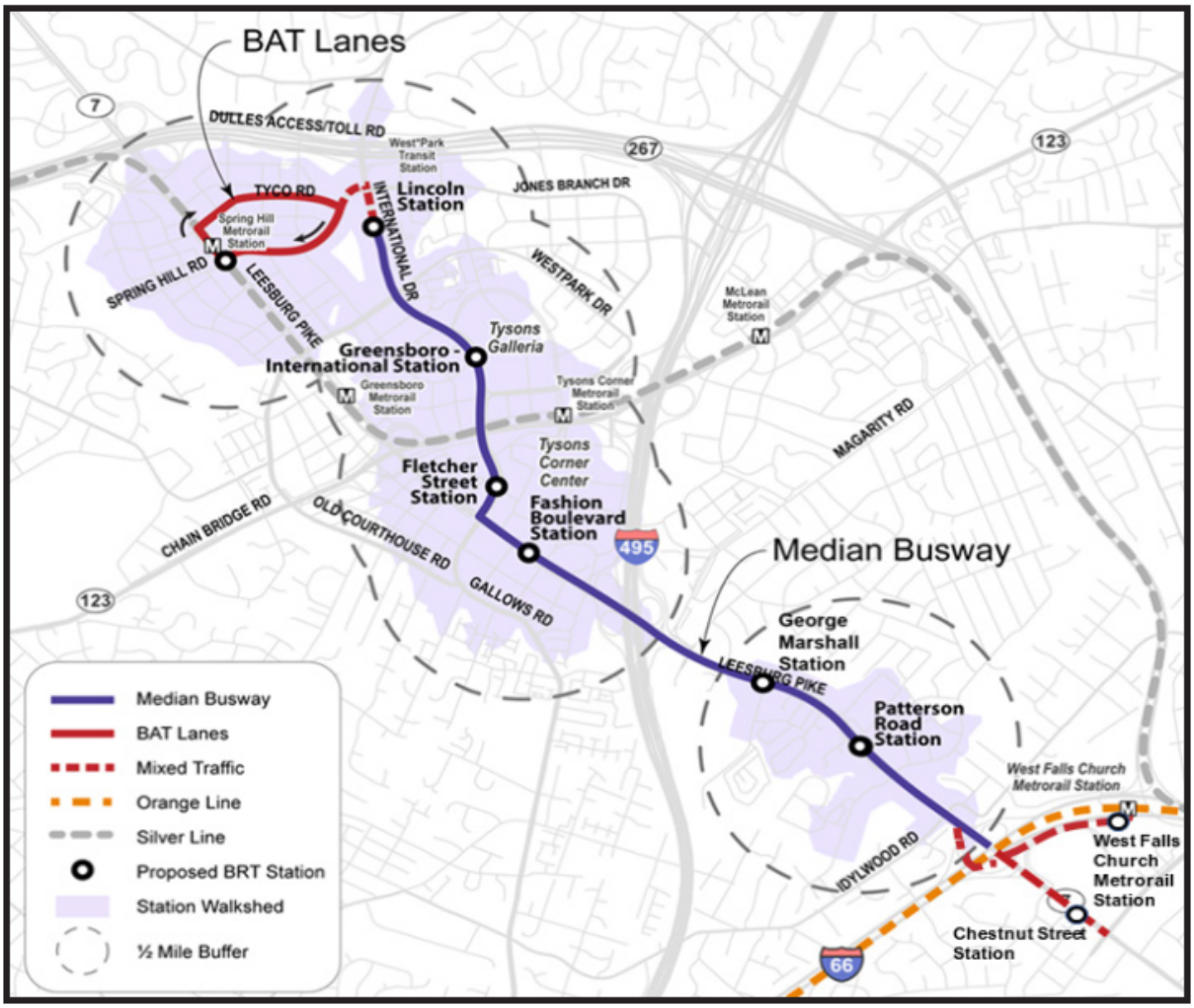
PROPOSED COMPREHENSIVE PLAN AMENDMENT

ITEM: PA 2021-CW-T1
May 31, 2023

GENERAL LOCATION: Portions of Route 7 (Tysons to West Falls Church), Spring Hill Road, Tyco Road, and International Drive.
SUPERVISOR DISTRICT: Providence, Dranesville, Hunter Mill
PLANNING AREAS: I and II
PLANNING DISTRICTS: McLean, Vienna, Jefferson
SUB-DISTRICT DESIGNATION: Multiple
PARCEL LOCATION: Multiple
Route 7 Bus Rapid Transit
For additional information about this amendment call (703) 877-5600.

PLANNING COMMISSION PUBLIC HEARING:
Wednesday, June 21, 2023 @ 7:30 PM
BOARD OF SUPERVISORS PUBLIC HEARING:
Tuesday, July 25, 2023 @ 4:00 PM
PLANNING STAFF DOES RECOMMEND THIS ITEM FOR PLAN AMENDMENT

Reasonable accommodation is available upon 48 hours notice. For additional information about accommodation call the Planning Commission office at (703) 324-2865, or the Board of Supervisors office at (703) 324-3151.



STAFF REPORT FOR PLAN AMENDMENT 2021-CW-T1

TABLE OF CONTENTS

BACKGROUND

On July 27, 2021, the Board of Supervisors (Board) endorsed the recommendations from the County's Route 7 Bus Rapid Transit (BRT) Study, which considered long-range multimodal transportation recommendations for the Route 7 (Leesburg Pike) Corridor. The Board endorsed the preferred project alternative, which includes route alignment and station locations, between the West Falls Church and Spring Hill Metrorail Stations. Concurrently, the Board authorized Plan Amendment (PA) 2021-CW-T1 to consider incorporating the recommendations from the preferred alternative into the Comprehensive Plan. The Plan Amendment authorization directed staff to consider:

> "[…] an amendment to the Comprehensive Plan to include recommendations of the preferred alignment and associated potential stations of the Route 7 BRT Study. The plan amendment will include: (a) Defining the two additional lanes along Route 7 recommended in the current Comprehensive Plan (from I-66 to International Drive) for exclusive use by median-running BRT; (b) Repurposing two existing lanes along International Drive (from Route 7 to Lincoln Circle) for exclusive median-running BRT; (c) Defining the BRT route from the West Falls Church Metrorail Station to Tysons along Route 7 (from 1-66) to Spring Hill Metrorail Station (via International Drive); and (d) potential station locations along this segment of the BRT route."

The current Comprehensive Plan recommends six (6) travel lanes on Route 7, between I-66 and I-495, and eight (8) lanes, between I-495 and the Dulles Toll Road. This would require widening the roadway in both cases. Recommendations from the County's BRT Study include re-allocating the additional planned lanes, from I-66 to International Drive, to be exclusive, median-running BRT.

Study recommendations also include the re-purposing of two (2) existing lanes on International Drive, from Route 7 to Lincoln Circle, for exclusive, median-running BRT. The recommended BRT route accesses the Spring Hill Metrorail Station via mixed traffic on Spring Hill Road and returns to International Drive via Business Access and Transit (BAT) lanes on Tyco Road.

The above recommendations define the Route 7 BRT routing, from the West Falls Metrorail Station to the Spring Hill Metrorail Station. This route alignment can be viewed, along with recommended BRT station locations, in **Figure 1**. Certain features of **Figure 1**, such as the addition of the George Marshall Station and the two potential alignments to West Falls Church Metrorail Station were added later to the map, so no walksheds are shown for those stations, but the walksheds would be expected to be similar to those shown (about a half-mile).The Plan Amendment proposed to update the Fairfax County Transportation Plan Map, including the BRT alignment and cross sections within the Tysons section of the Comprehensive Plan.

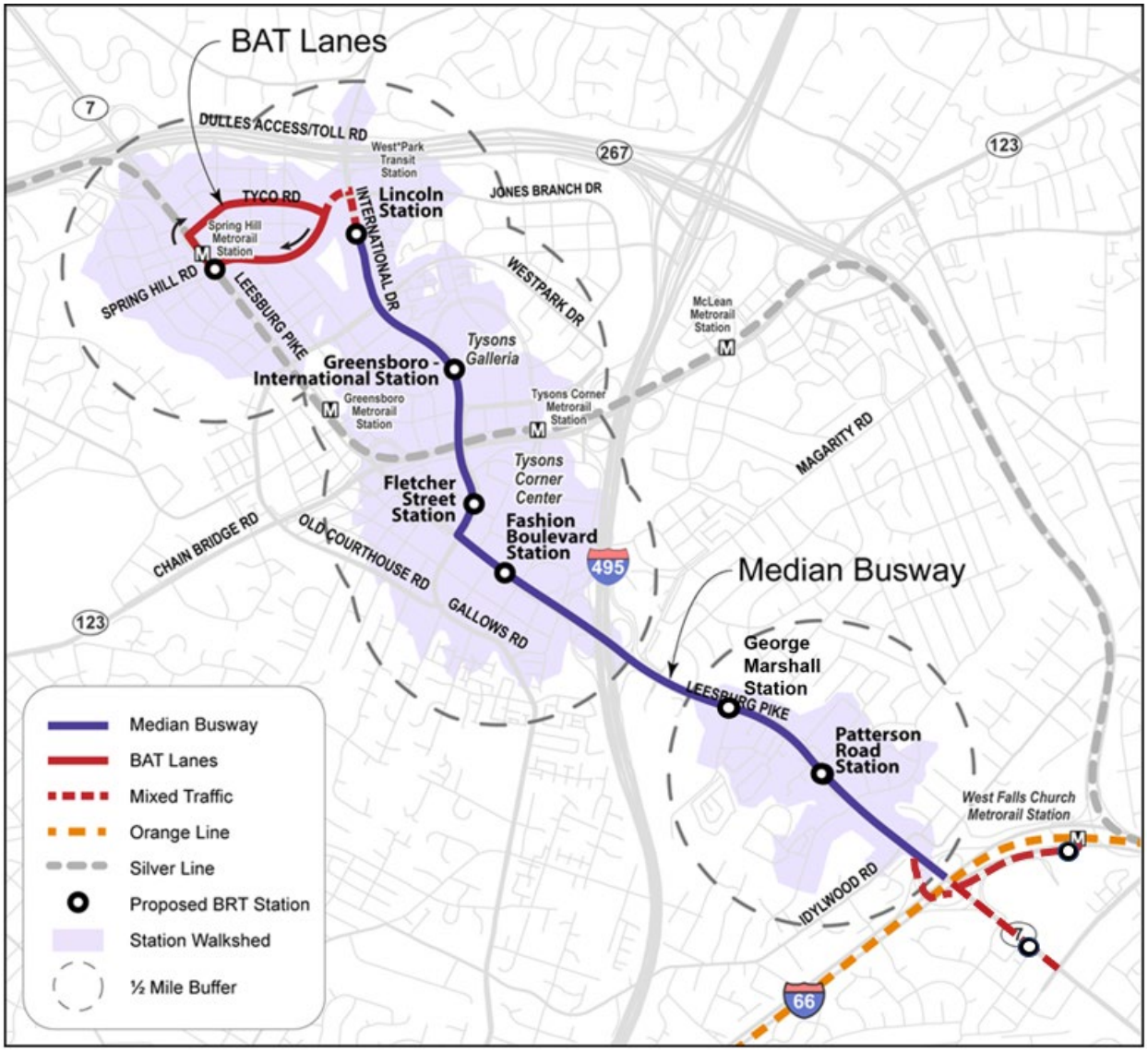


Figure 1: Route 7 BRT preferred route alignment and proposed stations

PLANNING HISTORY

In 2013, the Northern Virginia Transportation Commission (NVTC) commenced Envision Route 7, a multimodal study of the Route 7 (Leesburg Pike) corridor from the Mark Center in the City of Alexandria, through Baileys Crossroads, Seven Corners, the City of Falls Church, and Arlington County, to the Tysons Urban Center.

The purpose of the NVTC study was to evaluate how transit improvements within the Route 7 corridor would help alleviate transportation issues, by improving mobility, reducing vehicle and transit congestion, and providing greater access to existing and planned activity centers both

inside and in the vicinity of the study corridor. The Envision Route 7 study has been conducted in phases, each of which is summarized below:

Phase I of the NVTC Envision Route 7 Study (Fall 2012 – Fall 2013) assessed existing issues and identified the potential transit opportunities that could be leveraged to improve mobility and accessibility within the Route 7 corridor.

Phase II (Winter 2015 – Spring 2016) found that BRT along Route 7, from the Mark Center to Tysons, via the East Falls Church Metrorail Station, would be a viable transit solution for the corridor, providing added connectivity and multimodal choices. The key activities of Phase II included estimating the potential demand and ridership, determining possible funding mechanisms and strategies, and providing high-level estimates for both capital and operating costs. BRT was found to potentially upgrade transit quality, connect major job centers, connect multiple Metrorail Stations, along the Orange and Silver Line corridors, reduce greenhouse gas emissions compared to other modes, increase pedestrian access to transit, and potentially serve more than 7,500 transit-dependent riders each weekday along the corridor.

Phase III (Summer 2018 – Fall 2019) included a conceptual engineering study to help refine the project costs, identify potential areas of concern, develop a potential staging strategy, and provide guidance on preserving the required rights-of-way. Rights-of-way that could be utilized by the BRT were identified and the affected jurisdictions were provided guidance in each of their subareas and sector planning.

Following completion of Phase III, Fairfax County initiated its Route 7 - Tysons BRT Study in 2018 (completed in Fall 2021) to determine how to best integrate the BRT within the northern portion of the corridor, from the West Falls Church Metrorail Station through the Tysons Urban Center to the Spring Hill Metrorail Station.

Phase IV of the NVTC Envision Route 7 Study (ongoing) will evaluate and determine the mobility benefits and impacts resulting from the proposed BRT, from I-66 south to Seven Corners. Fairfax County's Route 7 BRT Study already completed transportation analysis and recommendations from I-66 north to the Spring Hill Metrorail Station and were incorporated into this phase. Future analysis (Phase IV-Part 2) will examine the segment from Seven Corners to the Mark Center (timeframe to be determined). A comprehensive plan amendment may be needed in the future to identify the mode and stop locations from Seven Corners to the Mark Center.

Additional information on the NVTC study is available at:
https://novatransit.org/programs/route7/.

The County's Route 7 – Tysons BRT Study developed a series of alternatives that were evaluated to assess BRT routing, alignment, station locations, and platform configurations, while also evaluating lane usage and cross sections. After obtaining public feedback in a series of community meetings throughout the study, a preferred alternative was ultimately selected as previously shown in **Figure 1**.

Key feedback that was received at the public meetings included the need for frequent bus headways, that the proposed BRT stops should be at highly desired destinations (such as Tysons Corner Mall and Tysons Galleria), that most would use the BRT for getting to/from work and leisure, and that Alternative 1 (preferred alternative) was the most appealing choice for the BRT system within Tysons.

The Board-endorsed preferred alternative was established through an extensive study of the Route 7 BRT in Tysons, which included several rounds of public outreach in Spring 2021 and an associated online survey. Participants in the outreach, which included a significant number of existing bus riders, prioritized bus frequency, speed, and reliability, each of which would be improved with BRT. Feedback received also supported a BRT alignment and stations along International Drive, and approximately half of the participants indicated that they might change their travel behaviors if BRT along Route 7 and International Drive was implemented.

Based on this public input, an updated set of long-term transportation recommendations was developed, representing the preferred alternative, along with current transportation models, tools, and data. FCDOT has also scheduled two virtual community meetings for this June (June 7, 2023, and June 8, 2023), prior to public hearings, to gather additional input from the public and to reaffirm the Board-endorsed recommendations.

The County's Route 7 BRT Study recommended that the preferred alternative for BRT along the studied segment of Route 7 be implemented in designated, median-running BRT lanes from I-66 to just south of the International Drive and Spring Hill Road intersection. The BRT would then use Business Access and Transit (BAT) lanes along the northern portion of Spring Hill Road to Route 7 and continue in BAT lanes along the southern portion of Tyco Road to Spring Hill Road. BRT station locations along the corridor were selected based on proximity to population, households, employment centers, and other attractions along the preferred alignment, and based on the 2045 land use forecast. Considerations for proposed stations included ease of transfer to other existing and future bus routes, as well as existing and future planned development along the corridor. The George Marshall station was included at the request of Providence District Supervisor Palchik when the preferred BRT alternative was presented to the Board of Supervisors and ultimately endorsed. The inclusion was due to the proximity of the George Marshall High School and planned development of townhouses and apartments within the area.

Information about the County's Route 7 BRT Study can be found at:
https://www.fairfaxcounty.gov/transportation/study/route7-brt.

CHARACTER OF THE CORRIDORS AND AREA

Route 7 is a principal arterial roadway which extends across the county, from the City of Alexandria to the east to Loudoun County to the west. The portion of Route 7 that pertains to this plan amendment is the section between its interchange with I-66 and International Drive. As previously described, the selected BRT route also includes portions of International Drive, Spring Hill Road, and Tyco Road. For the purpose of describing the existing and planned character of the corridor, the overall route will be divided into individual segments.

Segment 1 consists of Route 7 between Haycock Road and I-66, which traverses a mix of townhouses and business complexes on the southern side and the redevelopment of the Meridian Hill High School which is planned for high density mixed-use development.

This portion of roadway, as shown in **Figure 2,** currently consists of four lanes, with additional turn and merge lanes where necessary. The surrounding area is planned and developed with medium intensity residential uses, with a variety of neighborhood-serving commercial, office, and institutional uses, including West Metro Plaza, the planned West Falls Church redevelopment site (planned for high density mixed-use) and Mary Ellen Henderson Middle School.

Figure 2: Route 7 (four lanes), between Haycock Road and I-66 Interchange

Segment 2 consists of Route 7 between I-66 and I-495, which traverses stable suburban neighborhood areas including Pimmit Hills. This section of Route 7 is the boundary between the J10 Jefferson North Planning Sector of the Jefferson Planning District to the south, and the Pimmit M2 Planning Sector of the McLean Planning District to the north and enters the Tysons Urban Center at its western end.

This portion of roadway, as shown in **Figure 3**, currently consists of four lanes, with additional turn and merge lanes where necessary. The surrounding area is planned and developed with low to medium intensity residential uses, with a variety of neighborhood-serving commercial, office, and institutional uses, including Idylwood Plaza, Tysons Station shopping center and George Marshall High School.

Figure 3: Route 7 (four lanes), between Patterson Road and Dominion Drive

Segment 3 consists of Route 7 from I-495 to International Drive, which is located within the southern portion of the Tysons Urban Center. This section of Route 7 forms the boundary between the Tysons Central 123 District to the north, which is planned for higher-intensity, high-rise transit-oriented development (TOD), and the Old Courthouse District to the south, which is planned for lower-intensity non-TOD development serving as a transition to neighboring communities. Route 7 is ultimately planned as a pedestrian-friendly, tree-lined boulevard with connectivity between the two districts.

This portion of the roadway, as shown in **Figure 4**, is currently six-lanes in width, with additional turn and merge lanes and service drives in many locations. Existing uses along the corridor primarily consist of older commercial, office, retail, and hotel use.

Figure 4: Route 7 (six lanes), west of I-495 to Route 7 off-ramp

Segment 4 includes International Drive, from Route 7 to Spring Hill Road, which is an arterial roadway that runs north-south through Tysons. It traverses the Tysons Central 123 and Tysons Central 7 Districts, which are planned for high-intensity TOD, and the North Central District, which is a Non-TOD district planned for office uses and mixed-use residential neighborhoods.

The existing roadway, as shown in **Figure 5,** consists of four to six lanes, with additional turn lanes. Current uses along the corridor consist of commercial, retail, and some mixed-use (residential and retail) uses, including Tysons Corner Center, Tysons Galleria, and Tysons Square.

Figure 5: International Drive (six lanes), northbound at the Tysons One Place intersection

Segment 5 consists of Spring Hill Road, which is an arterial roadway that runs east-west from International Drive back to Route 7. It is located within the Tysons West District of the Tysons Urban Center, which is planned for high-intensity TOD associated with a pedestrian-oriented arts and entertainment district around the Spring Hill Metrorail Station.

The existing roadway, as shown in **Figure 6**, consists of four lanes, with additional turn lanes. Current uses include a variety of office, commercial, retail, and residential uses. There is a retaining wall on the right to protect from erosion.

Figure 6: Spring Hill Road (four lanes), eastbound to International Drive

Segment 6 consists of Tyco Road, which is also a four-lane arterial roadway located in the Tysons West District, running east-west from Spring Hill Road to Route 7.

The existing roadway, as shown in **Figure 7**, consists of four lanes with surrounding office, commercial, retail, and residential uses.

Figure 7: Tyco Road (four lanes), eastbound to Spring Hill Road

ADOPTED COMPREHENSIVE PLAN

The Fairfax County Comprehensive Plan Transportation Plan Map depicts long term transportation recommendations within Fairfax County. Planned transportation infrastructure recommendations are also reflected in the detail maps included in the Comprehensive Plan's Area Plan volumes.

The Fairfax County Comprehensive Plan Transportation Plan map for this area are shown below in **Figure 8** and can be referenced when reviewing Transportation Plan map figures within the following sections of this Staff Report. For the legend and notes, the full Transportation Plan Map can be found here: https://www.fairfaxcounty.gov/transportation/sites/transportation/files/assets/documents/transportation_plan_map.pdf

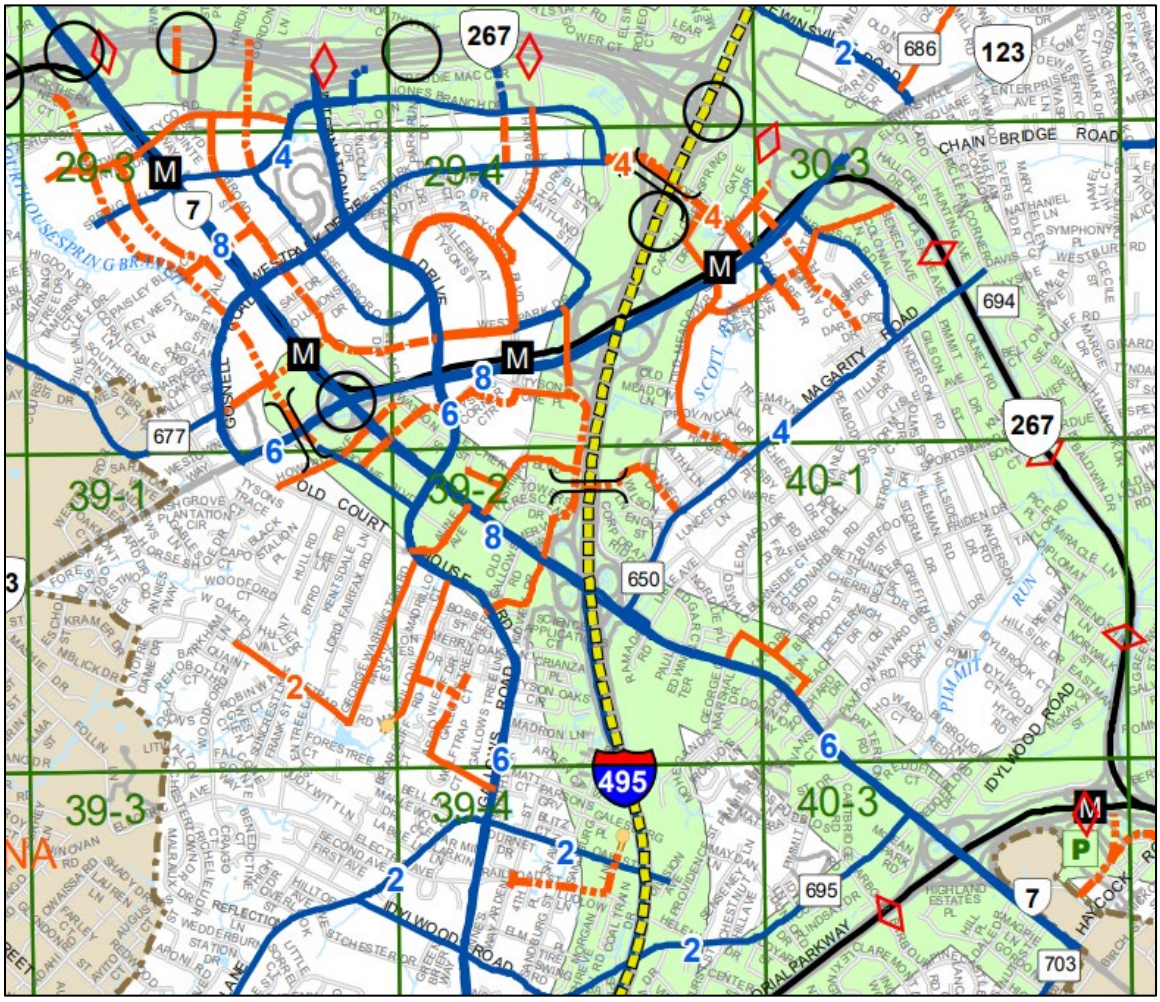


Figure 8: Fairfax County Comprehensive Plan Transportation Plan Map

Fairfax County's adopted Comprehensive Plan includes recommendations for increased capacity on Route 7, from the Tysons Urban Center to the City of Falls Church, including up to 8 lanes west of I-495, and 6 lanes east of I-495. In addition, the Plan designates this section of Route 7 as an Enhanced Public Transportation Corridor (EPTC), indicating a major public transportation facility should be provided following appropriate outreach and analysis of alternatives. The County's BRT Study looked to balance the need for additional capacity with the benefits of making the corridor more multimodal.

Route 7 (*West Falls Church Metrorail Station to I-495)*

As shown in **Figure 8**, the current Comprehensive Plan Transportation Plan Map includes the following long term transportation recommendations for Route 7, from West Falls Church Metrorail Station to I-495:

Recommendations:

- Enhanced Public Transportation Corridor designation
- Widen to 6 lanes, from I-66 to I-495

Route 7 *(I-495 to International Drive)*

As shown in **Figure 8**, the current Comprehensive Plan Transportation Plan Map includes the following long-term transportation recommendations for Route 7, from I-495 to International Drive. **Figure 9** shows the adopted Comprehensive Plan cross-section for a Boulevard.

Recommendations:

- Enhanced Public Transportation Corridor designation
- Widen to 8 lanes, from I-495 to International Drive

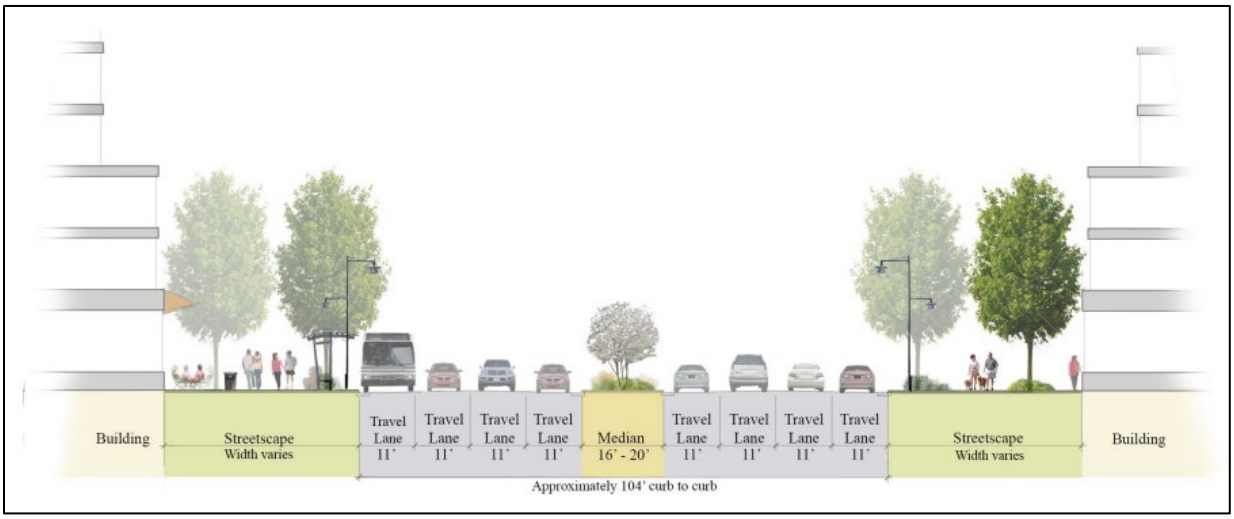


Figure 9: Boulevard Section with landscaped Median

International Drive *(Route 7 to Spring Hill Road)*

As shown in **Figure 8**, the current Comprehensive Plan Transportation Plan Map includes the following long-term transportation recommendations for International Drive, from Route 7 to Spring Hill Road. **Figure 10** shows the adopted Comprehensive Plan cross-section for an Avenue.

Recommendations:

- Widen to 6 lanes, from Route 7 to Route 123
- No improvements from Route 123 to Spring Hill Road

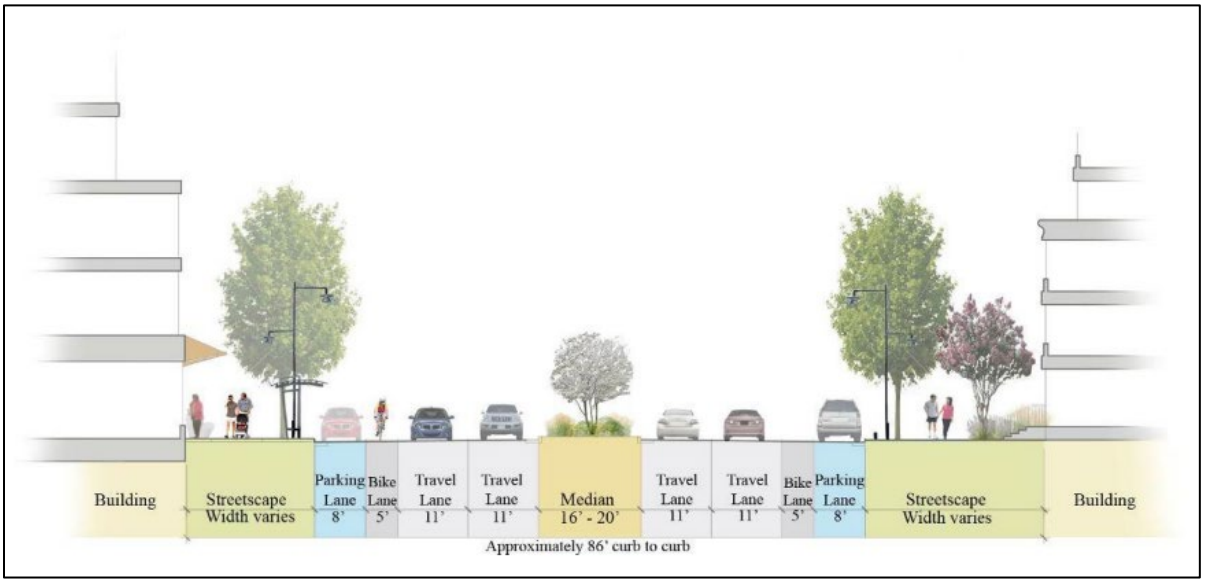


Figure 10: Avenue section with landscaped median

Spring Hill Road *(International Drive to Route 7)*

As shown in **Figure 8**, the current Comprehensive Plan Transportation Plan map includes the below long-term transportation recommendations for Spring Hill Road, from International Drive to Route 7. **Figure 11** shows the adopted Comprehensive Plan cross-section for a Collector.

Recommendations:

- Widen to 4 lanes, from International Drive to Route 7

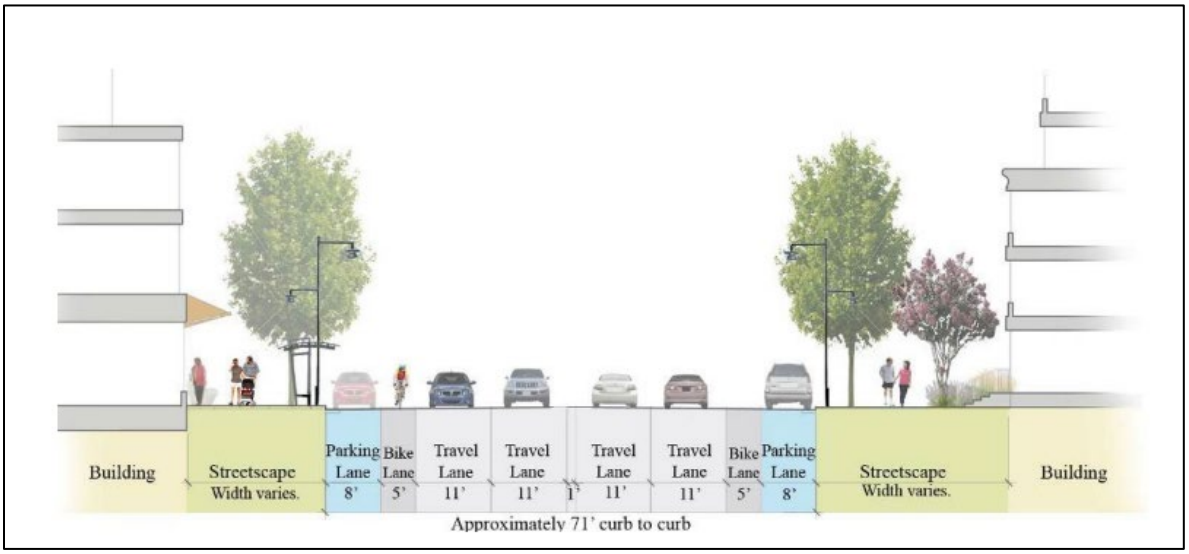


Figure 11: Collector Street section with two travel lanes in each direction and no median

Tyco Road (*Route 7 to Spring Hill Road)*

As shown in **Figure 8**, the current Comprehensive Plan Transportation Plan map shows that there are currently no transportation improvement plans for Tyco Road.

PROPOSED PLAN AMENDMENT

The proposed Plan amendment would incorporate the Board-endorsed recommendations for BRT from the preferred alternative described in the Route 7 – Tysons BRT study, between the West Falls Church and Spring Hill Metrorail Stations, into the Transportation Plan Map and Area Plan Transportation maps, with Plan text modifications, as necessary. The recommendations section provides details on the specific plan changes.

These recommendations are summarized below and shown in **Figure 12**.

- Maintain Enhanced Public Transit Corridor designation
- Widen Route 7 (from I-66 to I-495) from 4 lanes to 6 lanes, with lane 5 and 6 designated for exclusive BRT
- Widen Route 7 (from I-495 to International Drive) from 6 lanes to 8 lanes with lane 7 and 8 designated for exclusive BRT
- Repurpose International Drive (from Route 7 to Lincoln Circle Drive) from 6 lanes to 4 lanes with 2 existing lanes for exclusive BRT
- Build Business Access and Transit lane on Spring Hill Road (from Tyco Road to Route 7) on northern side
- Build Business Access and Transit lane on Tyco Road (from Route 7 to Spring Hill Road) lane on southern side
- Add locations of proposed BRT station locations along BRT corridor in the general locations as depicted in the maps below.
- Include an interim/optional BRT alignment connecting Route 7 to, and terminating at, West Falls Church Metrorail Station. The interim alignment would be implemented until the southern section of the Route 7 BRT system (south of West Falls Church to the Mark Center in Alexandria) is completed, allowing the northern section to operate independently in the time being.

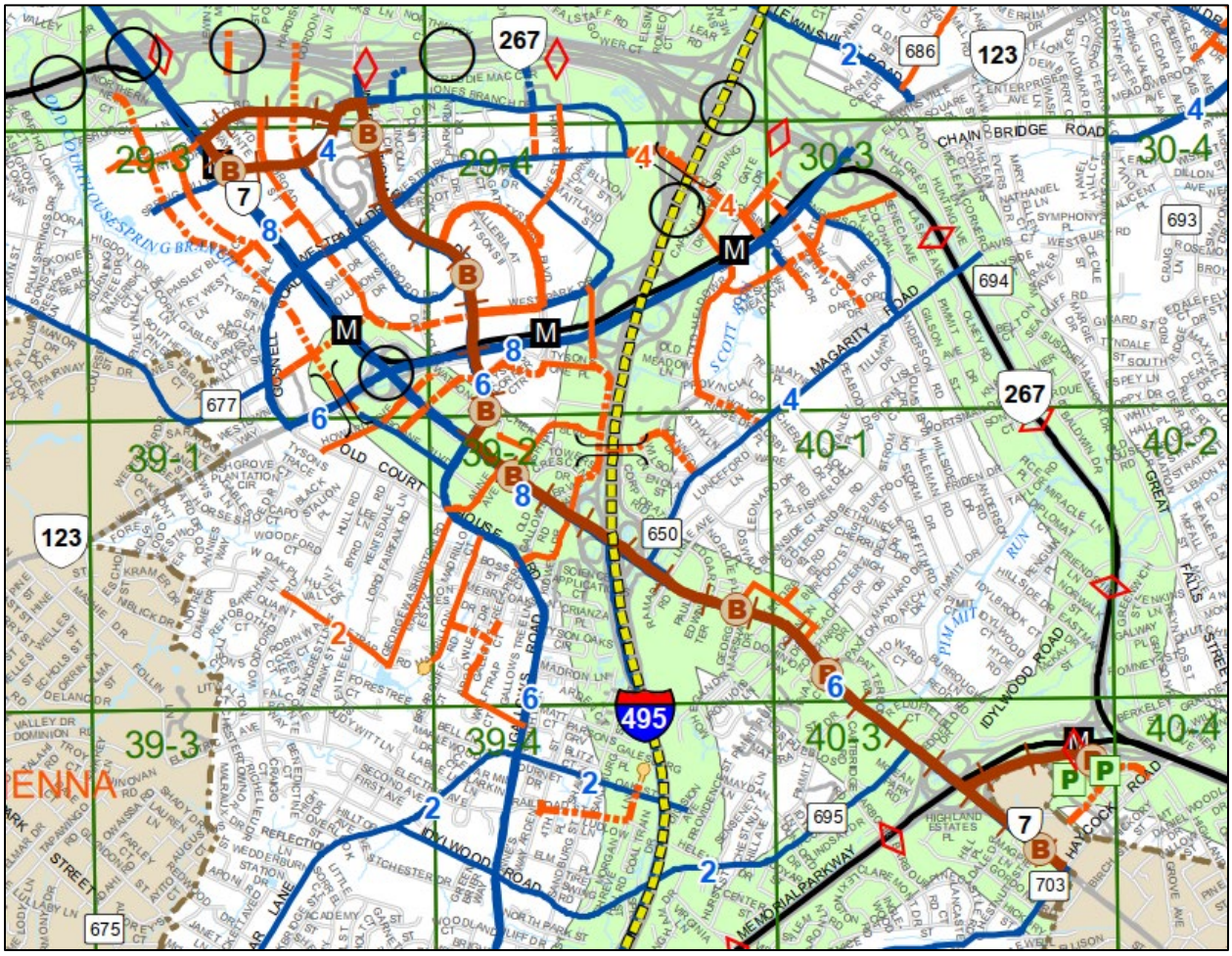


Figure 12: Proposed Transportation Plan Map Improvements for Route 7 BRT

This Plan Amendment is only considering changes to the Comprehensive Plan regarding BRT in the northern section of the Route 7 BRT system. Fairfax County will ultimately evaluate the Route 7 BRT system in the Seven Corners and Baileys Crossroads section of the County at a later date in coordination with NVTC, VDOT, other local jurisdictions, and ultimately the public

ANALYSIS

Transportation

Fairfax County Department of Transportation (FCDOT) initiated the Route 7 - Tysons BRT Study in 2018 to develop and evaluate BRT alternatives on Route 7 in Tysons. The study was built on work conducted by the Northern Virginia Transportation Commission (NVTC), which explored transit alternatives on Route 7 between Mark Center in Alexandria and Tysons. The Route 7 BRT study follows up on that Envision Route 7 study by reviewing route alignment and street cross-section alternatives as well as station locations and platform configurations. The study area encompasses the Tysons Urban Center with its four Washington Metropolitan Area Transit Authority (WMATA) Silver Line Metrorail stations and stretches southeast on Route 7 to the I-66 interchange.

Staff undertook a multi-step, data-driven process to ensure that the BRT alternatives considered and selected fit within the project goals. The process began by determining goals and objectives for the Study, utilizing a review of previous studies, and working with stakeholders to develop accompanying measures of effectiveness (MOEs) for both transit and roadway users.

The Goals and Objectives were determined to be:

- **Access and Mobility:** Provide choices through accessible transit service
- **Mode Share/Efficiency:** Increase transit usage and reduce Single Occupancy Vehicle (SOV) usage to ensure efficient movement of people and goods
- **Land Use/Economic Vitality:** Support economic development and land use goals
- **Equity:** Meet the needs of all users- residents, workers, visitors, and disadvantaged populations
- **Safety:** Improve safety for all users and the public
- **Environmental Concerns:** Minimize environmental impacts and improve air quality
- **Financial Feasibility:** Make sustainable, cost-effective investments in transit

Measures of effectiveness were used to evaluate potential alignments and station location options, and included but were not limited to:

- Population and employment (within ½ mile)
- Bus ridership, travel speed, and reliability
- Number of new transit riders
- Pedestrian delay and crossing times at key intersections
- Vehicle miles traveled (VMT)
- Area of land required (property impact)
- Automobile travel time, intersection level of service
- Project cost

The project team, comprised of FCDOT and VDOT staff, developed nine alternatives in the assessment phase which stakeholders qualitatively reduced to three final alternatives, as shown in **Figure 13.** All three alternatives include BRT on Route 7, from West Falls Church Metrorail Station to International Drive. The alternatives differ within Tysons with Alternative 1 utilizing International Drive, Spring Hill Road and Tyco Road to connect with the West Park Transit Station and Spring Hill Metrorail Station. Alternative 2 utilizes International Drive and Chain Bridge Road to connect with the Tysons Corner Center Metrorail Station. Alternative 3 keeps the BRT on Route 7 all the way to Spring Hill Metrorail Station, with an additional connection to the West Park Transit Station.

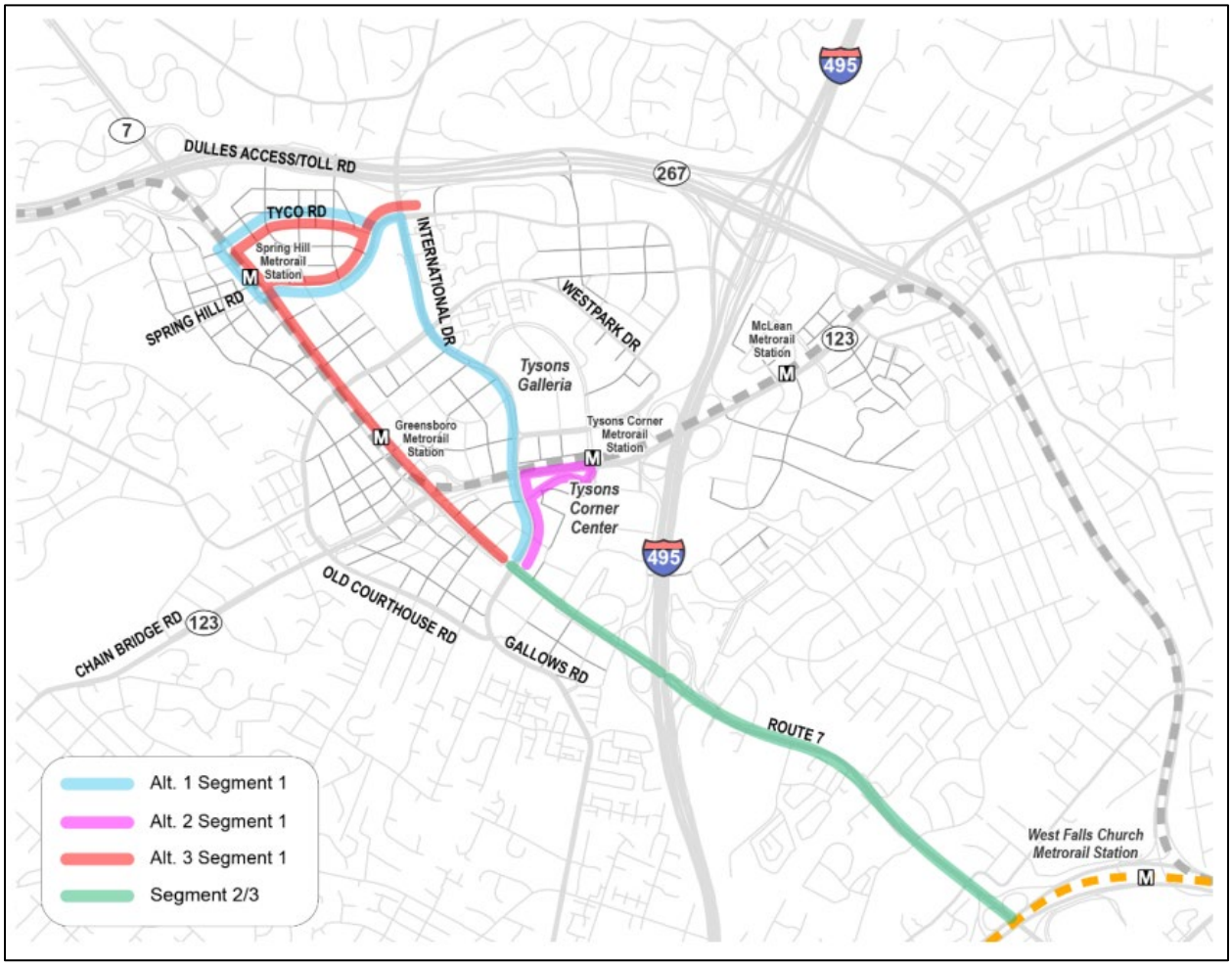


Figure 13: County BRT Study – Alternatives

In the evaluation phase, the project team and stakeholders quantitatively examined these three final alternatives and a no-build baseline scenario, utilizing demographic analysis and modeling tools. This analysis highlighted advantages, disadvantages, and trade-offs for each alternative.

FCDOT assessed the final three alternatives, based on the established Study goals and objectives, and refined them for evaluation, which included detailed transit and traffic operations analysis in coordination with stakeholders and other agencies, including the Virginia Department of Transportation (VDOT) and NVTC. The study team collected data, such as traffic counts for the corridor, and conducted the existing and future no-build conditions baseline analysis. Finally, the refined alternatives were evaluated for 2045 conditions. The project team, based upon the comparative analysis of the alternatives with the input of stakeholders and the public, selected Alternative 1 (Spring Hill Metro to I-66, via International Drive) and the Board endorsed Alternative 1 on July 27, 2021. Alternative 1 was preferred since it serviced the most households, employment centers, and population in general. It also traversed the center of Tysons which would help to expand the transit network within Tysons connecting to two Metrorail Stations (West Falls Church and Spring Hill) as well as having a station in close proximity to the West*Park Transit Station for transfer to local bus service routes in the County. The route also had the least impact on traffic congestion within Tysons in the future forecast year (2045) and on

pedestrian crossing times along the route (due to its being in a median runningway and offering pedestrian refuge areas at proposed BRT station locations).

FCDOT is currently evaluating the right-of-way impacts the proposed changes would have along the corridor. Bicycle and pedestrian facilities, as recommended and outlined in the Tysons Design Guide, are being evaluated and included with this effort.

Land Use

There are no proposed changes to planned land uses with this proposed Plan amendment; however, integrating the specifics of the BRT planning into the adopted Comprehensive Plan enables further implementation of adopted land use recommendations. The Tysons Plan links the phasing of its land use recommendations to the provision of transportation infrastructure, encouraging an integrated transportation and land-use concept that attracts mixed-use TOD and private investment to the transit connection locations. The adopted recommendations for the West Falls Church TSA also expect a high-quality transit system along the Route 7 corridor, relying on an integrated multi-modal transit system to enable increased access to the Metrorail station. The recommended amendments to the Plan provide the essential details regarding BRT routing, design, and station locations that are necessary to facilitate further development and investment in support of the system and overall land use goals for those areas.

The Metropolitan Washington Council of Governments Cooperative Land Use Forecast, Round 9.1, which includes population, household, and employment forecasts through the year 2045, was applied universally for all scenarios and alternatives evaluated to derive the proposed station locations along the route where demand was shown to be highest. The recommendations in the currently adopted Comprehensive Plan were included, including the widening of Route 7 from the I-66 interchange to International Drive as well as the designation of Route 7 as an Enhanced Public Transit Corridor (EPTC).

Water Quality and Stormwater Management

The Department of Public Works and Environmental Services (DPWES) provided preliminary comments for the proposed BRT alignment during the review of the Route 7 BRT Study, with the understanding that storm water management would be analyzed later in the design phase of the Route 7 BRT project. Their comments stated at a high level that the potential road widening of Route 7 from I-66 to International Drive to accommodate the median busway would impact some existing RPAs and floodplains. RPAs and/or floodplains are currently mapped at the Pimmit Drive intersection and at 7854 Leesburg Pike. A floodplain is also present on Westpark Drive, approximately 130 feet east from its intersection with International Drive. Any proposed disturbance (direct or upstream) along these roadways should be identified and minimized to the greatest extent feasible, and restoration of these areas completed in accordance with Chapter 118, if applicable.

Heritage Resources

The Department of Planning and Development Heritage Resources staff found that there were no County Historic Overlay Districts, County Inventory of Historic Sites, or historic cemeteries potentially affected by the proposed project. According to Virginia Department of Historic Resources (SHPO) records, Tyson's Corner Mall, located at 1961 Chain Bridge Road, was recommended eligible for the National Register of Historic Places under Criteria A and B by a consultant in a 2019 Phase I/Reconnaissance level survey. It has not been evaluated by staff.

CONCLUSION

Based on the results of the outreach and alternatives analysis, as part of the Route 7 BRT Study, a new, updated set of long-term transportation recommendations was developed and endorsed by the Board on July 27, 2021. The following recommendations are planned to be incorporated into the Comprehensive Plan.

RECOMMENDATION

Staff recommends the Comprehensive Plan be modified as shown below. Text proposed to be added is shown as underlined and text proposed to be deleted is shown with a ~~strikethrough~~. Text shown to be replaced is noted as such.

MODIFY: Fairfax County Comprehensive Plan, 2017 Edition, Area II, Tysons Urban Center, Amended through 2-23-2021, Areawide Recommendations: Transportation, Page 42:

"Alternatives to automobile travel, especially transit, will become increasingly important to maintain a balance between land use and transportation, ensure tolerable levels of congestion are not exceeded for long periods of time, limit negative impacts to economic activities, and create a healthier, more sustainable environment. For these reasons, alternatives to automobile travel should meet increasingly higher targets over time. To achieve this, it is essential to implement the following strategies:

- Provision of the necessary transit infrastructure and services to increase transit use over time including Bus Rapid Transit.

- Achievement of higher vehicle trip reduction levels over time through transportation demand management (TDM) programs including an increase in carpooling, telework, the application of variable working hours, and reducing the ratio of parking spaces to commercial floor area"

MODIFY: Fairfax County Comprehensive Plan, 2017 Edition, Area II, Tysons Urban Center, Amended through 2-23-2021 Areawide Recommendations: Transportation Page 50:

- "As development occurs, street network planning should be refined and updated to define alignments and establish the role of streets as more detailed planning and development occurs.

- Street networks should provide a high level of connectivity so that drivers, pedestrians and transit users can choose the most direct routes and access urban properties. Connectivity should support the desired development patterns. Street networks should provide intermodal connectivity to easily transfer between modes.

- Street network capacity, including alternative paths, and redundancy should be provided through a dense, connected network (a grid) rather than through an emphasis on high levels of vehicle capacity on individual arterial facilities. This approach ensures that the street network can support other objectives such as pedestrian activity, multimodal safety, Bus Rapid Transit, access to rail stations, and support for adjacent development."

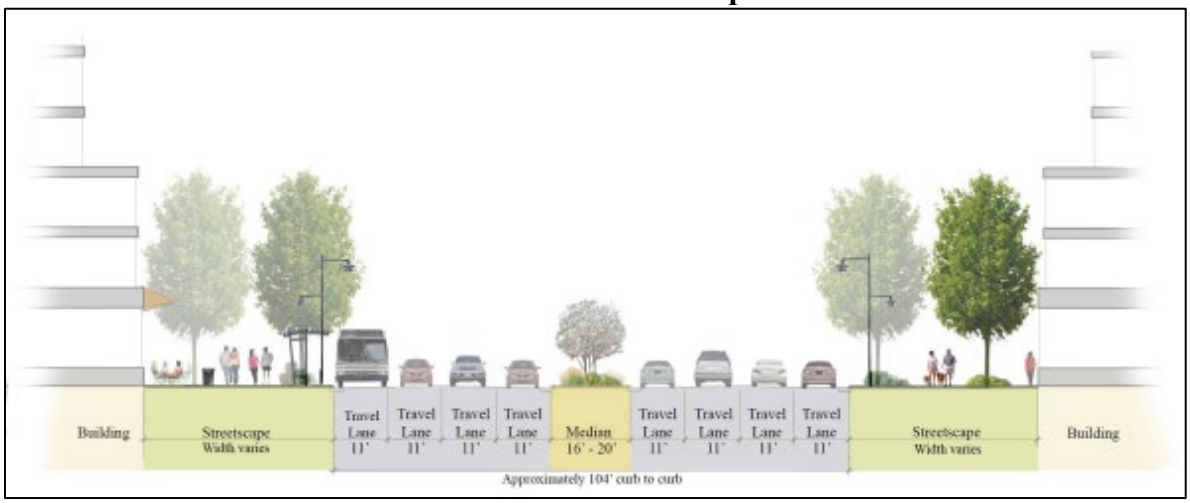
MODIFY: Fairfax County Comprehensive Plan, 2017 Edition, Area II, Tysons Urban Center, Amended through 2-23-2021 Areawide Recommendations: Transportation Pages 54-59:

"*Boulevards (Principal Arterials)*

Route 7 and Route 123 are both boulevards (principal arterials). Boulevards will be the most important multi-modal connectors and thoroughfares within Tysons. In addition to carrying the largest volume of automobile traffic, they also have the ability to accommodate the Metrorail, circulator, bus, bicycle, and pedestrian modes within their rights-of-way.

Boulevards may have three to four travel lanes in each direction. Medians are necessary to provide a pedestrian refuge, rights-of-way for turn lanes and/or to accommodate Metrorail or bus rapid transit (BRT) on portions of Leesburg Pike and Chain Bridge Road/Dolley Madison Boulevard. In addition, boulevards will have wide sidewalks with street trees on each side. Some portions of boulevards may include shared or dedicated lanes for the Circulator System.

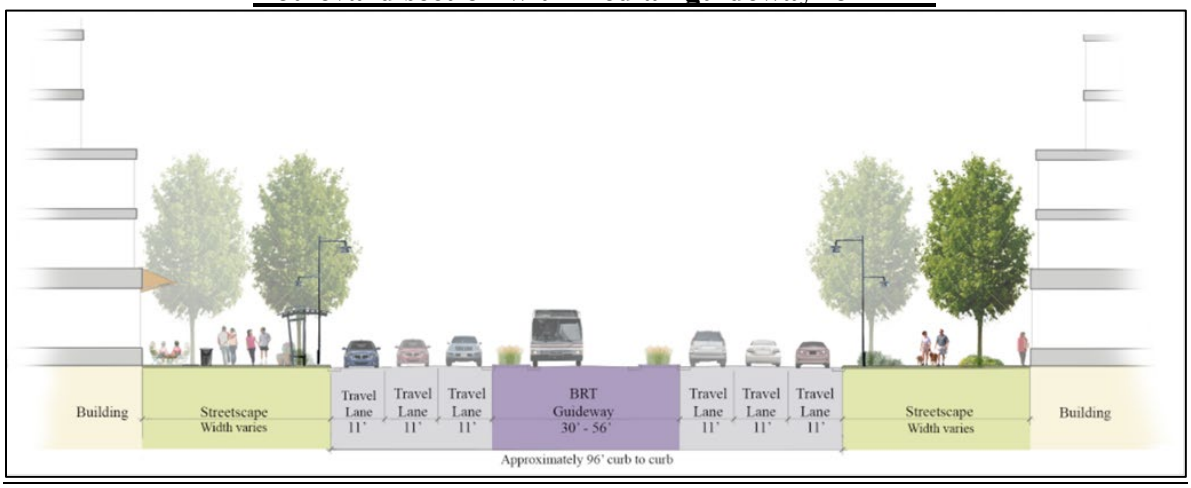
Figure 1
Boulevard section with landscaped median



ADD: Fairfax County Comprehensive Plan, 2017 Edition Area II Tysons Urban Center, Amended through 2-23-2021 Areawide Recommendations: Transportation Page 55:

"Figure 1B

Boulevard section with median guideway for BRT



Boulevard cross section dimensions:

- The desirable width of the median is 20 feet to allow safe pedestrian refuge.
- 3 to 4 lanes per direction (11 feet for each lane), including BRT lanes, where shown on the Transportation Plan Map.
- The lower range of the BRT guideway is assumed where there are no intersections, and the higher end is anticipated at intersection/station locations.
- The BRT guideway and travel lanes should be accommodated within the approximate curb-to-curb measurement"
- Refer to the Urban Design Recommendations for guidance on the streetscape.

Typical street cross sections are depicted above. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements such as Bus Rapid Transit on select corridors.

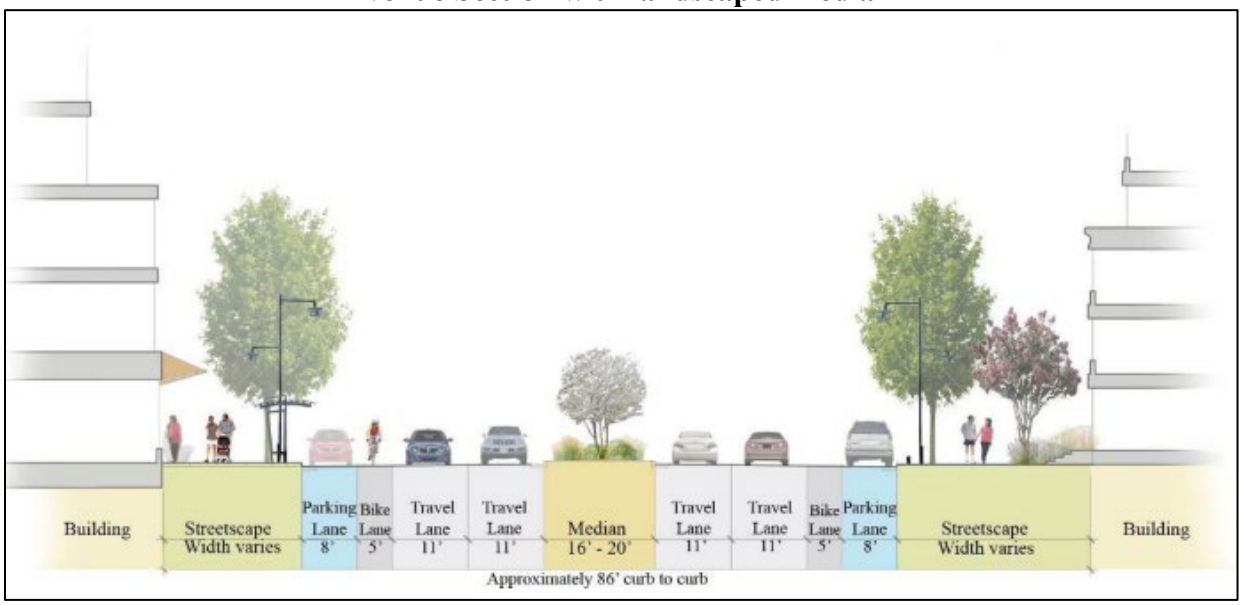
Avenues (Minor Arterials)

Boone Boulevard, Greensboro Drive, and Westpark Drive are examples of avenues. Avenues support Boulevards by providing alternative paths and diverting vehicular traffic away from them. Portions of avenues may also accommodate circulators and provide desirable addresses to new business and residential development. These streets may generally have two travel lanes in each direction, on-street parking, wide sidewalks, and bike lanes. Medians are not preferred but may be necessary depending on design, safety, operation, and capacity considerations.

Additionally, avenues extend into the interior of Tysons, connecting residential and employment

areas. Uses and character of avenues will range from transit oriented mixed use with street level retail within the station areas, to neighborhood residential within non-station areas like East Side and North Central. Many portions of the avenues could also accommodate circulators or Bus Rapid Transit on shared or dedicated lanes.

Figure 2
Avenue Section with landscaped median"



ADD: Fairfax County Comprehensive Plan, 2017 Edition Area II Tysons Urban Center, Amended through 2-23-2021 Areawide Recommendations: Transportation Page 56:

Figure 2B
Avenue section with median guideway for BRT

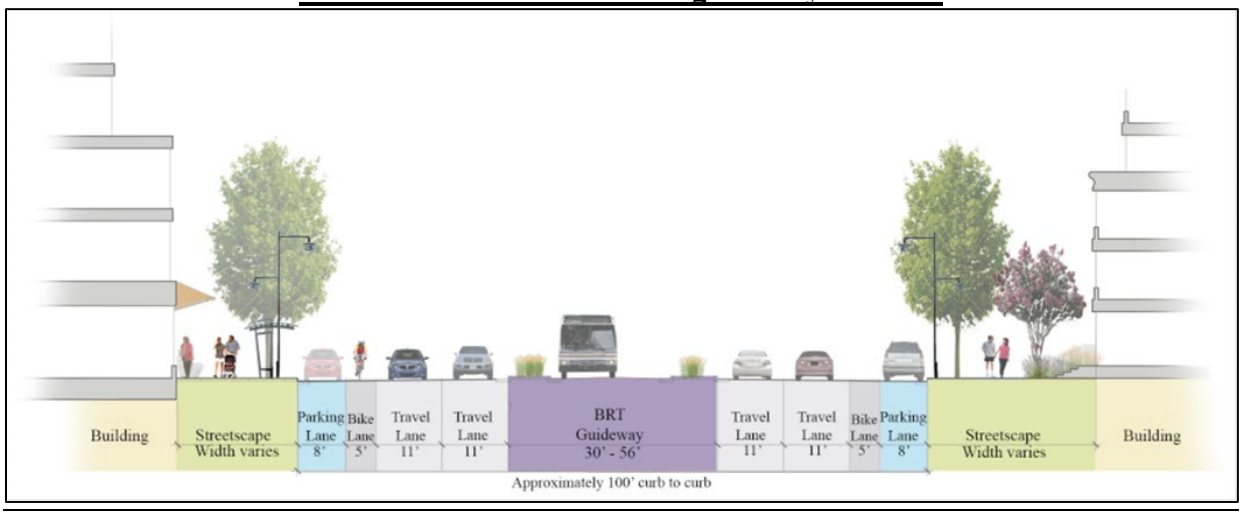
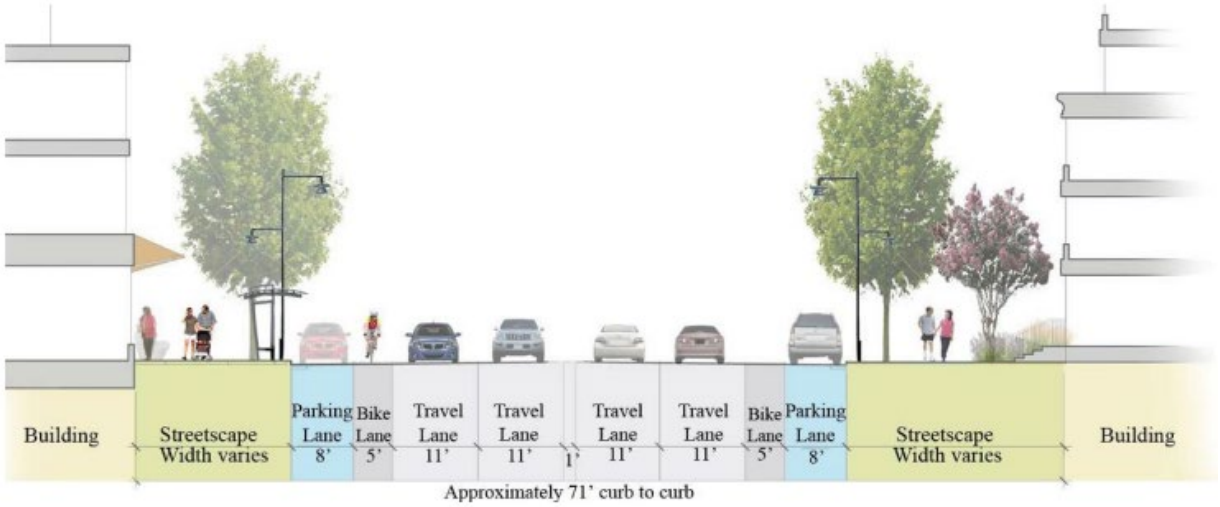


Figure 3
Avenue section with no median



Avenue cross-section dimensions:

- Accommodate Circulator, as identified in the Tysons Circulator Study, or as Tysons Circulator Study may be amended in the future.
- 2 or 3 travel lanes per direction (11 feet for each lane, 10 feet for streets that are residential in character), including BRT lanes, where shown on the Transportation Plan Map.
- The lower range of the BRT guideway is assumed where there are no intersections, and the higher end is anticipated at intersection/station locations.
- The BRT guideway and travel lanes should be accommodated within the approximate curb-to-curb measurement
- Accommodate Bus Rapid Transit, as shown on the Transportation Plan Map.
- On-street parallel parking is recommended. This parking may be prohibited during peak periods to address traffic capacity needs on some streets.
- 8 feet for on-street parallel parking per direction.
- 5 foot on-road dedicated bike lane per direction.
- The desirable width of the median, if provided, is 20 feet to allow safe pedestrian refuge.
- Refer to the Urban Design Recommendations for guidance on the streetscape.

Typical street cross sections are depicted. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements. For example, a parking lane and a bicycle lane may be combined to operate as a travel lane during peak periods in some locations.

Collector Streets (Collector)

Collector streets within Tysons will connect local streets, with slow-moving traffic, to higher speed facilities like avenues and boulevards. Collector streets typically have one or two travel lanes in each direction. They are slow-moving lanes with traffic calming elements such as bulb-outs at intersections, frequent pedestrian crossings, parallel on-street parking, bike lanes and wide sidewalks to maximize walkability. Medians are not preferred but may be necessary to provide pedestrian refuge or turn lanes.

Figure 4
Collector street section with one travel lane in each direction and no median

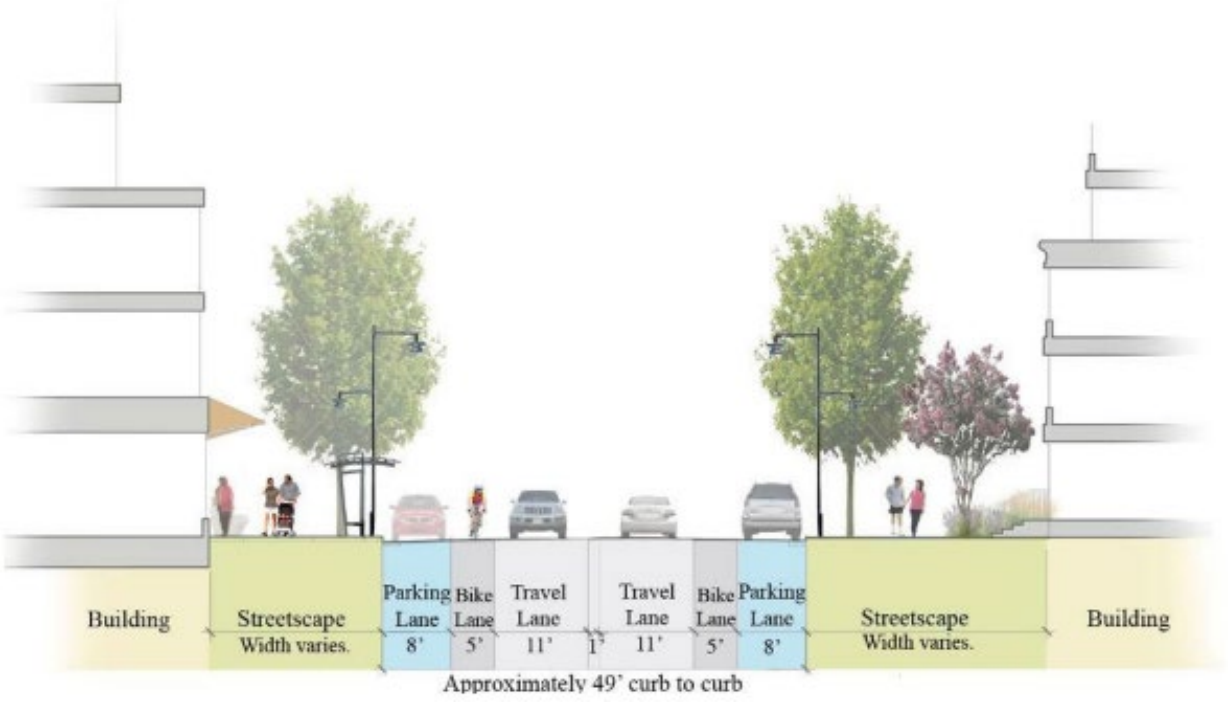
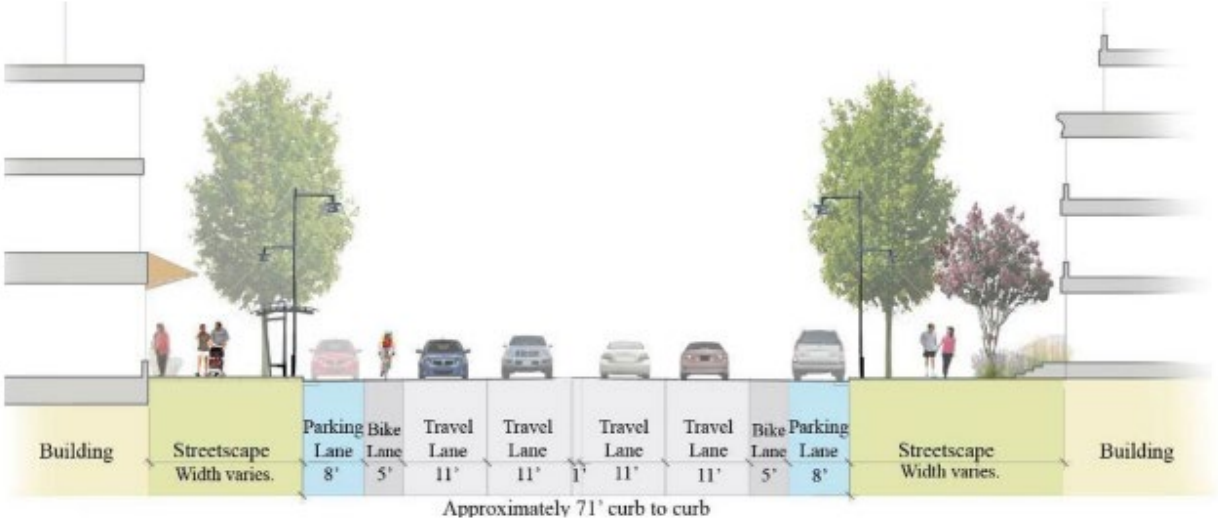


Figure 5
Collector street section with two travel lanes in each direction and no median



Collector Street cross-section dimensions:

- Accommodate Circulator, as identified in the Tysons Circulator Study, or as Tysons Circulator Study may be amended in the future.

- 1 to 2 travel lanes per direction (11 feet minimum for each lane, 10 feet for streets that are residential in character).

- 8 feet for on-street parallel parking per direction.

- 5 foot on-road dedicated bike lane per direction.

- The desirable width of the median, if provided, is 4 to 8 feet to allow safe pedestrian refuge.

- Refer to the Urban Design Recommendations for guidance on the streetscape.

- Accommodate Bus Rapid Transit, in mixed traffic, as shown on the Transportation Plan Map.

Typical street cross sections are depicted. Although dimensions are noted, final street design will require accommodation of all applicable road design infrastructure. Additionally, final street designs may vary as necessary to address other design and engineering goals and requirements, such as Bus Rapid Transit as well as individual development proposals."

MODIFY: Fairfax County Comprehensive Plan, 2017 Edition, Area II, Tysons Urban Center, Amended through 2-23-2021 Areawide Recommendations: Transportation Page 73:

"Table 7
Transportation Infrastructure, Programs, and Services, As They Relate to the Level of Development in Tysons

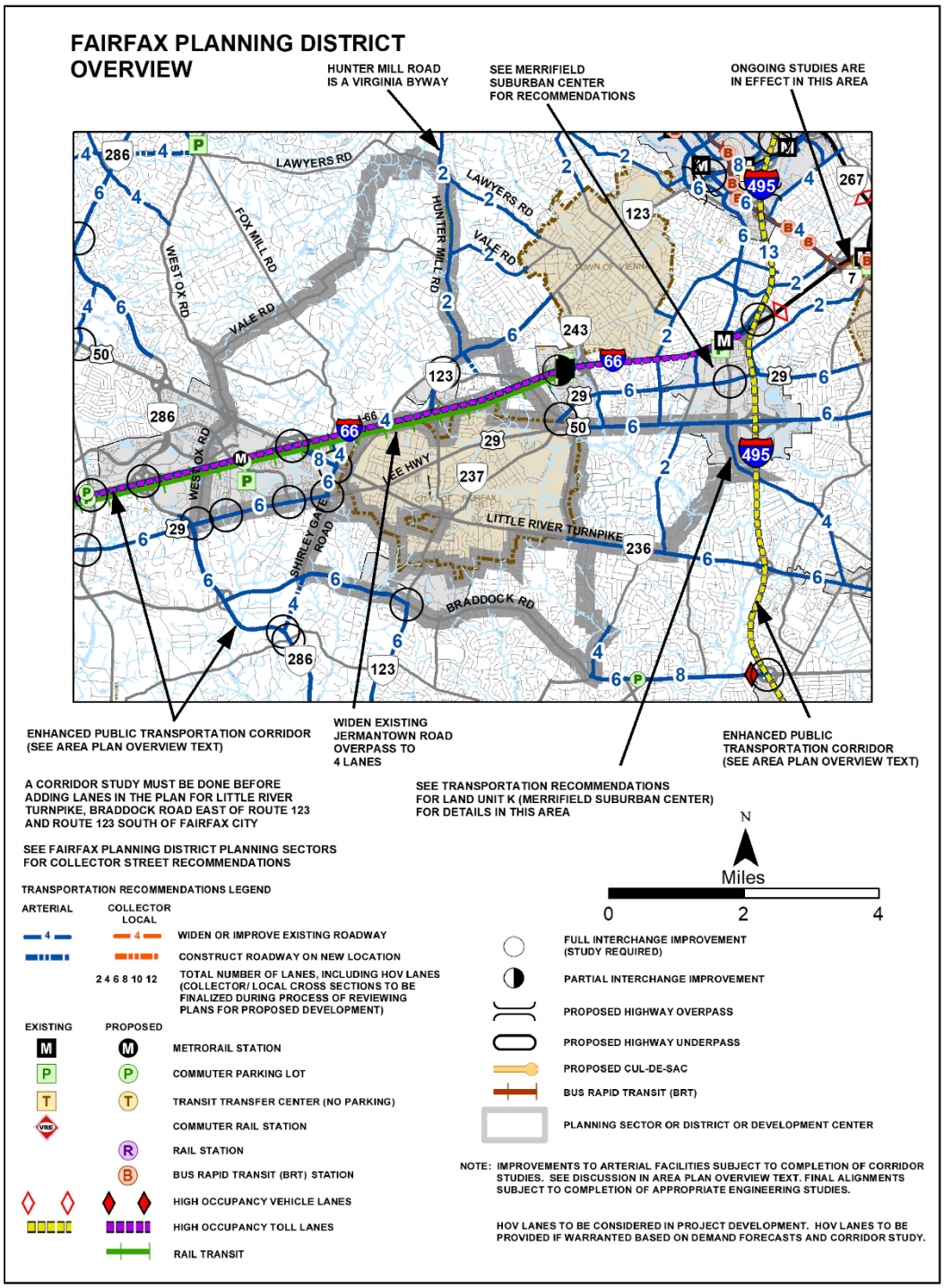
Type of Transportation Program or Infrastructure Project	Description of Transportation Program or Infrastructure Project	Area Served by Improvement
I. Transportation Improvements Completed		
A. Transit and Pedestrian Improvements		
Rail Transit Routes	Phase I of Metrorail Silver Line Phase I	Tysons-wide/ Countywide
Bus transit routes	Neighborhood bus routes; circulator bus routes serving Metrorail stations; express bus routes on I-95/I-495	Tysons-wide/ Countywide
Sidewalks	Sidewalks to provide connections to developments within walking distance of rail stations (TMSAMS and others)	District
B. Tysons-wide Road Improvements		
Roads – Arterial Widening	Complete widening of Leesburg Pike to 8 lanes between the DAAR and Chain Bridge Road	Tysons-wide
Roads – Freeway Widening	Widen I-495 from 8 to 12 lanes to provide 4 Express Lanes between the Springfield Interchange and the American Legion Bridge	Tysons-wide/ Countywide
Roads – Freeway Ramp	Express Lane ramp connecting to Jones Branch Drive	Tysons-wide
Roads – Freeway Ramp	Express Lane ramp connecting to the Westpark Drive Bridge	Tysons-wide
Roads – Freeway Ramp	Express Lane ramp connecting to Leesburg Pike	Tysons-wide
C. TDM Measures		
TDM	Application of aggressive TDM measures (e.g. 45% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District
II. Required Additional Transportation Improvements to Accommodate 60 Million sq. ft. of Development		
A. Transit Improvements		
Rail Transit Routes	Completion of Phase II of Metrorail Silver Line (from the Wiehle/Reston East Metrorail Station to west of Dulles Airport with three stations in Fairfax County)	Tysons-wide/ Countywide
Bus Transit Routes	Further improvements to neighborhood bus routes; circulator bus routes and **Bus Rapid Transit** serving Metrorail stations; express bus routes I-95/I-495 and additional express bus service on I-66.	Tysons-wide/ Countywide
B. Tysons-wide Road Improvements		
Roads – Arterial Widening	Widen Chain Bridge Road to 8 lanes between Leesburg Pike and I-495	Tysons-wide
Roads – Arterial Widening	Widen Chain Bridge Road, from 4 to 6 lanes, between Leesburg Pike and Old Courthouse Road	Tysons-wide
Roads – Arterial Widening	Widen Leesburg Pike, from 4 to 6 lanes, between I-495 and **I-66 to accommodate 2 exclusive BRT lanes**	Tysons-wide
Roads – Arterial Widening	Widen Leesburg Pike, from 6 to 8 lanes, between Chain Bridge Road and I495 **to accommodate 2 exclusive BRT lanes**	Tysons-wide
Roads – Connecting Bridge	Bridge connecting Jones Branch Drive to Scotts Crossing Road	Tysons-wide
Roads – Arterial Widening	Widen Leesburg Pike, from 4 to 6 lanes, between the DAAR and Reston Avenue	Tysons-wide
C. Grid of Streets		
Roads – Grid of Streets	Grid west of Westpark Drive	District
Roads – Grid of Streets	Grid bounded by Gosnell Rd., Leesburg Pike, and Chain Bridge Road	District
Roads – Grid of Streets	Grid connections to Greensboro Drive	District
Roads – Grid of Streets	Grid of streets east of I-495	District
D. TDM Measures		
TDM	Application of aggressive TDM measures (e.g. 45% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District
E. Misc. Improvements		
Bicycle Access Points	Bicycle connections into and out of Tysons	Tysons-wide
Roads and Intersection Spot Improvements	Intersection improvements outside of Tysons as identified in the Neighborhood Traffic Impact Study and other studies	Tysons-wide
Metrorail Station Access	Access improvements as identified in the Tysons Metrorail Station Access Management Study	Tysons-wide

Type of Transportation Program or Infrastructure Project	Description of Transportation Program or Infrastructure Project	Area Served by Improvement
III. Required Additional Transportation Improvements to Accommodate 84 Million sq. ft. of Development		
A. Transit Improvements		
Bus Transit Routes	Further improvements to neighborhood bus routes; circulator bus routes **and Bus Rapid Transit** serving Metrorail stations; BRT routes on I-66 and I-95/I-495	Tysons-wide/ Countywide
B. Tysons-wide Road Improvements		
Roads – Arterial Extension	Extend Boone Boulevard between Boone Boulevard and Northern Neck Drive	Tysons-wide
Roads – Arterial Extension	Extend Greensboro Drive between Spring Hill Road and Tyco Road	District
Roads – Freeway Ramp	Ramp connecting Greensboro Drive extension to westbound DAAR	Tysons-wide
Roads – Freeway Ramp	Ramp connecting Boone Boulevard extension to westbound DAAR and eastbound DAAR to Boone Boulevard extension	Tysons-wide
Roads – Freeway Widening	Collector – distributor roads along the DAAR from Greensboro Drive extension to Hunter Mill Road	Tysons-wide
Roads – Avenue Widening	Widen Magarity Road from 2 to 4 lanes between Great Falls Street to Leesburg Pike	Tysons-wide
Roads – Arterial Widening	Widen Gallows Road from 4 to 6 lanes between Leesburg Pike and I-495	Tysons-wide
Roads – Connecting Road	I-495 crossing connecting the Tysons Corner Center area to Old Meadow (limited to transit, pedestrians, and bicyclists)	Tysons-wide
C. Grid of Streets		
Roads – Grid of Streets	Substantial sections of the grid of streets	District
D. TDM Measures		
TDM	Application of aggressive TDM measures (e.g. 55% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District
E. Road Safety Improvements		
Roads – Collector Safety Improvement	Improve and enhance the safety of Old Courthouse Road from the Town of Vienna to Gosnell Road	District
F. Misc. Improvements		
Bicycle Access Points	Bicycle connections into and out of Tysons	Tysons-wide
Roads and Intersection Spot Improvements	Intersection improvements outside of Tysons as identified in the Neighborhood Traffic Impact Study and other studies	Tysons-wide
Metrorail Station Access	Access improvements as identified in the Tysons Metrorail Station Access Management Study	Tysons-wide
IV. Required Additional Transportation Improvements to Accommodate 113 Million sq. ft. of Development		
A. Transit Improvements		
Improved Transit	Additional BRT routes, other supporting services including park-and-ride, feeder bus routes to rail stations	Tysons-wide/ Countywide
Urban Transit Corridors	At least two additional urban transit corridors with substantial TOD development: Orange Line Metrorail extension and an additional rail extension	Tysons-wide/ Countywide
B. Tysons-wide Road Improvements		
Roads – Freeway Widening	Widen I-495 (Outer Loop) between Leesburg Pike and I-66 by one lane	Tysons-wide
Roads – Freeway Ramps	Ramps connecting Jones Branch Drive to westbound DAAR and eastbound DAAR to Jones Branch Drive.	Tysons-wide
C. Grid of Streets		
Roads – Grid of Streets	Completion of the grid of streets	District
D. TDM Measures		
TDM	Application of more aggressive TDM measures (e.g. 65% reduction in vehicle trips for an office development within 1/8 mile of a Metrorail station)	District

“

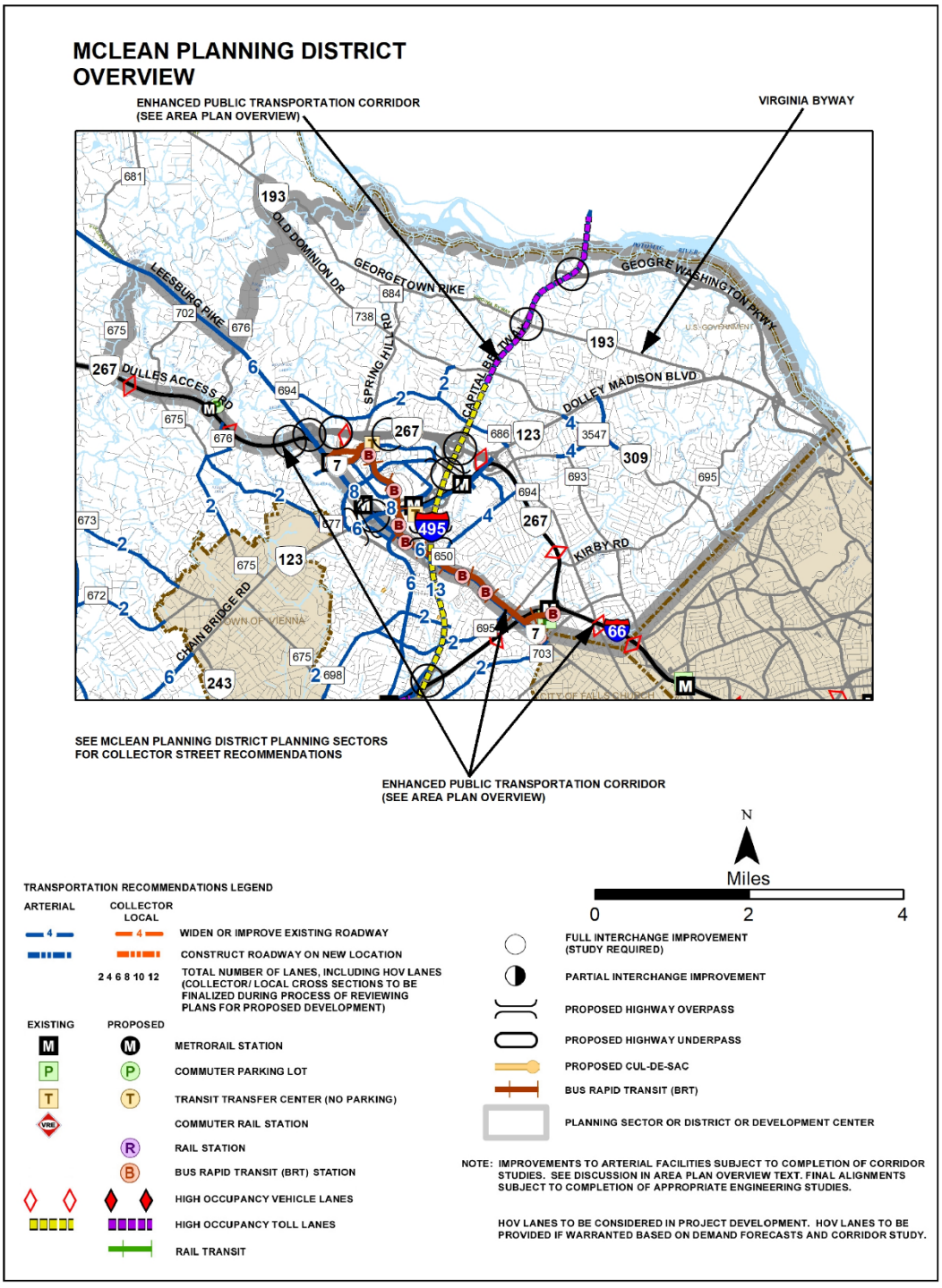
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, Fairfax Planning District, as amended through February 23, 2021, Overview, Figure 2, "Countywide Transportation Recommendations, Fairfax Planning District," page 5, to incorporate updates to the corridor recommendations within the figure as shown below:



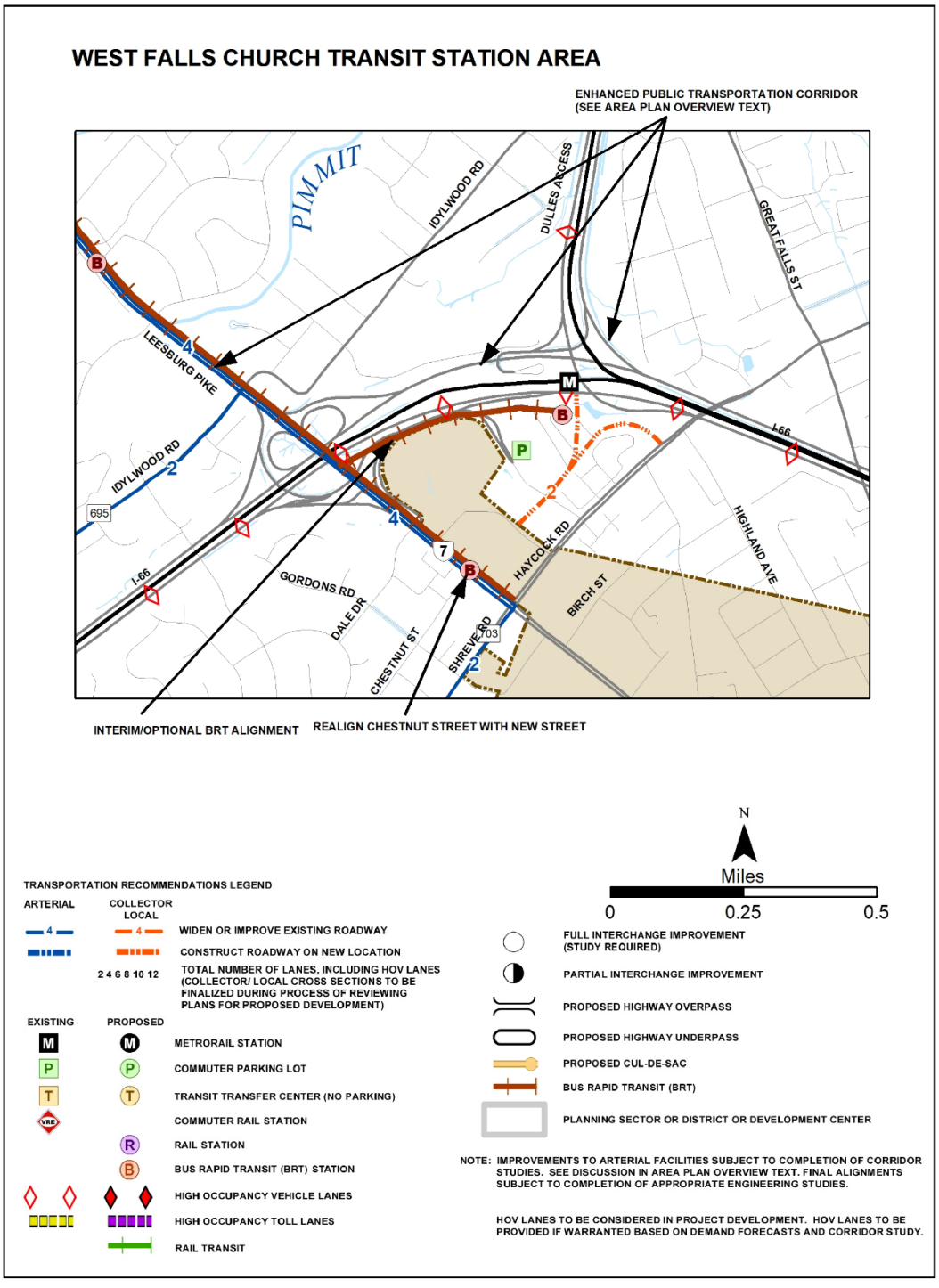
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, as amended through October 19, 2021, Overview, Figure 2, "Countywide Transportation Recommendations, McLean Planning District," page 4, to incorporate updates to the corridor recommendations within the figure as shown below.



MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, as amended through October 19, 2021, West Falls Church Transit Station Area, Figure 35, "Transportation Recommendations," page 92, to incorporate updates to the corridor recommendations within the figure as shown below.



MODIFY:

Fairfax County Comprehensive Plan, 2017 Edition, Area II McLean Planning District, Amended through 10-19-2021 West Falls Church Transit Station Area Page 91:

"**Transportation**

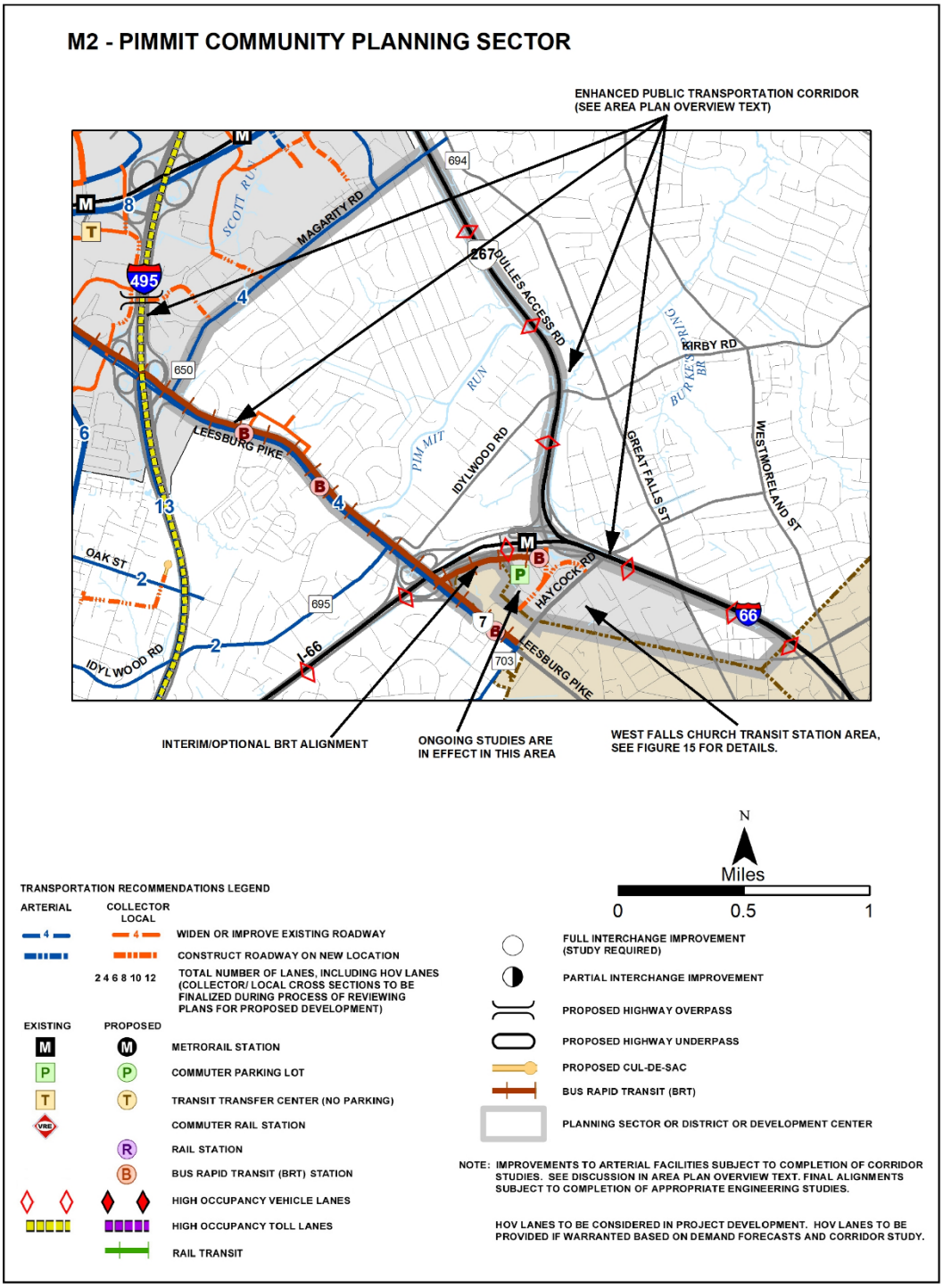
Planned roadway improvements in the vicinity of the West Falls Church TSA are shown on Figure 35.

Recommended Public Transit Improvements

A ~~high-quality transit~~ Bus Rapid Transit system is expected along the Route 7 corridor. Provisions for this transit system, such as appropriately sized bus bays and shelters, should be accommodated along Route 7 and adjacent to the WMATA Metrorail station entrance. Standards for transit-serving infrastructure should be reviewed with FCDOT's Transit Services Division during the entitlement process for individual developments."

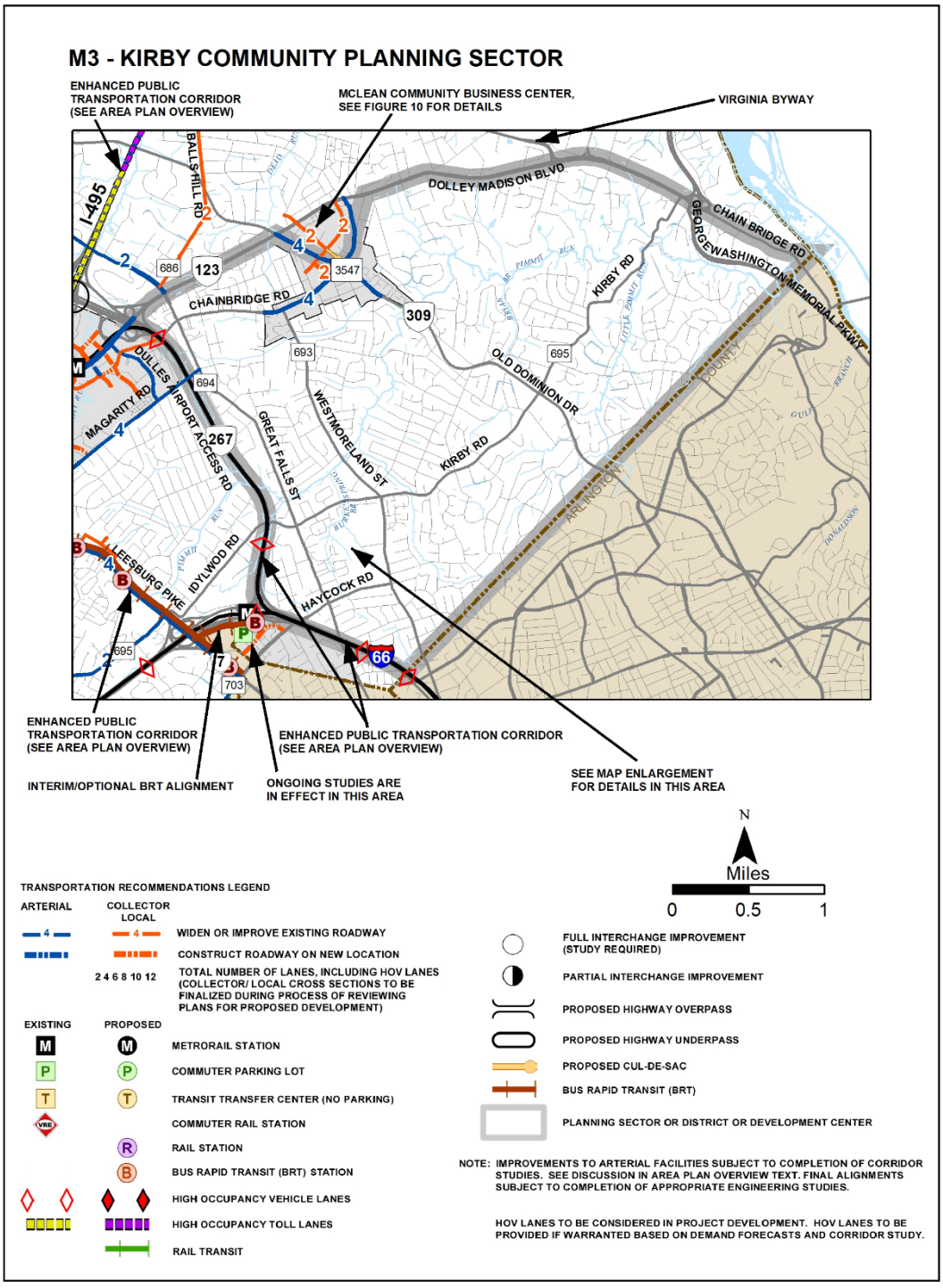
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, as amended through October 19, 2021, M2-Pimmit Community Planning Sector, Figure 42, "Transportation Recommendations," page 114, to incorporate updates to the corridor recommendations within the figure as shown below.



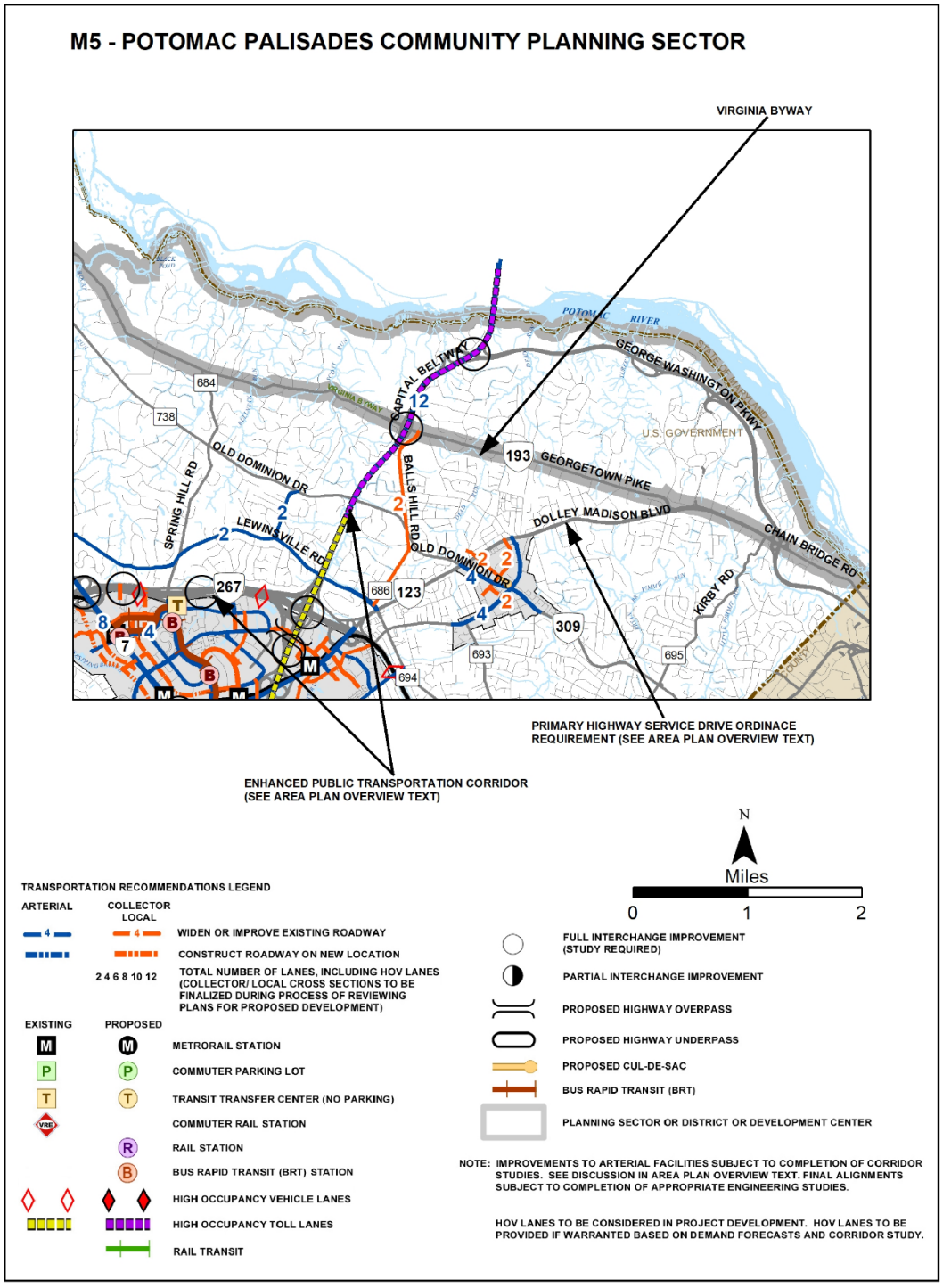
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, as amended through October 19, 2021, M3-Kirby Community Planning Sector, Figure 45, "Transportation Recommendations," page 122, to incorporate updates to the corridor recommendations within the figure as shown below.



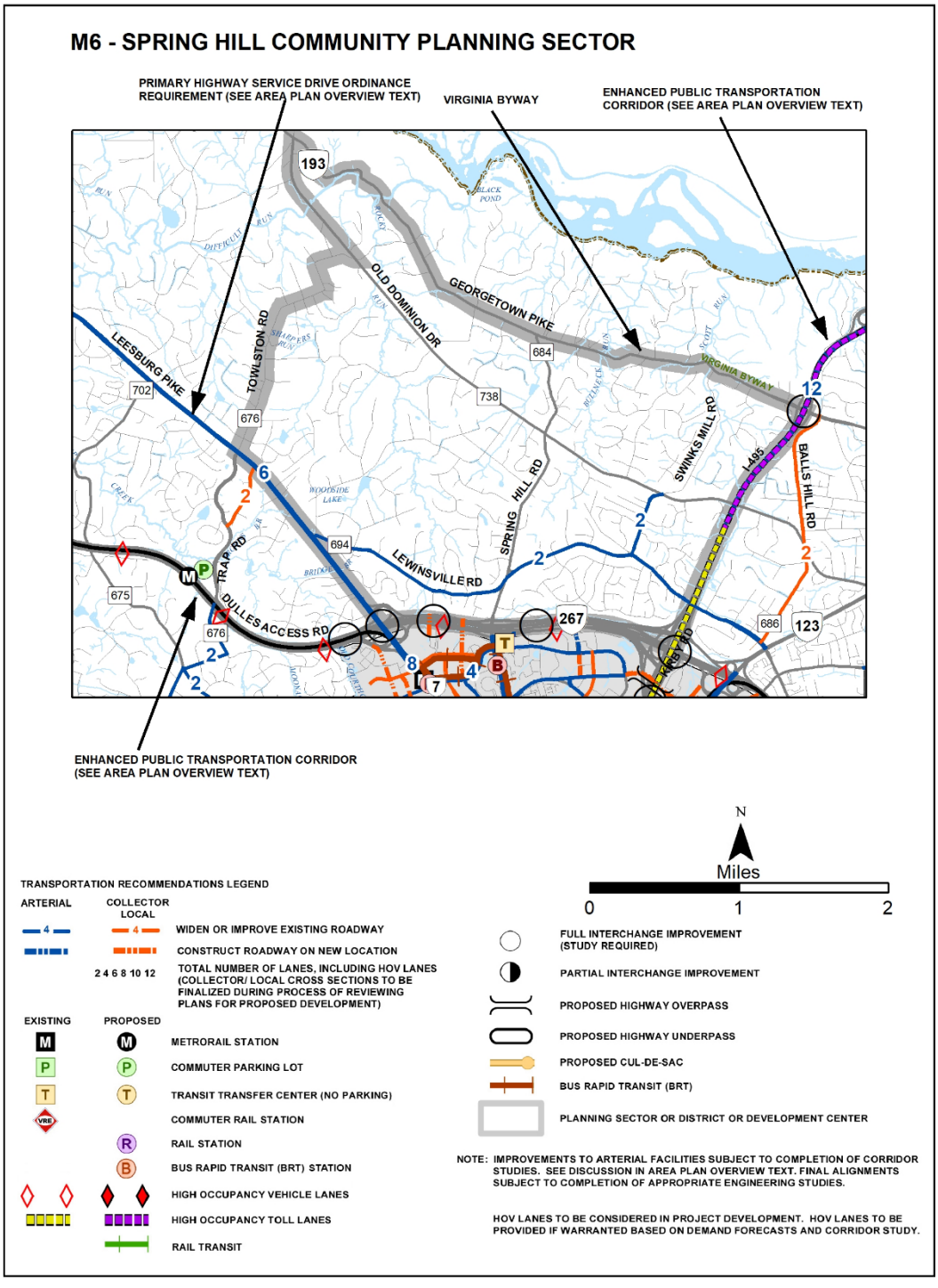
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, as amended through October 19, 2021, M5-Potomac Palisades Community Planning Sector, Figure 52, "Transportation Recommendations," page 135, to incorporate updates to the corridor recommendations within the figure as shown below.



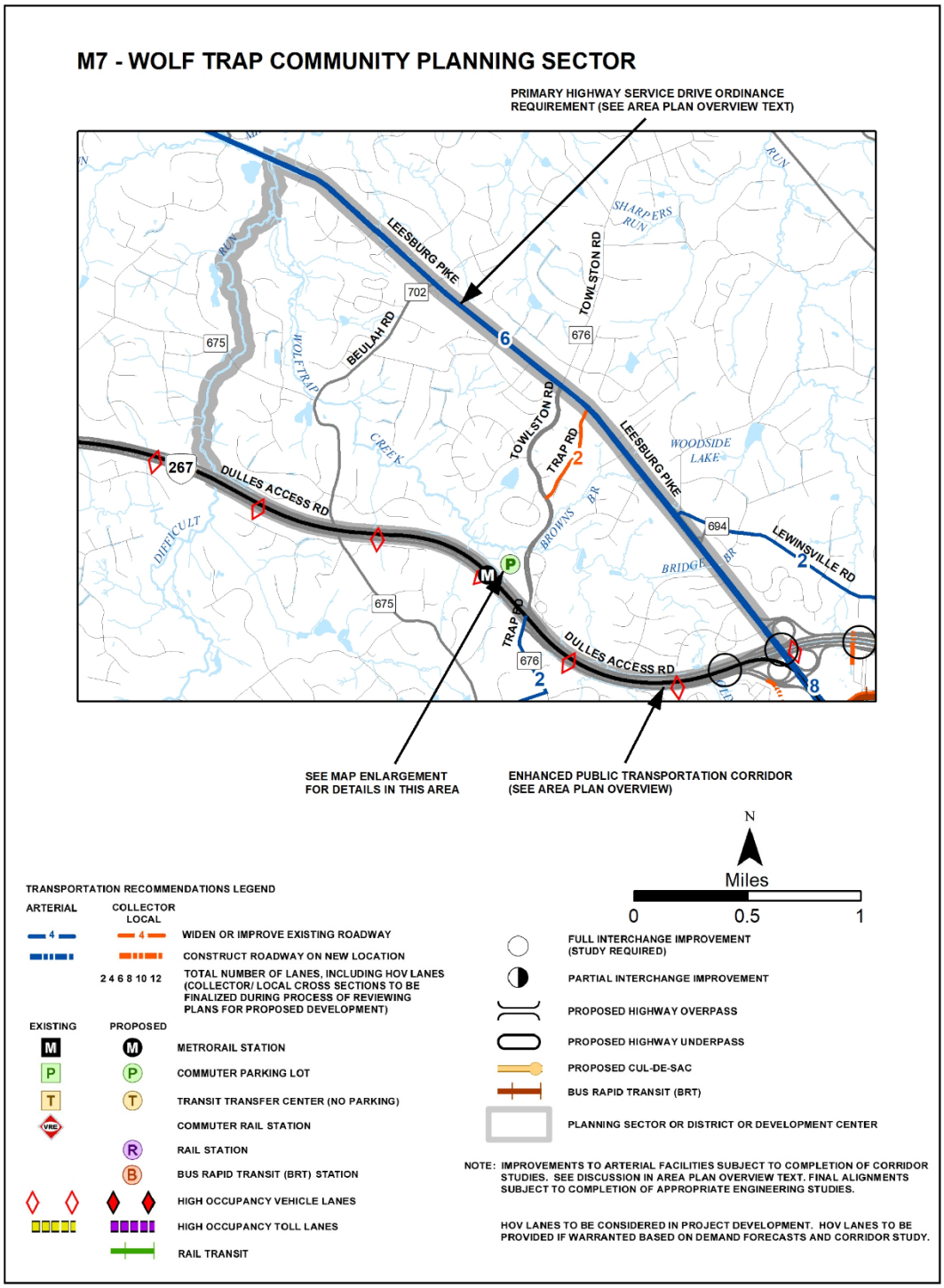
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, as amended through October 19, 2021, M6-Spring Hill Community Planning Sector, Figure 55, "Transportation Recommendations," page 141, to incorporate updates to the corridor recommendations within the figure as shown below.



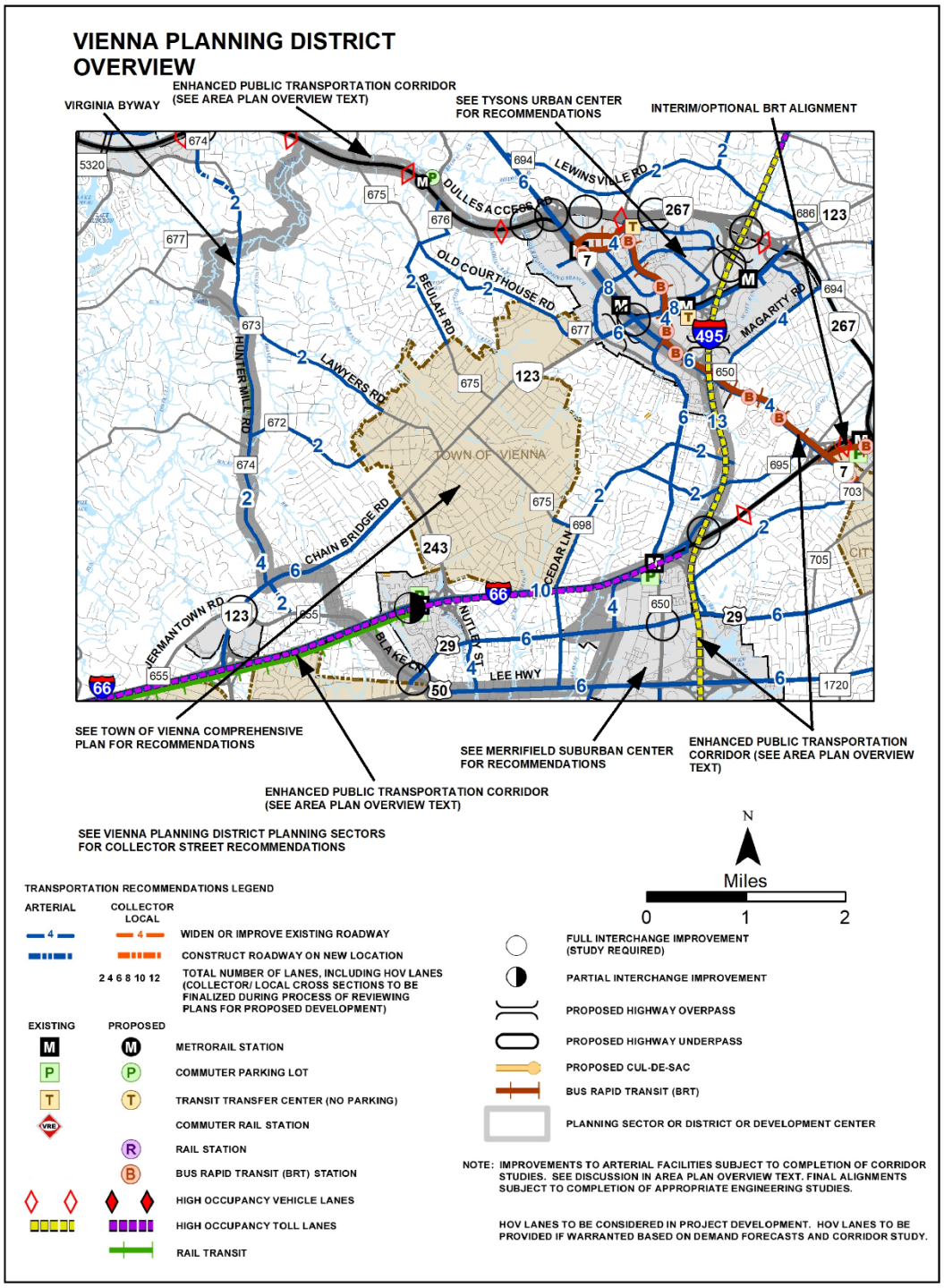
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, as amended through October 19, 2021, M7-Wolf Trap Community Planning Sector, Figure 58, "Transportation Recommendations," page 147, to incorporate updates to the corridor recommendations within the figure as shown below.



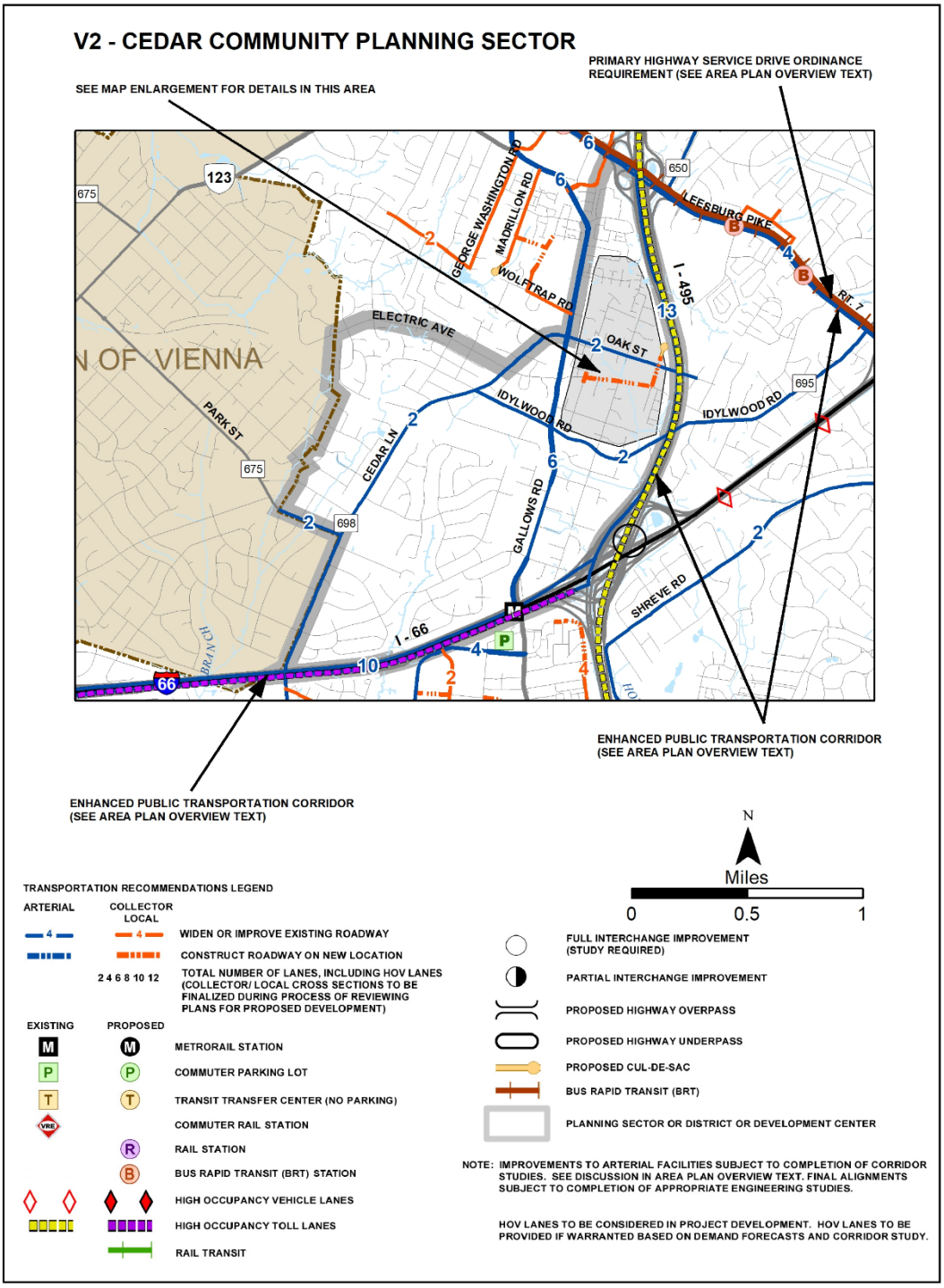
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, Vienna Planning District, as amended through February 23, 2021, Overview, Figure 2, "Countywide Transportation Recommendations, Vienna Planning District," page 4 to incorporate updates to the corridor recommendations within the figure as shown below.



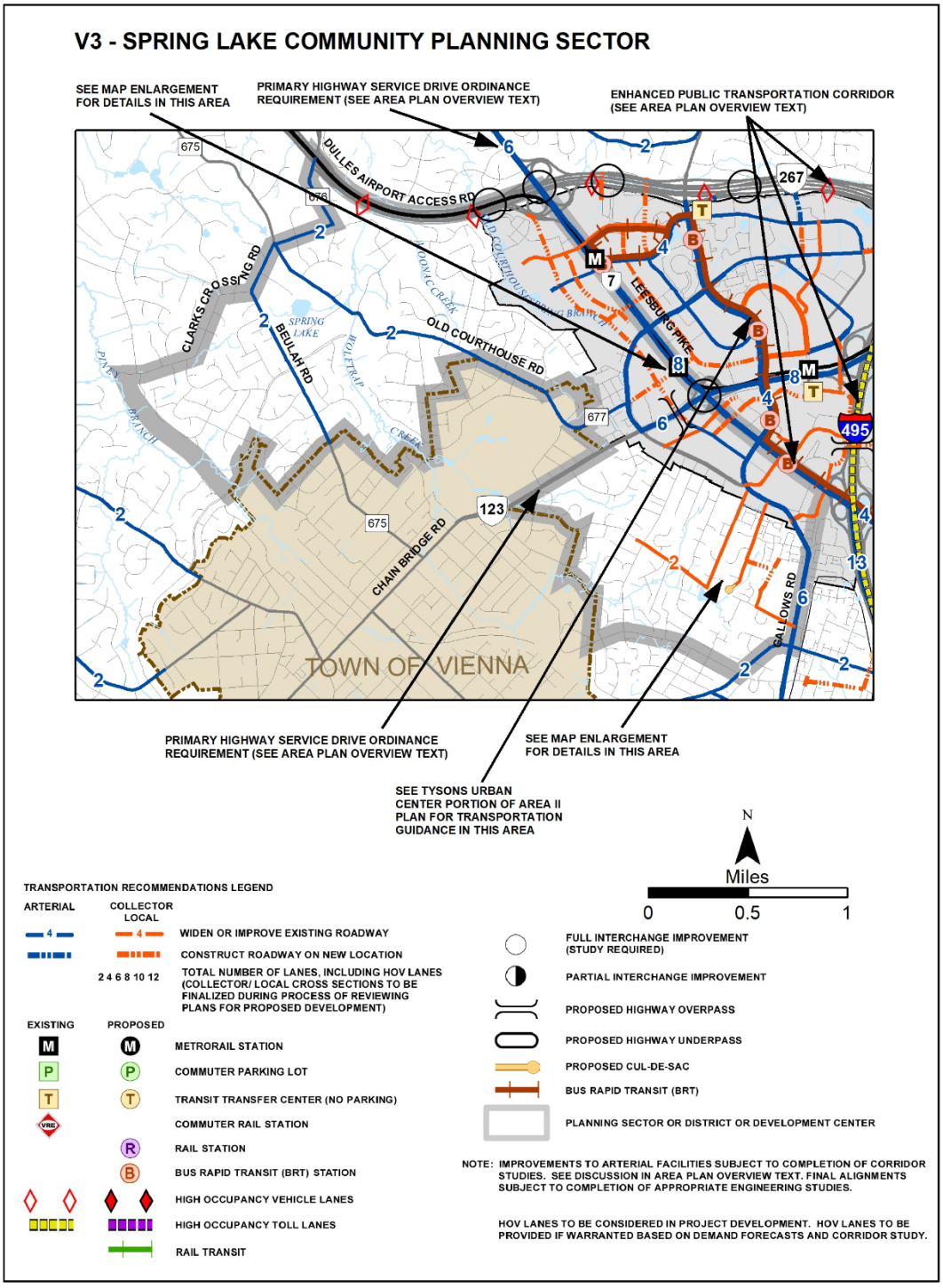
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, Vienna Planning District, as amended through February 23, 2021, V2-Cedar Community Planning Sector, Figure 20, "Transportation Recommendations," page 59, to incorporate updates to the corridor recommendations within the figure as shown below.



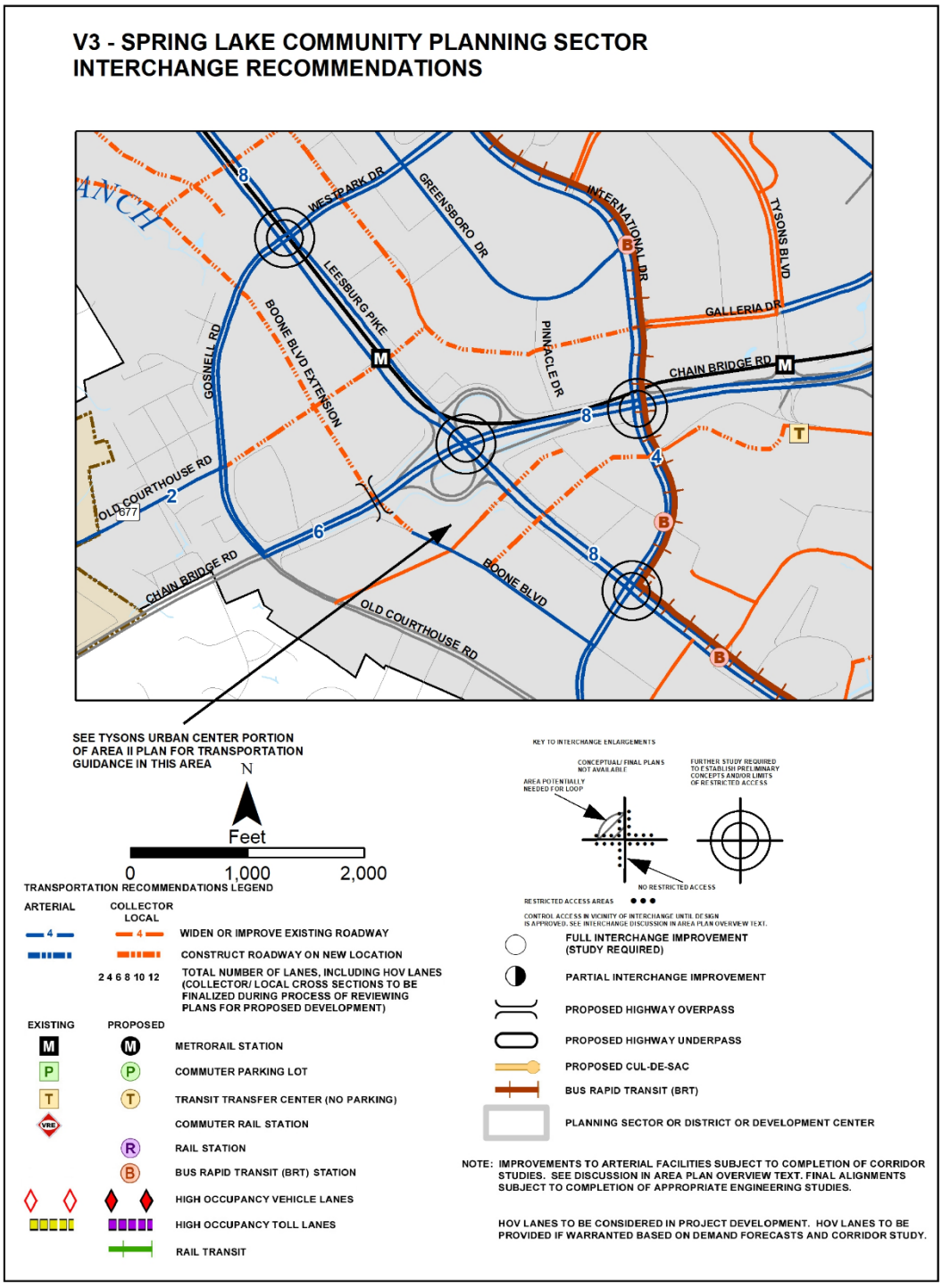
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, Vienna Planning District, as amended through February 23, 2021, V3-Spring Lake Community Planning Sector, Figure 24, "Transportation Recommendations," page 69, to incorporate updates to the corridor recommendations within the figure as shown below.



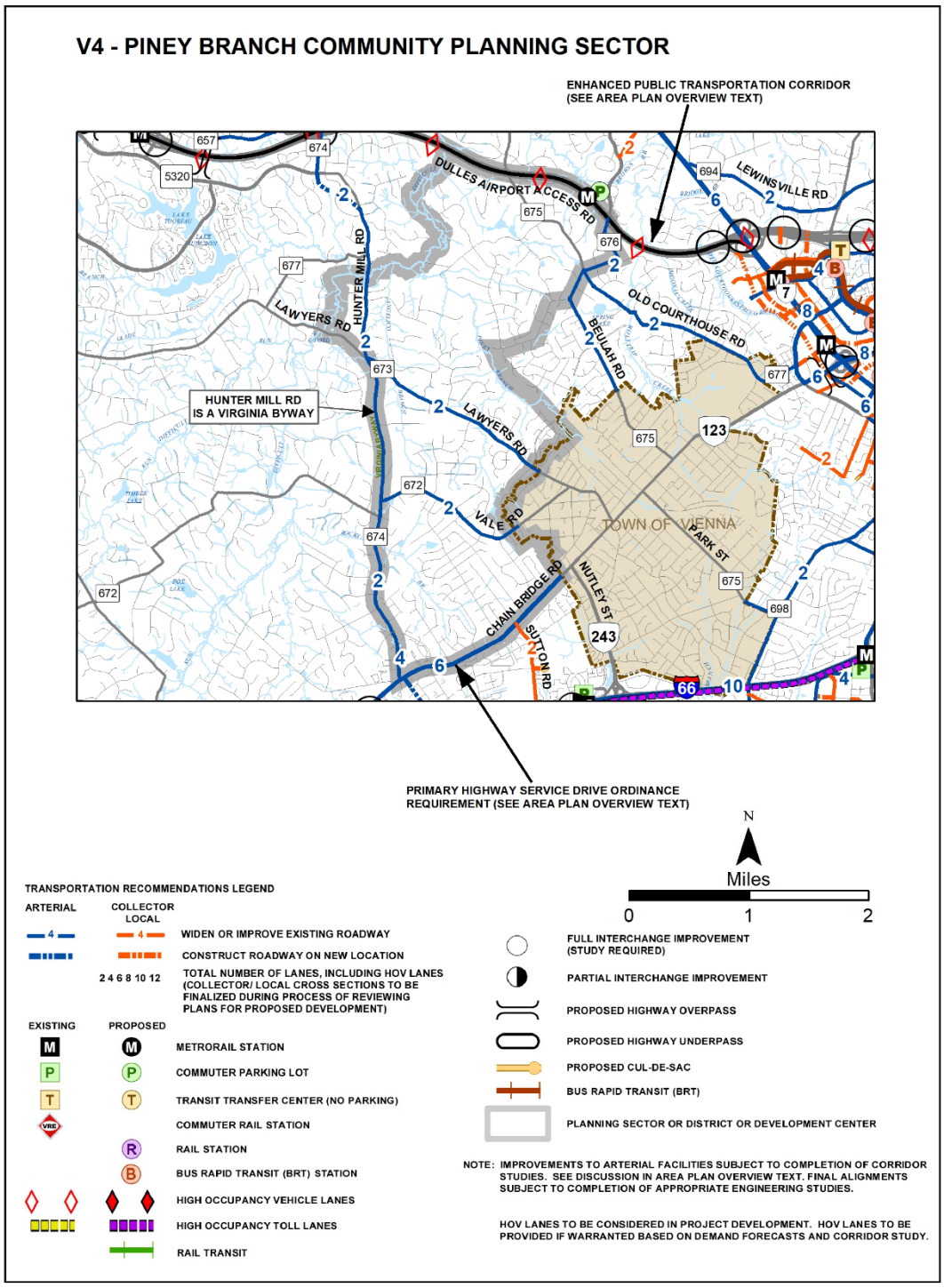
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, Vienna Planning District, as amended through February 23, 2021, V3-Spring Lake Community Planning Sector, Figure 26, "Interchange Recommendations," page 71, to incorporate updates to the corridor recommendations within the figure as shown below.



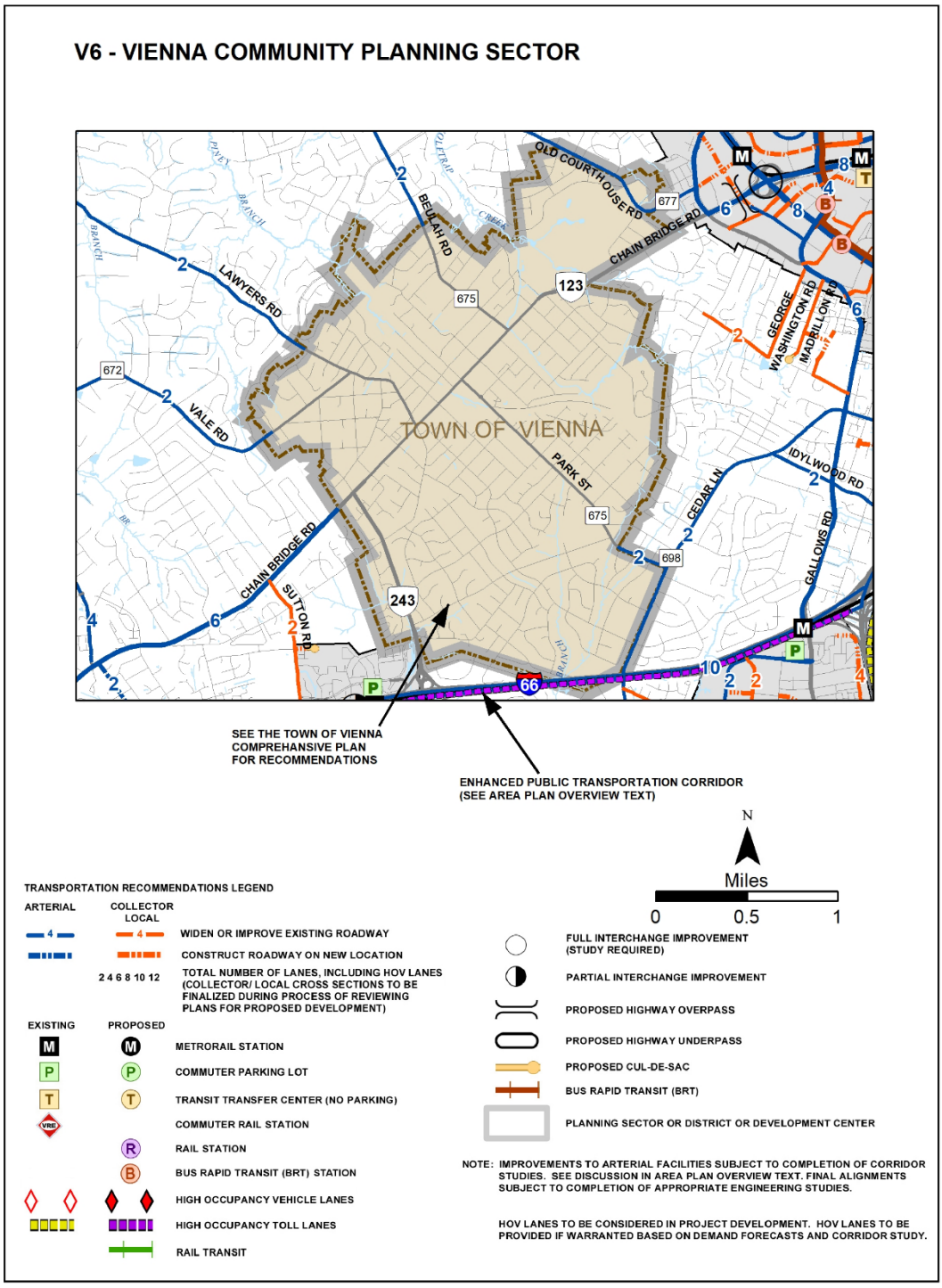
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, Vienna Planning District, as amended through February 23, 2021, V4-Piney Branch Community Planning Sector, Figure 29, "Transportation Recommendations," page 77, to incorporate updates to the corridor recommendations within the figure as shown below.



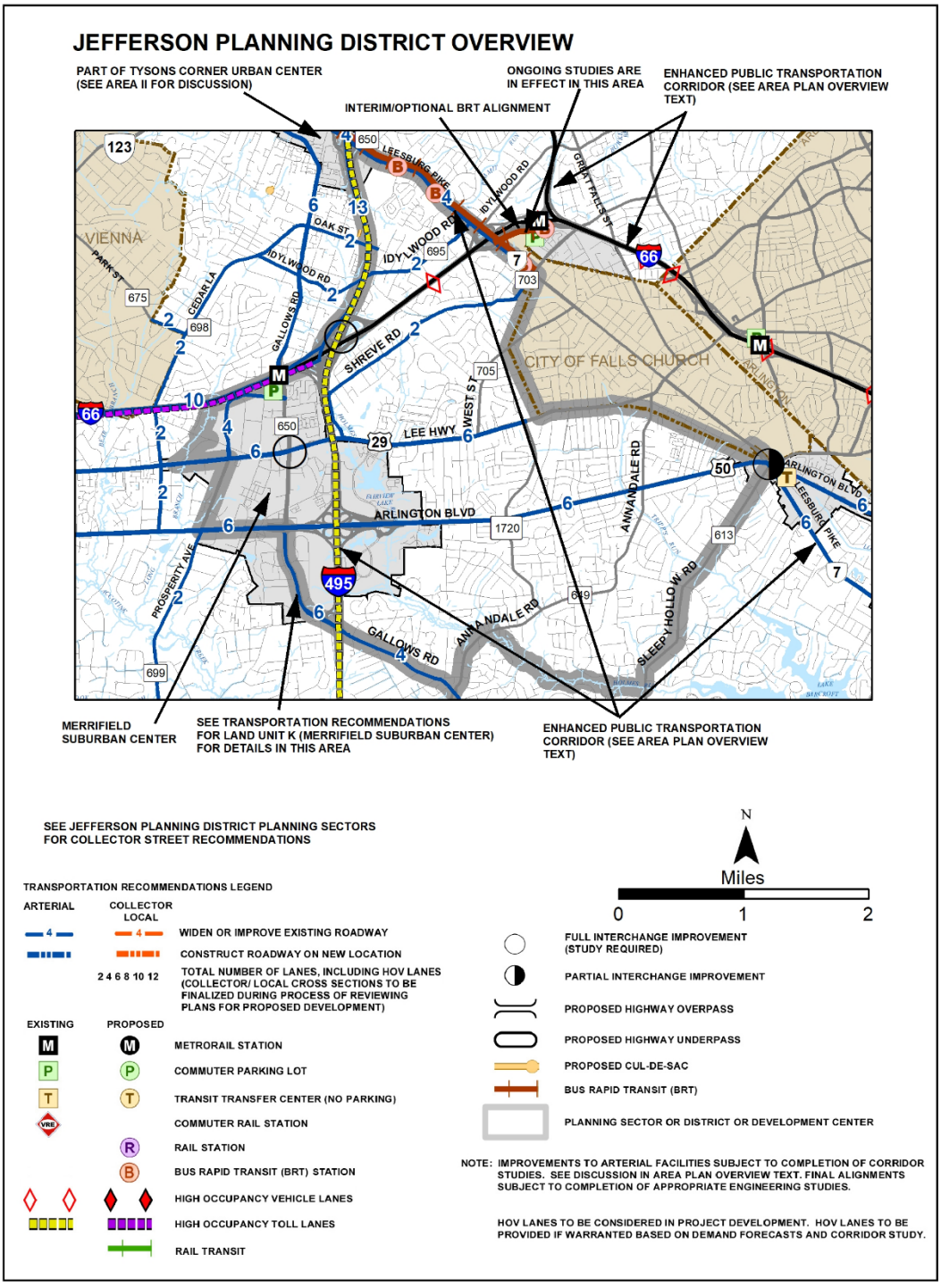
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area II, Vienna Planning District, as amended through February 23, 2021, V6-Vienna Community Planning Sector, Figure 29, "Transportation Recommendations," page 77, to incorporate updates to the corridor recommendations within the figure as shown below.



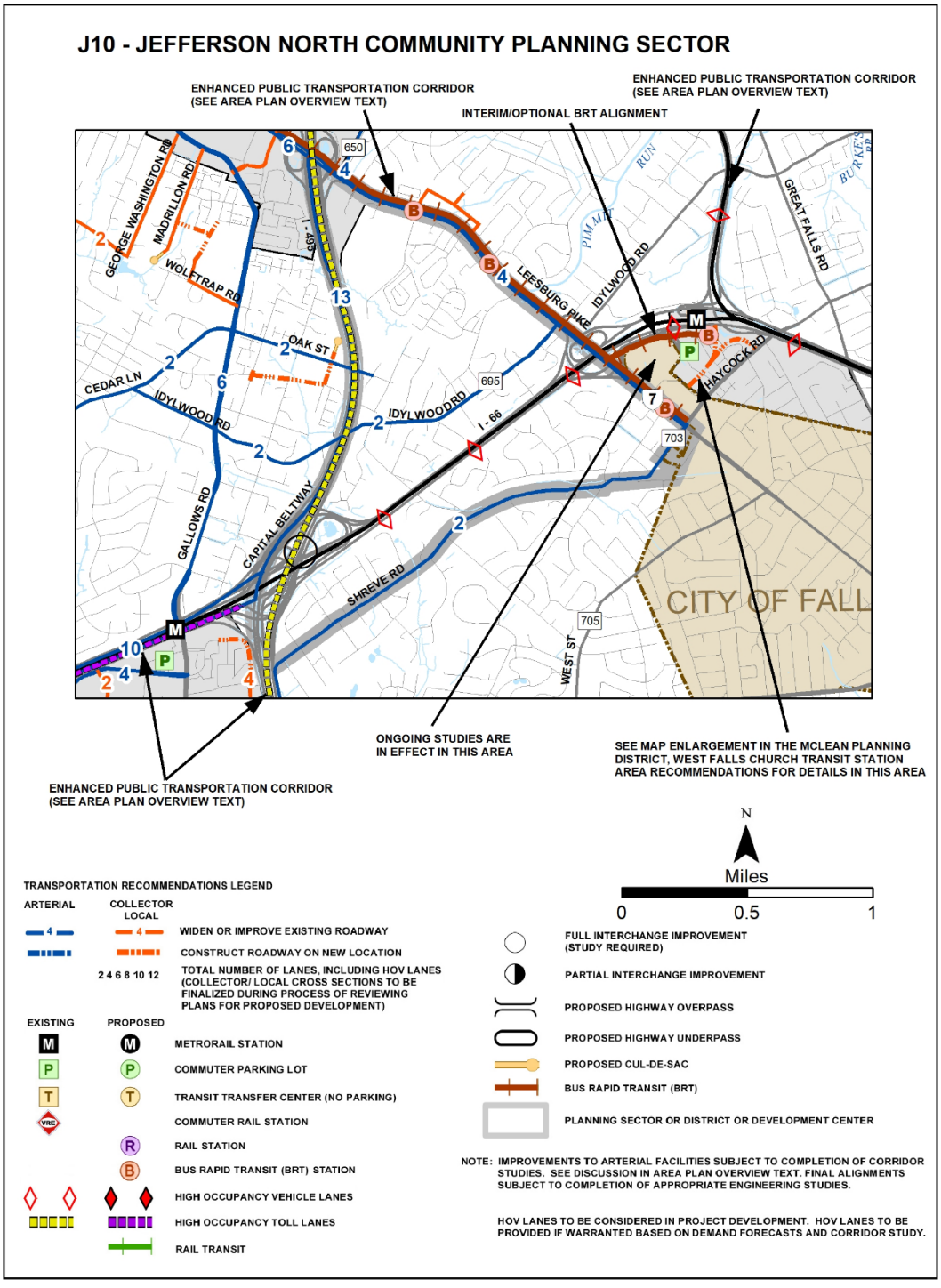
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area I, Jefferson Planning District, as amended through July 13, 2021, Overview, Figure 2, "Countywide Transportation Recommendations, Jefferson Planning District," page 4, to incorporate updates to the corridor recommendations within the figure as shown below.



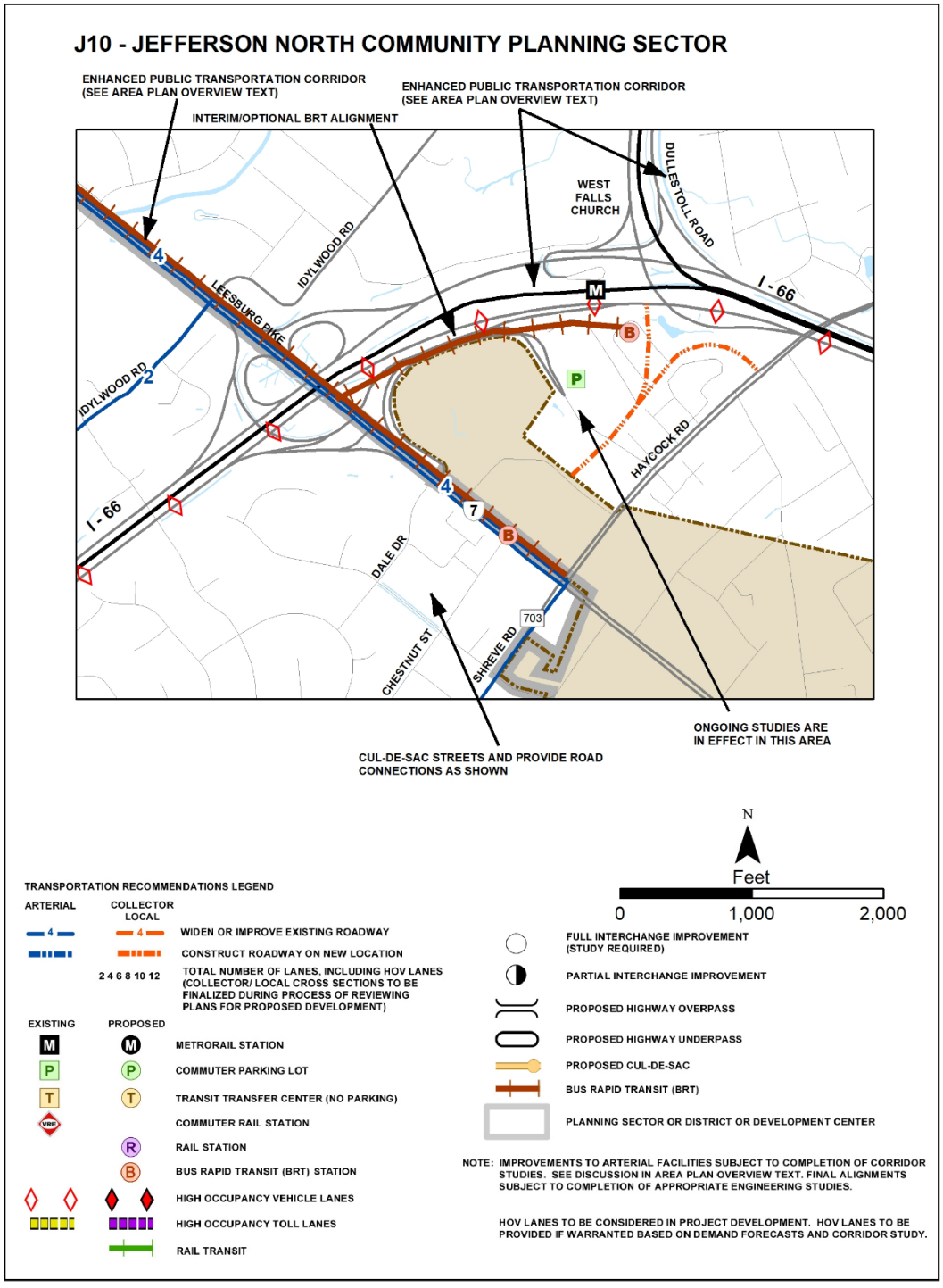
MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area I, Jefferson Planning District, as amended through July 13, 2021, J10-Jefferson North Community Planning Sector, Figure 33, "Transportation Recommendations," page 70, to incorporate updates to the corridor recommendations within the figure as shown below.



MODIFY FIGURE:

Fairfax County Comprehensive Plan, 2017 Edition, Area I, Jefferson Planning District, as amended through July 13, 2021, J10-Jefferson North Community Planning Sector, Figure 34, "Transportation Recommendations," page 71, to incorporate updates to the corridor recommendations within the figure as shown below.



COMPREHENSIVE LAND USE PLAN MAP

Fairfax County Comprehensive Land Use Plan Map, as amended through November 20, 2018, should be modified to incorporate updates to the corridor recommendations as specified in the Transportation Plan Map.

COUNTYWIDE TRANSPORTATION PLAN MAP:

Fairfax County Countywide Transportation Plan Map, as amended through March 21, 2023, (and as incorporated by reference in Fairfax County Comprehensive Plan – Policy Plan, 2017 Edition, Transportation Element, Figure 1) to incorporate updates to the corridor recommendations, as summarized in the Conclusions Section, starting on page 34 of this report.