTrip cards at the Anacostia Metro Station. In addition, SmarTrip cards reduced from $5 to $2 are made accessible at local retailers in low-income neighborhoods.

E. MANAGING STREETS TO EXPAND PERSON-CARRYING CAPACITY AND RELIABILITY

Private vehicles, including cars, taxis, and trucks, are a vital component of the District’s transportation system. They require proactive management to support the needs of the transportation system without resulting in congestion and gridlock. The following policies are recommended to help make effective use of the vehicular transportation system. More detailed infrastructure, policy, and program recommendations for vehicles are included in the Vehicle Element.

Move traffic efficiently and safely by optimizing traffic signal operations on all major roadway corridors and updating corridor traffic signal timing on a regular basis.

In 2011, DDOT began modernizing the District’s traffic signal system in coordination with a 5-year traffic signal timing optimization project. The traffic signal optimization project includes replacing outdated traffic control software and equipment at intersections and re-timing traffic signals. When complete, more than 1,600 signals will be upgraded. Current plans are for traffic signal timing to be evaluated and reassessed on a 5-year rotating basis.

The modernization of the citywide signal system will add critical new features to support the increasingly complex multimodal needs of the District’s transportation system. It also will better
support emergency and event operations and services. The system should include transit beneficial features such as transit signal priority and pre-emption. It also should include features that enable better active and real-time management of the system during events and special situations. Emergency vehicle pre-emption should be considered. Actuated bicycle signalization—signals that detect the presence of bicyclists—and special bicycle signals should be incorporated at key locations. Signal timings should allow sufficient time for pedestrians to safely cross intersections.

**Improve multimodal travel reliability and reduce congestion through area and corridor management strategies.**

As the District continues to grow, managing vehicle access on key corridors and to key destinations through price or minimum vehicle occupancy may become an important approach to providing reliable access to activity centers. The District’s congested entry routes, including freeways and bridges as well as the Central Employment Area, are areas to explore occupancy and pricing strategies as ways to manage congestion.

Lane management typically uses price and/or occupancy requirements to manage vehicular demand in designated lanes or on roadway facilities. Typically, high-occupancy vehicles and transit vehicles are permitted to use managed facilities at a discounted rate or for free.

In addition to corridor-specific pricing and vehicle occupancy strategies, area management strategies should be considered. The best known examples of area pricing are based on a cordon area, a specific area of the city where pricing is based on time of day and amount of congestion. This typically involves center cities and the places and times of day with the highest concentrations of travel demand. Cordon pricing requires investment in vehicle detection and payment collection technology prior to implementation.

A cordon area in the District could be implemented for weekday trips into the Central Employment Area at a rate approximately equivalent to a round-trip peak period Metrorail fare. Revenues from the zone should be dedicated to operations and maintenance of the managed facility (or area) and toward projects that expand the person-moving capacity of the transportation system, including those providing greater access to the priced areas or corridors.

These approaches to managing demand would help manage the reliability and accessibility of goods movement and delivery in the District. In addition, they would help to improve the District’s air quality by reducing the amount of delay per vehicle throughout the transportation network.

**Manage vehicular speed for safety and efficiency.**

The District should emphasize safety and vehicle speed management in the design of all streets by designing streets to meet the posted speed limit. The District also should evaluate speed limits in excess of 25 mph to assess the trade-offs between travel time and safety.

In addition to traffic operational benefits of a steady vehicle speed profile, lower vehicle speeds tend to result in fewer and less severe crashes for all modal users. In the case of pedestrians and bicycles, vehicular speeds of less than 20 mph result in fewer crashes involving fatality or severe injury.

Many people believe that the regulation of the transportation network to promote low vehicular speeds results in longer travel time and more congestion along a given street. In most instances, this is not true. The stop-and-go nature of urban driving, combined with the practical matter of intersection capacity, results in an optimum urban street capacity at a speed of approximately 25 mph.

**F. MAXIMIZING EFFICIENCY THROUGH TRANSPORTATION DEMAND MANAGEMENT**

The entire transportation network operates best when supply and demand are managed. Transportation Demand Management (TDM) complements the previously identified policies for multimodal capacity. TDM seeks to maximize travel opportunities within the transportation system through strategic programs, policies, and services. The following recommended policies seek to expand opportunities for system efficiency through TDM. More detailed infrastructure, policy, and program recommendations for TDM are included in the TDM Element.
Incorporate TDM programs in all development projects that impact the District’s right-of-way. The District should ensure TDM programs are provided for all development projects that impact the District’s right-of-way. This would establish TDM as an important element for site and transportation access, with different quantities and types of TDM programming for different development intensities and in context with the transportation options available within any given neighborhood.

All developments can provide design-based TDM measures without requiring ongoing investment or operation, such as:

- Leaving space and providing WiFi in lobbies for information and connections to taxi/transit/ridesharing services
- Ensuring that designs reflect moveDC pedestrian and bicycle plans
- Ensuring adequate pedestrian and bicycle facilities under current codes as well as any anticipated requirements above and beyond the master plan
- Provide bikeshare/carshare facilities on-site for use by the public
- Orienting development to the street and allowing for a clear path from the front door to transit facilities
- Managing parking in a way that reflects the urban nature of the District
- Participating in neighborhood programs/promotions

Efforts could be as simple as acknowledging receipt of an information packet describing the District’s multiple transportation programs when a building permit is approved (the person obtaining the permit would be responsible for supplying the materials to the building occupants). These and other low- or no-cost options are items that all developments, regardless of size, could incorporate.

Develop policies and incentives to encourage “car-lite” living.

DDOT should investigate the feasibility of financial or other incentives for car-lite living, including tax incentives. Households without a vehicle place fewer demands on the city’s roadway and curbside networks, generate fewer environmental emissions, and generate less opportunity for crashes. The District should further support car-lite living by continuing to dedicate on-street parking spaces for carsharing vehicles and continuing to allow carsharing vehicles to use curbside space throughout the city.

G. USING PLACEMAKING TO CREATE A DYNAMIC PUBLIC REALM

The District’s transportation network is for more than travel—it’s also how most people experience the city. Creating better public places provides additional value beyond mobility. The following recommended policies seek to expand opportunities for sustainability and livability citywide. More detailed infrastructure, policy, and program recommendations for sustainability and livability are included in the Sustainability and Livability Element.

Develop a “Placemaking in Public Space” program.

DDOT should develop a program to encourage and actively promote opportunities for enhancement in ineffective and under-used public spaces citywide. Any enhancements within the public realm should prioritize safety and functionality of the space and carefully consider the impacts of the change to the space prior to any modifications being made. Examples of placemaking include:

- Green infrastructure
- Public art
- Beautification projects
- Public plazas
- Parklets
- Café seating
**H. IDENTIFYING SUSTAINABLE FUNDING STRATEGIES**

The District will need to aggressively invest in transportation strategies to meet the demands of a growing population. Many different financing and project delivery strategies will be needed in the long term to meet the city’s many transportation needs. The following system-wide policies are recommended. More detailed information on funding and overall implementation is included in Chapter 5.

**Identify a variety of funding and delivery approaches for construction and operations of the transportation system.**

DDOT should continue identifying and pursuing opportunities in public-private partnerships (PPPs or P3s) for infrastructure delivery. PPPs can be structured in many different ways, but the goal is to deliver infrastructure projects more effectively in terms of both time and money. The combination of funding from public and private sectors can significantly expand government agencies’ purchasing power for projects and reduce their time in delivery (planning, design, and construction).

A Federal Transit Administration survey of eight PPPs for transit projects found that the surveyed projects were operational 1 to 6 years earlier than planned and realized cost savings of $1 to $38 million. PPPs also reduce the need for separate bids at each project stage, and private companies in a PPP often bid for a project with a fixed fee, eliminating time spent in lengthy negotiations of financial terms. DDOT has successfully used approaches such as design-build-to-budget on recent District projects, including the 11th Street Bridge and the H Street Streetcar Line.

**Evaluate the role of the District’s transportation investments in regional economic development.**

The District should articulate the regional economic benefit of strategic transportation investments in infrastructure located in D.C. The District’s transportation infrastructure may be located within the city’s boundaries, but it often is essential to the entire region’s mobility. Investments that the District makes improve access to the region’s largest employment center (and the largest in the United States outside of New York) and benefit residents of neighboring Maryland and Virginia by maintaining a functional and reliable transportation system in the city.
The long-term viability of D.C. continuing to make these kinds of investments—many of which are very large—is closely tied to making a case for their benefit to the entire region. This may not yield direct financial assistance from the other states, but it can help to guide discussions of how to prioritize transportation projects in regional long-range plans, how Maryland and Virginia may be able to offset D.C.’s outlay of resources through increased support for transit operations or other regionwide contributions, and how these states can help D.C. in appealing for federal funding assistance that benefits the entire region.

**Support a regional infrastructure bank for mega-projects.**

The District should start a dialogue on and support the formation of a regional mega infrastructure bank. Usually executed at the state level or regional level, infrastructure banks can be used to help fund and deliver projects that are critical to a region’s (city’s or state’s) development that could not otherwise fit into fiscally constrained programs.

The current Federal Highway Administration State Infrastructure Bank (SIB) program was established in the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) transportation bill, although SIBs have been allowed in some form since the mid-1990s. The SIB program allows states to establish infrastructure-specific revolving funds in partnership with the United States Department of Transportation (USDOT) and for these funds to be capitalized with federal funding. They allow loans at reduced rates, financing of bonds, credit lines, bond insurance, and other loan guarantees.

Washington, D.C.’s state-equivalent status means that it may be able to develop such a program, but most likely should look to do so in partnerships with other regional jurisdictions.

### I. PROACTIVELY MANAGING THE TRANSPORTATION SYSTEM

Maximizing the efficiency of the transportation system will require policy refinements and performance monitoring. The following are recommended systemwide policies to address proactive system management. More detailed infrastructure, policy, and program recommendations for system management are included in several Modal Elements.

**All transportation investments also should be state of good repair (SOGR) projects.**

DDOT should seek to align project programming and funding between projects intended to bring the transportation system to a SOGR, and new construction and enhancement projects. Combining funding sources will realize efficiency in project delivery and demonstrate an agency commitment to showing that repair and maintenance of the transportation system are just as important as major changes to it.

SOGR refers to maintenance and rehabilitation projects that keep infrastructure in a sound and functional condition and offset the need for more costly, extensive maintenance into the future. For DDOT, the logistical needs of these projects—such as maintenance of traffic, mobilization of work crews and equipment, and potential temporary impacts on parallel infrastructure systems (e.g., utilities)—represent project costs. To the extent that other adjacent or connected projects can be integrated into an SOGR project, an overall cost savings may be achieved by reducing resources needed for project delivery. This may require additional environmental analysis on a project-by-project basis.

**Further formalize the data collection, evaluation, sharing, and monitoring program within DDOT.**

Unified data collection and monitoring programs help:

- Identify where changes to the transportation system are needed
- Create universal application of policies and standards
- Provide informed evaluation as to what is most effective after implementation

DDOT should establish a program across its different administrations to allow consistent data formats, regular updates, and systematic means of evaluation and monitoring transportation system performance. This policy also includes providing public access to as much non-personal or non-proprietary data as possible in real time or close to it.
J. CONNECTING TRANSPORTATION TECHNOLOGY WITH USERS

Technology and data can shift the transportation landscape for people, build stronger communities, and create a highly-responsive transportation system. The following are recommended systemwide policies for transportation technology integration. More detailed infrastructure, policy, and program recommendations for technology are included in several Modal Elements.

Encourage open data to stimulate public and private collaboration in data exchange and creation of valuable information for operators and consumers.

To the extent possible and reasonable (to protect privacy and other appropriate rights), DDOT should collect and compile data from existing systems and those being planned in an open format.

The primary issues to open data lie in access permissions and rights to data as well as the format in which it is stored. Getting data out of systems and having it available for use in analytical and operational purposes can have tremendous benefits in terms of delivering more effective and efficient transportation solutions.

Support autonomous vehicle implementation and connected vehicle research, using D.C. as a test bed for the nation.

Autonomous (self-driving) and connected vehicles have the potential to improve safety, efficiency, and mobility while also reducing parking challenges and improving air quality. Successfully implemented, autonomous vehicles can offer people the convenience of driving, without many of its negative impacts and challenges. Like any new technology, additional study of autonomous vehicles is needed to evaluate things like safety in a complex urban environment.

With or without autonomous vehicles, connected vehicle technology can offer people a safer, more efficient, and more predictable driving experience, while allowing the transportation system to perform better. Connected vehicles manage traffic by communicating through vehicle-to-vehicle and vehicle-to-infrastructure data transmission.

Successfully implemented, connected vehicle technologies could transform operations for the District by:

- Helping to reduce crash frequency and severity
- Providing data to traffic managers in real-time to optimize system performance
- Providing travelers better information to make informed travel choices and to understand the impact of those choices
- Permitting vehicles to talk to the system to increase vehicle energy efficiency and system operational efficiency
III. Planning Framework

Most of the District’s significant streets have more demand by all modes than there is space, time, or money to accommodate. In nearly every city, a small number of a city’s streets are called upon to do nearly everything—be a primary bike corridor, strategic freight route, dedicated lane transit corridor, priority pedestrian route, main vehicular artery, and place to park.

A. DECISION-MAKING FRAMEWORK

Rather than forcing each major street to serve every mode of travel, the moveDC plan recommends a complete and integrated network for all transportation modes. The recommended networks draw from the best concepts in the three transportation system approaches. Figure 4.1 shows modal priorities on District streets that would result from moveDC infrastructure recommendations.

Off-street infrastructure recommendations, such as Metrorail modifications, commuter rail changes, and trail recommendations, were coordinated with street-network level recommendations as the complete networks were developed. The following approach guided the development of the moveDC plan:

- Every street should prioritize pedestrians and permit vehicles and local deliveries to operate
- Every street should fully accommodate one of the following:
  - Bicycles in a protected facility
  - Transit in dedicated (and protected) lanes
  - Vehicular traffic and freight
- Where the street network is limited in terms of connectivity or where right-of-way offers opportunity, several transportation modes may be accommodated. The preference is to provide a better quality accommodation by strategically separating travel modes, rather than a network made up of compromises for all modes.

B. MOVE DC INFRASTRUCTURE PLAN

Figures 4.2 through 4.7 show the recommended multimodal infrastructure plan for the District. The infrastructure plan shows elements such as high-capacity surface transit, Metrorail, commuter rail, streetcars, bikeways, managed lanes, new and reconfigured streets, and bridge projects. The plan does not provide specific local transportation network recommendations for local streets (as classified by DDOT), neighborhood bikeways, and neighborhood traffic calming. The Modal Elements provide additional information and recommendations about each modal network and the policies that support moveDC’s envisioned infrastructure.

The recommended plan is focused specifically on the District of Columbia; however, it is mindful of the neighboring region. Connections to existing and planned transit systems, bike and pedestrian networks, rail networks, and vehicular systems are embedded in the recommended plan, along with the many D.C.-focused recommendations. Table 4.1 highlights moveDC recommendations from the perspectives of regional integration, system capacity expansion, and network connectivity.

Two sets of maps are included in this chapter: citywide (with downtown inset) and planning area specific. The planning area maps coincide with DDOT’s five designated planning areas—Downtown, Eastern, Northern, Southern, and Western. The geographic extent of each planning area is defined by a combination of significant transportation facilities and coordinated with Ward and Advisory Neighborhood Commission boundaries wherever possible.
FIGURE 4.1 – MODAL PRIORITIES
This figure shows conceptual modal priorities on corridors based on infrastructure recommendations in the moveDC plan.
FIGURE 4.2 – PLANNED TRANSPORTATION NETWORK
This figure shows the planned transportation network. Major network elements include a Central Employment Area congestion pricing cordon, support for commuter rail and Metrorail enhancements, managed lanes on major facilities entering the District, a well-connected network of bicycle facilities including new trails and cycle tracks, and sidewalks on at least one side of every street.
FIGURE 4.3 – DOWNTOWN PLANNING AREA TRANSPORTATION NETWORK

The moveDC overall transportation network for the Downtown planning area includes:

- **Transit**
  - Support for commuter rail service expansion, passenger and commuter rail facility improvements at L’Enfant Plaza and Union Station, WMATA’s **Momentum Plan**, and a new Potomac River Metrorail tunnel and downtown Metrorail loop
  - Streetcar lines: Anacostia Initial Line, North-South, and One City
  - High-capacity transit: 16th Street NW, Maine Avenue SW/M Street SW/SE, North Capitol Street, and Woodley Park/U Street NW/Navy Yard
  - Water transit service within the District and between D.C. and neighboring jurisdictions

- **Pedestrian**
  - Sidewalks on at least one side of every street

- **Bicycle**
  - Improved river crossings
  - Improved trail connectivity
  - Many new cycle tracks to and within downtown
  - Extensive bicycle network throughout downtown

- **Vehicular**
  - A Central Employment Area congestion pricing cordon
  - Managed lanes on some of the major facilities entering the District
  - New local street connections in the Foggy Bottom area and across I-395
  - Preservation of designated freight routes

Legend

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<tr>
<th>Existing Infrastructure</th>
<th>moveDC Plan Elements (Future)</th>
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<tr>
<td>Metrorail Station</td>
<td>Trail</td>
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<tr>
<td>Metrorail Line</td>
<td>Bicycle Lane</td>
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<tr>
<td>Commuter Rail Station</td>
<td>Cycle Track</td>
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<tr>
<td>Commuter Rail</td>
<td>DC Streetcar (Planned 22-mile Network)</td>
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<td>Street</td>
<td>Streetcar Extension</td>
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<td>Railroad</td>
<td>High-Capacity Transit (Shared Lanes)</td>
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<tr>
<td>Trail</td>
<td>High-Capacity Transit (Dedicated Space)</td>
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<tr>
<td>Bike Lane (incl. Contraflow &amp; Climbing)</td>
<td>Water Transit</td>
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<td>Metrorail Line</td>
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<td>Roadway Reconfiguration</td>
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<td>Mixed Use or Neighborhood Center</td>
<td>Bridge Replacement or Rehabilitation</td>
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<td>Multi-Neighborhood or Regional Center</td>
<td>Street</td>
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- Street
- Metrorail Station
- Union Station Improvements
- Downtown Congestion Pricing Cordon

72 District Department of Transportation
The moveDC overall transportation network for the Eastern planning area includes:

- **Transit**
  - Support for commuter rail service expansion, WMATA’s *Momentum Plan*, and a new Potomac River Metrorail tunnel and downtown Metrorail loop
  - Streetcar line: One City
  - High-capacity surface transit: 8th Street NE/SE, Minnesota Avenue NE/SE, Pennsylvania Avenue SE, Rhode Island Avenue NE

- **Pedestrian**
  - Sidewalks on at least one side of every street

- **Bicycle**
  - New bicycle connections over the Anacostia River
  - Improved trail connectivity
  - Cycle tracks on major routes including Alabama Avenue SE, Bladensburg Road NE, East Capitol Street, and Massachusetts Avenue SE
  - Bicycle facilities on Rhode Island Avenue NE

- **Vehicular**
  - Managed lanes on New York Avenue NE
  - Improve/reconfigure the Anacostia Freeway SE (D.C. 295) and the old Southeast Freeway to improve connectivity and safety
  - New local street network in Reservation 13 (Hill East)
  - Extension of Eastern Avenue NE between Bladensburg Road and Kenilworth Avenue
  - Preservation of designated freight routes

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**Legend**

- **Existing Infrastructure**
  - Metrorail Station
  - Metrorail Line
  - Commuter Rail Station
  - Commuter Rail
  - Street
  - Railroad
  - Trail
  - Bike Lane (incl. Contraflow & Climbing)
  - Cycle Track

- **moveDC Plan Elements (Future)**
  - Trail
  - Bicycle Lane
  - Cycle Track
  - DC Streetcar (Planned 22-mile Network)
  - Streetcar Extension
  - High-Capacity Transit (Shared Lanes)
  - High-Capacity Transit (Dedicated Space)
  - High-Frequency Bus Corridor Improvement
  - Water Transit
  - Metrorail Line
  - Managed Lane
  - Roadway Reconfiguration
  - Bridge Replacement or Rehabilitation
  - Street
  - Metrorail Station
  - Union Station Improvements
  - Downtown Congestion Pricing Cordon
FIGURE 4.5 – NORTHERN PLANNING AREA TRANSPORTATION NETWORK
The moveDC overall transportation network for the Northern planning area includes:

- **Transit**
  - Streetcar Lines: North-South
  - High-capacity surface transit: North Capitol Street, Woodley Park/U Street NW/Navy Yard, and Van Ness/Columbia Heights/Brookland

- **Pedestrian**
  - Sidewalks on at least one side of every street

- **Bicycle**
  - Completion of the Metropolitan Branch Trail
  - New crossings of the Rock Creek Park via a cycle track on Military Road NW and trails
  - Cycle tracks on major routes including Missouri Avenue NW, New Hampshire Avenue NW, and South Dakota Avenue NE

- **Vehicular**
  - New local street grid at the McMillan site and in the Soldier’s and Airmen’s Home area
  - New street crossings of the railroad tracks
  - Preservation of designated freight routes
FIGURE 4.6 – SOUTHERN PLANNING AREA TRANSPORTATION NETWORK
The moveDC overall transportation network for the Southern planning area includes:

- **Transit**
  - Support for commuter rail service expansion, WMATA's **Momentum Plan**, and a new Potomac River Metrorail tunnel and downtown Metrorail loop
  - Streetcar lines: Anacostia Initial Line with an extension to Congress Heights
  - High-capacity surface transit: Minnesota Avenue SE and South Capitol Street
  - Water transit service within the District and between D.C. and neighboring jurisdictions

- **Pedestrian**
  - Sidewalks on at least one side of every street

- **Bicycle**
  - New bicycle connections over the Anacostia River
  - Improved trail connectivity
  - Cycle tracks on major routes including Alabama Avenue SE, Good Hope Road SE, and Mississippi Avenue SE
  - Bicycle connection from Anacostia to St. Elizabeths

- **Vehicular**
  - Managed lanes on the Anacostia Freeway (I-295) and I-395/I-695
  - Improve/reconfigure the Anacostia Freeway SE (D.C. 295) and the old Southeast Freeway to improve connectivity and safety
  - New local street network in the Skyland area
  - New local street connection between 13th Street SE and St. Elizabeths Hospital redevelopment area
  - Preservation of designated freight routes
FIGURE 4.7 – WESTERN PLANNING AREA TRANSPORTATION NETWORK

The moveDC overall transportation network for the Western planning area includes:

- **Transit**
  - Support for a new Potomac River Metrorail tunnel and downtown Metrorail loop
  - Streetcar line: One City
  - High-capacity transit: Van Ness/Columbia Heights/Brookland, Wisconsin Avenue NW, and Woodley Park/U Street NW/Navy Yard
  - Water transit service within the District and between D.C. and neighboring jurisdictions

- **Pedestrian**
  - Sidewalks on at least one side of every street

- **Bicycle**
  - New crossings of the Rock Creek Park via a cycle track on Military Road NW and trails
  - Improved trail connectivity
  - New bike bridge between Georgetown and Theodore Roosevelt Island
  - Cycle tracks on major routes including Arizona Avenue NW, Connecticut Avenue NW, K Street NW, and Reservoir Road NW/R Street NW

- **Vehicular**
  - Reconfiguration of the Rock Creek and Potomac Parkway between K Street NW and Q Street NW to accommodate two-way travel all day
  - Preservation of designated freight routes

---

**Legend**

<table>
<thead>
<tr>
<th>Existing Infrastructure</th>
<th>moveDC Plan Elements (Future)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metrorail Station</td>
<td>Trail</td>
</tr>
<tr>
<td>Metrorail Line</td>
<td>Bicycle Lane</td>
</tr>
<tr>
<td>Commuter Rail Station</td>
<td>Cycle Track</td>
</tr>
<tr>
<td>Commuter Rail</td>
<td>DC Streetcar (Planned 22-mile Network)</td>
</tr>
<tr>
<td>Street</td>
<td>Streetcar Extension</td>
</tr>
<tr>
<td>Railroad</td>
<td>High-Capacity Transit (Shared Lanes)</td>
</tr>
<tr>
<td>Trail</td>
<td>High-Capacity Transit (Dedicated Space)</td>
</tr>
<tr>
<td>Bike Lane (incl. Contraflow &amp; Climbing)</td>
<td>High-Frequency Bus Corridor Improvement</td>
</tr>
<tr>
<td>Cycle Track</td>
<td>Water Transit</td>
</tr>
</tbody>
</table>

*Ward Boundary*

- Land Use Change Area
- Mixed Use or Neighborhood Center
- Multi-Neighborhood or Regional Center

*Union Station Improvements*

*Downtown Congestion Pricing Cordon*
### Table 4.1: Recommended Network Plan Highlighted Summary

<table>
<thead>
<tr>
<th>Regional Integration</th>
<th>System Capacity Expansion</th>
<th>Network Connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pedestrians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installation of sidewalks on at least one side of every street citywide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion of key regional trails (e.g., Metropolitan Branch Trail)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support to MARC and VRE (commuter rail) for service expansion</td>
<td>Support to WMATA in implementation of the <em>Momentum Plan</em></td>
<td></td>
</tr>
<tr>
<td>Support for Union Station enhancements</td>
<td></td>
<td>Planned 22-mile streetcar network with extensions to Silver Spring and Congress Heights</td>
</tr>
<tr>
<td>Support to WMATA in implementing a new Potomac River Metrorail tunnel between Rosslyn and Georgetown and a new downtown Metrorail loop that separates the Orange/Blue Lines and the Yellow/Green Lines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water transit within the District and between D.C. and neighboring jurisdictions</td>
<td>Citywide interconnected high-capacity surface transit network</td>
<td></td>
</tr>
<tr>
<td>Efficiency and effectiveness improvement to high-frequency bus corridors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 4.1: Recommended Network Plan Highlighted Summary (continued)

<table>
<thead>
<tr>
<th>Regional Integration</th>
<th>System Capacity Expansion</th>
<th>Network Connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bicycles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protected bicycle network (cycle tracks and trails) to and within downtown and across major barriers (parks, rivers, rail, or freeways)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle lanes citywide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Capital Bikeshare (CaBi) stations citywide</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vehicles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of Central Employment Area congestion pricing for private vehicle trips</td>
<td>Traffic signal optimization and system enhancement citywide</td>
<td>New local street connections in land use change areas and across barriers such as rail and freeways</td>
</tr>
<tr>
<td>Managed lane network on New York Avenue NE, the Anacostia Freeway (I-295), I-395, I-695, and the Theodore Roosevelt Memorial Bridge (I-66/US 50)</td>
<td>ITS system upgrades citywide</td>
<td>Reconfigurations of freeways into urban boulevards (D.C. 295 and I-66 between Constitution Avenue and K Street NW)</td>
</tr>
<tr>
<td>Major bridge replacements and rehabilitations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preservation of designated freight routes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IV. Performance of the Plan

The moveDC plan’s goals, described in Chapter 1, were used in the quantitative and qualitative evaluation of the recommended plan’s performance. The Districtwide Travel Demand model and the plan’s spatial analysis model were used to develop the metrics for each plan performance measure. The recommended plan’s performance measures and measurement methods were the same as those used in the analysis of the approaches described in Chapter 3.

The recommended plan’s overall performance—by goal category—is summarized by report cards on the following pages. The report cards also show the performance of each of the approaches.

The recommended plan’s network takes into account the technical and non-technical input and the trade-offs between different plan goals. The planned network strikes a balance between serving the needs of the city’s residents, a large non-D.C. workforce, and the many people who visit the city. The recommended plan network also coordinates with and connects to infrastructure and policy in neighboring jurisdictions.

The moveDC plan’s performance reflects its balanced nature—modally, geographically, operationally, and from a policy perspective. It aspires to be efficient, effective, and sustainable, while providing mobility for the entire city and interconnectivity to the region.

The goals of moveDC are intended as far-reaching and visionary targets. They are not always possible to measure precisely under future conditions. The Districtwide Travel Demand Model does not distinguish commute versus non-commute trips for all modes. The forecasts prepared as a part of this planning process are for all trips in a 24-hour period. The Districtwide Travel Demand Model projects that the recommended plan would achieve 64 percent of all future (2040) trips in the District by non-auto modes. Because commute trips tend to be more non-auto than others (because transit service is greater and employment density is typically well-served by bicycle facilities), this result still shows substantial progress toward the goals. Future performance monitoring, on an ongoing basis, will be needed to evaluate progress on this and other goals.

The forecast principally reflects the effect of the moveDC plan’s recommended infrastructure on a population and workforce with travel attitudes similar to those of today. The many policies in moveDC, policies under consideration by neighboring jurisdictions, and evolving District and regional population attitudes and behaviors toward travel are significantly under-represented in the model results. moveDC’s and the region’s policies, in combination with changing demographics, should push the District’s transportation system nearer to or beyond the established goals.
A. COMPARATIVE REPORT CARD

The recommended plan and the three approaches were measured comparatively within each of moveDC’s goal areas. The charts rate the performance within each goal area on a scale from 0 to 100, with 100 meaning the goal is reached.

Sustainability and Health
Goal: Achieve 75% of all commute trips in the District by non-auto modes. moveDC wants to promote a healthy lifestyle and sustainable transportation system through the creation of safe places to live, work, and play. Providing for today’s needs without negatively impacting the ability of future generations to do the same is important.

- **A higher rating means:** The transportation system helps to promote an environmentally friendly and healthy lifestyle
- **The moveDC plan’s rating is equal to the performance of Approach 3 (Connect the Neighborhoods), improving sustainability and health by increasing non-auto mode share while limiting new transportation infrastructure in flood zones

Citywide Accessibility and Mobility
Goal: Maximize system reliability and capacity for moving people and goods. The system must maintain connectivity and accessibility in many ways (driving, public transportation, walking, and biking), while also accommodating freight movements within and through the District. Connections to regional transportation facilities provide access into and out of the city.

- **A higher rating means:** It is easier to get in and around the city
- **The moveDC plan compares favorably with the three approaches. It increases system capacity and integrates with the regional transportation system**
**Neighborhood Accessibility and Connectivity**

**Goal:** Support neighborhood vitality and economic development. Enhanced connectivity and improved transit service can contribute to neighborhood vitality. These investments can reduce travel time and cost for people and also encourage economic development.

- **A higher rating means:** There are more connections between District neighborhoods and activity centers
- **The moveDC plan performs better than the three approaches by increasing network coverage and transportation access**

**Safety and Security**

**Goal:** Achieve zero fatalities and serious injuries on the District transportation network. The transportation system can contribute to safety and security by providing enhanced accommodations for walking, bicycling, driving, and transit. Sidewalks and accommodation for emergency evacuation are considerations within this category.

- **A higher rating means:** The transportation system will be safer
- **The moveDC plan compares favorably with the three approaches due to planned corridor improvements in high crash locations and increasing transportation capacity on evacuation routes**
Public Space
Goal: Reinforce Washington, D.C.’s historic landscapes and quality of neighborhood public space. World-class cities are defined not only by their great spaces, but also by the corridors that connect them. Streets should be attractive and walkable.

- **A higher rating means:** Streets are more attractive and walkable
- The *moveDC* plan compares favorably with the three approaches due to the opportunity to improve streetscapes and enhance the public realm through its infrastructure investments

Preservation
Goal: Maximize reliability for all District transportation infrastructure by investing in maintenance and asset management. Infrastructure is aging in the District and will need continued investment. There is a need to balance maintenance and transportation system enhancements to ensure that the transportation system can achieve a state of good repair.

- **A higher rating means:** A lesser amount of infrastructure is added to the transportation system, requiring relatively comparatively less financial resources to maintain
- The *moveDC* plan compares favorably with the three approaches because it efficiently deploys high-cost infrastructure such as streetcar and high-capacity surface transit and rehabilitates the District’s bridge infrastructure
B. MOVEDC PLAN PERFORMANCE
To assess how the projected 2040 transportation system would function, the moveDC plan was evaluated against performance measures derived from the plan’s goals.

Transportation Choice
The number of future transportation options available in a given place is characterized by a mobility index. Available transportation options measured by the mobility index, shown in Figure 4.8, consist of protected bicycle facilities with a 2-minute ride, bicycle facilities within a 2-minute ride, a Metrorail station within a 7-minute walk, and a high-capacity transit station (including streetcar) within a 7.5-minute walk. Green shading represents more choices, while red shading represents fewer transportation choices.

Transportation Options
With the recommended transportation networks, downtown is well served while many other neighborhoods also benefit from new transportation choices. In addition, neighborhoods along some major travel corridors enjoy nearly as much transportation choice as downtown.

By 2040, the following percentages of the District population will have access to these modes of transportation:
Mode Share for Daily Trips

As shown in Figure 4.9, the recommended plan anticipates that trips in 2040 with a starting and ending point in the District will occur primarily on foot and by bicycle. Compared to the three approaches studied, the moveDC plan anticipates a slightly smaller number of trips to be made by transit. Figure 4.10 shows that trips in 2040 with either a starting or ending point in D.C. are anticipated be made at a higher rate by transit, as compared to District-to-District trips.

The recommended plan’s performance compares favorably against with the 75% non-auto mode share goal. moveDC’s mode share goal, incorporated from Sustainable D.C., is for commute trips only. The Districtwide Travel Demand Model does not distinguish between commute and non-commute trips for all travel modes—non-commute trips tend to have a higher driving share. Ongoing evaluation of the District’s progress toward the Sustainable D.C. and moveDC goal will need to be conducted using U.S. Census information and household travel survey data taken at the regional level.

Figure 4.9: Mode Share for 2040 Trips within the District

Figure 4.10: Mode Share for 2040 Trips to or from the District
CHAPTER 4: POLICY AND PLANNING FRAMEWORK

Capacity to Move People

Compared to today (2014), there will be significantly more person-carrying capacity in the District’s future (2040) transportation system. Automobile capacity will decrease slightly to provide space for other modal networks to experience a substantial increase in capacity. As shown in Figure 4.11, the recommended plan network capacity compares favorably to the other approaches studied.

Bike/Walk Network

The District will continue to invest in bicycling and walking facilities. By 2040, sidewalks will be available on at least one side of every street and many more bikeways will be constructed. As shown in Figure 4.12, the bicycle network in the recommended plan compares favorably to the three alternative approaches.

Transit Access

By 2040, approximately 22% of the percent of the District’s population will have access to a Metrorail station, and 45% will have access to a high-capacity surface transit (including streetcar) stop. Figure 4.13 shows how the recommended plan compares against the three approaches in offering transit access. The availability of high-capacity surface transit is less than the three alternative approaches due to the smaller network recommended in the moveDC plan.

Parking

In the future, peak period on-street parking restrictions will be determined on a case-by-case basis as other modal facilities are implemented in a corridor.
**Vehicular Network Operation**

The recommended plan reduces vehicular capacity on many corridors, but provides a significant increase in overall person-carrying capacity of the network. In the future (2040) scenario, the number of vehicle trips, miles and hours traveled, and delay increases substantially from existing (2010) modeled conditions.

**Figure 4.14** shows a model of the 2040 peak hour volume to capacity (V/C) ratio—comparing the number of vehicles passing a certain point on a roadway to the number that could pass the same point in free-flowing traffic conditions. In the figures below, green denotes a V/C ratio of less than 0.75, which represents traffic on the move. Yellow represents slow traffic, red depicts stopped traffic, and black signifies critical traffic. **Figure 4.15** shows the same model, but with the effects of the moveDC plan’s recommended improvements. Although the images look similar at this scale, the improvement in performance with the recommended improvements is significant.

**Tables 4.2** to **4.6** summarize system performance. As shown in **Table 4.2**, when compared to existing (2010) modeled conditions, the recommended plan results in potentially fewer vehicle miles traveled and only a slight increase in vehicle hours traveled and delay for District-to-District trips. Similarly, moveDC’s multimodal investments help to reduce the increase in vehicular travel between the District and the region. This is significant when considered in the context of the forecasted increase in population of nearly 50% in the District and an increase in jobs in the District by more than 27%.

**Tables 4.5** and **4.6** show the effect of moveDC’s coordinated and comprehensive multimodal investment approach in the form of decreases in motorized (driving) mode share and corresponding increases in transit and non-motorized (walking/bicycling) mode shares.

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**Figure 4.14: 2040 Future Baseline p.m. Peak Hour V/C Ratios**

![2040 Future Baseline p.m. Peak Hour V/C Ratios](image1)

**Figure 4.15: 2040 Recommended Plan p.m. Peak Hour V/C Ratios**

![2040 Recommended Plan p.m. Peak Hour V/C Ratios](image2)
### Table 4.2: Vehicular System Performance

<table>
<thead>
<tr>
<th>Measure</th>
<th>Model Base Year</th>
<th>Future Baseline</th>
<th>moveDC Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2040</td>
<td>2040</td>
</tr>
<tr>
<td>Vehicle Miles Traveled</td>
<td>9.13 million</td>
<td>10.45 million</td>
<td>9.07 million</td>
</tr>
<tr>
<td>Vehicle Hours Traveled</td>
<td>335,000</td>
<td>389,000</td>
<td>354,000</td>
</tr>
<tr>
<td>Delay (Hours)</td>
<td>21,000</td>
<td>30,000</td>
<td>23,000</td>
</tr>
</tbody>
</table>

Note: These values are for the District of Columbia only

### Table 4.3: Total Daily (District-to-District) Trips

<table>
<thead>
<tr>
<th>Measure</th>
<th>Model Base Year</th>
<th>Future Baseline</th>
<th>moveDC Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2040</td>
<td>2040</td>
</tr>
<tr>
<td>Motorized (Drive)</td>
<td>639,000</td>
<td>756,000</td>
<td>654,000</td>
</tr>
<tr>
<td>Transit</td>
<td>314,000</td>
<td>384,000</td>
<td>427,000</td>
</tr>
<tr>
<td>Non-Motorized (Walk/Bike)</td>
<td>450,000</td>
<td>698,000</td>
<td>747,000</td>
</tr>
</tbody>
</table>

Notes:
1. Motorized includes private vehicle (driver and passenger) and commercial vehicles
2. Transit is bus, streetcar, high-capacity surface transit, Metrorail, commuter rail, and water transit

### Table 4.4: Total Daily (to/from District) Trips

<table>
<thead>
<tr>
<th>Measure</th>
<th>Model Base Year</th>
<th>Future Baseline</th>
<th>moveDC Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2040</td>
<td>2040</td>
</tr>
<tr>
<td>Motorized (Drive)</td>
<td>1,305,000</td>
<td>1,480,000</td>
<td>1,340,000</td>
</tr>
<tr>
<td>Transit</td>
<td>486,000</td>
<td>615,000</td>
<td>685,000</td>
</tr>
<tr>
<td>Non-Motorized (Walk/Bike)</td>
<td>200,000</td>
<td>229,000</td>
<td>244,000</td>
</tr>
</tbody>
</table>

Notes:
1. Motorized includes private vehicle (driver and passenger) and commercial vehicles
2. Transit is bus, streetcar, high-capacity surface transit, Metrorail, commuter rail, and water transit
### Table 4.5: Mode Share (District-to-District) Trips

<table>
<thead>
<tr>
<th>Measure</th>
<th>Model Base Year</th>
<th>Future Baseline</th>
<th>moveDC Plan</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2040</td>
<td>2040</td>
</tr>
<tr>
<td>Motorized (Drive)</td>
<td>45.5%</td>
<td>41.1%</td>
<td>35.8%</td>
</tr>
<tr>
<td>Transit</td>
<td>22.4%</td>
<td>20.9%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Non-Motorized (Walk/Bike)</td>
<td>32.1%</td>
<td>38.0%</td>
<td>40.9%</td>
</tr>
</tbody>
</table>

Notes:
1. Motorized includes private vehicle (driver and passenger) and commercial vehicles
2. Transit is bus, streetcar, high-capacity surface transit, Metrorail, commuter rail, and water transit
3. Columns may not total 100% due to rounding

### Table 4.6: Mode Share (to/from District) Trips

<table>
<thead>
<tr>
<th>Measure</th>
<th>Model Base Year</th>
<th>Future Baseline</th>
<th>moveDC Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2040</td>
<td>2040</td>
</tr>
<tr>
<td>Motorized (Drive)</td>
<td>65.6%</td>
<td>64.7%</td>
<td>58.8%</td>
</tr>
<tr>
<td>Transit</td>
<td>24.4%</td>
<td>26.9%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Non-Motorized (Walk/Bike)</td>
<td>10.0%</td>
<td>10.0%</td>
<td>10.7%</td>
</tr>
</tbody>
</table>

Notes:
1. Motorized includes private vehicle (driver and passenger) and commercial vehicles
2. Transit is bus, streetcar, high-capacity surface transit, Metrorail, commuter rail, and water transit
3. Columns may not total 100% due to rounding
This map shows a summary of higher concentrations (relative to one another) of Title VI designated populations in the District. The analysis was prepared using demographic data from the U.S. Census (2010) at the Tract level.
CHAPTER 4: POLICY AND PLANNING FRAMEWORK

V. Accessibility and Equality

Early in the planning process, the themes of sharing prosperity and creating an environment that allows neighborhoods to flourish were identified as important. Transportation’s role in supporting and enriching neighborhoods is considerable. It ranges from offering people access to the places they need to go to enriching the physical and economic environment through improvements to public spaces.

Transportation is a key component of a strategy to better share prosperity. When a transportation system offers people a range of choices that aligns with their needs (financial, schedule, convenience, and other), it offers those people the opportunity to achieve their fullest potential.

Potentially vulnerable populations, from a demographic perspective, often could benefit most from improved access, more transportation choice, and community investment. Recognizing this, the distribution of recommended transportation infrastructure of moveDC was evaluated.

Using demographic data from the 2010 U.S. Census, areas with high concentrations (relative to Districtwide averages) of potentially vulnerable populations were identified and are shown in Figure 4.16. The identification of these areas is based on Census Tract data and there may be other areas with potentially vulnerable populations that are not highlighted.

Identifying potentially vulnerable populations helped evaluate the impact and potential benefit of moveDC infrastructure recommendations on transportation access and mobility choice in these areas, relative to the District as a whole. As projects are developed from the moveDC plan’s recommendations, additional analysis and evaluation will be necessary to ensure that populations in these areas, as well as others, are not subjected to disproportionate negative impacts.

Figure 4.16 shows areas of the city with population groups that may benefit from increased, or at least, reasonable transportation investment. These areas, shown in orange and red, comprise approximately 40% of the population.

The following briefly summarizes major transportation investments in areas with potentially higher concentrations of vulnerable populations:

- 33% of plan-recommended bike lanes
- 34% of plan-recommended cycle track
- 37% of plan-recommended new trails
- 46% of plan-recommended new street connections
- 49% of plan-recommended streetcar mileage
- 36% of plan-recommended high-capacity transit mileage (includes streetcar)

Figure 4.17 shows comparative summary of transportation access for the city as a whole versus the areas shown in red and orange in Figure 4.16. The areas with potentially vulnerable populations have a similar level of transportation choices available to that of the city as a whole.
Pedestrian activity brings life to District streets