



**Biking Advancements.** From funding bike racks on all Metrobuses in 2002 to developing and implementing the nation's largest bike-sharing program, DDOT has been a national leader in encouraging bicycle transportation. The District has among the highest bike-to-work rates in the nation, and now boasts more than 100 miles of bike lanes and multi-use trails. We have installed bike lanes, bike racks and bike boxes across the District to encourage cycling and improve bicycle safety. Capital Bikeshare celebrated its second anniversary in September 2012 and has already surpassed 3 million rides. In 2009, we opened Bikestation DC, the first facility of its kind on the East Coast, offering protected parking for more than 100 bikes, a private changing room, and day-use locker rentals, just outside Union Station. The project was honored with a Brunel Award, the rail industry's most prestigious international award, in the freight and rail support buildings category. DDOT is committed to encouraging bicycle travel and ensuring the safe, convenient and efficient movement of cyclists throughout the District.

**goDCgo.com.** One way DDOT encourages people to choose sustainable transportation alternatives is to educate and inform them of the myriad transportation options available in the District. The purpose of goDCgo is to provide residents, employees and visitors of the District with the information they need to make informed choices about traveling in the city. The site provides information on all modes of transportation, from bus and Metro to pedicabs and car sharing. It features an interactive map of bike lanes, trails, Capital Bikeshare locations, car sharing locations, and bus and Metro routes. The goDCgo team works with employers in the District to encourage employees to bike, walk, carpool or take transit to work. goDCgo is a concerted effort by DDOT to equip users of our transportation system with the tools they need to get around safely, efficiently and sustainably.



## Local Perspective: Multimodalism

DDOT's advancements in multi-modal transportation have outpaced many of its peers' during the past decade. The District currently boasts the fifth highest bike-to-work rate in the U.S., as well as the nation's leading bike-sharing program, Capital Bikeshare, which reached more than 2.5 million rides in just two years of operation.

"In many ways this has been DDOT's decade," said Harriet Tregoning, Director of the DC Office of Planning. "DDOT has helped to make DC a place known for innovative transportation. It has enormously increased transportation choices and conveniences, and has made it possible to live in the District without an automobile. Developing 21st century cities isn't just about private investment. It's about what cities will do to make themselves more attractive places to live and work."

Tregoning sees many indicators of this success. Today only 65% of households in the District own even a single automobile and fewer than half of trips made by District residents involve a car. Vehicle registrations have not increased even as another 20,000 residents moved to DC.

"This has translated into DC residents enjoying the lowest transportation costs in our region and some of the lowest in the nation," according to Tregoning. "It helps to make Washington, DC a more affordable place to live because housing and transportation costs are the two largest expenditures a typical household makes."

*Left: Photo by Elvert Barnes, Flickr*





**Greening DDOT.** During the past decade, DDOT has built sustainability into a broad range of activities. In 2005, we converted all of the traffic signals in the District to energy-efficient LED, making Washington the largest city in the nation to deploy this technology citywide. Our Green Alley projects replace impervious alley surfaces with permeable concrete, asphalt or brick pavement to help manage stormwater runoff. Last year, we piloted an LED street light campaign to improve the quality and energy efficiency of roadway, sidewalk and alley lighting in the District. Through our Transportation Online Permitting System, we have streamlined transportation permitting and eliminated paper waste created by hard-copy documents. In 2011, we moved our headquarters to a LEED-certified, Metro-accessible building near the Capital Riverfront, decreasing the resources expended in daily activities and reducing the need for employees to travel for meetings. All of these advances show that DDOT is not only committed to helping the District's residents, employees and visitors lead a greener lifestyle, but also to greening its own operations.

**Urban Forestry.** DDOT's Urban Forestry Administration (UFA) is tasked with the preservation and conservation of a full complement of street trees within the District of Columbia. UFA ensures that trees along the District's thoroughfares are nurtured in a safe and healthy environment – a requisite for a flourishing tree canopy. In addition to their aesthetic beauty and social benefits, our trees save residents an estimated \$361 million annually by removing air pollutants, defraying energy costs, and retaining storm water. In 2007, DDOT created Canopy Keepers, a tree adoption program where residents commit to providing weekly watering services to newly planted trees, a critical component of the initial two year growth span of a sapling. During the past decade, DDOT has planted thousands of trees to revitalize the District's tree canopy and provide more sustainable and aesthetically pleasing streetscapes.



### DDOT Perspective: Management Modernization

When John Thomas, DDOT's Associate Director for Urban Forestry, joined the agency in 2001, there were more than 3,800 backlogged service requests for dead, dying or damaged trees. Today, DDOT is operating near a zero backlog for leafless, dead tree removal among its inventory of 140,000 street trees.

"Innovation has played a critical role in our evolution during the past decade," said Thomas. "When I started at DDOT, we used carbon copied handwritten contracts and nearly 900-1,000 employees were without email. Employees were scattered throughout the city, so collaboration across departments was manually intensive and time consuming."

As a young DOT, DDOT has, in many ways, skipped a generation in innovation moving beyond standard technology investments – cell phones and agency-wide email.

"Today, we are using industry-leading technologies at DDOT, such as our GIS-based asset management system, which streamlines communication, improves automation and efficiency of our street tree management efforts, and reduces maintenance costs," added Thomas. "As a result, we are better able today to provide the District's more than 600,000 residents and 17 million annual visitors with safer, more attractive and sustainable streets and neighborhoods."





## Then and Now: DC Streetcar

For nearly 100 years, the primary mode of transit across our city was the streetcar. At one time boasting more than 100 miles of track in the District, the horse-drawn and electric streetcar systems provided crosstown links, as well as connections with Maryland and Virginia suburbs. Streetcars allowed the city to expand beyond its original northern boundary at Florida Ave. and spurred development along Georgia, Connecticut and Wisconsin Avenues.

Unfortunately, the high cost of maintaining the rail and electrical lines, coupled with increased auto ownership and the District's population decline spelled the end of the streetcar. In 1962, nearly 100 years after the Washington and Georgetown Railroad Company inaugurated service, Congress mandated that streetcars be replaced with buses.

The streetcar is coming back to DC as DDOT works to implement a 37-mile route network. With the increased focus on multi-modal transportation options, the streetcar has been revived as a complement to bus and Metro service. Fixed rail lines have demonstrated the ability to attract greater residential and commercial investment than bus service. In addition, parts of our Metrorail and bus systems are overly congested with even greater ridership projected in the future. Streetcars provide a modern, convenient and attractive transportation alternative for commuters, and DDOT is excited to make DC Streetcar a model for the nation.



# CAPITAL ASSETS



Proper maintenance of the District's roads, bridges, sidewalks, bike lanes and alleyways is essential to providing a safe and efficient transportation system. DDOT spends more than two-thirds of its annual budget preserving more than \$44 billion worth of transportation infrastructure. From filling potholes and refreshing pavement markings to redesigning streetscapes and replacing bridges, DDOT is committed to ensuring all aspects of our transportation system are in good repair.

Regular maintenance of the District's 1,100 miles of streets, 7,770 intersections, and 202 bridges not only ensures the safety and comfort of users, but also helps to avoid costly replacement projects in the future. DDOT makes use of state-of-the-art technology and building materials to ensure that construction and renovation projects have the longest possible operational life. High-grade pavement and durable, ultra-reflective roadway marking materials make our streets safer and require less frequent maintenance. Sustainable design practices and tools allow us to plan and deliver projects that will have lower life-cycle maintenance costs.

When major replacement projects are necessary, DDOT leverages all available funding mechanisms and procurement methods to minimize the financial impact on the District. DDOT has been aggressive in acquiring federal funds for transportation projects across the District through the appropriations process and through various bonds and grants. Our unique position as both a city- and state-level agency allows us to pursue numerous revenue streams.

Our aggressiveness in finance and technology has allowed us to dramatically improve the District's transportation system in a short period of time. In its decade as an agency, DDOT has rehabilitated or replaced more than a dozen bridges, repaved more than half of the city's roads, filled countless potholes, removed thousands of dead or dying trees, and redesigned corridors from Georgetown to Hillcrest. We will continue to work into the future to protect and maintain our transportation assets.

*Left: Crews lower supports into place for the Eastern Ave. bridge replacement, July 2010*



## DDOT Perspective: Innovative Financing and Procurement

In 2002, DDOT had a lot of catching up to do. “We had employees sweeping the streets with brooms,” recalls DDOT’s first director, Dan Tangherlini, of the agency’s humble beginnings. Potholes were rampant, snow was barely cleared, and many streetlights were dark. Trees were uncared-for and countless streets had no signs. Money was left unspent and District bridges ranked among the worst in the nation.

“We were lucky to have city and agency leaders with the vision and foresight to empower DDOT with several unique authorities critical to getting DDOT on its feet and city transportation systems in shape,” recalls DDOT Chief Counsel, Frank Seales, Jr., who supported Mayor Anthony Williams and former Director Tangherlini in drafting the new organization’s charter and twice served as interim Director. “The ability of DDOT to independently procure services, apply for federal grants, and direct revenue generated by DDOT towards capital assets were critical to the agency’s success, especially in those early days.”

In its relatively short history, DDOT has been able to use its unique position as both a state and city DOT to leverage and secure a number of new bond initiatives and federal funding programs. DDOT worked with FHWA to implement a design-build-to-budget procurement for the 11th Street Bridge, a first for the District, to achieve more than \$80 million in savings by acquiring approximately \$340 million in infrastructure for \$260 million. DDOT also secured \$75 million in GARVEE bonds to fund the project.

“DDOT has become a profit generating agency within the District—a strong indicator of our progress,” Seales noted. During the past decade, the agency has nearly eliminated its maintenance backlog, allowing DDOT-generated revenue to be reintegrated into the District general fund.



**Georgetown Project.** One of the agency’s first and most important undertakings was the Georgetown Project, a massive overhaul of the utilities and roadways on Wisconsin Ave. and M Street, which began in 2001. By the late 1990s, Georgetown’s aging utility infrastructure was deteriorating, resulting in frequent power outages in the area and even causing numerous manhole covers to explode from the roadway. In order to fix individual problems, utility companies would cut and remove sections of roadway to repair the lines underneath. Oftentimes, however, little care was given to the condition of the roadway after the repairs. The result was an area that was hazardous to pedestrians and motorists.

In order to reduce these piecemeal repairs and the disruptions they caused, DDOT worked with Pepco, Verizon, Washington Gas and the DC Water and Sewer Authority to coordinate a complete rebuild of the utility and roadway infrastructure in the area. The four year \$50 million project was completed in 2005 and dramatically improved the reliability, longevity and safety of Georgetown’s transportation and utility infrastructure. DDOT coordinated roadway paving and repair and provided \$7 million in streetscape improvements, installing or improving street lights, benches and sidewalks.

*Above: Workers repave M St. after the four year utility and roadway improvement project*





**Potholepalooza.** The only music you will hear at DDOT’s “Potholepalooza” is the sound of jackhammers breaking up old asphalt. As moisture seeps into the roadbed, temperature changes can cause problems. Moisture trapped in asphalt can freeze and expand, opening large crevices. Water and air can accumulate between the pavement and the underlying earth, causing an unstable base for the pavement. Since each freeze and thaw cycle exacerbates the pothole problem, fast response times are imperative to maintain ideal roadway conditions. In 2009, DDOT launched the first Potholepalooza, an annual month-long campaign to repair the city’s potholes after DC’s winter months. Residents and commuters can call, email, go online or Tweet to report potholes, and DDOT maintains a commitment to repair potholes within 48 hours. The repair process is relatively simple, but we need your help to find them all. In 2011, we received more than 1,300 pothole reports and filled more than 5,000 – an average of 216 per day.

**Parking.** Even though DDOT strives to encourage alternative transportation methods, we realize that providing convenient parking will always be part of our responsibilities. DDOT manages more than 17,000 metered parking spaces throughout the District with a combination of traditional single-space meters and solar-powered multi-space meters that accept credit cards. In 2011, we launched a pay-by-phone parking system, allowing motorists to pay for parking at any metered space in the city by phone. Since its inception, the program has registered 400,000 members and 4.4 million transactions. In order to manage demand for parking in the city’s most congested areas, DDOT has launched performance-based parking pilots. Under this program, rate and/or time restrictions are adjusted in metered areas to promote transit use and to encourage motorists seeking long-term parking to do so off-street. DDOT is constantly seeking new ways to improve parking in the District, and we have conducted numerous parking think tanks, online chats and surveys to engage the public in constructive dialog.

**Transportation Operations.** Field operations are an essential part of DDOT’s everyday activities. From installing signs and marking roadways to filling potholes and aiding motorists, our operations employees provide first-rate service on a daily basis. Our Traffic Management Center monitors roadway conditions throughout the District and coordinates emergency response and with other agencies. The Roadway Operations Patrol responds to traffic incidents and emergencies on the District’s roadways 24 hours a day. In 2011, the Roadway Operations Patrol was dispatched more than 5,000 times to remove disabled vehicles, respond to minor accidents and assist in traffic control measures. Our snow operations branch manages our snow removal fleet and coordinates with other agencies to clear the District’s thoroughfares in a timely fashion. Team members in our parking operations branch are tasked with managing the operation and maintenance of all District parking meters. All of these workers are DDOT’s front-line employees in maintaining a safe and efficient transportation system.







**Event and Emergency Response.** In addition to our everyday responsibilities for ensuring the safe and efficient operation of the District's transportation system, DDOT must be prepared for a number of events and emergencies. As the nation's capital, the District is host to numerous international summits, visits by heads of state and political conferences and rallies. DDOT works with other city agencies, law enforcement and the National Park Service to ensure that the District's special events—more than 100 annually—run smoothly. What on the surface might seem like an ordinary occurrence in Washington—a festival, parade or marathon—requires hours, weeks or months of careful planning and preparation. We also work with neighboring jurisdictions to develop emergency evacuation plans in case of natural or man-made disasters. From Nationals games and presidential inaugurations to snowstorms and hurricanes, our operations staff works around the clock to ensure that crowds can move safely and efficiently through the District under all circumstances.

*Left, Top: President Obama's Inaugural parade down Pennsylvania Ave.; Bottom: Inauguration crowds walking down 18th St. to the National Mall (photo by a4611production, Flickr)*

## DDOT Perspective: Obama Inauguration

"It was an all hands on deck event," said Natalie Jones-Best, DDOT Emergency Preparedness and Risk Manager. "The Inauguration of President Barack Obama was a momentous occasion for DDOT."

Months before more than 1.5 million people descended on the National Mall on January 20, 2009 for this historic event, DDOT employees were coordinating with the Secret Service, National Park Police, Capitol Police, Metropolitan Police Department, FEMA and countless other agencies to ensure the safety and security of attendees.

"It's my job to plan for the worst case scenario," said Jones-Best, who served as DDOT's co-chair for the event. "Contingency plans were in place for everything from a snowstorm to a mass evacuation of the Mall."

In addition to the numerous plans for road closures, bus parking, evacuation and snow removal, DDOT employees also were responsible for various improvements to the Inaugural parade route. All of the stoplights on Pennsylvania Ave. between the Capitol and the White House had to be removed for the parade and reinstalled for the next day. The road was repaved and special parade striping was laid to help those marching stay in line.

Although 2009 marked Jones-Best's third Inauguration with the agency, it was special for many reasons.

"The sheer size made it different," she recalls, and the general demeanor of the crowd was a big help. "I'd never seen excitement like this."