Shady Grove Sector Plan Amendment

Preliminary Plan Recommendations
Overview

- Land Use and Zoning
- Urban Design
- Environmental Sustainability
- Public Facilities
- Parks and Open Spaces
- Mobility
- Implementation
Preliminary Recommendations

1. Reevaluate the staging triggers.
2. Update the Sector Plan recommendations per the 2016 Subdivision Staging Policy (SSP); Bus Rapid Transit (BRT) on MD 355; and the Corridor Cities Transitway (CCT).
3. Adjustments to land use and zoning as well as public facilities recommendations.

Purpose for the Plan Amendment
Public Outreach

- November 14, 2018: Open House
- May 20, 2019: Existing Transportation Conditions
- June 26, 2019: Transportation and Land Alternatives
- October 16, 2019: Preliminary recommendations
Vision and Overview

2006 Sector Plan and current draft update highlights:

- Mixed-use area surrounding the Metro Station (Metro Neighborhoods)
- Retention of industrial/office areas.
- Protection of existing residential communities.
- New bikeways and street network.
Approved Development

1. Townes at Shady Grove
2. Shady Grove Station-Westside
3. Shady Grove Station-Jeremiah Park (Eastside)
4. Montgomery County Department of Transportation Fleet Management
5. Maryland Transportation Authority
2014 District Map Amendment (DMA), which is the enactment of the new Zoning Ordinance, introduced new zones to Plan area, including Commercial Residential, Employment Office and Commercial Residential Town. Residential zones are the same.
Municipal Annexations

- Bainbridge at Shady Grove
- City of Rockville Maximum Expansion Limits
- City of Gaithersburg Maximum Expansion Limits
- Carmax
- Bainbridge
- Shady Grove Metro
- City of Rockville Maximum Expansion Limits
- Town of Washington Grove Maximum Expansion Limits
- City of Gaithersburg Maximum Expansion Limits

Preliminary Recommendations
Land Use and Zoning

Key Preliminary Recommendations

- Complete the relocation for all County facilities from the County Service Park (CSP) to other appropriate locations.
- Promote the redevelopment of the Metro Station surface parking and single use commercial properties into mixed-use places.
- Adjust properties that were rezoned via the 2014 District Map Amendment.
- Retain light industrial zoned properties to promote independent entrepreneurs and small businesses.
Land use and zoning changes are primarily focused for properties surrounding the Metro Station or in Metro Station Policy Area.
Preliminary Recommendations

Metro Neighborhoods
### Land Use Recommendations

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<thead>
<tr>
<th></th>
<th>Residential</th>
<th>Non-Residential</th>
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<td>3,091</td>
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<td>▪ Townes at Shady Grove (multifamily building)</td>
<td>1,729</td>
<td>61,828 sq. ft</td>
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<td>▪ Shady Grove Station, Westside and Jeremiah Park</td>
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<td><strong>Preliminary Recommendation</strong></td>
<td>4,500</td>
<td>2.30 million sq.ft</td>
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Opportunities

Goals
- To promote walkability
- To provide mixed-use activity centers accessible to serve surrounding areas

Preliminary Recommendations
Land Use and Zoning: Metro West

Existing Zoning

- Shady Grove Sector Plan Boundary
- Metro Station
- Commercial Residential
  - CRT 0.75, C-0.75, R-0.25, H-50' T
  - CRT 1.5, C-0.5, R-1.25, H-100' T

Proposed Zoning

- Shady Grove Sector Plan Boundary
- Metro Station
- Commercial Residential
  - CRT 0.75, C-0.75, R-0.25, H-50' T
  - CRT 2.0, C-0.5, R-1.5, H-200' T
  - CRT 2.0, C-1.0, R-1.5, H-120' T
Land Use and Zoning: Metro South

Preliminary Recommendations
Preliminary Recommendations

- Support the Historic Preservation Commission (HPC) recommendation that the Old Derwood Store and Post Office should be listed on the Master Plan for Historic Preservation.
  - Support a new zoning recommendation that would permit reuse of the existing structure and some additional residential development.
Section 8.1.1 of the Zoning Ordinance The zones in Article 59-8 were applied by Local Map Amendment before this Zoning Ordinance was adopted. These zones may appear on the digital zoning map, but they cannot be requested by any property owner under a Local Map Amendment or confirmed or applied to any property owner under a Sectional Map Amendment adopted after October 30, 2014.

Existing Planned Development (PD) properties
- Townes at Shady Grove (PD-35)
- Derwood Station (PD-2)
- Park Overlook (PD-5)
2006 Urban Design Goals
- Organize future development into a series of attractive neighborhoods around the Metro Station
- Protect the Derwood residential communities
- Retain the area’s business parks but promote residential uses to achieve a mixed-use character on selective locations of employment, technology and housing.

2019 Amendment Goals
- Confirm 2006 Plan vision for overall area
- Provide additional guidance for targeted locations to address plan area boundary changes and clarify expectations per 2014 district zoning revisions.
Preliminary Recommendations

2006 Sector Plan

Derwood Residential Communities
- Preserve Integrity
- Enhance streetscaping, sidewalks, bike routes, and traffic calming measures
- Provide direct access to Metro
- Old Derwood: Redevelop frontages along Redland Road, while retaining existing street pattern and historic resources.

Employment / Commercial
- Encourage infill development to provide housing near metro
- Consider reconfiguring existing uses to allow for a mix of uses to be implemented.

Industrial / Institutional
- Allow limited expansion of existing uses to meet county needs
- Implement measures to reduce noise, odors, and traffic
- Retain existing industrial parks.

Existing/Potential Mixed-Use
- Completed/Approved development per 2006 Plan guidance.

Recommendation for above areas: Confirm 2006 Plan guidance

Amendment Focus Areas
- Metro Neighborhoods and other commercial properties
- Recommendation: Provide Additional Guidance
Opportunities

- To promote pedestrian friendly environments
- To provide mixed-use activity centers accessible to serve surrounding areas

Goals
- To promote pedestrian friendly environments
- To provide mixed-use activity centers accessible to serve surrounding areas

Preliminary Recommendations

1. WMATA Parking Areas
2. Metro West Neighborhood
3. The Grove Retail Area
4. Shady Grove Plaza
Preliminary Recommendations

Metro Neighborhoods

Metro North (1) and Metro West (2) Districts

- Consolidate Parking Facilities to create development pads
deliver a vertical mix of uses
- Create public open space and new streets that connect
  with adjacent neighborhoods/districts
- Incorporate existing stream as an amenity for new
development
- Enhance existing parking structures

Integrate existing stream as an amenity
Provide substantial public open space
Deliver a vertical use mix
Enhance existing garages
**Metro Neighborhoods**

**Metro South District (1)**

- Focus development intensity along Sommerville Drive to improve a connection to Metro, and Redland Road to connect neighborhoods across the tracks.
- Explore creative infill development and public open space that builds on the light-industrial character of the district.
- Promote adaptive reuse and expansion of existing uses.
- Promote retention of existing retail.

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**Preliminary Recommendations**

- Higher density on existing streets.
- Alternatives to Open Space.
- Innovative infill uses.
- Adaptive re-use and expansion.
The Grove (1) and Shady Grove Plaza (2)

- Promote mixed-use development that delivers a mix of housing types, improved streetscape that connects to adjacent development, and accessible public open space.
Parks and Open Spaces

- Create new parks and open spaces in the Metro Neighborhoods for public use to promote a livable environment for existing and future residents, visitors and employees.

- Create new public parks at Piedmont Crossing, Derwood Station and Jeremiah Park properties.

- Link new parks and open spaces with existing and proposed bikeways and trails.

- Retain existing public parks as public open space.
Preliminary Recommendations

- Confirm the 2006 Sector Plan recommended public facilities

- Shady Grove Station redevelopment public facilities
  - Jeremiah park, school site and library
  - An alternative 1-acre neighborhood park on the former Parks Department site, if it is developed.

- Utilizing acquired land for parks
  - Derwood Station Neighborhood Park
  - Piedmont Crossing Local Park
Key Recommendations

▪ Promote energy efficiency and encourage net zero energy building design.

▪ Improve the urban environment by incorporating best practices such as goals to reduce heat island effect and promote Environmental Site Design (ESD) in stormwater management practices.

▪ Retain existing wooded areas where designated, and provide increased tree canopy throughout the Plan area.

▪ Include sustainable design solutions to create an attractive public realm with integrated green features, and enhanced mobility and walkability.
Environmental Sustainability

Forest Cover
• Improve forest and tree cover to at least 50% of the plan area.
• Retain forest on the eastern side of the Grove Shopping Center to maintain significant forest cover, improve air and water quality, sequester carbon, and provide a noise buffer to protect developed areas from traffic noise generated by the Redland Road Extension connecting to Interstate 370 and the Intercounty Connector.
• Require 15 to 25% tree canopy coverage on redeveloping properties in the mixed-use zones and dense residential and commercial areas.
• Encourage green features (softscaping) in required open space areas and the public realm.
• Prioritize environmental public benefit points for tree canopy cover and energy conservation.

Air Quality and Carbon Emissions
The compact, mixed-use development recommended in the Shady Grove Sector Plan, and the proximity of the Shady Grove Metro Station, will help reduce per-capita carbon emissions and improve air quality.
• Include building design features that keep roofs cool – either green roofs or cool roofs.
• Implement improvements and facilities to make walking and biking to the Metro Station a pleasant and inviting experience. Create human-scale block sizes, through-block connections, paths and sidewalks, bike networks and bike-share stations.
• Increase forest and tree cover.

Water Quality
Water quality can be improved by minimizing impervious surfaces in developments, preserving and increasing forest and tree canopy cover, and treating stormwater runoff in stormwater management facilities that filter out pollutants and reduce erosive stream flows.
• Minimize imperviousness/maximize pervious areas.
• Landscaping: use native plants that require less watering and fertilization; use rainwater for watering; apply Sustainable Sites Initiatives (SITES) principles.
• Increase forest and tree cover.
Environmental Sustainability

Climate Protection
- Make attainment of net zero carbon emissions an aspirational goal in all new development and redevelopment. Include as many of the following recommendations as practical in development plans:
  - Use native vegetation in landscaping and tree planting to sequester carbon and reduce urban heat island effect.
  - Include on-site renewable energy generation.
  - Include building design features that keep roofs cool – either green roofs or cool roofs.
  - Implement improvements and facilities to get people out of cars (see Air Quality).
  - Promote site and building design for energy conservation and higher levels of LEED certification or a comparable rating system.
  - Over parking areas where trees cannot easily be planted and maintained (ex. rooftop garage parking), consider shading features that include solar panels.

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

- Support the MD 355 North Bus Rapid Transit (BRT) route along Frederick Road (MD 355) and the Corridor Cities Transitway (CCT).
- Provide new streets that permit alternative ways to navigate the Plan area.
- Support the 2006 Shady Grove Sector Plan recommendation for a MARC Station at the Metro Station.
- Utilize Vision Zero as a framework to address High Injury Network roadways in the Plan area.
- Establish new Non-Automotive Driver Mode Share (NADMS) goals that promote multimodal approaches to transportation.
- Amend the 2006 Shady Grove Sector Plan and the 2018 Bicycle Master Plan to support safe, feasible bicycle facilities.
Moving safely within one’s community is a right, regardless of mode choice:

- Traffic-related deaths are **preventable**.
- All users—drivers, bicyclists, and pedestrians—make **imperfect** choices.
- Focus on prevention of **severe and fatal crashes**, which includes assessment of user **vulnerability**.
  - Crash **Severity** > Crash **Frequency**
- Takes a **systems** approach to transportation.
- 1,347 crashes between January 2015 and May 2019:
  - **30 severe** crashes
  - **3 fatal** crashes
  - **51 crashes involving nonmotorists**; 6 severe or fatal nonmotorist crashes

**Shady Grove Crashes**
- Crash Involving Nonmotorist
- Severe Injury Crash
- Fatal Crash
- All Crashes
Mobility: Vision Zero

Montgomery County's High Injury Network

County Roadways
- No. 1: Crabb's Branch Way, Redland Road to Indianola Drive
- No. 7: Shady Grove Road, Metro Access Road to Midcounty Highway

State Roadway
- No. 6: Frederick Road (MD 355), Gude Drive to Shady Grove Road
Preliminary Recommendations

Mobility: Vision Zero - Crabbs Branch Way

- Explore opportunities for turn lane removal on Crabbs Branch Way between Redland Road and Indianola Drive:
  - Segment is on County’s high-injury network
  - Existing segment includes two travel lanes and center turn lane
  - Minimal turning needs due to limited access points

Existing Conditions
- 90-foot wide right of way; classified as an arterial with no expansion planned
- Width includes 1.5-foot variable width slope on either side of pedestrian facility
- Center turn lane only services 5 access points along 2,400-linear-foot segment
- Posted speed is 35 MPH; 58% NB and 64% SB drivers exceed posted speed with 85% between 41-45 MPH
- 14,971 ADT per Travel Demand Model (existing condition runs)

Option Two - Master-Planned Bicycle Facility & Sidewalk Upgrade
- Implements 8-foot wide pedestrian refuge
- Restripes cartway to better accommodate bus traffic
- Implements 3.5-foot flexipave extensions along western side of roadway to accommodate 8-foot facility
- Requires replanting eastern side of street to accommodate master-planned sidewalk
- Requires storm drain relocation; potential minimal retaining wall to accommodate mild slopes
- Proposed target speed 25 miles per hour; downgrade from arterial to central business district street
Mobility: Bikeway Network

- 2006 Shady Grove Sector Plan Recommendations amended by Bicycle Master Plan, approved December 2018 (shown right)

- Plan Amendment will supersede 2018 Bicycle Master Plan recommendations

- Proposed changes include:
  - Revisions to Shady Grove Road facility
  - Moving Crabbs Branch Way facility to eastern side of street
  - New facility on Indianola Drive to support BRT access
Preliminary Recommendations

Mobility: Future BRT

- Plan area falls adjacent to MD 355 BRT segment 4
- “Alternative B Modified,” option chosen for further study, includes one median reversible BRT lane
- Studied stop locations within Plan Area include:
  - Shady Grove Metro Station at Somerville Drive
  - MD 355 Indianola Drive (infill station)
Mobility: Corridor Cities Transitway (CCT)

Corridor Cities Transitway-Phase 1

Preliminary Recommendations
Initial Recommendations

1. Functional Classification of Shady Grove Road
   - Change the classification from “Major Highway” to “Arterial”
   - Implement consistent posted speed along corridor

2. Replacement of Crabbs Branch Way turning lane with vegetated median

3. Adjustments to streets in the Metro Neighborhoods
   - Support Bus Rapid Transit
   - Address impacts of development since 2006 Plan
Mobility: Study Intersections & Policy Area Standards

- 19 study intersections
- Three (3) policy areas with different congestion standards:
  - Shady Grove Metro Station Area (red): 120 seconds/vehicle
  - Rockville City (orange): 63 seconds/vehicle
  - Derwood (orange): 59 seconds/vehicle
Mobility: Existing Conditions

- 0%-25% capacity used
- 26%-50% capacity used
- 51%-75% capacity used
- 76%-100% capacity used
- over 100% capacity used
Mobility: Proposed Plan Amendment
Scenario #1

- 0%-25% capacity used
- 26%-50% capacity used
- 51%-75% capacity used
- 76%-100% capacity used
- over 100% capacity used
Mobility: Plan Amendment Scenario #2

- Speed reduction on Shady Grove Road & Crabbs Branch Way
- Removal of center turn lane on Crabbs Branch Way
- Assumes achievement of Non-Auto Drive Mode Share Goals:
  - 50 percent target for Metro Station Policy Area home-based work trips
  - 35 percent target for Plan Area (excludes Metro Station Policy Area)
  - 25 percent target for all employees working within the plan area
Mobility: Proposed Plan Amendment
Scenario #2

- 0%-25% capacity used
- 26%-50% capacity used
- 51%-75% capacity used
- 76%-100% capacity used
- over 100% capacity used
Mobility: Proposed Plan Amendment Scenario #2 with Mitigation

- 0%-25% capacity used
- 26%-50% capacity used
- 51%-75% capacity used
- 76%-100% capacity used
- over 100% capacity used

Preliminary Recommendations
Preliminary Recommendations

Existing Conditions

Proposed Plan Amendment
Scenario #2 with Mitigation

Shady Grove Plan Area
Proposed Amendment's Build-Out Intersection Capacity
Revised Speeds, without Crabbs Branch Way Center Turn Lane
Congestion Mitigated with Phasing and Geometric Improvements
Sabra & Associates, Inc. (SAI) has been working with staff to study potential mitigations at MD 355 and Gude Drive, including the following options:

**At Grade**
- Adjusting the HCM standard to 80 or 100 average seconds delay with geometric adjustments

**Grade Separated**
- Gude Drive overpass
- Full interchange
Staging Status

Stage 1
1. The Greater Shady Grove TMD was approved in May 2006.

Stage 2
1. Shady Grove Station (Jeremiah Park) has a dedicated 8.1 acre park-school site.
2. Kelly Park in Gaithersburg will have a new elementary school (Gaithersburg Cluster) by 2022.

Stage 3
1. DGS and EYA have entered into an agreement to provide space for an urban library on the ground level of a new multi-family residential building at Shady Grove Station, Westside.
2. The Parks Department has implemented:
   - Amity Drive Neighborhood Parks (0.67 acres)
   - Conservation Meadow Park (12 acres)
3. The Parks Department has acquired:
   - Derwood Station Neighborhood Park (4.25 acres)
   - Piedmont Crossing Local Park (9.77 acres).
Staging Status

Stage 3

4. Crabbs Branch Way within the CPS has been reconstructed with on-street parking, a median, and a shared use path. New shared use paths have been installed along Redland Road, east of Crabbs Branch Way. New sidewalks have been installed along the frontage of the Townes of Shady Grove Road, east of the CSX tracks.
Staging Status

Stages 2-3

- The Montgomery County 2017 MDOT Priorities letter did not include the MD 355-Gude interchange as a potential project.
  - Prior priority letters did include the MD 355-Gude Interchange as a potential project.

- The Crabbs Branch Interchange is not included in the County’s CIP. Since 2006, no physical roadway changes have occurred at MD 355 and Gude Drive.

- No new development has taken place at the Grove Shopping Center since 2006. The Montgomery County Public School (MCPS) Bus Depot has an approved Preliminary Plan (Shady Grove Station), but alternative site or sites to relocate the school bus have not been identified.

![Staging Sequence: Relocation of the County Service Park](image-url)
Staging

Subdivision Staging Policy

Subdivision Staging Policy (SSP) provides guidance on matters concerning land use development, growth management, and related issues (transportation and schools).

- SSP is approved by the Council (every four years) and administered by the Planning Board.
  - Current SSP: 2016-2020
  - Next update underway; Adoption scheduled November 2020

2016-2020 Subdivision Staging Policy

A new schools test that evaluates capacity at the individual school level is added to the Annual Schools Test. School facility payments are eliminated, and the school impact tax is increased by 33 percent instead. Student generation rates are required to be updated on a biennial basis.

Projected cumulative utilization rate more than 120 percent at any school level across the entire cluster is the threshold at which new residential development is halted.

Current Moratorium Clusters:
- Montgomery Blair (124.3%)
- Albert Einstein (130.1%)
- Walter Johnson (129.3%)

Elementary School Threshold: Projected utilization rate of 120% and projected seat deficit of 110 seats or more.

Middle School Threshold: Projected utilization rate of 120% and projected seat deficit of 180 seats or more.
## Preliminary Recommendations

### Public Benefits and Zones

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<th>Major Public Facilities</th>
<th>Connectivity and Mobility</th>
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<td>Transit Proximity</td>
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<td>Connectivity and Mobility</td>
<td>Minimum Parking</td>
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### Diversity of Uses and Activities

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<td>Dwelling Unit Mix</td>
<td>Small Business Opportunities</td>
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### Quality of Buildings and Site Design

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<th>Architectural Elevations</th>
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### Protection and Enhancement of the Natural Environment

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<td>Energy Conservation and Generation</td>
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<td>Habitat Preservation and Restoration</td>
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<td>Recycling Facility Plan</td>
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### Zone Specifications

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Recommended Public Benefits

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

- Fifteen (15) percent Moderately Priced Dwelling Units (MPDUs) as the highest priority public benefit.
  - 25 percent on the WMATA-Metro property.

- The provision of major public facilities, including but not limited to a recreation center, new neighborhood parks and open spaces, and undergrounding of utilities.

- Connectivity and mobility, including but not limited to, neighborhood services, streetscape improvement, public parking, minimum parking and trip mitigation.

- Quality building and site design, including but not limited to, exceptional design, public open space, and public art.

- Diversity of uses and activities, including but not limited to, moderately priced dwelling units, dwelling unit mix, care centers, small business opportunities, and enhanced accessibility for seniors or the disabled.

- Protection and enhancement of the natural environment, including but not limited to, tree canopy, vegetated roof, habitat preservation and restoration, and energy conservation and generation.
Project Schedule

- **October 2018 – October 2019**: Staff outreach, analysis and Plan development

- **Winter 2019**: Planning Board Public Hearing and worksessions

- **Winter 2020**: County Executive Review

- **Spring-Summer 2020**: County Council’s Public Hearing and worksessions