

SPRING 2020

Shady GROVE

SECTOR PLAN

MINOR MASTER PLAN AMENDMENT

PUBLIC HEARING DRAFT



Abstract

This Sector Plan contains the text and supporting maps for a comprehensive amendment to the approved and adopted 2006 Shady Grove Sector Plan, as amended. It also amends The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's counties, as amended, the Master Plan of Highways and Transitways, as amended, and the Bicycle Master Plan, as amended.

This Plan focuses on land use and zoning recommendations primarily surrounding the Shady Grove Metro Station, as well as mobility options, urban design and public facilities. This Plan area is also adjacent to the municipalities of Rockville, Gaithersburg and the Town of Washington Grove.

Master and sector plans convey land use policy for defined geographic areas and should be interpreted together with relevant Countywide functional plans and County laws and regulations. Plan recommendations provide comprehensive guidelines for the use of public and private land; and should be referred to by public officials and private individuals when making land use decisions. Public and private land use decisions that promote plan goals are essential to fulfilling a plan's vision.

Master and sector plans look ahead 20 years from the date of the adoption, although they are intended to be revised every 10 to 15 years. Moreover, the circumstances when a plan is adopted will change and the specifics of a plan may become less relevant over time. Plans do not specify all development possibilities. Their sketches are for illustrative purposes only, intended to convey a sense of desirable future character rather than detailed recommendations for a particular design.

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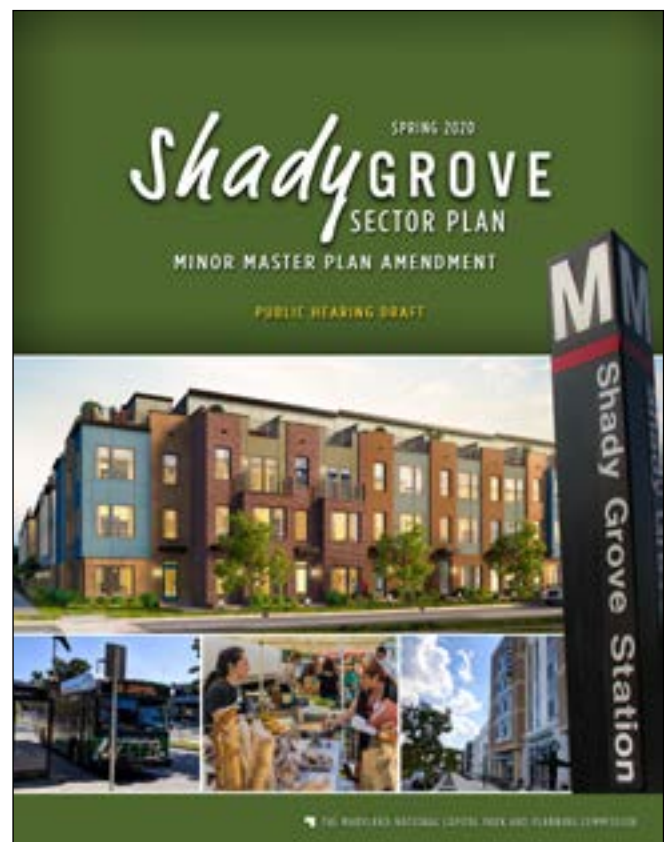
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The Maryland-National Capital Park and Planning Commission

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The Commission is charged with preparing, adopting, and amending or extending The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties. The Commission operates in each county through Planning Boards appointed by the County government. The Boards are responsible for preparing all local plans, zoning amendments, subdivision regulations, and administration of parks.

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1

Introduction

This Sector Plan envisions the future of the Shady Grove Metro Station area as a mixed-use and pedestrian-oriented environment with attractive streetscapes, distinctive architecture, and a sense of place that is complemented with public art, facilities and amenities, and new mobility options. This vision is consistent with the 2006 Shady Grove Sector Plan which aspired to transform a light industrial area into a new mixed-use community near the Shady Grove Metro Station (**Map 1**).

To achieve this vision, this Sector Plan amendment recommends increased densities for the WMATA properties and other properties in the Metro West and South neighborhoods (Table 1). The Plan also supports the redevelopment of commercial properties along major roads, the complete relocation of the County Service Park (CSP), including the Montgomery County Public Schools (MCPS) Bus Depot, and implementation of the approved Shady Grove Station, Jeremiah Park development.

All residential communities in the Plan area that were built with the Planned Development (PD) Zone will be rezoned to a Euclidean Zone. Further, zoning for existing Derwood residential neighborhoods will be retained, and new development will be compatible with existing residential development.

Several light industrial and office areas in the Plan area, such as the Frederick Road (MD 355) automotive corridor, Oakmont Avenue, and Crabbs Branch Way Office Park will be retained. 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.

It is anticipated that new residential and non-residential development will implement a variety of public benefits, including new parks and open spaces as well as multimodal improvements for people who take transit, walk, and bike.

In the future, new bus rapid transit (BRT) options in the Plan area, including along Frederick Road (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.

While this Sector Plan amendment recommends a similar amount of development as the prior Plan, it does not recommend a staging plan. The major public infrastructure projects tied to the staging of the 2006 Sector Plan have been implemented or are funded for implementation, including the redevelopment of the County Service Park and the funding of a new elementary school. In addition, the transportation improvements that were tied to the 2006 Sector Plan staging do not prioritize transit and are contrary to the Vision Zero policy.



VISION

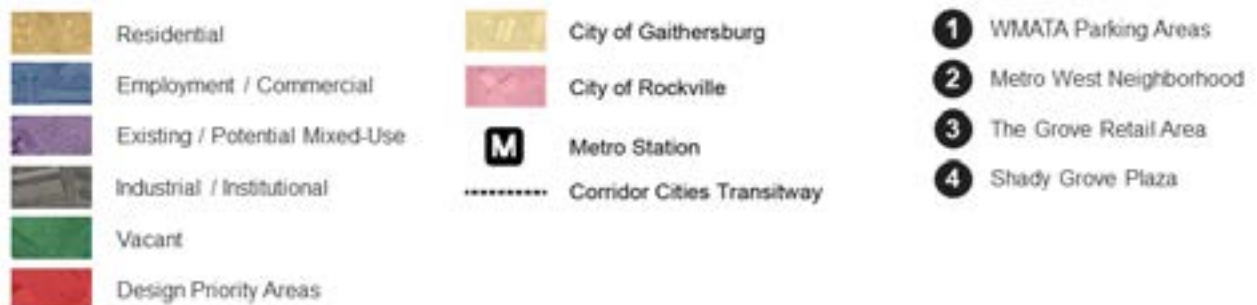
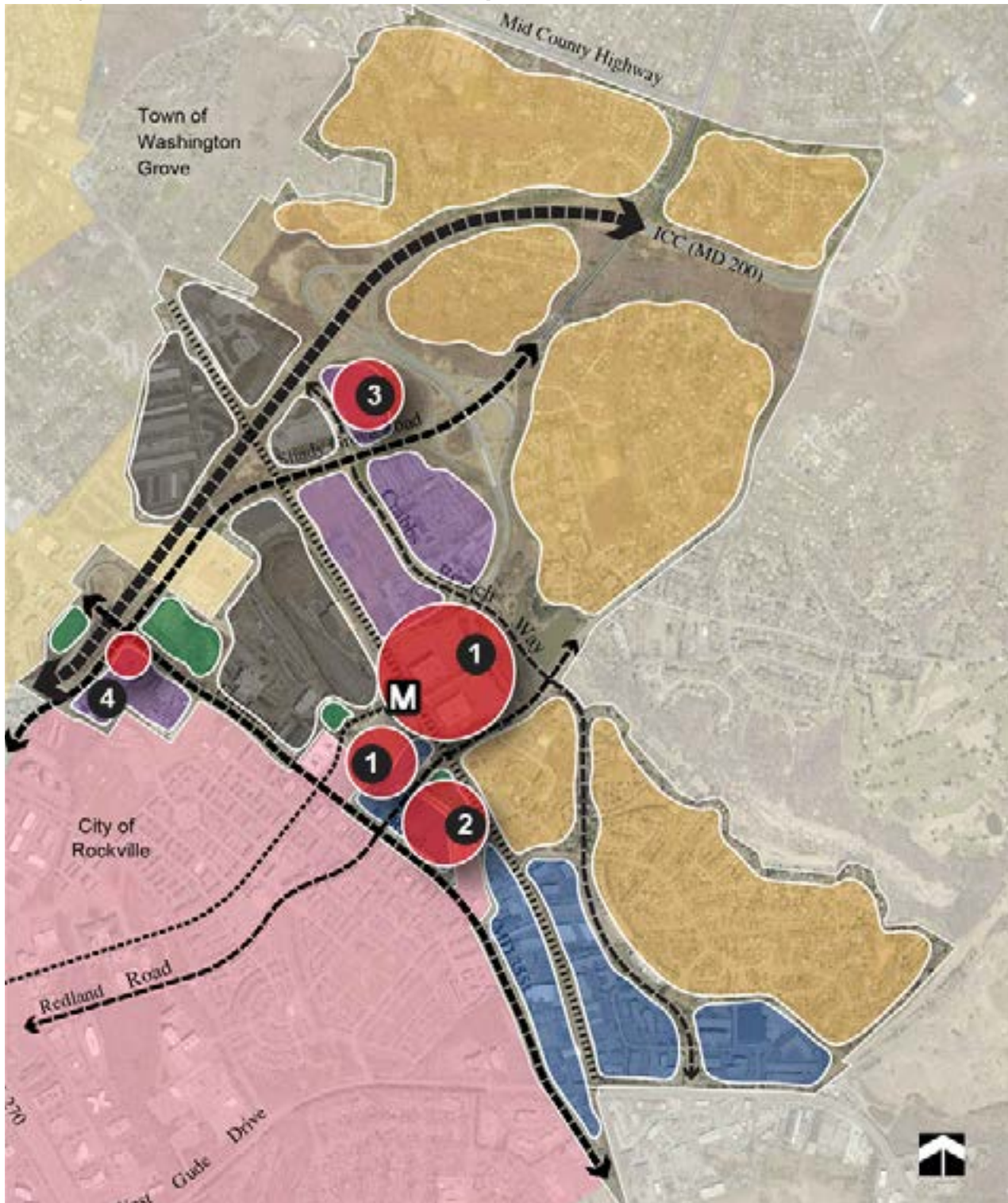
This Sector Plan envisions the future of the Shady Grove Metro Station area as a mixed-use and pedestrian-oriented environment with attractive streetscapes, distinctive architecture and a sense of place that is complemented with public facilities and amenities, and new mobility options.

In the future, new bus rapid transit (BRT) options in the Plan area, including along Frederick Road (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 aspirational sustainability goal, as well as enhancing tree canopy and promoting the best in sustainable design for this Plan area.

Table 1:
Potential Build-Out and Jobs-Housing Ratios

	Existing	Approved	Potential Build-Out	Total
Residential Units	3,091	1,729	4,540	9,360
Non-Residential Square Feet	4.66 million square feet	61,828 square feet	2.22 million square feet	6.92 M
Non-Residential Square Feet Converted into jobs	13,775	155	6,191	20,121
Jobs/Housing Ratio	4.46	0.09	0.99	2.14

Map 1:
Shady Grove Sector Plan Vision Concept Plan



OVERVIEW

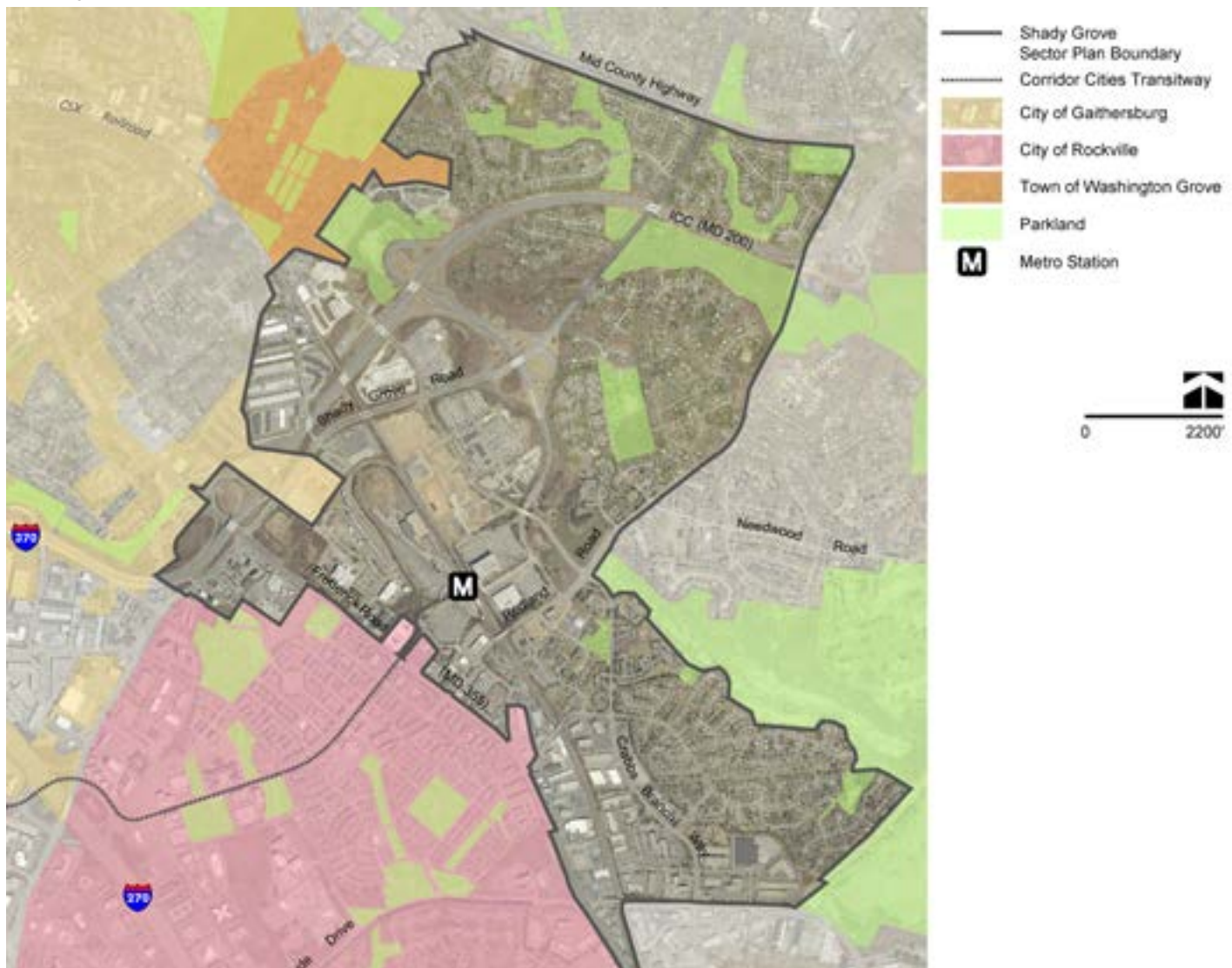
Sector Plan Area

The twisted 'L' shaped Sector Plan area, which is approximately 2,000 acres, is defined by several major roads, including Frederick Road (MD 355), the Intercounty Connector (MD 200), Shady Grove Road and Redland Road. Mid County Highway serves as the northern boundary of the Plan area and the Metrorail and CSX rail tracks also contribute to dividing the Plan area into different segments (**Map 2**).

The Plan area is characterized by a variety of residential, commercial, industrial and institutional

uses. Established residential neighborhoods are primarily in the northern and southeastern portions of the Plan area. Public facilities, including Shady Grove Middle School, Blueberry Hill Local Park, and Redland Local Park, as well as Mill Creek and Crabbs Branch Stream Valley Parks, contribute to characterize the Plan area. Single-use commercial areas along Crabbs Branch Way, Frederick Road (MD 355) and Oakmont Avenue further define the Plan area. The Plan area is adjacent to three municipalities and the Upper Rock Creek Master Plan area is located east of this Plan area. Since 2006, the Plan area's size has been modified with the annexations of three properties by Gaithersburg and Rockville.

Map 2:
Shady Grove Sector Plan Area





Existing Land Use and Zoning

Established single-family residential neighborhoods are primarily in the R-90 and R-200 Zones. Residential areas, such as Mill Creek and Redland Station, which are north of Shady Grove Road, are in the R-90 Zone, and Parkside Estates and Mill Creek South are south of Shady Grove Road in the R-200 Zone (**Map 3**).

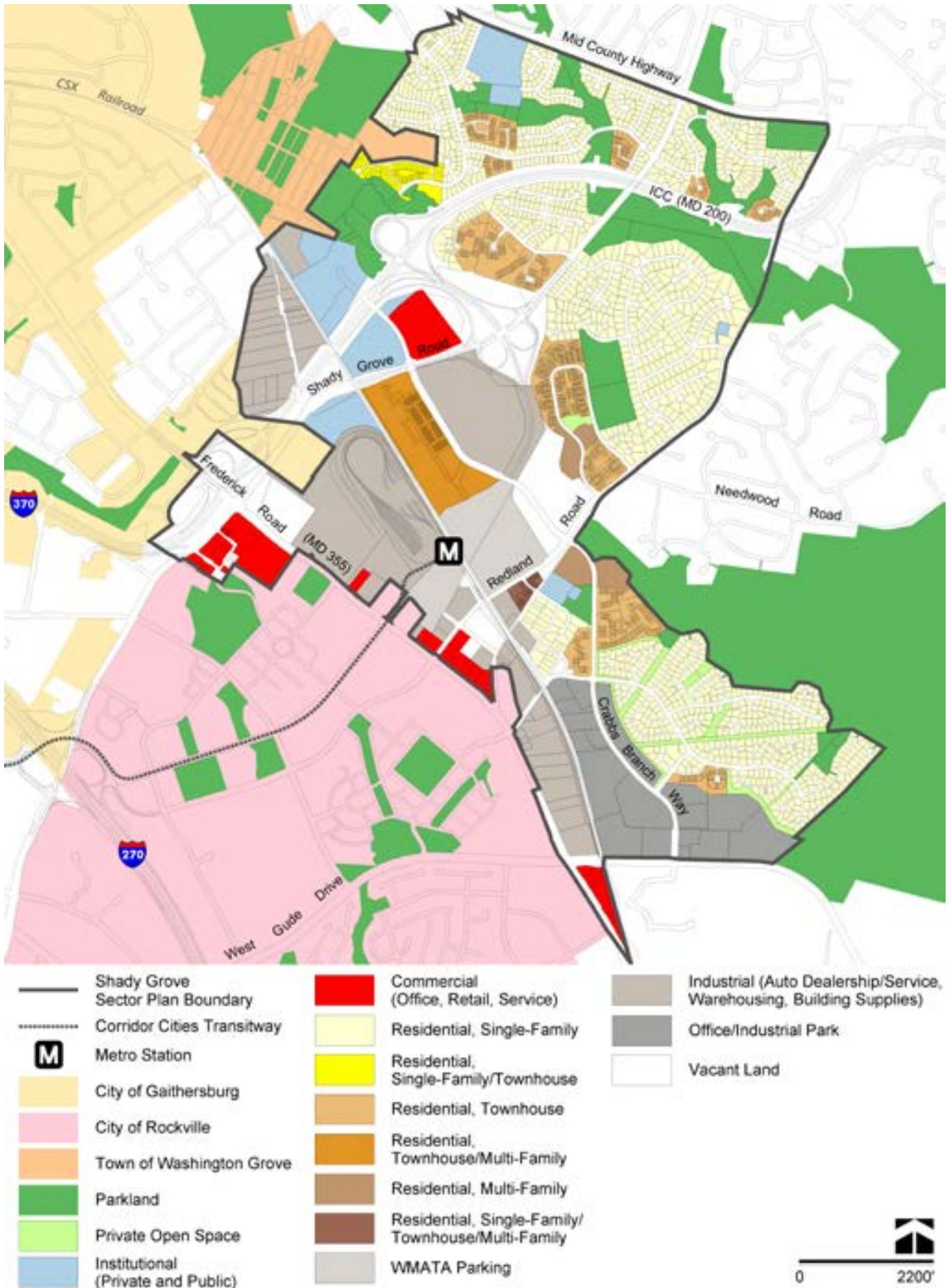
Park Overlook-Mallard Cove, Derwood Station, and the Townes at Shady Grove were approved via the Planned Development (PD) Zone. The October 2014 District Map Amendment (DMA) prohibits the reconfirmation of the PD Zone; therefore, this Plan amendment will provide new residential zones for these properties. The 2006 Sector Plan confirmed residential neighborhoods to single-family zones and the PD Zone.

The DMA also converted commercial and industrial properties to new zoning categories, including the Commercial Residential (CR), Commercial Residential Town (CRT), Employment Office (EOF) and Moderate Industrial (IM) Zones. Office and flex-industrial uses are concentrated along Crabbs Branch Way, between Indianola Drive and East Gude Drive, in the IM Zone. Similarly, properties along Oakmont Avenue are in the IM Zone (**Map 4**).

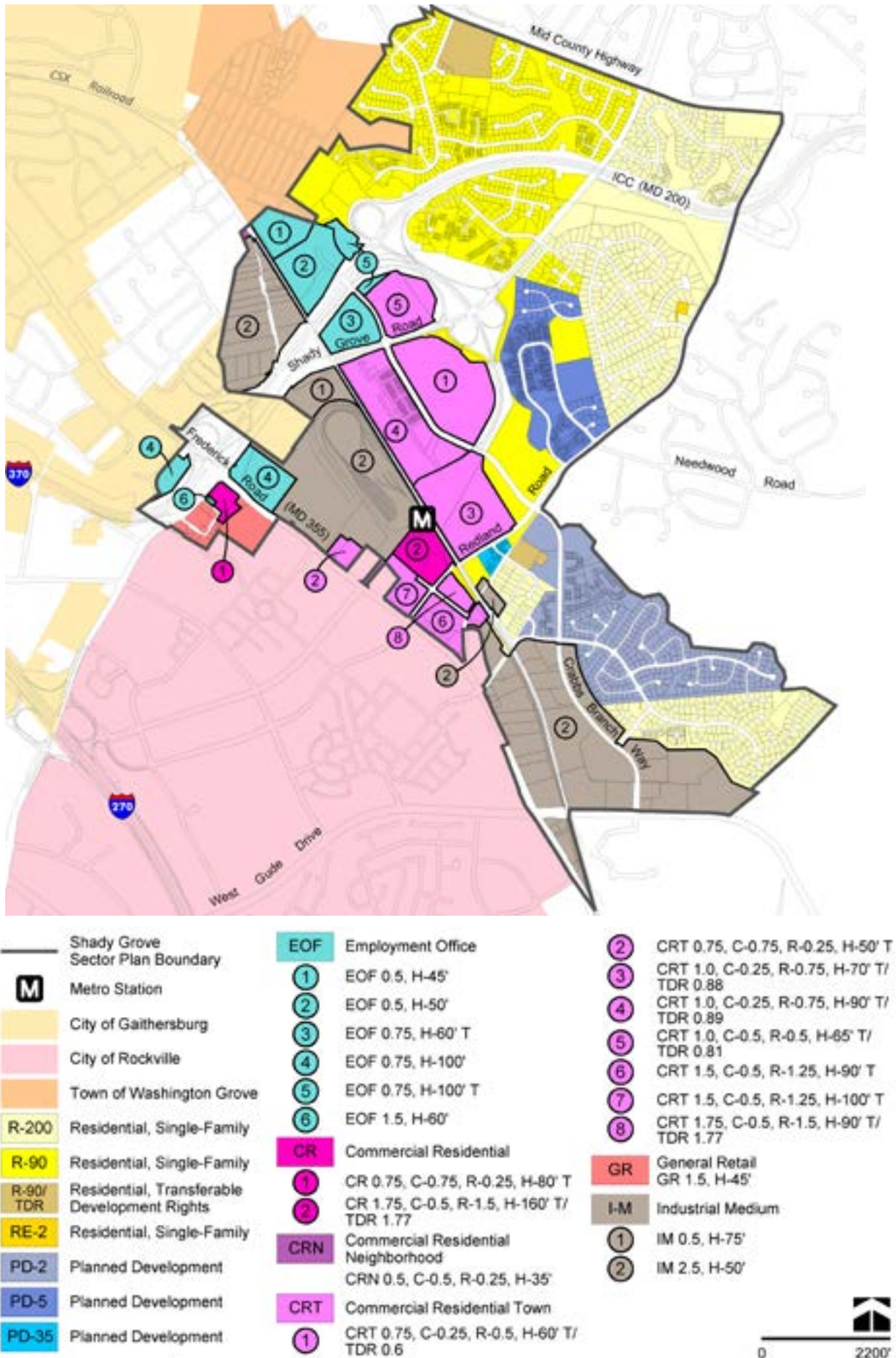
Properties in the Metro West and South neighborhoods were rezoned to the Commercial Residential (CR) and the Commercial Residential Town (CRT) Zones. Shady Grove Station (Westside and Jeremiah Park), which is part of the development of the County Service Park (CSP), was rezoned to the Commercial Residential Town/Transferable Development Rights (CRT/TDR) Zones. The primarily automotive corridor along Frederick Road (MD 355), south of Paramount Drive, was rezoned to the IM Zone.



Map 3:
Shady Grove Plan Area Existing Land Uses



Map 4:
Shady Grove Plan Area Existing Zoning



Demographic Profile

Based on the 2010 U.S. Census, the Shady Grove Study Area, which is a larger area than the Sector Plan area, has an estimated population of 42,845 residents. The age profile of residents in the study area is consistent with the Countywide profile. Countywide, approximately 13.9 percent of residents are between 35-44 years old, while within the study area, 13.5 percent of residents are within the same age range (Figure 1).

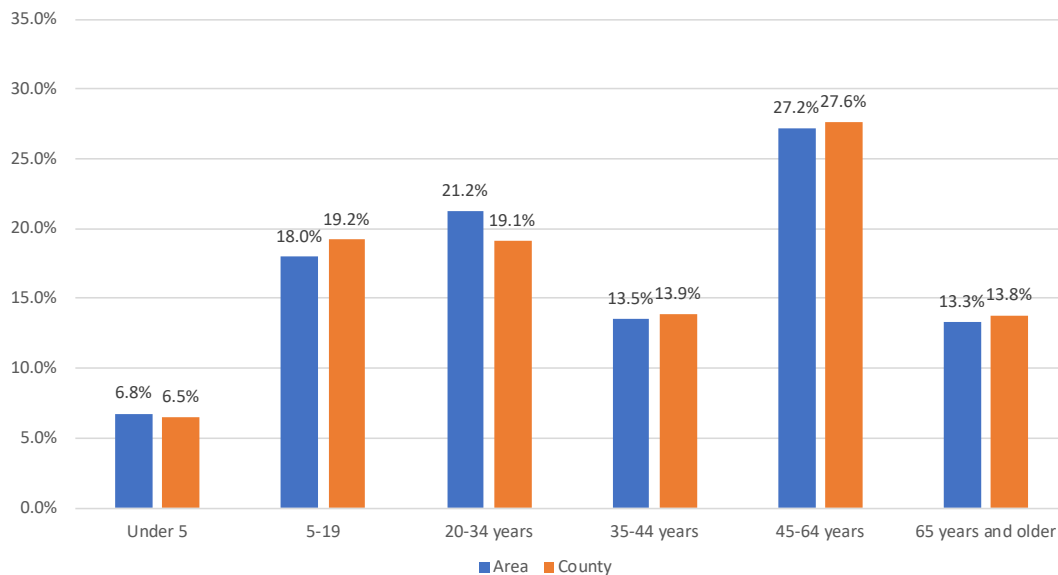
Families represent a majority of households, 72 percent, in the study area. Single-headed households account for approximately 28 percent of residents, which is comparable to the Countywide average of 30 percent. The

area's household types for owner-occupied, 63 percent, and rental-occupied, 36 percent, is comparable to the Countywide average.

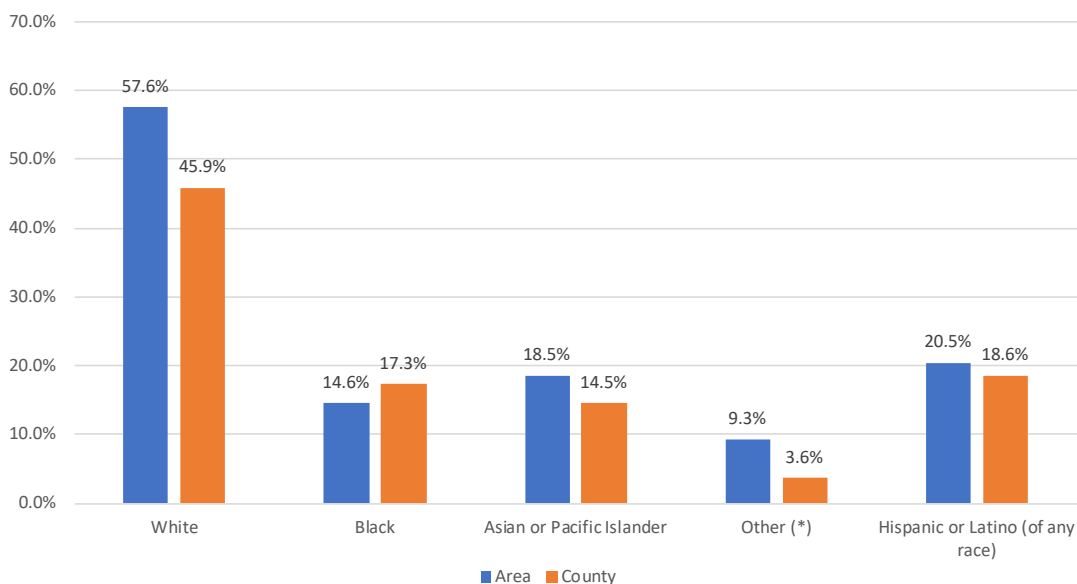
The study area's white population (57 percent) is higher than the Countywide average of 46 percent and the percentage of Asians (18 percent) and Hispanics (20 percent) are both higher than the Countywide averages of 14 percent and 18 percent, respectively. African Americans account for 14 percent of residents in the study area (Figure 2).

Since the 2000 Census, the percentage of African Americans and Hispanics has increased, while other ethnic groups have remained constant in the study area.

**Figure 1:
Residents Age Range**



**Figure 2:
Residents Racial Profile**

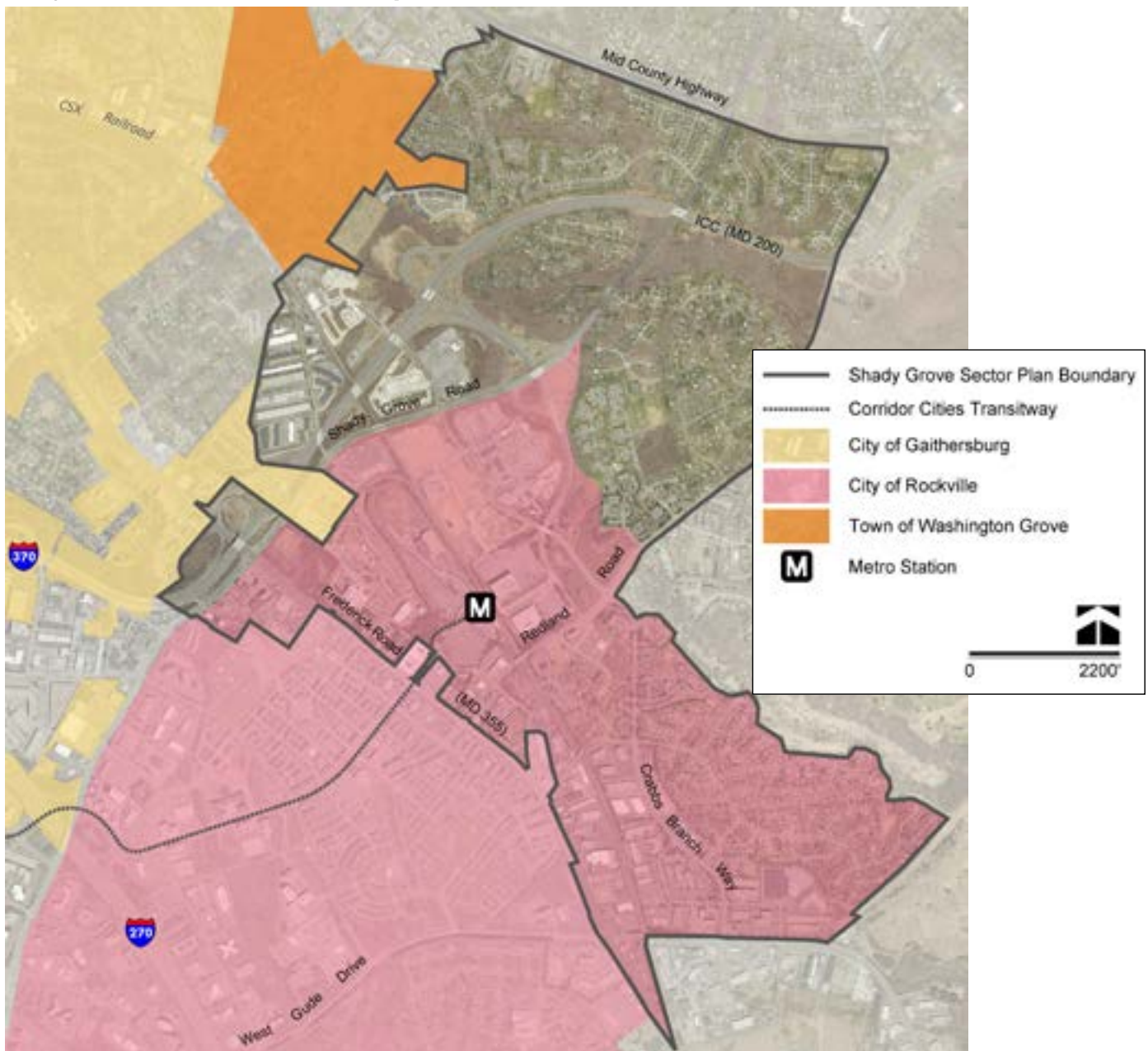


Relationship to the Surrounding Municipalities

The municipalities of the Town of Washington Grove, the City of Gaithersburg, and the City of Rockville surround the northwestern, western and southwestern boundaries of the Sector Plan area. Maximum Expansion Limits (MEL) for both Rockville and Gaithersburg encompass a large portion of the Plan area (**Maps 5 and 6**). Municipal expansion limits define where a municipality can expand in the future. The 2006 Sector Plan did not address future municipal annexations.

In 2011, the City of Rockville annexed the former Reed Brothers Dodge property at the northeastern intersection of Frederick Road and King Farm Boulevard extended/Metro Station Road, which is now the Bainbridge Shady Grove Metro residential development. The property immediately south of the Bainbridge development was also annexed by Rockville in 2016. A multi-family residential development was approved for this property. The City of Gaithersburg in 2012 annexed the property at 16411 Shady Grove Road, which is now a CarMax. The Town of Washington Grove has acquired the 12-acre Washington Grove Conservation Park at Shady Grove Crossing, but it has not annexed the property into the Town's boundary.

Map 5:
City of Rockville Maximum Expansion Limits



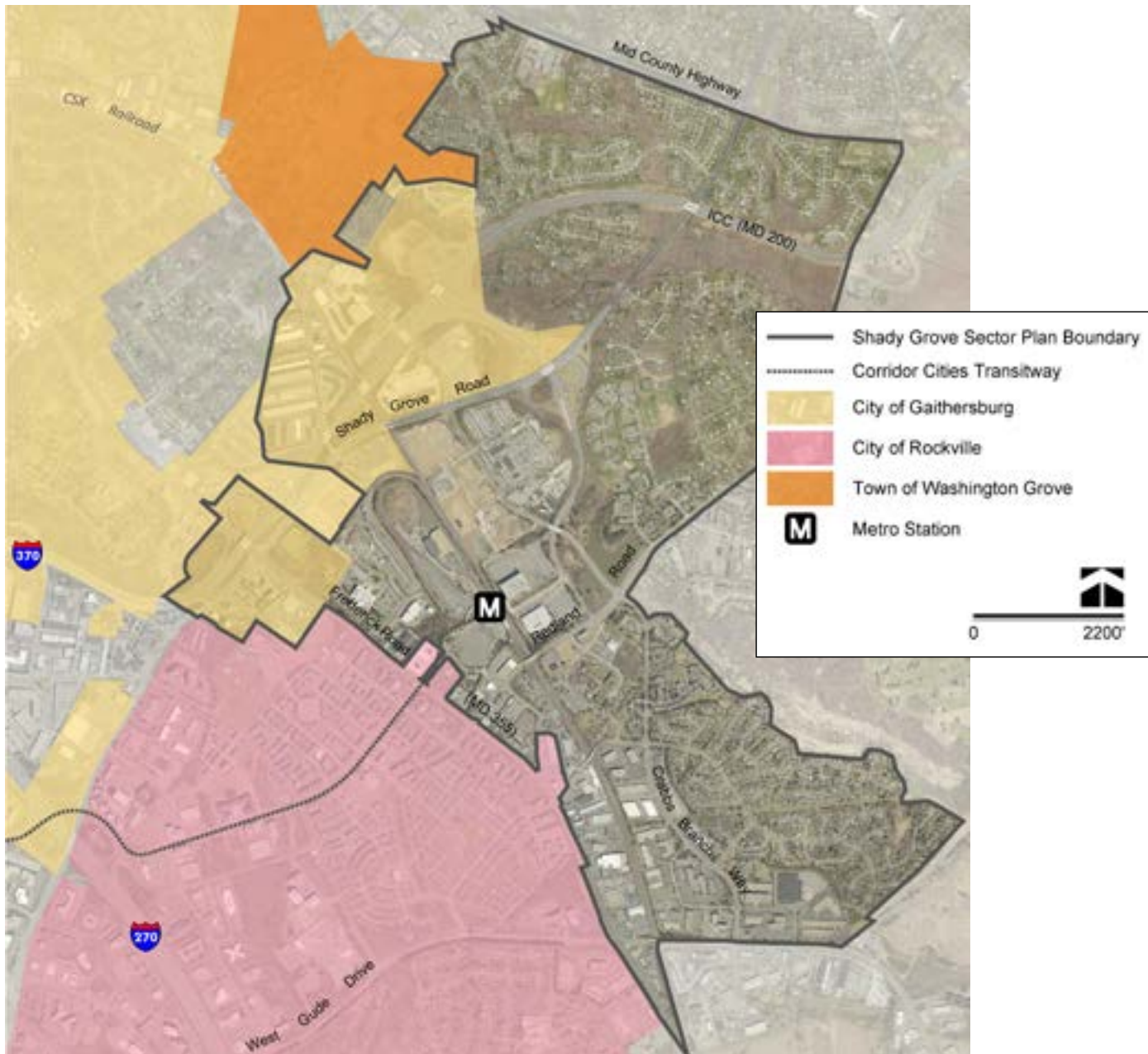
1 Introduction

Both municipalities of Rockville and Gaithersburg share expansion limits for properties along Shady Grove Road. The current MEL for the City of Gaithersburg includes properties along Shady Grove Road, including the Grove Shopping Center and the County's David F. Bone Equipment Maintenance and Transit Operations Center (EMTOC) as well as properties along Oakmont Avenue.

Rockville's existing MEL includes all properties between MD 355 and the Metro Access Road, including properties surrounding the Metro station and along Crabbs Branch Way. The City of Rockville Draft Comprehensive Plan-Rockville 2040 does recommend the expansion of the city's

current MEL to include properties north of Shady Grove Road, including the Grove Shopping Center, the County's David F. Bone Equipment Maintenance and Transit Operations Center (EMTOC) as well as properties along Oakmont Avenue. Rockville's proposed MEL expansion includes areas where the City of Gaithersburg also intends to expand in the future.

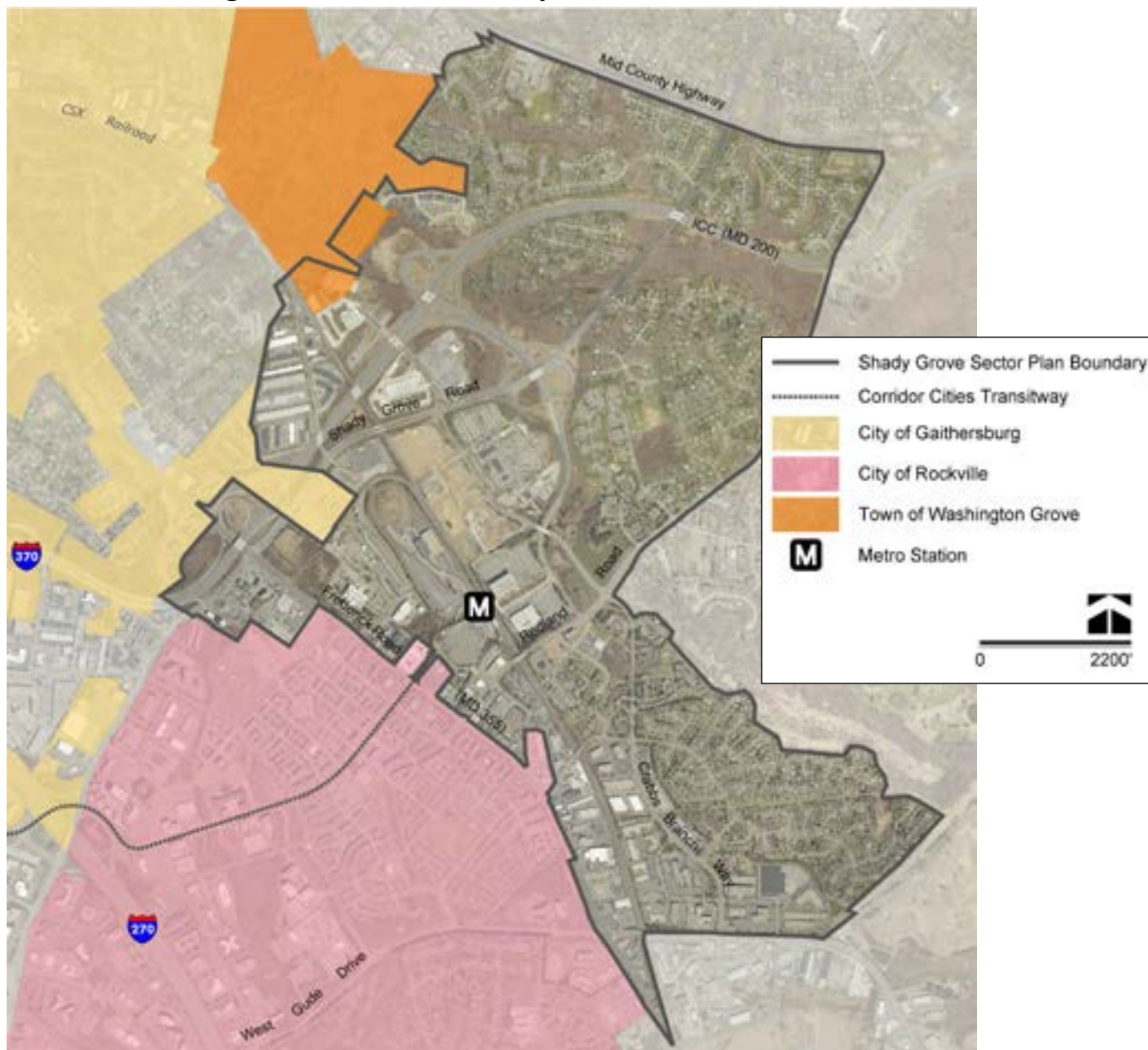
Map 6:
City of Gaithersburg Maximum Expansion Limits



The Town of Washington Grove’s MEL includes the 12-acre Washington Grove Conservation Park along Ridge Road, Roberts Oxygen, and a portion of the MCDOT’s Salt Storage Facility at the David F. Bone Equipment Maintenance and Transit Operations Center (EMTOC) (Map 7).

In 1992, Montgomery County and the cities of Rockville and Gaithersburg signed a Memorandum of Understanding (MOU) that created a framework for annexations. The MOU expired in 2012 and has not been renewed by the jurisdictions. This Sector Plan recommends that the County and cities of Rockville and Gaithersburg reestablish an MOU to create a new framework for future annexations that could support the recommendations in this Sector Plan.

Map 7:
Town of Washington Grove Maximum Expansion Limits



Existing Residential Communities

The Shady Grove Sector Plan area is within the broader Derwood community that consists of predominately residential neighborhoods (**Map 8**). The 2006 Sector Plan recommended retaining the integrity of the existing residential communities while providing some opportunities to enhance residential areas with new sidewalks and bikeways. A significant portion of Derwood is within the Upper Rock Creek Master Plan area.

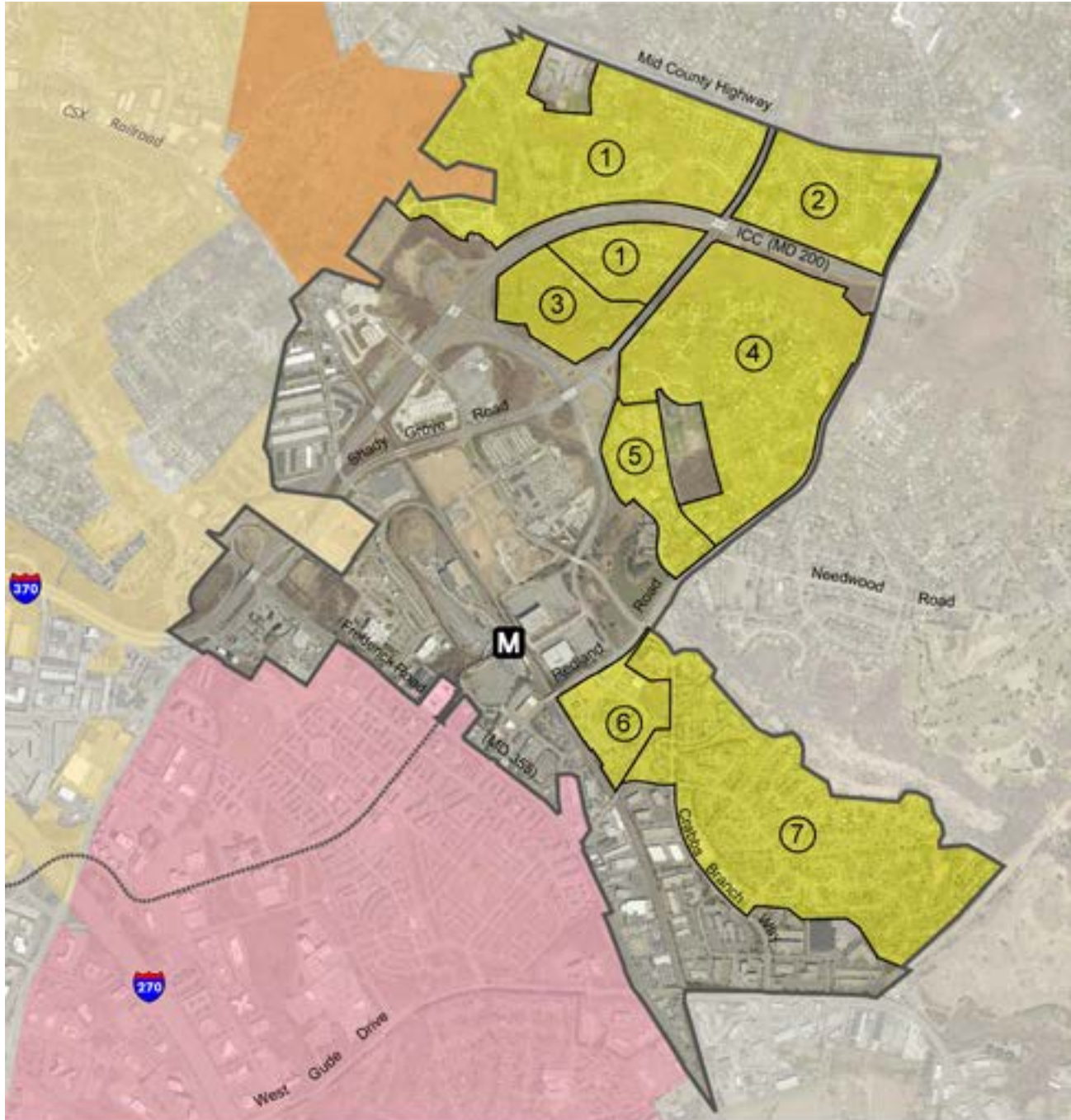
Existing residential neighborhoods are located primarily in the northern and southeastern portions of the Plan area. Mill Creek South, Founders Mill, Parkside

Estates, and Redland Station are some of the residential neighborhoods, which are north and south of the Intercounty Connector (MD 200), respectively. Derwood Station, which is east of Crabbs Branch Way, is adjacent to Crabbs Branch Stream Valley Park and the Upper Rock Creek Master Plan area.

A variety of public facilities, including Blueberry Hill Local Park, Redland Local Park, Washington Grove Conservation Park, and Shady Grove Middle School provide recreational and educational opportunities within the Plan area. Mill Creek Stream Valley Park, which is located north and south of MD 200, provides additional recreational and trail opportunities for residents.



Map 8:
Residential Neighborhoods



- | | |
|------------------------------------|------------------------------|
| — Shady Grove Sector Plan Boundary | ② Founders Mill |
| ----- Corridor Cities Transitway | ③ Redland Station |
| M Metro Station | ④ Parkside Estates |
| City of Gaithersburg | ⑤ Park Overlook/Mallard Cove |
| City of Rockville | ⑥ Old Derwood |
| Town of Washington Grove | ⑦ Derwood Station |
| Residential Neighborhoods | |
| ① Mill Creek | |



Conditional Uses Guidelines

The 2014 Zoning Ordinance update renamed special exception uses as conditional uses. Conditional uses are land uses that are permitted in residential and non-residential zones if specific conditions are met. Division 3.1 of the ordinance identifies all conditional uses, which are typically approved by the Hearing Examiner.

The 2006 Sector Plan supported “special exceptions for housing, particularly senior, assisted living, and other special needs housing” (p.58) in the Plan area. This Sector Plan also endorses specialty housing that contributes to diversifying the existing and future housing inventory in the Plan area.

This Plan recommends:

- Support independent living for seniors, residential care, and other specialty housing that is compatible with existing residential development;
- Avoid the concentration of similar conditional uses within residential neighborhoods.



Independent living for seniors



Residential care



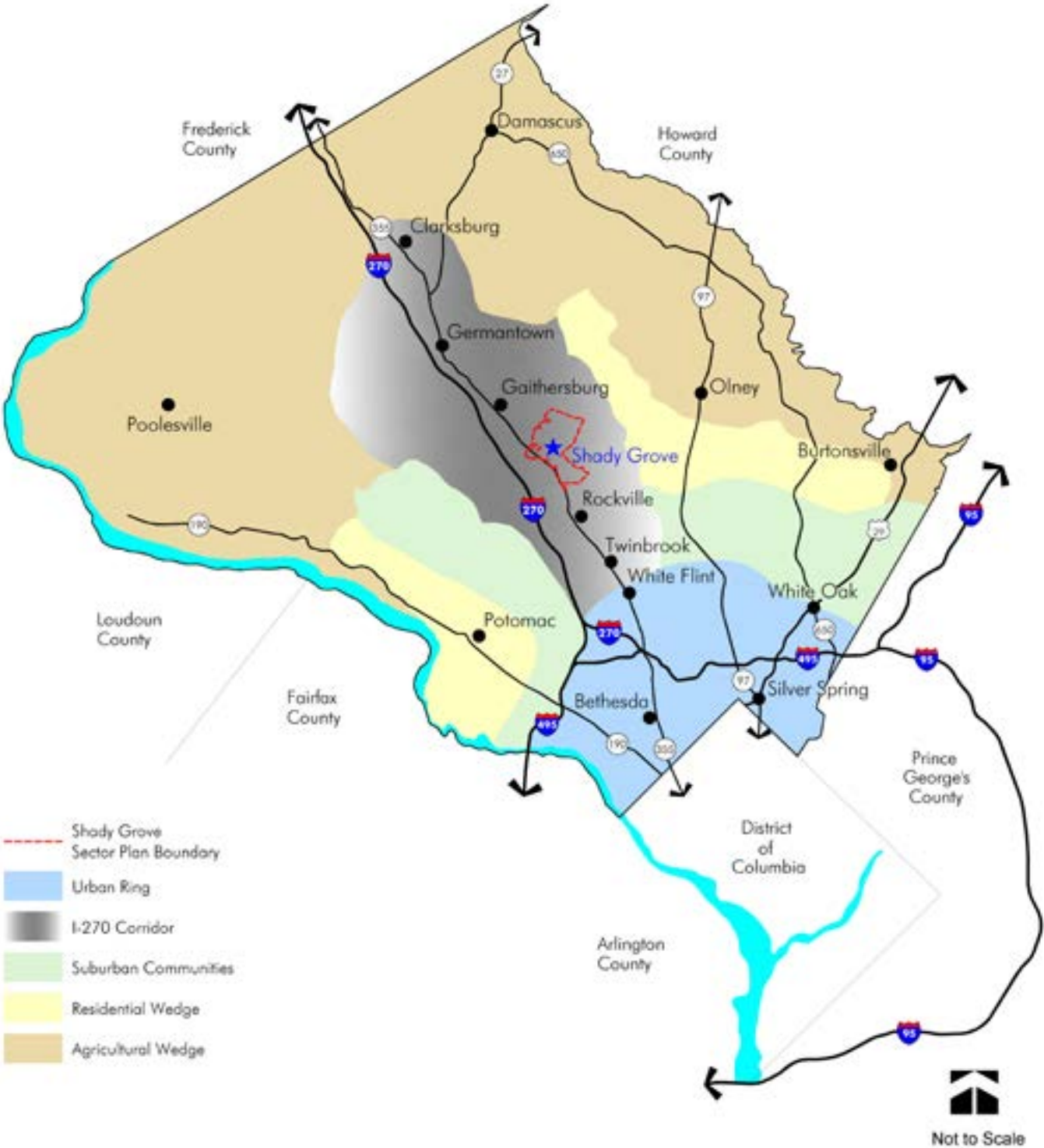
Specialty housing

Planning Context and Framework

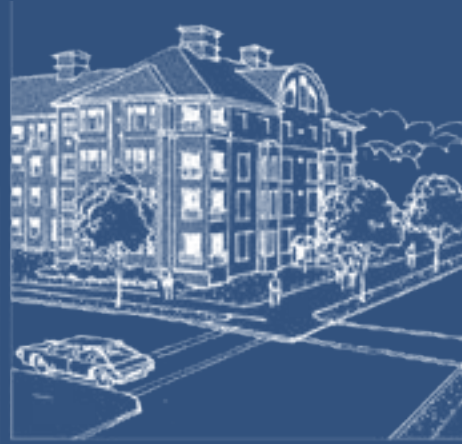
The 2006 Shady Grove Sector Plan and this Plan amendment are guided by Montgomery County’s 1993 General Plan Refinement that recommends concentrating new development at transit station areas and other key centers (**Map 9**). The 2006 Sector Plan recommendations were also framed by the Montgomery County 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.



Map 9:
The General Plan Refinement with the Shady Grove Sector Plan Area







2

Key Recommendations

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

Key Recommendations

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.
- Provide adequate transitions between new development and existing neighborhoods through appropriate building heights and development intensities.

LAND USE AND ZONING

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

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.

MOBILITY

- Support the MD 355 northbound 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 changing 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-Auto Driver Mode Share (NADMS) goals that promote multimodal approaches to transportation.
- Accommodate new bikeways that link the Plan area to adjacent municipalities.
- Promote new pedestrian paths and bikeways between existing residential communities and mixed-use development.

PARKS, TRAILS 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 Piedmont Crossing, Derwood Station and Jeremiah Park properties.
- Link new parks and open spaces with existing and proposed bikeways and trails.
- Retain existing public parks as public open space.

HISTORIC RESOURCES

- Support the designation of the 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.

COMMUNITY FACILITIES

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



3

Urban Design Framework

This Sector Plan area consists of several enclaves with residential, light industrial, institutional and commercial uses. The 2006 Shady Grove Sector Plan conceptualized the entire area surrounding the Metro station as mixed-use with potential for a higher-density urban village at the Shady Grove Metro Station. The 2006 Sector Plan established new neighborhoods near the Metro station that included residential uses along with parks, schools and other institutions to complement surrounding well-established residential communities.

This Sector Plan amendment confirms the framework recommended by the 2006 Plan; design recommendations are focused on neighborhoods that remain undeveloped or areas where potential has changed as a result of development approvals, changes in zoning, or annexations by adjacent municipalities. Design guidance is focused on commercial clusters on Shady Grove Road, and Metro East, West and South neighborhoods.





METRO NEIGHBORHOODS

The most significant part of the 2006 Plan’s vision focused on redevelopment around the Metro station to provide amenities and convenience retail to transit riders and neighboring well-established residential communities. The 2006 Plan recommended a traditional approach with a tight pattern of small blocks and interconnected streets, street-oriented buildings, concealed parking, and a network of urban open spaces. New development consistent with this vision has either been approved, is currently under construction, or has been completed on a few vacant properties in the Old Derwood, Metro North, and Jeremiah Park neighborhoods.

The Metro West and Metro South neighborhoods have seen little change since the approval of the 2006 Plan, except for redevelopment and approval of two of the largest properties in the West neighborhood and their annexation by the City of Rockville. The remainder of these neighborhoods includes low-density development with viable businesses that could benefit from the addition of residential uses and an improved pedestrian environment, but fragmented land patterns and multiple ownerships make comprehensive redevelopment difficult. Implementation of a tight and regular grid of streets as recommended in the 2006 Sector Plan will be challenging. Subsequently, this Sector Plan recommends that incremental infill redevelopment that breaks up large blocks, creates amenities for pedestrians and connects to adjacent areas should also be promoted.

New development should consider the following:

- Promote quality building and site design for all new development.
- Prioritize development at strategic locations to build synergies with adjacent recently developed properties.
- Focus improvements along existing streets that connect to the Metro station and communities on both sides of the rail tracks to support pedestrian activity, retail, and proposed transit.
- Concentrate public open space at locations supportable by existing and proposed connections, and where existing environmental resources can be integrated as accessible amenities.

SHADY GROVE ROAD

Two property clusters outside the Metro station area remain with the capacity to redevelop. Each has the potential to connect and expand the vision for the adjacent proposed development, extending the Sector Plan's vision for adjacent neighborhoods, or connecting to completed or proposed development within neighboring municipalities.

Shady Grove Plaza is at the western end of the 2006 Plan's Shady Grove Technology Corridor, a notion no longer feasible due to an annexation by the City of Gaithersburg along this road. However, redevelopment in this cluster could contribute to extending pedestrian improvements along Shady Grove Road initiated by recently built projects, including the Upper Rock District, and the proposed Shady Grove Neighborhood Center, which are further west in the City of Rockville.

Further east, The Grove commercial area is a commercial property with low-intensity development located directly across from the potential CSP Jeremiah Park neighborhood. Development on this property could extend the vision for the Jeremiah Park neighborhood, and transition to higher-intensity development along the northern part of the property.



Figure 3:
Illustrative: The Grove Commercial Area



Design Guidance: Buildings

The 2006 Sector Plan recommended street-oriented buildings connected by safe pedestrian access for all developing properties. This Sector Plan amendment confirms this vision but also recognizes that implementation of that vision will be incremental, particularly at the Metro Neighborhoods where working with multiple ownerships will be a challenge. This situation also presents opportunities for creating a unique local character based on existing use and ownership patterns. Redevelopment should:

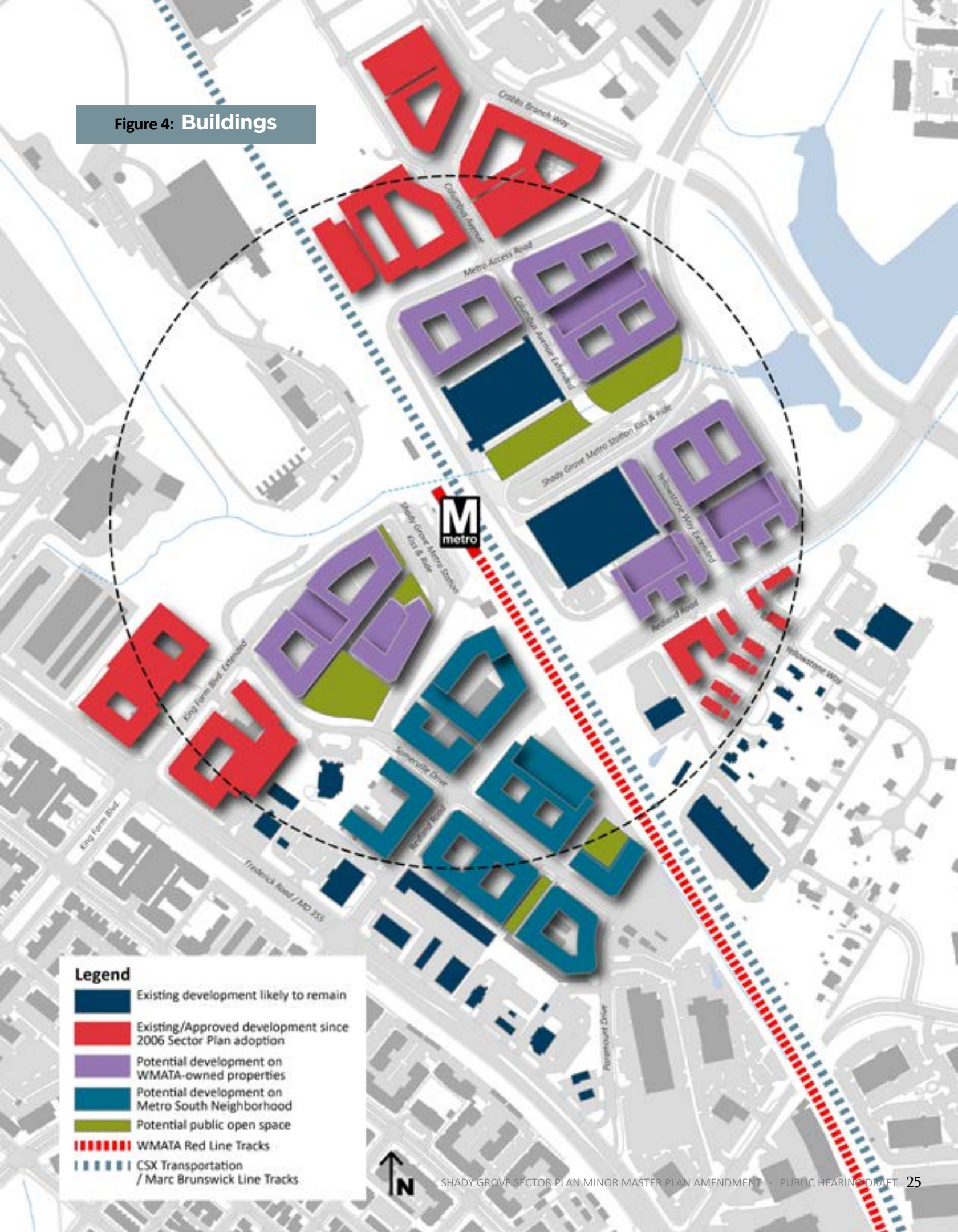
- Create a pattern of interconnected streets and public open spaces, with street-oriented buildings.
- Explore a vertical use mix, where feasible. Consider horizontal mixes if it allows for retaining existing uses or creating unique local character.
- Consider different and innovative types of

development, such as infill, adaptive re-use and or additional development on properties with growth capacity and existing uses that could remain.

- Prioritize development along Somerville Drive and Redland Road, to connect to the Metro station and communities on the east side of the tracks, and to support proposed transit.
- Reduce the size of larger blocks to promote pedestrian activity. Allowances for larger block sizes should be considered, on a case by case basis, to make development feasible, or to accommodate requirements for structured parking.
- Encourage quality building and site design elements, such as building orientation that takes advantage of passive heating, lighting and ventilation.



Figure 4: Buildings



Legend

- Existing development likely to remain
- Existing/Approved development since 2006 Sector Plan adoption
- Potential development on WMATA-owned properties
- Potential development on Metro South Neighborhood
- Potential public open space
- WMATA Red Line Tracks
- CSX Transportation / Marc Brunswick Line Tracks

Design Guidance: Connectivity

The 2006 Sector Plan recommended a tight grid of local public streets for larger property clusters where redevelopment was envisioned. However, in certain neighborhoods, such as Metro West, annexations by the City of Rockville preclude the implementation of significant elements of that vision. A robust local grid of streets in all developing properties remains a priority for the Metro Neighborhoods but achieving it with incremental redevelopment will require flexibility in the placement and type of connections. Redevelopment in the area should:

- Prioritize improvements and redevelopment along existing streets, particularly if they provide direct access to the Metro station 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.
- Provide pedestrian-friendly amenities along with all new connections.



Figure 5: Connections



Legend

- Existing development likely to remain
- Recent/Approved/Potential Development
- Potential public open space
- WMATA Red Line Tracks
- CSX Transportation / Marc Brunswick Line Tracks
- Existing Street
- Recommended Street
- Potential Connection
- Somerville Drive Promenade

Design Guidance: Open Space

Recommendations for emerging neighborhoods in the 2006 Sector Plan prioritize the creation of public open space at accessible locations to create areas where the public can gather and socialize. This Sector Plan confirms several of the components of the open space system recommended by the prior Plan, to include creating:

- Open spaces connected to natural areas such as stream valley parks;
- A minimum one-acre town square within the west side of the WMATA owned property;
- A 2-acre town commons within the east side of the WMATA owned property;
- A promenade to include a linear park approximately 50 feet wide leading to the Metro Station;
- Recreational facilities surrounding large existing stormwater management ponds; and
- Miscellaneous public open spaces throughout redeveloped properties.

Open space type designations (town square, town commons) have been updated in the individual property descriptions on the Land Use and Zoning Framework chapter, to match current nomenclature. Modified recommendations place added emphasis on consolidation and integration between formal and natural open space, and on the exploration of non-traditional alternatives to public gathering spaces provided by new development to accommodate the challenges of incremental redevelopment. In addition to the above, redeveloping properties should:

- 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 near transit, at significant intersections, or at locations that can provide good access for most.
- Integrate existing environmental resources or wooded areas into the public open space network to provide alternatives for recreation as the area redevelops.
- Ensure open spaces are framed and activated by surrounding uses.
- Consider crime prevention through environmental design (CPTED) strategies to design safe public spaces.

CIVIC GREEN





4

Land Use and Zoning

The Shady Grove Sector Plan Amendment is primarily organized by a series of neighborhoods, which are in proximity to the Metro Station: Metro West, Metro South, Metro North, Old Derwood, and Shady Grove Station, Westside and Jeremiah Park. These neighborhoods serve as the focal point of the land use and zoning recommendations in this Sector Plan. Beyond the Metro Neighborhoods, the Plan also includes recommendations for a transition area-between the higher densities and intensity of land uses near the Metro Station to the existing low-density residential communities.

The Sector Plan also includes recommendations for key properties along Shady Grove Road and in the Upper Mill Creek area. While established residential neighborhoods, such as Redland Station and Derwood Station, office and industrial properties are retained, technical zoning corrections and minor modifications are recommended to comply with the 2014 Zoning Ordinance and better align with existing conditions.

Specific land use, urban design and open space guidance are provided for properties where redevelopment is anticipated in the life of this Sector Plan.

Shady Grove Metro Neighborhoods

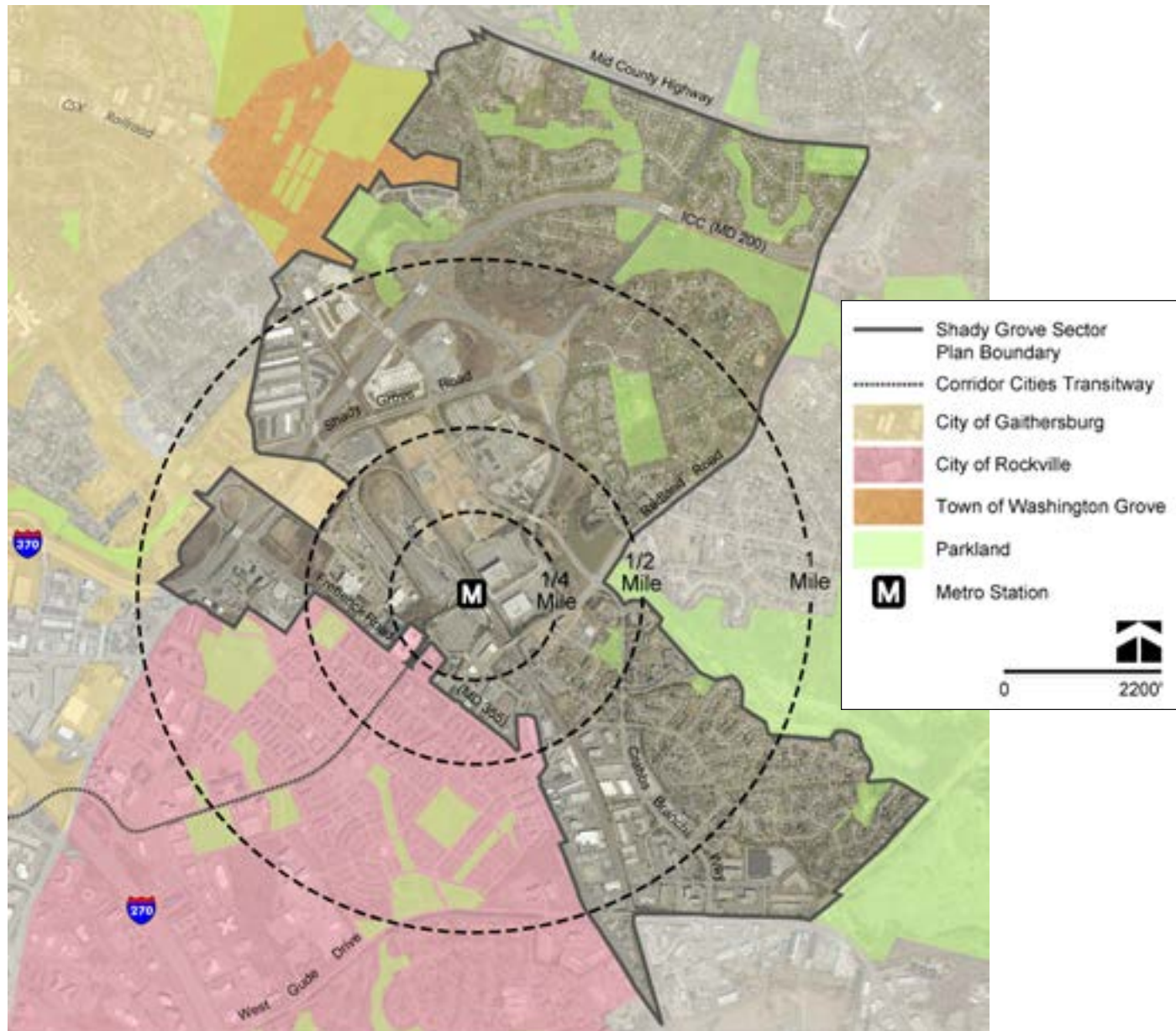
The Metro Neighborhoods constitute the core area of the Plan area and are primarily within a half mile from the Shady Grove Metro Station (Map 10).

Most of the proposed new development in this Plan is anticipated within these neighborhoods.

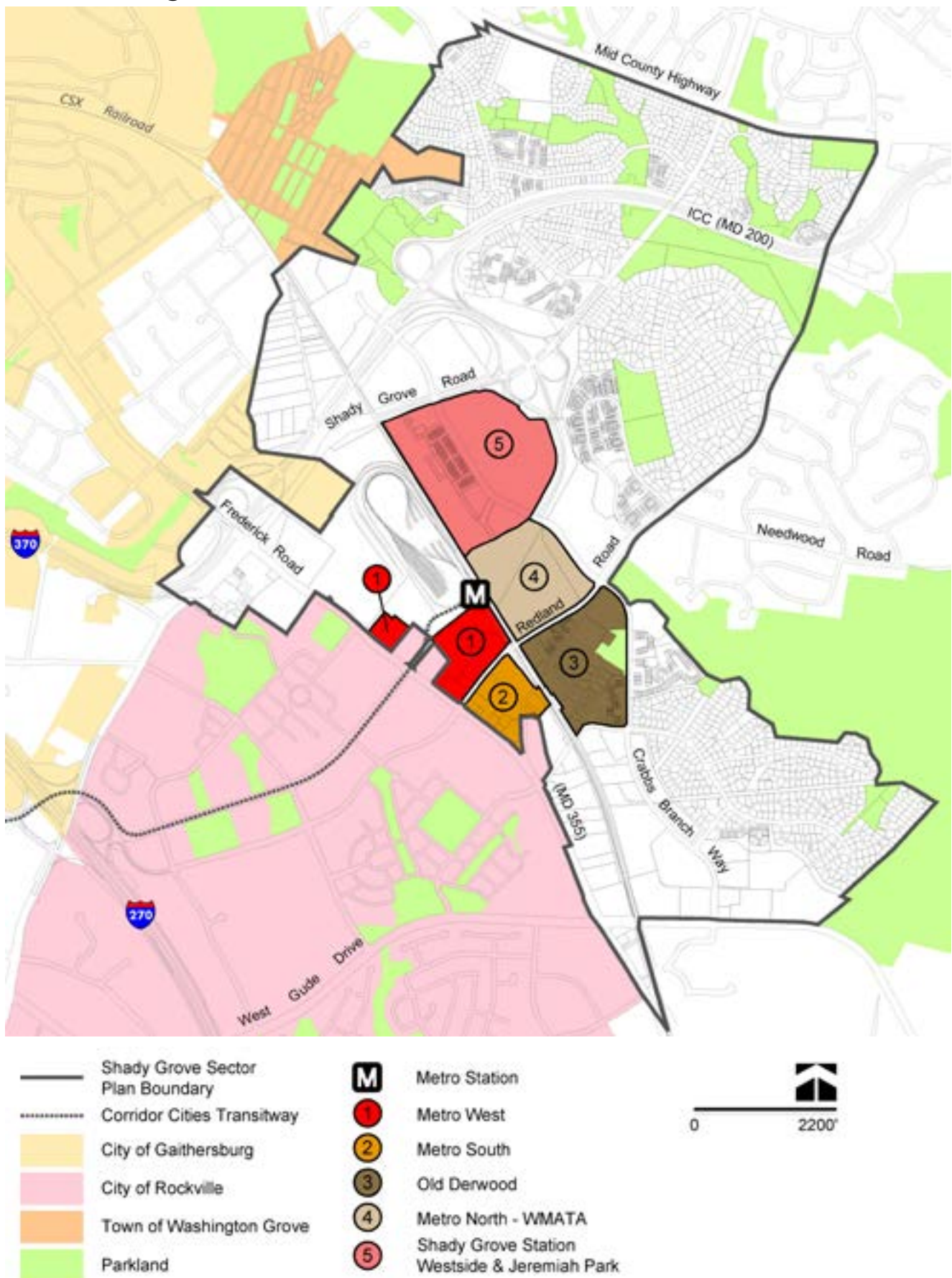
The Metro Neighborhoods are Metro West, Metro South, Old Derwood, Metro North-WMATA and Shady Grove Station, Westside and Jeremiah Park (Map 11).

Unlike the 2006 Sector Plan, this Plan includes Jeremiah Park as a Metro Neighborhood since this development has an approved preliminary plan and is adjacent to the Metro station.

Map 10:
Metro Station Proximity



Map 11:
The Metro Neighborhoods



METRO WEST



Metro West

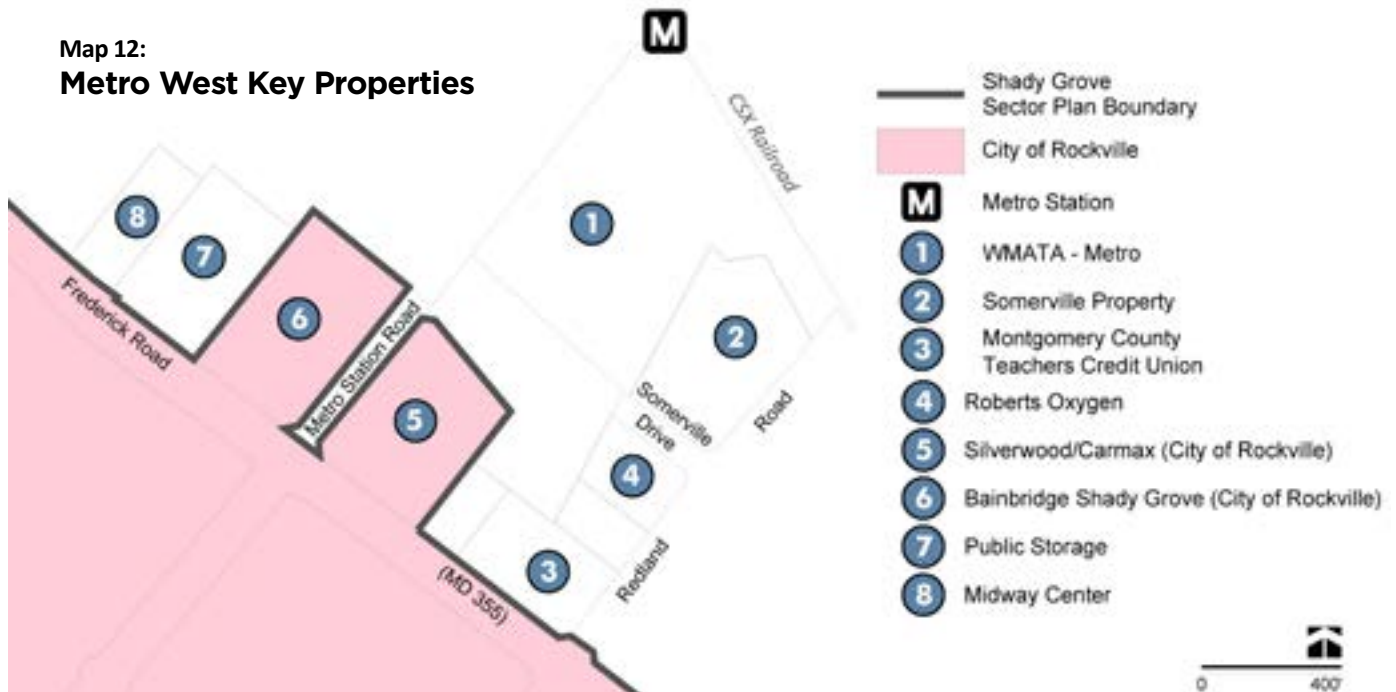
The Metro West neighborhood is envisioned as the most intensively developed portion of the Sector Plan area. Located east of MD 355, north of Redland Road and west of the Shady Grove Metro Station, this approximately 30-acre area has a variety of retail, commercial, and residential uses.

The Metro West neighborhood is located west of the Metro station and includes the surface WMATA parking and the Montgomery County Teachers Credit Union building (**Map 12**). This neighborhood has the highest recommended building height and density for the Plan

area. Significant infrastructure improvements, especially new streets, will be necessary to achieve the Sector Plan's vision for this area.

Key properties in this neighborhood include the WMATA/ Metro surface parking area and Thomas Somerville. This neighborhood is within a quarter mile of the Metro station, and the Corridor Cities Transitway (CCT) and MD 355 bus rapid transit (BRT) routes will traverse this neighborhood. The 2014 District Map Amendment rezoned this area to the following zones: 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 (**Map 13**).

**Map 12:
Metro West Key Properties**



The 2006 Sector Plan envisioned this area as “a lively mix of uses including a public town square, mid- and high-rise apartment buildings, offices, a hotel, and street level retail” (p.39). A new street network; maximum building height at the Metro station; a minimum percentage of residential development; and a town square were also recommended for this neighborhood.

This neighborhood is within the maximum expansion limits of the City of Rockville. In 2011 and 2016, the City of Rockville annexed the former Reed Brothers Dodge and CarMax properties, which are located at the northeastern and southeastern intersection of MD 355 and the King Farm Boulevard Extended/Metro Station Road, respectively. The Reed Brothers property was developed into the Bainbridge at Shady Grove, a mid-rise multifamily residential building. The CarMax property was approved for another multi-family residential building, but the development has not been built.

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. This Sector Plan increases the potential for new transit-oriented development in this neighborhood because it is adjacent to the Metro station.

This Sector Plan recommends the following for the Metro West neighborhood:

Land Use and Zoning

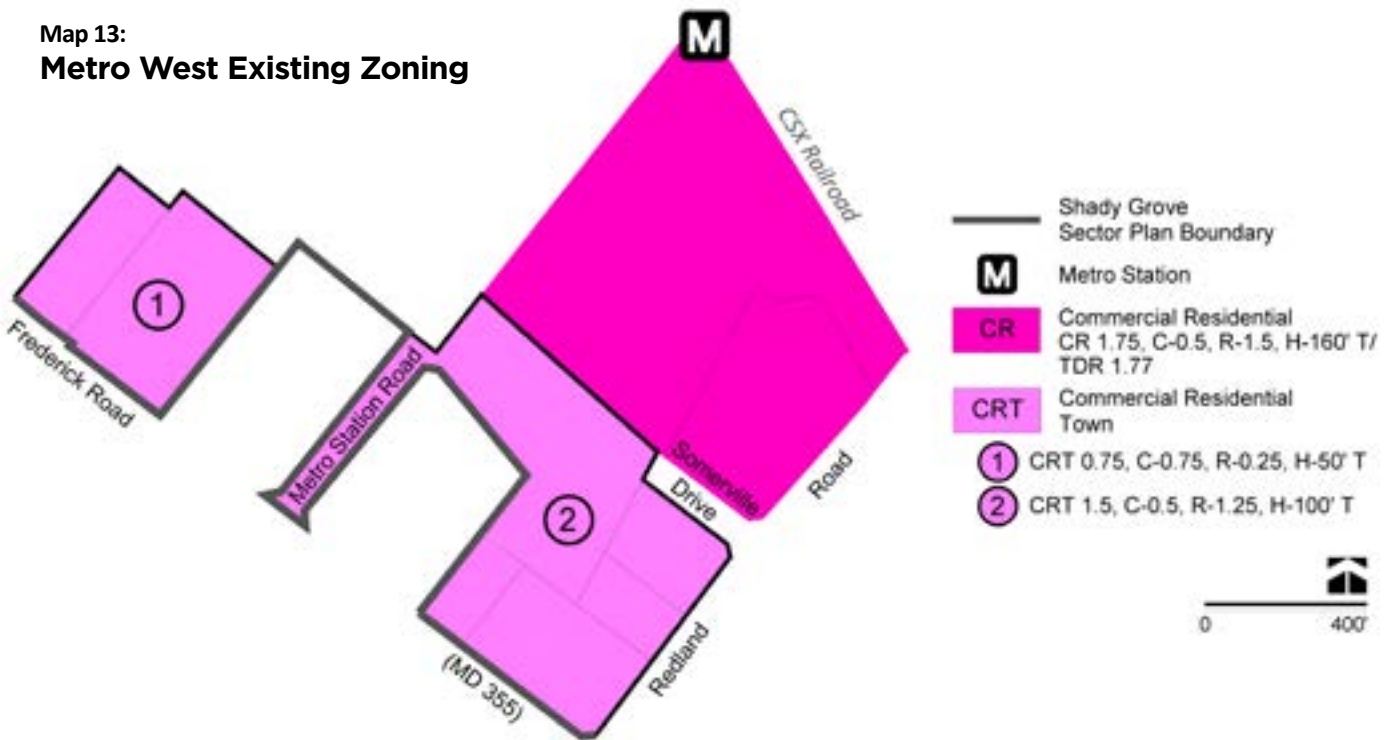
- Rezone the WMATA/Metro property, including the surface parking lot and the Somerville property, 15901 Somerville Drive, from the CR 1.75 C0.5 R1.5 H-160T/ TDR 1.77 Zone to the CR 2.0 C1.0 R1.5 H-200 Zone to promote high-intensity mixed-use development at the Metro station that contributes to the Sector Plan’s public benefits, including the maximum percentage of affordable housing and a minimum one-acre Civic Green for the WMATA property (**Map 14**).
- Rezone the commercial properties between MD 355 and west of Somerville Drive, including the Montgomery County Teachers Credit Union, from the CRT 1.5 C0.5 R1.25 H-100 T Zone to the CR 2.0 C1.0 R1.5 H-120 Zone to promote high-intensity mixed-use development that contributes to the Sector Plan’s public benefits.
- Rezone the MidWay Shopping Center and Public Storage properties north of King Farm Boulevard Extended, from the CRT 0.75 C0.75 R0.25 H-50 T Zone to the CRT 0.75 C0.75 R0.25 H-50 Zone.

Urban Design

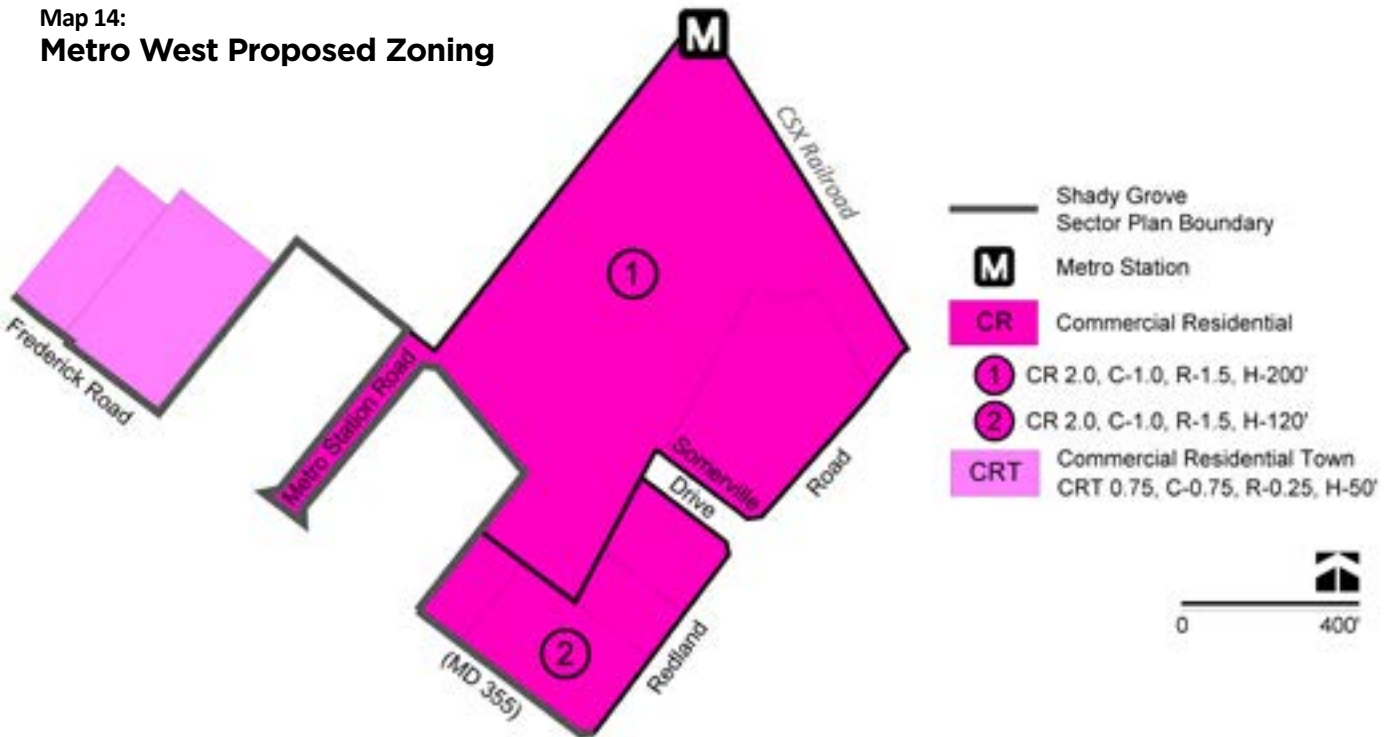
- Concentrate maximum development intensity and building height near the Metro station and within the existing WMATA surface parking lot. Coordinate proposed locations for new transportation facilities (BRT, CCT) with new development, and ensure compatibility between new development and existing or approved development on adjacent properties within this neighborhood.
- Provide a minimum one-acre contiguous Civic Green within the redeveloped WMATA surface parking lot to be anchored and activated by development. Create connections to potential public open space on developing properties east and south of the WMATA property.
- Allow flexibility in the implementation of the goal to create an internal network of streets, if needed, to accommodate the diverse ownership pattern or existing viable uses that might remain. Developing properties should consider alternatives to business streets such as shared streets or mid-block pedestrian connections to create smaller blocks and expand pedestrian areas, or to provide open space.
- Areas dedicated to public open space should be consolidated and accessible from new connections or existing public streets. Create opportunities for activating uses at public open space locations.



Map 13:
Metro West Existing Zoning



Map 14:
Metro West Proposed Zoning



METRO SOUTH



Metro South

The Metro South neighborhood includes a variety of light industrial uses, such as automotive services, storage and retail businesses (**Map 15**). The vacant property at Redland Road and Somerville Drive has redevelopment potential with residential and non-residential uses, and the proposed MD 355 BRT will traverse Redland Road to the Metro Station.

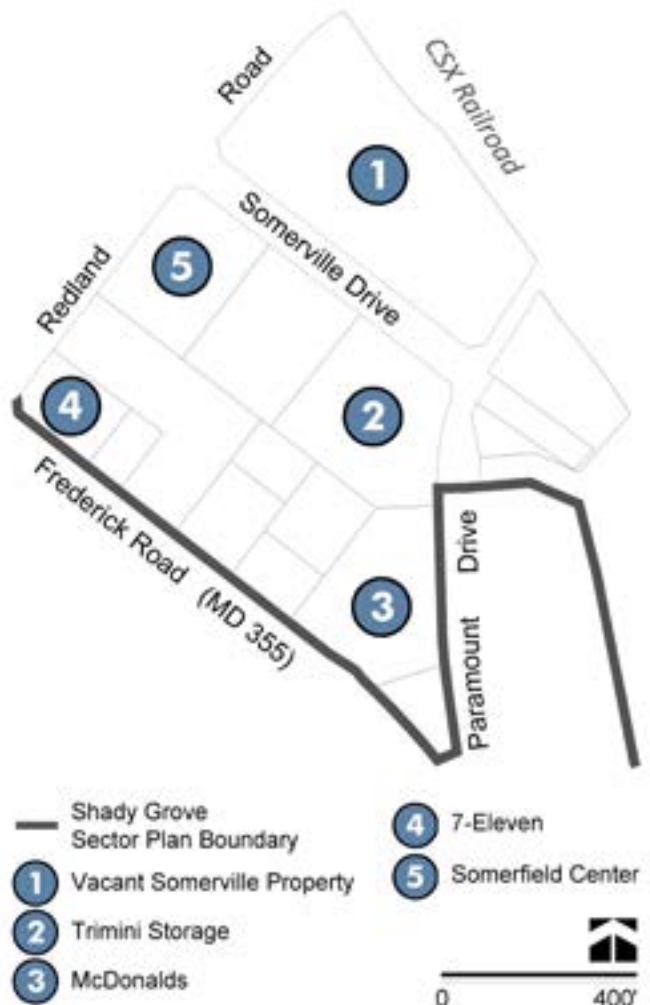
The 2006 Sector Plan envisioned this neighborhood as a mixed-use residential area with the highest density, up to 2.0 FAR, permitted on the vacant 4.85-acre property at the southeast intersection of Somerville Drive and Redland Road. All remaining properties were allowed to develop, up to 1.6 FAR. A range of building heights, a variety of open spaces, and a new network of public streets were also recommended. Properties in this neighborhood are in the CRT 1.5 C0.5 R1.25 H-90 T, and CRT1.75 C0.5 R1.5 H-90T/TDR 1.77 Zones (**Map 16**). No new development has occurred in this neighborhood.

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.

The highly visible 4.85-acre vacant property at Somerville Drive and Redland Road can accommodate significant new residential and non-residential development. A minimum half-acre Neighborhood Green is recommended for this property. Further, the adjacent linear WMATA property (Parcel N) could be incorporated with the vacant property to add development area and to better transition to the Metro/CSX rail tracks.

This Sector Plan supports the creation of walkable north-south as well as east-west connections that would provide more walkable destinations and amenities between Frederick Road and Somerville Drive.

Map 15:
Metro South Key Properties



Since there are more than ten property owners in this area, this Sector Plan recommends flexibility towards the implementation of the recommended network of streets. The location and character of these streets or pedestrian connections will be further delineated during the redevelopment process.

This Sector Plan recommends:

Land use and Zoning

- Rezone the vacant Somerville property (Parcel N313) at Redland Road and Somerville Drive from the CRT1.75 C0.5 R1.5 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 (**Map 17**).
- 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.

Urban Design

- Support property assembly to establish a consistent and walkable block pattern that provides access to new amenities for this neighborhood, including a promenade or mid-block connections.
- Alternatively, support a less regular pattern of blocks and connections to assist in the incremental

redevelopment of the area should property owners choose to consider development opportunities individually. In such cases, consider:

- o Promoting synergies between adjacent properties considering redevelopment.
 - o Ensuring compatibility between adjacent frontages on separate developing properties.
 - o Consolidating areas designated for public open space at centralized locations to be determined during the regulatory review process. Support using internal pedestrian connections to satisfy public open space requirements.
 - o Creating internal connections to reduce the size of existing, larger blocks. To accommodate incremental redevelopment, in lieu of public streets, consider mid-block pedestrian ways, internal shared streets, or other creative ways to provide passage and reduce block size.
 - o Minimizing the number of new curb cuts along Frederick Road.
- Encourage retail or other active uses at strategic locations to promote pedestrian activity, and to support the surrounding neighborhoods.
 - Redevelopment on this property should also provide a minimum half-acre Neighborhood Green. Its location will be determined during the development review process.

**Map 16:
Metro South
Existing Zoning**



**Map 17:
Metro South
Proposed Zoning**



OLD DERWOOD



Old Derwood

The Old Derwood neighborhood is the oldest part of the Sector Plan with historic resources dating back to the 1880s. Recommendations in this Sector Plan seek to reestablish the residential character of this portion of the Plan area.

Old Derwood is a predominantly residential area 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 (**Map 18**). Sidewalks and streetscapes are missing from some segments of this neighborhood's streets, which reflect the historic nature of the area that dates to the 1800s.

As further detailed in the Historic Resources section of this Sector Plan, a cluster of homes and services emerged in this area as a distinct place in the late 19th Century centered around a train station. The Crabb family cemetery at the intersection of Indianola Drive and Derwood Road is located on land patented in 1753 by Captain Henry Wright Crabb. Henry Crabb's son, Jeremiah Crabb, served as the County's first U.S. Congressman.

The 2006 Sector Plan recommendations sought to "reinforce Old Derwood's residential character with compatible residential adjacent land uses and streetscape improvements that incorporate the area's history" (p.45). Community members have advocated for the listing of several properties, including the store and post office, that recall the historic nature of the area.

The implementation of the Townes at Shady Grove reflects the 2006 Sector Plan recommendations. In 2007, the Parks Department acquired 4.25 acres for the Derwood Station Neighborhood Park. 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 (**Map 19**).

Several single-family dwellings, between Chieftain Avenue, Derwood Road, Yellowstone Way, and Derwood Street do not meet the minimum land area of 20,000 square feet for the R-200 Zone. Therefore, this Plan recommends the R-60 Zone or R-90 Zones for these properties, which are more than the minimum 6,000 or 9,000 square feet of land area required for these zones.

**Map 18:
Old Derwood Key Properties**



Key properties in this neighborhood are the following: Vehicle Emission Inspection Station, Townes at Shady Grove, Derwood Bible Church, Derwood Store and Post Office, and the Derwood Business Center.

Vehicle Emissions Inspection Program

The VEIP is east of the CSX rail tracks, south of Redland Road and west of the Townes of Shady Grove development. Access to this property is via Chieftain Avenue and Derwood Road. The 2006 Sector Plan recommended rezoning this property from the Light Industrial (I-1) Zone to the R-90 Zone with the floating Planned Development (PD-35) Zone. The 2014 Zoning Ordinance removed the future use of the PD Zone; therefore, this Plan recommends the Commercial Residential Neighborhood as appropriate for any redevelopment of this property (**Map 20**).

This Sector Plan, like the 2006 Sector Plan, recommends residential development on this property to reestablish Old Derwood as a residential neighborhood. The VEIP, which is owned by the State of Maryland, could relocate to another location that would permit more efficient development for a property that is adjacent to the Metro station.

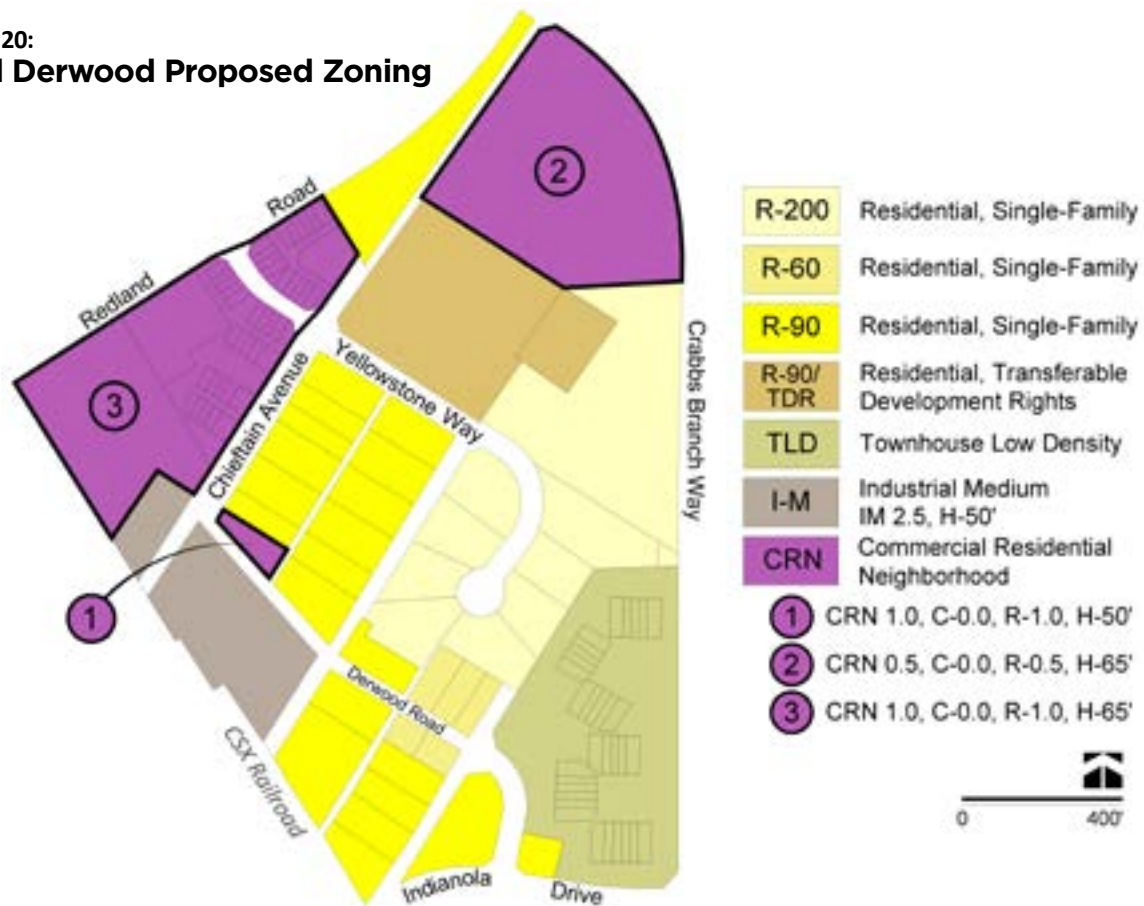
This Sector Plan recommends:

- Relocate the VEIP to another location that is compatible to its existing light-industrial use.
- Rezone the VEIP property from the R-90 Zone to the Commercial Residential Neighborhood (CRN 1.0 CO.0 R1.0 H-65) Zone that contributes to the Sector Plan's public benefits, including affordable housing.
- Noise mitigation measures must be included into the new development, such as locating structured parking adjacent to the CSX tracks.
- Locate more intense development and higher heights towards Redland Road and lower building heights, including single-family and attached dwellings, towards the existing residential community to ensure development compatibility.

Map 19:
Old Derwood Existing Zoning



Map 20:
Old Derwood Proposed Zoning



Townes at Shady Grove

The Townes at Shady Grove, a 149-unit residential development, is located at the western and eastern intersection of Redland Road and Yellowstone Way. Approved in 2009, the final phase of this development, which is a multifamily building, is currently under construction. This development was approved as a Local Map Amendment (LMA), via the PD-35 Zone.

This Sector Plan recommends the Commercial Residential Neighborhood (CRN) Zone as a suitable equivalent to the built development since the PD Zone cannot be confirmed through the Sectional Map Amendment process due to the new regulations in the 2014 Zoning Ordinance. The CRN 1.0 C0.0 R1.0 H-65 Zone is proposed for the property. No new development is anticipated for this property.

This Plan recommends:

- Rezone the multifamily residential building at 16011 Redland Road and the remaining townhouses and single-family dwellings (7900-7919 Yellowstone Way, 16121-16131 Redland Road, and 15912-15948 Chieftain Avenue) from the PD-35 Zone to the CRN1.0 C0.0 R1.0 H-65 Zone.

Derwood Bible Church

The 3.8-acre Derwood Bible Church property, including a cemetery, is located at the southeast intersection of Yellowstone Way and Chieftain Avenue. The property is in the R-90/TDR 13 Zone. In 2017, Baldwin Landing, a residential development with 42 dwelling units was approved for this property, but it was never implemented because the property owner could not relocate the church to another property in the County.

This Plan recommends:

- Confirm the R-90/TDR-13 Zone for the Derwood Bible property, including the existing cemetery. If the church relocates in the future, residential development must transition to existing residential development along Yellowstone Way.

Derwood Business Center

This office-industrial condominium building, located along Derwood Road and between Derwood Street and Chieftain Avenue, has a range of small businesses on this 2.5-acre property. The 2006 Sector Plan recommended retaining the Light Industrial (I-1) Zone for the property and indicated that the floating Residential Townhouse (RT-6) Zone is suitable to redevelop the property. The 2014 District Map Amendment rezoned this property to the IM-2.5 H-50 Zone. If this property redevelops, the Commercial Residential Neighborhood-Floating (CRNF 0.75 C0.0 R0.75 H-50) is suitable for this property.

This Plan recommends:

- Confirm the IM-2.5 H-50 for the Derwood Business Center. The floating Commercial Residential Neighborhood-Floating (CRNF 0.75 C0.0 R0.75 H-50 Zone) is suitable for this property.
- Redevelopment of this property must provide noise mitigation measures from the adjacent CSX rail tracks and establish a compatible relationship with existing single-family dwellings.

The Derwood Store and Post Office

The Derwood Store and Post Office reflects one of the last vestiges of Derwood's history. During the creation of the 2006 Sector Plan, the Planning Board placed the property on the Locational Atlas and Index of Historic Sites (#22/33-3). In May 2019, the Historic Preservation Committee (HPC) recommended the designation of this property to the Master Plan for Historic Preservation and supported rezoning the property to an appropriate residential zoning category to allow for its adaptive reuse and restoration.

The 2006 Sector Plan recommended the Planned Development (PD-22) Zone, above the base R-200 Zone, for this property to allow "re-use and renovation of the building" and "to allow up to six residential units within the existing structure" (p.47). The 2014 Zoning Ordinance prohibited the use of the PD Zone; therefore, this Sector Plan recommends the Commercial Residential Neighborhood (CRN) Zone for this property to preserve and reuse the building for residential use.

This Plan recommends:

- Rezone this property from the R-200 Zone to the Commercial Residential Neighborhood (CRN1.0 C0.0 R1.0 H-50 Zone) to permit the building's historic adaptive reuse, renovation and some additional residential development.
- Encourage a range of unit types, including duplexes and small cottages for the non-historic addition.
- Support flexibility to the development standards where permissible, including waiving some development standards of the zone that would permit preservation and reuse of this building.
- Allow on-site parking requirements to be partially met with on-street parking.

METRO NORTH



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 WMATA/Metro. Several Ride-On and Maryland Transportation Authority (MDTA) 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 Amendment rezoned this property to the CRT 1.0 C0.25 R0.75 H-70T/TDR 0.88 Zone (**Map 21**).

The 2006 Sector Plan envisioned this area as primarily residential with “convenience retail and office uses near the Metro station to serve both commuters and residents. Locate street-level retail and second-floor offices in front of existing garages to screen the parking garages and activate sidewalks” (p.43). It also recommended a new street network, maximum building heights up to six stories, and the alternative location for a library, if it is not located in the County Service Park.

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 that is dominated by automobiles today. The recommended development could potentially screen the existing parking structures by introducing 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 a critical road connection that should be implemented. This roadway will also provide another link to Old Derwood and to this emerging neighborhood center. The existing stream should be retained and improved as a feature that will provide the framework for a new linear public park that connects with other public open spaces and pedestrian areas within the neighborhood.

**Map 21:
Metro North-WMATA Existing Zoning**

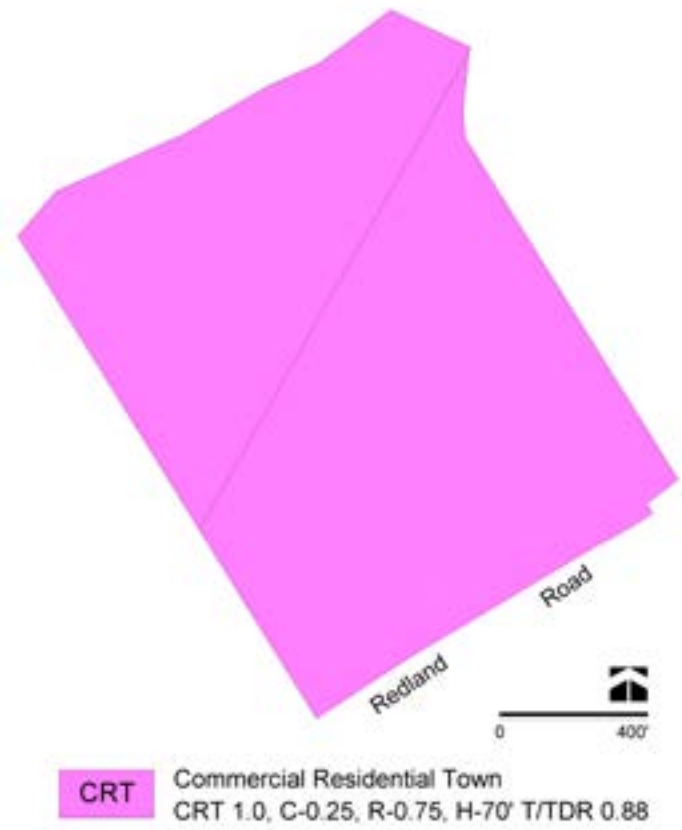
This Plan recommends:

Land Use and Zoning

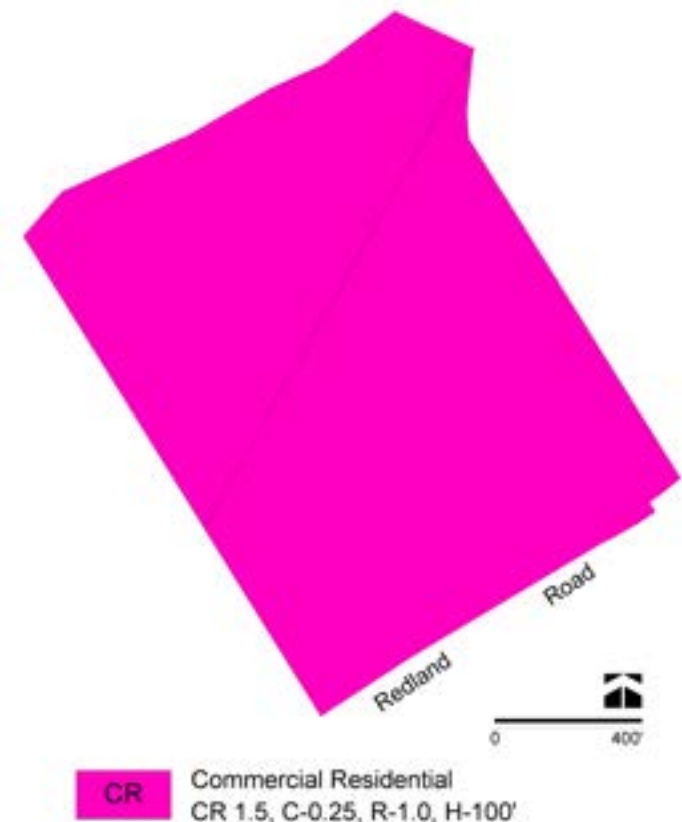
- Rezone this property from CRT 1.0 C0.25 R0.75 H-70T/TDR 0.88 Zone to CR 1.5 C0.25 R1.0 H-100 Zone to promote intense mixed-use at the Metro station that contributes to the Sector Plan's public benefits, including a higher percentage of affordable housing and open space (Map 22).

Urban Design

- The central portion of the site should develop with higher heights; building heights, use and intensity along the Metro-North access should be compatible with recent development to the north, and development along Redland Road should be complementary with recent development within the existing Old Derwood residential community to the south.
- Establish an internal street network to promote pedestrian activity and to improve circulation between adjacent residential communities and the new mixed-use area.
- Consolidate access points into existing parking garages, to facilitate redevelopment along their fronts. Consider clustering access points for existing and new parking structures along the shared garage access drives.
- Retain the existing stream and enhance it to create a linear park that would provide an amenity for the neighborhood.



**Map 22:
Metro North-WMATA Proposed Zoning**



SHADY GROVE STATION - WESTSIDE AND JEREMIAH PARK



Shady Grove Station, Westside and Jeremiah Park

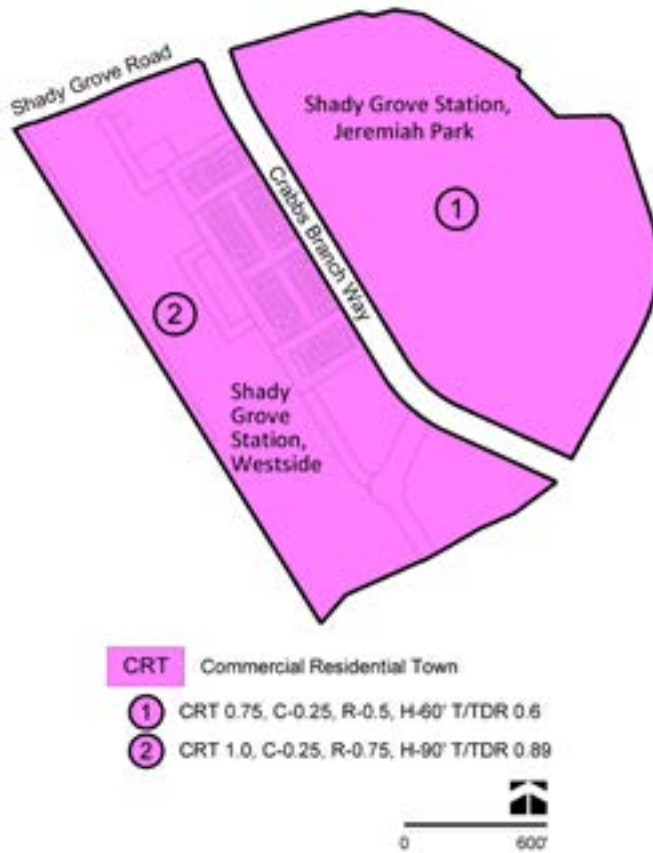
The 45-acre Shady Grove Station, Westside is a new development that implements several recommendations from the 2006 Sector Plan, especially the relocation and redevelopment of the Montgomery County Service Park (CSP). The 2006 Sector Plan identified this area as Metro-North and recommended rezoning 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 (**Map 23**).

The redevelopment of the CSP was initiated in 2012 by the Executive Branch via the Smart Growth Initiative. All public facilities from the western portion of the CSP have relocated either to the new Multi-Agency Service Center in Montgomery Village or Montgomery County's Division of Fleet Management Equipment Maintenance and Operations Center (EMTOC) at the northwestern quadrant of Shady Grove Road and Crabbs Branch Way.

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. Twenty-five percent of this development will include affordable housing, including workforce housing and moderately priced dwelling units (MPDUs). The Department of General Services (DGS) and EYA have agreed to provide a public library within a multifamily building.

The reconstruction of Crabbs Branch Way, a trail around the stormwater pond at Redland Road and Crabbs Branch Way, and a new pedestrian connection to the Metro station are some of the infrastructure implemented with this development. It is anticipated that the approved development will continue to be implemented during this decade.

**Map 23:
Shady Grove Station,
Westside and Jeremiah Park
Existing Zoning**

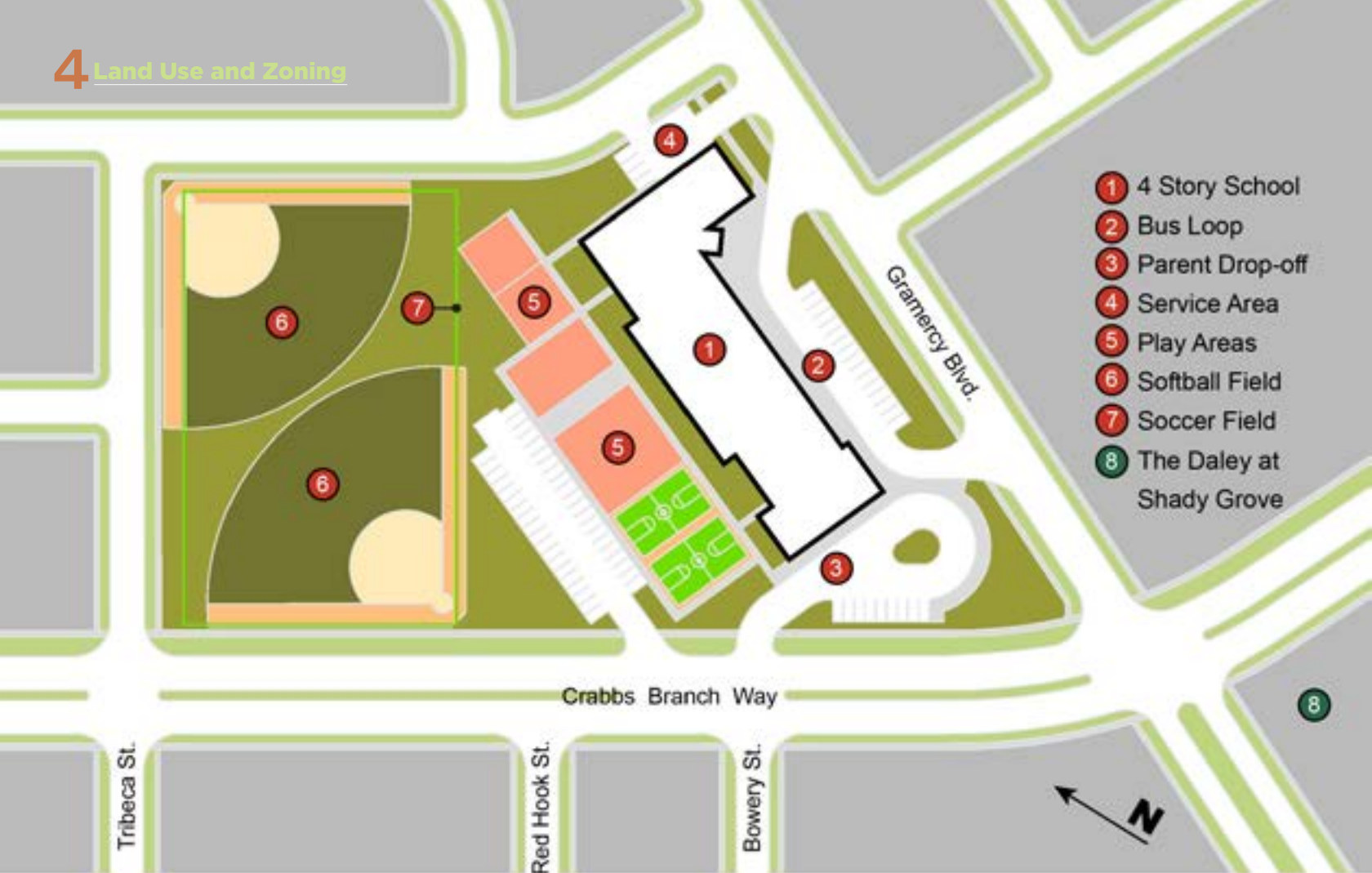


**Map 24:
Shady Grove Station,
Westside and Jeremiah Park
Proposed Zoning**



This Plan recommends:

- Rezone this property from CRT 1.0 C0.25 R0.75 H-90 T/TDR 0.89 Zone to the CRT 1.0 C0.25 R-0.75 H-90/TDR 0.89 Zone (**Map 24**) to further the Sector Plan's public benefits, including affordable housing options, and public facilities.



Illustrative concept for Jeremiah Park and School

Jeremiah Park Montgomery County Public Schools Bus Depot

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 property, which is approximately 10 acres. These properties are in the CRT 0.75 C0.25 R0.5 H-60T/TDR 0.6 Zone.

The 2006 Sector Plan named this area as Jeremiah Park to acknowledge the importance of Jeremiah Crabb, “a Revolutionary War officer and the County’s first U.S. Congressman, whose family lived in this area and is buried in the Crabb Family Cemetery, located in Old Derwood” (p.52).

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 relocating its 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 at the Metro station.

The Montgomery County Council has not approved a Declaration of No Further Need (DNFN) for Jeremiah Park, which is required before the County Executive could sell a public property. In 2012, the Planning Board approved a Preliminary Plan for the redevelopment of the CSP, Shady Grove Station (Westside and Jeremiah Park) that requires the dedication of a combined 8.1-acre park and an elementary school site, along with 689 residential dwelling units, including 25 percent of which is affordable housing, including workforce housing and MPDUs. The public park is approved at 4.1 acres and the school will be 4 acres. This Sector Plan supports the complete implementation of the approved development.

This Plan recommends:

- Rezone this property from CRT 0.75 C0.25 R0.5 H-60T/TDR 0.6 Zone to the CRT 0.75 C0.25 R0.5 H-60/TDR 0.6 Zone to promote the Sector Plan public benefits, including affordable housing and new public facilities (Map 24).
- 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, public streets, and public facilities.

Parks Department Training and Maintenance

This 10-acre portion of Jeremiah Park is the former location for the Parks Department Maintenance and Training Center. This area is in the CRT 0.75 C0.25 R0.5 H-60T/TDR 0.6 Zone (**Map 24**). In 2017, the center relocated to the Multi-Agency Service Center in Montgomery Village, and this area is vacant.

If the adjacent MCPS bus depot is retained in the long-term, this Sector Plan recommends implementing a portion of the approved preliminary plan for this site. This Sector Plan recommends a minimum one-acre Neighborhood Green for this portion of Jeremiah Park, along with noise mitigation from the Metro Access Road.

This Plan recommends:

- Rezone the vacant portion of Jeremiah Park from CRT 0.75 C0.25 R0.5 H-60T/TDR 0.6 Zone to CRT 0.75 C0.25 R0.5 H-60/TDR 0.6 Zone.
- Primarily multifamily residential is appropriate for this area.
- If the MCPS bus depot remains at its current location, and if this property is redeveloped with residential development, provide landscape screening as a visual buffer to the bus depot.



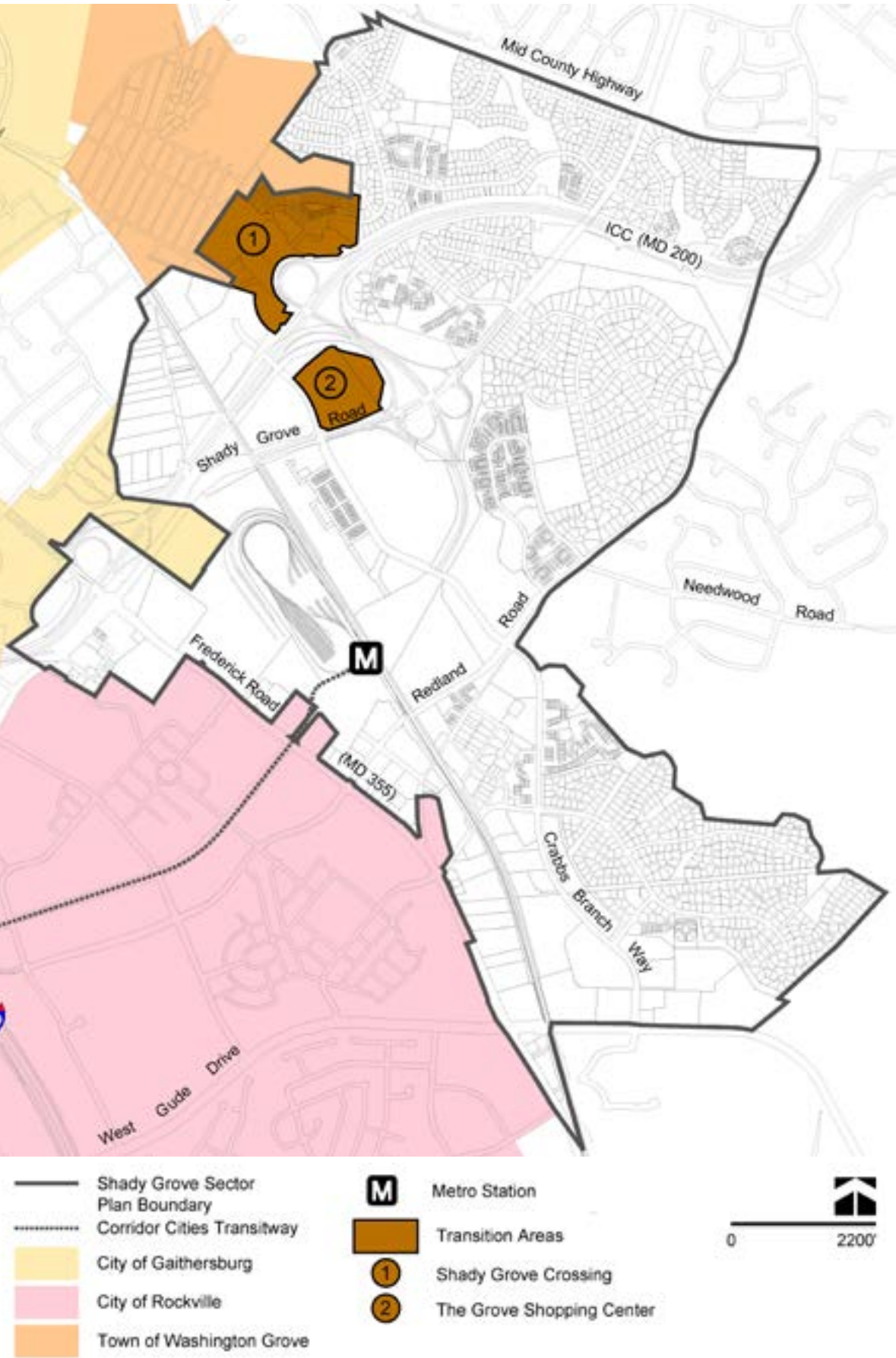
TRANSITION AREA

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. This area intends to provide lower-intensity development and incorporate a variety of recreational opportunities. Since 2006, residential development at Shady Grove Crossing, including the 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. In addition, 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 (**Map 25**).



Map 25:
Transition Area Properties



Shady Grove Crossing



Located south of the Town of Washington Grove, this 65-acre property, formerly known as Casey at Mill Creek-Piedmont Crossing, is developed with 61 residential units, a neighborhood park, and a historic meadow. The Town of Washington Grove acquired the 12-acre historic meadow, which was designated as a Legacy Open Space (LOS) property in the 2006 Sector Plan.

The M-NCPPC maintains this meadow, which is now called Washington Grove Conservation Park. The town's

municipal limits could extend in the future to include this open space.

The Parks Department has acquired approximately 9.77 acres of this property that is adjacent to the Intercounty Connector (MD 200) for a future local park. However, there is no vehicular or pedestrian access to this future park. Montgomery County Department of Transportation (MCDOT) is currently conducting a feasibility study to extend the current roadway terminus of Crabbs Branch Way to Amity Drive.

This Plan recommends:

- Confirm the R-90 Zone for properties in this area, including Shady Grove Crossing, the historic meadow, and the vacant Parks Department property.
- Extend the current road terminus of Crabbs Branch Way to Amity Drive as a public street and provide a bike trail connection to the Town of Washington Grove.
- Develop a local park with active recreation on the vacant Parks Department property.

The Grove Shopping Center



The Grove, a 16-acre traditional neighborhood shopping center, has approximately 120,000 square feet of commercial uses. 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 envisioned a 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 (**Map 26**).

A linear 1.82-acre wooded property (N947), which is owned by Montgomery County, consisting of an existing stream and trees, is located north of the shopping center. This property is in the EOF 0.75 H-100 T. Roads, including Crabbs Branch Way, Shady Grove Road, and the Metro Access Road, surround this property.

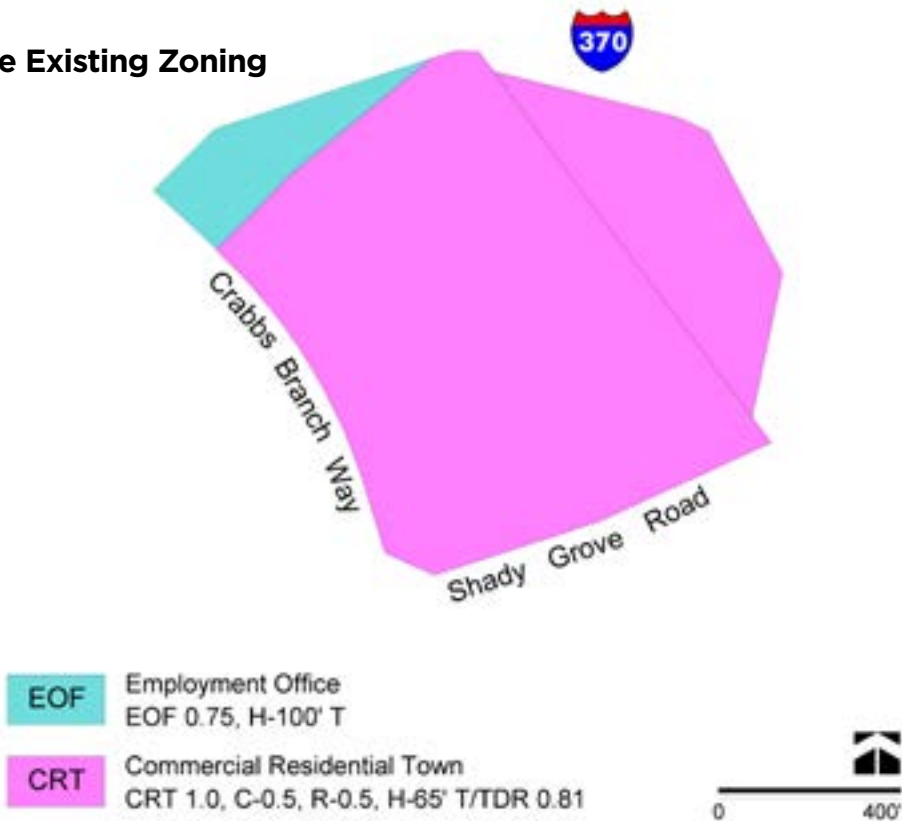
This Sector Plan envisions mixed-use development at this property via redevelopment that could deliver new public benefits, including the maximum percentage of

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 roads.

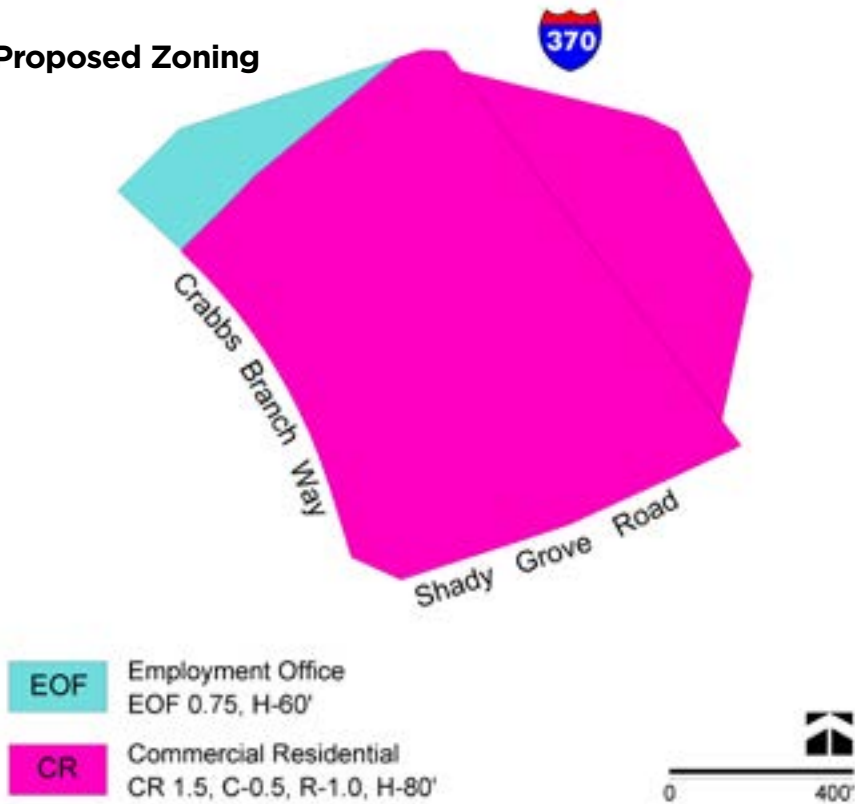
This Plan recommends:

- Rezone The Grove shopping center from CRT 1.0 C0.5 R0.5 H-65T/TDR 0.81 Zone to 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 15 percent of affordable housing, sustainability, and open space. Density from the vacant wooded property should be transferred to the larger shopping center area (**Map 27**).
- 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 roads, and to further the Sector Plan's environmental recommendations.
- Incorporate a broad range of building and unit types to serve different households.
- Rezone the County-owned parcel (N947) from the EOF 0.75 H-100 T Zone to the EOF 0.75 H-60 Zone to align this property's zone with the David Bone Equipment Maintenance Transit Operations Center property.

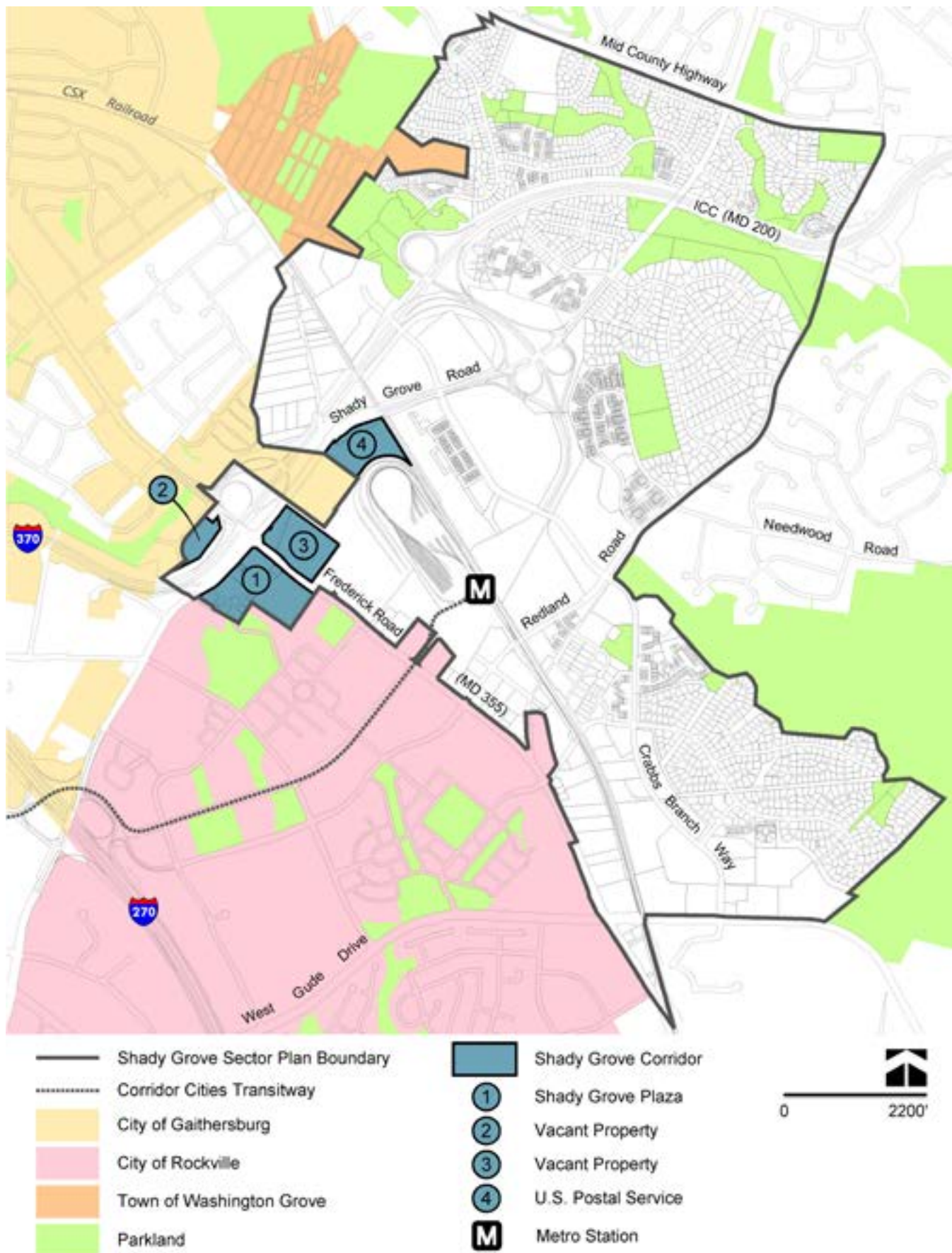
Map 26:
The Grove Existing Zoning



Map 27:
The Grove Proposed Zoning



Map 28:
Key Shady Grove Road Properties



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 road's character 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 Shady Grove Plaza and two vacant properties, are the dominant uses at the western end of the 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 Light Industrial (I-1) 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 road, protecting residential communities, and relocating industrial uses. No technology uses have 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.

Properties along this corridor, between MD 355 and the Metro Access Road, are included in the Rockville and Gaithersburg maximum expansion limits. In 2012, the City of Gaithersburg annexed the property at 16411

Shady Grove Road, which is now a CarMax automotive center. The annexation and declaration of use agreements between CarMax and the City of Gaithersburg precludes any residential development on the property while the adjacent Transfer Station is in use.

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 for some properties along the corridor will complement the existing Upper Rock District development and the approved Shady Grove Neighborhood Center developments, both further west along Shady Grove Road in the City of Rockville. This corridor is divided into three areas: Shady Grove Plaza, two vacant Casey owned properties, and the U.S. Postal Service (**Map 28**).



Shady Grove Plaza

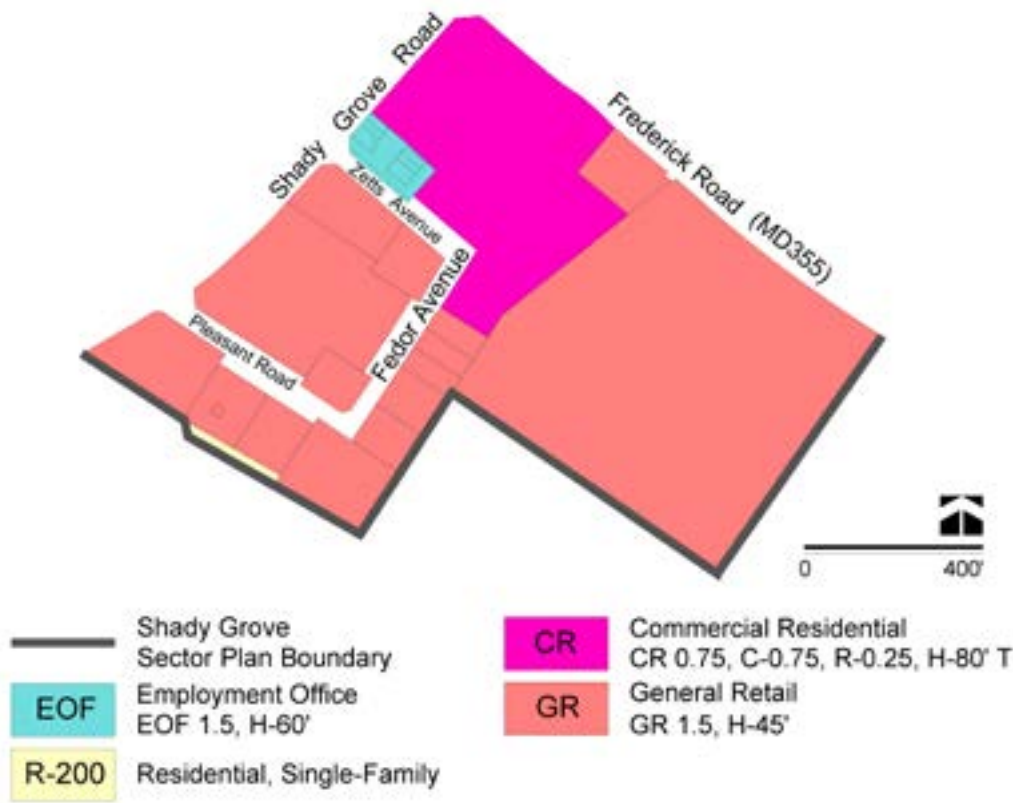
A bank, hotel, retail businesses and an office building are located in this approximately 29.9-acre area, which is located at the southwest quadrant of Shady Grove Road and MD 355. The 2006 Sector Plan recommended preserving existing trees that are vestiges of the original ‘shady grove,’ maintaining the existing commercial (O-M and C-3) Zones and mixed-use (TS-M) Zone, and extending Pleasant Street to King Farm. The extension of Pleasant Street to King Farm is no longer possible since the City of Rockville has removed the potential extension in King Farm.

In 1978, the County Council approved the Transit Station, Mixed (TS-M) Zone, for up to 0.34 FAR, on approximately 4.26 acres of this area. The 2006 Sector Plan confirmed the TS-M Zone and the 2014 District Map Amendment rezoned this property to the CR 0.75 C0.75 R0.25 H-80 T

Zone. Other properties in this area were rezoned to GR1.5 H-45 and EOF 1.5 H-60 (Map 29). No redevelopment has occurred in this area since 2006.

This area is located within the Shady Grove Metro Station Policy Area, per the Subdivision Staging Policy, where increased levels of transportation congestion are permitted because of its proximity to transit.

Map 29:
Shady Grove Plaza Existing Zoning

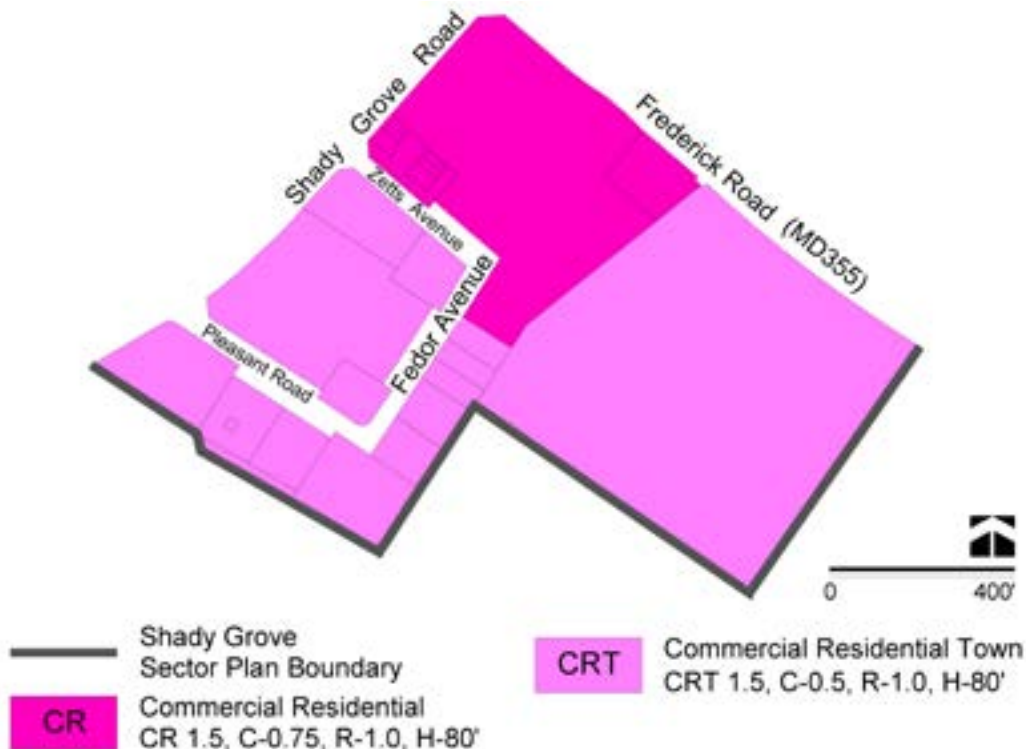


This Sector Plan's land use and zoning recommendations for this area will permit new non-residential and residential development for properties in this area. The Shady Grove Plaza property should retain the existing wooded area, which is approximately 0.35 acres or provide a minimum half-acre Neighborhood Green when this property redevelops. The existing trees are the last remaining vestiges of the original Shady Grove trees that existed on this property.

This Sector Plan recommends:

- Rezone the Shady Grove Plaza property, 16220 Frederick Road, from CR 0.75 C0.75 R0.25 H-80T Zone to CR 1.5 C0.75 R1.0 H-80 Zone to promote the Sector Plan's recommended public benefits, including the maximum percentage of MPDUs and public open space. During the redevelopment of this property, efforts should be made to retain the existing wooded area and incorporate it into any new development.
- Rezone the property at 16210 Frederick Road from GR 1.5 H-45 to CR1.5 C0.75 R1.0 H-80 Zone.
- Rezone the former office condo property (8625-8653 Zetts Avenue) from EOF 1.5 H-60 Zone to CR 1.5 C0.75 R1.0 H-80 Zone.
- Rezone the King Buick and Mitsubishi property, 16200 Frederick Road, from GR 1.5 H-45 Zone to CRT 1.5 C0.5 R1.0 H-80 Zone.
- Rezone all other commercial properties in this area from GR 1.5 H-45 Zone to CRT 1.5 C0.5 R1.0 H-80 Zone (Map 30).

Map 30
Shady Grove Plaza Proposed Zoning



Vacant Casey Property

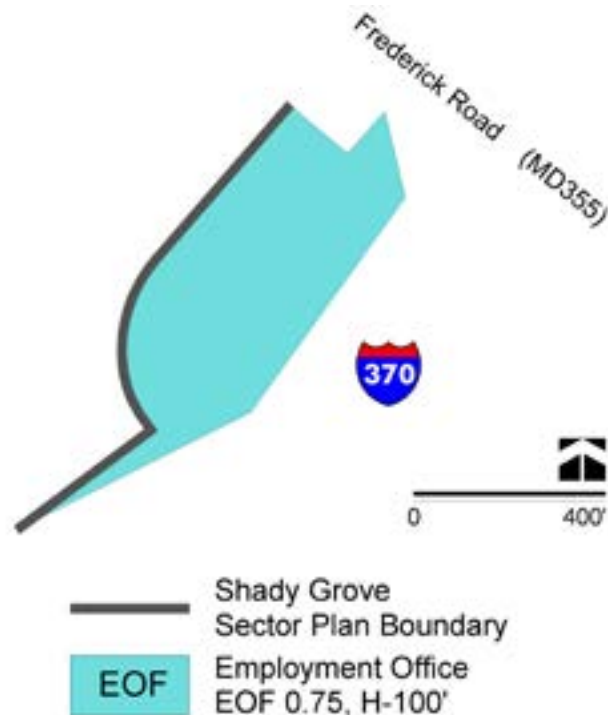
Located north of I-370, west of Frederick Road and south of Oneill Drive, this vacant 7-acre property is adjacent to the city limits of Gaithersburg and is within the city's maximum expansion limits. Rosedale Apartments, Casey Community Center, and the Rosemont residential community are north of this property in the City of Gaithersburg. Access to this property is limited to Oneill Drive.

The 2006 Sector Plan rezoned this property to the Technology and Business Park (I-3) Zone from the Multi-Family Residential (R-20) Zone, and the 2014 District Map Amendment rezoned this property to EOF 0.75 H-100 (Map 31).

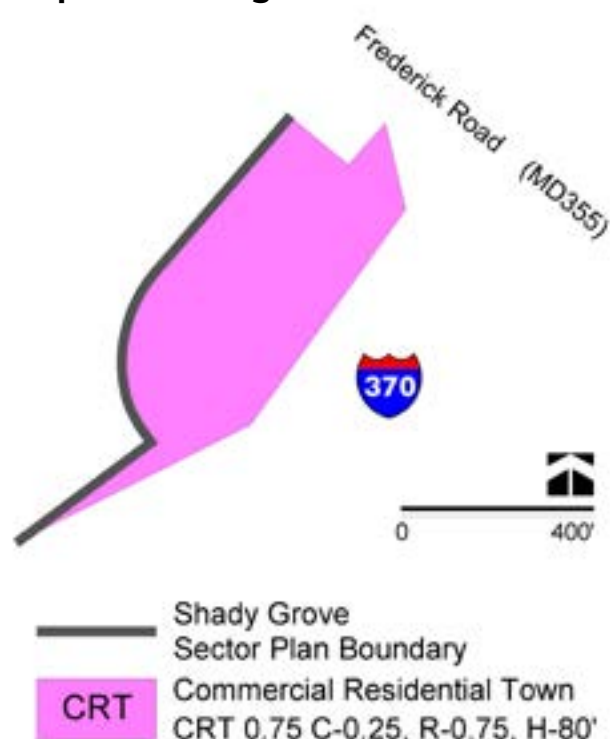
This Sector Plan recommends primarily residential development on this property since it complements the existing residential community to the north and the recommendation for mixed-use development to the south. This Plan recommends:

- Rezone the vacant Casey property from EOF 0.75 H-100 Zone to CRT 0.75 C0.25 R0.75 H-80 Zone to promote the Sector Plan's recommended public benefits, including the maximum percentage of MPDUs, dwelling unit mix, and enhancement of the natural environment (Map 32). Efforts should be made to retain portions of the existing forest/wooded area adjacent to the I-370 ramp that will help mitigate noise from adjacent roads and meet the Plan area's environmental goals.

**Map 31:
Vacant Casey Property
Existing Zoning**



**Map 32:
Vacant Casey Property
Proposed Zoning**



U.S. Postal Service Center, CarMax and a vacant property

A vacant property at the southeastern quadrant of Shady Grove Road and MD 355, a CarMax automotive sales center, and a U.S. Postal Service Center are in this 39.4-acre area. The CarMax property was annexed into the City of Gaithersburg in 2012 and is in the city's Mixed-Use Development (MXD) Zone.

An existing stream and wetlands are on the vacant property that constrains the full development on the property. Future development on this property must maintain the existing stream and its associated buffers and wetlands, and it must adhere to the Planning Board's Environmental Guidelines. The 2006 Sector Plan also recommended a fire and rescue station on the vacant property at Shady Grove Road and MD 355. The Montgomery County Fire and Rescue Service continues to support a future fire station at this location. This Sector Plan does not recommend residential development on properties in this area while the Shady Grove Transfer Station is in use.

This Plan recommends:

- Confirm the EOF 0.75 H-100 Zone for the vacant property at Shady Grove Road and MD 355.
- Confirm the IM-0.5 H-50 Zone for the U.S. Postal Service property.



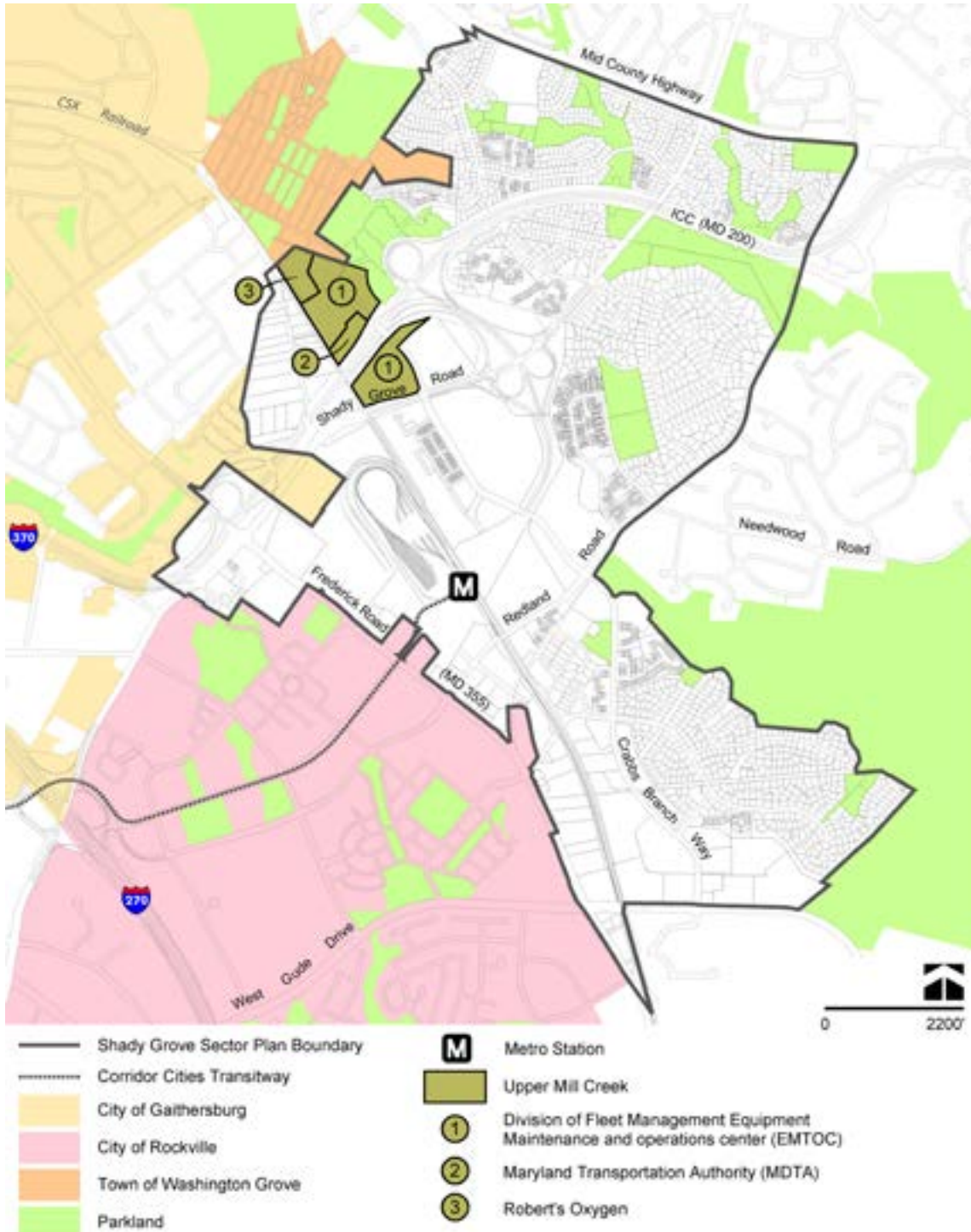
Left: Shady Grove Plaza; Top right: U.S. Postal Service; Bottom right: Shady Grove Road and MD 355 Intersection.

UPPER MILL CREEK

The 54-acre Upper Mill Creek area consists of three properties that are east of the CSX rail tracks, north of Shady Grove Road, west of Crabbs Branch Way and bisected by I-370. Montgomery County's Division of Fleet Management Equipment Maintenance and Operations Center (EMTOC) is located at the northwestern intersection of Shady Grove Road and Crabbs Branch Way.

The Maryland Transportation Authority (MDTA) has built a new police station and administrative office for the ICC, which is immediately north of I-370 (**Map 33**). The 2006 Sector Plan provided alternative recommendations for these two vacant properties that were called Casey 6 and 7. Either the relocation of some of the County Service Park (CSP) facilities or new residential and non-residential development were recommended.

Map 33:
Key Upper Mill Creek Properties



Montgomery County's Division of Fleet Management Equipment Maintenance and Operations Center

Completed in 2013, the EMTOC has a variety of Ride On bus functions, including service maintenance bays, compressed gas and diesel-fuel stations, and administrative buildings. The EMTOC properties are in the EOF 0.75 H-60 T, EOF 0.75 H-100T, EOF 0.5 H-50, and EOF 0.5 H-45 Zones. The MDTA property is in the EOF 0.5 H-50 Zone.

Roberts Oxygen, a distributor of compressed industrial, medical and specialty gases, is located north of the EMTOC facilities and west of the Town of Washington Grove. This property is in the EOF 0.5 H-45 Zone. Redevelopment is not anticipated in the long term for this property.

This Plan recommends:

- Rezone Montgomery County's Division of Fleet Management Equipment Maintenance and Operations Center, 16624 Crabbs Branch Way, from the EOF 0.75 H-60 T Zone to the EOF 0.75 H-60 Zone.
- Rezone Parcel (P947) from EOF 0.75 H-100 T Zone to EOF 0.75 H-60 Zone. This parcel has an existing stream with its associated buffers, stormwater management structure, trees and it is unbuildable.
- Confirm the EOF 0.5 H-50 Zone for the MDTA property.
- Confirm the EOF 0.5 H-50 Zone for Roberts Oxygen. Any redevelopment of this property should maintain the existing 50-foot setback established from the adjacent MCDOT salt storage structures to create a compatible relationship with the existing single-family dwellings in the Town of Washington Grove.

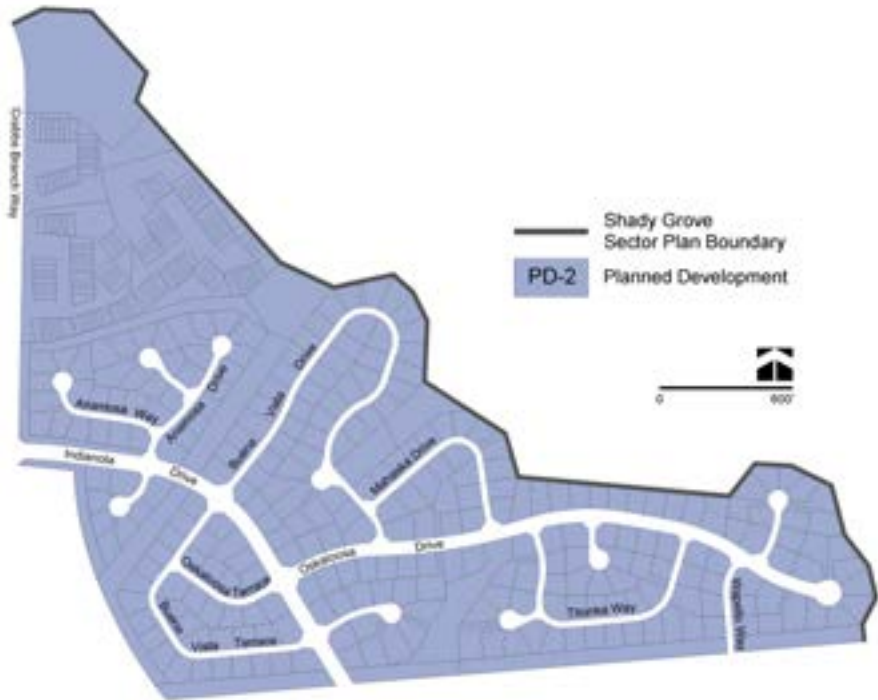


Several residential neighborhoods within the Plan area, including Park Overlook-Mallard Cove, Derwood Station, and Townes of Shady Grove were approved in the Planned Development (PD) Zone, via a Local Map Amendment.

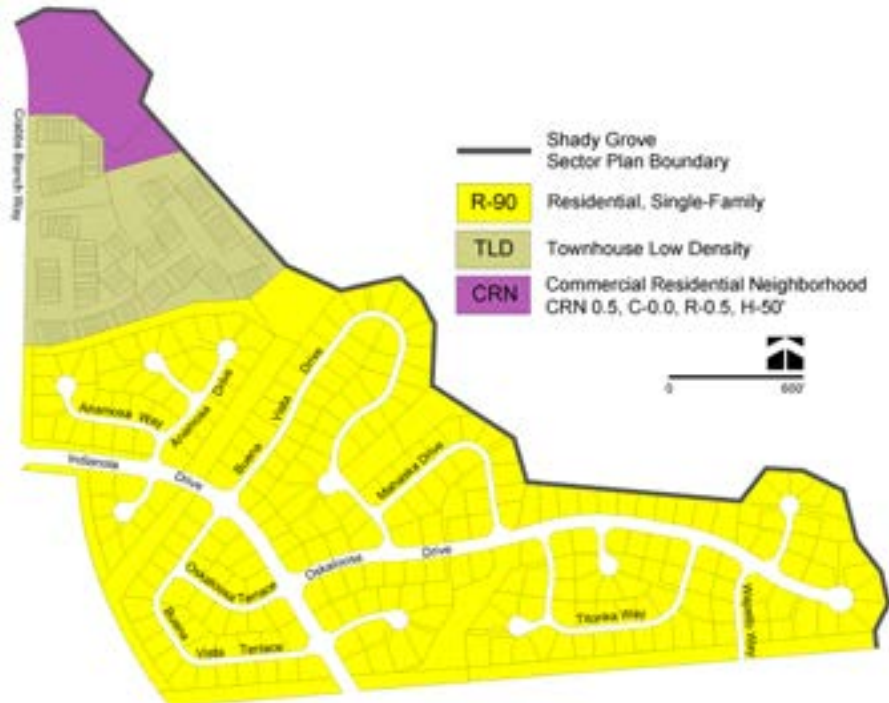
Section 8.1.1. of the 2014 Zoning Ordinance indicates that zones in Article 59-8, including the PD Zone, “may appear on the digital zoning map, but they cannot be requested by any property owner under a Local Map Amendment or confirmed or applied to any property under a Sectional Map Amendment adopted after October 30, 2014.”

Derwood Station (**Map 34**), 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. This Sector Plan recommends new Euclidean zones, such as R-90 and Townhouse Low Density (TLD), which are closely related to the built development for Derwood Station and other PD-Zoned properties (**Map 35**).

Derwood Station Existing Zoning



Derwood Station Proposed Zoning



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 contractors, advanced manufacturing, flex office space, as well as Class A and B offices 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.

WMATA Railyards and Transfer Station

WMATA's Shady Grove maintenance rail yard and the Montgomery County Department of Environmental Protection (DEP)-managed Shady Grove Processing Facility and Transfer Station are west of the CSX tracks, east of MD 355, and south of Shady Grove Road. The processing facility provides recycling services and solid waste management for County residents and businesses. Both properties are in the IM 2.5 H-50 Zone.

This Sector Plan confirms the importance of the processing facility and transfer station at this location since the facility utilizes the existing rail tracks. The relocation of this facility to another part of the County is not anticipated in the long term. Since additional residential development is anticipated within this Plan area, DEP should establish initiatives to reduce odors emanating from the processing facility.

This Plan recommends:

- Confirm the IM2.5 H-50 Zone for the Shady Grove Processing Facility and the Shady Grove maintenance rail yard.
- Mitigate environmental impacts, especially odors, from the transfer station.

Oakmont Avenue Industrial Corridor

Located north of Shady Grove Road, west of the CSX tracks and bisected by Oakmont Avenue, properties in this district provide a range of services to County residents and opportunities for small and independent businesses and entrepreneurs. This cluster of industrial properties is similar to other industrial districts in the County, such as Parklawn Drive in Twinbrook and Howard Avenue in Kensington.

A variety of industrial uses, including automotive services, home remodeling and construction businesses, storage and biotechnology companies are located within this 50-acre area. Properties along Oakmont Avenue are in the Moderate Industrial (IM) 2.5 H-50 and CRN 0.5 C0.5 R0.25 H-35 Zones.

This Plan recommends:

- Confirm the Moderate Industrial (IM) Zone and CRN 0.5 C0.5 R0.25 H-35 Zone for properties along Oakmont Avenue.

Frederick Road Automotive Corridor

This linear 44-acre corridor is located east of Frederick Road (MD 355), south of Paramount Drive, and west of the CSX rail tracks. Automotive sales and services are the dominant uses in this corridor, along with some commercial uses. Properties in this corridor are in the Moderate Industrial (IM) 2.5 H-50 Zone. Properties in this corridor are adjacent to the proposed bus rapid transit (BRT) MD 355 route, and a potential infill station is possible at Indianola Drive. The existing boundary for the City of Rockville includes the automotive business at 15625 Frederick Road.

Redevelopment is not anticipated in the long term in this corridor because several properties have long-term leases and investments for automotive uses. The 2006 Shady Grove Sector Plan confirmed the Light Industrial (I-1) Zone and encouraged commercial and residential uses as permitted in the I-1 Zone. The 2014 District Map Amendment rezoned this corridor from I-1 to Moderate Industrial (IM) 2.5 H-50.

This Plan recommends:

- Confirm the Moderate Industrial (IM) 2.5 H-50 Zone for properties in the Frederick Road automotive corridor.

Crabbs Branch Office Park

The Crabbs Branch Office Park is an office park with a broad array of technology, biotechnology, industrial/flex, and office development uses in the 100-acre area. There are office condominiums in the office park, including the Franklin Office Condominium, which is in the southeast quadrant of Crabbs Branch Way and Indianola Drive.

Located north of East Gude Drive, east of CSX rail tracks, and south of Indianola Drive, this office park has approximately 1.64 million square feet of development. A real estate investment trust owns almost one million square feet of office and flex space within the office park.

The 2006 Sector Plan confirmed the Light Industrial (I-1) Zone and made no specific land use recommendations for this area. The 2014 District Map Amendment rezoned properties to the Industrial Moderate (I-M 2.5 H-50) Zone. All properties in the office park are in the IM-2.5 H-50 Zone (Map 36).

Crabbs Branch Way divides the office park into an eastern and western segment. Derwood Station, a primarily single-family residential community, is located east of the office park. Nationally and internationally known organizations, such as FedEx, American Red Cross, and SFC Energy are located 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.

Three office buildings, 15850 and 15800 Crabbs Branch Way and 15810 Indianola Drive, at the northwestern quadrant at Indianola Drive and Crabbs Branch Way, are proposed for the EOF Zone since they are traditional office buildings. This Sector Plan recommends rezoning these properties to align the existing office uses with the Employment (EOF) Zone where offices are allowed as permitted uses, rather than limited uses in the IM Zone (Map 37).

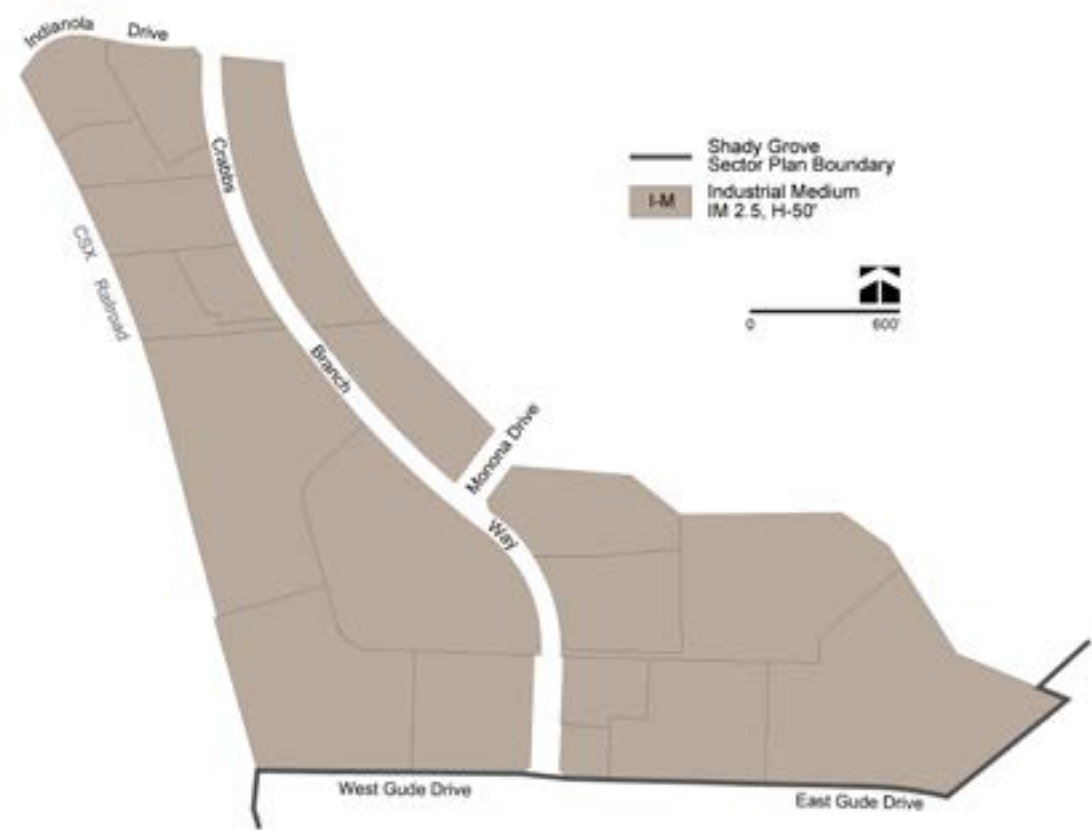
The American Society of Plant Biologists headquarters, located at the intersection of Crabbs Branch Way and Monona Drive, is one of the last vestiges of the Gudes land holdings, a prominent family in the County's history. This property includes the early 20th Century colonial revival manor house, which is currently used as an office building.

This Plan recommends:

- Rezone the office properties at 15850 Crabbs Branch Way, 15800 Crabbs Branch Way and 15810 Indianola Drive from the IM 2.5 H-50 Zone to the EOF 2.5 H-50 Zone.
- Rezone the American Society of Plant Biologist property, located at 15501 Monona Drive, and the office property at 7361 Calhoun Place from the IM 2.5 H-50 Zone to the EOF 2.5 H-80 Zone.
- Rezone the office buildings at 7500 Standish Place, 7362 Calhoun Place and 15400 Calhoun Drive from the IM 2.5 H-50 Zone to the EOF 2.5 H-70 Zone.
- Confirm all other office properties in the Crabbs Branch Office Park to the Industrial Moderate (I-M 2.5 H-50) Zone.



Map 36:
Crabbs Branch Office Park Existing Zoning



Map 37:
Crabbs Branch Office Park Proposed Zoning





5

Housing



The 2006 Shady Grove Sector Plan offered an opportunity to increase the range of housing to meet Countywide needs. The 2006 Plan's goals included increasing housing choice and affordability options while providing adequate recreation, schools, and community services to create a strong and balanced community. This is a reflection of County policies to locate housing near transit to increase ridership, and near jobs to decrease commute time and distance.

The 2006 Sector Plan and this Plan respond to the high market demand for housing by recommending an increase in zoning for residential development within proximity of the Shady Grove Metro Station. The Sector Plan also encourages a range of housing choices that benefit from Metro proximity.

This Sector Plan aims to support and further the original goals of the 2006 Sector Plan, while updating them to ensure this Plan's alignment with current County housing policies and goals.



POLICY CONTEXT

Guided by the General Plan Refinement (1993) and the Housing Element (2011), the policy goals for the 2006 Shady Grove Sector Plan and this Plan both support County policies to meet the housing needs of a diverse workforce. Among the goals of the General Plan Refinement and the Housing Element are:

- Concentrate new housing in mixed-use and transit-orientated areas.
- Encourage housing near employment centers, with adequate access to a wide variety of facilities and services. Support mixed-use communities to further this objective.
- Encourage and maintain a wide choice of housing types and neighborhoods for people of all incomes, ages, lifestyles, and physical capabilities at appropriate locations and densities.
- Encourage an adequate supply of affordable housing throughout the County for those living or working in Montgomery County, especially for households at the median income or below.

To meet future needs and to contribute to the County's long-term vitality, this Sector Plan recommends confirming the recommendations of the 2006 Sector Plan, which calls for mixed-use residential development in transit-oriented areas and other strategic locations. These recommendations, along with retaining existing residential development, will contribute to the implementation of the Housing Element's policies and objectives.

Recommendations:

- Require 15 percent moderately priced dwelling units (MPDUs) as the highest priority public benefit for all new residential development.
- Publicly owned properties, including WMATA, should be encouraged provide up to 25 percent of MPDUs.
- Increase the number of housing units located within walking distance to Metro.
- Provide and continue current incentives that encourage developers to provide a large amount of affordable housing, including MPDUs.
- Maintain and protect the existing residential neighborhoods in Derwood.
- Provide a range of unit types, including for families, seniors, and persons with physical challenges.
- Provide a range of unit sizes within each housing type.



6

Parks, Trails and Open Space

Public parks, trails, and open spaces all contribute to creating and defining a community and providing a vital link to nature and active recreation. This Sector Plan area has and is near several stream valleys and regional parks, including Crabbs Branch Stream Valley Park and Rock Creek Regional Park. The 20-acre Blueberry Hill Local Park and the ten-acre Redland Local Park are parks within the Sector Plan area that provide active recreation for existing residents, including tennis and basketball courts and large open lawn areas. Mill Creek Towne Local Park is another public park that is located immediately north of the Plan area, along Shady Grove Road (**Map 38**).

6 Parks, Trails and Open Space

This Sector Plan, as well as the 2006 Sector Plan, recognizes that additional residential density will require more parks, trails, and open spaces for existing and future residents. The 2006 Sector Plan recommended a range of public parks, including the 4-acre Jeremiah Park; a neighborhood park at the Casey at Mill Creek, now called Shady Grove Crossing; a town square and a town commons at the Metro Station; and new trails. The 2006 Sector Plan also recommended Countywide trails throughout the Plan area, including connections to Upper Rock Creek Regional Park and the Mill Creek and Cabin Branch Stream Valley parks.

Since 2006, two new parks have been completed: the Amity Drive Neighborhood Park and the 12-acre Washington Grove Meadow Conservation Park. Further, the Parks Department in 2007 acquired a 4.25-acre property that is adjacent to the Derwood Bible Church, and in 2008 acquired a 9.77-acre property, adjacent to the Washington Grove Conservation Park. Known as the Derwood Station Neighborhood Park and Piedmont Crossing Local Park, respectively, these undeveloped properties will be implemented as parks. The approved Shady Grove Station (Jeremiah Park) development plan has an 8.1-acre park-school site that includes a four-acre local park. In 2008, the Parks Department received the Stadtman Preserve, which is 5.8 acres of high-quality wetlands and forest as well as a midcentury modern house that is in the Upper Rock Creek Master Plan area and is adjacent to the Mill Creek Stream Valley.

This Sector Plan recommends the implementation of unbuilt parks, and additional parks that further the recommendations in the 2017 Park, Recreation and Open Space Master Plan (PROS) and the 2018 Energizing Public Open Space Master Plan.

POLICY GUIDANCE

Policy guidance from the 2017 Park, Recreation and Open Space Master Plan (PROS) highlight how future parks and recreation needs can meet the County's growing population, promoting parks and recreation equity for County residents, and creating a network of active parks that facilitate social gatherings. The PROS Plan indicates that "forecasted patterns of growth between 2010 to 2045 will be concentrated along I-270 (including the Shady Grove area), representing only 14 percent of the County's land, but 72 percent of the population and 82 percent of employment. With the scarcity of developable land and the increase in density in urban areas, park planning has become more critical to creating livable and healthy communities" (p. 67).

The PROS Plan identifies unmet recreation needs in the Shady Grove and Derwood communities for dog parks, basketball courts, pickleball courts, ball fields, and playgrounds. Additional active and passive recreation facilities are needed for residents in the Metro Neighborhoods of this Plan area. Based on the PROS Plan, this Sector Plan area has a significant deficit of active recreation and passive recreation opportunities, such as nature immersion, bird watching, and botanical exploration, which are not easily accessible.



HIERARCHY FOR PARKS, TRAILS AND OPEN SPACE

The Parks Department 2017 Park, Recreation and Open Space (PROS) Plan and the prior PROS Plan (2012) recommended a hierarchy of open spaces for urbanizing areas in the County. The parks and open spaces recommendations further enhance the 2017 PROS Plan. The following hierarchy should be applied to a new urbanizing area, such as properties in the Metro Neighborhoods.

For the Sector Plan area:

- Active recreation destinations located within or near the Plan area, including courts, playgrounds, and lawn areas large enough for pick-up soccer, festivals or events, etc.
- Central Civic Green
- An interconnected system of sidewalks and trails
- Wooded areas

For each Urban Neighborhood:

- A Neighborhood Green
- Walk to recreational amenities

For each Block:

- Space for an urban square, plaza, or green area

For each Building:

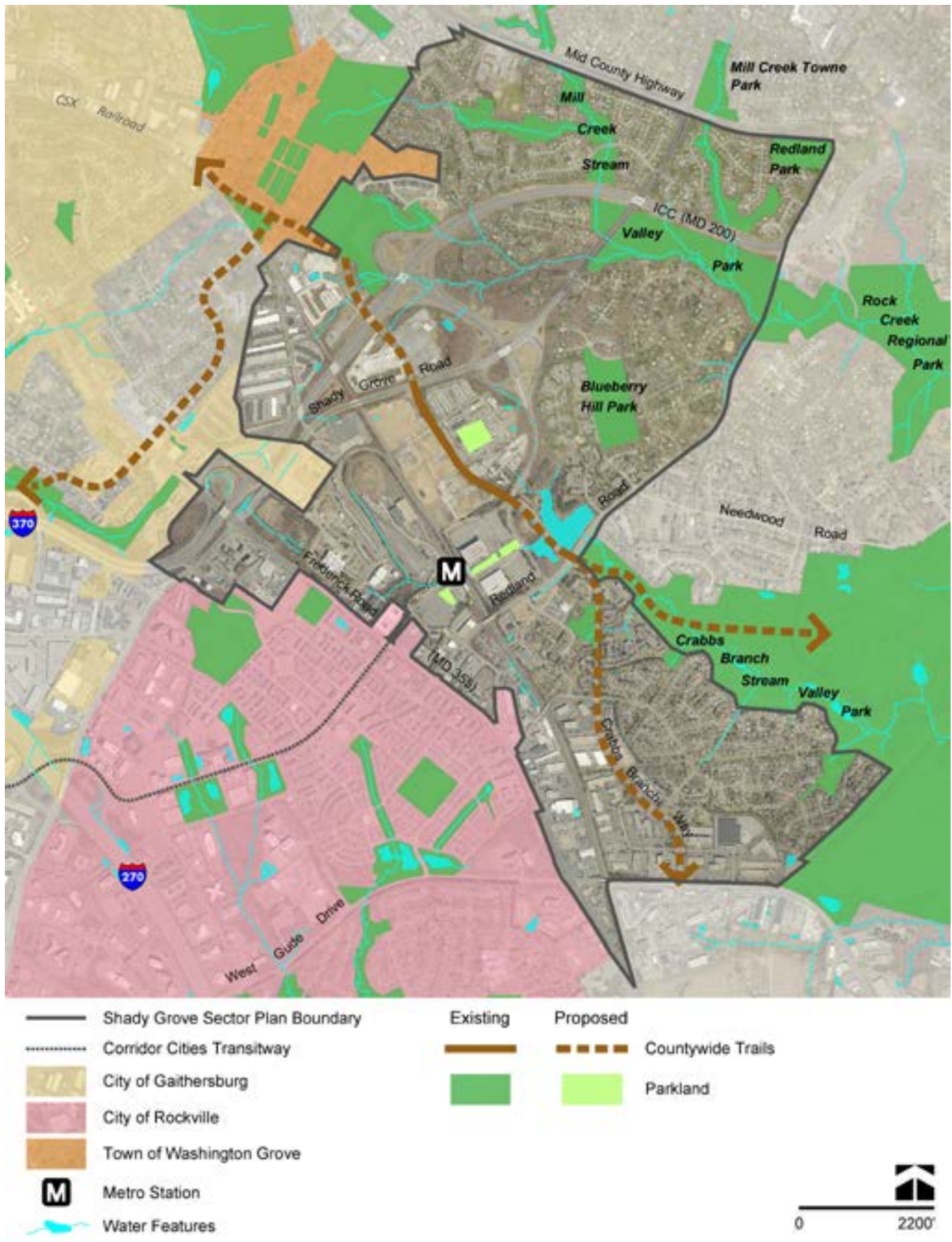
- Space for outdoor recreation space

For each Residence:

- Private outdoor space



Map 38:
Existing and Proposed Parks and Trails



RECOMMENDATIONS

The recommended park system for this Sector Plan area is intended to expand recreational opportunities, provide largely integrated trail systems, and protect areas of natural and historical significance (**Map 39**). The following are the Sector Plan's parks and open space goals and recommendations:

Goal: Create a network of activated parks that facilitate social gatherings in the Metro Neighborhoods and at the Grove.

Recommendations:

- Implement the preliminary plan with the 4-acre Jeremiah Park at Shady Grove Station, Jeremiah Park. If the Montgomery County Public Schools (MCPS) Bus Depot does not relocate from its current location, provide a 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 park will be surrounded by the future CCT and BRT, as well as the highest recommended density in the Plan area. Key features of this park should be expanses of green lawn and spaces for community gatherings. This Civic Green is envisioned as the main public open space in the Metro West neighborhood.
- Utilize the existing stream on the eastern side of the Metro Station as a potential linear park or greenway.
- Create a minimum three-quarters of an acre Neighborhood Green at the redeveloped The Grove shopping center. This park should include neighborhood amenities, including a flexible open space and multi-age play features.

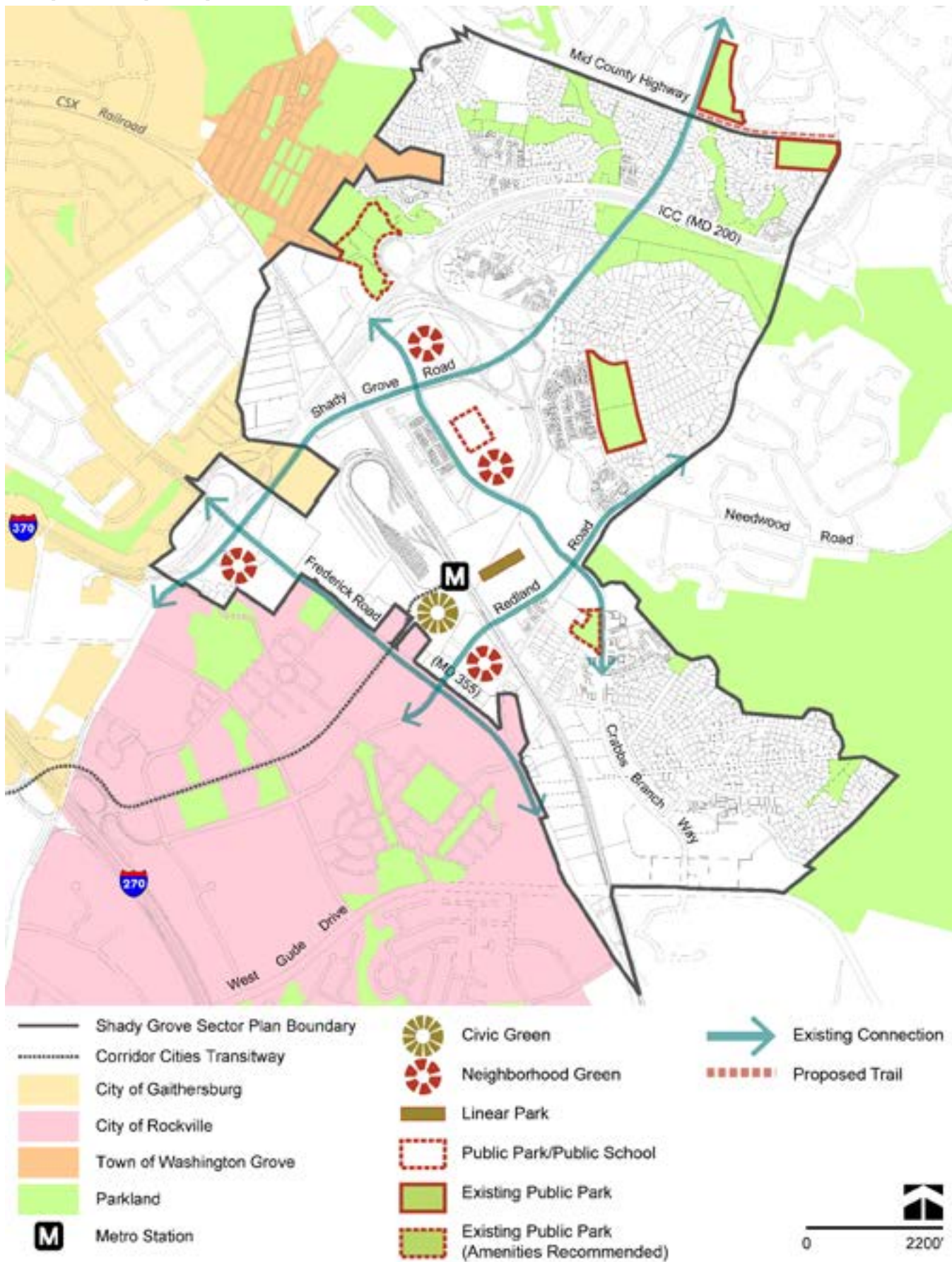
Goal: Prioritize acquisition, development, and programming for new parks.

Recommendations:

- Implement the acquired parkland at the Derwood Station and Shady Grove Crossing/Piedmont Crossing properties into a neighborhood park and local park, respectively, with a variety of recreational opportunities.
- Execute the roadway extension of Crabbs Branch Way to Amity Drive. This roadway will provide public access to public parks, including the Washington Grove Conservation Park.
- Provide dog parks, skate parks, and other new park amenities that support a growing community.
- Prioritize the acquisition of open spaces that are suitable for ballfields and active recreation as properties become available.



Map 39:
Proposed Open Space Network





Goal: Create a robust trail system of natural and hard-surface trails.

Recommendations:

- Explore opportunities to provide trail connections between the Rock Creek Regional Park trail system to the Sector Plan area.
- Create a trail connection that links Redland Local Park with Mill Creek Towne Local Park, via the County-owned, unbuilt Mid County Highway right-of-way.
- Support the unbuilt trails recommended in the 2006 Sector Plan.

Goal: Enhance existing parks and open spaces.

Recommendations:

- Retain Blueberry Hill Local Park as an active and passive recreation park site. This Plan recommends the implementation of a non-native species plant and supplemental planting to sustain the existing forested area. A formalized natural surface trail loop should be explored.
- Maintain the existing recreational uses at Redland Local Park. Establish a pedestrian and bike trail that links this park to the Mill Creek Towne Local Park.

Goal: Protect historic and cultural resources.

Recommendations:

- Explore the potential Legacy Open Space (LOS) designation as a Heritage or Open Space Resource for the American Society of Plant Biologist property in the Crabbs Branch Office Park. This property, including the early 20th century colonial revival manor house, is currently used as an office building and is associated with the Gudes, a prominent family in the County's history.
- This 4.5-acre property encompasses considerable open space with adjacent areas of preserved open space, including a direct greenway connection to the Gude Trail that provides public access to Rock Creek Regional Park. There are formal boxwood gardens on the property as well as stately trees, including a County Champion Black Gum. Any potential LOS acquisition by the Department of Parks or dedication would likely exclude the manor building.



7

Sustainability

This Sector Plan envisions returning Shady Grove toward the original shady condition that inspired the area's name. The restoration of tree canopy in the Sector Plan area will help improve air quality, reduce storm runoff, 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 contribute to reducing stress, promoting good mental health, and encouraging residents and visitors to get beneficial physical exercise. The preservation and enhancement of tree canopy will make Shady Grove a beautiful, healthy, and sustainable place to live, work and visit.

This Sector Plan also envisions new development that showcases the best in sustainable design, including building orientation, architecture, ventilation systems, and operating systems that conserve energy, and incorporating new and developing technologies for generating renewable energy on-site. It aspires to reach a net-zero energy goal where the amount of energy generated balances with the amount of energy consumed. Together with improvements in water quality treatment through improved stormwater management practices, this plan will create a built environment that contributes to cleaning the air, water, and making Shady Grove a more livable and sustainable community.

The recommendations in this Sector Plan amendment build on the recommendations in the 2006 Sector Plan to respond to new challenges and concerns for creating the sustainable place that existing and future residents, employees and visitors need and deserve.

FOREST AND TREE COVER AND IMPERVIOUS SURFACES

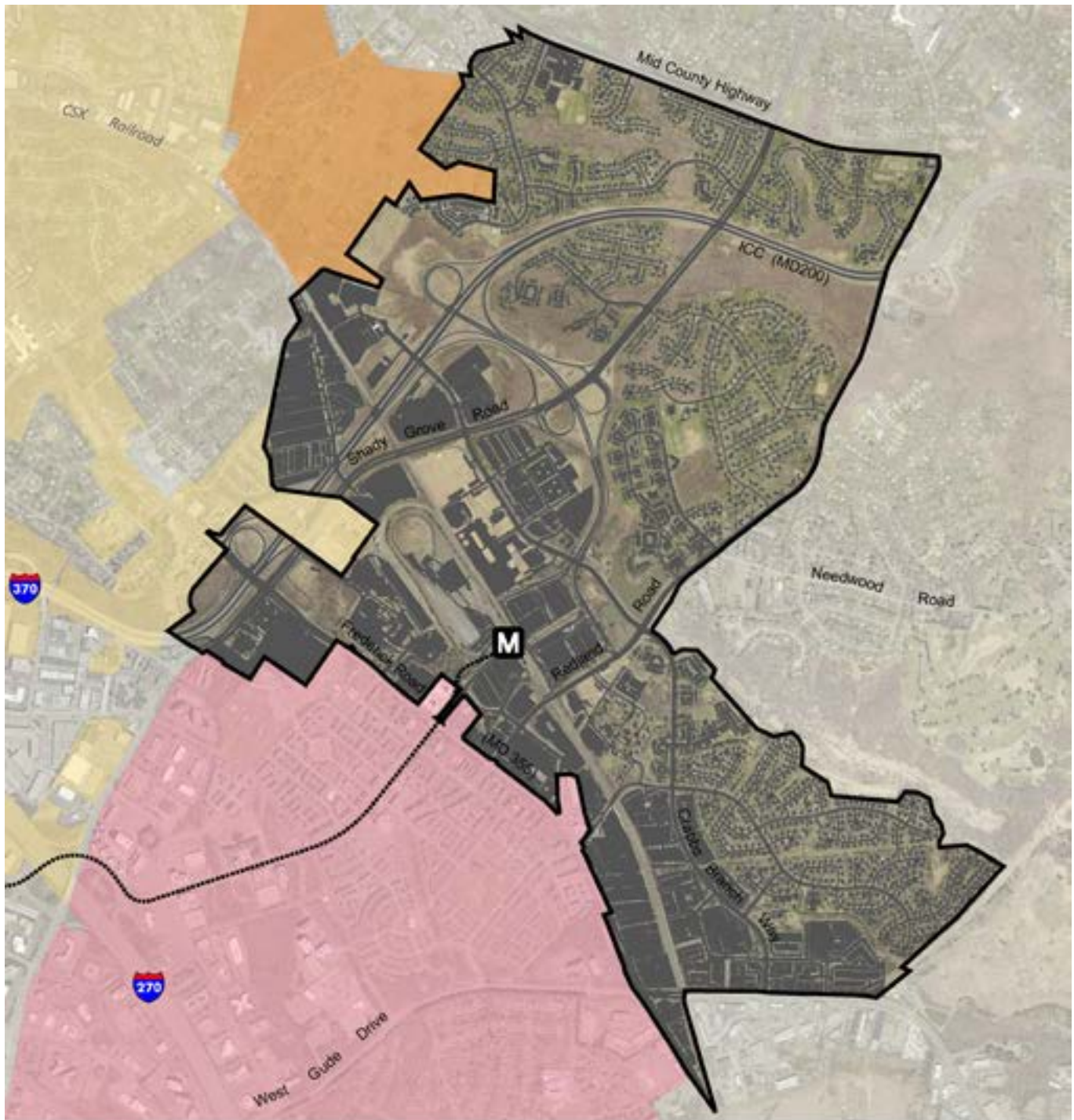
Water quality correlates to the amount of forest cover and the percentage of the watershed that is impervious. Overall, impervious surfaces cover approximately 36 percent of the Plan area, while forests occupy about 11 percent of the Plan area (**Map 40**). Tree canopy coverage does not match forest cover in terms of water quality benefits. However, there are still significant water quality, air quality, and health benefits that accrue from a healthy tree canopy. Approximately 41 percent of the Plan area has tree canopy cover (**Map 41**).

The distribution of these land covers varies through the Plan area. Commercial areas, industrial areas, and the formerly industrial area that contained former CSP have very little forest and tree cover, and large areas of impervious surfaces. Single-family housing neighborhoods tend to have better tree cover. A few forested stands remain within the Plan area adjacent to some of the major roads. The remaining forest on the former County Service Park (CSP, Jeremiah Park) should be retained to the maximum extent possible. There is also a significant forest stand east of The Grove shopping center, between the shopping center's surface parking area, and I-370 and the Metro Access Road. This forest stand creates a buffer between the shopping center and the roads, filtering the pollution from the highways and providing both visual screening and noise mitigation.

To improve upon forest and tree coverage, and minimize new impervious surfaces, infill development should be directed at the existing surface parking lots. If surface parking lots are retained, improvements should be introduced to make them more environmentally benign, such as introducing or improving tree cover and improving stormwater management. If properties redevelop, property owners and developers should consider solar panels that shade parking lots and pavement and generate clean energy, in lieu of or in addition to, tree cover.



Map 40:
Existing Impervious Areas



- Shady Grove Sector Plan Boundary
- Corridor Cities Transitway
- City of Gaithersburg
- City of Rockville
- Town of Washington Grove
- Impervious Surface
- M Metro Station



American Forests, a respected non-profit conservation group, recommends a goal of 40 percent tree cover for developed and developing communities to promote sustainability and a healthy human environment. It is anticipated that Shady Grove Station, Westside will achieve a tree canopy of approximately 25 percent.

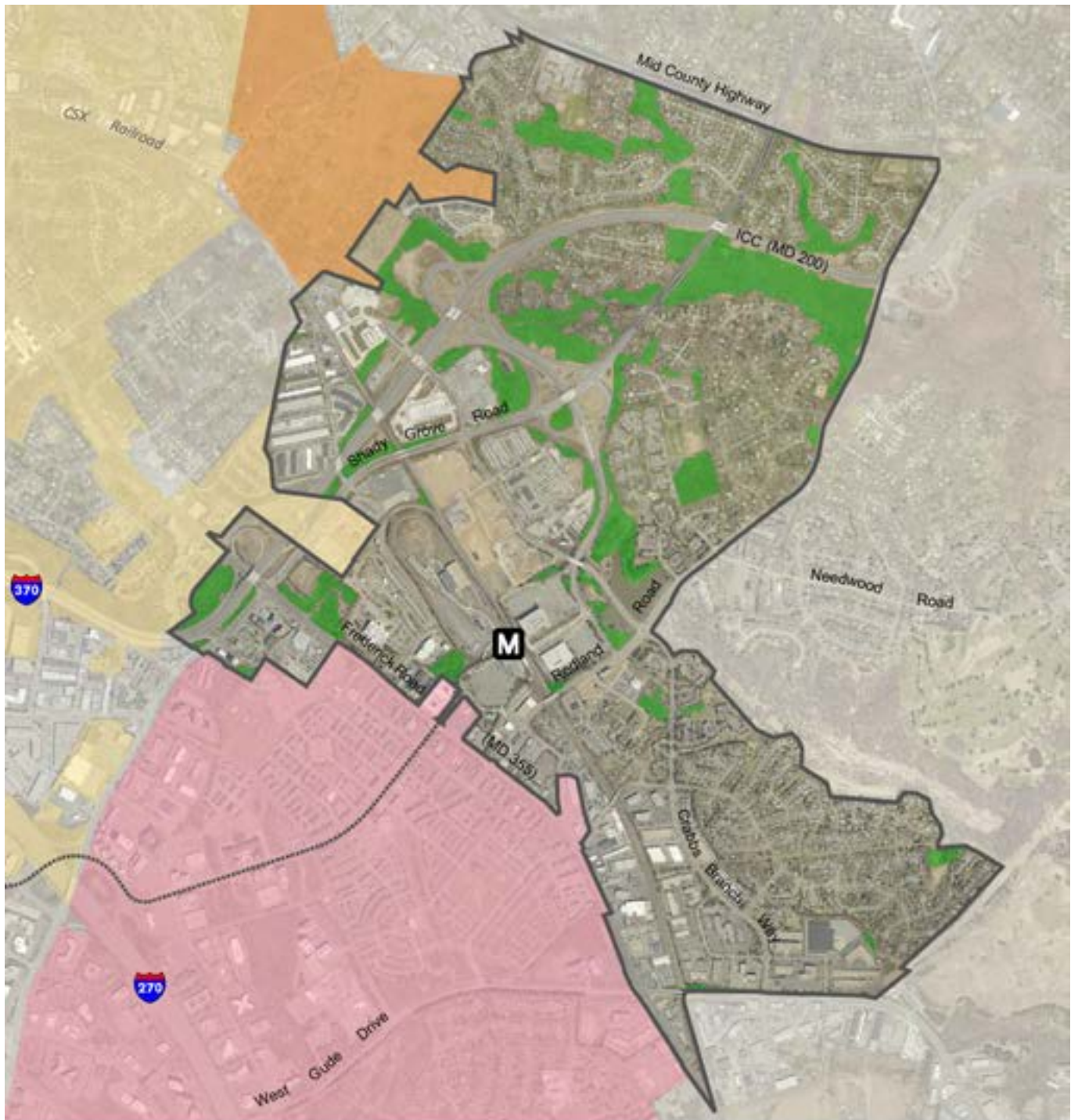
This Sector Plan recommends preserving the existing green infrastructure, wherever possible, and extending new tree canopy and green spaces into and through the commercial/retail areas as portions of these areas are redeveloped. By taking advantage of opportunities to increase tree canopy through new development and redevelopment, including planting trees in public and private open space areas and as a part of streetscaping, can advance toward the 40 percent tree canopy goal.

Recommendations

- Improve forest and tree cover to at least 40 percent of the Plan area.
- Achieve 30 percent of tree cover within 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 highways, including Interstate 370 and the Intercounty Connector (MD 200).
- Encourage green features (softscaping) in required open space areas and the public realm.
- Prioritize environmental public benefit points for tree canopy cover and energy conservation.
- Promote site and building design for energy conservation and LEED certification or a comparable rating system.
 - o Consider block and building orientation to maximize passive solar heating and lighting, and to offer optimal siting for solar energy generation.
 - o Consider building construction design, materials, and systems to save energy.



Map 41:
Existing Tree Canopy



- Shady Grove Sector Plan Boundary
- - - - - Corridor Cities Transitway
- City of Gaithersburg
- City of Rockville
- Town of Washington Grove
- Forest Canopy
- M** Metro Station



WATER QUALITY

Most of the Sector Plan area drains east into the Rock Creek watershed (**Map 42**). The Plan area includes portions of three Rock Creek subwatersheds: Mill Creek, Crabbs Branch, and the Southlawn Tributary. Mill Creek and Crabbs Branch flow into Rock Creek north of (Route 28), making them Maryland State Use Class IV streams, suitable for use as “recreational trout waters,” meaning that trout may be stocked by the state for recreational fishing, but stocked populations cannot survive and reproduce. The Southlawn Tributary flows into Rock Creek south of Route 28, making it a Maryland State Use Class I stream, suitable for “water contact recreation and protection of aquatic life.”

The most recent results of the County’s biological stream monitoring program have rated the stream water quality of Mill Creek and the Southlawn Tributary as “fair,” based on the presence or absence of indicator species of fish and aquatic macroinvertebrates. Stream monitoring indicated that the water quality in the Crabbs Branch Tributary is “poor.”

A small portion of the Plan area near the intersection of Shady Grove Road and MD 355 drains southward into the Upper Watts Branch watershed, which is a Maryland State Use Class I-P stream. The “P” designation indicates that the Watts Branch feeds into the potable water supply for the region. The most recent biological stream monitoring results place the Upper Watts Branch into the “good” water quality category.

Small portions of the western Plan area boundary drain to the upper Muddy Branch watershed. It is also a Maryland State Use Class I-P stream. The streams in this watershed are classified as having “fair” water quality based on biological monitoring.

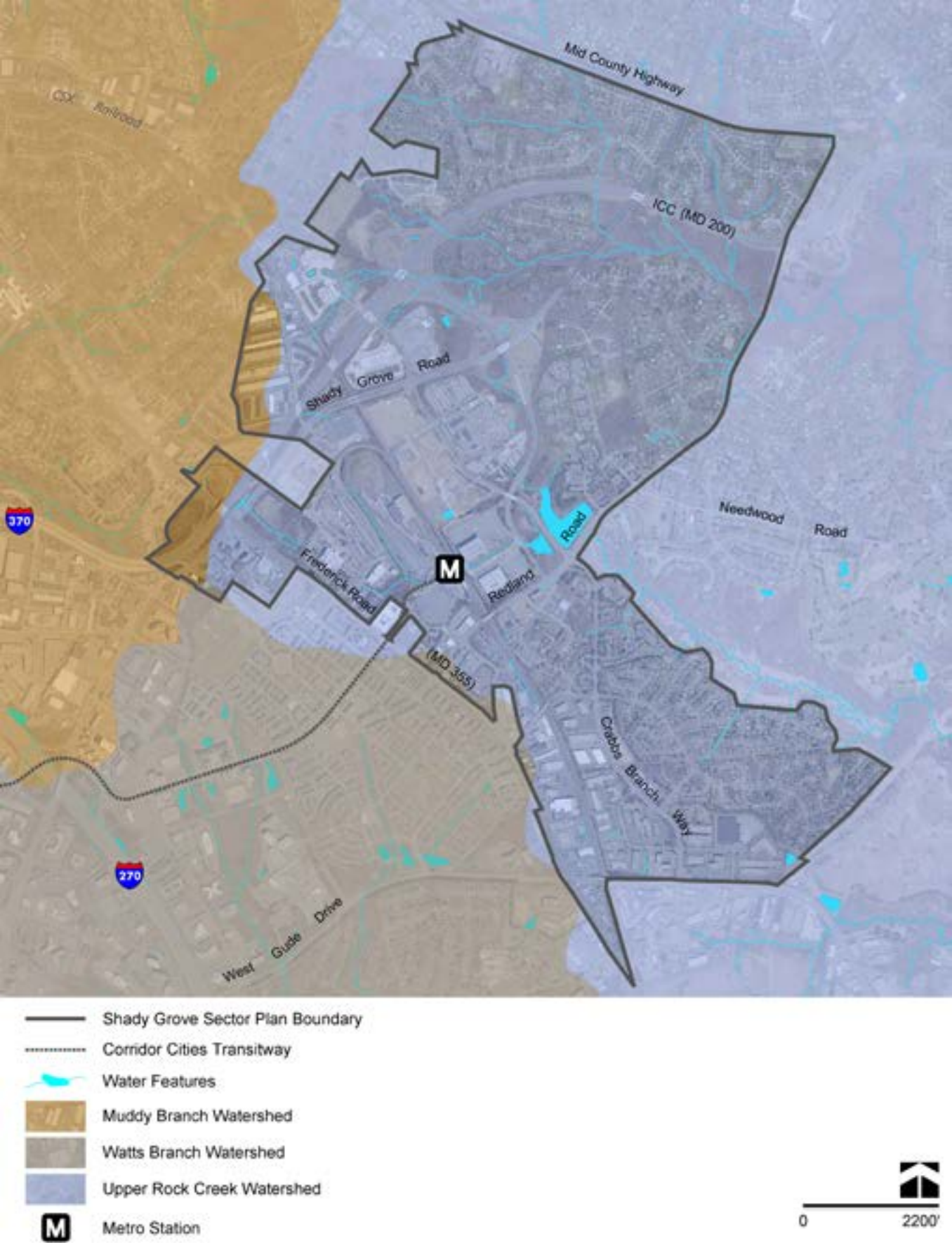
Water quality in developed areas is degraded by increases in impervious surface area and the loss of protective forest cover. Water quality is also diminished by runoff carrying pollutants, including sediment, hydrocarbons, fertilizers, waste from animals, and sewage leaks.

Water quality can be improved by minimizing impervious surfaces in developments, preserving and increasing forest and tree canopy cover, and treating stormwater runoff in stormwater management facilities that filter out pollutants and reduce erosive stream flows.

Recommendations:

- 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.

Map 42:
Existing Subwatersheds



GREENHOUSE GAS MODELING

Since the adoption of the 2006 Sector Plan, additional requirements for master plans and sector plans have been added through the passage of several County requirements, including estimating the greenhouse gas (GHG) emissions from the projected development and to include recommendations to reduce GHG emissions. Consideration of GHG emissions is critical to enabling the County to fulfill its commitment to reduce carbon emissions by 80 percent over 2005 levels by the year 2027, and to reduce emissions to zero by 2035 (per Montgomery County Council Resolution No. 18-974, Emergency Climate Mobilization).

Chapter 33A of the Montgomery County Code governing planning procedures requires the Planning Board to estimate the carbon footprint of areas being master planned, and to make recommendations for carbon emissions reductions. Carbon footprint is assessed by estimating GHG emissions from construction and operation of the projected development (Montgomery County Code Chapter 33A-14).

Our current greenhouse gas modeling effort uses a version of the spreadsheet model developed by King County, Washington. The spreadsheet model considers embodied energy emissions, building energy emissions, and transportation emissions in projecting total emissions for an area. The model documentation defines embodied emissions as “emissions that are created through the extraction, processing, transportation, construction and disposal of building materials as well as emissions created through landscape disturbance (by both soil disturbance and changes in above ground biomass). Building energy emissions are created in the regular operation of a building, including lighting, heating, cooling, and ventilation, operation of computers and appliances. Transportation emissions are released by the operation of cars, trucks, buses and motorcycles. Results are given for the entire life of the development from construction to demolition and are given in Metric Tons of Carbon Dioxide Equivalents (MTCO2e). These results assume a “business as usual” approach to development.

Montgomery County’s master and sector plans have often made recommendations for improvements in forest and tree cover and minimization of impervious surfaces to protect and improve water and air quality. The growing concerns over climate change also benefit by increasing forests and tree cover that absorb and sequester carbon, and by minimizing impervious surfaces to reduce damage from flooding caused by more frequent and intense rainfalls. This Sector Plan recommends the following measures to mitigate climate change at a local level:

- 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:
 - o Use native vegetation in landscaping and tree planting to sequester carbon and reduce urban heat island.
 - o Include on-site renewable energy generation.
 - o Orient new buildings to support the use of passive solar and renewable energy.
 - o Include building design features that keep roofs cool – either green roofs or cool roofs.
 - o Encourage improvements and facilities to get people out of cars (see Air Quality).
 - o Promote site and building design for energy conservation and LEED certification or a comparable rating system.
 - o Over parking areas where trees cannot easily be planted and maintained (ex. rooftop garage parking), consider shading features that include solar panels.

AIR QUALITY AND CARBON EMISSIONS

The causes of degraded air quality and carbon emissions are closely linked, and recommendations to improve air quality and to reduce carbon emissions overlap. Burning fossil fuels to power vehicles, homes, and businesses releases fine airborne particulates that exacerbate respiratory illnesses and contribute to cardiovascular disease and mortality. Fossil fuel combustion also emits the precursors to ground-level ozone, which is created in sunlight and catalyzed by higher air temperatures. The Washington Metropolitan Statistical Area, including Montgomery County, has been designated a marginal non-attainment area for failure to achieve federal standards for ozone pollution. Carbon emissions implicated in climate change are also released when fossil fuels are burned.

Improving urban air quality and reducing carbon emissions involves reducing vehicle miles traveled and building energy consumption, increasing clean energy generation, sequestering carbon, reducing urban heat island effect, and filtering pollutants from the air.

The compact, mixed-use development recommended in this Plan, and the proximity of the Metro station will contribute to reducing per-capita carbon emissions and improving air quality. Enhancing the pedestrian and bicycling infrastructure also contributes significantly to improving air quality and climate protection. High-quality, connected bikeways and pedestrian environments give

people alternatives to traveling everywhere by automobile, reducing vehicle miles traveled. These facilities help reduce air pollution, energy consumption, and carbon emissions, as well as providing opportunities for exercise.

Preserving forests and increasing tree canopy also filters pollutants from the air and sequesters carbon emissions, as well as reducing energy use by ameliorating the urban heat island effect.

Recommendations

- Include building design features that keep roofs cool – either green roofs or cool roofs.
- Encourage improvements and facilities to make walking and biking to the Metro station a pleasant and inviting experience. Create human-scale block sizes, through-block connections, paths and sidewalks, bike networks, and bike-share stations.
- Increase forest and tree cover.

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 exercise, recreation and mental well-being: parks and open spaces, trails, sidewalks, and bicycle networks.
- Locate appropriate land uses near sources of noise generation.
- Provide access to health care facilities.
- Provide opportunities to buy or grow fresh produce/ healthy food choices: provide opportunities for community gardens; provide spaces for farmers' markets.
- Promote an environment that minimizes light pollution.

NOISE

This Sector Plan area has several sources of existing infrastructure, including roads such as Shady Grove Road, I-370, and the Intercounty Connector (MD 200), and industrial uses, such as the WMATA railyards, that contribute to generating intrusive levels of noise to different segments of the Plan area. The 2006 Sector Plan also identified noise as a significant issue that impacts the quality of life for residents.

Noise walls have been installed along both sides of Shady Grove Road, between Briardale Road and the Metro Access

Road ramps, which is adjacent to the Redland Station and Parkside Estates neighborhoods. Additional noise walls are recommended east of Briardale Road if they are consistent with County's noise standards. The Shady Grove Station, Westside development has installed noise walls adjacent to the CSX and Metro rail tracks and the overall design has included different architectural measures to minimize noise impacts on residential properties.

This Plan recommends providing noise mitigation measures for new development in the Metro Neighborhoods and The Grove shopping center. Mitigation measures may include parking garages adjacent to the CSX rail tracks, where feasible, as well as site design and construction techniques and materials. The County's Noise Control Law and the Planning Board's Guidelines for the Consideration of Transportation Impacts in Land Use Planning and Development will also be utilized during the development review process for new development.

This Sector Plan recommends retaining office, light industrial and automotive uses along the CSX rail tracks, primarily south of Indianola Drive, which is more compatible with noise sources. Additional noise mitigation may be appropriate for residential areas along Shady Grove Road and Mid-County Highway, if it is consistent with the County's noise standards.



Existing Noise Wall along Shady Grove Road

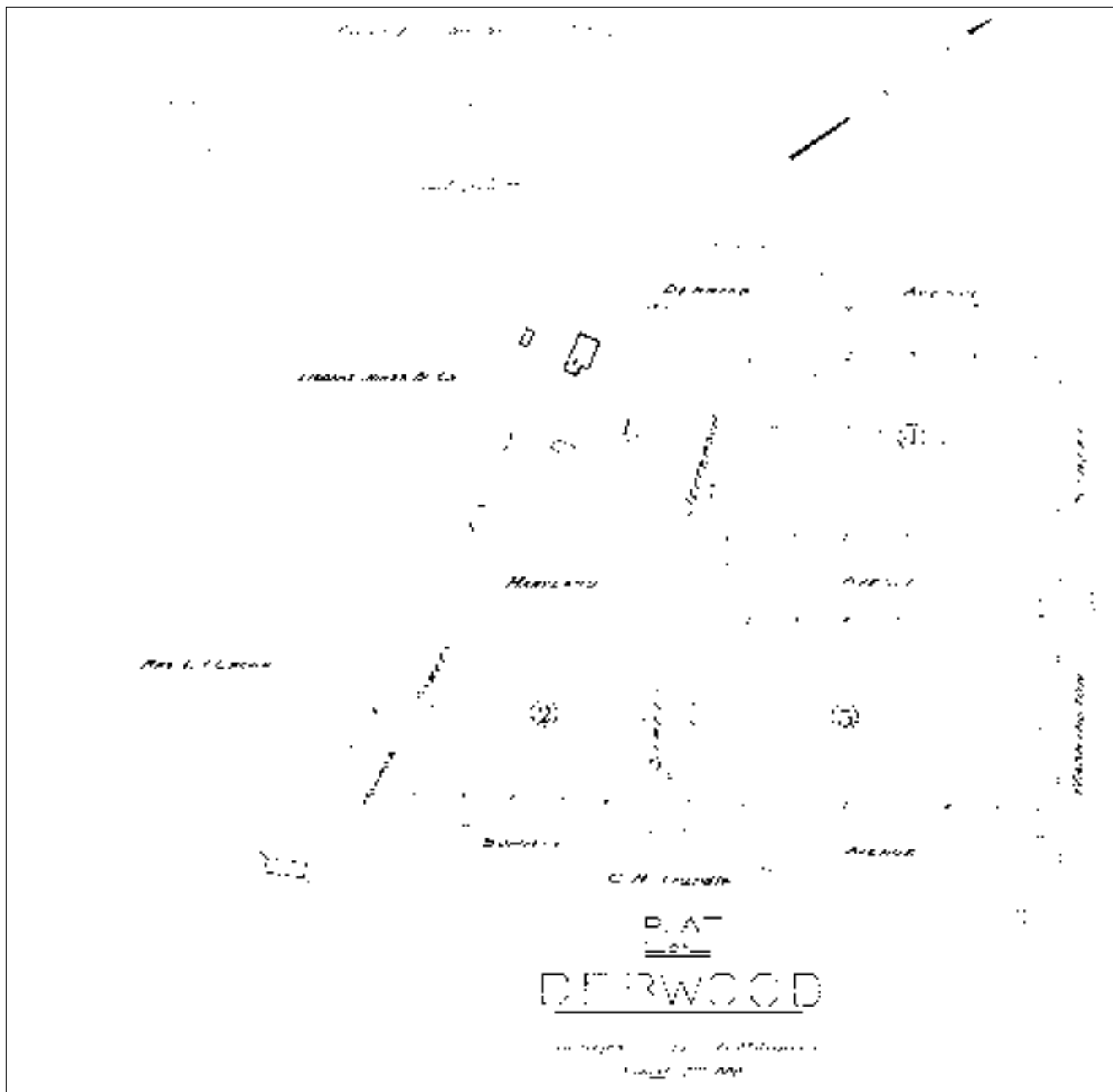


8

Historic Resources



Map 43:
Historic Record Plat for Old Derwood



In 1723, Ralph Crabb, a local merchant, farmer, and public official, received a patent for a 470-acre parcel referred to as “Deer Park” that included present-day Derwood. In the mid-19th century, Derwood consisted of three dwellings and a blacksmith shop at the intersection of two roads near the Crabbs Branch Tributary.

The Metropolitan Branch of the Baltimore & Ohio (B&O) railroad opened on May 25, 1873. It contributed to the creation of new residential communities and summer resorts in Montgomery County, stimulated the local economy by providing farmers of perishable goods access to larger markets, and encouraged the establishment of

commercial industries such as mills on the line. Railroad service to Derwood started in 1875, and a post office opened in 1883. The train station led to the opening of the Derwood subdivision in 1889 and the area developed into a small manufacturing town with a creamery, cannery, steam flour mill, a school and other businesses (**Map 43**).

By the 1950s, ‘Old’ Derwood consisted of approximately 35 buildings. A fire in 1954 destroyed the Derwood Mill and Station, and neither the mill nor the station were rebuilt. In 1966, the Post Office vacated the Derwood Store and relocated to a shopping center at the intersection of Redland and Muncaster Mill roads.

Background

Montgomery County's historic resources are guided by the Locational Atlas and Index of Historic Sites, the Master Plan for Historic Preservation and the Historic Preservation Ordinance (Chapter 24A of the Montgomery County Code).

Established in 1976, the Locational Atlas and Index of Historic Sites identifies resources that are potentially historically significant. Resources listed on the Locational Atlas are protected from demolition or substantial alteration under Chapter 24A of the Montgomery County Code. This designation is meant to be temporary until analysis for listing in the Master Plan for Historic Preservation can be completed. The Master Plan for Historic Preservation includes all officially designated historic sites and districts. These sites or districts have met at least one criterion for historical or architectural significance and merit protection under the Historic Preservation Ordinance, Chapter 24A.

In 1976, the Planning Board listed the Derwood Historic District, comprising most of the original 1889 subdivision, in the Locational Atlas and Index of Historic Sites. The Historic Preservation Commission (HPC) in 1984 evaluated the historic district and recommended its designation to the Master Plan for Historic Preservation since the area retained historical and architectural significance as a turn-of-the-century railroad community. The County Council in 1990, however, determined that the area did not merit designation to the Master Plan for Historic Preservation, and removed the district from the Locational Atlas and Index of Historic Sites. The Crabb Family Cemetery (22/033-001A), located at the northeastern intersection of Derwood Road and Indianola Drive, was added to the Master Plan for Historic Preservation.

Before the approval of the 2006 Sector Plan, residents in the Old Derwood community sought to reinforce the community's history and residential character by requesting the historic reconsideration for several properties, including the Derwood Store and Post Office. The Planning Board, in 2004, listed this property to the Locational Atlas and Index of Historic Sites.

The 2006 Sector Plan supported the evaluation of the Derwood Store and Post Office to the Master Plan for Historic Preservation and the evaluation of four individual properties to the Locational Atlas and Index of Historic Sites, including the Derwood Baptist Church; Derwood School, Hall's Store; and the Hoskinson-Schwartz House. Hall's Store was demolished in 2018.



Top: Mount Pleasant on Shady Grove Road, circa 1933

Bottom: Shady Grove Road and Route 355 in the 1960s



Left: Crabb Family Cemetery; Right: Derwood Store and Post Office

MASTER PLAN FOR 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 (**Map 44**). Located at the northeastern intersection of Derwood Road and Indianola Drive, the Crabb cemetery is the resting place for four generations of the Crabb family between 1800 and 1925. General Jeremiah Crabb (c.1760-1800) served as a lieutenant in the Revolutionary War and Montgomery County's first elected member of Congress. The 2006 Sector Plan incorporated his name as a historical inspiration for the park-school site recommended on Crabbs Branch Way.

Derwood Store and Post Office

On May 7, 2019, the HPC recommended the designation of the 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. The 2006 Sector Plan supported rezoning the Derwood Store property to the PD-22 Zone in order to facilitate adaptive reuse and retention of the building for up to six residential units.

The HPC's recommendation is consistent with the 2006 Sector Plan that supported the property's listing to the Master Plan for Historic Preservation since it meets four of the nine designation criteria as described in Section 24A-3 of the Montgomery County Ordinance.

The Derwood Store and Post Office has been vacant for several years. The property owner intends to rehabilitate the existing building, add some additional residential units, and to utilize local historic preservation tax credits. This Sector Plan amendment supports the designation of this building to the Master Plan for Historic Preservation.

Locational Atlas and Index of Historic Sites

The 2006 Sector Plan recommended the evaluation of four properties for the Locational Atlas and Index of Historic Sites, including:

- Derwood Baptist Church, 15812 Esquire Court;
- Derwood School, 15805 Paramount Drive;
- Hall's Store, 15833 Derwood Road (demolished in 2018); and
- Hoskinson-Schwartz House, 15919 Chieftain Avenue.

This Sector Plan recommends the removal of these individual resources for evaluation for listing in the Locational Atlas and Index of Historic Sites. In 1991, these resources were initially reviewed and rejected by the County Council. These resources will not be re-examined as part of the Historic Preservation Office's work program absent a request by the property owner to designate the property in the Master Plan for Historic Preservation.

**Map 44:
Existing Historic Resources**



Historic Resources Recommendations

This Plan recommends:

- List the Derwood Store and Post Office (22/33-3) in the Master Plan for Historic Preservation, and its associated environmental setting.
- Rezone the Derwood Store and Post Office to an appropriate zoning category that would allow for its adaptive reuse with residential units. Permit development standards flexibility, including parking waivers and setback requirements adjustments to restore the structure.
- Remove the 2006 Sector Plan recommendation to evaluate the following properties in Old Derwood for inclusion in the Locational Atlas and Index of Historic Sites:
 - o Derwood Baptist Church, 15812 Esquire Court;
 - o Derwood School, 15805 Paramount Drive;
 - o Hall's Store, 15833 Derwood Road; and
 - o Hoskinson-Schwartz House, 15919 Chieftain Avenue.



9

Community Facilities

This Sector Plan retains and updates most of the community facilities recommended in the 2006 Sector Plan (**Map 45**). These facilities, such as a recreation center and new parks, are essential to further achieve the community envisioned by this Sector Plan. The implementation of some of these facilities could be achieved through public benefits in the CR and CRT Zones.

FIRE, RESCUE AND EMERGENCY MEDICAL SERVICES

This Sector Plan area is primarily served by Fire and Rescue Station 8 at 801 Russell Avenue, which is in the City of Gaithersburg to the north, and Station 28 at 7272 Muncaster Mill Road, which is northeast to the Plan area. Additional resources from other fire-rescue stations respond to the Plan area as needed.

The Montgomery County Fire and Rescue Service (MCFRS) has 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. MCFRS continues to support this recommendation that a future fire station and associated services are needed for the Shady Grove area. The proposed location would provide access to the Plan area, as well as to the surrounding Rockville and Gaithersburg communities via Frederick Road, Shady Grove Road, and MD 200.

PUBLIC SAFETY

The Montgomery County Police Department's 1st District, located at 100 Edison Park Drive in Gaithersburg, and the 6th District, located at 45 West Watkins Road in Montgomery Village, provide public safety services to the Plan area. 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.

LIBRARIES

The 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 a library at Shady Grove Station, Westside, since it will provide an important public facility to the Plan area.

RECREATION CENTER

The 2006 Shady Grove Sector Plan indicated that a community recreation center was possible in the future to serve the community. However, the Sector Plan noted that based on prior Department of Recreation standards, "there does not appear to be a need for a full-size recreation center" (p.101).

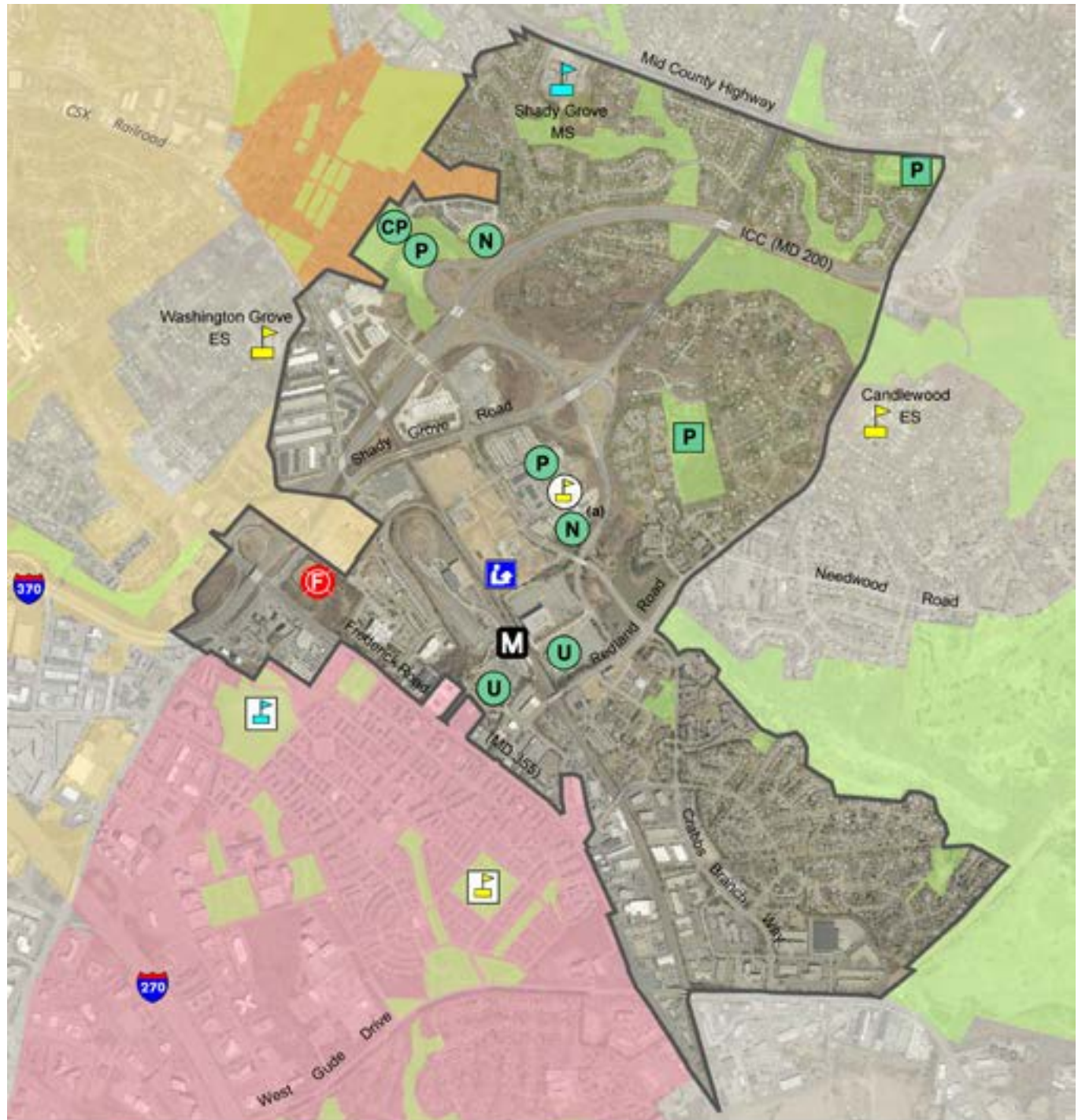
The Department of Recreation's Facility Development Plan 2010-2030 (2011) has determined that a community recreation center, with potential aquatic features, is appropriate for the Shady Grove area based on current and projected population densities. This Sector Plan recommends that a recreation center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

- Locate a future recreation center within the Metro Neighborhoods as the preferred location. If all the CSP public facilities relocate, consider Jeremiah Park as an alternative location, if an elementary school is not located at this property.
- Explore co-location for the recreation center, along with other public facilities, to minimize public expenditures and maximize efficiencies.

SENIOR SERVICES AND CHILD DAYCARE

The Sector Plan area has existing child daycare services, including at The Grove shopping center and the Metro station. There are no specific senior services in the Plan area. As the area builds out with more residential development, additional child daycare and senior services would be necessary to support an intergenerational community. 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.

Map 45:
Existing and Proposed Community Facilities



Shady Grove Sector Plan Boundary	Existing Facilities	Proposed Facilities	Proposed Facilities In Rockville
City of Gaithersburg	Elementary School	Elementary School	Elementary School
City of Rockville	Middle School	Local Park	Middle School
Town of Washington Grove	Local Park	Urban Park	
Parkland	Neighborhood Park	Library	
Metro Station	Conservation Park	Fire Station	
		Neighborhood Park (a = Alternative)	

PUBLIC SCHOOLS

Public schools provide a foundation for a residential community and contribute to a community's civic identity and engagement. Shady Grove Middle School is within the Sector Plan area, while Washington Grove Elementary School is located west of Oakmont Avenue and Candlewood Elementary School is south of Redland Road. Mill Creek Towne Elementary School is located north of Mid-County Highway.

Magruder, Gaithersburg and Richard Montgomery are the three high school clusters that serve the Sector Plan area (Map 46). 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, all three clusters have experienced student enrollment increases. Established residential neighborhoods, including Mill Creek and Parkside Estates, are in the Magruder cluster, while Derwood Station, which is east of the Crabbs Branch Office Park is in the Richard Montgomery cluster.

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 as well as 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.

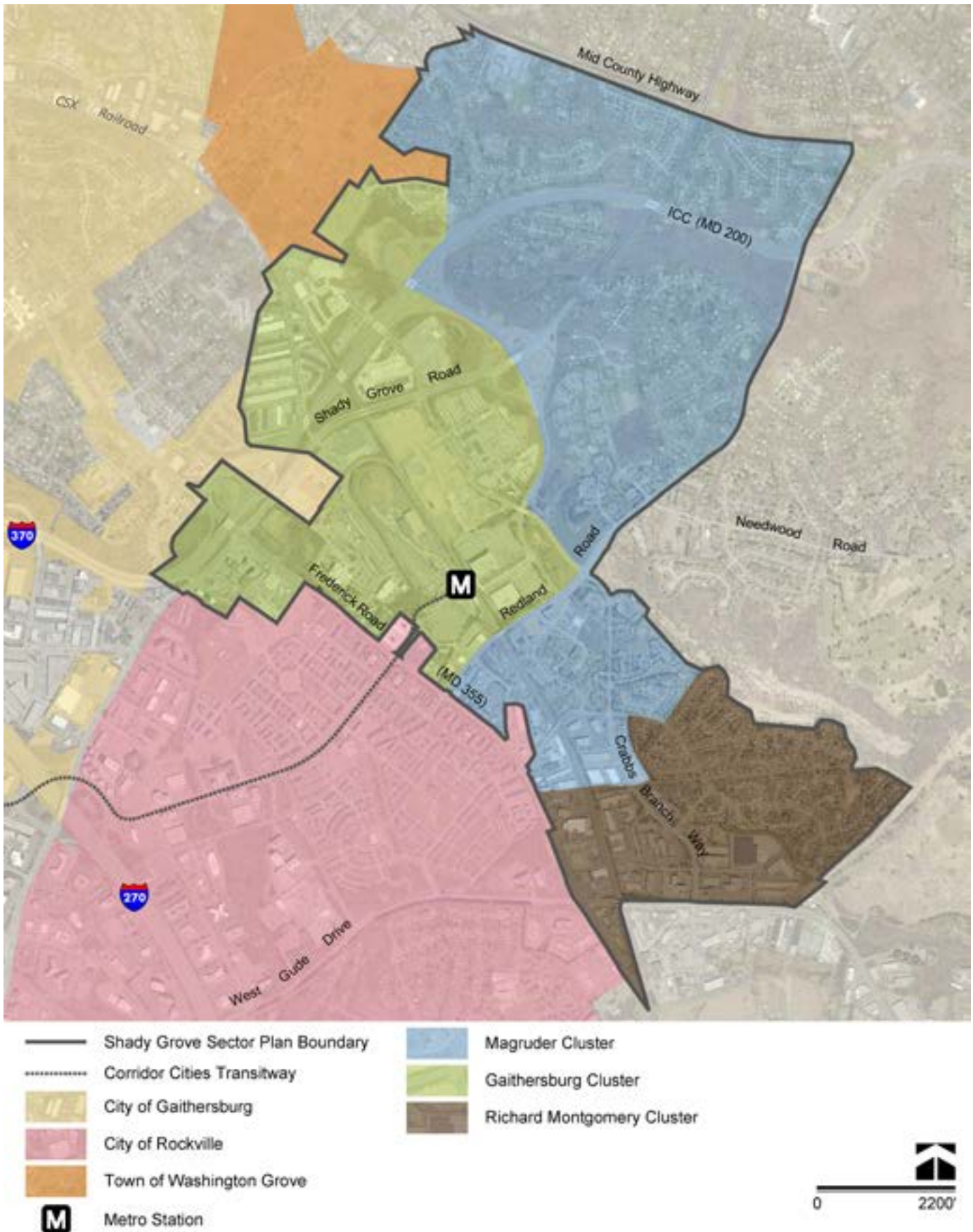
There are limited opportunities in the Plan area to accommodate a typical or modified size for an elementary school. The build-out of the Plan area will take decades to achieve, and some properties may not redevelop as envisioned by the Sector Plan. For example, only approximately ten percent of the 2006 Sector Plan recommended residential development has been built. The type and amount of new residential development will frame how many students are generated from this Plan area. Based on the proposed zoning recommendations, most of the new development will be mid-rise multifamily residential or residential townhouses, while a limited amount will be high-rise residential.

This Sector Plan recommends the following alternatives to address school needs for this 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.



Map 46:
Existing High School Clusters



Gaithersburg Cluster

Since 2007, the Gaithersburg cluster has experienced significant growth. It is expected to experience additional student enrollment from new mixed-use and residential developments, including Shady Grove Station, Westside, and Downtown Crown in the City of Gaithersburg. Existing elementary schools in the cluster, including Gaithersburg, Rosemont, Strawberry Knoll, Summit Hall, and Washington Grove exceed their program enrollment capacities. The Board of Education has conducted a feasibility study to construct additions and modernizations for several elementary schools, but has determined that a new school site is the best solution to address enrollment deficits. A new elementary school will be built at Kelley Park in the City of Gaithersburg by 2022.

This Sector Plan amendment recommends the following options to address elementary school needs in the cluster:

- Construct a new elementary school on the preferred site, Jeremiah Park, in this Plan area.
- If a site is not provided in the Plan area, utilize one of the planned sites in King Farm.
- In addition to considering the construction of a new elementary school to meet future needs, options to reassign students to elementary schools adjacent to the Gaithersburg cluster, including Richard Montgomery and Magruder clusters with available capacity, or potential expansions, if possible, could be considered.

Middle Schools

Gaithersburg and Forest Oak are the middle schools for the Gaithersburg cluster. Long-range projections indicate that both middle schools will have enrollment-available capacities in the future. The following alternatives are recommended to accommodate additional middle school students in this cluster:

- Determine if the capacity of existing middle schools can be increased.
- Both middle schools in the adjacent Magruder cluster have long-term available capacities that could be utilized, if needed.
- If increasing the capacities of existing middle schools is not feasible or is insufficient to address future enrollment growth, consider utilizing the planned middle school site at King Farm.

High Schools

Gaithersburg High School is projected to exceed its enrollment capacity by more than 300 students in the long term. MCPS has begun to plan for the new high school on the Crown Farm property to address enrollment growth in the cluster and Mid-County area. The following is recommended to accommodate additional high school students from this Plan:

- Construct a new high school at the Crown Farm property.

Magruder Cluster

Mill Creek, Founders Mill, Park Overlook, Old Derwood residential neighborhoods, and a portion of Derwood Station, are within the Magruder cluster. Shady Grove Middle School, which is in the Plan area, is also within this cluster. New residential development from the Metro South and Old Derwood neighborhoods, as well as residential turnover from Redland Station, Parkside Estates and Park Overlook neighborhoods will contribute new students to this cluster.

Candlewood Elementary School, which is the elementary school service area for the Metro South and Old Derwood neighborhoods, has available enrollment capacity. Enrollment forecasts indicate that Sequoyah and Flower Hill elementary schools also have available enrollment capacities, while Judith Resnik, Mill Creek Towne and Cashell elementary schools have current and future enrollment deficits. Enrollment forecasts indicate that Redland and Shady Grove middle schools, as well as Magruder High School, all have long-range student enrollment capacities. The following alternatives are recommended to accommodate additional elementary, middle and high school students from the Plan area:

- Determine if the capacity of existing elementary schools can be increased. Cashell Elementary, Mill Creek Towne Elementary and Judith Resnik exceed their enrollment capacities, while other elementary schools are within their enrollment capacities. MCPS has programmed a classroom addition at Judith Resnik.
- Redland Middle School and Shady Grove Middle School are projected to continue to have enrollment capacities into the next decade.
- Magruder High School is also forecast to have student enrollment capacities into the next decade. MCPS has a major capital project that will address various building systems and programmatic needs.

Richard Montgomery Cluster

The Derwood Station neighborhood, east of the Crabbs Branch Office Park, is the only portion of the Plan area, which is in the Richard Montgomery cluster. This cluster covers a significant part of the City of Rockville, including most of the City's Rockville Pike corridor. Student enrollment at elementary schools in the cluster has increased, which led MCPS to open Bayard Rustin Elementary School in 2018. Enrollment forecast indicate the middle school, Julius West Middle, has sufficient capacity for future enrollment growth. Richard Montgomery High School is currently over its enrollment capacities, and it is projected to remain over capacity for the rest of the decade. The new high school at Crown Farm will provide a new high school for this cluster. Based on the current cluster boundary, no new residential development from this Sector Plan will impact this cluster.





10

Mobility

The Shady Grove Metrorail Station serves as a regional transit node attracting more than 30,000 commuters per day. These commuters use the Metrorail and various Ride On, Maryland Transit Administration (MTA) and Metro buses. The 2006 Sector Plan required the formation of a Transportation Management District (TMD), which was created in 2006. The prior Sector Plan also proposed a new street network for key properties surrounding the Metro Station, three interchanges in the Plan area, and pedestrian and bicycle improvements.

This Sector Plan Amendment supports new policy initiatives, such as Vision Zero, that strive to eliminate severe and fatal traffic injuries on roadways by 2030. This Plan also supports future bus rapid transit (BRT) along Frederick Road (MD 355) and the Corridor Cities Transitway (CCT), as well as new bikeways that support the intent of the 2018 Bicycle Master Plan. New transitway 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 is the terminus for the Washington Metropolitan Area Transit Authority's (WMATA) western segment of the Metrorail Redline, and serves several Ride On and 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 micromobility options are important recommendations for this Sector Plan Amendment, as well as the prior 2006 Sector Plan. The planned CCT and MD 355 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.

Some of the key transit recommendations are:

- 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 east side of the station, which creates more flexibility for redevelopment opportunities on the west side of the station.
- Consistent with the recommendations of the 2006 Sector Plan, explore the feasibility of an infill Metro Station in proximity to the Montgomery College Rockville campus.

Maryland Area Regional Commuter Train Service (Marc Rail)

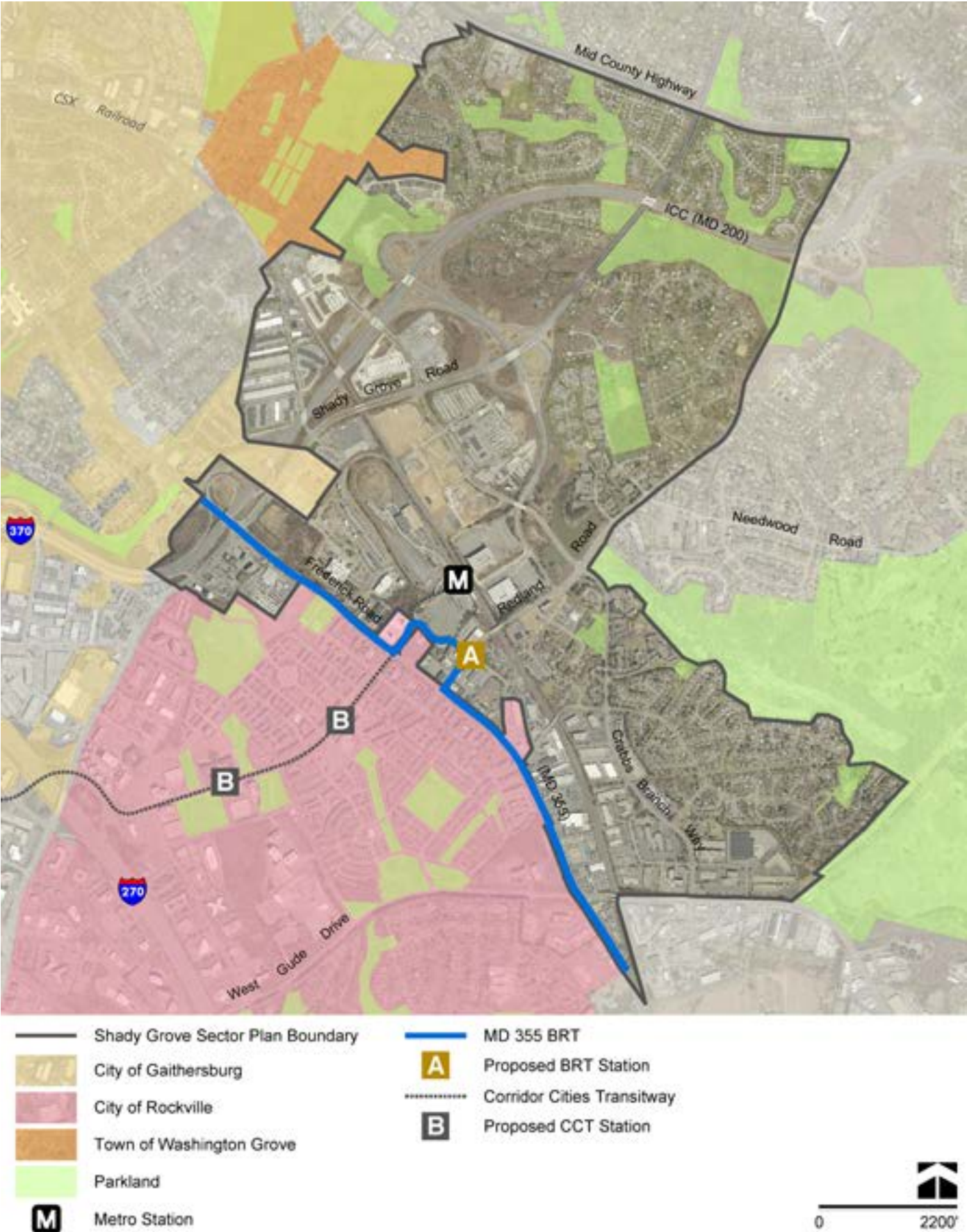
MARC's Brunswick Line runs through the Sector Plan area, providing regional rail connections between Washington, D.C. and West Virginia. The nearest MARC station is located just north of the Plan area in the Town of Washington Grove. The 2006 Sector Plan recommended a MARC station at the Metro station since it would enhance multimodal possibilities for the transit station. In the long-term, this Sector Plan also reaffirms the integration of a MARC station at the Metro station, along with other planned transit options, to promote a multimodal center.

This Plan recommends:

- Support future MARC service at the Shady Grove Metro Station that contributes to a multimodal environment.



Map 47:
Proposed MD 355 BRT and Corridor Cities Transitway



Bus Rapid Transitways

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 (**Map 47**). The 2013 Countywide Transit Corridors Functional Master Plan identified Frederick Road (MD 355) as Corridor 3 in the proposed Countywide Bus Rapid Transit (BRT) network. The CCT is a planned 15-mile BRT route between the Shady Grove Metro Station and Redgrave Place / Clarksburg Road in Clarksburg.

Corridor Cities Transitway

The CCT, as currently planned, 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/ 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) indicated that additional funding will not be provided for the design or construction of the CCT following its support through the NEPA (National Environmental Policy Act) process.

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. Serving communities in the Mid-County area with transit, which may include considering alternative alignments for the CCT, will be further explored in the I-270 Corridor Transit Plan.

MD 355 BRT

The 2013 Countywide Transit Corridors Functional Master Plan recommended Frederick Road as a segment of the MD 355 BRT North Corridor. The Montgomery County Department of Transportation (MCDOT) is currently conducting an alternatives study for MD 355 BRT, which includes the Frederick Road corridor within the Sector Plan area (Segment 4). The proposed MD 355 BRT will enhance mobility options for existing and future residents, visitors, and employees along the MD 355 corridor. This Sector Plan also recognizes the importance of east-west

mobility, particularly for pedestrians accessing the Metro station. Existing signal timings result in average pedestrian delays between 61 and 71 seconds for east-west crossings. Future BRT or bus plans that enhance transit options along MD 355 should consider pedestrian delay because long wait periods often result in pedestrian non-compliance, creating unsafe situations for both pedestrians and motorists.

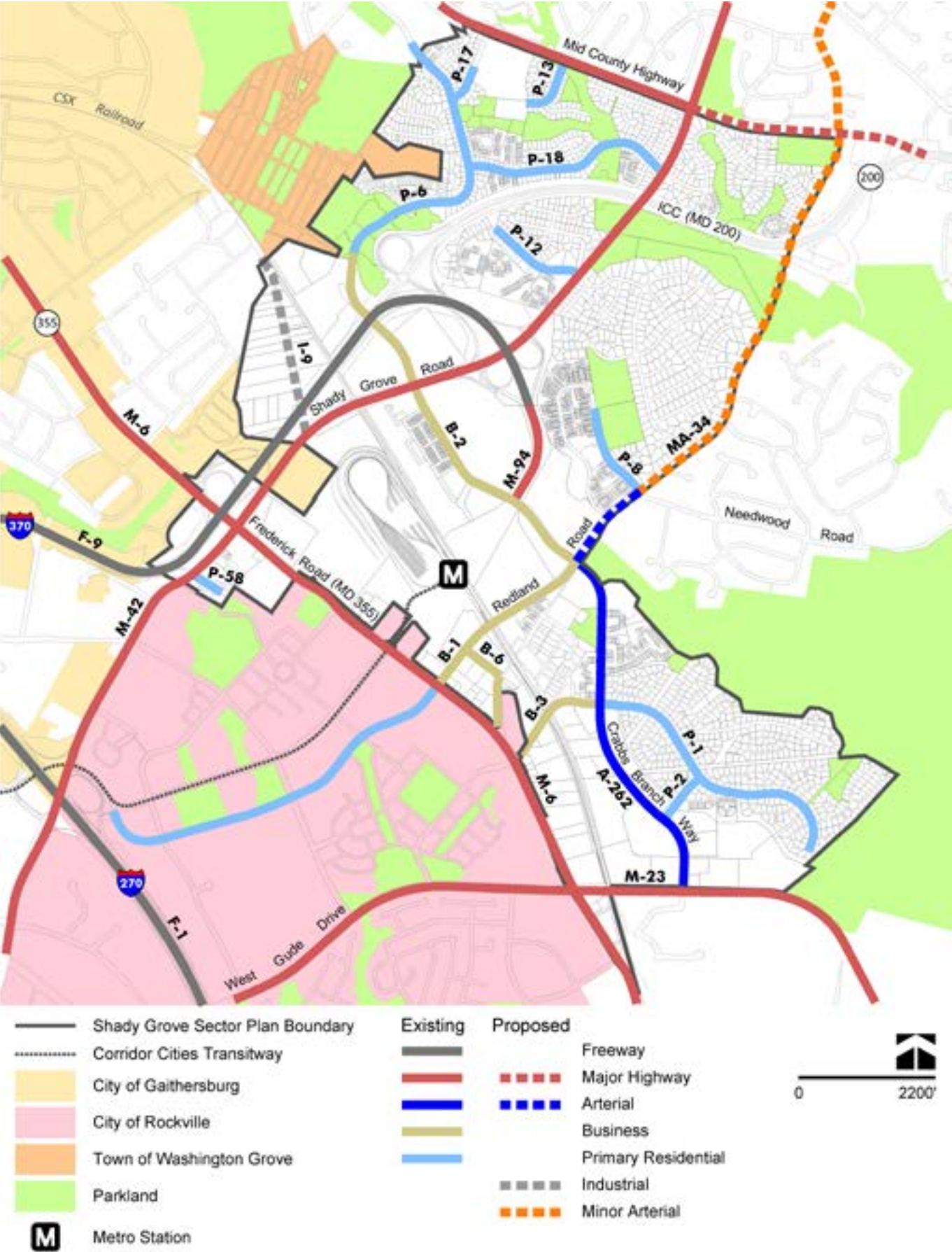
Several alternative alignments are under consideration, including a reversible median. This Sector Plan recommends:

- 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 the Shady Grove Metro Station or the closest extent possible based on operational needs.
- Minimize pedestrian delay (also called “holding area wait time”) at signalized locations on MD 355 where pedestrians cross transit facilities and prohibit two-stage crossings.
- Provide pedestrian refuge divisions within the plan area. If a dedicated BRT lane(s) is provided in a center roadway median, the BRT design should account for ADA compliant refuges at pedestrian crossings.

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 (**Map 48**). 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 roads 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 Sector Plan area, including Shady Grove Road, Frederick Road, Crabbs Branch Way and future streets.

Map 48:
Existing Street and Highway Network



Key Streets in the Sector Plan Area

Shady Grove Road

Shady Grove Road (M-42) is classified as a major highway that crosses the Plan area from residential neighborhoods in the east and 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 interchange, while the area between I-370/Metro Access Road interchange and Mid County Highway has a minimum right-of-way of 120 feet (Figure 6).

This roadway primarily has six travel lanes with wide intersections, such as Shady Grove Road and MD 355, that increase crossing distances for pedestrians and bicyclists. Shady Grove Road has an average daily traffic (ADT) of more than 50,000 vehicles with a posted speed limit of 40 miles per hour west of the I-370/Metro Access Road interchange, and 45 miles per hour east of the interchange. The area between I-370/Metro Access Road to Mid County Highway is identified in the Vision Zero High-Injury Network (HIN).

This Sector Plan recommends:

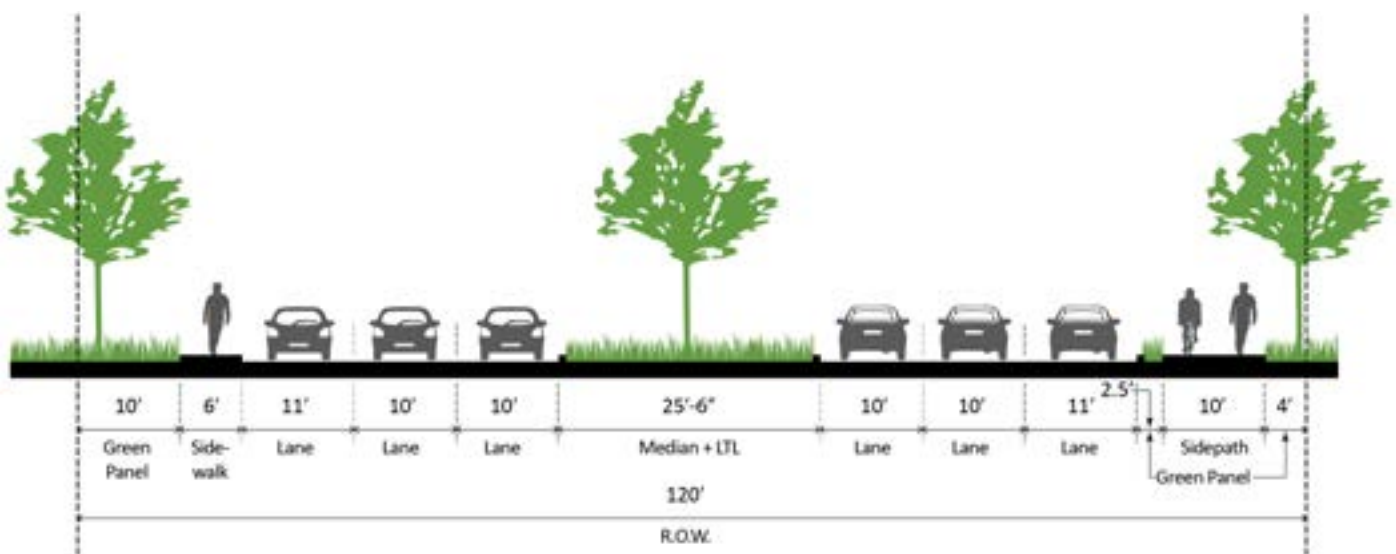
- Confirm the existing recommended 150-foot right-of-way between the western Plan area boundary to I-370/Metro Access Road and the minimum 120 feet between I-370 to Mid County Highway.
- Provide context sensitive design measures, such as 10-foot lane widths to support a desired target speed of 25 miles per hour within the Urban Road Code Area,

and 30 miles per hour (beyond Urban Road Code Area) to promote and implement Vision Zero principles that contribute to a safer roadway.

- Remove the channelized right turns at the Shady Grove Road & I-370/Metro Access Road interchange to improve bicycle and pedestrian crossings along the recommended facility on the southern side of the road and reduce potential vehicular conflicts on the northern side of the road.
- Restrict future widening at Shady Grove Road and MD 355. This recommendation excludes any widening or improvements necessary to support BRT, bicycle, and pedestrian needs.
- Consistent with Vision Zero principles, if future amendments to the County's Subdivision Staging Policy (SSP) recommend alternative or differing operational adequacy metrics than average intersection delay, remove the channelized right turns at Shady Grove Road and MD 355.
- As an urban area, lower target speeds on the roadway to create a consistent, safer speed across the corridor through engineering and enforcement.

Figure 6:
Illustrative Shady Grove Road

- 6-lane section between Brairdale Road and Mid-County Highway looking North
- Proposed Bikeway: Sidepath along east side



Crabbs Branch Way

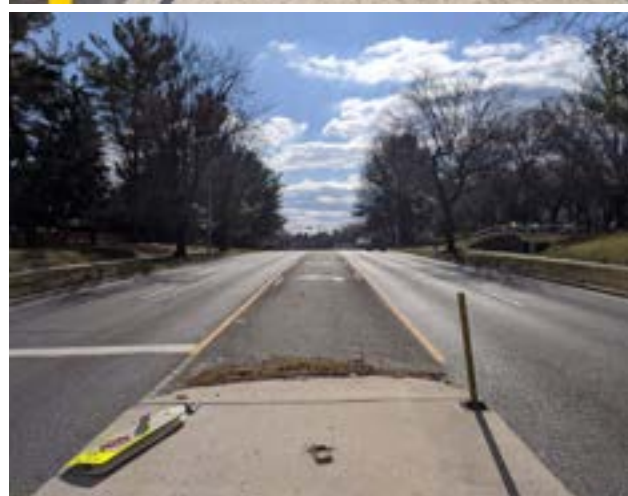
Crabbs Branch Way (B-2) parallels MD 355 within the Plan area between Gude Drive and the planned future connection to Amity Drive. This road is classified as a Business District Street with a minimum 100-foot right-of-way between Shady Grove Road and Redland Road, and a minimum 80-foot right-of-way between Shady Grove Road to approximately 1,000 feet north of I-370. The southern segment of Crabbs Branch Way between Redland Road and Gude Drive is classified as an 80-foot arterial. This Sector Plan confirms the existing rights-of-way and their associated minimum widths.

The 2006 Shady Grove Sector Plan recommended the extension of Crabbs Branch Way to Amity Drive, which is currently under facility planning by MCDOT. The Shady Grove Station development, between Shady Grove Road and the Metro Access Road, has been implemented with a landscaped median, on-street parking, and a sidepath.

The segment of Crabbs Branch Way between Redland Road and Indianola Drive is identified as a high-priority segment in the Vision Zero High-Injury Network (HIN). To improve this segment, this Sector Plan recommends modifying this segment of Crabbs Branch Way by converting the existing center turn lane into a vegetated landscape median. The implementation of this recommendation can be achieved since there are only five driveways along the 2,400 linear foot segment; the turning lane provides little benefit. The addition of an extended center median will slow traffic and provide an extended refuge for those who cross at unsignalized locations (**Figure 7**). Additionally, this Plan recommends the inclusion of a new sidepath on the eastern side of the road.



Existing Crabbs Branch Way

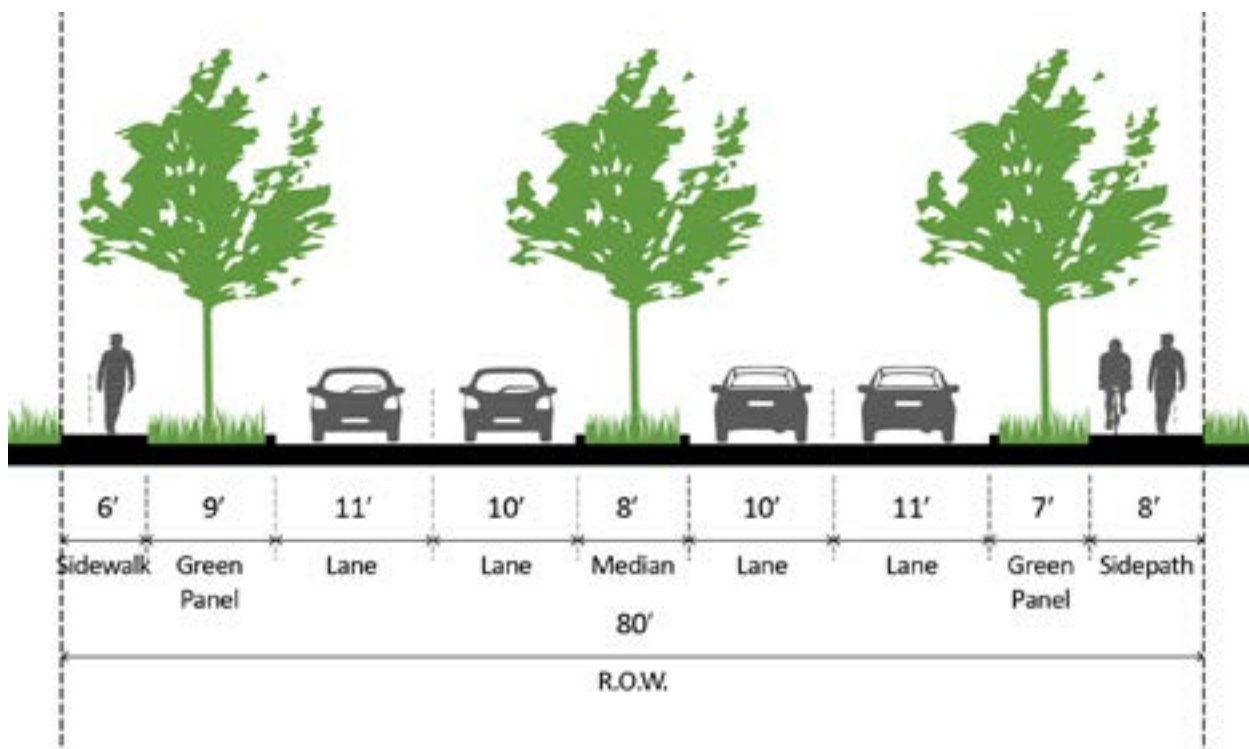


This Sector Plan recommends:

- Convert the existing center turn lane between Indianola Drive and Redland Road into a vegetated median to slow traffic. The median should extend into or through crosswalks at existing or future crosswalk locations.
- Explore opportunities for traffic calming on Crabbs Branch Way, such as the provision of a mini roundabout, to function as a gateway feature between Crabbs Branch Way Extended and Amity Drive Extended. Additionally, explore traffic calming speed boards and bumps to slow traffic entering the residential neighborhood along Amity Drive.

Figure 7:

Illustrative Crabbs Branch Way



Frederick Road

Frederick Road (MD 355) is a State arterial roadway that provides primary north-south travel throughout the County, linking Frederick County and Washington, D.C. The 2006 Shady Grove Sector Plan recommended creating an urban boulevard for a segment of Frederick Road (M-6) between Indianola Drive and Ridgemont Avenue. To accommodate BRT, the 2013 Countywide Transit Corridors Functional Master Plan recommended a minimum 123-foot right-of-way. Outside of the Metro Neighborhoods, the 2006 Sector Plan recommended a minimum 150-foot right-of-way. This Sector Plan Recommends retaining the 150-foot right-of-way section outside of the Metro Station Neighborhoods. Within the Metro Station Neighborhoods, this Sector Plan recommends either a 127-foot or 137-foot minimum right-of-way to accommodate peak-hour single lane and dual lane median running BRT options, respectively (**Figures 8 and 9**).

The eastern side of MD 355, between King Farm Boulevard and Indianola Drive, has numerous curb cuts that provide access to the existing commercial development. This Sector Plan, similar to the 2006 Sector Plan, also recommends minimizing site access from MD 355, especially between Redland Road and Paramount Avenue, to improve safety for all modes. The annexed Bainbridge and the former CarMax property, located at 15931 Frederick Road, limit the extension of a parallel street in the Metro West neighborhood; however, opportunities remain between Redland Road and Paramount Drive. This Sector Plan recommends that new development should assess the potential to provide additional roadway network. Reservations of space and dedications may be requested to implement future facilities. The potential parallel street, which could be realized as individual properties redevelop, could reduce conflict points for pedestrians and bicyclists and improve operations for the planned MD 355 BRT.

Consistent with Vision Zero principles, this Sector Plan recommends enlarged pedestrian refuges along MD 355 to provide areas for pedestrians to wait safely, while crossing the street. This vision would be consistent with the urban boulevard design of the 2006 Sector Plan.

This Sector Plan recommends:

- Adjust the minimum right-of-way width for the Metro Neighborhoods in the Plan area to be either 127-foot or 137-foot based on the pursued MD 355 BRT option. Retain the minimum of 150 feet for other portions of Frederick Road in the Plan area.
- Promote short block lengths and consolidate entrances along MD 355, especially in the Metro South neighborhood.
- Consistent with Vision Zero principles, if future amendments to the County's Subdivision Staging Policy (SSP) recommend alternative or differing operational adequacy metrics than average intersection delay, remove the channelized right turns at Shady Grove Road and MD 355, as well as Gude Drive and MD 355.

Figure 8:

Illustrative Frederick Road (MD 355)

- 6-lane section with reversible transitway between Redland Road and Paramount Drive looking North
- Proposed Bikeway: Separated Bike Lane along east side

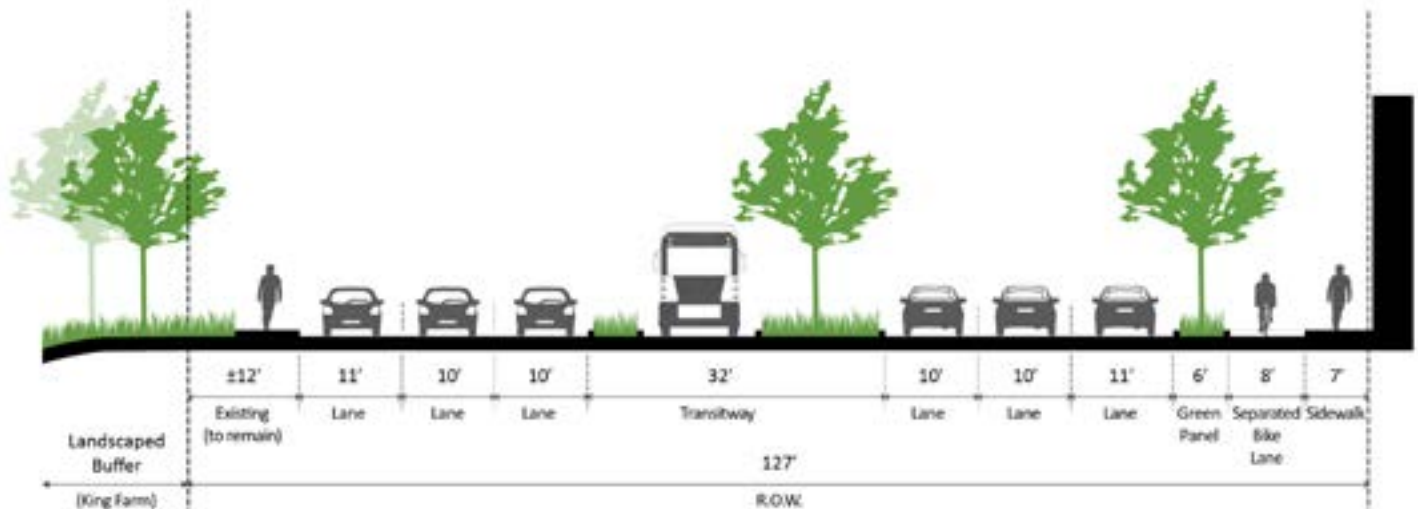
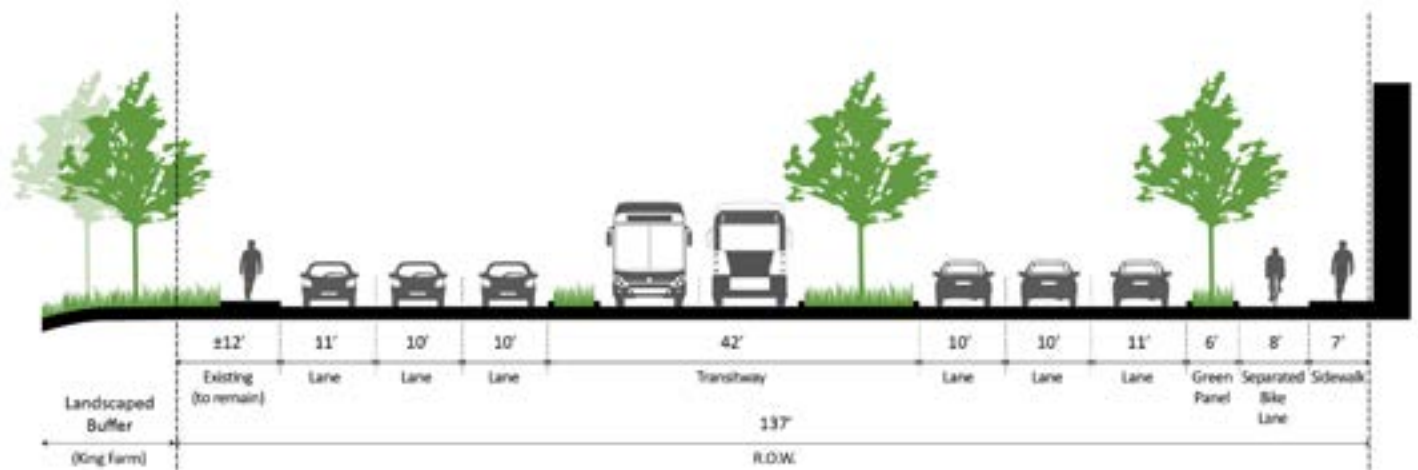


Figure 9:

Illustrative Frederick Road (MD 355)

- 6-lane section with two-way transitway between Redland Road and Paramount Drive looking North
- Proposed Bikeway: Separated Bike Lane along east side.



Redland Road

Redland Road provides east-west travel through the Sector Plan area from the City of Rockville to the Upper Rock Creek Master Plan area. This Sector Plan clarifies differences between the Master Plan of Highways and Transitways and the 2006 Sector Plan. This street is classified as a Business District Street (B-3) with a 100-foot minimum right-of-way between Crabbs Branch Way and MD 355 (**Figure 10**), and as a Major Arterial street (MA-34) between Crabbs Branch Way and Needwood Road with a minimum 70-foot right-of-way. The area between Needwood Road and northern end of the Plan area is classified as a Minor Arterial with a 70-foot minimum right-of-way.

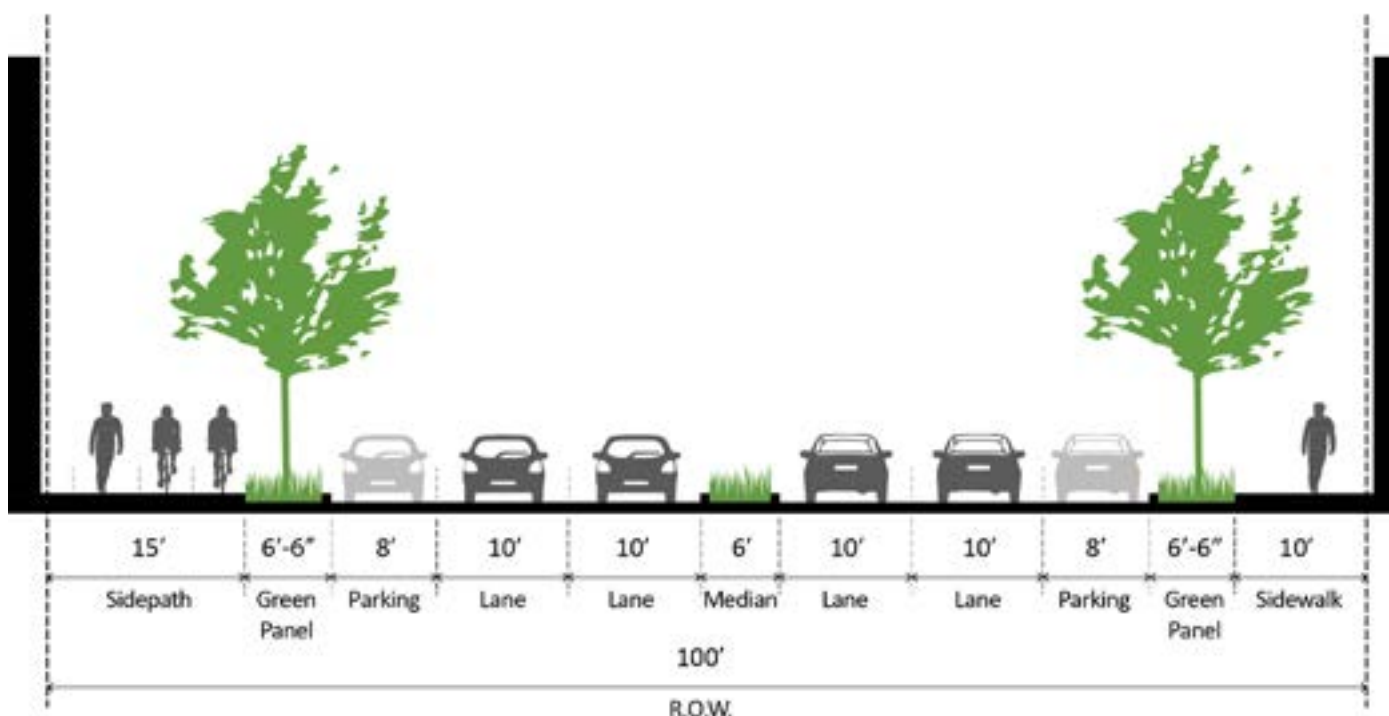
This Sector Plan recommends:

- Confirm the existing recommended minimum 100-foot Business District Street for the segment between MD 355 and Crabbs Branch Way; reclassify the area between Crabbs Branch Way and Needwood Road from a Primary Residential to a Major Arterial with a minimum 70-foot right-of-way; and reclassify the segment between Needwood Road to the northern Plan area from a Primary Residential to a Minor Arterial with a minimum 70-foot right-of-way.

Figure 10:

Illustrative Redland Road

- 4-lane section with parking between Frederick Rd. and the Metro tracks looking East
- Proposed Bikeway: Sidepath along north side



Mid County Highway

Mid County Highway (M-83) serves as the northern boundary of the Sector Plan. It is classified as a major highway (M-83) with a minimum 150-foot right-of-way. Most of the existing road within the Plan area does not have any sidewalks and it terminates at Shady Grove Road. The area between Shady Grove Road and Redland Road is undeveloped and a wooded publicly owned right-of-way.

Prior plans, including the 2006 Sector Plan and the 2004 Upper Rock Creek Master Plan illustrate this roadway extending to Redland Road and the Intercounty Connector (MD 200). The construction of MD 200 did not implement any access ramps to the extension of Mid County Highway.

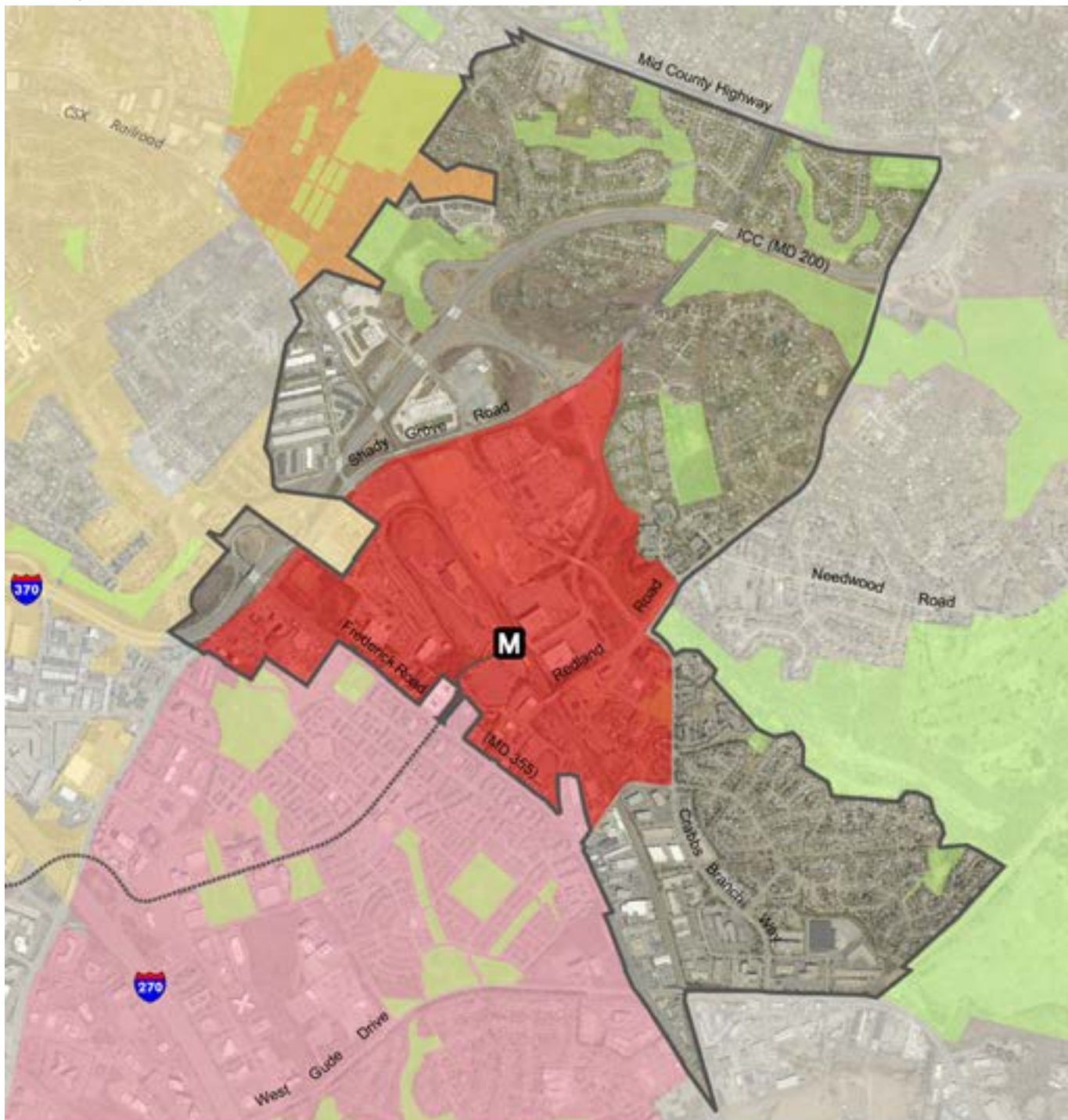
The County Council in 2017, via Resolution No. 18-957, directed the Planning Board “not to assume additional road capacity from the northern extension of Mid County Highway when calculating the land use-transportation balance in future master plans, including but not limited to the upcoming Gaithersburg East Master Plan and the Germantown Plan for the Town Sector Zone. This step ensures that any new development allowed under these plans will not rely on the northern extension of Mid County Highway, while retaining the right-of-way for this extension in these plans.”

The extension of Mid County Highway to Redland Road and the Intercounty Connector (MD 200) is challenging, as the extension would disturb existing natural resources including forests and streams. In addition, the extension of Mid County Highway to the Intercounty Connector (MD 200) would require an interchange that could necessitate acquisition of adjacent single-family properties.

This Sector Plan recommends the continued pursuit of high-quality transit service to improve accessibility to the Plan area and other communities in the Mid-County area. In addition, this Sector Plan supports the use of the existing public right-of-way as a trail that links Mill Creek Towne Local Park with Redland Local Park.



Map 49:
Shady Grove Urban Road Code Area



- Shady Grove Sector Plan Boundary
- - - - - Corridor Cities Transitway
- City of Gaithersburg
- City of Rockville
- Town of Washington Grove
- Parkland
- M** Metro Station

Urban Road Code Area



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Table 2:
Roadway Classifications

Master Planned Streets	Limits		Designation	Minimum ROW (feet) ¹	Lanes ²	Proposed Target Speed ³	Design Standards ⁴
Major Highways							
Frederick Road (MD 355)	City of Gaithersburg City Limits (500’ north of I-370)	Ridgemont Avenue	M-6	150’	6D + 1T or 2T	25 MPH	2008.02 modified
Frederick Road (MD 355)	Ridgemont Avenue	Indianola Drive	M-6	127’ or 137’ ⁵	6D + 1T or 2T	25 MPH	2008.02 modified
Frederick Road (MD 355)	Indianola Drive	Southern Plan Boundary	M-6	150’	6D + 1T or 2T	25 MPH	2008.02 modified
Gude Drive	City of Rockville Limits	Eastern Plan Boundary	M-23	150	6D	25 MPH	2008.02 modified
Shady Grove Road	Western Plan Boundary	I-370 Access Ramps	M-42	150	6D	25 MPH	2008.02
Shady Grove Road	I-370 Access Ramps	Midcounty Highway	M-42	120	6D	30 MPH	2008.02
Mid County Highway	Goshen Road	Shady Grove Road	M-83	150	4D	45 MPH	2008.05
Metro Access Road	Intercounty Connector (MD 200)	Future WMATA Street (1,350’ north of Redland Road)	M-94	150	4D + 1T or 2T	25 MPH	2008.02
Arterials							
Crabbs Branch Way	Redland Road	Indianola Drive	A-262	80	4D	25 MPH	2004.04 modified
Crabbs Branch Way	Indianola Drive	Gude Drive	A-262	80	4D	25 MPH	2004.04
Redland Road	Crabbs Branch Way	Needwood Road (northern access)	MA-34	70	4	25 MPH	2004.07 modified
Minor Arterial							
Redland Road	Needwood Road (northern access)	Muncaster Mill Road	MA-34	70	2	25 MPH	2004.07
Business District Streets							
Redland Road	MD 355	Somerville Drive	B-1	100	4D + 1T	25 MPH	2005.04 modified
Redland Road	Somerville Drive	Crabbs Branch Way	B-1	100	4D	25 MPH	2005.04 modified
Crabbs Branch Way	Redland Road	Shady Grove Road	B-2	100	4D	25 MPH	2005.04 modified
Crabbs Branch Way	Shady Grove Road	1000 feet north of I-370	B-2	80	4D	25 MPH	2005.03 modified
Indianola Drive	MD 355	Crabbs Branch Way	B-3	70	2	25 MPH	2005.02 modified
King Farm Boulevard Extended	MD 355	Metro Station	B-4	80 + 50 ⁶	2D + 1T	25 MPH	2005.02 modified
Somerville Drive Extended	King Farm Boulevard Extended	Redland Road	B-6	90	2D + 1T	25 MPH	2005.02 modified
Somerville Drive	Redland Road	Paramount Drive	B-6	80	2	25 MPH	2005.02 modified
Paramount Drive	MD 355	Somerville Drive	B-6	70	2	25 MPH	2005.02

Table 2:
Roadway Classifications

Master Planned Streets	Limits		Designation	Minimum ROW (feet) ¹	Lanes ²	Proposed Target Speed ³	Design Standards
Business District Streets							
Columbus Avenue Extended	Gramercy Boulevard	Redland Road	B-7	70	2	25 MPH	2005.02
Street A	Columbus Avenue Extended	Metro Access Road	B-8	60	2	25 MPH	2005.01
Metro South Neighborhood ⁷	MD 355	Somerville Drive	B-9	60	2	25 MPH	2005.01
Metro Access Road Extended	Redland Road	Chieftain Avenue	B-9	60	2	25 MPH	2005.01
Primary Residential Streets							
Crabbs Branch Way	1000 feet north of I-370	118 feet west of Castanea Lane	P-6	70	2	25 MPH	2003.08
Indianola Drive	Crabbs Branch Way	Eastern Roadway Terminus-Gude Trail	P-1	70	2	25 MPH	2003.12
Monona Drive	Crabbs Branch Way	Indianola Drive	P-2	70	2	25 MPH	2003.12
Amity Drive	118 feet west of Castanea Lane	Washington Grove Lane	P-6	70	2	25 MPH	2003.08
Needwood Road	Redland Road	Blueberry Hill Local Park	P-8	70	2	25 MPH	2003.12
Briardale Road	Shady Grove Road	1600 feet north of Shady Grove Rd	P-12	70	2	25 MPH	2003.12
Miller Fall Road	Mid County Highway	Shady Grove Middle School	P-13	70	2	25 MPH	2003.12
Epsilon Drive	Shady Grove Road	Amity Drive	P-18	70	2	25 MPH	2003.12
Industrial Roads							
Oakmont Avenue	Northern Plan Boundary	Shady Grove Road	I-9	60	2	25 MPH	2006.01

¹ Reflects minimum right-of-way and may not include lanes for turning, parking, acceleration, deceleration or other purposes auxiliary to through travel. Rights-of-way are measured symmetrically based upon roadway right-of-way centerline.

² The number of planned through lanes for each segment, not including lanes for turning, parking, acceleration, deceleration or other purposes auxiliary to through-travel; “D” denotes a divided roadway; “T” denotes dedicated transit lanes (e.g. “4D + 1T” would denote four lanes, divided by a center median with one master-planned, dedicated transitway lane).

³ The “target speed” of a roadway refers to the intended or desired speed of roadway users. Target speeds should inform roadway design, and ideally, the posted speed of the roadway. Target speeds for roadways within the Urban Road Code Area are required to be 25 miles per hour per County Code.

⁴ Modified indicates that some modification is needed to the referenced design standards to reflect planned elements. This referenced design standard is anticipated to change in the future when the County adopts a new Road Code.

⁵ 127’ assumes one peak-hour median-running BRT lane; 137’ assumes two peak hour median running BRT lanes; this segment falls within the municipal boundaries of the City of Rockville, and the purpose of these recommended widths are to ensure adequate property dedication for pedestrian, bicycle and transit elements from properties that fall beyond the current municipal boundaries on the eastern side of the roadway. Right-of-way dedication beyond the 120’ should be provided by property owners on the western side of MD 355, meaning that the western side properties are responsible for an additional 7’ or 17’ beyond centerline.

⁶ 80 feet plus the existing 50 foot transit reservation adjacent to the Bainbridge Property

⁷ The proposed streets in the Metro South neighborhood could be either public or private streets or linear open space

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 2016, Montgomery County committed to eliminating traffic fatalities and severe injuries by 2030. In 2017, the County Executive released an initial two-year action plan of activities to advance the County toward Vision Zero. Upon completion of the two-year action plan, the County will advance a ten-year action plan to achieve Vision Zero by 2030.

Vision Zero principles are:

- transportation-related deaths and injuries are preventable;
- street designers must assume that all users—drivers, pedestrians and bicyclists—make imperfect choices;
- street designers must emphasize the prevention of severe and fatal crashes, which includes an acknowledgement of user vulnerability; and
- reducing crash severity is more important than reducing crash frequency.

Roads in the County's High-Injury Network (HIN) are those with the highest rates of fatalities and severe injuries per mile in the County. Three of the County's HIN roads are within this Plan area: MD 355, a segment of Shady Grove Road, and a segment of Crabbs Branch Way (**Map 50**).

Between January 2015 and May 2019, 1,347 crashes have occurred along roadways within or along the boundary roads of the Sector Plan area. Approximately 2.45 percent of these crashes have resulted in a severe injury or fatality, and 3.79 percent of the 1,347 reported crashes have involved a non-motorist—the network's most vulnerable user group. Six of these non-motorist crashes have resulted in a severe injury or fatality.

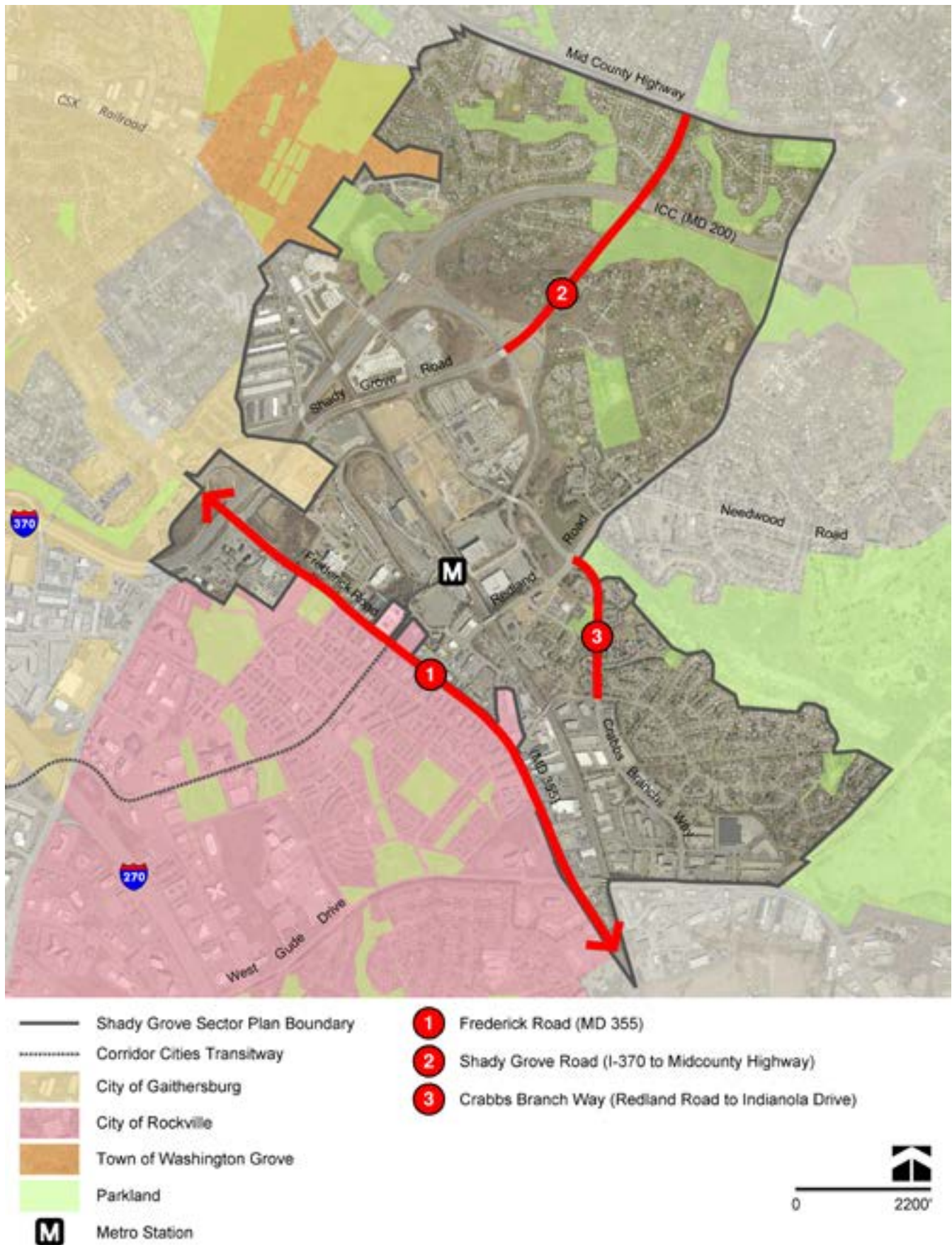
This Sector Plan endorses Vision Zero as a framework to address safety issues for key roads, including MD 355, Shady Grove Road, and Crabbs Branch Way. This Plan's transportation appendix provides additional Vision Zero solutions that can be implemented in the Plan area.

This Plan recommends:

- Provide a minimum of six feet of landscaped buffering between pedestrian/bicycle facilities and vehicular traffic. Where this width cannot be attained, provide vertical separation to protect pedestrians from moving vehicular traffic.
- Ensure all crossings are ADA compliant with curb ramps oriented in the direction of crossing.
- Ensure all bus stops are accessible with safe proximate crossings over roadway facilities.
- Limit curb radii to a maximum of 25 feet within the Plan area.



Map 50:
Existing Vision Zero High-Injury Network Roadways within the Plan 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 (Map 51). 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. 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. A pedestrian promenade is recommended along Somerville Drive, which will contribute to creating a distinctive area that leads to the Metro Station (Figure 11).

This Sector Plan recommends:

- Provide flexibility towards the typology of streets, either public, private or linear open space, which will be determined during the review for new development. If it is a public or private street, it should follow the Business District Street, minimum 60 feet right-of-way.
- Consider some streets as pedestrian only streets or linear public open space links that could provide unique placemaking opportunity.

Figure 11:
Illustrative
Somerville Drive
Between Redland Road
and Paramount Drive

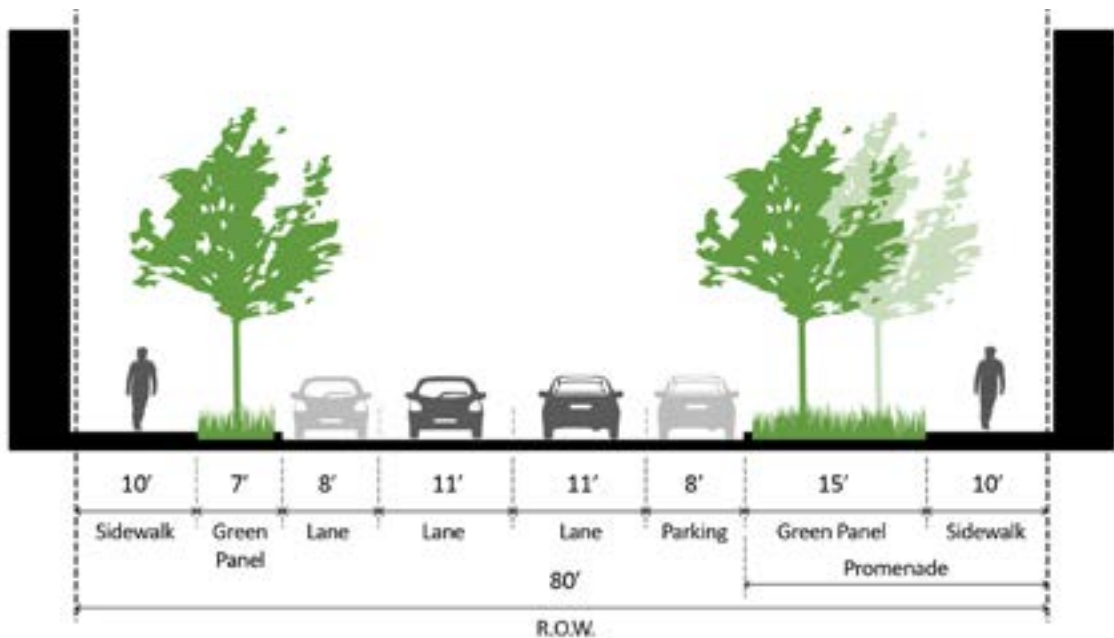
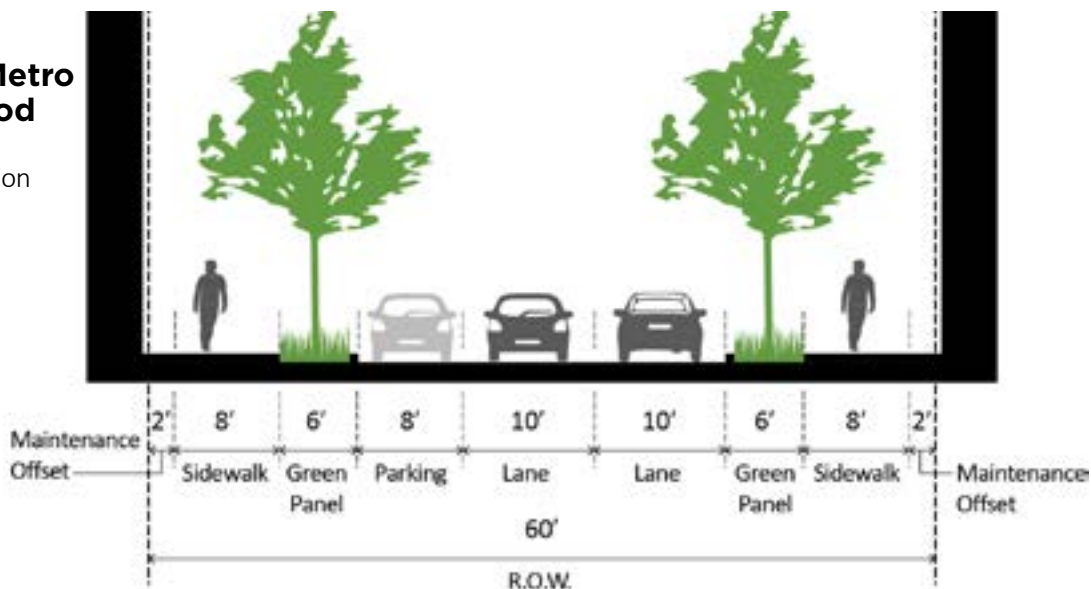
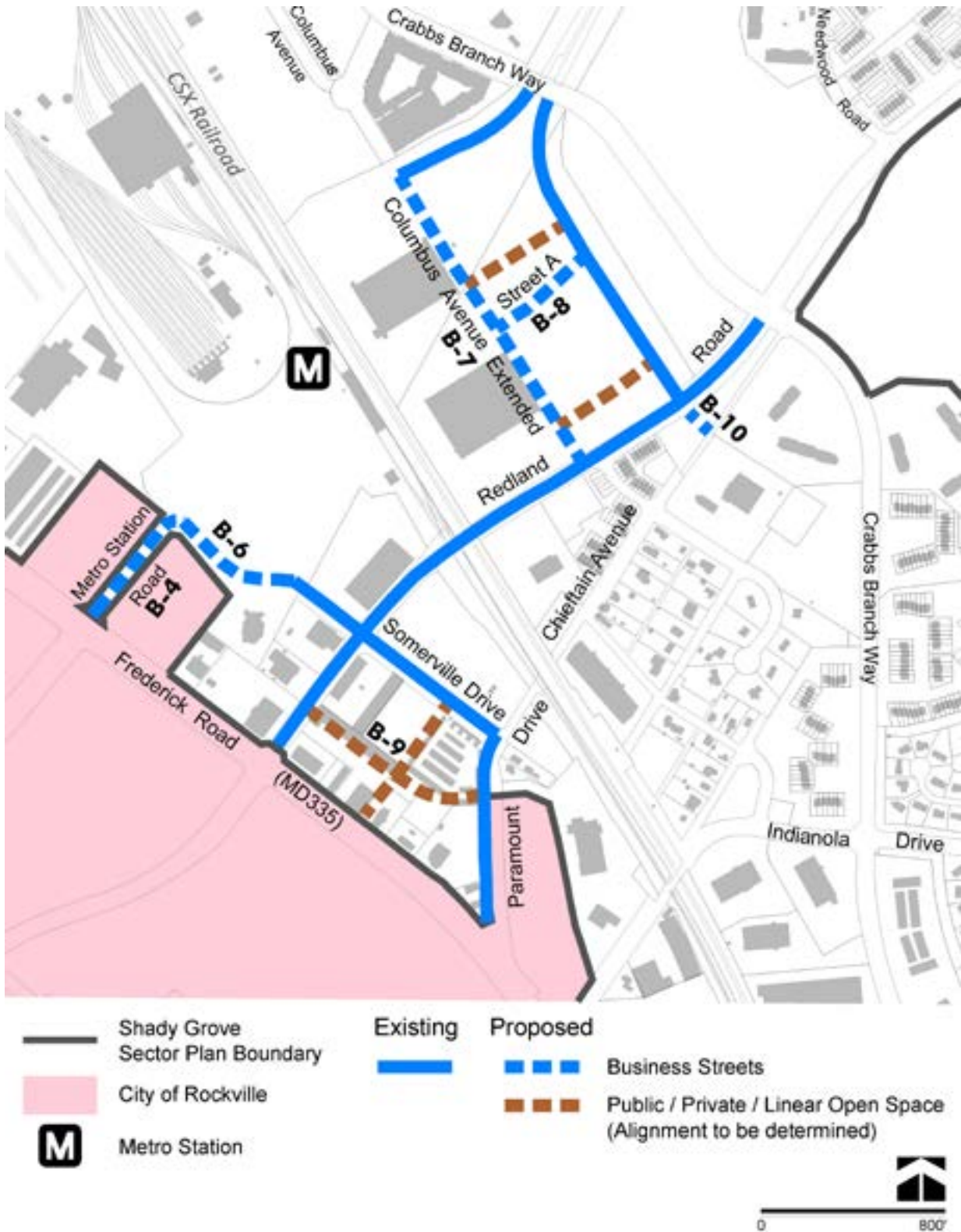


Figure 12:
Illustrative Metro
Neighborhood
South
Proposed 60' section



Map 51:
Proposed Metro Neighborhood Streets



BRT STREETS

The current MD 355 BRT study indicates that the proposed route may traverse King Farm Boulevard Extended, Somerville Drive, and Redland Road in the Plan area. The current alignment of the CCT is also along King Farm Boulevard Extended. This existing road, which is WMATA property rather than right-of-way, is approximately 80 feet in width.

The existing Bainbridge multifamily development, located at the intersection of Frederick Road and King Farm Boulevard Extended, has an existing 50-foot easement adjacent to the roadway. However, the former CarMax property at 15931 Frederick Road, which has an approved plan for multifamily residential development in the City of Rockville, has no additional easement or dedicated area adjacent to the road.

The City of Rockville's annexation and site plan approval of the former CarMax property in the Metro West neighborhood has precluded some of the 2006 Sector Plan's recommended roadways between Redland Road and King Farm Boulevard Extended. Likewise, Bainbridge's multifamily residential development has also negated another roadway recommendation in the 2006 Sector Plan. Subsequently, this Sector Plan only recommends Somerville Drive and King Farm Boulevard Extended as public streets. Additional streets or connections are possible through the redevelopment process in the Metro West neighborhood.

MCDOT's MD 355 BRT study indicates that the proposed BRT route will operate along Somerville Drive Extended, then connect to King Farm Boulevard Extended. A BRT station is proposed along Somerville Drive, north of Redland Road. This Sector Plan recommends increasing the right-of-way on proposed Somerville Drive Extended to 90 feet for the area close to the Metro Station (Figure 14), and 80 feet for the area east of Redland Road, to provide an enhanced streetscape environment (Figure 11).

Figure 13:
Illustrative King Farm Boulevard Extended/Metro Station Road

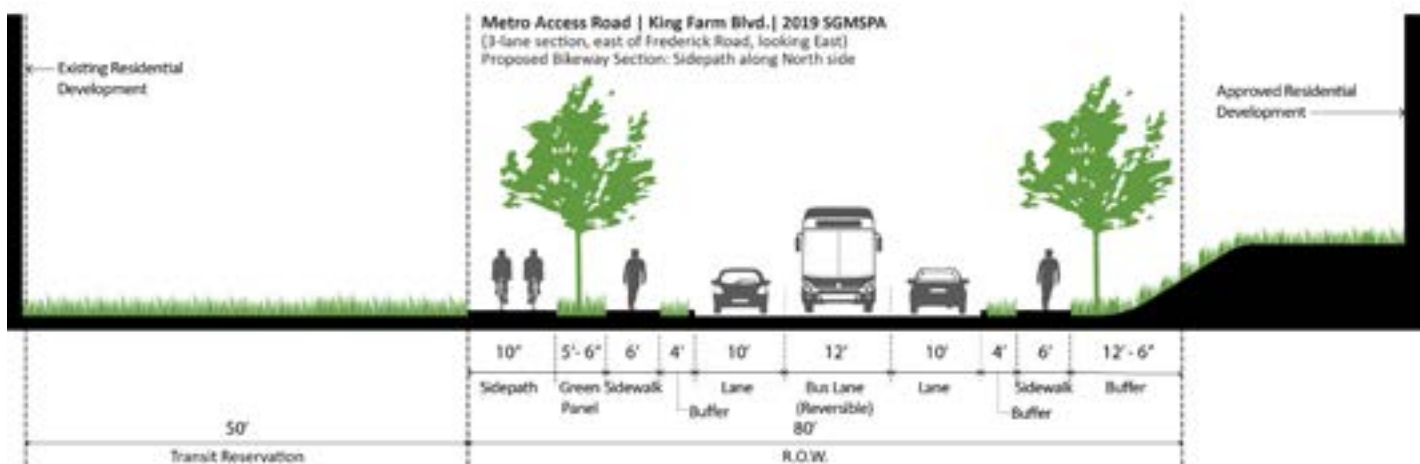
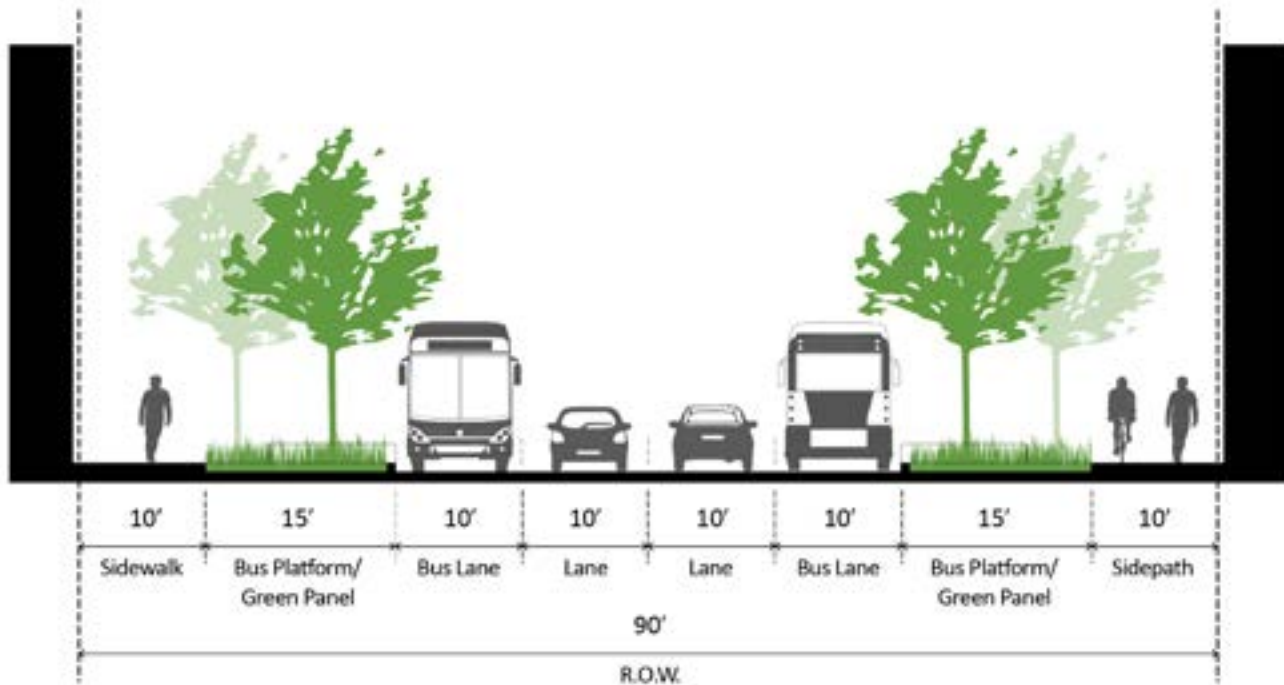


Figure 14:
Illustrative Somerville Drive and Redland Road to the Metro Station



This Sector Plan recommends:

- Modify the cross-section for King Farm Boulevard Extended/Metro Station Road to include a potential dedicated BRT lane as well as a sidepath (**Figure 13**). This proposal is different than the prior cross-section proposed by MTA during the preliminary design for the CCT.
- King Farm Boulevard Extended/Metro Road is recommended as a Business District Street with a minimum right-of-way of 80', excluding a transit easement of 50' feet along the northern side of the roadway.
- Somerville Drive Extended is also recommended as a Business District Street with a minimum right-of-way of 90 feet.

BICYCLE AND PEDESTRIAN NETWORK

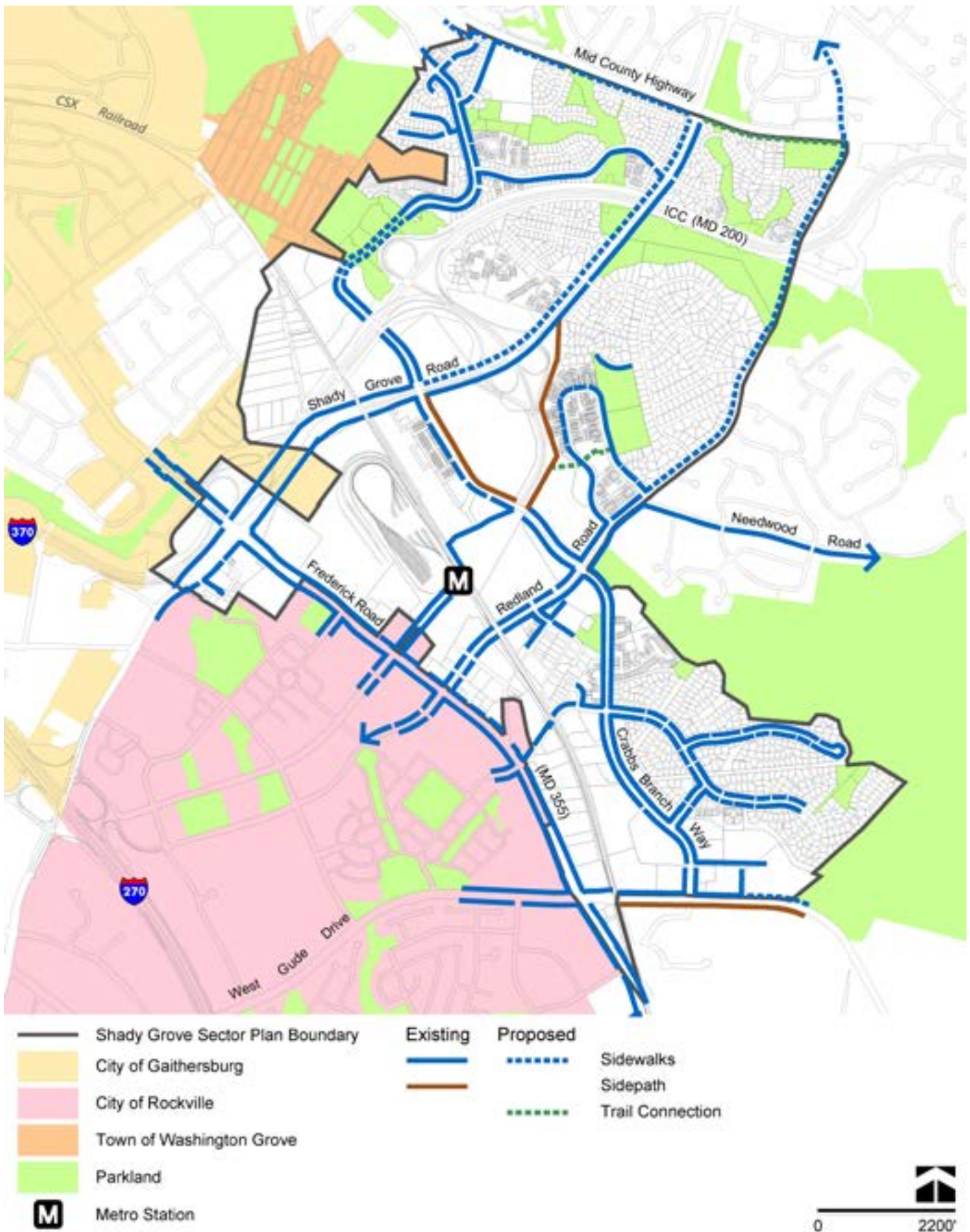
This Sector Plan promotes a walkable and bikeable environment that creates a network of streets and safe bicycle facilities that incorporate Vision Zero principles. New pedestrian and bicyclist investments, including Capital Bikeshare stations, sidepaths along Crabbs Branch Way and the Metro Access Road, and the reconstruction of Crabbs Branch Way have improved the walking and biking environment in the Plan area. However, there are missing sidewalks on existing roadways, including along Shady Grove Road and Redland Road (**Map 52**). The bikeway classifications listed in Table 3 update the 2018 Bicycle Master Plan recommendations, which further promote an interconnected network of bikeways (**Map 53**).

This Sector Plan recommends the following:

- All pedestrian walkways should be at grade, rather than underground pathways as recommended in the 2006 Sector Plan.
- Construct protected intersections at all intersections with bicycle facilities.



Map 52:
Pedestrian Network



Shady Grove Road

The 2018 Bicycle Master Plan recommends separated bikeways on Shady Grove Road and also proposes this street as a segment of the proposed ‘breezeway’ network. The proposed breezeway network functions as a network of “bicycle arterials” linking major activity centers with high-quality bicycle facilities capable of accommodating higher speeds. This Sector Plan recommends a sidepath for this roadway since it minimizes single-family properties acquisitions and roadway modifications and retains existing trees along the roadway. The implementation of this recommendation could be accomplished via a future Capital Improvements Program (CIP) project since no redevelopment will occur adjacent to the existing single-family dwellings.

Consistent with Vision Zero principles, this Sector Plan recommends enlarged pedestrian refuges along MD 355 to provide protected areas for pedestrians to wait safely while crossing the street, and such a vision would be consistent with the urban boulevard design of the 2006 Shady Grove Sector Plan.

This Sector Plan recommends:

- Amend the 2018 Bicycle Master Plan to remove the sidepath from the north side of Shady Grove Road. The sidepath on the south side of Shady Grove Road will be retained. Prioritize a buffer width of six feet. If a six foot wide buffer cannot be accommodated, provide vertical separation, such as a guardrail, to protect pedestrians and bicyclists from the roadway.
- Install missing sidewalks along the northern portion of Shady Grove Road between Crabbs Branch Way and Mid County Highway.

Crabbs Branch Way

This Sector Plan confirms the existing sidepath along the east side of Crabbs Branch Way with the Shady Grove Station development, between Shady Grove Road and the Metro Access Road. The Shady Grove Station, Westside development has implemented a sidepaths on the east side of the street, as well as a large sidewalk on the west side of the street; therefore, two separate sidepaths are not feasible at this location. Further, the Metro Access bridge also limits the implementation of an additional sidepath along the west side.

This Sector Plan recommends:

- Amend the 2018 Bicycle Master Plan to replace the recommendation for a sidepath along the western side of Crabbs Branch Way between Redland Road and East Gude Drive with a sidepath on the eastern side of Crabbs Branch Way. Remove the recommendation for a sidepath along the west side of the roadway between Shady Grove Road and the northern Plan area boundary.

Indianola Drive

Indianola Drive is an east-to-west street that links MD 355 commercial properties to established residential neighborhoods, including Derwood Station. This Sector Plan recommends a sidepath along the north side of Indianola Drive between MD 355 and Crabbs Branch Way to support accessibility to the infill MD 355 BRT station located on MD 355, which is also recommended by this Plan. This new facility would link with recommended bicycle facilities on MD 355 and Crabbs Branch Way and would better utilize space along the wide road. The 2018 Bicycle Master Plan did not recommend any bicycle facilities on this roadway.

This Sector Plan recommends:

- Provide a sidepath along the northern side of Indianola Drive between MD 355 and Crabbs Branch Way. Where possible, retain existing trees and provide new canopy along the sidepath.
- Explore reducing travel lanes through curb extensions and striping, east of Crabbs Branch Way.

Redland Road

Redland Road is an east-west street through the Sector Plan from the Upper Rock Master Plan area to the City of Rockville. Sidepaths exist for portions of this roadway, including between Crabbs Branch Way and Needwood Road. Bikeway recommendations for this roadway varies from the Metro Neighborhoods to established residential neighborhoods.

This Sector Plan recommends:

- Beyond the Metro Neighborhoods, remove the 2018 Bicycle Master Plan’s recommendation for bikeable shoulders on the south side of Redland Road. Maintain the recommendation for a sidepath on the north side of the road, prioritizing a pedestrian buffer. In instances where the buffer between the roadway is less than six feet, provide vertical separation and/or other speed-calming measures to protect pedestrians and bicyclists.
- Provide a sidewalk connection between Overhill Road and Briardale Road, which is currently missing.
- In locations where sidewalks cannot be implemented on both sides of the road, provide adequately marked crossings with pavement markings and compliant pedestrian-crossing signage, where appropriate.

Mid County Highway

Mid County Highway is a major highway that serves as the northern Plan area boundary. Although there are Ride On bus stops and the Shady Grove Middle School along this roadway, there are no existing sidewalks between Washington Grove Lane and Shady Grove Road. The proposed recommendations seek to improve the pedestrian realm.

This Sector Plan recommends:

- Provide a sidewalk along Mid County Highway, at a minimum between Shady Grove Middle School and Shady Grove Road.
- Provide a safe, stop controlled crossing facility with a traffic control device, such as a full traffic signal or pedestrian hybrid beacon at Miller Fall Road and the entrance to Shady Grove Middle School to provide access to the proposed sidewalk and existing bus stops.
- Explore opportunities to improve pedestrian crossings of Shady Grove Road at Mid County Highway, including the removal of the partial-free right turn.
- Install a pedestrian and bike trail connection between Redland Local Park and Mill Creek Towne Park.

Frederick Road (MD 355)

Frederick Road (MD 355) is the main north-south major highway through the Plan. There are existing sidewalks throughout the corridor, including within the City of Rockville, but they are adjacent to existing travel lanes. The future MD 355 BRT or through property redevelopment should enhance the pedestrian and bicyclist realm as illustrated in Figures 8 and 9.

This Sector Plan recommends:

- Confirm the 2018 Bicycle Master Plan's recommended breezeway facility on the east side of the roadway and remove recommended bicycle facilities from the west side of the road. This recommendation is advisory only in locations where the roadway is within the City of Rockville.



Map 53:
Existing and Proposed Bikeway Network

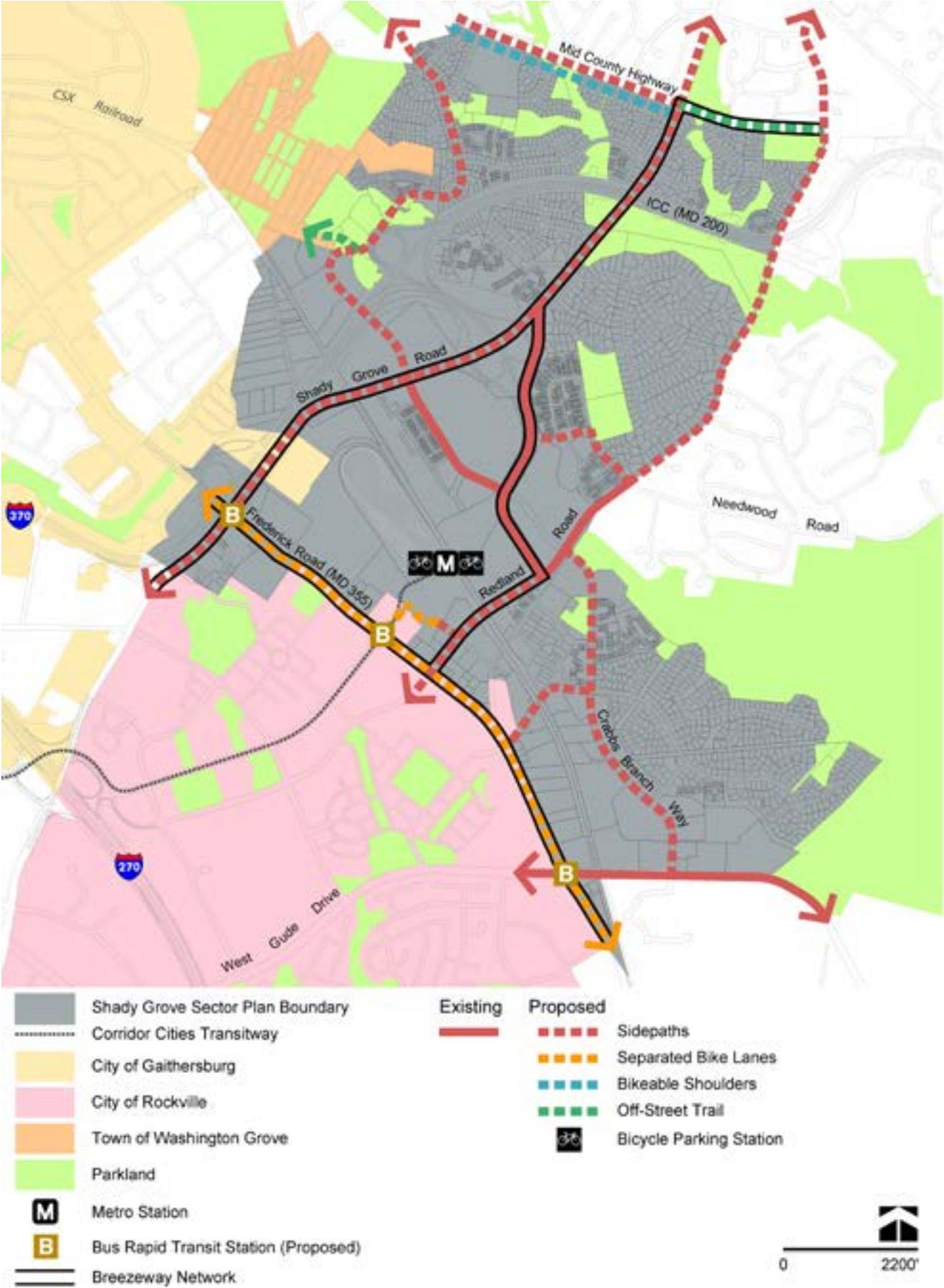


Table 3:
Existing and Proposed Bikeway Network

Project / Street	From	To	Bikeway Type	Status
Clarksburg to City Of Gaithersburg Breezeway				
Frederick Rd (MD 355)	City of Gaithersburg City Limits (500' north of I-370)	Southern Plan Boundary	Separated Bike Lanes (Two-Way, East Side)	Proposed
Intercounty Connector Trail Breezeway				
Redland Rd ¹	Frederick Rd (MD 355)	Metro Access Road	Sidepath (North Side)	Proposed
Metro Access Road ¹	Redland Rd	Shady Grove Rd	Sidepath (East Side)	Existing
Shady Grove Rd ^{1, 3, 4}	Metro Access Rd/I-370 Ramps	Midcounty Highway	Sidepath (South Side)	Proposed
Midcounty Hwy ^{1, 2}	Shady Grove Rd	Redland Rd	Off-Street Trail	Proposed
Life Sciences Center To Shady Grove Metro Breezeway				
Shady Grove Rd	Western Plan Boundary	Shady Grove Access Rd/I-370 Ramps	Sidepath (South Side)	Proposed
Additional Recommendations				
Amity Drive ³	Washington Grove Ln	118' West of Castanea Lane	Sidepath (North Side)	Proposed
Crabbs Branch Way	118' West of Castanea Lane	Shady Grove Rd	Sidepath (East Side)	Proposed
Crabbs Branch Way	Shady Grove Rd	Redland Rd	Sidepath (East Side)	Existing
Crabbs Branch Way	Redland Rd	E Gude Dr	Sidepath (East Side)	Proposed
E Gude Drive ⁴	City of Rockville Limits	Eastern Plan Boundary	Sidepath (West Side)	Improvement proposed
Indianola Dr	Frederick Rd (MD 355)	Crabbs Branch Way	Sidepath (North Side)	Proposed
Midcounty Hwy	Northern Plan Boundary	Shady Grove Rd	Sidepath (South Side)	Proposed
Midcounty Hwy ⁵	Northern Plan Boundary	Shady Grove Rd	Bikeable Shoulders	Improvement proposed
Piedmont Crossing Local Park Trail	Brown St	Crabbs Branch Rd/Amity Dr Ext	Off-Street Trail	Proposed
Redland Rd ⁴	Shady Grove Access Rd	Needwood Rd (Northern access)	Sidepath (North Side)	Improvement proposed
Redland Rd ^{3, 4}	Needwood Rd (Northern access)	Northern Plan Area Boundary	Sidepath (North Side)	Proposed
King Farm Boulevard Ext (Street A)	Frederick Rd (MD 355)	Shady Grove Metro Station	Separated Bike Lanes (Two-Way, North Side)	Proposed
Somerville Dr Ext	King Farm Blvd Ext	Redland Rd	Sidepath (North Side)	Proposed

¹ Due to constraints on Shady Grove Road and Redland Road, the Intercounty Connector Trail Breezeway may be constructed to be 10' wide as consistent with the existing segments along Metro Access Road.

² Alternative treatments, such as flexible pavement or a structured facility, may be acceptable for conservation purposes.

³ This Plan supports the retention of existing mature trees within the right-of-way, where possible

⁴ Provide adequate separation between the facility and the roadway; if a buffer of at least 6' cannot be achieved, provide vertical separation between non-motorists and the roadway

⁵ Where the shoulders cross deceleration and turning lanes, provide striping and markings to improve safety; if a future capital project repurposes existing right-of-way to accommodate the planned sidepath on the south side, the bikeable shoulders may be removed in support of a safer, separated facility.

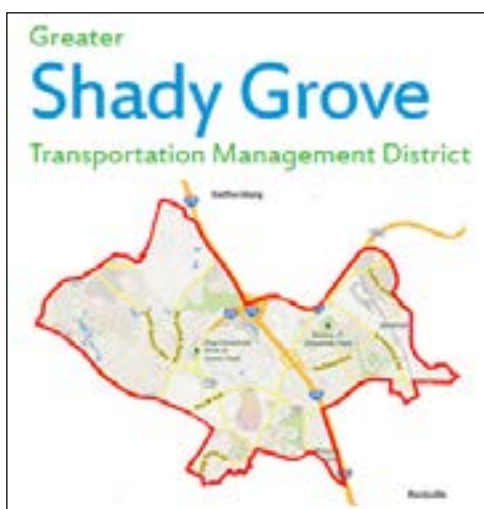
Table 4:
Amendments to the 2018 Bicycle Master Plan

This Sector Plan recommends the removal of the following bikeways from the 2018 Bicycle Master Plan:

Project / Street	From	To	Bikeway Type	Status
Frederick Rd (MD 355)	Shady Grove Road	Gude Drive	Sidepath (West Side)	Majority of Segment on West Side within City of Rockville
Redland Rd		Needwood Rd (Northern access)	Sidepath (North Side)	Focus on Protected Facility on North Side of Right-Of-Way
Crabbs Branch Way	1,000' North of I-370	Redland Rd	Sidepath (West Side)	Not Constructed with Recent Development; Space Limitations on Bridge
Oakmont Ave	Central Avenue	Shady Grove Road	Sidepath (East Side)	Changed Facility Classification to Industrial St; Focus on Safer Parallel Connection at Brown Street
Needwood Rd	Redland Rd	Blueberry Hill Park	Sidepath (East Side)	Existing Wide Sidewalk Between Property Line and Mature Trees

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.

The recommended higher NADMS goal will be achieved via both public and private initiatives, such as new bike lanes, car and bikesharing, parking reductions, which are permitted in the CR Zone, as well as new mobility innovations. New development can provide employees with transit benefits, new buildings with showers and changing rooms, transit screens and wayfinding. Overall improvements to public transportation, such as the BRT and the CCT, along with density recommendations and supportive activities of the TMD will contribute to achieving the recommended NADMS goals.

This Sector Plan recommends:

- Maintain the requirement that all new developments must enter into Traffic Mitigation Agreements (TMAGs) in the Metro Station Policy Area.
- Require Traffic Mitigation Agreements 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 in the Metro Station Policy Area for all home-based work trips (commute trips).

- Increase the existing NADMS goal for employees commuting into the Plan area who reside elsewhere from 12.5 percent to 25 percent.
- Support a 35 percent NADMS goal for residents living in the portions of the Sector Plan Area, exclusive of the Metro Station Policy area, for all home-based work trips (commute trips).

TRANSPORTATION STANDARDS

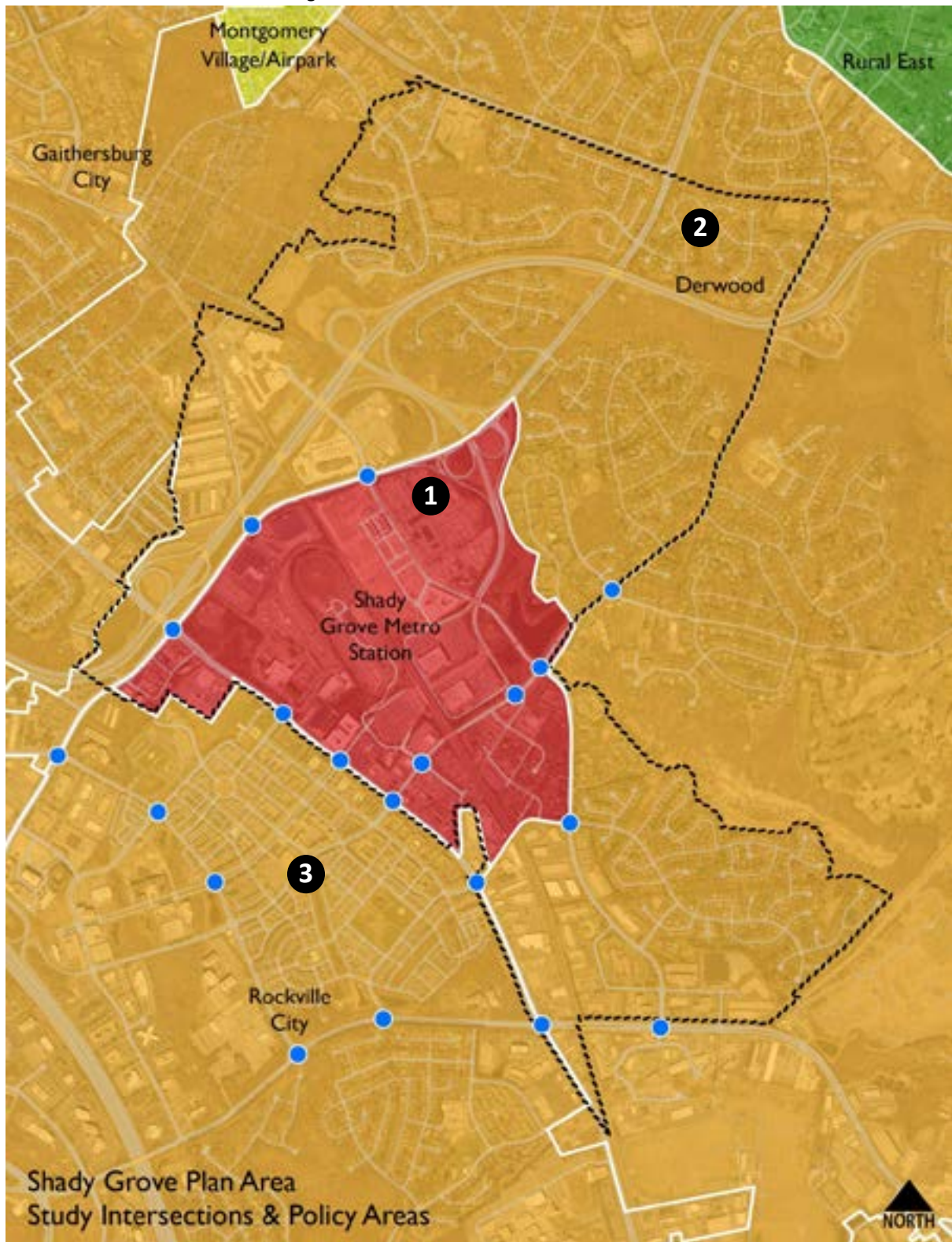
This Sector Plan recommends modifying the Highway Capacity Manual (HCM) standards for Frederick Road (MD 355) intersections, including MD 355 and East Gude Drive. The northeastern intersection of MD 355 and East Gude Drive are within the County, while the northwestern intersection is within the City 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 54**).

This Sector 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 approximately less than a half-of-a mile from the higher Shady Grove MSPA.

Existing Highway Capacity Manual (HCM) Standards

Standards in the Plan and Surrounding Areas



- 1** Red Area: 120 seconds/vehicle
- 2** Orange Area (Below Derwood): 59 seconds/vehicle
- 3** Orange Area (Above Rockville City): 63 seconds/vehicle

INTERSECTIONS

Since this Sector 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 mitigation 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 for pedestrians and transit riders. This Sector Plan, like the 2006 Sector Plan, recommends a multimodal 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 contributions towards transitways and Vision Zero improvements.

This Plan recommends restrictions on the implementation of additional travel or turn lanes until safety and person-throughput investments can be demonstrated. 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 more conflict points for pedestrians. Research on induced demand suggests that adding new travel and turning lanes adds more traffic onto a road network over time, and leads to longer crossing distances for pedestrians, with potential for crashes with higher percentages of severe injury and death.



INTERCHANGES

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.

The 2006 Sector Plan identified three recommended interchanges within the Sector Plan area, including at MD 355 and Gude Drive. The interchange at MD-200 and I-370 has been since constructed as a component of the Intercounty Connector project.

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, multimodal choice, and throughput.
- Amend the existing SSP congestion standard for this intersection to be no less than 80 seconds of delay per vehicle to have a more consistent transportation policy approach for the MD 355 corridor.

Crabbs Branch Way and Metro Access Road

This Sector Plan recommends the 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 (SSP). And as such, the anticipated mobility benefits of a partial interchange are not warranted by the associated budgetary and environmental costs. This Sector 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 an acceptable service level (p.114). This recommendation is also a stage two requirement. Since 2006, this interchange proposal has not been conceptually studied by the Montgomery County Department of Transportation (MCDOT) or the Maryland State Highway Administration (SHA). The County's 2017 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 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 roads may be the best solution amongst possible design options" (p.65). The City of Rockville supports 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 from 80 to 100 seconds per vehicle, a single-point urban interchange, and a Gude Drive overpass of MD 355. These alternatives also considered how future BRT would impact roadway changes.

The highest estimated cost alternative is a single-point urban interchange that could cost upwards of \$75 million 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 \$25 million. Conceptual designs indicate that vehicles would enter the through lanes from the inner travel lane in order to maintain a single structure 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.



11

Implementation

URBAN DISTRICT

The 2006 Sector Plan recommended an urban district to provide “maintenance, promotion, and programmed activities” for the properties in the Metro Neighborhoods and Jeremiah Park (p.116). This Sector Plan also supports a future urban district to support the maintenance of public streetscape, improving pedestrian safety, along with branding and promoting the area. There are different models for urban districts and this potential district would be determined when this Shady Grove district is created. This effort could be accomplished through a partnership with the adjacent municipalities.

FINANCING

The implementation of this Sector Plan will require a combination of investments from the public sector, the private sector, or a public-private partnership. The relocation of the MCPS bus depot will require the County to utilize a variety of financing tools to implement the approved Jeremiah Park development. Reconstructing Crabbs Branch Way, a pedestrian trail at the stormwater management pond along Redland Road, and a roadway connection to the Metro Station, were implemented via a public-private partnership between EYA and Montgomery County. Long-term mobility infrastructure, such as MD 355 BRT, could be financed by different means, including, federal and State aid and special assessments.

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), Commercial Residential Town (CRT), Employment Office (EOF), General Retail (GR) and Moderate Industrial (IM) Zones. Existing single-family residential zones were retained.

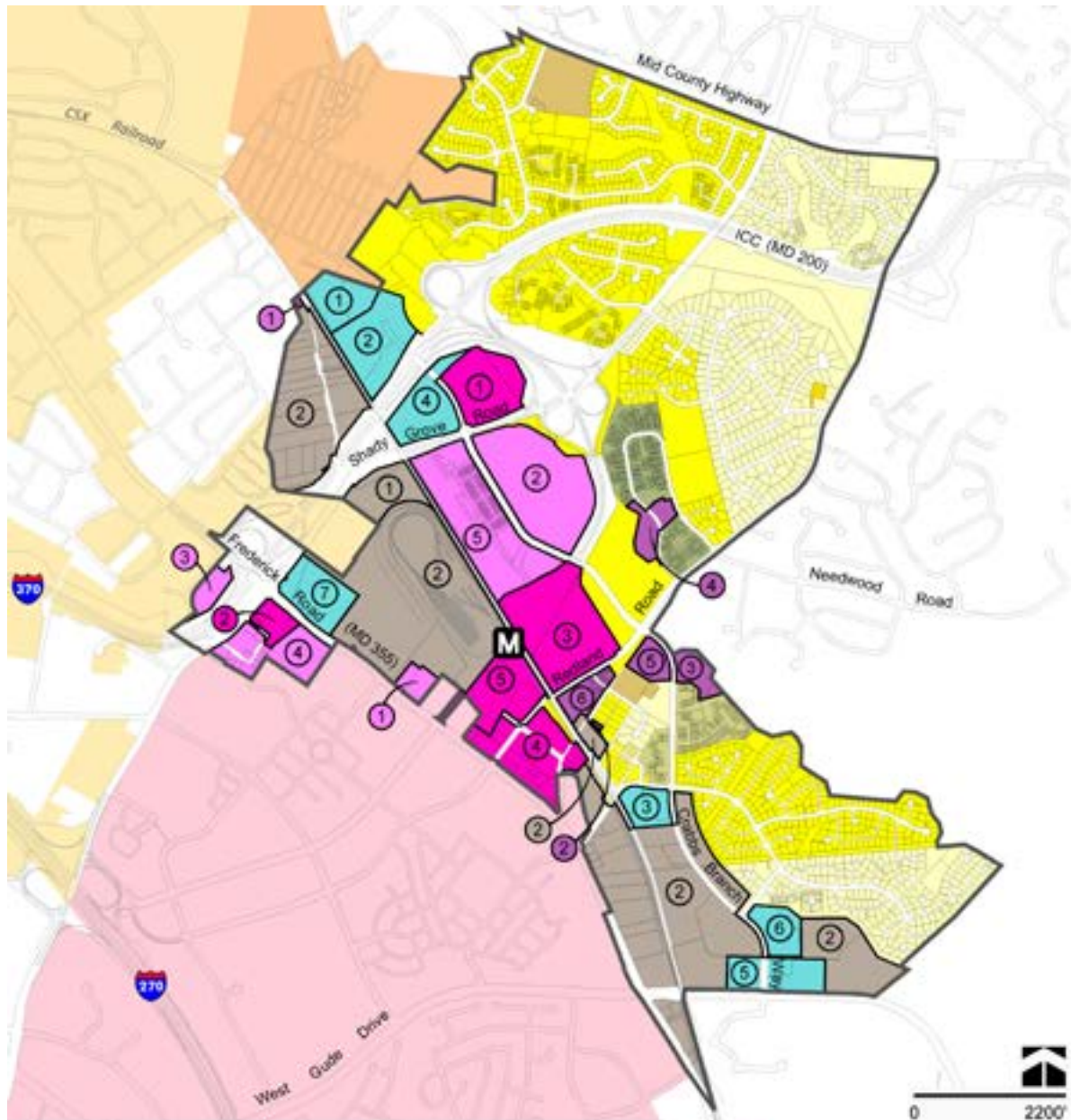
This Sector Plan recommends rezoning properties in the Metro West and Metro South neighborhoods to the CR Zone to promote increased development opportunities, including the provision of building lot terminations (BLTs). The CR Zone is also recommended for the Grove shopping center and a portion of the Shady Grove Plaza properties. These new zones will be implemented via the Sectional Map Amendment (SMA) process (**Map 55**).

This Sector Plan recommends changing all Planned Development (PD) zoned properties to existing Euclidean zones that reflect the built development, such as the Commercial Residential Neighborhood and Townhouse Low Density Zones. The 2014 Zoning Ordinance prohibits

the future use of the 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.

Office properties in the Crabbs Branch Office Park were rezoned from Light Industrial (I-1) to Industrial Moderate (IM). The I-1 Zone permitted a broad range of office uses, as well as light industrial uses. This Sector Plan recommends rezoning eight office properties in the office park to the Employment Office (EOF) Zone since this zone better aligns better with existing office uses and addresses non-conforming building heights.

Map 55:
Proposed Zoning



	Shady Grove Sector Plan Boundary		EOF 0.5, H-45'		CRN 0.5, C-0.0, R-1.0, H-50'
	Metro Station		EOF 0.5, H-50'		CRN 0.5, C-0.0, R-0.5, H-50'
	City of Gaithersburg		EOF 2.5, H-50'		CRN 1.0, C-0.0, R-1.0, H-60'
	City of Rockville		EOF 0.75, H-60'		CRN 0.5, C-0.0, R-0.5, H-65'
	Town of Washington Grove		EOF 2.5, H-70'		CRN 1.0, C-0.0, R-1.0, H-65'
	R-200 Residential, Single-Family		EOF 2.5, H-80'		CRT Commercial Residential Town
	R-60 Residential, Single-Family		EOF 0.75, H-100'		CRT 0.75, C-0.75, R-0.25, H-50'
	R-90 Residential, Single-Family		CR Commercial Residential		CRT 0.75, C-0.25, R-0.5, H-60'/TDR 0.6
	R-90/TDR Residential, Transferable Development Rights		CR 1.5, C-0.5, R-1.0, H-80'		CRT 0.75, C-0.25, R-0.75, H-80'
	RE-2 Residential, Single-Family		CR 1.5, C-0.75, R-1.0, H-80'		CRT 1.5, C-0.5, R-1.0, H-80'
	TLD Townhouse Low Density		CR 1.5, C-0.25, R-1.0, H-100'		CRT 1.0, C-0.25, R-0.75, H-90'/TDR 0.89
	TMD Townhouse Medium Density		CR 2.0, C-0.5, R-1.5, H-120'		I-M Industrial Medium
	EOF Employment Office		CR 2.0, C-1.0, R-1.5, H-200'		IM 0.5, H-75'
			CRN Commercial Residential Neighborhood		IM 2.5, H-50'
			CRN 0.5, C-0.5, R-0.25, H-35'		

EQUITY

The County Council in 2019, via Bill No. 27-19, requires the Planning Board to consider racial equity and social justice impact when a Master Plan is being prepared. This Sector Plan's overall housing, environmental, and mobility recommendations provide the framework to establish an intergenerational community that builds upon the County's commitment to racial equity and social justice.

This Sector Plan recommends a significant amount of new residential development, including affordable housing, which will contribute to providing a broad range of housing opportunities for residents. In addition, this Sector Plan encourages public properties to provide a larger percentage of affordable housing and additional specialty housing, such as senior housing.

Existing mobility options, including Metrorail and Metro bus, Ride On, and regional MTA provide public transportation services to the Sector Plan area. These services will be enhanced in the future with MD 355 BRT and the CCT, and new bikeways and trails.

This portion of the Derwood community has several light industrial properties, including the WMATA rail yards and the Transfer Station and Recycling Center. These two facilities will not relocate in the future. The environmental impact from the Transfer Station and Recycling Center is unusual since odors periodically do emanate from the center, based on prevailing winds. Although this Sector Plan recommends the full relocation of public facilities from the CSP, it is unknown if the MCPS bus depot will be relocated in whole or in part in the future. If the bus depot is retained, the Shady Grove Station, Westside community will continue to experience the activities of the bus depot.

Environmental sustainability recommendations in this Sector Plan seek to increase the tree canopy in the Metro Neighborhoods and to promote site and environmental best practices, which will contribute to a better environment for current and future residents and visitors. These recommendations in combination with existing and future sustainability laws will contribute to creating a resilient community.

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 percent moderately priced dwelling units (MPDUs) as the highest priority public benefit.
- The provision of major public facilities, including but not limited to implementing 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 of 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 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.

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. 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 is also influenced by the redevelopment of the CSP and the completion of several mobility and public facilities requirements from the 2006 Plan. Completed staging requirements include the Greater Shady Grove Transportation Management District (TMD), the implementation of Derwood Station, the Shady Grove Station, Westside and Jeremiah Park dedicated park-school site, the space for a public library, and the construction of a portion of Crabbs Branch Way. Pedestrian and bike enhancements have also occurred in the Plan area, including new Capital Bikeshare stations and sidepaths 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 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 2006 Sector Plan staging do not prioritize transit, are contrary to the County's Vision Zero commitment, and could negatively impact accessibility to future BRT along MD 355. Finally, the long-range forecast for this Plan indicates 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.

CAPITAL IMPROVEMENTS PROGRAM

Montgomery County's Capital Improvements Program (CIP), which is approved by the County Council, establishes how and when new public construction projects are completed. The recommended CIP indicated in Table 5 represents the key mobility infrastructure that could be funded through the CIP.

MD 355 BRT is anticipated to serve the Plan area, which MCDOT is currently studying. No cost estimates have been determined. This Sector Plan recommends a broad range of financing options, including federal and State assistance, general obligation bond financing, a special assessment district(s), or other innovative financing mechanisms to implement the BRT network.

Table 5:
Proposed Capital Improvements Program

Project Name	Description	Category	Road #	Estimated Cost (\$M)	Lead Agency	Coordinating Agencies
Bikeways	Enhance non-automotive options	Transportation Connectivity			MCDOT	MCDOT, M-NCPPC, Developers
Frederick Road (MD 355)	BRT	Transportation			MDOT/SHA	MCDOT, SHA, M-NCPPC
MARC Station	New transit connection	Transportation			MTA	MCDOT, M-NCPPC
Road diet for Crabbs Branch Way	Bike/Pedestrian improvement	Transportation Connectivity			MCDOT	M-NCPPC
		Transportation Connectivity			MCDOT	M-NCPPC

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SPRING 2020

Shady GROVE

MINOR MASTER PLAN AMENDMENT

PUBLIC HEARING DRAFT

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