



## Final Report November 2011

**Fairfax County Department of Transportation** 

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## TMSAMS Executive Summary

In June 2010, the Fairfax County Board of Supervisors (BOS) adopted a new Comprehensive Plan for Tysons Corner to take advantage of the arrival of Metrorail service to Tysons Corner and transform the area from the auto-oriented, suburban development pattern that exists today into a true urban downtown for Fairfax County. The Tysons Plan calls for a walkable, pedestrian and bicycle friendly Tysons Corner that will eventually be home to 100,000 residents and 200,000 workers. While the Tysons Plan outlines a long-term vision for Tysons Corner, it does not provide a multimodal access management plan to address near term access to the Metrorail stations in Tysons Corner.

In order to create a multimodal access management plan for the Metrorail stations, currently under construction in Tysons Corner, as well as to get the public to begin thinking about how they will reach the stations, the BOS approved funding for the Tysons Metrorail Station Access Management Study (TMSAMS) project on June 1, 2009. The ultimate objective of the study was to create a document that can be used as a tool for the BOS to make funding decisions on multi-modal transportation improvement projects, specifically to access the Metrorail stations in Tysons Corner, as funding becomes available.

A TMSAMS Advisory Group was formed to guide the study through its completion, determine what information to present to the public, how best to present the information and how to collect public input. Representing a broad spectrum of interests, the TMSAMS Advisory Group consisted of representatives from each of the BOS district offices that include and encompass Tysons Corner, residents from each of these districts, bicycle advocates, representatives from the business and development community as well as staff from the Fairfax County Park Authority, the Fairfax County Office of Public Affairs and the Chairman of the BOS Office. It was staffed by the Fairfax County Department of Transportation (FCDOT). Along with the Comprehensive Plan for the Tysons Corner Urban Center, the TMSAMS Advisory Group selected three recently completed FCDOT studies to provide the basis for recommended alternative mode transportation improvements in the TMSAMS effort. These studies are: the Fairfax County Transit Development Plan (TDP), the Tysons Corner Sidewalk Analysis, and the Tysons Corner Bicycle Master Plan.

The Perspectives Group, a private public-outreach consulting firm with extensive Tysons Corner related experience, conducted a comprehensive public involvement process for TMSAMS. This public involvement process included a total of four initial public meetings, approximately 20 key stakeholder interviews and the development of a TMSAMS website with an online survey. This highly successful public involvement process resulted in over 250 people attending one of the four public meetings and over 1,900 people participating in the TMSAMS online survey.

After this extensive public involvement process was complete, The Perspectives Group compiled the results of the input collected and produced this final report, including summaries from all areas of the outreach effort. Section 6 of the report highlights the top ranked bus transit, pedestrian and bicycle facility improvement recommendations, specifically improving access to the four new rail stations, from the Comprehensive Plan for the Tysons Corner Urban Center, the Fairfax County Transit Development Plan, the Tysons Corner Sidewalk Analysis and the Tysons Corner Bicycle Master Plan. A final public meeting, with over 95 people in attendance, was held on October 4th, 2011 to present the findings of the TMSAMS public outreach effort.

Also included in this report are recommendations from the TMSAMS Advisory Group for additional improvements, additional analysis and increased use of technological innovations to address transportation related issues not covered by the FCDOT studies that were incorporated into the TMSAMS effort. As

previously stated, the ultimate objective of this study is to create a document that can be used as a tool for the Fairfax County BOS to make funding decisions on multi-modal transportation improvement projects, to access the Metrorail stations in Tysons Corner. In order to reach that objective, the next step is for FCDOT staff to conduct a thorough assessment of the priorities and recommendations contained in this report.

In conducting this assessment, staff will produce preliminary cost estimates for the projects, assess construction feasibility, assess right-of-way implications, and assess which improvements can be included in the proffers of rezoning cases. The product of this assessment will be a recommended list of multi-modal transportation improvements designed to improve access to the four Metrorail stations in Tysons Corner. In conjunction with the recommendations, staff will develop a phasing plan that ties the projects to anticipated funding levels. The chapters that follow this summary provide greater detail on the background of TMSAMS, the TMSAMS Advisory Group, the process and existing studies used in TMSAMS, public priorities identified through TMSAMS, TMSAMS Advisory Group Recommendations and the Next Steps for TMSAMS.

# Background

In June 2010, after a multi-year process, the Fairfax County BOS adopted a new Comprehensive Plan for Tysons Corner. The catalyst for the new plan was the new Silver Metrorail Line, currently under construction and scheduled to begin operation in late 2013, with four stations in Tysons Corner.

The Tysons Plan envisions a green urban center that will be home to up to 100,000 residents and 200,000 jobs by 2050 and mandates "a functional and accessible system of pedestrian walkways, trails, shuttles, bike routes, a grid of streets, transit connections, and standard principles of trip reduction."

The vision also calls for reducing "the suburban focus on isolated buildings, surface parking and moving vehicles through Tysons Corner to somewhere else," and to "connect new buildings, urban parks, structured parking, and pedestrian and bicycle accommodations to form engaging streetscapes and connected neighborhoods." By endorsing transportation designs which engender active and healthy lifestyles, the vision emphasizes a "complete streets policy" which serves all modes of travel by travelers of all groups and abilities.

The Tysons Plan concentrates on the area within the Tysons Corner Urban Boundary, as defined in the adopted Tysons Plan, and has a 50-year window for build out. While the Plan sets a long term vision for Tysons Corner, it does not address near-term multimodal access to the four Tysons Corner Metrorail Stations. Since the Plan did not directly address near-term access to the Metrorail Stations in Tysons Corner, the BOS authorized the establishment of the Tysons Corner Metrorail Station Access Management Study (TMSAMS) in June of 2009. The Board subsequently included the TMSAMS effort in one of the Follow-On Motions created when the new Tysons Plan was adopted.

The Wiehle Avenue/Reston Parkway Station Access Plan, often referred to as RMAG, was a highly successful, Metrorail Access Management Study, completed in 2008, for the two Metrorail Stations planned in Reston, Virginia. RMAG used broad community participation to identify and prioritize necessary roadway, pedestrian, and bicycle facility improvements as well as necessary transit service improvements required to improve access to the new Metrorail Stations in Reston.

The TMSAMS Study is modeled on the RMAG Study with some exceptions. Since structured parking will be provided at the Metrorail Stations in Reston, the RMAG study included the automobile as one of the transportation modes analyzed to access the Metrorail Stations in Reston. Since the long-range vision for Tysons Corner calls for a walkable, bikeable downtown, with no permanent, long-term public parking planned at the Metrorail Stations in Tysons Corner, TMSAMS focuses on pedestrian, bicycle and bus service improvement recommendations to improve access to the four new Metrorail Stations in Tysons Corner.

The size of the area analyzed is a second major difference between RMAG and TMSAMS. The RMAG study focused on an area within a one-mile radius of the Metrorail Stations in Reston. The TMSAMS study area is larger with an emphasis on the area located within a three-mile radius of the Metrorail Stations in Tysons Corner.

- \*A PDF of the Wiehle Avenue/Reston Parkway Station Access Management Plan can be found here: http://www.fairfaxcounty.gov/fcdot/pdf/wr\_sam/sam\_report.pdf
- \*A PDF of the Comprehensive Plan for the Tysons Corner Urban Center can be found here: http://www.fairfaxcounty.gov/dpz/comprehensiveplan/adoptedtext/2007-23.pdf

# TMSAMS Advisory Group

The TMSAMS Advisory Group was selected to guide the TMSAMS effort with FCDOT and included:

- One representative from the Fairfax County Board Chairman's Office
- Two representatives each from Supervisors' Districts in Dranesville, Hunter Mill, and Providence Districts (which are within or adjacent to Tysons Corner)
- Two representatives from the Tysons Transportation Association (TYTRAN)
- One representative from the Town of Vienna
- One representative from the Fairfax County Park Authority (FCPA)
- · Two representatives from the FCDOT
- One representative from the Fairfax County Office of Public Affairs (OPA)
- One representative from Visit Fairfax

Staff members from the FCDOT supported the Advisory Group. A list of the TMSAMS Study Advisory Group members can be found in *Appendix A*. Based on the directive from the BOS and priorities previously identified by FCDOT for the Tysons Corner area, the Advisory Group set the following goals:

- To inform the public, and encourage participation via a multidimensional outreach campaign, about planned trail, sidewalk, crosswalk, and bicycle facility improvements, as well as planned transit service improvements, with an emphasis on the area within a three-mile radius of the Metrorail Stations in Tysons Corner, that will enhance access to the four Tysons Corner Metrorail Stations.
- To combine data from previous county plans and studies with information obtained from the outreach campaign to prepare a prioritized list of projects which should be implemented before, or as closely as possible to, the opening of the Tysons Corner Metrorail stations.
- To identify areas where additional planning and analysis is needed.

The Advisory Group selected a **one-mile radius** from each of the four Metrorail Stations in Tysons Corner to evaluate planned sidewalk, trail, crosswalk, and internal bus service improvements in Tysons Corner. A **three-mile radius** from the rail stations was used to evaluate planned to bicycle facility improvements and planned neighborhood bus service. Planned regional bus service was considered for areas beyond the three-mile radius of the Metrorail Stations in Tysons Corner but typically within the boundaries of Fairfax County.

Parking at the Tysons Metrorail Stations is not considered in the TMSAMS because the long-range vision in the Tysons Plan specifically does not include permanent, long-term public parking at the stations. However, parking-related comments collected in the public outreach process are included in this study. Furthermore, providing interim parking at the Metrorail Stations in Tysons Corner is a separate project as directed by the Board in one of the Follow-On Motions approved at the time the Plan was adopted.

The Advisory Group started meeting in late 2010 and met multiple times throughout the project in order to guide the outreach effort. A number of Advisory Group members devoted countless hours to ensure that the outreach materials and the survey questions were communicated to the public as clearly as possible. Advisory Group recommendations, including areas needing additional analysis, can be found in **Section 7.0** of this report.

## Studies, Plans and Maps Used in TMSAMS

Since much of the work required to produce an access management study for the Metrorail Stations in Tysons Corner was already completed in the Comprehensive Plan for the Tysons Corner Urban Center, the Fairfax County Transit Development Plan (TDP), the Tysons Corner Sidewalk Analysis and the Tysons Corner Bicycle Master Plan, recommended transit service improvements, pedestrian and bicycle facility improvements were taken from these studies/plans and incorporated into the TMSAMS effort. Detailed information on these studies is provided below.

#### The Comprehensive Plan for the Tysons Corner Urban Center

Adopted by the Fairfax County BOS in June of 2010, the Comprehensive Plan for the Tysons Corner Urban Center was designed to take advantage of four new Metrorail Stations in Tysons Corner to transform the area into a walkable, green, urban center. The Plan envisions Tysons Corner as Fairfax County's Downtown with 100,000 residents and 200,000 jobs by 2050. Although the plan does not specifically address near-term Metrorail Station access in Tysons Corner, it does layout a plan for trail facilities located within a one-mile radius of the Tysons Corner Metrorail Stations. These planned trail facilities were incorporated into the TMSAMS public outreach process. A PDF of the Comprehensive Plan for the Tysons Corner Urban Center can be found here:

http://www.fairfaxcounty.gov/dpz/comprehensiveplan/adoptedtext/2007-23.pdf

#### **Fairfax County Transit Development Plan**

Completed in 2009, The Fairfax County TDP identifies county bus needs for the next ten years. The TDP coordinates existing regional Metrobus and local Fairfax Connector services and recommends service enhancements based on customer demand through a focus on cost efficiency and service effectiveness. Planning emphasizes priority corridors and activity centers to best link the County's economic activity centers with its growing population by making the best use of existing transportation infrastructure. This is being accomplished through prioritized service plans that incorporate enhancements to existing Metrobus and Connector fixed-route services and proposals for new services, as well as by providing recommendations for transit-supportive facilities such as park and ride lots and transit centers.

TMSAMS uses a set of analyses in the TDP that is specific to Tysons Corner and is suggested to be operational by the start of rail service. Bus routes include five "Tysons Link" internal shuttles, (The Tysons Link Service conforms to the Tysons Corner Urban Boundary as defined in the Tysons Plan that approximates a one-mile radius from the stations), neighborhood feeder routes serving the areas immediately surrounding Tysons Corner, and regional service connecting Tysons Corner with the rest of Fairfax County. PDFs of the Transit Development Plan can be found here: http://www.fairfaxcounty.gov/fcdot/tdp.htm.

#### **Tysons Corner Sidewalk Analysis**

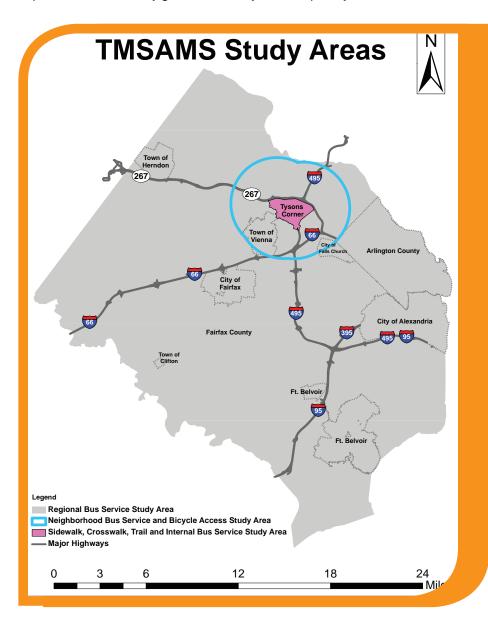
Completed in 2009, the Tysons Corner Sidewalk Analysis is an informal study, completed by the FCDOT, to identify missing sidewalk and crosswalk segments located within an approximate one-mile radius of the Metrorail Stations in Tysons Corner. Pedestrian facilities located within this radius are likely to be the most highly utilized by Metrorail users and are therefore the most important segments needed to access

the new Metrorail Stations in Tysons Corner. Using the public input collected through the TMSAMS effort, missing crosswalk and sidewalk segments identified through this analysis were prioritized and will be implemented as funding becomes available. This analysis differentiated between currently funded sidewalk improvements and unfunded sidewalk improvements.

#### **Tysons Corner Bicycle Master Plan**

Completed in 2011, the Tysons Corner chapter of the County's Bicycle Master Plan was accelerated for the TMSAMS process and encompasses an approximate three-mile radius of the Metrorail Stations in Tysons Corner. The plan provides detailed bicycle infrastructure recommendations to replace the conceptual bicycle network provided in the 2010 Tysons Corner Plan Amendment. The 2011 Plan includes a vision for a connected network of on-road bicycle facilities, an action plan for specific roads within and adjacent to Tysons Corner, safety strategies for cyclists and motorists, and an implementation schedule. A PDF of the Tysons Corner Bicycle Master Plan can be found here:

http://www.fairfaxcounty.gov/fcdot/bike/tysonsbikeplan/tysons\_final\_bike\_master\_plan.htm.



#### TMSAMS Study Areas Map

The TMSAMS Study Areas Map, shown here, shows the Tysons Corner Urban Boundary, as defined in the Comprehensive Plan for the Tysons Corner Urban Center, in pink. This study area was used to evaluate recommended sidewalk and crosswalk improvements, recommended trail improvements and recommended Tysons Link bus routes in the TMSAMS effort. A three-mile boundary of the Metrorail Stations in Tysons Corner is shown in blue. This area was used to evaluate recommended neighborhood transit service and recommended bicycle facility improvements in and too Tysons Corner. The study area for recommended regional bus service to Tysons Corner is shown in gray and includes all of Fairfax County.

# Public Participation Process

A key focus of the TMSAMS Study was to solicit input from communities and businesses in and surrounding Tysons Corner. Public outreach efforts included a TMSAMS Website, an online survey, key stakeholder interviews and four public meetings. Detailed maps were created and used in each of these outreach efforts to gather input on planned pedestrian and bicycle facilities as well as planned transit service improvements to access the four Metrorail Stations in Tysons Corner. These maps showed the following:

- Sidewalks & Crosswalks Existing, funded but not built, and planned but not funded sidewalk and crosswalk improvements within a one-mile radius of the Tysons Metrorail Stations as shown in the Tysons Corner Sidewalk Analysis.
- Trails Planned but unfunded trail facilities with a one-mile radius of the Tysons Metrorail Stations as shown in the Comprehensive Plan for the Tysons Corner Urban Center.
- **Bicycle Facilities** Existing, funded but not built, and planned but unfunded bicycle facilities within a three-mile radius of the Metrorail Stations in Tysons Corner as shown in the Tysons Corner Bicycle Master Plan, and
- **Bus Routes** Existing and planned but unfunded local and regional bus routes as shown in the Fairfax County Transit Development Plan

## 5\_1 TMSAMS Website

A special TMSAMS Website was linked to the FCDOT Website to share background information, public meeting schedules, interactive survey information, and maps. It can be found at www.tmsams.info.

## **5.2** Online Survey

The TMSAMS Advisory Group developed 37 multi-modal survey questions, with corresponding maps, which were posted online in both English and Spanish. To provide background in advance of taking the survey, a short informational video on planned pedestrian, bicycle, and bus service was also posted on the site. The survey was online for approximately 38 days (March 22 through April 30, 2011) and was taken 1,896 times. Online survey responses are in **Section 6**. A list of the online survey questions can be found in **Appendix H**.

## 5.3 Key Stakeholder Interviews

Conducting key stakeholder interviews provides the opportunity to collect much more detailed and insightful responses than what is typically obtained through other data collection methods. During the TMSAMS public involvement process, key stakeholder interviews were conducted with over 20 businesses and public organizations identified by the TMSAMS Advisory Group and FCDOT. During these key stakeholder meetings, each organization was provided with a list of questions designed to inform the participants about and obtain feedback on planned sidewalk, trail and bicycle facility improvements, as well as

planned bus service improvements, to improve access to the four Metrorail Stations in Tysons Corner. Stakeholder preferences and comments are found in **Section 6**. The stakeholder list and interview questions are in **Appendices E, F, and G**.

## **5.4** Public Meetings

Four public meetings were extensively advertised and held in Tysons Corner, and the Fairfax County Supervisor Districts of Dranesville, Hunter Mill, and Providence. During these meetings, maps were displayed on easels that allowed the public to see existing and planned pedestrian facilities, bicycle routes, and bus routes.

Meetings started with a power point presentation, provided by FCDOT staff, explaining the maps and TMSAMS process to date. The presentation was followed by small group sessions, led by TMSAMS Advisory Group members, where attendees had the opportunity to discuss planned transportation improvements as well as their own communities' and personal transportation needs.

More than 250 people attended the public meetings. Preferences and comments from the meetings are found in **Section 6**. A copy of the power point presentation can be found in **Appendix B**. The public meeting handout is in **Appendix C**.

## Preferences Obtained Through the Public Outreach



From February to May 2011, the TMSAMS Advisory Group, FCDOT, and consultants conducted public outreach for this study. This outreach included four public meetings, over 20 key stakeholder interviews with public and private organizations in the Tysons Corner area, and an online survey which was taken by 1,896 people. The public was asked to give their input and to prioritize recommended bus service, pedestrian, and bicycle transportation improvements to provide better access to the new Silver Line Metrorail stations in Tysons Corner. The following public input was recorded from these outreach efforts.

### 6 1 Sidewalk Priorities within Tysons Corner (one-mile radius)

To receive public input on planned sidewalk improvements providing access to the Silver Line Metrorail stations the following question was asked of the public:

Referring to the map below, if you walk in the immediate Tysons Corner area please select the top five planned sidewalk segments that you would like to see constructed.

The public selected priorities are highlighted in yellow on the map below.



Of the 1,896 people who participated in the TMSAMS public outreach process, 806 answered this question by selecting a planned sidewalk project. Of these 806 responses, the top five planned sidewalk project priorities are as follows:

#### **Top 5 Sidewalk Priorities**

1.	Segment 3 VA Dominion Power Easement, Between Higdon Dr. and Leesburg Pike (Rt. 7)
2.	Segment 18 International Dr., East side, Between Fletcher St, and Ring Rd
3.	Segments 2 & 1* Westwood Center Dr, North and South sides, Between Cul-de-sac and Sheraton Tysons Dr. and Leesburg Pike (Rt.7)
4.	Segment 12 Scotts Run Community Park Trail, Between Coleshire Meadow Dr and Magarity Rd
5.	Segment 4 Tyco Rd, South, Between VA Dominion Power Easement to Spring Hill Rd
	Detailed information on each sidewalk segment is located in Appendix I

<sup>\*</sup>These segments are the same location but opposite sides of the street.

#### **Sidewalk Comments Most Frequently Mentioned**

In addition to feedback collected on planned sidewalk improvements, the following general comments were collected regarding pedestrian access to the Metrorail stations in Tysons Corner:

- Sidewalks should be complete at least surrounding the Metro stations
- Tysons Corner needs a complete grid of sidewalks
- Safety is the major concern and is needed for pedestrians and bicyclists
- Rt. 7, Rt.123, and Rt.267 all need a crossover for pedestrians and bicyclists
- A safe I-495 crossing needs to be in place for pedestrians
- All sidewalks need to be ADA (Americans with Disabilities Act) accessible
- Pimmit Hills needs better pedestrian connections to Tysons

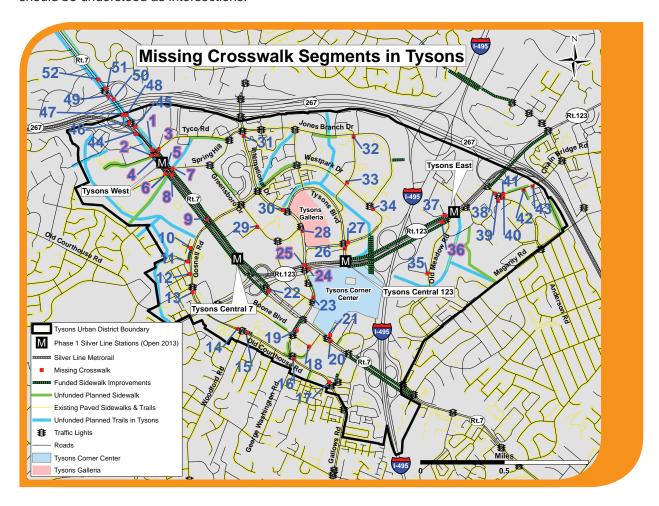
## 6.2 Crosswalk Priorities within Tysons Corner (one-mile radius)

To receive public input on planned crosswalk improvements to provide better access to the Silver Line Metrorail stations, the following question was asked of the public:

Referring to the map below, these crosswalk locations are planned but not constructed. Please select the five most important crosswalks to you.

The public selected priorities are highlighted in purple on the map below.

An intersection would include crosswalks in each direction. Therefore some of the selected priorities should be understood as intersections.



Of the 1,896 people who participated in the TMSAMS public outreach process, 962 answered this question by selecting a planned crosswalk project. Of these 962 responses, the top five planned crosswalk project priorities are as follows:

#### **Top Crosswalk Priorities**

1.	Segments 24 & 25 Chain Bridge Rd (Rt. 123) and International Dr., East & North
2.	Segment 36 Chain Bridge Rd. (Rt. 123)/ Old Meadow Rd/Capital One Dr
3.	Segments 5, 6, 7, & 8 Leesburg Pike (Rt.7)/Spring Hill Rd, North, West, East, South
4.	Segment 9 Leesburg Pike (Rt.7)/Gosnell Rd/Westpark Dr North
5.	Segments 1, 2, 3, & 4 Leesburg Pike (Rt.7)/Tyco Rd/Westwood Center Dr., North, West, East, South
	Detailed information on each crosswalk is located in Appendix J

#### **Crosswalk Comments Most Frequently Mentioned**

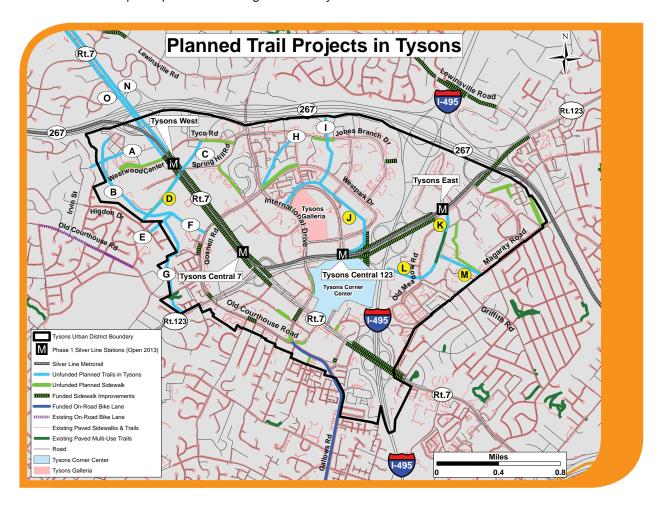
In addition to feedback collected on planned crosswalk improvements, the following general comments were collected regarding crosswalk improvements to access the Metrorail stations in Tysons Corner:

- · Crosswalks should be complete around the Metrorail stations
- · Crosswalk safety is a major concern
- · Lighting and crosswalk markings are needed
- · All crosswalks should be ADA (Americans with Disabilities Act) accessible
- · More time is needed to cross at crosswalks
- Crosswalks are essential on Rt. 7 and Rt. 123.

## 6.3 Trail Priorities within Tysons Corner (one-mile radius)

To receive public input on planned trail improvements that will provide better access to the Silver Line Metrorail stations the following question was asked of the public:

Referring to the map below, if you walk or bike in the immediate Tysons Corner area please select the top five planned trail segments that you would like to see constructed.



Trails may be gravel or paved and can be used by pedestrians and/or bicyclists.

Of the 1,896 people who participated in the TMSAMS public outreach process, 856 answered this question by selecting a planned trail project. Of these 856 responses, the top five trail project priorities are as follows:

#### **Top 5 Trail Priorities**

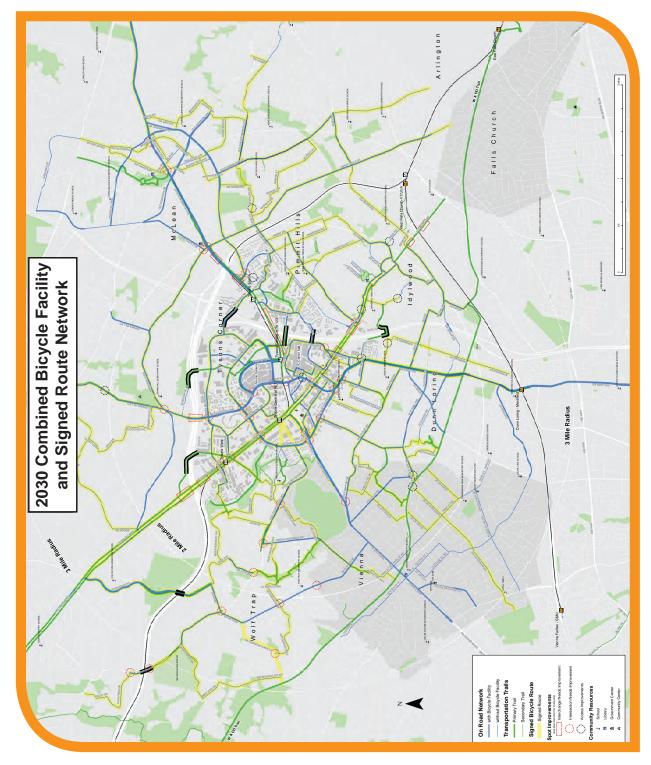
1.	Segment D	37.9%
2.	Segment J	36.7%
3.	Segment K	34.6%
4.	Segment L	33.6%
5.	Segment M	31.0%

#### **Trail Comments Most Frequently Mentioned**

In addition to feedback collected on planned trail improvements, the following general comments were collected regarding trail access to the Metrorail stations in Tysons Corner:

- All trails and paths in Tysons Corner should be connected
- · The trails in Tysons Corner are not safe
- The trails should be separated for bicyclists and pedestrians

## 6.4 Bicycle Priorities within Three-Mile Radius of Tysons Corner



This map is from the Tysons Corner Master Bicycle Plan, which includes all planned bicycles transportation improvements from present to 2030. These improvements are broken down into four phases from relatively low cost near-term improvements to separated bicycle facilities from roads that could occur in the future.

To receive public input on planned bicycle infrastructure improvements that will provide better access to the Silver Line Metrorail stations, the following two questions were asked of the public:

Examining the previous map, is your place of residence or work close to a bicycle facility/route that leads to Tysons Corner?

• Yes – 56.8%

No – 43.2%

Where would you like to see bicycle routes established?

- Rt. 7
- Beulah Road
- · Dulles Toll Road
- · Magarity Road
- Rt. 7 crossing Dulles Toll Road
- Towlston Road to Metrorail station
- Towlston Road to Metrorail station
- Old Courthouse Road from Gosnell Road to Beulah Road

- Rt. 123
- · Chain Bridge Road
- Lewinsville Road to Rt. 123/to Tysons West station
- · McLean to Tysons Corner
- Old Dominion Drive
- Spring Hill Road
- Trap Road to Dulles Toll Road

#### **Bicycle Comments Most Frequently Mentioned**

In addition to feedback collected on planned bicycle facility improvements, the following general comments were collected regarding bicycle access to the Metrorail stations in Tysons Corner:

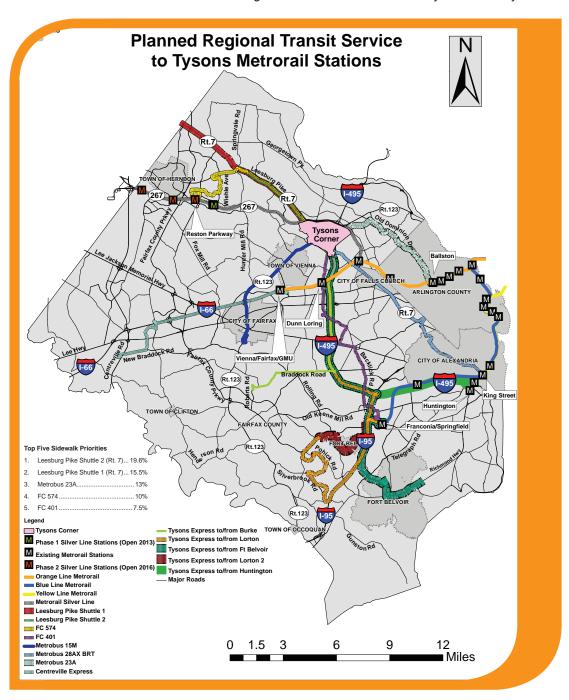
- · It is too dangerous to ride in Tysons Corner
- · Safer roads, routes, lanes, and crossings are needed
- There are not enough bike lanes
- Bike lanes need to be separated from traffic
- Lanes, trails, and paths are needed just for bicycles
- Bike parking facilities need to be secure, covered, and protected by police
- · Need more direct bicycle routes to stations
- Need bicycle parking facilities at stations and surrounding area

## 6\_5 Bus Priorities – Regional, Neighborhood, and Link Services

#### 6.5a Regional Bus Service

To receive public input on planned Regional bus service improvements to access the Silver Line Metrorail stations, the following question was asked of the public:

Referring to the map below, the following regional bus routes are planned to serve Tysons Corner when Silver Line Metrorail service begins. Which of these routes are you most likely to use?



Of the 1,896 people who participated in the TMSAMS public outreach process, 509 answered this question by selecting a planned regional bus route. Of these 509 responses, the top five regional bus route priorities are as follows:

#### **Top 5 Regional Bus Route Priorities**

1.	Leesburg Pike Shuttle 2 (Rt. 7)	19.6%
2.	Leesburg Pike Shuttle 1 (Rt. 7)	15.5%
3.	Metrobus 23A	13%
4.	FC 574	10%
5.	FC 401	7.5%

#### **Regional Bus Route Comments Most Frequently Mentioned**

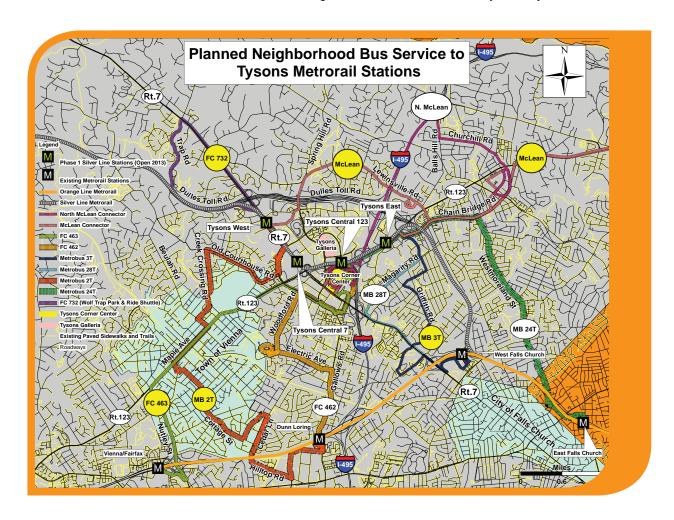
In addition to feedback collected on planned regional bus service, the following general comments were collected regarding regional bus service to the Metrorail stations in Tysons Corner:

- Would use the 15M (15M was inadvertently left off of survey options)
- Need service from Georgetown Pike to Metrorail stations
- Service from Maple Avenue to the stations is needed
- Place Bus Rapid Transit (BRT) dedicated lanes on Rt. 7
- Need connection to Herndon Monroe Park and Ride

#### 6.5b Neighborhood Bus Service within Three-Mile Radius of Tysons Corner

To receive public input on planned Neighborhood bus service improvements to access the Silver Line Metrorail stations, the following question was asked of the public:

Referring to the map below, the following neighborhood bus routes are planned to serve Tysons Corner when Silver Line Metrorail service begins. Which of the routes are you likely to use?



Of the 1,896 people who participated in the TMSAMS public outreach process, 966 answered this question by selecting a planned neighborhood bus route. Of these 966 responses, the top five planned neighborhood bus route priorities are as follows:

#### **Top 5 Neighborhood Bus Service Priorities**

1.	. FC 732 (Wolf Trap Park and Ride Shuttle)	20.3.%
2.	Metrobus 2T	17.6%
3.	McLean Connector	14.9%
4.	Metrobus 3T	14.1%
5.	. FC 463	8.8%

#### **Neighborhood Bus Service Comments Most Frequently Mentioned**

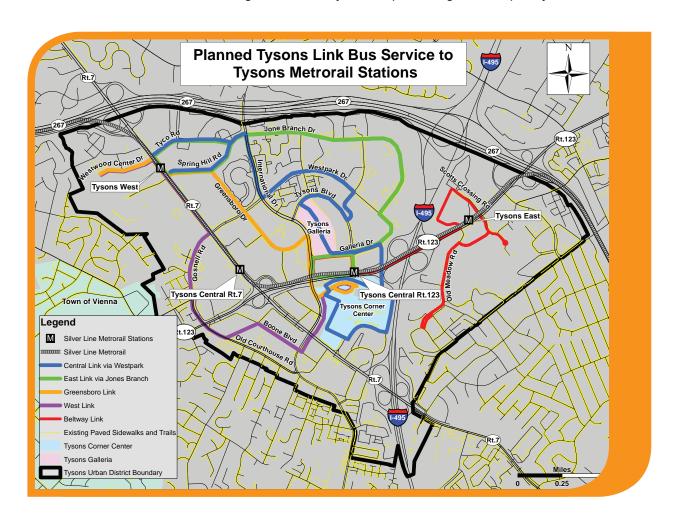
In addition to feedback collected on planned neighborhood bus service, the following general comments were collected regarding neighborhood bus service to the Metrorail stations in Tysons Corner:

- · Do not put 2T bus route through Creek Crossing Road
- Bus service must be frequent
- Do not put a Park and Ride at Wolf Trap Park
- · Old Dominion Drive needs bus service
- Beulah Road needs bus service for the entire length
- · All day and weekend bus service is needed
- Covered bus shelters are needed
- Rt. 7 needs bus service for the entire length through Tysons Corner
- · Keep buses out of residential neighborhoods
- Use smaller, more efficient buses for local service
- North Vienna needs bus service

#### 6.5c Link Bus Service within Tysons Corner

To receive public input on planned Link bus service improvements to access the Silver Line Metrorail stations, the following question was asked of the public:

Referring to the map below, the following bus routes are proposed within Tysons Corner when Silver Line Metrorail service begins. Which do you anticipate using most frequently?



Of the 1,896 people who participated in the TMSAMS public outreach process, 594 answered this question by selecting a planned Tysons Corner Link bus route. Of these 594 responses, the five planned Tysons Corner Link bus routes are prioritized are as follows:

#### **Planned Tysons Corner Link Bus Routes Priorities**

1.	Central Link via Westpark	.27.9%
2.	West Link	25.4%
3.	Beltway Link	23.7%
4.	Greensboro Link	13.3%
5.	East Link via Jones Branch	9.6%

#### **Tysons Corner Link Bus Service Comments Most Frequently Mentioned**

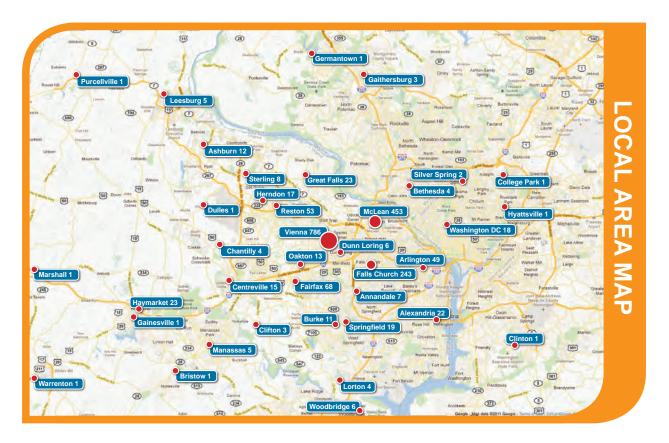
In addition to feedback collected on planned Link bus service, the following general comments were collected regarding Link bus service to the Metrorail stations in Tysons Corner:

- Bus service must be frequent
- All day and weekend service is needed
- · Covered bus shelters are needed

## 6.6 More results from the online survey

All statistical survey results can be found in *Appendix H*. All survey comments are found in *Appendix K*.

#### Survey respondents live throughout the study area and beyond.





- Most people who answered the survey now use Metrorail. Of 1,870 respondents, 62.2% use Metrorail and 37.8% don't.
  - At present, Metrorail stations used most frequently are:
  - West Falls Church (544 of 1,870 respondents)
  - Vienna/Fairfax-GMU (259)
  - Dunn Loring-Merrifield (235)
  - East Falls Church (118)
- The majority of people now travel to a Metrorail station by car.

•	Car (Park	73.9% of 1,542 respondents
---	-----------	----------------------------

Car (Kiss and Ride) 20.5%
Bus 12.1%
Walk 11.3%
Bike 4.1%
Other 4.9%

- **About half of those who work outside the home receive transportation-related benefits from their employers.** 34.1% of 1,656 respondents have free parking, 15.2% receive a transit subsidy, and 9.6% have both.
- Among those who are employed in Tysons Corner and live within a three-mile radius,
   3.8% now bicycle to work, of 1,246 respondents.

#### When Tysons Corner Metrorail service is available

The furthest east and furthest west stations will be used by the most people.

Tysons West 26.7% of 1,838 respondents

Tysons East 22.5%
 Tysons Central 7 16.8%
 Tysons Central 123 16.1%
 None 17.9%

- 1 in 3 people plan to use the buses which operate within central Tysons Corner, of 1,613 respondents.
- 1 in 2 people plan to use a neighborhood bus, of 1,609 respondents.
- 1 in 5 people plan to use a regional bus, of 1,438 respondents.
- © Frequent bus arrivals, service reliability, and proximity to a bus stop are most important to those considering taking a bus to a Metrorail station, of 1,407 respondents.
- Most people in the Tysons area live or work near a bicycle facility or bicycle route which leads to central Tysons Corner (56.8% of 1,228 respondents).
- The main reasons people will use Tysons-area sidewalks, crosswalks and trails are to get to a bus or Metrorail station, to shop, and for recreation, according to 1,235 respondents.
- Improved or wider bike lanes, better road and path lighting, and bicycle parking at stations are considered top priority bicycle facility improvements, according to 919 respondents.

Of those who plan to come to Tysons Corner from elsewhere in the Metrorail system, most will walk from the Tysons station to reach their final destination. 64.7% of 1,258 respondents will walk, 13.2% will take a bus, 10.6% will be picked up by car, and 7% will bicycle.

## After studying the survey maps and answering survey questions, respondents reported:

- **O** If going to a new Tysons Corner Metrorail station, they plan to use a variety of travel options:

•	Walk	44.8% of 1,271 respondents
•	Bicycle	36.8%
•	Bus	33.2%
•	Kiss and Ride	32.5%
•	Other (Drive, cab, etc.)	17.1%
•	Metrorail	12.1%
•	Private shuttle	4.6%

A majority found the survey somewhat or very helpful. 30.5% of 1,349 respondents found it very helpful, 56.7% somewhat helpful, and 12.8% not helpful.

## TMSAMS Advisory Group Recommendations

The mandate of the TMSAMS Advisory Group was to ensure that the goals of the study were met. With Plan Amendment guidance and additional studies in mind, the TMSAMS Advisory Group compiled the following recommendations for FCDOT Staff. These recommendations are in addition to the pedestrian, bicycle and bus service improvements that were presented to the public for prioritization during the TMSAMS public outreach process, shown in **Section 6** of this report, and are not intended to conflict with those projects in terms of prioritization. They are intended to provide guidance to FCDOT Staff on areas that need additional analysis to ensure that residents and employees, in and around Tysons Corner, will be served by a robust multi-modal transportation system when the Metrorail stations in Tysons Corner open in late 2013.

## 7\_1 Pedestrian/Bicycle Recommendations

#### Pedestrian/Bicycle Recommendation 1

Due to multiple entrance and exit ramps onto the Dulles Toll Road and I-495 from Rt.7 and from Rt.123, pedestrian and bicycle access into Tysons Corner is difficult and dangerous along these corridors, specifically along Rt.7 from areas north of Tysons Corner and along Rt.123 from areas east of Tysons Corner. Linear, median-running, pedestrian/bicycle parks are a possible solution to provide safe and attractive pedestrian and bicycle access into the core of Tysons Corner while bypassing the entrance and exit ramps along Rt.7 and Rt.123.

FCDOT should work with the Virginia Department of Transportation (VDOT) to evaluate and develop an option to provide this type of facility along these corridors to ensure adequate, safe and attractive pedestrian and bicycle access is provided into the core of Tysons Corner. Special consideration of this type of improvement should be given to the redesign of the Rt.7 bridge over the Dulles Toll Road when that project moves forward.

#### Pedestrian/Bicycle Recommendation 2

The Tysons Corner Sidewalk Analysis was incorporated into the TMSAMS effort to identify and prioritize sidewalk and crosswalk improvements in Tysons Corner. This study focused on missing sidewalk segments and crosswalks within the Tysons Corner Urban Boundary or an approximate one-mile distance around the four Metrorail stations in Tysons Corner.

FCDOT staff should conduct a more extensive sidewalk and trail analysis to evaluate and identify necessary sidewalk, and crosswalk facility improvements with an emphasis on a three-mile area surrounding the Tysons Metrorail stations. Priority should be given to pedestrian and bicycle facility improvements providing direct access to bus stops or that provide direct, longer distance, connections to the Metrorail stations in Tysons Corner. Suggested priority corridors to be evaluated are as follows:

- Rt.123 into Tysons Corner from the McLean Central Business District
- Magarity Road to the Tysons East Metrorail station
- Gallows Road to the Tysons Central 123 Metrorail station
- Old Courthouse Road, from Trap Road, to the Tysons Central 7 Metrorail station

- Rt.7, from Trap Road and Spring Hill Road, to the Tysons West Metrorail station
- Rt.123, from the Town of Vienna, to the Tysons Central 7 and Tysons Central 123 Metrorail stations

#### Pedestrian/Bicycle Recommendation 3

Increase pedestrian safety with enhanced crosswalk design, including colored pavement, to identify a crosswalk in an urban area and special "pedestrian refuge" areas in medians.

#### Pedestrian/Bicycle Recommendation 4

Continue the Washington Metropolitan Area Transit Authority (WMATA) plans for the Vienna Metro pedestrian/bike improvements within the immediate vicinity of the Vienna Metro station.

#### Pedestrian/Bicycling Recommendation 5

Phasing recommendations in the Tysons Corner Bicycle Master Plan should be re-evaluated based on public input obtained through the TMSAMS process. Corridors prioritized for bicycle facility improvements in the TMSAMS effort should be "fast-tracked" into the near term.

#### Pedestrian/Bicycle Recommendation 6

Where possible, Fairfax County staff should contact Tysons Corner property owners to obtain permission for pedestrian and bicycle access, across private property, to Metrorail stations. Access, through private property, between Gosnell Road and the Tysons Central 7 Metrorail stations is an example that should be explored to address this recommendation.

## 7\_2 Bus Service Recommendations

#### **Bus Service Recommendation 1**

The planned Tysons Corner Link Service, as defined in Chapter 8.7 of the TDP, confines the service to the boundaries of the Tysons Corner Urban Boundary and routes less than four miles long that will "link" employment, residential, and retail with Silver Line stations as a circulator. The TDP further states that "a branding strategy ("Tysons Corner Link") could be effective in establishing an identity to distinguish the proposed service as a transit service noticeably different from the transit services currently operated within the county. According to the TDP, "Tysons Corner Link" service should incorporate the following elements:

- Reliability with frequent and faster service and services operated on schedule, customers
  will perceive wait time to be acceptable and reliability to exceed the typical Connector and Metrobus experience.
- Small buses easy to board and alight and sized to match the expected demand, which minimizes excess dwell times allowing for quicker travel times and clearly distinct from the standard large buses operated by the Fairfax Connector and Metrobus.
- Passenger amenities items such as shelters, benches, schedule and real-time information to help manage and improve passenger wait time experience.
- **Collateral materials** clear information on how to use the "Link" service explaining where and how to access the bus, where each route goes, and what the schedule is.
- Bus stop signage signage should be clear, simple and recognizable.

The TDP further states that "existing and proposed Tysons Corner area neighborhood and regional service routes on the whole do not have the same service attributes as the proposed Link routes", and suggests that those services would undermine the value of the "Link" brand. Public comments collected through the TMSAMS effort suggests otherwise. FCDOT should consider "branding" as "Tysons Corner Link" all neighborhood and regional bus service, with an emphasis on service provided within a three-mile radius of the Tysons Corner Metrorail stations and to Tysons Corner. These routes should stand out against other bus services provided within the county to make it clear that these routes serve Tysons Corner and the Metrorail stations.

#### **Bus Service Recommendation 2**

In coordination with the Fairfax Connector, WMATA, and the Fairfax County Supervisor District Offices that encompass Tysons Corner, FCDOT should revise routes shown in the TDP based on public input obtained through the TMSAMS effort. Additional routes, using smaller "shuttle style" buses, should be evaluated to serve lower density areas where demand can support this type of service and where the roadway network may not be able to accommodate standard size Fairfax Connector and WMATA buses. Subscription bus services should also be considered. See *Appendix K* for a list of bus routes that should be investigated.

#### **Bus Service Recommendation 3**

In coordination with the Fairfax Connector, WMATA, the Town of Vienna and the Fairfax County Supervisor District Offices that encompass Tysons Corner, FCDOT should complete a bus stop study for Tysons Corner and the areas within a three-mile radius of the Tysons Corner Metrorail stations. This study should address the following:

- Identify all bus stop locations for existing and planned routes
- Determine if any existing stop locations can be consolidated
- Coordinate with but do not unnecessarily duplicate stops on other routes

- · Ensure bus stop safety by ensuring adequate lighting and visibility is provided
- Ensure bus stops are accessible to all users, are connected by sidewalks and or trails and comply with or exceed ADA standards
- Determine how bicycle parking can be provided at bus stops
- Review the bus shelter inventory and ongoing plan to make necessary improvements

#### **Bus Service Recommendation 4**

For those who would like to use transit but live beyond walking distance to a planned bus route, provide remote Park-and-Ride and Kiss-and-Ride facilities, with bicycle parking, along key bus routes in advance of the Silver Line opening. Areas that should be considered for remote Park-and-Ride and/or remote Kiss-and-Ride facilities are as follows:

- Along Rt.7, Leesburg Pike, west of Tysons Corner
- Along Rt.123, Dolley Madison Blvd, in the McLean Central Business District

#### **Bus Service Recommendation 5**

Since Rt.7 and Rt.123 are the two main boulevards running through Tysons Corner and serve as the most direct routes to, from and through the area, bus routes running on these roads are likely to be the most highly used by bicyclists. Bus routes operating on these roads should be fitted with extra bicycle carrying capacity, over what is typically provided on Fairfax Connector and WMATA buses, to accommodate this extra demand.

#### **Bus Service Recommendation 6**

Include bus stop accessibility information on the Fairfax Connector Website and coordinate with and encourage WMATA to do the same.

# 7\_3 Roadway Project Recommendations

# **Roadway Project Recommendation 1**

Implement a formal process between FCDOT and VDOT to share information about VDOT's planned road maintenance plans, such as repaving, within the three-mile radius of Tysons Corner, so projects can be assessed for potential multi-modal and "complete streets" improvements such as:

- Restriping to create wider shoulders or bike lanes
- Improving crosswalks, and
- · Improving bus stop access.

# **Roadway Project Recommendation 2**

Investigate possible enhanced public transportation corridors, for Gallows Road and other facilities providing direct access into Tysons Corner, to include the specifics of transit routes, technology, timing and the possibility of greater capacity for alternative modes.

# **Roadway Project Recommendation 3**

Prioritize and "fast track" road projects within the three-mile radius of Tysons Corner, that enhance multi-modal travel and adhere to the Complete Streets policy.

# **Roadway Project Recommendation 4**

Improve the Beulah/Trap Road/Old Courthouse Road intersection to create a better turning radius for buses.

# **Roadway Project Recommendation 5**

Improve the alignment, drainage and pavement material on Old Courthouse Road, in the vicinity of Besley Drive, to support regular bus service in this area and to improve access to county parks on both sides of Old Courthouse Road.

## **Roadway Project Recommendation 6**

Realign Beulah Road at Clarks Crossing to create right-of-way for a multi-modal trail (Segments A/B, Phase I, NoVi Trail Network).

### **Roadway Project Recommendation 7**

Prioritize the widening of Rt.7, west of Tysons Corner and add a separate pedestrian/bicycle overpass at the Dulles Toll Road.

## **Roadway Project Recommendation 8**

Address all recommended intersection improvements identified in the Tysons Corner Neighborhood Analysis. http://www.fairfaxcounty.gov/tysons/transportation/

# 7\_4 Travelers with Disabilities Recommendations

Travelers with Disabilities Recommendation 1: The ADA requires the bare minimum in terms of facilities required to accommodate people with disabilities. FCDOT should work with VDOT to ensure all transportation projects within Fairfax County include standards endorsed by the U.S. Access Board including but not limited to:

- · Raised letter and Braille signs at bus stops and in bus shelters
- Audible pedestrian traffic signals
- · Wide medians and curb cuts to allow two persons in wheel chairs to cross side-by-side
- Raised sidewalks/no street-level crossing areas
- · Audible announcements at rail stations
- · Emergency phones in case of elevator outages, and
- Pay phones in rail stations.

# 7.5 Community Support Recommendations

# **Community Support Recommendation 1**

Protect property owners in neighborhoods surrounding Tysons Corner from commuter parking on residential streets to access the nearby Metrorail stations in Tysons Corner. Strategies to meet this recommendation include:

- Making use of the BOS and Town of Vienna policies for pre-emptive, streamlined neighborhood parking permitting processes
- Developing an online tool for location and booking of available parking spaces within Tysons Corner
- Providing adequate parking patrols, on foot, in vehicles and on bicycles, to enforce parking restrictions
- Implementing widespread and closely-spaced parking restriction signage
- Publicizing parking patrols and fines before the Metro Silver Line opens

# **Community Support Recommendation 2**

Although the Comprehensive Plan for the Tysons Corner Urban Center specifies no permanent, long-term public parking at the Metrorail stations in Tysons Corner, the need for parking at the Metrorail stations in Tysons Corner was a recurring theme heard during the TMSAMS Public Involvement Process. FCDOT should continue its work on the Tysons Interim Parking Study, as directed by the Board as a Follow-On Motion in June of 2010, to identify locations to provide interim commuter parking facilities at the Metrorail stations in Tysons Corner.

# **Community Support Recommendation 3**

FCDOT should develop and implement a way finding plan, including signage and the use of online/smart technologies, in Tysons Corner and within a three-mile boundary of the Tysons Corner Metrorail stations.

# **Community Support Recommendation 4**

Using smart technology to make it easier for travelers to plan and use multi-modal transportation options, FCDOT, in partnership with TYTRAN and/or the Tysons Partnership, should plan and launch a centralized multi-modal education/outreach campaign and website in advance of Metro opening. This campaign could include the following:

- The creation (or crowdsource) of a campaign catch phrase
- The creation of an online social and support networks of travelers (starting with TMSAMS email list)
- The creation of a "Citizens for a Livable Tysons Corner" group
- Employing community champions to use visualization tools for speaking to neighborhood groups and HOAs
- The use of Web tools to monitor info about resident and business concerns
- Publicizing the effectiveness of car sharing, teleworking, flexible work hours and other strategies to remove single occupant vehicles from road
- Publicizing instructions for bicycle sharing, bicycle parking and car sharing opportunities
- An online tracking of transportation enhancements by mode

- Publicizing and the use of MWCOG's "School Pool" system (http://tdm.commuterconnections. org/MWCOGSchoolPool/) to help parents and students utilize multi-modal means of getting to school and work
- In coordination with TYTRAN or other private partners, a free online traveler's dashboard should be developed to support multi-modal travel options and local businesses through advertising
- WMATA SmarTrip cards which include membership/privileges for all public transportation options, including bus, bike share, bike and car parking, should be publicized
- Online travel tools should be partnered with and publicized including:
  - www.seeclickfix.com
  - www.NuRide.com
  - www.Uber.com
  - www.ParkCirca.com

# 7\_6 Implementation Recommendations

# **Implementation Recommendation 1**

To ensure timely action on implementation of the multimodal priorities recommended in this report, the following steps should be taken as soon as the report is approved by the BOS:

- Calculate preliminary engineering and total project cost estimates for each priority and assign to lead agency
- Label priorities "TMSAMS" and include in the 2011 Annual Report for the Board's Four-Year Transportation Program and the subsequent Board's Four-Year Program Quarterly Reports, the Transportation Design Division Monthly Projects Status Report, and VDOT's Six-Year Plan
- Request that VDOT re-evaluate Six-Year Plan Projects to advance allocations to Tysons Corner priorities for timely implementation before the stations open
- Include and account for study priorities in the annual report on the County's Tysons Corner Area Transportation to the Board, TYTRAN, and the Tysons Partnership

# **Implementation Recommendation 2**

Include and account for TMSAMS multi-modal priorities in annual report on Tysons Corner Area Transportation to the BOS, TYTRAN and the Tysons Partnership. Identify TMSAMS projects in BOS quarterly reports.

# **Implementation Recommendation 3**

FCDOT Staff should seek grants to assist with planning and implementing pedestrian, bicycle and bus service improvements, including these objectives:

- Increased bus service and frequency
- Sustainable, accessible bus shelters especially on Routes 7 and 123
- Smaller shuttle-style buses
- · Park-and-Ride and/or Kiss-and-Ride and bike facilities
- Pedestrian and Bicycle improvements to specifically access bus stops and/or Metrorail stations

Grants that should be considered include:

- Urbanized Area Formula Program, Statute (Title 49) 5307
- Fixed Guideway Modernization, Statute (Title 49) 5309
- Bus and Bus Facilities, Statute (Title 49) 5309, 5318
  - Transportation for Elderly Persons and Persons with Disabilities, Statute (Title 49) 5310
- Job Access and Reverse Commute Program, Statute (Title 49) 5316
- Paul S. Sarbanes Transit in Parks Program, Statute (Title 49) 5320
- · Safe Routes to Schools
- Transportation Enhancement Grants

# Implementation Recommendation 4

Review, and pursue if necessary, private industry solutions for providing on-demand transit services and revenue-raising opportunities such as the sponsoring of bus stops and bike share.

# **Implementation Recommendation 5**

In coordination with TYTRAN, the Tysons Partnership, and the Fairfax County Supervisor District Offices that encompass Tysons Corner, FCDOT should seek mutually beneficial private-public and private-private partnerships to create multi-modal facilities which are completed before the opening of Metro.

Outreach should begin immediately to:

- Walmart regarding Metro connectivity via the Ashgrove trail area
- Dominion Power and the Georgelas Group regarding the Vesper Street right-of-way
- Sheraton Premiere Hotel trails leading to Metro stations in Tysons Corner and Reston

# **Implementation Recommendation 6**

FCDOT should create a GIS-located QR tracking or its current state-of-the-art equivalent of TDM/property agreements and proffers.

# **Implementation Recommendation 7**

FCDOT should create an online tracking system for transportation improvements by mode.

## **Implementation Recommendation 8**

User counts of all modes (pedestrian, bicycle, transit riders and drivers) should be performed regularly after Metrorail service begins in Tysons Corner.

# TMSAMS Next Steps

This report identifies preferences for Metrorail Station access improvements obtained through an extensive public participation process. Also included in this report are recommendations from the TMSAMS Advisory Group for additional improvements, additional analysis and increased use of technological innovations. The ultimate objective of this study is to create a document that can be used as a tool for the Fairfax County BOS to make funding decisions on multi-modal transportation improvement projects, to access the Metrorail stations in Tysons Corner. In order to reach that objective, the next step is for FCDOT staff to conduct a thorough assessment of the priorities and recommendations contained in this report. The Board is expected to direct staff to conduct this assessment at its November 2011 Board meeting.

In conducting this assessment, staff will produce preliminary cost estimates for the projects, assess construction feasibility, assess right-of-way implications, and assess which improvements can be included in the proffers of rezoning cases. The product of this assessment will be a recommended list of multi-modal transportation improvements designed to improve access to the four Metrorail stations in Tysons Corner. In conjunction with the recommendations, staff will develop a phasing plan that ties the projects to anticipated funding levels. It should be noted that most of the improvements will be constructed subsequent to the opening of the rail stations.

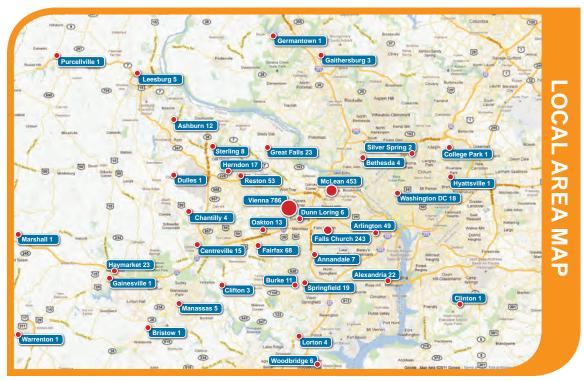
It is important to recognize that current funding has been allocated to TMSAMS projects and work has begun. In FY 2012, \$4 million in RSTP funds is dedicated to station access projects. Projects that are already funded were included in the maps that were used in the TMSAMS public outreach efforts. These projects include pedestrian facilities that cross major barriers near the rail stations, specifically facilities that cross the Rt. 123/Rt. 7 interchange and that cross the Dulles Connector Road on Rt. 123.

In addition, Fairfax County has allocated a total of \$14.3 million of anticipated CMAQ/RSTP funding in fiscal years 2013-2017 for TMSAMS and other related transportation improvements. The next step is to use the results of this report to develop detailed FCDOT recommendations.

# General Demographic Observations

The following questions and responses were selected from the TMSAMS Online Survey to provide general demographic data and other observations about participants of the TMSAMS Online Survey. The full survey, including all responses, can be found in Appendix H.

# 1. What is your zip code?





Answered question: 1,896

Skipped question: 0

# 2. What is your age?

a. Under 20

b. 20 – 29

c. 30 - 39

d.40 - 49

e. 50 -59

f. 60 - 69

g. Over 70

UNDER 20	20 – 29	30 – 39	40 – 49	50 - 59	60 – 69	70 AND OVER
10	132	360	441	444	316	129

Answered question: 1,832

Skipped question: 64

# 3. Do you presently use Metrorail?

a. Yes

b. No

c. If yes, from which station?

STATION	RESPONSE COUNT	STATION	RESPONSE COUNT
Anacostia	1	Crystal City	1
Ballston-MU	23	Dunn Loring-Merriefield	235
Bethesda	3	East Falls Church	118
Braddock Rd	4	Eastern Market	1
Branch Ave	1	Farragut West	1
Capitol South	1	Franconia-Springfield	39
Clarendon	5	Huntington	9
Cleveland Park	2	Metro Center	1
Columbia Heights	1	New Carrolton	1
Courthouse	14	Pentagon	1

STATION	RESPONSE COUNT
Pentagon City	8
Rosslyn	12
Silver Spring	1
Takoma	2
Tenleytown AU	1

STATION	RESPONSE COUNT
U Street	1
Van Dorn Street	2
Vienna/Fairfax-GMU	259
West Falls Church	544
Woodly Park	2

Yes - 1,163 (62.2%)

No - 707 (37.8%)

Answered question: 1,870

Skipped question: 26

# 4. How do you usually get to Metrorail?

a. Walk

b. Bike

c. Bus

d. Car (park)

e. Car (Kiss and Ride) f. Other (Please specify)

WALK	BIKE	BUS	CAR (PARK)	CAR (KISS AND RIDE)	OTHER
174	63	186	1140	316	75
11.3%	4.1%	12.1%	73.9%	20.5%	

# 5. If you work outside of your home, does your employer provide:

a. Free parking

b. Transit subsidy

c. Both

d. Neither

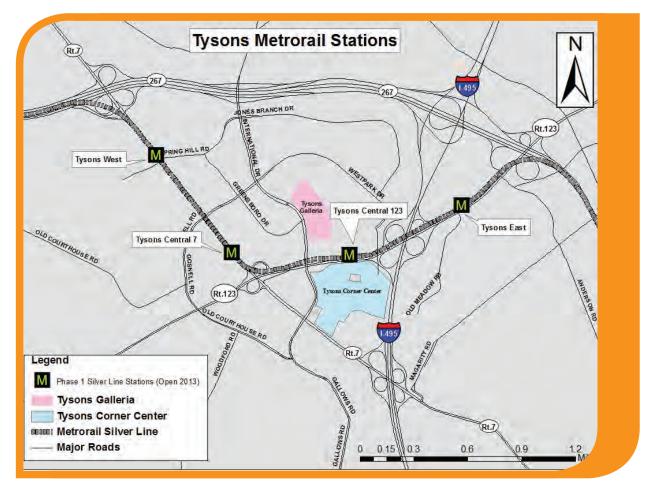
FREE PARKING	TRANSIT SUBSIDY	вотн	NONE
564	251	159	682
34.1%	15.2%	9.6%	41.2%

Answered question: 1,656

# 6. When the four Silver Line Metrorail stations open, which will you plan on using?

- a. Tysons East
- b. Tysons Central 123 c. Tysons Central 7
- d. Tysons West

e. None



TYSONS EAST	TYSONS CENTRAL 123	TYSONS CENTRAL 7	TYSONS WEST	NONE
369	263	275	438	293
22.5%	16.1%	16.8%	26.7	17.9%

Answered question: 1,638

# 7. When the Silver Line is open, do you plan on using it?

a. Yes b. No

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT	
Yes	1196	86.3%	
No	190	13.7%	

Answered question: 1,386

Skipped question: 510

# 8. Now that you've taken the survey, if you plan on using one of the Silver Line Metrorail stations, how will you get there?

a. Metrorail b. Walk c. Bike d. Bus

e. Private shuttle f. Kiss and Ride g. Other (Please specify)

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Metrorail	154	12.1%
Walk	569	44.8%
Bike	468	36.8%
Bus	422	33.2%
Private Shuttle	59	4.6%
Kiss and Ride	413	32.5%
Other	217	

Most Frequent "Other" Responses

Drive Mixed/drive and walk Taxicab

Answered question: 1,271

# 9. How helpful has this survey been?

a. Very helpful

b. Somewhat helpful

c. Not helpful

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Very Helpful	412	30.5%
Somewhat helpful	765	56.7%
Not helpful	172	12.8%

Answered question: 1,349

# Appendix TMSAMS Advisory Group Members

# **TMSAMS Advisory Group Members**

Micah Himmel	Providence District
Sally Liff	Providence District
Hillary Zahm	Providence District
Merrily Pierce	Hunter Mill District
Scott Konnath	Hunter Mill District
Jenifer Joy Madden	Hunter Mill District
Julie Ide	Dranesville District
Carol A. Martz	Dranesville District
Dorothy McAuliffe	Dranesville District
Jason Tipton	Chairman Bulova's Office
Mayor Jane Seeman	Town of Vienna
Aaron Georgelas	TYTRAN
Keith Turner	TYTRAN
Barry Biggar	Visit Fairfax
Kris Morley-Nikfar	Fairfax County DOT
Sandy Stallman	Fairfax County Park Authority
Leonard Wolfenstein	Fairfax County DOT
Brian Worthy	Fairfax County Office of Public Affairs

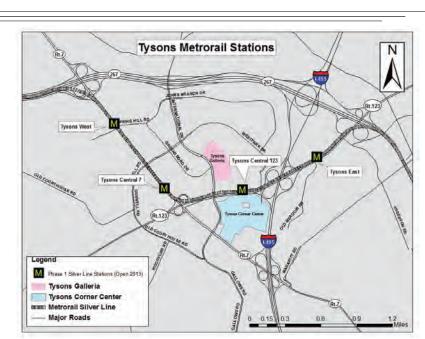
The TMSAMS Advisory Group was supported by staff from the FCDOT. The FCDOT can be contacted by telephone at 703-877-5600 (TTY 711) or by postal mail at:

Fairfax County Department of Transportation 4050 Legato Road Suite 400 Fairfax, VA 22033-2867



Tysons Metrorail Station Access Management Study

March 22nd, 23rd, & 24th 2011



Four Metrorail Stations scheduled to open in Tysons in 2013

Tysons East



Tysons Central 123



Tysons Central 7



Tysons West



# PINSAMS Background

# Comprehensive Plan for Tysons Adopted in June 2010

- Calls for high density transit oriented development
- Will transform Tysons from a suburban office park into a vibrant urban center







# No Daily or Long Term Parking at Tysons Stations



Rosslyn/Ballston Corridor

**Ballston Metrorail Station** 



# **Longer Term Station Access**

Comprehensive Plan for Tysons calls for:

- Extensive Grid of Complete Streets
- Pedestrian Friendly Streetscapes





- •Board of Supervisors approved funding for TMSAMS in summer of 2009, to address more immediate access needs for the Metrorail Stations in Tysons.
  - 1. Educate the public on alternative mode transportation improvement recommendations that have been made to improve access to the four Metrorail Stations in Tysons.
  - 2. 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.



- Micah Himmel: Providence District
- Sally Liff: Providence District
- Hillary Zahm: Providence District
- Merrily Pierce: Hunter Mill District
- · Jenifer Joy Madden: Hunter Mill District
- Scott Konnath: Hunter Mill District
- · Julie Ide: Dranesville District
- Carol A. Martz: Dranesville District
- Dorothy McAuliffe: Dranesville District
- Sandy Stallman: FFC Parks Authority
- Kris Morley-Nikfar: FFC DOT
- Jason Tipton: Chairman Bulova's Office
- Brian Worthy: FFC Office of Public Affairs
- Keith Turner: TYTRAN
- Aaron Georgelas: TYTRAN
- Mayor Jane Seeman: Town of Vienna
- Barry Biggar: Visit Fairfax

# Focus

· Bus Service Improvements



Pedestrian Improvements



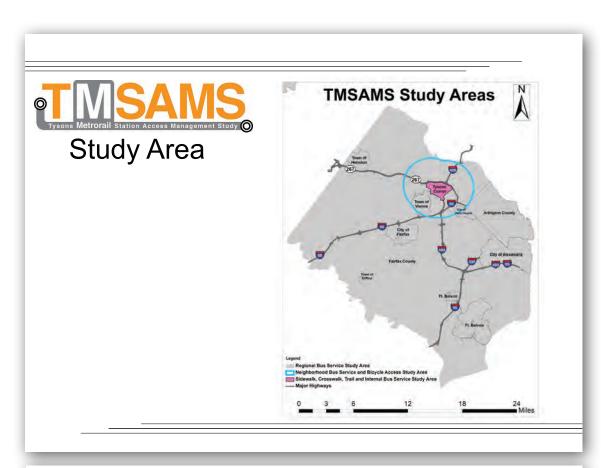
• Bicycle Facility Improvements

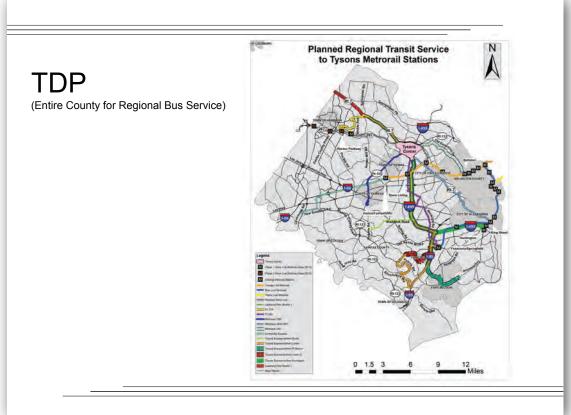


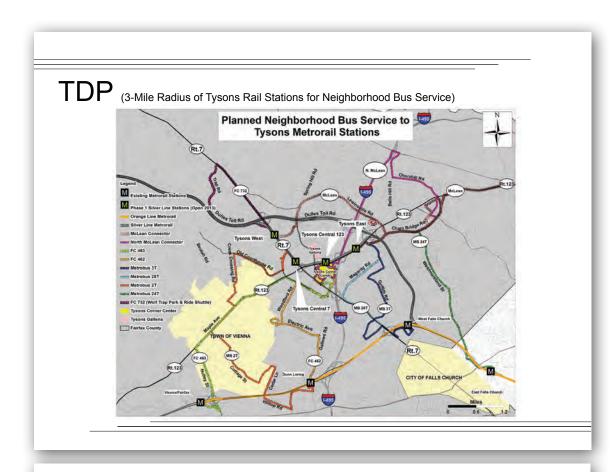
# Studies/Plans Included in

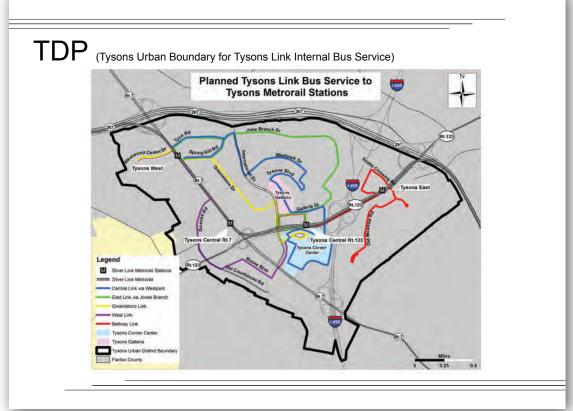


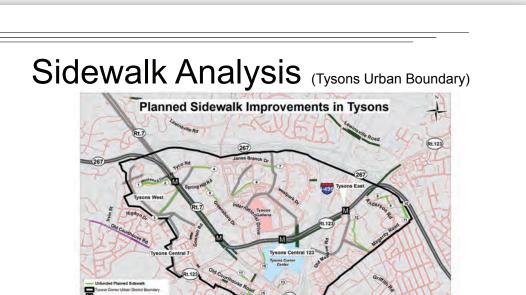
- Fairfax County Transit Development Plan (TDP)
- Tysons Corner Sidewalk Analysis
- Comprehensive Plan for Tysons Corner Urban Center (planned trail facilities)
- Tysons Bicycle Master Plan

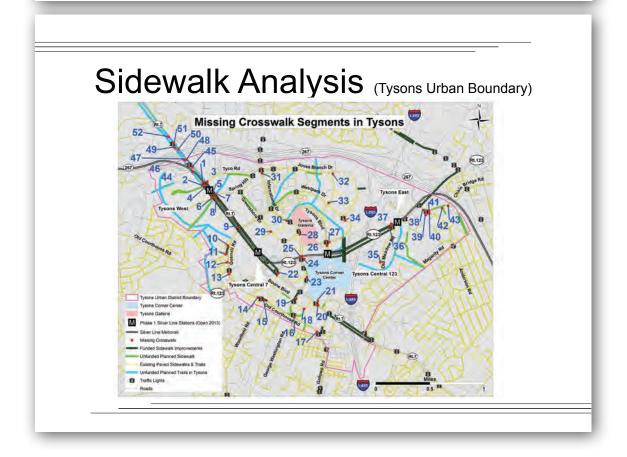












## **General Questions**

1.	When to	he Silver	Line o	pens do	you plan on	usina	it?
----	---------	-----------	--------	---------	-------------	-------	-----

Yes	77%
No	
Don't know	2%
Occasionally	2%

# 2. Which mode of transportation are you most likely to use to reach the Tysons Metrorail stations when they open?

Walk	42.8%
Bicycle	14%
Bus	35.8%
Kiss and Ride	
Car	

# 3. Which Metrorail station would you plan on using most frequently?

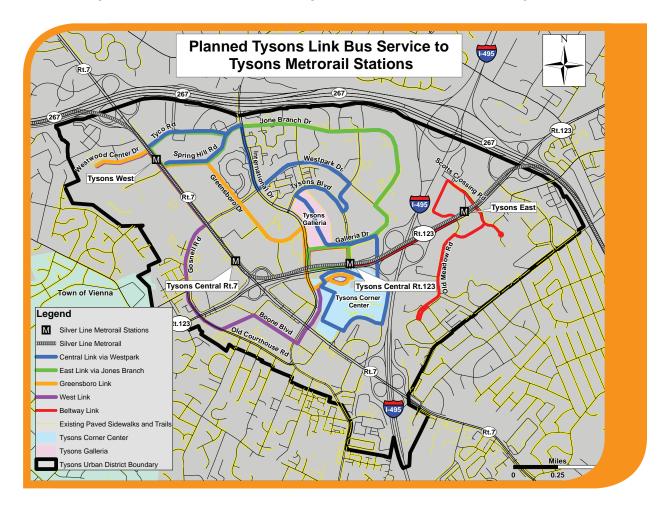
Tysons West	29.4%
Tysons East	
Central 7	
Central 123	

### **Bus Route Questions**

# 1. Which factors would influence you to take a bus to the new Metrorail stations? Please rank 1-7 in order of your priority. (The below results are listed in order of which meeting attendees selected their number 1 factor.)

Frequency of service	. 28.4%
Cost of service	. 10.8%
Cost of parking at your destination	7.6%
Distance to nearest bus/transit stop	. 13%
Quality of bicycle/pedestrian network used to access the nearest bus/transit stop	. 14.5%
Travel time	12.9%
Reliability	12.9%
Other – Accessibility, parking	. 6.3%

# Planned Tysons Link Bus Service to Tysons Metrorail Stations Map



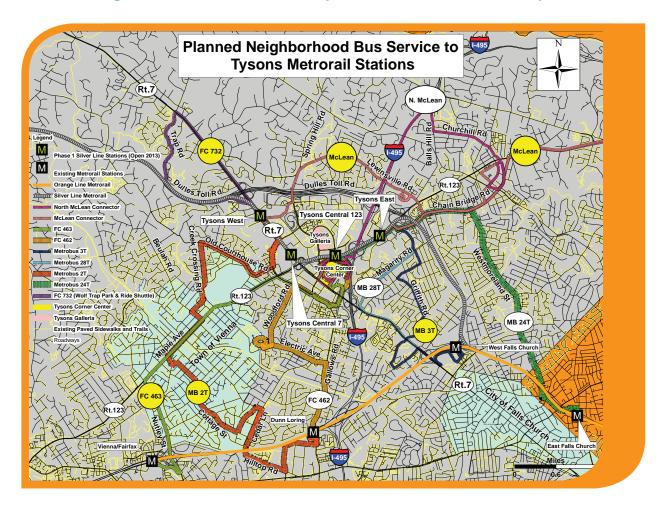
2. The Tysons Link bus routes, shown on the map above, are planned within Tysons Corner when Metrorail service begins. Do you anticipate using Tysons Link service and, if so, which route? Do you feel there are any routes needed to be added to the Tysons Link service?

Central Link	3
Beltway	3
Extend East Link	
Scotts Crossing	
East Link to Jones Branch Drive	

### Comments:

- Will not use
- None of these routes go near my house
- I won't take the bus
- A bus on Old Courthouse Road is essential
- Buses need to run on weekends
- Service from Wolf Trap is essential
- Don't anticipate using but my children might use it to get to jobs or entertainment destinations.

# Planned Neighborhood Bus Service to Tysons Metrorail Stations Map



3. The Neighborhood bus routes on the map above are planned to serve Tysons Corner when the Silver Line service begins. Do you anticipate using the neighborhood routes and, if so, which route? Do you feel there are any routes that need to be added to the Neighborhood service?

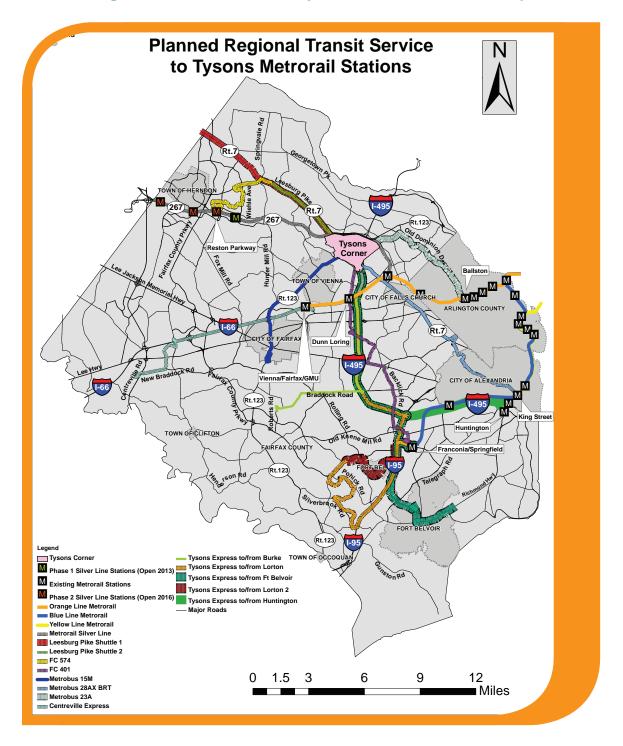
Yes, would use them	. 4
No, would not use them	. 2
Will use 401	. 1
Will use 28	. 1
Will use 2C	. 1
Will use FC 463	. 1
Will use North McLean Connector	. 3
Will use FC732	. 0
Will use Metrobus 2T	. 0
Will use 24T	. 0
May use 28T	. 1

### Comments:

- · Would use Chain Bridge Road service
- Need a Wolf Trap park and ride

- Need parking permits for residential neighborhoods
- Expand neighborhood service and hours
- Need more frequent service throughout days and weekends
- · Will not use service in current format. Use a Jitney service with small buses very frequently
- Keep 3T as it is now

# **Planned Regional Transit Service to Tysons Metrorail Stations Map**



4. The Regional bus routes, shown on the map above, are planned to serve Tysons Corner when the Silver Line service begins. Do you anticipate using the regional routes and, if so, which route? Do you feel there are any routes that need to be added to the Regional service?

Yes, would use them	2
No, would not use them	
Likes FC 401	
Likes 2C	

### Comments:

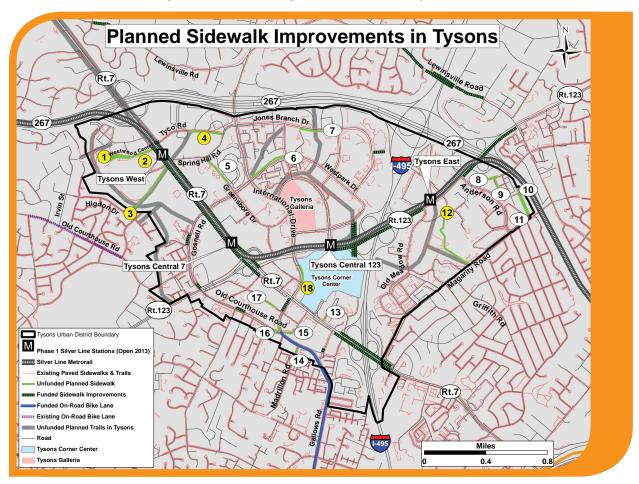
• I anticipate using shuttles 1 & 2 to and from Leesburg.

# **Sidewalks, Trails and Crosswalks Questions**

1. Which factors would influence you to walk to the new Metrorail stations? Please rank 1 – 8 in order of your priority. (The below results are listed in order of which meeting attendees selected their number 1 factor.)

Complete sidewalks to station	23.4%
Constructed paths to station	12.6%
Safe, well-lighted sidewalks and paths	17.4%
Crosswalks at intersections	
Crosswalks with enough time to cross	12.5%
Stations within walking distance, ½ mile or less	
Health benefits	5.9%
Good for the environment	

**Planned Sidewalk Improvements in Tysons Corner Map** 



2. The numbered sidewalk segments, shown on the above map, are planned for Tysons Corner. If you walk in the immediate Tysons Corner area please select your top five proposed sidewalk segments. Are there any sidewalk segments not listed that should be constructed?

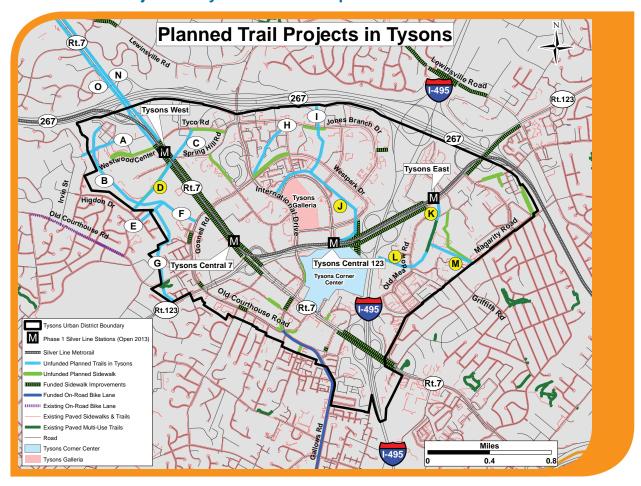
SEGMENT	RESPONSE	SEGMENT	RESPONSE	SEGMENT	RESPONSE
1	0	7	0	13	2
2	4	8	10	14	1
3	0	9	2	15	1
4	0	10	2	16	1
5	0	11	0	17	0
6	0	12	7	18	4

### Comments:

This is critical to avoid the same mistake that was mad when West Falls Church was made: it
was isolated from Pimmit Hills; we can't repeat the same mistake with Tysons East

- It's not safe to walk around Tysons Corner Mall property perimeter so segment 13 is valuable
- · The funded Rt. 7 sidewalk over the Beltway must connect Pimmit Hills to the mall
- Need sidewalk from Old Courthouse Road, up on the hill, to Old Courthouse Road/Gosnell Road intersection and then through the Home Goods shopping plaza to the Metro station

# **Planned Trail Projects In Tysons Corner Map**



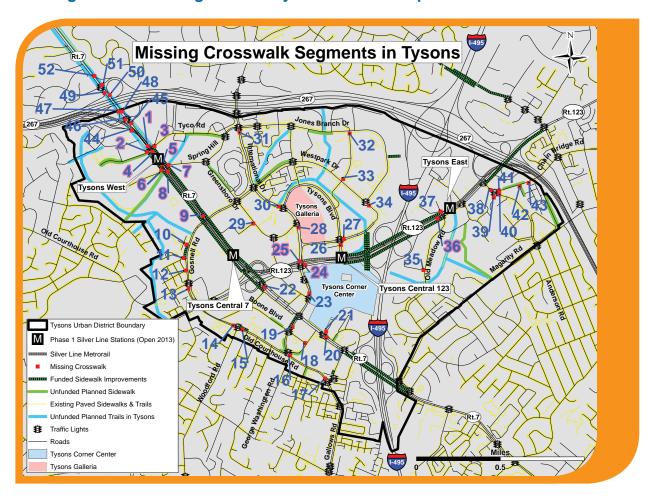
3. The trail segments, identified by letter on the above map, are planned but not built. Please select the five most important trail segments you feel should be constructed. Are there any trails not shown that should be constructed?

SEGMENT	RESPONSE	SEGMENT	RESPONSE	SEGMENT	RESPONSE
Α	2	F	0	K	10
В	1	G	0	L	7
С	0	Н	0	M	10
D	2	T.	2	N	4
E	0	J	5	0	7

### Comments:

- I want to see safe dedicated trails connecting Tysons Corner to Pimmit Hills along Rt. 7 and over the Beltway. It's not safe to walk or bike to the mall from Pimmit Hills
- Trails needed from Magarity Road between Pimmit Hills and the public school to reach Old Meadow at Coleshire Meadows
- Need trail/sidewalk from Pump Station to Old Dominion Drive on south side of Rt. 123
- Rt. 123 sidewalk improvements needed
- Sidewalks on Lewinsville Road
- · Sidewalks on Rt. 7

# Missing Crosswalks Segments in Tysons Corner Map



4. The crosswalks, identified by number on the above map, are planned but not constructed. Please select the five most important crosswalks you feel should be constructed.

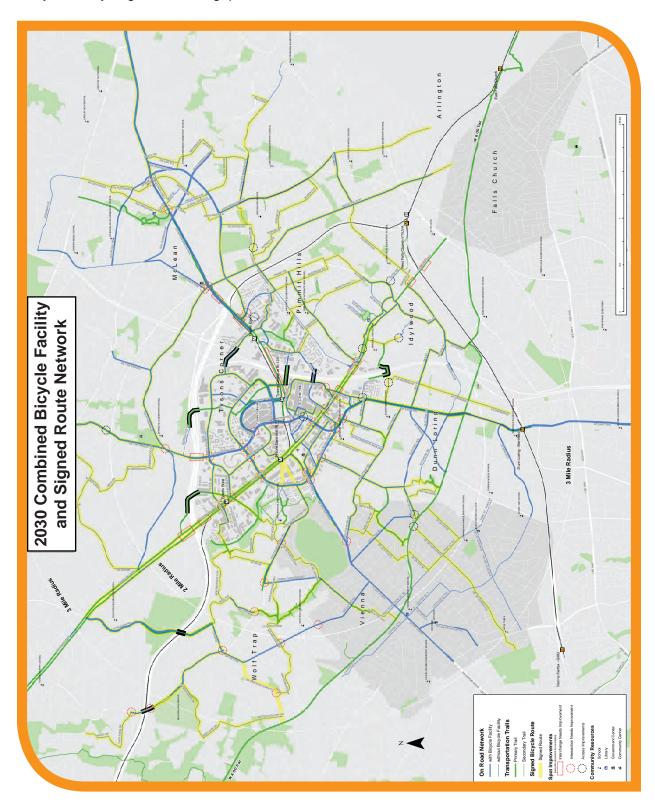
CROSSWALK	RESPONSE	CROSSWALK	RESPONSE	CROSSWALK	RESPONSE
1	1	19	0	37	4
2	6	20	1	38	6
3	1	21	1	39	5
4	1	22	0	40	6
5	3	23	1	41	5
6	3	24	2	42	1
7	1	25	2	43	1
8	5	26	0	44	1
9	1	27	1	45	0
10	0	28	0	46	1
11	0	29	0	47	2
12	1	30	0	48	2
13	1	31	0	49	3
14	1	32	0	50	1
15	1	33	0	51	1
16	1	34	0	52	4
17	0	35	0		
18	0	36	4		

# Comment:

• It needs to be safe to get to Tysons Corner and to the mall

# **Bicycle**

Bicycling within Tysons Corner is a growing mode of transportation yet there are still issues that hold many from bicycling. The following questions address some of these issues.



### 1. Examining the map, is your place of residence or employment close to a bicycle route that leads to Tysons Corner?

#### Comments:

- Are you kidding? What bike path along Rt. 123 in McLean? There is not a bike path there
- No, but would like one to be on Rt. 123 outside of the Beltway
- Yes, but I would not use it, it is not safe
- Yes, but I will not use it

### For what trip purposes would you consider using the planned trails and bike facilities the most?

TRIP PURPOSE	RESPONSE
To get to work	10
To get to transit	14
To get to retail	12

TRIP PURPOSE	RESPONSE
To get home	11
To get to school	3
For recreation	9

## 2. Please prioritize the bicycle improvements you feel are needed by numbering them 1-4. (The below results are listed in order of which meeting attendees selected their number 1 factor.)

Improved or wider bike lanes	34%
Better road and path lighting	
Bicycle parking at Metro stations	
Bicycle access onto Metrorail cars	
Other	

### 3. If you are riding a bicycle to Tysons Corner, what bicycle facilities are most important to you?

OPTIONS	RESPONSE
Covered and protected bicycle racks	10
Bicycle Racks conveniently located to the Metrorail stations	11
Safe crosswalks to access bicycle facilities	14

## Appendix

**TMSAMS Fact Sheet** 



Fact Sheet #1
March 2011

#### O INTRODUCTION

We need your input on transportation improvements for pedestrians, bicyclists and bus networks in Tysons Corner. In just three years, four new Metrorail stations will open in Tysons Corner on the new Silver Line and a vibrant mix of shops, residences, and places of employment will soon surround these stations.

For persons living in or near Tysons, having better access to the Metro will pay off in many ways. Property values should increase in the area and it will be a more enjoyable and healthier place to live.

As in on the Metro system in Arlington, there will be little or no car parking at the Metrorail stations. Fairfax County has identified a number of projects to improve travel to and from the new Tysons Metrorail stations including walking, riding a bike or taking the bus. Your input is needed now to help set priorities on multi-modal improvements within a three-mile radius from the center of Tysons Corner and to make it easier and safer to travel to the new Silver Line Metro stations.

#### **HOW YOU CAN PARTICIPATE**

Public Meetings – Join your fellow citizens for an evening of educations, questions, discussions, and opportunities for you to voice your thoughts.

#### **PUBLIC MEETINGS – EVENINGS**

**Tuesday, March 22, 2011** – McLean High School Cafeteria 1633 Davidson Road, McLean, VA 22101 7:00 p.m. – 9:00 p.m.

**Wednesday, March 23, 2011** – George C. Marshall High School Cafeteria 7731 Leesburg Pike, Falls Church, VA 22043 7:00 p.m. – 9:00 p.m.

**Thursday, March 24, 2011** – Westbriar Elementary School Cafeteria 1741 Pine Valley Drive, Vienna, VA 22182 7:00 p.m. – 9:00 p.m.

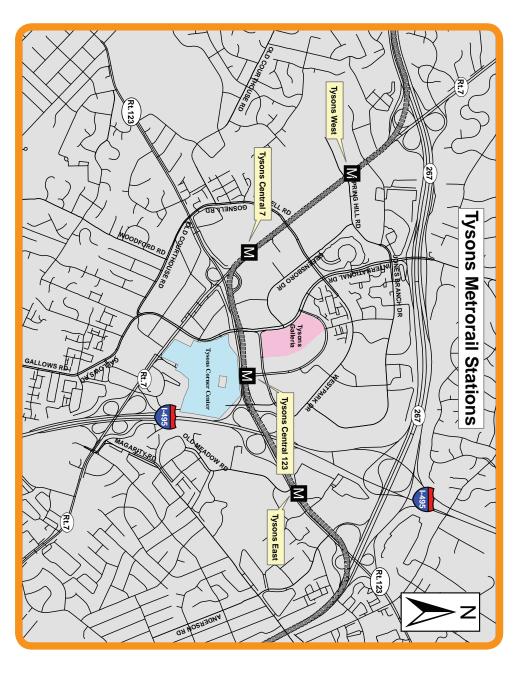
#### **PUBLIC MEETING – DAYTIME**

Thursday, March 24, 2011 – Teqcorner Building 1616 Anderson Road, McLean, VA 22102 11:00 a.m. – 1:00 p.m.





### **Metrorail** Station Map





#### **ABOUT THE STUDY**

There are three goals for this study:

- To inform the public on transportation improvements recommended in the Fair-fax County Department of Transportation studies regarding pedestrian, bicycle, and transit that will enhance access and egress (coming and going) to the four new Silver Line Metrorail stations being constructed in Tysons Corner.
- To allow the public to evaluate and prioritize those recommendations
- To identify areas where additional planning and analysis is needed as well as develop a prioritization of improvements to the transportation system.



#### **BACKGROUND**

The Wiehle Avenue/Reston Parkway Station Access Management Plan, completed in April of 2008, and just as with this project, the public helped to identified necessary transportation improvements for pedestrian, bicyclists and bus systems to the future Wiehle Avenue and Reston Parkway Metrorail Stations. The finalized plan was so well received that the Board of Supervisors requested a similar study be completed for the four rail stations currently under construction in Tysons Corner.

For the last several years the County has been engaged in an effort to update the Comprehensive Plan for Tysons Corner. The Fairfax County Department of Transportation (FXDOT) is also managing multiple transportation studies for Tysons Corner. Since much of the work required to produce an access management study such as this, is already being completed through studies managed by FCDOT, the Board of Supervisors stated a need for a comprehensive public participation project to bring all Tysons Corner studies and projects together as one so that the public can listen, absorb, evaluate, and comment on program improvements to the bus network, and pedestrian and bicycle facilities.

The Tysons Metrorail Station Access Management Study (TMSAMS) is being led by the Fairfax County Department of Transportation and the TMSAMS Advisory Group. Three Fairfax County districts (Dranesville, Hunter Mill, and Providence), which fall in the study area, are represented on the advisory group as well as County agencies and local organizations.

Studies and plans included in the TMSAMS are the Fairfax County Transit Development Plan, the Tysons Corner Sidewalk Analysis, and the Tysons Bicycle Master Plan

The planning process for TMSAMS will take approximately 12 months. The public involvement period of the project is anticipated to end in May of 2011.



## Appendix



### Key Stakeholder Interview List

- Booz Allen Hamilton
- · Capital One
- · Citizens for Traffic Calming on Old Courthouse Road (CTCOCR)
- · Coalition for Smarter Growth
- Dulles Corridor Metrorail Project
- · Dulles Corridor Rail Association
- Fairfax Advocates for Better Bicycling (FABB)
- Fairfax County Chamber of Commerce
- Fairfax County Economic Development Authority (FCEDA)
- Fairfax Disability Board
- Gannet
- · Great Falls Civic Association
- Lerner Enterprises
- Lewinsville Coalition
- Macerich
- McLean Citizen Association
- · Northeast Vienna Citizens Association
- Pimmit Hills Citizens Association
- · Rotary Club of Tysons Corner
- VA Mega Projects
- · Vienna Tysons Regional Chamber of Commerce
- · Wolf Trap Park for the Performing Arts

## **Appendix**



## **Business Organization Key Stakeholder Interview Questions and Collected Responses**

Prior to the interview, an explanation of the study was given to those who were being interviewed. The goals of the study, the reasons for the need of the public input, and how the study would be used for a tool for the Fairfax County Department of Transportation for this and future projects.

### 1. Does your organization offer any mass-transit incentives?

No	58%
Yes	42%
Of "no" responses, those who plan to offer incentives in future	42%

### 2. Regarding your staff's travel choices, how do they travel locally? Responses are in order of priority:

1.	Single Occupancy Vehicle (SOV)	88%
	Bus	
	Metrorail	
	Carpool	
	Bicycle	
	Walk	

#### Comments:

- High majority uses SOVs
- Staff needs SOVs during the day

### 3. When the Silver Line stations open what reasons do you feel your staff will use Metrorail? Please prioritize the reasons:

- 1. To and from job
- 2. Meetings during the day
- 3. Lunch
- 4. Shopping

#### Comments:

- We will use the Silver Line when it is open to Dulles and we can get to Reston
- · Staff will use it if it is a "one-seat" ride

- 4. Since there will be no parking garages at the new Metro stations riders will need to access the stations by different modes of transportation. What changes to the bus systems would be needed to encourage your staff to ride transit? Please prioritize the changes that may encourage riding a bus.
- 1. More "pick up" times
- 2. Better reliability
- 3. Affordable fares
- 4. Stops close to home
- 5. Covered bus stops
- 6. Less crowded buses
- 7. Cleaner buses

#### Comments:

- Schedules and service to Tysons Corner is confusing
- Need later and weekend service times
- 5. Another way of accessing the Silver Line stations will be by pedestrian traffic. What infrastructure changes might be needed for your staff to walk to a station? Please prioritize the changes that may encourage walking.
- 1. Constructing sidewalks where none exist
- 2. Additional crosswalks
- 3. Improve existing sidewalks
- 4. Improve path systems
- 5. Better lighting on sidewalks and paths
- 6. Longer time for pedestrians to cross crosswalks

#### Comments:

- Safety is priority
- Need safe walkways over Rt. 7 and Rt. 123
- Need a grid of sidewalks throughout Tysons Corner
- Need complete crosswalks throughout Tysons Corner
- 6. Another way of accessing the Silver Line stations will be by bicycle. What infrastructure changes might be needed for your staff to bicycle to a station? Please prioritize the changes that may encourage bicycle riding.
- 1. Establish bike lanes where none exist
- 2. Bicycle parking at stations
- 3. Better lighting

#### Comments:

- · It is not safe to ride a bike in Tysons Corner
- · Bike facilities/parking/lockers are needed throughout Tysons, not just at the stations Corner

#### General Common Comments:

- We don't want a Park and Ride at Wolf Trap
- Create simple but detailed guides for public transportation systems
- · Safety for pedestrians and bicyclists are imperative

## Appendix





Prior to the interview and explanation of the study was given to those who were being interviewed. The goals of the study, the reasons for the need of the public input, and how the study would be used for a tool for the Fairfax County Department of Transportation for this and future projects.

### Regarding your daily travel choices, how do you, and your members travel for your daily trips?

Single Occupancy Vehicle (SOV	82%
Bus	
Metrorail	6%
Bike	

#### Comments:

- · We will use the Silver Line
- We will continue to use Vienna Metro because of the parking options

When the Silver Line stations open what reasons do you feel you and your members will use Metrorail? Please prioritize the reasons:

- 1. Travel to job
- 2. Shopping
- 3. Weekend trips
- 4. Tourism

#### Comments

- We will use the Silver Line to Dulles when it is available
- We will use the Silver Line to avoid West Falls Church

Since there will be no parking garages at the new Metro stations riders will need to access the stations by different modes of transportation. What changes to the bus systems would be needed to encourage you and your members to ride transit? Please prioritize the changes that may encourage transit use.

- 1. More "pick up" times
- 2. Better reliability
- 3. Stops closer to home
- 4. Covered bus stops
- 5. Affordable fares
- 6. Less crowded buses
- 7. Cleaner buses

#### Comments:

- Use smaller buses
- · Day, evening, and weekend service is needed
- · Rt. 7 and Rt. 123 service is very important

Another way of accessing the Silver Line stations will be by pedestrian traffic. What infrastructure changes might be needed for you and your members to walk to a station? Please prioritize the changes that may encourage walking.

- 1. Constructing sidewalks where none exist
- 2. Additional crosswalks
- 3. Better lighting on sidewalks and paths
- 4. Improve existing sidewalks
- 5. Improve path system
- 6. Longer times for pedestrians to cross crosswalks

#### Comments:

- · Safety is top priority; it is too dangerous for pedestrians
- All sidewalks need to be complete; we need a grid of sidewalks
- All crosswalks need to be in place especially around the stations

Another way of accessing the Silver Line stations will be by bicycle. What infrastructure changes might be needed for you and your members to bicycle to a station? Please prioritize the changes that may encourage bicycle riding.

- 1. Establish bike lanes where none exist
- 2. Bicycle parking at stations
- 3. Better lighting
- 4. Other Bicycle parking at areas other than stations

#### Comments:

- Safety is a major concern, bicycling in Tysons Corner is too dangerous
- More bike facilities are needed throughout Tysons Corner

# Appendix TMSAMS Online Survey

The following are the introduction, online survey questions, and collected responses for TMSAMS online survey. The survey was available at http://www.fairfaxcounty.gov/fcdot/tmsams/survey.htm from March 22, 2011 to May 02, 2011. Close to 1,900 citizens participated in survey.

In just three years, four new Metrorail stations will open in Tysons Corner on the Silver Line. A vibrant mix of shops, residences, and places of employment will soon surround these stations.

For person living in or near Tysons Corner, having better access to Metrorail will pay off in many ways. Property values should increase in the area and it will be a more enjoyable and healthier place to live.

As on the Metrorail system in Arlington, there will be little or no car parking at the Metrorail stations. Fairfax County has identified a number of projects to improve travel to and from the new Tysons Corner Metrorail stations including walking, riding a bike or riding a bus. Your input is needed now to help set priorities on multi-modal improvements within a three-mile radius from the center of Tysons Corner and to make it easier and safer to travel to the new Silver Line Metrorail stations.

Taking the survey is on the honor system, so please take the survey only once, it will take you approximately 10 – 15 minutes.

### 1. What is your age?

a. Under 20

b. 20 – 29

c. 30 - 39

d.40 - 49

e. 50 -59

f. 60 - 69

g. Over 70

UNDER 20	20 – 29	30 – 39	40 – 49	50 - 59	60 – 69	70 AND OVER
10	132	360	441	444	316	129

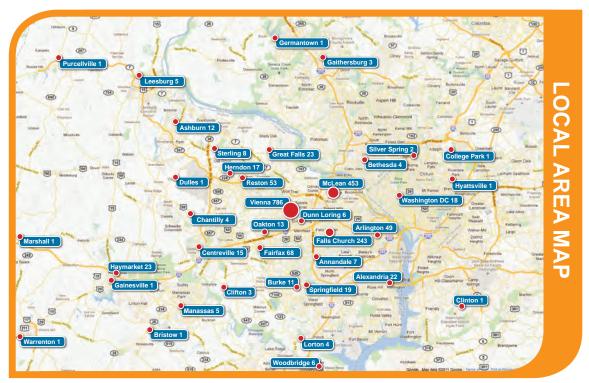
Answered question: 1,832

Skipped question: 64

### 2. What are the closest cross streets to your home?

Answered question: 1,896

### 3. What is your zip code?





Answered question: 1,896

### 4. What is the name of your homeowners association or management group, if applicable?

The responses represented 415 HOAs or management groups.

Most Frequent Responses:

- Gates of McLean
- · Pimmit Hills Civic Association
- Shouse Village
- Greater Tysons Green Civic Association
- Tysons Green
- · Wolf Trap Woods
- · Hallcrest Heights
- The Reserve
- Towlston Meadows

Answered question: 1,423

Skipped question: 473

### 5. If you'd like to receive periodic updates on the study and notifications on public meetings, please provide your e-mail address to be added to our distribution list.

c. If yes, from which station?

We received 834 email addresses.

Answered question: 834 Skipped question: 1,062

### 6. Do you presently use Metrorail?

a. Yes b. No

Yes - 1,163 (62.2%)

No - 707 (37.8%)

STATION	RESPONSE COUNT
Anacostia	1
Ballston-MU	23
Bethesda	3
Braddock Rd	4
Branch Ave	1

STATION	RESPONSE COUNT
Capitol South	1
Clarendon	5
Cleveland Park	2
Columbia Heights	1
Courthouse	14

STATION	RESPONSE COUNT	STATION	RESPONSE COUNT
Crystal City	1	Pentagon City	8
Dunn Loring-Merriefield	235	Rosslyn	12
East Falls Church	118	Silver Spring	1
Eastern Market	1	Takoma	2
Farragut West	1	Tenleytown AU	1
Franconia-Springfield	39	U Street	1
Huntington	9	Van Dorn Street	2
Metro Center	1	Vienna/Fairfax-GMU	259
New Carrolton	1	West Falls Church	544
Pentagon	1	Woodly Park	2

Answered question: 1,870

Skipped question: 26

### 7. How do you usually get to Metrorail?

a. Walk b. Bike c. Bus d. Car (park)

e. Car (Kiss and Ride) f. Other (Please specify)

WALK	BIKE	BUS	CAR (PARK)	CAR (KISS AND RIDE)	OTHER
174	63	186	1140	316	75
11.3%	4.1%	12.1%	73.9%	20.5%	

Answered question: 1,542 Skipped question: 354

### 8. If you work outside of your home, does your employer provide:

a. Free parking b. Transit subsidy c. Both d. Neither

FREE PARKING	TRANSIT SUBSIDY	вотн	NONE
564	251	159	682
34.1%	15.2%	9.6%	41.2%

Answered question: 1,656

Skipped question: 240

### 9. When the four Silver Line Metrorail stations open, which will you plan on using?

a. Tysons East

b. Tysons Central 123 c. Tysons Central 7

d. Tysons West

e. None

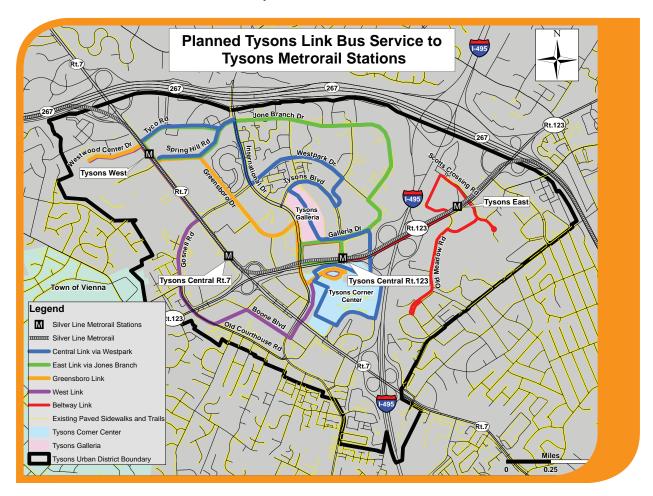


TYSONS EAST	TYSONS CENTRAL 123	TYSONS CENTRAL 7	TYSONS WEST	NONE
369	263	275	438	293
22.5%	16.1%	16.8%	26.7	17.9%

Answered question: 1,638

### 10. The following bus routes are proposed within Tysons Corner when Silver Line Metrorail service begins. Which do you anticipate using most frequently?

- a. Central Link via Westpark b. East Link via Jones Branch c. Greensboro Link
- d. West Link e. Beltway Link f. None



CENTRAL LINK VIA WESTPARK	EAST LINK VIA JONES BRANCH	GREENS- BORO LINK	WEST LINK	BELTWAY LINK	NONE
166	57	79	151	141	1,092
27.9%	9.6%	13.3%	25.4%	23.7%	

Answered question: 1,613

### 11. The following neighborhood bus routes are planned to serve Tysons Corner when Silver Line Metrorail service begins. Which of these routes are you likely to use?

a. McLean Connector b. North McLean Connector

c. FC463

d. FC462

e. FC732 (Wolf Trap Park and Ride Shuttle)

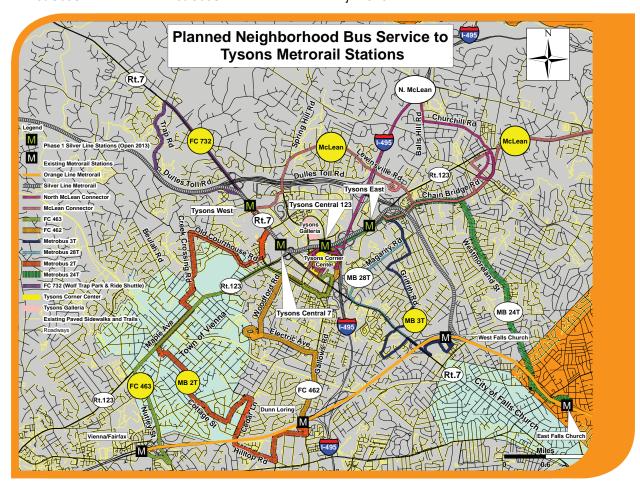
f. Metrobus 3T

g. Metrobus 28T

h. Metrobus 2T

i. Metrobus 24T

j. None



OPTION	RESPONSE COUNT	RESPONSE PERCENT
McLean Connector	144	14.9%
North McLean Connector	71	7.3%
FC 463	85	8.8%
FC 462	52	5.4%
FC 732 (Wolf Trap Park and Ride Shuttle)	196	20.3%
Metrobus 3T	136	14.1%
Metrobus 28T	67	6.9%
Metrobus 2T	170	17.6%
Metrobus 24T	45	4.7%
None	805	

Answered question: 1,609

Skipped question: 287

### 12. Based on the planned bus routes map in question 11, would you recommend any improvements in the neighborhood bus service?

Most Frequent Responses

- 2T –No new routes through Creek Crossing.
- · Bus service must be frequent.
- Wolf Trap Park do not use as a Park and Ride.
- · Old Dominion needs local bus service.
- Beulah Rd need bus service for entire length.
- All day/weekend bus service is needed.
- · Covered bus shelters are needed.
- Rt. 7 needs bus service up and down the length.
- · Keep buses out of residential neighborhoods.
- Use smaller, more efficient buses for local service.

Answered question: 675

Skipped question: 1,221

### 13. The following regional bus routes are planned to serve Tysons Corner when Silver Line Metrorail service begins. Which of these routes are you likely to use?

a. Leesburg Pike Shuttle 1 b. Leesburg Pike Shuttle 2

c. FC574 d. FC 401

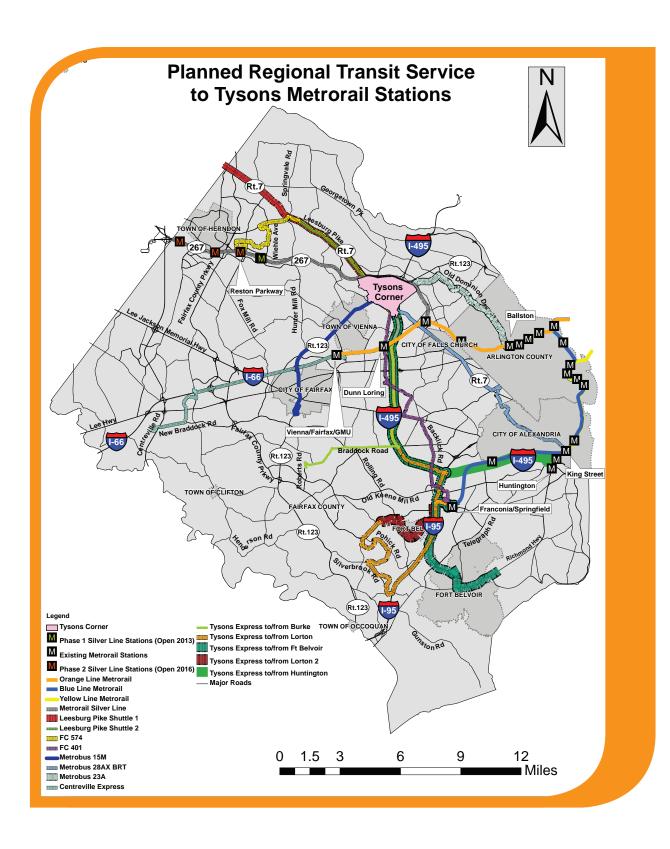
e. Metrobus 2C f. Metrobus 28AX BRT

g. Metrobus 23 A h. Centreville Express

i. Tysons Express to/from Ft. Belvoir j. Tysons Express to/from Lorton

m. Tysons Express to/from Huntington n. None

o. Other (please specify)



OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Leesburg Pike Shuttle 2	100	19.6%
Leesburg Pike Shuttle 1	79	15.5%
FC 574	51	10.0%
FC 401	38	7.5%
Metrobus 2C	22	5.6%
Metrobus 28AX BRT	32	6.9%
Metrobus 23A	66	13.0%
Centreville Express	27	6.5%
Tysons Express to/from Ft. Belvoir	14	3.9%
Tysons Express to/from Lorton	7	2.4%
Tysons Express to/from Lorton 2	2	.8%
Tysons Express to/from Burke	20	4.6%
Tysons Express to/from Huntington	12	3.5%
None	1,111	
Other	131	

#### Top "Other" Responses:

- 15M (15M was inadvertently left off of survey options)
- Need service from Georgetown Pike to Metrorail station
- Service from Maple Avenue to stations is needed
- Place Bus Rapid Transit (BRT) dedicated lanes on Rt. 7
- Herndon Monroe Connection to park and ride

Answered question: 1,438

Skipped question: 458

### 14. Based on the planned bus routes map in question 13, would you recommend any improvements in the regional bus service?

#### Most Frequent Responses:

- · 2T, no new routes through Creek Crossing
- Need frequent service throughout the day and weekends
- · Service from maple Avenue directly to stations is needed
- North Vienna needs bus service
- Old Dominion needs bus service (Reserve)
- Place BRT dedicated lanes on Rt. 7
- · No buses on residential streets
- Need parking at Metro stations

Answered question: 319

### 15. If you are ending your Metrorail trip in Tysons Corner, how will you get to your final destination in Tysons Corner?

a. Walking b. Bicycling c. Metrorail d. Bus

e. Private shuttle f. Kiss-and-Ride g. Other (please specify)

OPTION	RESPONSE COUNT	RESPONSE PERCENT
Walking	814	64.7%
Bicycling	91	7.3%
Metrorail	31	2.5%
Bus	166	13.2%
Private Shuttle	23	1.8%
Kiss and Ride	133	10.6%
Other	197	

Most Frequent "Other" Responses:

· Drive private car

Taxi cab

Answered question: 1,258

Skipped question: 638

### 16. Which factors will influence you to take a bus to a Metrorail station? Please rank 1-7 in order of your priority.

a. Frequency of service b. Cost of service

c. Cost of parking at your destination d. Distance to nearest transit stop

e. Quality of bicycle/pedestrian network used to access the stations

f. Travel time g. Reliability

OPTIONS	1	2	3	4	5	6	7	RESPONSE COUNT
Frequency of Service	468	297	194	126	101	61	80	1,327
Cost of Service	126	182	143	166	177	266	185	1,245
Cost of Parking	105	117	121	113	160	225	357	1,198
Distance to Nearest Transit Stop	286	185	188	182	175	132	108	1,256
Quality of Bike/Ped network	284	139	101	126	143	139	312	1,282
Travel Time	194	205	254	221	188	135	85	1,261
Reliability	180	204	237	216	173	117	134	1,261
Other								160

### **Most Frequent "Other" Responses:**

- The weather
- · Shelters, quality, weatherproof, well-lit, benches
- Safety
- Hours of service, 24/7 and on weekends
- Not too crowded, seats available on bus

Answered question: 1,407

Skipped question: 489

### 17. If you live beyond walking distance to a planned bus route, where would you suggest park and ride facilities be considered along these routes?

#### Top Responses:

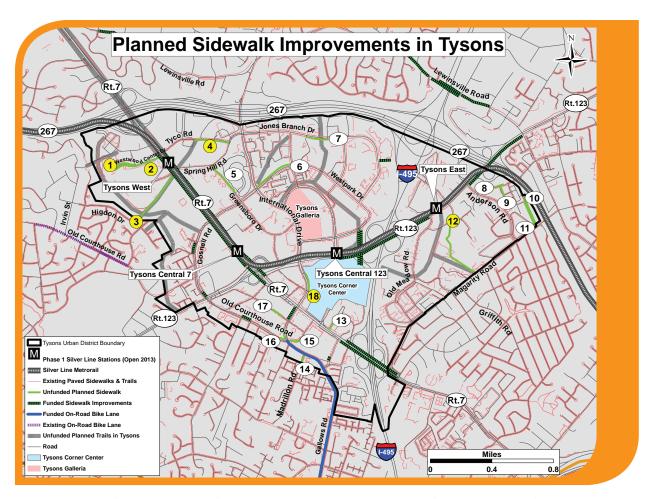
- Wolf Trap Farm Park
- McLean Bible Church
- Not Wolf Trap Farm Park
- · Tysons Corner Mall
- Tysons II Galleria
- Church parking lots on Rt. 7 and Rt. 123
- · Pimmit Hills Adult Education Center
- Colvin Run Mill & Baron Cameron
- · Vienna-Oakton town line
- Moore Cadillac parking garage
- Old MITRE building next to Rt. 123
- COVANCE site on Rt. 7

Answered question: 526

Skipped question: 1,370

18. If you walk in the immediate Tysons Corner area please select the top five planned sidewalk segments, shown in green, that you would like to see constructed.

a. Segments 1 - 18

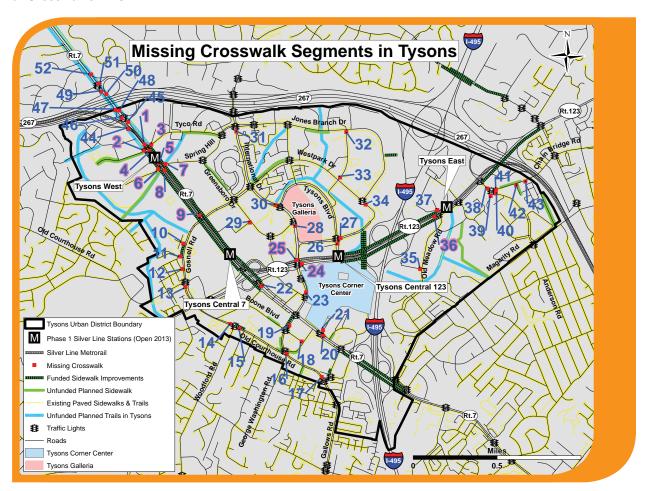


SEGMENT	RESPONSE COUNT	RESPONSE PERCENT	SEGMENT	RESPONSE COUNT	RESPONSE PERCENT
1	246	30.5%	10	118	14.6%
2	247	30.6%	11	108	13.4%
3	289	35.9%	12	219	27.2%
4	173	21.5%	13	127	15.8%
5	171	21.2%	14	56	6.9%
6	140	17.4%	15	109	13.5%
7	69	8.6%	16	114	14.1%
8	160	19.9%	17	103	12.8%
9	126	15.6%	18	257	31.9%

Answered question: 806

### 19. These crosswalk locations are planned but not constructed. Please select the five most important crosswalks to you.

#### a. Crosswalks 1 - 52

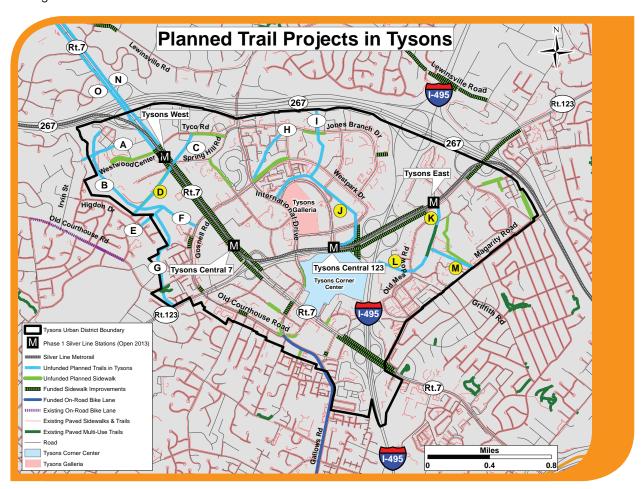


SEGMENT	RESPONSE COUNT	RESPONSE PERCENT	SEGMENT	RESPONSE COUNT	RESPONSE PERCENT
1	8.5%	112	14	11.4%	51
2	8.1%	141	15	20.1%	44
3	7.3%	94	16	14.9%	45
4	9.5%	121	17	10.6%	32
5	5.3%	148	18	12.9%	21
6	4.6%	147	19	9.9%	53
7	4.7%	119	20	3.2%	104
8	3.3%	114	21	6.1%	121
9	2.2%	143	22	6.1%	106
10	5.5%	82	23	11.4%	110
11	10.8%	78	24	20.1%	193
12	12.6%	70	25	14.9%	143
13	11.0%	91	26	10.6%	102

SEGMENT	RESPONSE COUNT	RESPONSE PERCENT	SEGMENT	RESPONSE COUNT	RESPONSE PERCENT
27	12.9%	124	40	12.1%	116
28	9.9%	95	41	11.4%	110
29	3.2%	31	42	7.7%	74
30	6.1%	59	43	6.9%	66
31	6.1%	59	44	5.0%	48
32	2.0%	19	45	4.1%	39
33	2.2%	21	46	5.2%	50
34	2.1%	20	47	6.5%	63
35	6.4%	62	48	6.0%	58
36	18.6%	179	49	9.4%	90
37	12.5%	120	50	7.4%	71
38	13.6%	131	51	8.0%	77
39	12.7%	122	52	7.1%	68

20. If you walk or bike in the immediate Tysons Corner area please select the top five planned trail segments, shown in blue, that you would like to see constructed.

a. Segments A – O.



SEGMENT	RESPONSE COUNT	RESPONSE PERCENT
Segment A	120	14.0%
Segment B	200	23.4%
Segment C	201	23.5%
Segment D	324	37.9%
Segment E	176	20.6%
Segment F	227	26.5%
Segment G	180	21.0%
Segment H	83	9.7%

SEGMENT	RESPONSE COUNT	RESPONSE PERCENT
Segment I	166	19.4%
Segment J	314	36.7%
Segment K	296	34.6%
Segment L	288	33.6%
Segment M	265	31.0%
Segment N	179	20.9%
Segment O	198	23.1%

### 21. For what trip purposes will you use the sidewalks, crosswalks, and trails?

a. To get to work b.

b. To get to bus/Metrorail

c. To get to retail

d. To get home

e. For recreation

f. Other (please specify)

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
To Get to Work	352	28.5%
To Get to Bus/Metrorail	813	65.8%
To Get to Retail	715	57.9%
To Get to Home	463	37.5%
For Recreation	609	49.3%
Other	71	

#### Most Frequent "Other" Responses:

- Exercise
- Visit relatives
- Walk dog
- To get to school
- To get to meetings
- Lunch hour

Answered question: 1,235

### 22. Where should Fairfax County consider adding additional sidewalk, crosswalk, or trail segments for better access to the Metrorail Stations in Tysons Corner?

Most Frequent Responses:

- Rt. 7 and Rt. 267 crossing (Dulles Toll Rd)
- Around all Metrorail stations
- Rt. 7, the full length
- Rt. 123, the full length
- · Vienna, downtown all the way to stations
- Beulah Rd. to Wolf Trap Park
- Courthouse Rd to Trap Rd. to Beulah Rd.
- · Lewinsville Rd. to Tysons East station
- Magarity Rd to station
- · Old Courthouse Rd needs sidewalks connected
- Crosswalks across Rt. 7 and Rt. 123
- Crossing I 495 on Rt. 123
- Crossing I 495 on Rt. 7
- · Spring Hill Rd and Old Dominion

Answered question: 528 Skipped question: 1,368

### 23. If you work in Tysons Corner and live within a 3 mile radius, do you now use your bicycle to commute to work?

a. Yes

b. No

c. If no, why not?

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Yes	47	3.8%
No	425	34.1%
N/A	774	62.1%
If no, why not?	298	

#### Most Frequent "No" Responses:

- Too dangerous
- No bike lanes
- · No safe paths or trails
- Too far/too much time
- Weather
- Words "killed", "death", or "life" mentioned in response
- Need car during day
- Traveling with children
- Inconvenient
- · Cannot cross main roads

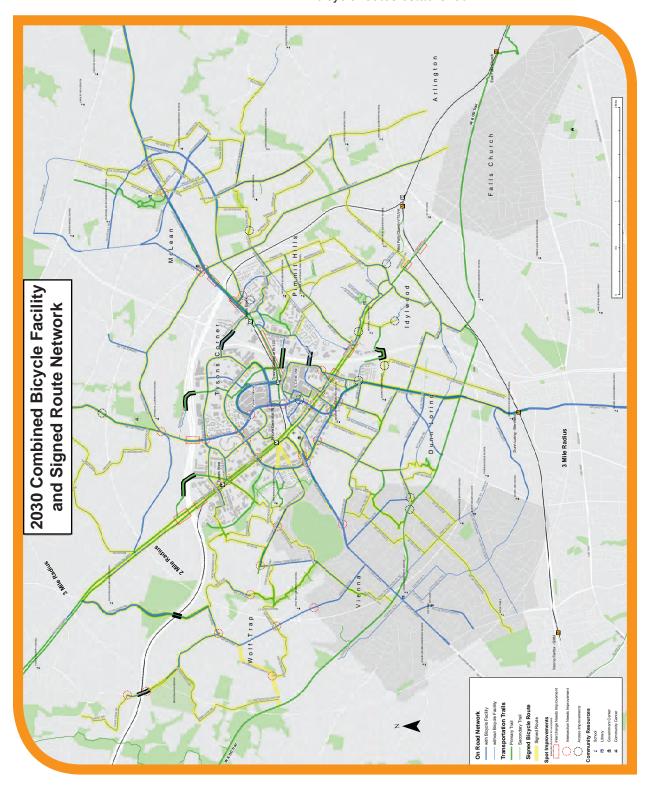
Answered question: 1,246

### 24. Examining the map, is your place of residence or work close to a bicycle facility/route that leads to Tysons Corner?

a. Yes

b. No

c. If you answered no, where would you like to see bicycle routes established?



OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Yes	697	56.8%
No	531	43.2%
If no, where would you like to see bicycle routes established?	349	

#### Most Frequent Responses:

- Rt. 7
- Rt. 123
- Beulah Rd.
- Chain Bridge Rd.
- Dulles Toll Rd, on the south side
- Lewinsville Rd to Rt. 123/to Tysons West station
- Magarity Rd.
- McLean to Tysons Corner
- Old Courthouse Rd. to Beulah Rd.
- Old Dominion Dr.
- Old Dominion between Spring Hill and Swinks Rd.
- Rt. 123 to and from McLean
- Rt. 7 crossing Dulles Toll Rd.
- Rt. 7 to Falls Church
- Spring Hill Rd.
- Towlston Rd. to Metro station
- W&OD connected to Tysons Corner
- Trap Rd. to Dulles Toll Rd

Answered question: 1,228

Skipped question: 668

### 25. What bicycle facilities in Tysons Corner are important if you decide to ride a bicycle there?

a. Covered and protected bicycle racks

b. Bicycle racks conveniently located near station

c. Safe crosswalks to access bicycle facilities

d. Other (please specify)

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Covered and Protected Bicycle racks	531	52.7%
Bicycle racks conveniently located near stations	673	66.8%
Safe crosswalks to access bicycle facilities	779	77.4%
Other	114	

#### Most Frequent "Other" Responses:

Secure/monitored parking by police or security

· Covered parking

Safe bike trails to station

Specific bike trails, not mixed-use trails

Isolation from roadways and traffic

· Bike sharing program

Answered question: 1,007

Skipped questions: 889

### 26. If you live within a 3 mile radius of Tysons Corner are you likely to ride your bicycle to use one of the new Metrorail Stations once they are operational?

a. Yes b. No c. N/A d. If no, why not?

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Yes	563	44.4%
No	452	35.6%
N/A	253	20.0%
If no, why not?	321	

#### Most Frequent Responses:

- · Not safe to ride in road in Tysons Corner
- · No safe bike path, trails or lanes
- Doesn't own bike/does not ride
- Prefer walking/not interested in biking
- · Biking attire not appropriate for work or shopping
- · Have children with me, cannot bike
- Not in good enough shape/age issues
- · Too much to carry with me
- Sweaty/need shower and changing facilities
- Weather
- Too far
- Risk of bike theft

Answered question: 1,268

Skipped question: 628

### 27. For what trip purposes will you use the planned trails and bike facilities?

a. To get to work b. To get to bus/Metrorail c. To get to retail d. To get to home

e. To get to school f. For recreation g. Other (please specify)

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
To Get to Work	298	27.3%
To Get to Bus/Metrorail	615	56.3%
To Get to Retail	547	50.0%
To Get to Home	402	36.8%
To Get to School	44	4.0%
For Recreation	761	69.6%
Other	71	

### Most Frequent "Other" Responses:

- None/will not use them
- Exercise
- Scenic variety
- To get to entertainment
- To save time
- Family outings
- Doctors' appointments
- Visit family

Answered question: 1,093

Skipped question: 803

### 28. If riding a bicycle to Metrorail, which station do you plan on using the most frequently?

a. Tysons East

b. Tysons Central 123

c. Tysons Central 7

d. Tysons West

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Tysons East	260	30.3%
Tysons Central 123	118	13.8%
Tysons Central 7	162	18.9%
Tysons West	318	37.1%

Answered question: 858

### 29. Please list your bicycle improvement needs by priority by numbering them 1-4.

a. Improved or wider bike lanes

b. Better road and path lighting

c. Bicycle parking at stations

d. Bicycle access onto the Metrorail cars

OPTIONS	1	2	3	4	RESPONSE COUNT
Improved or Wider Bike Lanes	586	153	96	65	900
Better Road and Path Lighting	171	332	220	146	869
Bicycle Parking at Stations	146	273	341	102	862
Bicycle Access onto the Metrorail Cars	76	100	141	485	802
Other					111

#### Most Frequent "Other" Responses:

- Connect the trails and bike lanes
- Improve intersection of Rt. 7 and Rt. 267 (Dulles Toll Rd.)
- Bike bridges over busy roadways
- No mixed-use trails
- Allow bikes on Metro cars during rush hours
- · Safety issues at ramps
- Public campaign to promote driver awareness of bicyclists
- · Safety first

Answered question: 919
Skipped question: 977

## 30. The following improvements are recommended in the Tysons Bicycle Master Plan. Please prioritize your reasons for considering bicycling to the Metrorail stations by numbering them 1-4.

a. Bike lanes/shared lanes with markings

b. Shared use paths

c. Wider road travel lanes

d. Bicycle crossings over the Beltway and the Dulles Toll Road

OPTIONS	1	2	3	4	RESPONSE COUNT
Bike Lanes/shared Lanes with Markings	278	256	187	106	827
Shared Use Paths	161	225	262	171	819
Wider Road Travel Lanes	99	191	195	304	789
Bicycle Crossing Over the Beltway and the Dulles Toll Rd.	394	155	116	171	836
Other					72

#### Most Frequent "Other" Responses:

- Dedicated bike lanes/paths/trails away from traffic
- Too dangerous
- · Rt. 7 crossovers needed
- Bike only paths
- Rt. 123 crossovers

Answered questions: 895

Skipped questions: 1,001

### 31. What other improvements would encourage you to ride your bicycle to the new Metrorail stations?

Most Frequent Responses:

- · Safer road, routes, lanes, crossings
- · Bike lanes/trails/paths separated from all traffic
- Bike lanes/trails/paths dedicated just for bikes
- · Bike parking, secure, police protected, and covered facilities
- More direct routes
- · Police protection, police on bikes
- · Rt. 7 and Rt. 123, safer and better crossings
- · Better lighting
- · Reduced traffic speed

Answered question: 316

Skipped question: 1,580

### 32. Where should Fairfax County consider building additional bicycle and trail facilities to provide better access to, and within Tysons Corner?

Most Frequent Responses:

- In McLean
- Rt. 7, on the north side
- Rt. 7 and Rt. 267 crossing
- Wolf Trap Park connecting to Tysons Corner
- Tysons Corner Mall
- Rt. 123 from Vienna to Tysons Corner
- · Old Courthouse Rd.
- I-495 crossings (Rt. 7 and Rt. 123)
- All paths should be able to connect with each other

Answered question: 375

### 33. What factors and benefits would move you to ride a bicycle to the Metrorail stations?

a. Less pollution b. Exercise c. Convenience d. Not dependant on bus schedule

e. Economical f. Other (please specify)

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Less Pollution	355	37.6%
Exercise	729	77.2%
Convenience	598	63.3%
Not Dependent on Bus Schedule	478	50.6%
Economical	434	46.0%
Other	100	

#### Most Frequent "Other" Responses:

- None
- Safety
- · Faster than walking or riding the bus
- Fun
- Scenery/Outdoors

Answered questions: 944

Skipped questions: 952

### 34. When the Silver Line is open do you plan on using it?

a. Yes b. No

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Yes	1196	86.3%
No	190	13.7%

Answered question: 1,386

Skipped question: 510

### 35. Now that you've taken this survey, if you plan on using one of the new Silver Line Metrorail stations, how will you get there?

a. Metrorail b. Walk c. Bike d. Bus

e. Private shuttle f. Kiss and Ride g. Other (please specify)

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Metrorail	151	12.1%
Walk	569	44.8%
Bike	468	36.8%
Bus	422	33.2%
Private Shuttle	59	4.6%
Kiss and Ride	413	32.5%
Other	217	

#### Most Frequent "Other" Responses:

- Drive
- Mixed/drive and walk
- Taxicab

Answered question: 1,271

Skipped question: 625

### 36. Having taken the survey, do you have any additional comments about bus, pedestrian, and bicycle access to the new Tysons Corner Metrorail stations?

- Most Frequent Responses
- Parking, should have it at stations
- 2T Creek Crossing, no new bus, re-route this service
- · Safety, this is the major concern and is needed for pedestrians and bicyclists
- Wolf Trap Park should not be used as a commuter lot
- · Bike lanes need to be wider with shallow curbs
- · Keep the buses out of neighborhoods
- Sidewalk and crosswalk safety is a major concern
- Buses, need frequent service
- Restrict parking in neighborhoods to residents
- Access is everything; need better access to all stations
- · Rt. & and Rt. 267 needs a crossover for pedestrians and bicyclists
- I-495 crossings need to be there and safe
- Tysons Corner residents deserve better consideration
- · ADA accessible for all facilities and services
- Pimmit Hills needs better connection to Tysons Corner
- Too much emphasis on bikes in this study
- Thank you for inviting the public to participate

Answered question: 543

### 37. How helpful has this survey been?

a. Very helpful

b. Somewhat helpful

c. Not helpful

OPTIONS	RESPONSE COUNT	RESPONSE PERCENT
Very Helpful	412	30.5%
Somewhat helpful	765	56.7%
Not helpful	172	12.8%

Answered question: 1,349

## Appendix

### **TMSAMS Sidewalk Improvement Key**

SIDEWALK IMPROVEMENT NUMBER	STREET NAME	SIDE OF STREET	BETWEEN STREETS (APPROXIMATE)
1	Westwood Center	North	Cul-de-sac and Sheraton Tysons Drive
2	Westwood Center	South	Cul-de-sac and Leesburg Pike (Rt.7)
3	Virginia Dominion Power Easement	N/A	Higdon Drive and Leesburg Pike (Rt.7)
4	Tyco Road	South	Virginia Dominion Power Easement to Spring Hill Road
5	Greensboro Drive	North	Spring Hill Road to Rotunda Condominium Entrance
6	Westpark Drive	North	International Drive to Park Run Drive
7	Jones Branch Drive	South	Park Run Drive and Westbranch Drive
8	Chain Bridge Road	North	Anderson Road to Colonial Lane
9	Colonial Lane	East	Chain Bridge Road to Cul-de-sac
10	La Salle Avenue	East	Cul-de-sac to Magarity Road
11	La Salle Avenue	West	Cul-de-sac to Magarity Road
12	Scoots Run Community Park Trail	N/A	Coleshire Meadow Drive to Magarity Road
13	Towers Crescent Drive	South	Leesburg Pike (Rt.7) and Marriot Hotel Entrance
14	Madrillon Road	East	Gallows Road and Boss Street
15	Aline Avenue (Northeast of Gallows Road)	South	Gallows Road and first driveway entrance
16	Northwest Corner of Gallows Road and Old Courthouse Road	North side of Old Courthouse Road and west side of Gallows Road	Entrance to Tysons Square Office Park on Old Courthouse Road to Entrance to Tysons Square Office Park on Gallows Road
17	Boone Boulevard	North	Howard Avenue and Gallows Road
18	International Drive	East	Fletcher Street and Ring Road

## Appendix

### TMSAMS Planned Crosswalk Improvements Key

CROSSWALK IMPROVEMENT NUMBER	NAME OF STREET CROSSED	INTERSECTION	SIDE OF INTERSECTION
1	Leesburg Pike (Rt. 7)	Leesburg Pike (Rt.7)/Tyco Road/ Westwood Center Drive	North
2	Westwood Center Drive	Leesburg Pike (Rt.7)/Tyco Road/ Westwood Center Drive	West
3	Tyco Road	Leesburg Pike (Rt.7)/Tyco Road/ Westwood Center Drive	East
4	Leesburg Pike (Rt. 7)	Leesburg Pike (Rt.7)/Tyco Road/ Westwood Center Drive	South
5	Leesburg Pike (Rt. 7)	Leesburg Pike (Rt.7)/Spring Hill Road	North
6	Spring Hill Road	Leesburg Pike (Rt.7)/Spring Hill Road	West
7	Spring Hill Road	Leesburg Pike (Rt.7)/Spring Hill Road	East
8	Leesburg Pike (Rt. 7)	Leesburg Pike (Rt.7)/Spring Hill Road	South
9	Leesburg Pike (Rt. 7)	Leesburg Pike (Rt.7)/Gosnell Road/Westpark Drive	North
10	Tyspring Road	Tyspring Street/Gosnell Road	West
11	Raglan Road	Raglan Road/Gosnell Road	West
12	Wall Street	Wall Street/Gosnell Road	West
13	Gosnell Road	Gosnell Road/Old Courthouse Road	South
14	Old Courthouse Road	Woodford Road/Old Courthouse Road	West
15	Old Courthouse Road	Woodford Road/Old Courthouse Road	East
16	Gallows Road	Gallows Road/Aline Drive/Old Courthouse Road	East
17	Gallows Road	Gallows Road/Gallows Branch Road	Northwest

CROSSWALK IMPROVEMENT NUMBER	NAME OF STREET CROSSED	INTERSECTION	SIDE OF INTERSECTION
18	Boone Boulevard	Boone Boulevard/Aline Drive	Northwest
19	Gallows Road	Gallows Road/Boone Boulevard	Northeast
20	Leesburg Pike (Rt. 7)	Leesburg Pike (Rt.7)/Fashion Boulevard	Southeast
21	Fashion Boulevard	Leesburg Pike (Rt.7)/Fashion Boulevard	Northeast
22	Leesburg Pike (Rt. 7)	Leesburg Pike (Rt.7)/Chain Bridge Road	Southeast
23	International Drive	International Drive/Fletcher Street	North
24	Chain Bridge Road (Rt.123)	Chain Bridge Road (Rt.123)/ International Drive	East
25	International Drive	Chain Bridge Road (Rt.123)/ International Drive	North
26	Tysons Boulevard	Tysons Boulevard/Galleria Drive	South
27	Galleria Drive	Tysons Boulevard/Galleria Drive	East
28	International Drive	International Drive/Greensboro Drive	South
29	Solutions Drive	Solutions Drive/Greensboro Drive	Southwest
30	International Drive	International Drive/Tysons Boulevard	Northwest
31	International Drive	International Drive/Jones Branch Drive/Spring Hill Road	South
32	Westbranch Drive	Westbranch Drive/Jones Branch Drive	South
33	Westbranch Drive	Westbranch Drive/ Westpark Drive	North
34	Westpark Drive	Westpark Drive/Jones Branch Drive	East
35	Old Meadow Road	Old Meadow Road/Old Meadow Lane	South
36	Chain Bridge Road (Rt.123)	Chain Bridge Road (Rt.123)/Old Meadow Road/Capital One Drive	West
37	Capital One Drive	Chain Bridge Road (Rt.123)/Old Meadow Road/Capital One Drive	North

CROSSWALK IMPROVEMENT NUMBER	NAME OF STREET CROSSED	INTERSECTION	SIDE OF INTERSECTION
38	Anderson Road	Anderson Road/Chain Bridge Road/Ambergate Place	North
39	Ambergate Place	Anderson Road/Chain Bridge Road/Ambergate Place	West
40	Anderson Road	Anderson Road/Chain Bridge Road/Ambergate Place	South
41	Chain Bridge Road (Rt. 123)	Anderson Road/Chain Bridge Road/Ambergate Place	East
42	Colonial Lane	Colonial Lane/Chain Bridge Road	South
43	Seneca Avenue	Seneca Avenue/Chain Bridge Road	South
44	Eastbound DTR Off Ramp to Southbound Leesburg Pike (Rt.7)	Eastbound DTR Off Ramp to Southbound Leesburg Pike (Rt.7)/Leesburg Pike (Rt.7)	West
45	Eastbound DTR On Ramp from Northbound Leesburg Pike (Rt.7)	Eastbound DTR On Ramp from Northbound Leesburg Pike (Rt.7)/Leesburg Pike (Rt.7)	East
46	Leesburg Pike (Rt.7)	Eastbound DTR Off Ramp to Northbound Leesburg Pike (Rt.7) with median break/Leesburg Pike (Rt.7)	North
47	Eastbound DTR On Ramp from Southbound Leesburg Pike (Rt.7)	Eastbound DTR On Ramp from Southbound Leesburg Pike (Rt.7)/Leesburg Pike (Rt.7)	West
48	Eastbound DTR Off Ramp to Northbound Leesburg Pike (Rt.7)	Eastbound DTR Off Ramp to Northbound Leesburg Pike (Rt.7)/Leesburg Pike (Rt.7)	East
49	Westbound DTR On Ramp from Southbound Leesburg Pike (Rt.7)	Westbound DTR On Ramp from Southbound Leesburg Pike (Rt.7)/Leesburg Pike (Rt.7)	West
50	Westbound DTR On Ramp from Northbound Leesburg Pike (Rt.7)	Westbound DTR On Ramp from Northbound Leesburg Pike (Rt.7)/Leesburg Pike (Rt.7)	East
51	Westbound DTR Off Ramp onto Southbound Leesburg Pike (Rt.7)	Jarrett Valley Drive/Leesburg Pike (Rt.7)/Westbound DTR Off Ramp onto Southbound Leesburg Pike (Rt.7)	East
52	Westbound DTR Off Ramp onto Northbound Leesburg Pike (Rt.7)	Westbound DTR Off Ramp onto Northbound Leesburg Pike (Rt.7)/Leesburg Pike (Rt.7)	East

# Appendix Recommended Transit Routes to be Investigated by FCDOT

The TMSAMS Advisory Group recommends the following routes to be investigated by FCDOT staff in regards of adequate service and to examine if the routes are serving the community as well as possible.

ROUTE		
1	Route 123, from Old Dominion to Lewinsville/Great Falls St	
2	Great Falls St, from Chain Bridge Road to Kirby (or Haycock)	
3	Old Chesterbrook Road, from Westmoreland to Kirby	
4	Kirby Road, from Old Dominion to Great Falls St	
5	Old Dominion, from Chain Bridge Road to Balls Hill Road	
6	Balls Hill Road, from Churchill Road to Old Dominion	
7	Falstaff Road in McLean Hamlet	
8	Idyllwood Road between Route 7 and Great Falls Street	
9	Great Falls city shuttle	
10	Area west of Lawyers Road between Vienna and Wiehle Metro stations	
11	Northern Vienna on main and secondary roads between Route 7 and Route 123: <ul><li>Old Courthouse Road</li><li>Beulah Road</li><li>Trap Road</li></ul>	

