



Shady Grove Sector Plan Amendment: Preliminary Staff Recommendations



Nkosi Yearwood, Planner Coordinator, Area 2 Division, Nkosi.Yearwood@montgomeryplanning.org, 301.495.1332



Nancy Sturgeon, Master Planner Supervisor, Master Plan Team, Area 2 Division, Nancy.Sturgeon@montgomeryplanning.org, 301.495.1308



Carrie Sanders, Chief, Area 2 Division, Carrie.Sanders@montgomeryplanning.org, 301.495.4653

Completed: 11/25/2019

Description

Staff will present the preliminary recommendations for the Shady Grove Sector Plan Amendment, including land use and zoning, mobility, sustainability, public facilities, parks and open space, and staging.

Staff Recommendation: Discussion

Summary

The Minor Master Plan Amendment for the 2006 *Shady Grove Sector Plan* began with the Planning Board's approval of the Scope of Work on November 15, 2018. Four public meetings have been held for the Sector Plan update, including an open house on November 14, 2018 and preliminary recommendations on October 16, 2019. The Planning Board received a briefing on the status of the Sector Plan on September 26, 2019.

INTRODUCTION

The 2006 *Shady Grove Sector Plan* created an aspirational vision to transform a light industrial area into a new mixed-use community that is in proximity to the Shady Grove Metrorail Station. Implementing this plan's vision to change the area's large, established industrial area, including the Montgomery County Service Park (CSP) into a new community, has been one of the most ambitious and complex redevelopment projects Montgomery County has undertaken.

This Sector Plan Amendment retains the 2006 Sector Plan's vision to further create a mixed-use environment from the primarily single-use properties surrounding the Metro station area. The redevelopment or retention of the CSP were staging alternatives that the 2006 Sector Plan recommended. This recommendation of the 2006 Sector Plan has been implemented - most of the CSP public facilities have relocated to other properties, except the Montgomery County Public Schools (MCPS) Bus Depot.

The mobility recommendations in this Sector Plan amendment require pedestrian and bike accommodations; advance Vision Zero principles to address High Injury Network roadways; increase Non-Automotive Driver Mode Share (NADMS) goals; and modify the Highway Capacity Manual (HCM) standard for Frederick Road (MD 355) and Gude Drive to support growth along the MD 355 corridor. The MD 355 Bus Rapid Transit (BRT) is incorporated in this Sector Plan's recommendations, including potential BRT streets around the Metro station area.

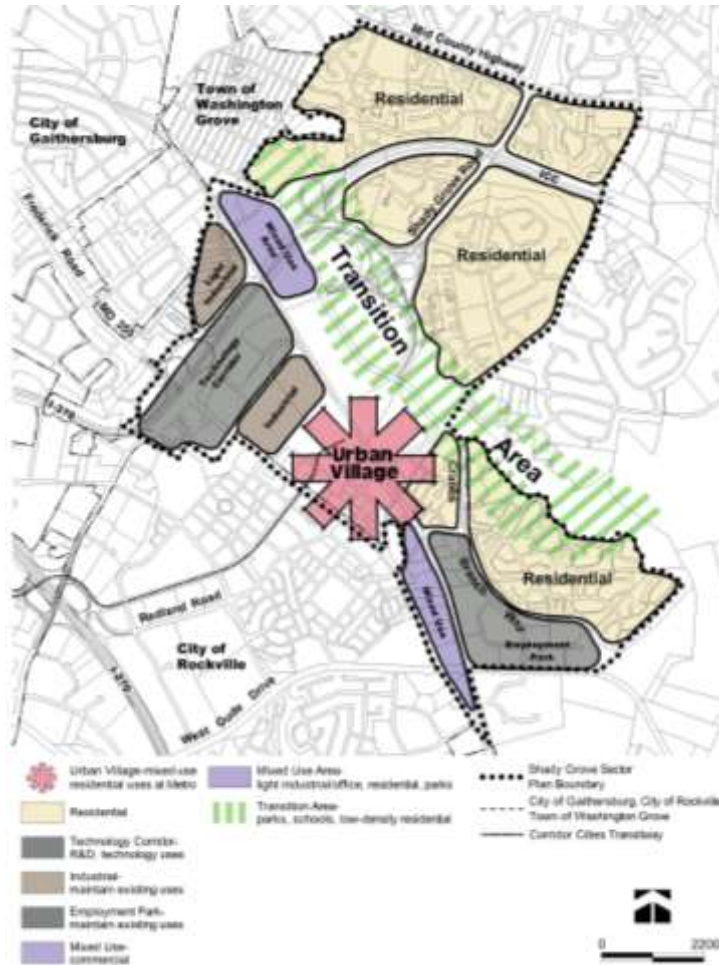
This Sector Plan update recommends increased densities for the WMATA properties and other properties in the Metro West and South neighborhoods. All residential neighborhoods in the plan area that were built with the Planned Development (PD) Zone will be rezoned to a Euclidean zone since the PD Zone cannot be reconfirmed per Section 8.1.1 of the 2014 Zoning Ordinance. Some zoning adjustments are proposed for the Crabbs Branch Way Office Park, where existing office uses are better aligned to the Employment Office (EOF) Zone than the existing Industrial Moderate (IM) Zone.

Most of the proposed public facilities recommended in the 2006 Sector Plan, including an elementary school at Jeremiah Park and the fire station are retained in this plan amendment. Proposed parks and open spaces are retained and expanded for some properties, such as the Grove Shopping Center, using the *Park, Recreation, and Open Space Plan (PROS)* framework.

This Sector Plan recommends a similar amount of development to the prior plan, but does not recommend a staging plan because major public infrastructure projects tied to the staging of the 2006 Sector Plan have already been implemented or will be implemented shortly, including the development of the County Service Park and the funding of a new elementary school. In addition, the transportation improvements that were tied to the 2016 Sector Plan staging do not prioritize transit and are contrary to Vision Zero policy. This plan amendment recommends a high priority public benefit in the CR zone be the implementation of significant multimodal improvements for those that take transit, walk and bike.

VISION

This Sector Plan amendment envisions the future of the Shady Grove Metro Station area as a mixed-use and pedestrian-oriented environment, with strong public facilities and amenities, and new mobility options. This vision confirms the 2006 *Shady Grove Sector Plan* recommendations, which also envisioned the transformation of single-use commercial properties surrounding the Metro Station area into an urban village (Map 1).



Promoting attractive streetscapes, distinctive architecture, and public art, as well as creating a sense of place in the Metro Neighborhoods, are additional priorities for this plan area. This plan promotes the complete relocation of the public facilities along Crabbs Branch Way, including Montgomery County Public Schools (MCPS) Bus Depot, and to implement the approved Shady Grove Station, Jeremiah Park development. This plan also supports the redevelopment of commercial properties along major roadways that can implement the plan's goals for mixed-use and pedestrian-oriented environments.

Existing Derwood residential neighborhoods will be retained, and new development will be compatible to existing residential development. It is anticipated that new residential and non-residential development will implement a variety of public benefits, including new parks and open spaces. Several light industrial and office areas in the plan area, such as the Frederick Road (MD 355) automotive corridor, Oakmont Avenue, and Crabbs Branch Office Park will be retained.

In the future, new bus rapid transit (BRT) options in the plan area, including along MD 355, will enhance mobility options for existing and future residents, employees, and visitors. New streets within the Metro Neighborhoods and new bikeways will enhance pedestrian and bikeway connections throughout the plan area. Achieving net-zero energy for new development is an aspiration environmental goal, as well as enhancing tree canopy and promoting the best in sustainable design are additional goals for this plan area.

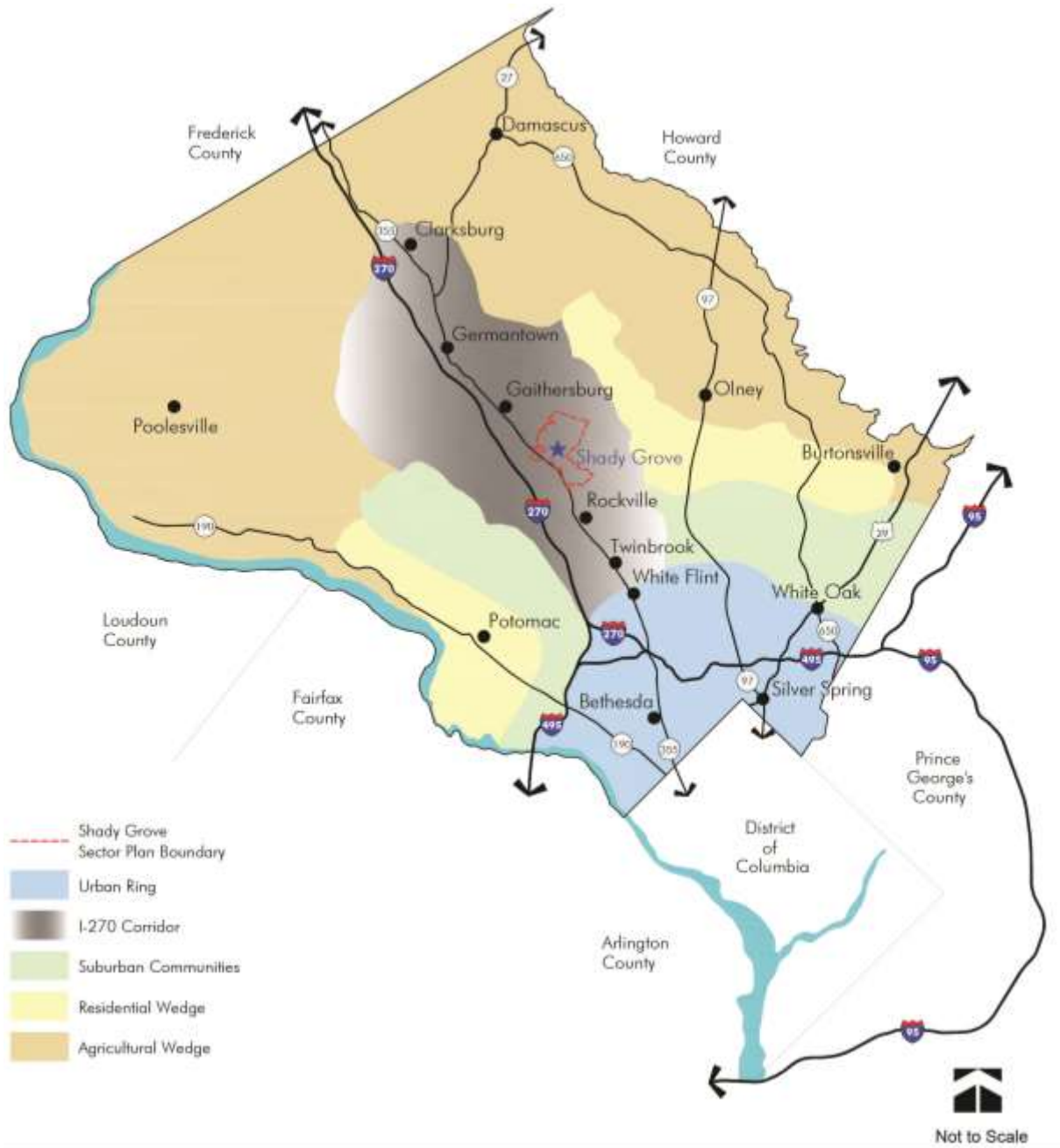
PLANNING CONTEXT AND FRAMEWORK

The 2006 *Shady Grove Sector Plan* and this Sector Plan Amendment are guided by Montgomery County's 1993 *General Plan Refinement* that recommends concentrating new development at transit station areas and other key centers (Map 2). The 2006 Sector Plan recommendations were also framed by Council's 2002 *Transportation Policy Report (TPR)* that recommended increasing housing in the I-270 Corridor, especially at transit stations, to improve the jobs-to-housing balance in the Corridor.

The 2006 Sector Plan created a bold vision to redevelop a primarily industrial and commercial area, surrounding the Metro Station, into a new place that is primarily residential with new public facilities and amenities. The redevelopment of the 90-acre CSP property is a key recommendation in the 2006 Sector Plan recommendation. In 2008, the County Executive established the *Smart Growth Initiative* as a major step toward implementing the plan recommendation to relocate CSP public facilities.

Frederick Road (MD 355) Bus Rapid Transit (BRT) and the Corridor Cities Transitway (CCT) are two future BRT routes that will serve the Sector Plan area. The 2006 Sector Plan included the CCT, which at that time was proposed as a light-rail network. MD 355 Bus Rapid Transit was not considered for Frederick Road until the 2013 *Countywide Transit Corridors Functional Master Plan*.

The municipalities of the Town of Washington Grove, and the cities of Rockville and Gaithersburg have modified the existing boundaries of the plan area through acquisition and annexations of properties. All three jurisdictions have Maximum Expansion Limits (MELs) that can absorb a significant portion of the plan area.



Map 2: The General Plan Refinement with the Shady Grove Sector Plan area.

KEY RECOMMENDATIONS

Recommendations for this Sector Plan Amendment build upon the 2006 *Shady Grove Sector Plan* framework to create a new mixed-use destination surrounding the Metro Station with new residential and non-residential development, public facilities, mobility options, and parks and open spaces. Key plan recommendations include the following:

Land Use and Zoning

- Complete the relocation for all County facilities from the County Service Park (CSP) to other appropriate locations.
- Promote the redevelopment of the Metro Station surface parking, including higher densities and heights, and single-use commercial properties into mixed-use places.
- Adjust properties that were rezoned via the 2014 District Map Amendment.
- Retain light industrial zoned properties to promote independent entrepreneurs and small businesses.

Mobility

- Support the MD 355 North Bus Rapid Transit (BRT) route along Frederick Road (MD 355) and the Corridor Cities Transitway (CCT).
- Provide new streets that permit alternative ways to navigate the plan area.
- Support the 2006 *Shady Grove Sector Plan* recommendation for a MARC Station at the Metro Station.
- Utilize Vision Zero as a framework to address High Injury Network roadways in the plan area. This includes changes intersection delay standards to advance multimodal connections.
- Prioritize the provision of multimodal transportation connections as a high priority public benefit for new development.
- Establish new Non-Automotive Driver Mode Share (NADMS) goals that promote multimodal approaches to transportation.
- Accommodate new bikeways that link the Plan area to adjacent municipalities.

Urban Design

- Recognize the unique context and development challenges for properties in the Metro Neighborhoods and other commercial centers in the plan area.
- Build upon the 2006 Sector Plan urban design and streetscape recommendations.
- Encourage design excellence for new development, including quality public use spaces and building design.
- Promote walkability with enhanced streetscapes to define the public realm.
- Promote variety in building heights and massing in the Metro Neighborhoods to maximize access to natural light and air for building occupants, surrounding communities, and public open spaces.

Affordable Housing

- Require 15 percent Moderately Priced Dwelling Units (MPDUs) as the highest priority public amenity for new residential development.
- Encourage a higher percentage of MPDUs on publicly owned properties, including up to 25 percent for the WMATA property.
- Promote a diverse range of housing options.

Parks and Open Space

- Create new parks and open spaces in the Metro Neighborhoods for public use to promote a livable environment for existing and future residents, visitors, and employees.
- Create new public parks at Shady Grove Crossing/Piedmont Crossing, Derwood Station, and Jeremiah Park properties.
- Link new parks and open spaces to existing and proposed bikeways and trails.
- Retain existing public parks as public open space.

Public Facilities

- Support the public facilities recommended in the 2006 *Shady Grove Sector Plan*, including a local park and an elementary school at Jeremiah Park.
- Support the Department of Recreation's long-term plans for a new recreation center in the plan area.
- Promote the co-location of public facilities to reduce public expenditures and use the available land area more efficiently.
- Encourage innovative design for new prototypes of public facilities.

Historic Preservation

- Support the designation of the Old Derwood Store and Post Office to the Master Plan for Historic Preservation.
- Incorporate the history of Old Derwood within the Metro Neighborhoods.

Sustainability

- Promote energy efficiency and encourage net-zero energy building design.
- Improve the urban ecology by incorporating best practices such as goals to reduce heat island effect and promote Environmental Site Design (ESD) in stormwater management practices.
- Retain existing wooded areas where designated and provide increased tree canopy throughout the plan area.
- Include sustainable design solutions to create an attractive public realm with integrated green features and enhanced mobility and walkability.

URBAN DESIGN FRAMEWORK

This Sector Plan amendment confirms the framework recommended by the 2006 Sector Plan that envisioned a mixed-use and a higher-density area surrounding the Metro Station. The 2006 Sector Plan established new neighborhoods near the Metro Station that included residential uses along with parks, public facilities, and other institutions to complement surrounding well-established residential communities. Key buildings, connectivity, and open space recommendations include the following:

Buildings

- Create a pattern of interconnected streets and public open spaces, with street-oriented buildings.
- Explore a vertical use mix, where feasible. Consider horizontal mixes, if it allows for retaining existing uses or creating a unique local character.
- Consider different and innovative types of development, such as infill, adaptive re-use and/or additional development on properties with growth capacity and existing uses that could remain.

Connectivity

- Prioritize improvements and redevelopment along existing streets, particularly if they provide direct access to Metro or connect between existing or proposed neighborhoods.
- Create new connections to reduce the size of large blocks and to improve pedestrian access in higher-density areas. The location and type of connection should be determined during the regulatory review process.
- Consider alternatives such as shared streets, mid-block pedestrian connections, or other innovative mobility alternatives, to break larger blocks, if public streets are unfeasible.

Open Space

- Organize public open space along existing public streets or extensions of them, or ensure these spaces are accessible from a public street.
- Consolidate public open space areas at strategic locations to focus public activity, such as near transit, at significant intersections, or at locations that can provide good access for most people.
- Integrate existing environmental resources or wooded areas into the public open space network to provide alternatives for recreation.

METRO NEIGHBORHOODS RECOMMENDATIONS

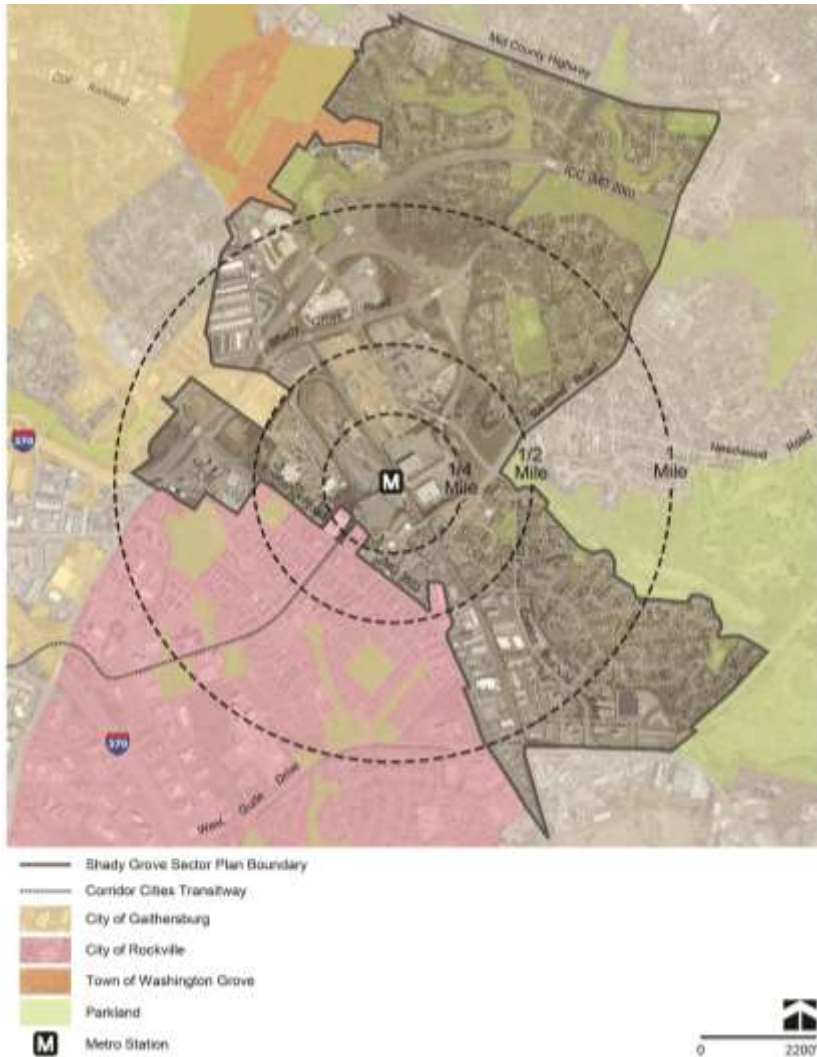
The Metro neighborhoods constitute the core area of the plan area and are primarily within ½ mile from the Shady Grove Metro Station (Map 3). Unlike the 2006 Sector Plan, this Plan includes Jeremiah Park as a Metro neighborhood since this development has an approved preliminary plan for both sides of Crabbs Branch Way.

The Metro neighborhoods are: Metro West, Metro South, Old Derwood, Metro North-WMATA, and Shady Grove Station, Westside and Jeremiah Park (Map 4).

Metro West

The Metro West neighborhood is envisioned as the most intensively developed portion of the Sector Plan area. Located east of MD 355, north of Redland Road and west of the Metro Station, this approximately 30-acre area has a variety of retail, commercial, and residential uses. Properties in this neighborhood are in CR 1.75 C0.5 R1.5 H-160 T/TDR 1.77, CRT 1.5 C0.5 R1.25 H-100 T, and CRT 0.75 C0.75 R0.25 H-50T Zones.

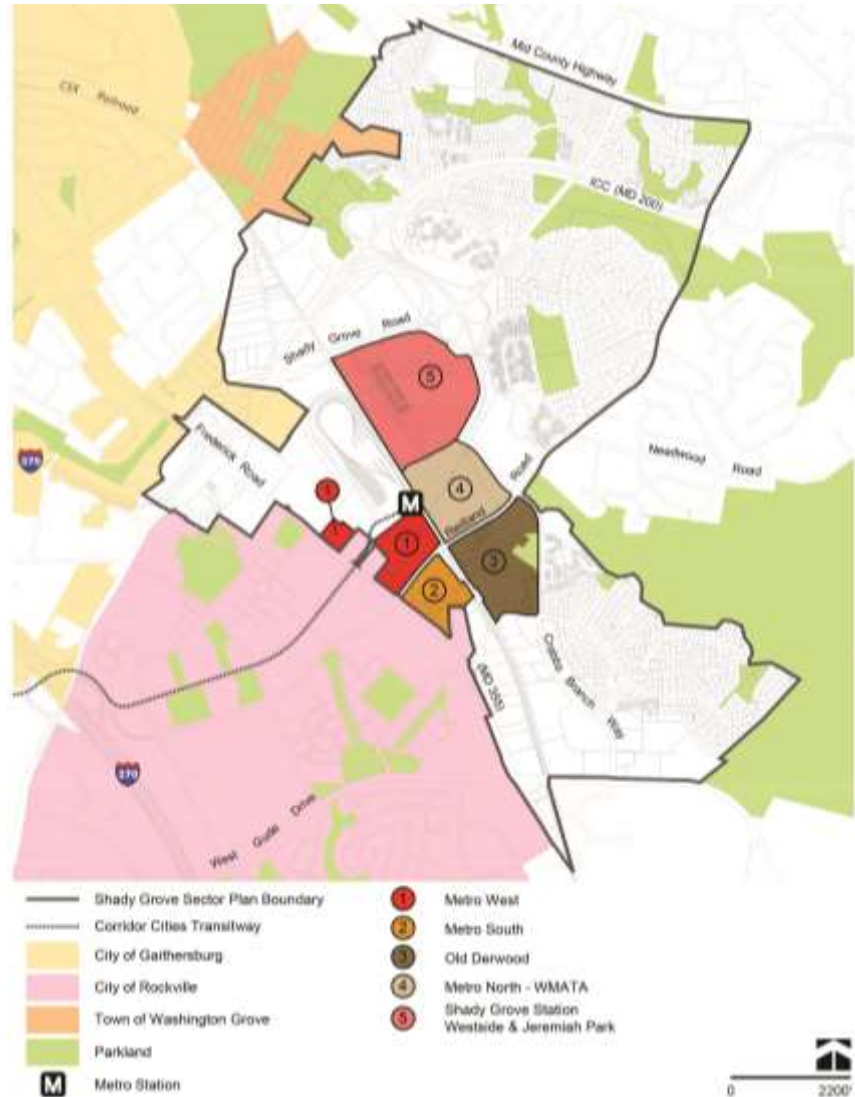
This Sector Plan amendment, similar to the 2006 Sector Plan, envisions this neighborhood as a mixed-use area with various residential and non-residential uses, along with new parks and open spaces, and the CCT and MD 355 BRT providing new mobility alternatives. A broad range of non-residential development, such as offices or institutional uses, are encouraged for the WMATA/Metro parking lot and the Somerville properties.



Map 3: Proximity to the Metro Station

Key land use and zoning recommendations:

- Rezone the WMATA/Metro property, including the surface parking lot and the Somerville property, 15901 Somerville Drive, from the CR 1.75 C0.5 R1.5 H-160T/TDR 1.77 Zone to the CR 2.0 C1.0 R1.5 H-200 Zone to promote high-intensity mixed-use development at the Metro Station that contributes to the Sector Plan’s public benefits, including the maximum percentage of affordable housing and a minimum one-acre Civic Green for the WMATA property.



Map 4: Shady Grove Metro Neighborhoods

Metro South

Metro South is envisioned as a complementary mixed-use neighborhood to the more intense Metro West neighborhood.

Located south of Redland Road, east of MD 355, and west of the CSX/Metro rail tracks, this approximately 18.7-acre neighborhood currently has a variety of commercial and light industrial uses. Properties in this neighborhood are in the R-90, CRT 1.5 C0.5 R1.25 H-90 T, and CRT1.75 C0.5 R1.5 H-90T/TDR 1.77 Zones.

This Sector Plan recommends increased residential and non-residential development for all properties in this area since it is in proximity to the Metro Station and could contribute to a variety of public benefits, including the maximum percentage of affordable housing and new open spaces.

Key land use and zoning recommendations:

- Rezone the vacant property (Parcel N313) at Redland Road and Somerville Drive from the CRT 1.75 C0.5 R1.25 H-90T/TDR 1.77 Zone to the CR 2.0 C0.5 R1.5 H-120 Zone to promote the Sector Plan recommended public benefits, including the maximum percentage of affordable housing and open space.

- Rezone the remaining properties in this neighborhood from the CRT 1.5 C0.5 R1.25 H-90 T Zone to the CR 2.0 C0.5 R1.5 H-120 Zone to support the Sector Plan recommended public benefits, including housing options.

Old Derwood

Old Derwood is a predominantly residential area that is located east of the CSX rail tracks, south of Redland Road and west of Crabbs Branch Way. Institutional uses, including Derwood Bible Church, a Pepco substation, and the State’s Vehicle Emissions Inspection Program (VEIP), are also located in this area. Sidewalks and streetscape are missing from some segments of this neighborhood’s streets reflecting the old nature of the area, which dates back to 1800s. Properties in this neighborhood are in the Planned Development (PD-2), PD-35, R-90, R-90/TDR-13, R-200 and IM-2.5 H-50 Zones

Key land use and zoning recommendations:

- Relocate the Vehicle Emissions Inspection Program (VEIP) to another location that is compatible with its existing light industrial use.
- Rezone the VEIP property from the R-90 Zone to the Commercial Residential Neighborhood (CRN 1.0 C0.0 R1.0 H-65) Zone that contributes to the Sector Plan’s public benefits, including affordable housing and specialty residential development.
- Rezone existing R-200 Zone single-family properties that do not meet the minimum land area requirement of the zone, which is a minimum 20,000 square feet, to the R-90 or R-60 Zones.
- Rezone the Old Derwood Store and Post Office property from the R-200 Zone to the Commercial Residential Neighborhood (CRN0.5 C0.0 R0.5 H-50) Zone to permit the building’s historic reuse and renovation.

Metro-North WMATA

Two structured parking garages and three surface parking areas consisting of approximately 4,800 parking spaces are the main features on this 24.5-acre area that is owned by Washington Metropolitan Area Transit Authority (WMATA). Several Ride-On and Maryland Transportation Authority (MTA) bus bays, along with a Kiss-N-Ride area, are also located on this property. An existing stream bisects the northern parking areas from the smaller southern parking areas. The 2014 District Map rezoned this property to the CRT 1.0 C0.25 R0.75 H-70T/TDR 0.88 Zone.

This Sector Plan’s land use recommendations for this area, in conjunction with the adjacent Shady Grove Station, Westside development, will contribute to creating an active neighborhood in an area today that is dominated by automobiles. The recommended development could potentially screen the existing parking structures by introducing new uses to promote pedestrian activity along new streets. Redevelopment on this property will require reconfiguration and consolidation of existing vehicular and pedestrian access to parking structures. The extension of Columbus Avenue from the adjacent property is an important roadway connection that should be implemented.

Key land use and zoning recommendations:

- Rezone this property from the CRT 1.0 C0.25 R0.75 H-70T/TDR 0.88 Zone to the CR 1.5 C0.25 R1.0 H-100 Zone to promote intense mixed-use at the Metro station that contributes to the Sector Plan’s public benefits, including the maximum percentage of affordable housing and open space.

Shady Grove Station, Westside

The 45-acre Shady Grove Station, Westside is a new development that implements several recommendations from the 2006 Sector Plan, especially the relocation and redevelopment of the CSP. The 2006 Sector Plan identified this area as Metro North and recommended rezoning this portion of the CSP to a mixed-use zone to promote new residential and non-residential development. The 2014 District Map Amendment rezoned this property to the CRT 1.0 C0.25 R0.75 H-90T/TDR 0.89 Zone.

Shady Grove Station, Westside is a public-private partnership between Montgomery County and EYA of Bethesda. The first phase of residential townhouses is close to completion and the Daley, the first of at least three multi-family buildings, was built in 2018. This development will deliver up to 25 percent of affordable housing, including workforce housing and MPDUs. The Department of General Services (DGS) and EYA have agreed to provide a public library within a multifamily building.

Key land use and zoning recommendations:

- Rezone this property from the CRT 1.0 C0.25 R0.75 H-90 T/TDR 0.89 Zone to the CRT 1.0 C0.25 R-90 H-90/TDR 0.89 Zone to further the Sector Plan’s public benefits, including affordable housing options, and public facilities.
- Implement the approved public library in this development.

Jeremiah Park-Montgomery County Public Schools Bus Depot and Parks Department

The 45-acre Jeremiah Park area has the Montgomery County Public Schools (MCPS) Bus Depot, which occupies approximately 35 acres with more than 400 school buses, as well as parking for employees and other maintenance functions. Adjacent to the MCPS facility is the former Parks Department Training and Maintenance Center, which is approximately 10 acres. These properties are in the CRT 0.75 C0.25 R0.5 H-60T/TDR 0.6 Zone.

A key recommendation in the 2006 Sector Plan is the relocation of the MCPS bus depot and the Parks Department to “more appropriate sites. These facilities may or may not continue to co-locate and MCPS may consider relocation their bus depot facilities to multiple sites” (p.52). This Sector Plan reconfirms the recommendation to relocate the MCPS Bus Depot to other appropriate sites to maximize the public investment to create a transit-oriented community along Crabbs Branch Way and in proximity to the Metro Station.

In 2017, the Parks Department center relocated to the Multi-Agency Service Center in Montgomery Village, and the approximate 10-acre portion of Jeremiah Park is now vacant. If the adjacent MCPS bus depot is retained, this vacant property could redevelop, via the existing preliminary plan.

Key land use and zoning recommendations:

- Implement the approved Shady Grove Station, Jeremiah Park preliminary plan that would permit a future park-school site along with new residential development, including affordable housing.
- Rezone this property from the CRT 0.75 C0.25 R0.5 H-60T/TDR 0.6 Zone to the CRT 0.75 C0.25 R0.5 H-60 Zone to promote the Sector Plan public benefits, including affordable housing and new public facilities.

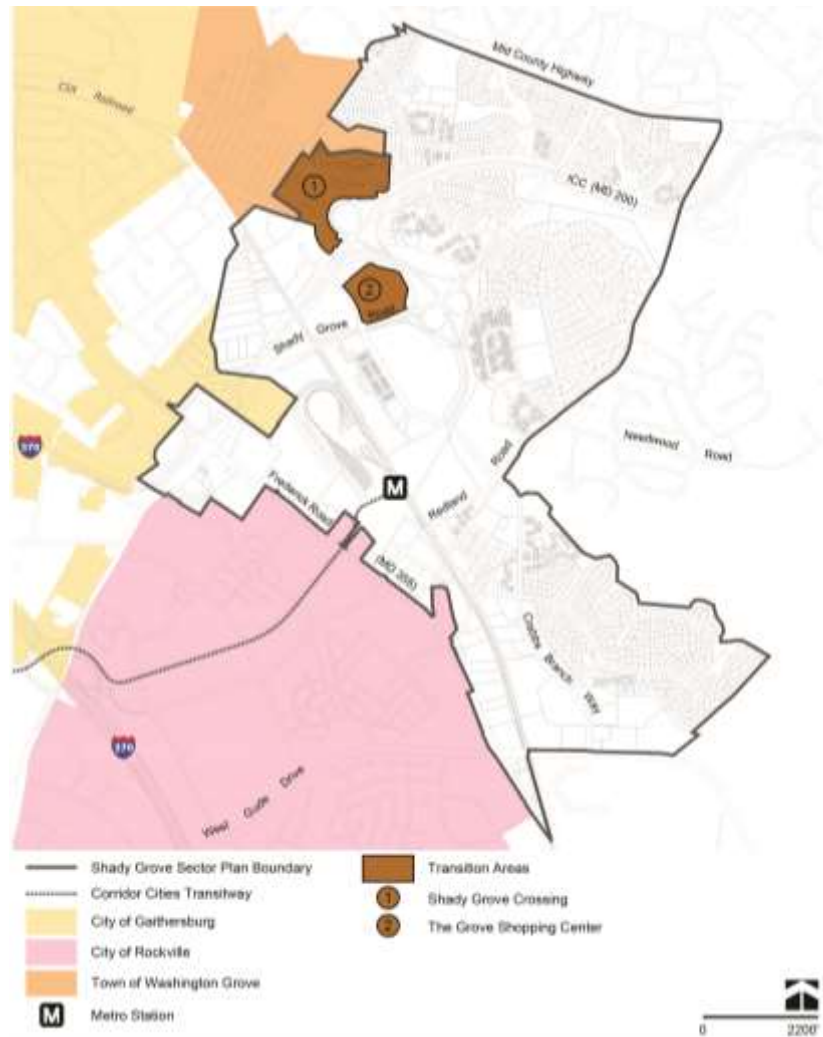
TRANSITION AREA

The 2006 Sector Plan identified the properties east of Crabbs Branch Way and west of the Metro Access Road, including the Grove Shopping Center as a transition area. The intent of this area is to provide lower intense development and to incorporate a variety of recreational opportunities. Since 2006, residential development at Shady Grove Crossing, partial extensions of Amity Drive and Crabbs Branch Way, a neighborhood park, and a historic meadow have been implemented.

This Sector Plan amends the prior plan's transition area by incorporating Shady Grove Station, Jeremiah Park to the Metro Neighborhoods since it has an approved preliminary plan for both sides of Crabbs Branch Way. Also, the stormwater management pond has been removed from this area since the trail recommendation has been implemented. The two key transition areas are: Shady Grove Crossing and the Grove Shopping Center (Map 5).

The Grove Shopping Center

The Grove Shopping Center is a 16-acre traditional neighborhood shopping center, which has approximately 120,000 square feet of commercial uses and surface parking. It is located at the northeast quadrant of Shady Grove Road and Crabbs Branch Way. A vacant four-acre wooded property with a stormwater management pond (P968) is located east of the surface parking area. The 2006 Sector Plan rezoned this property to the RMX-2C/TDR to promote mixed-use development, including senior housing and additional non-residential uses. The 2014 District Map Amendment rezoned this property, including the vacant property, to the CRT 1.0 C0.5 R0.5 H-65T/TDR 0.81 Zone.



This Sector Plan envisions mixed-use development at this property via redevelopment that could deliver new public benefits, including the maximum percentage of MPDUs and enhancement of the natural environment. The existing wooded area on the vacant parcel (P968), east of the shopping center, should be retained as a forest conservation area and contribute as a noise mitigation measure from adjacent roadways.

This Sector Plan recommends:

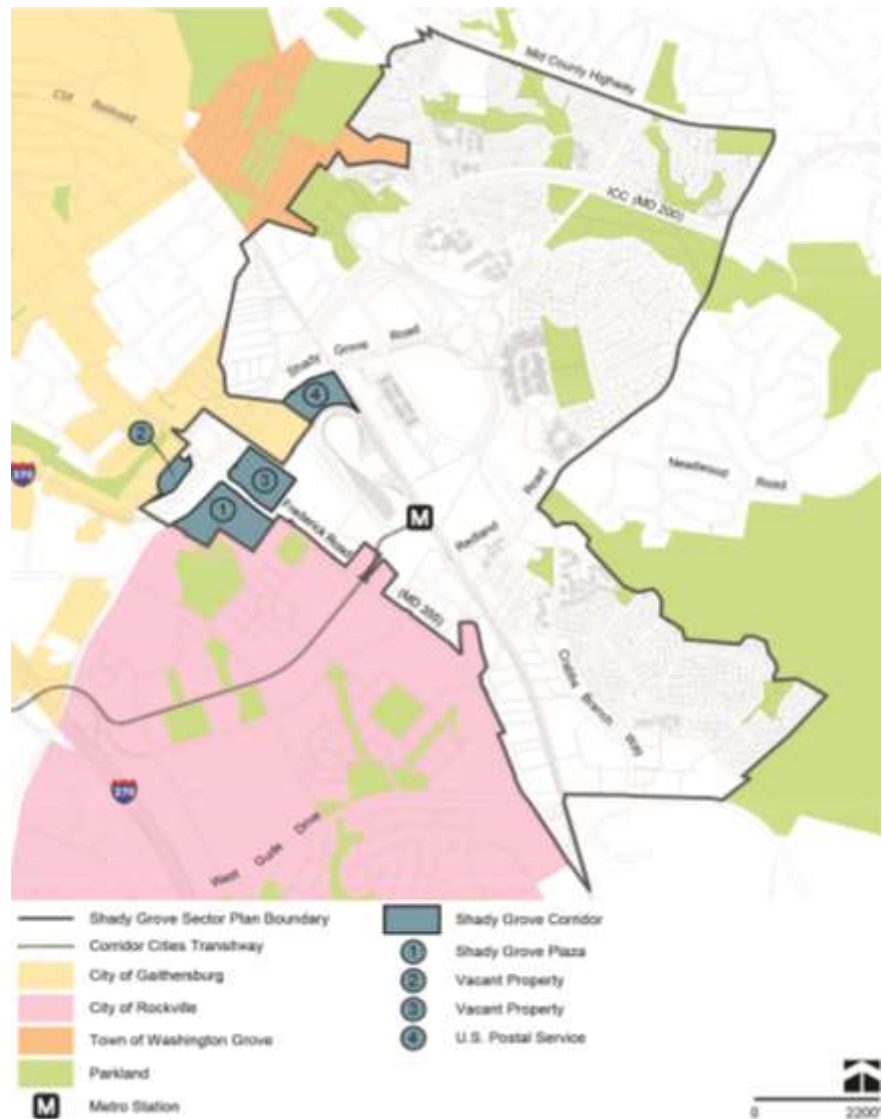
- Rezone the Grove Shopping Center from the CRT 1.0 C0.5 R0.5 H-65T/TDR 0.81 Zone to the CR 1.5 C0.5 R1.0 H-80 Zone to promote mixed-use development and contribute to the Sector Plan's public benefits, including the maximum percentage of affordable housing, sustainability, and open space. Density from the vacant wooded property should be transferred to the larger shopping center area.
- Establish a network of short blocks and internal streets to promote improved internal circulation and walkability.
- Extend a continuous sidewalk along the northern portion of Shady Grove Road.
- Provide a minimum 0.75-acre neighborhood green with building frontages that define the public realm.
- Retain some of the existing wooded/forest area to mitigate noise from adjacent roadways, and to further the Sector Plan's environmental recommendations.
- Incorporate a broad range of unit types to serve different households.

SHADY GROVE ROAD CORRIDOR

Shady Grove Road is a six-lane major highway that diagonally traverses the planning area from Mid-county Highway to the city limits of Rockville and Gaithersburg. The character of the roadway varies with residential neighborhoods, such as Parkside Estates and Mill Creek, as the primary land uses in the east. The central area, which is between the CSX rail tracks and the Metro Access Road, is characterized by institutional and commercial uses, including the Grove Shopping Center. Commercial properties, including the Shady Grove Plaza and two vacant properties, are the dominant uses at the western end of this corridor in the plan area.

The 2006 Sector Plan identified three clusters of properties and envisioned some technology uses between the CSX rail tracks and the municipalities. Four properties, including two vacant properties at the northwestern and

southeastern quadrants of MD 355 and Shady Grove Road, were rezoned from the Light Industrial (I-1) Zone to the Technology and Business Park (I-3) Zone to promote “opportunities for advanced technology and biotechnology businesses” (p. 25). The 2006 Sector Plan also recommended enhancing the visual character of the roadway, protecting residential communities, and relocating industrial uses. No new development has been implemented since 2006. The 2014 District Map Amendment rezoned non-residential properties in this corridor to the IM-0.5 H-75, EOF 0.75 H-100, GR 1.5 H-45, EOF 1.5 H-60, and CR 0.75 C0.75 R0.25 H-80T Zones.



Map 6: Key Shady Grove Road properties

This Sector Plan modifies the 2006 Sector Plan’s recommendations for this corridor by proposing residential and non-residential development, rather than only research and development and office uses. New mixed-use development, especially at Shady Grove Plaza, will complement the existing Upper Rock District development and the approved Shady Grove Neighborhood Center developments, which are both further west along Shady Grove Road in the City of Rockville. This Sector Plan promotes a safer roadway that incorporates Vision Zero best practices that improve safety for all roadway users.. This corridor is divided into three areas: Shady Grove Plaza, two vacant Casey trust-owned properties, and U.S. Postal Service (Map 6).

INDUSTRIAL AREAS

Most of the non-residential development in the plan area, approximately 3.3 million square feet, is zoned industrial. Many industrial areas provide a range of services to County residents, such as home remodeling and building contractors, along Oakmont Avenue, as well as advanced manufacturing, flex office space, and Class A and B offices are located along Crabbs Branch Way. Industrially zoned areas, as well as uses, are concentrated in four areas within the plan area: WMATA Railyards and Shady Grove Transfer Station; Oakmont Avenue Industrial Corridor; Frederick Road Automotive Corridor; and the Crabbs Branch Office Park.

This Sector Plan recommends confirming the existing Industrial Moderate (IM) 2.5 H-50 Zone for the Shady Grove Processing Facility, the Shady Grove maintenance rail yard, the Frederick Road automotive corridor and the Oakmont Avenue industrial area.

The Crabbs Branch Office Park, which is a traditional suburban office park with a broad array of technology, biotechnology, industrial/flex, and office development, including office condominiums, are within this area.

Existing office buildings located at 7361 Calhoun Place, 7500 Standish Place, and 15400 Calhoun Drive exceed the 50-foot height in the IM Zone. These buildings are 78 feet, 51 feet and 64 feet in height, respectively. These properties were built under the I-1 Zone that permitted office buildings up to 12 stories. This Sector Plan recommends rezoning some office properties, including the three buildings that are beyond the existing height limit to the Employment Office (EOF) Zone since this zone better aligns with the existing built development.

PLANNED DEVELOPMENT ZONED PROPERTIES

Several residential neighborhoods within the plan area, including Park Overlook-Mallard Cove, Derwood Station, and Townes of Shady Grove were approved via a Local Map Amendment in the Planned Development (PD) Zone. Derwood Station, Park Overlook-Mallard Cove, and the Townes of Shady Grove, which includes multifamily residential, townhouses, and single-family dwellings, were approved in the PD-2, PD-5 and PD-35 Zones, respectively.

Section 8.1.1. of the 2014 Zoning Ordinance indicates that zones in Article 59-8, including the PD Zone, “may appear on the digital zoning map, but they cannot be requested by any property owner under a Local Map Amendment or confirmed or applied to any property under a Sectional Map Amendment adopted after October 30, 2014.” This Sector Plan recommends new Euclidean zones, such as R-90 and TLD, which are closely related to the built development for Derwood Station and other PD zoned properties.

PUBLIC FACILITIES

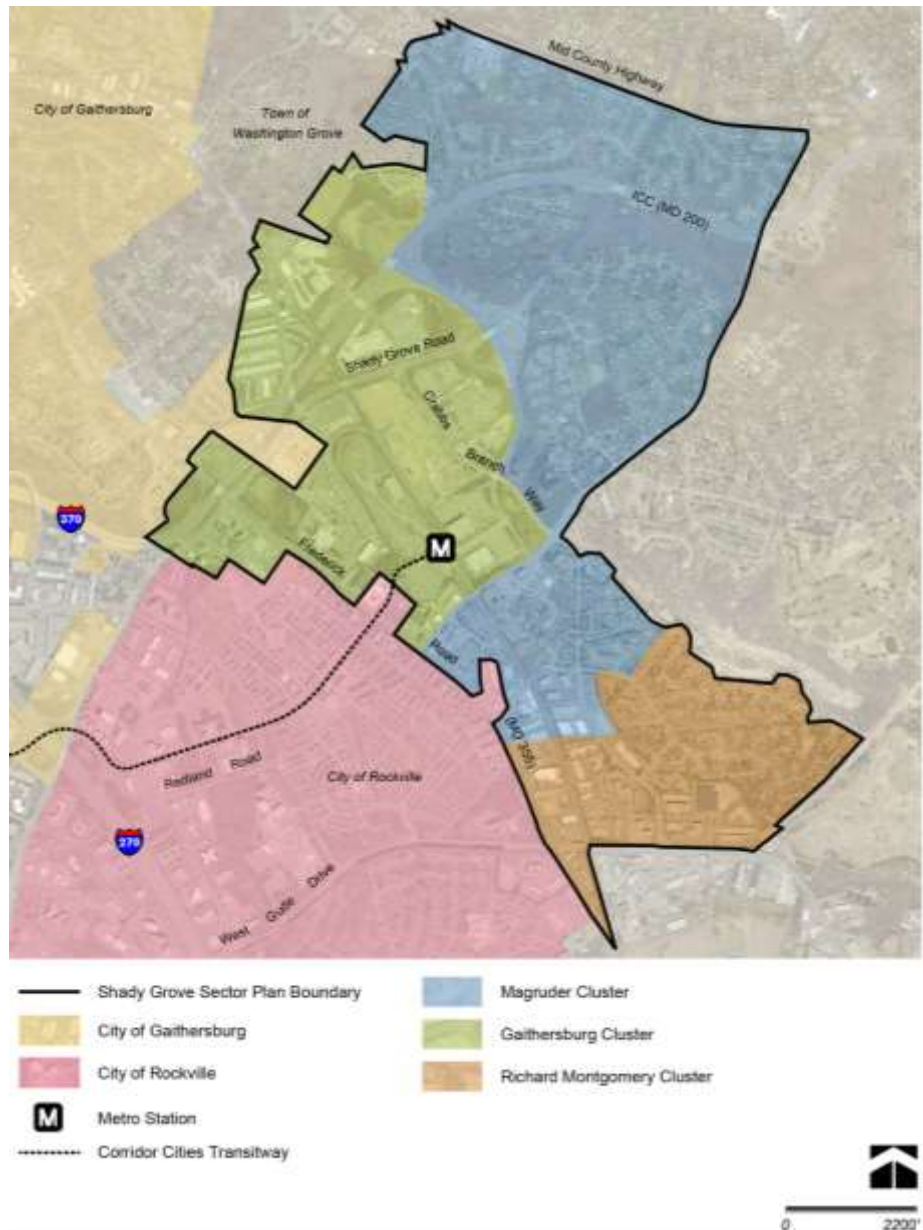
The 2006 Sector Plan recommended a broad range of public facilities, including an elementary school and a fire station for the Sector Plan area. This Sector Plan Amendment confirms all the recommended public facilities with some modifications shown on Map 8.

Public Schools

Magruder, Gaithersburg and Richard Montgomery are the three high school clusters that serve the Sector Plan area (Map 7). Established residential neighborhoods, including Mill Creek and Parkside Estates, are in the Magruder cluster, while Derwood Station, which is east of the Crabbs Branch Way Office Park, is in the Richard Montgomery cluster. Properties north of Redland Road and west of the Metro Access Road are in the Gaithersburg cluster. Most of the anticipated new residential development from this Sector Plan will be within the current Gaithersburg cluster. Since 2006, student enrollment increases have occurred in all three clusters.

The 2006 Sector Plan recommended Jeremiah Park as the preferred location for an elementary school and considered the Shady Grove Crossing property, formerly called Casey at Mill Creek, as an

alternative, if the property was acquired with private funds. The approved Shady Grove Station (Westside and Jeremiah Park) preliminary plan for the CSP redevelopment includes the dedication of an



Map 7: Existing High School Clusters within the plan area.

8.1-acre park-school site at Jeremiah Park. The implementation of this park-school site is dependent on the relocation of the MCPS School Bus Depot.

Montgomery County Public Schools (MCPS) supports a new elementary school within the plan area. Approved and proposed residential development from this Sector Plan is projected to generate enough students for an elementary school and will also contribute students to middle and high school clusters. Projected student enrollment will primarily impact the Gaithersburg cluster with smaller impacts to the Magruder and Richard Montgomery clusters.

This Sector Plan amendment confirms Jeremiah Park as the preferred location for an elementary school site. If the MCPS School Bus Depot does not relocate during the life of this Plan, there are existing school sites at King Farm in the City of Rockville that could accommodate an elementary school and a middle school. In 2018, the Board of Education approved a new elementary school at Kelley Park in the City of Gaithersburg that will serve the Gaithersburg cluster.

This Sector Plan recommends the following alternatives to address school needs for the Gaithersburg cluster:

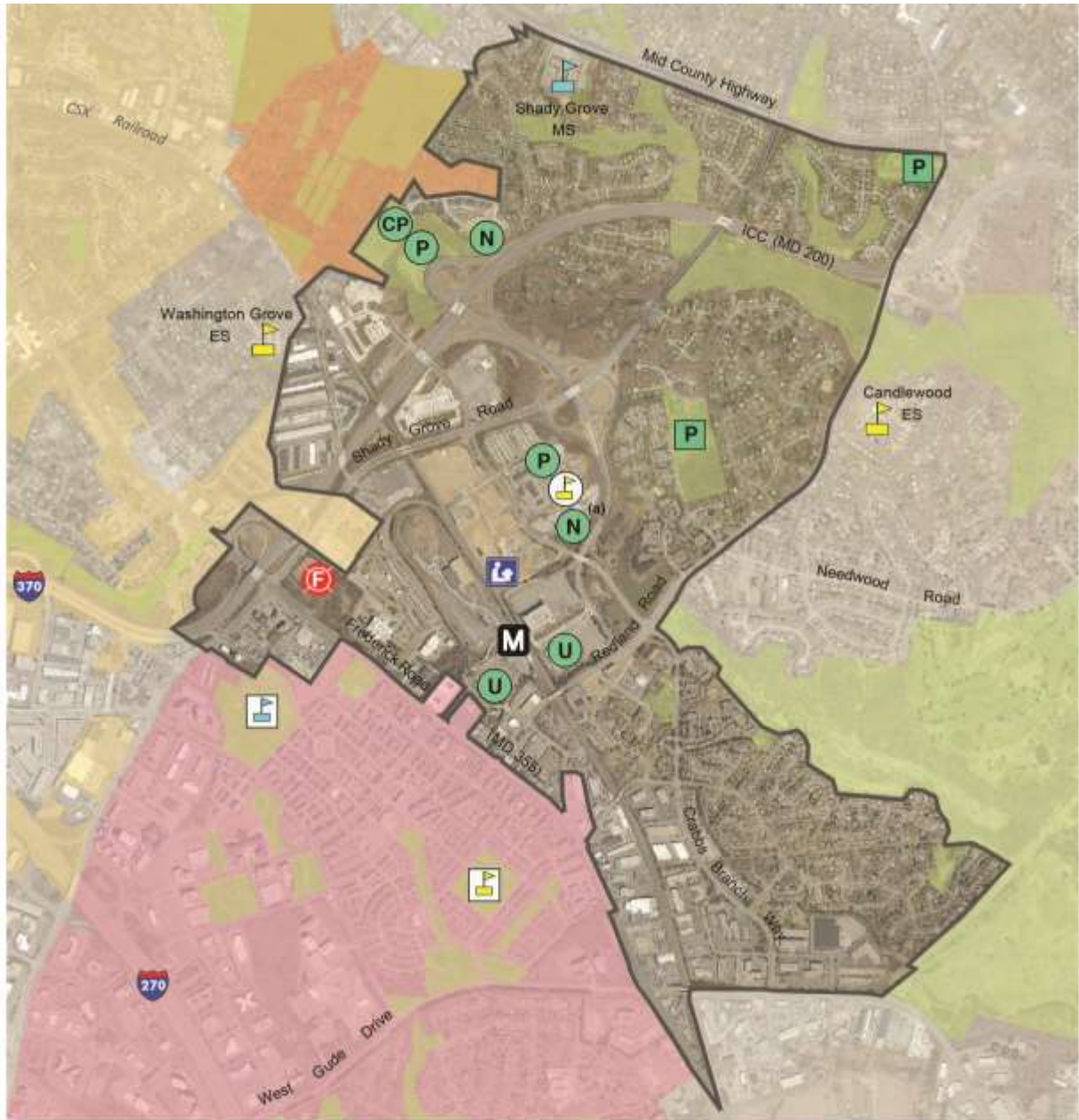
- Confirm Jeremiah Park as the preferred location for an elementary school and implement the approved preliminary plan, Shady Grove Station, for a park-school site on this property.
- Increase the enrollment capacities at the existing elementary schools in the Gaithersburg cluster, if schools can be increased.
- If an elementary school site is not provided in the plan area, then utilize the elementary school site in King Farm to address school needs.

Libraries

- Montgomery County Department of General Services (DGS) has entered into a lease agreement with EYA, the developer for Shady Grove Station, Westside, to provide space for an urban library on the ground level of a new multi-family residential building near the Metro Station. This Sector Plan supports the implementation of the library at this development.

Recreation Center

- The Department of Recreation's *Facility Development Plan 2010-2030* (2011) has determined that a community recreation center, with potential aquatic features, is appropriate for the Shady Grove area based on current and projected population densities. This Sector Plan recommends that a recreation center could be located within the Metro Neighborhoods since it will further contribute to a livable environment. The provision of a recreation center is considered as a public benefit for redeveloping properties in the CR and CRT Zones.



Map 8: Existing and proposed public facilities

Fire, Emergency Medical Services

- The Montgomery County Fire and Rescue Service (MCFRS) in the 2006 *Shady Grove Sector Plan* determined that a future fire-rescue station with emergency medical services (EMS) is needed for the Shady Grove area and recommended the vacant property at the southeast intersection of MD 355 and Shady Grove Road. This Sector Plan amendment confirms this recommendation.

Public Safety

- The 2006 *Shady Grove Sector Plan* recommended the “provision of a police facility within the plan area, potentially co-located with the Fire and Rescue facility” (p.102). This Sector Plan supports a substation in the plan area, in conjunction with the recommended Fire Station, or as a public benefit for redeveloping properties within the Metro Neighborhoods in the CR and CRT Zones.

Senior Services and Child Daycare

- This Sector Plan recommends additional senior and child daycare services to support existing and future families. These services should be considered as public benefits for redeveloping properties in the CR and CRT Zones.

HISTORIC PRESERVATION

The Crabb Family Cemetery (22/033-001A) is the only resource listed in the *Master Plan for Historic Preservation* in the plan area. Prior to the approval of the 2006 Sector Plan, the Planning Board approved the listing of the Old Derwood Store and Post Office to the *Locational Atlas and Index of Historic Sites* (Map 9).

On May 7, 2019, the Historic Preservation Commission (HPC) recommended the designation of the Old Derwood Store and Post Office (22/33-3) to the *Master Plan for Historic Preservation* and supported rezoning the property from the R-200 Zone to an appropriate residential zone that would allow for the adaptive reuse and necessary rehabilitation to the structure. This Sector Plan supports the designation of the Old Derwood Store and Post Office to the *Master Plan for Historic Preservation*.



This Sector Plan also recommends removing four individual resources recommended in the 2006 Sector Plan for evaluation and potential listing to the *Locational Atlas and Index of Historic Sites*. These resources were reviewed and rejected by the Council in 1991, and a few properties have been significantly altered or demolished. The sites are:

- Derwood Baptist Church, 15812 Esquire Court;
- Derwood School, 15805 Paramount Drive;
- Hall's Store, 15833 Derwood Road; and
- Hoskinson-Schwartz House, 15919 Chieftain Avenue.

PARKS

The recommended park system for this plan area is intended to expand recreational opportunities, provide largely integrated trail systems, and protect areas of natural and historical significance (Map 10). The parks and open spaces recommendations further enhance the 2017 *Park, Recreation, and Open Space Plan (PROS)*. The following are the Sector Plan's parks and open space recommendations:

- Implement the preliminary plan approved 4-acre Jeremiah Park on the Shady Grove Station, Jeremiah Park development. If the Montgomery County Public Schools (MCPS) Bus Depot does not relocate from its current location, provide a minimum one-acre Neighborhood Green on the former Parks Department Maintenance site if it redevelops.
- Create a new minimum one-acre Civic Green on the WMATA property in the Metro West neighborhood. This Civic Green is envisioned as the main public open space in the Metro West neighborhood.
- Create a minimum $\frac{3}{4}$ acre Neighborhood Green at the redeveloped Grove Shopping Center. This park should include neighborhood amenities, including a flexible open space and multi-age play features.
- Implement the acquired parkland at Derwood Station and Piedmont Crossing properties into a neighborhood park and local park, respectively, with a variety of recreational opportunities.
- Create a trail connection that links Redland Local Park with Mill Creek Towne Local Park, via the County-owned unbuilt right-of-way.



Map 10: Existing and proposed parks and trails

ENVIRONMENTAL SUSTAINABILITY

This Sector Plan envisions returning Shady Grove toward the original shady, tree-covered condition that inspired the area's name. The restoration of tree canopy in the plan area will help improve air quality and reduce stormwater runoff and it will contribute to keeping the area cooler in summer and sequester carbon to ameliorate climate change. Trees planted along sidewalks and bikeways will make them more comfortable and attractive to pedestrians and cyclists, inspiring more people to get around Shady Grove without driving. The greening of Shady Grove will help reduce stress, improve mental health, and encourage residents and visitors to get beneficial physical exercise. Key sustainability recommendations are the following:

Forest and Tree Cover and Impervious Surfaces

- Achieve 25 percent of tree cover for the Metro Neighborhoods.
- Retain forest on the eastern side of the Grove Shopping Center to maintain significant forest cover, improve air and water quality, sequester carbon, and provide a noise buffer to protect developed areas from traffic noise generated by surrounding roadways, including Interstate 370 and the Intercounty Connector (MD 200).

Water Quality

- Minimize imperviousness and maximize pervious areas.
- Landscaping: use native plants that require less watering and fertilization; use rainwater for watering; apply Sustainable Sites Initiatives (SITES) principles.
- Increase forest and tree cover.

Climate Protection

- Make attainment of net-zero carbon emissions an aspirational goal in all new development and redevelopment. Include as many of the following recommendations as practical in development plans, such as:
 - Use native vegetation in landscaping and tree planting to sequester carbon and reduce urban heat island.
 - Include on-site renewable energy generation.
 - Include building design features that keep roofs cool – either green roofs or cool roofs.

Preservation/Enhancement of Biological Diversity

- Plant native vegetation that is highly attractive to pollinators and provides food sources for declining populations of native pollinator species.
- Incorporate multiple layers of native vegetation in landscaping.

Health and Wellness

- Provide opportunities for healthful exercise, recreation, and mental well-being: parks and open spaces, trails, sidewalks, and bicycle networks.
- Locate appropriate land uses near sources of noise generation.

Noise

- Provide noise mitigation measures for new development in the Metro Neighborhoods and the Grove Shopping Center.
- Consider additional noise mitigation along Shady Grove Road and Mid-County Highway.
- Retain office, light industrial and automotive uses along the CSX rail tracks, primarily south of Indianola Drive.

MOBILITY

The Shady Grove Metrorail Station, which serves as a regional transit node attracts more than 30,000 commuters who utilize the Metrorail or variety of buses, including Ride On.

The 2006 Sector Plan required the formation of a Transportation Management District (TMD) and the TMD was created in 2006. It proposed a new street network for key properties surrounding the Metro Station, it proposed three interchanges in the plan area and it recommended pedestrian and bike improvements.

This Sector Plan Amendment promotes new policy initiatives, such as Vision Zero that strives to eliminate severe and fatal injuries on County roadways by 2030. This policy prioritizes designing roadways for safety of people who drive, walk, bike and take transit over residents over designing roadways to move vehicles at high rates of speed.

This plan also supports the future Bus Rapid Transit (BRT) along Frederick Road (MD 355) and the Corridor Cities Transitway (CCT) as well as new bikeways that implement the 2018 *Bikeway Master Plan* recommendations. Both new transitways and bikeway recommendations will provide enhanced mobility options in the plan area and contribute to achieving the recommended Non-Automotive Driver Mode Share (NADMS) goal.

Transit

The Shady Grove Metro Station area serves as a focal point in the Derwood community. It is the terminus for WMATA's western segment of the Metrorail Redline, along with several Ride On and Maryland Transit Administration (MTA) commuter bus routes. Opened in 1984, the existing Metro Station is surrounded by approximately 5,800 parking spaces, the largest number of parking spaces in the Metrorail system.

Increasing transit and mobility options are important recommendations for this Sector Plan, as well as the prior 2006 Sector Plan. The planned Corridor Cities Transitway (CCT) and Frederick Road (MD 355) bus rapid transit (BRT) will provide additional transit services to the plan area. Both sides of the Metro Station will be impacted when new infrastructure is implemented, including new roadways and potentially additional long-term parking.

This Sector Plan recommends:

- Significant multimodal improvements, including transitways and Vision Zero improvements, shall be a high priority public benefit for development applications in the CR zone
- Implement new public streets on both sides of the WMATA property to promote improved circulation and access for new development and infrastructure and improved access for transit riders to reach the station.
- Permit additional long-term Metro parking on the eastside of the station, which creates more flexibility for redevelopment opportunities on the westside of the station.

Bus Rapid Transit

The MD 355 BRT and the CCT are two proposed transitways that will traverse the plan area, including connections at or near the Metro Station.

Corridor Cities Transitway

The CCT is a two-phase BRT system that provides a transportation option for the Mid-County area. The first 9-mile phase of the CCT is proposed to begin at the Shady Grove Metro Station and terminate at Metropolitan Grove, via King Farm Boulevard extended, also called Metro Station Road. Based on the current CCT alignment, only the area east of MD 355 to the Metro Station is within this plan area. Recently, the Maryland Department of Transportation (MDOT) has indicated that no additional funding would be provided towards the engineering or construction of the CCT. This Sector Plan recommends the continued pursuit of locally serving rapid transit service, such as the CCT, as an effective tool to improve non-automotive access to the plan area. Alignments for the CCT will be further explored in the I-270 Corridor Transit Plan scheduled to begin in 2020.

MD 355 BRT

The Montgomery County Department of Transportation (MCDOT) is currently conducting a Rockville Pike-Frederick Road (MD 355) BRT corridor study from Bethesda to Clarksburg. Several alternatives are under consideration, including a reversible median. This Sector Plan recommends:

- Prioritize planning, design, and construction investment in a dedicated lane alternative that solidifies the Shady Grove Metrorail Station area as a regional node.
- Locate a BRT station at Shady Grove Metro Station or the closest extent possible based on operational needs.

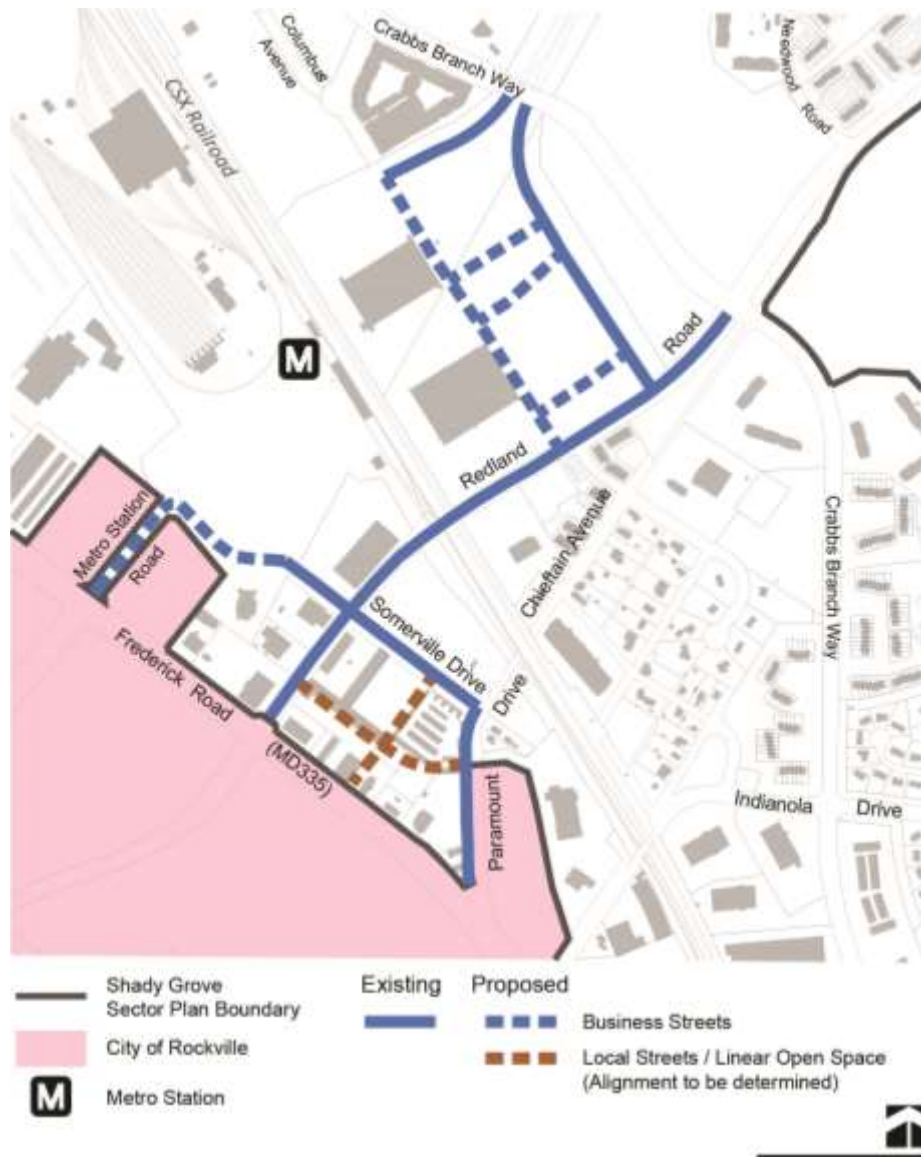
Street Network

This Sector Plan's street network recommendations seek to create a new direction for existing and future streets in the Plan area to promote a safer environment. This plan also utilizes Vision Zero principles as a framework to reevaluate streets, such as Shady Grove Road and Crabbs Branch Way, to promote safer roadways for all users. New street connections are recommended in the Metro Neighborhoods to promote access to transit and to create unique placemaking opportunities. Street network recommendations focus on key streets in the Plan area, including Shady Grove Road, Frederick Road, and future streets. This Plan recommends:

- Expand the Urban Road Code boundary and Bicycle and Pedestrian Priority Area (BiPPA) to include the entirety of the Sector Plan area boundary. The current Urban Road Code area and BiPPA are primarily centered around the Metro Station Policy area.

Metro Neighborhood Streets

A local street network is proposed for properties surrounding the Metro Station, which will contribute to creating a walkable environment. This Sector Plan modifies the local street network recommended in the 2006 Sector Plan since it cannot be achieved because two key properties have been annexed into the City of Rockville. Further, the 2006 Sector Plan's proposed rights-of-way significantly constrained properties and do not consider the numerous properties in these neighborhoods. This Sector Plan specifies public streets on routes where the proposed MD 355 BRT and the CCT are anticipated, and flexibility is provided for other streets in the Metro Neighborhoods (Map 11). The approved Shady Grove Station development has implemented a variety of new streets, including Columbus Avenue and Gramercy Boulevard. The proposed street network will vary in character with some streets providing on-street parking, while others could be designed only for pedestrians.

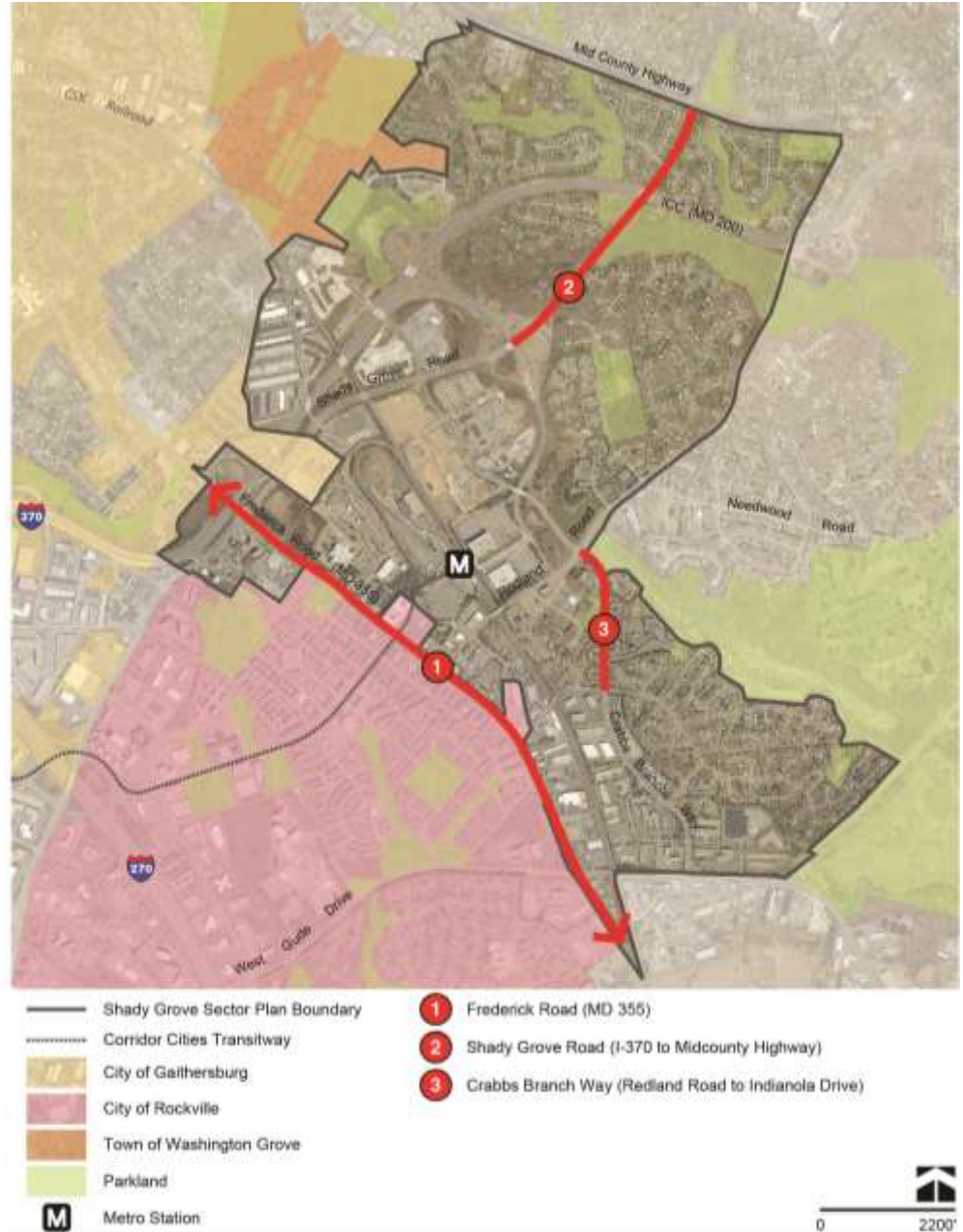


Map 11: Metro West, South and Metro North street network.

Vision Zero

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries on roadways while increasing safe, healthy, equitable mobility for all roadway users. First implemented in Sweden in the 1990s, Vision Zero has been adopted by jurisdictions across the country, including within the D.C. Metropolitan Region. In 2017, Montgomery County adopted its Vision Zero Action Plan, and its major goal is to achieve “zero severe and fatal collisions” on the County’s roadways by 2030 (p.5).

This Sector Plan endorses Vision Zero concepts as a framework to address safety issues for key roadways, including MD 355, a portion of Shady Grove Road, and a segment of Crabbs Branch Way (Map 12).



Map 12: Vision Zero’s High Injury Network in the plan area.

Shady Grove Road

Shady Grove Road (M-42) is classified as a major highway that crosses the plan area from residential neighborhoods to the east and to commercial properties in the west. The recommended minimum right-of-way of Shady Grove Road is 150 feet between the western plan area boundary and the I-370/Metro Access Road, while the area between I-370 and Mid-county Highway has a minimum right-of-way of 120 feet. This roadway primarily has six travel lanes with intersections, such as Shady Grove Road and MD 355, that increases the width of the roadway. This Sector Plan recommends the following for Shady Grove Road:

- Extend the Urban Road Code and BiPPA to the area east of I-370.
- As an urban area, lower the posted speed limit to **35** MPH to create a consistent speed across the corridor.
- Provide a sidepath along the southern portion of this roadway.

Crabbs Branch Way

Crabbs Branch Way, between Redland Road and Indianola Drive, is included in the High Injury Network. Between January 2015 and May 2019, 272 *automotive* crashes have occurred along the roadway or in proximity to its intersections. This Sector Plan recommends the following to improve this roadway segment:

- Replace the center turn lane with a landscape median.

There are limited access points along this approximately 2,400-linear foot segment, and removing the existing center turn lane is not anticipated to add significant delay and will contribute to reducing speeds along the corridor.

Frederick Road

Frederick Road (MD 355), within the Sector Plan area, is within County's Vision Zero High Injury Network. Consistent with Vision Zero principles, this Sector Plan recommends enlarged pedestrian refuges along MD 355 to reduce the probability of injury for pedestrians who do not adhere to crossing signals and markings.

Bicycle and Pedestrian Network

This Sector Plan promotes a walkable and bikeable environment that creates a network of streets and safe bicycle facilities that incorporate Vision Zero principles. New pedestrian and bicyclist investments, including Capital Bikeshare stations, shared use paths along Crabbs Branch Way and the Metro Access Road, and the reconstruction of Crabbs Branch Way have improved the walking and biking environment in the plan area.

This Sector Plan recommends the following:

- Install sidewalks along the northern portion of Shady Grove Road between Crabbs Branch Way and Mid-County Highway and along the northern portion of Redland Road between Briardale Road and Overhill Road.
- All pedestrian walkways should be at grade, rather than underground pathways as recommended in the 2006 Sector Plan. A landscape panel with street trees shall be installed between the roadway and the sidewalk.
- Consider protected intersections for intersections with bikeways, which are within the Metro Neighborhoods.
- Expand the Bicycle and Pedestrian Priority Area (BiPPA) to include all of Shady Grove Road, Frederick Road (MD 355) and Crabbs Branch Way within the plan area.

Transportation Demand Management

The Shady Grove Sector Plan area is within the Greater Shady Grove Transportation Management District (TMD). Established in 2006, the TMD area also includes portions of the cities of Rockville and Gaithersburg, including King Farm and the Life Sciences Center. The TMD promotes reducing single-occupant vehicle trips, reducing vehicle emissions, and supporting traffic safety and pedestrian access.

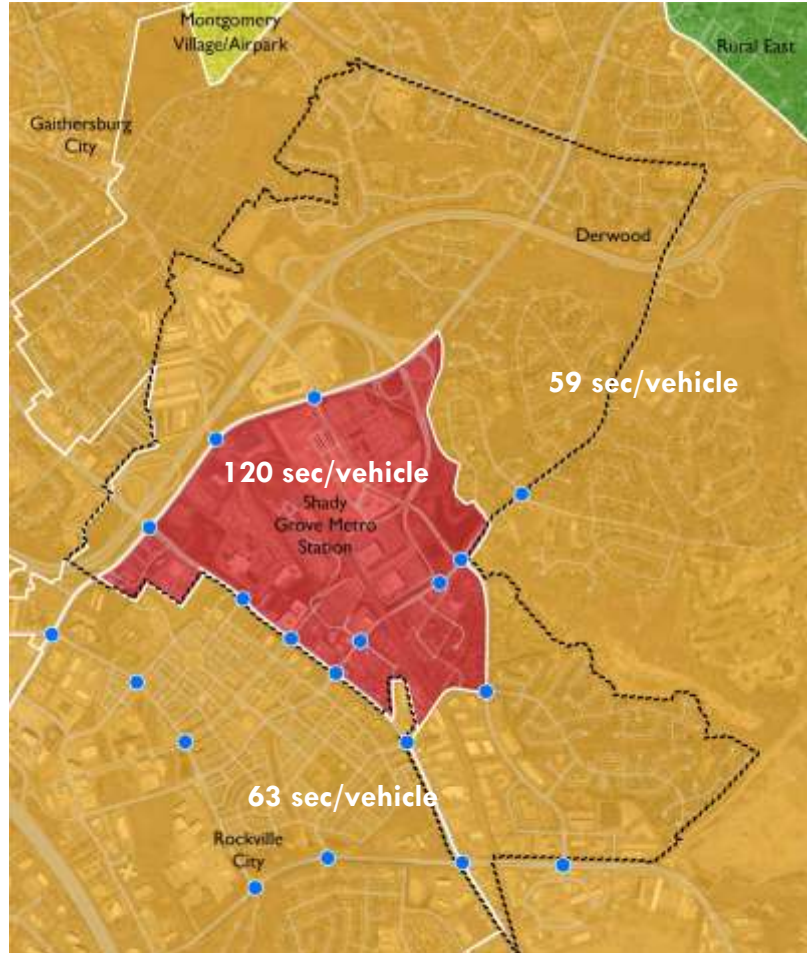
Currently, the estimated Non-Auto Driver Mode Share (NADMS) is approximately 34.2 percent based on consolidated Census Tract data, which are slightly larger than the Plan area, and derived from the 2009-2013 American Community Survey. This Sector Plan TMD recommends builds upon the existing Plan's recommendations with the following recommendations:

- Maintain the requirement that all new developments must enter into Traffic Mitigation Agreements (TMAGs) in the Metro Station Policy Area.
- Require Traffic Mitigation Agreements (TMAGS) to mitigate for traffic through significant multimodal improvements that further transitways master planned projects and Vision Zero improvements
- Support a 50 percent NADMS goal for residents living the Metro Station Policy Area for all home-based work trips (commute trips).
- Increase the existing NADMS goal for office employees of the plan area who reside elsewhere from 12.5 percent to 25 percent.

Transportation Standards

This Sector Plan recommends modifying the Highway Capacity Manual (HCM) standards for Frederick Road (MD 355) intersections, including MD 355 and East Gude Drive. The northeastern intersection of MD 355 and East Gude Drive are within the County, while the northwestern intersection is within the City of Rockville. There are three Highway Capacity Manual (HCM) standards for the plan area:

- The Shady Grove Metro Station Policy Area (MSPA), which includes all the Metro Neighborhoods, has an HCM standard of 120 seconds/vehicle.
- Existing residential communities, such as Parkside Estates and Mill Creek, are in the Derwood Policy Area with an HCM standard of 59 seconds/vehicle.
- The City of Rockville's HCM standard is 63 seconds/vehicle (Map 13).



Map 13: Highway Capacity Standards within and surrounding the plan area.

This plan recommends a higher HCM standard, up to 80 seconds/vehicle, for the MD 355 and Gude Drive intersection since it is part of a larger corridor where new BRT infrastructure and additional intense development are planned. This HCM recommendation acknowledges that both the City of Rockville and Derwood policy areas have lower HCM standards, but this intersection is appropriately less than a half-of-a mile from the higher Shady Grove MSPA.

Intersections

Since this plan envisions a mixed use transit-oriented area, roadway intersections in this Plan area, especially within the Metro Neighborhoods, should prioritize bicyclist and pedestrian improvements and access to transit, rather than widening or increasing roadway capacity.. Long-range forecasts that were developed in concert with the plan recommendations indicated that the intersection at MD 355 and East Gude Drive is forecasted to exceed the current Local Area Transportation Review (LATR) standard assuming no mitigative measures are taken.

Existing intersections at key locations, including at MD 355 and Gude Drive and MD 355 and Shady Grove Road have multiple turn lanes and dedicated right turn lanes that contribute to creating a challenging walking environment and difficulty for transit riders to reach transit stops. This Sector Plan, like the 2006 Sector Plan, recommends a multi-modal mitigation approach to intersections that may exceed the LATR standard, instead of roadway widening. To mitigate for failing intersections, applicants shall provide multimodal improvements, including transitways and Vision Zero improvements.

This Plan proposes restrictions on the implementation of additional travel or turn lanes until safety and throughput investments. The introduction of additional travel and turning lanes widens crossings for pedestrians. Even in instances where crossing times are adjusted, the fact remains that additional lanes result in additional conflict points for pedestrians. Research on induced demand suggests that adding new travel and turning lanes adds more traffic onto a roadway network over time, and leads to longer crossing distances for pedestrians, with potential for crashes with higher percentages of severe injury and death.

Interchanges

The 2006 Sector Plan identified three recommended interchanges within the Sector Plan area:

- Partial Interchange: Crabbs Branch Way and Metro Access Road
- MD 355 and Gude Drive
- I-200 and I-370

The interchange at I-200 and I-370 has been since constructed as a component of the Intercounty Connector project.

Partial Interchange – Crabbs Branch Way and Metro Access Road

This Sector Plan recommends removal of the partial interchange at Crabbs Branch Way and Metro Access Road. Nearby intersections are not projected to operate beyond existing levels of acceptability per the 2016 Subdivision Staging Policy, and as such, the anticipated mobility benefits of a partial interchange are not warranted by the associated budgetary and environmental costs. This Plan also prioritizes choice and person throughput over single-occupant vehicle throughput. Subsequently, this Sector Plan recommends using limited County funds on other priorities within the Sector Plan area.

MD 355 and Gude Drive

The 2006 Sector Plan includes the recommendation for an interchange at MD 355 and Gude Drive or other improvements to achieve acceptable service level (p.114). This recommendation is also a stage two requirement. Since 2006, this interchange proposal has not been conceptually studied by Montgomery County Department of Transportation (MCDOT) nor the Maryland State Highway Administration (SHA). The 2017 County's State Transportation Priorities letter did not include this intersection as a priority. However, the 2015 priorities letter did include this intersection on the development and evaluation program.

The 2019 Public Hearing Draft for the *Comprehensive Plan for the City of Rockville's* recommends that the city continue "to support capacity improvements at Gude Drive and MD 355, perhaps the intersection that delays the most drivers on a daily basis. Grade separation of the two roadways may be the best solution amongst possible design options" (p.65). Planning staff has met with the City of Rockville planning staff, who also support an interchange at this location, especially if another roadway access is created at I-270 and West Gude Drive.

Six different alternatives for this intersection were explored during the plan creation, including: adjusting the congestion standard to 80 to 100 seconds per vehicle, a single-point urban interchange; and a Gude Drive overpass of MD 355 were considered. These alternatives also considered how roadway changes would be impacted by future BRT.

The highest estimated cost alternative is a single-point urban interchange that could cost upwards of \$75M with significant property and roadway impacts. A Gude Drive overpass option would provide two uncontrolled through lanes over MD 355 and could cost up to \$25M. Conceptual designs indicate that vehicles would enter the through lanes from the inner travel lane in order to maintain a single rather than two separate structures. A traffic signal would be maintained on MD 355 to account for turning movements, but the number of signal phases would be reduced as an east-west through phase would no longer be necessary.

This Sector Plan recommends that interchanges are not the correct solution for corridors with closely spaced signalized intersections as the isolated benefits have the potential to push congestion more quickly up and downstream, creating new traffic issues elsewhere. As such, this plan recommends raising the congestion threshold at the intersection to 80 seconds per vehicle to allow for more modest, lower-cost improvements, to be implemented as necessary based on findings commensurate with new development per the County's subdivision staging policy.

Operational acceptability as defined by the 2016 SSP, can be achieved at an 80 second/vehicle delay threshold in both the morning and evening periods in the forecast year with the addition of eastbound and westbound free right turns, receiving lanes for the turns on MD 355, and the conversion of the existing southbound right-turn into a shared-through right lane.

Because of the safety impacts related to free-right operations, this Sector Plan recommends analyzing the benefits of any improvement against safety costs, privileging safety over capacity when faced with potential trade-offs. This Sector Plan recommends:

- Remove the recommended interchange at MD 355 and Gude Drive in favor of using limited County funds on improvements that support safety, choice, and throughput.
- Amend the existing SSP congestion standard for this intersection to be no less than 80 seconds of delay per vehicle, in order to have a more consistent transportation policy approach for the MD 355 corridor.
- Explore the feasibility of a Metrorail station near the Montgomery College Rockville Campus.

ZONING

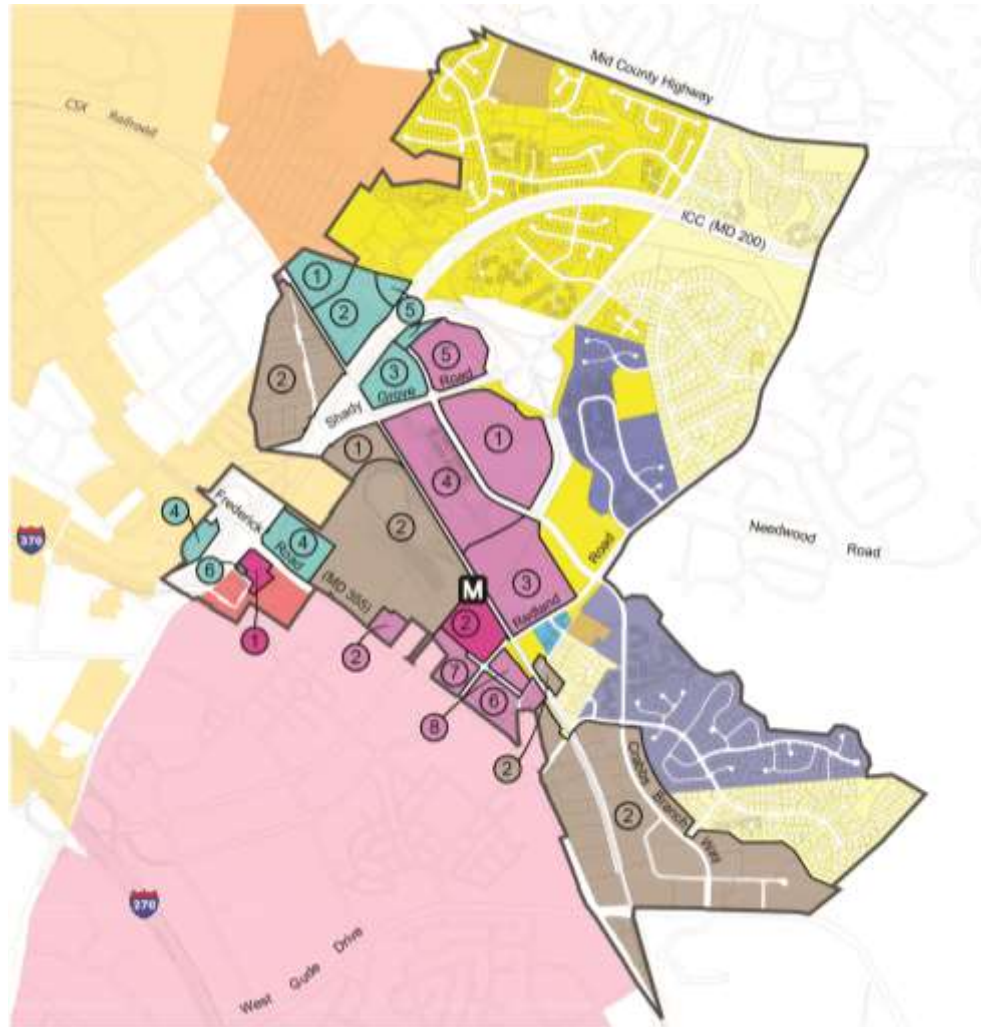
Montgomery County adopted a new Zoning Ordinance that became effective on October 30, 2014. The new Ordinance established several new zones for non-residential areas in this Plan area, including the Commercial Residential (CR) Zone, Commercial Residential Town (CRT) Zone, Employment Office (EOF) Zone, General Retail (GR) and Moderate Industrial (IM) Zone.

Properties in the Metro West neighborhood were rezoned to the CR and CRT-TDR Zones, while the Metro South neighborhood was rezoned to the CRT and CRT-TDR Zones. The Grove Shopping Center and the County Service Park (Shady Grove Station, Westside and Jeremiah Park) were rezoned to the CRT-TDR Zone (Map 14).

The Oakmont Industrial area, Crabbs Branch Office Park, and the MD 355 Automotive Corridor were rezoned to the Moderate Industrial (IM) Zone. The Shady Grove Plaza properties, located at the southwestern quadrant of Frederick Road (MD 355) and Shady Grove Road, were rezoned to the EOF, CR and GR Zones. Existing single-family residential zones were retained.

The 2014 Zoning Ordinance prohibits the future use of the Planned Development (PD) Zone, which is a floating zone, via the Sectional Map Amendment (SMA) process. Several residential developments in the plan area, including the Townes of Shady Grove, Derwood Station, and Park Overlook-Mallard Cove were approved and built with the different PD zones. The 2006 Sector Plan also recommended the PD-35 for the VEIP and the PD-22 for the Old Derwood Store and Post Office properties. This Sector Plan recommends Euclidean zones for these two properties, rather than floating zones.

Office properties in the Crabbs Branch Office Park were rezoned from the Light Industrial (I-1) Zone to the Industrial Moderate (IM) Zone. The I-1 Zone permitted a broad range of office uses, as well as light industrial uses. This Sector Plan recommends rezoning some office properties along Crabbs Branch Way to the Employment Office (EOF) Zone since this zone permits offices as permitted uses and does not have a maximum Floor Area Ratio (FAR) limit for office development like the IM Zone.



Shady Grove Sector Plan Boundary	EOF 0.5, H-45'	CRT 0.75, C-0.75, R-0.25, H-50' T
Metro Station	EOF 0.5, H-50'	CRT 1.0, C-0.25, R-0.75, H-70' T/ TDR 0.88
City of Gaithersburg	EOF 0.75, H-60' T	CRT 1.0, C-0.25, R-0.75, H-90' T/ TDR 0.89
City of Rockville	EOF 0.75, H-100'	CRT 1.0, C-0.5, R-0.5, H-65' T/ TDR 0.81
Town of Washington Grove	EOF 0.75, H-100' T	CRT 1.5, C-0.5, R-1.25, H-90' T
Residential, Single-Family	EOF 1.5, H-60'	CRT 1.5, C-0.5, R-1.25, H-100' T
Residential, Single-Family	Commercial Residential	CRT 1.75, C-0.5, R-1.5, H-90' T/ TDR 1.77
Residential, Single-Family	CR 0.75, C-0.75, R-0.25, H-80' T	General Retail
Residential, Transferable Development Rights	CR 1.75, C-0.5, R-1.5, H-160' T/ TDR 1.77	GR 1.5, H-45'
Planned Development	Commercial Residential Neighborhood	Industrial Medium
Planned Development	CRN 0.5, C-0.5, R-0.25, H-35'	IM 0.5, H-75'
Planned Development	Commercial Residential Town	IM 2.5, H-50'
	CRT 0.75, C-0.25, R-0.5, H-60' T/ TDR 0.6	



Map 14: Existing Zoning

PUBLIC BENEFITS

The optional method in the Employment Office (EOF), Commercial Residential Town (CRT), and Commercial Residential (CR) Zones require public benefits from a minimum of two to four categories. This Sector Plan encourages redeveloping properties in the Metro Neighborhoods and other key locations to utilize the optional method and to provide the following public benefits, which are priorities for this Sector Plan area:

- Fifteen (15) percent Moderately Priced Dwelling Units (MPDUs) as the highest priority public benefit.
- The provision of major public facilities, including but not limited to implementation of significant multimodal transportation improvements, including segments of transitways, a recreation center, new neighborhood parks and open spaces, and undergrounding of utilities.
- Connectivity and mobility, including but not limited to neighborhood services, streetscape improvements, public parking, minimum parking and trip mitigation through the provision multimodal improvements, including transitways and Vision Zero improvements.
- Quality building and site design, including but not limited to exceptional design, public open space, and public art.
- Diversity of uses and activities, including but not limited to moderately priced dwelling units, dwelling unit mix, care centers, small business opportunities, and enhanced accessibility for seniors or the disabled.
- Protection and enhancement of the natural environment, including but not limited to tree canopy, vegetated roof, habitat preservation and restoration, and energy conservation and generation.

IMPLEMENTATION

Staging of Development

The 2006 Sector Plan established two staging options that centered on the redevelopment or retention of the Montgomery County Service Park (CSP) as well as the funding of public facilities and infrastructure. Since 2006, most of the public facilities at the CSP, including the Parks Department Maintenance and Training Center and the Montgomery County Department of Transportation Equipment and Maintenance Operations Center have relocated to Multi-Agency Service Center in Montgomery Village or the Montgomery County Division of Fleet Management Services - David F. Bone Equipment Maintenance and Transit Operations Center (EMTOC), located at the northwestern intersection of Crabbs Branch Way and Shady Grove Road. The Montgomery County Public Schools (MCPS) Shady Grove Bus Depot is the last remaining public facility located at the CSP.

The Sector Plan's recommendation that staging is unnecessary in the plan is influenced by the redevelopment of the CSP and the implementation of several mobility and public facilities requirements in the three-phased staging plan. Several staging requirements, which have been implemented, including: the Greater Shady Grove Transportation Management District (TMD) was created in 2006, several parks, including Derwood Station, have been acquired and implemented, the Shady Grove Station, Westside and Jeremiah Park development have provided a dedicated a park-school site, space for a public library and a portion of Crabbs Branch Way has been reconstructed. Additionally, pedestrian and bike enhancements have occurred in the plan area, including new Capital Bikeshare stations and shared use paths along Redland Road.

This plan recommends adjusting the Highway Capacity Manual (HCM) standard for the Frederick Road (MD 355) corridor, including at MD 355 and Gude Drive, which would promote an acceptable service level for the MD 355 corridor. Continuing the 2006 Sector Plan's staging framework, including the Gude interchange in stage two, would preclude new development opportunities in the Metro Station Policy Area where existing mobility and infrastructure exists. In addition, the transportation improvements that were tied to the 2016 Sector Plan staging do not prioritize transit, are contrary to the County's commitment to Vision Zero, and could negatively impact accessibility to future BRT along MD 355. The long-range forecast done for this plan indicates that the 2006 Sector Plan's partial interchange recommendation from Crabbs Branch Way to the Metro Access Road is no longer necessary to achieve appropriate transportation and land-use balance.