

Herndon Transit Station Area

Multimodal District Plan

Phase 1 (3rd Submission)



A Fairfax County,
Virginia Publication

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Herndon TSA Multimodal District Plan

Phase 1, 3rd Submission

Applying the Multimodal System Design Guidelines (Guidelines)

Fairfax County implemented the steps described in the Virginia Department of Rail and Public Transportation (DRPT) Multimodal System Design Guidelines (Guidelines) final document dated October 2013 to analyze existing and future population and employment, designate Multimodal Districts and Centers, calculate the activity density, designate multimodal corridors, determine existing and future transportation modes, and define modal emphasis. Appendix B contains an outline which describes the methodology used by the county to apply the Guidelines for selected activity centers.

This document relates specifically to the Herndon Transit Station Area (TSA) Multimodal District. The activity density for the Herndon TSA is 74.9 people + jobs per acre, which correlates to a P6 Urban Core type. A map of the Herndon TSA is included as Figure 1 on page 13. This map distinguishes between the multimodal center, which is the transit station mixed use area, and the multimodal district, which consists of the entire Herndon transit-oriented development (TOD) district.

The data used to calculate the activity density is included in Appendix A, Table 1 on pages 11 and 12. As expressed in the Guidelines, Transect or “T-Zones” are also used to define the density and intensity of development, but through the application of a consistent scale of six different “T-Zones” ranging from T-1 (rural) to T-6 (dense urban core area).

Transect Zones will be considered in more detail during the implementation of Phase 2 “interim”, when roadway sections will be compiled. In the case for the Herndon TSA, the P6 Urban Core translates to a T-6 level of intensity, mainly within the quarter-mile radius of the Centers. A T-5 designation is assigned outside of the Center, primarily within the half-mile radius of the Centers and should include the entirety of the Herndon TSA. During Phase 2 “interim” submission for the Herndon TSA, the optimal values of each corridor element based upon the T-Zone designations as recommended by the Guidelines will be used for the development of the cross-sections. Once these “interim” cross-sections are submitted, FCDOT will work with the larger Reston community to further refine the elements included in the cross-sections and develop “final” cross-sections. These “final” cross-sections will be submitted to VDOT and once approved will supersede with “interim” approved cross-sections.

This document includes citations from the Fairfax County Comprehensive Plan (Plan). The Plan recommendations for the Reston Transit Station Areas are available online at:

<https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/compplan/area3/reston.pdf#page=179> >.

The Plan guidance for the Reston Transit Station Areas is also available to review at the Planning Division office from Monday-Friday 8:00 AM-4:30 PM, located at 12055 Government Center Parkway, Suite 730, Fairfax, VA 22035

Fairfax County Comprehensive Plan, 2017 Edition, Area III, Upper Potomac Planning District
<https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/compplan/area3/upperpotomac.pdf> as amended through 07-31-2018,

Reston Transit Station Areas

Overview

Reston is located in the northwestern quadrant of Fairfax County, approximately 20 miles west of Washington DC, seven miles west of Tysons and six miles east of Washington Dulles International Airport. It is a community of approximately 8,400 acres (including road rights-of-way) and is bisected by the Dulles Airport Access Road and Dulles Toll Road (DAAR, Route 267) on Figure 1 of the Upper Potomac Planning District. The community will be served by three Metrorail Silver Line stations: the Reston Town Center Station, the Wiehle-Reston East Station and the Herndon Station, as shown on Figure 29 of the Upper Potomac Planning District. For purposes of the Comprehensive Plan, these areas encompass the Metrorail stations and are designated as Transit Station Areas (TSAs), as shown on Figure 34 in the Reston Section of the Comprehensive Plan. The Vision for Reston articulated below and the associated Planning Principles should apply to the whole community of Reston. The other guidance in this section is designed to apply only to the TSAs.

The Wiehle-Reston East and Reston Town Center TSAs are located along both sides of the DAAR from the Virginia Department of Transportation owned storage facility to the east, Hunter Mill Road on the southeast and Fairfax County Parkway on the west. The Herndon TSA encompasses the Herndon Metrorail Station and is located along the south side of the DAAR and is bounded by Fairfax County Parkway on the east, Fox Mill Road and Sunrise Valley Drive on the south, and Centreville Road on the west. Land to the north of the Herndon Station is within the Town of Herndon.

The character of development within these three TSAs varies greatly. Development includes office parks at varying development intensities* from low intensity office parks with buildings of two and three-stories and mostly surface parking, to medium intensity office buildings of 5-10 stories with above-grade structured parking, to the Reston Town Center, a high-intensity mixed-use area that includes office and residential buildings of up to twenty stories, to residential neighborhoods at various densities* in the Reston Town Center TSA (e.g. West Market) and the Herndon TSA (e.g. Great Oak).

The TSAs together make up the county's second largest office market and, given their proximity to Washington Dulles International Airport and the excellent regional access provided by the Metro's Silver Line and the DAAR, are appropriate for a variety of residential and employment land uses.

Each TSA has within it a core area that has been designated for Transit-Oriented Development (TOD). These TOD areas or districts are adjacent to the future rail stations and are planned to transition to a more urban form and include a complementary mix of uses at higher development intensities than that planned for the other areas in the TSAs.

The planning objectives for these TOD districts are to create a transit-focused neighborhood within ½ mile of the transit station that will encourage pedestrian activity to enliven the area throughout the day and evening and where the emphasis will be on creating places and connections that are safe, comfortable and attractive for pedestrians and bicyclists. These objectives will result in the evolution of the existing commercial areas along the DAAR, including those formerly designated as the Reston Center for Industry and Government, into truly viable pedestrian-oriented neighborhoods.

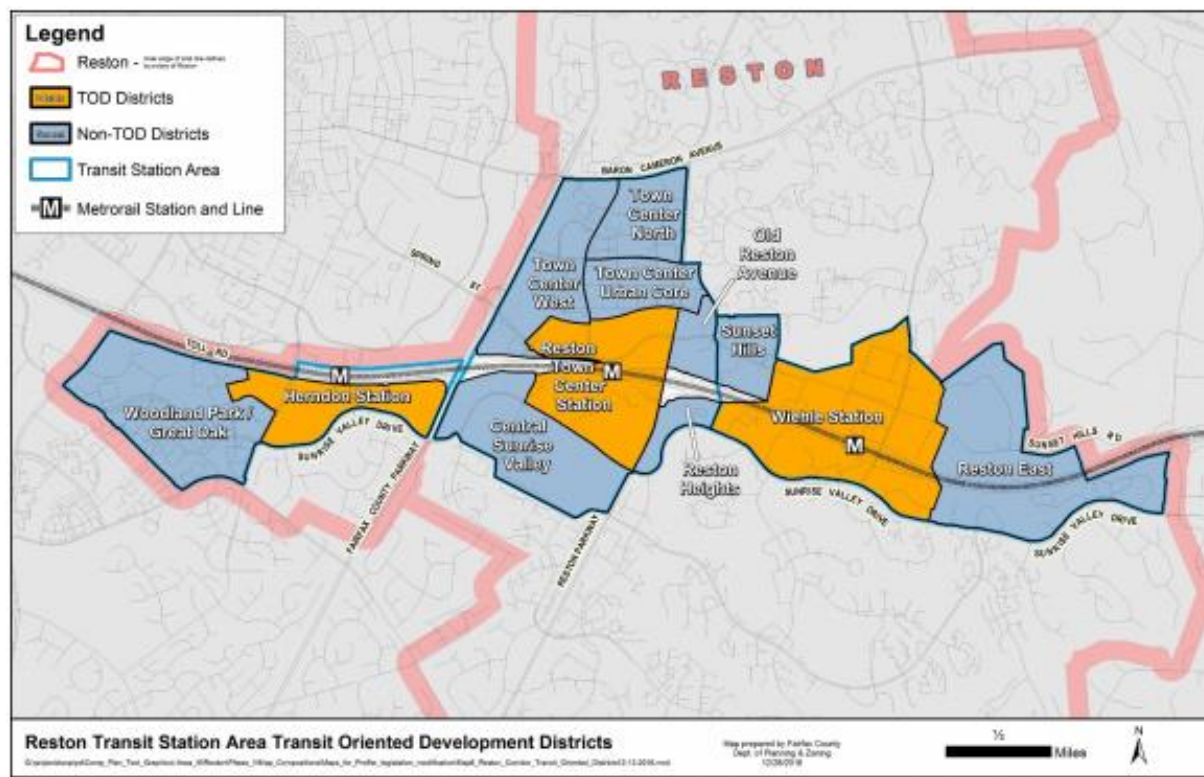


Figure 34, Fairfax County Comprehensive Plan, 2017 Edition, Area III, Upper Potomac, Reston, as amended through 07-31-2018.

Concept for Future Development and Areawide Recommendations

Concept for Future Development

The Concept for Future Development's policy direction focuses employment growth into designated Mixed-Use Centers. The Concept identifies these three future Metro stations (Reston Town Center, Wiehle-Reston East and Herndon) as Transit Station Areas (TSAs) along the Dulles Corridor. The purpose of the TSA designation is to optimize development opportunities associated with the availability of mass

transit while maintaining the stability of existing land uses outside of the TSAs. TSAs allow a mixture of residential, office, retail and other commercial uses and may provide opportunities for joint public-private development.

Areawide Recommendations

These Areawide recommendations are designed to help achieve the future vision for the Reston Transit Station Areas (TSAs). These recommendations present a framework for the specific District recommendations that follow. In addition, they provide guidance on areawide issues that apply to multiple TSA Districts and in some cases, all of the TSA Districts. The recommendations focus on land use, urban design, transportation, environmental stewardship, parks and recreation facilities, public facilities and implementation.

Land Use

The overall land use approach for the Transit Station Areas (TSAs) envisions a change from the current pattern of low to medium density office parks to a mixed-use pattern that balances office, residential, retail, hotel, civic, and institutional uses in a pedestrian and bicycle-friendly environment, particularly in the areas closest to the stations. The employment areas farther away from the stations will continue to provide excellent locations for office development to occur as well as other complementary uses, such as data centers and research and development uses. The recommendations encourage a more urban, transit-oriented development pattern, with the objective of creating a walkable activity center at each station. The areas closest to the stations should consist of a mix of uses to include employment, housing and services to meet the needs of daily living. As noted earlier, achieving this vision will be a long-term process. Therefore, the land use section also includes guidance on land use compatibility, land use flexibility, incremental redevelopment as well as new development.

A key element in creating a more urban fabric in the TSAs will be the introduction of new streets to provide a more grid-like pattern to the road network that will enhance pedestrian and vehicular circulation around the stations. Another important element will be the introduction of new urban parks of various sizes and a well-connected public open space network. In addition, public gathering spaces and public uses will be located in the TSAs so as to continue to meet the needs of the Reston community.

Transit Station Areas Land Use Concept The land use concept for the TSAs is informed by experience in the Washington Metropolitan area that shows that a higher proportion of residents within walking distance of a Metro station will use transit as compared with workers. In addition, residents are willing to walk further to transit than workers will. Therefore, to best take advantage of transit, the land use concept places an emphasis on locating the significant majority of new office uses in mixed use developments in TOD Districts located within a safe, comfortable and reasonably direct ¼ mile walk of the Metro stations (see Figure 30). The predominant use in new development to be located in TOD areas between ¼ and ½ mile of the stations should be multi-family housing in order to realize the objective of achieving an improved jobs-to-housing balance in Reston.

This approach of differentiating the emphasis of new development types in areas closest to the stations versus areas more removed from the stations formed the basis of the two TOD district-specific land use categories described below, Transit Station mixed use and Residential mixed use. Exceptions to this approach should only be considered to facilitate the provision of significant new public infrastructure such as the planned new crossings of the DAAR. In those instances, new office uses above those already zoned may be considered for areas between $\frac{1}{4}$ and $\frac{1}{2}$ mile of the stations.

Herndon Transit Station Area

Fairfax County Comprehensive Plan, 2017 Edition, Area III, Upper Potomac Planning District as amended through 07-31-2018, Reston Transit Station Areas, pages 179-182.

Herndon Transit Station Area

The Herndon Transit Station Area (TSA) encompasses the Herndon Metrorail station and is bounded on the north by the DAAR, on the east by Fairfax County Parkway, on the south by Sunrise Valley Drive, Frying Pan Road and Fox Mill Road, and on the west by Centreville Road.

Local-serving amenities including plazas, other urban parks, trails, and public art should be provided throughout the districts to serve local leisure and recreation needs. The exact number of urban parks, their sizes and distribution will be determined by the amount and type of new development, in accordance with the Urban Parks Framework in the Policy Plan. Recreational impacts of new development should be offset through provision of recreation facilities on-site or contributions to nearby parks.

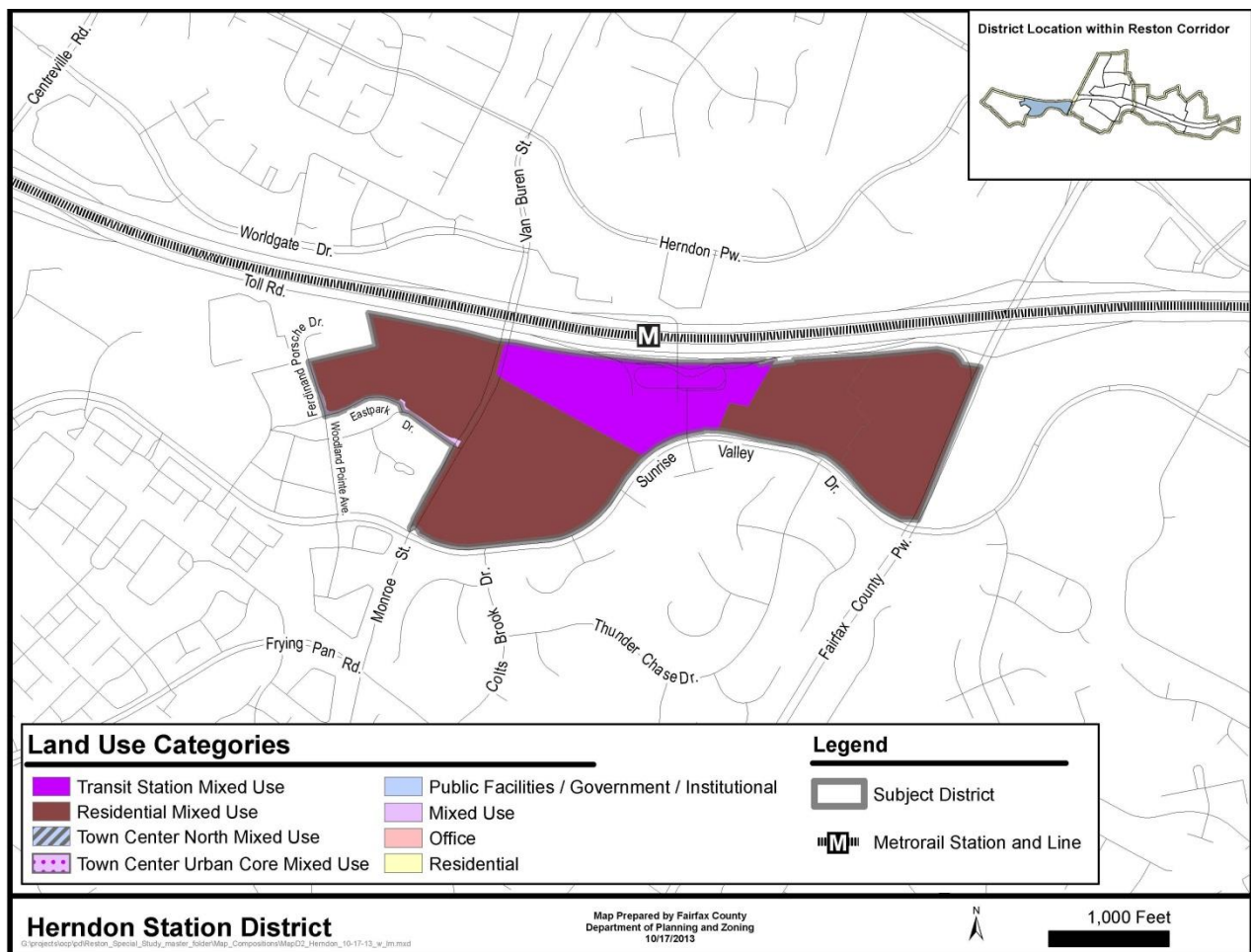
The existing Sunrise Valley Wetlands provides a particular opportunity to link a natural habitat by trails and pedestrian facilities planned for the TSA to other small semi-urban scale parks along Sunrise Valley Drive in a connected park amenity. As described in the Areawide text on Urban Parks, Recreation Facilities, and Cultural Facilities, athletic field needs will be met through the construction of new fields as well as improvements to existing nearby fields. As a part of this, Areawide Plan guidance establishes a goal of one new full-service athletic field within each TSA. Contributions toward land and improvements sufficient to achieve this goal should be provided with development. This TSA includes the Herndon Transit-Oriented Development (TOD) Station District and the Woodland Park/Great Oak District

Herndon Station Transit-Oriented Development (TOD) District

The vision of the Herndon Station TOD District is for a moderate intensity urban neighborhood with a mix of uses including office, residential, and hotel, together with support retail and services, adjacent to a district-defining natural resource amenity. In addition, redevelopment should create pedestrian-friendly connections to one or more smaller urban plazas or parks to provide gathering places for people of all ages as well as places to walk and enjoy green spaces.

Guidance for evaluating development proposals in each district is contained in the Areawide Recommendations and the following district and subdistrict recommendations. Redevelopment options are dependent on the degree to which necessary public infrastructure can be provided and Plan objectives and development conditions set forth in the Areawide and subdistrict guidance can be satisfied by development proposals.

The Herndon Station District is comprised of approximately 126 acres and is generally bounded by the DAAR on the north, the Fairfax County Parkway on the east, Sunrise Valley Drive on the south and the Woodland Park office development on the west, as shown on Figure 62 in the Reston Section of the Comprehensive Plan. Monroe Street is the primary north-south street in the district.



Redevelopment Option

The vision for this district is for redevelopment at higher intensities with more diverse land uses than currently exist and a wider array of support services.

Local-serving amenities including plazas, other urban parks, trails, and public art should be provided throughout the subdistrict to serve local leisure and recreation needs. The exact number of urban parks, their sizes and distribution will be determined by the amount and type of new development, in accordance with the Urban Parks Framework in the Policy Plan.

The Transit Station Mixed Use area is planned for intensity within a range of 1.5 to 2.5 FAR. The planned zoning target for office development in this area of the subdistrict is 2.1 million square feet of existing, approved and new development. The planned zoning target for residential development is approximately 2,000 residential units. Development proposals should typically provide a mix of 50 percent non-residential use and 50 percent residential use. The availability of vacant land within close proximity to the Metro station presents an opportunity to realize the desired mix for Transit Station Mixed Use areas of 50 percent non-residential uses and 50 percent residential uses. Individual developments may have flexibility to build more office use if other developments are built or rezoned with a use mix that contains proportionally less office. Ground level retail and support service uses are encouraged to add to the vibrancy and enhance the pedestrian environment. Support retail uses should be located in office, hotel or residential buildings and be complementary to other uses with the objective of allowing residents and employees to minimize daily automobile use.

The Residential Mixed Use area is planned for intensity up to 1.5 FAR (approximately 2,700 units). The area is planned for predominantly residential uses with a mix of other uses including office, hotel and supporting retail. In addition, the wetlands area should be preserved. The availability of vacant land in this district creates an opportunity to achieve the Residential Mixed Use goal of 75 percent residential uses. Individual development may have flexibility to vary from the stated percentages if other developments are built or rezoned with a use mix that maintains these proportions for the area designated as the Residential Mixed Use category. Ground level retail and support service uses are encouraged to add to the vibrancy and enhance the pedestrian environment. Support retail uses should be located in office, hotel or residential buildings and be complementary to other uses with the objective of allowing residents and employees to minimize daily automobile use.

Transportation Recommendations for the Herndon TSA

Fairfax County Transportation Plan and Policy Plan guidance

The Countywide Transportation Plan Map is a component of the Comprehensive Plan and depicts the County's recommendations for transportation improvements, including adding HOV/HOT lanes, widening roads, constructing interchanges, extending existing roads, and constructing new roads. These recommendations are included into the Herndon TSA multimodal district maps. The Countywide Trails Plan Map delineates the planned trail network throughout the county. Future walkways and bike paths along with the existing network are shown on the maps included in this document.

Appendix 1 of the Transportation section of the Policy Plan contains the County's roadway functional classification, which varies slightly from the FHWA/VDOT functional classification. The county divides the "Minor Arterial" classification into two categories: Minor Arterials - A and Minor Arterials – B. This

information was used to compare the classification between FHWA/VDOT and the county to determine if there were any issues before moving to the DRPT classification step.

Pedestrian Mobility and Bicycle Facilities

Fairfax County Bicycle Master Plan

Fairfax County adopted its Bicycle Master Plan in October 2014. The plan includes recommendations for different types of bicycle facilities throughout the county, including signage, sharrows, bike lanes and protected bike lanes. The Reston Plan guidance includes the Bicycle Master Plan recommendations. The Bicycle Network Map in Figure 4 on page 16 shows the existing and future bicycle network. When the cross-sections are being developed during Phase II, the specific bicycle facility recommendation will also be finalized.

Pedestrian Mobility

The street network planning in the Reston TOD districts should provide a safe and comfortable environment for pedestrians while addressing mobility and access needs for all users (including emergency service, goods movement and utilities placement). The enhanced street network should provide a high level of connectivity within the TOD districts so that pedestrians, bicyclists, transit users, and vehicles can choose the most direct routes and access urban properties. In addition, improved connectivity should be provided between the TOD districts and other districts as well as between the TSAs and the adjoining areas outside the TSAs.

In addition, direct paths, such as trails or walkways, should be provided for pedestrians where additional street connections cannot be made or where a more enhanced pedestrian network is desirable. The Pedestrian Network Map is Figure 5 on page 17.

Public Transportation

Metrorail

The introduction of Metrorail service along the Dulles Airport Access Road and Dulles Toll Road (DAAR, Route 267) is a key component to providing increased mobility and reducing vehicle dependency for employees and residents in the three TSAs. Focusing the highest density development, especially new office development, around the Metrorail stations is vital to promote the use of mass transit and achieving the vision for these TSAs.

Bus Service-Existing

Fairfax Connector bus service currently serves both local riders and people commuting from the TSAs to other employment centers. These routes will be modified to provide convenient and reliable feeder service from other parts of Reston as well as the outlying communities to the Metrorail stations. There will also be a need for effective service between the TOD areas and between areas on both sides of the DAAR.

Fairfax County Transit Development Plan – Recommended Bus Routes

In 2016, Fairfax County Department of Transportation completed a comprehensive Transit Development Plan (TDP) for all bus service in the County. The TDP serves as a 10-year plan for the expansion and enhancement of bus service in Fairfax County. The routes recommended in the TDP have been integrated into the transportation network maps and are shown as “Future Fairfax Connector” routes and “Future Metrobus” routes. Additionally, the bus system that serves Reston was reorganized with the future opening of the Silver Line. Route changes in the Herndon Service Area are shown on the Proposed Route 929 Map in Figure 4-22 on page 128. At this time there are no planned high capacity bus routes that would require dedicated lanes in the Herndon TSA. The County is currently undertaking a planning study to extend the life of the TDP from 2020 to 2025.

The entire Transit Development Plan can be found online at:

<https://www.fairfaxcounty.gov/transportation/tdp>.

Road Network and Circulation

The road network and circulation recommendations provide additional transportation guidance for development within the Wiehle-Reston East, Reston Town Center, and Herndon TSAs. As new streets are constructed, right-of-way should be provided for their ultimate configuration including pedestrian and bicycle facilities as identified in the Plan. The streets should provide a high level of connectivity and accommodate all modes of transportation to the fullest extent possible.

Balancing the competing needs of numerous stakeholders will be necessary from the earliest stages in the planning and design of transportation projects. The design of a facility should ensure safety and function appropriately for all users regardless of the mode of travel they choose. Flexibility in design may be considered to achieve Plan objectives. The Transportation element of the Policy Plan can be found online at: <https://www.fairfaxcounty.gov/planning-development/sites/planningdevelopment/files/assets/compplan/policy/transportation.pdf>

The amount of new development planned for the Reston TSAs will require significant transportation improvements and changes in travel patterns. Planned roadway improvements, including several new crossings of the DAAR, are necessary to enhance circulation and access in the area and help relieve congestion at key intersections. Improvements to transit and to pedestrian and bicycle networks are also needed to encourage travel by these modes. The provision of such infrastructure and the achievement of trip reduction objectives should occur in concert with future growth.

A fundamental purpose of the grid of streets is to increase connectivity in the TSAs. One benefit is the availability of alternative routes for vehicles, thereby reducing congestion. A conceptual enhanced street network for the Herndon Transit Station Area is represented in Figure 3 on page 15. In planning the grid of streets, consideration should be given to avoiding intersections with acute or awkward angles; minimizing exclusive turn lanes; and having block sizes generally within a 400 foot to 600 foot range. Any block longer than 600 feet should contain a mid-block pedestrian connection where possible.

Existing and Future Transportation Network

Fairfax County staff combined the recommendations from the various transportation plans, studies, and maps as mentioned above to create an all-inclusive transportation network map. This map includes the current and future pedestrian network, current and future bicycle network, and current and future transit network, which can be found in Figure 7 on page 19.

Functional Classification

Fairfax County used the VDOT 2013 Draft Functional Classification GIS layer to identify the functional classification of each street within the Herndon TSA Multimodal District. This VDOT functional classification was then used in coordination with the VDOT/DRPT Translation Matrix to classify each street in the Multimodal District with a DRPT street typology. The list of streets included in the Herndon TSA Multimodal District and defined as a multimodal street can be found in Table 2 on page 20. An associated map with the VDOT functional classification system is shown in Figure 8 on page 22.

Fairfax County staff reviewed each street in the district and used Comprehensive Plan text and transportation plan recommendations on widening and improvements to derive the DRPT based street typology. The Fairfax County recommended DRPT Functional Classification can be found in Table 2 on page 20. The accompanying map can be found in Figure 9 on page 23.

Modal Emphasis

All roads in the Herndon TSA were evaluated to determine the modal emphasis, or which modes are to be accommodated on each roadway. This chart is shown in Table 2 on page 20.

The Comprehensive Plan provides guidance in terms of cross-sections for certain roadways in the Herndon TSA Multimodal District. Where the Comprehensive Plan does not provide guidance, Fairfax County DOT will use the DRPT Guidelines to develop cross-sections based on modal priority and optimal values for each transportation element included on the street. Recommended cross-sections using the multimodal design standards will be included in the Phase II submission, after the county receives approval from VDOT on Phase I.

Appendix A

Table 1: Activity Density Classification

Area	Wiehle-Reston East TSA^	Reston Town Center TSA^	Herndon TSA^	Wiehle-Reston East TSA *	Reston Town Center TSA *	Herndon TSA *
Planning District(s)	Upper Potomac	Upper Potomac	Upper Potomac	Upper Potomac	Upper Potomac	Upper Potomac
Offices (2013 Potential, gsf)	9,556,882	15,660,326	4,239,458	3,345,415	5,968,224	929,552
Employment Factor (gsf/emp)	300	300	300	300	300	300
Jobs	31,856	52,201	14,132	11,151	19,894	3,099
Retail Centers (2013 Potential, gsf)	170,684	1,369,083	182,986	752,718	1,342,850	209,149
Employment Factor (gsf/emp)	400	400	400	400	400	400
Jobs	427	3,423	457	1,882	3,357	523
Industrial Centers (2013 Potential, gsf)	65,587	447,343	0	0	0	0
Employment Factor (gsf/emp)	450	450	450	450	450	450
Jobs	146	994	0	0	0	0
Government Ins Centers (2013 Potential, gsf)	153,228	1,990,321	23,227	83,635	149,205	23,239
Employment Factor (gsf/emp)	500	500	500	500	500	500
Jobs	306	3,981	46	167	298	46
Single-Family Units (2013 Potential, ea)	0	0	0	0	0	0
Residential Occupancy Factor 2013 (ppl/unit)	3.13	3.13	3.13	3.13	3.13	3.13
People	0	0	0	0	0	0
Townhouse Units (2013 Potential, ea)	0	685	300	0	0	0
Residential Occupancy Factor 2013 (ppl/unit)	2.77	2.77	2.77	2.77	2.77	2.77
People	0	1,897	831	0	0	0
Multifamily Units (2013 Potential, ea)	9,066	12,000	5,880	4,182	7,460	1,162
Residential Occupancy Factor 2013 (ppl/unit)	1.94	1.94	1.94	1.94	1.94	1.94

People	17,588	23,280	11,407	8,113	14,472	2,254
Subtotal - Jobs	32,735	60,599	14,635	13,200	23,550	3,668
Subtotal - People	17,588	25,177	12,238	8,113	14,472	2,254
Total - People and Jobs	50,323	85,776	26,874	21,314	38,022	5,922
Total Land Area (acres)	522	802	359	86	117	27
Density (ppl+jobs/acres)	96.4	107.0	74.9	247	324	222
Density Classification	P6	P6	P6	P6	P6	P6

Notes for Table 1:

^Activity densities for the areas designated as "transit station mixed use" and "residential mixed use" in the three Reston Transit Station Areas, as recommended in the Fairfax County Comprehensive Plan, 2017 Edition, Area III, Upper Potomac Planning District, amended through 10-16-2018, Reston Transit Station Areas.

*Activity densities for the areas designated as "transit station mixed use". These areas generally include the parcels within a safe, comfortable and reasonably direct 1/4 mile walk from the stations.

A range of development potential is recommended by the Plan; the mid-point was applied for the transit station mixed use areas. This mid-point was used for the impacts analysis and takes into account that not all parcels will develop at the planned maximum intensity/FAR.

Figure 1: Herndon TSA Multimodal District

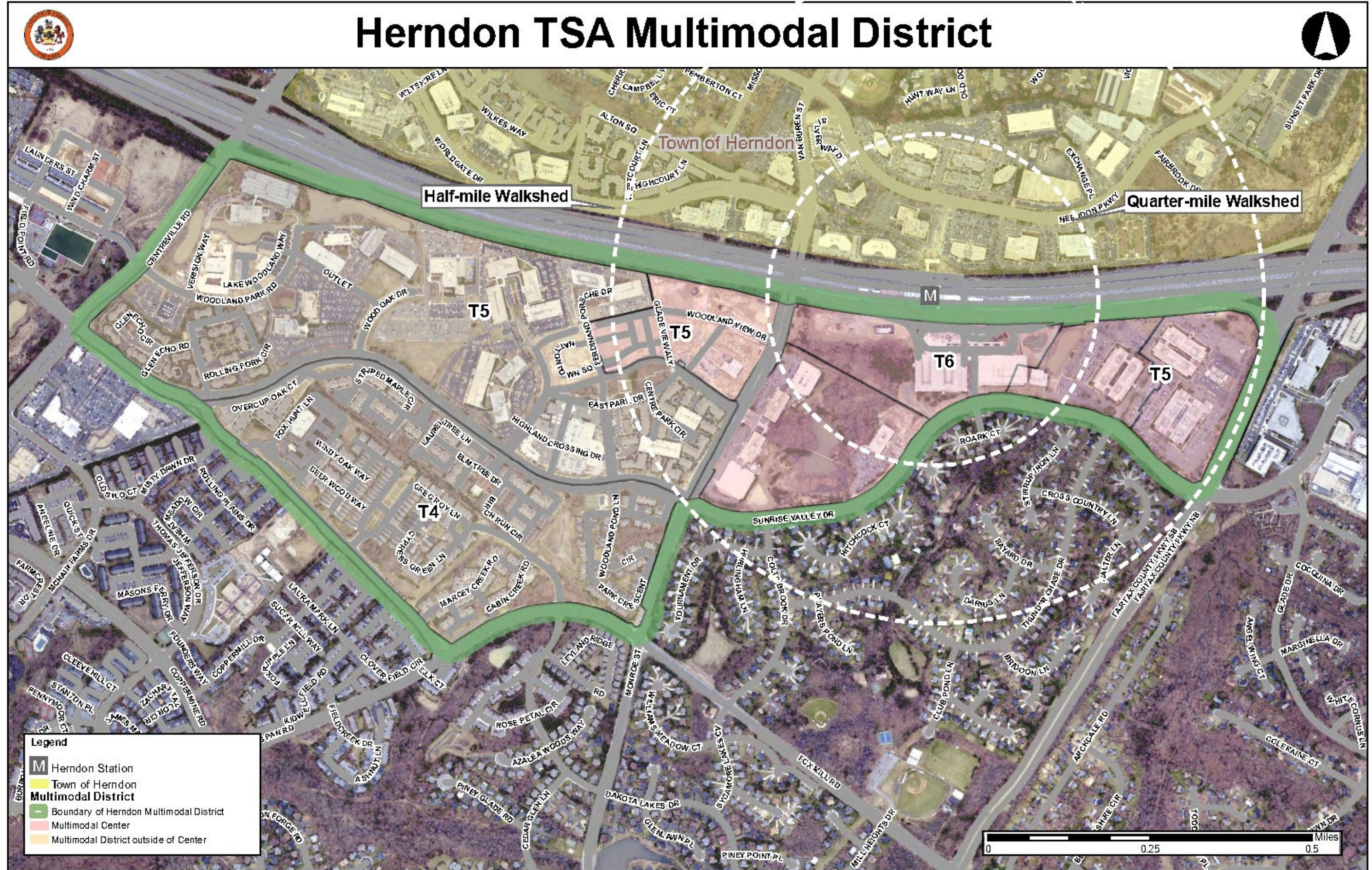


Figure 2: Existing Street Network

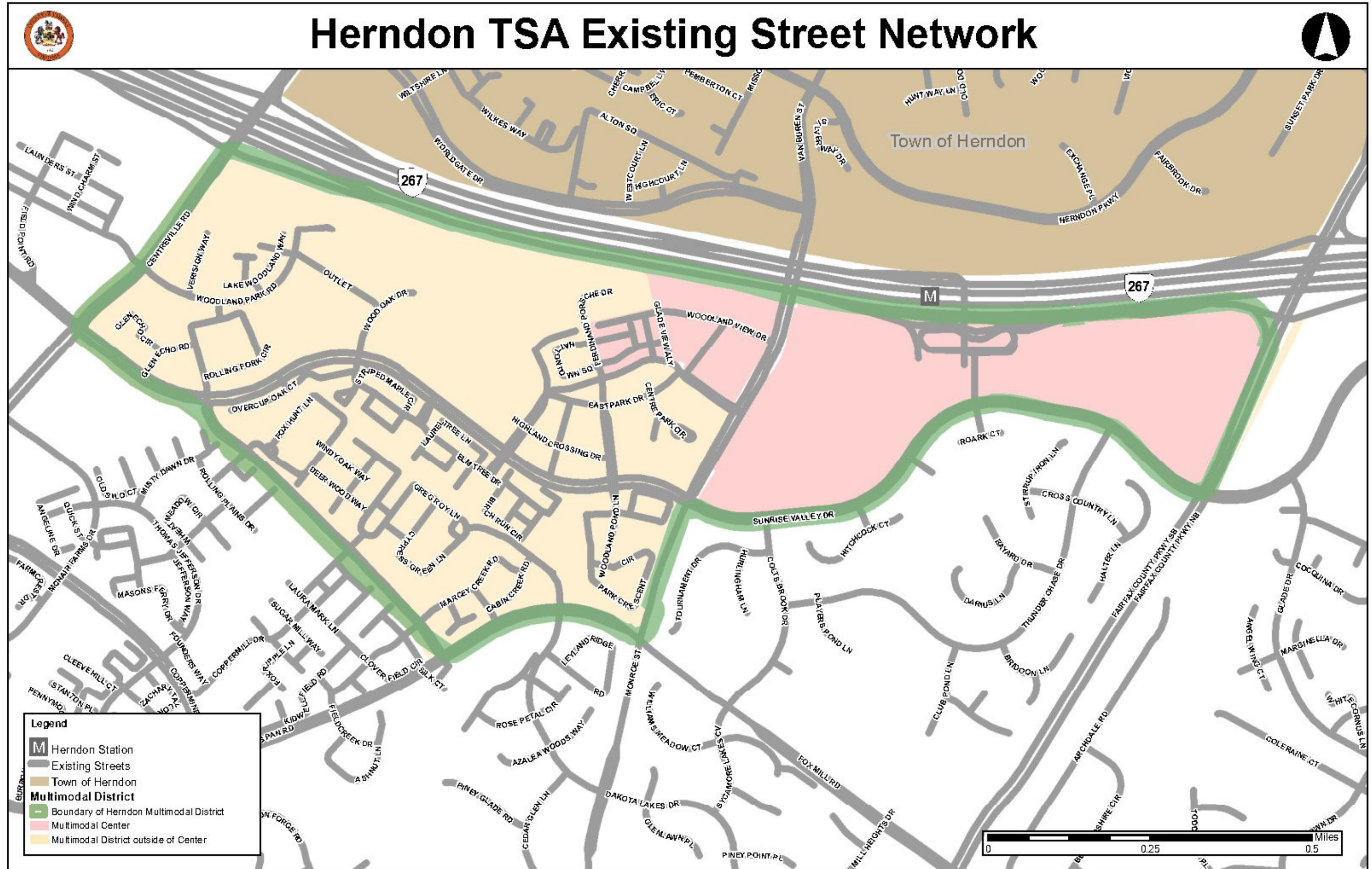


Figure 3: Future Street Network

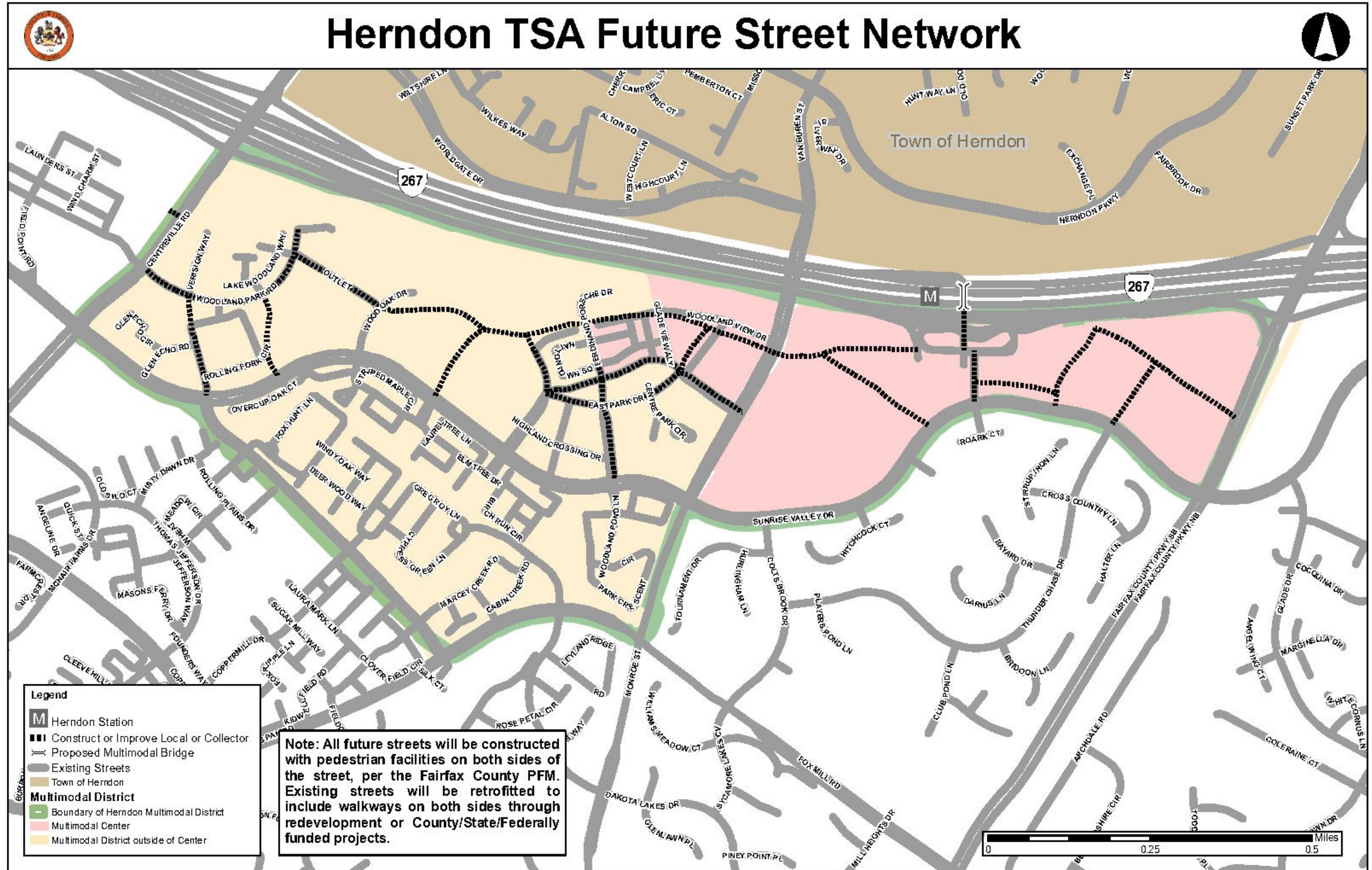


Figure 4: Bicycle Network

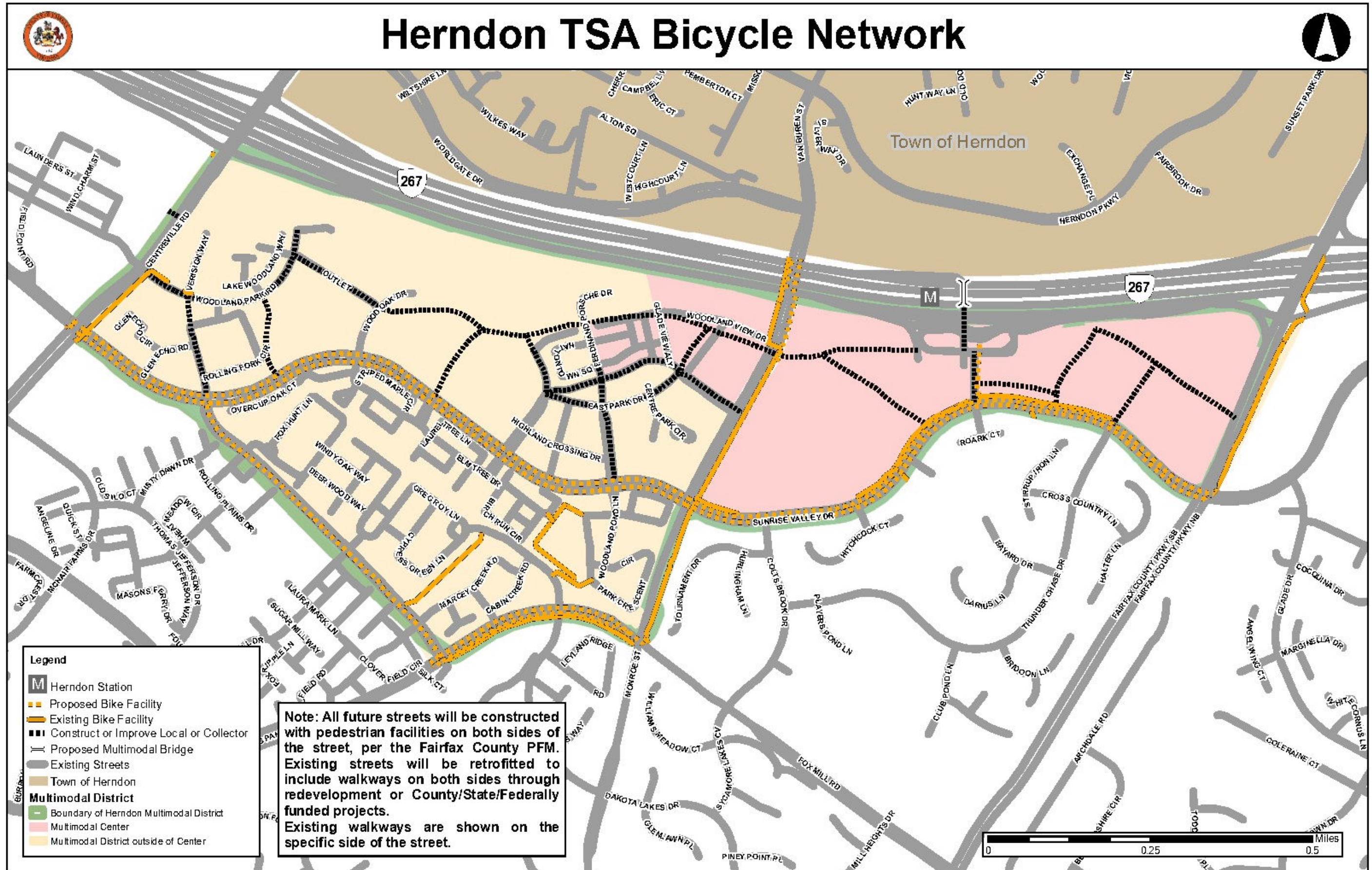


Figure 5: Pedestrian Network

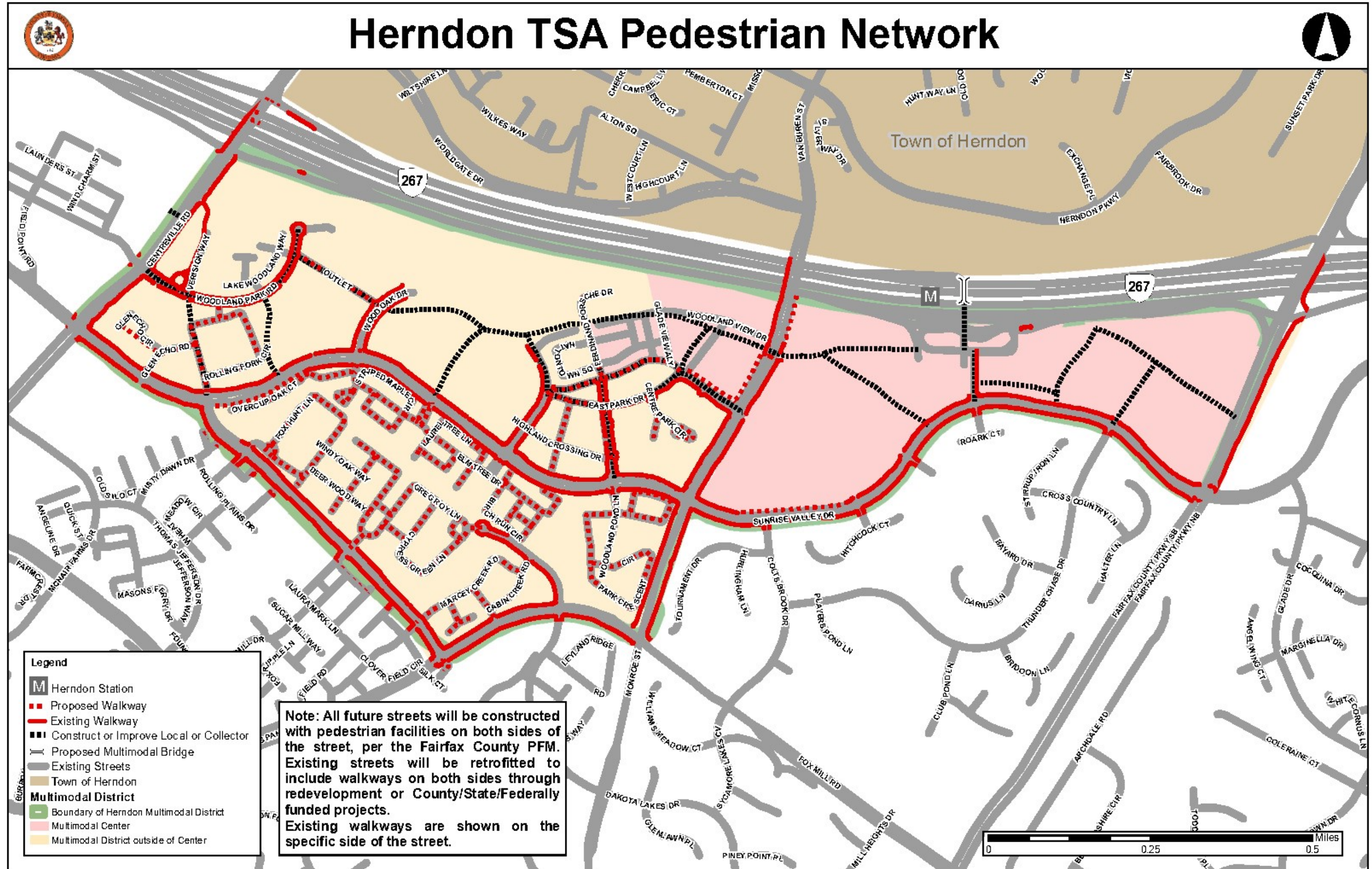


Figure 6: Transit Network

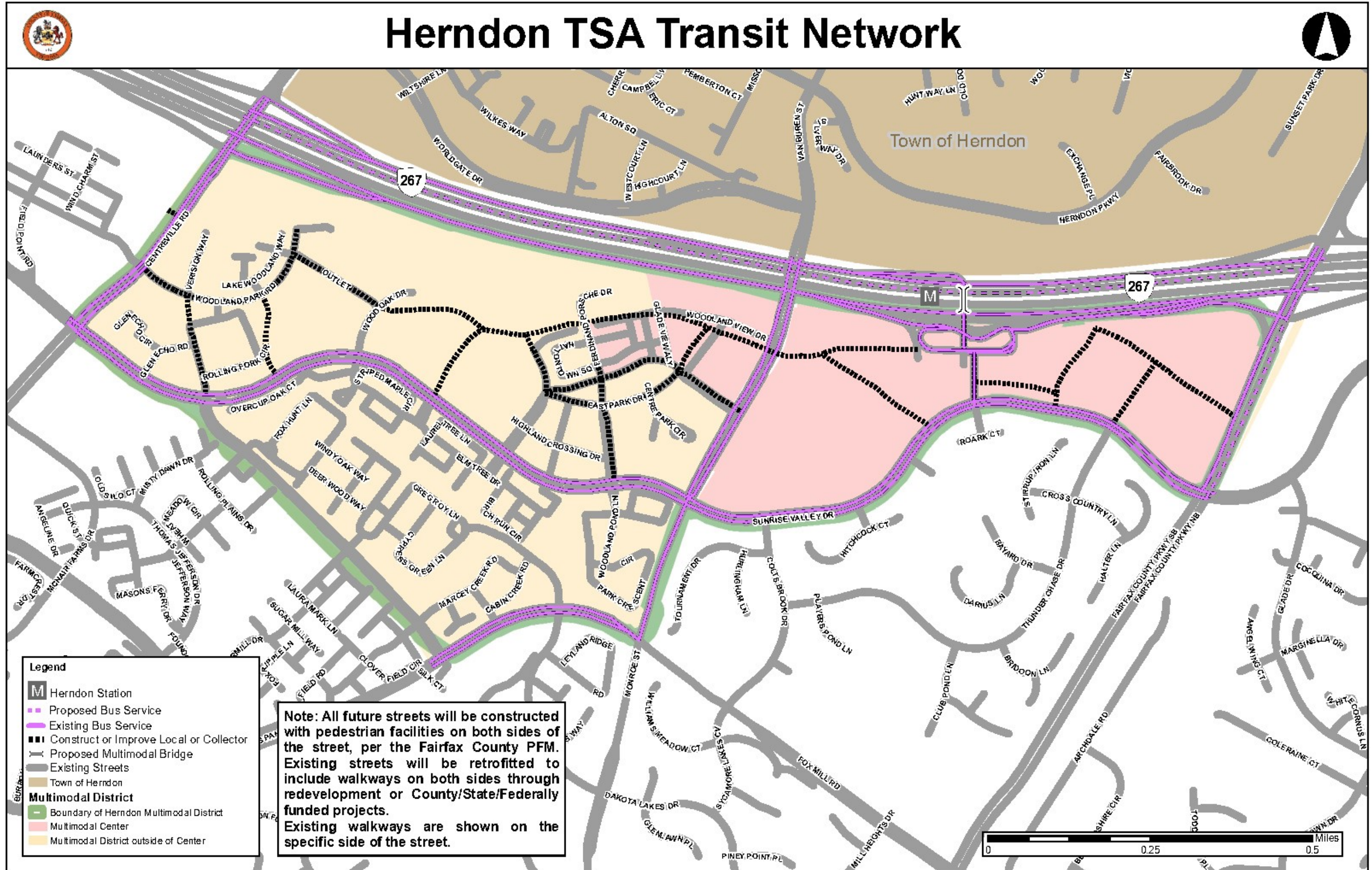


Figure 7: Multimodal Transportation Network

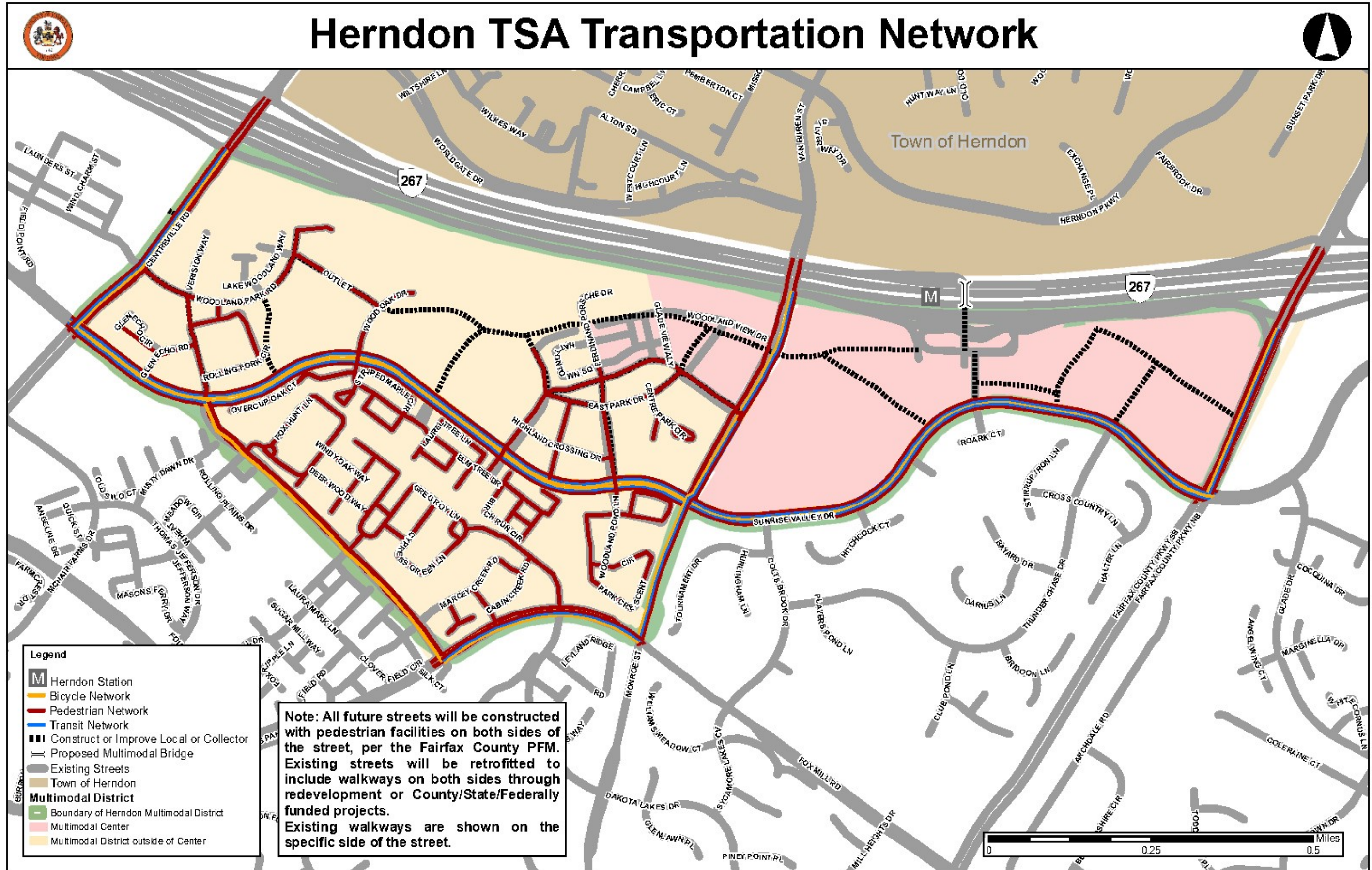


Table 2: Herndon TSA Functional Classification and Modal Emphasis

District	Name	From	To	VDOT Functional Classification	FCDOT Functional Classification	DRPT Classification	Modal Emphasis
Herndon TSA	Ferdinand Porsche Dr	Eastpark Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Eastpark Drive	Ferdinand Porsche Dr	Monroe Street	Local	Local	Local	Pedestrian
Herndon TSA	Monroe Street	Sunrise Valley Drive	Dulles Toll Road	Minor Arterial	Minor Arterial - B	Avenue	Bicycle, Pedestrian, Transit
Herndon TSA	Sunrise Valley Drive	Centreville Rd	Fairfax County Pkway	Minor Arterial	Minor Arterial - B	Avenue	Bicycle, Pedestrian, Transit
Herndon TSA	Fairfax County Parkway	Sunrise Valley Drive	Dulles Toll Road	Principal Arterial	Freeway/Expressway	Through Corridor	Bicycle, Pedestrian, Transit
Herndon TSA	Centreville Road	Sunrise Valley Drive	Dulles Toll Road	Minor Arterial	Minor Arterial - A	Through Corridor	Bicycle, Pedestrian, Transit
Herndon TSA	Woodland Park Road	Centreville Rd	End	Local	Local	Local	Pedestrian
Herndon TSA	Wood Oak Drive	Sunrise Valley Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Glen Echo Road	Sunrise Valley Drive	Rolling Fork Circle	Local	Local	Local	Pedestrian
Herndon TSA	Fox Mill Road	Sunrise Valley Drive	Frying Pan Road	Minor Arterial	Minor Arterial - B	Avenue	Bicycle, Pedestrian Transit
Herndon TSA	Frying Pan Road	Fox Mill Road	Monroe Street	Minor Arterial	Minor Arterial - B	Avenue	Bicycle, Pedestrian
Herndon TSA	Fox Hunt Lane	Fox Mill Road	End	Local	Local	Local	Pedestrian
Herndon TSA	Deer Wood Way	Fox Hunt Lane	Stone Fence Lane	Local	Local	Local	Pedestrian
Herndon TSA	Windy Oak Way	Fox Hunt Lane	Birch Cove Road	Local	Local	Local	Pedestrian
Herndon TSA	Birch Cove Road	Deer Wood Way	Stone Fence Lane	Local	Local	Local	Pedestrian
Herndon TSA	Deer Wood Ct	Deer Wood Way	Deer Wood Way	Local	Local	Local	Pedestrian
Herndon TSA	Stone Fence Lane	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Greg Roy Lane	Stone Fence Lane	Frying Pan Road	Local	Local	Local	Pedestrian
Herndon TSA	Cyprus Ridge Lane	Greg Roy Lane	Cypress Green Ln	Local	Local	Local	Pedestrian

District	Name	From	To	VDOT Functional Classification	FCDOT Functional Classification	DRPT Classification	Modal Emphasis
Herndon TSA	Cyprus Green Lane	Greg Roy Lane	Green Grass Court	Local	Local	Local	Pedestrian
Herndon TSA	Green Grass Court	Greg Roy Lane	Cypress Green Lane	Local	Local	Local	Pedestrian
Herndon TSA	Marcey Creek Road	Fox Mill Road	Cabin Creek Road	Local	Local	Local	Pedestrian
Herndon TSA	Cabin Creek Road	Avalon Bay Lane	Greg Roy Lane	Local	Local	Local	Pedestrian
Herndon TSA	Coopers Branch Court	Marcey Creek Road	End	Local	Local	Local	Pedestrian
Herndon TSA	Avalon Bay Lane	Marcey Creek Road	Frying Pan Road	Local	Local	Local	Pedestrian
Herndon TSA	Overcup Oak Court	Elm Tree Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Elm Tree Drive	Sunrise Valley Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Pumpkin Ash Court	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Striped Maple Circle	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Meadow Willow Circle	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Black Willow Drive	Sunrise Valley Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Cypress Grove Circle	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Sycamore View Lane	Elm Tree Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Laurel Tree Lane	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Locust Park Drive	Sunrise Valley Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Birch Run Circle	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Hickory Nut Lane	Elm Tree Drive	Birch Run Circle	Local	Local	Local	Pedestrian
Herndon TSA	Weeping Cherry Walk	Hickory Nut Lane	Birch Run Circle	Local	Local	Local	Pedestrian
Herndon TSA	Woodland Pond Lane	Sunrise Valley Drive	Park Crescent Circle	Local	Local	Local	Pedestrian
Herndon TSA	Wood Crescent Circle	Entirety	N/A	Local	Local	Local	Pedestrian
Herndon TSA	Corporate Park Drive	Sunrise Valley Drive	End	Local	Local	Local	Pedestrian
Herndon TSA	Highland Crossing Drive	Corporate Park Drive	Woodland Point Ave	Local	Local	Local	Pedestrian
Herndon TSA	Woodland Crossing Drive	Sunrise Valley Drive	East Park Drive	Local	Local	Local	Pedestrian
Herndon TSA	East Park Drive	Corporate Park Drive	Monroe Street	Local	Local	Local	Pedestrian
Herndon TSA	Woodland Pointe Ave	Sunrise Valley Drive	East Park Drive	Local	Local	Local	Pedestrian

Figure 8: VDOT / FHWA Functional Classification

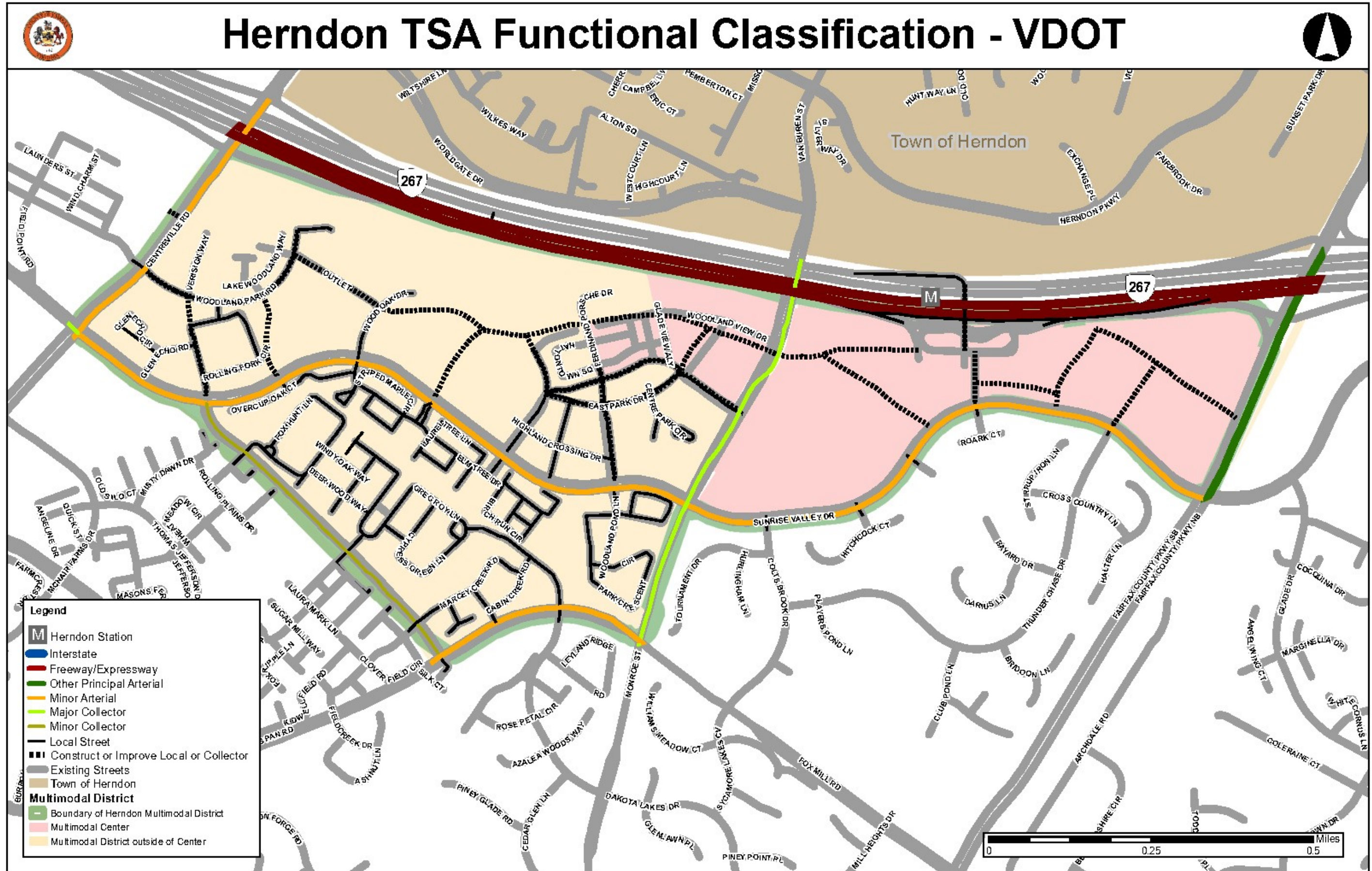
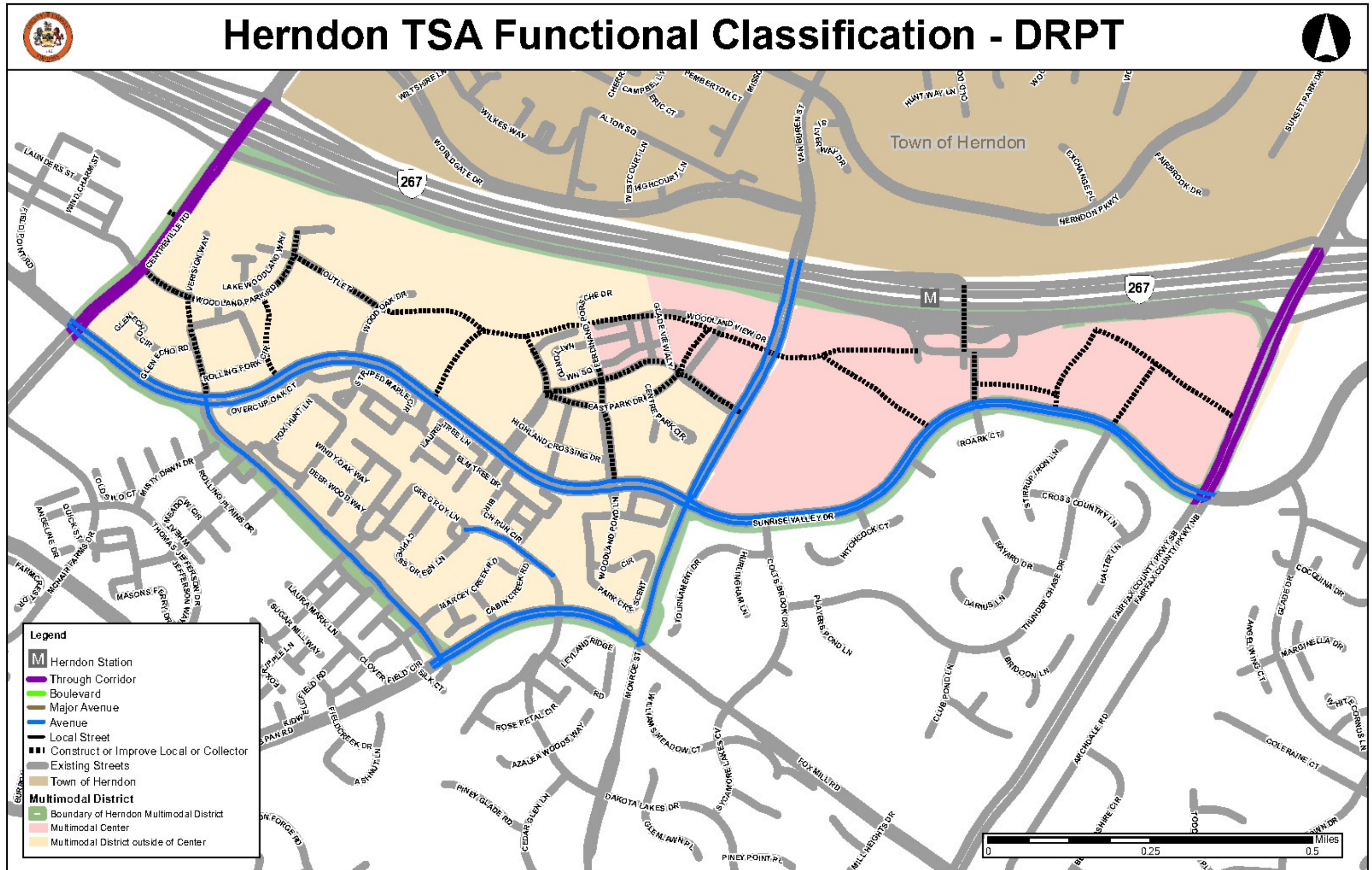


Figure 9: DRPT Functional Classification



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Appendix B

Fairfax County Methodology for Developing a Multimodal System Plan

Urban Street Standards Approach and Process

Background and History: The Virginia Department of Rail and Public Transportation (DRPT) published the final Multimodal System Design Guidelines (Guidelines) in October 2013. The Guidelines establish a basic framework for multimodal planning in the Commonwealth and are intended as a resource for local planners, engineers, designers, policy and decision makers, and anyone else engaged in multimodal planning throughout Virginia.¹ The Guidelines discuss the integration of land use, transportation, and urban design to support multimodal connectivity and mobility in Virginia.

In 2010, § 33.1-69.001 was added to the Code of Virginia, requiring the Virginia Department of Transportation (VDOT), DRPT, and jurisdictions with urban and urban development areas that use the urban county executive form of government to review new design standards for state secondary highway system components. In January 2014, VDOT implemented this legislation by adopting the Guidelines as its statewide multimodal design standards for mixed-use urban centers through the addition of Appendix B(2) to the Road Design Manual (RDM). In Fairfax County, mixed-use urban centers include Community Business Centers and Transit Station Areas that are organized by the land classifications in the Concept for Future Development as described in the Fairfax County Comprehensive Plan. Mixed-use centers are planned for a mix of higher density residential and non-residential land uses.

Fairfax County has been working with VDOT and DRPT on several fronts: reviewing of the statewide Multimodal Design Standards, developing a Multimodal System Plan for Fairfax County, and revising Appendix B(2) of the RDM. The purpose of this document is to describe in detail the methodology Fairfax County undertook in developing its Multimodal System Plan.

Multimodal System Plan Defined: According to DRPT, a Multimodal System Plan for a local jurisdiction is “an integrated land use and multimodal transportation plan that shows the key Multimodal Districts, Centers and Multimodal Corridors in a region and ensures that there is a connected circulation network for all travel modes. Such a plan can either be done “from scratch” or, more often, by assembling all of the existing land use and transportation plans into a unified whole.”² Fairfax County has taken the later approach because the Comprehensive Plan includes recommendations for multimodal transportation components. Furthermore, the county’s Comprehensive Plan is reviewed regularly, and Plan amendments and land use studies are supported by transportation planning analysis in accordance with state and federal requirements.

Fairfax County’s Multimodal System Plan: The Multimodal System Plan is comprised of both countywide and activity center level components. The countywide components include a **Countywide Multimodal Corridor Map** that displays the connectivity and modes between activity centers, and a **Countywide Multimodal System Plan Map** that assembles all of the modal networks onto one map. The Multimodal Corridor Map will include supporting tables listing the roadways using DRPT classifications for each core area.

¹ http://www.drpt.virginia.gov/activities/files/DRPT_MMSDG_FINAL_oct31B.pdf, page 10.

² http://www.drpt.virginia.gov/activities/files/DRPT_MMSDG_FINAL_oct31B.pdf, page 19.

The activity center level components consist of the **Multimodal District Plans for Fairfax County Activity Centers**. Each Multimodal District Plan will delineate the boundaries of where the standards apply, reclassify roadways using DRPT categories, and identify modal emphasis. They also will contain the supporting documentation for District and Core classifications for each activity center. Both the county-wide and activity center level documents and maps will be submitted to VDOT for review and approval and, collectively, will comprise the county's Multimodal System Plan.

The Guidelines identify five steps that local jurisdictions can follow in developing a Multimodal Systems Plan. This document describes how Fairfax County approached each of the five steps.

VDOT Submittal Process: It was mutually determined by Fairfax County, VDOT and DRPT that the submittal process for VDOT to review and approve each Multimodal District Plan will be broken into two phases:

Phase I Submittal: Steps 1 – 5

The Phase I Submittal package includes:

- A. A narrative describing the Multimodal District and Center
- B. Calculations showing how the Activity Density Classification is derived. For the Reston Transit Station Areas, the areas planned for transit station mixed use and residential mixed use are classified as a P6 multimodal center type. According to Guidelines, this is the most urban center type in terms of planned density and intensity of land uses.
- C. Series of maps showing the existing and future transportation network, including pedestrian, bicycle, transit connectivity
- D. Chart listing DRPT functional classification of each street in the District
- E. Chart listing the modal emphasis (pedestrian, bicycle, transit, parking, green) for each street

Phase II Submittal: Step 6

- A. Cross sections for each street in the District (excluding local streets)

Fairfax County is to submit each application directly to VDOT who will distribute the package to VDOT staff as well as DRPT with a 60-day review window. Each Phase I application is to be submitted and approved prior to the submittal of Phase II.

Special Submittal Process for Reston Transit Station Areas: An interim process is envisioned for activity centers subject to immediate development pressure where cross-sections guidance is not a component of the Comprehensive Plan or other Board of Supervisors' adopted documents. Due to the immediate need for a Multimodal District Plan for the three Reston Transit Station Areas as a result of an influx of new development centered on the Metro Silver Line, a hybrid process was mutually agreed upon by VDOT and Fairfax County. The three Multimodal Districts where this process will be used include:

- Wiehle-Reston East
- Reston Town Center
- Herndon

Phase II Interim Submittal (Reston)

This alternative process will allow the county to utilize 'optimal complete street' cross sections in the interim when a large number of development applications are expected, while the final cross sections are reviewed and approved by the county. The county will recommend that all transportation modes serve as primary elements and therefore the optimal cross sections shown in the DRPT Guidelines will apply. In some cases, these optimal cross sections require a significant

amount of right-of-way for wide sidewalks, on-street parking, bicycles lanes, etc. If a developer cannot meet the standard, a waiver(s) will be required.

Phase II Final Submittal (Reston)

The county will work with Reston land owners, developers, and other stakeholders to develop cross sections with guidance from the DRPT guidelines. The Phase II Final Submittal will include the final roadway cross sections based on this further analysis of stakeholder input, prioritization of the modes, and right-of-way availability.

Step 1: Ensuring Public Engagement and Ongoing Input (page 25 of the Guidelines)

The Guidelines state that a “Multimodal System Plan is ultimately designed for the public, and as such, should reflect the perceptions, opinions and concerns of the public served by the plan.”³ The Fairfax County Comprehensive Plan contains recommendations for future land use, transportation, housing, and other functional areas and forms the framework for the design of the multimodal system plan. Plan recommendations are developed with broad-based public outreach and participation. Likewise, public outreach and participation are key components to the Plan review and amendment process. Public engagement in the Plan amendment process can include a variety of methods such as informational presentations, design charrettes, community task forces, workshops, and/or public hearings; all of which are cited in the Guidelines.

Step 2: Analyzing Existing and Future Population & Employment (page 26 of Guidelines)

Step 2 involves data collection and analysis from a multimodal perspective to examine existing and future relationships between land uses and the transportation system, anticipated travel trends and growth of travel by various modes, and key areas of activity and destinations in the region for generating multimodal trips, either now or in the future.⁴ In Fairfax County, data collection and analysis is conducted to assess the impacts of development scenarios, implement Plan monitoring, and provide forecasts to the Metropolitan Washington Council of Governments (MWCOG). Countywide policy goals inform the strategic approach for allocating population and employment throughout the county as described in Step 3.

The Guidelines define activity density as a measure of population and employment combined, and is expressed in terms of jobs plus population per acre.

$$\text{ACTIVITY DENSITY} = \text{POPULATION} + \text{JOBS/ACRE}$$

Rather than using the activity density for the Multimodal Center (core area) to categorize the typology, Fairfax County determined it was more appropriate to use the activity density for the Multimodal District (activity center) geography. The term activity center is also used by MWCOG to describe existing urban centers, traditional towns, transit hubs, and areas expecting future growth and where local governments are targeting future residential and commercial development.⁵ Comprehensive Plan quantification is based upon the activity center boundary. The 20 activity centers that were analyzed all fell within the P4 – Large Town/Suburban Center

³ http://www.drpt.virginia.gov/activities/files/DRPT_MMSDG_FINAL_oct31B.pdf, page 25.

⁴ http://www.drpt.virginia.gov/activities/files/DRPT_MMSDG_FINAL_oct31B.pdf, page 26.

⁵ <http://www.regionforward.org/coalition-3/work/activity-centers>, accessed 21 October 2013.

to P6 - Urban Core center type. Because core areas are the densest areas planned within an activity center, the core area typologies also fell within the P4 –Large Town/Suburban Center to P6 - Urban Core type.

The quantification of Comprehensive Plan potential is based upon planned residential and non-residential development. Due to the complexity and number of land use options in the Plan, the practice has been to combine all of the Plan options into two major alternatives. One alternative is “maximum non-residential”, calculated by assuming the implementation of land use recommendations that maximize commercial development. The other alternative is “maximum residential” and assumes the implementation of land use recommendations that maximize housing development. In preparing a Multimodal System Plan, the county chose to use the “maximum residential” alternative to evaluate Plan potential.

Several types of data were used to determine the Activity Density for Fairfax County activity centers:

1. Plan quantification of development potential - The “maximum residential” alternative of the Comprehensive Plan was used. A total amount of square feet was calculated for the planned office, retail, industrial, and government/institutional uses, as well as planned residential units. Planned hotel use was grouped with retail.
2. Planned nonresidential use - Employment factors were used to calculate the number of jobs estimated to result from each type of planned non-residential use. For example, 300 gross square feet per employee for office use and 450 gross square feet per employee for industrial production are some of the factors that were used. The employment factors were originally derived from Montgomery County, and modifications were made, as warranted, based upon various estimates by the Department of Planning and Zoning. These employment factors have been used consistently for the past several years in a variety of applications, including supplying MWCOC with employment estimates and estimating the impact of proposed development.
3. Planned residential use - Expressed in terms of single family, townhouse, and multi-family units. The number of people per dwelling unit was derived from the average household size by unit type by Planning District. If the geography of a Multimodal District included more than one Planning District, the Planning District that comprised a larger area was used; in other cases one Planning District included most of the planned residential use.
4. Net acreage of each activity center - The total acreage of the area less the area devoted to major roads.

Step 2 Deliverable - A chart entitled Multimodal District Classifications, which summarizes the Activity Density calculations for each of the selected activity centers (see Attachment 1).

Steps 3 and 4: Designating Multimodal Districts and Centers (page 29 and 30 of Guidelines)

The Concept for Future Development as found in the Comprehensive Plan establishes the vision and policy direction for the county’s future growth. The Concept for Future Development places emphasis on concentrating future employment growth and higher intensity development in designated Mixed-Use Centers, which are also considered activity centers in the county. The activity centers are envisioned to comprise a more balanced ratio of jobs and households as part of the mix of land uses. Many activity centers are also recommended to contain a well-connected grid of streets to facilitate safe and convenient access for pedestrians and bicyclists, and to support the viability of placemaking elements such as sidewalk cafes, urban parks, public art, and civic plazas.

Multimodal Districts

The county's activity centers are categorized as Tysons Corner Urban Center, Suburban Centers, Community Business Centers, and Transit Station Areas. There are a total of 30 activity centers, some of which also are designated as Commercial Revitalization Districts (CRDs) or Commercial Revitalization Areas (CRAs). CRDs and CRAs were designated by the Board of Supervisors in 1998 to incentivize improvements to the economic vitality, appearance, and function of specific older commercial centers. When applying the terminology from the Guidelines, the county views activity centers as analogous to the Multimodal Districts. Initially, 20 activity centers are anticipated to be submitted to VDOT for review. Tysons Corner Urban Center is omitted because this area has a separate agreement with VDOT for roadway design standards and maintenance. Activity centers not served by planned or existing transit or planned for higher intensity development also are removed from consideration. Lastly, activity centers that are currently the subject of a planning study in which the recommended land use density or intensity and transportation network is anticipated to be modified will be evaluated at a later date, and could result in the submittal of additional Multimodal District Plans.

Multimodal Centers

The Comprehensive Plan recommends core areas for a majority of the activity centers. When applying the Guidelines terminology, the county views core areas as analogous to the Multimodal Centers. These core areas are planned for the highest intensity development with multimodal connectivity and are typically located within ½-¾ mile of an existing or planned transit station or town center.

The Guidelines define a Multimodal Center as a 1-mile diameter circle within a Multimodal District. The Center (core area) forms the nucleus for activities and is served by existing or future transit and by a current or planned network of streets. The boundary of each core area in the county was identified by evaluating the planned intensity or density for land units or sub-units in an activity center and also from unique site characteristics such as environmentally sensitive land or major highways. Land units were used because these smaller geographic areas contain site-specific land use recommendations and distinguish changes in intensity and land use in finer detail and with more accuracy than overlaying a one-mile circle around an existing or planned transit station or town center. Because of this variation from the Guidelines, boundaries of the county's centers vary somewhat in shape and size. In some cases, the Center comprises the entire District.

Step 3 and 4 Deliverable - A countywide map that identifies the twenty activity centers, with their corresponding Multimodal District and Center(s) boundaries.

Step 5: Designating Multimodal Corridors (page 32 of Guidelines)

1. The county's extensive GIS database was used to map the activity centers and core areas, and identify roads that intersect these areas. The GIS Layers that were used as a base for creating the maps for each activity center include:
 - A. VDOT Draft Roadway Functional Classification
 - B. FCDOT Roadway Functional Classification (Comprehensive Plan-Transportation Chapter)
 - C. NHS Routes
 - D. Sidewalk/Trails (pedestrian layer)
 - E. Bicycle Master Plan (adopted October 2014)
 - F. Fairfax Connector Bus Routes
 - G. WMATA Metrobus Routes
 - H. Metrorail Stations and Railways
 - I. Park and Ride/Commuter Lots
 - J. VRE Stations and Railways

- K. VRE Routes
- L. Circulator Routes- i.e. local shuttle systems moving people within an activity center or between a transit station and major employment center.
- M. Fairfax County Transit Development Plan
- N. Revitalization Areas
- O. Sub-units
- P. Fairfax County Border
- Q. Any future planned roadways

2. VDOT Functional Classifications were used as the basis to categorize the selected roadways that intersect the activity centers, and these classifications were compared with the Countywide Transportation Plan Map and transportation-related guidance in the Fairfax County Comprehensive Plan. If there were any discrepancies identified between the VDOT and FCDOT classifications, the county attempted to resolve these through a classification translation table (VDOT Translation Matrix) and discussed differences with VDOT.

3. Fairfax County’s Roadway Classifications as defined in the Comprehensive Plan were translated to the Multimodal Corridor Types (major avenue, avenue, local, etc.) using the VDOT Translation Matrix.

4. Process for Identifying Multimodal Corridors and Functional Classification

- a. Load GIS layers including VDOT Functional Classification, FCDOT Functional Classification and Fairfax County Multimodal Districts.
- b. Perform GIS operation to select all roadways from FCDOT Functional Classification Layer to Fairfax County Multimodal Districts layer. Roads classified as ‘Local’ were excluded from the list.
- c. Export table to identify the FCDOT functional classification of all roads within the Multimodal Districts.
- d. Perform GIS operation to select all roadways from VDOT Functional Classification layer that intersect with Fairfax County Multimodal Districts layer. This layer includes all streets within Fairfax County and the selected streets represent the Multimodal Corridors.
- e. Export table to identify the FCDOT functional classification of all roads within each Fairfax County Multimodal District.
- f. Create table below to compare VDOT Functional Classification and FCDOT Functional Classification and include columns for translation into DRPT Functional Classification and Modal Emphasis.

District	Street Name	VDOT Functional Classification	FCDOT Functional Classification	DRPT Classification	Modal Emphasis

Various county agencies (Department of Transportation, the Department of Planning and Zoning, and the Office of Community Revitalization) with knowledge of specific activity centers worked together to classify streets according to the Guidelines. Resources used to classify streets include the adopted Fairfax County Comprehensive Plan guidance, recommendations from ongoing studies, review of the physical layout of the current design of the street using aerial imagery, review of the modes currently accommodated on the street, as well as the planned future modes. For activity centers where cross-sections are incorporated into the Comprehensive Plan, these cross-sections were the primary sources used to determine the Multimodal Street Typology. The county noted any issues with the classification due to

differences between VDOT Functional Classification and FCDOT Functional Classification or with translation based on the physical layout of the street.

Step 5 Deliverable – A spreadsheet listing 1. roadways, 2. the VDOT Functional Classification, and 3. the DRPT Multimodal Street Typology. Accompanying the spreadsheet is a map displaying the roadways with their associated DRPT classification type.

Step 5A: Determine the modal emphases (modes that exist or are planned and will be accommodated with at least minimum standards) for all roadways except local roads

Information that formed the basis of the analysis included:

1. The Bicycle Master Plan, transit/bus routes, existing sidewalk/trail information, along with any other relevant studies as shown in Attachment II.
2. Identified Through Corridors and Placemaking Corridors
3. Planned street grid, if applicable.

Step 5A Deliverable - A series of Multimodal Corridor Maps that show the transportation modes on each corridor and a corresponding document that lists the modal emphases for all multimodal corridors.

Step 6: Defining the modal priority and creating corridor cross-sections

Once steps 1-5 are completed and approved, cross sections of each corridor in the multimodal district are created. Each mode identified as a modal emphasis in Step 5 must be accommodated with at least the minimum dimension described in the DRPT guidelines. If one or more primary modes are identified, that mode must be assigned the optimal dimension shown in the DRPT Guidelines. Careful consideration is given to the total amount of right-of-way available to the corridor.

Step 6 Deliverable – An illustrated cross section for each multimodal corridor.

Publications:

Fairfax County Department of Planning and Zoning, Fairfax County Zoning Ordinance as amended through May 14, 2013, Appendix 7, Commercial Revitalization Districts, 25 June 2013,
<<http://www.fairfaxcounty.gov/dpz/zoningordinance/appendices/apx07.pdf>>

Office of Community Revitalization, An Overview of the Development Review Process Within Commercial Revitalization Districts and Areas, April 2013,
<http://www.fcrevit.org/publications/download/DevelopmentInCRD_CRA.pdf>

Fairfax County Department of Planning and Zoning, State of the Plan: An Evaluation of Comprehensive Plan Activities Between 2000-2010, May 2013,
<http://www.fairfaxcounty.gov/dpz/projects/state_of_the_plan.pdf>

Attachment I: Multimodal District Classifications based on Comprehensive Plan Development Potential

Area	Merrifield	Annandale	Baileys Crossroads	Seven Corners	North Gateway	Penn Daw	Beacon/Groveton	Hybla Valley/Gum Springs	South County	Woodlawn	McLean
Planning District(s)	Jefferson	Annandale	Baileys	Baileys	Mt Vernon	Mt Vernon	Mt Vernon	Mt Vernon	Mt Vernon	Mt Vernon	McLean
Office (2013 Potential, gross square feet - gsf)	13,355,140	2,370,000	5,960,000	1,899,444	175,913	517,160	1,906,725	1,432,476	430,071	980,636	2,134,782
Employment Factor (gsf/emp)	300	300	300	300	300	300	300	300	300	300	300
Jobs	44,517	7,900	19,867	6,331	586	1,724	6,356	4,775	1,434	3,269	7,116
Retail Centers (2013 Potential, gsf)	3,150,937	1,830,000	2,760,000	1,636,155	215,070	704,176	912,686	2,217,428	151,837	569,426	1,134,230
Employment Factor (gsf/emp)	400	400	400	400	400	400	400	400	400	400	400
Jobs	7,877	4,575	6,900	4,090	538	1,760	2,282	5,544	380	1,424	2,836
Industrial Centers (2013 Potential, gsf)	2,321,823	0	0	42,471	0	0	0	0	0	0	0
Employment Factor (gsf/emp)	450	450	450	450	450	450	450	450	450	450	450
Jobs	5,160	0	0	94	0	0	0	0	0	0	0
Government Ins Centers (2013 Potential, gsf)	4,290,675	200,000	351,500	179,711	0	0	0	0	272,208	0	237,210
Employment Factor (gsf/emp)	500	500	500	500	500	500	500	500	500	500	500
Jobs	8,581	400	703	359	0	0	0	0	544	0	474
Single-Family Units (2013 Potential, ea)	0	21	1	0	0	0	0	0	0	44	0
Residential Occupancy Factor 2013 (ppl/unit)	2.90	3.00	2.81	2.81	2.84	2.84	2.84	2.84	2.84	2.84	2.89
People	0	63	3	0.00	0	0	0	0	0	125	0
Townhouse Units (2013 Potential, ea)	645	180	131	35	0	92	0	0	60	0	763
Residential Occupancy Factor 2013 (ppl/unit)	2.66	3.10	2.99	2.99	2.90	2.90	2.90	2.90	2.90	2.90	2.56
People	1,716	558	392	105	0	267	0	0	174	0	1,953
Multifamily Units (2013 Potential, ea)	11,309	2,530	8,769	6,020	2,265	1,662	2,722	1,443	0	82	438
Residential Occupancy Factor 2013 (ppl/unit)	2.27	2.51	2.37	2.37	2.11	2.11	2.11	2.11	2.11	2.11	1.85
People	25,671	6,350	20,783	14,267	4,779	3,507	5,743	3,045	0	173	810
Subtotal - Jobs	66,135	12,875	27,470	10,876	1,124	3,484	8,637	10,318	2,358	4,692	10,426
Subtotal - People	27,387	6,971	21,177	14,372	4,779	3,774	5,743	3,045	174	298	2,764
Total - People and Jobs	93,523	19,846	48,647	25,248	5,903	7,258	14,381	13,363	2,532	4,990	13,190
Total Land Area (acres)	1234.0	237.3	453.5	255.3	69.1	102.7	92.7	239.2	51.9	74.7	265.5
Density (ppl+jobs/acres)	75.8	83.6	107.3	98.9	85.4	70.7	155.1	55.9	48.8	66.8	49.7
Density Classification	P6	P6	P6	P6	P6	P6	P6	P5	P5	P5	P5

Note: If an activity center spans more than one planning district, planners evaluated which geographic area has the most residential potential, and the corresponding residential occupancy factors for that planning district were applied. In other cases, the majority of an activity center is in one planning district. The employment factors represent countywide standards. gsf = gross square feet; emp = employee; ppl = people Revised through 11/21/14

Area	Franconia-Springfield Area (CBC +TSA)	Huntington	Innovation Center TSA	Tysons Corner	Van Dorn	Vienna Metro Station	West Falls Church Metro Station	Wiehle-Reston East TSA^	Reston Town Center TSA^	Herndon TSA^	Wiehle-Reston East TSA *	Reston Town Center TSA *	Herndon TSA *
Planning District(s)	Springfield	Mt Vernon	Upper Potomac	McLean, Vienna	Rose Hill	Vienna	McLean	Upper Potomac	Upper Potomac	Upper Potomac	Upper Potomac	Upper Potomac	Upper Potomac
Offices (2013 Potential, gsf)	4,039,122	1,443,013	7,575,097	57,803,315	1,281,189	1,260,311	23,100	9,556,882	15,660,326	4,239,458	3,345,415	5,968,224	929,552
Employment Factor (gsf/emp)	300	300	300	300	300	300	300	300	300	300	300	300	300
Jobs	13,464	4,810	25,250	192,678	4,271	4,201	77	31,856	52,201	14,132	11,151	19,894	3,099
Retail Centers (2013 Potential, gsf)	6,415,944	649,703	402,507	12,360,977	957,462	139,567	28,514	170,684	1,369,083	182,986	752,718	1,342,850	209,149
Employment Factor (gsf/emp)	400	400	400	400	400	400	400	400	400	400	400	400	400
Jobs	16,040	1,624	1,006	30,902	2,394	349	71	427	3,423	457	1,882	3,357	523
Industrial Centers (2013 Potential, gsf)	2,511,064	0	0	0	130,423	0	0	65,587	447,343	0	0	0	0
Employment Factor (gsf/emp)	450	450	450	450	450	450	450	450	450	450	450	450	450
Jobs	5,580	0	0	0	290	0	0	146	994	0	0	0	0
Government Ins Centers (2013 Potential, gsf)	529,299	44,395	0	217,822	0	0	0	153,228	1,990,321	23,227	83,635	149,205	23,239
Employment Factor (gsf/emp)	500	500	500	500	500	500	500	500	500	500	500	500	500
Jobs	1,059	89	0	436	0	0	0	306	3,981	46	167	298	46
Single-Family Units (2013 Potential, ea)	479	806	0	74	200	0	251	0	0	0	0	0	0
Residential Occupancy Factor 2013 (ppl/unit)	3.19	2.84	3.13	2.89	2.83	2.99	2.89	3.13	3.13	3.13	3.13	3.13	3.13
People	1,528	2,289	0	214	566	0	725	0	0	0	0	0	0
Townhouse Units (2013 Potential, ea)	0	1,852	0	924	0	1,680	94	0	685	300	0	0	0
Residential Occupancy Factor 2013 (ppl/unit)	2.91	2.90	2.77	2.56	2.69	3.00	2.56	2.77	2.77	2.77	2.77	2.77	2.77
People	0	5,371	0	2,365	0	5,040	241	0	1,897	831	0	0	0
Multifamily Units (2013 Potential, ea)	7,144	7,670	8,184	50,727	786	3,555	1,894	9,066	12,000	5,880	4,182	7,460	1,162
Residential Occupancy Factor 2013 (ppl/unit)	2.00	2.11	1.94	1.85	1.86	2.32	1.85	1.94	1.94	1.94	1.94	1.94	1.94
People	14,431	16,184	15,877	93,845	1,462	8,248	3,504	17,588	23,280	11,407	8,113	14,472	2,254
Subtotal - Jobs	36,143	6,523	26,257	224,016	6,954	4,550	148	32,735	60,599	14,635	13,200	23,550	3,668
Subtotal - People	15,959	23,844	15,877	96,424	2,028	13,288	4,470	17,588	25,177	12,238	8,113	14,472	2,254
Total - People and Jobs	52,102	30,367	42,134	320,440	8,982	17,838	4,618	50,323	85,776	26,874	21,314	38,022	5,922
Total Land Area (acres)	737.0	604.6	450.0	2140.4	190.7	351.8	165.0	522.0	802.0	359.0	86.2	117.3	26.7
Density (ppl+jobs/acres)	70.7	50.2	93.6	149.7	47.1	50.7	28.0	96.4	107.0	74.9	247	324	222
Density Classification	P6	P5	P6	P6	P5	P5	P4	P6	P6	P6	P6	P6	P6

^Activity densities for the areas designated as "transit station mixed use" and "residential mixed use", as recommended in the Fairfax County Comprehensive Plan, 2013 Edition, Area III, Upper Potomac Planning District, amended through 4-29-2014, Reston Transit Station Areas.

*Activity densities for the areas designated as "transit station mixed use". These areas generally include the parcels within a safe, comfortable and reasonably direct 1/4 mile walk from the stations.

A range of development potential is recommended. The mid-point was calculated for the transit station mixed use areas and used for the impacts analysis, taking into account that not all parcels will develop at the planned maximum intensity.

Attachment II: Transportation Studies, recently completed or ongoing as of November 2014

Agency	Contact Person	Project Name	Objective or Recommendations	Completion Date	Website
DRPT		Route 1 Alternatives Analysis Study	- Explore a range of land use configurations and densities for the Route 1 corridor and evaluate the role of land use in supporting the multimodal transportation alternatives under consideration.	Winter 2014	http://route1multimodalaa.com/
FCDOT	Tom Burke	Huntington Affected Area Study	- Evaluate cumulative transportation conditions and future projections for the Huntington Area - Develop transit and TDM strategies	Early 2015	
FCDOT		Countywide Transit Network Study (CTNS)	- Determine future countywide transit needs. - Determine travel markets (highest level of demand). - Determine countywide connected transit network.	Recommended concepts early 2014.	
FCDOT	Charlie Strunk	Bicycle Master Plan	- Recommend a network of on and off road facilities - Recommend how bicycle friendly designs can be incorporated into future roadway and transit projects	Adopted by the Fairfax County Board of Supervisors in October 2014.	http://www.fairfaxcounty.gov/fcdot/bike/county_bike_master_plan.htm
VDOT		VTrans 2035 Update	- Policy Plan describing long-range vision for transportation needs, investments, actions, and public policies to advance statewide Vision and Goals. - Lists 6 goals for how the transportation system should perform	Adopted February 2013, revised April 2013	http://vtrans.org/resources/VTrans2035Update_Final_Draft_with_Appendices.pdf
VDOT		Governor's Strategic Plan		December 2010	
DRPT		Super NoVa Transit/TDM Vision Plan	- Policy statements for marketing and communication, planning, operations, transit facilities, access to transit, technology, TDM - Recommendation for transit network (heavy rail extension, commuter rail, streetcar, LRT/BRT, bus); recommendation for rail network; expand high capacity, regional and local transit	Fall 2012	http://www.supernovatransitvision.com/ http://www.supernovatransitvision.com/documents.html
DRPT, Kimley-Horn		Super NoVa Action Plan	- Advance the Super NoVa Vision Plan to achieve Mobility Beyond Boundaries.	Work with the Vision Plan Stakeholders, elected officials, the Virginia Office of Transportation Public-Private Partnership (OTPP) to implement projects and policies outlined in Vision Plan.	