

Effective noise control will ensure the sustainability of the planning area as a desirable place to live, work, and conduct business. Roads, streetscapes, residences, and public areas must be designed and located to maximize noise attenuation. This Plan recommends:

- Supporting noise-compatible site design along Shady Grove Road, MD 355, Metro and CSX rail lines, the Solid Waste Transfer Station, and Roberts Oxygen.
- Incorporating compliance with the Adopted County Noise Control Ordinance (Chapter 31B of the County Code) and the Planning Board's *Staff Guidelines for the Consideration of Transportation Noise Impacts in Land Use Planning and Development*.
- Providing noise walls along Shady Grove Road and I-370 if noise levels are found to exceed appropriate standards and guidelines.
- Incorporating noise berms and other mitigation strategies for residential uses along the Metro access road as part of redevelopment of the County and the M-NCPPC properties.
- Investigating the feasibility of eliminating the CSX train whistle as a noise source through CSX policy changes or changes in the at-grade crossing.
- Wherever possible, locating structured parking adjacent to CSX tracks to mitigate noise.

Air Quality

Montgomery County currently does not meet the National Ambient Air Quality Standards set by the Environmental Protection Agency, creating health concerns stemming from exposure to ground level ozone. The main sources of these pollutants are utilities and other industries, motor vehicles, small gasoline powered engines, and small businesses using solvents, cleaning solutions, paints, and insecticides. In the Washington region, motor vehicles account for 30 to 40 percent of the ozone.

After they are emitted, these pollutants can travel several miles before reacting to form ozone. Accordingly, multi-jurisdiction strategies are needed to address ozone. Montgomery County must continue ongoing initiatives to reduce emissions. At the master plan level, these initiatives should include transportation demand management strategies that encourage people to reduce motor vehicle trips and miles traveled. Providing residential units close to transit can contribute significantly to this reduction.

Odors emanating from the Solid Waste Transfer Station are an additional air quality concern in the Shady Grove Sector Plan area. This Plan recommends:

- Designing new development and redevelopment to minimize the need for motor vehicle trips.
- Limiting Metro parking to the existing 6,000 spaces.
- Providing safe and convenient pedestrian and bicycle access to Metro, community retail centers, recreation, and employment areas within the Shady Grove planning area, and link this system to regional trail networks.
- Providing incentives for transit use to minimize single-occupant vehicle travel.
- Working with the Solid Waste Transfer Station to control odors by eliminating or relocating its yard waste processing area or through other innovative measures.

IMPLEMENTATION

To achieve a vital, sustainable community, this Plan recommends implementation strategies for zoning, staging public facilities, and guidelines for project plan, subdivision, and site plan review. Staging that coordinates residential and commercial development with transportation improvements and a new mixed-use zone for Metro station areas outside Central Business Districts are key implementation strategies.

STAGING

Staging governs the timing of development and public facilities, not the total amount of development or the mix of commercial or residential development. This Plan stages new housing and commercial uses with public facilities to avoid further traffic congestion, crowded schools, and inadequate recreation. Staging requirements will help ensure that quality of life in the Shady Grove planning area will not be degraded due to a lack of public facilities.

This Plan supports staging strategies that are responsive to public fiscal concerns. The Plan's proposals to relocate County Service Park facilities, create a new urban street network, provide one elementary school, and establish several new public parks will require some form of public/private partnerships or direct private funding.

STAGING PRINCIPLES

The proposed staging principles are based on the following goals.

- Address public fiscal concerns. The timing and sequence of development should be responsive to funding for capital improvements. Funding will come from a variety of sources including private funds. Public facilities that directly benefit new development should be financed without undue burden on the County.
- Coordinate development with public facilities. Providing public facilities in conjunction with land development can help ensure their timely delivery and reduce their cost.
- Promote residential development. Staging triggers should ensure adequate capacity for residential uses to avoid preemptive use of available capacity by commercial development.
- Support a strong, vibrant community. The delivery of public facilities in sequence with development can help strengthen community identity and its economic viability.
- Respond to market demands. Staging should allow development that responds to market demand for housing and development adjacent to the Metro station.

STAGING SEQUENCE

<p>STAGE 1</p>	<p>County Council adoption of zoning text amendments and sectional map amendments that enable the Plan's implementation.</p> <p>Establish a Transit Management District (TMD) to increase transit ridership by requiring resident and business participation in transit programs, promoting transit alternatives, and increasing public awareness of transit options. No new development may occur until a TMD is created.</p>
<p>STAGE 2</p> <p>STAGING TRIGGER</p>	<p>All properties within the Metro Neighborhoods up to 1,700 dwelling units and 300,000 square feet of commercial development, giving priority to development closest to the Metro station. (Relocation of County facilities is exempt from staging and can proceed at any time.)</p> <p>First report to Planning Board from the TMD showing transit objectives and implementation measures.</p>
<p>STAGE 3</p> <p>STAGING TRIGGERS</p>	<p>All properties within the Metro Neighborhoods up to 3,000 dwelling units and 600,000 square feet of commercial development.</p> <p>Funding for the partial interchange of Crabbs Branch Way and the Metro access road. Funding for upgrading Redland Road between Crabbs Branch Way and MD 355.</p>
<p>STAGE 4</p> <p>STAGING TRIGGERS</p>	<p>All remaining properties within the Metro Neighborhoods up to the remaining residential units, commercial density, and development areas outside the Metro Neighborhoods.</p> <p>Funding for Jeremiah Park located on the school bus depot site. Funding for a pedestrian underpass of Shady Grove Road along Crabbs Branch Way.</p>

Relocating County Service Park facilities is the key to creating attractive and compatible Metro Neighborhoods. Creation of the proposed Metro North Neighborhood and Jeremiah Park cannot be achieved relocation of public facilities. If relocation of County Service Park facilities does not occur and total residential yield is less than anticipated, a new local park is still needed given the current deficit of active recreation in the regional area.

FUNDING MECHANISMS

A variety of funding sources will be necessary to implement this Plan's vision, given that County sources are likely to be insufficient. State and Federal highway funding are possible sources for road, transit, pedestrian, and bike improvements. Non-profit groups and private foundation grants are possible sources for senior housing, public art, and streetscaping. Private funding sources can be used for land dedication, land swaps, developer-provided facilities, maintenance partnerships, impact taxes, and development district payments.

Urban Maintenance District

Creation of an Urban Maintenance District: a public/private partnership that provides maintenance, promotion, and programmed activities in the Metro Neighborhoods. An urban maintenance district, established and operated as a public/private partnership, is a tool to ensure enhanced public services to this new community. It's functions could include maintaining and enhancing streetscape, promotion, cultural activities programming, specialized transportation, and business support.

Development District

A single development district or multiple districts should be considered as a possible funding source to help implement the infrastructure improvements required by this Plan. This special taxing district would have the authority to finance infrastructure improvements needed to support land development by issuing tax-exempt bonds repaid through special assessments or taxes within the district.

Development districts can provide a funding mechanism for expedient provision of infrastructure such as libraries, schools, police and fire stations, transit facilities, parks, and recreation. They are not intended to finance improvements that are considered the developer's responsibility under APFO and site plan review requirements. This Plan does not require the provision of a development district but suggests that it may be a valuable funding approach.

ZONING PLAN

The planning area's current zoning pattern reflects the vision of the 1977 *Shady Grove Sector Plan* and has allowed the development of industrial areas, residential neighborhoods, and commercial centers. Achieving this Plan's vision to transform the Metro station area into a mixed-use residential community will require new and amended zones, and rezoning of particular sites.

Existing and Proposed Zoning

This Plan continues the 1990 Plan's mix of Euclidean and floating zones to create the desired high quality environment. It also recommends amendments to the Zoning Ordinance that update uses, encourage housing and allow site plan review.

Objectives

- Provide for housing in the I-270 Corridor.
- Encourage assembly of Metro Neighborhood properties into well-coordinated, residential blocks with a network of interconnected streets.
- Achieve the recommended mix of uses and density distribution in the Metro Neighborhoods.
- Achieve a high quality, urban environment with the provision of adequate public benefits and amenities.
- Create a technology corridor along Shady Grove Road.
- Encourage future redevelopment of MD 355 South into a mixed-use corridor.
- Protect the existing residential communities from incompatible development through site plan review.

Recommendations (See Proposed Zoning Map and Table)

The following zoning text amendments are necessary to implement the Shady Grove Sector Plan:

- Amend the I-3 zone to permit research and technology uses, and permit limited commercial mixed-uses.
- Amend the R&D zone to require site plan review under standard method.

- Introduce a new mixed-use Metro station zone (MXR) to achieve the proposed Metro Neighborhoods. This new zone will require a minimum of two-thirds housing of the total allowable FAR to promote housing.
- Amend the I-1 zone to permit a limited amount and type of commercial services in visible locations.
- Introduce an overlay zone for I-1 property in MD 355 South to allow mixed uses.

The following summarizes the zoning recommendations for each area of the Sector Plan:

Derwood Residential Communities

- No zoning changes.

Shady Grove Road Technology Corridor

- Rezone Sites 2, 3, 4, 5 and 8 from I-1 to R&D to permit technology, and research and development uses. These sites are also suitable for I-3 optional method for mixed-use housing.
- Rezone Sites 6 and 7 to the I-3 zone with Site 7 also suitable for housing with a PD 15 zone (a maximum of 15 du/ac).
- Amend the I-3 zone to allow research and development uses.
- Amend the R&D and I-3 zones to allow existing building supply uses to be conforming land uses.

Metro Neighborhoods

- Rezone all properties except the Industrial Core area to a new, non-CBD Metro station zone, the proposed MXR zone that will provide a housing density incentive, a range of uses, and will require public amenities. This new zone will function in the same way as current CBD zones, but with density recommendations suitable for the Metro station.
- Amend the Montgomery County Road Code to permit Commercial Business District Streets in mixed use, non-CBD centers.

Old Derwood Community

- Rezone properties along Redland Road from I-1 to an R-90 base zone with PD-35 (a maximum of 35 du/ac) to encourage redevelopment into residential uses near the station.
- Maintain the R-200 zone for the Derwood Bible Church and allow a PD-13 floating zone (a maximum of 13 du/ac).
- Recommend the Derwood Business Condominium as suitable for townhouse development with RT-6 zoning, (a maximum of 6 du/ac).

Office and Industrial Park

- Recommend an I-1 zone text amendment to permit a limited amount of mixed-commercial uses intended to serve area employees and visitors in appropriate business locations.
- Ensure that this mix is compatible with the residential Derwood Station community.

MD 355 South

- Place an overlay zone on these I-1 properties that permits a broader range of mixed uses, such as office and housing, without rendering the existing uses nonconforming.

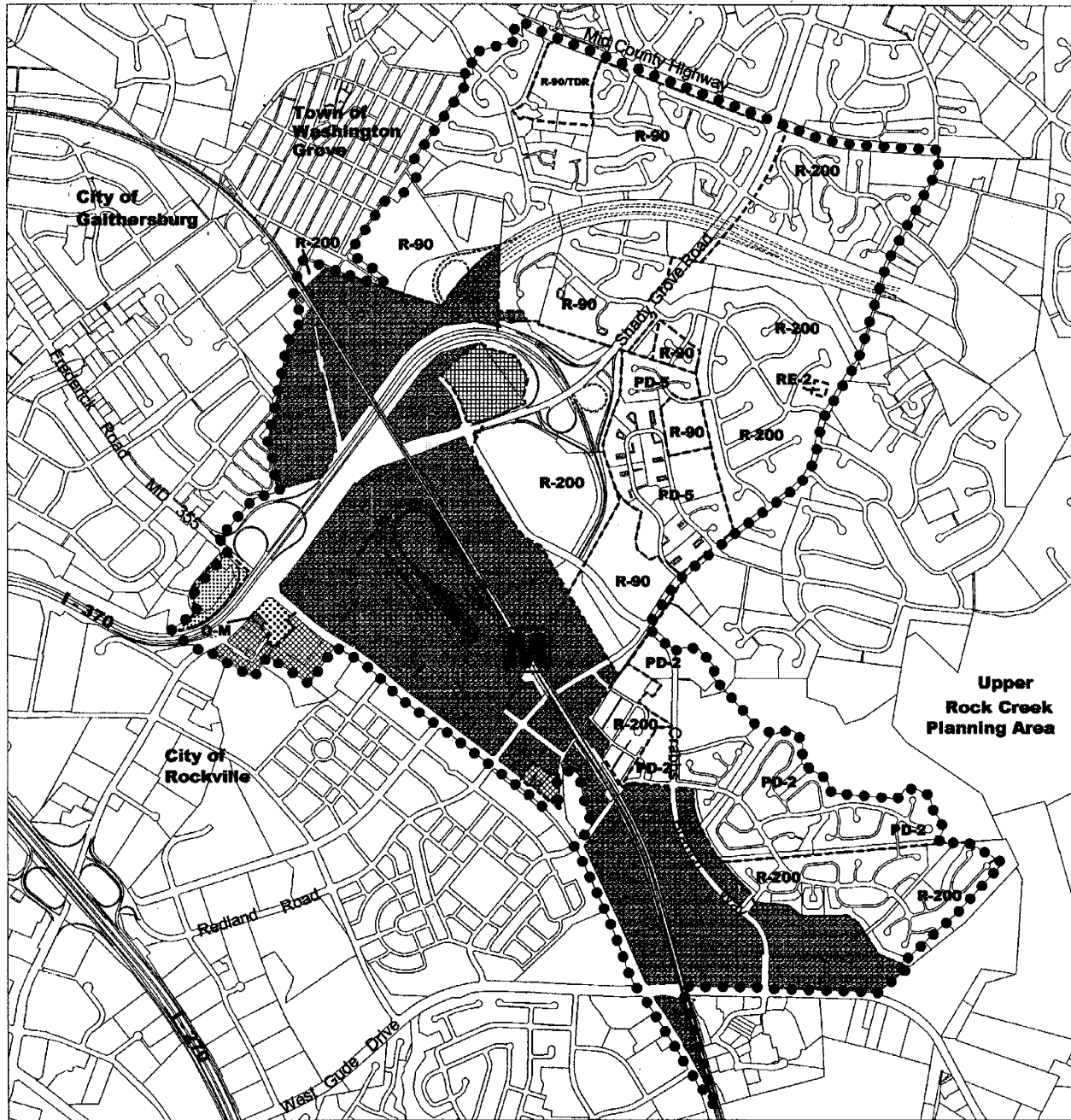
Proposed Zoning

PROPERTY	ACRES	EXISTING ZONING	PROP. EUCLIDIAN ZONING	PROPOSED FLOATING ZONING	RECOMMENDED DENSITY
Derwood Communities - no zoning changes					
Shady Grove Road Technology Corridor					
Shady Grove Plaza	29	C-3, TSM, OM			
Casey 6	25	I-1	I-3		.3 FAR
Casey 7	17	I-1	I-3	PD 20*	
Casey 2	5	R-20	R&D	I-3 w/ housing	.5 FAR
Casey 3	13.5	I-1	R&D	I-3 w/ housing	.5 FAR
Sears Property (Great Indoors)	13.5	I-1	R&D	I-3 w/ housing	.5 FAR
Post Office	13.5	I-1	R&D	I-3 w/ housing	.5 FAR
Dept. of Liquor Control		I-1	R&D	I-3 w/ housing	.5 FAR
Metro Neighborhoods					
Metro West	38	I-1	MXR		1,200 du 600,000 sf 1.25 FAR
Metro South	25.5	I-1/C-3	MXR		550 du 205,000sf 1 FAR
Metro North WMATA	41.5	I-1	MXR		500 du 26,000 sf 1 FAR
DPWT	27	I-1	MXR		1,000 du 40,000 sf 1 FAR
MCPS food service	3	I-1	MXR		30 du .5 FAR
Metro East/Old Derwood					
Derwood Bible Church	4	R-200	R-200	PD-13*	
VEIP	3	I-1	R-90	PD-35*	
Somerville	4	I-1	R-90	PD-35*	
Derwood Business Condominiums	2.5	I-1	I-1	RT-6	
Industrial Core - no zoning changes					
Buffer Area					
The Grove		C-1	C-1		
MCPS	45.5	R-200	R-90	PD-5*	
M-NCPPC	11.5	R-200	R-90	PD-15*	
Casey Mill Creek	58	Development plan filed			
Office Industrial Park					
All properties	113	I-1			
MD 355 Corridor					
All properties	34.5	I-1	I-1	I-1 w/overlay for mixed use housing	
Oakmont Industrial Park					
All properties	49.5	I-1			

* Proposed Planned Development zones represent maximum allowable units per acre including MDPU bonus density. Dwelling units does not include special exceptions for housing.

* SF includes office, retail, and industrial development.

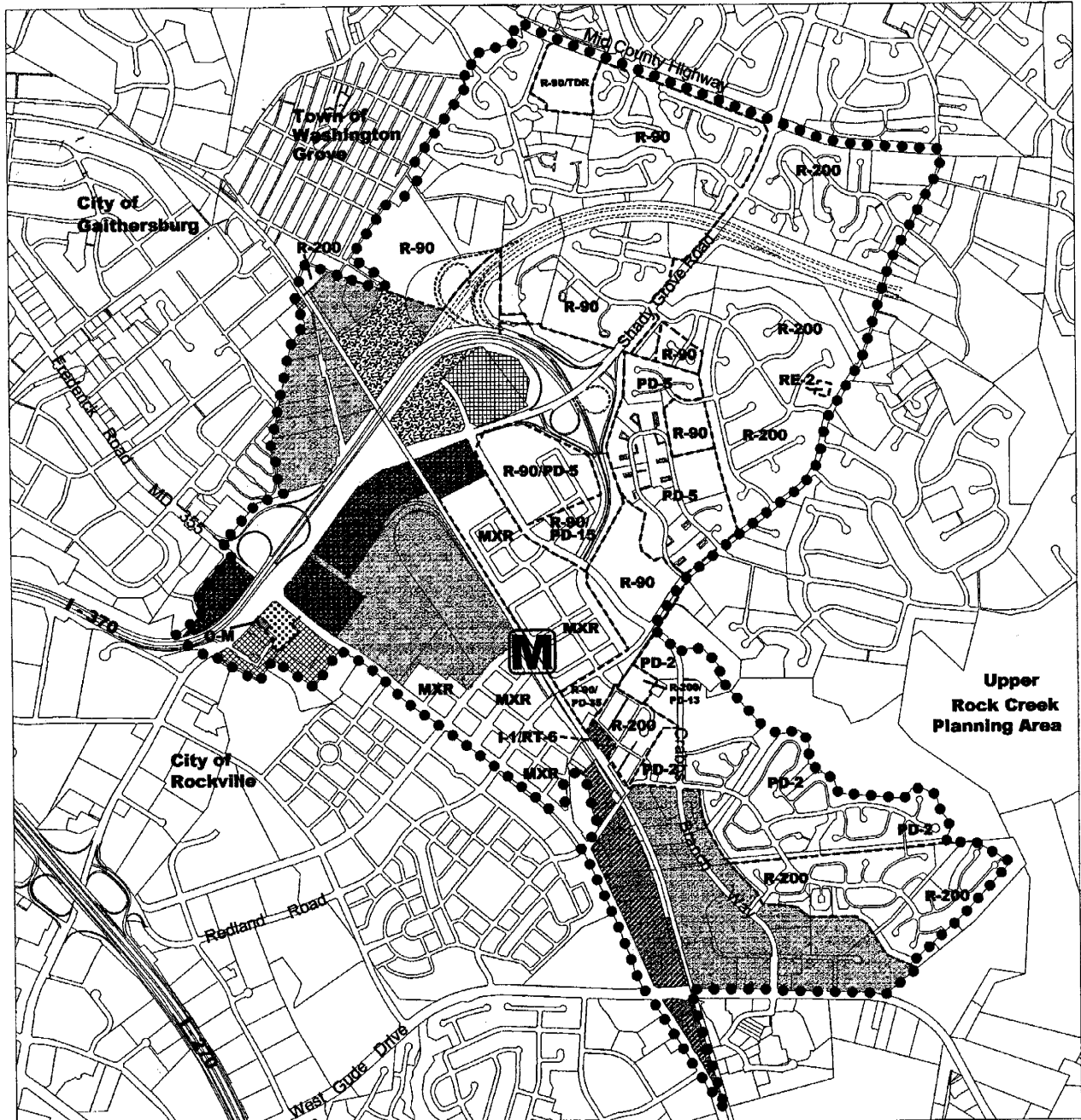
Existing Zoning



RE-2 Residential, Single-Family	TS-M Transit Station, Mixed
R-200 Residential, Single-Family	O-M Office Building, Moderate Intensity
R-90 Residential, Single-Family	C-1 General Commercial
R-90/TDR Residential, Transferable Development Rights	C-3 Convenience Commercial
R-20 Residential, Multi-Family	I-1 Light Industrial
PD-2 Planned Development	----- Zoning Boundary Lines
PD-5 Planned Development	●●●● Shady Grove Sector Plan Boundary



Proposed Zoning



RE-2	Residential, Single-Family	PD-13	Proposed Planned Development	C-3	Convenience Commercial
R-200	Residential, Single-Family	PD-15	Proposed Planned Development	I-1	Light Industrial
R-90	Residential, Single-Family	PD-35	Proposed Planned Development	I-1	Proposed Light Industrial (Overlay)
R-90/TDR	Residential, Transferable Development Rights	MXR	New Residential, Metro Mixed Use	I-3	Proposed Industrial Park
R-20	Residential, Multi-Family	TS-M	Transit Station, Mixed	R&D	Proposed Research & Development
PD-2	Planned Development	O-M	Office Building, Moderate Intensity	---	Zoning Boundary Lines
PD-5	Planned Development	C-1	General Commercial		



GUIDELINES FOR REGULATORY PLANNING AND REVIEW

This section highlights key guidelines for housing, transportation, parks, recreation and amenities and transit-oriented development that should be implemented during regulatory review. For the complete set of guidelines, see each chapter of the Plan.

Housing Guidelines

Expanding housing opportunities is a major objective of this Plan. An increase in housing at the Metro station will increase transit ridership and provide housing close to jobs in the I-270 Corridor. A range in unit types will help support the need to provide for the County's diverse population. The following guidelines should be achieved in the regulatory planning and review of any project. This Plan recommends:

- Achieving a minimum of two-thirds housing of total FAR within the new MXR zoned Metro Neighborhoods to promote housing at the Metro station.
- Achieving a maximum of 75 percent multi-family units and a minimum of 25 percent single-family attached units on the east side of the Metro station.
- Achieving a range of unit sizes to accommodate families, singles, and couples.
- Providing for senior housing within various locations, especially on public property.

Transportation Guidelines

An interconnected grid of local streets is a major organizing element in the mixed-use residential communities of the Metro Neighborhoods. Local streets in the Metro station area are important for traffic distribution, and access to Metro parking, kiss-n-ride, and pedestrian facilities. Their streetscape improvements will contribute to the community's vitality, street life, and overall attractiveness. The following guidelines should be achieved in the regulatory planning and review of any project. This Plan recommends:

- Creating local streets as commercial business streets with short intersection spacing, street-oriented development, and minimal number of driveway curb cuts. Alleys are not required, but are not precluded from consideration.
- Allowing a variable right-of-way for the proposed Urban Boulevard in the Metro West Neighborhood. This right-of-way will narrow as it nears the Metro station. Its wide median should be developed with multi-age recreation, seating, pathways, and amenities.
- Creating urban streets with pedestrian-friendly characteristics such as tight corner radii, and special paving treatment for crosswalks and sidewalks adjacent to retail or for restaurant outdoor use.
- Allowing on-street parking to be counted as meeting the minimum parking requirements to reduce the size of off-street parking facilities.
- Consider viewing the minimum parking requirements as the maximum allowed.
- Limit the supply of employee and resident parking to encourage Metro use and reduce local traffic.
- Development shall adhere to the streetscape plan to create the desired community character.

Transit-Oriented Development Guidelines

This Plan strives to achieve transit-oriented development throughout the planning area. Transit-oriented development locates buildings close to the street with parking areas to the side, rear, or internal to the development to minimize walking distances from transit stops. Building entrances and retail storefronts face the street and help animate the sidewalk. Regulatory planning and review should ensure adherence to the Plan's transit-oriented design principles. Amendments to Chapter 49, the Montgomery County Road Code will support transit-oriented development. This Plan recommends the following:

- Achieve an urban form of development within the Metro Neighborhoods with the buildings close to the street. Locate storefront and building entrances to face the street to animate and improve orientation.
- Include new Commercial Business Streets in the Montgomery County Road Code update, and permit their use in non-CBD areas.
- Expand provisions for streetscape to allow for CBD-type streetscape treatment in non-CBD areas.

Parks, Recreation, and Amenities Guidelines

Adequate recreation, open space, and amenities contribute to creating an attractive and livable residential community. Each Metro Neighborhood should be developed with sufficient recreation, open space, and amenities to meet resident and employee needs within their own community and without crossing major roads. Review should establish that development projects seeking additional density are providing sufficient recreation and open space as recommended. This Plan recommends:

- Within Metro West, provide the Town Square, an urban park of approximately 1.5 acres; the Promenade, a linear park approximately 50 feet wide located along Street D; a small public use park located adjacent to the CSX tracks near Redland Road; and a public park located within the median of the urban boulevard.
- Within Metro South, continue the Promenade linear park with the same design characteristics as in Metro North along Street D.
- Within Metro North, development should include the Town Common, an urban park of approximately 1.8 acres, and several small public use parks within the neighborhood.
- Within Jeremiah Park, development should dedicate land for a local park and another public facility such as a library, recreation center, or aquatic center. A small public use park for the residents should also be developed.
- All development shall satisfy the on-site recreation guidelines in the *Recreation Guidelines for Residential Development*.
- Provide the amenities recommended in this Plan for each Metro Neighborhood to help establish long-term value, enjoyment, and attractiveness. Use high quality materials and include artwork, fountains, seating areas, and other special features as appropriate. Artwork that helps create a sense of place, tells Derwood's history, or provides a sense of discovery and participatory features should be encouraged.
- Achieve continuous streetscape along all local streets within the Metro Neighborhoods that allows tight spacing of shade trees, curbside street lighting, and street furnishings such as seating and trash receptacles. Off-site streetscaping may be required to complete a full block or to create pedestrian access to Metro.
- Require extensive streetscape and landscaping in development outside the Metro Neighborhoods, such as the Shady Grove Road Corridor, to increase the sense of nature and attractiveness.

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