

TRANSPORTATION






TRANSPORTATION

Everyone in Washington, DC relies on our transportation system every day to get where they need to go—to work, to school, to see family and friends—and to connect to what they need—food, healthcare, and nature. The District, more so than most cities, puts enormous strain on its transportation system. The District’s population is approximately 700,000, but grows by almost 80% during the weekday with commuters traveling from as far away as West Virginia and Delaware to their DC workplaces.⁴⁵ This enormous influx of people results in serious traffic congestion. The DC region has the sixth worst traffic congestion in the country with an average of 11 percent of driving time spent in congestion.⁴⁶

While buildings are the main source of greenhouse gas (GHG) emissions in the District, 21 percent of emissions come from transportation, making it the second largest source.⁴⁷ Many residents and workers enjoy convenient access to high quality sidewalks, bike lanes, and trails, however, access is unequal. Past practices like race-based redlining, land use, and development patterns have a lasting legacy, and some areas of Washington, DC have such inferior access to public transportation or are so disconnected from city amenities that walking and biking are not viable transportation options. Further, differing physical abilities restrict others from getting around conveniently. Regardless of where one lives or one’s physical ability, all residents should have good access to high quality transit and safe, well-maintained sidewalks. All residents should also be able to move safely, no matter what mode of transportation they choose. However, every trip—whether by bus, bike, car, or train—begins and ends with a walk so prioritizing pedestrians in transportation planning is important. Equally important is funding maintenance. Decades of deferred maintenance on the Metrorail system which has resulted in very expensive and inconvenient work to get the system back to a state of good repair.

An efficient, safe, and convenient transportation system is not just for people though. It fuels our economy through increased productivity, better supply chain management, and access to new workers and markets. The District is lucky to have one of the best transportation systems in the country despite its troubles. According to recent rankings, the District has the fourth best transit system, is the seventh most walkable, and the ninth most bicycle-friendly city in the United States.⁴⁸ However, it takes a lot of infrastructure to keep our city moving. In our 69 square mile city, there are 1,100 miles of streets, almost 1,500 miles of sidewalks, 85 miles of bicycles lanes, 241 bridges, 16 tunnels, and 278 Capital Bikeshare stations.⁴⁹ Sustainable DC offers four goals and 23 actions to help improve our transportation system. Beyond Sustainable DC, more detailed transportation planning regularly occurs. The District Department of Transportation (DDOT)'s moveDC plan is the District's comprehensive transportation plan and Vision Zero is the plan to eliminate transportation-related deaths. Clean Energy DC offers additional strategies for reducing emissions for our transportation sector.





Sustainable DC 2.0's actions on transportation have real benefits for Washington, DC at all levels:

INDIVIDUAL

Walking or biking to work—even if just part of the way—is one of the best ways to incorporate exercise into your daily routine. Just 30 minutes of walking—a 15 minute commute each way—is enough to reduce your risk of diabetes and high blood pressure.⁵⁰

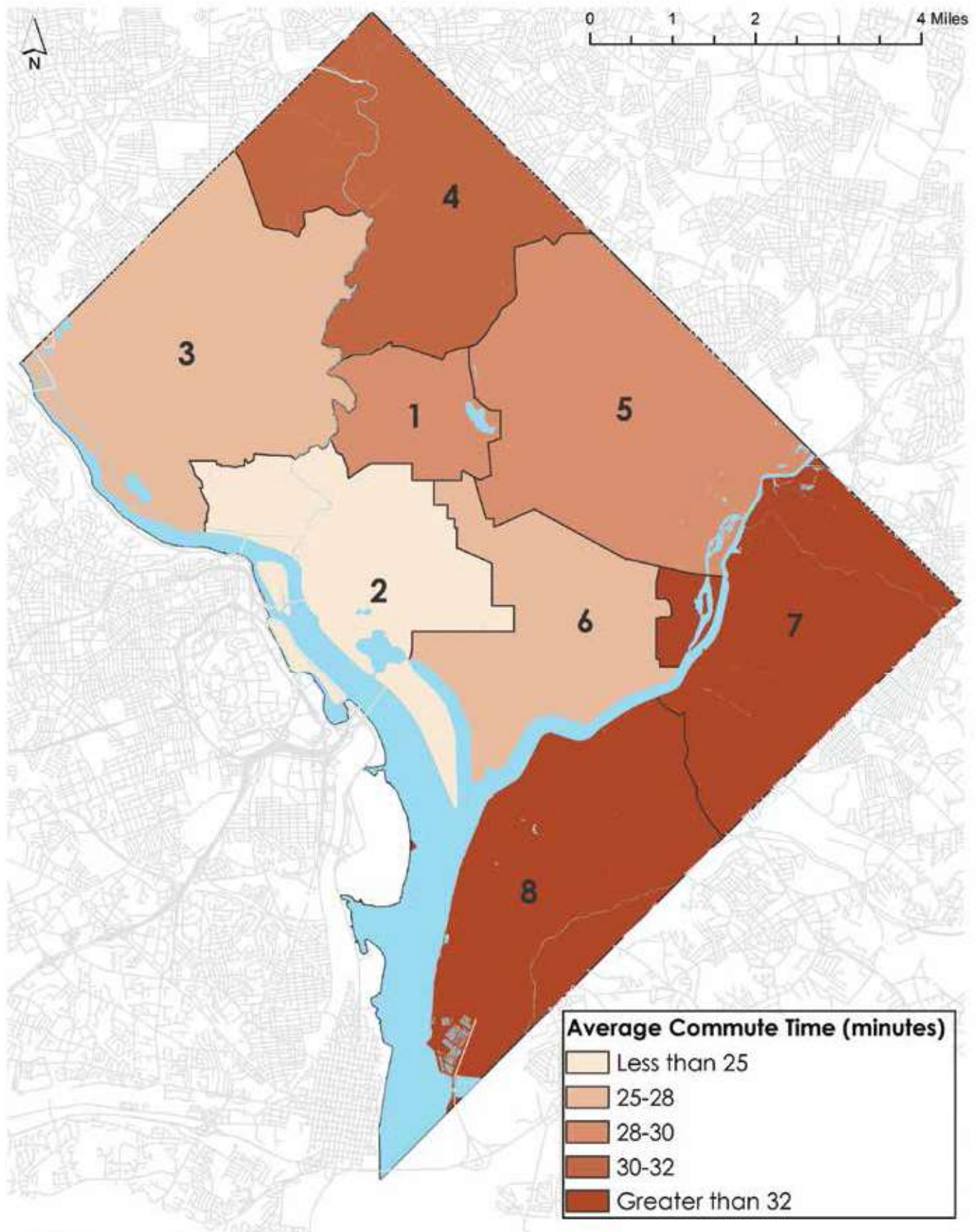
NEIGHBORHOOD

Walkable neighborhoods can support more local businesses because stores clustered together encourage customers to spend more money at multiple stores in the same area.⁵¹

DISTRICT

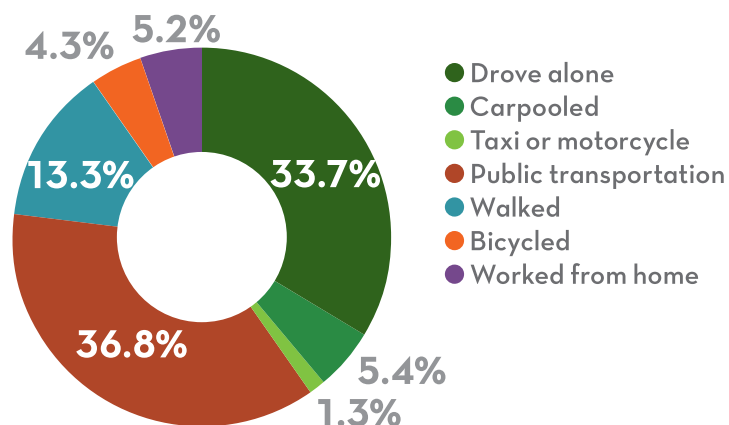
Traveling by public transportation is 10 times safer per mile than traveling by automobile.⁵² We each reduce the chance of being in a crash by more than 90 percent simply by taking public transit as opposed to commuting by car.⁵³

AVERAGE COMMUTE TIME BY WARD (2014)



Data Source: DC Economic Strategy & DC GIS

Commute Mode Share in DC (2016)^{lviii}

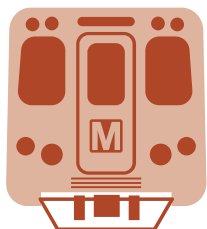


It costs between

\$30,000 to \$50,000 to build one underground parking space in DC.^{lx}



30% of residents are within walking distance of a Metrorail station.



IN 69 SQUARE MILE DC, THERE ARE:

1,100 miles of streets

1,595 miles of sidewalks

1,652 traffic signals

7,700 intersections

85 miles of bicycles lanes

60 miles of multi-use trails

241 bridges

16 tunnels

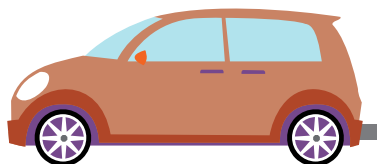
278 Capital Bikeshare stations^{lix}



Traveling by public transit is

10 times safer per mile than traveling by car.^{lxiii}

38% of DC households do not own a car.^{lxi}



21% of GHG emissions come from transportation.^{lxiv}



GOAL 1

Improve connectivity and accessibility through efficient, integrated and affordable transit systems.



TARGET 1

By 2032, increase use of public transit to 50% of all commuter trips in all wards.



TARGET 1 BASELINE

40.5%

TR1.1

Expand high capacity transit on high ridership corridors.

High capacity transit like Bus Rapid Transit or streetcar can provide faster and more reliable public transportation on high ridership corridors. Successful systems like Cleveland's Healthline typically have dedicated bus lanes, stations spread further apart, transit signal priority, off-board fare collection, all-door boarding, and longer buses that often feel more like trains. Ongoing efforts, such as the expansion of the DC Streetcar, implementation of the 16th Street NW Transit Priority Project, keeping the DC Circulator free will help improve transit speed and reliability. By better understanding which high capacity corridors are the best candidates and what capital and operational investments it will take to make them successful, the District Government will be in a good position to start building high capacity transit corridors to better serve residents beyond walking distance (1/2 mile) of a Metrorail station.

TIMEFRAME

Medium term

LEAD

DDOT, WMATA

TR1.2

Improve transit connections to employment and activity centers from underserved areas.

Approximately 30% of residents are within walking distance (a half mile) of rapid transit like Metrorail.⁵⁴ To provide quality, convenient transit access to underserved areas—particularly new activity centers east of the Anacostia River such as MLK Gateway, Skyland, and St. Elizabeths—the District Government will prioritize connecting areas of the city east of the Anacostia River not currently within walking distance of rapid transit with direct routes to employment and activity centers.

TIMEFRAME

Medium term

LEAD

DDOT

PARTNER

WMATA

TR1.3

Define and secure permanent funding for transit planning and improvements.

Because transportation infrastructure investments are costly and take several years to complete—especially heavy rail infrastructure like Metrorail—the District needs a consistent, reliable source of funding to keep long-term projects moving. The District, together with transit partners, will create and implement a strategy for securing necessary funds to appropriately maintain and improve transit in the District and region. In a landmark step towards completing this action, the District Council passed the Dedicated Funding for the “Washington Metropolitan Area Transit Authority Emergency Act of 2018” to provide the District’s full \$178.5 million share in new, dedicated, and bondable funding for Metro. Maryland and Virginia also committed their share to meet the full \$500 million a year that Metro needs to operate and maintain Metrorail. Maintaining this commitment each year is the key to success.

TIMEFRAME

Short term

LEAD

DDOT

PARTNER

EOM

TR1.4

Develop design guidelines to ensure transit systems are resilient to climate change.

Unless action is taken, the effects of climate change on our transit system—buckling rail lines, cracked pavement, and traffic light outages—mean moving around the District will become more frustrating, costly, and dangerous. The District will design, operate, and maintain our transit infrastructure for resilience against increased flooding, high heat, and severe storms in addition to making sure transit operates reliably in everyday conditions. One good example of such design guidelines is the New York Port Authority’s 2015 guidelines to ensure that new agency infrastructure and buildings are designed to account for projected changes in temperature, precipitation, and sea level.

TIMEFRAME

Medium term

LEAD

DDOT

PARTNERS

DOEE, HSEMA, WMATA

TR1.5

Identify and remove the obstacles to families taking transit.

Many families with small children (or who require strollers) find using transit, particularly buses, difficult. By better understanding the specific obstacles making transit difficult for families, the District will be able to change policies or make physical changes to make riding transit convenient and safe for families. Changsha, China launched a Child Friendly City initiative, which included children in the design process to make transit more family friendly. Other jurisdictions charge a lower fare for children, which the District should also consider doing, building on the success of the Kids Ride Free for school age children.

TIMEFRAME

Medium term

LEAD

DDOT

PARTNER

WMATA





GOAL 2

Expand safe, connected infrastructure for pedestrians and cyclists.



TARGET 2

By 2032, increase biking and walking to 25% of all commuter trips in all wards.



TARGET 2 BASELINE

16.8%

TR2.1

Develop and maintain a safe and convenient citywide bicycle lane and trail network.

Washington, DC currently has 85 miles of bicycle lanes, including 10 miles of protected bicycle lanes and 60 miles of multi-use trails.⁵⁵ However, many residents do not have convenient access to this network or do not feel safe biking with traffic on the street. The District Government will expand the current system to a 130-mile⁵⁶ connected and convenient bicycle lane network, including 44 miles of protected bicycle lanes.⁵⁷ Additionally, the District will expand the trail network to 114 miles.⁵⁸ Bike lanes and trails will be prioritized in neighborhoods east of the Anacostia River where bicycle infrastructure is currently insufficient, and will do so in consultation with the community to ensure residents' concerns and desires are taken into account in planning.

TIMEFRAME

Long term

LEAD

DDOT

TR2.2

Grow the Capital Bikeshare program so that 75% of District residents have access to a station within a quarter mile of their home.

The Capital Bikeshare program has been extremely successful with nearly 21 million rides since it launched in 2010. The District Government will increase the system from its current 278 stations to 325 stations by 2020. Additional stations will be placed so that 75% of District residents are within 1/4 mile of a bike station focusing on neighborhoods with the least access to the system now, including areas east of the Anacostia River.

TIMEFRAME

Medium term

LEAD

DDOT

TR2.3

Increase bike, scooter and pedestrian safety education for drivers, cyclists, and pedestrians, and enforce laws protecting those who walk and use scooters and bicycles.

In order to eliminate traffic fatalities and serious injuries, the District Government will develop new partnerships with community organizations—such as the Washington Area Bicyclist Association, the American Automobile Association, and the Metropolitan Washington Council of Governments—to provide more education to all three groups so everyone understands their role in creating a safe transportation environment for pedestrians and cyclists. This includes educating drivers about the rights of cyclists and pedestrians, and making sure that cyclists and pedestrians are aware of their responsibilities in keeping our sidewalks and streets safe to achieve the District Government’s Vision Zero plan to eliminate transportation-related deaths. Backing up these education efforts is the force of the law: the District of Columbia will enforce laws that protect bikers, such as prohibition on cars and trucks parking in bike lanes and other laws that advance Vision Zero.

TIMEFRAME

Ongoing

LEAD

DDOT

PARTNERS

DMV, MPD

TR2.4

Collect data to improve understanding of cyclist and pedestrian travel patterns.

Without high quality data on bicycle and pedestrian travel patterns, it is difficult to plan for future users, allocate funding, or design and build new infrastructure. The District Government will leverage existing data and develop new methods of collecting this valuable data, such as bike counters installed at popular bike routes like the Met Branch Trail and the 15th Street NW cycle track. The District Government will also require access to data from private transportation providers, including dockless bike and scooter sharing programs, and utilize private sector data options, to better understand future program opportunities.

TIMEFRAME

Short term

LEAD

DDOT, OCTO

TR2.5

Program crosswalks and traffic lights for improved safety and convenience of pedestrians, prioritizing children, older adults, and people with disabilities.

Traffic and crosswalk signals should be timed to provide adequate time for pedestrians to safely cross the street, especially those with reduced mobility, such as children, older adults, and people with disabilities. The District Government will analyze traffic lights to provide safe and convenient travel for pedestrians, bicyclists, and vehicle traffic.

TIMEFRAME

Short term

LEAD

DDOT

TR 2.6

Ensure sidewalks are in good repair on at least 90% of District streets, prioritizing new sidewalk construction in pedestrian priority areas such as schools, parks, transit stops, and retail corridors.

Around 24% of the District’s linear streets are missing sidewalks on one or both sides of the street,⁵⁹ while additional segments of sidewalks are in poor shape, making it difficult to walk in some areas of the city, particularly in neighborhoods in Northwest and Southeast. In alignment with moveDC,⁶⁰ the District Government will maintain sidewalks in a state of good repair and install new sidewalks and pedestrian infrastructure on at least 90% of streets currently lacking them, starting with pedestrian priority areas such as those mentioned above. In general, pedestrians should be prioritized on all District sidewalks.

TIMEFRAME

Medium term

LEAD

DDOT



GOAL 3

Enhance affordable, convenient transportation options to reduce dependency on single occupant vehicles.



TARGET 3

By 2032, reduce commuter trips made by car to 25%.



TARGET 3 BASELINE

42.7%

TR3.1

Encourage carpooling and carsharing.

Trips in gasoline-powered single occupancy vehicles (SOV) are the most polluting form of transportation, but some people do not have convenient access to transit or have the ability to walk or bike. To accommodate people who need to drive, the District will make it more convenient and appealing for commuters to carpool (when two or more people share the ride to a similar or nearby destination) or carshare (a resource that makes car available in different locations). The District will work with partners to strengthen regional programs like the Metropolitan Washington Council of Government (MWCOCG)'s Guaranteed Ride Home, and ridesharing matching programs could be expanded or marketed to encourage participation.

TIMEFRAME

Short term

LEAD

DDOT

PARTNER

DOEE

TR3.2

Encourage private businesses to offer incentives to employees for transit, biking, and walking.

Eighteen percent of the District's greenhouse gas emissions come from private passenger vehicles, which are also responsible for a significant amount of traffic congestion in the city. The District Government will build on the goDCgo program to work with businesses to develop a suite of incentives that private businesses can offer to their employees to encourage clean commuting, such as including facilities for showering after biking and walking and subsidizing Metro SmarTrip cards. To make sure existing required benefits are available to those entitled, the District Government will also ensure all employers comply with the existing transit benefits law.

TIMEFRAME

Medium term

LEAD

DDOT, DOEE, DOES

TR3.3

Complete a study to understand the best strategies for reducing congestion for all without unfairly burdening residents with low incomes.

The District has some of the worst traffic congestion in the country, particularly during the morning and evening commute. The average DC driver is stuck in traffic congestion for 63 hours each year, costing the District an estimated \$6.1 billion.⁶¹ There are many potential methods of reducing congestion—a downtown congestion fee like London’s or demand-based parking that charges a price for parking based on current demand. However, there could also be unintended consequences to these strategies that unfairly burden residents with low incomes or harm the economy. To understand the best strategies for reducing congestion in an equitable way, the District Government will study available options and make recommendations for those that best fit the needs of District residents.

TIMEFRAME

Medium term

LEAD

DDOT, DOEE

PARTNER

OP

TR3.4

Develop a strategy in response to autonomous vehicles

Autonomous vehicles—or self-driving vehicles—are already in operation in many cities and will likely disrupt many of our current transportation systems and paradigms creating both new opportunities and challenges. In 2019, the District Government will complete a study of how autonomous vehicles will affect transportation in the District. The study will include impacts on congestion, transit, fleet storage and maintenance, parking and the use of public space.

TIMEFRAME

Short term

LEAD

DDOT, DMPED

PARTNERS

DOEE, DPW

TR3.5

Encourage and promote telecommuting and alternative work schedules for District Government employees.

Some commuters in the DC region commute several hours each way resulting in increased congestion, stress, and vehicle emissions.⁶² The District Government already has teleworking and alternative work schedules for employees, but many employees are discouraged or disallowed from using the benefit. As a signal to private employers, the District will lead by example in making teleworking and alternative work schedules available and actively encouraging their use, helping managers understand how to ensure accountability, and making sure production stays high.

TIMEFRAME

Short term

LEAD

DCHR

PARTNER

DOEE





GOAL 4

Reduce greenhouse gas emissions and air pollution from the transportation sector.



TARGET 4

Reduce greenhouse gas emissions from transportation by 60%.



TARGET 4 BASELINE

1.73

metric tons

TR4.1

Strictly limit idling engines.

Cars, trucks, buses, and other motor vehicles are a large source of toxic air contaminants such as carbon monoxide, which contribute to asthma and other respiratory diseases. The District Government will increase enforcement of existing anti-idling regulations (focusing on areas where idling often occurs like the National Mall and areas with high concentrations of vulnerable populations such children and the elderly), strengthen its engagement with bus and truck companies, incorporate citizen reporting, and increase its anti-idling marketing efforts.

TIMEFRAME

Short term

LEAD

DOEE

PARTNER

DDOT

TR4.2

Require the District Government to purchase green fleet and passenger vehicles.

Because the District Government procures its own vehicles, it has control over which vehicles to purchase, creating an excellent opportunity to lead by example. Except in special cases, the District Government will require all agencies to purchase zero to low-emission vehicles and will prioritize placing green vehicles that spend most of their time in one area (such as police cruisers and buses) in areas with high concentrations of vulnerable populations.

TIMEFRAME

Medium term

LEAD

DPW, MPD, OSSE

PARTNERS

DDOT, DOEE

TR4.3

Encourage network of electric vehicle charging stations throughout the city.

Electric vehicles (EVs) have a battery instead of a gasoline tank, and an electric motor instead of an internal combustion engine, which means they do not emit pollution from their tailpipes. There is still limited infrastructure to charge EVs. The District Government will partner with the private sector, Pepco, and other relevant players to facilitate the development of convenient, publicly accessible EV charging stations (for example in designated spaces on appropriate streets or in parking structures). Electrification opportunities will be evaluated based on their ability to reduce GHGs, maximize public benefit and investment from the private sector, and equity.

TIMEFRAME

Medium term

LEAD

DDOT, DOEE

PARTNERS

DFHV, DPW, OP, PSC, WMATA

TR4.4

Fully electrify District-controlled buses, and work with regional bus systems to reduce regional bus emissions.

While the Washington Metro Area Transit Authority owns most of the Metrobuses operating in the District, there is an opportunity for the District to expand electrification of the DC Circulator, and potentially Metrobus. Twenty percent of the DC Circulator fleet are now zero emission vehicles, and the District Government can continue to expand this share in the future. The District Government will build the necessary infrastructure to fully electrify all District Government-controlled buses to eliminate tailpipe emissions from these large vehicles. Because most District buses are less than five years old and procurement for new buses is a lengthy process, this action will be accomplished in the medium term.

TIMEFRAME

Medium term

LEAD

DDOT, OSSE, WMATA

PARTNERS

DOEE, DPW

