

# delivers

district department of transportation

## d • delivers

### mission statement

The mission of the District of Columbia Department of Transportation is to:

Develop and maintain a cohesive, sustainable transportation system that delivers safe, affordable, and convenient ways to move people and goods — while protecting and enhancing the natural, environmental, and cultural resources of the District.

### vision statement

DDOT is committed to achieving an exceptional quality of life in the nation's capital through more sustainable travel practices, safer streets, and outstanding access to goods and services.

Central to this vision is improving energy efficiency and modern mobility by providing next generation alternatives to single occupancy driving in the city.

## director's message

When I took the helm of the District Department of Transportation (DDOT) in February 2009, I walked into an organization of dedicated staff responsible for over \$44 billion worth of infrastructure. The foundation was there. My goal for the Department is to meet the needs of a 21st century city by taking into account mode choice and maintaining our infrastructure, investment in our neighborhoods, sustainability and livability, and improved transparency and communication (like this!).

I am excited to present to you the 2010 Action Agenda, which lays out clear, defined, and measurable actions that we as an agency commit to delivering in a timely, on-budget manner through an open process. The Action Agenda is meant to be a two-year document which will be followed by a public report on the progress we made: areas in which DDOT excelled and areas that need improvement.

We have identified policies and programs described in this document that will meet, and in some cases exceed, the current needs of District residents, commuters, and visitors without compromising mobility options or the environment for future generations. In fact, we want to set the stage for the continued renaissance of Washington. We desire over time to bring back 100,000 residents to the nation's capital by linking neighborhoods to economic opportunities, and investing in a built environment that stands the test of time and encourages people to live, work, and play in the city.

The entire DDOT team and I look forward to working with the Mayor, city council, and the public to achieve these goals and set more in the future. We commit to you that DDOT will deliver.

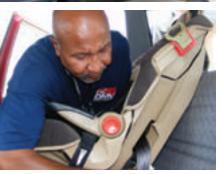
Gabe Klein Director District Department of Transportation







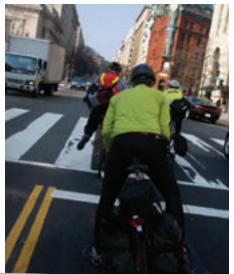










































## introduction

Transportation is about much more than how we move around the city and the time it takes us to get where we are going. The design and operation of our transportation facilities affect the quality of life for over 1 million daily users of our city's system. And that system is experienced radically differently if you are riding a bike, taking the bus, or driving a Buick.

Although the transportation system is often the forgotten backdrop of our daily routines (except when something goes wrong), in fact this system is at the heart of equitable economic development and diverse social communities. The transportation choices that are available define which jobs our residents can access and the locations convenient for them to live. When we go to work in the morning, for example, we must find a way there. If travel options are limited, these limits translate into fixed costs and restricted preferences.

As transportation choices expand and connectivity improves, people can decide how much of their income to spend on travel versus other household expenses. They can select modes according to convenience, lifestyle, and other factors. In short, a robust transportation network empowers us: it empowers us with greater freedom in how we allocate our limited time and money.

Streets define the public image of the city and the success of our communities. Transportation public space occupies over one-third of the land area of the District of Columbia, making the District Department of Transportation (DDOT) the largest single landowner in the city. So much land ownership presents not only fantastic opportunities, but also tremendous responsibilities. The tens of millions of square feet of asphalt and pavement require progressive approaches to address the quantity and quality of storm water runoff, combat urban heat island effects, and maintain a livable habitat for our trees, urban wildlife, and human residents. The thousands of streetlights and traffic signals consume staggering amounts of energy, while the many private vehicles fighting for space on our streets emit many tons of pollutants into the air, requiring new solutions and significant investments. This document outlines a set of policies and corresponding plan of action that DDOT will follow to meet these challenges; to increase the livability of the city for the future while continuing to grow a world-class transportation department and system in our nation's capital. This two-year plan includes aggressive, but achievable, benchmarks to measure our success. It is organized around the five core values and functions of the Department:

- Safe Passages: Safety is paramount for DDOT. DC is proud to have the lowest fatality rates among all state DOTs and the highest highway safety rating in the United States. DC also enjoys a 93% seat belt usage rate, one of the highest in the country. We are committed to retaining that rank and improving overall safety for all users of the system, regardless of mode and inclusive of all ages and abilities.
- 2. Sustainable Living: At DDOT, "sustainability" equates to creating great spaces and moving people and goods in ways that preserve, protect, or even restore our human and natural environments, minimizing waste and consumption, and making the most of the transportation assets.
- 3. Capital Assets: Investing in maintaining a state of good repair is vital to asset preservation and good stewardship of the public infrastructure. Prioritizing the repair and maintenance of infrastructure not only protects the public, but also means lower costs and improved safety in the future.
- 4. Prosperous Places: Streets are the living rooms of communities. DDOT knows that good design of our public right-of-way means good access to businesses, safe and efficient operations, and attractive spaces and places.
- 5. Firm Foundation: DDOT can help create a better Washington by continually improving the excellence of our agency through investment in our workforce via education and training, enhanced communications, cutting-edge technology, and outstanding customer service tools.



## safe passages

**SAFETY IS DDOT'S TOP PRIORITY** – By aiming to significantly reduce transportation-related injuries and fatalities, DDOT's comprehensive traffic safety efforts improve livability and quality of life for everyone in the District.



The District of Columbia is a dense, highly mobile city, hosting a diverse population of residents, tourists, employees, and business travelers. However, as those people move around District streets each year, more than 6,000 people are injured or killed in transportation-related accidents.



When given a choice, people typically choose to live, walk, bike, and shop on safe streets. Conversely, unsafe streets form barriers between communities, limiting mobility and access. Safe streets raise property values, encourage economic growth, and promote environmentally sustainable transportation. Safety enhancements that target pedestrians and bicyclists not only reduce the risk of vulnerable road users being struck by motor vehicles, but also encourage adoption of these environmentally friendly modes. Finally, safe streets are efficient streets. Traffic collisions are responsible for a significant portion of traffic congestion. Safer streets have fewer and less severe collisions, allowing everyone, including motorists, to get where they are going.

The District has made substantial progress. DDOT was ranked number one among state DOTs for lowest fatality rates in 2009, and we aim to stay there through the formalization of our safety program and the development of our multidisciplinary safety team to assess safety issues citywide, as well as continuous improvements to our policies, programs, partnerships, technology, and physical infrastructure.

DDOT's strong partnerships with the Metropolitan Police Department (MPD), Fire and Emergency Medical Services (FEMS), schools, advocates, and notfor-profit education/outreach groups are instrumental to ensuring the safety



#### **Did You Know?**

Compared with all 50 states and Puerto Rico, the District of Columbia had the secondlowest traffic fatality rate in 2008, and improved to being ranked #1 in lowest traffic fatality rates among all State DOT's in 2009.

Advocates for Highway and Auto Safety

of our residents and visitors. Particular emphasis is placed on safeguarding the District's most vulnerable road users, including pedestrians and bicyclists, children, older adults, and persons with disabilities. Ongoing programs that focus on children include Project Safe Child, Safe Routes to School, and School-Zone Automated Speed Enforcement. Innovative designs and safety devices, including rapid flashing beacons, photo red-light enforcement, pedestrian refuge islands, and dedicated bicycle lanes, promote safety for all travel modes.

DDOT also pursues strong safety education programs, including the District's ongoing participation in the regional Click-It and Ticket initiative, Smooth Operator (aggressive driving), and Checkpoint Strikeforce (impaired driving). Additionally, DDOT works with numerous community outreach groups to educate and promote traffic safety among non-English speaking residents and visitors.

Through these efforts we saw traffic fatalities decrease over 27% from 2007 to 2008 and crashes involving pedestrians decrease 23% over the same period. While significant, this still falls short of our ultimate goal of zero travel-related fatalities. We are committed to achieving a 10% reduction annually in traffic crashes and injuries.



E Street NW intersection







Pedestrian and Bicyclist Fatalities (2005 - 2008)



**DDOT Safety Program** 



#### E Street, NW Road Diet

DDOT transformed the roadway on E Street, NW to create an important cross-town bicycle link. What was once two travel lanes in each direction is now one travel lane in each direction with a center turning lane. This configuration creates safer conditions for all users, while maintaining orderly vehicle flow.

#### **Did You Know?**

In 2007, the Texas Transportation Institute ranked DC number three in congestion behind the Chicago and San Francisco metro areas.

## policies and actions

## Dramatically reduce traffic injuries by at least 10% annually and work toward ZERO fatalities.

Traffic injuries and fatalities are the ultimate safety barometers for any transportation system. Foremost among our policies is to reduce both injuries and fatalities through expanded enforcement and education, sensible policies, and design improvements that protect travelers of all modes.

- Expand the enforcement powers of traffic control officers and school crossing guards.
- Continue and build upon regional educational campaigns such as Smooth Operator.
- Support the expansion of the traffic unit and the bicycle patrol unit of the MPD.
- Implement traffic calming studies citywide.
- Expand the number of schools receiving Safe Routes to School planning assistance.
- Create opportunities for schools to compete to have projects from their Safe Routes to School plans constructed.
- Increase the number of road safety audits performed by the DDOT Safety Team.
- Implement leading pedestrian intervals at 100 high-volume pedestrian intersections.



Performance Measures	2009	2012 (Goal)
Number of collisions	15,821	,
Number of serious injuries	1,864	1,500
Number of traffic fatalities	33	27
National ranking for safety	# 1	# 1



#### **Plan and design to equally protect all street users.** Frequently, the gravest crash injuries are to those least protected: pedestrians and cyclists. Increased protection of these travelers is necessary to lower the incidence and severity of crashes.

- Adopt an implementable Complete Streets policy to provide safe accommodation for all modes on all streets.
- Reduce speeding on local and collector streets. Ensure appropriate traffic speeds on all roads. Pilot lowering speeds below 25 MPH on select local streets.
- Increase the use of rapid flashing beacon signs for safer pedestrian crossings.
- Implement improvements at top 50 high-crash intersections.
- Require contractors to establish proper work zones.

Performance Measures	2009	2012 (Goal)
Number of pedestrian-related fatalities	16	13
Number of bicycle-related fatalities	0	0
Number of pedestrian-related crashes	628*	500
Number of bicycle-related crashes	335*	250
Number of crash-prone locations investigated by DDOT annually	50	100
* (2008 figures)		

action agenda



### Use technology to improve system performance and enhance safety.

Driver frustration can be a significant contributing factor in aggressive driving and decreased safety. Ensuring a reliable system and smooth operations not only increases mobility, but also increases safety.

- Implement uninterruptible (battery back-up) power supply to maintain traffic signal operations in the event of power failures.
- Improve incident management functions through enhanced communications and proactive deployment.
- Implement a vehicle weight management system in the District.
- Maximize the capacity of existing infrastructure through expanded use of intelligent transportation systems (ITS).
- Develop personal digital assistant (PDA) applications to alert travelers of system delays and opportunities to avoid problem areas.

Performance Measures	2009	2012 (Goal)
Percentage of intersections identified for Leading Pedestrian Intervals installed	25%	50%
Percentage of traffic signals with malfunctioning loop detectors	10%	5%

#### Educate users to respect and protect

**one another.** Respect goes a long way toward protecting the safety of all users. DDOT has seen marked success in educating drivers to stop for pedestrians in crosswalks and anticipate bicyclists while turning, but more is needed. While education campaigns will continue to be a major activity of the agency, enforcement is often the most effective form of education.

- Expand Street Smart campaign to include education about and for bicyclists, transit riders, trucks, motorists, and pedestrians.
- Train bus and taxi drivers on pedestrian and bicycle laws and safety.
- Increase use of targeted public safety messages and advertisements on television, radio, and billboards.
- Pursue legislation requiring that new drivers receive bicycle and pedestrian education prior to obtaining a driver's license.
- Broadcast key weight management and routing information to the motor carrier industry, including relevant truck and bus companies.
- Expand traffic safety checkpoints to high-crime locations.
- Expand mobile photo enforcement unit in work zones.
- Undertake a Move It/Move Over initiative to efficiently move noninjury accidents from blocking the roadway.

#### **Did You Know?**

In a recent three-year period (1999 – 2001), the intersection of 23rd Street and Southern Avenue, SE was the site of 40 motor vehicle crashes. The average cost of damage per crash was estimated to be \$15,500, with over \$500,000 of total damage at that intersection alone. After spending \$95,466 to improve street lighting, modify lane markings, improve the road surface, and relocate bus stops, the annual number of crashes was reduced to a single accident in 2008. Based on this crash reduction, it was estimated the first-year benefit was a savings of \$145,482, plus an additional annual savings of \$185,902 thereafter, resulting in savings of more than \$500,000 during the initial three years.

**DDOT Traffic Operations Administration** 

Performance Measures	2009	2012 (Goal)
Percentage of all District drivers that wear seat belts all the time	93%	99%
Percentage of trucks traveling with overweight loads on I-295	30%	10%
Number of mobile automated speed enforcement units	12	22
Number of speed/red light cameras deployed	49	61



## sustainable living

#### A CONTINUED COMMITMENT TO PUBLIC TRANSPORTATION - The

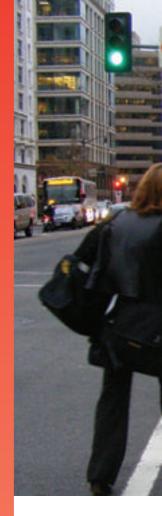
Washington metropolitan region is second only to New York in transit ridership. The District continues to meet demands for high-quality service through the operation of the Circulator local bus service, financial and technical support for WMATA, and the design and construction of the first phases (2.75 miles) of what will be a 37-mile streetcar system.



Washington has the second-busiest transit system in the nation and the second-highest walk-to-work rate among major U.S. cities, and has introduced the first public bicycle-sharing program in the country. Our inviting tree canopy, mixed-use neighborhoods, and traditional streets help the city rank as one of the most walkable in the United States.

#### **Did You Know?**

Nationally, 28% of all trips are within a mile of the home, and 40% are within two miles. In Washington this proportion is much higher, and yet many of these trips are still made by car. To encourage walking trips for basic necessities, in conjunction with other city agencies DDOT supports the creation of new retail and mixeduse districts within walking distance of residential areas and the establishment of new corner shops throughout residential districts. In this way, walking will be the most convenient and obvious choice for many basic trips in the city.



National Household Travel Survey

The Washington metropolitan region's road system consistently ranks as the second-most congested in the nation. In addition to causing persistent delays and economic costs, traffic congestion degrades air quality, is a significant factor in global warming, and adds to our nation's ever-increasing dependence on foreign oil. Paved surfaces in the city contribute to higher temperatures (urban heat island effect), allow toxins to wash into streams and rivers, and lead to overwhelmed sewers, which spill sewage into nearby waterways during heavy rain.

As part of the city's green agenda, DDOT strives to move people and goods as efficiently and cleanly as possible. Washington is a built city, and as such road



widening is rarely a possibility. That means the District must promote travel modes that are more space-efficient. A single passenger in a private automobile consumes over 250 square feet of roadway space, while a bus passenger or bicyclist can be moved using an average of only 35 square feet and a pedestrian requires less than 10 square feet.

Beyond space, air quality is a major concern for the Washington metropolitan area and the District, where child and adult asthma rates of 19.8% far exceed the national average. In 2008, DDOT's investment in alternative modes helped the District reduce gasoline consumption by over 1 million gallons and prevented the creation of an estimated 360,000 pounds per year of volatile organic compounds and NOx and more than 27 million pounds of CO2—the equivalent to removing 2,200 cars from District roads.

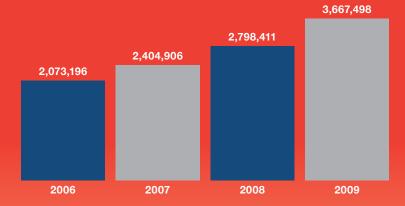
DDOT was one of the first U.S. cities to designate on-street parking spaces for car-sharing vehicles. The 86 on-street parking spaces dedicated to 500 car-share vehicles provide an important convenience to the more than 30,000 District-resident members, while supporting alternative transportation and reducing the number of vehicles occupying DC streets. In a recent survey, 575 DC car-share members reported selling their vehicle as a result of joining the car-sharing service, and another 1,168 members reported postponing the purchase of a personal vehicle.

Growth in transit is stunning. Between July 2008 and July 2009, two new Circulator routes were added, causing ridership to grow from 283,192 to 438,769, an increase of 150,000 riders. As a result of these efforts and the change in behavior they caused, motor vehicle registrations fell in Washington from 2005 to 2008, while growing in the rest of the region.

By rededicating street space to plantings and rethinking the way streets are paved, DDOT can help increase the sustainability of the streets themselves. By increasing the amount of vegetation planted on and around DC's streets, DDOT can reduce the amount of pavement exposed to direct sunlight and lessen the urban heat island effect. The use of porous paving materials works with increased vegetation to moderate the amount of water that reaches the sewer system during rainfalls. These practices filter pollutants from water and can significantly reduce the strain on the sewers, preventing the release of raw sewage into nearby waterways. Additionally, DDOT will look for ways to reduce the amount of energy needed to operate street signals and lights. As one initiative, DDOT is testing LED lighting in alleys and will investigate their potential on general roadways, including solar and wind powered versions.



#### Annual Circulator Ridership (October 2006 – November 2009)



DDOT Progressive Transportation Services Administration

## policies and actions

#### Make walking the mode of choice for trips of less than one mile and biking the mode of choice for trips of less than three miles.

The District's terrain and climate make walking and bicycling highly viable travel options. DDOT will take aggressive action to increase the attractiveness and convenience of these zero-emission modes for shorter trips within the city. Success in this objective would mean a healthier population, cleaner air, more vibrant communities, and more efficient travel for all.

- Transform the DC bike-share system into a substantive transit option with 100 stations and 1,000 bicycles.
- Set aside 5% of the capital budget each year as a core program for pedestrian and bicycle improvements.
- Implement the recommendations of the Bicycle Master Plan and Pedestrian Master Plan.
- Quadruple the lane miles of separated cycle facilities.
- Formally adopt bike boxes for bicyclist safety at intersections into DC standards and implement them in at least 100 locations.
- Repurpose on-street parking spaces for bicycle parking in at least 25 locations.
- Add four more bike stations.
- Support developments that increase the availability of retail, services, and entertainment within walking distance of residential areas.

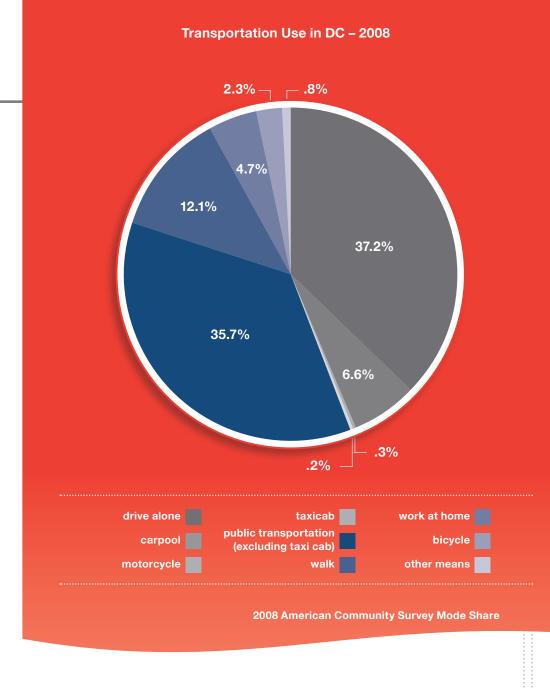
- Increase marketing and private sector promotion of non-motorized modes.
- Improve the District travel-demand model to capture non-motorized trips.
- Update and expand the Bicycle Master Plan for the next decade.
- Support non-vehicular travel and unique place-making in the public space.

Performance Measures	2009	2012 (Goal)
Percentage of bicycle mode share	2.3%	5%
Percentage of walk mode share	12%	14%
Miles of bicycle lanes & protected tracks	40	80



Prioritize expansion and enhancement of transit services. In the District, 37% of households do not have a private automobile and therefore rely on public transportation to meet their daily needs. More people travel by bus rather than Metro rail. Improving transit services will improve not only travel for these residents, but also the overall quality of life for the city community as a whole.

- Construct the initial two line segments of the streetcar system.
- Identify funding for and design a 37-mile streetcar network.
- Develop a five-year growth plan for increasing Circulator service.
- Work with WMATA to develop improved service plans for highridership routes in the District, consolidating a minimum of 100 bus stops.
- With stakeholders, finalize engineering design for the K Street CenterWay and identify funds for construction.
- Implement improvements and enhanced traveler conveniences at the top 10 bus transfer locations in the city (excluding Metro stations).
- Work with WMATA to improve at least four bus plazas at District Metro stations.
- Elevate the streetcar to "megaproject" with a dedicated team.



Performance Measures	2009	2012 (Goal)	
Average monthly Circulator ridership	340,000	500,000	
Total miles of operating streetcar lines	0	2.75	
Total miles of streetcar lines in design and construction	2.75	2.75	

**Minimize traffic congestion and promote efficient vehicle operations.** Traffic congestion is a major factor in the region's poor air quality, but it also has negative implications for delivery of goods, safety, and local quality of life.

- Identify funding to upgrade the DDOT Traffic Management Center (TMC) to a state-of-the-art facility.
- Improve staff training for the Traffic Management Center.
- Increase enforcement of double-parking and rush-hour violations, utilizing automated tools where possible.
- Explore congestion pricing methods with the private sector and other cities.
- Enhance car-sharing options, coverage, and intermodal connectivity.
- Monitor and expand performance parking districts (i.e., variable pricing).
- Improve on-street commercial loading operations through metering, increased enforcement against non-commercial users, and better design and placement of loading zones.
- Use technologies to more effectively manage on-street parking—thereby reducing traffic congestion and increasing curbside turnover in high-demand areas.

Performance Measures	2009	2012 (Goal)
Number of car-share vehicles	500	750
Number of performance parking districts	2	8

#### **Did You Know?**

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If all Americans who take public transportation to work decided to drive instead, their cars would circle the earth with a line of traffic 23,000 miles long.

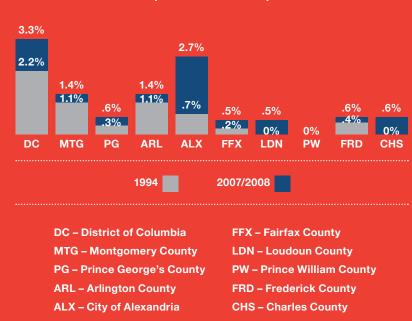
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#### Bike Commuting Share by Jurisdiction of Residence (1994 – 2007/2008)

#### 1994 and 2007/2008 TPB Household Travel Survey

#### **DC Bike Ambassadors**

The DC bike ambassadors make appearances at local events, teach bike commuting clinics, and distribute bike maps and bike safety information with the goals of:

- Encouraging more DC residents and visitors to try cycling for fun, fitness, and transportation.
- Educating drivers, cyclists, and pedestrians on the safe use of roads and trails.
- Reducing barriers that prevent more people from cycling.
- Providing resources to make the choice to go by bike an easy one.





#### **Encourage development projects that promote and support non-auto mobility.** On-street facilities are only part of the necessary equation in achieving a walkcentric, bike-centric city. Private development practices are equally critical.

- Partner with developers to ensure private sector implementation of transportation demand management (TDM) strategies.
- Encourage good urban design that promotes walkability, minimizing curb cuts that disrupt traffic flow and impinge on pedestrian comfort and safety.
- Engage in efforts to change minimum parking requirements to maximum parking requirements in appropriate areas of the city where transit resources are rich.
- Require convenient, covered, and secure bicycle parking in new development; require building owners to allow bicycle access.
- Support zoning code updates that expand bicycle parking and amenity requirements and implement vehicle parking maximums where feasible.
- Meet the challenges of a 21st century urban DOT by incorporating a new administration—the Progressive Transportation Services Administration—that will focus on non-auto mobility.

#### Did You Know?

WMATA was created in 1967 by an interstate compact to plan, develop, build, finance, and operate a balanced regional transportation system in the National Capital area. Construction of the planned 103-mile Metro rail system began in 1969 and was largely funded by the federal government. The first phase of Metro rail began operation in 1976, and the original planned system was completed in early 2001. In 2004, three new stations opened—two extended the Blue Line east of the Beltway and the first infill station (New York Avenue) opened on the Red Line. The system now totals 106 miles, 38.3 miles of which are located within the District.

Performance Measures	2009	2012 (Goal)
Percentage of new developments undergoing zoning review that generate TDM plans	50%	100%
Percentage of new developments that participate in preliminary design review meetings (PDRMs)	60%	90%

#### **Minimize the environmental impacts of transportation infrastructure.** With its sizable footprint on the city land area, DDOT infrastructure must do more to lessen our impact on storm water runoff, the urban heat island effect, and energy consumption.

- Minimize impervious surfaces in the right-of-way and mimic natural systems to supplement the management of storm water.
- Develop standards for low-impact design (LID) treatments, materials, and management in the public space.
- Develop and cultivate partnerships for private and/or local maintenance of LID treatments.
- Test the use of progressive techniques such as pervious pavers, continuous root zones, recycled asphalt, and rubber sidewalks.
- Expand the planted areas within the public right-of-way where possible (e.g., increase the number of planted medians and expand the size of tree boxes).
- Improve the health, diversity, and expanse of the District tree canopy; use data to measure and track canopy replenishment.
- Establish electric vehicle charging stations in conjunction with existing power infrastructure.
- Pilot the use of Light Emitting Diode (LED) fixtures for roadway, alley, and pedestrian lighting.



Performance Measures	2009	2012 (Goal)
Number of vehicles taken off the road through Congestion Mitigation and Air Quality Improvement Program	_	2,200
Percentage of impervious surface area	—	-2%
Light Emitting Diode (LED) street lighting in the District pilot projects	15	500
Number of street tree boxes expanded	_	10,000

**Use technology to improve traveler information, choice, and convenience.** Traveling better means traveling smarter. We will deploy new means to share realtime information with the traveling public to make traveling more efficient, predictable, and even fun.

- Implement next-bus displays in bus shelters.
- Use signal priority systems to decrease bus delays and travel times.
- Pursue real-time traveler applications for "smart phones," PDAs, and other advancements.
- Move toward "One Card" technology, allowing access to all city transportation services (e.g., Metrorail, Metrobus, Circulator, bike share, car share, and parking meters).
- Use www.godcgo.com website to better promote alternative modes of travel in the District and sustainable transportation.
- Integrate "pay by phone" technology into city parking meters.
- Implement solar-powered parking meters that are part of an interactive network and will feature real-time information and dynamic pricing capability.
- Install automated traffic enforcement technologies on transit vehicles.
- Continue to expand the use of social networking tools for real-time transportation alerts.



# **Did You Know?**

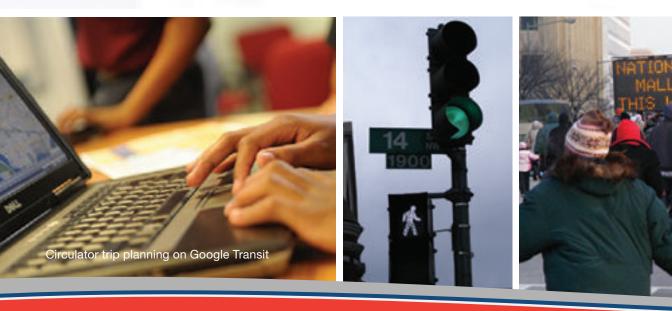
Transportation is the second-highest income expenditure, after housing, in the United States. (averaging about 15%).

American Community Survey

Performance Measures	2009	2012 (Goal)
Average number of hits per month on goDCgo.com	6,000	20,000
Number of bus shelters with next-bus displays	0	75
Number of networked parking spaces	0	2,000
Number of meters with pay by phone availability	0	16,000



# Technology at bus shelters



# Presidential Inauguration

# **Did You Know?**

Percentage of households that do not own an auto: DC 37%, USA 10%. DC has the second-highest rate of walk to work in the nation.

### US Census Bureau

## **Bike Share**

DDOT's bike-sharing program has 1,200 members who use the system for an average of 90 trips per day. The average rental time is 27 minutes.

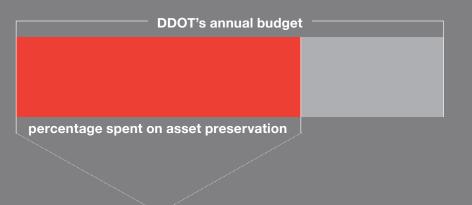


# capital assets

**Median Home Price in DC = \$350,000 –** If DC homeowners maintained their homes at the same rate they invest in maintenance of public infrastructure, they would spend a bare \$300 per year and see a rapid deterioration in home condition and value.



DDOT maintains over \$44 billion worth of infrastructure. Among our assets are more than 1,100 miles of streets, 7,700 intersections (1,680 with signals), 241 bridges, 1,600 miles of sidewalk, and 453 miles of alleys. Maintaining these assets in quality condition is vital to moving people through the city.

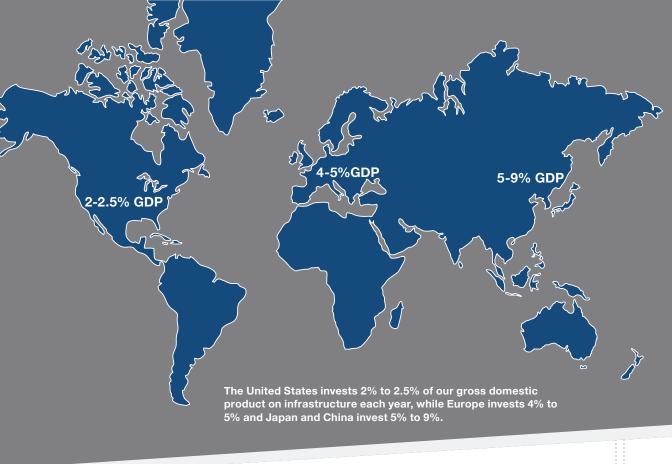


### system's estimated value

DDOT's annual budget for asset preservation represents just 0.1% of the system's estimated value. Industry standards suggest an annual investment of about 3.5% of the replacement value is necessary to keep infrastructure adequately maintained.

To prolong the life of this infrastructure, the District must make sufficient regular investments in preventive maintenance. Over two-thirds of DDOT's annual budget is dedicated to asset preservation, and yet this represents just 0.1% of the system's estimated value. DDOT is constrained by budget—there is never enough funding to do everything—making seemingly mundane maintenance projects compete with glamorous new projects for funding priority.

Deferred maintenance—delaying necessary repairs due to insufficient resources—is a major concern of almost every DOT, and it can be a costly decision. What may only cost \$1 to repair today may cost hundreds of dollars later when simple repair is no longer an option and full reconstruction is necessary. With regular maintenance, a well-built road can easily last nearly a century, while one neglected of maintenance will have one-third the lifetime.



The cost of deferred maintenance accrues not just to the DOT but also to adjacent businesses that lose customers if the area looks dilapidated and travelers experience greater wear and tear and added frustrations. Ultimately, the taxpayer and user suffer.

DDOT tracks infrastructure conditions closely and carefully chooses how to spend money to achieve the maximum benefit from limited resources. It is critical that planned maintenance proceed on schedule. While DDOT spends the majority of its budget on maintaining a state of good repair, it also spends a portion of funds to expand and improve the system. Tight stewardship over these limited financial resources is crucial, as is ensuring that projects are delivered on time and on budget.

Asset	Inventory	Unit	Replacement Cost Per Unit	Replacement Value	Annual Maintenance	% of Value
Pavement						
Interstate/freeway	164	lane miles	\$1,200,000	\$196,800,000	\$1,200,000	0.61%
Arterial/collector	1,865	lane miles	\$1,000,000	\$1,865,000,000	\$11,300,000	0.61%
Local roadways	2,257	lane miles	\$880,000	\$1,986,160,000	\$7,300,000	0.37%
Sidewalks	1,400	miles (~4' width)	\$158,400	\$221,760,000	\$1,350,000	0.61%
Trails	10	miles	\$2,000,000	\$20,000,000		0.00%
Alleys	355	miles	\$792,000	\$281,160,000	\$2,000,000	0.71%
Structures						
Tunnels	17	tunnels	varies	_	_	_
Vehicle bridges	200	bridges	varies	\$30,219,770,500	\$2,500,000	0.01%
Pedestrian bridges	15	bridges	varies	_	_	_
Parking						
Single space	1,500	meters	\$500	\$750,000	\$300,000	40.00%
Multi-space	254	meters	\$7,500	\$1,905,000		0.00%
Bicycle racks	1,100	racks	\$430	\$473,000	_	0.00%
Streetlights	68,000	assemblies	\$7,000	\$476,000,000	I	
Traffic Managemen	t					
Signal assemblies	87,000	assemblies	\$8,000	\$696,000,000	\$7,000,000	1.01%
CCTV cameras	140	cameras	\$35,000	\$4,900,000		_
Variable message boards	82	boards	varies	\$3,000,000		_
Regulatory signs	500,000	signs	\$60	\$30,000,000	_	0.00%
Speed humps	500	humps	\$35,000	\$17,500,000	_	0.00%
Directional						
Wayfinding	500	signs	\$500	\$250,000	_	0.00%
Street name signs	30,000	signs	\$60	\$1,800,000		0.00%
Heritage trails	9	trails	\$1,200,000	\$10,800,000		0.00%
Trees	231,253	trees	\$35,000	\$8,093,855,000	\$7,500,000	0.09%
TOTAL VALUE OF	ASSETS			\$44,127,883,500	\$40,450,000	0.09%



# **Did You Know?**

Over the last three decades, years of deferred maintenance left many of the nation's bridges in dangerously poor condition, as exemplified by the Minneapolis bridge collapse in 2007. The cost of rehabilitating and rebuilding bridges can cost three times the cost of regular maintenance. In short, spending money now will prevent the need to spend more money later, and is a wise investment.

# policies and actions



# Maximize life span of new construction.

Lifecycle costs must be considered in addition to initial construction cost estimates when choosing construction materials and specifications. Deferred maintenance severely reduces the lifetime of assets, and therefore sufficient resources for routine maintenance must be among the highest priorities for fiscal responsibility.

- Continue use of durable and easily maintained materials in new construction, and reuse construction materials whenever possible.
- Review and update streetscape standards to focus on quality, standard materials that minimize maintenance and repair costs.
- Require maintenance agreements when non-standard materials are used in private development projects.
- Deploy a universal system for utility coordination among all major utilities to minimize conflicts and unnecessary cuts.
- Increase enforcement and accountability for appropriate, timely, and high-quality repair of street cuts.

Performance Measures	2009	2012 (Goal)
Number of utility cuts on streets under moratoria	—	0
Percentage of asphalt re-used in street resurfacing	0	15%



**Ensure on-time and on-budget project delivery.** A top priority among all DOTs, excellence in project management allows organizations to deliver projects better, faster, and with top-notch results.

- Use creative contracting arrangements (e.g., design-build) to facilitate project delivery, shared risk with contractor, and stronger accountability of private sector partners.
- Introduce legislation that will enable DDOT to use public-private partnerships (PPP) where appropriate to maximize return on investment for taxpayers.
- Dovetail new work with existing and planned construction projects to avoid duplication and maximize efficiency.
- Implement the District Transportation Access Portal (DTAP) to guide project evolution from planning to design to construction, and facilitate transparency with all stakeholders.
- Build pre-construction team within DDOT to ensure utility coordination, timely and clear communication, and that projects are built as originally planned with stakeholders.

Performance Measures	2009	2012 (Goal)
Percent of projects completed on budget	55%*	90%
Percent of projects completed within two weeks of the scheduled completion date	_	90%
* (2008 figures)		

action agenda



**Consistently apply asset data to guide where and when work is done.** Good data leads to good decision making. DDOT will improve the quantity and quality of our data and ensure its use in capital planning to leverage resources to maximum effect.

- Publish frequent schedule updates and multi-year plans for future work.
- Continue to incorporate asset conditions into capital programming and planning; achieve synergies by attacking multiple infrastructure issues at work sites.
- Create a State Data Center and produce quarterly reports of performance indices.
- Expand existing partnerships with universities.

Performance Measures	2009	2012 (Goal)
Percent of District streetlights rated in good or moderate condition	80%	95%
Number of miles of missing sidewalk constructed	25	50
Percentage of DC street trees rated in good or excellent condition	77.5%	80%

Leverage District assets to fund transportation improvements. The fees that are collected for use of public space would provide for substantial transportation improvements if such fees were dedicated to this use.

- Explore zoning changes and creative financial mechanisms that allow increased density in exchange for private investment in transportation infrastructure.
- Review and update all DDOT fees for service (such as occupancy of public space) to come in line with market rates.
- Streamline DDOT's permitting system to ensure ease of use and increased compliance.
- Review current revenue collection methodologies and systems to ensure that the District is adequately reimbursed for all private use of public space.

Performance Measures	2009	2012 (Goal)
Number of options to pay for curbside parking	2	4
Percentage of DDOT enforcement revenues dedicated to the DDOT Unified Fund	_	10%



Partner with local stakeholders to help protect and preserve assets. Asset preservation is not only a job for the DOT. Individual citizens, property owners, developers, and travelers also have a role to play.

- Launch a tree steward program with citizens who request new trees along with additional neighborhood volunteers to create a cadre of "Tree Keepers."
- Supply watering bags, informational brochures, and pruning workshops for citizen stewards.
- Promote and encourage adjacent land and business owners to promptly and properly remove snow and ice from sidewalks and bus shelters.
- Develop new and innovative means of public participation, such as online project comments and technical assistance for block associations.
- Conduct a social marketing campaign to minimize littering on city streets.

Performance Measures	2009	2012 (Goal)
Number of Tree Keepers	655	1,200
Number of neighborhood snow patrols formed	0	16

# **Did You Know?**

In 1920, a Detroit policeman named William L. Potts worked out an electric light system that allowed him to control three street intersections from one tower. He picked the colors red, yellow, and green because railways used them. These were the first traffic signals.

http://www.sentex.net/~ajy/facts/transportation.html













# prosperous places

**DEMOGRAPHIC CHANGES MATTER** – At its height in 1952, Washington was home to over 800,000 residents, which provided a larger tax base, more density, and transportation options like streetcars. Today the population is less than 600,000. We have more than enough room to grow.



The urban fabric of Washington, DC, is rich and varied, ranging from quiet residential streets and small neighborhood retail corridors to Class-A commercial districts. However, many areas of the District have long suffered from underinvestment and neglect that has challenged businesses development and local job growth.



By providing the necessary infrastructure foundation on which economic investments can thrive, transportation improvements such as new streetscapes and traffic calming measures can stabilize and improve real estate values and provide a vital spark for neighborhood revitalization. Since DDOT controls roughly one-third of the city's land area, the agency has a unique ability to stimulate reinvestment and revitalization in neighborhoods, transforming the way they look and connect with each other, and helping people move between and throughout.

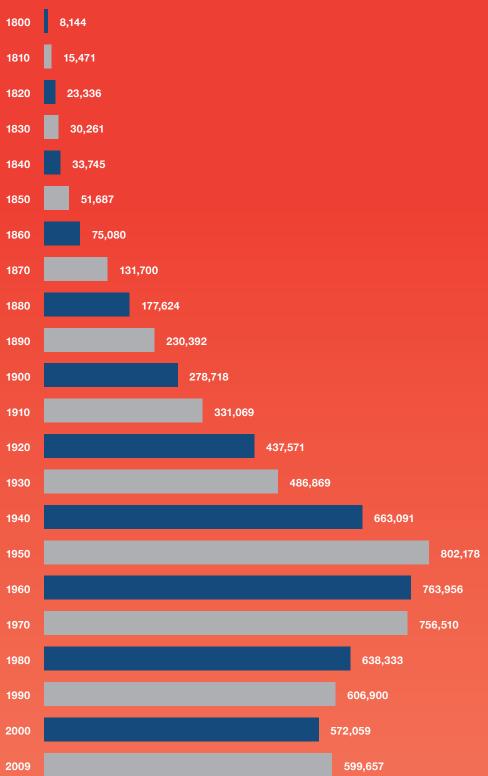
While all of DDOT's projects seek to improve the safety, efficiency, and condition of the transportation system, DDOT is proud that many of our projects go above and beyond basic mobility improvements. In many corridors throughout the city, investment in roads, sidewalks, and streetscapes has served as a catalyst for economic development, attracting jobs, business growth, and retail customers. In addition to economic benefits to the community, neighborhood development can produce important environmental benefits, particularly by reducing travel distances from home to shopping and employment areas. A pleasant urban environment encourages residents to shop locally and enhances the ability



Barracks Row Streetscape – a Return on Investment A good example of the economic benefits of transportation investment is 8th Street, SE - Barracks Row. In 2003, DDOT completed a \$9 million streetscape improvement project in the Barracks Row commercial district of Ward 6. In close consultation with the community, new sidewalks, trees, streetlights, parking, and other features were installed. The District's investment jump-started a renaissance that saw sales and rental prices quadruple between 1999 and 2006. Retail sales previously made outside the area are now being captured on the corridor. Equally impressive are the 43 new businesses added, 52 facades restored, and over 200 new jobs created. The public infrastructure investment facilitated private economic growth in an area that has become a bustling, nationally renowned destination.

of retail districts to attract customers. As a result, residential and commercial vacancies decline and property values improve. Indicators of success include increased numbers of pedestrians, higher retail sales, job creation, and new retail stores.

When DDOT makes infrastructure improvements along District streets, we strive to minimize the construction impacts on nearby business and residences. Efficient and timely delivery of services and swift construction are paramount to a project's success. Choosing when to work and how to stage is also important as the impact of construction can be mitigated by scheduling projects outside of high-activity periods. Further, coordinating street projects with planned utility improvements can reduce the length and frequency of construction projects. And keeping businesses informed of construction will allow them to anticipate and prepare for any unavoidable disruptions. Through these efforts DDOT aspires to maintain a high level of accountability and customer service.



DC Historical Populations (1800 – 2009)



# **Columbia Heights Renaissance Fountain**

The Columbia Heights Plaza, located at the intersection of 14th Street, Park Road, and Kenyon Street, NW was dedicated in the summer of 2009. This plaza, centered by the Renaissance Fountain, was the signature piece of the multi-phased roadway and streetscape improvement project.



# policies and actions

# Build great streetscapes to promote economic vitality. Great places have great streets.

Streets set the tone and the character for an area. DDOT is committed to raising the overall economic vitality of the city by first raising the quality of our street environments.

- Continue to implement the world-class Great Streets program and incorporate the Great Streets principles into all streetscape projects.
- Refuse to sacrifice "form" for "function."
- Expand tree canopy, as trees have the potential to reduce social service budgets, decrease police calls for domestic violence, strengthen urban communities, and decrease the incidence of child abuse.
- Start a Green Streets initiative whereby unused roadway space, including traffic islands, can be transformed to landscaped refuges, seating areas, or wider pedestrian zones.
- Design streetscapes that accommodate and promote retail activity by including ample sidewalk space, upgraded parking management, loading improvements, and fluid operations.
- Continue to create great open spaces, (e.g., Columbia Heights Plaza) with improved lighting to stimulate growth, increase community use, and enhance public safety.

- Revitalize streetcar corridors in partnership with stakeholders, including the private sector.
- Ensure timely restoration of public space to current neighborhood design standards.
- Improve the craftsmanship and quality of streetscape restorations and improvements.
- Raise the standard of urban design on all street projects.
- Complete a public realm master plan for the central business district.
- Support improved storm water management systems and low impact development in both commercial and residential areas of the District.

Performance Measures	2009	2012 (Goal)
Number of miles of streetscape improved	3	9
Number of outdoor café permits issued	31	90
New DDOT constructed public plaza space	1	2



**Target infrastructure investments to strengthen local retail and employment districts.** Use street projects as an opportunity to create unique places within the city.

- Incorporate traffic calming measures to improve pedestrian safety, tame traffic, and improve the attractiveness of non-automobile transportation.
- Design high-quality, distinctive public spaces that attract and retain visitors.
- Plan and design facilities to account for public art, including murals, sculpture, and performance space within the right-of-way.
- Continue to build partnerships with Business Improvement Districts and Main Street organizations to focus on the needs of the retail community.

Performance Measures	2009	2012 (Goal)
Square footage of newly leased retail space in streetscape areas within a year of construction	0	10,000
Percentage increase in sales tax in streetscape areas within a year of construction	—	1%
Percent increase in property values	_	2%



Minimize construction impacts on local businesses and communities. Although most businesses see generous sales increases following street improvement projects, many suffer impacts during construction. DDOT strives to minimize these impacts so businesses can weather construction and thrive in the newly improved area.

- Implement web-based systems that effectively manage public space permits and better track utility work.
- Continue to tailor construction phasing to the needs and conditions of the local community. Schedule construction to avoid high-activity seasons.
- Obtain a high level of local community and business input early on in projects.
- Provide information about all current and upcoming projects on the DDOT website and through DTAP.
- Include a DDOT Community Relations Team in every major construction project in retail areas.

Performance Measures	2009	2012 (Goal)
Percentage of revenue change for business on construction corridors	-5%	0
Percentage of business owners involved in pre-construction coordination	_	90%
Number of applications processed using online permitting	—	95%

**Make streets fun.** Stressed-out drivers and harried subway commuters may dominate the streets on the typical workday, but streets can and should also be the venue for festivals and events, an extension of the city's park network, and places to learn to ride a bike, throw a football, and build community.

- Develop and expand the annual Feet in the Street event, whereby the city closes select streets to vehicle traffic and allows full bicycle, pedestrian, and retail use.
- Pilot at least one "curbless" street where all users share space.
- Encourage the private sector to enhance alleys as dynamic places.
- Create a DDOT event task force to support and monitor local street events.

2009	2012 (Goal)
1	2
	2009 1





# firm foundation

**d.University** – d.University is a curriculum-based program with a special emphasis on technical training and ongoing professional development programs. Eventually, every single DDOT employee will have participated in some training and/or educational activity and opportunity.



By maintaining a high level of employee training, customer satisfaction, and financial stability, DDOT will continue to be a national leader in transportation, efficiently moving people and attracting businesses and young professionals to the area.

### **Did You Know?**

DDOT has seen a dramatic narrowing of the customer service "perception gap" in several key areas, including alley repair, sidewalk repair, traffic signal repair, and sign maintenance and installation. This gap reflects the measurement of DDOT's actual performance as compared to the measurement of DDOT's perceived performance by the public. DDOT will continue to improve overall service and responsiveness to further narrow the divide between perceived and actual service delivery.



**DDOT Office of Unified communications** 

The District of Columbia has a population of nearly 600,000 residents, but this population swells to over 1 million each day as hundreds of thousands of workers and visitors travel to the city. To ensure that DDOT is able to move these residents and visitors efficiently, the agency must coordinate among a complex set of people and departments internally, as well as with other government agencies. To enact change, DDOT must gain the confidence of communities, businesses, and commuters. To innovate, DDOT must have a high-quality staff on the leading edge of transportation.

DDOT's core programs described in this document form the foundation for outstanding planning, design, construction, operations, and maintenance. Through these programs, DDOT pursues innovations in the transportation field and strives to improve customer service and outreach. Ddot sponsored pedestrian safety training

DDOT's agency-wide customer service data demonstrate strong improvement in service delivery, customer satisfaction, and agency responsiveness in 2009. DDOT maintains a consistent customer issue resolution rate of 95%. The recent implementation of a customer call-back program has helped the agency make valuable gains in customer satisfaction. It is particularly worth noting that while the volume of correspondence has increased in 2009, the rate that customer issues are resolved on time has also increased. DDOT intends to improve on this high level of customer service.

DDOT will explore new methods of community outreach for new projects. Large projects will involve earlier and more comprehensive community and stakeholder input. This effort will lead to improved ownership and acceptance of new projects by those most affected by them. To do this, DDOT will explore alternative methods of input including our new website, blogs, live chats, Facebook, online surveys, and proactive visits to existing community gatherings with qualified personnel.

# policies and actions

Assemble and support an outstanding agency workforce. An agency is only as good as the people within it, and DDOT aims to be a world-class agency comprised of top-notch staff.

- Recruit leading talent for permanent employment through internship programs, apprenticeships, career fairs, and other private firms.
- Create the d.University program with a specific curriculum for each job in the agency, and a combination of instructor-led, university, and web-based classes.
- Support staff development through professional certification, continuing education courses, and technology transfer of best practices.
- Identify department and agency codependencies; create formal and informal mechanisms for vertical integration of projects and functions, from planning to implementation.
- Introduce additional employee wellness and safety programs that focus on individual well-being and responsibility for coworkers in order to reduce injuries, improve morale, and increase productivity.
- Consolidate all office staff to one LEED-certified building near transit.
- Move all frontline staff to new facilities at Farragut Place, NE.

action agenda

- Cut the DDOT dedicated vehicle fleet by 50% from 2008 levels.
- Install electric charging stations in the new building, and purchase electric fleet vehicles.
- Provide transit benefits to all DDOT employees, including free Circulator access.

Performance Measures	2009	2012 (Goal)
Average number of training / enrichment hours per employee	_	24
Total investment in professional development and training	\$950,000	\$1,200,000

367



**Provide exceptional customer service, responsiveness, and transparency.** Transportation affects nearly every resident, worker, and visitor in the District of Columbia. Therefore quick and accessible customer service is essential to the function of the city.

- Use web-based social networks and programs such as Facebook, Twitter, YouTube, chat, SeeClickFix, and others to maximize outreach, solicit feedback, and enable two-way communication.
- Work collaboratively with the Metropolitan Washington Council of Governments (MWCOG) and our neighboring jurisdictions, continuing to set the bar for smart transportation and integrated services (e.g., regional bike share).
- Reduce response time in investigating and addressing citizen requests. Make customer service information readily available, accessible, reliable, and useable.

Performance Measures	2009	2012 (Goal)
Percentage satisfaction rate (as reported by the Office of Unified Communications)	88%	95%
Number of communication methods used to provide public information	5	10+



### **Did You Know?**

In April 2009, Americans—the younger generations in particular—spent nearly 14 billion minutes on Facebook. Real, physical community meetings, however, tend to draw only a small group of dedicated, typically older, community members. By bringing community issues to the Internet, tools like Facebook and Twitter may help involve many community members who are too busy for or not informed about meetings, or are otherwise not engaged in local affairs.

The Nielsen Company



DDOT will become a performance-driven agency with ever-increasing data tracking, analysis, and reporting to our stakeholders and the general public.

- Create project benchmarks to assess achievement.
- Use performance measures to evaluate management and to shape future programs and practices.
- Collect and analyze data related to public engagement in pursuit of improving outreach practices.
- Institute a culture of continuous process improvement and collaboration.
- Hire and empower a chief performance officer for DDOT with a focus on metrics, performance data, and a feedback loop to ensure that efficiency goals are being met.

Performance Measures	2009	2012 (Goal)
Percentage of projects in which performance measures were developed / applied	10%	98%
Documentation rate of stakeholder meetings	65%	90%
Number of employees trained in CPI	1%	75%



**Elevate financial stewardship and accountability practices.** With a fixed number of dollars to spend on capital improvements and everexpanding needs, there is no excuse for waste. DDOT will operate like a publicly traded company (one of the responsible ones), with transparency, financial constraints, oversight, and accountability. By applying performance metrics, building consistency, and capturing efficiencies, DDOT will make tax dollars go further and tackle more projects. We take this responsibility very seriously.

- Follow to the six-year Transportation Improvement Program (TIP) with minimal variation.
- Apply DDOT's environmental management system in all DDOT administrations to reduce agency waste, conserve energy, and evaluate environmental impacts of projects and practices.
- Expand the role of the deputy director of resource management in agency operations. Apply more rigor to financial decisions and spearhead more collaboration with the Offices of the Chief Financial Officer and City Administrator.

Performance Measures	2009	2012 (Goal)
Number of transportation projects in the TIP executed as planned	80%	95%
Percentage of projects reviewed by DDOT Environmental Branch	60%	95%

# **DDOT Organizational Chart**

# Planning, Policy and Sustainability Administration (PPSA)

PPSA establishes broad strategic goals to guide multimodal program development and the policies necessary to implement these goals, and ensures compliance with goals and policies through plan review and permitting.

# Infrastructure Project Management Administration (IPMA)

IPMA is responsible for the design, engineering, and construction of roadways, bridges, traffic signals, and alley projects in the District of Columbia. IPMA also manages special construction projects and all roadway assets.

# Transportation Operations Administration (TOA)

TOA effectively maintains the integrity of public assets, such as roadways, sidewalks, traffic calming devices, streetlights, and parking meters, and ensures a safe and user-friendly transportation environment.

# Progressive Transportation Services Administration (PTSA)

PTSA is responsible for developing and operating the District of Columbia's streetcar and Circulator bus system, expanding the District's bike-sharing and carsharing program, and providing budget and operation oversight for the District's investment in Metrorail and Metrobus.

# Urban Forestry Administration (UFA)

UFA's mission is to establish a full population of street trees within the District and to ensure that the estimated 130,000 trees that line the District's roadways are maintained in a healthy and safe condition.



























district department of transportation

2000 14th street, nw, 6th floor washington, dc 20009