Tysons

Update on FCDOT Tysons Corner Studies

May 24, 2012

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FCDOT Tysons Area Studies

1. Tysons Corner Interim Parking
2. Tysons Metrorail Station Access Management Study (TMSAMS)
3. Tysons Corner Circulator Study: Preliminary Results Summary

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Tysons Corner Interim Parking

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Background

- The Comprehensive Plan amendment identified the need for interim parking at the rail stations until there is a critical mass of new development around the stations.
- County staff reviewed requirements for commercial parking and ways in which this parking could be provided.
- County staff identified potential sites within ¼ mile of the new stations
- Owners were contacted to determine their level of interest.
- Limited interest expressed so far.
- County is now preparing a formal Request for Interest to gauge potential interest.

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Interim Parking RFI

- Pursues Interim Commuter Parking Agreements with interested property owners.
- Proposed sites should be located within ¼ mile of a Metrorail station in Tysons Corner.
- Proposals should utilize existing surface parking lots/garages or new surface parking lots in Tysons Corner.
- The Interim Parking RFI process is anticipated to begin approximately 12 months prior to the opening of the Metrorail stations in Tysons Corner.

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Tysons Metrorail Station Assess Study (TMSAMS)

- Study Goals Include:
  - Educate the public on alternative mode transportation improvement recommendations that have been made to improve access to the four Metrorail Stations in Tysons.
  - Identify how the public would like these improvement recommendations to be prioritized.
  - Identify areas or topics, pertaining to improving bus, bicycle and pedestrian access to the rail stations in Tysons, that need additional analysis or study.

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Tysons Metrorail Station Assess Study (TMSAMS)

- Significant public input received through the TMSAMS public outreach process.
- TMSAMS Final Report was complete in October 2011.
- Report submitted to Board in December 2011.
- Staff recommendation considered and approved by the Board on May 22, 2012.
- Funding identified to begin implementation of recommended projects.

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Tysons Corner Circulator Study: Preliminary Results Summary

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Study Purpose

- LONG RANGE Planning study to support Tysons Corner redevelopment and rezoning process
  - Design circulator system to support goal of maximizing transit trips/minimizing auto trips
- Identify needed transit preferential treatments
  - Support a reliable and effective circulator system
  - Identify required expansion of right of way – may require additional adjacent land

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Planning Process

- Peer analysis of circulator systems in other cities
- Project goals and objectives
- Network development process
- Long range ridership forecasts
- Transit preferential treatments
- Mode options
- Operating and capital costs
- Finalize recommendations

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Network Development Process

- Five preliminary networks developed initially
  - Long range design based on 2050 forecasted conditions
  - Individual routes developed – combined into networks
- Evaluation of five preliminary route networks
- Network #1 and Network #2 selected for more detailed evaluation

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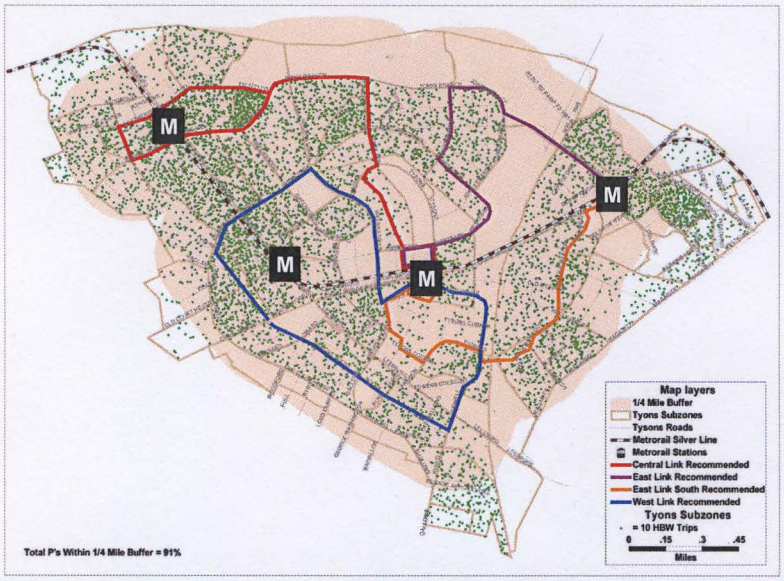
Trips Beginning in Tysons Corner- Network #1

Year 2050 Tysons Corner Home-Based Work Trips Beginning in Tysons By Subzone - 1/4 Mile Buffer Around Rail Stations And All Links



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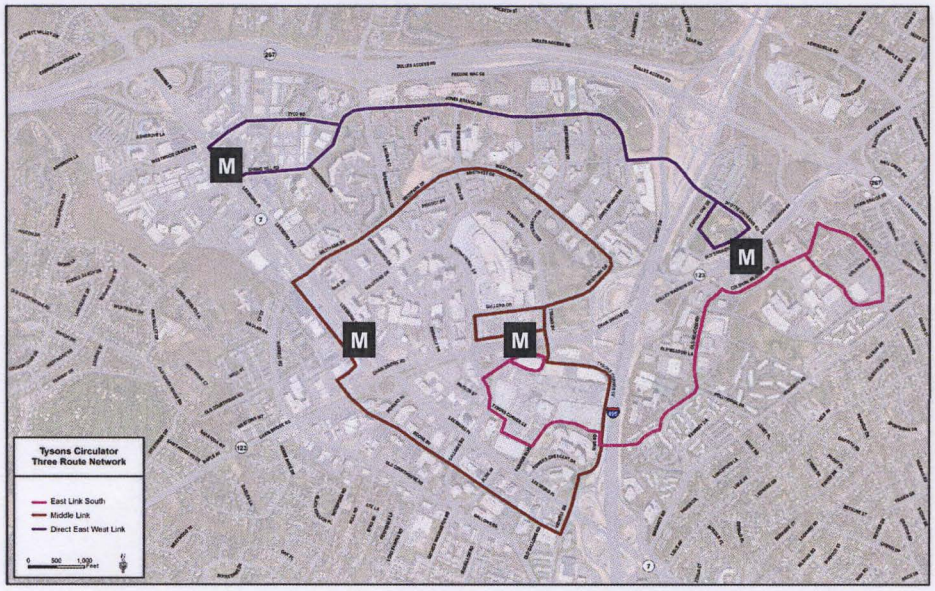
Network #1: Three Route Network



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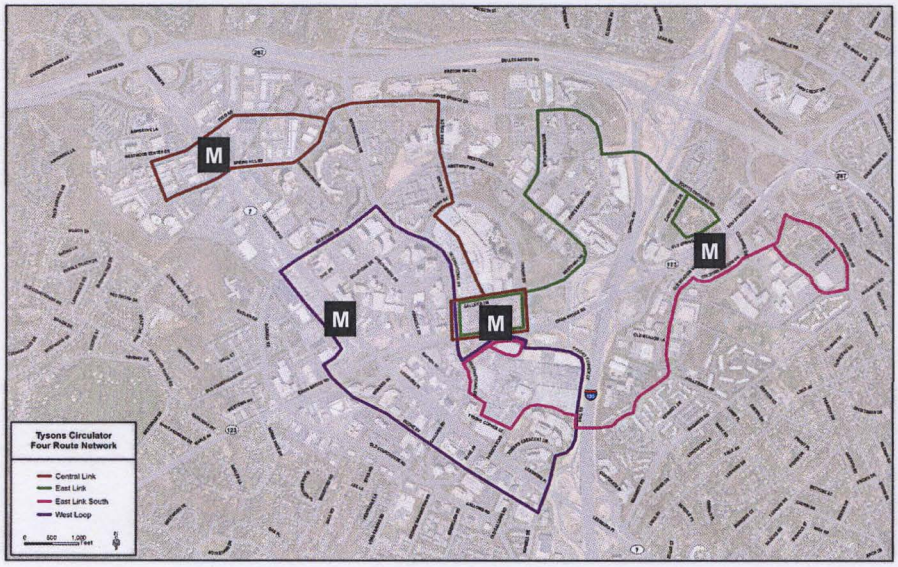
Network #2: Four Route Network



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Ridership Forecasts

- Utilize regional forecasting model – reflect 2050 conditions
- Four key variables impact ridership
  - Service frequency
  - Circulator fare
  - Parking cost
  - Travel time (speeds)

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Ridership Forecasts

- Two ridership scenarios

	Scenario #1	Scenario #2
Frequency	6 minutes peak, 10 minutes off-peak	4 minutes peak, 6 minutes off-peak
Fare	$1.00	No fare
Parking Costs	Higher than Tysons currently – reflects costs in Wilson Boulevard Corridor	Higher than Tysons currently – reflects costs in Wilson Boulevard Corridor
Travel Speeds	Based on Lower Level of Dedicated Transit Lanes	Based on Higher Level of Dedicated Transit Lanes

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Ridership Forecasts

- Scenario #1

Network	Total Ridership	Transfer from Metrorail	Non-Metrorail Riders
Network #1	17,575	6,195	11,380
Network #2	16,643	7,355	9,108

- Scenario #2

Network	Total Ridership	Transfer from Metrorail	Non-Metrorail Riders
Network #1	33,746	12,323	19,423
Network #2	33,310	14,362	18,948

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Detailed Network Evaluation

- Evaluation criteria
  - Daily ridership
  - Boardings per revenue hour
  - Operating cost per rider
  - Capital cost per rider
  - Circulator travel time between select origins/destinations
  - Change in transit mode share
  - Run time variability – congestion

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Transit Preferential Treatments

- Types
  - Dedicated transit lanes
  - Queue jumps
  - Transit signal priority
- Factors considered
  - Level of congestion (speed)
  - Queue length at intersections
  - Transit vehicle volumes
  - Person carrying capacity

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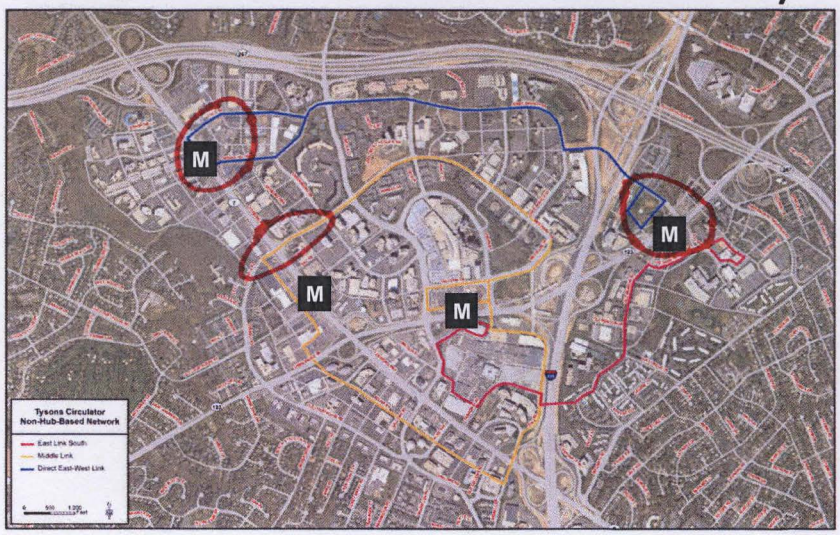
Identified Areas for Exclusivity



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Next Steps

- Select final network
- Finalize transit preferential treatment recommendations
- Recommend modes – bus, streetcar/light rail/other
- Calculate costs
- Refine ridership forecasts – final network
- Complete final report in Spring 2012

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