



The Great Seneca Plan

CONNECTING LIFE AND SCIENCE

2024

PLANNING BOARD DRAFT



ABSTRACT

The Great Seneca Plan covers 4,330 acres in the heart of the I-270 Corridor between the cities of Gaithersburg and Rockville and the Town of Washington Grove. This Plan focuses on strengthening the economic competitiveness of the Life Sciences Center through mixed-use development, public realm improvements, equitable access, and implementation strategies. In addition, it envisions a thriving residential neighborhood with local serving amenities and services in the Londonderry and Hoyle's Addition area and offers limited recommendations for the Quince Orchard, Rosemont, Oakmont, Walnut Hill, Washingtonian Light Industrial, Washingtonian Residential, and Hi Wood areas. Recommendations are organized within the themes of the built, social, natural, and economic environments and provide guidance for land use; zoning; urban design; transportation; parks, trails, and public open space; the economy; and the environment.

The Great Seneca Plan: Connecting Life and Science contains the text and supporting maps for a comprehensive amendment to the approved and adopted 2010 *Great Seneca Science Corridor Master Plan*, as amended. It also

amends *Thrive Montgomery 2050*, as amended; the 2018 *Master Plan of Highways and Transitways*, as amended; the 2018 *Bicycle Master Plan*, as amended; the 2022 *Corridor Forward: The I-270 Transit Plan*; and the 2023 *Pedestrian Master Plan*.

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. Plans provide comprehensive recommendations 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 adoption, although they are intended to be revised every 10 to 15 years. Moreover, after a plan is adopted, circumstances often change, and the specifics of a plan may become less relevant over time. Plans do not specify all development possibilities. They often include illustrative sketches intended to convey a sense of desirable future character rather than detailed recommendations for a particular design

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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 (*Thrive Montgomery 2050*) 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 those county governments. The Planning Boards are responsible for preparing all local plans, zoning ordinances, and subdivision regulations and the administration of the bi-county park system.

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SPRING 2024

The Maryland-National Capital Park and Planning Commission
Prepared by the Montgomery County Planning Department
MontgomeryPlanning.org

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Introduction

I. Introduction

A. EXECUTIVE SUMMARY

The Great Seneca Plan (Plan), a comprehensive amendment to the 2010 *Great Seneca Science Corridor Master Plan* (2010 Plan), covers 4,330 acres in the heart of the I-270 Corridor between the cities of Gaithersburg and Rockville and the Town of Washington Grove. The Plan area includes several distinct areas with a variety of contexts, conditions, and opportunities, including the Life Sciences Center (LSC), Quince Orchard, National Institute of Standards and Technology (NIST), Londonderry and Hoyle's Addition, Rosemont, Oakmont, Walnut Hill, Washingtonian Light Industrial Park, Washingtonian Residential, and Hi Wood.

The Plan focuses predominantly on the Life Sciences Center, a thriving economic hub that is host to a diverse population, as well as growing life sciences, medical, and educational institutions. The 2010 *Great Seneca Science Corridor Master Plan* established a bold vision of transforming the Life Sciences Center into a walkable, vibrant science center with a mixture of uses served by transit, as well as an array of services and amenities for residents, workers, and visitors.

The life sciences industry is an important economic driver for the county. There are currently over 400 life sciences-related establishments in Montgomery County employing over 40,000 public and private sector workers, which accounts for 10 percent of the county's overall employment. Growth in the private life science sector significantly outpaced growth in overall private employment in the county over the last decade. The Life Sciences Center is the epicenter for this important industry in the county. As of 2021, the LSC and adjacent areas contained 33 percent of the county's private life science establishments and 64 percent of its private life sciences employees.

The Great Seneca Plan's overall vision for the future of the Life Sciences Center remains relatively consistent with the vision established in the 2010

Plan, a thriving life sciences hub. However, the Plan seeks to address barriers that have stymied progress toward achievement of the 2010 Plan vision, as well as to develop recommendations that respond to the many social, environmental, technological, demographic, and economic shifts that have occurred globally and locally since 2010.

The Great Seneca Plan also strives to integrate policy guidance from countywide polices, plans, and initiatives adopted over the last decade, including *Thrive Montgomery 2050*, the county's General Plan. The overarching principles of *Thrive Montgomery 2050* – economic competitiveness, racial equity and social justice, and environmental health and resilience – are foundational to the vision and recommendations of this Plan, particularly in the Life Sciences Center.

The Great Seneca Plan envisions the Life Sciences Center as a complete community, a place that will include a range of land uses, jobs, diverse housing options, services, and amenities to meet the needs of a variety of people within a 15-minute walk, bike ride, roll, or other trip through safe, accessible, and reliable transportation infrastructure. The Plan envisions the Life Sciences Center becoming more than the sum of its individual parts. Anchored by a core downtown, the Plan embraces a high-quality built environment, an active and enriching social life, and natural features that contribute to better physical and mental well-being. The Plan envisions transforming roadways from barriers to vital elements of the public realm that knit neighborhoods together, providing valuable links and social spaces. The recommendations endeavor to strengthen the economic competitiveness of the Life Sciences Center as an epicenter of life sciences and biotech innovation, but also make the vision accessible for all who live in, work in, and visit the area.

Beyond the Life Sciences Center, the Plan envisions a thriving residential neighborhood with local serving amenities and services in the Londonderry and Hoyle's Addition area, and offers limited recommendations for the Quince Orchard, Rosemont, Oakmont, Walnut Hill, Washingtonian Light Industrial Park, Washingtonian Residential, and Hi Wood areas.

The Plan provides the context, vision, and recommendations for each distinct area of the Plan in separate chapters. Recommendations are organized in the themes of the built, social, natural, and economic environments and provide guidance for land use; zoning; urban design; transportation; parks, trails, and public open space; economy; environment; and implementation.

Key recommendations include:

- Establish a Life Sciences Center Overlay Zone for the entire Life Sciences Center area that supports mixed-use life sciences development and incentivizes production of affordable and market-rate housing.
- Encourage compact, mixed-use development near transit that integrates and connects life sciences uses with residential uses, retail, and neighborhood services and amenities.
- Create a recognizable and finer grain street grid network to promote walkability and connectivity.
- Right-size roadways and intersections to create a safer and more comfortable environment for people who are walking, rolling, bicycling, riding transit, and driving.
- Implement a complete network of comfortable walkways and bikeways, connected by safe, protected crossings.
- Advance dedicated transit lanes, including the Great Seneca Transit Network and the Corridor Connectors.
- Repurpose two travel lanes on Key West Avenue to establish a tree-lined promenade for people who are walking, biking, and rolling.
- Repurpose a portion of the Great Seneca Highway right-of-way as a greenway and/or space for development. This open space could provide more than 4.5 acres of new development or publicly accessible open space for active recreation, social gathering, and contemplative experiences.
- Increase on-site clean energy generation, incorporate strategies to increase building energy efficiency, and incorporate environmentally sustainable development strategies into all developments.

- Increase green cover and tree canopy coverage, minimize impervious surfaces, and increase bioswales and rain gardens.
- Enhance infrastructure and amenities to attract life sciences companies, residents, and workers, including housing, multi-modal transportation, public open space, recreation, and walkability.
- Facilitate new development and adaptive reuse of existing buildings to meet industry demand based on quantity, type, and size of life science real estate. Encourage development of small- and medium-scale lab space not provided by private market.
- Establish a place management organization in the Life Sciences Center to implement master plan recommendations and perform other supporting functions.
- Identify funding mechanisms to implement Plan recommendations, including parks, open space, and transportation infrastructure improvements.
- Remove staging requirements from the 2010 Plan.
- Rezone properties in the Londonderry area to achieve a mixture of uses, including additional residential and local-serving retail uses.

Implementation of the Great Seneca Plan, particularly achievement of the vision and recommendations for the Life Sciences Center, will occur over the next two to three decades through a combination of private development and public investment. Critical recommendations to advance implementation in the Life Sciences Center are the adoption of an overlay zone, development of funding mechanisms to implement Plan recommendations, and establishment of a place management organization to activate and program underutilized sites and open spaces; implement placemaking, public realm, and infrastructure improvements; brand and market the area; and pursue funding. Given that fulfillment of the Plan's vision and recommendations will take time, the Plan recommends periodic evaluation of implementation to assess progress.

B. PLAN PURPOSE

The 2010 Plan established a bold vision of transforming the Life Sciences Center into a walkable, vibrant science center with a mixture of uses served by transit, as well as an array of services and amenities for residents, workers, and visitors. The 2010 Plan acknowledged that achieving this ambitious vision required periodic review of the Plan's progress and implementation of recommendations. To ensure this review, the Plan recommended establishment of an Implementation Advisory Committee and a Biennial Monitoring Report.

The Life Sciences Center continued to grow, outpacing the county in private life science sector jobs. However, implementation of the 2010 Plan vision encountered barriers. The cornerstone of the 2010 land use recommendation and staging requirements, the Corridor City Transit Way (CCT), was being reevaluated. The ability for growth in the area was stymied due to the staging requirements of the 2010 Plan, which allocated development based on provision of key public facilities and infrastructure including the CCT. The 2010 Plan acknowledged that it was necessary to evaluate the staging and implementation over time to assess development, infrastructure delivery, and progress toward fulfillment of the Plan vision.

The 2021 *Great Seneca Science Corridor Minor Master Plan Amendment* (2021 Amendment) was initiated to formally evaluate the progress of the 2010 Plan and develop recommendations to facilitate the continued growth of the life sciences industry. Specifically, the Amendment adjusted the staging requirements established by the 2010 Plan and recommended a comprehensive amendment to align the vision and recommendations for the area with the county's current reality and priorities. The Great Seneca Plan is a comprehensive amendment to the 2010 Plan, as recommended by the 2021 Amendment.

The purpose of the Plan is to:

- Address barriers that have stymied progress toward achieving the 2010 Plan vision.

- Integrate policy guidance from countywide policies, plans, and initiatives.
- Develop recommendations that respond to the social, environmental, technological, demographic, and economic shifts that have occurred locally and globally since 2010.
- Establish a shared vision to guide future development and investment, as well as to advance racial equity and social justice.
- Attract, retain, and grow the life sciences and healthcare industries by enhancing the Life Sciences Center as a complete community.

C. CONTEXT

The Great Seneca Plan: Connecting Life and Science (Plan) is an update to the 2010 *Great Seneca Science Corridor Master Plan* (2010 Plan) and follows the 2021 *Great Seneca Science Corridor Minor Master Plan Amendment* (2021 Amendment).

The Plan retains the 2010 *Great Seneca Science Corridor Master Plan* (2010 Plan) boundary and covers 4,330 acres in the heart of the I-270 corridor, shown in Figure 1. The Plan borders the Intercounty Connector (ICC) and MD 355. As shown in Figure 2, the Plan area is non-contiguous and dispersed among municipalities. The City of Gaithersburg occupies 10 square miles in the center of the Plan area, the City of Rockville borders the Plan area on the east, and the Town of Washington Grove borders the Plan area to the northeast. The Plan includes several distinct areas, including the Life Sciences Center (LSC), Quince Orchard, National Institute of Standards and Technology (NIST), Londonderry and Hoyle's Addition, Rosemont, Oakmont, Walnut Hill, Washingtonian Light Industrial Park, Washingtonian Residential, and Hi Wood. The Life Sciences Center is bordered by the City of Gaithersburg on the north and west, and the City of Rockville on the east. The Quince Orchard area is bordered by the City of Gaithersburg on the east. The remaining areas are nearly surrounded by the cities of Gaithersburg and Rockville.

The Great Seneca Plan focuses predominantly on the Life Sciences Center, in the southeastern corner of the Plan area. This area, shown in Figure 3, has experienced the most change over the past decade and has new planned transformational investments on the horizon, including the LSC Loop Trail and the Great Seneca Transit Network. The Life Sciences Center has been the center of new development applications and construction in the area. The area is also adjacent to important commercial centers in the City of Gaithersburg, such as the Rio Lakefront and Downtown Crown, built since the 2010 Plan.

FIGURE 1: REGIONAL CONTEXT OF THE GREAT SENECA PLAN AREA

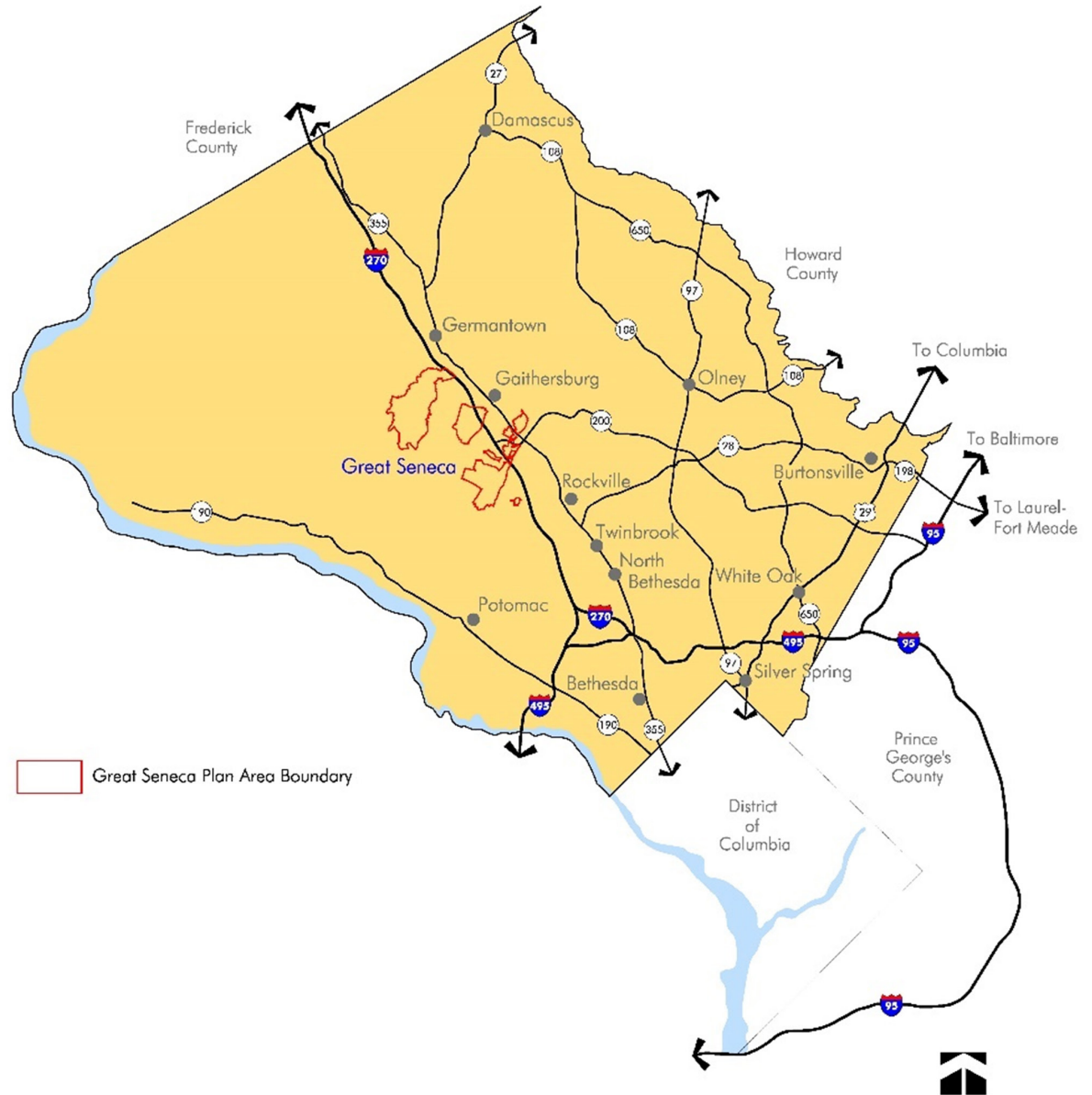
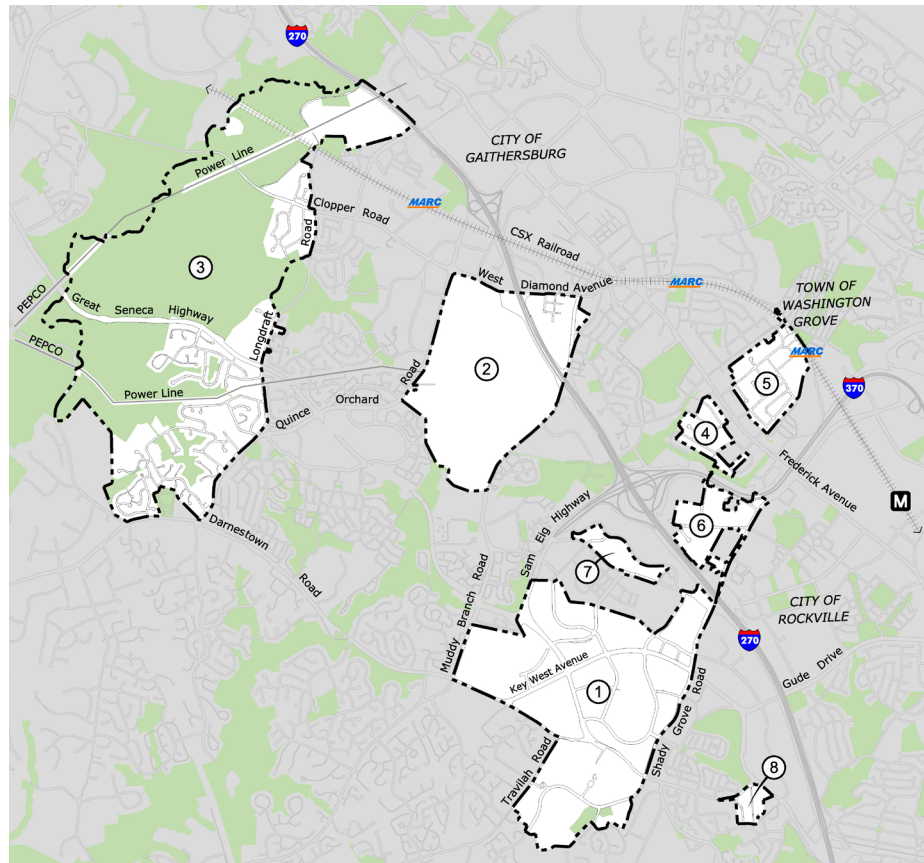


FIGURE 2: GREAT SENECA PLAN AREA



- ① Life Sciences Center
 - ② NIST/Londonderry and Hoyle's Addition
 - ③ Quince Orchard
 - ④ Rosemont
 - ⑤ Oakmont/Walnut Hill
 - ⑥ Washingtonian Light Industrial Park
 - ⑦ Washingtonian Residential
 - ⑧ Hi Wood
- Parkland
 - Non Plan Area
 - Planning Area Boundary
 - M Shady Grove Metro Station
 - MARC MARC Station

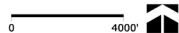
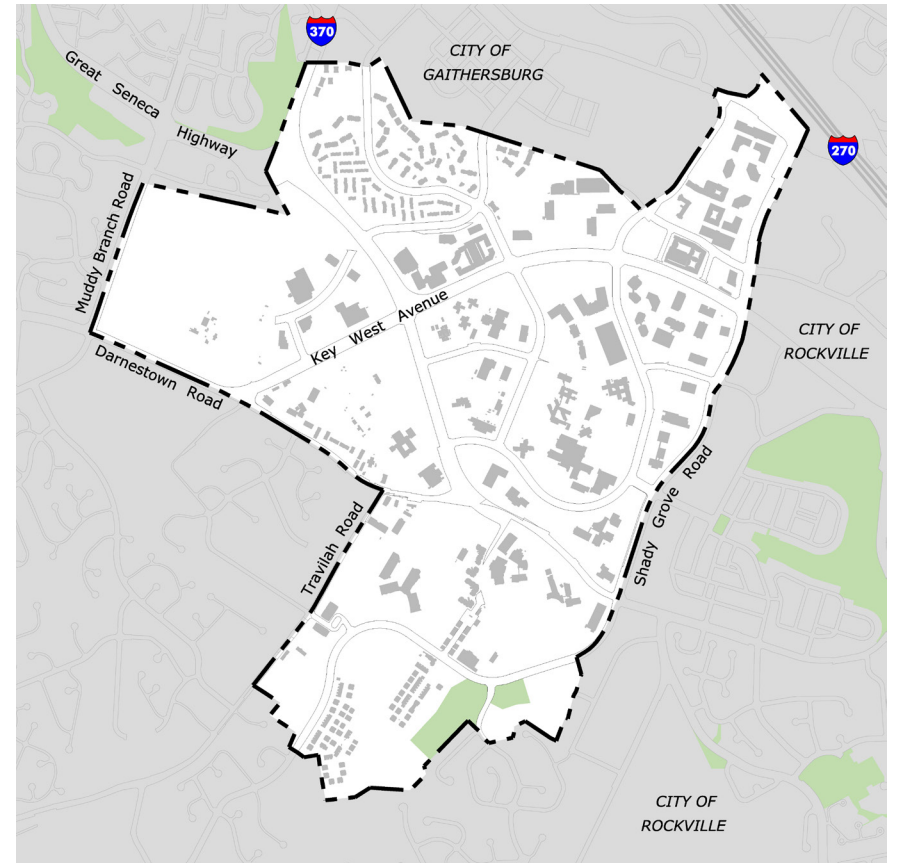


FIGURE 3: LIFE SCIENCES CENTER



- Life Sciences Center Planning Area Boundary
- Non Plan Area
- Parkland



D. PLAN AREA HISTORY

Earliest Indigenous History

Montgomery County—located along the Maryland fall line where the Piedmont Physiographic Province meets the Atlantic Coastal Plain—is characterized by plateaus and rolling hills incised by deep, narrow stream valleys. Many of these streams were navigable from the Chesapeake Bay up to the fall line and provided transportation which influenced settlement patterns. The ancestors of the indigenous population of Maryland, including the Piscataway and Susquehannock, arrived in Montgomery County over 12,000 years ago. Gradually, indigenous populations concentrated in settlements along rivers and streams. Most of the inland areas of Montgomery County served as hunting grounds, sources for raw materials, and impermanent campsites during winter months.

Colonial Settlement and Montgomery County

Initially, white colonists had relied on both indentured and enslaved labor for commercial tobacco farming. Planters, however, shifted to the exclusive use of enslaved African labor, and the colony codified slavery based on race in 1664. By 1715, Maryland had enacted a comprehensive law that confirmed the life-long enslavement of Africans and their descendants. During the late 18th and early 19th centuries, residents planted maize, corn, and oats, and processed grain, wool, and wood in stream-powered mills. Plantation and mill owners relied on enslaved labor.

Quince Orchard and Hunting Hill

The former Quince Orchard and Hunting Hill communities were located near the present-day intersections of Quince Orchard Road and Darnestown Road and Great Seneca Highway and Darnestown Road, respectively. The African American community at Quince Orchard was founded in the mid-nineteenth century when Thomas Neverson purchased 40 acres in 1848. Several other free African American families were living in the area. The community

expanded post emancipation with the establishment of a school and church that served critical religious, social, and educational functions.

African Americans community leaders used their own resources to establish a school and church. In 1868, Neverson, George W. Johnson, and Charles Beander, trustees of the Pleasant View Methodist Episcopal Church, bought 3 acres of land for the church. A few months later, Garey [sic] Green, James Ricks, and Carlton Mason acquired one-acre from them to build the Quince Orchard School.

Between 1868 and 1869 the trustees of the Methodist Episcopal Church opened the Quince Orchard School and then transferred the property to Board of School Commissioners of Montgomery County. The school suffered damage from multiple fires and burned down in 1901. Instead of building a new school for African American students, Montgomery County Public Schools built a new school for the local white children and moved the abandoned school onto this site for the African American children. In the county, and nationally, African American schools received less funding, had fewer teachers who received less pay, were provided worse facilities and equipment, and given outdated books. In 1951, Montgomery County Public Schools closed the Quince Orchard School and consolidated it with nearby schools.

Methodism experienced a period of rapid expansion throughout the county in the late nineteenth century. The Quince Orchard and nearby Hunting Hill communities were served by three Methodist churches (two for white residents and one for black residents). While the Black trustees of Pleasant View Methodist Episcopal Church—also known as the Quince Orchard Methodist Episcopal Church—acquired land for their church in 1868, the new building was not completed until twenty years later, in 1888. The Pleasant View congregation was part of the 'Washington Conference of Colored Members' of the Methodist Episcopal Church. The congregation razed the original church structure in 1914 and replaced it with the present-day building at 11810 Darnestown Road.

White residents established the no-longer-extant Quince Orchard Methodist (later named the McDonald) Episcopal Church South and Hunting Hill Methodist Episcopal Church in 1903. Prior to the Civil War, the national Methodist Episcopal Church split over slavery. Congregants who favored slavery formed the Methodist Episcopal Church South. Methodist schisms remained until the Methodist Episcopal, Methodist Episcopal South, and Methodist Protestant churches merged to create The Methodist Church in 1939. Locally, the McDonald Episcopal Church and Hunting Hill Methodist Episcopal Church congregations merged in 1965. Three years later, this white congregation merged with the Black congregation at Pleasant View Methodist Episcopal Church and established the Fairhaven United Methodist Church at 12801 Darnestown Road.

Modern History

At the conclusion of World War II, there was a national movement to construct highways and interstates. In 1944, the National Capital Park and Planning Commission announced a new Master Plan for freeways, highways, parkways, and streets, including the relocation and expansion of US-240 (known as the Washington National Pike and later renamed I-270).

Following the fears of a nuclear attack on Washington, D.C. after successful tests by the Soviet Union in 1949, certain Federal agencies moved to the I-270 corridor including the National Institutes of Health (NIH) in 1953 and the Atomic Energy Commission in 1957. Built in phases between 1950 and 1960, the completion of I-270 led to increased suburbanization, the relocation of government facilities from Washington, D.C. to Montgomery County. The Federal government acquired 579.5 acres within the Great Seneca Plan boundary for the National Institute of Standards and Technology (NIST) campus between 1956 and 1986.

Development of the I-270 corridor grew as technology corporations were attracted to the region by the proximity of Federal agencies. Private businesses established headquarters for companies including COMSAT Laboratories, Fairchild Industries, Digital Communications, Inc., IBM, Hewlett

Packard Company, Vitro, and American Satellite Corporation. Many of these corporations strove for architectural distinction that provided a sense of technological optimism. By the 1980s, more than 80,000 employees traversed the corridor to travel to and from their places of employment.

The county's biotech industry, also drawn to the area for access to Federal agencies such as the National Institutes of Health (NIH), thrived due to federal funding, grants, local universities, and county support. The roots of the Life Sciences Center can be traced to the 1971 *Gaithersburg Vicinity Master Plan*, which proposed a medical center and paved the way for the Shady Grove Adventist Hospital. In the 1980s, as part of its economic development program, Montgomery County strategically invested in the area to improve its competitive position to attract the life sciences industries.

In 1982, Montgomery County invested in the Shady Grove Life Sciences Center, a publicly owned 232-acre research and industrial park, which eventually attracted Otsuka Pharmaceutical Company, one of Japan's largest pharmaceutical firms. Three years later, Montgomery County partnered with NIST and the University of Maryland to establish the Center for Advanced Research and Biotechnology. In 1992, Maryland received \$234.33 million (29 percent) of the biomedical research and development grants awarded by the NIH. Montgomery County firms received over 80 percent of the contracts awarded in Maryland.

In the Great Seneca Plan boundary, other changes to the landscape occurred concurrently with the development of I-270. Maryland opened Seneca Creek State Park in 1958 and continued to expand the park over the next decade. In 1975, Long Draught Creek was dammed for recreational use and flood control which submerged 90 acres within the Plan boundary to create present-day Clopper Lake. The creation of this man-made lake is a unique feature within the Plan boundary.

E. DEMOGRAPHIC CONTEXT

Montgomery County is home to some of the most culturally diverse places in the United States, including two of the most culturally and ethnically diverse cities in the country, Rockville and Gaithersburg. Positioned between these two cities, the Plan area demographics are predominantly characterized by younger residents, renters, people with lower median incomes, and residents who speak a language other than English at home.

Approximately 16,000 people in 6,900 households live in the Plan area. The population has grown by 20% since 2010 and over 40% since 2000. The rate of population growth in the Plan area has far outpaced population growth in Montgomery County, which has only grown 23% since 2000.

The Plan area has a slightly younger but similar age profile to Montgomery County, with a larger share of 20- to 34-year-olds. While the net growth in this age group in the Plan area between 2010 and 2020 was limited, there was a net loss in this age group in Rockville, Gaithersburg, and Montgomery County. The Plan area is unique for attracting younger residents between 2010 and 2020.

Households in the Great Seneca Plan area are notably smaller, more often include renters, and have a lower median income than those of Rockville, Gaithersburg or Montgomery County. Nearly two-thirds of Plan area households are renters, compared with one-third of the county households overall. Racial and ethnic diversity in the Plan area are consistent with those of the county overall, with no notable differences. However, a higher percentage of residents (50%, compared with 40% countywide) speak a language other than English at home. In addition to English, the top languages spoken in the Plan area are Spanish, Chinese, Korean, and French.

The unique demographic characteristics of the Plan area shaped the outreach and engagement approach for developing this Plan. Identifying key groups and stakeholders allowed Montgomery Planning to target specific community member groups, in addition to conducting general engagement activities.

F. COMMUNITY ENGAGEMENT

Master plans create a vision for the future and identify specific recommendations to help implement that vision. Robust community engagement and meaningful participation in the planning process are critical to developing the vision and resulting recommendations.

The engagement strategy for the Great Seneca Plan focused on meeting people where they are: in terms of information, physically, and in the community. Throughout the planning process, Montgomery Planning sought input from residents, workers, property owners, students, state and county agencies, and community organizations, among others.

People come to the planning process with distinct levels of experience, backgrounds, and access to information. To achieve more equitable engagement, Planning staff sought to level the informational playing field by translating Plan-related materials and holding meetings in the languages most spoken by Plan stakeholders (English, Mandarin, and Spanish), providing access for people who are visually and hearing-impaired (as needed), and distributing educational material that explained the Plan process and key concepts.

Planning staff also brought activities and events to community members. Master plan recommendations affect the daily lives of residents; however, it can be challenging for parents, workers, and those with unpredictable access to transportation, among others, to engage in the planning process. The Great Seneca Plan process provided various engagement options, including in-person and virtual meetings, live and on-demand activities, opportunity to provide feedback through door-to-door canvassing, and pop-up events in neighborhoods to offer great flexibility to participants.

The Plan process enabled people to participate with the people and organizations with whom they already felt comfortable. Planning staff partnered with local groups, organizations, and institutions to share information about the Plan and discuss needs, wants, and concerns. This approach provided stakeholders with space to share their concerns,

perspectives, and visions for the future while fostering trust and accountability.

Montgomery Planning developed equitable engagement strategies to target communities that have been historically excluded from the planning process and employed a variety of tactics to reach people where they were throughout the Plan's development. The activities provided many possible avenues for connecting with people. They included:

- “Pop-ups” at farmers’ markets, coffee shops, commercial centers, food distribution sites, and grocery stores, where staff could meet with people in the midst of their daily activities.
- Door-to-door canvassing, through a partnership with Everyday Canvassing, with a goal of knocking on over 5,000 doors of individual units in multi-family buildings.
- Meetings that were co-hosted with community organizations, including the Chinese Culture and Community Services Center, Identity, and the Great Seneca Science Corridor Implementation Advisory Committee.
- An online mapping tool, ReactMap, that utilized signage in significant locations to elicit community response.
- In-person and online meetings where people could share ideas and priorities.
- Online questionnaires to allow people to rank their priorities and share ideas.
- Focus groups with life sciences companies and developers.
- Virtual feedback maps to explore community priorities and receive feedback on recommendations.

These equitable engagement strategies and activities involved demographically diverse residents throughout the Plan's development. Through this robust outreach and engagement process, Montgomery Planning staff learned from community members' lived experience, priorities, and ideas. The Plan vision is built on these community discussions, and the Plan's recommendations reflect the diverse opinions, needs, and opportunities that people shared through this process.

G. RACIAL EQUITY AND SOCIAL JUSTICE

The Plan envisions a future for the communities in the Great Seneca Plan area that celebrates the diverse backgrounds, languages, and cultures that contribute to the character and history of the area and offers opportunities to all community members. All residents deserve high-quality housing, education, jobs, transportation, and recreational opportunities. Providing more equitable access to these opportunities requires us to prioritize private and public investment in the areas where more people work and live, as well as in communities that have experienced past patterns of discrimination.

The Plan area, specifically the Life Sciences Center, is an employment center that attracts people from all over the county, who have all levels of education and experience. The Life Sciences Center and adjacent areas have been a silver lining for the county's economy, going against the countywide trend of job losses since 2010 and through the pandemic. The number of people employed in the area grew by 28%, while employment declined in the rest of the county by 7%.¹ The area, while maintaining its importance as an employment center, has a growing residential population that has outpaced the county growth rate over the past two decades.

¹ This is private employment only and does not include Universities of Shady Grove, NIST, or any other federal lab.

The Plan calls for investment in transportation infrastructure and amenities in the Life Sciences Center, an employment hub, education center, and increasingly dense residential community. The Plan recommends providing transportation options in this area, encouraging more housing (including more affordable housing), and creating unique amenities in this area.

The Plan also advocates investment in the Londonderry area, an area that has been comparatively disadvantaged in terms of economic development, educational opportunities, environment, and infrastructure. The Plan recommendations are to address long-standing inequities and leverage private investment through redevelopment while protecting current residents from displacement.

The Great Seneca Plan also recommends expanding transportation choices—including improved facilities for walking, biking, rolling, and public transit. This will enhance access to jobs and other opportunities, particularly for people of color and low wage earners who are less likely to own a car and more likely to live in areas without adequate infrastructure to meet their mobility needs without an automobile.

Recommendations like reduced target travel speeds, narrower and fewer vehicular travel lanes, smaller turn radii, and the removal of channelized right-turn lanes improve safety for all travelers—including drivers and passengers in automobiles—which is especially important in making transportation more equitable because people of color are more likely to be hurt or killed in crashes, whether they are inside or outside private vehicles.

Diversity and inclusion are essential to the county's economic success, as well as to the ability to produce more equitable outcomes for all our residents. Supporting economic competitiveness in growing industries like the life sciences brings more well-paying employment opportunities for people with a diversity of education and work experience. This Plan highlights strategies to increase the diversity of the workers employed in the life sciences industry.

Equity and Opportunity in the Life Sciences

The life sciences industry provides an opportunity for expanding employment and wages for communities that have traditionally had less access. Life sciences jobs often require advanced degrees; however, the industry also offers many opportunities for people with bachelor's degrees or less education.

There has been increasing demand for life science occupations that do not require advanced degrees. For example, 53% of people employed in Biomedical Technician occupations in the U.S. have no more than an associate's degree. Another 35% have a bachelor's degree. These jobs tend to be more racially and ethnically diverse than jobs with similar wages. Twenty percent of biomedical technicians in Montgomery County are Black, and another 8% are Hispanic. While these shares are not fully representative of their populations in the county, they are closer than other jobs in highly productive industries.

The life sciences industry also offers opportunities for people at different stages in their careers, which can attract and retain younger residents and students in the county. According to an analysis of job postings by the Montgomery County Economic Development Corporation, nearly half of all life sciences jobs posted in 2018 required three years of experience or fewer to apply.

Montgomery County has recognized the potential of the industry for equitable economic development. Montgomery County Public Schools offers a biotechnology program and the Universities at Shady Grove (USG) and Montgomery College offer four-week retraining programs for work in the life sciences industry. Montgomery College retrains hospitality and food-service workers to work in the biomanufacturing sector, while USG focuses on training people with a science background to work in lab facilities. Both Montgomery College and USG also offer degrees in life sciences. (Source: Lightcast)

H. GUIDING PLANS AND POLICIES

Since the adoption of the 2010 Plan, Montgomery County has adopted policies and enacted legislation with far-reaching significance for planning, particularly to achieve safe, equitable and sustainable development. The following county initiatives, among others, have informed the development of the Plan vision, framework, and recommendations:

- 2016: The Montgomery County Council adopted a Vision Zero resolution that commits to eliminating traffic fatalities and severe injuries by 2030.
- 2019: The Montgomery County Council adopted the Racial Equity and Social Justice Act to reduce and eliminate racial disparities and inequities in Montgomery County. The Racial Equity and Social Justice Act requires Montgomery Planning to consider racial equity and social justice impact when preparing a master plan.
- 2021: The County Executive released Montgomery County’s Climate Action Plan (CAP), a document that identifies short-, mid-, and long-range actions to combat and adapt to climate change. Montgomery Planning and Montgomery Parks have committed to implementing the CAP actions within the scope of their authority, including within master plans.
- 2021: The *Complete Streets Design Guide* (CSDG), approved in 2021, provides direction for designing roadways that provide safe, accessible, and healthy travel for all users, including pedestrians, bicyclists, transit riders, and motorists. The CSDG is codified in the Montgomery County Code Sec. 49-25. Complete streets policy and standards.
- 2022: The Montgomery County Council approved *Corridor Forward: The I-270 Transit Plan*, a functional master plan that recommended a near-term transit network and a long-term transit vision to expand transit access for communities along the I-270 corridor. Corridor Forward re-envisioned the Corridor Cities Transitway (CCT) as the Corridor Connectors, a series of dedicated bus lanes that connect communities to existing and planned rapid transit.
- 2022: Montgomery Parks updated the 2017 *Parks, Recreation and Open Space (PROS) Plan* to guide the future development and management of our park system. Parks, recreation, and open spaces provide active, social, and leisure opportunities that are essential to the high quality of life for Montgomery County residents. The focus of the 2022 PROS Plan was to provide equitably activated, central community spaces that meet recreational needs and protect and manage natural and cultural resources for future generations. The PROS Plan update was correlated with the *Thrive Montgomery 2050* update.
- 2022: *Thrive Montgomery 2050*, the update to the county’s General Plan, was approved by the Montgomery County Council in October 2022 and provides guidance for all master plans. It “aims to create communities that offer equitable access to jobs, more housing, transportation, parks, and public spaces” and helps to “guide the design of the built environment to strengthen the social and physical health of our residents, supporting active lifestyles, and encouraging interaction and engagement.” Thrive includes policies and practices to achieve economic competitiveness, racial and social equity and sustainability.

I. PLAN FRAMEWORK

The Great Seneca Plan area includes a variety of contexts, conditions, and opportunities. Due to the dispersed nature of the Plan and the physical separation of geographic areas within the Plan area, there is not a single unifying vision for the Plan. Rather, the Plan considers each area separately and establishes a vision and related recommendations that respond to the unique needs of each. The areas included in the Plan are as follows (Figure 4):

- Life Sciences Center
- National Institute of Standards and Technology (NIST) and Londonderry / Hoyle's Addition
- Quince Orchard
- Rosemont
- Oakmont and Walnut Hill
- Washingtonian Light Industrial Park
- Washingtonian Residential
- Hi Wood

This Plan organizes recommendations by area into separate chapters so that residents, community members, developers, and other stakeholders can easily reference the applicable chapter for their area of interest. The Life Sciences Center is the focus of the Plan and therefore is the longest chapter.

Within each chapter, the Great Seneca Plan recommendations are organized in the themes of the built, social, natural, and economic environments. The Plan elements associated with each theme are as follows:

- Built Environment: The built environment theme includes land use, zoning, urban design, housing, and transportation recommendations.
- Social Environment: The social environment theme includes parks, public open space, trails, and community facilities recommendations.

- Natural Environment: The natural environment theme includes sustainability, resilience, climate, and natural resource management, as well as environmental recommendations.
- Economic Environment: The economic environment theme includes real estate, economic development, and economic competitiveness recommendations.

The Plan offers distinct recommendations within each theme but recognizes that the themes are not discrete; many of the recommendations in one theme influence and contribute to recommendations in another.

FIGURE 4: GREAT SENECA PLAN – GEOGRAPHIC AREAS

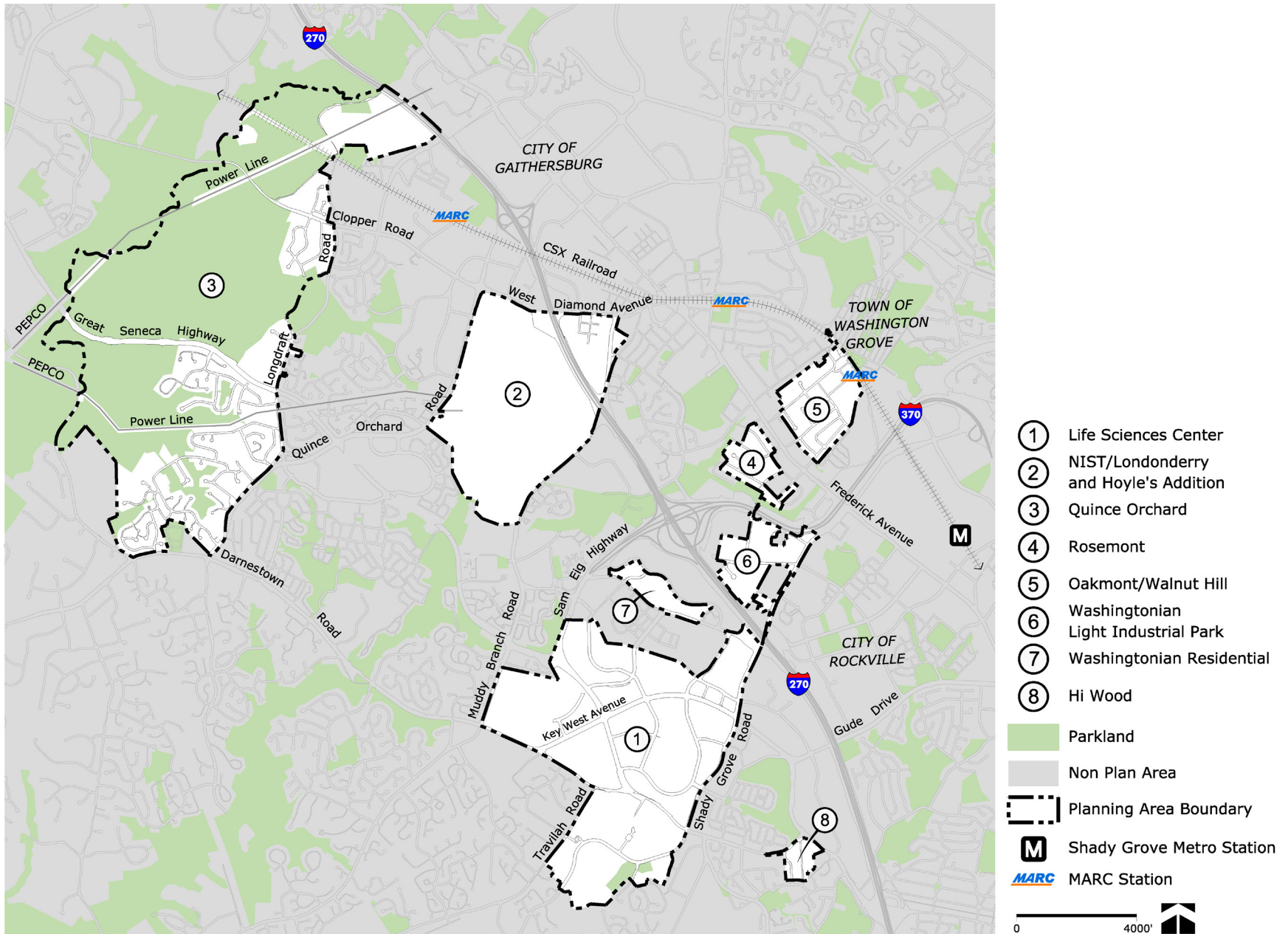


FIGURE 5: EXISTING ZONING

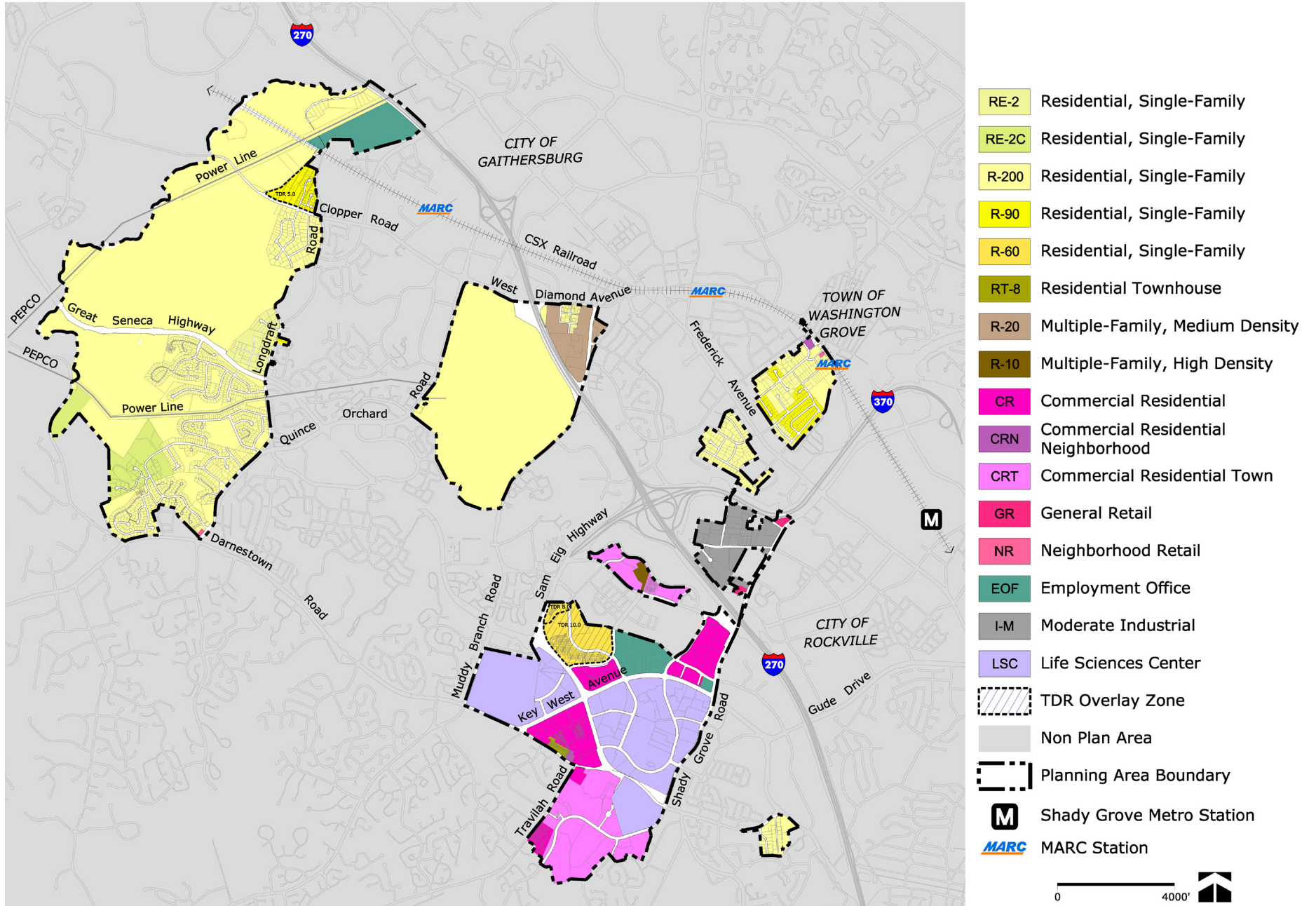
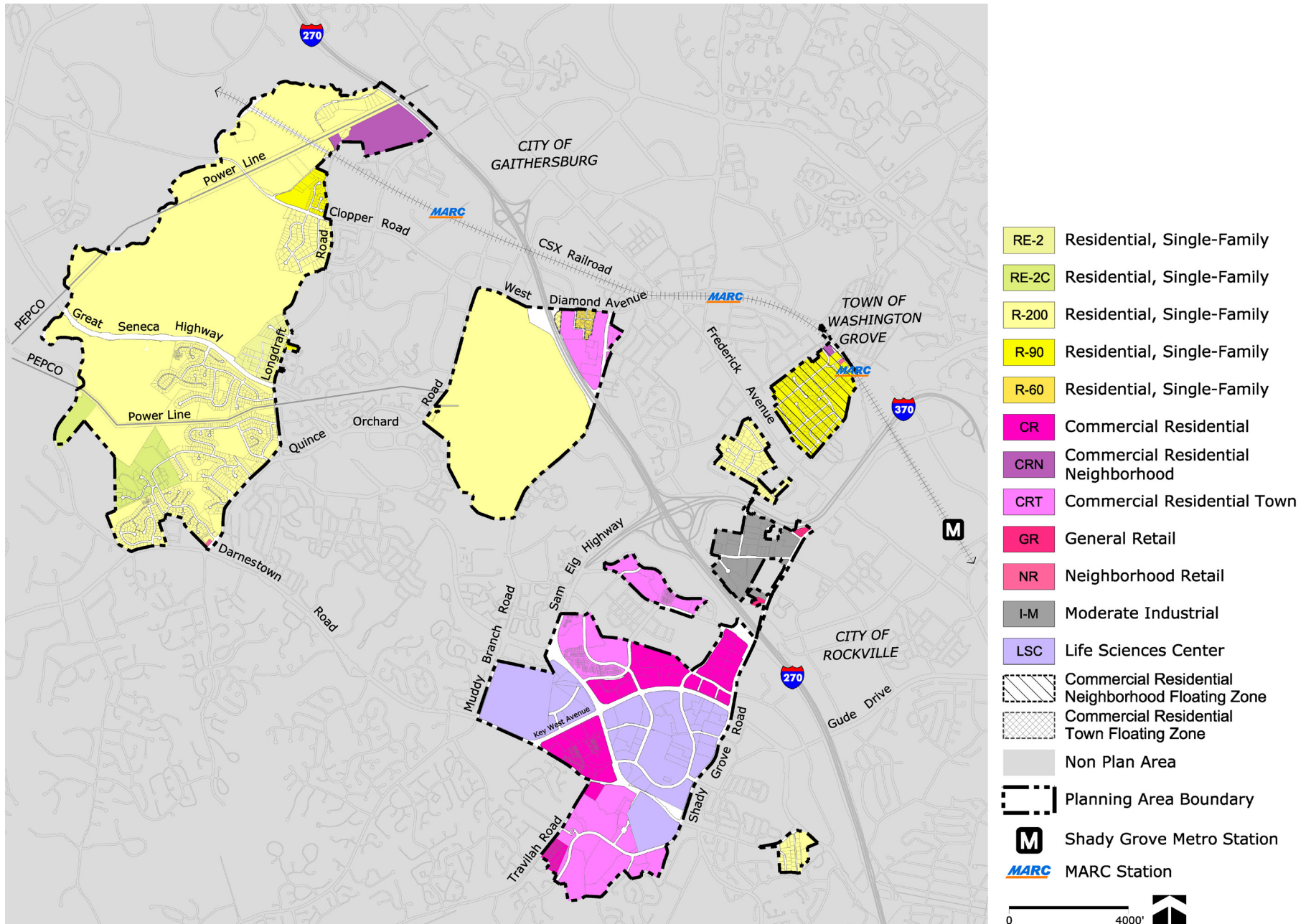


FIGURE 6: RECOMMENDED ZONING



Built Environment

The built environment provides the foundation for how people live, travel, and interact with their surroundings. It refers to the places made by people—such as offices, homes, roads, and walkways— where we live, work, and travel. The built environment recommendations seek to make the concept of 15-minute living envisioned in *Thrive Montgomery 2050* an option for as many people as possible. The concept of 15-minute living has emerged as a way of reimagining existing communities to maximize their attractiveness and efficiency by mixing housing, offices, and retail uses so that services, infrastructure, facilities, and amenities are available within walking distance to serve the daily needs of people who live or work there. While not every area in the Plan can achieve this, the concept is a useful organizing principle to create recommendations that make communities more complete.

The Plan acknowledges that not every area of the county is appropriate for growth; growth and future investment should be concentrated in activity centers served by high-quality transit where many people live, work, and visit. The Life Sciences Center is a significant employment center today, and this Plan strives to retain, grow, and attract employment opportunities in the Plan area. The Plan further strives to increase mixed-use infill and redevelopment supported by diverse housing options; safe, accessible, and reliable transportation infrastructure; services; and amenities to meet the needs of a variety of people within a 15-minute walk, bike, or roll.

The goals for a safe, accessible built environment are to:

- Prioritize investments in infrastructure and amenities near transit hubs and activity centers where people live and work.
- Eliminate transportation-related fatalities and severe injuries.
- Provide housing and transportation options for all people.

Social Environment

A well-designed social environment fosters relationships and creates spaces for positive interactions. The recommendations within this theme seek to create a well-connected public realm of streets, parks, publicly accessible open spaces, and community facilities to strengthen the physical and mental health of residents, support active lifestyles, and encourage social interaction.

A strong social environment is supported by community facilities and services, such as libraries, schools, and public safety. The goals for engendering a flourishing social environment are to:

- Build spaces that serve multiple functions rather than a single purpose.
- Make outdoor healthy physical activity irresistible.
- Add and enhance parks and outdoor recreational facilities in densely populated centers of activity.
- Focus on the specific needs and desires of an increasingly diverse population, particularly of historically marginalized and underserved communities and groups.
- Create places that foster community, civic engagement, and social cohesion.

FIGURE 7: PROPOSED BIKEWAY FACILITIES

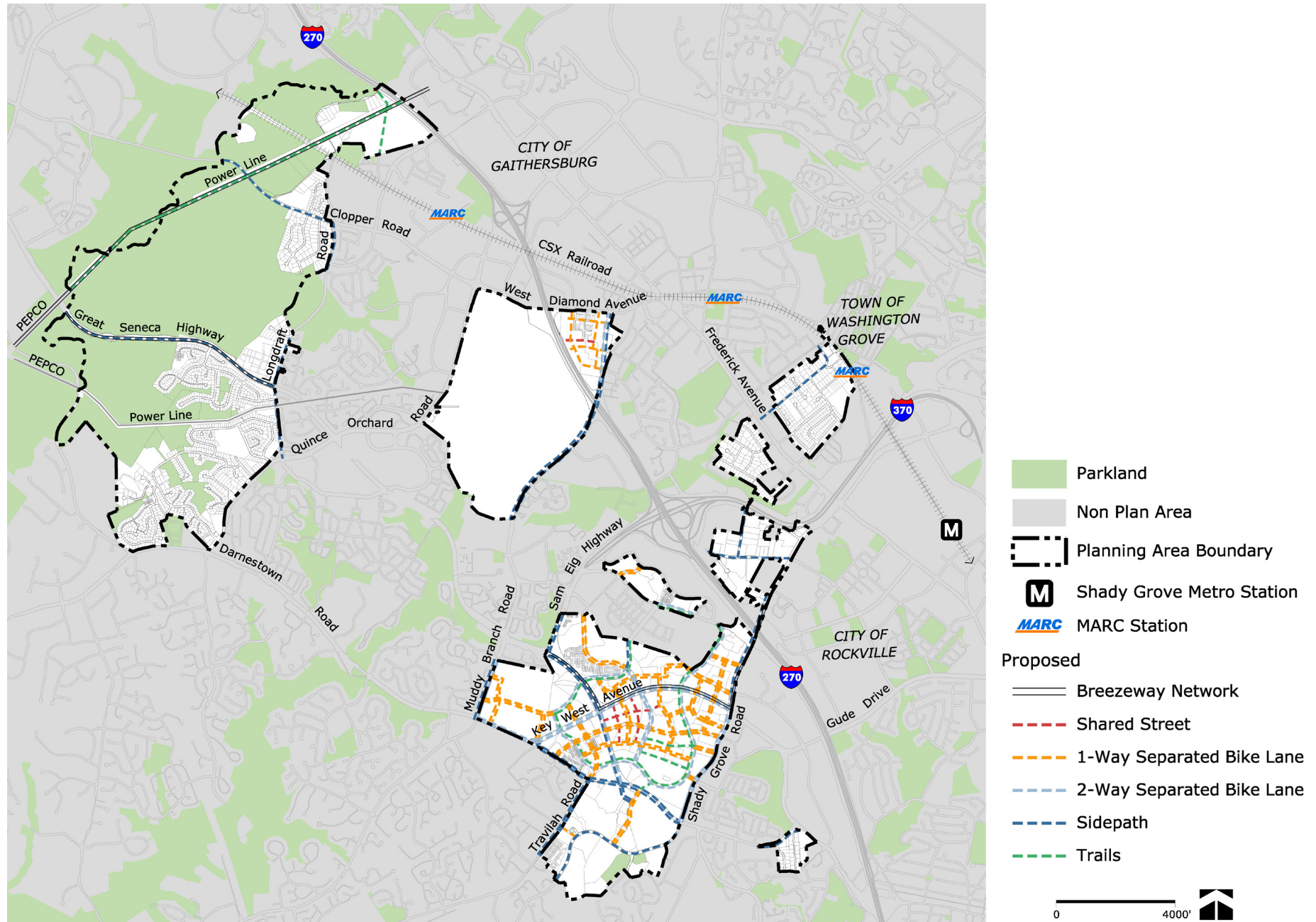


FIGURE 8: RECOMMENDED ROAD DESIGNATIONS

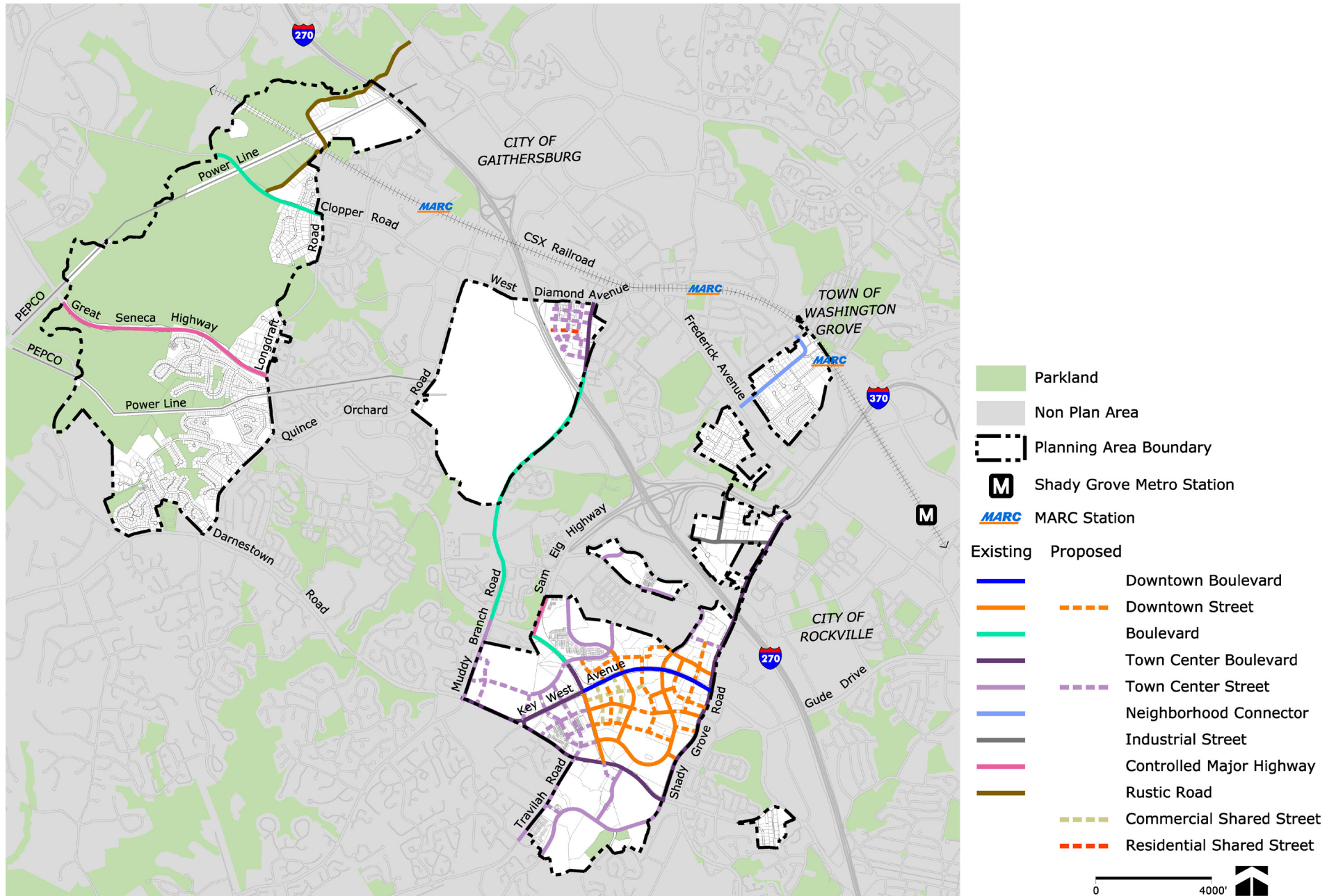


FIGURE 9: EXISTING COMMUNITY FACILITIES

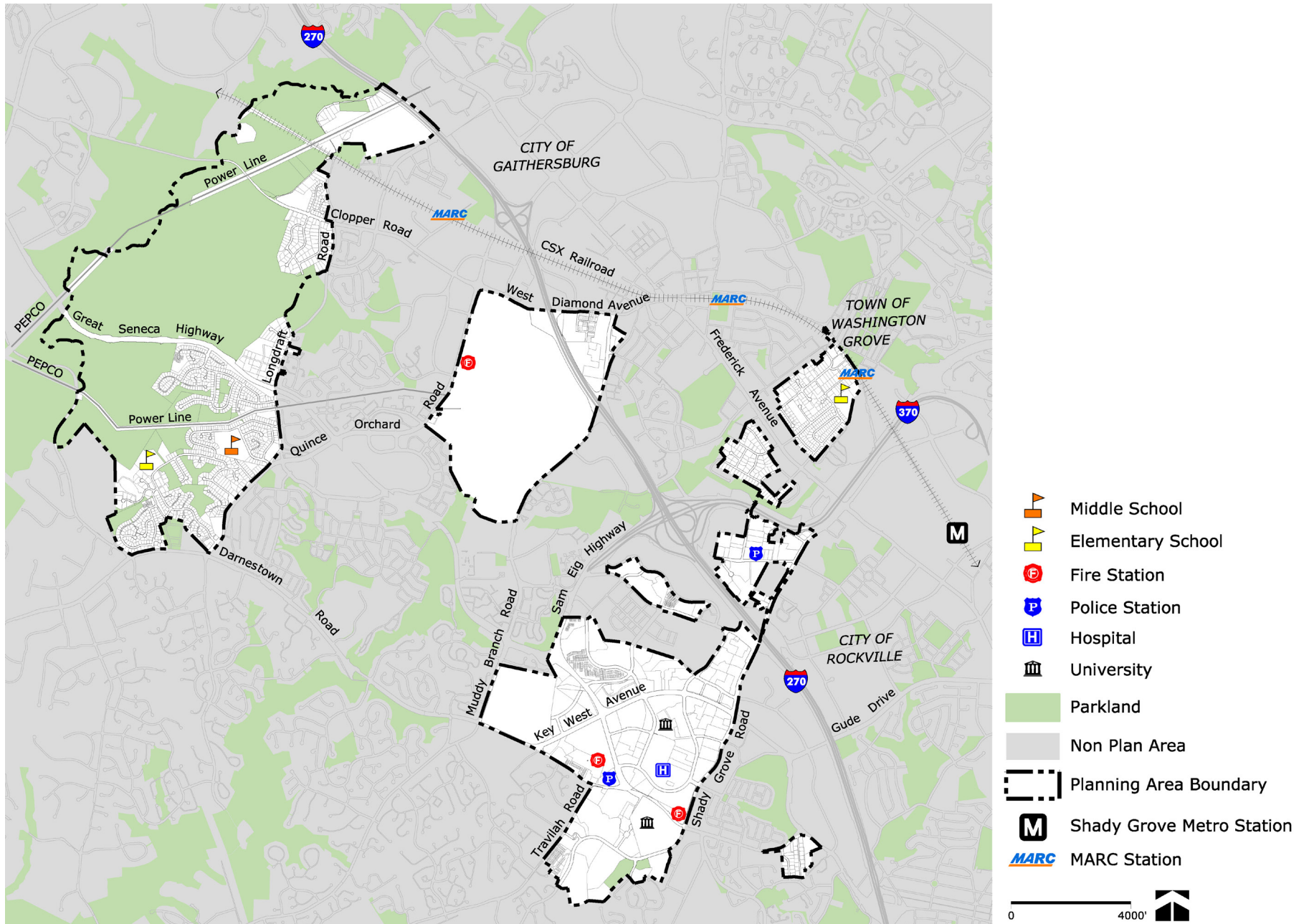
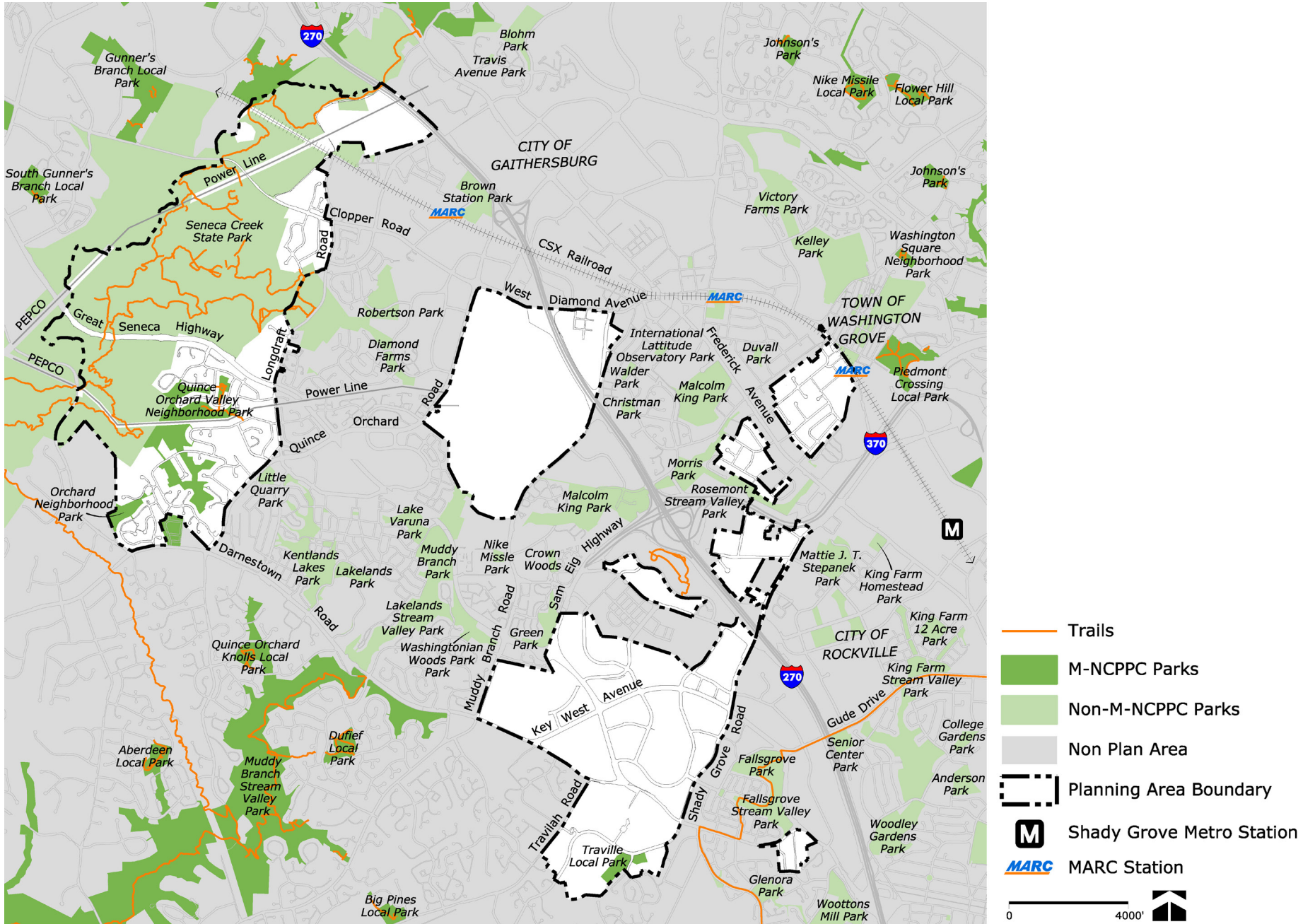


FIGURE 10: EXISTING AND PROPOSED PARKS AND TRAILS



Natural Environment

The natural environment and our ability to sustain it are directly affected by what we build, where we build, and how we build. Therefore, it interacts with all facets of our built environment, our social environment, and our economic environment.

Most of the serious environmental problems we face today are the result of cumulative impacts. Stormwater runoff problems were not caused by the development of a single property, but by the combined runoff of tens or hundreds of developments within a watershed. Air pollution problems were not caused by a single automobile owner driving to the store, but by thousands of drivers going to work or school, shopping, home, and all the other places people need to be every day. Likewise, climate change problems have been caused by the cumulative impacts of countless engines, power plants, and industries powered by fossil fuels, along with the emissions from the conversion of millions of acres of forest, fields, and wetland into developed and agricultural lands.

There is no single grand action that can reverse these changes, restore our environment, and create healthy communities for our families and native species. Just as the damage from climate change, habitat loss, and pollution has occurred from cumulative impacts, ultimately it can only be addressed through the cumulative actions of each individual person, business, industry, community, and government entity.

This Plan makes recommendations to help mitigate and adapt to climate change and its impacts, protect air and water quality, protect and improve human health, preserve biological diversity, promote environmental equity, and create resilient communities.

The goals for developing healthy, sustainable, and resilient communities in the Great Seneca Plan area are to:

- Create resilient communities that respond to climate change.

- Create communities that protect and support good health by minimizing climate threats and pollution and provide opportunities for physical activity.
- Identify land that prioritizes natural resource protection and management, including existing parklands.
- Identify and address environmental injustices from land uses that disproportionately affect the health and well-being of communities of color and people of limited resources.
- Continue to protect and improve air and water quality and biological diversity.

Climate-Resilient Communities

Design buildings, transportation systems, open spaces, and infrastructure to:

- Conserve energy and help reduce greenhouse gas emissions.
- Adapt to existing and projected climate change impacts, including extreme heat and extreme precipitation.
- Foster resilience by enhancing the ability of the community to bounce back following climate-change induced disruptions.

Economic Environment

The Plan seeks to retain, attract, and grow the county's major industries and educational capacity to support a healthy economic environment. As this is a land-use plan, many of the recommendations aimed at improving economic competitiveness are tied to creating a sense of place and delivering services, amenities, and infrastructure desired by employers, workers, residents, and visitors. Employers locate in places where their employees want to live, and employees increasingly desire vibrant and walkable communities that offer a range of housing types and transportation options. The Plan's economic goal is to improve the area's ability to retain and attract employers and residents, as well as its economic opportunities, by creating great places. Recommendations that contribute to the achievement of this goal include:

- Create housing opportunities that allow more people to live near their place of employment and mobility options that enable choice in commuting.

- Create a complete community, with housing, amenities, and services for all types of individuals and families.
- Increase opportunities and the value proposition for businesses to locate and expand, with a focus on life sciences research and development.

J. IMPLEMENTATION

Each chapter in the Plan recommends implementation strategies for zoning, community facilities, and capital infrastructure improvements. While infill and redevelopment may be limited in some areas of the Plan, the implementation recommendations also offer guidance for future development review applications.

Annexation

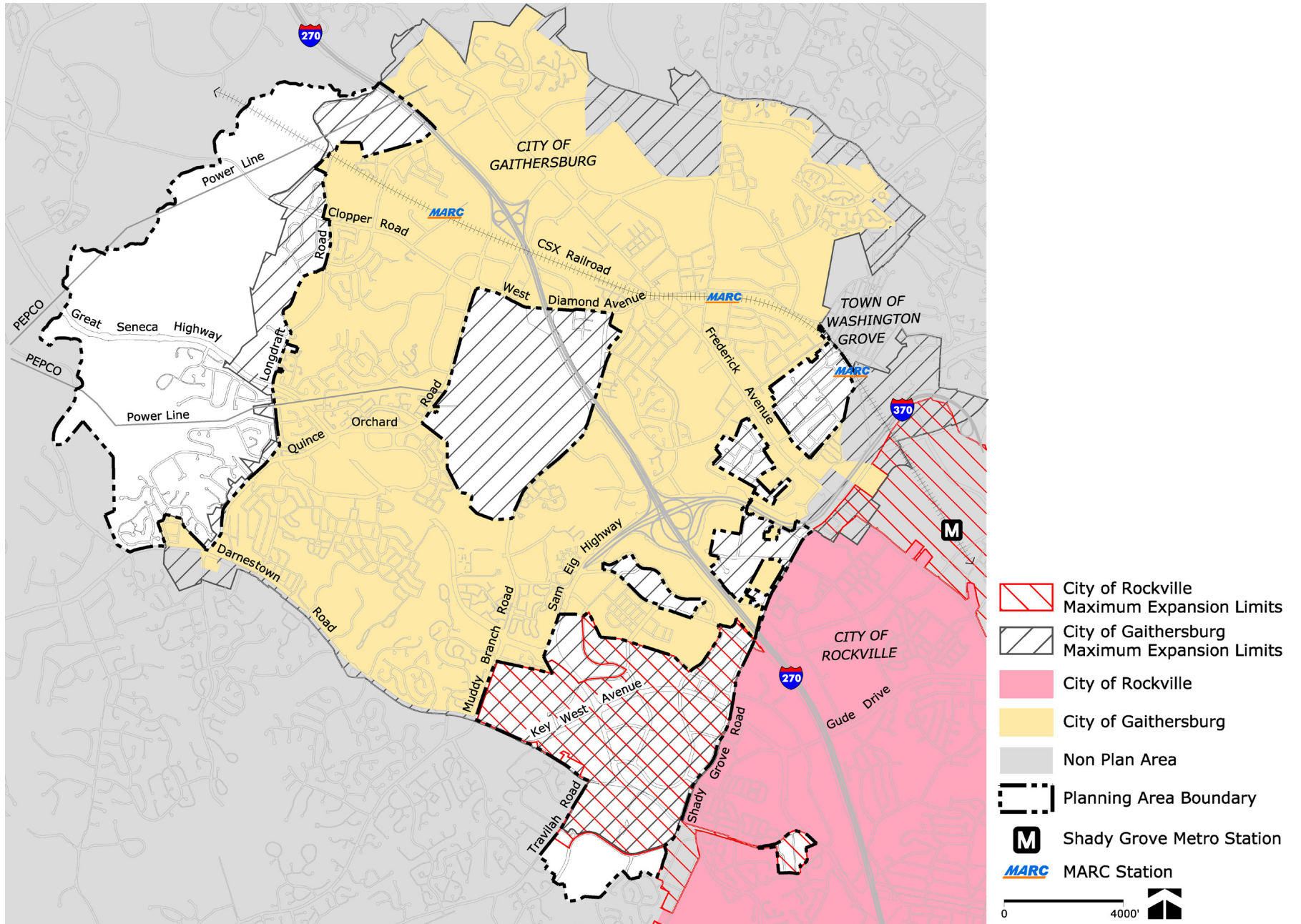
This Plan recognizes that future municipal annexations may occur and that annexing properties by municipalities may be appropriate in some instances. The Plan acknowledges appropriate annexations in the recommendations.

Municipalities in Maryland establish Maximum Expansion Limits (MEL) that establish boundaries for future potential annexations of unincorporated land. The Local Government Article of the Annotated Code of Maryland (Section 4-401 – 4-416) requires that municipalities produce a Municipal Growth Plan delineating the MEL. Only land within the MEL and adjoining the municipal boundaries can be considered for annexation.

In 2009, the City of Gaithersburg established a new MEL as part of its adopted Municipal Growth Element. The new MEL includes nearly all of the Plan area, including the Life Sciences Center. In 2021, the City of Rockville adopted Rockville 2040, the city's new comprehensive plan, which established a new MEL, including most of the Life Sciences Center, which is identified as a "proactive annexation area." The MEL of Gaithersburg and Rockville are shown in Figure 13.

This Plan, consistent with the 2010 Plan, strongly opposes annexation of any portion of the Life Sciences Center by the municipalities. For half a century, the county has invested substantial resources to create and develop the Life Sciences Center. As the 2010 Plan stated, annexing any of the Life Sciences Center would leave the county without control of a significant element of its economic development strategy and create irretrievable revenue losses.

FIGURE 11: MUNICIPAL MAXIMUM EXPANSION LIMITS





The Life Sciences Center

II. The Life Sciences Center

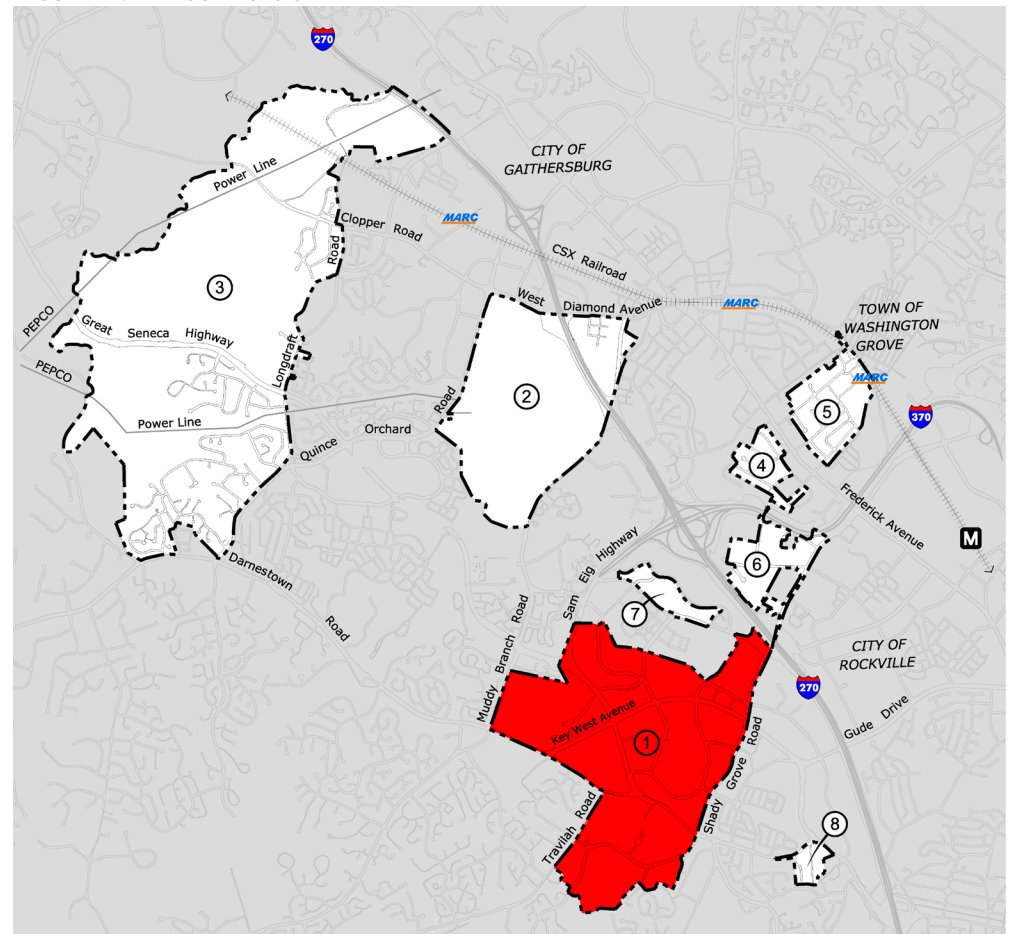
A. CONTEXT AND VISION

Context

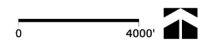
The Life Sciences Center is in the heart of the I-270 Corridor, in the southeastern portion of the Plan area. It is bordered by the City of Gaithersburg to the north and west, and the City of Rockville to the east. The major roadways of Shady Grove Road, Darnestown Road, Great Seneca Highway, and Key West Avenue run through the area.

The Life Sciences Center serves as the county's premier location for the life sciences and biohealth industries. The Adventist HealthCare Shady Grove Medical Center, the Universities at Shady Grove, and the National Cancer Institute's consolidated headquarters are all located in the Life Sciences Center, as are biotechnology companies such as Regenxbio, GlaxoSmithKline, Emergent BioSolutions, and MilliporeSigma, among many others. The Life Sciences Center and adjacent areas contain approximately 9,000 private sector life science jobs, more than 60% of the county's total private life science employment.²

FIGURE 12: LIFE SCIENCES CENTER



- ① Life Sciences Center
- ② NIST/Londonderry and Hoyle's Addition
- ③ Quince Orchard
- ④ Rosemont
- ⑤ Oakmont/Walnut Hill
- ⑥ Washingtonian Light Industrial Park
- ⑦ Washingtonian Residential
- ⑧ Hi Wood
- Non Plan Area
- ▭ Planning Area Boundary
- M Shady Grove Metro Station
- MARC MARC Station



² Data source: MD Dept of Labor QCEW microdata 2021 2nd quarter; private employment only.

In addition to the institutions and private sector office and lab development, the Life Sciences Center includes over 3,500 multi-family and attached single-family residential units, as well as 215,000 square feet of retail development.

Vision

The Life Sciences Center is a thriving economic hub, home to a diverse population, and host to growing life sciences, medical, and educational institutions. It is a leader not only in the region but in the country for life sciences research and innovation. The area consistently ranks among the top in the nation for the life sciences industry. In the face of sluggish growth in other areas of the county, the life sciences industry has continued to demand more construction for its growing employee base.

The 2010 Plan envisioned the Life Sciences Center as a vibrant live/work community, an economic center for the county, and a provider of high-quality amenities that foster social, environmental, and physical health. Progress toward this vision has been and continues to be realized; however, progress related to the physical form of the area remains deficient. Specifically, the parks and open spaces, public realm connections, transit, and multi-modal transportation facilities envisioned in the 2010 Plan remain unfulfilled.

The Great Seneca Plan's overall vision for the future of the area remains relatively consistent with the vision established in the 2010 Plan. However, the Plan seeks to address barriers that have stymied progress toward achievement of the 2010 Plan vision, as well as to develop recommendations that respond to the many social, environmental, technological, demographic, and economic shifts that have occurred globally and locally since 2010.

The Great Seneca Plan envisions the Life Sciences Center as a complete community, a place that will include a range of land uses, jobs, diverse housing options, services, and amenities to meet the needs of a variety of

people within a 15-minute walk, bike ride, roll, or other trip through safe, accessible, and reliable transportation infrastructure (Figure 13). The Plan envisions the Life Sciences Center becoming more than the sum of its individual parts. Anchored by a core downtown, the Plan embraces a high-quality built environment, an active and enriching social life, and natural features that contribute to better physical and mental well-being. The Plan envisions transforming roadways from barriers to vital elements of the public realm that knit neighborhoods together, providing valuable links and social spaces. The recommendations endeavor to strengthen the economic competitiveness of the Life Sciences Center as an epicenter of life sciences and biotech innovation, but also make the vision accessible for all who live in, work in, and visit the area.

“The area should evolve into a more identifiable area with a sense of place, a more urban feeling environment where services and workplaces in the biotechnology area are better integrated. Public art and identifiable places of culture, nature and urban services should be connecting the various campuses into a more cohesive environment.”

– Community Member, Online Survey

FIGURE 13: CONCEPTUAL DIAGRAM OF THE LIFE SCIENCES CENTER AS A COMPLETE COMMUNITY



The Conceptual Diagram is an urban design illustrative sketch intended to convey a sense of desirable future character rather than detailed recommendations for a particular design. Final road and open space alignment will be determined with new development or redevelopment of the site at regulatory review.

B. BUILT ENVIRONMENT

Currently, the built environment of the Life Sciences Center is characterized by a collection of suburban campuses with stand-alone, single-use buildings, setbacks, and surface parking lots, as shown in Figure 14. The buildings provide brief, isolated windows of activity, but the intermittent spacing of buildings, coupled with the significant setbacks and surface parking lots, detract from the vibrancy of the area. While the campuses are connected by major roadways, there are few connections between buildings and campuses. The major roadways act as barriers to people traveling from one area to another and disrupt the physical and social cohesion of the area.

The built environment recommendations of this Plan seek to address these barriers and facilitate continued growth of the life sciences industry through compact, mixed-use development (Figure 15); public realm improvements; amenities and neighborhood retail to support 15-minute living; and equitable access to this important employment center, by offering transportation and housing choices.

“Livability without needing cars. This area has a lot of what it needs—local stores, sidewalks, jobs—but it isn’t connected. It’s walkable, but it’s not convenient to bike or bus anywhere else.”

– Community Member, USG Pop-up

Goals

- Create a Life Sciences Center downtown supported by diverse housing options; safe, accessible, and reliable transportation infrastructure; services; and amenities to meet the needs of a variety of people within a 15-minute walk, bike, roll, or ride.
- Support the continued expansion of life science uses in the Plan area and their integration with other uses to further the greater Life Sciences Center as a complete community.
- Increase the number of both market-rate units and income-restricted affordable housing units.
- Create a multi-modal environment where walking, rolling, biking, and transit are at least as attractive as driving.

Land Use, Zoning, and Urban Design Recommendations

The Life Sciences Center has continued to see both life science and residential growth since 2010. However, uses have developed separately, creating single-use campuses and residential enclaves, with little overlap. These development patterns support an auto-oriented transportation network and impede active, vibrant communities and places. This style of development not only contributes to an inactive public realm, it threatens the economic competitiveness of the county. Recent development has made significant progress in engaging and activating the public realm through site design, architectural elements, and provision of privately-owned, publicly accessible open space, but additional efforts are necessary. Throughout the county, there has been a desire to integrate life science uses with other uses and focus on placemaking and human-scaled development.

The Plan seeks to support “15-minute living” for as many people as possible by establishing a complete community. Complete Communities, as envisioned by Thrive 2050, enable people to meet many of their daily needs within walking or biking distance from where they live or work. They include a range of land uses, infrastructure, services and amenities, and building types.

The Plan pursues a more compact form of development that promotes infill, adaptive reuse, and vertical growth. The public realm and the form and location of buildings should contribute to an active place that encourages social interaction and enables healthy lifestyle choices.

1. Establish a Life Sciences Center Overlay Zone for the entire Life Sciences Center area, including all parcels shown in Figure 16, that supports mixed-use life sciences development, and incentivizes production of affordable and market-rate housing.
2. Rezone all parcels in the Life Sciences Center as shown in Figure 17 and Table 1.
3. Amend the Thrive Growth Map to include the Life Sciences Center as a large center.
4. Encourage compact, mixed-use development near transit that integrates and connects life sciences uses with residential uses, retail, and neighborhood services and amenities.
5. Promote vertical organization of life sciences spaces to make land available for mixed-use and public open space.
6. Encourage adaptive reuse of existing structures, coupled with infill development, when feasible.
7. Consolidate parking facilities in garages that are not visible from pedestrian areas, preferably lined with building uses or screened when visible from streets and public open spaces.
8. Develop Design Guidelines to promote design excellence and provide detailed guidance on the following:
 - Building design and articulation that promotes architectural variety and results in development alternatives responsive to the surrounding context.
 - Public realm activation strategies that engage streets and public open spaces to encourage social interaction.

- Sustainability considerations that promote building design and placement that are responsive to climate and optimal solar orientation.
- Climate action–supportive strategies such as adaptive reuse and infill development.

FIGURE 14: LIFE SCIENCES CENTER EXISTING LAND USE

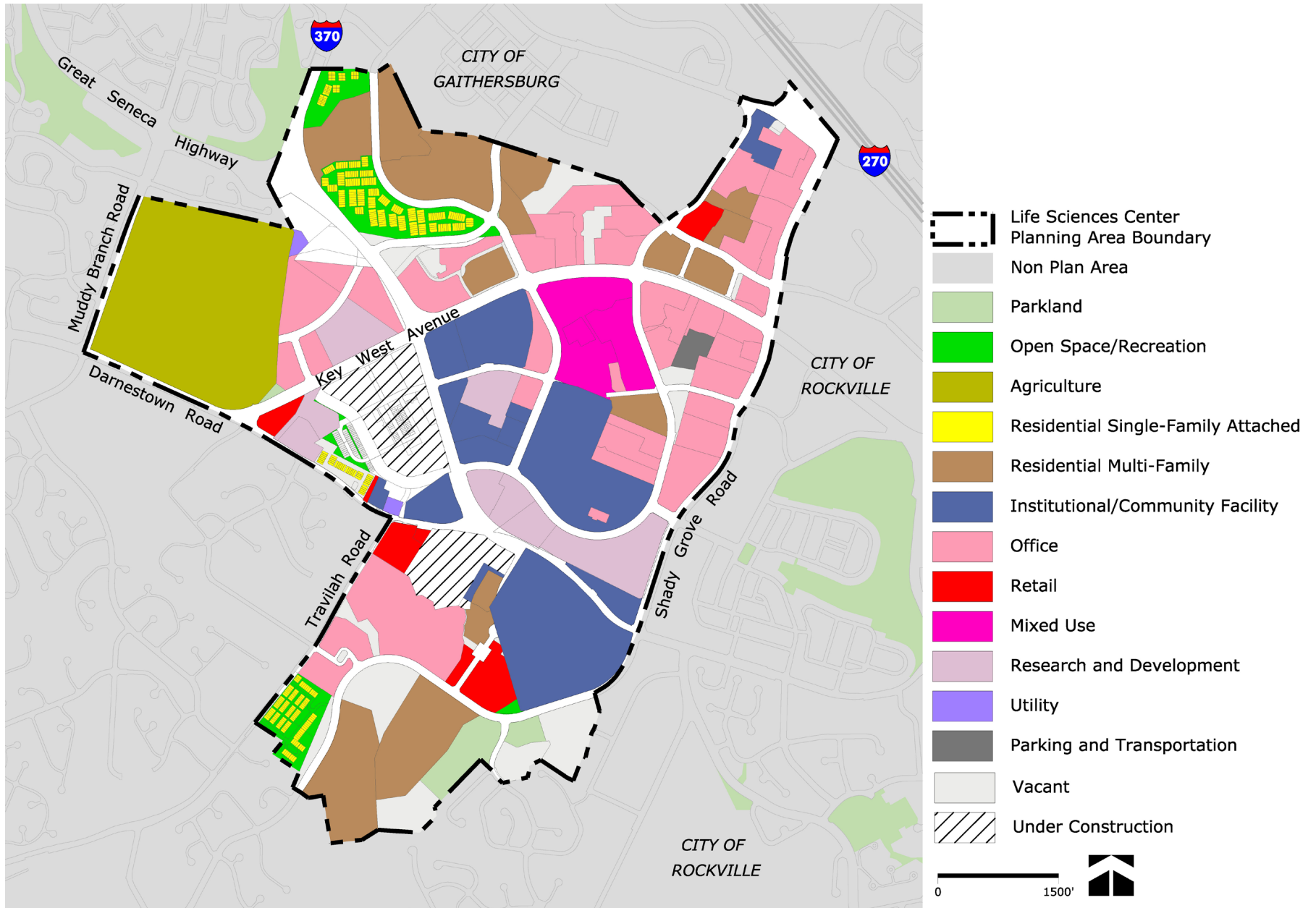


FIGURE 15: LIFE SCIENCES CENTER RECOMMENDED LAND USE

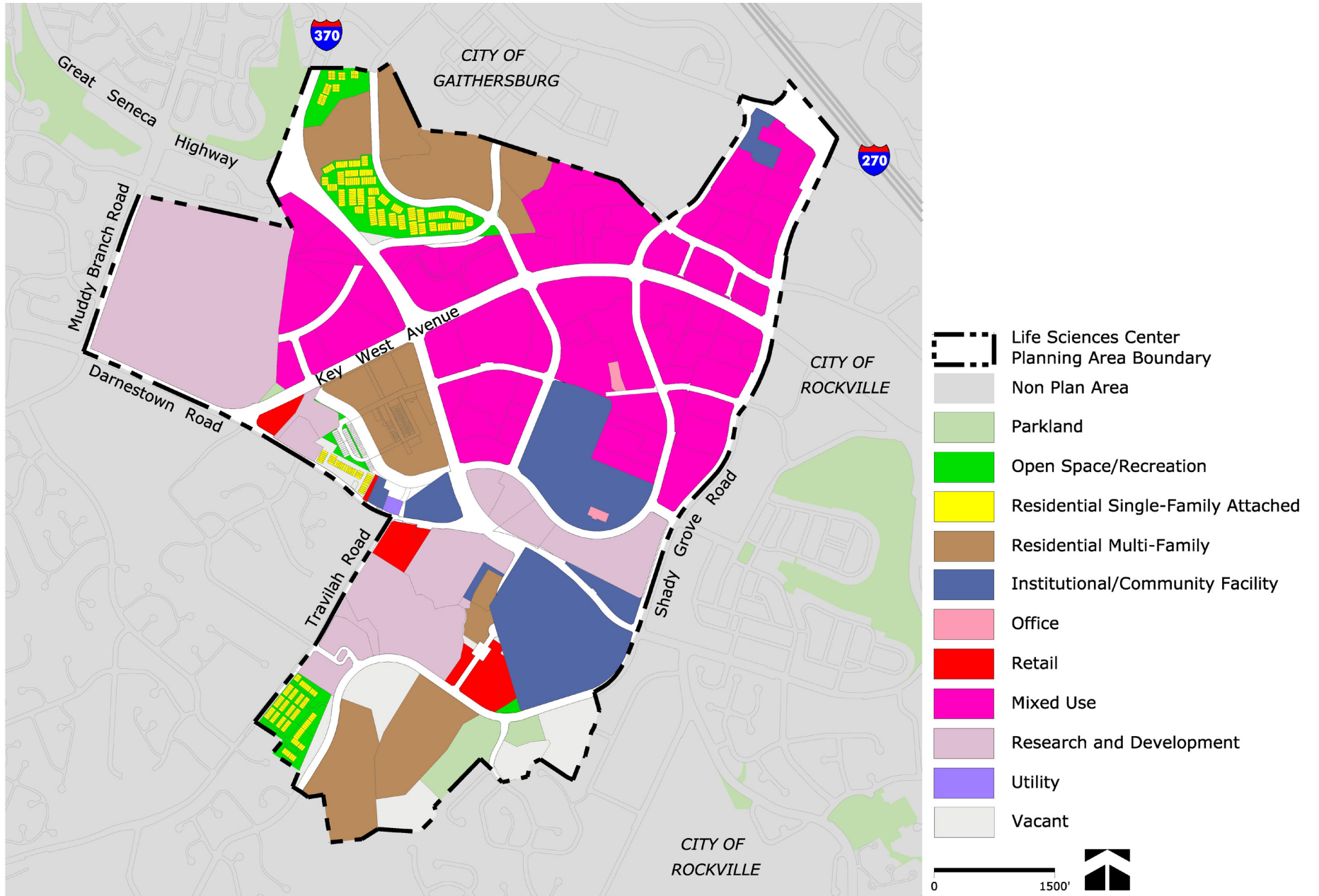


FIGURE 16: LIFE SCIENCES CENTER EXISTING ZONING

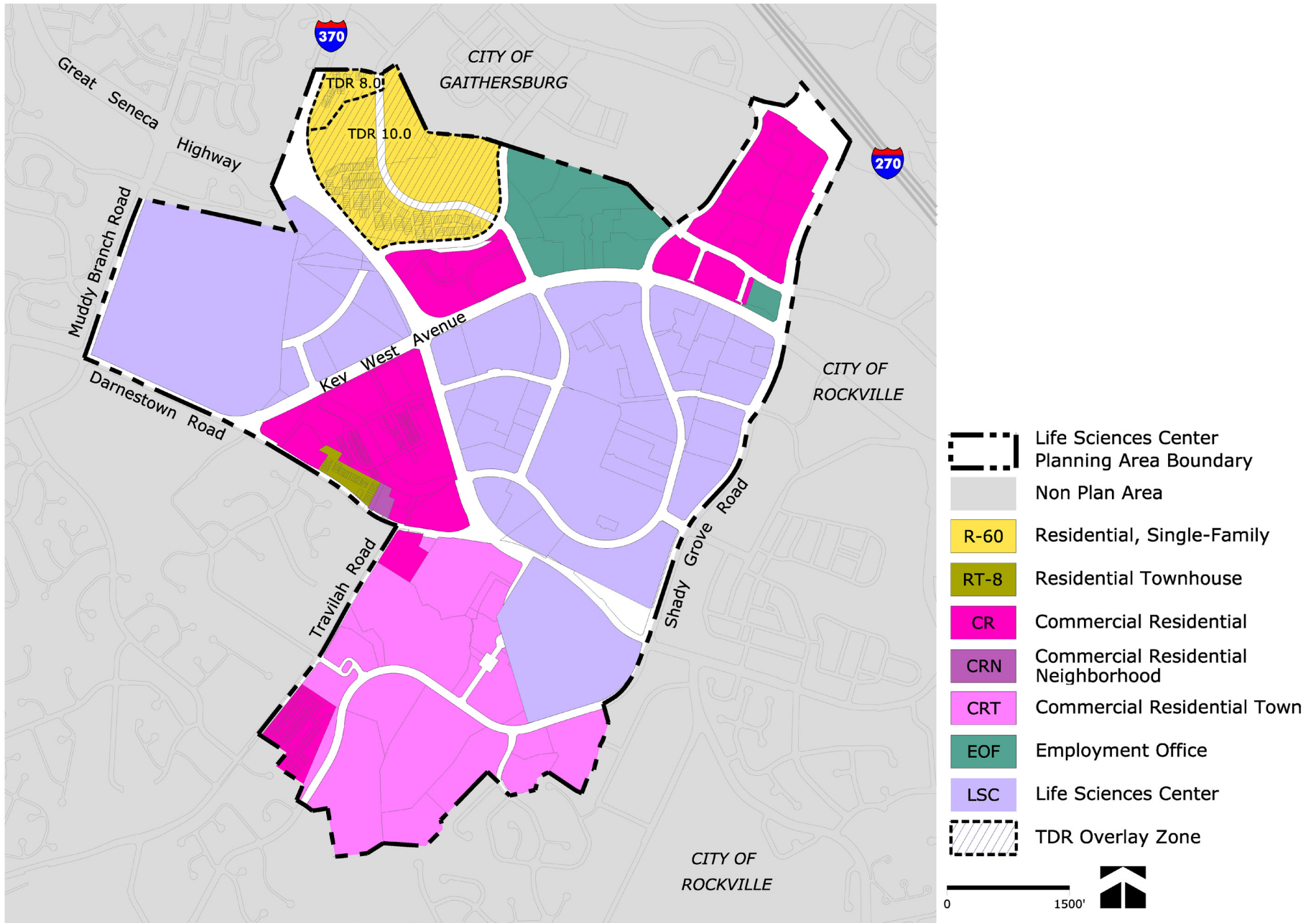


FIGURE 17: LIFE SCIENCES CENTER RECOMMENDED ZONING

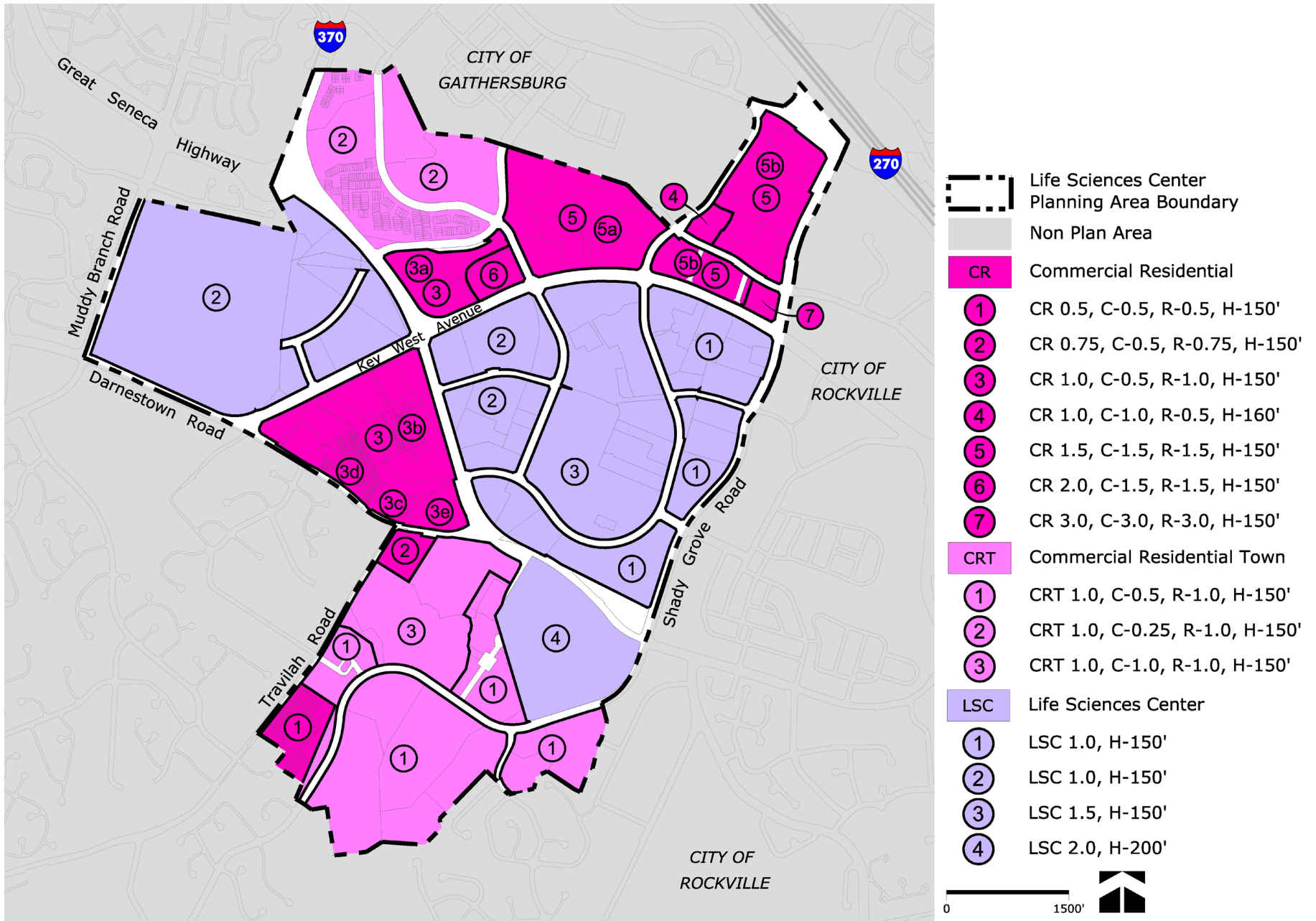


TABLE 1: LIFE SCIENCES CENTER ZONING

Map #	Existing Zoning	Proposed Zoning	Justification
1 CR	CR-0.5 C-0.5, R-0.5, H-80	CR-0.5 C-0.5, R-0.5, H-150	Allow for mixed-use development and increased height
2 CR	CR-0.75 C-0.5, R-0.75, H-80	CR-0.75 C-0.5, R-0.75, H-150	Allow for mixed-use development and increased height
3a CR	CR-1.0 C-0.5, R-1.0, H-80	CR-1.0 C-0.5, R-1.0, H-150	Allow for mixed-use development and increased height
3b CR	CR-1.0, C-0.5, R-1.0, H-150	CR-1.0, C-0.5, R-1.0, H-150	Confirm existing zoning
3c CR	CRN 0.5, C-0.5, R-0.25, H-35	CR-1.0 C-0.5, R-1.0, H-150	Allow for higher density, mixed-use development, and increased height
3d CR	RT – 8.0	CR-1.0 C-0.5, R-1.0, H-150	Allow for higher density, mixed-use development, and increased height
3e CR	CR-1.0, C-0.5, R-1.0, H-150	CR-1.0, C-0.5, R-1.0, H-150	Allow more flexibility of uses
4 CR	CR-1.0, C-1.0, R-0.5, H-160	CR-1.0, C-1.0, R-0.5, H-160	Allow more flexibility of uses
5 CR	CR-1.5, C-1.5, R-1.5, H-100	CR-1.5, C-1.5, R-1.5, H-150	Allow for mixed-use development and increased height
5a CR	EOF – 1.5, H-75	CR-1.5, C-1.5, R-1.5, H-150	Allow for mixed-use development and increased height
5b CR	CR-1.5, C-1.5, R-1.5, H-100	CR-1.5, C-1.5, R-1.5, H-150	Allow for mixed-use development and increased height
6 CR	CR-2.0, C-1.5, R-1.5, H-150	CR-2.0, C-1.5, R-1.5, H-150	Confirm existing zoning
7 CR	EOF – 1.5, H-75	CR-3.0, C-3.0, R-3.0, H-150	Allow for higher density, mixed-use development, and increased height
1 CRT	CRT-0.5 C-0.25, R-0.25, H-100 T	CRT-1.0, C-0.5, R-1.0, H-150	Allow for higher density, mixed-use development, and increased height
2 CRT	R-60 / TDR 8.0 and R-60 / TDR 10.0	CRT-1.0 C-0.25, R-1.0, H-150	Allow for higher density, mixed-use development, and increased height
3 CRT	CRT-0.5 C-0.5, R-0.25, H-100 T	CRT-1.0, C-1.0, R-1.0, H-150	Allow for higher density, mixed-use development, and increased height
1 LSC	LSC- 1.0, H-110T	LSC- 1.0, H-150	Confirm existing zoning and accept the translation from old zoning code to new. Provide more height to accommodate different types of buildings.
2 LSC	LSC-1.0, H-150T	LSC- 1.0, H-150	Confirm existing zoning and accept the translation from old zoning code to new
3 LSC	LSC-1.5, H-150T	LSC-1.5, H-150	Confirm existing zoning and accept the translation from old zoning code to new
4 LSC	LSC-2.0, H-200T	LSC-2.0, H-200	Confirm existing zoning and accept the translation from old zoning code to new

Housing Recommendations

This Plan aims to increase the amount of housing and to meet the needs of people with different income levels and household composition, including families, seniors, and persons with disabilities who currently reside within the Plan area.

Thrive Montgomery 2050 encourages “the production of more housing to better match supply with demand.”³ This area has a strong rental market and continues to experience demand for housing. Rental housing vacancy rates are below the county average and rents are above average. This Plan seeks to increase the number of housing units available by integrating housing with life science and medical uses. Encouraging mixed-use, infill development expands the land available for housing and supports Montgomery County’s economic competitiveness by providing housing for a growing workforce.

1. Require new developments to provide at least 12.5% Moderately Priced Dwelling Units (MPDUs), or other MPDU obligation as established by Code, aligned with current county policy.
2. Encourage public, private, nonprofit, philanthropic, and religious institution partners to expand housing affordability in infill and redevelopment.
3. Preserve existing naturally occurring affordable housing where possible, striving for no net loss of naturally occurring affordable housing in the event of redevelopment.
4. When public properties are redeveloped with a residential component, provide a minimum of 30% MPDUs, with 15% affordable to households earning at the standard MPDU level of 65-70% or less of Area Median Income (AMI) and 15% affordable to households at or below 50% of Area Median Income (AMI).

³ Thrive 2050, page 132.

5. In the event of redevelopment, priority should be given to existing eligible residents for the units under market-affordable rental agreements. Property owners should coordinate with Department of Housing and Community Affairs (DHCA) to develop a relocation plan and tenants to ensure that eligible residents receive support and assistance to mitigate the impacts of temporary relocation.
6. Prioritize two and three-bedroom units for residential development projects to provide additional family-sized units.
7. Make it easier to infill housing with healthcare and/or life sciences by providing flexibility and incentives. See section F. Implementation of this chapter.

“The area has rapidly gone from being expensive to unaffordable, and apartments should not be just one bedroom, but two or three bedrooms at least, so that some of these higher density living options can be viable for more families who are struggling to afford housing, not just single people.”

– Community Member, Shady Grove Farmer’s Market Pop-up

Transportation Recommendations

The Plan seeks to transform the Life Sciences Center into a place where all travelers—regardless of age, ability, or mode of transportation—have multiple safe and convenient transportation options. Right-sizing roadways and intersections, by repurposing or reducing travel lanes, provides space for other forms of transportation and amenities. The Plan prioritizes safety and choice over mobility and prioritizes serving pedestrians, bicyclists, transit users, and vehicle passengers who live, work, learn, and visit the Plan area over the through-movement of high-speed vehicles.

The County Code requires that each transportation facility be planned and designed to “maximize the choice, safety, convenience, and mobility of all users, regardless of age, ability, or mode of transportation ...” Streets designed to protect and serve the most vulnerable road users are safer for everyone.

Right-sizing roadways is a step toward achieving the stated goals in the County Code, as well as other policies such as Vision Zero, Complete Streets, and *Thrive Montgomery 2050*. Policy guidance from Thrive 2050 is to “stop proposing new roadways with 4+ lanes in master plans” and to expand the street grid in centers of activity.

This Plan takes a different approach to downtown right-of-way allocation. Parking will primarily be provided in structured garages, not provided on-street. On-street parking can be provided through reallocation or dedication of additional right-of-way through the development review process, and subject to the plans and policies in place at the time of development. Currently the CSDG prioritizes other elements of the streetscape above on-street parking.

Since the previous 2010 Plan was adopted, lower than anticipated auto traffic, shifts in countywide transportation policy guidance, and improved understanding of safe street design encourage a reevaluation of right-of-way allocation. Wide roads increase crossing distances, acting as a barrier to walking, biking, rolling, and using transit, and contribute to vehicles traveling at higher speeds, which increases the risk of serious crashes.

1. Create a recognizable and finer grain street grid network to promote walkability and connectivity. Final road alignment and design will be determined with new development or redevelopment of the site at regulatory review. Streets should be public unless they are intended to provide direct access to a site. Final determination of ownership should occur during the regulatory review process. (Figure 19).
 - Where development occurs within master-planned blocks that are more than twice as large as the sizes recommended in the Complete Streets Design Guide, proposed developments must provide additional non-master planned street connections to reduce block size. If providing a complete street connection is not possible, developments must dedicate right-of-way to advance the eventual construction of the non-master planned street connection.
2. Right-size roadways and intersections to create a safer and more comfortable environment for people who are walking, rolling, bicycling, riding transit, and driving.
 - Repurpose general-purpose travel lanes.
 - Make travel lanes narrower and reduce roadway design speeds to targets identified in the CSDG.
 - Remove channelized right-turn lanes from all intersections.
 - Reduce the number of dedicated left- and right-turn lanes to shorten crossing distances.
 - Minimize curb radii, using curb extensions rather than painted buffers. Include mountable curbs for emergency vehicle and truck access if necessary.
3. Change street name suffixes to reflect reinvisioned character and new classification, including Great Seneca Highway and Key West Avenue.
4. Signalize, restrict, or close median breaks on Key West Avenue, Shady Grove Road, Darnestown Road, and Great Seneca Highway.

5. Amend the *Master Plan of Highways and Transitways* to reflect area types shown in Figure 20 and roadway designations shown in Figure 19 and Table 2.
 6. Designate the Downtown Area Type within the Life Sciences Center as a Red Transportation Policy Area.
 7. Consolidate, remove, or relocate driveways from designated Downtown Boulevards, Town Center Boulevards, and Boulevards to other side streets and alleys, and limit future driveways.
 8. Build out a network of alleys in the Downtown and Town Center area types to support loading and site access.
9. Implement a complete network of comfortable walkways and bikeways, connected by safe, protected crossings.
 - Upgrade all intersections with high-visibility continental or ladder crosswalk markings for all pedestrian approaches.
 - Provide protected pedestrian crossings that are consistent with the CSDG maximum spacing for protected crossings, including at existing and new intersections and at mid-block locations where needed.
 - Ensure ADA accessibility on all public pathways, including sidewalks, trails, and street crossings, in accordance with current best practices.
 - Achieve Pedestrian Level of Comfort (PLOC) 2 or better along and across the right-of-way.

“Many of the distances in this area are very walkable/bikeable/bus-able, but the roads are built to be hostile to walking, biking, and riding the bus. The amazing thing is how many people walk, bike, and ride the bus despite the hostile roads.”

*– Community Member,
Door-to-door Canvassing*

10. Implement a complete network of connected low-stress bicycle facilities, as shown in Figure 21.
 - Implement protected intersections at all intersections with existing or planned separated bike lanes, sidepaths, buffered bike lanes, or conventional bike lanes, consistent with the CSDG and the 2018 *Bicycle Master Plan*.
 - Upgrade sidepaths to widths and materials that are consistent with the CSDG.
 - Implement the Life Sciences Center Loop Trail as a shared use trail. Reaffirm the dimensions for the “Buffer, “Shared Use Trail,” and “Tree Panel” portions of the Cross Section Types specified in the “Montgomery County Life Sciences Center Loop Trail Design Guidelines (Draft 07/10/15),” p. 10. Remove the “Potential Separated Bike Lane (Per ongoing Bicycle Master Plan)” shown more faintly on the Cross Section Types.

- Implement long-term bicycle parking at destinations such as transit stations; trails, parks, and public open spaces; and large employment or retail centers.
 - Implement bicycle parking stations at the locations indicated in the 2018 *Bicycle Master Plan*: the Belward campus site, the Adventist HealthCare Shady Grove Medical Center (along Broschart Road), and the Elms at Public Safety Training Academy (PSTA) site. Implement additional bicycle parking stations on the Universities at Shady Grove Campus and in or adjacent to the Key West Promenade.
11. Install new micromobility corrals in underutilized parking facilities, within available rights-of-way, and near civic gathering spaces.
 12. Implement the Great Seneca Transit Network Pink and Lime Routes, including repurposing auto travel lanes to dedicated transit lanes.
 13. Provide dedicated transit lanes for the Corridor Connectors identified in *Corridor Forward*: the I-270 Transit Plan, as shown in Figure 23. For the Great Seneca Connector, this Plan recommends proceeding with the alignment that includes dedicated bus lanes on Medical Center Drive through the former Public Safety Training Academy (The Elms at PSTA) and within the approved cross-sections for the Belward properties (either within the 50' median or on the road) to Muddy Branch Road.
 14. Coordinate with the Montgomery County Department of Transportation to align planned Great Seneca Transit Network Grey, Cobalt, and Lime Extended routes with Corridor Connector dedicated facilities to serve existing and planned destinations. Coordinate with the Montgomery County Department of Transportation to implement the realigned Great Seneca Transit Network Grey, Cobalt, and Lime Extended routes.
 15. Remove planned but unbuilt grade-separated interchanges recommended in the 2010 *Great Seneca Science Corridor Master Plan*.
 16. Improve internal connectivity among adjoining properties, and external connectivity with new pedestrian areas and public open and recreational spaces.
 - Prioritize a well-connected local grid of streets in all developing properties.
 - Allow flexibility in internal street placement and design.
 - Promote the creation of complete streets, including alternatives such as curbless and shared streets, to prioritize pedestrian activity at specific locations that support the proposed development uses and the open space goals.
 - Promote inter-parcel pedestrian and bicycle connectivity through accessible sidewalk and sidepath connections between sites.
 17. Conduct a study of Maryland 28 in collaboration with MCDOT, SHA, the City of Rockville, and the City of Gaithersburg to reduce travel lanes on Key West Avenue from 6 to 4 in support of the Plan's vision and recommendations.

FIGURE 18: LIFE SCIENCES CENTER RECOMMENDED STREET GRID

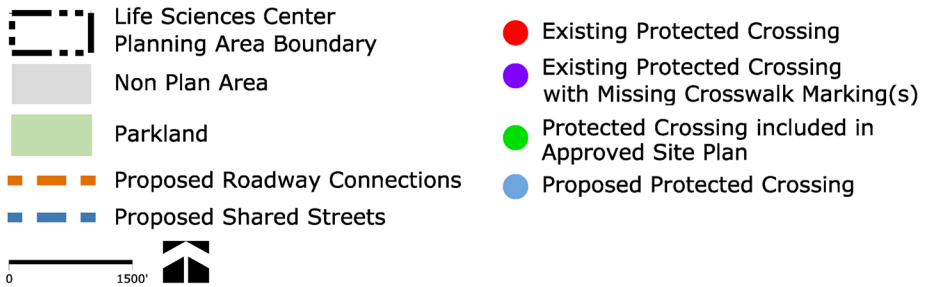
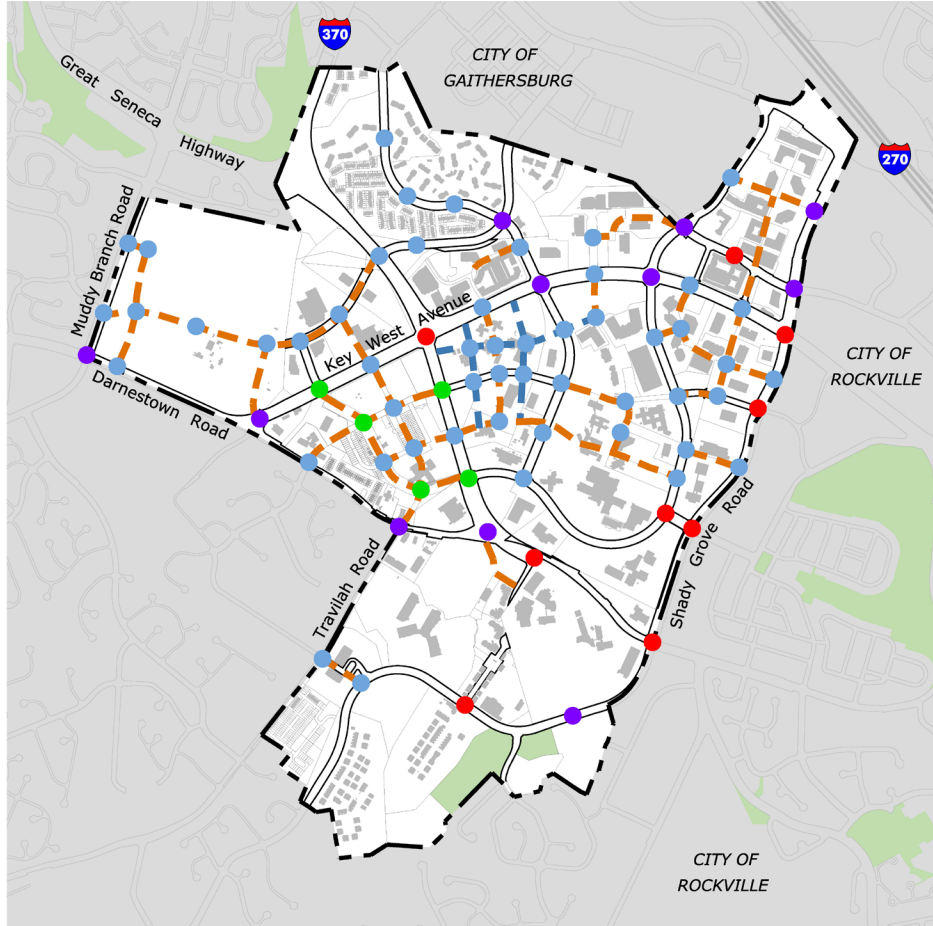


FIGURE 19: LIFE SCIENCES CENTER RECOMMENDED ROADWAY DESIGNATIONS

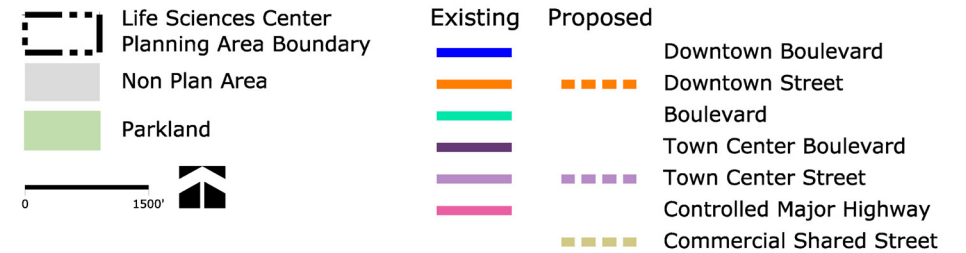
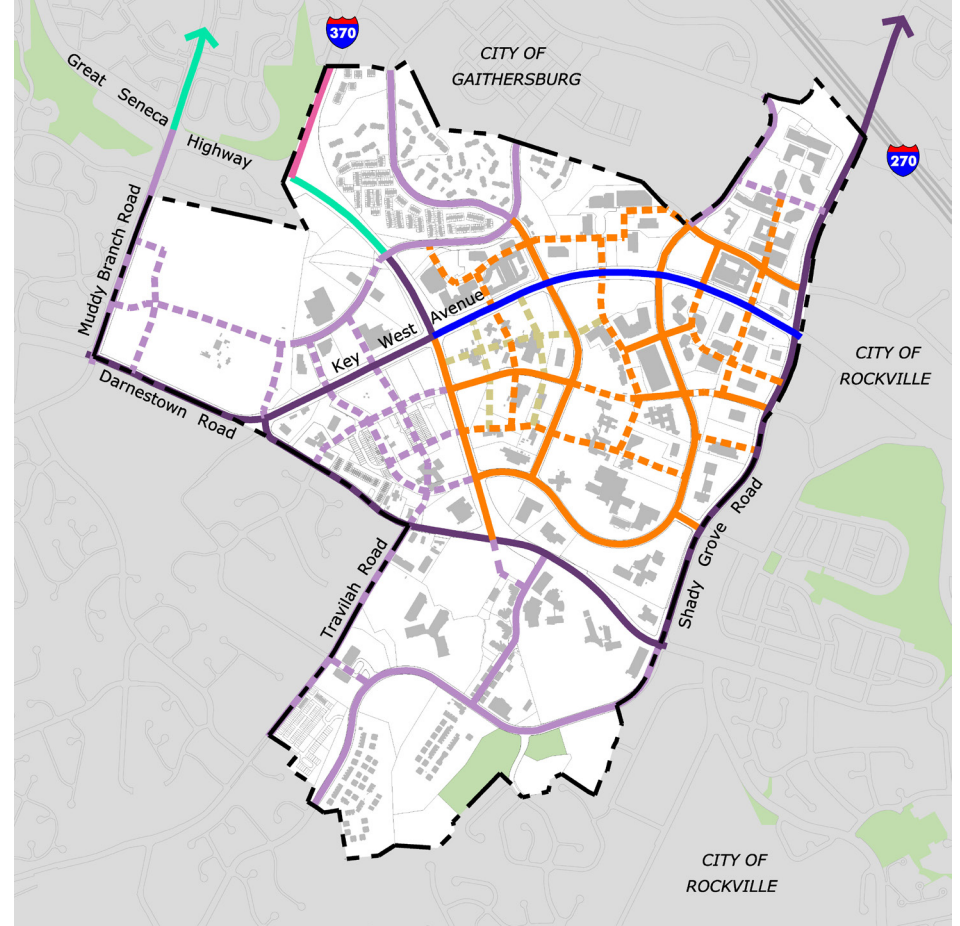


FIGURE 20: LIFE SCIENCES CENTER PROPOSED AREA TYPES

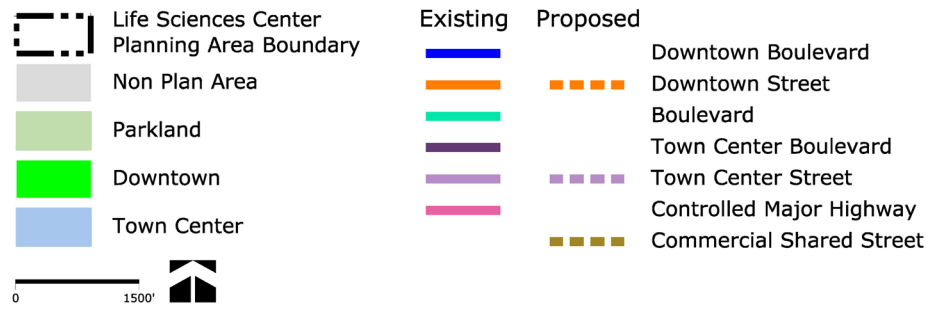
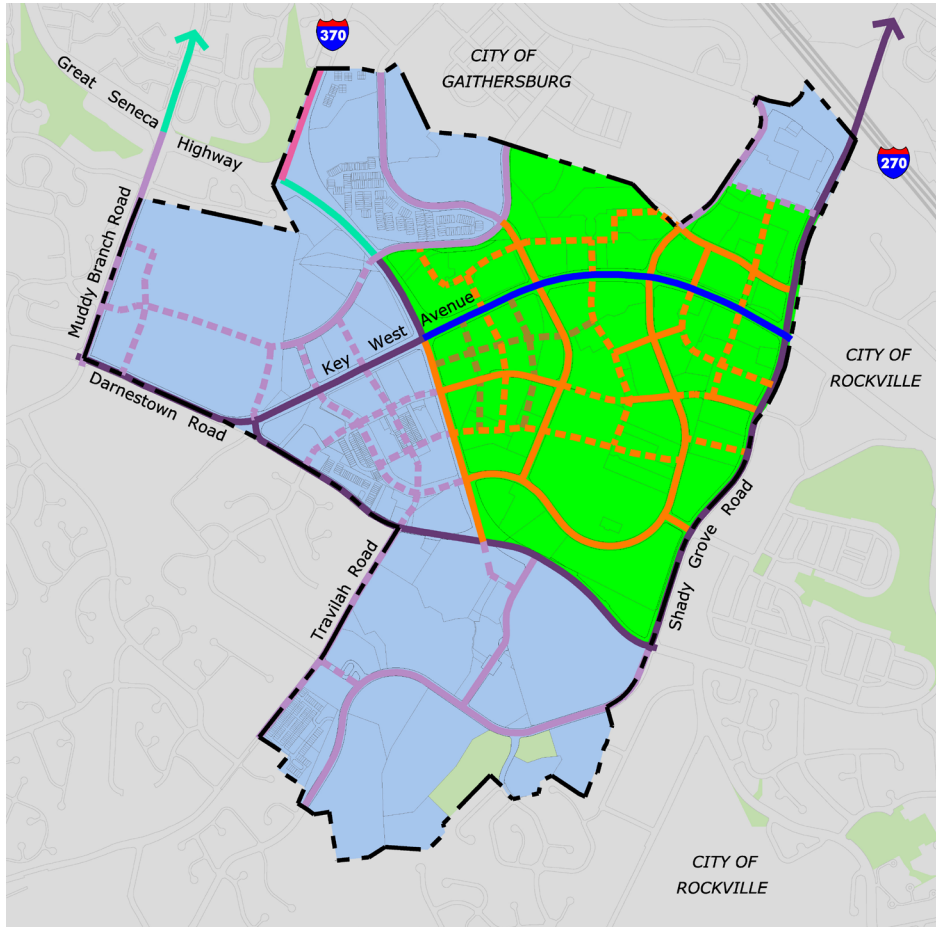


FIGURE 21: LIFE SCIENCES CENTER PROPOSED BICYCLE FACILITIES

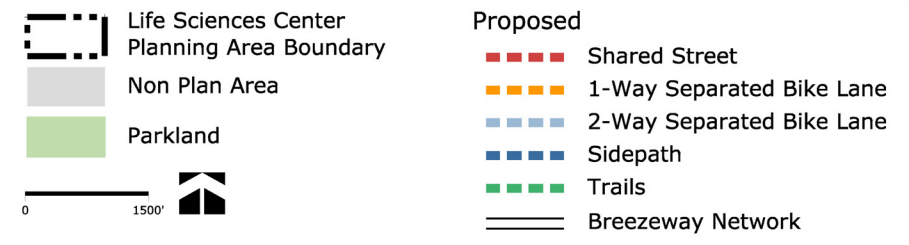
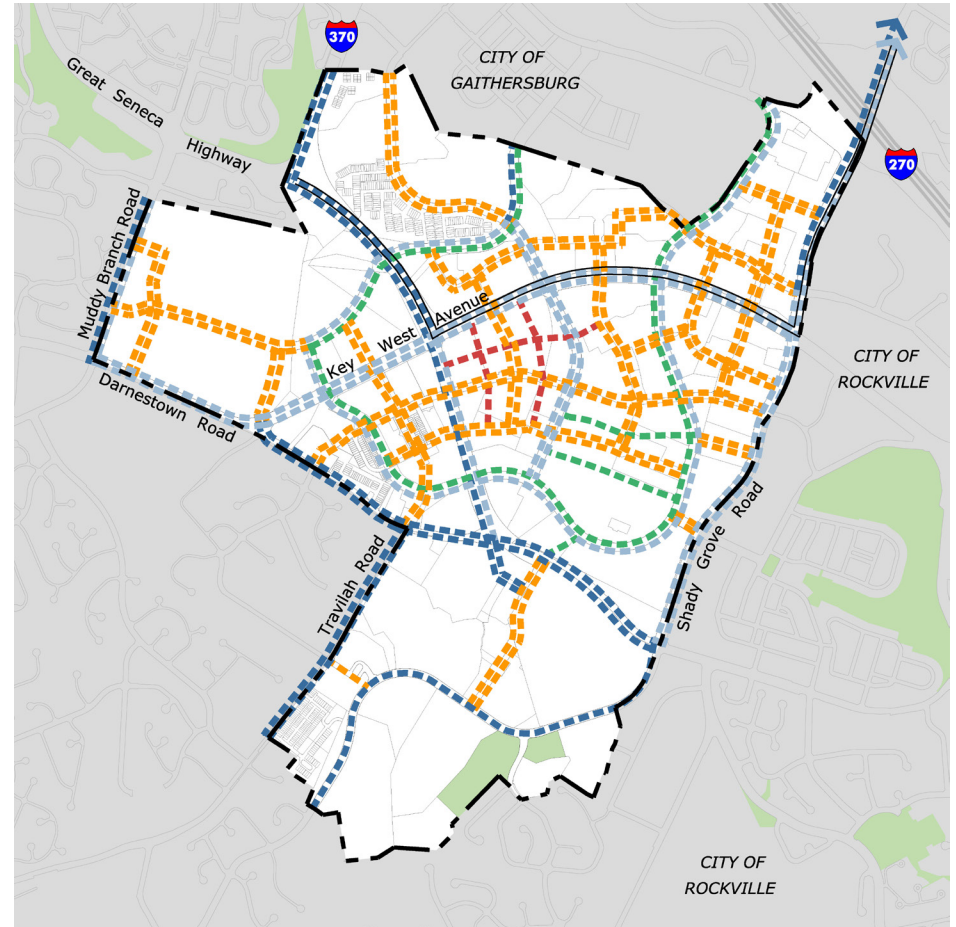


FIGURE 22: LIFE SCIENCES CENTER MASTER PLANNED STREETS

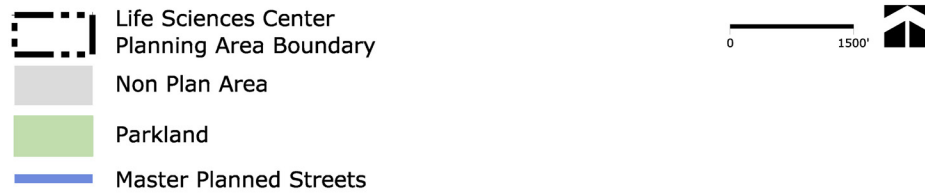
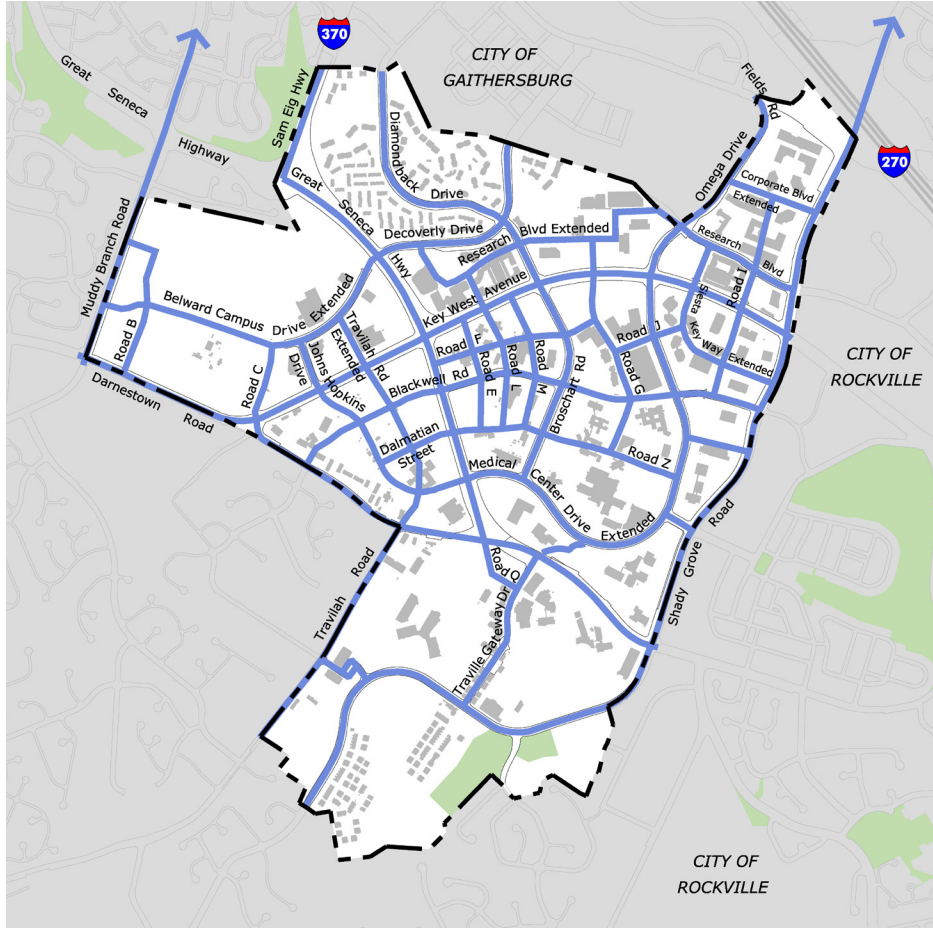
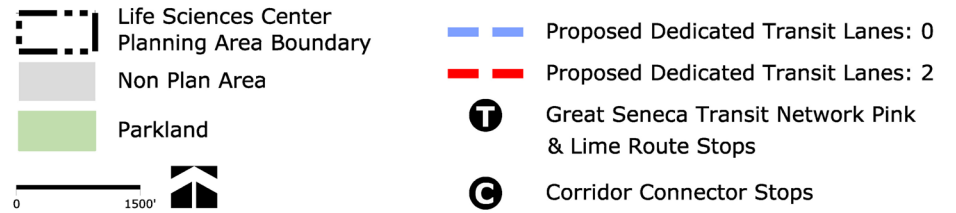
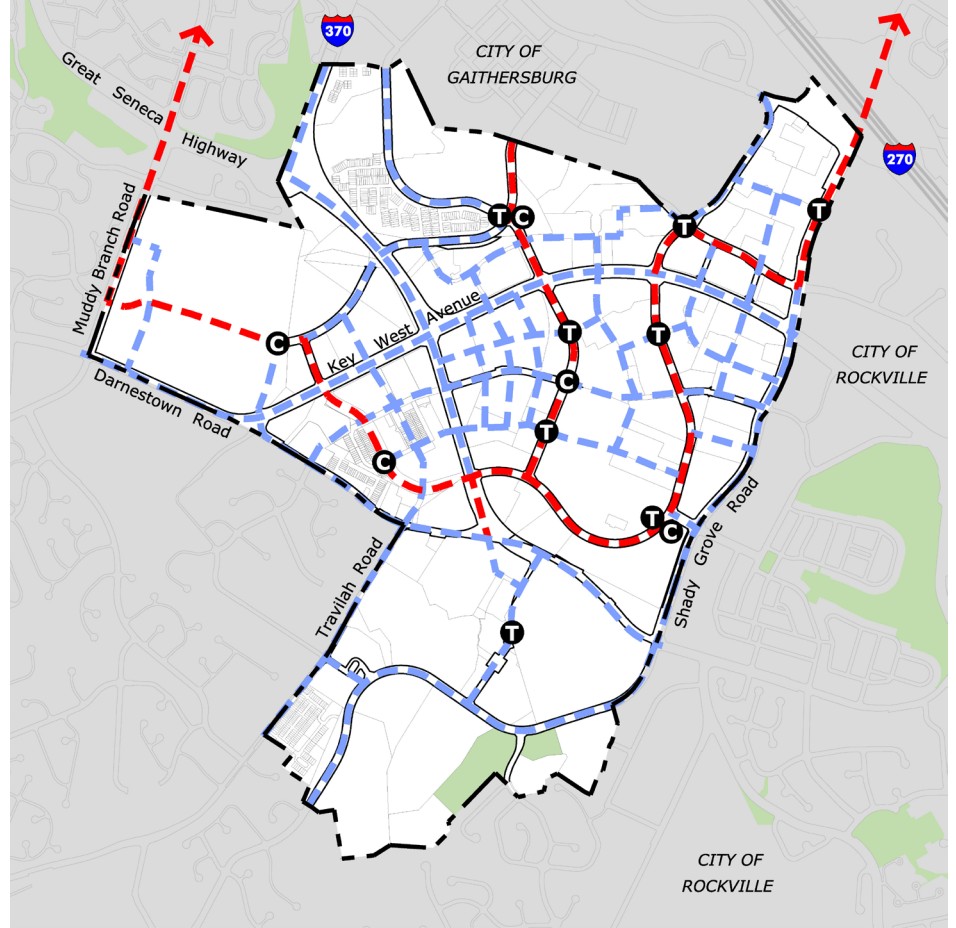


FIGURE 23: LIFE SCIENCES CENTER PROPOSED DEDICATED BUS LANES



Illustrated transit stops are master-planned but subject to change at facility planning.

TABLE 2: LIFE SCIENCE CENTER STREET CLASSIFICATIONS, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Sam Eig Hwy	Great Seneca Hwy (MD 119)	I-270	Controlled Major Highway	45	150	6	6	0	Sidepath	Sidepath
Great Seneca Hwy (MD 119)	Decoverly Dr	Sam Eig Hwy	Boulevard	35	150-200	4	4	0	Sidepath	Sidepath (Breezeway)
Key West Ave (MD 28)	Great Seneca Hwy (MD 119)	Shady Grove Rd	Downtown Boulevard	25	200	6	4	0	2-Way Separated Bike Lane (Breezeway)	2-Way Separated Bike Lane
Blackwell Rd	Great Seneca Hwy	Broschart Rd	Downtown Street	20	80	4	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Blackwell Rd Extended	Broschart Rd	Road G	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Blackwell Rd	Road G	Medical Center Dr	Downtown Street	20	80	2	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Blackwell Rd Extended	Medical Center Dr	685' west of Shady Grove Rd	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Blackwell Rd	685' west of Shady Grove Rd	Shady Grove Rd	Downtown Street	20	80	2	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Broschart Rd	Medical Center Dr	Key West Ave	Downtown Street	20	130	4	2	2	2-Way Separated Bike Lane	1-Way Separated Bike Lane
Diamondback Dr	Key West Ave	Decoverly Dr	Downtown Street	20	130	4	2	2	2-Way Separated Bike Lane	1-Way Separated Bike Lane
Great Seneca Hwy (MD 119)	Darnestown Rd	Medical Center Dr	Downtown Street	20	150	4	2	2	2-Way Separated Bike Lane	2-Way Separated Bike Lane
Great Seneca Hwy (MD 119)	Medical Center Dr	Key West Ave	Downtown Street	20	150	4	2	0	Sidepath	2-Way Separated Bike Lane
Medical Center Dr	Great Seneca Hwy	Broschart Rd	Downtown Street	20	130	4	2	2	LSC Loop Trail	2-Way Separated Bike Lane
Medical Center Dr	Broschart Rd	Medical Center Way	Downtown Street	20	130	4	2	2	LSC Loop Trail	2-Way Separated Bike Lane

TABLE 2: LIFE SCIENCE CENTER STREET CLASSIFICATIONS, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Medical Center Dr	Medical Center Way	Key West Ave	Downtown Street	20	130	4	2	2	LSC Loop Trail	2-Way Separated Bike Lane
Road Z	Great Seneca Hwy	Road G	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road Z	Road G	Medical Center Dr	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	2-Way Separated Bike Lane
Medical Center Way	Medical Center Dr	Shady Grove Rd	Downtown Street	20	100-150	2	2	0	2-Way Separated Bike Lane	2-Way Separated Bike Lane
Omega Dr	Key West Ave	Research Blvd	Downtown Street	20	130	4	2	2	LSC Loop Trail	2-Way Separated Bike Lane
Research Blvd Extended	Decoverly Dr	Omega Dr	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Research Blvd	Omega Dr	Rockville City Limits	Downtown Street	20	110	4	2	2	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road F	Great Seneca Hwy	Road G	Commercial Shared Street (Planned)	15	44	n/a	2	0	Shared Street	Shared Street
Road G	Road Z	Research Blvd Extended	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road I	Blackwell Rd	Corporate Blvd Extended	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road J	Road G	Siesta Key Way Extended	Downtown Street	20	80	2	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road L	Road Z	Research Blvd Extended	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road R	Medical Center Dr	Shady Grove Rd	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Siesta Key Way	Research Blvd	Key West Ave	Downtown Street	20	80	2	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane

TABLE 2: LIFE SCIENCE CENTER STREET CLASSIFICATIONS, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Siesta Key Way Extended	Key West Ave	Shady Grove Rd	Downtown Street (Planned)	20	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road E	Road Z	Key West Ave	Commercial Shared Street (Planned)	15	44	n/a	2	0	Shared Street	Shared Street
Road M	Road Z	Key West Ave	Commercial Shared Street (Planned)	15	44	n/a	2	0	Shared Street	Shared Street
Darnestown Rd	Muddy Branch Rd	Key West Ave (MD 28)	Town Center Boulevard	30	130	6	4	0	2-Way Separated Bike Lane	2-Way Separated Bike Lane
Darnestown Rd	Key West Ave (MD 28)	Yearling Dr	Town Center Boulevard	30	90	3	4	0	Sidepath	Sidepath
Darnestown Rd	Yearling Dr	Great Seneca Hwy	Town Center Boulevard	30	90	4	4	0	Sidepath	Sidepath
Darnestown Rd	Great Seneca Hwy	Shady Grove Rd	Town Center Boulevard	30	90-120	4	4	0	Sidepath	Sidepath
Great Seneca Hwy (MD 119)	Key West Ave (MD 28)	Discoverly Dr	Town Center Boulevard	30	150	4	4	0	Sidepath	Sidepath (Breezeway)
Key West Ave (MD 28)	Darnestown Rd (MD 28)	Great Seneca Hwy (MD 119)	Town Center Boulevard	30	200	6	4	0	2-Way Separated Bike Lane	2-Way Separated Bike Lane
Shady Grove Rd	Darnestown Rd	Key West Ave	Town Center Boulevard	30	130	6	4	0	2-Way Separated Bike Lane	2-Way Separated Bike Lane
Shady Grove Rd	Key West Ave	Research Blvd	Town Center Boulevard	30	130	6	4	0	2-Way Separated Bike Lane	2-Way Separated Bike Lane
Shady Grove Rd	Research Blvd	I-270 Offramp	Town Center Boulevard	30	150	6	5	2	Sidepath	2-Way Separated Bike Lane
Shady Grove Rd	I-270 Offramp	1200' west of Frederick Rd	Town Center Boulevard	30	140	6	4	2	Sidepath	2-Way Separated Bike Lane
Belward Campus Dr Extended	Muddy Branch Rd	110' west of Johns Hopkins Dr	Town Center Street (Planned)	25	150	n/a	2	2	1-Way Separated Bike Lane	1-Way Separated Bike Lane

TABLE 2: LIFE SCIENCE CENTER STREET CLASSIFICATIONS, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Belward Campus Dr	110' West of Johns Hopkins Dr	Johns Hopkins Dr	Town Center Street	25	150	4	2	2	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Belward Campus Dr	Johns Hopkins Dr	930' east of Johns Hopkins Dr	Town Center Street	25	90	4	2	0	2-Way Separated Bike Lane	LSC Loop Trail
Belward Campus Dr Extended	930' east of Johns Hopkins Dr	Great Seneca Hwy (MD 119)	Town Center Street (Planned)	25	90	n/a	2	0	2-Way Separated Bike Lane	LSC Loop Trail
Blackwell Rd	Darnestown Rd	Medical Center Dr Extended	Town Center Street (Planned)	25	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Blackwell Rd	Medical Center Dr Extended	Great Seneca Hwy	Town Center Street (Planned)	25	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Corporate Blvd Extended	Omega Dr	Shady Grove Rd	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Discoverly Dr	Great Seneca Hwy (MD 119)	Diamondback Dr	Town Center Street	25	90	4	2	0	2-Way Separated Bike Lane	LSC Loop Trail
Discoverly Dr	Diamondback Dr	Skyhill Way	Town Center Street	25	110	4	2	2	Sidepath	LSC Loop Trail
Diamondback Dr	Discoverly Dr	330' south of Ellington Blvd (City of Gaithersburg)	Town Center Street	25	100	4	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Johns Hopkins Dr	Key West Ave	Belward Campus Dr	Town Center Street	25	130	4	2	2	2-Way Separated Bike Lane	LSC Loop Trail
Medical Center Dr Extended	Key West Ave	Great Seneca Hwy	Town Center Street (Planned)	25	130	n/a	2	2	LSC Loop Trail	2-Way Separated Bike Lane
Dalmatian St	Medical Center Dr Extended	Great Seneca Hwy	Town Center Street (Planned)	25	80	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Molecular Dr	Travilah Rd	Shady Grove Rd	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Muddy Branch Rd	Darnestown Rd (City of Gaithersburg)	Belward Campus Dr Extended	Town Center Street	25	110	4	2	0	Sidepath	2-Way Separated Bike Lane

TABLE 2: LIFE SCIENCE CENTER STREET CLASSIFICATIONS, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Muddy Branch Rd	Belward Campus Dr Extended	Midsummer Dr	Town Center Street	25	110	4	2	2	Sidepath	2-Way Separated Bike Lane
Omega Dr	Research Blvd	Fields Rd	Town Center Street	25	90	4	2	0	LSC Loop Trail	2-Way Separated Bike Lane
Road B	Muddy Branch Rd	Darnestown Rd	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road C	Belward Campus Dr Extended	Key West Ave	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road Q	Traville Gateway Dr	Darnestown Rd	Town Center Street (Planned)	25	60	n/a	2	0	Sidepath	Sidepath
Shady Grove Rd	Silver Bell Ter	Darnestown Rd	Town Center Street	25	60	4	2	0	Sidepath	None
Travilah Rd	Unicorn Way	Darnestown Rd	Town Center Street	25	70	2	2	0	Sidepath	Sidepath
Travilah Rd Extended	Darnestown Rd	Key West Ave	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Travilah Rd Extended	Key West Ave	Belward Campus Dr	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Traville Gateway Dr	Darnestown Rd	Shady Grove Rd	Town Center Street	25	80	2	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane

Note: Minimum rights-of-way do not generally include lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Additional rights-of-way may also be needed to accommodate master planned bicycle and transit facilities, including protected intersections, the envelopes of transit stations, and pedestrian crossing refuges.

FIGURE 24: TYPICAL DOWNTOWN STREET CROSS SECTION

Downtown Street | 2 travel lane section
Proposed Section: One-way separated bike lane both sides

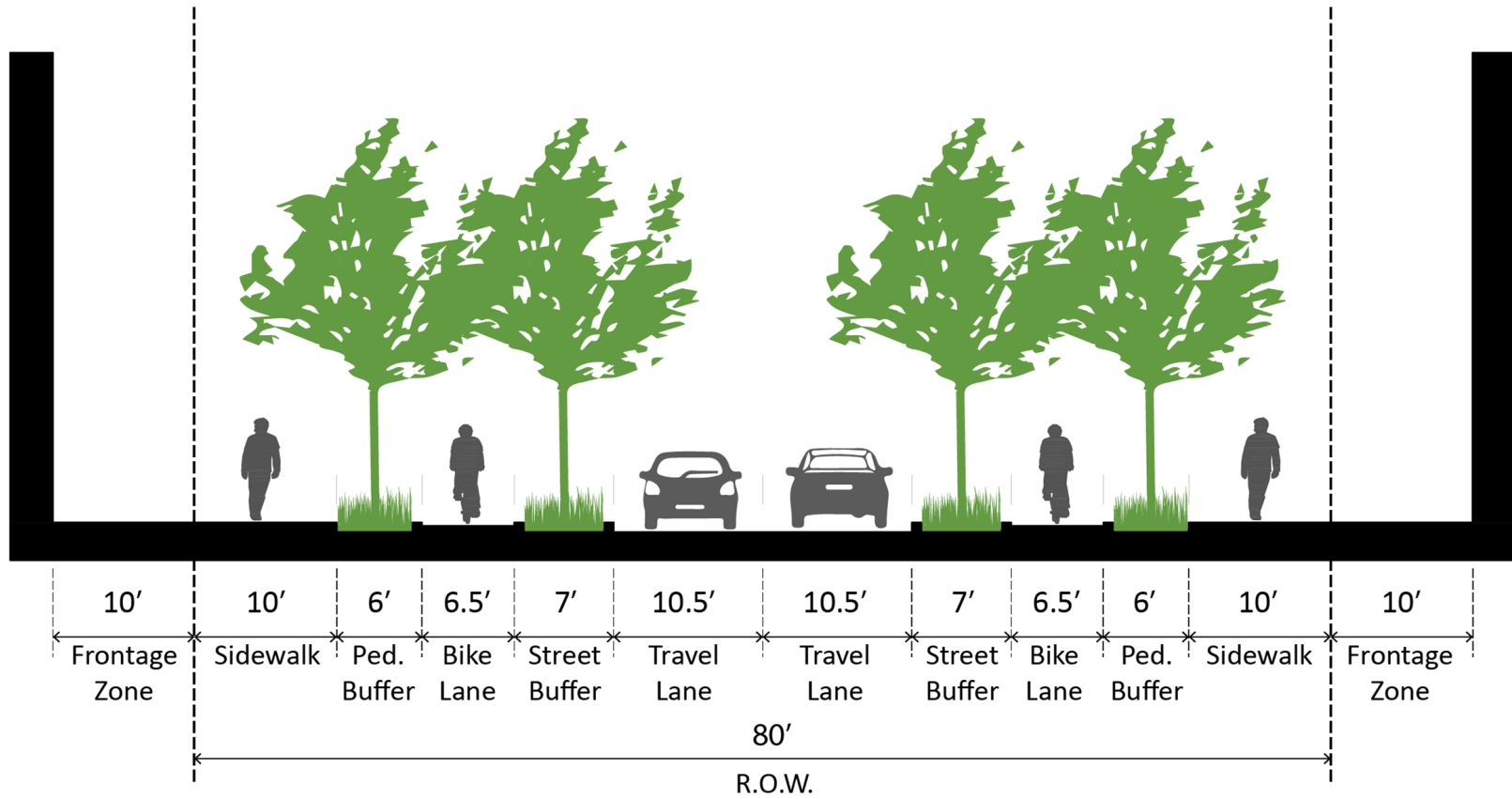


FIGURE 25: TYPICAL TOWN CENTER STREET WITHOUT BIKEWAYS CROSS-SECTION

Town Center Street | 2 travel lane section, no bikeways

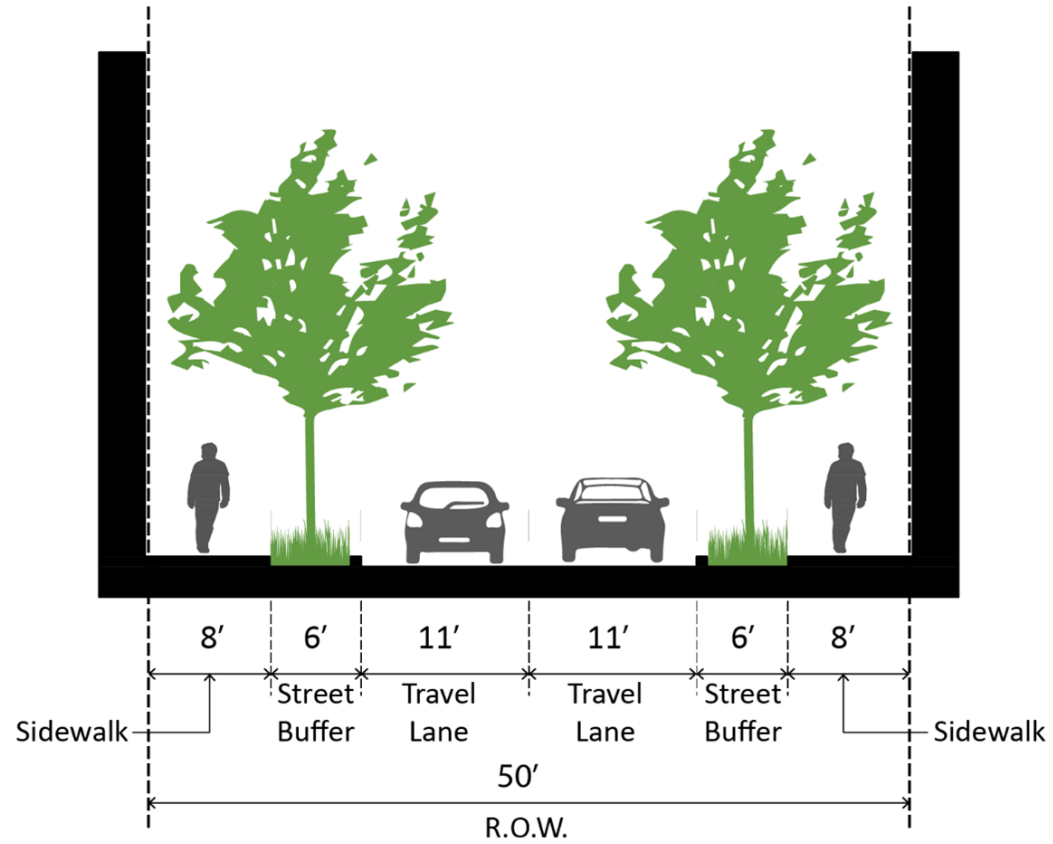


FIGURE 26: TYPICAL TOWN CENTER STREET CROSS-SECTION

Town Center Street | 2 travel lane section
Proposed Section: One-way separated bike lane both sides

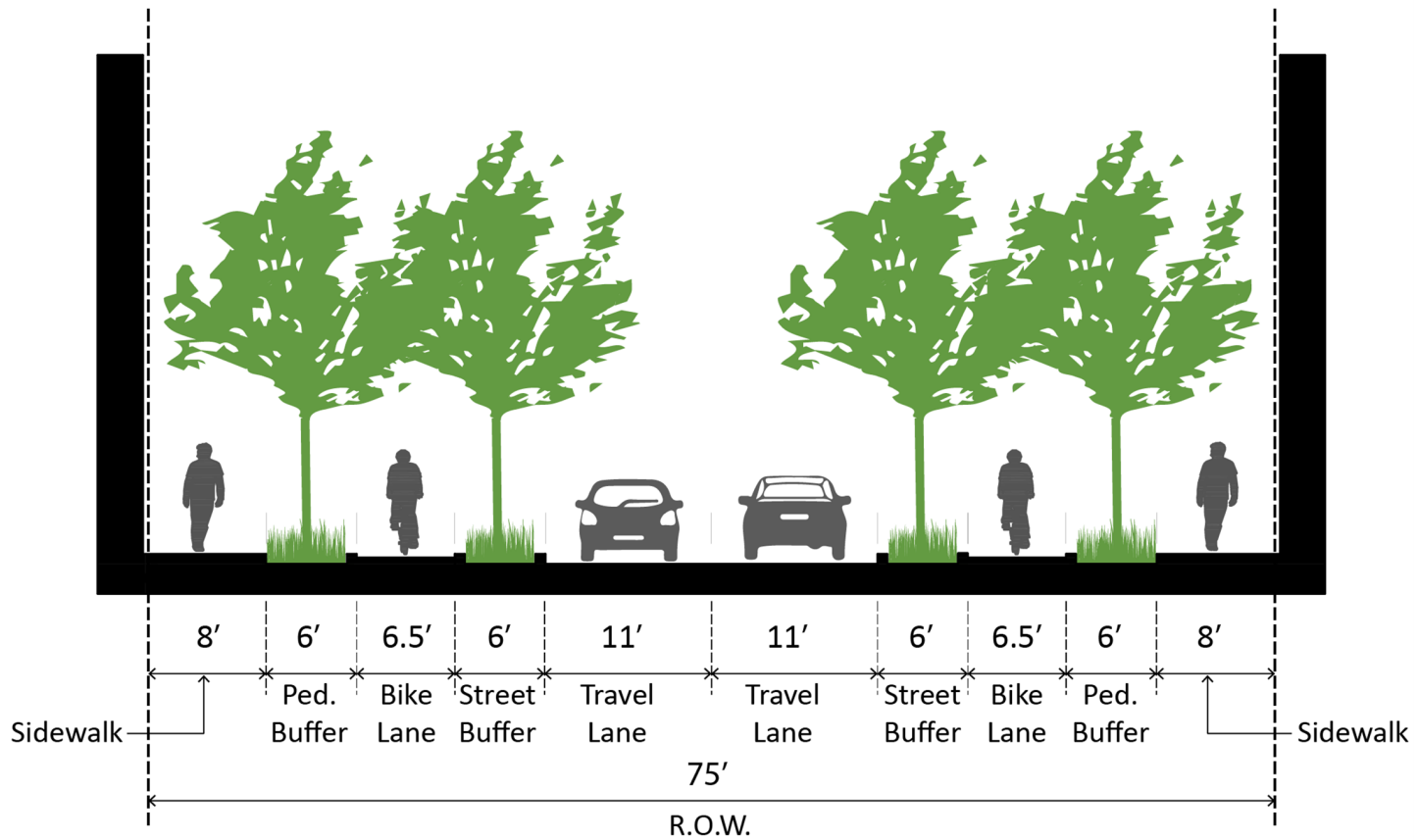


FIGURE 27: BLACKWELL ROAD CROSS-SECTION

Blackwell Road | Looking east between Great Seneca Highway and Broschart Road
 Proposed Section: 2 lane section with one-way separated bike lanes each side

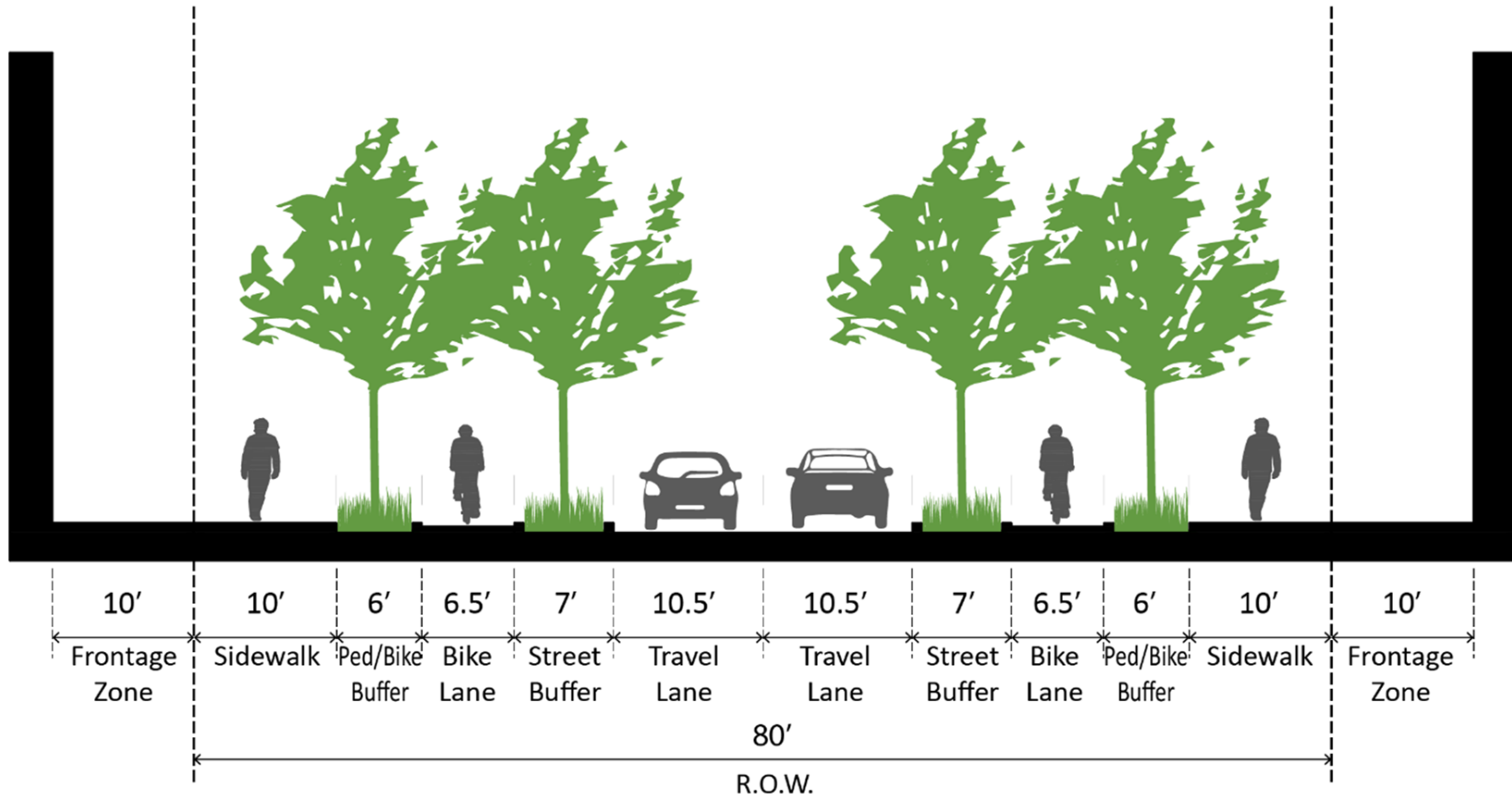


FIGURE 28: BROSCHART ROAD CROSS-SECTION

Broschart Road | Looking north between Medical Center Drive and Decoverly Drive
 Proposed Section: 5 lane section with dedicated transit and two-way separated bike lanes both sides

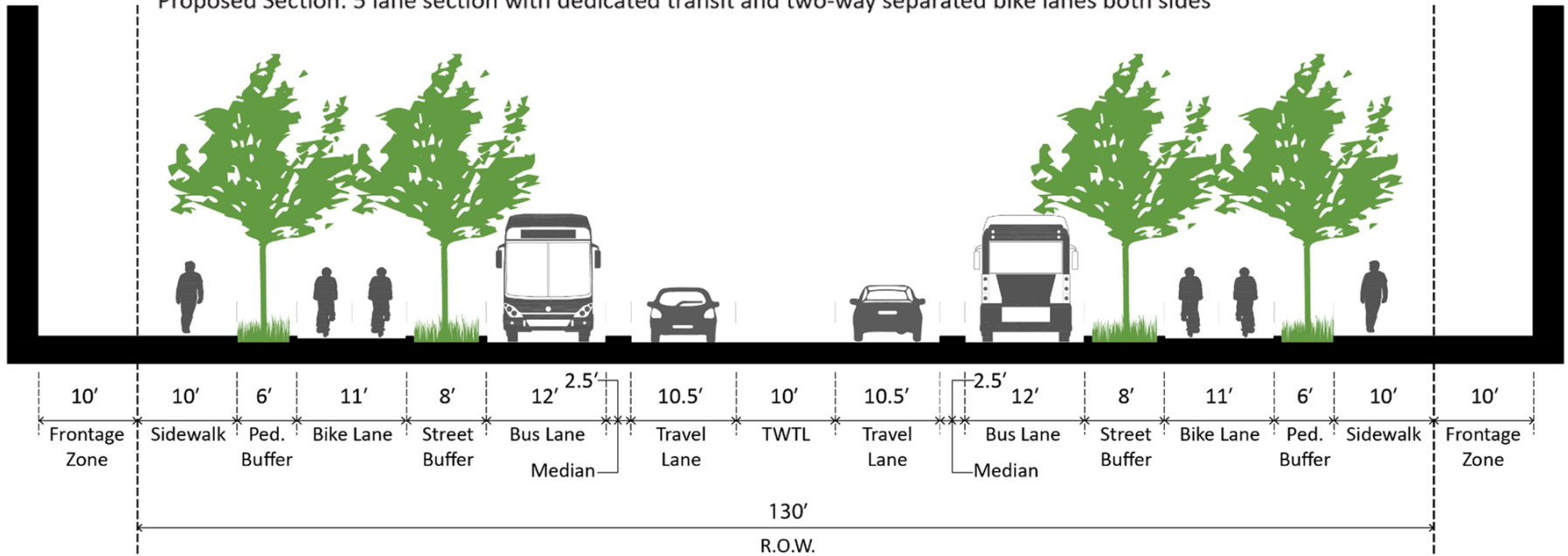


FIGURE 29: GREAT SENECA HIGHWAY CROSS-SECTION 1

Great Seneca Highway | Looking north between Medical Center Drive and Key West Avenue
 Proposed Section: 3 lane section with two-way separated bike lane east side

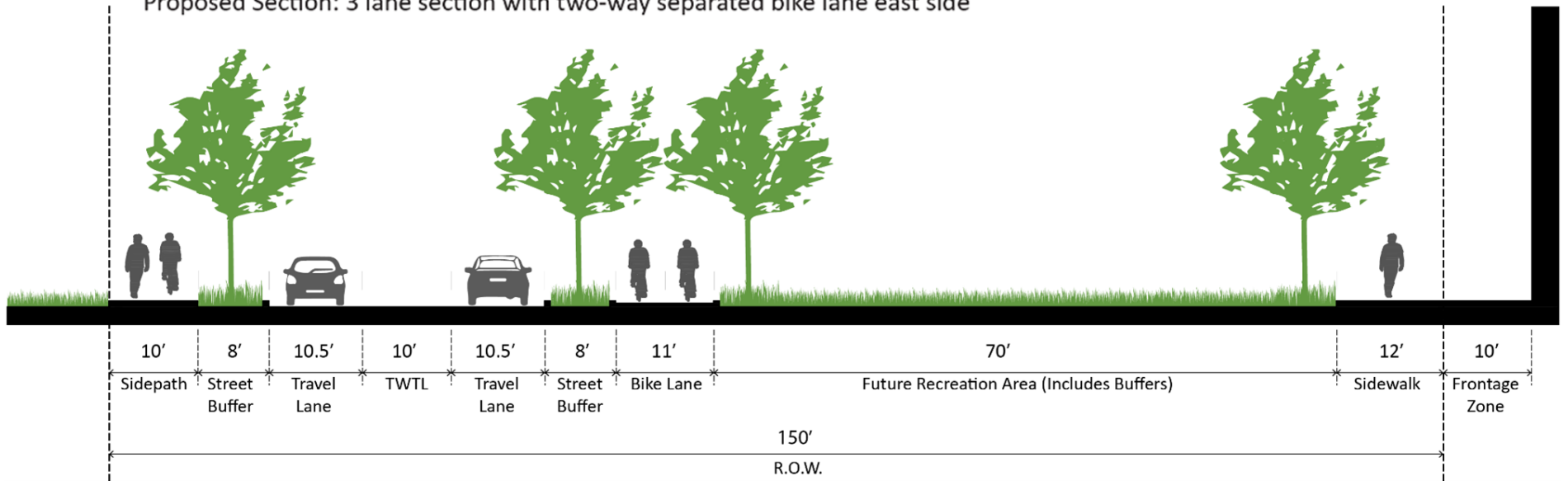


FIGURE 30: GREAT SENECA HIGHWAY CROSS-SECTION 2

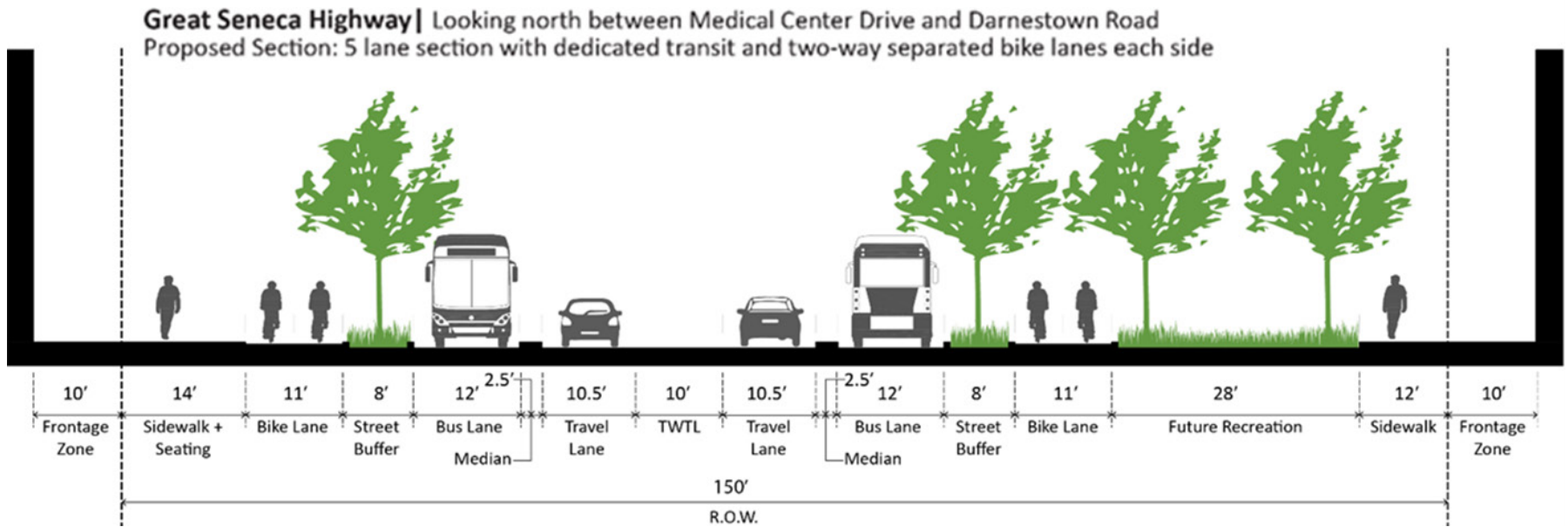


FIGURE 31: KEY WEST AVENUE CROSS-SECTION

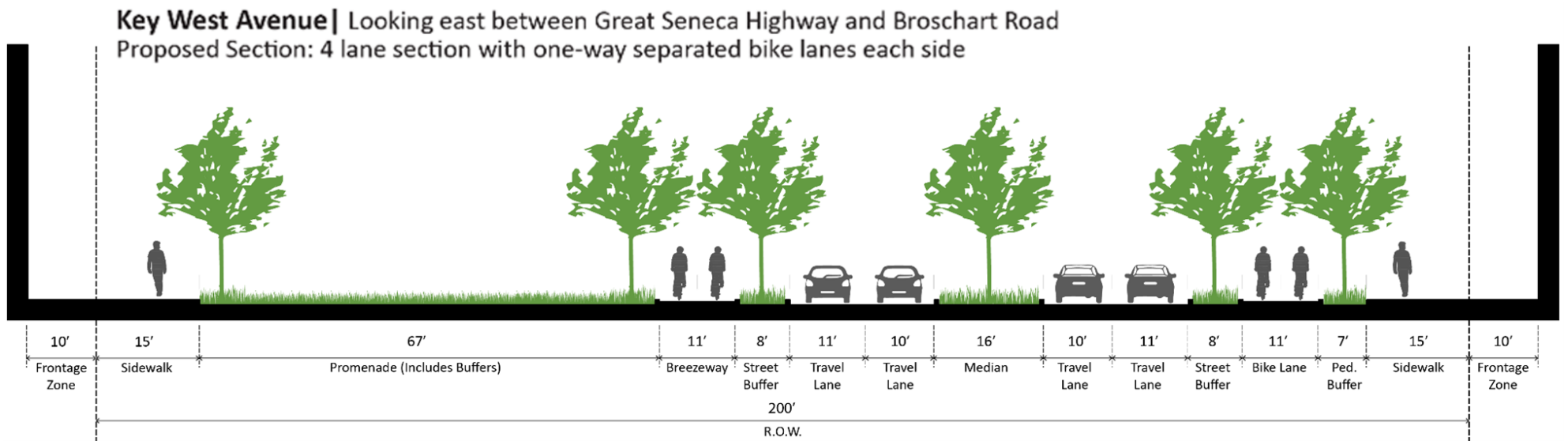
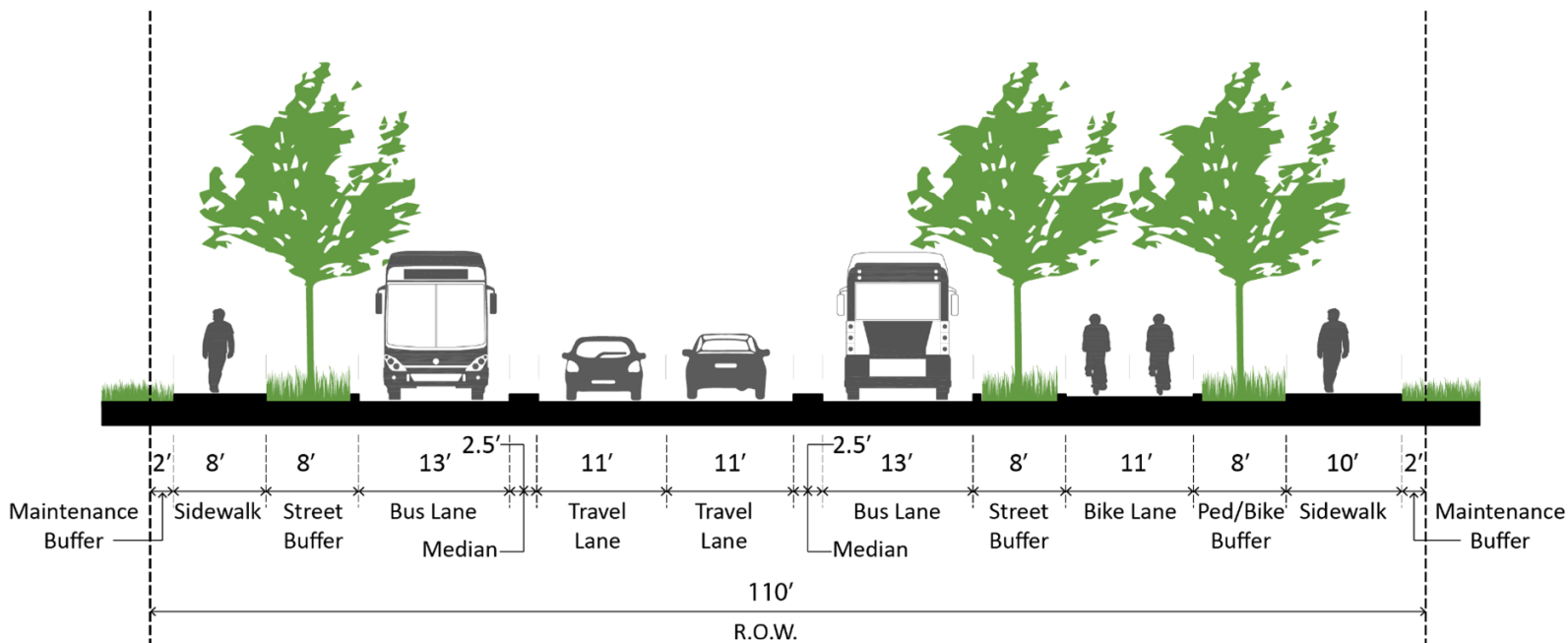


FIGURE 32: MUDDY BRANCH ROAD CROSS-SECTION

Muddy Branch Road | Looking north, north of Belward Campus Drive
 Proposed Section: 4 lane- section with 2 travel lanes, dedicated transit lanes and two-way separated bike lane east side



Opportunity Sites

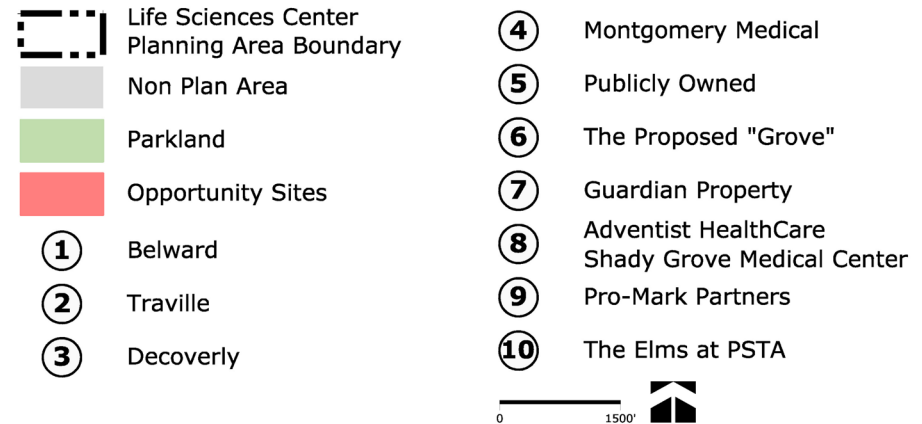
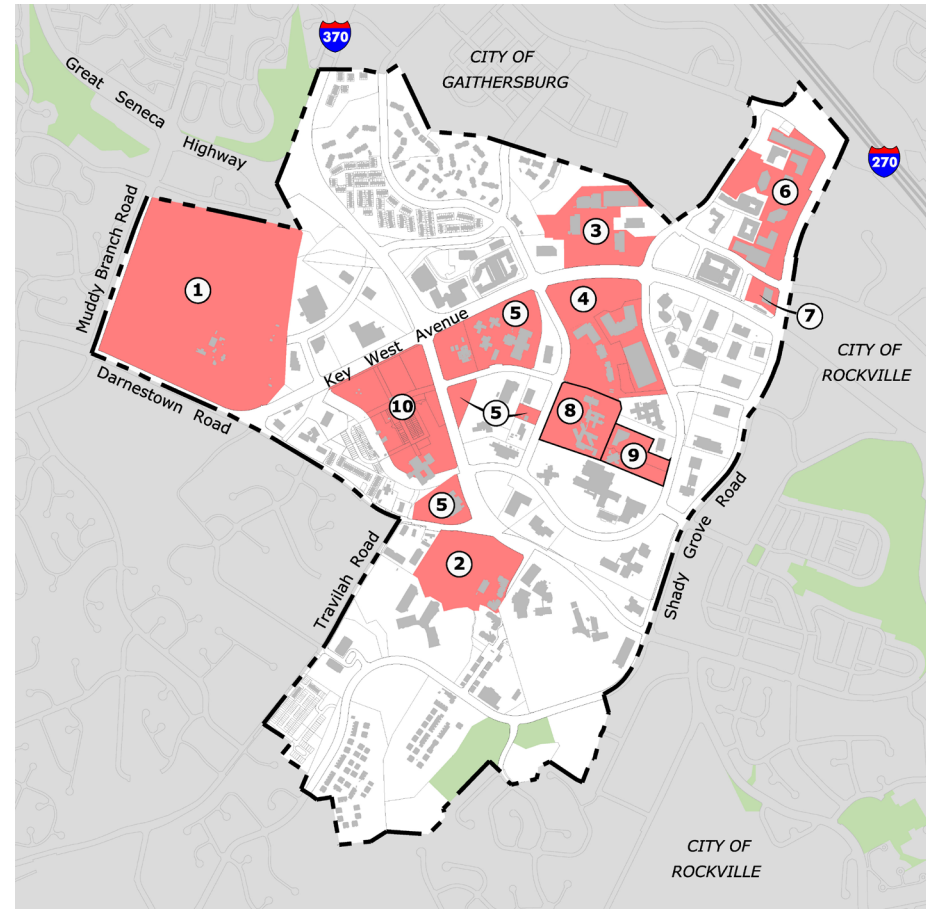
The opportunity sites, shown in Figure 33, are properties that have the potential to accommodate infill development or redevelopment near planned transit, as well as to deliver public benefits, including parks, public open space, streets, and sustainable design. The sites are currently at different stages of delivering new buildings and benefits; some sites are under construction or undergoing development review, while other sites have been identified by property owners or staff as high potential sites. These sites are envisioned to help create the building form, street grid, and public amenities central to the Plan vision. For all figures, final road and open space alignment and design will be determined with new development or redevelopment of the site at regulatory review.

1. Belward

Belward Campus has a long-standing preliminary plan as well as two approved site plans. This Plan retains many of the recommendations from the 2010 Plan and supports implementation of valid approved preliminary plan and site plans. These plans envision development that will include medical and life sciences uses with amenities such as adaptive reuse of the historic Belward Farm buildings, preservation of open space and mature trees surrounding the farmstead, construction of a street grid, and the creation of Privately Owned Public Space (POPS) and the Mission Hills preserve. This Plan recommends supporting the Corridor Connector alignment that includes dedicated bus lanes through the property within its approved cross-sections (either within the 50' median or on the road) to Muddy Branch Road. Recommendations for this site include:

- Preserve views of the Belward farmstead, to the extent practicable, from Darnestown Road and residential neighborhoods to the south and west, consistent with other Master Plan objectives for this site.

FIGURE 33: LIFE SCIENCES CENTER OPPORTUNITY SITES



- Require adaptive reuse of the historic Belward Farm buildings (that will remain) for recreational, educational, social, institutional or cultural uses that complement the community and new development.
- Step new buildings down to 60 to 80 feet depending on whether they are adjacent to the Belward Farm, to be decided at site plan review.
- Preserve open space and mature trees surrounding the farmstead. Retain an environmental setting large enough to convey the agricultural character of the historic resource, approximately seven acres.
- Support the creation of a new POPS (aka Muddy Branch “park”) on Belward Campus along Muddy Branch Road to provide recreational amenities for workers and nearby residents.
- Ensure that open space contains contemplative and active spaces, such as athletic fields or pickleball courts.
- Implement a bicycle parking station directly adjacent to a future Great Seneca Transit Network Gray Route stop along the planned Corridor Connector on Belward Campus Drive. Coordinate with Montgomery County Department of Transportation to align the bicycle parking station with the location of the Great Seneca Transit Network stop. Consider locating the bicycle parking station in the right-of-way in the median of Belward Campus Drive or within future development on the Belward Campus site directly adjacent to the transit stop.

2. Traville Parcel

Traville Parcel N is phase two of a larger research and development campus that includes Parcel M immediately to the south, which has already been developed. This property has an approved preliminary and site plan. The most recent development phase includes three research and development buildings; two are under construction

and the final building has a pending regulatory application. This Plan envisions that the site will continue to build out as approved, delivering open space on the northeast corner of the parcel, and an extension to Great Seneca Highway through the property. Beyond current approvals, this Plan imagines that future development could add a mixed-use component to the open campus.

3. Decoverly

This property has long-standing preliminary and site plan approvals that originally included office and residential uses. Recent amendments expanded the allowed uses to include research and development uses and subsequently, development of the last available parcel, which has a pending regulatory application. This Plan recommends exploring redevelopment along the Key West Avenue frontage, to consider infill residential or additional life sciences uses. Redevelopment should create a street connection (Research Boulevard Extended) between Omega Drive and Diamondback Drive, as well as a pedestrian connection to the Downtown Crown development. If redevelopment occurs, consolidated public open space should be provided by repurposing existing green areas as accessible public open space.

4. Montgomery Medical (formerly JHU Montgomery County Medical Center)

The former home of the Johns Hopkins Montgomery County Medical Center, this property is owned by Alexandria Real Estate and currently contains the National Cancer Institute headquarters and research laboratories, as well as several life sciences buildings. The Plan recommends infill development to replace the existing surface parking lots and activate frontages along Broschart Road, Blackwell Road, and Key West Avenue, which should be designed as pedestrian-friendly urban streets.

5. Publicly owned sites (9700 Great Seneca Highway, 9925 Blackwell Road, 15000 Broschart Road, 14910 Broschart Road)

These publicly owned sites are occupied by various institutional uses: the National Cyber Security Center for Excellence, the R.I.C.A. John L. Gildner Institute, and the Nanda Childcare Center (respectively). Redevelopment of these prominent locations would significantly contribute to implementing several of the more transformative public realm recommendations of this Plan, particularly along Key West Avenue, Great Seneca Highway, and Broschart Road. Existing uses could be reintegrated into future mixed-use development. Alternatively, the Plan recommends evaluating the feasibility of relocating these uses and exploring opportunities for mixed-use that includes life sciences, residential, and retail uses, along with improved connectivity, public open space, and community facilities.

An elementary school site is recommended for the state-owned site at the corner of Broschart and Blackwell. When there is an application for development of the property, Montgomery County Public Schools must make a realistic assessment of whether an elementary school site is needed and whether MCPS and the County have the funds necessary to purchase the property in a timely manner. If the finding cannot be made, development should be permitted to proceed.

If a finding is made, the school will be subject to the height requirements, design guidelines and other applicable elements as part of the development review process. Since the Life Sciences Center will be urban in nature, a school, if constructed in this location, must be in an urban form, and co-located with other community uses such as a childcare facility, health center, or other comparable public use.

6. The Proposed “Grove” (2611 Research Boulevard, 15300 Corporate Boulevard, 15304 Corporate Boulevard, 9201 Corporate Boulevard, 9211 Corporate Boulevard)

This Plan recommends the continued redevelopment of these aging office buildings into a mixed-use cluster that includes residential and

retail uses, anchored by public open space. Redevelopment should expand east-west connectivity through the cluster and improve the public realm along Shady Grove Road, Omega Drive, and Research Boulevard.

7. The Guardian Property (15200 Shady Grove Road)

This Plan recommends rezoning these properties from EOF 1.5, H-75 to CR 3.0, C-3.0, R-3.0, H-150 to promote mixed-use redevelopment with life sciences and/or residential uses that continues the urban pattern already established by the Bell Shady Grove and Mallory Square apartments to the west. Redevelopment should contribute to implementation of the Plan’s recommendations and improve frontages of all streets that the site fronts.

8. Adventist HealthCare Shady Grove Medical Center

Adventist HealthCare Shady Grove Medical Center is an important anchor for the area and contributor to Montgomery County. The Shady Grove Medical Center currently employs approximately 2,000 people, including medical professionals and support staff. The Shady Grove Medical Center anticipates redevelopment of their campus in the coming years to improve healthcare efficiencies and patient services, particularly through the consolidation of buildings and entrances.

The Great Seneca Plan acknowledges that the Shady Grove Medical Center campus has unique infrastructure requirements and constraints and seeks to balance the needs of the campus with the vision for the Life Sciences Center to become a complete community, characterized by a high-quality built environment and vibrant public realm. Rather than propose a fine-grained street grid and alley network throughout the campus, the Plan recommends one east-west street connections as well as bicycle and pedestrian connections between Medical Center Drive and Broschart Road, north of the Medical Center’s existing patient tower and anticipated service dock and south of the master planned extension of Blackwell Road. The final alignment, design and ownership of the street and bicycle/ pedestrian connections shall be

determined with new development or redevelopment of the site at the time such development is under regulatory review by the Planning Department. The Plan further recommends a publicly-owned urban park, a minimum of ½ acre in size, be provided along Broschart Road, near the future transit stop.

The Plan acknowledges the importance of the Medical Center in both the Life Sciences Center and the county. As the Medical Center grows and evolves, efforts should be made to improve frontages along Medical Center Drive, Broschart Road, and the recommended street connections to improve multimodal accessibility and connectivity, as well as contribute to the public realm of the Life Sciences Center. While specific design guidance will be provided in the Great Seneca Plan Design Guidelines, the Plan acknowledges that flexibility in building placement, form, orientation and transparency may be necessary to achieve hospital efficiencies and services, and recommends that these development standards be determined with new development or redevelopment of the site at regulatory review by the Planning Department.

9. ProMark Partners (9711 and 9715 Medical Center Drive)

These properties have redevelopment potential given their consolidated ownership, extensive surface parking lots and low intensity uses. This Plan recommends mixed-use redevelopment with residential or life science uses. Redevelopment should seek synergies with surrounding Adventist HealthCare, improve frontages along Medical Center Drive that integrate the LSC Loop, provide one east-west connection between Medical Center Way and Blackwell Drive, and provide publicly accessible open space within the property.

10. Elms at PSTA

The Elms at PSTA has an approved site plan. The site will deliver an athletic field, trails and public open space, new street connections, and 630 residential units. This Plan recommends that future infill

development on this property be concentrated on the surface parking lot along Key West Avenue to further implementation of this Plan's recommendations along this frontage.

C. SOCIAL ENVIRONMENT

The Life Sciences Center is a world-class innovation center with the potential for complementary amenities, but it lacks publicly accessible open space and recreational amenities. However, there are opportunities to meet these needs. Recently approved developments, such as the Belward Campus, and developments under construction, such as the Elms at PSTA and Traville Parcel N, are required to deliver privately owned public space (POPS) for social gathering, active recreation, and contemplative relaxation. Traville Local Park, a currently undeveloped M-NCPPC Montgomery County Department of Parks (Montgomery Parks) park is also located in the Life Sciences Center.

In addition to the forthcoming privately owned public space and Traville Local Park, the area is served by additional community facilities and schools, including the Montgomery County Police Department (MCPD) District 6 and Fire and Rescue Travilah Station. The 2010 Plan recommended the construction of the Travilah Station, located at the northwest corner of Shady Grove Road and Darnestown Road in the Life Sciences Center. The station was completed in 2014. Given the recent completion of the Travilah Station, the Plan does not recommend any additional public safety facilities to serve the area. The Life Sciences Center falls into two school clusters—Gaithersburg and Wootton. The area is served by Rosemont, Lakewood, and Stonemill Elementary Schools; Frost, Forest Oak, and Cabin John Middle Schools; and Wootton and Gaithersburg High Schools. Under a maximum build-out scenario, the Life Sciences Center area may generate approximately 300 elementary school, 135 middle school, and 175 high school students to the public schools serving the area.

In 2027, Montgomery County Public Schools (MCPS) intends to conduct a

large-scale boundary change across numerous clusters, including all clusters serving the Plan area. Several capital projects adding capacity at the high school level are expected to be completed and ready to relieve overutilized schools by then. The boundary change will give MCPS an opportunity to reassign students to better balance the utilization levels between different schools, not only at the high school level, but also at the elementary and middle school levels.

In 2029, Wootton High School is anticipating completion of a major capital project, which is projected to add around 100 additional seats to its capacity. In addition, several middle schools and elementary schools serving the Plan area and its vicinity have room to add capacity in the future when the need arises. Given the planned capital projects in the school clusters serving the Plan area, the Plan does not recommend any additional school facilities.

Goals

- Create parks and public open spaces that serve multiple functions—social gathering, active recreation, access to nature, and environmental stewardship—rather than a single purpose.
- Focus on the specific needs and desires of an increasingly diverse population.
- Create places that foster community, civic engagement, and social cohesion.
- Develop quality of place based on design and sustainability best practices, anchored by a robust network of streets and public open spaces.

Recommendations

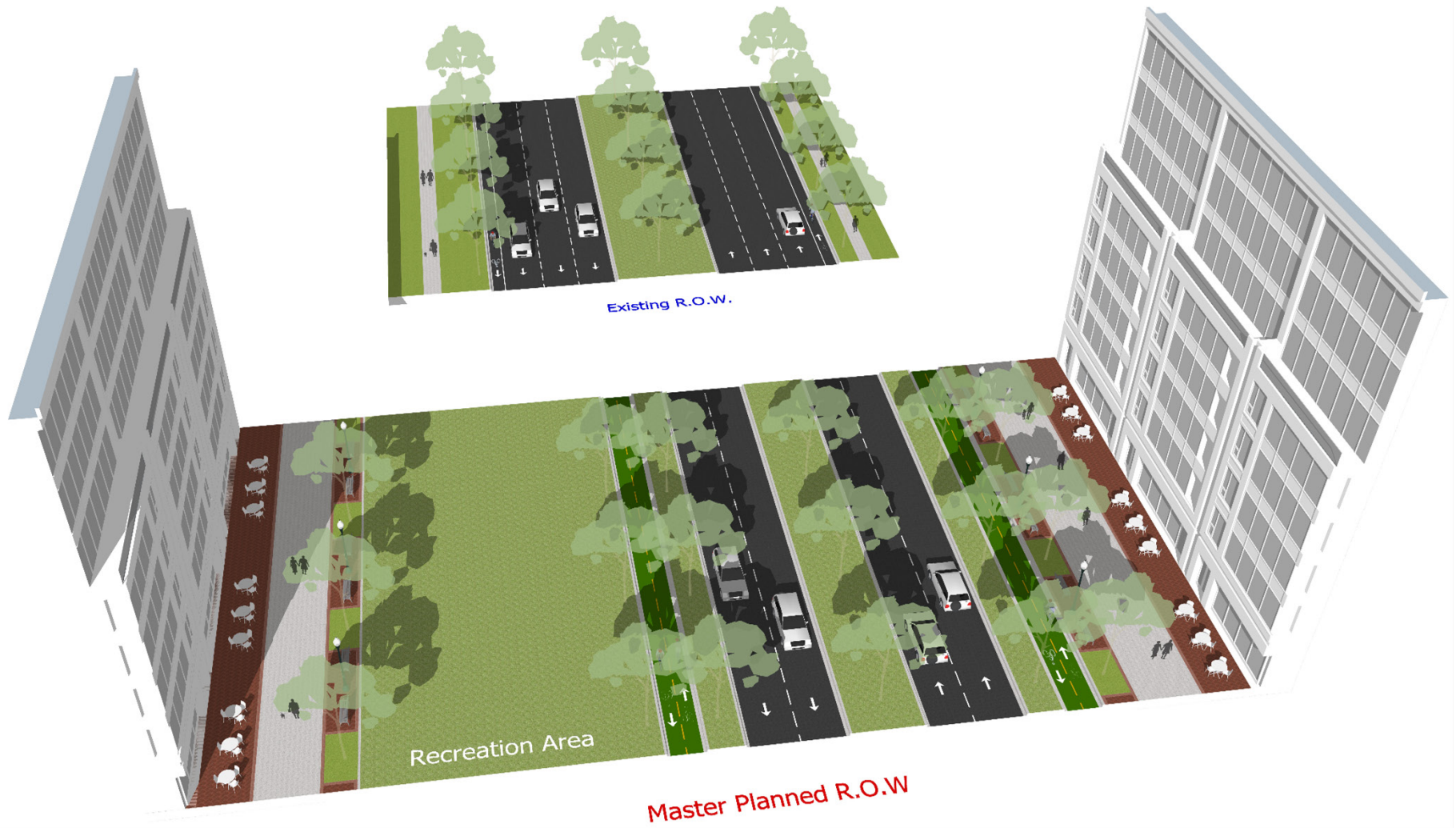
1. Repurpose two travel lanes on Key West Avenue to establish a tree-lined promenade for people who are walking, biking, and rolling, as shown in Figure 34. The repurposed right-of-way remains needed for public use; the area should be established as a promenade that incorporates active and passive uses as well as retail kiosks to

create active, social, and leisure opportunities for people to linger, instead of simply passing through. The promenade area should be managed by the place management organization recommended in the implementation section of this chapter. Fire access will be accommodated through the sidewalk and frontage zone.

- The Key West promenade will be primarily implemented through a capital project, rather than through incremental development. The county, in coordination with the place management organization, should pursue local, state, and federal funding resources, including the capital improvements program, grants, and public / private partnerships, as well as private resources including development contributions, to design and implement this transformative recommendation.
2. Repurpose a portion of the Great Seneca Highway right-of-way as a greenway. The repurposed right-of-way could provide more than 4.5 acres of publicly accessible open space for active recreation, social gathering, and contemplative experiences through a public easement, and/or space for new development.
 - The Great Seneca Greenway could be primarily implemented through a capital project, or through incremental development. The county, in coordination with the place management organization, should pursue local, state, and federal funding resources, including the capital improvements program, grants, and public / private partnerships, as well as private resources including development contributions, to design and implement this transformative recommendation.
 3. Support access to healthy, local foods including through farmers' markets, food stands and community gardens. Should the existing Shady Grove Farmers' Market require relocation due to redevelopment of the Montgomery Medical opportunity site, alternative sites should be identified to continue the farmers' market, including the parks and public open spaces recommended by this Plan.

4. Establish a hierarchy of well-connected parks and POPS that facilitate physical activity, social interaction, and access to nature.
 - Design and locate POPS in order to foster social interaction and attract employees and residents to recreate before, during, and after business hours.
 - Locate retail near parks and public open spaces.
 - Integrate existing environmental resources, such as forestland or conservation areas, into the public open space network to provide alternatives for nature-based recreation.
5. Explore the potential for the eastern portion of Traville Local Park to include amenities consistent with a local park. The western section of Traville Local Park currently serves conservation purposes and should continue to do so in the future.
6. Integrate new and existing development with a robust network of public open space and parkland connected via pedestrian, bicycle, and trail networks. Consider the following:
 - Supplement this network with formal public open spaces connected to and activated by mixed-use development. Establish a publicly-owned urban park on the Adventist HealthCare Shady Grove Medical Center site.
 - Consolidate public open space at strategic locations to focus public activity at transit or at locations that are easily accessible.
 - Ensure that public open space delivered by mixed-use development is also connected to the overall open space network within the Life Sciences Center.
7. POPS and publicly-owned urban parks should be safe and accessible to all, through:
 - Open access throughout the week and weekend.
 - Lighting to deter crime and increase usage throughout the entire day, while maintaining dark sky standards.
8. Support improvements to bicycle and pedestrian facilities along state and county roads that serve as important connections to nearby park and municipal trails, including Muddy Branch Trail, Seneca Greenway Trail, Powerline Trail, and Millennium Trail.
 - Amenities such as consistent lighting, publicly accessible restrooms, and water fountains throughout the Life Sciences Center to encourage extended use.
 - Signage about the space and/or its features.
 - ADA-accessible design and access points.

FIGURE 34: CONCEPTUAL DIAGRAM OF KEY WEST AVENUE PROMENADE WITHIN THE EXISTING MASTER PLANNED ROW



D. NATURAL ENVIRONMENT

The Life Sciences Center can become a leader in environmentally sustainable and resilient design in the region. The recently constructed Leadership in Energy and Environmental Design (LEED) Platinum Biomedical Sciences and Engineering Education Facility at the Universities at Shady Grove serves as a model for incorporating green practices in design. Partnering in energy generation and preservation is particularly important for life science uses. Life science and health care facilities have intensive energy needs that cannot be disrupted. Lab spaces used by life sciences companies typically consume five to 10 times more energy than an office of the same size.⁴ On-site energy production and simultaneous reduction of energy will strengthen the resiliency of the area.

The Life Sciences Center includes opportunities to preserve and protect rare and/or important natural features. The area contains a rare habitat where an outcrop of serpentinite bedrock creates conditions that are hostile to many plant species typical of the Mid-Atlantic Piedmont region. Plants that are better adapted to the chemical makeup of the soil on the serpentinite are predominant instead, including some that are rare for this area. In addition, 12% of the area is forested.

The Life Sciences Center is located within the Watts Branch and Muddy Branch watersheds. The headwaters of Piney Branch, a tributary of the Watts Branch, are located in the Life Sciences Center. The Piney Branch watershed was declared a Special Protection Area, which means it is subject to protections beyond standard environmental laws, regulations, and guidelines for land development and certain uses.

This Plan seeks to promote innovative, sustainable building design and preserve native habitat and unique environmental features. The Life Sciences Center should be a sustainable community that attracts nationwide interest through its design.

“The trees and nature being accessible to rest the eye and soothe the mind and body.”

*– Community Member,
Door-to-door Canvassing*

Goals

- Minimize greenhouse gas emissions, maximize energy conservation, and meet energy needs through clean energy generation.
- Conserve and protect water quality.
- Use the best available stormwater management techniques in the Piney Branch Special Protection Area to protect the watershed’s headwaters.
- Identify heat islands and employ strategies to reduce extreme summer temperatures.
- Improve air quality by reducing ozone and particulate pollution.
- Protect unique and sensitive biological communities.

⁴ https://www.savills.co.uk/research_articles/229130/345762-0#:~:text=The%20US%20Pacific%20Gas%20and,building%20of%20the%20same%20size.

Energy and Design Recommendations

1. Increase on-site clean energy generation to reduce the energy demand on the power grid and energy loss in transmission from the generation site to the end user.
2. Engage the life sciences community to advance the county's climate action goals. Given the sector's significant energy needs, establish partnerships with county government, research institutions, and businesses to test and showcase resiliency and energy innovation utilizing county assets and infrastructure.
3. Incorporate strategies to increase building energy efficiency at the time of initial building and site design through building orientation, incorporating shading features, using proper wall-to-window ratios, using good insulation, and using high-efficiency HVAC and lighting systems.
4. Incorporate environmentally sustainable development strategies into all developments that align with best practices and mirror the life science industry's state-of-the-art technology: green roofs, rain gardens, permeable/light-colored pavement, solar panels, mass timber construction, landscaping, geothermal heating and cooling, etc.
5. Expand electric vehicle charging infrastructure.

Environmental Quality and Preservation Recommendations

1. On private property, provide a minimum of 35% green cover of the total site, excluding existing forest cover on the property, which may include the following, either singly or in combination:
 - Intensive green roof (6 inches or deeper)*
 - Tree canopy cover
 - Vegetative cover
 - Landscaped areas
 - Rain gardens and bioswales
 - Solar energy and green roof

* If on-site energy generation requires the use of either the roof or open space, accommodations for these features may alter the 35% minimum green cover requirement.

2. Increase tree canopy coverage by planting trees on public and private land, along rights-of-way, within open space, and in existing neighborhoods.
 - Areas of surface parking lots on public and private properties should provide at least 50% tree canopy coverage of the parking lot area. If it can be demonstrated that 50% tree canopy cover cannot be achieved, the remaining coverage requirement can be met through the installation of solar canopies.
3. Minimize impervious surface cover associated with heat islands, increased flooding from runoff, erosion, and poor water quality, whenever developing or redeveloping a site.
4. Increase the use of bioswales and rain gardens, especially in the Piney Branch Special Protection area.
5. Protect existing forests to provide carbon sequestration, heat island mitigation, air and water filtration, watershed protection, support of biological diversity, and proven physical and mental health benefits.
6. Plant native vegetation, which is better adapted to local climate, wildlife, and native pollinators, in new developments.
7. Plant trees wherever possible to shade paved and hardscape areas. If tree planting is not possible, provide artificial shading features.
8. Protect existing sensitive species, including in areas underlain by serpentinite bedrock, which supports rare species.
9. Use nature-based climate solutions, including soil improvement techniques, in landscaped features wherever possible.

E. ECONOMIC ENVIRONMENT

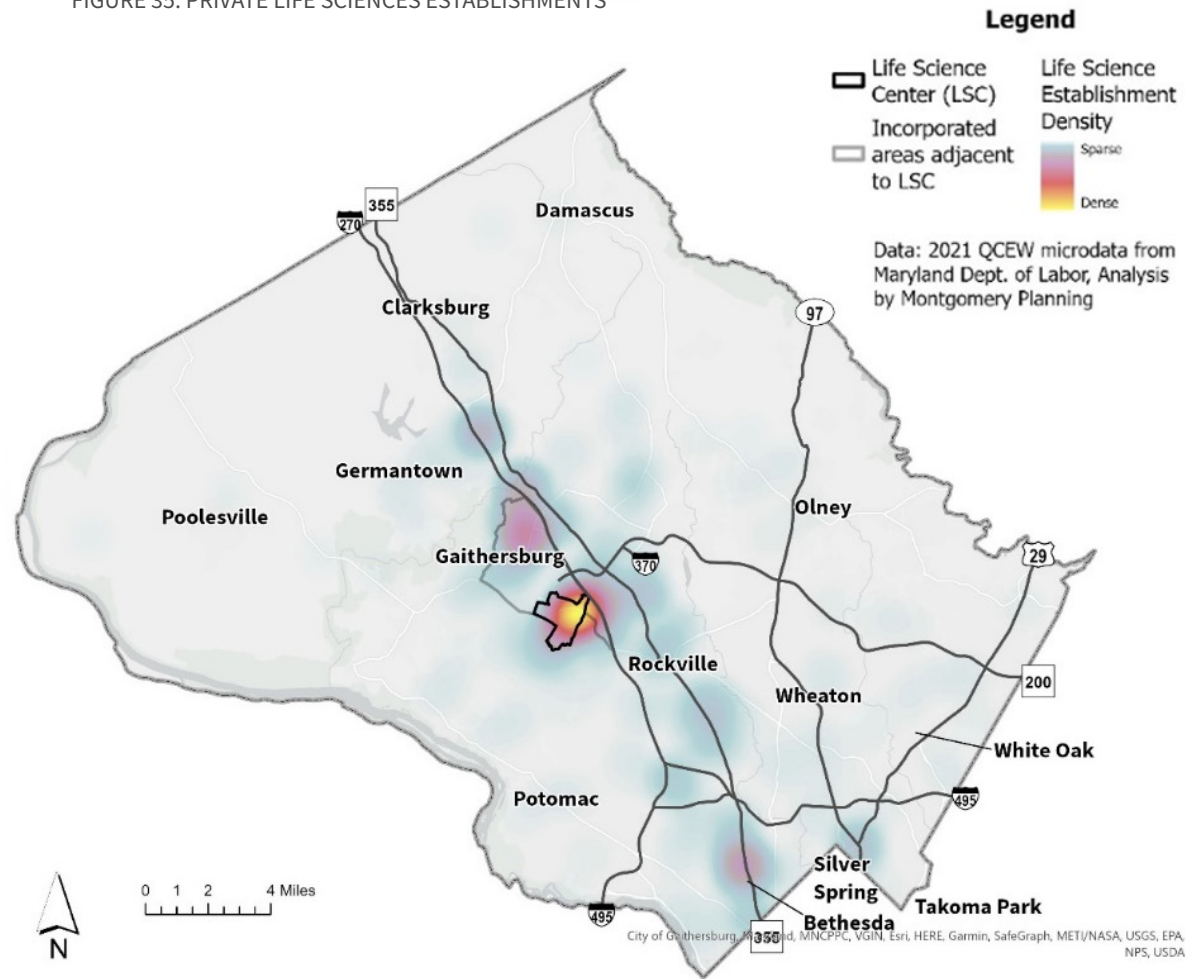
The Life Sciences Center is one of the county’s main economic engines. The life sciences industry is a crucial cornerstone of economic development, offering well-paying jobs to a diverse workforce. Even as the county experienced slow job growth in many employment sectors, the private life sciences industry grew by over 40% between 2010 and 2021.

The Life Sciences Center contains the densest concentration of private life science establishments in the county (see Figure 35).

Almost two-thirds of the county’s total life science jobs are concentrated in the LSC and adjacent areas in Rockville and Gaithersburg. The LSC is already a highly valued and highly productive area. This Plan seeks to maximize and capture that value by inviting more businesses and people to join in the success. Better transit connections to job centers like the Life Sciences Center will make it easier for current and future employees to get to work, helping employers attract and retain staff. Investing in transit, walking, rolling, and bicycling infrastructure is also critical to building complete communities that have the amenities, sense of place, and level of activity that more and more people of all backgrounds and ages are seeking in the places where they live, work, and recreate.

The lack of housing options is a barrier to attracting and retaining employees for many businesses and institutions in the Life Sciences Center. Providing housing choices will allow people who work in the area to live in the area too, if they choose to do so. Affordable, attainable housing will make the area more economically competitive.

FIGURE 35: PRIVATE LIFE SCIENCES ESTABLISHMENTS



This Plan seeks to retain, attract, and grow the life sciences and healthcare industries as well as educational capacity by enhancing the Life Sciences Center as a place, and delivering services, amenities, and infrastructure desired by employers, workers, residents, and visitors.

Goals

- Transition the Life Sciences Center into a vital complete community, consistent with *Thrive Montgomery 2050*.
- Increase the Life Sciences Center's competitiveness as a major global life sciences innovation hub.

Economic Competitiveness Recommendations

1. Enhance infrastructure and amenities to attract life sciences companies, residents, and workers, including housing, multi-modal transportation, public open space, recreation, and walkability, in line with the Montgomery County Economic Development Corporation's Strategic Plan.
2. Facilitate new development and adaptive reuse of existing buildings to meet industry demand based on quantity, type, and size of life science real estate. Encourage development of small- and medium-scale lab space not provided by the private market.
3. Encourage the placement and design of retail to be integrated with public and private open space, walkability features, and other aspects of the site's design and relationship to surrounding properties.

F. IMPLEMENTATION

The Life Sciences Center was fostered through careful investment and planning from Montgomery County in the 1970s and 1980s. Initially constructed on publicly owned land, the Life Sciences Center has experienced commercial and residential growth over the last few decades, including the development of Adventist HealthCare Shady Grove Medical Center, the Universities at Shady Grove, and the National Cancer Institute. The 2010 Plan shepherded additional development opportunities, as well as

a vision for high-quality transit, a street network, public realm improvements, and open space amenities. Due to several factors, including the delayed implementation of high-quality transit, the 2010 Plan's staging requirements, significant inventory of pipeline development, and the lack of a coordinating or advocacy entity, the growth did not deliver the anticipated urban, mixed-use development, infrastructure, or public realm improvements envisioned in the 2010 Plan. Selective public investment as well as private investment will support the continued growth and success of the area.

This Plan recommends several implementation strategies to address these barriers and achieve the Plan's vision for the Life Sciences Center.

1. Following this Plan's approval by the Montgomery County Council and adoption by the Maryland-National Capital Park and Planning Commission, a sectional map amendment will apply the Plan's zoning recommendations to the official county zoning map.
2. Establish a Life Sciences Overlay Zone that supports mixed-use life sciences development and incentivizes production of affordable and market-rate housing.
3. This Plan recommends that the county establish a place management organization in the Life Sciences Center to implement master plan recommendations and perform other supporting functions, including:
 - Activate and program underutilized sites and open spaces.
 - Develop a brand for the area and a plan for marketing it.
 - Coordinate and implement placemaking, public realm, and infrastructure improvements.
 - Advocate for, directly fund, or apply for grants for key capital projects in the LSC.
4. This Plan recommends that county agencies explore the full range of funding mechanisms available to implement Plan recommendations, including parks, public open space, and multimodal transportation infrastructure improvements, which are critical to supporting a competitive and attractive Life Sciences Center, within 18 months of Plan adoption.

- Funding mechanisms that should be explored include Federal and State aid, a business improvement or innovation district, a special taxing district, development contributions per square foot, or other innovative funding mechanisms, along with general obligation bond financing.
 - During the exploration of funding mechanisms, the county should consider allowing the place management organization recommended by this Plan to advocate, raise, and spend funds to implement recommendations in the Plan, including capital projects. Any funds raised by the place management organization and directed to capital projects should result in the prioritization of these capital projects in the county’s capital improvement program.
5. Dissolve the Great Seneca Science Corridor Implementation Advisory Committee (GSSC IAC) established by the 2010 Plan. The organizing entity recommended in this Plan will replace the GSSC IAC and assume functions such as advocating for elements that are needed to transform this area of the county from an employment center to a complete, identifiable community.
 6. Remove staging requirements established by the 2010 Plan.
 7. Limit granting Adequate Public Facilities validity period extension requests for Preliminary Plans approved prior to October 30, 2014.
 8. Develop Design Guidelines to provide detailed guidance, as stated in the Built Environment section.
 9. Oppose annexation of any portion of the Life Sciences Center by the municipalities.

TABLE 3: LIFE SCIENCES CENTER CAPITAL IMPROVEMENT PROGRAM PRIORITIES

Project Name	Category	Lead Agency	Coordinating Agencies
Create publicly owned park on Broschart Rd	Parks and Open Space	M-NCPPC	Private
Repurpose travel lanes on Great Seneca Highway	Parks and Open Space	MCDOT	M-NCPPC, DGS, private
Right-size intersections	Transportation	MCDOT	SHA
Signalize, restrict, or close median breaks	Transportation	SHA	MCDOT
Consolidate, remove, or relocate driveways	Transportation	MCDOT	SHA
Alley network	Transportation	MCDOT	Private
Walkways and bikeways network	Transportation	MCDOT	Private
Micromobility corrals	Transportation	MCDOT	Private
Dedicated lanes for Great Seneca Transit Network	Transportation	MCDOT	SHA
Dedicated transit lanes for Corridor Connectors	Transportation	MCDOT	SHA
Repurpose travel lanes on Key West Avenue	Transportation	SHA	MCDOT, M-NCPPC, DGS
Bicycle and pedestrian connections to parks and trails	Transportation	MCDOT	SHA, M-NCPPC



National Institute of Standards and Technology,
Londonderry, and Hoyle's Addition

17060

LONDONDERRY TOWERS

III. National Institute of Standards and Technology, Londonderry, and Hoyle's Addition

A. CONTEXT AND VISION

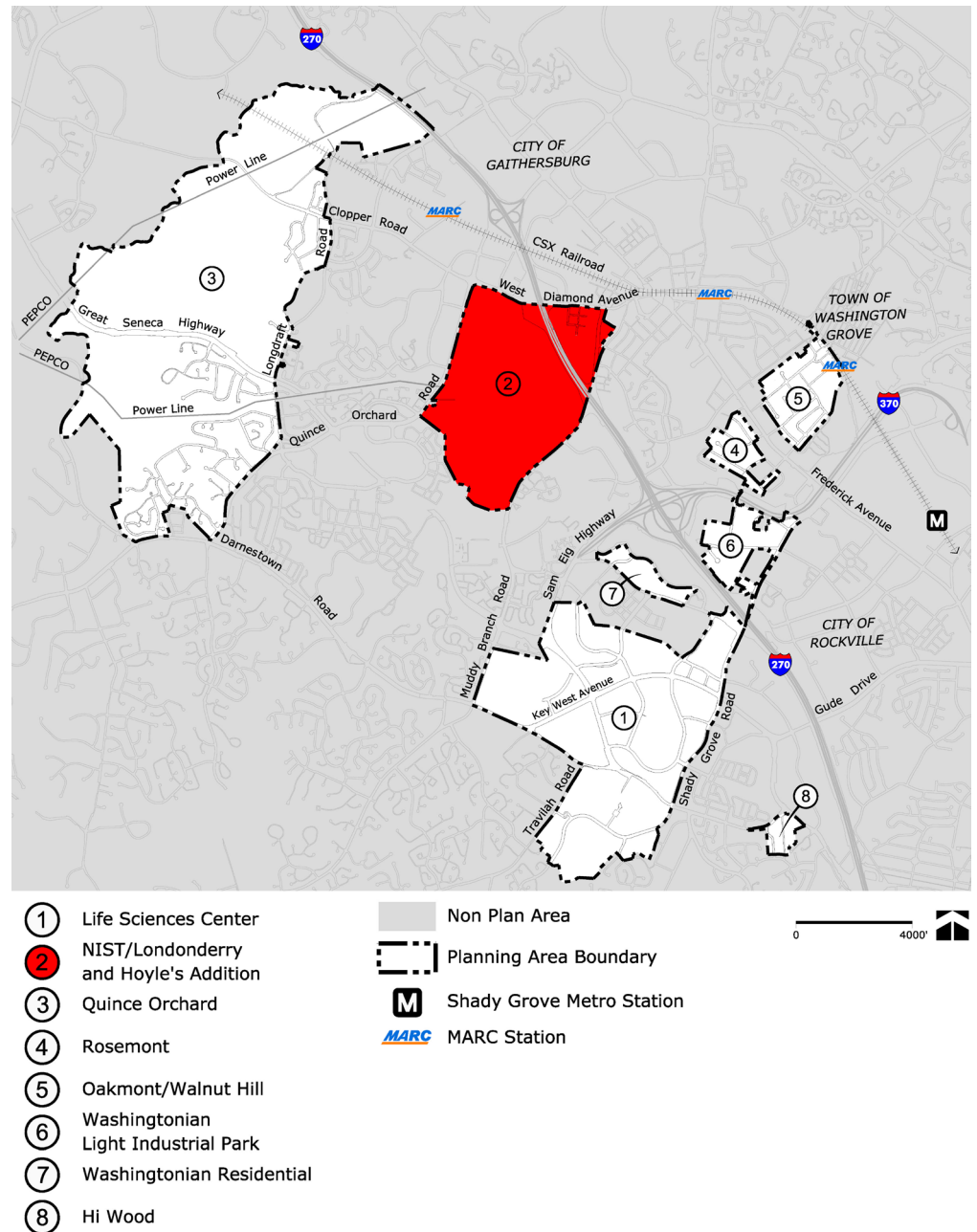
Context

Located on the west side of I-270, the National Institute of Standards and Technology (NIST) is a federal agency that promotes innovation and industrial competitiveness. NIST researchers work with industry, academic institutions, and other government agencies to advance measurement sciences, standards, and technology. The 580-acre facility, bordered by West Diamond Avenue, Quince Orchard Road, Muddy Branch Park, Muddy Branch Road, and I-270, has 3.4 million square feet in a campus-style research, development, and office complex.

On the east side of I-270, bounded by West Diamond Avenue and Muddy Branch Road, Londonderry is a residential neighborhood with a mix of high- and low-rise apartments, including the Londonderry Towers, Londonderry Apartments, Montgomery Club Apartments and Townhomes, and The Willows. Together, these apartments contain approximately 1,143 housing units, including naturally occurring affordable housing units, as well as 367 units that are subsidized through affordable housing programs. Hoyle's Addition, a residential subdivision bordered by West Diamond Avenue to the north, the Londonderry Apartments to the south and east, and The Willows to the west, includes approximately 15 single-family homes, as well as several vacant parcels.

According to Montgomery Planning's Community Equity Index (CEI), the Londonderry / Hoyle's Addition neighborhood is highly disproportionate/disadvantaged compared with the overall socio-economic diversity of the county. Over half the residents are low-income, 90% of people rent, and the per capita income is just over one-third of the county average.

FIGURE 36: NIST, LONDONDERRY AND HOYLE'S ADDITION



As shown in Figure 36, the Londonderry / Hoyle's Addition area is also relatively isolated from other parts of the county. The NIST campus and I-270 act as a barrier to the west and south. Muddy Branch Road and West Diamond Avenue deter walking and biking to nearby destinations. The area is served by two bus lines, but service is infrequent and does not connect residents to nearby grocery and retail destinations on Quince Orchard Road, West Diamond Avenue, and Muddy Branch Road.

Vision

This Plan envisions the Londonderry / Hoyle's Addition area as a thriving residential neighborhood with local-serving retail, public open spaces, and transit connections. The Plan proposes a grid of streets as well as improved transit and safer connections to nearby destinations. The area will continue to provide much-needed affordable housing and introduce market-rate housing options. Private and public investment in the area will offer opportunities to address long-standing inequities.

The Plan does not recommend any changes to the NIST property. Recommendations in this document focus on Londonderry / Hoyle's Addition.

B. BUILT ENVIRONMENT

Londonderry / Hoyle's Addition is home to many families and provides many deeply affordable and affordable units. This Plan recommends increasing the allowable density of the area to encourage more housing and housing diversity.

The area has become highly disadvantaged compared with the rest of the county, and adding more housing, as well as a wide range of housing types and sizes, is one strategy to improve equity. There is evidence that a concentration of socio-economic disadvantage can have corrosive effects for disadvantaged groups as well as advantaged groups. Conversely, residential socio-economic diversity increases the economic mobility of disadvantaged people.

Redevelopment of the area offers an opportunity for the neighborhood to more accurately reflect the county's diversity and to provide more housing and transportation options. The vision for the area is to increase both the

number of market rate housing units and the number of income-restricted affordable housing units.

Replacing the older housing stock with new apartments can have other impacts on equity. New buildings may increase the quality and quantity of housing units that are accessible to people with disabilities, as they are subject to new regulations.

Creating a community that is internally and externally well-connected offers new opportunities for existing and future residents. Planned bus rapid transit (BRT) on MD 355 and dedicated transit lanes on Muddy Branch Road, as well as improved pedestrian connections, will improve multi-modal connectivity to shopping, employment, and activity centers.

While private investment can help to make the needed improvements in Londonderry, the neighborhood's severe socio-economic disadvantage combined with its lack of adequate natural and recreational spaces and its exposure to high levels of air pollutants from I-270 make it a prime candidate for public investment in environmental mitigation, beautification, and amenities.

Land Use, Zoning, and Urban Design

1. Rezone properties currently zoned R-20 to CRT-2.0, C-1.5, R-2.0, H-150 to achieve a mixture of uses, including additional residential and local-serving retail uses. (Figures 34 and 35)
2. Rezone properties currently zoned R-200 to R-60 to allow for more flexibility.
3. Support a future application for a Commercial Residential Town (CRT) Floating Zone, CRTF 2.0, C-1.5, R-2.0, H-150 on R-200 properties in Hoyle's Addition.
4. Locate highest densities at the southern portion of the site to maximize visibility for potential non-residential uses, and transition to lower densities along the north.
5. Front building entrances and active ground floor uses along a new internal, north-south street parallel to Muddy Branch Road.

FIGURE 37: NIST, LONDONDERRY AND HOYLE'S ADDITION EXISTING ZONING

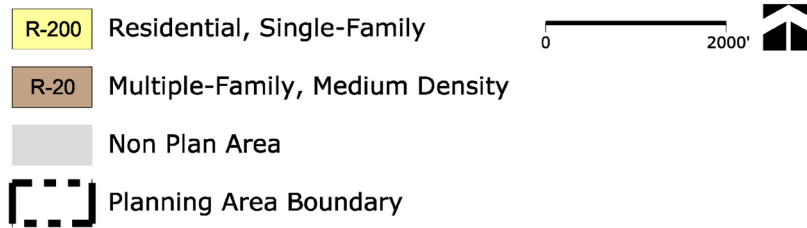
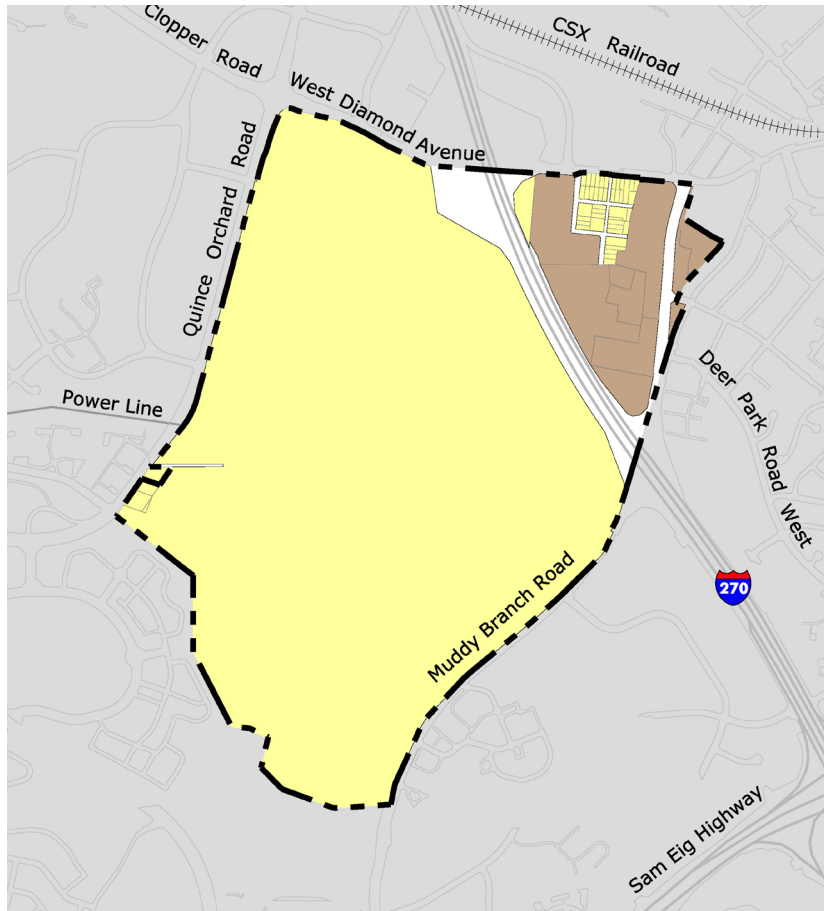
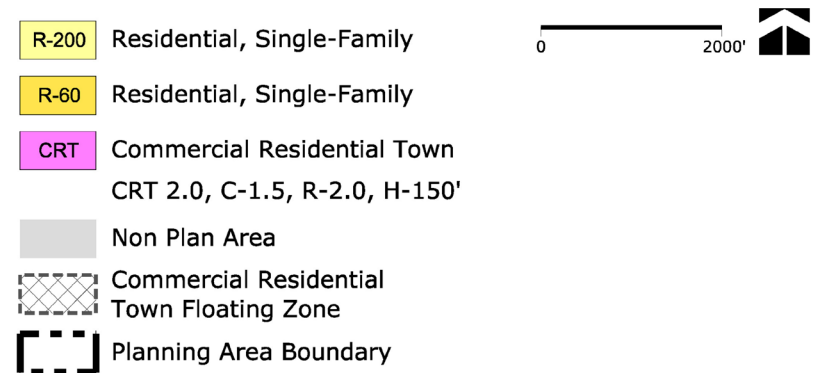
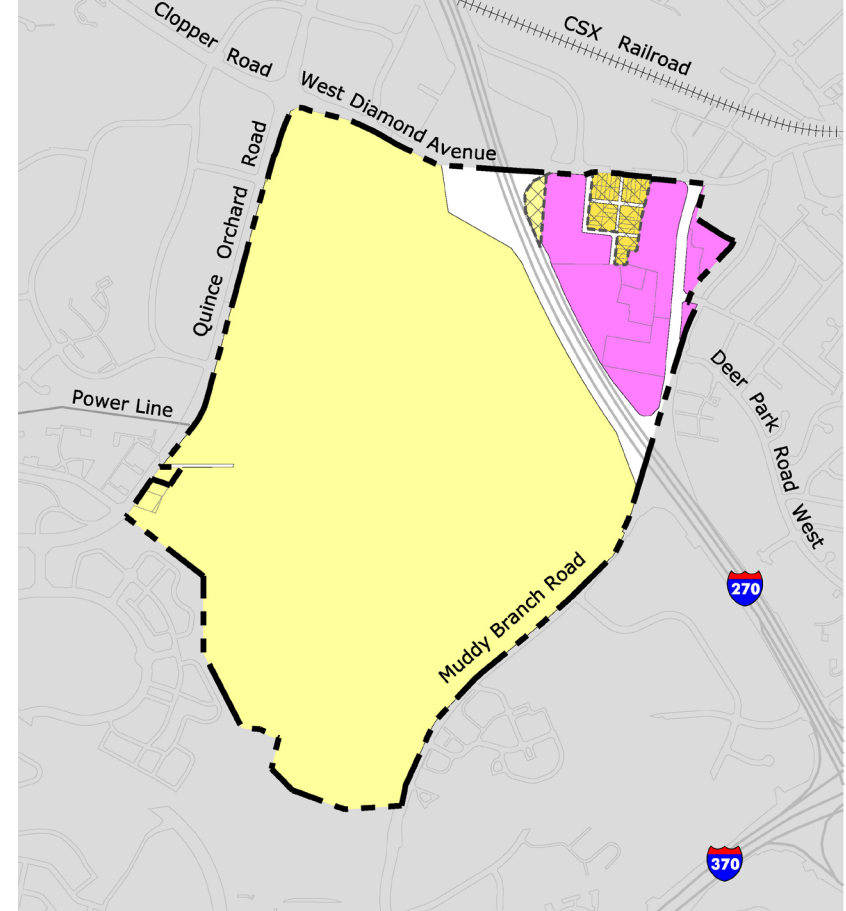


FIGURE 38: NIST, LONDONDERRY AND HOYLE'S ADDITION RECOMMENDED ZONING



Housing

1. Require new developments to provide at least 12.5% MPDUs, aligned with current county policy.
2. Work with public, private, nonprofit, philanthropic, and religious institution partners to preserve and expand housing affordability in the Londonderry area.
3. Property owners should work with the Montgomery County DHCA to extend their federal and county subsidy contracts to retain and expand the current levels of housing affordability in the Londonderry area.
4. In the event of redevelopment, priority should be given to existing eligible residents for the units that are under market-affordable rental agreements. Property owners should work with the DHCA and tenants to ensure that eligible residents receive support and assistance to mitigate the impacts of temporary relocation.
5. Preserve existing naturally occurring affordable housing where possible, striving for no net loss of naturally occurring affordable housing in the event of redevelopment.
6. Prioritize two- and three-bedroom units for residential development projects to provide additional family-sized units.

Transportation

1. Develop an internal street grid.
2. Install dedicated transit lanes on Muddy Branch Road.
3. Explore additional Ride On connections to essential destinations.
4. Improve bicycle, pedestrian, and local transit connectivity to the future MD 355 BRT stop, as well as to the MARC Gaithersburg Station and planned high-quality transit.

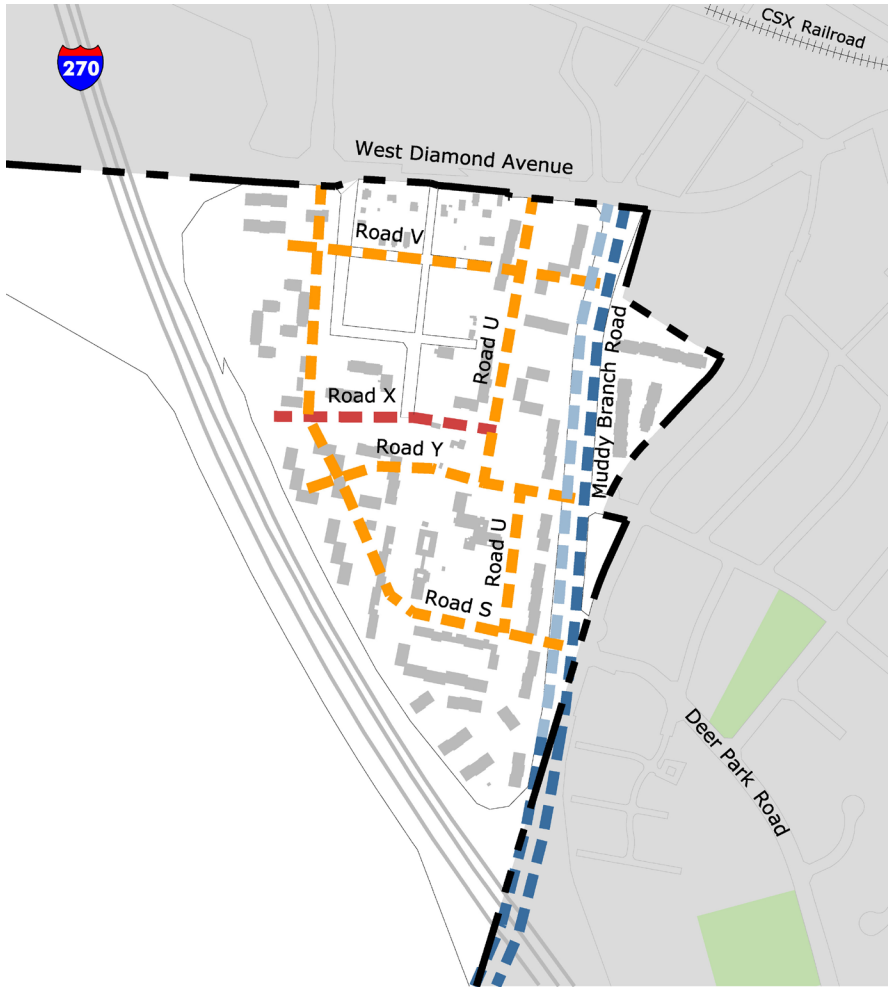
5. Right-size intersections to create a safer and more comfortable environment for people who are walking, rolling, bicycling, riding transit, and driving.
 - Remove channelized right-turn lanes from all intersections.
 - Reduce the number of dedicated left- and right-turn lanes to shorten crossing distances.
 - Minimize curb radii, using curb extensions rather than painted buffers. Include mountable curbs for emergency vehicle and truck access if necessary.

“Public transportation and walkability need to be improved. I absolutely dislike the size of some of the major streets and the impact they have on pedestrians and bikers.”

– Community Member, Public Meeting

6. Implement a complete network of comfortable sidewalks and sidepaths, connected by safe, protected crossings.
 - Upgrade the following intersections with high-visibility continental or ladder crosswalk markings for all pedestrian approaches:
 - vii. West Diamond Avenue and Perry Parkway
 - viii. West Diamond Avenue and King James Way
 - ix. West Diamond Avenue and Muddy Branch Road
 - x. Muddy Branch Road and King James Way
 - Provide protected pedestrian crossings that are consistent with the CSDG maximum spacing for protected crossings, including at existing and new intersections and at mid-block locations where needed. Ensure ADA accessibility on all public pathways, including sidewalks, trails, and street crossings, in accordance with current best practices.
 - Achieve PLOC 2 or better along and across Muddy Branch Road and West Diamond Avenue, as well as on all future roadways.
7. Install new micromobility corrals in underutilized parking facilities, within available rights-of-way, and near civic gathering spaces.
8. Screen or wrap parking garages. Consider placing garages along I-270 and/or the noise wall to create an additional buffer. Appropriately design and screen to maximize aesthetics and minimize light spillover.

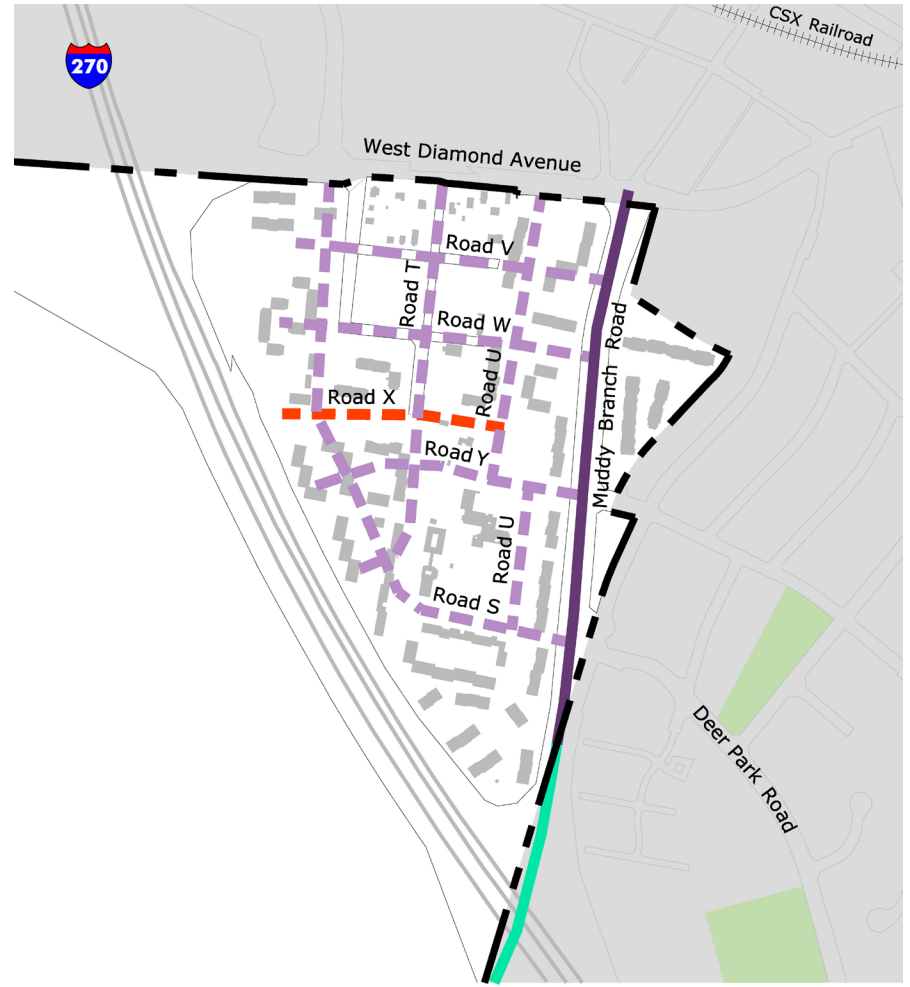
FIGURE 39: LONDONDERRY PROPOSED BIKEWAY NETWORK



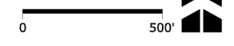
- Planning Area Boundary
 - Parkland
 - Non Plan Area
- Proposed**
- 1-Way Separated Bike Lane
 - 2-Way Separated Bike Lane
 - Sidepath
 - Shared Street



FIGURE 40: LONDONDERRY RECOMMENDED ROADWAY CLASSIFICATIONS*



- Planning Area Boundary
 - Parkland
 - Non Plan Area
- Existing**
- Boulevard
- Proposed**
- Town Center Boulevard
 - Town Center Street
 - Residential Shared Street



* As illustrated, Road U is offset across Road Y to reflect the existing development pattern. If redevelopment of multiple properties is possible, a configuration that aligns Road U across Road Y would be preferred.

TABLE 4: NIST/LONDONDERRY AND HOYLE'S ADDITION STREET CLASSIFICATION, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Town Center Boulevard										
Muddy Branch Rd	West Deer Park Rd	West Diamond Ave (MD 117)	Town Center Boulevard	30	140	4	4	2	2-Way Separated Bike Lane	Sidepath
Town Center Street										
Road S	Muddy Branch Rd	W Diamond Ave	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road T	150' west of Road S	W Diamond Ave	Town Center Street (Planned)	25	50	n/a	2	0	None	None
Road U	Road S	Road Y	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road U	Road Y	W Diamond Ave	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road V	150' west of Road S	Muddy Branch Rd	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Road W	150' west of Road S	Muddy Branch Rd	Town Center Street (Planned)	25	50	n/a	2	0	None	None
Road Y	150' west of Road S	Muddy Branch Rd	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Residential Shared Street										
Road X	150' west of Road S	Road U	Residential Shared Street (Planned)	15	44	n/a	2	0	Shared Street	Shared Street

Notes: Minimum rights-of-way do not generally include lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Additional rights-of-way may also be needed to accommodate master planned bicycle and transit facilities, including protected intersections, the envelopes of transit stations, and pedestrian crossing refuges.

C. SOCIAL ENVIRONMENT

The Londonderry area is underserved by parks, public open space, and outdoor recreation facilities. Montgomery Parks identifies this area as needing improvements in active/fitness, contemplative, and social experiences. There are few parks in or near this area to which residents can easily walk or bike. Redevelopment in the Londonderry area offers the opportunity to deliver a range of park and public open space experiences within easy walking and biking distance of current and future residents.

“I would like to see nice murals and a bigger park than the one currently in the apartment complex”

– Community Member, Door-to-door Canvassing

The Londonderry area is within the Gaithersburg Cluster and is served by Rosemont Elementary School, Forest Oak Middle School, and Gaithersburg High School. Both Rosemont Elementary and Forest Oak Middle Schools have a projected seat surplus. Gaithersburg High School has a projected deficit of more than 200 seats. Boundary discussions due to the construction of the new Crown High School will likely explore reallocating students to schools with more capacity, as needed.

The area is served by MCPD District 6 and Fire and Rescue Gaithersburg Station. The Plan does not recommend any additional public safety facilities to serve the area.

1. Ensure that public open space anchors mixed-use components.
2. Provide a regulation-size athletic field, multi-use ball courts, and a playground. Avoid placing these facilities immediately adjacent to I-270, to minimize exposure to motor vehicle exhaust.
3. Utilize the natural assets of forests, streams, and other features on publicly accessible land to encourage resident, worker, and visitor use, where appropriate.

D. NATURAL ENVIRONMENT

The proximity to I-270 presents unique environmental challenges for the area. According to the Environmental Protection Agency’s Environmental Justice Screening Tool, the Londonderry area has high air toxins and particulate pollution associated with a variety of diseases, including asthma, cardiopulmonary diseases, cancer, and diabetes, as well as high traffic proximity and noise, which are associated with negative health impacts. Design of the public realm and development should consider mitigation strategies to address these health impacts. The state and county should also study and identify mitigation strategies for both noise and air pollution from I-270 as part of the American Legion Bridge + 270 project.

1. Conduct a noise study as part of the American Legion Bridge + 270 project to determine the impact of I-270 on the community.
2. Construct a noise wall and vegetative barrier to mitigate noise and air pollution from I-270.
3. Provide a minimum of 35% green cover of the total site, excluding existing forest cover on the property, which may include the following, either singly or in combination:
 - Intensive green roof (6 inches or deeper)
 - Tree canopy cover
 - Vegetative cover
 - Landscaped areas
 - Rain gardens and bioswales

4. Increase tree canopy coverage by planting trees and forest stands wherever possible on public and private land, along rights-of-way, within open space, and in existing neighborhoods.
 - Areas of surface parking lots on public and private properties should provide at least 50% tree canopy coverage of the parking lot area.
5. Incorporate strategies to increase building energy efficiency at the time of initial building and site design by choosing optimal building orientation, incorporating shading features, using proper wall-to-window ratios, using good insulation, and using high-efficiency HVAC and lighting systems.
6. Minimize impervious surfaces, which are associated with heat islands, increased flooding from runoff, erosion, and poor water quality, whenever developing or redeveloping a site.
7. Increase the use of bioswales and rain gardens.
8. Protect existing forests to provide carbon sequestration, heat island mitigation, air and water filtration, watershed protection, support of biological diversity, and proven physical and mental health benefits.
9. Plant native vegetation, which is better adapted to local climate, wildlife, and native pollinators, in new developments.
10. Plant trees wherever possible to shade paved and hardscape areas. If tree planting is not possible, provide artificial shading features.
11. Protect the Long Branch Stream and forest within the stream buffer.

E. ECONOMIC ENVIRONMENT

Retail vacancy is low in the Gaithersburg area, particularly east of I-270. However, due to a variety of factors, including a lack of suitable sites and feasibility challenges, there has been relatively little retail development. Retail development is also increasingly delivered as part of a mixed-use development that is also adding more spending to an area through new housing development. Given both the lack of new retail supply and

high demand in the Gaithersburg submarket, coupled with the vision for significantly more housing development in Londonderry, it is likely that the area could also support new retail development. New retail development is not only viable but would serve as a significant amenity that could catalyze development and establish a sense of place for new and existing residents.

1. Allow up to 1.5 floor area ratio of commercial development to be reflected on the zoning map, as stated in the Built Environment section.

F. IMPLEMENTATION

1. Following this Plan’s approval by the Montgomery County Council and adoption by the Maryland-National Capital Park and Planning Commission, a sectional map amendment will apply the Plan’s zoning recommendations to the official county zoning map.
2. Applicants for redevelopment are encouraged to explore partnerships with the Housing Opportunities Commission to provide additional affordable housing requirements beyond the minimum required.

**TABLE 5:
NIST/LONDONDERRY AND HOYLE'S ADDITION CAPITAL IMPROVEMENT PROGRAM PRIORITIES**

Project Name	Category	Lead Agency	Coordinating Agencies
I-270 Barrier wall	Environment	SHA	
Tree canopy	Environment	MCDOT	M-NCPPC
Street grid	Transportation	MCDOT	Private, M-NCPPC
Dedicated transit lanes on Muddy Branch Road	Transportation	M-NCPPC	City of Gaithersburg
Bicycle and pedestrian connectivity to transit	Transportation	MCDOT	City of Gaithersburg
Right-size intersections	Transportation	MCDOT	
High visibility crosswalks	Transportation	MCDOT	
Micromobility corrals	Transportation	MCDOT	Private



Quince Orchard

IV. Quince Orchard

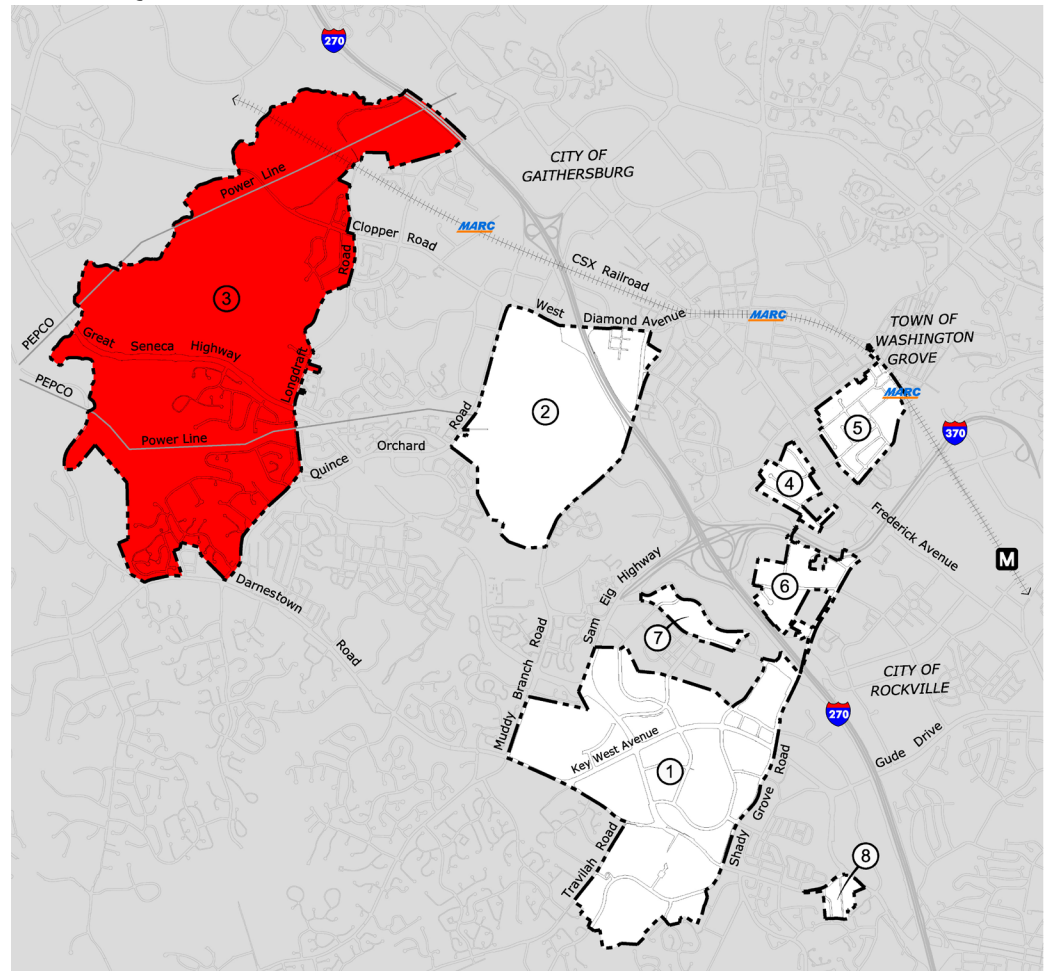
A. CONTEXT AND VISION

Context

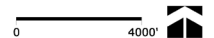
The Quince Orchard area, shown in Figure 41, is the westernmost portion of the Plan area and is generally defined by I-270 to the north, Great Seneca Creek to the west, Darnestown Road to the south, and the City of Gaithersburg to the east. The area includes the communities of Parkridge, Quince Orchard Valley, Quince Orchard Manor, Orchard Hills, and Willow Ridge, as well as several significant parks and environmental features, including Seneca Creek State Park and Clopper Lake, Quince Orchard Valley Neighborhood Park, and Orchard Neighborhood Park.

Limited residential development began in Quince Orchard in the early-to-mid 1900s, but development occurred in earnest in the 1960s and continued through the early 2000s. The area is predominantly characterized by single-family detached residential units and is largely zoned R-200, although there are also contained areas zoned R-90, Residential Estate 2 (RE-2), and Residential Estate 2C (RE-2C). There are also two contained areas that are zoned for commercial uses: the McGown property located at the northern edge of the area and a small parcel located near the intersection of Quince Orchard Road and Darnestown Road in the southeast corner of the area. These parcels are zoned Employment Office (EOF) and Neighborhood Retail (NR), respectively.

FIGURE 41: QUINCE ORCHARD



- | | |
|---|-----------------------------|
| ① Life Sciences Center | ■ Non Plan Area |
| ② NIST/Londonderry and Hoyle's Addition | ▭ Planning Area Boundary |
| ③ Quince Orchard | M Shady Grove Metro Station |
| ④ Rosemont | MARC MARC Station |
| ⑤ Oakmont/Walnut Hill | |
| ⑥ Washingtonian Light Industrial Park | |
| ⑦ Washingtonian Residential | |
| ⑧ Hi Wood | |



Vision

This Plan envisions that Quince Orchard will remain a primarily low-density residential area. Quince Orchard is not located near an existing or planned center of activity, and is not served by robust, high-quality transit, two factors identified in *Thrive Montgomery 2050* for locations to concentrate context-sensitive growth. However, consistent with Thrive, the Plan recommends allowing organic, incremental development in this area over the life of the Plan to “meet localized needs for services and provide a balanced, diverse, and appropriate range of housing choices; increase racial and socioeconomic integration; and achieve more complete communities.”⁵

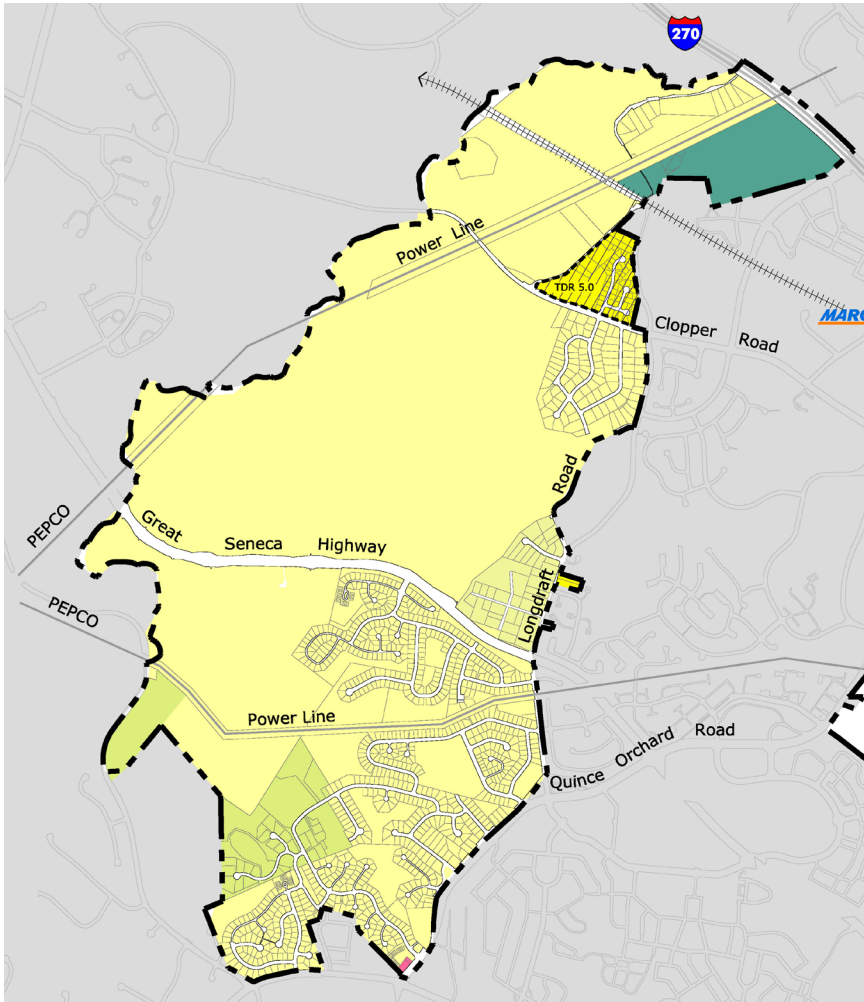
B. BUILT ENVIRONMENT

Due to relative isolation, limited transit, and large environmental features, the Plan recommends retaining the low-density zoning throughout the area, as shown in Figure 42. The Plan recommends changes to the McGown property located at 11520 Game Preserve Road, as shown in Figure 43. This property is approximately 66 acres and is bordered by a Pepco right-of-way to the north, I-270 to the east, the CSX rail line to the west, and the City of Gaithersburg’s Watkins Mill Town Center to the south. Tributaries of Great Seneca Creek flow through the northeastern portion of the largely forested property. Given the McGown property’s isolation from other centers of growth planned in Montgomery County, limited roadway access and transit options, and natural features and constraints, this Plan recommends rezoning the property to R-200, consistent with the zoning of nearby parcels.

1. Retain existing R-90, R-200, RE-2, and RE-2C.
2. Retain existing NR-0.75, H-45 zoning for 1048 Quince Orchard Road.
3. Rezone the McGown property, 11520 Game Preserve Road, to CRT-1.5, C 0.0, R 1.5, H-65 as shown in Figure 43.
4. Pursue the Germantown to Burtonsville Breezeway (Table 6). Coordinate with Pepco and the Maryland Park Service to implement the trail, including connections to the planned breezeway on Great Seneca Highway and the planned sidepath on Clopper Road.
5. Consider a trail connection to Caulfield Lane.
6. Support recommendations in *Corridor Forward: the I-270 Plan* to obtain, reserve and/or require right-of-way, for the long-term potential of the MTA MARC Rail Brunswick Line and the future Red Line Extension to Germantown Town Center, acknowledging the need for more detailed study and coordination with the City of Gaithersburg.

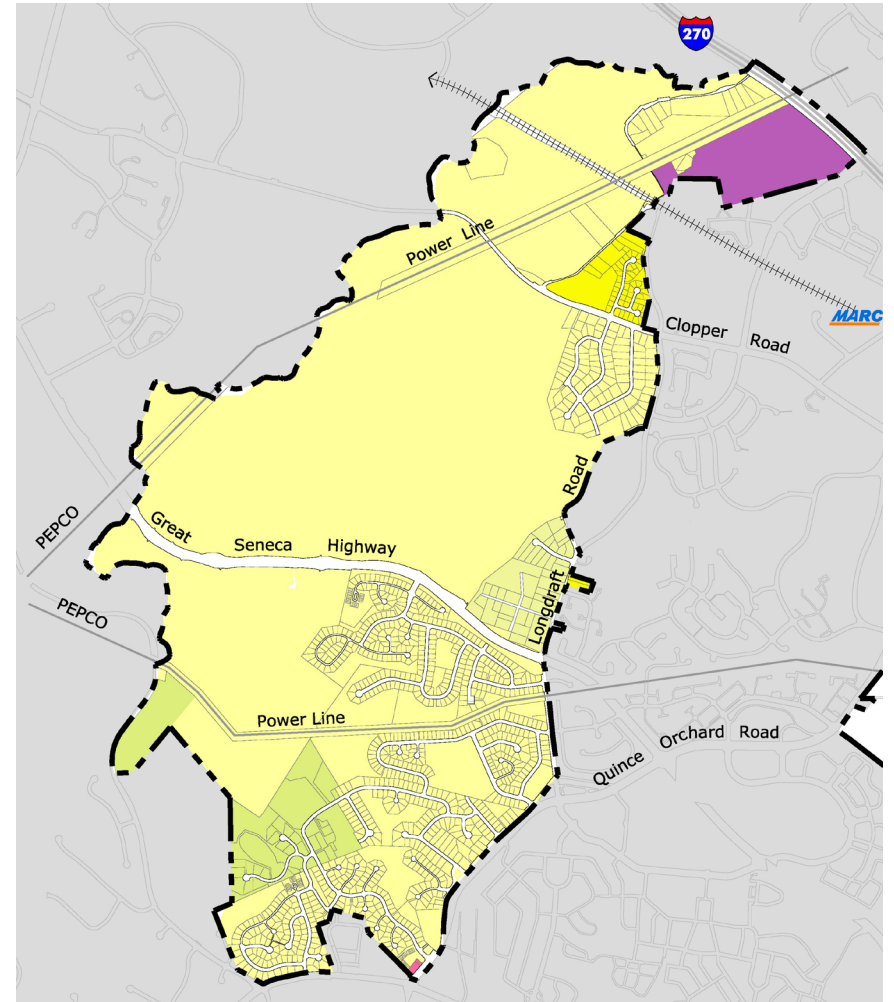
⁵ *Thrive Montgomery 2050*, page 70.

FIGURE 42: QUINCE ORCHARD EXISTING ZONING



- | | |
|----------------------------------|------------------------|
| RE-2 Residential, Single-Family | NR Neighborhood Retail |
| RE-2C Residential, Single-Family | EOF Employment Office |
| R-200 Residential, Single-Family | TDR Overlay Zone |
| R-90 Residential, Single-Family | Non Plan Area |
| Planning Area Boundary | MARC Station |
- 0 3000'

FIGURE 43: QUINCE ORCHARD RECOMMENDED ZONING



- | | |
|----------------------------------|---|
| RE-2 Residential, Single-Family | CRN Commercial Residential Neighborhood
CRN 1.5, C-0.0, R-1.5, H-65' |
| RE-2C Residential, Single-Family | NR Neighborhood Retail
NR 0.75, H-45' |
| R-200 Residential, Single-Family | Non Plan Area |
| R-90 Residential, Single-Family | Planning Area Boundary |
| MARC Station | |
- 0 3000'

FIGURE 44: QUINCE ORCHARD PROPOSED BIKEWAY NETWORK

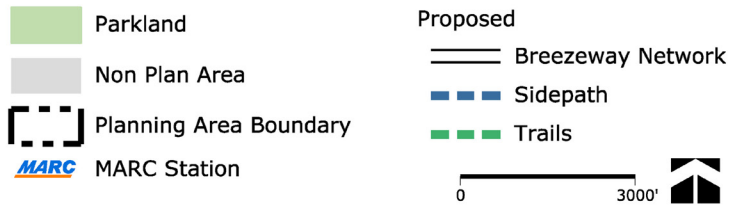
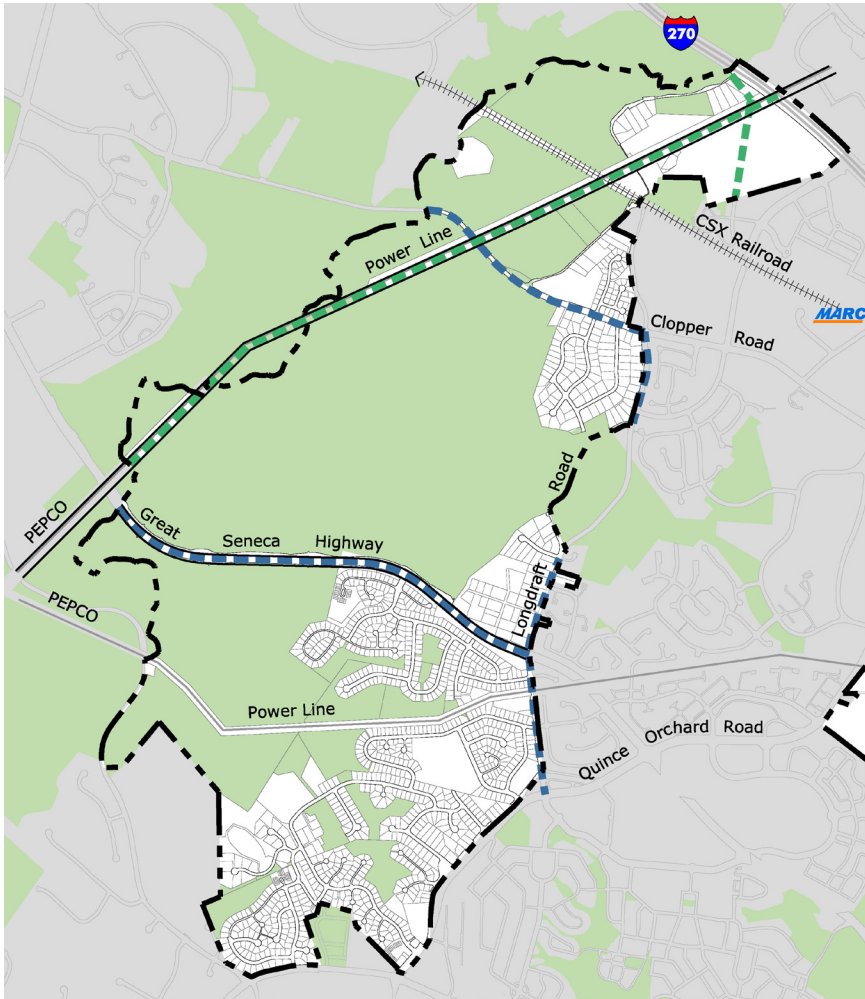


FIGURE 45: QUINCE ORCHARD STREET CLASSIFICATIONS

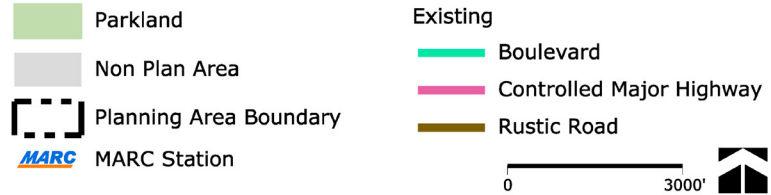
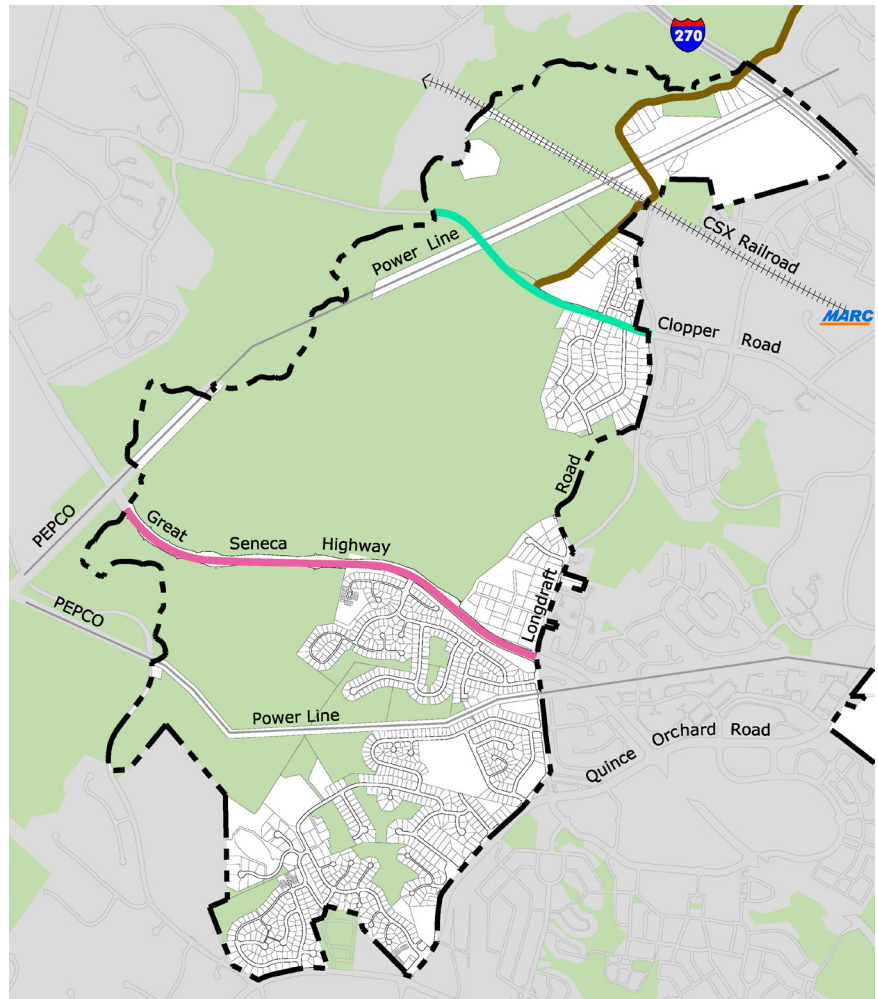


TABLE 6: QUINCE ORCHARD STREET CLASSIFICATION, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Major Highway										
Great Seneca Hwy (MD 119)	Longdraft Rd (Gaithersburg City Limits)	Great Seneca Creek	Controlled Major Highway	55	130	4	4	0	None	Sidepath (Breezeway)
Boulevard										
Clopper Rd**	Longdraft Rd	Great Seneca Creek	Boulevard	35	60	2	2	0	Sidepath	Sidepath
Area Connector										
Longdraft Rd	Golden Post Rd*	Clopper Rd (MD 117)	Area Connector	30	70	2	2	0	Sidepath	None
Longdraft Rd	Quince Orchard Rd (MD 124)	180' North of Longdraft Ct*	Area Connector	30	70	2	2	0	Sidepath	None
Rustic Road										
Game Preserve Rd	Clopper Rd (MD 117)	Frederick Rd (MD 355)	Rustic Road	25	70	2	2	0	None	None

*Roadways within the City of Gaithersburg

** The intended cross section for Clopper Road between Longdraft Road and Great Seneca Creek is a 60' right-of-way, as shown in Table 6 of the Plan, consisting of two 11' sidepaths, two 8' street buffers, and two 11' travel lanes. The intent is to accommodate the above facilities within a compact right-of-way, and accommodate stormwater needs within the 60' right-of-way, either with curb and gutter where those are present or through more detailed design as the segment passes through State parkland.

Notes: Minimum rights-of-way do not generally include lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Additional rights-of-way may also be needed to accommodate master planned bicycle and transit facilities, including protected intersections, the envelopes of transit stations, and pedestrian crossing refuges

C. SOCIAL ENVIRONMENT

Parks are essential to the social fabric of communities; they provide opportunities to exercise, recreate, and socialize. The Quince Orchard area includes three diverse parks: Seneca Creek State Park (1,842 acres within the Plan area), Orchard Neighborhood Park (12.3 acres), and Quince Orchard Valley Neighborhood Park (89.2 acres). These parks offer spaces for formal and informal social gathering, active recreation, and contemplative relaxation.

Seneca Creek State Park is a state-owned park and a regional attraction. In addition to miles of trails, picnic areas, and mountain biking, the park includes unique recreational facilities such as a disc golf course, historic sites, and water-based recreation on Clopper Lake.

Orchard Neighborhood Park and Quince Orchard Valley Neighborhood Park are owned and operated by Montgomery Parks. Orchard Neighborhood Park is mostly wooded and remains undeveloped. Quince Orchard Valley Neighborhood Park contains a playground and basketball courts, and an activity building, as well as undeveloped areas.

The Quince Orchard area contains two schools, Thurgood Marshall Elementary School and Ridgewood Middle School. The area is split between two clusters: Quince Orchard and Northwest. Students living in the area attend Marshall Elementary School, Brown Station Elementary School, Diamond Elementary School, Ridgewood Middle School, Lakelands Park Middle School, Northwest High School, and Quince Orchard High School.

Brown Station Elementary School, Thurgood Marshall Elementary School, and both middle schools are projected to maintain a seat surplus, while Diamond Elementary School is projected to have a small deficit. Both high schools are projected to have a seat deficit. Crown High School, scheduled to open in the 2027 school year, will relieve overutilization in the area by reassigning students among multiple high schools.

1. Continue to prioritize natural resource management at Orchard Neighborhood Park. Do not add recreational facilities or amenities.
2. Evaluate opportunities to update and refresh the developed area of

Quince Orchard Valley Neighborhood Park.

3. Support improvements to bicycle and pedestrian facilities along state and county roads that serve as important connections to nearby park trails, including the Seneca Greenway Trail and Powerline Trail.

D. NATURAL ENVIRONMENT

The natural features in the Quince Orchard area contribute to a healthy natural environment. Over 50% of the area's land is forested, and tree canopy covers more than 66% of the area. Seneca Creek State Park provides many environmental benefits, including high levels of forest and tree canopy cover, low imperviousness, water quality protection, extreme heat mitigation, and wildlife habitat.

Both Orchard Neighborhood Park and Quince Orchard Valley Neighborhood Park provide additional stream valley protection. Due to the high-quality forest habitat and proximity to the Great Seneca Creek, this Plan recommends reclassifying Orchard Neighborhood Park and parts of Quince Orchard Valley Neighborhood Park as stream valley parks. Park classifications determine what types of activities and land uses are appropriate in a park. Neighborhood parks are typically developed to contain playgrounds, ball courts, and sometimes athletic fields. Stream valley and conservation parks are typically undeveloped, except for trails.

1. Protect forest and tree canopy in the Quince Orchard area.
2. Explore opportunities for stream restoration in undeveloped areas of Quince Orchard Valley Neighborhood Park.
3. Explore the potential to transfer undeveloped areas of Quince Orchard Valley Neighborhood Park (south/west of Suffolk Terrace) into a new and separate Quince Orchard Stream Valley Park.
4. Encourage the installation of green infrastructure (such as rain gardens) on private property through existing county programs such as RainScapes.
5. Increase the use of bioswales and rain gardens in landscaped areas and along roadways.

E. ECONOMIC ENVIRONMENT

There is little economic activity in the area. The area borders two small shopping centers and is near the City of Gaithersburg’s Kentlands neighborhood. It is appropriate for the area to remain residential, with recreational and natural uses. There are no economic environment recommendations.

F. IMPLEMENTATION

Following this Plan’s approval by the Montgomery County Council and adoption by the Maryland-National Capital Park and Planning Commission, a Sectional Map Amendment will apply the Plan’s zoning recommendations to the official county zoning map.

TABLE 7: QUINCE ORCHARD CAPITAL IMPROVEMENT PROGRAM PRIORITIES

Project Name	Category	Lead Agency	Coordinating Agencies
Stream Restoration in Quince Orchard Neighborhood Park	Parks and Open Space	M-NCPPC	
Renovate Quince Orchard Valley Neighborhood Park	Parks and Open Space	M-NCPPC	
Germentown to Burtonsville Breezeway	Transportation	M-NCPPC	Pepco, Maryland Park Service, SHA, MCDOT
Trail Connection on Caulfield Lane	Transportation	MCDOT	M-NCPPC

The Montgomery County RainScapes Program – A Cumulative Action Solution

The cumulative impacts of development, including the loss of trees and forests and the introduction of rooftops, sidewalks, driveways, and streets, combine to create flooding and erosion problems that damage property and threaten public safety. Stormwater regulations, the Forest Conservation Law, and landscaping requirements that are applied during the Development Review process can help mitigate these impacts on properties that are newly developing or redeveloping. But they do not address the many individual existing properties that contribute to flooding and erosion problems that are growing worse due to climate change.

The Montgomery County Department of Environmental Protection’s RainScapes program offers technical assistance to property owners who want to help reduce flooding and erosion by reducing runoff from their own property. Some property owners may also be eligible for financial assistance to help reduce runoff through the creation of rain gardens, conservation landscapes, the installation of permeable pavement, and similar solutions. Go to www.montgomerycountymd.gov/water/rainscapes for more information.



Rosemont

V. Rosemont

A. CONTEXT AND VISION

Context

The Rosemont area is completely surrounded by the City of Gaithersburg and is generally defined by Alden Avenue, Virginia Drive, and Edgewood Drive, shown in Figure 46. The area is adjacent to Rosemont Elementary School and Morris Park, both within the City of Gaithersburg. Rosemont is exclusively characterized by single-family detached residential units primarily constructed in the 1950s and 1960s.

Rosemont is also located within the Corridor Focused Growth Area established by *Thrive Montgomery 2050* due to the proximity of the community to I-370 and BRT planned for MD 355. However, Rosemont is fully built out, with little opportunity for parcel consolidation. MD 355 (South Frederick Avenue) in the City of Gaithersburg and I-370 act as physical barriers.

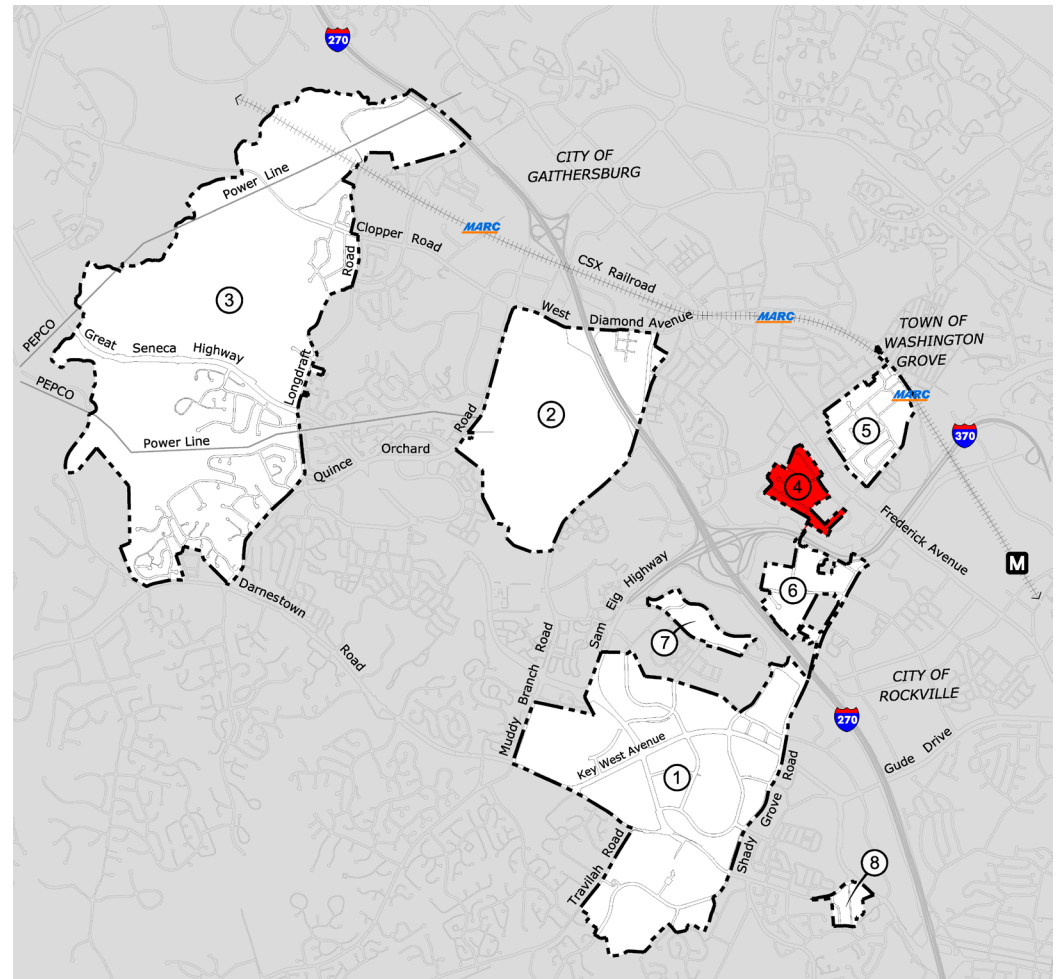
Vision

This Plan envisions that Rosemont will remain a residential area. While Rosemont is located near I-370 and MD 355, most of the single-family homes are still over one-half mile from the planned stations for the MD 355 BRT. The City of Gaithersburg surrounds the area, making it a potential candidate for future annexation by the City of Gaithersburg.

B. BUILT ENVIRONMENT

While the Rosemont area is over one-half mile from two future MD 355 BRT stops, connectivity to the area is somewhat constrained due to I-370 bordering the area on the east and south. Given the connectivity limitations and limited access to high-quality transit, the Plan recommends retaining R-200 zoning and encourages

FIGURE 46: ROSEMONT



- ① Life Sciences Center
 - ② NIST/Londonderry and Hoyle's Addition
 - ③ Quince Orchard
 - ④ Rosemont
 - ⑤ Oakmont/Walnut Hill
 - ⑥ Washingtonian Light Industrial Park
 - ⑦ Washingtonian Residential
 - ⑧ Hi Wood
- Non Plan Area
 - ⬜ Planning Area Boundary
 - M Shady Grove Metro Station
 - MARC MARC Station

0 4000'

organic, incremental development to achieve diversity in housing types in Rosemont over the life of the Plan.

1. Retain existing R-200 zoning.
2. Coordinate with the City of Gaithersburg to link the City’s planned Industrial Drive to Summit Hall Road Bicycle Connection to Edgewood Court

C. SOCIAL ENVIRONMENT

Rosemont enjoys access to nearby park facilities in the City of Gaithersburg, including Bohrer Park at Summit Hall Farm and Activity Center, Morris Park, and the Casey Community Center. In addition to athletic fields and courts, playgrounds, and trails, these facilities offer programming such as a farmer’s market and fitness and recreational classes. The area also surrounds Rosemont Elementary School and is near Summit Hall Elementary School, both of which provide additional recreational facilities.

The Rosemont area is within the Gaithersburg Cluster and is served by Rosemont Elementary School, Forest Oak Middle School, and Gaithersburg High School. Both Rosemont Elementary and Forest Oak Middle Schools have a projected seat surplus. Gaithersburg High School has a projected deficit of more than 200 seats. However, boundary discussions due to the construction of the new Crown High School will likely explore reallocating students to schools with more capacity, as needed. This Plan does not recommend any additional community facilities, including schools, in the Rosemont area.

D. NATURAL ENVIRONMENT

The Rosemont area lies within the Muddy Branch watershed. Monitoring results indicate a decline from “good” to “fair” water quality, then back to “good,” with a slight upward trend in recent years.

Flooding is a major issue throughout the county and specifically in the Plan area, and is one of the most common extreme weather impacts that county

residents face. As extreme weather events become more frequent, residents and the county must seek strategies to absorb climate impacts.

Flooding and water quality degradation can both be mitigated by improving stormwater management systems. Without the potential for large-scale or commercial redevelopment in Rosemont, which brings additional stormwater management infrastructure, homeowners may look for ways to mitigate flood risk on their own properties.

1. Encourage the installation of green infrastructure (such as rain gardens), on private property through existing county programs such as RainScapes.
2. Increase the use of bioswales and rain gardens in landscaped areas and along roadways.

E. ECONOMIC ENVIRONMENT

Rosemont will likely remain an entirely residential area without economic activities. Rosemont does not have easy walking or biking access to nearby commercial centers, although access by transit may improve with the implementation of the MD 355 BRT.

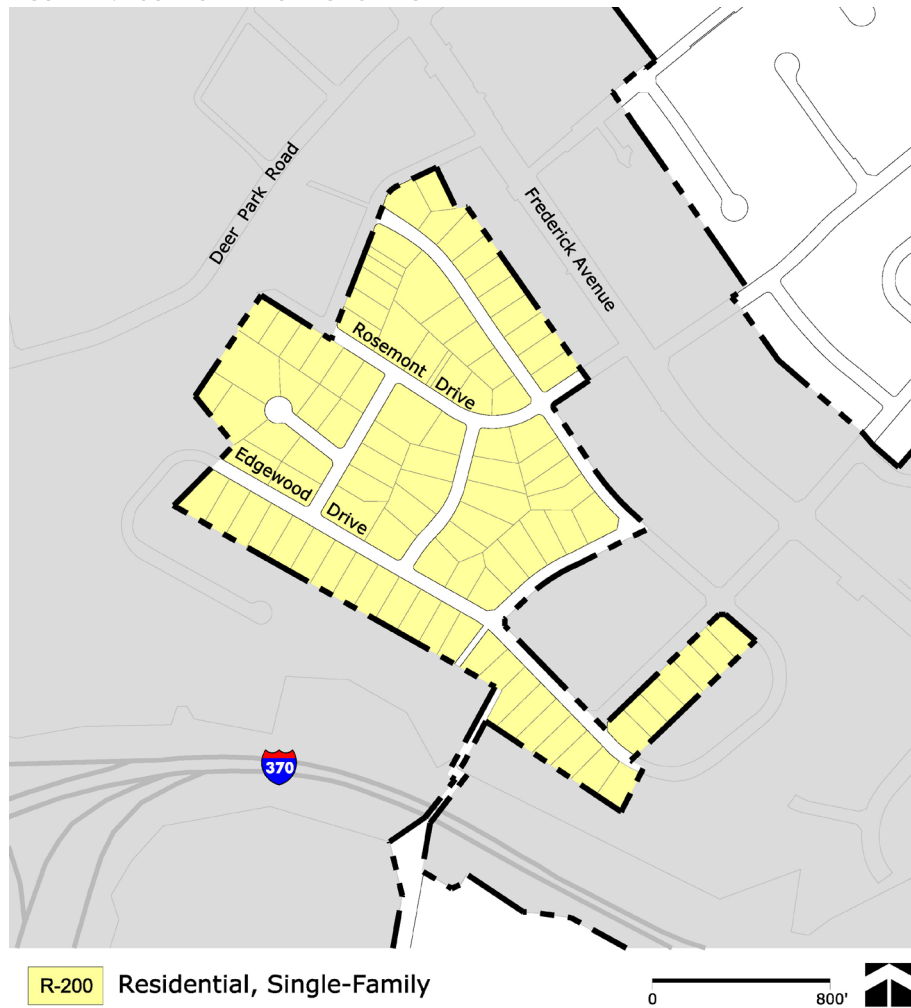
F. IMPLEMENTATION

1. Annexation of the Rosemont area into the City of Gaithersburg is logical and consistent with the City’s Maximum Expansion Limits.

TABLE 8: ROSEMONT CAPITAL IMPROVEMENT PROGRAM PRIORITIES

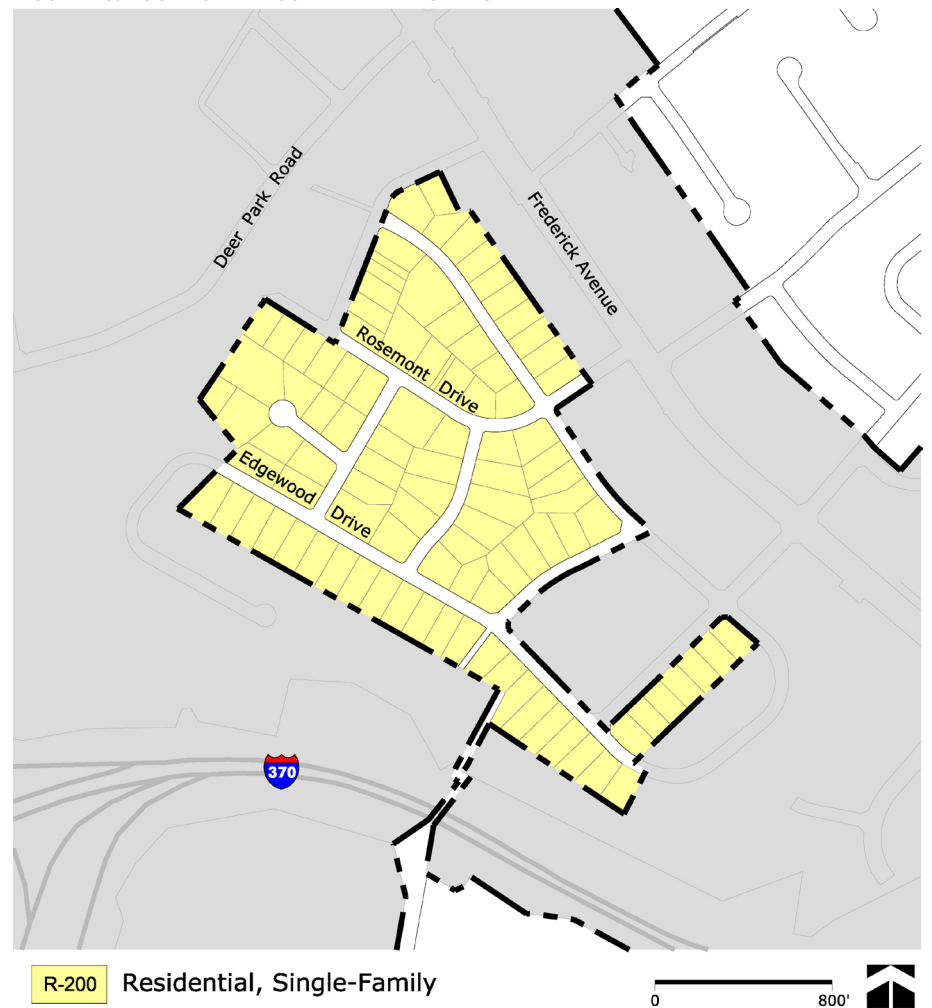
Project Name	Category	Lead Agency	Coordinating Agencies
Summit Hall Road Bicycle Connection	Transportation	City of Gaithersburg	MCDOT
Stormwater Management	Environment	MCDOT	M-NCPPC, private

FIGURE 47: ROSEMONT EXISTING ZONING



- R-200** Residential, Single-Family
- Non Plan Area
- Planning Area Boundary

FIGURE 48: ROSEMONT RECOMMENDED ZONING



- R-200** Residential, Single-Family
- Non Plan Area
- Planning Area Boundary



Oakmont and Walnut Hill

VI. Oakmont and Walnut Hill

A. CONTEXT AND VISION

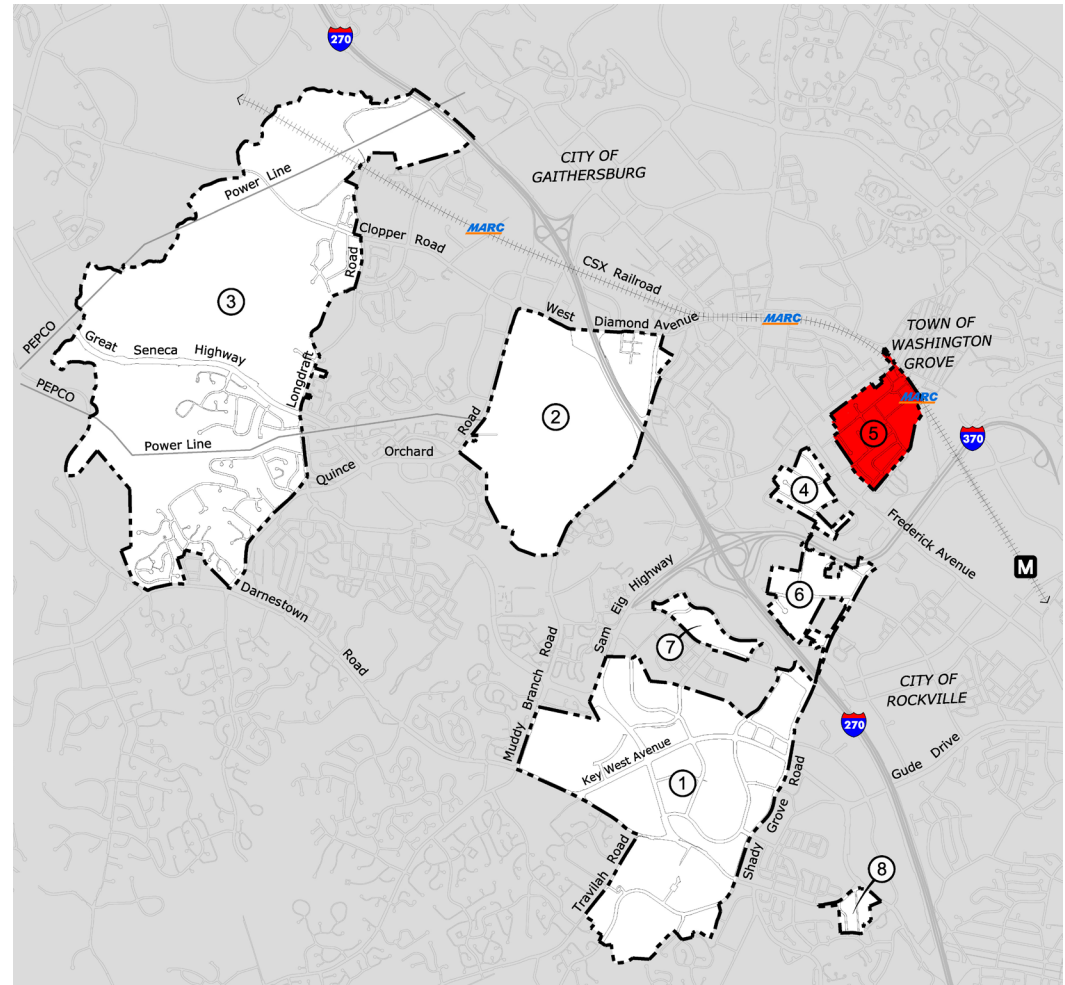
Context

The communities of Oakmont and Walnut Hill are located at the northeastern corner of the Plan area, immediately adjacent to the MARC Rail Brunswick Line (Figure 49). The City of Gaithersburg borders the area to the east, west, and south, and the Town of Washington Grove borders the area to the north. The Oakmont community is generally defined by Central Avenue, Oakmont Avenue, Oakmont Street, and North Westland Drive. While it is predominantly residential, it also includes institutions such as the Washington Grove Elementary School, several places of worship, a small restaurant, an adult day care center, warehouses, and several forested and vacant parcels. The community is immediately adjacent to the Washington Grove Station on the MARC Rail Brunswick Line, with direct service to Rockville, Kensington, Silver Spring, and Washington Union Station on weekday mornings and from Washington Union Station to Martinsburg, West Virginia, on weekday evenings.

A 2.6-acre forested area is located across Oakmont Avenue from the Washington Grove Station at the intersection of Oakmont Avenue and Central Avenue. An 1888 Plat of Oakmont dedicated this area for public recreation; however, the dedication was never accepted, and the area was never used for recreational purposes or maintained by Montgomery County or the M-NCPPC. The area is still owned by the successors of the 1888 Plat and the property remains unimproved, forested land.

Another unimproved parcel is located southeast of the Washington Grove Station at the intersection of Oakmont

FIGURE 49: OAKMONT AND WALNUT HILL



- | | | | |
|---|-------------------------------------|------|---------------------------|
| ① | Life Sciences Center | ■ | Non Plan Area |
| ② | NIST/Londerry and Hoyle's Addition | ⋯ | Planning Area Boundary |
| ③ | Quince Orchard | M | Shady Grove Metro Station |
| ④ | Rosemont | MARC | MARC Station |
| ⑤ | Oakmont/Walnut Hill | | |
| ⑥ | Washingtonian Light Industrial Park | | |
| ⑦ | Washingtonian Residential | | |
| ⑧ | Hi Wood | | |

Avenue and Oakmont Street. The nearly one-acre parcel was acquired by the M-NCPPC in 2007 through the Advance Land Acquisition Revolving Fund as a future road or transit right-of-way at the request of the Montgomery County Department of Transportation. The parcel was not acquired as parkland, nor included in the M-NCPPC's parkland inventory, and maintenance of the property is limited.

The Walnut Hill community is generally defined by Chestnut Street, North Westland Drive, Walnut Hill Road, and South Westland Drive. The community is characterized by single-family detached residential units predominantly developed in the 1960s, with several additional units constructed in the 1990s. The Walnut Hill Shopping Center, located south of Walnut Hill Road at 16531 South Frederick Avenue (MD 355), provides the community with neighborhood-serving uses. The Walnut Hill Shopping Center and two additional properties (8939 and 8941 North Westland Drive) were recently annexed into the City of Gaithersburg.

Parcels in Oakmont are primarily zoned R-200, with limited R-90 zoning, as well as a few parcels with Commercial Residential Neighborhood (CRN), Neighborhood Retail (NR), and Moderate Industrial (IM) zoning. Parcels in Walnut Hill are zoned residential, including R-200 and R-90.

Given the proximity of Oakmont and Walnut Hill to the Washington Grove MARC Rail Station and planned BRT on MD 355, this area is included within the Corridor Focused Growth Area established by *Thrive Montgomery 2050*. However, the long-term future of the Washington Grove MARC Rail Station is uncertain. Previous plans, including the 2010 *White Flint Sector Plan*, 2021 *Shady Grove Sector Plan*, and 2022 *Corridor Forward: The I-270 Transit Plan*, recommended new MARC stations in North Bethesda and Shady Grove, but acknowledged the policy of the rail owner (CSX Transportation) that no new station can be added without the removal of an existing station or provision of additional main line track. If this policy is maintained, the MARC Cornerstone Plan, MARC Brunswick Line Expansion Study, and Corridor Forward acknowledge that the Washington Grove MARC Rail Station may have reduced service or may be decommissioned to improve or provide service at stations with higher demand.

Vision

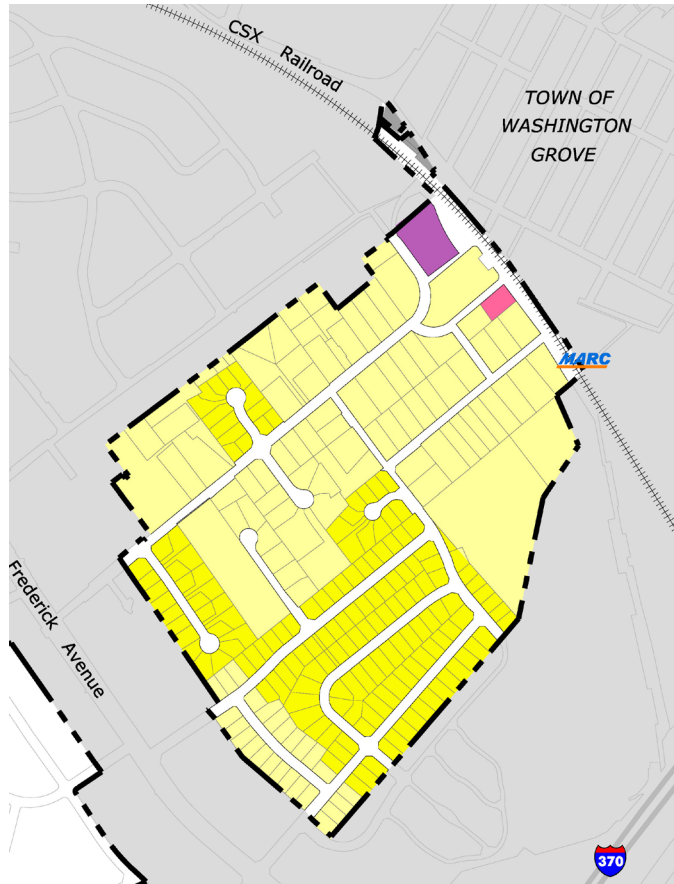
This Plan envisions that Oakmont and Walnut Hill will remain primarily low-density residential with the potential for limited retail uses. Oakmont can accommodate compact development at the scale of a village or neighborhood center if service at the Washington Grove MARC Rail Station is expanded to include increased frequency and headways.

Despite the area's location in a Corridor Focused Growth Area, this Plan does not recommend more intensive land uses and densities for the area, based on its limited access to high-quality, frequent, and reliable transit service, including potential for the reduction in or elimination of service at the Washington Grove MARC Rail Station.

B. BUILT ENVIRONMENT

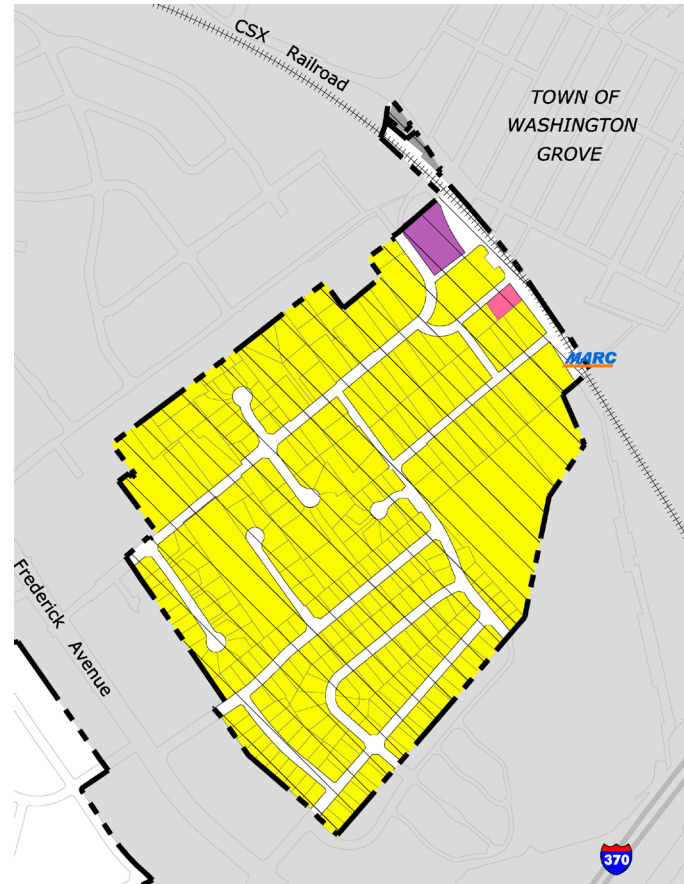
1. Retain existing R-90, CRN, NR and IM zoning.
2. Rezone properties currently zoned R-200 to R-90 to allow for more flexibility and density.
3. Support the long-term potential of the Maryland Transit Administration MARC Rail Brunswick Line and *Corridor Forward: The I-270 Transit Plan* recommendation to add stations at North Bethesda and Shady Grove by exploring skip stop operations or decommissioning underutilized stations like Washington Grove.
4. Retain existing zoning, as shown in Figure 50; however, if expanded service on the MARC Rail Brunswick Line is implemented and the Washington Grove station remains operational, support an application for a CRN Floating Zone for parcels within one-half mile of the Washington Grove station to enable a small village center, as shown in Figure 51.
5. Support recommendations in *Corridor Forward: the I-270 Plan* to obtain, reserve and/or require right-of-way, for the long-term potential of the MTA MARC Rail Brunswick Line and the future Red Line Extension to Germantown Town Center, acknowledging the need for more detailed study and coordination with the City of Gaithersburg.

FIGURE 50: OAKMONT AND WALNUT HILL EXISTING ZONING



- R-200 Residential, Single-Family
- R-90 Residential, Single-Family
- CRN Commercial Residential Neighborhood
- NR Neighborhood Retail
- I-M Moderate Industrial
- Non Plan Area
- Planning Area Boundary
- MARC MARC Station

FIGURE 51: OAKMONT AND WALNUT HILL RECOMMENDED ZONING



- R-90 Residential, Single-Family
- CRN Commercial Residential Neighborhood
CRN 0.5, C-0.5, R-0.25, H-65'
- NR Neighborhood Retail
NR 0.75, H-45'
- I-M Moderate Industrial
IM 2.5, H-60'
- Non Plan Area
- Commercial Residential Neighborhood Floating Zone
- Planning Area Boundary
- MARC MARC Station

C. SOCIAL ENVIRONMENT

The Oakmont and Walnut Hill area is served by nearby parks in the City of Gaithersburg and the Town of Washington Grove. The area is adjacent to Morgan Park and less than a quarter mile from Woodward Park, Washington Grove Meadow Conservation Park, and Chapel Park in the Town of Washington Grove. The area is also less than half a mile from Bohrer Park, Duval Park, and Morris Park in the City of Gaithersburg, although access to Bohrer and Morris Parks requires crossing South Frederick Avenue. No new parks or open spaces are recommended for this area.

The area contains Hershey's Restaurant, which has been operating since the 1950s. The restaurant occupies the former general store and post office building, which has been serving commuters and residents since the late 1800s. The restaurant offers a commercial amenity in a primarily residential area.

The Oakmont and Walnut Hill area is within the Gaithersburg Cluster and is served by Washington Grove Elementary School, Gaithersburg Middle School, and Gaithersburg High School. Washington Grove Elementary School was expanded in 2010 and has a seat surplus projected. Gaithersburg Middle School has a minor deficit projected. Gaithersburg High School has a projected deficit of more than 200 seats. Boundary discussions due to the construction of the new Crown High School will likely explore reallocating students to schools with more capacity, as needed. The Plan does not recommend any additional school facilities.

D. NATURAL ENVIRONMENT

The Oakmont and Walnut Hill area lies in the Muddy Branch watershed. Monitoring results indicate a decline from "good" to "fair" water quality, then back to "good," with a slight upward trend in recent years.

Flooding is a major issue throughout the county and specifically in the Plan area and is one of the most common extreme weather impacts that county residents face. As extreme weather events become more frequent, residents and the county must seek strategies to absorb climate impacts.

Flooding and water quality degradation can both be mitigated by improving stormwater management systems. Without the potential for large-scale or commercial redevelopment in Oakmont and Walnut Hill, which brings additional stormwater management infrastructure, homeowners may look for ways to mitigate flood risk on their own properties.

1. Encourage the installation of green infrastructure (such as rain gardens) on private property through existing county programs such as RainScapes.
2. Increase the use of bioswales and rain gardens in landscaped areas and along roadways.
3. Minimize impervious surface cover whenever developing or redeveloping a site.

E. ECONOMIC ENVIRONMENT

The Oakmont/Walnut Hill area is primarily residential but does contain Hershey’s Restaurant. The Plan does not include any economic environment recommendations for the Oakmont/Walnut Hill area.

F. IMPLEMENTATION

1. Following this Plan’s approval by the Montgomery County Council and adoption by the Maryland-National Capital Park and Planning Commission, a sectional map amendment will apply the Plan’s zoning recommendations to the official county zoning map.
2. Annexation of the Oakmont and Walnut Hill area into the City of Gaithersburg is logical and consistent with the City’s Maximum Expansion Limits.

TABLE 9: OAKMONT/WALNUT HILL CAPITAL IMPROVEMENT PROGRAM PRIORITIES

Project Name	Category	Lead Agency	Coordinating Agencies
Stormwater Management	Environment	MCDOT	M-NCPPC, private

TABLE 10: OAKMONT AND WALNUT HILL STREET CLASSIFICATION, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Neighborhood Connector										
Central Ave	500' East of MD 355	350' North of Oakmont Ave	Neighborhood Connector	25	70	2	2	0	None	Sidepath

Notes: Minimum rights-of-way do not generally include lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Additional rights-of-way may also be needed to accommodate master planned bicycle and transit facilities, including protected intersections, the envelopes of transit stations, and pedestrian crossing refuges.



Washingtonian Light Industrial Park

VII. Washingtonian Light Industrial Park

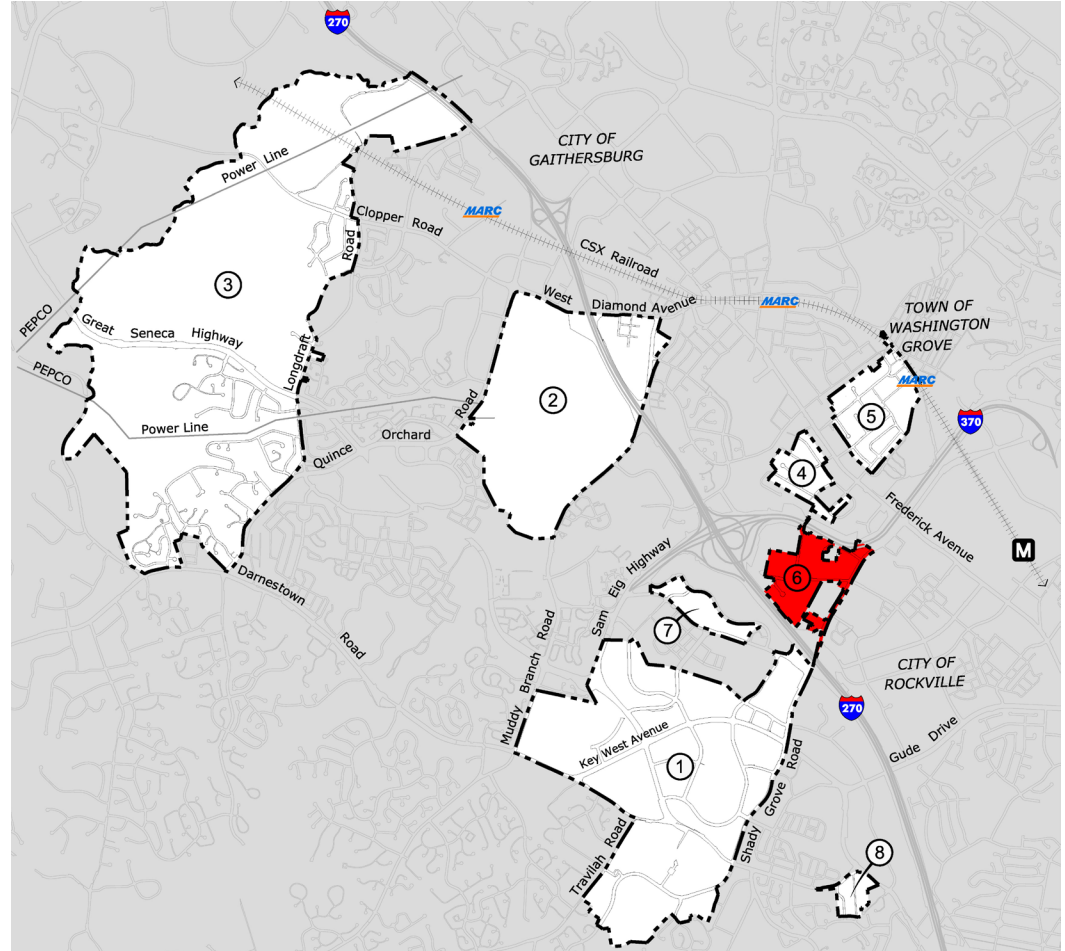
A. CONTEXT AND VISION

Context

The Washingtonian Light Industrial Park is located southeast of the I-270 and I-370 interchange along Shady Grove Road, as shown in Figure 52. The 103-acre industrial park is bordered by the City of Gaithersburg on the north, west, and south, and by the City of Rockville on the east. Parcels in the industrial park are predominantly zoned Moderate Industrial, although two properties along Shady Grove Road are zoned General Retail.

The industrial park includes a variety of uses, including the Shady Grove Shopping Center, Shady Grove Professional Office Park, restaurants, recreation and entertainment facilities, retail sales and service establishments, vehicle sales and service, research and development, and warehouses. It plays an important role in the county's economy.

FIGURE 52: WASHINGTONIAN LIGHT INDUSTRIAL PARK



- | | | | |
|---|---------------------------------------|------|---------------------------|
| ① | Life Sciences Center | ■ | Non Plan Area |
| ② | NIST/Londonderry and Hoyle's Addition | ⬭ | Planning Area Boundary |
| ③ | Quince Orchard | M | Shady Grove Metro Station |
| ④ | Rosemont | MARC | MARC Station |
| ⑤ | Oakmont/Walnut Hill | | |
| ⑥ | Washingtonian Light Industrial Park | | |
| ⑦ | Washingtonian Residential | | |
| ⑧ | Hi Wood | | |

Vision

This Plan envisions that the Washingtonian Light Industrial Park will remain primarily industrial in use. The county has approximately 1,952 acres of industrially zoned properties, which is less than one percent of land in Montgomery County. Developed industrial space is disappearing throughout the county; it has fallen to less than one million square feet, down from a high of over 4.5 million in the 1980s.

Industrial uses perform important functions that support the quality of life in Montgomery County, and it is essential that these companies have affordable locations near their consumers. Industrial uses enable different forms of employment, including vocational and entry-level jobs and spaces for small businesses, entrepreneurs, and artisans. Industrial zoned areas also often support basic needs for residents, nonprofit organizations, and public agencies, as well as offering unique recreational opportunities.

Warehousing and distribution are also important to the county's economy. The Washingtonian Light Industrial Park should continue to provide space for these crucial uses.

B. BUILT ENVIRONMENT

Industrial zones are often targeted for redevelopment because they are less valuable per acre than higher density and/or higher rent, office, retail, and multi-family properties. However, industrial uses are essential components of Montgomery County's economy. This Plan recognizes the importance of industrial land uses for the county and recommends maintaining industrial zoning, as shown in Figure 53.

1. Retain GR Zoning.
2. Rezone IM-2.5, H-50 to IM-2.5, H-60 to accommodate a broader mix of building types, as shown in Figure 54.

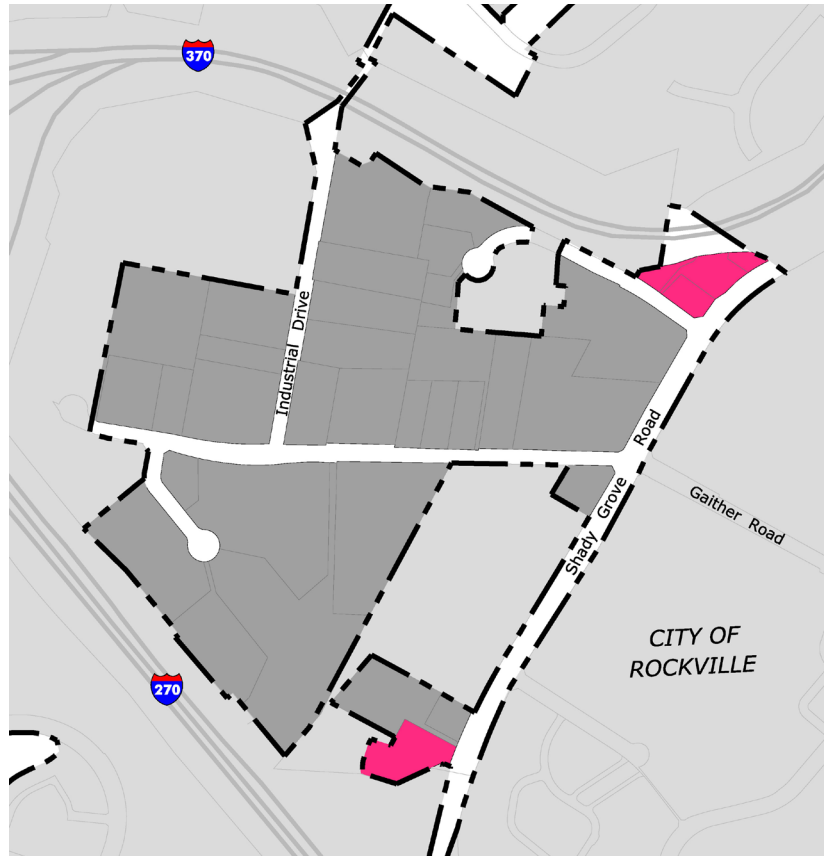
C. SOCIAL ENVIRONMENT

The Washingtonian Light Industrial Park contains no parks or public open spaces; however, it offers unique private recreational facilities, including batting cages, a trampoline park, indoor skydiving, and archery. The retention of industrial zoning will continue to provide space for these unusual private recreation uses. This Plan offers no recommendations for the social environment of this area.

“The Plan needs to have a 'character' to it that is carried through the area, so it has a feel to it; not pieces and parts. Crown, Kentlands, Siesta, Upper Rock. They are all completely different/siloed with no connective idea or qualities. It's a shame.”

– Community Member, Public Meeting

FIGURE 53: WASHINGTONIAN LIGHT INDUSTRIAL PARK EXISTING ZONING



- GR General Retail
- I-M Moderate Industrial
- Non Plan Area
- Planning Area Boundary

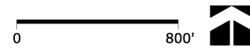
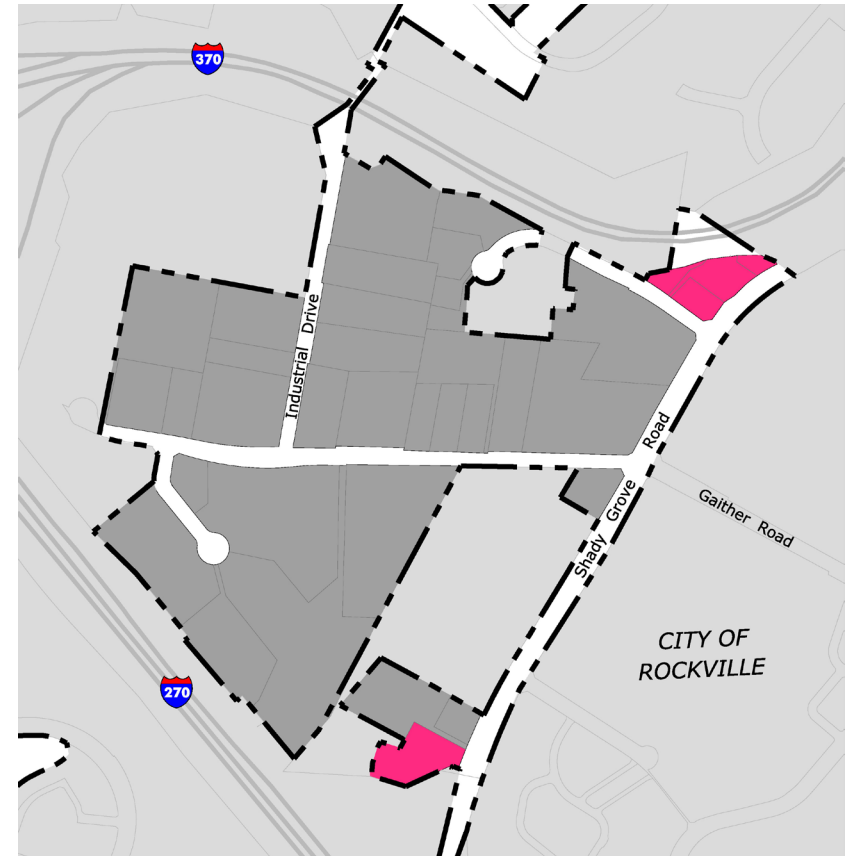


FIGURE 54: WASHINGTONIAN LIGHT INDUSTRIAL PARK RECOMMENDED ZONING



- GR General Retail
GR 1.5, H-45'
- I-M Moderate Industrial
IM 2.5, H-60'
- Non Plan Area
- Planning Area Boundary



TABLE 11: WASHINGTONIAN LIGHT INDUSTRIAL PARK STREET CLASSIFICATION, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Town Center Boulevard										
Shady Grove Rd	Research Blvd	I-270 Off-ramp	Town Center Boulevard	30	150	6	5	2	Sidepath	2-Way Separated Bike Lane (Breezeway)
Shady Grove Rd	I-270 Off-ramp	1,200' west of Frederick Rd	Town Center Boulevard	30	140	6	4	2	Sidepath	2-Way Separated Bike Lane (Breezeway)
Industrial Street										
Gaither Rd	City of Gaithersburg	Shady Grove Rd	Industrial Street	25	90	4	4	0	Sidepath	None
Industrial Dr	Gaither Rd	Gaithersburg City Limit	Industrial Street	25	70	2	2	0	None	Sidepath

Notes: Minimum rights-of-way do not generally include lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Additional rights-of-way may also be needed to accommodate master planned bicycle and transit facilities, including protected intersections, the envelopes of transit stations, and pedestrian crossing refuges.

D. NATURAL ENVIRONMENT

The Washingtonian Light Industrial Park is 80% impervious surface and has less than 10% tree canopy coverage. The lack of trees and high levels of impervious surfaces exacerbate both flooding and high heat weather events. In heat mapping conducted by the county, the Washingtonian Light Industrial Park shows the hottest afternoon temperatures in the Plan area. The impervious surfaces from surface parking lots and large roads are directly correlated with the higher temperatures. This Plan recommends introducing more street trees and green cover through private redevelopment and roadway improvements that can filter and slow stormwater runoff, as well as provide shade.

1. On private property, provide a minimum of 35% green cover of the total site, excluding existing forest cover on the property, which may include the following, either singly or in combination:
 - Intensive green roof (6 inches or deeper)
 - Tree canopy cover
 - Vegetative cover
 - Landscaped areas
 - Rain gardens and bioswales
2. Increase tree canopy coverage by planting trees and forest stands wherever possible on public and private land, along rights-of-way, within open space, and in existing neighborhoods.

- Areas of surface parking lots on public and private properties should provide at least 50% tree canopy coverage of the parking lot area.
3. Plant street trees and other native landscaping along roads to reduce heat island and negative health outcomes from air pollution, per the Green Streets recommendations in the CSDG.
 4. Increase planting of native species, especially to benefit native pollinators.
 5. Minimize impervious surface cover whenever developing or redeveloping a site.

E. ECONOMIC ENVIRONMENT

This Plan retains industrial zoning to ensure that local production, distribution, and repair businesses continue to have access to attainable space in the county. In addition to offering access to important warehouse and distribution spaces, industrial zoning can provide entrepreneurs with affordable space for the early stages of their businesses.

F. IMPLEMENTATION

Following this Plan’s approval by the Montgomery County Council and adoption by the Maryland-National Capital Park and Planning Commission, a Sectional Map Amendment will apply the Plan’s zoning recommendations to the official county zoning map.

TABLE 12: WASHINGTONIAN LIGHT INDUSTRIAL PARK CAPITAL IMPROVEMENT PROGRAM PRIORITIES

Project Name	Category	Lead Agency	Coordinating Agencies
Tree Canopy Coverage	Environment	MCDOT	M-NCPPC, private



Washingtonian Residential

VIII. Washingtonian Residential

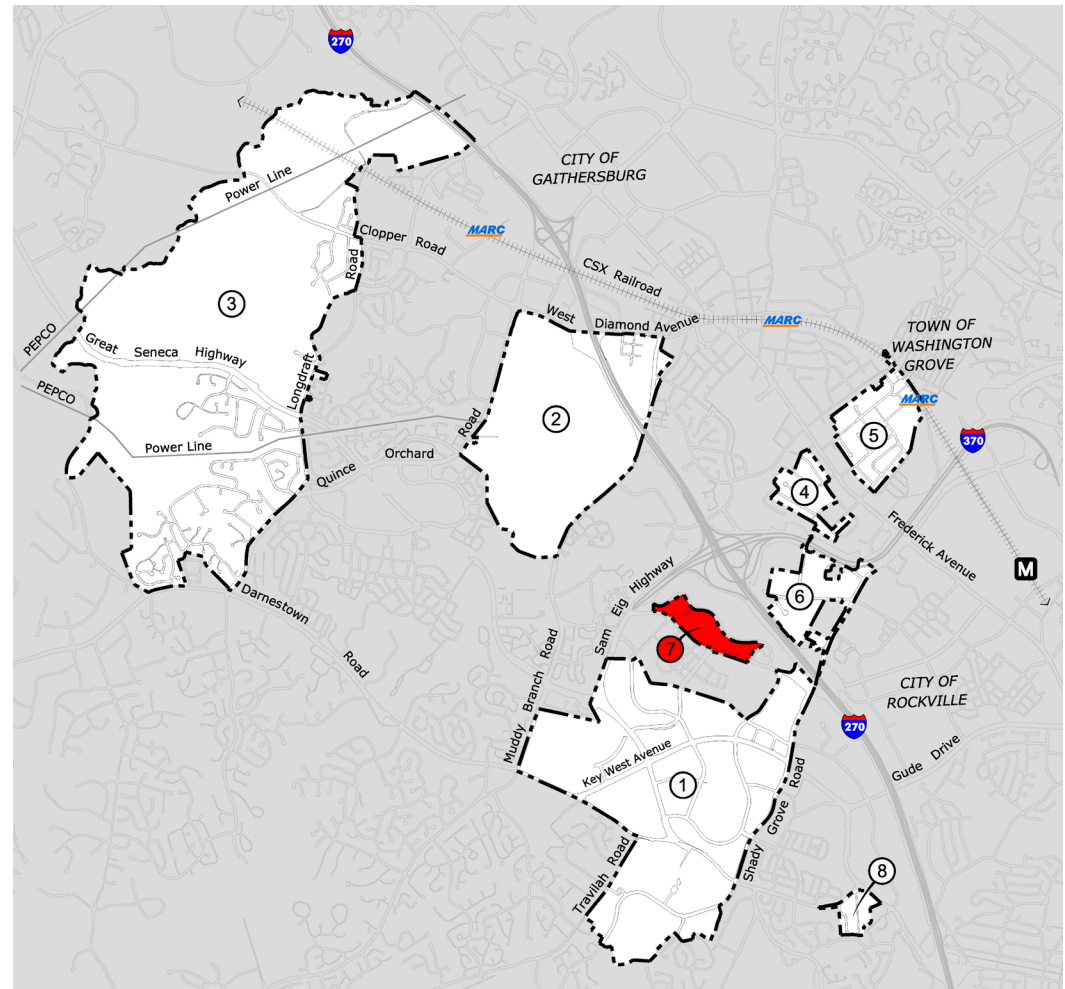
A. CONTEXT AND VISION

Context

The Washingtonian Residential area is surrounded by the City of Gaithersburg, as shown in Figure 55. It is north of Downtown Crown and south of Rio Lakefront, two mixed-use developments and centers of economic activity in the City of Gaithersburg. The area is generally bordered by Washingtonian Boulevard and Rio Lakefront to the north, Sam Eig Highway to the west, Fields Road and Downtown Crown to the south, and Marathon Terrace to the east. It is characterized by a mixture of residential units, including the Washingtonian Tower, a high-rise multi-family condominium building constructed in the mid-1960s, garden-style apartments constructed between the mid-1980s and the late 1990s, and single-family attached units constructed in the 1990s.

This Plan envisions that the Washingtonian Residential will remain an important residential area, whose residents enjoy the shops and entertainment available at Downtown Crown and Rio Lakefront. Redevelopment of older buildings offers opportunities to provide more housing for people and new walking, biking, and rolling connections for residents and between Downtown Crown and Rio Lakefront.

FIGURE 55: WASHINGTONIAN RESIDENTIAL



- ① Life Sciences Center
- ② NIST/Londonderry and Hoyle's Addition
- ③ Quince Orchard
- ④ Rosemont
- ⑤ Oakmont/Walnut Hill
- ⑥ Washingtonian Light Industrial Park
- ⑦ Washingtonian Residential
- ⑧ Hi Wood

- Non Plan Area
- ▭ Planning Area Boundary
- M Shady Grove Metro Station
- MARC MARC Station

B. BUILT ENVIRONMENT

The Washingtonian Residential is an important residential development that includes a diversity of multi-family living options. Residents enjoy close proximity to the adjacent regional activity centers of Rio Lakefront and Downtown Crown. The area should remain residential in character, providing much-needed housing and attracting residents that can support the nearby shops and entertainment, as well as the employment opportunities in the Life Sciences Center. The physical connections to these centers can be strengthened by improving transportation infrastructure and integrating the Washingtonian public realm with the nearby centers. Apart from the Washingtonian Tower, the area is zoned Commercial Residential Town (CRT) “T,” as shown in Figure 56. The Washingtonian Tower is zoned Residential Multi-Unit High Density – 10 (R-10).

1. Rezone the Eaves Washingtonian Center (9605 Marathon Court and 15600 Marathon Circle) and Sawyer Flats (9900 Shelburne Terrace and 9806 Mahogany Drive) from CRT-1.0, C-0.25, R-1.0, H-110 T to CRT-1.0, C-0.25, R-1.0, H-110, as shown in Figure 57. Commercial/Residential “T” zones were translated from certain zones existing before October 30, 2014.
2. Rezone the Residences at Rio (9890 Washingtonian Boulevard) from CRT-1.0, C-0.25, R-1.0, H-110 T to CRT-1.25, C-0.25, R-1.25, H-110.
3. Rezone the Washingtonian from R-10 to CRT-1.25, C-0.25, R-1.25, H-110.
4. Provide a street connection that extends Decoverly Drive north to Washingtonian Boulevard.
5. Require new developments to provide at least 12.5% MPDUs, aligned with current county policy.
6. Prioritize additional MPDUs in the CRT zones to provide additional affordable housing.
7. Prioritize two- and three-bedroom units for residential development projects to provide additional family-sized units.
8. In the event of redevelopment, give priority to existing eligible residents for the units under market-affordable rental agreements. Property owners should work with the DHCA and tenants to ensure that eligible residents receive support and assistance to mitigate the impacts of temporary relocation.
9. Work with public, private, nonprofit, philanthropic, and religious institution partners to preserve and expand housing affordability in the Washingtonian Residential area.
10. Build a publicly accessible pedestrian and bicycle connection that would link Downtown Crown through Washingtonian Residential to the Rio Lakefront.
11. Upgrade all intersections with high-visibility continental or ladder crosswalk markings for all pedestrian approaches.
12. Ensure ADA accessibility on all public pathways, including sidewalks, trails, and street crossings in accordance with current best practices.
13. Upgrade Fields Road to achieve PLOC 2 or better along the right-of-way.
14. Install dedicated bus lanes in both directions on Fields Road between Ellington Boulevard to Decoverly Drive to improve Great Seneca Transit Network bus speeds and reliability.
15. Build a Great Seneca Transit Network Lime Line Station on Fields Road.
16. Implement the bicycle parking station indicated in the 2018 *Bicycle Master Plan* at the Great Seneca Transit Network Lime Line Station on Fields Road.
17. Consolidate parking facilities in garages that are not visible from pedestrian areas, preferably lined with building uses or screened when visible from streets and public open spaces.

FIGURE 56: WASHINGTONIAN RESIDENTIAL EXISTING ZONING

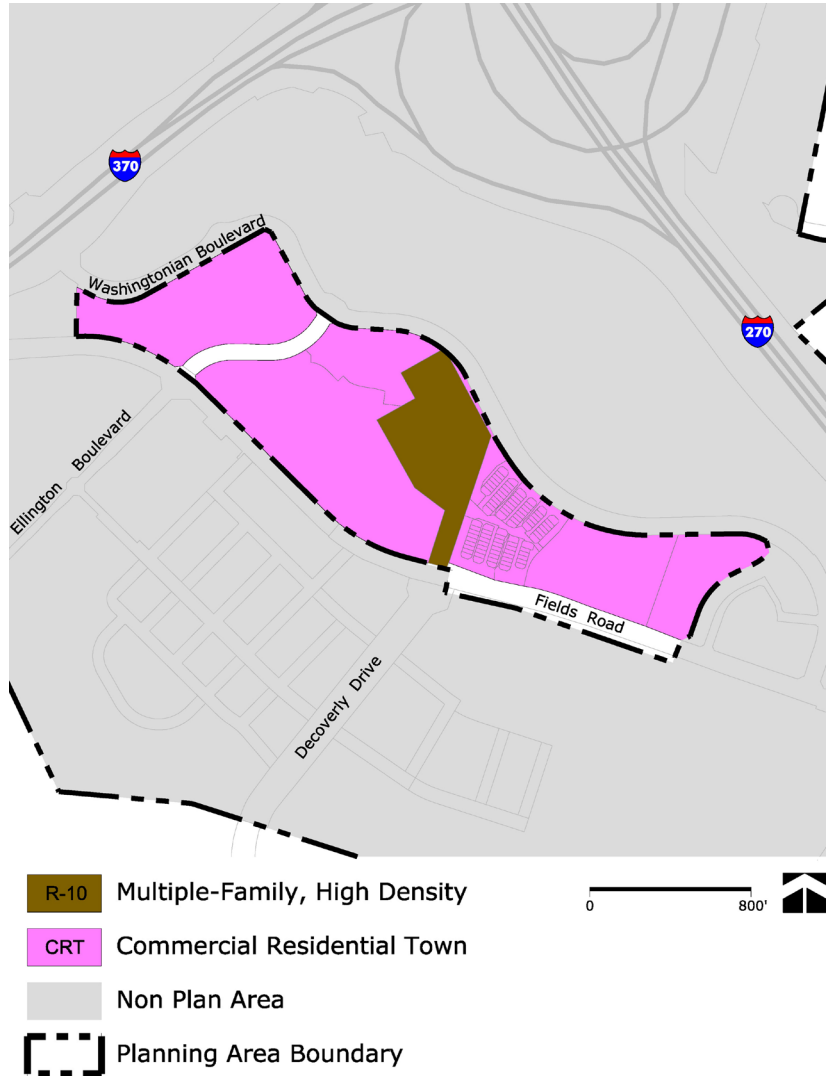


FIGURE 57: WASHINGTONIAN RESIDENTIAL RECOMMENDED ZONING

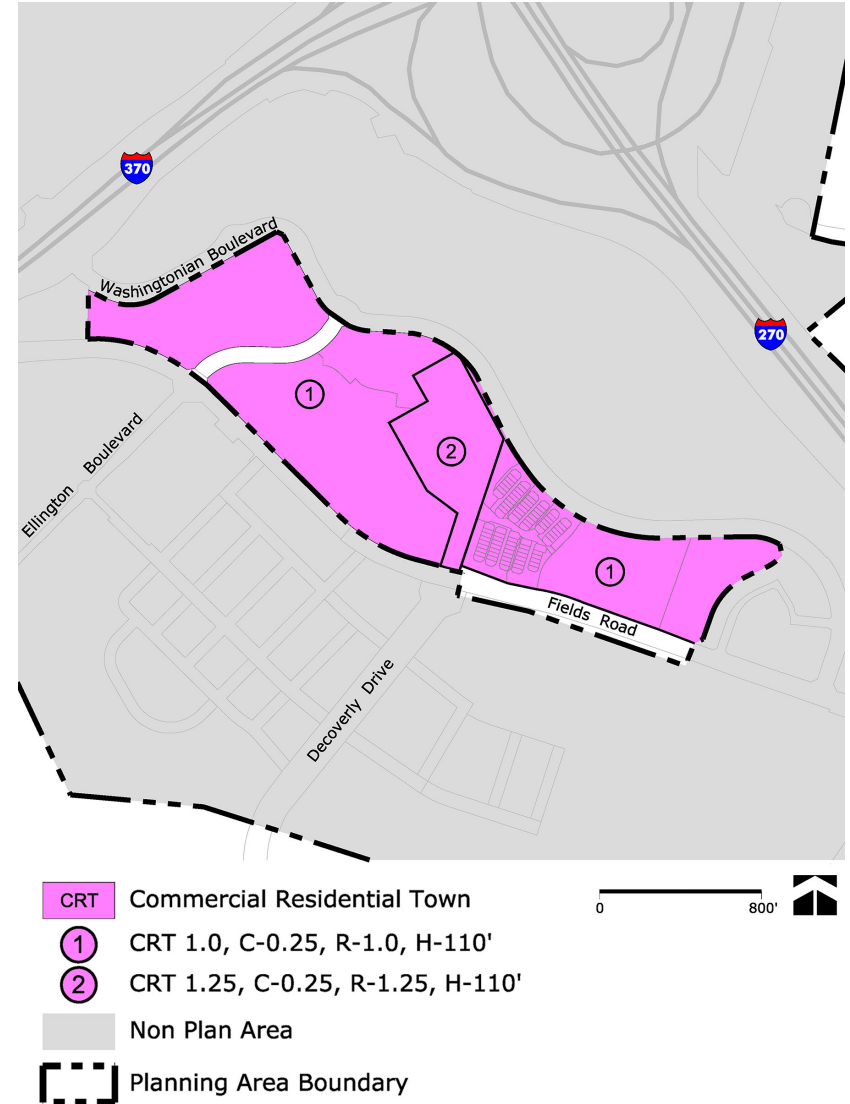


TABLE 13: WASHINGTONIAN RESIDENTIAL STREET CLASSIFICATION, TARGET SPEED, RIGHT OF WAY, TRANSIT LANE, AND BIKE FACILITY PRELIMINARY RECOMMENDATIONS

Roadway	From	To	County Classification	Target Speed (MPH)	Proposed Right of Way (Feet; Minimum)	Existing Traffic Lanes	Planned Traffic Lanes	Planned Dedicated Transit Lanes	Bike Facility (Left Side)	Bike Facility (Right Side)
Town Center Street										
Rio Blvd	Fields Rd	Washingtonian Blvd*	Town Center Street	25	80	4	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Discoverly Dr Extended	Fields Rd	Washingtonian Blvd*	Town Center Street (Planned)	25	75	n/a	2	0	1-Way Separated Bike Lane	1-Way Separated Bike Lane
Fields Rd	Discoverly Dr	675' West of Washingtonian Blvd	Town Center Street	25	100	4	2	0	2-Way Separated Bike Lane	LSC Loop Trail

*Roadway within the City of Gaithersburg

Notes: Minimum rights-of-way do not generally include lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Additional rights-of-way may also be needed to accommodate master planned bicycle and transit facilities, including protected intersections, the envelopes of transit stations, and pedestrian crossing refuges.

TABLE 14: WASHINGTONIAN RESIDENTIAL CAPITAL IMPROVEMENT PROGRAM PRIORITIES

Project Name	Category	Lead Agency	Coordinating Agencies
Discoverly Drive north to Washingtonian Boulevard street connection	Transportation	MCDOT	Private
Downtown Crown and the Rio Lakefront pedestrian and bicycle connection	Transportation	MCDOT	Private
High-visibility crosswalks	Transportation	MCDOT	City of Gaithersburg
Dedicated bus lanes on Fields Road	Transportation	MCDOT	City of Gaithersburg
Fields Road Great Seneca Transit Network Lime Line Station on Fields Road.	Transportation	MCDOT	City of Gaithersburg
Bicycle parking station at the Great Seneca Transit Network Lime Line Station on Fields Road.	Transportation	MCDOT	Private
Stormwater management	Environment	MCDOT	Private

Notes: Minimum rights-of-way do not generally include lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Additional rights-of-way may also be needed to accommodate master planned bicycle and transit facilities, including protected intersections, the envelopes of transit stations, and pedestrian crossing refuges.

C. SOCIAL ENVIRONMENT

There are ample opportunities for social interactions in the Washingtonian Residential area, which has access to diverse private and public open and recreational spaces. Residents enjoy easy access to the shops, restaurants, and entertainment at both Downtown Crown and the Rio Lakefront. In addition, the area is served by a civic green, pocket parks, playgrounds, and the Washingtonian Fitness Loop in the City of Gaithersburg. Improvements to the pedestrian, bicycle, and transit networks, as outlined in the built environment section, will further improve access to existing recreation and public open spaces.

The area is within the Wootton Cluster, served by Fallsmead Elementary School, Frost Middle School, and Wootton High School. Both Fallsmead Elementary and Frost Middle Schools have a projected minor seat deficit by 2027, while Wootton High School has a projected seat surplus.

This Plan does not include recommendations for the social environment for this area.

D. NATURAL ENVIRONMENT

The tree canopy of the Washingtonian Residential area covers 35% of the area, even though there is no forest area. The area has lower levels of particulate pollution than neighboring areas, perhaps due to its higher tree coverage.

High tree canopy and green cover percentages help reduce the heat island effect, manage and filter stormwater, and clean the air, in addition to providing mental health benefits. Redevelopment should strive to protect and maintain the green cover and tree canopy in the area.

1. Maintain tree canopy cover on at least 35% of the site in redevelopment. Use street trees, landscape islands in surface parking lots, and other landscaping to maximize tree cover over impervious surfaces.

2. Plant street trees and other native landscaping along roads to reduce heat islands and negative health outcomes from air pollution.
3. Increase total green cover to at least 35%. Increase the use of bioswales and rain gardens in landscaped areas.
4. Use native species for landscaping both in rights-of-way and in open spaces.
5. Minimize impervious surface cover whenever developing or redeveloping a site.

E. ECONOMIC ENVIRONMENT

The Washingtonian Residential area lies between two regional destinations, the Rio Lakefront and Downtown Crown. These destinations include amenities such as restaurants, retail shops, grocery stores, personal services, and a movie theater. There may be opportunities for limited mixed-use development in the area through future redevelopment; however, major commercial uses in the area are not appropriate. The area should continue to support the adjacent activity centers, not compete with them.

F. IMPLEMENTATION

The Washingtonian Residential area is completely surrounded by the City of Gaithersburg. Future planning for infrastructure and amenities to serve the area may be improved through annexation.

6. Following this Plan's approval by the Montgomery County Council and adoption by the Maryland-National Capital Park and Planning Commission, a sectional map amendment will apply the Plan's zoning recommendations to the official county zoning map.
7. Annexation of the Washingtonian area into the City of Gaithersburg is logical and consistent with the City's Maximum Expansion Limits.



Hi Wood

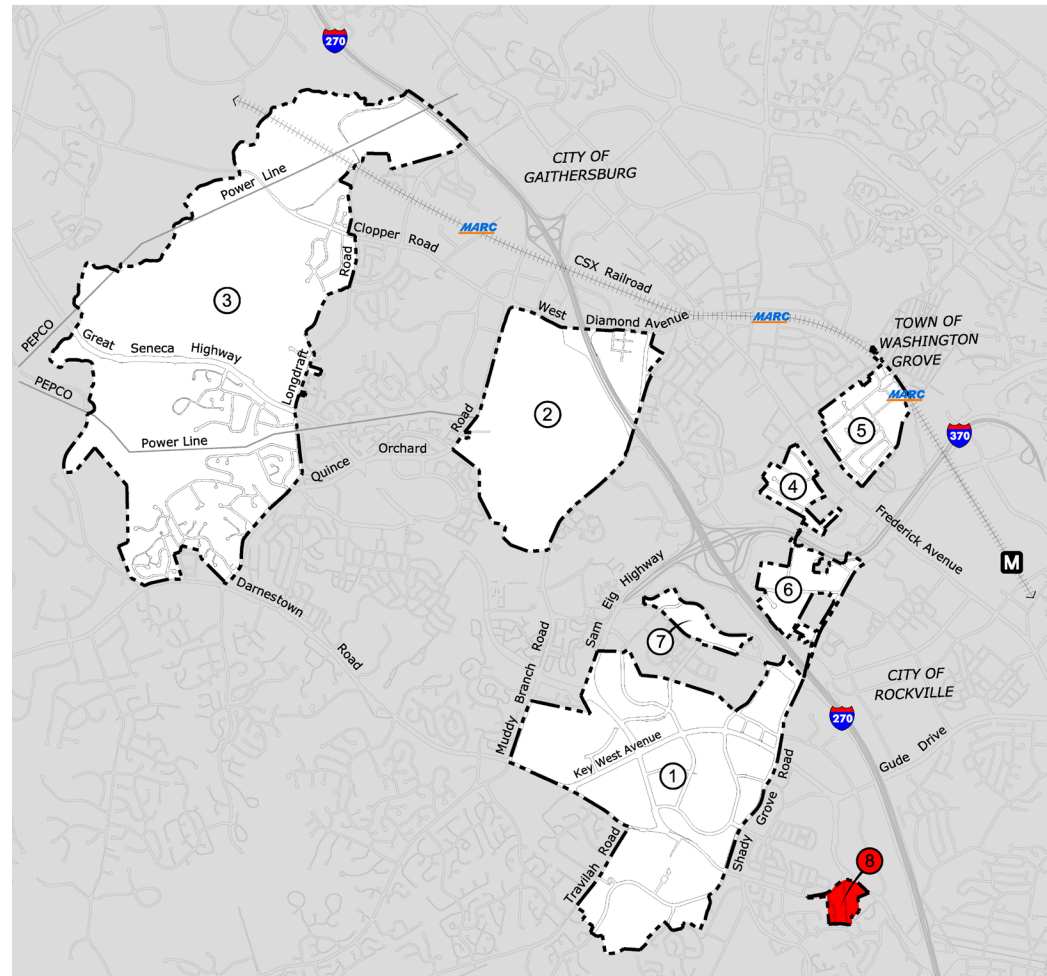
IX. Hi Wood

A. CONTEXT AND VISION

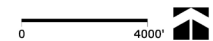
Context

The Hi Wood area is the easternmost portion of the Plan area and is surrounded by the City of Rockville, as shown in Figure 58. The area includes approximately 30 single-family detached units constructed in the 1950s and 1960s, and all parcels are zoned R-200. Hi Wood is fully built out, with little opportunity for parcel consolidation, and is appropriate for annexation into the City of Rockville. This Plan recommends retaining the existing R-200 zoning, but encourages organic, incremental development to achieve diversity in housing types in Hi Wood over the life of the Plan.

FIGURE 58: HI WOOD



- ① Life Sciences Center
 - ② NIST/Londonderry and Hoyle's Addition
 - ③ Quince Orchard
 - ④ Rosemont
 - ⑤ Oakmont/Walnut Hill
 - ⑥ Washingtonian Light Industrial Park
 - ⑦ Washingtonian Residential
 - ⑧ Hi Wood
- Non Plan Area
 - ▭ Planning Area Boundary
 - M Shady Grove Metro Station
 - MARC MARC Station



Vision

This Plan envisions that Hi Wood will remain a residential area. Hi Wood is located more than a mile from existing transit as well as the planned stations for the MD 355 BRT or Great Seneca Transit Network. The City of Rockville surrounds the area, making it a potential candidate for future annexation by the City of Rockville.

B. BUILT ENVIRONMENT

1. Retain existing R-200 zoning, as shown in Figure 59.
2. Construct a sidepath along the south side of Darnestown Road, consistent with the 2018 *Bicycle Master Plan*.

C. SOCIAL ENVIRONMENT

Hi Wood does not require any new parks or community facilities. The area is well served by Wootton's Mill, Glenora, and Falls Grove Parks in the City of Rockville, as well as the Carl Henn Millennium Trail. The area is within the school boundaries for Lakewood Elementary School, Frost Middle School, and Wootton High School. Frost Middle School and Wootton High School both have a surplus of seats. The Plan does not include recommendations for the social environment for this area.

D. NATURAL ENVIRONMENT

Flooding is a major issue throughout the county and specifically in the Plan area, and is one of the most common extreme weather impacts that county residents face. As extreme weather events

become more frequent, residents and the county must seek strategies to absorb climate impacts. Without the potential for large-scale or commercial redevelopment, which brings additional stormwater management infrastructure, homeowners in Hi Wood may look for ways to mitigate flood risk on their own properties.

1. Encourage the installation of green infrastructure (such as rain gardens) on private property through existing county programs such as RainScapes.
2. Increase the use of bioswales and rain gardens in landscaped areas and along roadways.

E. ECONOMIC ENVIRONMENT

Hi Wood will likely remain an entirely residential area. The Falls Grove Village Shopping Center, just one mile away, is accessible by the Millennium Trail or by Darnestown Road. This Plan has no recommendations to add economic activity to Hi Wood.

F. IMPLEMENTATION

Hi Wood is completely surrounded by the City of Rockville. Future planning for infrastructure and amenities to serve the area may be improved through annexation.

1. Annexation of the Hi Wood area into the City of Rockville is logical and consistent with the City's Maximum Expansion Limits.

FIGURE 59: HI WOOD EXISTING AND RECOMMENDED ZONING

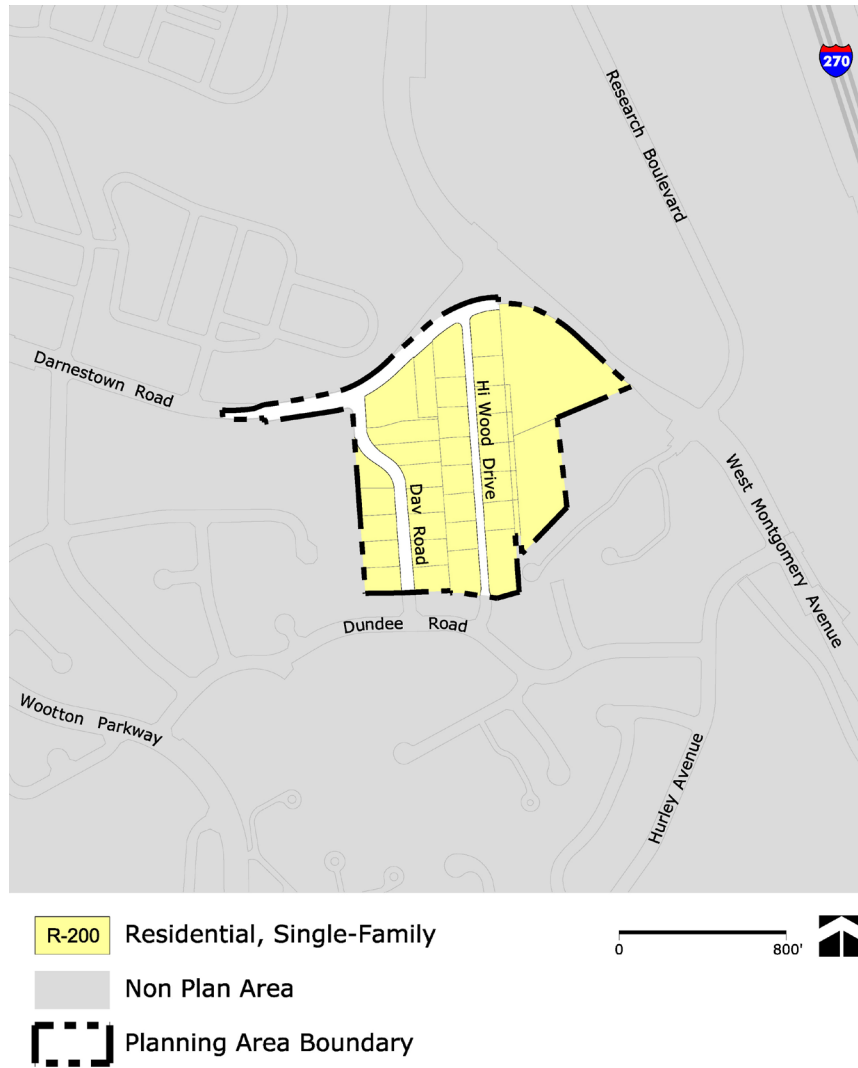


TABLE 15: HI WOOD CAPITAL IMPROVEMENT PROGRAM PRIORITIES

Project Name	Category	Lead Agency	Coordinating Agencies
Darnestown Road sidepath	Transportation	MCDOT	Private
Bioswales and rain gardens along roadways	Environment	MCDOT	Private

X. Conclusion

Implementation of the Great Seneca Plan will occur over a 20-to-30-year horizon. This Plan supports the continued coordination and cooperation of the public and private sectors to achieve the vision of the Plan, particularly for the Life Sciences Center. Critical recommendations to advance implementation in the Life Sciences Center are the adoption of an overlay zone, development of funding mechanisms to implement Plan recommendations, and establishment of an organizing entity to activate and program underutilized sites and open spaces; implement placemaking, public realm, and infrastructure improvements; brand and market the area; and pursue funding. The Plan recommends revisiting the plan periodically to evaluate the progress toward implementation of the vision.

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The Great Seneca Plan

CONNECTING LIFE AND SCIENCE

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SPRING 2024

The Maryland-National Capital Park and Planning Commission

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