

5.0 Implementing Phase 2 (2012-2016)

5.1 STRATEGY: GOALS AND OBJECTIVES

The objective of Phase 2 is to make the roadways in Tysons Corner noticeably more bicycle-friendly, so that users of all transportation modes begin to recognize routine bicycle accommodations. Phase 2 purposefully overlaps Phase 1 and continues through 2016, the projected third year of Metrorail operations.

Phase 2 is a mix of activities, including: a) improvements that will be done in conjunction with roadway improvements already in VDOT's plans, b) relatively low-cost bicycle facilities that can be added to existing roadways within and surrounding Tysons Corner with minimal impact to motor vehicle traffic, c) a set of safety improvements at intersections associated with the on-street bicycle facilities, and interchanges associated with planned sidepath construction, and d) the highest priority trail projects. Many of these improvements are in close proximity of the properties expected to be developed or redeveloped in the 2012-2016 timeframe.

Specific objectives for Phase 2 support achievement of the following Plan goals:

GOAL: Fully integrate bicycle transportation improvements into the planning and development process in Tysons Corner.

- Coordinate closely with developers that are working on near term redevelopment projects to ensure high-quality design of bicycle facilities that they fund and/or construct as developer contributions.
- Coordinate with VDOT regarding sidepath and ramp crossing design on VDOT arterial improvement projects.
- Coordinate with VDOT regarding design of intersection retrofits to accommodate bicycle and pedestrian crossing movements and promote safety.
- *GOAL: Improve bicycle travel safety, access and connectivity to, from, through and within Tysons Corner.*
- Upgrade bicycle level of service on Phase 1 signed bicycle routes by installing shared lane markings (sharrows), striped bicycle lanes, climbing lanes, and improved accommodations for bicycles at intersections.
- Install a second round of Signed Bicycle Routes that extends the signed route system to the east, south and west and provides wayfinding along some of the corridors receiving bicycle facilities in Phase 2.
- Plan, program and construct a set of bicycle safety-oriented striping/markings projects that will enhance cyclists' comfort and help motorists appropriately share the road.

- Focus on achieving a combination sidepath and service road route along VA 7 from VA 267 to Pimmit Drive; and if possible to Towlston Road in the North and Falls Church in the south.
- By 2014 begin a Bicycle Safety Education Campaign targeted for the Fairfax communities just outside Tysons Corner and select public middle and high schools.
- *Goal: Foster the development of a “bike culture” in Tysons Corner*
- In 2015 launch a bicycle-sharing service in greater Tysons Corner.
- In conjunction with the bicycle-sharing service, initiate a “Bike-to-Lunch” program geared to getting employees to reduce midday car use, and experience Tysons Corner by bicycle.
- Young, old and novice cyclists, especially, will be served by the sidepath and service road route along Leesburg Pike (VA Route 7), as well as the on-street facilities installed along the signed bike routes established in Phase 1.
- Continue to grow the Bike-Friendly Employer program by doubling corporate membership and doubling the quantity of bicycle parking in both public and private space.
- *GOAL: Increase the numbers of people bicycling for transportation by making it a viable choice for a wide range of cyclists – young and old, novice and experienced, and occasional and regular.*
- By 2016, double bicycle commuting rates to Tysons Corner (over the 2013 bicycle counts; see section 4.3).
- Continue the encouragement programs begun in Phase 1.

5.2 POLICIES

It is recommended that most policy changes will be accomplished in Phase 1. Phase 2 policy issues will include any of those remaining from Phase 1 and possibly adopting some of the emerging bicycle accommodation facilities such as bicycle boxes, colored bicycle lanes, and shared lane markings in a colored lane.

5.3 PROGRAMS

Ongoing Encouragement Programs

In Phase 2, the TMA for Tysons Corner should continue to grow the bicycle encouragement programs initiated in Phase 1. As envisioned in 2010, the Tysons Partnership may provide the most effective way to insure that these programs continue and maintain strong local participation and control:

- Bike-to-Metro Ambassadors;
- It’s About Time! Bicycle Commuter Encouragement Program;

- Bicycle-Friendly Employer Program;
- On-line Bicycle Commuter Network for cyclists; and
- Bike-to-Work Day activities.

New Programs

Phase 1 and 2 development of the physical bicycle network will provide a foundation for three programs recommended for initiation in Phase 2: a) a *Bicycle Safety Education Program*, b) a *Shared Bicycle Program*, and c) a *Bike-to-Lunch Program*. The Tysons Partnership is likely to be the best entity to take the lead with the Shared Bicycle and Bike-to-Lunch programs. A variety of leadership approaches may prove effective for the Bicycle Safety Education program. Each of these programs are described below.

Bicycle Safety Education Program

Cyclist and pedestrian safety education is recommended in Phase 2 given the potential for conflict between motorists and cyclists. Higher levels of cycling in Tysons Corner will be seen by motorists as a change in the transportation environment. Many may not be familiar with bicycle lanes or understand the shared lane marking.

Due to the location of affordable housing near Tysons Corner, many of the service workers with jobs in the core, walk and bicycle along Route 7 from Pimmit Hills and Idylwood to various locations in Tysons. In recent years, a number of pedestrian and bicycle crashes along Leesburg Pike at the Beltway interchange, illustrate the safety issues related to the needs of this constituency and its only travel path between work and home. Additionally, the expanded opportunities for bicycling resulting from implementing this plan will bring out new cyclists; some of whom may not have had much education in the area of bicycle safety.

To address these safety education needs pedestrian and bicyclist safety along the sidepaths, service road bikeways and ramp crossings proposed for VA Route 7 and portions of VA Route 123 is paramount. While necessary as interim facilities, these types of accommodations are less than ideal for cyclists. They require crossing driveways, two-way cycling through intersections and crosswalks, and crossing free-flow motor vehicle traffic merging off and on expressway ramps—all of which are a challenge. Nighttime use makes it that much more challenging.

Inexperienced and new cyclists can easily assume that because a sidepath keeps them away from moving traffic that these facilities are inherently safer than bicycling in the street. However, because of the dynamics of sidepath crossings, and mixing with pedestrians, they actually demand more attention to safety and a greater degree of scanning for potential traffic conflicts.

Education of cyclists who will regularly use these sidepaths should be focused as follows: 1) through bicycle safety education in select middle and high schools in the area, and 2) through employee and neighborhood-based education and outreach, such as door hangers and flyers passed out at grocery stores, information distributed through homeowner associations, civic groups, and neighborhood listservs; and information

provided to service workers by their employers.²⁶ This education effort should also target motorists with messages delivered in the roadway environment, using special banners, variable message signs, and alerts to new bicycle facilities when they are installed on particular roadways.

Shared Bicycle Program

The District of Columbia and Arlington, Virginia have launched an extensive shared bicycle service. These are bicycles that are parked on the street and available free to the public for short trips (30 minutes or about 4-5 miles); a small annual membership fee is charged upon first-time use. This service is most successful in a downtown or downtown-like environments that are too large for walk trips to meet all travel needs among a well distributed mix of land uses.



While Tysons Corner has a suburban transportation and development structure, it does have a diverse mix of uses across commercial and office employment, residential areas, places to eat, shop, exercise and run errands. However, the pedestrian environment is not consistently friendly and the suburban layout means that many origins and destinations are separated by distances longer than can be reached in an easy walk.

The shared bicycle is perfect for these types of trips within and to and from Tysons Corner. It may also be very useful for trips to and from the new Silver Line stations. However, it will not be successful until a set of bicycle facilities are implemented, so for this reason it should be scheduled for implementation in the later years of Phase 2.

Bike-to-Lunch Initiative

This is an encouragement program that can be undertaken when Shared Bicycle services are in place. The idea is that restaurants in Tysons Corner offer a lunch-time discount (or free item) for bicycling to the lunch spot. They will be encouraging “green” travel and may attract more customers. This promotion will directly encourage lunchtime use of the Shared Bicycle system, which might otherwise be a low use period. It will also

²⁶ Kilmer, Longfellow and Thoreau Middle Schools; Marshall, McLean and Madison High Schools. In time, education efforts can be shifted from the High Schools to the Elementary Schools.

expose many people to bicycling without requiring them to begin by making a major commitment to biking to work. It should also help the thousands of office employees in Tysons Corner associate bicycling with having fun, getting some exercise and enjoying their free time during the work week.



Bicycle Counts

Annual bicycle counts should be continued. Expansion of the counting locations or expansion of the hours may be considered, depending upon available resources. Another option would be to conduct counts twice yearly by selecting an additional data gathering period.

5.4 PHYSICAL IMPROVEMENTS

Phase 2 includes 25 miles of on-street facility installation and 10.7 miles of trail new construction or upgrades to existing trails. (See Table 5.1 at the end of this chapter for a summary of Phase 2 recommendations and Figure 5.1 for the Phase 2 map). The improvements recommended for Phase 2 can be characterized as follows:

- Many of these facilities are tied to VDOT planned projects, such as along Leesburg Pike. It is possible that funding restrictions could bump the associated roadway and bridge projects into the Phase 3 timeframe.
- The shared lane marking and bike lane improvements in Phase 2 can be accomplished with minimal impacts to existing traffic.
- There are many intersection improvements (16) and interchange improvements (8) in this phase because the streets passing through these intersections are slated for Phase 2 bicycle facilities. The BAC has made it a priority to improve intersections in conjunction with street segments because the cyclist's greatest need in Tysons is dealing with busy arterial crossings.
- It is expected that over the five-year Phase 2 timeframe, some of the improvements will be implemented by or in conjunction with new or redevelopment projects undertaken by the private sector.

A detailed list of all Phase 2 improvements is provided in Appendix H.

On-Street Improvements

Highlights of Phase 2 on-street improvements include bicycle lanes on a variety of roadways within Tysons Corner and leading to the Silver Line Stations. The following is a short list of important bicycle lane improvements:

- Jones Branch Road
- Old Courthouse Road
- Woodford Road, Aline Avenue, Kidwell Drive, and portions of Ring Road
- Old Meadow Road, Anderson Road, and Chain Bridge Road near Tysons East station.
- Spring Hill Road and Lewinsville Road in the area north of the Dulles Toll Road.

Intersections and Interchanges

The improvements in the following list are divided into three categories:

- Six intersections/interchanges already are in the planning cue for bicycle and pedestrian upgrades, or are related to planned sidepath projects (however, they may or may not be fully funded):
 - Lewinsville Road and Dolley Madison Boulevard (VA 123)
 - Leesburg Pike (VA Route 7) and Lisle Avenue
 - Interchange at Leesburg Pike (VA Route 7) and the Dulles Toll Road (VA 267)
 - Interchange at Dolley Madison Boulevard and the Dulles Toll Road
 - Interchange of VA 123 and the Beltway
 - Interchange Leesburg Pike (VA Route 7) and Interstate 66
- Two intersection improvements are anticipated to be relatively simple and low-cost:
 - Chain Bridge Road and Anderson Road; and
 - Aline Avenue/Old Courthouse/Gallows Road.

Fourteen intersections or interchange locations are proposed by this Plan for upgrades to improve bicycle safety and access to Tysons Corner in general and/or Silver Line Metrorail stations:

Tysons Corner from the north

- Lewinsville Road and Spring Hill Road
- Interchange at Dulles Toll Road and Spring Hill Road
- Spring Hill Road/International Drive/Jones Branch Road
- Westpark Dr and Greensboro Dr

Tysons West station

- Wolf Trap Creek Trail crossing of Old Courthouse Road at Besley Road
- Beulah Rd and Old Courthouse Rd
- Leesburg Pike (VA Route 7) and Tyco Road
- Leesburg Pike (VA Route 7) and Spring Hill Road

Tysons Central station at 7

- Boone Boulevard and Chain Bridge Road (VA 123)
- Chain Bridge Rd and Old Courthouse Rd
- Woodford Road and Old Courthouse Road

Tysons Central station at 123

- Madrillon Road and Gallows Road
- Leesburg Pike (VA Route 7) and Fashion Boulevard
- Rt 7 and Fashion Blvd
- Dolly Madison Blvd and I-495

Improvements to the at-grade crossings at Silver Line stations are included in the Silver Line Project. However, each station also includes a grade separated skyway across its adjacent arterial (VA Routes 123 or 7).

It is important to note that bicyclists (or pedestrians) will not be able to use these skyways when the Metro system is closed, therefore high-quality, at-grade crossings will remain an important priority even where grade-separated passage is provided.

Note: Pedestrian improvements are included because the design of bicycle improvements at intersections and interchanges requires consideration of pedestrian needs and accommodations as well.

Bicycle Transportation Network: Phase 2 Accommodations (2012 - 2016)

Review Draft
February 15, 2011

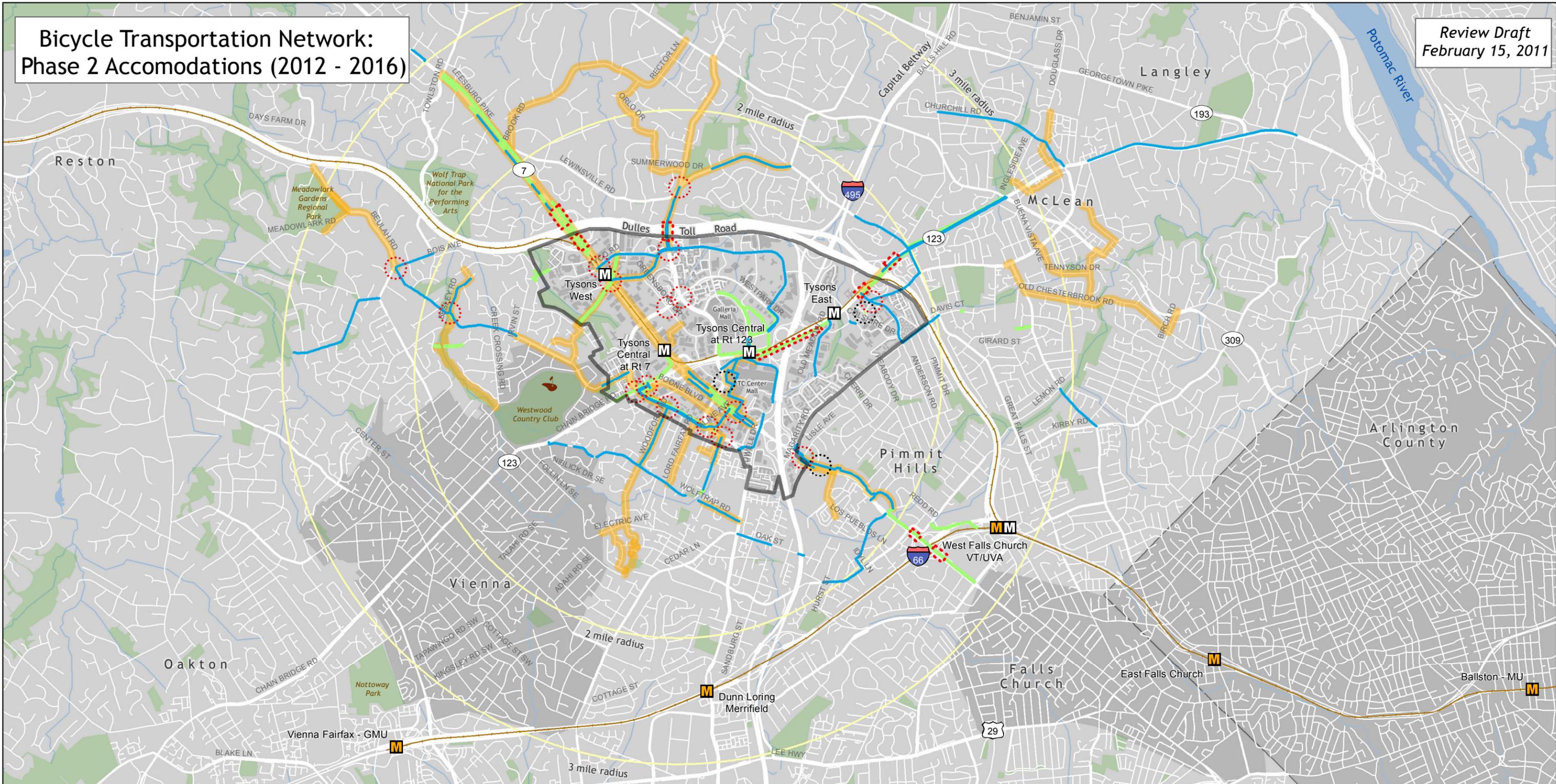
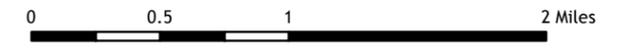


Figure 5.1



Phase 2

- On-Road Bicycle Facility
- Trail Construction or Upgrade
- Signed Bicycle Route
- Spot Access Improvement
- Intersection Improvement
- Interchange Crossing Improvement
- New Bicycle/Pedestrian Overpass



Overpasses

Current County and VDOT plans call for developing 10-foot wide shared use paths on each side of Leesburg Pike (VA Route 7) where it passes over the Dulles Toll Road (VA 267). In the next 5 years, it is anticipated that the Leesburg Pike bridge over VA 267 will need to be rehabilitated or replaced. In conjunction with providing sidepaths on the new bridge structure, at-grade path crossings of each of the entrance and exit ramps are planned.

While this approach to bicycle and pedestrian accommodation is an improvement over the existing conditions (no bicycle or pedestrian accommodations of any kind), at-grade path crossings of high-volume, free-flow entrance and exit ramps are unlikely to generate a significant number of users. It is recommended that the funds that would be used for the bridge accommodations, at-grade crossings and connecting paths be saved and combined with additional funds, to provide a grade separated crossing that would make the same connection. The likely alignment for this overpass would be just east of the interchange where a new on-ramp from Greensboro Extended to VA 267 may be needed (red line in Figure 5.2). (Also see the Phase 4 Recommendations Map: Figure 7.1)

Building the bicycle and pedestrian overpass in conjunction with the new westbound entrance ramp may be the most effective way to provide bicycle and pedestrian access to the west side of Tysons; i.e., have the greatest cost-benefit ratio. Providing both accommodations to link Tysons with this low-density residential area would be a wasted investment given the expected demand. While this overpass may not be built until Phase 3, it is likely that the decision to pursue an at-grade or grade separated solution will be made in Phase 2.

Figure 5.2 Overpass Alternative to At-Grade Shared Use Path Through the VA 267/VA Route 7 Interchange



Bicycle Passage on Virginia Routes 7 and 123

There is universal agreement within the bicycling community that these two major arterials are extremely challenging for cyclists and most avoid these routes whenever possible. However, if a person would like to bicycle between McLean and Vienna, there is no more direct route than Route 123.

Leesburg Pike (VA Route 7) has many destinations fronting this arterial corridor, but there are no parallel roads that offer similar access. The sidewalks, sidepaths and service roads in existence today are discontinuous, narrow and not configured effectively for bicycle access. Building on the improvements included in the Silver Line project, a useful interim route along major portions of Route 7 is recommended in Phase 2, by linking and improving service roads, sidewalks and intersections.²⁷

VA Route 7-Leesburg Pike (Interim Improvements)

- It is recommended that the Route 7 service roads and sidewalks between the VA 123 overpass and the Beltway be upgraded on both sides of the street to create bicycle access along Leesburg Pike and to the many destinations in this segment. This improvement will link the Phase 1 improvements north of VA 123 with the Beltway crossing sidepaths constructed as part of the HOT Lanes Project.
- It is recommended that south of the Route 7 Beltway crossing, the service road on the north/east side of Route 7 be improved to allow two-way bicycle movements as far south and east as Pimmit Drive.

²⁷The long term recommendations for this corridor call for Cycle Tracks (see Chapter X, Phase 4 Implementation Plan)

- If funding allows, the existing sidewalk should be widened to a sidepath as far as Haycock Road on the edge of Falls Church (near the West Falls Church Metrorail Station).

Route 123 Dolley Madison Boulevard/Chain Bridge Road

- Supplemental funding should continue to be sought for completing a sidepath under the Beltway along VA 123.
- The location of the Silver Line piers near the interchange of VA 123 and VA 267 makes it difficult to continue the sidepath on the north side of Dolley Madison Boulevard (VA 123) in McLean to the Tysons East station at Scotts Crossing Road. While not optimal, this plan supports locating that sidepath on the south side of VA 123 from Lewinsville Road to the Tysons East station. Phase 1 includes a modest paved shoulder in this section for cyclists that prefer to use the roadway.
- East of Lewinsville Road, buffered bicycle lanes on Dolley Madison Boulevard, and rehabilitation of the existing sidepath on the north side of the Boulevard will extend bicycle access to the McLean commercial center and the civic center at McLean Central Park.

Trail Construction

Phase 2 has a total of 10.7 miles of trail projects. Two of these projects are particularly critical to the center of Tysons Corner:

- A shared use path along the Virginia Power easement from Vesper Street to the Tysons West Silver Line station. This path will link the entire west side of Vienna to Tysons Corner and the Silver Line, while avoiding the use of VA 123 (Maple Avenue/Chain Bridge Road)
- A shared use path along Tysons Boulevard from Park to the Tysons Central at 123 Metrorail Station, and related spurs. This path will provide the residential community north of the Galleria off-street bicycle and pedestrian access to the Silver Line that is direct, minimizes hills, and allows cyclists to avoid using International Drive or Tysons Boulevard, which are large, high-speed streets and are not slated for improvement until later phases.

Both of these projects are closely related to plan developments in their respective part of Tysons Corner and could be included in a proffer package from these developers.

Spot Access Improvements

Three simple spot access improvements will improve access to Metrorail and improve safety and convenience of bicycle travel along Route 7: These projects will require coordination with relevant commercial property owners or civic associations and will involve a small amount of construction.

- A linkage of two sections of the Route 7 service road just south of Lisle Avenue. This will connect the southern portion of the Pimmit Hills neighborhood to the new bicycle passage across the Beltway along the Leesburg Pike.
- An improved transition trail and crossing from International Drive at Fletcher Street to the Ring Road that makes a circuit around the Tysons Corner Center (Tysons 1). This will be part of a bicycle link from the unincorporated residential area between VA 123 and Gallows Road to the Tysons Center at 123 station.
- A short linkage should be provided between Colshire Drive and Ambergate Place. While this linkage will be used primarily by pedestrians, increased use of this existing informal cut through is expected after the Silver Line opens.

Signed Bike Routes

30 miles of signed bicycle routes are slated for addition to the network in Phase 2. Many of these routes coincide with installation of facilities and trails such as along VA Route 7 and in the core of Tysons Corner. Others are extensions of the Phase 1 routes to additional neighborhoods surrounding Tysons Corner, including those in the following areas:

- West of Tysons near to the Meadowlark Gardens Regional Park and Wolf Trap;
- North of Tysons along Spring Hill, Lewinsville and Brook Roads;
- East of Tysons in McLean; and
- South of Tysons in the residential community between Old Courthouse Road and the W&OD Trail.

Coordination

Coordination will continue to be important during Phase 2 implementation of the Plan. Key agencies and areas of coordination include the following:

- Virginia Department of Transportation (VDOT) regarding installation of bicycle lanes, shares lane markings, intersection improvements, passage through interchanges, and development of a continuous interim bike route along Leesburg Pike.
- Developers, including the Macerich Corporation, Georgelas Group; Lerner Enterprises, Cityline Partners LLC (and others who may advance their development plans in the near future) regarding trail development, on-street facilities surrounding their developments and on-street improvements on private streets.
- The Tysons Partnership (likely to be the future TMA), property owners, building managers, employers and employee-based bicycle interest groups regarding the implementation of the Shared Bicycle Program and Bike-to-Lunch Initiative.
- Fairfax Advocates for Better Bicycling (FABB), the Washington Area Bicyclist Association (WABA) and the Fairfax County Public Schools (FCPS) regarding the Bicycle Safety Education program.

- Town of Vienna
- Management and expansion of bicycle parking at Silver Line station will need to be coordinated with the Washington Metropolitan Area Transit Authority (WMATA)
- Board of Supervisors' staff
- Various Homeowner Associations (HOAs)
- Other County Agencies: Park Authority and Department of Planning and Zoning

5.5 COST AND FUNDING

A summary of the estimated cost of implementing the recommended Phase 2 physical improvements is included in Table 5.2 below. More detailed information on the cost estimates is included in Appendix H.

Table 5.1 Phase 2 Recommendation Summary

Improvement Category	Recommendations (Miles or Number of Improvements)	(2011 Total Cost)
On-Road Bike Facility	24.7 miles	\$2,122,699
Off-Road Bike Facility	10.7 miles	\$2,582,414
Signed Bike Route	30.0 miles	\$180,000
Intersection Improvement	16 total	\$25,000 - \$500,000 @
Interchange Improvement	8 total	NA
Access Improvement	3 total	\$10,000 - \$50,000 @
Bridge Improvement	0 total	NA

5.6 CONCLUSION

The focus of Phase 2 is to begin to incorporate bicycle improvements into the planning, design and development process in Tysons Corner. As the area begins redeveloping, priority on-street and off-street bicycle facilities will be implemented. Bicycle access within and from the surrounding communities will also be improved. Additionally, in Phase 2, high-tech Bicycle Sharing infrastructure will be installed and encouragement programs like “Bike-to-Lunch” and “Bicycle-Friendly Employer Awards” will be launched. These will provide a strong foundation for the more significant improvements planned for Phase 3, as described in the following chapter.