

Ideas to moveDC



March 2014

moveDC is...

Statewide Vision Plan – Mandated by FHWA, similar to what MDOT, VDOT, and other state DOTs produce

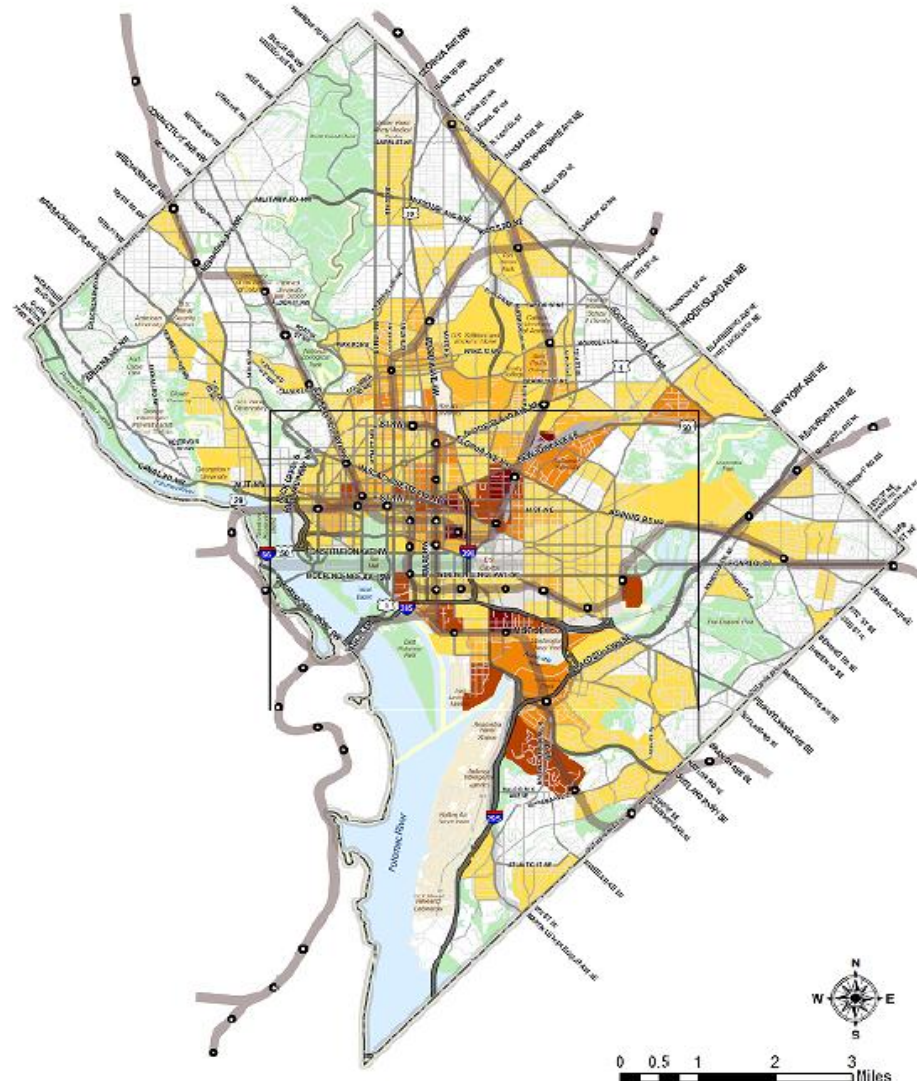
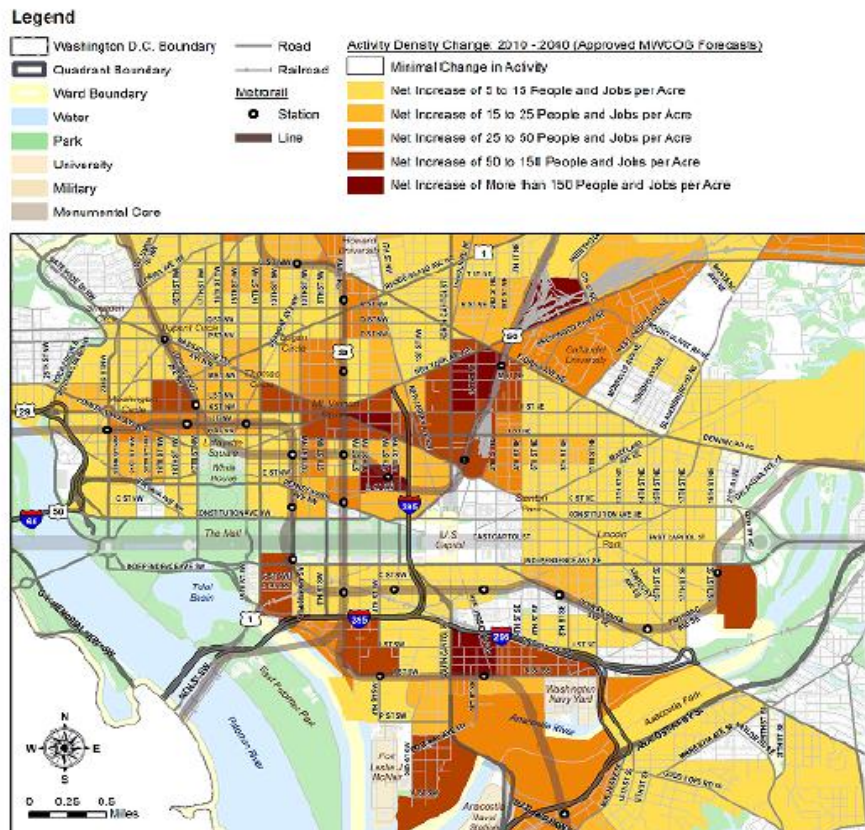
Local Transportation Plan – like what major cities produce, New York, San Francisco, London, Vancouver,...

DDOT hasn't developed a long-range plan since 1997.



Planning for today and tomorrow

FIGURE 2.9—CHANGE IN ACTIVITY DENSITY (2010 – 2040)
Growth is expected to occur in Noma, at Judiciary Square, and along M Street SE.



Population Growth

In the last decade, the District has grown by nearly 30,000 people. By 2040, we will be a city of more than 770,000 people.

District of Columbia

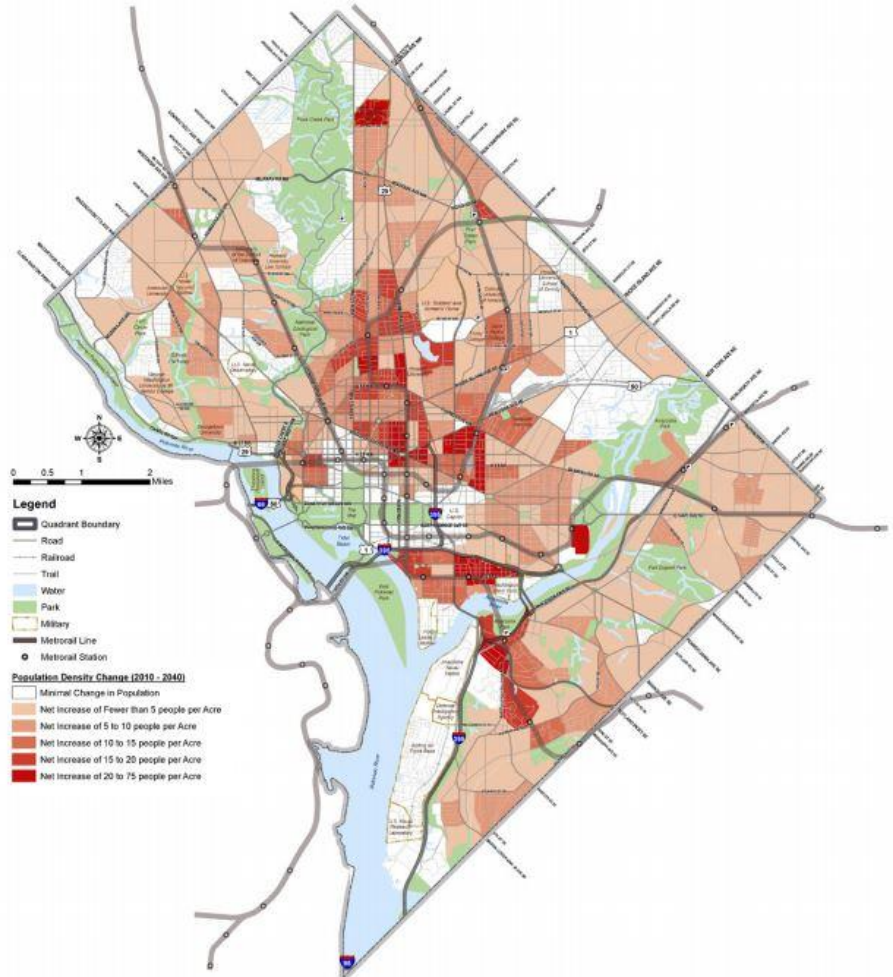
**170,000
more people
living in the District
by 2040**

**28% increase
over today's
District population
by 2040**

Metropolitan Washington Region

**8.6 million
more people
living in the Region
by 2040**

**35% increase
over today's
regional population
by 2040**



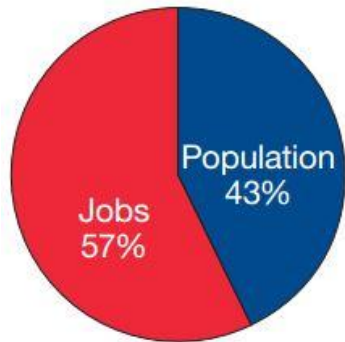
Employment Growth

District vs. Region

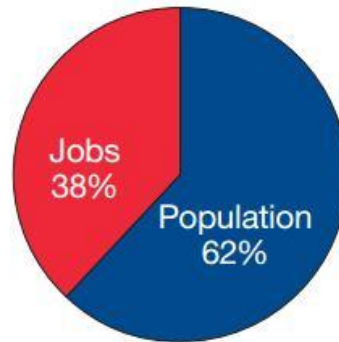
	Population		Employment	
	2010	2040	2010	2040
District of Columbia	602,000	772,000	784,000	983,000
Metropolitan Washington Region	6,626,000	8,661,000	3,993,000	5,618,000

Source: MWCOG Round 8.1 Socioeconomic Data

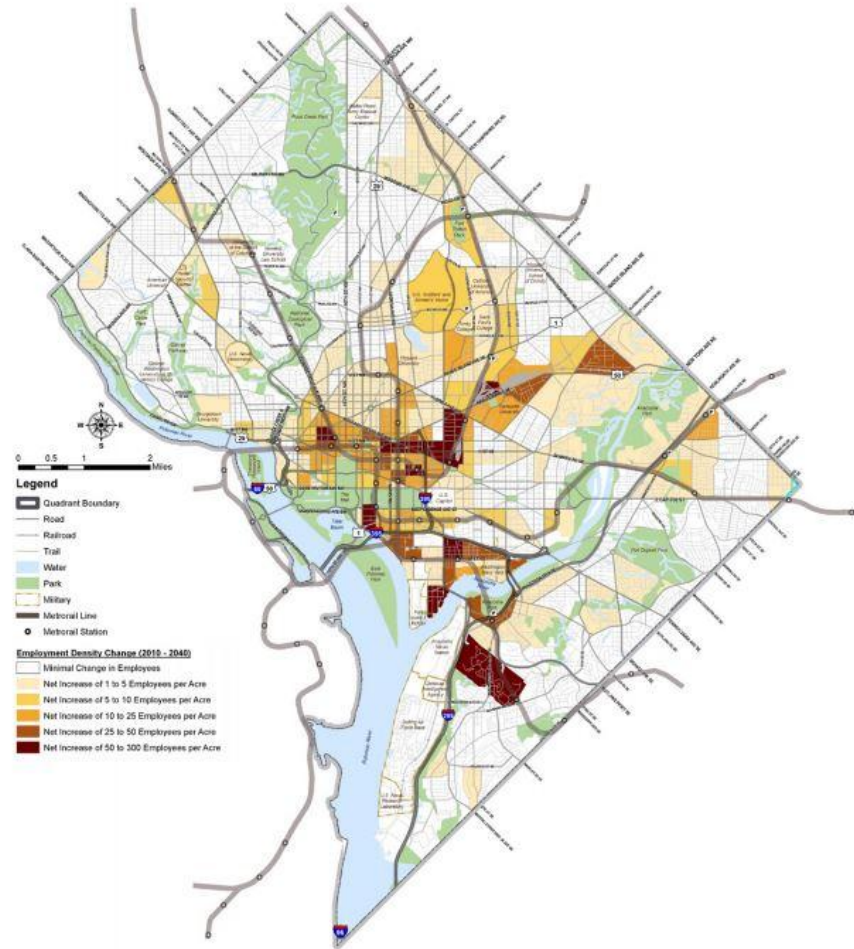
District of Columbia 2010 Population to Employment Ratio



Metropolitan Washington Region 2010 Population to Employment Ratio

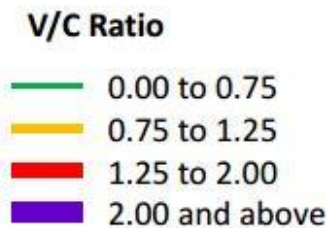


Source: MWCOG Round 8.1 Socioeconomic Data



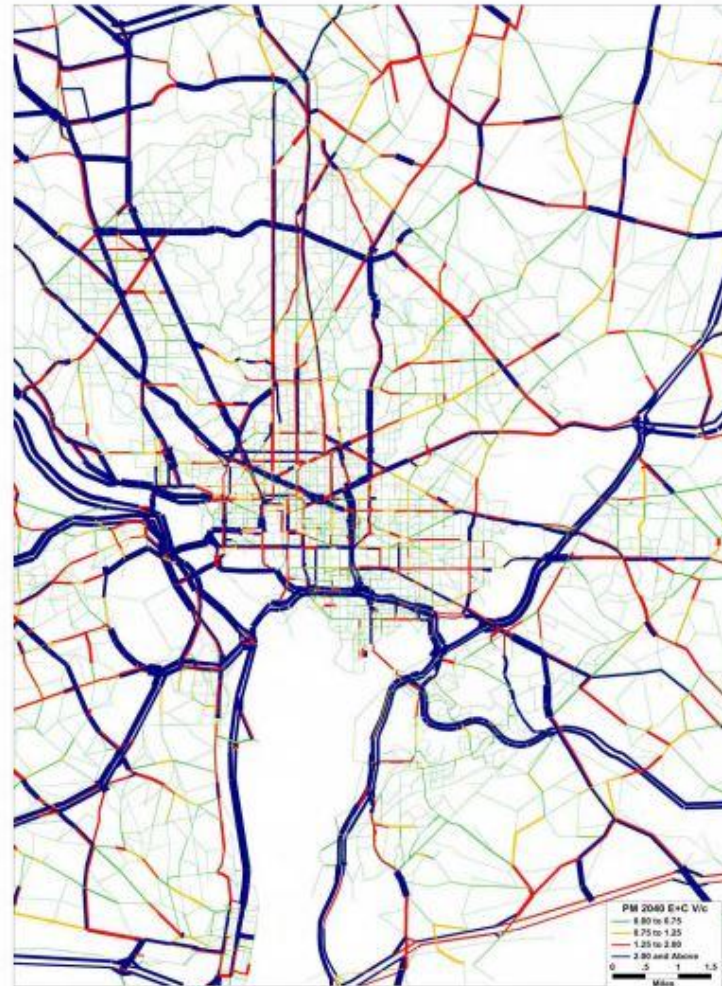
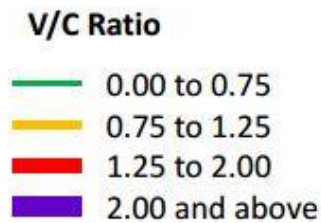
Existing Congestion Conditions (2010)

Vehicular Volume to Capacity
Model Base Year (2010)
p.m. Peak Period



Future Congestion Conditions (2040)

Vehicular Volume to Capacity
Future Baseline
p.m. Peak Period



Neighborhood Vitality

Engagement from Day 1



- **Public** – we heard from thousands of individuals in many ways
- **Transportation Plan Advisory Committee** – broad representation and diverse opinions
- **Agencies** – DC and regional/Federal
- **Within DDOT**

High Aspirations – Our Vision

The District of Columbia will have a world class transportation system serving the people who live, work, and visit the city. The transportation system will make the city more livable, sustainable, prosperous, and attractive. It will offer everyone in the District exceptional travel choices. As the transportation system evolves over time, the District will:

- Be more competitive and attractive locally, regionally, nationally, and internationally
- Have safer and more vibrant streets and neighborhoods
- Have cleaner air, streams, and rivers and be more responsive to climate change
- Accommodate the travel needs of all residents, workers, and visitors regardless of age or ability

The Goals are about More than Transportation

- **Sustainability and Health:** Achieve 75% of all District trips by non-auto modes
- **Citywide Accessibility and Mobility:** Maximize system reliability and capacity for moving people and goods
- **Neighborhood Accessibility and Connectivity:** Support neighborhood vitality and economic development
- **Safety and Security:** Achieve zero fatalities and serious injuries on District transportation network
- **Public Space:** Reinforce Washington DC's historic landscapes and quality of neighborhood public space
- **Preservation:** Achieve a state of good repair for all District infrastructure
- **Funding and Financing:** Invest in transportation to achieve outcomes within plan horizon

Gaining Perspective

- Games and surveys

- Scenario builder
- Build a street
- Metroquest
- Research survey

- Models and analysis

- Technical and diverse performance measures
- Districtwide travel demand model
- Special spatial analysis

- Basing decisions in plan on both components



Key Tensions in Plan Development

- Need to focus on neighborhood connections as well as congestion downtown
- Users value time and reliability, but are not always willing to pay
- Metrorail highly valued, but one of highest costs, too
- Recognize the need for change system-wide, but specific change is hard



Three Approaches

Stay the Course

*The system has **something for everyone**. Let's keep it that way.*

Get to the Center

*Let's really fix the **congestion downtown** and the whole city will be better off.*

Connect the Neighborhoods

*Focus on **short-distance travel** and the District will be more livable.*



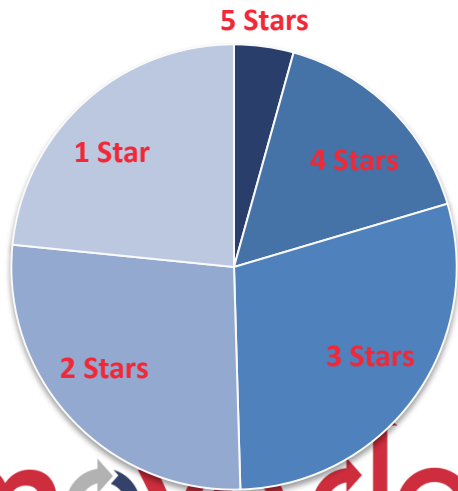
MetroQuest Results - Approaches

- Approach Ratings

- About 50% rated Approach 3 “5 stars”
- About 50% rated Approach 1 either “1 star” or “2 stars”

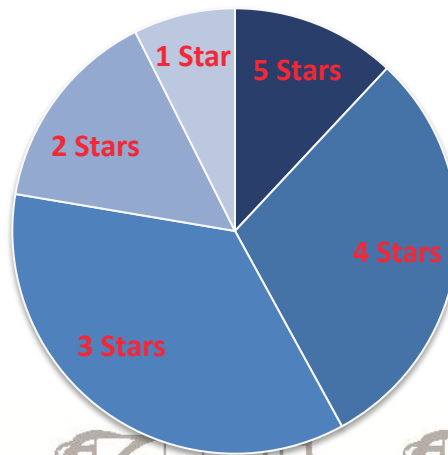
Approach 1 – Stay the Course

Average Rating: 2.5



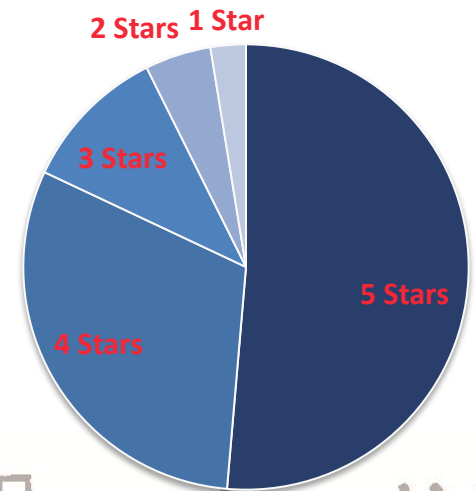
Approach 2 – Get to the Center

Average Rating: 3.2



Approach 3 – Connect the Neighborhoods

Average Rating: 4.2



Framework for Blending

- Every non-local street must:
(functional classification of collector or higher)
 - Prioritize pedestrians;
 - Accommodate vehicles and local deliveries; AND
 - Ideally, support
 - One of:
 - PROTECTED bicycle facilities (cycle track or side path)
 - DEDICATED high-capacity transit lane(s)
 - DESIGNATED freight route
 - OR several modes in simpler accommodation



Major Elements

- Support major regional core-capacity projects in DC
- Major infrastructure repairs (i.e. S. Capitol Street Bridge)
- Support to WMATA in implementation of their Momentum Plan and long-range expansion
- Commuter rail service expansions and station capacity enhancements
- Preservation of designated freight routes
- Traffic signal optimization and intelligent transportation system updates



Major Elements

- Buildout of citywide bike facility and trail network (adding 200 miles to 125 today)
- Additional Capital Bikeshare stations citywide
- 22-mile priority streetcar system + 45 miles of high-capacity transit corridors (rail or bus) connecting to regional corridors
- Pricing and management of freeway system and central employment area through cordon charge
- Support for water taxi service



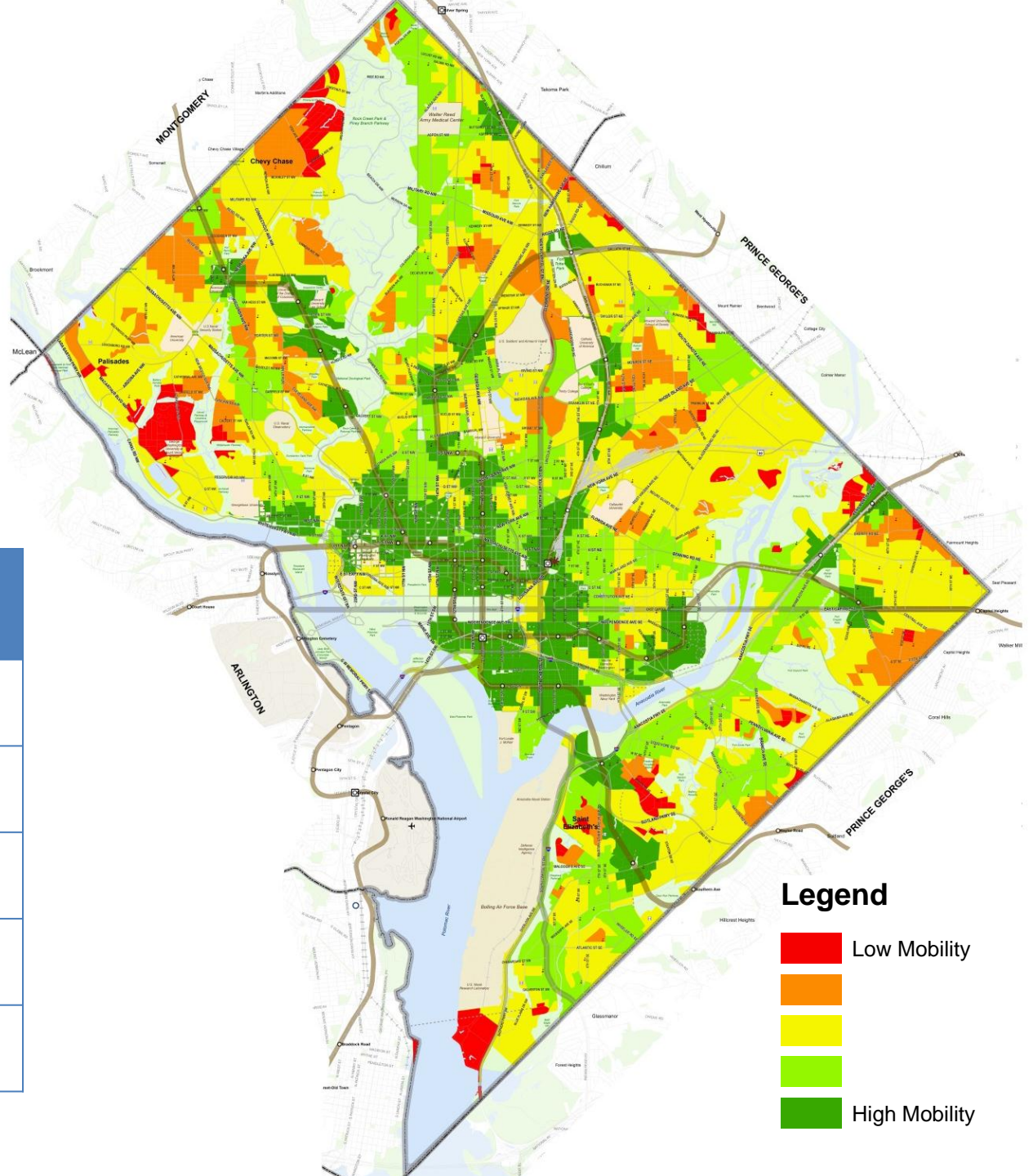
moveDC Plan Network Coverage

Facility	% of 2040 Population with Access
Sidewalk on at least 1 side of every street	100%
Bike facility within a 2-minute ride (protected, bike lane)	97%
Protected bike facility within a 2-minute ride (trails, sidepaths, cycle tracks)	80%
High Capacity Transit within a 7.5-minute walk	54%
Metrorail within a 7.5-minute walk	22%

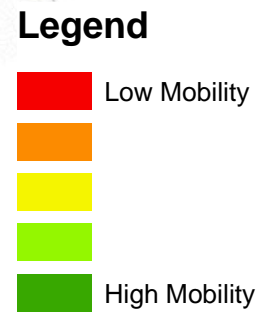


Mobility Index

moveDC Plan



Mobility Index	% of 2040 Population
Low Mobility	2%
	9%
	42%
	26%
High Mobility	21%



Policy Components

- 10 broad policy areas
- Covers management, operations, investment approaches
- Identifies elements for each mode and for system overall
- Identifies areas for DDOT to partner with other local and regional agencies



Addressing Tomorrow's Challenges

Vehicular Volume to Capacity

Future Baseline
p.m. Peak Period

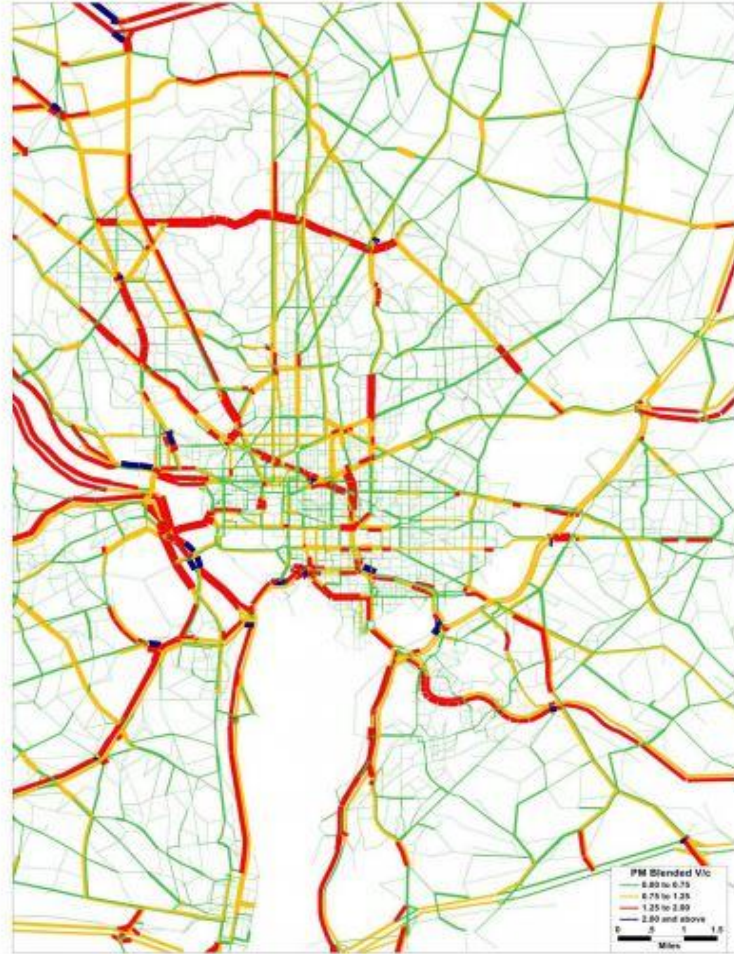
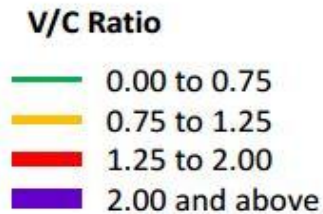
V/C Ratio

- 0.00 to 0.75
- 0.75 to 1.25
- 1.25 to 2.00
- 2.00 and above



Addressing Tomorrow's Challenges

Vehicular Volume to Capacity moveDC Plan p.m. Peak Period



Mode Share (District-District trips)

Travel Mode	Model Base Year (2010)	Future Baseline	moveDC Plan
Motorized (Drive)	45.5%	41.1%	35.8%
Transit	22.4%	20.9%	23.3%
Non Motorized	32.1%	38.0%	40.9%

Notes

1. Mode share shown in the above table is for daily trips that start and end in the District
2. Transit is Bus, Streetcar High Capacity Transit, Metrorail, Commuter Rail, and Water Transit
3. Non-motorized is Walking and Biking
4. Columns may not total 100% due to rounding



Total Daily Trips (District-District)

Travel Mode	Model Base Year (2010)	Future Baseline	moveDC Plan
Motorized (Drive)	639,000	756,000	654,000
Transit	314,000	384,000	427,000
Non Motorized	450,000	698,000	747,000

Notes

1. Trips shown in the above table is for trips that start or end in the District
2. Transit is Bus, Streetcar High Capacity Transit, Metrorail, Commuter Rail, and Water Transit
3. Non-motorized is Walking and Biking



Mode Share (to/from District)

Travel Mode	Model Base Year (2010)	Future Baseline	moveDC Plan
Motorized (Drive)	65.6%	64.7%	58.8%
Transit	24.4%	26.9%	30.5%
Non Motorized	10.0%	10.0%	10.7%

Notes

1. Mode share shown in the above table is for daily trips that start or end in the District
2. Transit is Bus, Streetcar High Capacity Transit, Metrorail, Commuter Rail, and Water Transit
3. Non-motorized is Walking and Biking
4. Columns may not total 100% due to rounding



Total Daily Trips (to/from District)

Travel Mode	Model Base Year (2010)	Future Baseline	moveDC Plan
Motorized (Drive)	1,305,000	1,480,000	1,340,000
Transit	486,000	615,000	685,000
Non Motorized	200,000	229,000	244,000

Notes

1. Trips shown in the above table is for trips that start or end in the District
2. Transit is Bus, Streetcar High Capacity Transit, Metrorail, Commuter Rail, and Water Transit
3. Non-motorized is Walking and Biking



Vehicular Performance

	Model Base Year (2010)	Future Baseline	moveDC Plan
Vehicle Miles Traveled (VMT)	9.13 million	10.45 million	9.07 million
Vehicle Hours Traveled (VHT)	335,000	389,000	354,000
Delay (Hours)	21,000	30,000	23,000

Note: These values are for the District of Columbia Only



Network Capacity Change

Facility Type	Change in Capacity (%) from existing network
	moveDC Plan
Roadway	-7%
High Capacity Transit (Metrorail, Surface, Water Taxi)	105%
Bicycle Facilities (Trail, Cycle Track, Sidepath, Bike Lane)	186%
Total (all facilities)	24%



moveDC's Top Ten for the Region

10. Support for, and initiatives in innovation

→ **Benefits to region:** continued private sector investment in transportation solutions, more user and trip-specific tools to help travelers, and keeping region at forefront of transportation innovation

9. Citywide signal system and intelligent transportation systems investments

→ **Benefits to region:** more ability for coordinated and efficient operations

8. Protect key freight and goods movement routes

→ **Benefit to region:** more efficient goods movement

7. Support for Union Station enhancements

→ **Benefits to region:** better passenger, Metrorail, commuter rail, and other transit experience



moveDC's Top Ten for the Region

6. **Management and pricing of transportation facilities such as I-66, New York Avenue, I-395, I-295, and DC 295 and in areas such as downtown**
 - **Benefits to region:** Consistency in freeway system operational policy, increased efficiency/reliability for transit and non-SOV users, maximization of person carrying capacity of region's limited freeway resources, and disincentives for driving in downtown
5. **Support for commuter rail run-through and off-peak direction and period service**
 - **Benefits to region:** increased attractiveness and effectiveness and mitigation of mid-day storage issues
4. **Close critical gaps in the region's pedestrian network (including trails and on bridges) and establish a Districtwide emphasis on pedestrians as the highest priority**
 - **Benefits to region:** improve safety and attractiveness of non-auto modes of travel



moveDC's Top Ten for the Region

- 3. Support for Momentum and the Regional Transit System Plan**
 - **Benefits to region:** improved system reliability, longevity, and enhanced ability to serve people in the region
- 2. Close critical gaps in the region's bike network (including trails and on bridges) and develop the most robust bike network in the region**
 - **Benefits to region:** greater bicycle accessibility and attractiveness
- 1. Extend/connect with high-capacity transit lines under development in neighboring counties**
 - **Benefits to region:** continuous regional high capacity surface transit network, relief for Metrorail, and increased transit effectiveness



Next Steps

- Finalize project prioritization and groupings
- Finalize financial projections and assumptions
- Draft Final Plan in Spring for public comment and completion

