



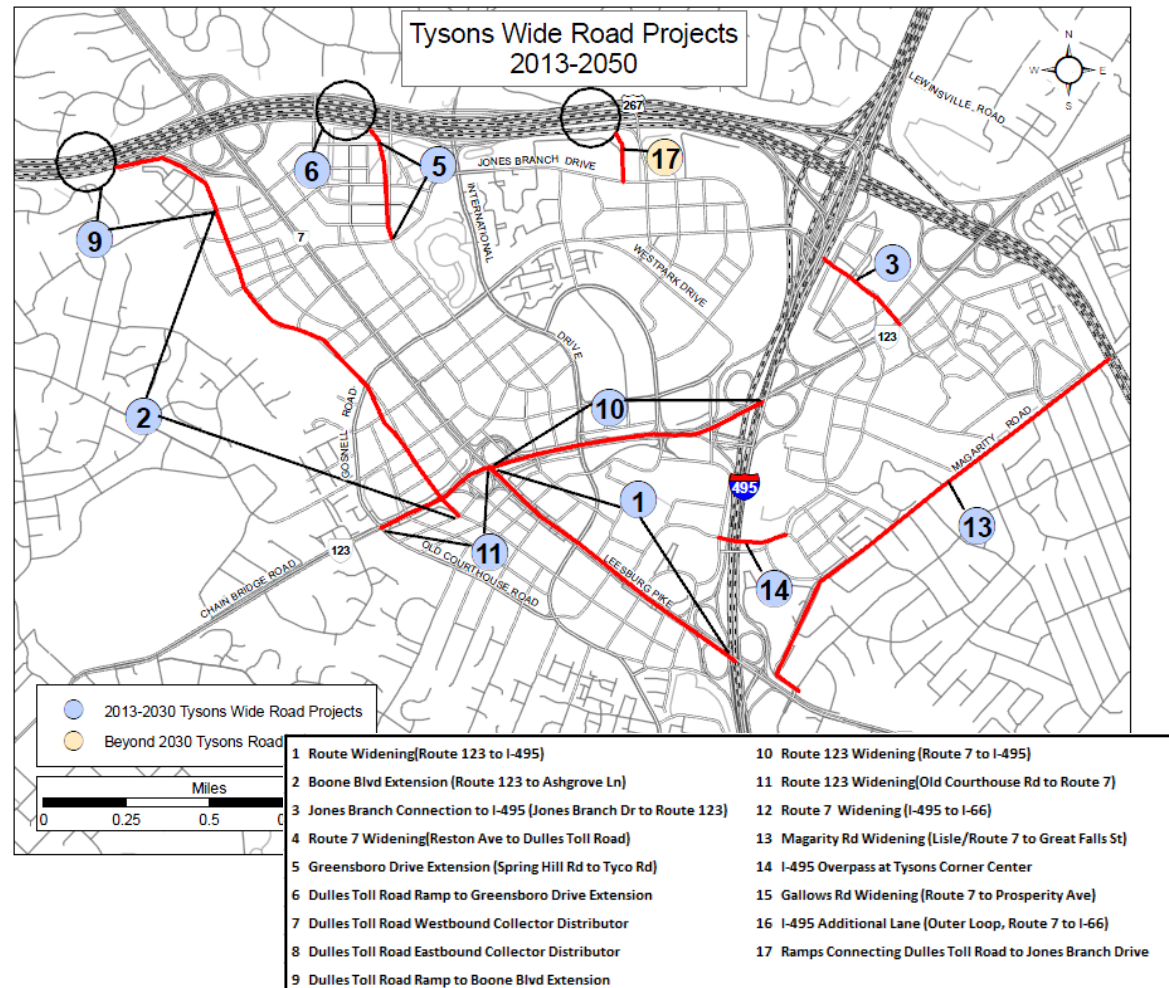
# MCA Member Meeting: Tysons Update

Fairfax County Department of Transportation

November 13, 2017

# Presentation Overview

- Balancing Land Use and Transportation
- How Are We Doing?
- Studies and Projects
  - Neighborhood Study
  - Major Roadway Projects
  - Grid of Streets
  - Transit Service
  - TMSAMS
  - Table 7B Projects
  - Bike Lane and Bikeshare
- Questions



# Balancing Land Use and Transportation



FCDOT's Site Analysis Section reviews entitlement projects and works to secure mitigation measures to address transportation based impacts.

Types of mitigation measures\* FCDOT requests:

- Implementation of the grid of streets and other roadway enhancements
- Bicycle/pedestrian infrastructure improvements
- Transportation Demand Management (TDM) measures
- Signalization (including pedestrian signalization)
- Additional transit stops or transit shelters
- Contributions to the Transportation Road and Grid Funds



\*Mitigation measures may consist of physical improvements or monetary contributions

# Balancing Land Use and Transportation

## Examples of Land Use Projects and their Proffered Mitigation Measures

- Grid of Streets Roads: Grant Street, Buchanan Street, Polk Street, Tyler Lane, Roosevelt Street
- Improved Old Meadow Road with Bicycle Lanes, Enhanced Streetscape, On Street Parking
- Shared Use Trail/Sidewalk along Grant Street (Connection to Scotts Run Trail Project)
- Traffic signal (Old Meadow Road/Grant Street)
- Contribution to the Tysons Grid of Streets Fund, the Tysons-Wide Transportation Fund, and the Dolley Madison Superstreet Project
- Bicycle Racks, Storage Areas, and Repair Station
- Commitments to Bus Shelters and Marked Crosswalks
- An Extensive TDM Plan with Goals, Monitoring Requirements and Penalties/Remedies

### The Highland District

(Old Meadow Road North of Holly Ridge, July 2016)





# Balancing Land Use and Transportation

## Examples of Land Use Projects and their Proffered Mitigation Measures

The Commons (Anderson Road, South of Old Chain Bridge Road Intersection, June 2013)

- Dartford Drive extension from Colshire Meadow Drive to Colshire Drive
- Widening/Improvement of Anderson Road from Old Chain Bridge Road to Colshire Drive
- Construction of Colshire Meadow Drive from Dartford Drive to Anderson Road
- Improvement of Colshire Drive
- Monetary Contributions for Intersection Restriping and Signal Retiming Along Route 123
- Provision of Bicycle Lanes on Anderson Road, Colshire Meadow Drive, and Dartford Drive
- An Extensive TDM Plan with Goals, Monitoring Requirements and Penalties/Remedies
- Traffic Signal (Colshire Meadow Drive/Dartford Drive)
- Contribution to the Tysons Grid of Streets Fund, the Tysons-Wide Transportation Fund, and the Dolley Madison Superstreet Project
- Bicycle Racks and Storage Areas



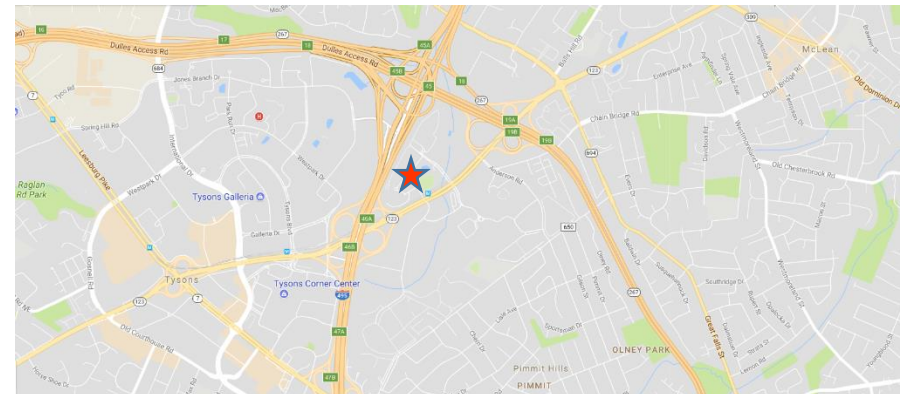
# Balancing Land Use and Transportation

## Examples of Land Use Projects and their Proffered Mitigation Measures

### Capital One (Northeast Corner of Dolley Madison and I-495, July 2017)

- Grid of Streets Roads: Capital One Tower Road, Capital One Drive South and North
- Right of Way Dedication for the Jones Branch Connector
- Contribution to the Tysons Grid of Streets Fund, the Tysons-Wide Transportation Fund, and the Dolley Madison Superstreet Project
- On-Site Transit Shelter
- 2 Traffic Signals
- An Extensive TDM Plan with Goals, Monitoring Requirements and Penalties/Remedies
- Bicycle Improvements (Storage Facilities, Dedicated Bike Lanes)
- Pedestrian Improvements (Crosswalks and Pedestrian Signals)

CAPITAL ONE - TYSONS CORNER EAST  
DESIGN GUIDELINES



# How Are We Doing?

## Tysons Annual Report

- FCDOT has, since 2011, annually collected a variety of types of transportation data
  - Status of Tysons projects
  - Vehicles traveling into and out of Tysons
  - Bus/Transit Usage
  - Trip reduction goals of constructed developments in Tysons
  - Levels of Service of key intersections in Tysons

# How Are We Doing? – Trip Reduction Goals

## Trip Reduction Goals of Constructed Developments in Tysons





















































































- County has expected goals concerning the reduction in number of trips generated by developments through Transportation Demand Management measures
- Ranges from 25% for smaller developments more than a half a mile away from a Metrorail station to up to 65% for large developments less than 1/8<sup>th</sup> of a mile away
- Based on most recently submitted counts, all developments with TDM specified goals are meeting their targets










# How Are We Doing? – Levels of Service (AM)





















































































## Intersections analyzed as a part of the Tysons Annual Report – AM Peak






2011 to 2017 Intersection AM Peak Hour LOS	2011	2012	2013	2015	2016	2017
1. Route 7 at Tyco Road						
2. Spring Hill Road at International Drive						
4. Route 123 at Tysons Boulevard						
5. Route 7 at Tysons Shopping Mall Ent.						
6. Gallows Road at Science Applications Court						
7. Woodford Road at Old Courthouse Road						
8. Route 123 at Old Courthouse Road						
9. Old Courthouse Road at Gosnell						
10. Route 123 at Anderson Road						
11. Route 123 at Great Falls Street						
12. Magarity Road at Great Falls Street						
13. Ramada Road at Route 7						
14. Lisle Street at Magarity Road at Route 7						
15. Route 123 at Old Meadow Road						

Level of Service (LOS)	
	A, B, or C
	D
	E
	F
	No LOS

# How Are We Doing? – Levels of Service (PM)

## Intersections analyzed as a part of the Tysons Annual Report – PM Peak

2011 to 2017 Intersection PM Peak Hour LOS	2011	2012	2013	2015	2016	2017
1. Route 7 at Tyco Road						
2. Spring Hill Road at International Drive						
4. Route 123 at Tysons Boulevard						
5. Route 7 at Tysons Shopping Mall Ent.						
6. Gallows Road at Science Applications Court						
7. Woodford Road at Old Courthouse Road						
8. Route 123 at Old Courthouse Road						
9. Old Courthouse Road at Gosnell						
10. Route 123 at Anderson Road						
11. Route 123 at Great Falls Street						
12. Magarity Road at Great Falls Street						
13. Ramada Road at Route 7						
14. Lisle Street at Magarity Road at Route 7						
15. Route 123 at Old Meadow Road						

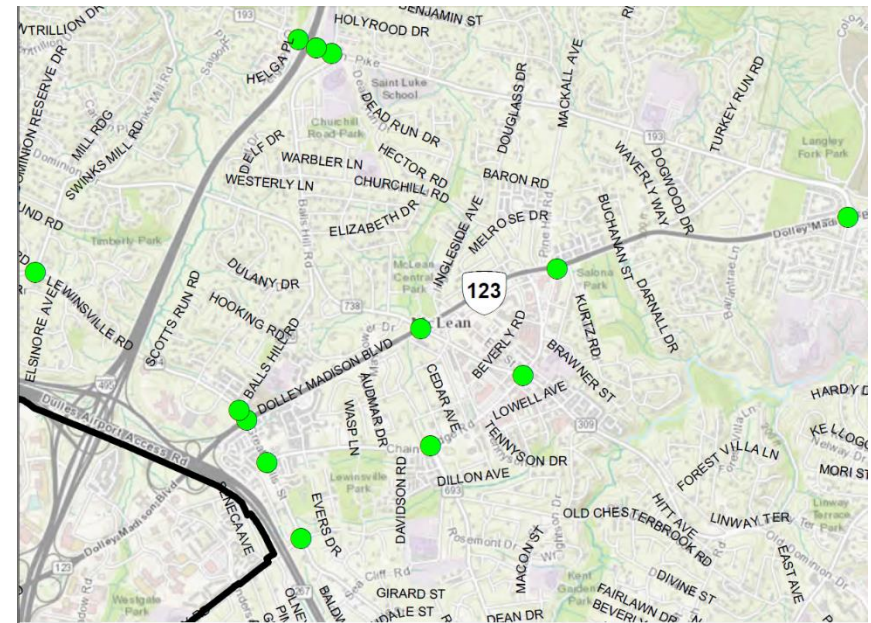
Level of Service (LOS)	
	A, B, or C
	D
	E
	F
	No LOS

# FCDOT Studies and Projects



# Tysons Neighborhood Study

- Purpose: Evaluate existing (at the time 2008) and future (2030) traffic impacts and potential mitigation measures for 30 intersections in the areas surrounding Tysons
- Intersections were chosen based on input from Dranesville, Providence, and Hunter Mill Supervisors
- Initially, 19 intersections were chosen; 11 more were added



# Tysons Neighborhood Study

- 13 intersections were shown to have either AM, PM, or both peak hours failing (LOS F is considered failing) under 2008 conditions
- Currently evaluating proposed mitigation measures and next steps for intersections that fail under 2008 and 2030 conditions
- Potential Next Steps\*
  - Conduct more detailed studies to evaluate feasibility of improvements
  - Continue to monitor regularly (locations that currently do not fail that are projected to potentially fail by 2030)
  - IN SOME LOCATIONS WE HAVE ALREADY BEGUN “NEXT STEPS”

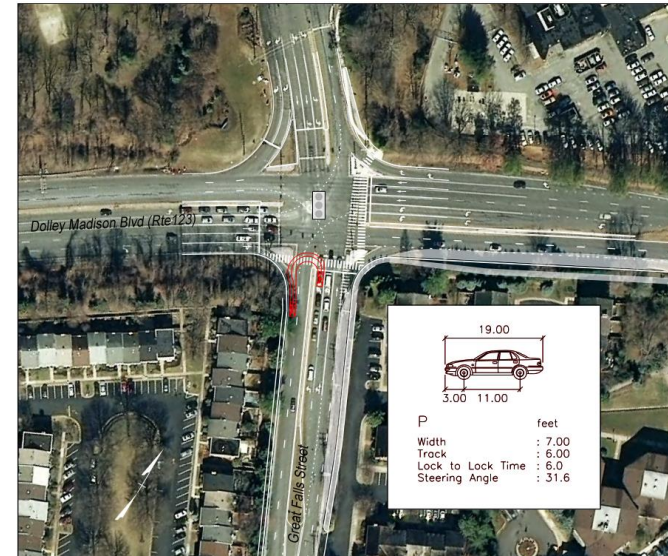
\*Because counts were conducted in 2008 (pre-Metrorail), FCDOT will be conducting new counts at most locations and will continue to monitor locations.



# Tyson's Neighborhood Study

## Projects Moving Forward

- Dolley Madison Boulevard Corridor Study
  - Includes the following Neighborhood Study intersections:
    - Dolley Madison Boulevard at Lewinsville Road/ Great Falls Street
    - Dolley Madison Boulevard at Old Dominion Drive
    - Lewinsville Road at Balls Hill Road
  - Also includes:
    - Great Falls Street and Chain Bridge Road
    - Dolley Madison Boulevard and Anderson Road
    - Dolley Madison Boulevard and Ingleside Avenue
    - Old Dominion Drive and Ingleside Avenue/Park Avenue
- Study is nearing completion (early 2018)



# Tysons Neighborhood Study

## Projects Moving Forward

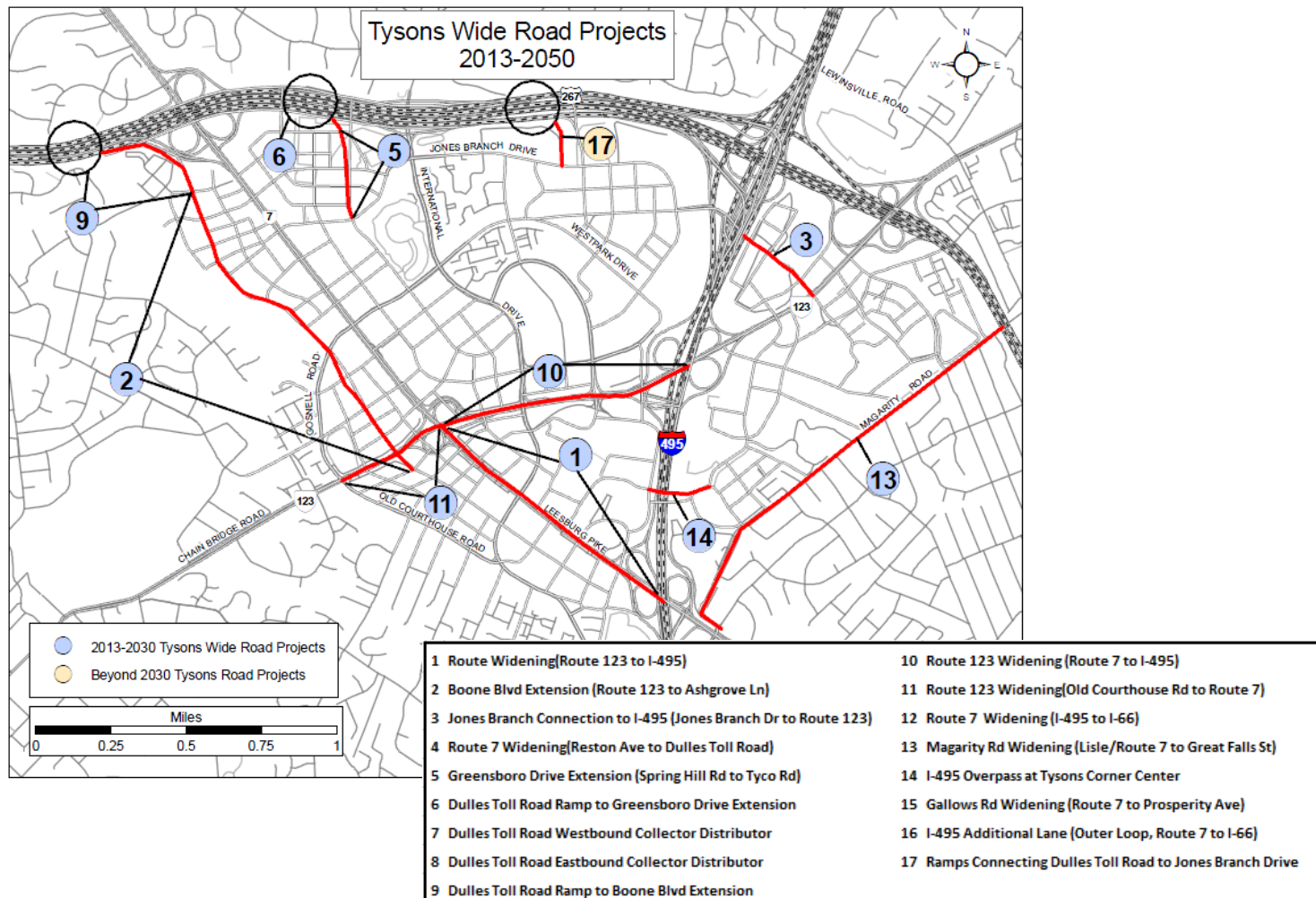
- Lewinsville Road and Spring Hill Road
  - Finalizing preliminary alternatives
  - Preparing to move 2 alternatives forward for detailed design and analysis
  - Proposed completion of study: Summer 2018
- Lewinsville Road and Leesburg Pike
  - Part of the VDOT Route 7 Widening Project (Jarrett Valley Drive to Reston Avenue)
  - Estimated Completion: Spring 2024 (Per Latest Status Report to the Board)
  - Concept for this intersection is a displaced left turn
  - VDOT website for the project (showing the displaced left)
    - [http://www.connectroute7.org/learn\\_more/documents.asp](http://www.connectroute7.org/learn_more/documents.asp)

# Leesburg Pike/Lewinsville Displaced Left





# Major Tysons-wide Roadway Projects (Table 7)



# Major Roadway Projects (Continued)

## Jones Branch Connector

- A new multimodal connection across the Beltway to improve circulation in Tysons, reduce congestion, support future development and enhance mobility for pedestrians, bicyclists, transit riders, and drivers.
- FCDOT administered design and right-of-way phases; VDOT administering construction.
- Construction began January 27, 2017. Now 25% complete.
- One lane each direction, and sidewalk on south side expected to be open to traffic and pedestrians by late 2018.
- Full project will be complete in 2019.





# Major Roadway Projects (Continued)

## Jones Branch Connector Aerial



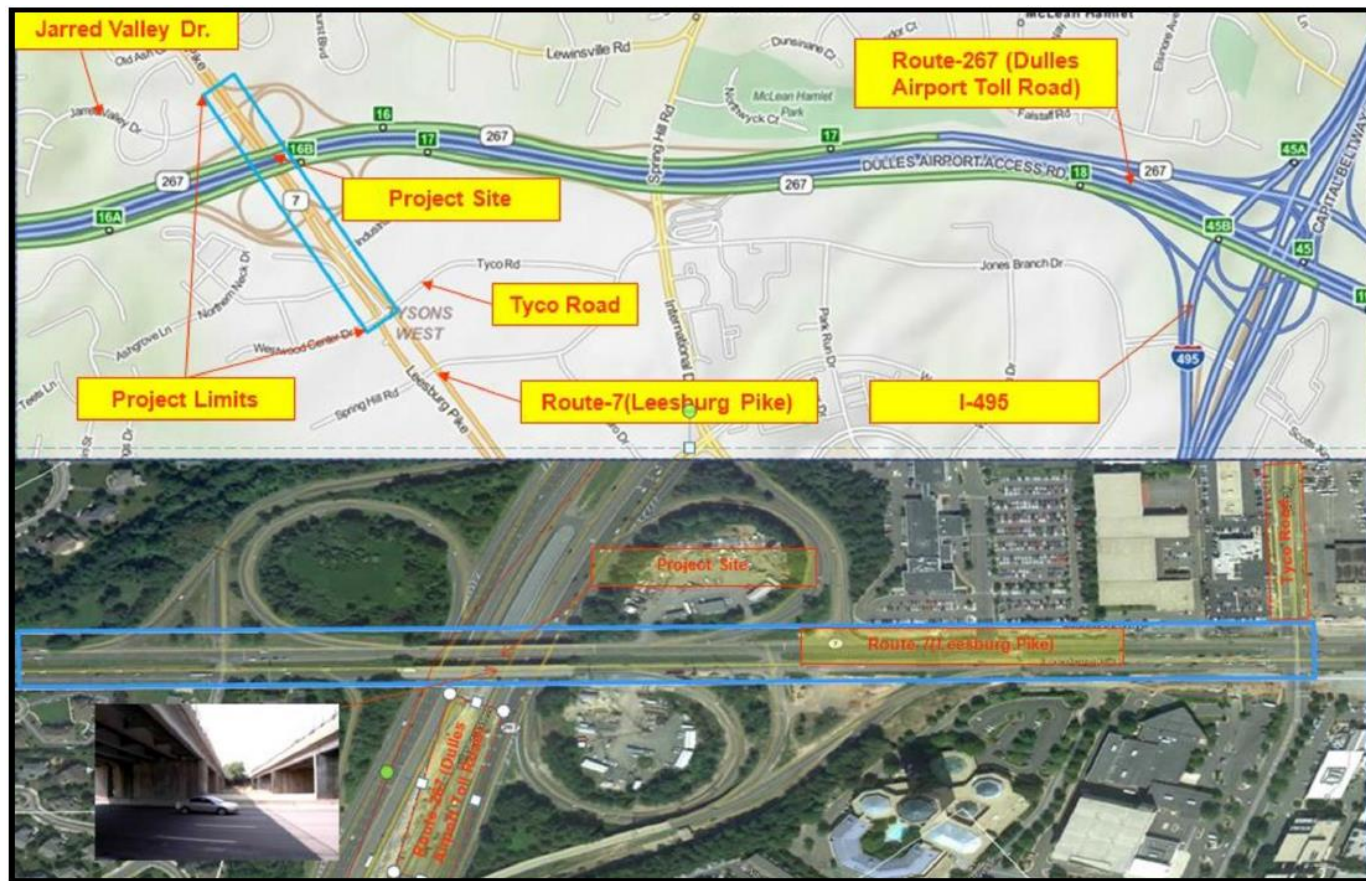
# Major Roadway Projects (Continued)

## Route 7 Bridge over Dulles Toll Road

- Project will widen bridge from 4 to 6 lanes. Total length ~0.4 miles.
- Shared use path for pedestrians and bikes on both sides.
- Project will improve access to Tysons and Spring Hill Metrorail Station from the west.
- Design-build contract awarded by VDOT in June 2015.
- Construction underway. 75% complete.
- Estimated construction completion: May 2018.

# Major Roadway Projects (Continued)

## Route 7 Bridge over Dulles Toll Road



# Major Roadway Projects (Continued)

## Route 7 Widening (Reston Avenue to Dulles Toll Road)

- Widen Route 7 from 4 to 6 lanes from Jarrett Valley Drive to Reston Avenue, with intersection improvements, shared use trail on both sides of road, and upgraded bus stops.
- Fully funded: \$234 million
- VDOT responsible for design, right-of-way, and construction phases with County input.
- Board endorsed design plans: Spring 2017.
- VDOT issued a Request for Qualifications in August 2017.
- Formal Request for Proposals expected to be issued in November 2017.
- Construction start: Spring 2019, and estimated completion: Spring 2024.



For more information visit  
[www.connectroute7.org](http://www.connectroute7.org)



# Major Roadway Projects (Continued)

## Route 7 Widening (Route 123 to I-495)

- Widening existing 6 lanes to 8 lanes with pedestrian improvements.
- Bus Rapid Transit proposed through the corridor (Envision Route 7 – NVTC).
- Traffic analysis and initial options: Fall 2014.
- BRT recommendations approved by NVTC: July 2016.
- BRT coordination required; additional consultant work initiated.
- Widening design will continue following answers to BRT questions.





# Major Roadway Projects (Continued)

## Route 123 Widening (I-495 to the Dulles Connector Road)

- Super Street Option selected. 30% design complete and being refined.
- Coordinating with the Route 123 corridor study before advancement.

## Route 123 Widening (I-495 to International Drive)

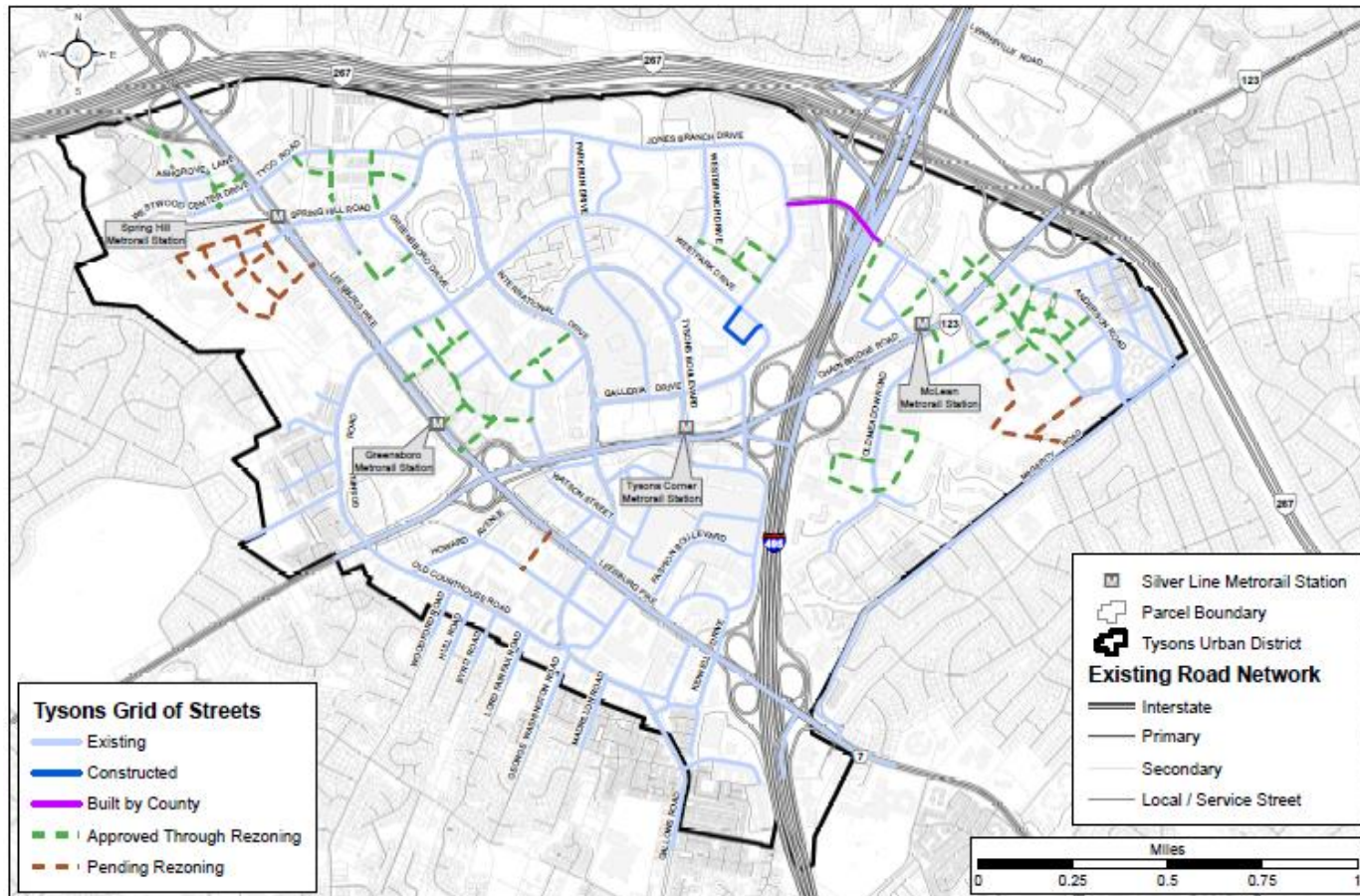
- Staff continues analysis of the Comprehensive Plan recommendation to widen Route 123 from 6 to 8 lanes.
- Multiple options being considered.

## Both Projects

- Consultant selection completed
- Analysis of Future Conditions – January 2018
- Development and analyses of Future Alternative – March 2018
- Final recommendation and phasing analyses – Spring 2018

# Tysons Grid of Streets

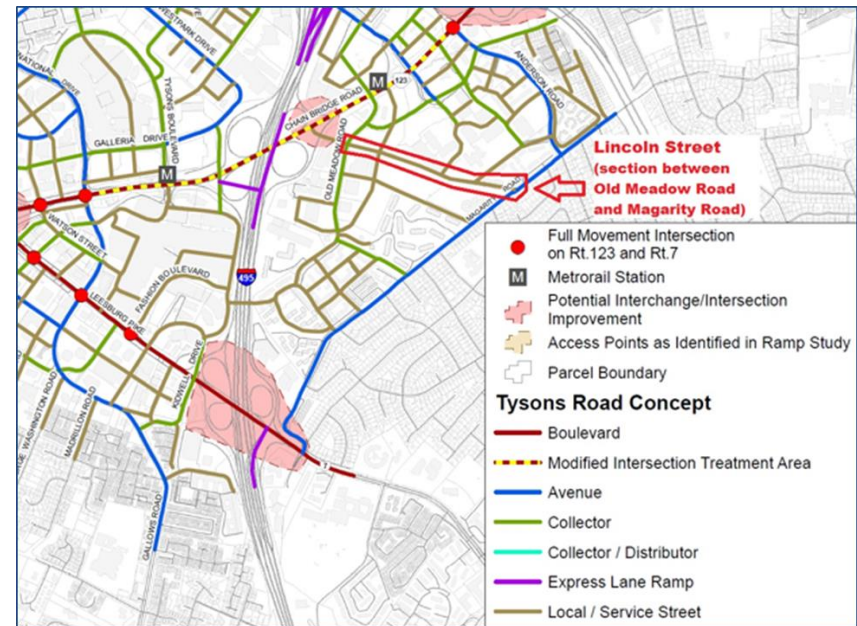
## On-going Development (2017)



# Tysons Grid of Streets (Continued)

## Lincoln Street

- Street to connect Route 123 to Magarity Road.
- Will allow access to existing/approved developments along Old Meadow Road from Magarity Road.
- Additional access to residential units on Old Meadow Road.
- On October 18, 2016, the Board approved \$1.2 million for feasibility study.
- Consultant selected.
- Design work underway.
- Estimated completion: 2023



# Transit Service

- Purpose: Enhance transit service to capitalize on Metrorail investment, support transit oriented development, and provide transit connections from the Metrorail stations to areas of Tysons not within walking distance to stations.
- Implemented improvements include:
  - Neighborhood bus routes from McLean and Vienna.
  - I-495 Express Lanes service from Burke Centre, Lorton, and Springfield.
  - Circulator routes serving Tysons' Metrorail Stations
- Fairfax Connector continually monitors ridership and redevelopment in Tysons to ensure convenient Metrorail station connections. Periodic adjustments are anticipated.
- Ridership is growing.
- Future improvements include:
  - Bus Rapid Transit from Alexandria and Falls Church on Route 7 (recommendations approved by NVTC).



# Transit Service (Continued)

## **Tysons Circulator Service (Short Term)**

- The first phase of the Circulator system serving the Metrorail stations began July 24, 2014.
- Changes implemented in May 2015 in response to rider feedback and to provide more direct, two-way service for the majority of riders
- Three routes:
  - 422 – Boone Blvd-Towers Crescent (Southeast Tysons)
  - 423 – Park Run-Westpark (Central Tysons)
  - 424 – Jones Branch Drive (Northern Tysons)
- Serving Tysons weekdays, Saturdays, and Sundays
- Ridership increasing.





# Transit Service (Continued)

## Transit service in McLean & Tysons

### Fairfax Connector

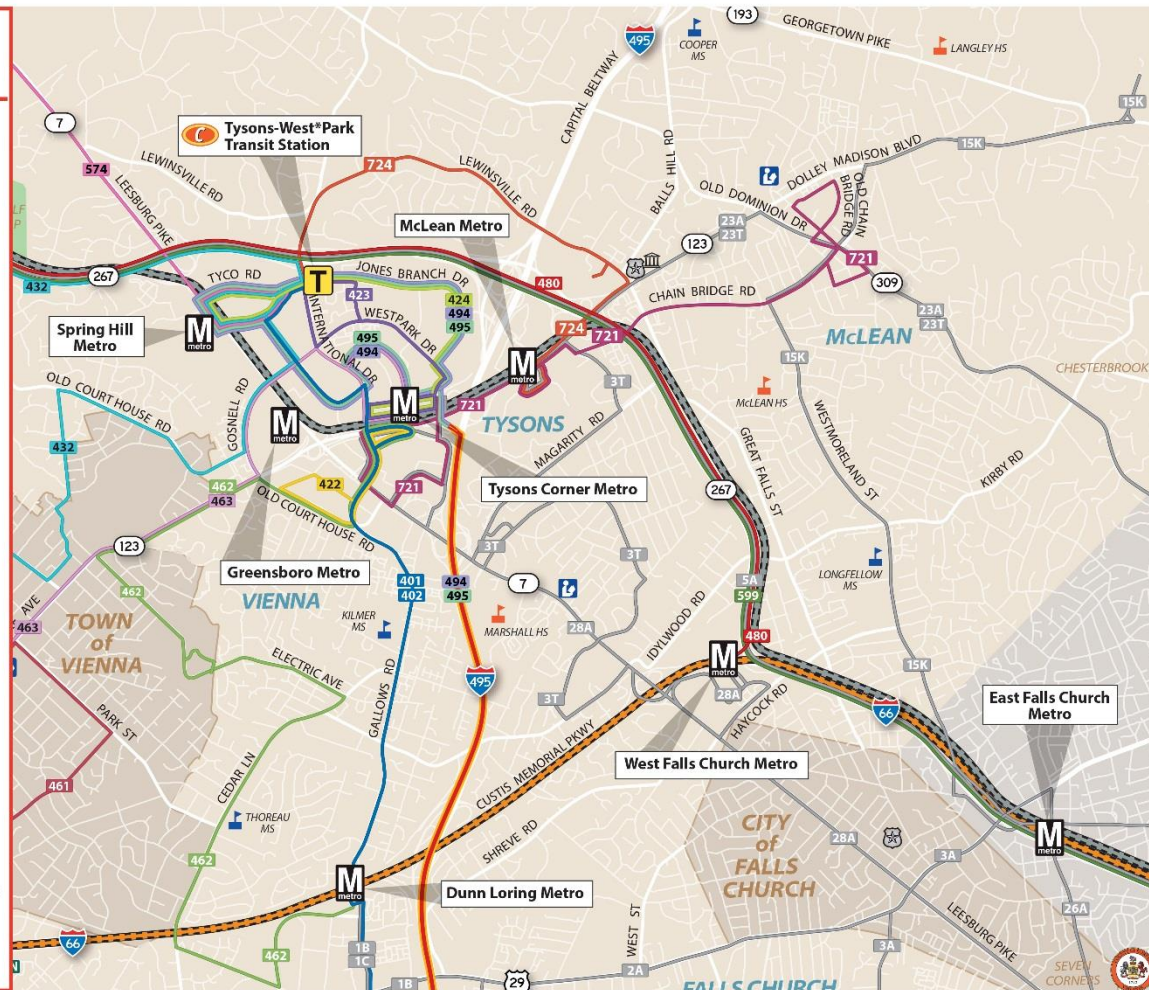
- 401** Weekday, Saturday & Sunday Service
- 402** Weekday, Saturday & Sunday Service
- 422** Weekday Service Only
- 423** Weekday, Saturday & Sunday Service
- 424** Weekday & Saturday Service
- 462** Weekday Rush Hour Service Only
- 463** Weekday, Saturday & Sunday Service
- 494** Weekday Service Only
- 495** Weekday Service Only
- 574** Weekday, Saturday & Sunday Service
- 721** Weekday, Saturday & Sunday Service
- 724** Weekday Rush Hour Service Only

### Metrobus

- 3T** Weekday & Saturday Service
- 15K** Weekday Rush Hour Service Only
- 23A** Weekday, Saturday & Sunday Service
- 23T** Weekday, Saturday & Sunday Service
- 28A** Weekday, Saturday & Sunday Service

### Metrorail

- SV** **Silver Line:** Spring Hill, Greensboro, Tysons Corner, McLean, East Falls Church
- OR** **Orange Line:** West Falls Church, East Falls Church



# TMSAMS

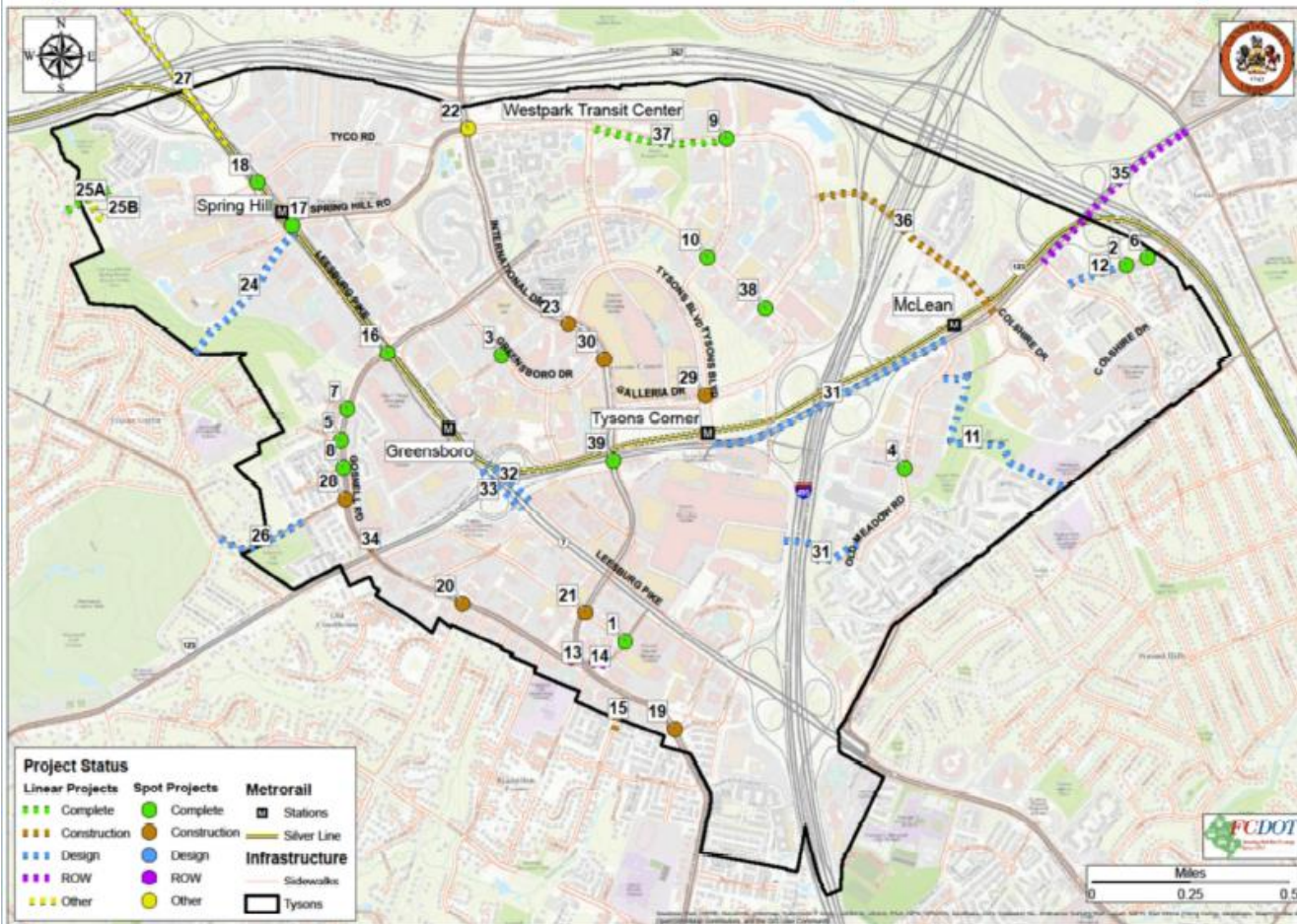
## Tysons Metrorail Station Access Management Study

- Purpose: prioritize access improvements to the Metrorail stations in Tysons.
- Completed in 2011.
- Staff recommendations approved in May 2012, and many funded in the Board's Four-Plan for Transportation.
- Staff currently working to design/construct these projects.
  - 22 Complete
  - 10 in Construction/Utility Relocation
  - 1 in Right-of-Way
  - 6 in Design



## TMSAMS (Continued)

## Tysons Metrorail Station Access Improvement Projects





# TMSAMS (Continued)

## Major Projects

- **Route 7 Walkways** on Both Sides under Route 123
  - Construction authorized
  - Est. completion: July 2018.
- **Vesper Trail** from Vesper Court to Route 7
  - Construction underway.
  - Est. completion: October 2018.

### Vesper Trail Overall Project Alignment





# TMSAMS (Continued)

## Major Projects

- **Route 7 Walkway** from Dulles Toll Road to Beulah Road.
  - To be constructed as part of VDOT's Route 7 Widening project from Jarrett Valley to Reston Parkway. Est. Completion: May 2018
- **Scotts Run Walkway** from Magarity Road to Colshire Meadow Drive.
  - Design complete. Land acquisition underway. Est. completion Fall 2020.
- **Pedestrian connection across I-495** (Tysons to Old Meadow).
  - VDOT has selected preferred alternative.
  - Community and Mall coordination underway
  - Est. completion: 2020.
- **Pedestrian connection on Route 123 from Great Falls Street to McLean Station.**
  - Land acquisition completed; utility relocation underway.
  - Est. completion: February 2019.

# Tysons Table 7B Projects

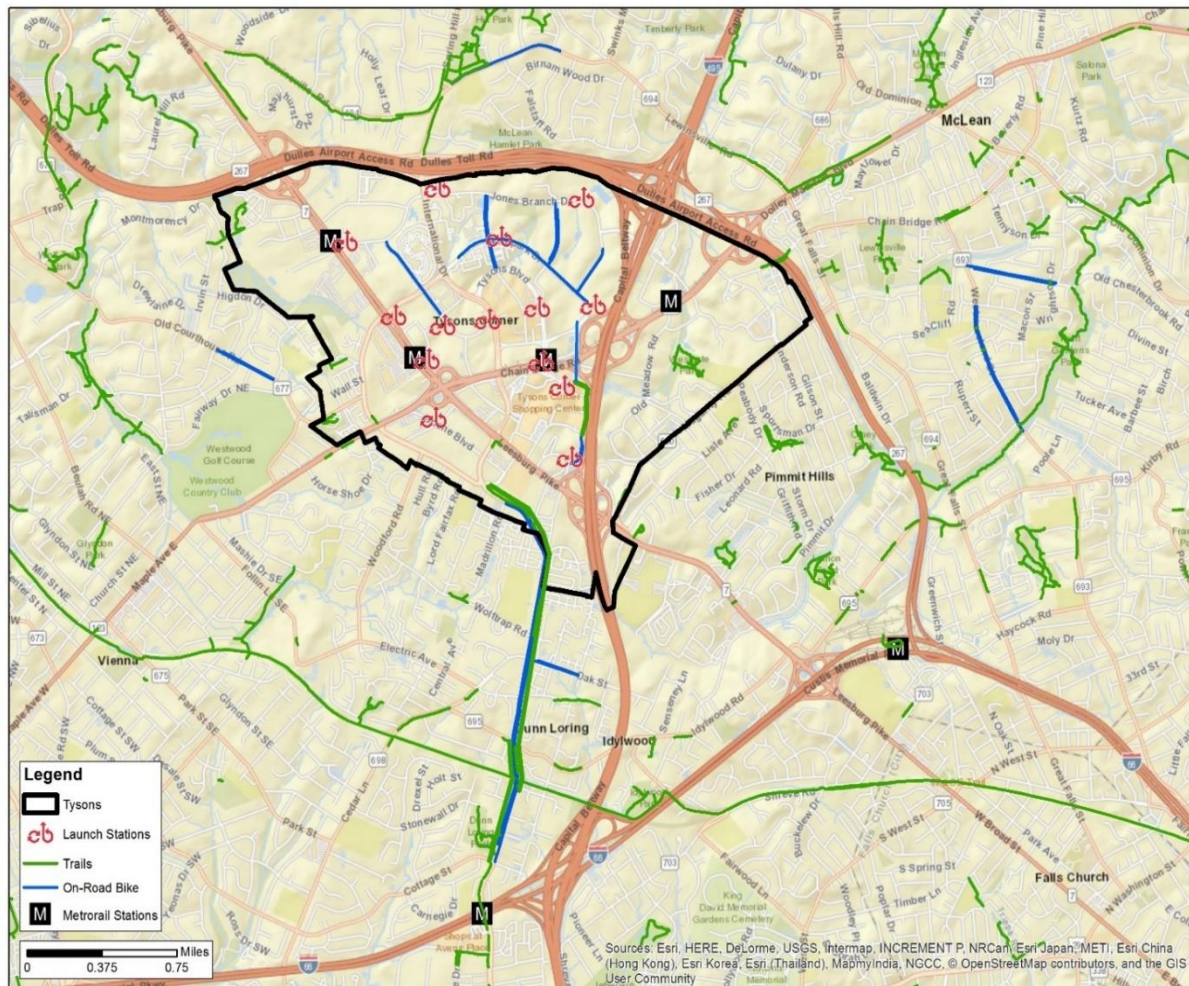
Projects resulting from further analysis of the road network and planned land use densities. Included in Comp. Plan Amendment to be considered by the Board on March 14, 2017.

- Reported on earlier in presentation
  - Route 123 Modified Intersection Treatment (Superstreet).
    - Inside the Beltway
    - Outside the Beltway
  - Underpass at Dolley Madison / Great Falls / Lewinsville intersection
- Improvement of the intersection of Magarity Road and Route 7
  - Project initiation at a future date.

# Tysons Table 7B Projects (Continued)

- Cleveland Ramp - Modification to the eastbound off-ramp from the Dulles Access Road to Route 123.
  - The Alternatives Analysis is complete. The analysis identified two preferred alternatives:
    - Braided Ramp Concept and an Auxiliary Lane concept, to be carried forward in an Interchange Modification Report (IMR).
- Route 7/Route 123 Interchange to allow additional capacity.
  - Advancing design based on design charrette recommendations; four design options considered.
  - Waiting for clarification on the configuration of Route 7 (Route 123 to I-495)
- Gallows Road at Gallows Branch, to I-495 SB Ramp
  - Study to be initiated in the future.

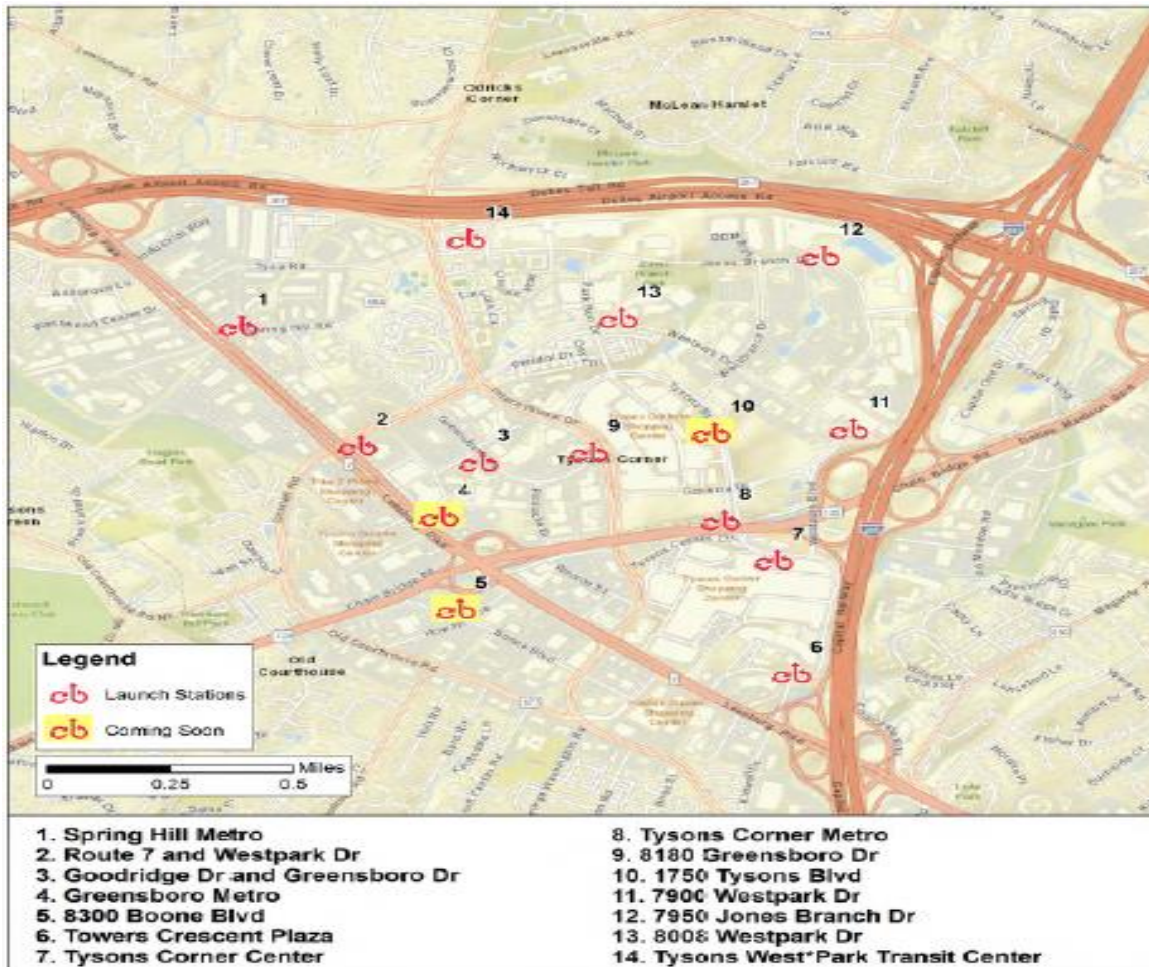
# Tysons Bike Lanes



- Bike lanes were installed in conjunction with VDOT Repaving in 2015
- First bike lanes on VDOT roads in Tysons
- Includes sharrows, bike lanes, and buffered bike lanes
- More bike lanes planned when VDOT repaving occurs in the future
- Buffered bike line pilot project design underway



# Tysons Bikeshare



- 12 of 15 bikeshare stations planned for launch currently installed
  - 2 Stations: Permitting with VDOT
  - 1 Station: Negotiating Agreement with Land Owner





Questions?