



County of Fairfax, Virginia

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# Tysons Transportation Infrastructure, Programs, and Services

(Table 7 in Tysons Comprehensive Plan)



# The Origin of the Elements in Table 7

- Vision for Tysons
- Comprehensive Plan 2030 Analysis
- Comprehensive Plan beyond 2030 Analysis
- Phasing Analysis (2020 and 2030)
- Transit Development Plan (shorter term)



# Phasing Analysis

- Evaluation of road projects
- Reduction in delay used as a measure of effectiveness
- Projects prioritized



Critical Intersections



# Categories of Transportation Elements in Table 7

- Transit and pedestrian improvements
- Tysons-wide road improvements
- Grid of streets
- TDM measures
- Bicycle access points, intersection improvements outside Tysons, Metrorail station access



## Transit Improvements

Under Construction and Programmed:

- Metrorail Silver Line Phase I and Phase II

Short- and Mid-Term Improvements:

- Neighborhood bus routes
- Circulator routes (Link) serving Metrorail stations
- Express bus routes on I-66 and I-95/I-495



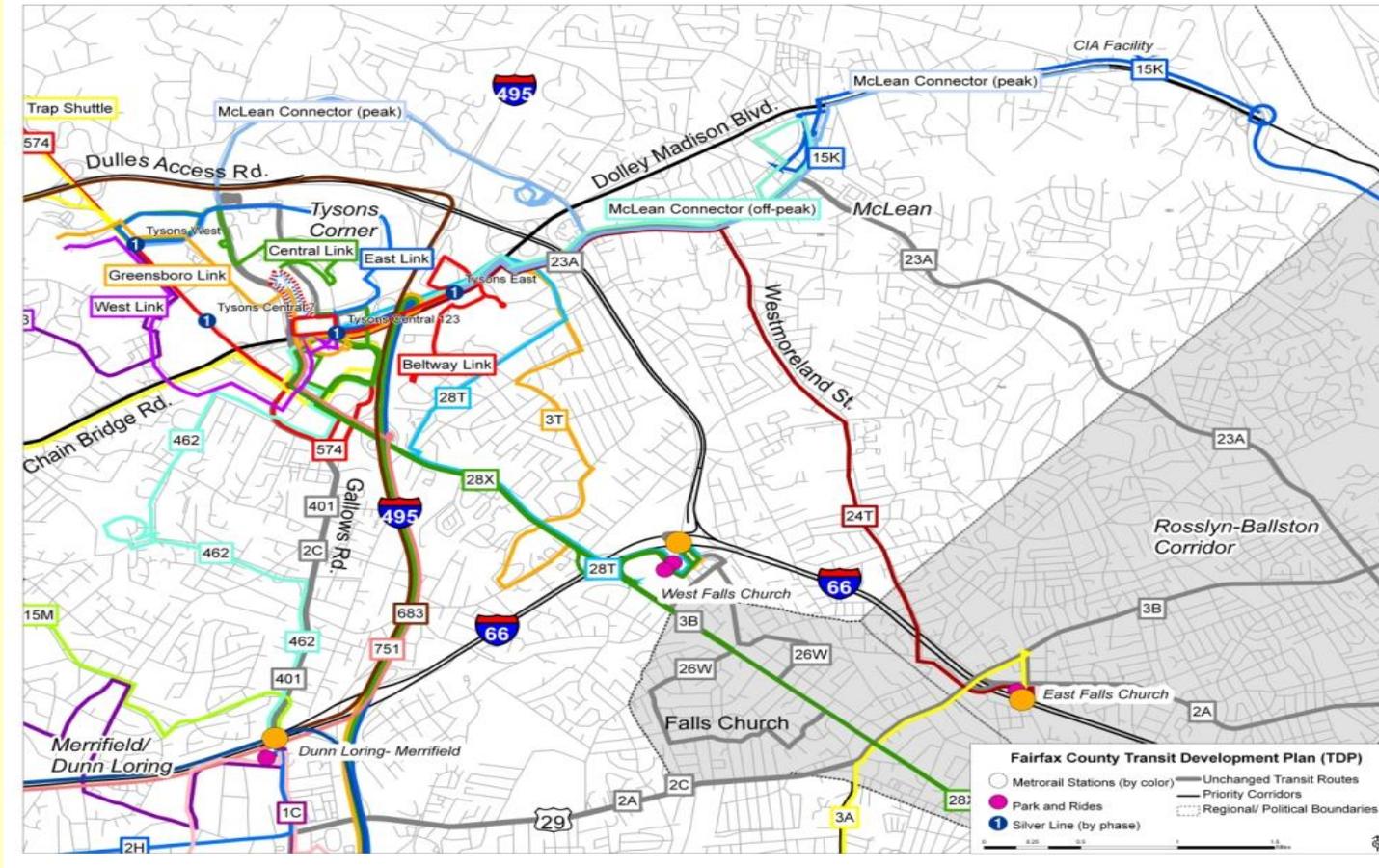
## Transit Improvements (continued)

Longer Term (beyond 2030):

- Further improvements to neighborhood, circulator, and express bus routes
- Additional BRT routes, supporting park-and-ride and feeder bus routes to rail stations
- Two additional urban transit corridors



# Transit Improvements



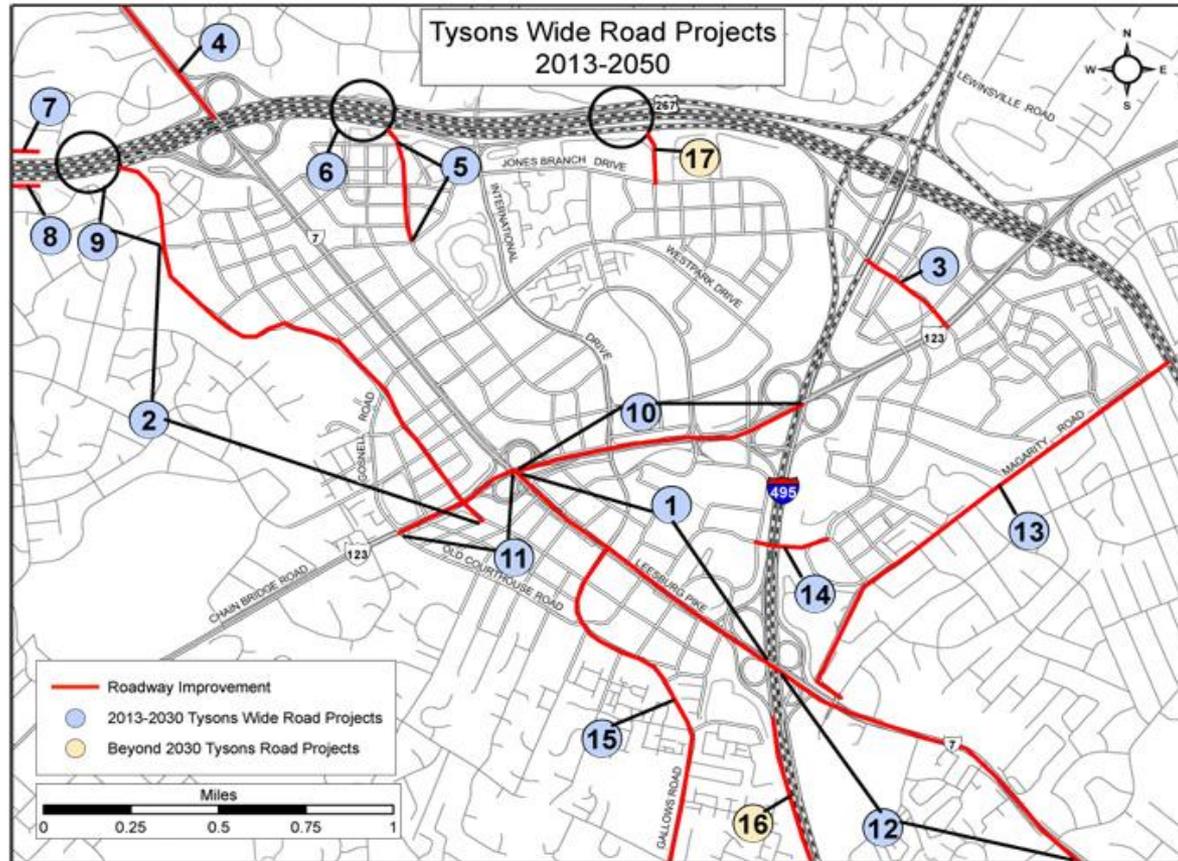


## Pedestrian Improvements

- Projects prioritized by looking at cost-effectiveness and need
- Many high priority projects are funded
- Tysons Metrorail Station Access Management Study (TMSAMS) recommendations to be used for selecting future projects

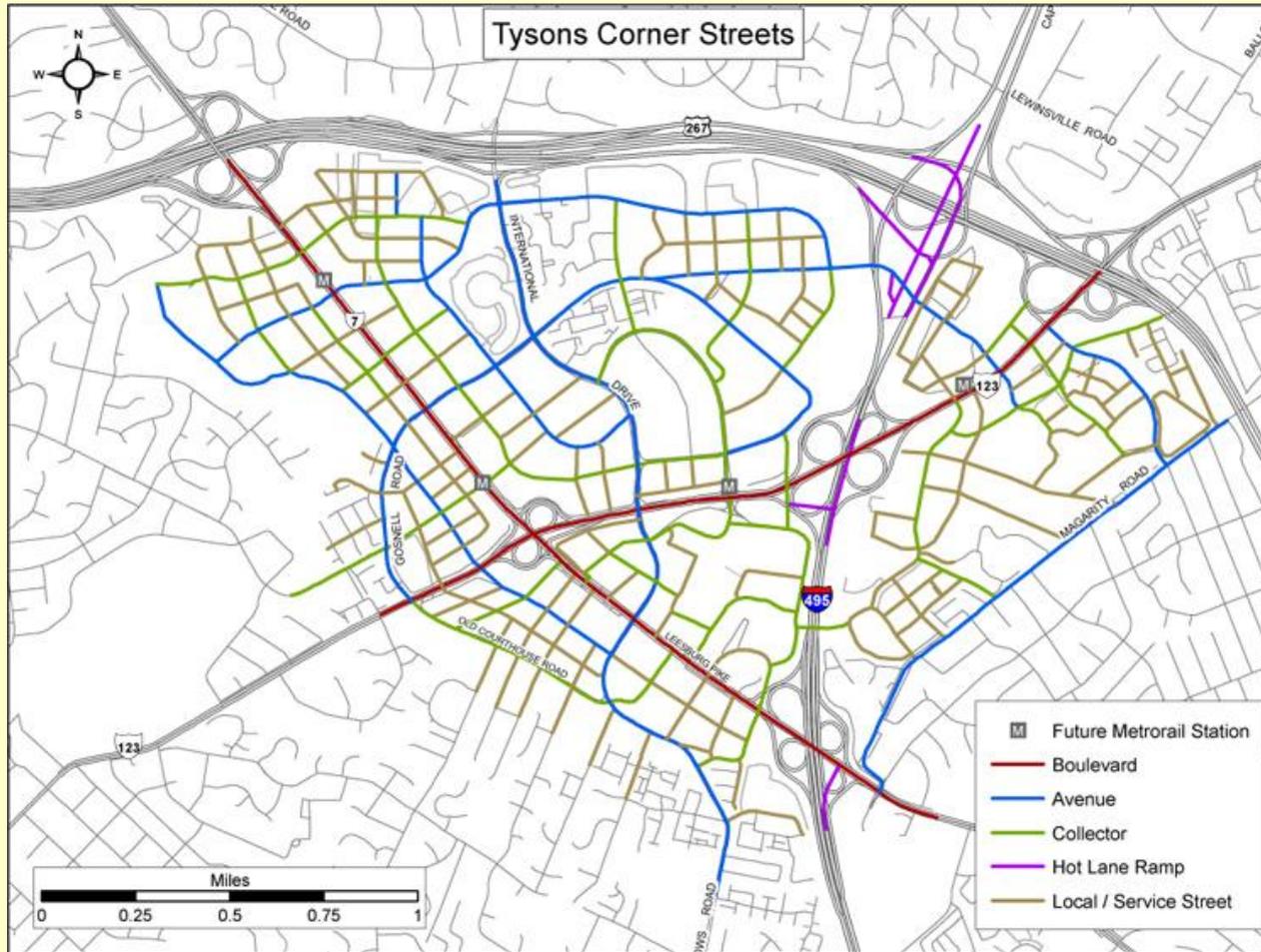


# Tyson's-Wide Road Improvements





# Tyson's Grid of Streets





# TDM Measures

Application of aggressive TDM measures

Development levels in total square feet (with corresponding forecast year)	TDM Vehicle Trip Reduction Goals, (Percentage Reduction from ITE Rates)			
	TOD Locations			Non-TOD Locations (more than 1/2 mile from station)
	0 to 1/8 Mile from Station	1/8 to 1/4 Mile from Station	1/4 to 1/2 Mile from Station	
<b>2010 to 2020</b>	<b>45%</b>	<b>35%</b>	<b>30%</b>	<b>25%</b>
<b>84 million (2030)</b>	<b>55%</b>	<b>45%</b>	<b>40%</b>	<b>35%</b>
<b>96 million (2040)</b>	<b>60%</b>	<b>50%</b>	<b>45%</b>	<b>40%</b>
<b>113 million (2050) (Comprehensive Plan Level)</b>	<b>65%</b>	<b>55%</b>	<b>50%</b>	<b>45%</b>



## Bicycle Access Points

- FCDOT developed a Tysons Corner Bicycle Master Plan (BMP)
- Significant citizen, stakeholder input used to develop priorities
- Recommendations phased in 4 time periods
- Highest priority access points include:
  - Gallows Road,
  - Vesper trail (Dominion Power line),
  - Ashgrove Road



## Intersection and Safety Improvements

- Intersection improvements outside of Tysons as identified in the Neighborhood Traffic Impact Study and other studies
- Improve and enhance the safety of Old Courthouse Road from the Town of Vienna to Gosnell Road



## How Cost Estimates Were Derived

- Road Construction Costs are Based on VDOT Planning Level Cost Estimates
- ROW Costs are Based on Estimate of Cost per Square Foot and an Estimate of Area Required
- Transit Costs are Based on Estimate of Cost per Service Hour and Cost per Vehicle; Existing Service Costs Subtracted



## Estimated Cost of Transportation Improvements (2012 to 2030)

Type of Cost	\$'s (millions)
Tysons-wide road projects	\$810
Grid of streets	\$444
Neighborhood spot improvements, bicycle and pedestrian access	\$70
Transit (capital and operational)	\$374
<b>Total</b>	<b>\$1,698</b>



## Estimated Cost of Transportation Improvements (2030 to 2050)

Type of Cost	\$'s (millions)
Tysons-wide road projects	\$96
Grid of streets	\$295
Transit (capital and operational)	\$1,160
Total	\$1,551
Other countywide transit projects required	