

THE GREAT SENECA PLAN: CONNECTING LIFE AND SCIENCE



The Great Seneca Plan

CONNECTING LIFE AND SCIENCE

Description

Staff will brief the Planning Board on the Great Seneca Plan: Connecting Life and Science, including the Plan's unique organizational framework, as well as the vision and preliminary recommendations for each of the Plan's areas and enclaves. The Plan's preliminary recommendations are organized in the themes of the built, social, natural, and economic environments and include implementation strategies.



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SUMMARY

- The Great Seneca Plan: Connecting Life and Science is an update to the 2010 *Great Seneca Science Corridor Master Plan* and follows the 2021 *Great Seneca Science Corridor Minor Master Plan Amendment*.
- This memorandum provides an overview of the Plan's unique organizational framework, as well as the vision and preliminary recommendations for each of the Plan's areas and enclaves. The Life Sciences Center is the focus of the Plan, and therefore most of the recommendations are dedicated to this area.
- Preliminary recommendations were developed through an iterative process between Planning Staff, community members, property owners, and institutional and agency partners, among others. Recommendations represent a balance between best practices and professional expertise, data analysis and modeling, and the lived experience and desires of the community.
- The preliminary recommendations are organized in the themes of the built, social, natural, and economic environments.
- Recommendations include right sizing of roadways to meet Vision Zero and Complete Streets goals; supporting complete communities as outlined in *Thrive Montgomery 2050*; forming an entity to program, promote, and brand the Life Sciences Center; and establishing an overlay zone to facilitate a mix of uses.

MASTER PLAN INFORMATION

Draft

Great Seneca Plan: Connecting Life and Science
Preliminary Recommendations

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Planning Board Information

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Great Seneca Plan

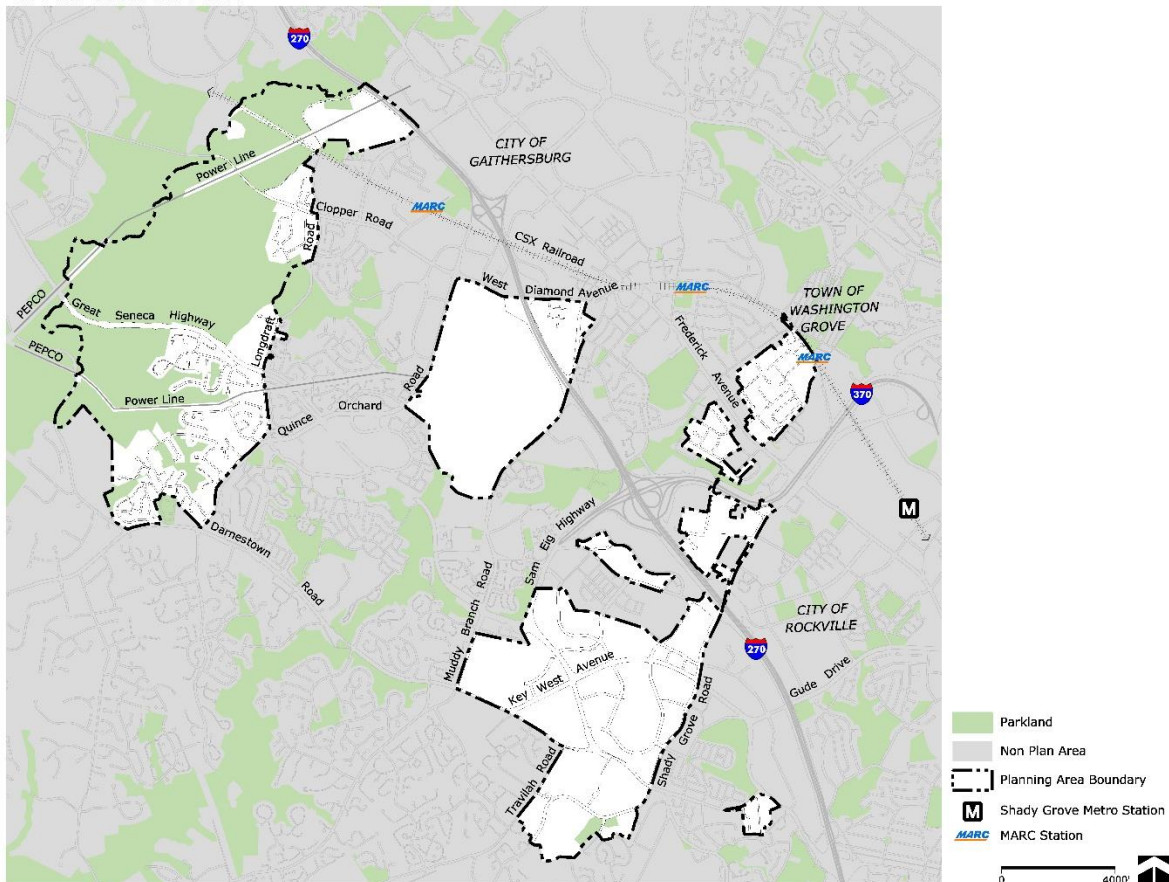


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INTRODUCTION

BACKGROUND

[The Great Seneca Plan: Connecting Life and Science](#) 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 2021 Amendment adjusted the staging requirements established by the 2010 Plan and recommended a comprehensive amendment to align the vision, recommendations, and overall staging requirements for the area with the county's current reality and its adopted plans, policies, and priorities. The Great Seneca Plan is a comprehensive amendment to the 2010 Plan, as recommended by the 2021 Amendment.

Planning Department Staff initiated preliminary work on the Great Seneca Plan in February 2022 and presented a [Scope of Work](#) to the Planning Board in May 2022. Planning Staff briefed the Planning Board on the [existing conditions](#) analysis in January 2023, provided an approach to recommendations and emerging "[big ideas](#)" for the Plan in April 2023, and provided an overview of [community engagement](#) activities and feedback received to date in May 2023. During the spring and summer, Planning Staff continued engagement with stakeholders and completed additional analysis to refine the big ideas and prepare preliminary recommendations.

In particular, the Plan seeks to support the Life Sciences Center, a major economic and employment hub for the county. This area has continued to deliver life science and residential development, but has faced barriers to growth, accessibility, and equity. This Plan seeks to address these barriers and transform this area into a high-quality destination for people who are working, living, studying, and visiting. A thriving Life Sciences Center will contribute to the economic health and competitiveness of the county.

This memorandum provides an overview of the Plan's unique organizational framework, as well as the vision and preliminary recommendations for each of the Plan's areas. The Plan's preliminary recommendations are organized in the themes of the built, social, natural, and economic environments and include implementation strategies. Planning Staff request that the Planning Board review the organizational framework, vision, and preliminary recommendations and provide guidance to Planning Staff to inform the development of the Plan's Working Draft.

CONTEXT

The Great Seneca Plan uses the 2010 Plan boundary and covers 4,330 acres in the heart of the I-270 corridor. As shown in Figure 1, 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: the Life Sciences Center (LSC), National Institute of Standards and Technology (NIST), Londonderry, Quince Orchard, Rosemont, Oakmont, Walnut Hill, Washingtonian Light Industrial Park, Washingtonian Residential, and Hi Wood. The LSC is bordered by the City of Gaithersburg on the north and west and by 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.

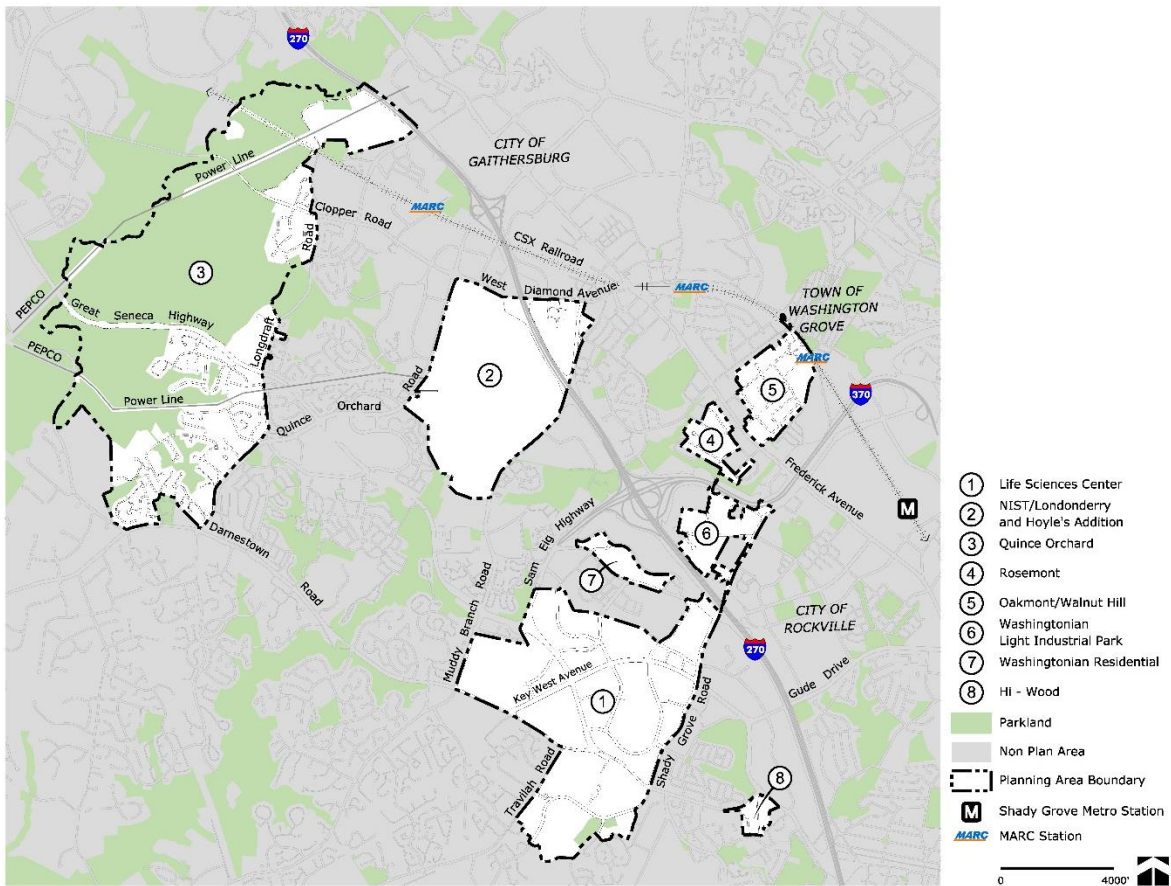


Figure 1: Map of the Great Seneca Plan Boundary and Areas.

The Great Seneca Plan focuses predominantly on the Life Sciences Center, in the southeastern corner of the Plan area. This area, shown in Figure 2, has experienced the most change over the past decade and has new transformational investments planned, including the LSC Loop Trail and the Great Seneca Transit Network. The Life Sciences Center has been the center of new development applications as well as 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.

Life Sciences Center

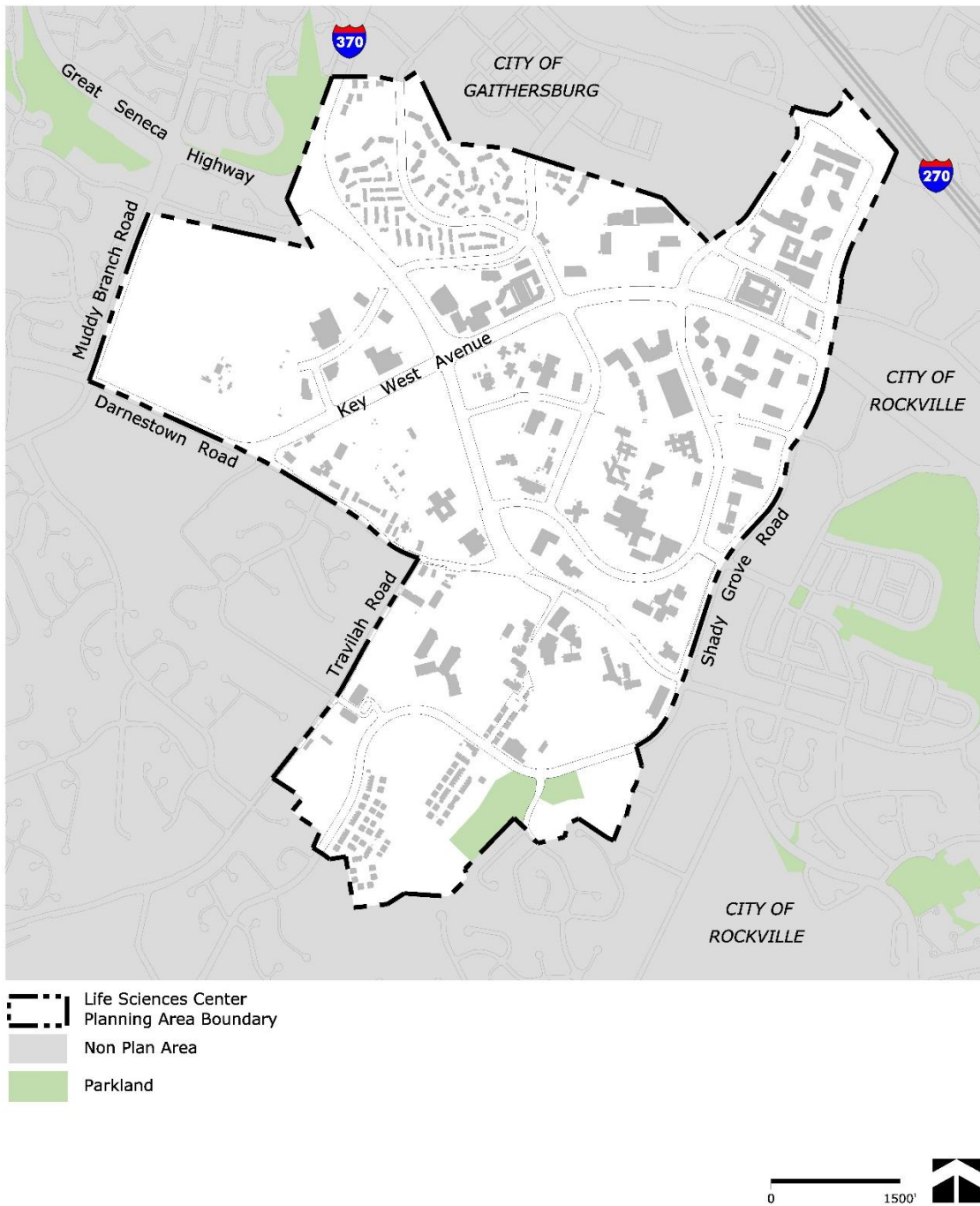


Figure 2: Map of the Life Sciences Center.

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 preliminary 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. This 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), which 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 *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 bus rapid transit.
- 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 environmental sustainability.

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 no 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, as shown in Figure 1, are:

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

This Plan organizes recommendations into separate chapters by area 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.

- Built environment: land use, zoning, urban design, housing, and transportation recommendations.
- Social environment: parks, open space, and trails recommendations.
- Natural environment: sustainability, resilience, climate, and environmental recommendations.
- Economic environment: real estate, economic development, and economic competitiveness recommendations.

LIFE SCIENCES CENTER

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 nearly 9,000 private sector life science jobs, nearly double the number located in the rest of the county.¹ In addition to the institutions and private sector office and lab developments, the Life Sciences Center includes over 3,500 multifamily and attached single-family residential units.

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 multimodal 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 3). 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.

¹ Data source: MD Dept of Labor QCEW microdata; private employment only. Life Sciences R&D and Mfg includes 2018 NAICS codes 3254 and 54174, and parts of 541713 and 541715.



Figure 3: Life Sciences Concept Drawing. The Life Sciences Center is a mixed-use complete community that is connected by a network of transportation options and connected to and by an array of natural and recreational spaces.

RECOMMENDATIONS

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. 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; public realm improvements; and equitable access to this important employment center, by offering transportation and housing choices.

The preliminary recommendations identify several opportunity sites in the Life Sciences Center. The opportunity sites are envisioned as properties that have the potential to accommodate infill development or redevelopment near planned transit, as well as to deliver public benefits including parks, publicly accessible open spaces, streets, and sustainable design.

Land use, Zoning, and Urban Design

1. Rezone all parcels in the Life Sciences Center as shown in Figure 4.
2. Establish a Life Sciences Center Overlay Zone for the entire Life Sciences Center area, including all parcels shown in Figure 4, that supports mixed-use life sciences development, incentivizes production of affordable and market-rate housing, and establishes financing mechanisms to achieve infrastructure and public realm improvements.
3. Encourage compact, mixed-use development near transit that integrates and connects life sciences uses with residential uses, retail, and neighborhood services and amenities.
4. Promote vertical organization of life sciences spaces to make land available for mixed-use and publicly accessible open space.
5. Encourage adaptive reuse of existing structures, coupled with infill development, when feasible.
6. 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.
7. 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.

Housing

1. Require new developments to provide at least 12.5% Moderately Priced Dwelling Units (MPDUs), aligned with current county policy.
2. Work with public, private, nonprofit, philanthropic, and religious institution partners to expand housing affordability.
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 percent MPDUs, with 15 percent affordable to households earning at the standard MPDU level of 65-70 percent or less of Area Median Income (AMI) and 15 percent affordable to households at or below 50 percent of Area Median Income (AMI). Redevelopment of public properties should also seek to co-locate housing with other uses, including life sciences.
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 work with the Department of Housing and Community Affairs (DHCA) and tenants to ensure that eligible residents receive support and assistance to mitigate the impacts of temporary relocation.

Recommended Zoning

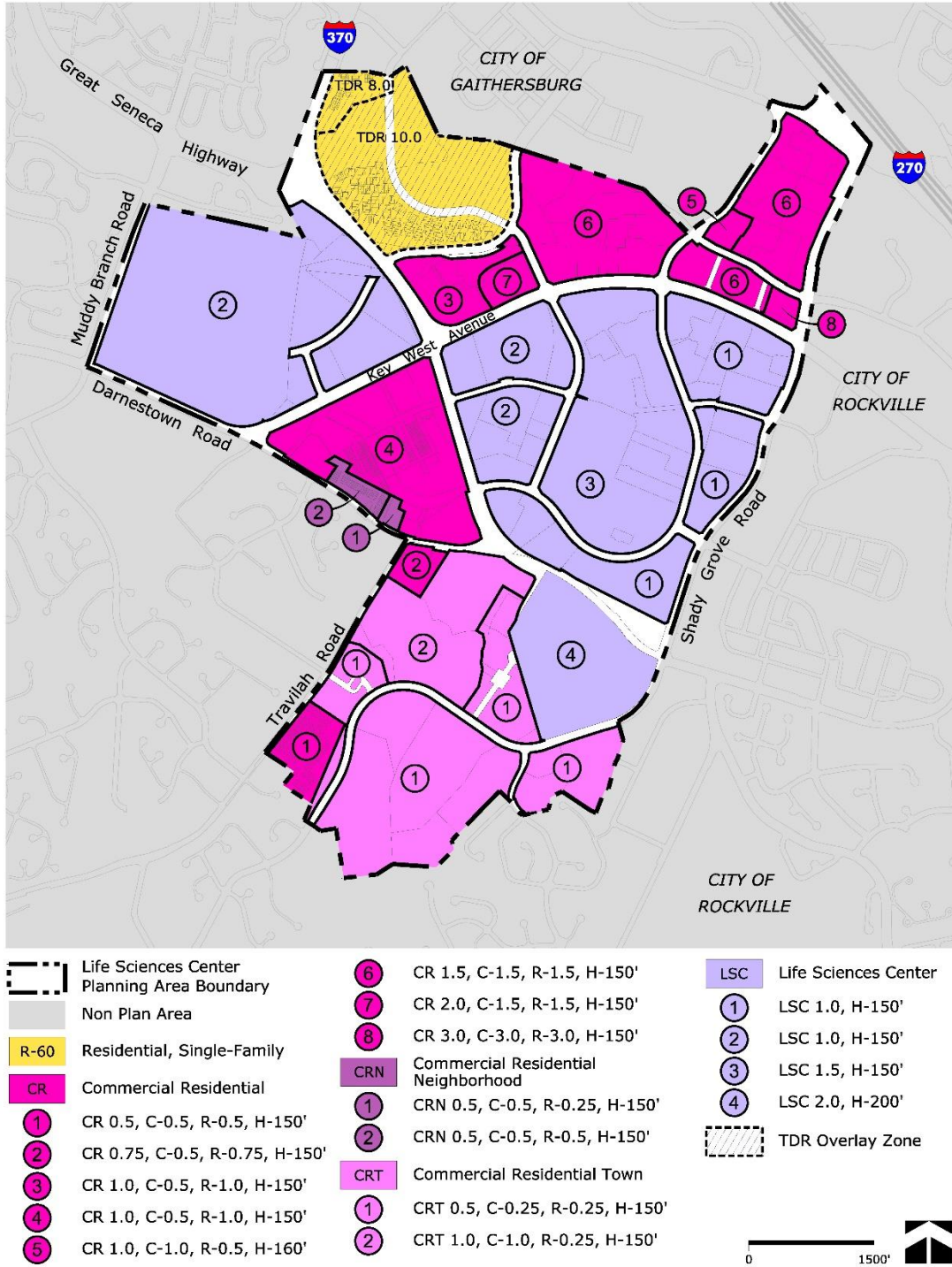


Figure 4: Recommended Zoning for the Life Sciences Center.

Transportation

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 or redevelopment of the site at regulatory review. (Figure 5).
 - 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 connections to reduce block size. If providing a complete connection is not possible, developments must dedicate right of way to advance the eventual construction of the non-master planned 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. Signalize, restrict, or close median breaks on Key West Avenue, Shady Grove Road, Darnestown Road, and Great Seneca Highway.
4. Build out a network of alleys in the Downtown and Town Center area types to support loading and site access.
5. Consolidate, remove, or relocate driveways from designated downtown boulevards, town center boulevards, and boulevards to other side streets and alleys, and limit future driveways.
6. Implement a complete network of comfortable walkways and bikeways, connected by safe, protected crossings.
 - Upgrade all intersections with high-visibility continental 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.
7. Implement a complete network of connected low-stress bicycle facilities.
 - 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.
 - Implement bicycle parking stations at destinations such as:

- i. transit stations
 - ii. trails, parks, and open spaces
 - iii. large employment or retail centers
8. Implement the Great Seneca Transit Network Pink and Lime Routes, including repurposing auto travel lanes to dedicated transit lanes.
9. Provide dedicated transit lanes for the Corridor Connectors identified in *Corridor Forward: The I-270 Transit Plan*. 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 the Belward properties to Muddy Branch Road.
10. 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 and 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.
11. Remove the planned but unbuilt grade-separated interchanges recommended in the 2010 *Great Seneca Science Corridor Master Plan*.
12. 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 shared streets, to prioritize pedestrian activity at specific locations that support the proposed development uses and the open space goals.

Proposed Roadway Connections

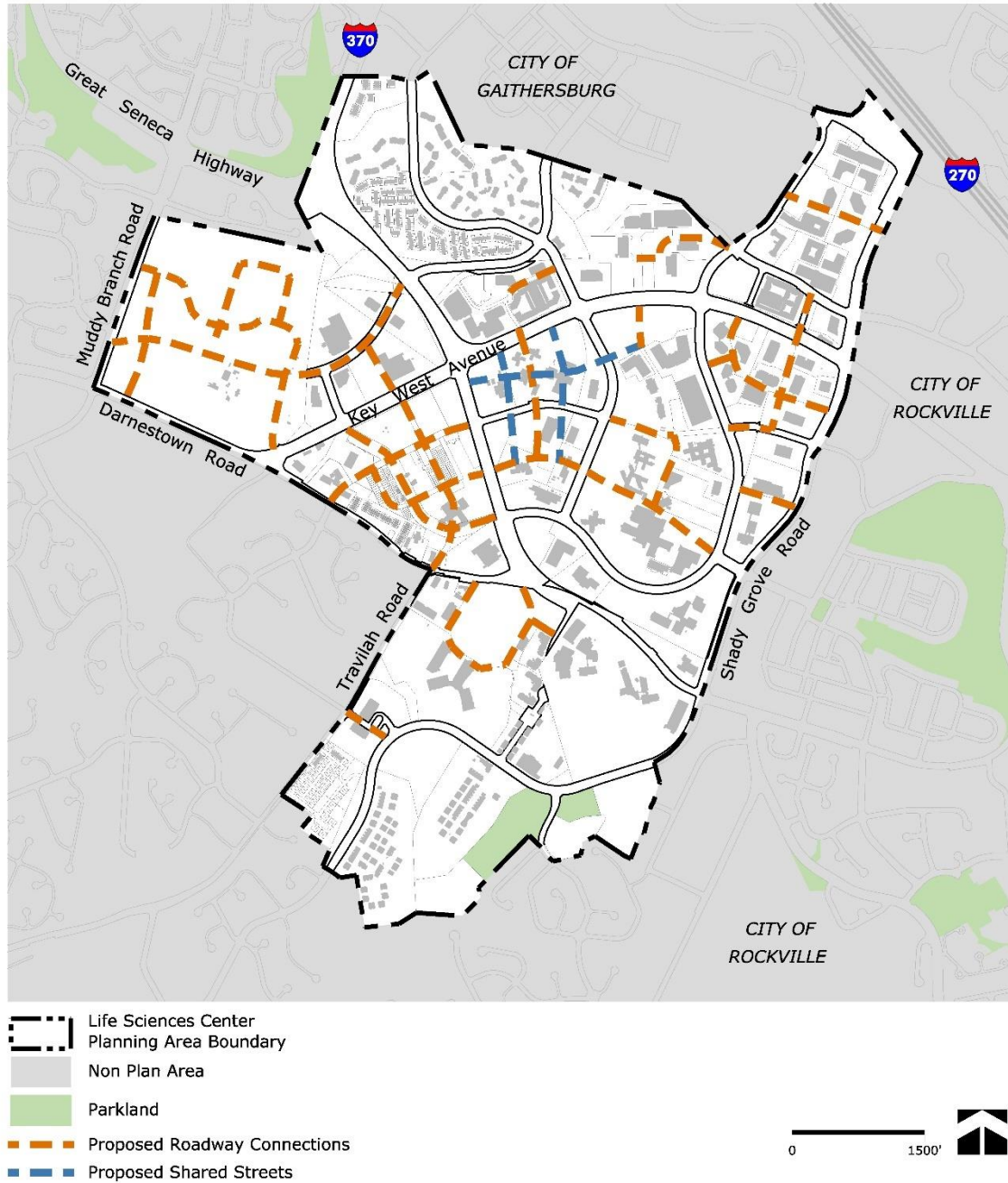


Figure 5: Proposed Roadway Connections. Final road alignment and design will be determined with new or redevelopment of the site at regulatory review.

Opportunity Sites

The opportunity sites are properties that have the potential to accommodate infill development or redevelopment (Figure 6). 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 Planning Staff as high potential sites. These sites are envisioned to help create the building form, street grid, and public amenities that are central to the Plan vision.

1. Belward

Belward Campus has a long-standing preliminary plan as well as two approved site plans. This Plan retains the recommendations from the 2010 Plan and supports implementation of the approved site plans. These 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 to Muddy Branch Road.

2. Traville

Traville Parcel N is phase two of a larger research and development campus that includes Parcel M immediately to the south, already developed. This property has an approved preliminary and site plan; the most recent development phase includes three research and development buildings; two are currently 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 allowed uses to include research and development uses and subsequently, development of the last available parcel 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 between Omega Drive and Diamondback Drive as well as a pedestrian connection to the Downtown Crown development. If redevelopment occurs, consolidated 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 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 currently occupied by various institutional uses, including 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.

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. Guardian Property (15200 Shady Grove Road and 9401 Key West Avenue)

This Plan recommends rezoning these properties 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 implement the Plan’s recommendations for Key West Avenue and improve frontages along Shady Grove Road and Research Boulevard.

8. Adventist Healthcare Shady Grove Medical Center

Adventist Healthcare Medical Center is an important anchor for the area. The site will continue to pursue infill development supportive of its current mission. Redevelopment could improve frontages along Broschart Road, expand access to publicly accessible open spaces, provide pedestrian connections through the site, and improve east-west vehicular connectivity between Medical Center Drive and Broschart Road. New public amenities, including an urban park, and open spaces should expand pedestrian access and connect with other LSC districts via the LSC Loop, an important pedestrian and bicycle connector recommended by the 2010 Plan.

9. Pro-Mark Partners (9711 and 9715 Medical Center Drive)

These properties are under consolidated ownership and given their 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 integrates the LSC Loop, explore east-west potential connections, and provide publicly accessible open space within the property.

10. The Elms at PSTA

The Elms at PSTA has an approved site plan. The site will deliver an athletic field, trails and open space, new street connections, and 630 residential units. This Plan recommends that future infill development on this property should be concentrated on the surface parking lot along Key West Avenue to further implementation of this Plan's recommendations along this frontage.

Opportunity Sites

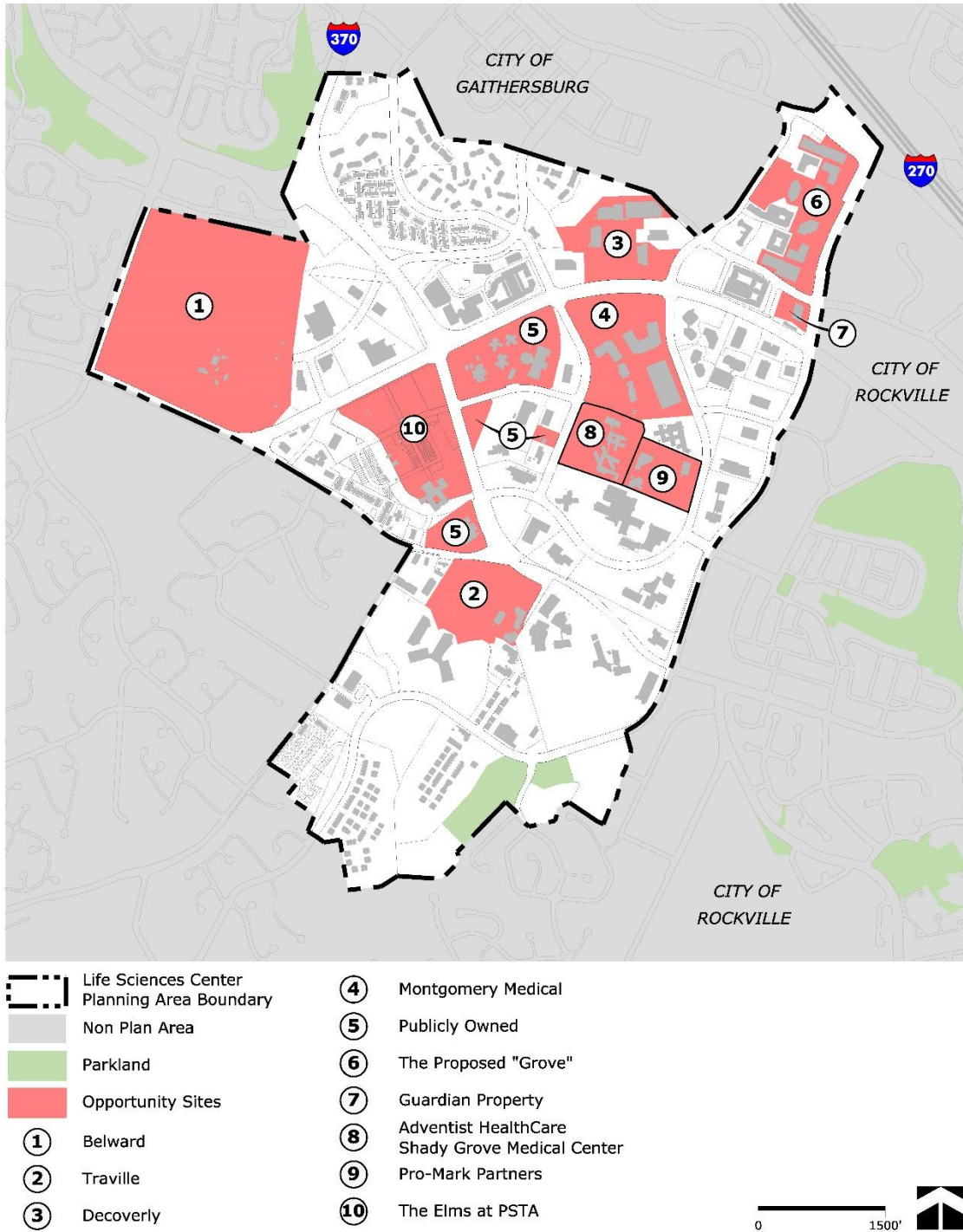


Figure 6: A map of opportunity sites in the Life Sciences Center.

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 open space 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. Montgomery Parks also owns an unimproved park property in the Life Sciences Center, Traville Local Park.

1. Repurpose two travel lanes on Key West Avenue to establish a tree-lined promenade for people who are walking, biking, and rolling. Incorporate active and passive uses as well as retail kiosks along the promenade to create active, social, and leisure opportunities for people to linger, instead of simply passing through.
2. Repurpose a portion of the Great Seneca Highway right-of-way as a linear open space. This open space could provide more than 4.5 acres of publicly accessible open space for active recreation, social gathering, and contemplative experiences.
3. 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.
 - Open spaces and POPS should be located and designed in consideration of retail locations so retail and open space mutually encourage and support activity.
 - Integrate existing environmental resources into the public open space network to provide alternatives for outdoor recreation.
4. Integrate new and existing development with a robust network of public and natural recreation spaces 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.
 - Consolidate public open space at strategic locations to focus public activity at transit or at locations that can provide access for most.
 - Ensure that open space delivered by mixed-use development is also connected to the overall open space network within the Life Sciences Center.
5. POPS and urban park spaces 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.
 - 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.
6. Develop the portion of Traville Local Park east of Willow Tree Drive to provide needed recreational facilities in this area of the county, including but not limited to an athletic field, a perimeter walking trail, a picnic shelter, and a playground. The portion of the park west of Willow Tree Drive should remain natural and undeveloped.

7. Support improvements to bicycle and pedestrian facilities along state and county roads identified in the Bicycle Master Plan and Pedestrian Master Plan that serve as important connections to nearby park and municipal trails, including Muddy Branch Trail, Seneca Greenway Trail, Powerline Trail, and Millennium Trail.

NATURAL ENVIRONMENT

The Life Sciences Center has the opportunity to become a leader in environmentally sustainable and resilient design in the region. The recently constructed 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.² Onsite energy production and simultaneous reduction of energy will strengthen the resiliency of the area.

In addition to environmental site and building design, 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.

Parts of the Life Sciences Center drain to the Watts Branch watershed and the Muddy Branch watershed. 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.

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

² https://www.savills.co.uk/research_articles/229130/345762-0#:~:text=The%20US%20Pacific%20Gas%20and,building%20of%20the%20same%20size.

³ As per the Montgomery County Economic Development Strategic Plan 2021–2025. https://static1.squarespace.com/static/5873c778e6f2e14a3529e892/t/624dd72fc30a024d37415e42/1649268531081/Economic_Development_Strategic_Plan_040622.pdf

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.
6. 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
7. Increase tree canopy coverage through the planting of trees and forest stands wherever possible by encouraging the planting of 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.
8. Minimize impervious surface cover associated with heat islands, increased flooding from runoff, erosion, and poor water quality, whenever developing or redeveloping a site.
9. Increase the use of bioswales and rain gardens, especially in the Piney Branch Special Protection area.
10. 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.
11. Plant native vegetation, which is better adapted to local climate, wildlife and native pollinators, in new developments.
12. Include artificial shading features in paved and hardscaped areas where there is limited soil to support tree growth.
13. Protect existing sensitive species including areas underlain by serpentine bedrock, which supports rare species.

ECONOMIC ENVIRONMENT

The Life Sciences Center is one of the county's main economic engines. Even as the county experienced slow job growth in many employment sectors, the life sciences industry grew by over 30% between 2010 and 2018. The Life Sciences Center contains more than twice the number of private sector workers in the life sciences industry than those employed in other areas of the county. This Plan seeks to attract, retain, 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, residents, and visitors.

1. Enhance infrastructure and amenities to attract life sciences companies, residents, and workers, including housing, multimodal transportation, public open space, recreation, and

walkability, in line with the Montgomery County Economic Development Corporation's Strategic Plan.

2. Facilitate adaptive reuse of existing buildings to meet industry demand for small-scale lab and manufacturing space and ensure a continuum of affordable lab supply.
3. Encourage development of small- and medium-scale lab space.
4. Encourage 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.

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 at 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.

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

1. Establish a Life Sciences Center Overlay Zone that supports mixed-use life sciences development, incentivizes production of affordable and market-rate housing, and establishes financing mechanisms to achieve infrastructure and public realm improvements.
2. Establish an entity in the Life Sciences Center that could:
 - Activate and program underutilized sites and open spaces.
 - Develop a brand for the area and market it.
 - Identify a dedicated annual funding stream to support and market these efforts.
 - Pursue placemaking and public realm improvements.
3. Dissolve the Great Seneca Science Corridor Implementation Advisory Committee (GSSC IAC) established by the 2010 Plan. The 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.
4. Remove staging requirements established by the 2010 Plan.
5. This Plan does not support granting Adequate Public Facilities validity period extension requests for preliminary plans approved prior to October 30, 2014.
6. Provide a list of recommendations to be carried out by partner agencies, shared with them. The list will be included in the Working Draft.

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. Although there are future plans to expand the facility within the existing parcel boundary, this has not occurred yet.

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 and single dwelling houses. Londonderry contains approximately 1,143 housing units, including naturally occurring affordable housing units, as well as 367 units that are subsidized through affordable housing programs.

According to Montgomery Planning's Community Equity Index (CEI), the Londonderry 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.

The Community Equity Index (CEI) is a composite measure of equity-related indicators that helps users understand socio-economic conditions that drive advantage and disadvantage across the county. It measures the extent to which individual neighborhoods are representative of the socio-economic diversity of the county. For more information about the CEI and to use the interactive CEI Explorer, visit the [CEI homepage](#).

The Londonderry 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 offer inhospitable walking and biking facilities for people to reach nearby destinations. The area is served by two bus lines, but service is infrequent.

VISION

This Plan envisions the Londonderry area as a thriving residential neighborhood with local serving retail, parks, 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.

RECOMMENDATIONS

BUILT ENVIRONMENT

Londonderry 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.⁴

Redevelopment of the area offers an opportunity 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 multimodal 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-200 to CRT-2.0, C-1.5, R-2.0, and H-150 to achieve a mixture of uses, including additional residential and local-serving retail uses.
2. Support a future application for a Commercial Residential Town (CRT) Floating Zone, CRTF 2.0, C-1.5, R-2.0, and H-150 on R-200 properties.
3. 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.
4. Front building entrances and active ground floor uses along a new internal, north-south street parallel to Muddy Branch Road.

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 https://montgomeryplanning.org/wp-content/uploads/2023/07/CEI_white_paper.pdf

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 as a public benefit for the Optional Method Development 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 and pedestrian 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.
6. Implement a complete network of comfortable sidewalks and sidepaths, connected by safe, controlled crossings.
 - Upgrade the following intersections with high-visibility continental crosswalk markings for all pedestrian approaches:
 - i. West Diamond Avenue and Perry Parkway
 - ii. West Diamond Avenue and King James Way
 - iii. West Diamond Avenue and Muddy Branch Road
 - iv. 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. Screen or wrap parking garages. Consider placing garages along I-270 and/or the noise wall to create an additional buffer.

SOCIAL ENVIRONMENT

The Londonderry area is underserved by park facilities. Montgomery Parks identifies this area as needing improvement in active, contemplative, and social experiences. Redevelopment in the Londonderry area offers the opportunity to deliver needed park and open space experiences in this area of the county.

1. Provide privately-owned public open space to anchor mixed-use components.
2. Provide an athletic field, multi-use courts, a playground, and a community garden. These recreational facilities should not be located immediately adjacent to I-270 due to air pollution caused by motor vehicle exhaust.
3. Utilize the natural assets of forests, streams, and other features to encourage resident, worker, and visitor use, where appropriate.

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.⁵ 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 for private applicants, 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, good insulation, and high-efficiency HVAC and lighting systems.
6. Minimize impervious surfaces that 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.

⁵ Exposure to high levels of vehicle pollution and traffic noise increases the risk of health conditions related to heart disease, stroke, and diabetes for nearby residents. <https://www.prb.org/resources/the-health-costs-and-benefits-of-living-near-roads-highways-and-light-rail/>

9. Plant native vegetation, which is better adapted to local climate, wildlife, and native pollinators, in new developments.
10. Include artificial shading features in paved and hardscaped areas where there is limited soil to support tree growth.

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.

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 (SMA) 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.

QUINCE ORCHARD

CONTEXT AND VISION

CONTEXT

The Quince Orchard area 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, Quince Orchard Valley Neighborhood Park, Orchard Neighborhood Park, and Clopper Lake. 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 at Darnestown Road in the southeast corner of the area. These parcels are zoned Employment Office (EOF) and Neighborhood Retail (NR), respectively.

VISION

This Plan envisions that Quince Orchard will remain a primarily low-density residential area. Organic, incremental development to achieve diversity in housing types is encouraged in this area over the life of the Plan.

RECOMMENDATIONS

BUILT ENVIRONMENT

Due to relative isolation, limited transit, and large environmental features, the Plan recommends retaining the low-density zoning throughout the area. The Plan recommends changes to the McGown property located at 11520 Game Preserve Road. 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, as well as 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 R-200.
4. Pursue the Germantown to Burtonsville Breezeway. 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.

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 the 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, part of the Maryland-National Capital Park and Planning Commission. Quince

Orchard Valley Neighborhood Park contains a picnic area, a playground, an athletic field, and sport courts, as well as an activity building. Orchard Neighborhood Park is mostly wooded and remains undeveloped.

1. Improve Quince Orchard Valley Neighborhood Park by evaluating opportunities to update and refresh the developed area of Quince Orchard Valley Neighborhood Park.
2. Support improvements to bicycle and pedestrian facilities along state and county roads identified in the Bicycle Master Plan and Pedestrian Master Plan that serve as important connections to nearby park trails, including the Seneca Greenway Trail and Powerline Trail.

NATURAL ENVIRONMENT

The natural features in the Quince Orchard area contribute to a healthy natural environment. Over 50% of the area 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. Identify opportunities for stream restoration in areas of the Quince Orchard Valley Neighborhood Park that are more like stream valley parks.
3. Reclassify stream valley areas of the Quince Orchard Valley Neighborhood Park (south/west of Suffolk Terrace) into a separate and consolidated Quince Orchard Stream Valley Park.
4. Encourage the installation of stormwater management 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.

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.

IMPLEMENTATION

Following this Plan's approval by the Montgomery County Council and adoption by the Maryland-National Capital Park and Planning Commission, an SMA will apply the Plan's zoning recommendations to the official county zoning map.

ROSEMONT

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. 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. The City of Gaithersburg surrounds the area, making it a potential candidate for future annexation by the City of Gaithersburg.

RECOMMENDATIONS

BUILT ENVIRONMENT

The Plan recommends retaining R-200 zoning and encourages 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.

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 sport courts, playgrounds, and trails, these facilities offer programming such as a farmer's market, and fitness and recreational classes. The enclave also surrounds Rosemont Elementary School and is near Summit Hall Elementary School, both of which provide additional recreational facilities.

NATURAL ENVIRONMENT

The Rosemont area drains to 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 bring additional stormwater management infrastructure, homeowners may look for ways to mitigate flood risk on their own properties.

1. Encourage the installation of stormwater management 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.

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.

IMPLEMENTATION

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

OAKMONT AND WALNUT HILL

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. 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, and warehouses. 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.

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 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*, have recommended new MARC stations in North Bethesda and Shady Grove, but acknowledged the rail owner's (CSX Transportation's) policy 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 Washingtonian Grove MARC Rail Station may have reduced service or 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 maintained.

Despite its location in a Corridor Focused Growth Area, this Plan does not recommend more intensive uses for the enclave, based on plans for reduced service at the Washington Grove MARC Rail Station.

RECOMMENDATIONS

BUILT ENVIRONMENT

1. Support the long-term potential of the Maryland Transit Administration MARC Rail Brunswick Line and the Corridor Forward Plan recommendation to add stations at North Bethesda and Shady Grove by exploring skip stop operations or decommissioning underutilized stations like Washington Grove.
2. Retain existing zoning; 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-quarter mile of the Washington Grove station.

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.

In addition to the municipal parks, 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.

NATURAL ENVIRONMENT

The Oakmont and Walnut Hill area drains to 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 stormwater management 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.

ECONOMIC ENVIRONMENT

The Oakmont/Walnut Hill area is primarily residential but does contain Hershey’s Restaurant. There are no economic environment recommendations for the Oakmont/Walnut Hill area.

IMPLEMENTATION

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

WASHINGTONIAN LIGHT INDUSTRIAL PARK

CONTEXT AND VISION

CONTEXT

The Washingtonian Light Industrial Park is located southeast of the I-270 and I-370 interchange along Shady Grove Road. 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.

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 1% 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 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.

RECOMMENDATIONS

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 multifamily 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.

1. Retain GR Zoning
2. Rezone IM-2.5, H-50 to IM-2.5, H-65 to accommodate a broader mix of building types.

SOCIAL ENVIRONMENT

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

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 providing 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.

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.

IMPLEMENTATION

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

WASHINGTONIAN RESIDENTIAL

CONTEXT AND VISION

CONTEXT

The Washingtonian Residential area is surrounded by the City of Gaithersburg. 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 Towers, a high-rise multifamily 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.

Apart from the Washingtonian Towers, the area is zoned Commercial Residential Town (CRT) “T.”⁶ The Washingtonian Towers is zoned Residential Multi-Unit High Density – 10 (R-10).

VISION

This Plan envisions that the Washingtonian Residential area 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.

RECOMMENDATIONS

BUILT ENVIRONMENT

The Washingtonian Residential area 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.

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. 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. Require new developments to provide at least 12.5% MPDUs, aligned with current county policy.
5. Prioritize additional MPDUs as a top public benefit for the Optional Method Development in the CRT zones to provide additional affordable housing.
6. Prioritize two- and three-bedroom units for residential development projects as a public benefit for the Optional Method Development to provide additional family-sized units.
7. 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. Work with public, private, nonprofit, philanthropic, and

⁶ The “T” zones are translated from zones that existed prior to October 30, 2014, that allowed residential density to be increased above the number designated for residential on the zoning map in proportion to the provision of MPDUs or workforce housing.

religious institution partners to preserve and expand housing affordability in the Washingtonian Residential area.

8. Build a publicly accessible pedestrian and bicycle connection that would link Downtown Crown through Washingtonian Residential to the Rio Lakefront.
9. Upgrade all intersections with high-visibility continental crosswalk markings for all pedestrian approaches.
10. Ensure ADA accessibility on all public pathways, including sidewalks, trails, and street crossings in accordance with current best practices.
11. Upgrade Fields Road to achieve PLOC 2 or better along the right-of-way.
12. 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.
13. Build a Great Seneca Transit Network Lime Line Station on Fields Road.
14. 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.

SOCIAL ENVIRONMENT

There are ample opportunities for social interactions in the Washington 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 open spaces.

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.

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.

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.

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

HI WOOD

CONTEXT AND VISION

The Hi Wood area is the easternmost portion of the Plan area and is surrounded by the City of Rockville. 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.

RECOMMENDATIONS

BUILT ENVIRONMENT

1. Retain existing R-200 zoning.
2. Construct a side path along the south side of Darnestown Road, consistent with the 2018 *Bicycle Master Plan*.

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.

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 stormwater management 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.

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.

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.

CONCLUSION

Preliminary recommendations were developed through an iterative process between Planning Staff, community members, property owners, and institutional and agency partners, among others. Recommendations do not come from a single place but represent the balance between best practices and professional expertise, data analysis and modeling, and the lived experience and desires of the community.

The vision and recommendations will continue to evolve through conversations with community members, stakeholders, property owners, and decision makers. Additional recommendations for greenhouse gas mitigation and climate adaptation and resilience will be developed as Planning Staff complete the Climate Assessment and accompanying narrative. Planning Staff will incorporate changes from the Planning Board before presenting the Working Draft of the Plan, anticipated in early 2024.