Arlington County Transportation & Development Division

2014 Performance Measurement Report

February, 2015
Transportation & Development Division Overview

Arlington County is a national leader in sustainable transportation and smart growth. Over forty years ago, the community made the far-reaching decision to emphasize growth around transit lines, and embrace multi-modal transportation. Arlington County’s Board and government have worked to develop innovative transportation policies and programs that are now widely replicated across the country.

The Transportation and Development Division operates within Arlington’s Department of Environmental Services. For more than 40 years, the Transportation & Development Division has provided planning, operations, engineering, and transportation support services to the County.

The Transportation and Development Division is led by Director Dennis Leach and is comprised of five Bureaus:

- Transportation Engineering and Operations
- Transit
- Transportation Planning
- Development Services
- Commuter Services

The work of the Transportation & Development Division reflects Arlington’s commitment to transit-oriented development (TOD). The division works to provide well-balanced services designed around high-quality public transit. We believe that promoting multi-modal transportation benefits all users, from transit riders and drivers, to cyclists and pedestrians.

The infrastructure and services that the Transportation & Development Division provides - roads, sidewalks, parking spaces, bike lanes, Arlington Transit (ART), Capital Bikeshare, The Commuter Stores® and more - have made high-density, mixed-use development along our transit corridors possible while preserving residential neighborhoods.

The Master Transportation Plan (MTP) - a policy and project guide that was developed with community stakeholders – directs the work of the Transportation & Development Division. The plan allows us to concentrate our investments in ways that yield the greatest good not only from a transportation standpoint, but also for overall quality of life of Arlington residents and workers.

Arlington’s vision for our transportation system supports community efforts to improve the natural environment and achieve better public health and fitness. Decades of planning and investment have made Arlington a community where Metrorail, bus, walking, and bicycling are truly viable and convenient modes of transportation.
Meet our Bureaus

Transportation Engineering and Operations

Arlington’s streets and related public infrastructure are designed and managed by the Transportation Engineering and Operations bureau (TE&O). The bureau manages 974 lane miles of roads, 180 traffic monitoring cameras, 6,900 County owned and 13,000 Dominion Virginia Power owned streetlights, 5,400 metered parking spaces, intelligent transportation system equipment, and 294 traffic signals.

The mission of this bureau is to optimize the use of these assets to safely and efficiently move people/goods on Arlington’s streets by all modes of transport. An important tool to achieve this mission is the bureau’s Traffic Management Center (TMC), a state of the art transportation control center. The TMC staff utilize signal monitoring and CCTV cameras to adjust traffic signal timing to help achieve the bureau’s mission.

Transit

The Transit Bureau oversees both transit operations and the transit capital program. Transit operations includes oversight of local Metrorail, Metrobus, and MetroAccess services as well as two Arlington operated services: the County’s local bus service, Arlington Transit (ART); and, Arlington’s local paratransit program, Specialized Transit for Arlington Residents (STAR). Arlington Transit has grown from a small service providing shuttles from neighborhoods to Metrorail stations into a fleet of 60 buses and 15 routes, operating not only feeder service but also cross-county routes connecting major activity centers. The Capital Programs part of the bureau is responsible for developing new or improved existing transit facilities, such as new Metrorail station entrances, the Crystal City-Potomac Yard Transitway, and bus stops.
Transportation Planning
The Transportation Planning Bureau develops short and long-range plans for transportation infrastructure and services. The bureau is also responsible for developing, maintaining, and promoting the County Master Transportation Plan (MTP). The bureau reviews developer and County plans to ensure compliance with the MTP; collaborates with other DOT bureaus and County departments to produce street designs that serve transit, bicycles, pedestrians, and auto traffic; manages capital projects for complete streets and bicycle and pedestrian facilities; and manages and coordinates the taxicab industry to ensure compliance with the ordinance.

Commuter Services
The Commuter Services bureau, or Arlington County Commuter Services (ACCS), aims to change travel behavior by making it easy for residents, employees, and visitors to use all available transportation options, other than driving alone, to meet their travel needs. ACCS’ varied programs include employer and residential outreach efforts; general travel option marketing; commuter information distribution; operation of commuter stores; provision of guidance and oversight to new development on transportation demand management requirements; BikeArlington; WalkArlington, Capital Bikeshare; and Mobility Lab and research.

Development Services
The Development Services bureau reviews development projects and negotiates the public transportation and other infrastructure needs associated with private development. Development Services ensures that transportation remains integrated with Arlington’s land use and zoning regulations for private development as well as compatibility with its public infrastructure.
Arlington County’s Master Transportation Plan (MTP)

Description
The Master Transportation Plan (MTP), a requirement of Virginia’s Department of Transportation, is a long range and community-driven vision for Arlington’s transportation system through 2030. The MTP is one of the core elements of Arlington’s Comprehensive Plan, which is the County’s highest level planning policy document. The 2007 plan, referenced here, is an update of previous versions of the MTP, which have guided transportation planning and implementation since the 1960s. The MTP description on these two pages is provided in this report as background because of its importance in guiding the Division’s work. The 2007 MTP update was developed through an extensive two-year public involvement process. The public’s opinions were solicited via community surveys, focus groups, public work-sessions, and through a 24-member MTP Plenary Group that provided input from many different advisory and business groups in the County. The MTP Goals and Policies document was approved by the County Board in November 2007, with all the other MTP elements adopted between 2007 and 2011.

The overall goals and policies and map elements of the plan are supported by six modal element documents — bicycle, transportation demand and system management, parking and curb space management, pedestrian, streets, and transit — which provide more detailed guidance.

Goals
The MTP details six goals which guide the document:

- **Goal 1** – Provide High-Quality Transportation Services.
- **Goal 2** – Move More People Without More Traffic.
- **Goal 3** – Promote Safety.
- **Goal 4** – Establish Equity.
- **Goal 5** – Manage Effectively and Efficiently.
- **Goal 6** – Advance Environmental Sustainability.

General Policies
The MTP policies provide overall concepts that underlay the framework for the plan:

A. Integrate Transportation with Land Use
B. Support the Design and Operation of Complete Streets
C. Manage Travel Demand and Transportation Systems
D. Additionally, the plan includes element-specific policies summarized on the following page.
Streets Policies:
The 13 policies in the Streets Element of the MTP include policies to achieve a greater balance among modes through the introduction of a new street typology, as well as recommendations to improve quality of service, enhance safety, and manage and maintain Arlington’s transportation facilities.

Transit Policies:
The 10 policies in the Transit Element of the MTP include policies to institute both a Primary and a Secondary Transit Network that focus transit investment in corridors where much of the trip-making occurs today and is anticipated in the future.

Pedestrian Policies:
The 12 polices in the Pedestrian Element of the MTP include policies to provide a walkway network to accommodate pedestrian travel throughout the County. It contains policies to enhance pedestrian safety and security, ensure pedestrian mobility and accessibility for all users, increase walking trips, and maintain and manage pedestrian facilities.

Bicycle Policies:
The nine polices in the Bicycle Element of the MTP guide development of bikeways and bicycle transportation programs. They aim to complete the bikeway network, encourage bicycling through added amenities and activities, enhance bicycle safety, collect bicycle activity data, and improve management and maintenance.

Parking and Curb Space Management Policies:
The 13 policies in the Parking and Curb Space Element of the MTP provide a comprehensive framework to prioritize and manage uses, minimize the impacts on residential areas, and enhance user convenience while employing equitable, fiscally sound, and environmentally sustainable practices.

Transportation Demand and System Management Policies:
The seven policies in the Demand and System Management Element of the MTP include policies that support behavior change that leads to substantial changes in commuting mode split for Arlington travelers. For example, the projected 2030 mode split shows about half of Arlington commuters driving to work. Transportation System Management policies focus on facility redesign, access management, traffic signal timing and optimization, high-occupancy vehicle lanes, incident response plans, targeted traffic enforcement, and intelligent transportation systems.
Strategic Approach

As noted previously, the Master Transportation Plan (MTP) guides the Transportation and Development Division’s work. A number of more detailed strategic planning documents, such as Arlington’s Transit Development Plan (TDP), the Capital Bikeshare Transit Development Plan, and the Transportation Demand Management (TDM) Strategic Plan, build off of the MTP and guide specific transportation programs.

The Transportation and Development Division developed this Strategic Performance Report in order to track the division’s progress toward the vision set out in the MTP. The plan helps to promote public transparency by clearly communicating progress to the community, County staff, and elected officials.

At the outset of the development of the Division’s performance measures, leadership focused on the development of a guiding set of goals and objectives for the plan. While the MTP provides goals and objectives aimed toward a long-range vision for the community, the Transportation & Development Division lacked a unifying set of goals and objectives to which the Division could measure, assess, and communicate its ongoing performance.

The Transportation and Development Division began the process of creating goals, objectives, and performance measures by compiling a list of goals and objectives from existing plans, and identifying recurring themes. This information was analyzed by the Division’s leadership in a series of workshops with representatives from all of the transportation bureaus. During the initial workshops, the working group members used the themes to brainstorm options for a division-wide vision, mission, goals, and objectives.

In subsequent workshops the Division’s leadership further developed the vision, mission, goals, and objectives to balance the need that they be broad enough to include all of the transportation efforts within the County but specific enough to be tied to performance measures, to which the majority of this report is dedicated.

The Transportation and Development Division will use these performance measures to track progress in meeting our strategic goals and objectives. This report is our first Annual Performance Report; the Division plans to release an updated report at the end of every fiscal year. Clear goals and objectives, smart data collection, and performance measures built around outcomes (what we have accomplished), not just outputs (what we have done), ensure that the Transportation and Development Division can transparently account for its impacts on Arlington County.
**Vision:**
A thriving sustainable community supported by transportation choices allowing for seamless movement at any time and to any place.

**Mission:**
Provide an accessible, integrated system of transportation choices in coordination with land use and development.

**Goals:**
- **Accessibility:** Expand multimodal access and connectivity
- **Mobility:** Improve mobility for all users
- **Safety and Security:** Transportation infrastructure that is safe and secure for all users and all modes of travel
- **Manage Effectively and Efficiently:** Construct and manage effectively, efficiently and transparently
- **Environment, Energy, Health and Economy:** Enrich the quality of life in Arlington County through sustainable transportation improvements and infrastructure
The Transportation & Development Division Goals correlate to the MTP Goals. They differ slightly in that mobility and accessibility are identified as two separate goals, and equity, rather than being a goal in and of itself, is an explicit or implicit component of all of the goals. The pages that follow in this Performance Measures Report are organized around the Transportation & Development Division Strategic Goals.

**Master Transportation Plan Goals**

1. **Provide High Quality Transportation Services**
   Provide high quality transportation services for all users and modes.

2. **Move More People without More Traffic**
   Provide more travel choices and reduce the relative proportion of single occupant vehicle (SOV) travel through Transportation Demand Management (TDM), telecommuting, and travel shifts to other modes including transit, carpooling, walking, and bicycling.

3. **Promote Safety**
   Provide transportation system operations that are safe and secure, and enable prompt and effective emergency response.

4. **Establish Equity**
   Serve the mobility and accessibility needs of all residents regardless of age, income, or ability.

5. **Manage Effectively and Efficiently**
   Fund, develop, manage, and maintain transportation facilities and services in an equitable and cost-effective manner.

6. **Advance Environmental Sustainability**
   Reduce the impact of travel on community resources, including air and water quality, and increase energy efficiency.

**Transportation & Development Division Strategic Goals**

- **Accessibility**
  Expand multimodal access and connectivity.

- **Mobility**
  Improve mobility for all users.

- **Safety and Security**
  Create transportation infrastructure that is safe and secure for all users and all modes of travel.

- **Manage Effectively and Efficiently**
  Construct and manage effectively, efficiently, and transparently.

- **Environment, Energy, Health, and Economy**
  Enrich the quality of life in Arlington County through sustainable transportation improvements and infrastructure.
Goals & Objectives

Accessibility

Goal: Expand multimodal access and connectivity to destinations both within and outside of the County.

Objectives:

1. Maximize accessibility for Arlington residents, employees and visitors to regional activity centers and destinations within Arlington.
2. Meet the needs of traditionally underserved populations in transportation planning, operations, maintenance and the provision of infrastructure.

Mobility

Goal: Improve mobility for all users of the transportation system in Arlington County.

Objectives:

1. Provide efficient (cost and time to users) personal mobility balancing all modes of transportation.
2. Maximize use of transportation options while minimizing single-occupancy vehicle travel.

Credit: transporteativo.org.br
Safety and Security

Goal: Provide transportation infrastructure and an integrated transportation network that is safe and secure for all users and all modes of travel.

Objectives:

1. Minimize the frequency and severity of injury on all modes of travel.
2. Mitigate transportation-related safety and security risks.
3. Build and maintain a premier safety culture within the Transportation & Development Division and the community at large.

Manage Effectively and Efficiently

Goal: Construct and manage the transportation system, infrastructure, and operations effectively, efficiently, and transparently.

Objectives:

1. Ensure fiscal stewardship in the funding, development, management, operation, and maintenance of transportation systems to maximize community value.
2. Build and sustain meaningful public support in transportation policies and programs.
3. Construct financially sustainable assets and preserve, maintain, and improve the condition of the existing transportation system.

Environment, Energy, Health, and Economy

Goal: Enrich the quality of life in Arlington County through sustainable transportation improvements and infrastructure.

Objectives:

1. Maintain or reduce noise, air and water pollution through Transportation & Development Division Activities.
2. Promote public health through transportation activities.
3. Leverage investments in transportation and guide development of land use and transportation to support economic development.
How do we measure success?

Performance measures are a quantitative or qualitative characterization of performance and progress toward meeting defined objectives. They quantify the division’s efficiency or effectiveness in conducting operations.

The performance measures developed for Arlington County’s Transportation and Development Division were derived from a multi-step selection process. In the spring and summer of 2014, several workshop sessions were held with staff from all five transportation bureaus to gather input on potential performance measures.

The working group considered a list of options, culled from the 101 performance measures in Arlington’s Master Transportation Plan (MTP), as well as performance measures from other relevant Transportation & Development Division plans and studies. The performance measures that were developed are linked to the unified Transportation & Development Division goals outlined in this document.

The selection of performance measures for each objective was based both on the applicability of the measures to tracking performance toward the goals and objectives as well as the ability of each measure to be tracked with data available through a public data source or through internal Division data.

Measures that would strongly track performance toward objectives where data were not yet available were flagged for future consideration.
Arlington County’s investment in transportation infrastructure and services illustrates that the community and its leaders care deeply about travel choices to help achieve a sustainable community.

Every day, the Transportation & Development Division strives to increase accessibility and maximize options for movement throughout the County and to the rest of the region. By providing a high quality transit system, a robust bicycle and pedestrian network, and effective transportation demand management approaches, the behavior of many users of this system has changed. People are using transit, bicycling, and walking more frequently, while single occupancy vehicle travel and vehicle miles traveled has declined over the last 15 years. The transportation environment is becoming greener and safer through smarter technology and infrastructure investments that reduce energy consumption and collisions.

This shift in travel behavior is benefiting Arlington County in a number of ways. Even as our population has grown substantially, congestion has declined in the County. The shift to other modes has reduced pollutants in the air and water, and improved health through increased physical activity. The County’s transportation program saves users money and contributes to the local economy. Modes like transit, walking and bicycling provide users an affordable alternative to driving. The reduction in cars on the road reduces congestion and the economic cost of travel delays. Together, all of these things make Arlington a competitive and attractive place to live, work and visit.

The Transportation and Development Division has achieved these impressive improvements while reducing its reliance on local taxpayers. Today just over a quarter of the County’s transportation programs are funded through the general fund.

### PERFORMANCE MEASURE

**Proximity to Multi-Modal Transportation**

#### Approximately 50% of residents and nearly 75% of jobs are within ¼ mile of the Primary Transit Network.*

*The Primary Transit Network is a subset of the transit network which offers 15 minute service or better for 18 or more hours per day

### Percent of Population and Jobs in Close Proximity to Transportation Resources

- 100% Population (CY2014)
- 100% Employment (CY2011)
- 50% 1/8 mile of Sidewalks
- 75% 1/4 mile of Bike Share
- 60% 1/4 mile of Bike Shade
- 90% 3/4 mile of Any Bus Stops
- 50% 1/4 mile of PTN
- 73% 1/2 mile LRT
- 34% 3/4 mile Light Rail
- 22% 1/4 mile of Car Share

![Graph showing proximity to transportation resources](image-url)
GOAL
Expand multimodal access and connectivity

PERFORMANCE MEASURE
Service to Traditionally Underserved Populations

Arlington is working to ensure that all County residents, workers, and visitors have equitable access to transportation amenities and services.

46% of Arlington’s low-income households are within a ¼ mile of a Capital Bike Share station.

26% of Arlington’s minority population is within a ¾ mile of a Metro Station.

22% of Arlington’s entire population is within a ¼ mile of a car share service.

Traditionally Underserved Populations within 1/4 Mile of ART Bus Stops

- Minority Populations: 56% in 2008, 71% in 2014
- Low Income Populations: 58% in 2008, 73% in 2014
- Total Population: 52% in 2008, 65% in 2014
Arlington households made more daily trips than a typical household in the region, but 58% of those trips are made using alternative modes, compared to only 54% for a regional household.

Arlington’s population has grown by over 10% since 2006, yet vehicle miles traveled have declined by nearly 6% in the same period.
The number of collisions resulting in injury has declined by 52% since 2006.

Number of Vehicular Collisions, Resulting in Injury or Death

- 2006: 1,444
- 2007: 831
- 2008: 711
- 2009: 716
- 2010: 599
- 2011: 533
- 2012: 557
- 2013: 593
- 2014: 479

Total Vehicular Collisions

- 2006: 1,444
- 2007: 831
- 2008: 711
- 2009: 716
- 2010: 599
- 2011: 533
- 2012: 557
- 2013: 593
- 2014: 479

Annual and Per Capita Vehicle Miles Traveled (VMT)

- 2006: 1,444
- 2007: 831
- 2008: 711
- 2009: 716
- 2010: 599
- 2011: 533
- 2012: 557
- 2013: 593
- 2014: 479

Zero Car Households

One Car Households

Arlington Region

On an average day, Arlington households make three times as many bike and walk trips than a typical household in the region. Arlington residents are able to choose to be car-free or car-light more often than others in the region.
Traffic at key intersections in the County has been reduced, on average, by 3.5% since 2006, reducing emissions that result from idling.

Greenhouse Gas Emission Reductions Attributed to County TDM Programs

Since 2009, ART’s Natural Gas bus fleet saved an estimated 55,034 pounds of smog causing particulate matter from being released into the atmosphere.
Through the implementation of TDM programs and by providing alternatives to SOV travel, the County avoided 41,100 daily vehicle trips and 756,000 vehicle miles in FY2014.
The Division is increasing its leverage of alternative transportation funding (revenue), and decreasing the use of local tax dollars (general fund), which made up only 26% of the budget in FY2014.

**Virginia State Transportation Capital Fund Leveraged (millions)**

- **FY2014**: $18.4
- **FY2013**: $9.8
- **FY2012**: $18.1
- **FY2011**: $8.2
- **FY2010**: $4.1

The County is decreasing its reliance on local dollars while maximizing state and federal funding.
Over the past eight years, the vast majority of all development in the County has taken place in three primary corridors.