Bikeway Classifications

Ref. No.	Name	Limits	Class Type	Comments
B-1	MD 355	Length of planning area	Shared Use Path Class I	Locate along west side
B-2	Shady Grove Road	Length of planning area	Bike Lanes Class II	Provide sidewalks along both sides
B-3	Midcounty Highway	Length of planning area	Shared Use Path Class I	Locate bike path on west side, sidewalk on east side
B-4	Crabbs Branch Way	Length of planning area	Shared Use Path Class I (See Proposed Trail Comments)	Locate bike path on east side from Amity Drive to Redland Road, Shift to west side south to Gude Drive. Provide connections to the Metro Station
B-5	Gude Drive	Length of planning area	Shared Use Path Class I	Locate on north side, tie into Rockville's Bicycle Beltway
B-6	Redland Road	Crabbs Branch east to Muncaster Mill	Either a Shared Use Path, Class I or sidewalks with Class III	Classification to be determined at project planning
B-7	Metro access road	Shady Grove south to Metro	Shared Use Path Class I	Provide connection to Park Overlook
B-8	Park Overlook	Metro access road to Blueberry Hill Park and Needwood	Shared Use Path Class I	Obtain easements from homeowners' association
B-9	Needwood Road	Blueberry Hill Park to Muncaster Mill	Shared Use Path Class I	Locate on south side of roadway
B-10	Redland Road	Crabbs Branch west to MD 355	Bike lanes Class III	Unmarked lanes adjacent to parking
B-11	New Road	Both sides of Metro station	Bike lanes Class III	Unmarked lanes
B-12	Amity Drive	Length of planning area	Bike lanes Class III	Unmarked lanes
B-13	Indianola Drive	Crabbs Branch east to park property	Bike lanes Class III	Study as an access to Upper Rock Creek Park
B-14	Crabbs Branch Stream Valley Park	Redland to regional park	Shared Use Path Class I	Study as an access to Upper Rock Creek Park

Roadway System

The proposed roadway recommendations improve the existing network by providing intersection improvements, connecting roadway, and creating a series of new streets to improve access within the Metro Neighborhoods. The recommendations that follow range from major highway to local street improvements (see Proposed Roadway Network and Classification Table).

Intercounty Connector (ICC) and Midcounty Highway Extended

The proposed ICC provides a major route for east-west traffic across the County. This Plan retains the previous plan's recommendations for right-of-way and number of lanes. Future decisions regarding the ICC will be made in the context of the federal Environment Impact Statement (EIS) process. If the Final EIS concludes that the full ICC cannot be built as envisioned in area master plans, then alternative east-west transportation projects will be considered. These alternative options are described in the 2002 *Transportation Policy Report* as Option 1 and Option 2 and are included in this Plan's Appendix. Either option is consistent with the Plan's recommendations.

MD 355

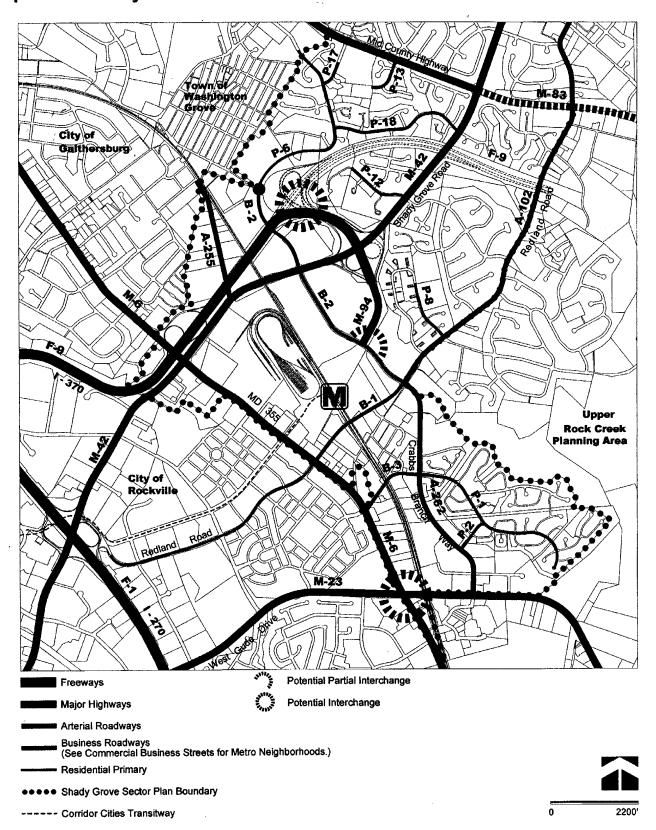
MD 355 runs from Friendship Heights to Clarksburg. Within urban metro areas, the roadway is treated as an Urban Boulevard, divided with a median, requiring slower speeds, enhanced with streetscape and emphasizing pedestrian safety and access. This urban character should be achieved along MD 355 between the Solid Waste Transfer Station and Indianola Drive, and is consistent with road character in Rockville and Gaithersburg. This Plan recommends:

- Maintaining classification as a Major Highway with six lanes, divided. Increase the right-of-way to 150 feet outside the Metro Neighborhoods to ensure adequate curbside space for pedestrians and streetscape improvements.
- Creating an Urban Boulevard character between Indianola Drive and the entrance to the Solid Waste Transfer Station. Maintain the existing 120-foot right-of-way with additional space through a public improvement easement for adequate sidewalks. Roadway design characteristics will include features appropriate for Metro areas with significant pedestrian traffic, such as increased streetscape improvements, slower travel speeds, short intersection spacing, and minimized pedestrian crossing distances at intersections.
- Minimizing direct driveway access from MD 355. The proposed street system is designed to consolidate access to side streets. If driveways are allowed because no alternative access is feasible, use driveway aprons not corner curb returns. Driveway ramps must reach the level of adjacent sidewalk to maintain a safe sidewalk for pedestrians. Avoid driveways with defining curbs and medians that increase pedestrian exposure to turning vehicles and that encourage high speed turning movements.
- Maximizing pedestrian safety, especially at intersections, by minimizing pedestrian crossing distance, increasing pedestrian time to cross, and ensuring adequate sight distances.
- Allowing short block lengths intersecting MD 355 in the Metro station area (see Commercial Business Streets for Metro Neighborhoods). Shorter block lengths better accommodate residential development, improve Metro access by increasing the number of possible routes to the station, and create a more pedestrian-friendly environment.
- Providing the recommended streetscape improvements.

Shady Grove Road

This road is a major traffic route through the planning area connecting with two interstate highways, I-370 and I-270. Local access is limited to a few connecting streets along Shady Grove Road. This Plan recognizes Shady Grove Road's role in cross-County travel. Improvements should address local pedestrian access, noise impacts, and streetscape character.

Proposed Roadway Network



- Maintain Major Highway classification with six-lanes, divided, with an increase to a 150-foot right-ofway. Increased right-of-way will provide adequate space for pedestrians and streetscape improvements.
- Improve Shady Grove Road's overall character with streetscape improvements.
- Provide noise walls east of I-370 along residential properties, if found in compliance with the County's noise guidelines.
- Provide a shared use path (Class I) underpass at Crabbs Branch Way under Shady Grove Road
 (See Proposed Bikeways).

Redland Road

Redland Road provides a travel route between Muncaster Mill Road and MD 355. It is classified as an Arterial. (assuming approval by Council) This Plan reaffirms that Redland Road should not be widened to four lanes north of Needwood Road.

- Achieve an 80-foot right-of way with a maximum of two lanes from Needwood Road to Muncaster Mill Road.
- Permit roadway improvements between Needwood Road and Crabbs Branch Way that minimize negative impacts on Park Overlook, the adjacent townhouse community.
- Achieve a 100-foot right-of-way from Crabbs Branch Way to MD 355 to create a four lane, divided Commercial Business Street. Support on-street parking during off-peak traffic periods to serve local businesses.
- Develop a full intersection at Yellowstone Way to improve access to Metro and to new residential development.
- Provide a Class III bikeway in the Metro Neighborhoods to accommodate bikes and on-street parking during non-peak traffic periods.

Crabbs Branch Way

Crabbs Branch Way is a significant travel route through the planning area from Gude Drive to Shady Grove Road. It provides access to residential areas, the Metro station and the County Service Park. The road does not extend north of I-370 although a bridge under I-370 was built in anticipation of such an extension. This Plan recommends:

- Extending Crabbs Branch Way with an 80-foot right-of-way, under I-370 to Amity Drive, to improve local connections. To discourage cut-through traffic, a traffic circle should be considered at the intersection of Crabbs Branch Way and Amity Drive. Additional traffic calming measures along Amity Drive should also be considered.
- Achieving a 100-foot right-of-way between Shady Grove Road and Redland Road to accommodate four lanes and a median. Support on-street parking during off-peak hours to provide needed parking for the local park and residents. During peak hours parking lanes will become travel lanes.
- Creating a partial interchange connecting the Metro access road to Crabbs Branch Way to provide more direct access to I-370.
- Maintaining the current 80-foot right-of-way between Redland Road and Gude Drive.

Interchanges

- Create grade-separated interchanges at:
 - Metro access road and Crabbs Branch Way (limited to the east side)
 - MD 355 and Gude Drive, if found necessary. Minimize impacts on adjacent businesses by measures such as depressing MD 355 under Gude Drive
 - ICC and I-370 (to be developed in the ICC's Draft Environmental Impact Statement).

Local Street Network

This Plan recommends Commercial Business Street standards to achieve urban street characteristics in the Metro Neighborhoods. Such characteristics include short block intersecting spacing, tight corner radii, variable rights-of-way, and urban streetscape treatments. This Plan recommends:

- Providing a new grid system of local streets forming short walkable blocks within the Metro station vicinity (see Commercial Business Streets for Metro Neighborhoods). Those streets that are listed in the Street and Highway Classification table are needed to improve access to Metro and local circulation. Additional streets that are illustrated but not listed in the table are also desired.
- Within the Metro Neighborhoods, all streets shall be built to Commercial Business Street standards with primarily 70-foot right-of-ways.
- Designing local intersections with pedestrian-friendly characteristics such as minimal corner radii, raised pedestrian crosswalks, and special crosswalk pavement.
- Providing traffic calming measures along all residential streets experiencing cut-through traffic, particularly in the Old Derwood community.

Other Roadway Improvements

These recommendations are not required by this Plan but are consistent with its objectives.

- If the vacant Casey properties 6 and 7 are developed with relocated County services, permit a new, private street over the CSX tracks and north of I-370, connecting Crabbs Branch Way to Oakmont Avenue to improve local access for industrially zoned properties. Also, study an "authorized vehicles only" ramp to and from I-370 to serve adjacent industrially zoned properties.
- Explore opportunities to create new street connections under the CSX tracks especially at the Metro station where expanding the existing pedestrian tunnel may be feasible.
- Study the need for a new interchange at Midcounty Highway and Shady Grove Road.

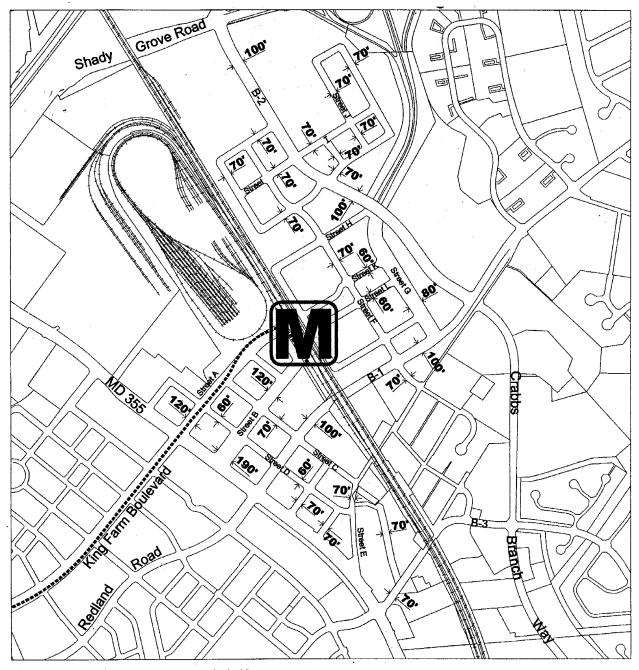
Parking Supply and Demand

Parking policies in Metro station areas should be part of an overall strategic plan to encourage transit use while meeting local business and resident parking needs. There is a significant demand for Metro parking spaces, with current facilities at capacity. To reduce future traffic and provide sufficient area to create a mixed-use residential community, this Plan recommends limiting the expansion of parking at the station. Locating residential units close to Metro rather than parking garages, decreases future traffic since a high percent of residents use Metro. Constrained parking at the Metro also results in higher number of transit trips to the station, via Ride-On and Metro buses, and the future Corridor Cities Transitway.

The Plan's parking recommendations strive to provide an adequate supply of short-term parking for retail, restaurant, and small business customers, and make more efficient use of shared parking opportunities with Metro garages through the Transportation Management District. This Plan recommends:

- Limiting the supply of Metro parking to the currently provided 6,000 spaces to reduce additional automobile traffic in the planning area.
- Designating short-term garage spaces and allow shared long-term parking spaces in off-peak periods to maximize use of parking facilities.
- Allowing on-street parking along major roads in non-peak periods on a case-by-case basis. Onstreet parking for local streets should be unrestricted. On-street parking contributes to pedestrian safety by physically separating the sidewalk from moving vehicles.
- Providing joint use of Metro parking spaces during non-peak hours for Metro Neighborhood residents. Consider minimum parking requirements as maximum parking permitted.
- Ensure that all parking facilities adjacent to residential development are designed to be compatible and attractive neighbors.

Commercial Business Streets for Metro Neighborhoods



Note: All 70' ROW streets to have parking on both sides.

All 60' ROW streets to have parking on one side only.

Final alignment of proposed roads to be determined by the Preliminary Plan.



----- Corridor Cities Transitway

Street and Highway Classifications

Roadway		Limits	Minimum ROW Width (feet)	Number of Travel Lanes
Freeways				
F-9	Interstate 370	Western Plan Boundary to Intercounty Connector	300	6, divided
F-9	Intercounty Connector (ICC)	I-370 to Redland Rd	300	6, divided plus Transitway/Bikeway
Major Highwa				
M-6	MD 355, Frederick Av	I-370 to Ridgemont Av	150	6, divided
M-6	MD 355, Frederick Av	Ridgemont Av to Indianola Drive	120	6, divided
M-6	MD 355, Frederick Av	Indianola Dr to Gude Dr	150	6, divided
M-23	Gude Drive	MD 355 to Eastern Plan Boundary	150	6, divided
M-42	Shady Grove Rd	Western Plan Boundary to I-370	150	6, divided
M-42	Shady Grove Rd	I-370 to Midcounty Hwy	120	6, divided
M-83	Midcounty Highway	Northern Plan Boundary to Redland Rd	150	4-6, divided
M-94	Metro Access Road	I-370 to Street "G"	150	4, divided, with exclusive transitway
Arterials				
A-102	Redland Road	Crabbs Branch Way to Needwood Road	80	4
A-102	Redland Road	Needwood Road to Midcounty Hwy Extended	80	2
A-255	Oakmont Avenue	Shady Grove Road to Northern Plan Boundary	80	2
A-262	Crabbs Branch Way	Gude Dr to Redland Rd	80	4
	Business District Streets			
B-1	Redland Road	MD 355 to Crabbs Branch Way	100	4, divided
B-2	Crabbs Branch Way	Gude Drive to Shady Grove Road	100	4, divided
B-2	Crabbs Branch Way Extended	Shady Grove Road to 1,000 feet north of I-370	80	4
B-3	Indianola Drive	MD 355 to Crabbs Branch Way	70	2
B-4	King Farm Boulevard Extended (Street "A")	1,100 LF from MD 355 to Metrorail Station	120	2
B-5	Street "B"	MD 355 to Street "D"	190	2
B-5	Street "B"	700 LF from Street "D" to Metrorail Station	120	2
B-6	Somerville Drive Extended (Street "C")	Street "A" to Street "E"	70	2
B-7	Street "D"	Street "A" to Street "E"	60	2
B-8	Paramount Drive (Street "E")	MD 355 to CSX Transportation	70	2
B-9	Street "F"	Crabbs Branch Way to Street "K"	70	2
B-10	Street "G"	Metro Access Road to Crabbs Branch Way	80	2

Roadway		Limits	Minimum ROW Width(feet)	Number of Travel Lanes		
B-11	Street "H"	Metro Acess Road to Street "F"	70	2		
B-12	Street "I"	550 LF west of Crabbs Branch Way to 900 LFeast of Crabbs Branch Way	70	2		
B-13	Street "J"	Street "I" to 700 LF north of Street "I"	70	2		
B-14	Street "K"	Street "F" to Street "G"	70	2		
B-15	Street "L"	Street "F" to Street "G"	70	2		
Primary Residential Streets						
P-1	Indianola Drive	Crabbs Branch Way to Crabbs Branch Park	70	2		
P-2	Monona Drive	Crabbs Branch Way to Indianola Way	70	2		
P-6	Amity Drive	Northern Plan boundary to Crabbs Branch Way Extended	70	2		
P-8	Needwood Road	Redland Road to Blueberry Hill Local Park	70	2		
P-12	Briardale Road	Shady Grove Road to 1,500 LF north of Shady Grove Road	70	2		
P-13	Miller Fall Road	Midcounty Highway to Shady Grove Middle School	70	2		
P-17	Taunton Drive	Amity Drive to Shady Grove Middle School	70	2		
P-18	Epsilon Drive	Shady Grove Road to Amity Drive	70	2		

These are the number of planned through lanes for each segment.

Not including lanes for turning, parking, acceleration, or other purposes auxiliary to through travel.

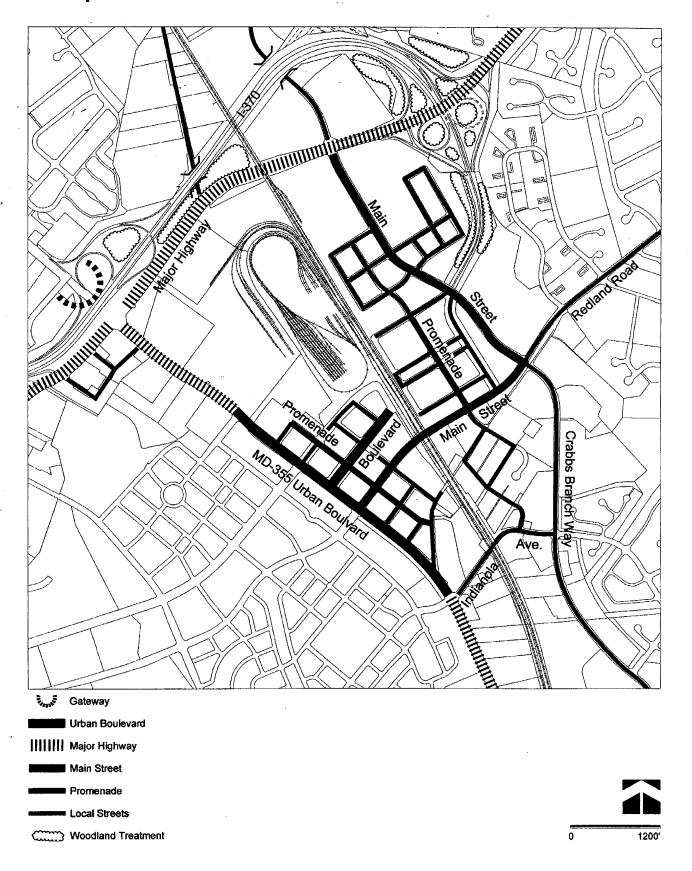
Streetscape Plan

The Shady Grove planning area needs a safe and an attractive pedestrian environment that encourages Metro use, contributes to social interaction, and provides a setting for public life. Currently, walking to Metro or nearby parks is challenging and unpleasant due to the lack of sidewalks and streetscape improvements. This Plan recommends an extensive network of streetscaping, sidewalks, trails, and crosswalks to improve the pedestrian environment. The recommended streetscape improvements create an attractive setting for pedestrian and business activity, reinforce the stability of existing neighborhoods, and promote the vitality of the new Metro Neighborhoods.

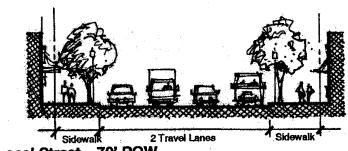
Objectives

- Encourage walking by creating an attractive pedestrian environment that improves access to Metro and other destinations.
- Strengthen community identity by developing streetscapes that distinguish each of the Metro Neighborhoods and the Metro station area.

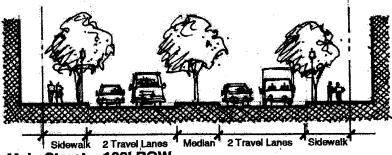
Streetscape Plan



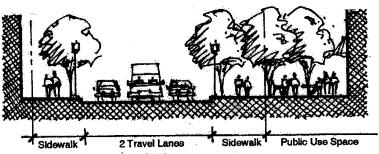
Proposed Cross Sections



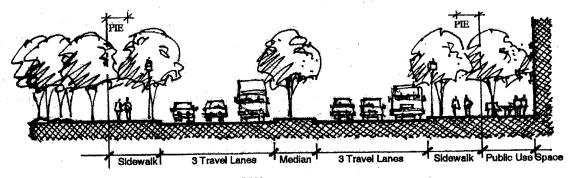
Local Street - 70' ROW



Main Street - 100' ROW



Promenade - 60' ROW



Urban Boulevard - 120' ROW

- Reinforce the street hierarchy by achieving a higher level of streetscape improvements along major corridors and within the Metro station area and in areas of significant pedestrian activity.
- Increase greenery to improve attractiveness and environmental quality by planting closely spaced street trees along all streets.
- Improve pedestrian safety with street lighting that also contributes to community character and identity.
- Reduce visual clutter and create attractive street corridors by placing utilities underground, coordinating public signage, and encouraging attractive commercial signage.
- Maintain streetscape improvements through public/private partnerships.

Concept

The streetscape concept enhances the existing corridors of Shady Grove Road and MD 355, and creates a new district of streetscape improvements centered in the Metro Neighborhoods. This concept supports the Plan's land use recommendations. A major theme of the streetscape concept is "regreening the Shady Grove" to create an attractive setting for existing and new communities. A separate document, the *Shady Grove Streetscape Plan*, will include detailed specifications on streetlights, street tree species, paving, and other streetscape elements (see Streetscape Concept and Street Cross-sections).

Shady Grove Road Corridor

- Upgrade Shady Grove Road with sidewalks, lighting, and extensive landscaping and street trees to create a green, attractive setting along its entire length.
- Reforest the right-of-way between I-370 and Shady Grove Road to increase the amount of greenery in the Corridor.
- Create a naturalized landscape within the I-370 interchange with Shady Grove Road and along both sides of the Metro access road to provide a greater sense of the natural environment.

MD 355 Corridor

- Create an Urban Boulevard from the Solid Waste Transfer Station to Indianola Drive to establish the identity of the Metro station area, facilitate walking, and improve Metro access.
- Within the Urban Boulevard, provide extensive street trees, and special sidewalk and crosswalk paving to improve pedestrian safety and encourage walking.
- Provide a double row of shade trees along both sides of the roadway to help create a boulevard character.
- Along the roadway outside the Metro Neighborhoods, north and south of the Metro station area, provide shade trees in a curbside lawn panel to separate pedestrians from moving traffic. Provide a six-foot wide sidewalk at a minimum.

New Streets in the Metro Neighborhoods

- Provide an urban streetscape throughout the Metro Neighborhoods with ornamental pedestrianscaled lighting, special sidewalk and crosswalk paving, and coordinated street furniture.
- Plant trees according to urban standards for closely spaced street trees to achieve the "regreening of Shady Grove" theme and to create an attractive setting for residents and businesses.
- Outside the right-of-way and directly adjacent to storefront retail uses, provide adequate paved areas to accommodate outdoor seating such as movable tables and chairs. Provide foundation plantings where appropriate to increase the sense of greenery.
- Create extensively landscaped Promenades in Metro West, Metro North and Metro South. The Promenade, a linear urban public use space, is partially within the right-of-way and provides seating areas, recreation, and amenities such as artwork, fountains, and seasonal plantings. The Promenade should achieve a garden character compatible with adjacent residential development.

- In the Metro West Neighborhood, create an extensively landscaped boulevard that leads to the Metro station. It should reflect the "regreening of Shady Grove" theme by establishing a garden character in the medians. Seating areas and other amenities should be provided within median areas that are over 50 feet wide to create outdoor places.
- In the Metro West Neighborhood, provide streetscape around the town square with lawn panels, shade trees, and seating areas to create a green urban park.
- In the Metro North Neighborhood, landscape public sidewalks around the town common with lawn panels, shade trees, and seating to create a green urban park.

Redland Road between MD 355 and Crabbs Branch Way

• Create a main street with extensively landscaped median. Provide shade trees, special sidewalk paving, and crosswalks to improve pedestrian safety and encourage walking.

Crabbs Branch Way between Shady Grove Road and Redland Road

- Create a main street with extensively landscaped median. Provide lawn panels for street tree
 planting to complement the primarily residential character.
- Develop the recreation trail, a Class I shared use bike path, on the street's east side with special paving (not asphalt), a double row of shade trees, seating areas, and other special features.
- Design the pedestrian underpass at Shady Grove Road with features that express the garden character. Incorporate artwork into the design of the underpass.
- Provide special sidewalk paving and crosswalks to improve pedestrian safety and encourage walking.

Signage

Commercial signs should be located on building facades or consolidated in a monument sign.
 Freestanding, pole mounted signs should be avoided to minimize visual clutter and improve overall attractiveness.

Overhead Utilities

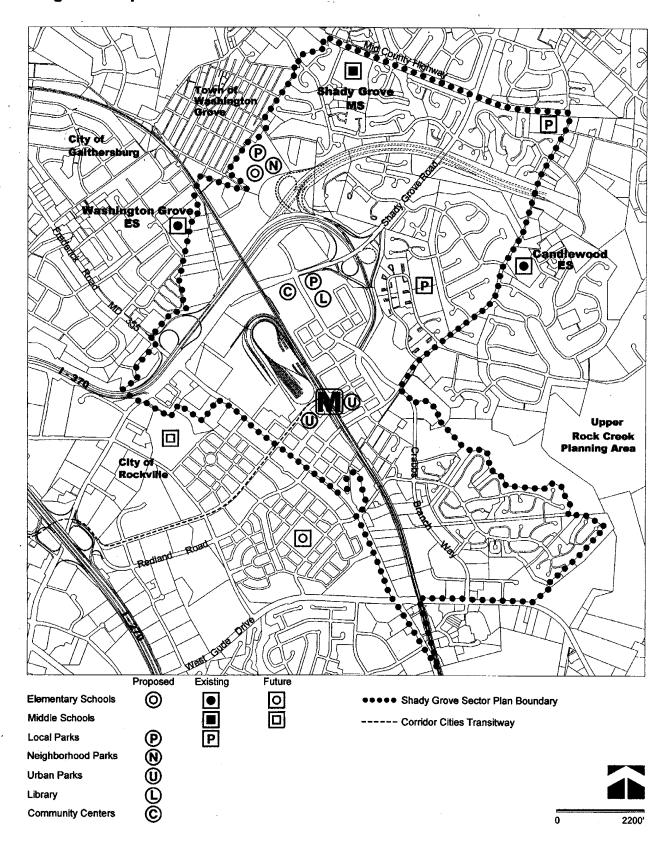
- Require development within the Metro Neighborhoods to underground utilities along new and existing roadways, especially along major roadways with existing overhead utilities.
- Placing existing overhead utilities underground in areas outside the Metro Neighborhoods will be considered on a case-by-case basis.

Neighborhood Protection

Through traffic is inappropriate within residential communities. It disturbs the peace of a neighborhood and creates a hazard for children and pedestrians. This Plan supports measures to mitigate cut-through traffic and calm travel speeds to help protect the existing single-family communities.

- Support several traffic circles in Old Derwood to help reduce cut-through traffic and slow travel speeds.
- Support traffic calming measures and a traffic circle along Amity Drive at its connection with Crabbs Branch Way.
- Encourage the establishment of neighborhood parking permit programs to protect nearby residential areas from non-resident parking.
- Study the need for traffic restrictions within Parkside Estates and Old Derwood to discourage cutthrough traffic.

Existing and Proposed Public Facilities



AREA WIDE ELEMENTS

PUBLIC FACILITIES

Public parks, schools, and other civic uses provide needed community services and become gathering places for community life. This Plan recommends a full range of public facilities that should be conceived as civic places, creating community identity and providing a pedestrian-friendly character. The Plan provides general locations for these facilities based on current estimates of future facility needs. The actual number of such facilities should be reevaluated based on actual development yield and County policies when development occurs.

In addition to parks and schools, public facilities in the County Service Park provide needed services such as bus repair, park maintenance, and school lunch service. This Plan recommends gradually relocating the County Service Park facilities since these services do not require proximity to the Metro Station.

Public Facilities Concept

Provide a full complement of public facilities that can serve both new and existing residents. This Plan recommends locating public facilities in the Jeremiah Park area as transitional uses that are convenient to the community. Public facilities such as a library and local park located at Crabbs Branch Way and Shady Grove Road should be visible, accessible, and create a civic presence. Existing County service facilities should be relocated and reconfigured to sites where they can operate more efficiently.

Park and Recreation Facilities

The park system proposed for the Shady Grove planning area will expand recreation opportunities, provide a park trail system integrated with sidewalks and bikeways, and help protect areas of natural and cultural significance.

Objectives

- Provide a series of public and private small urban parks in higher density areas near the Metro station to meet the recreational needs of residents and employees.
- Provide additional active and passive recreational opportunities for a wide range of age groups and interests.
- Provide safe and attractive pedestrian and bicycle routes in a connected system between parks and from adjoining neighborhoods.
- Provide park settings for historic features.

The County's Park, Recreation and Open Space Master Plan (PROS) identifies unmet recreation needs in the Shady Grove and Derwood communities for basketball courts, ball fields, and playgrounds. Additional active and passive recreation facilities are needed for residents of the Metro Neighborhoods. Passive recreation opportunities such as nature walks, picnicking, trails and bird watching are not easily accessible in this area. This Plan has the potential to meet these needs and create a range of recreational opportunities including passive recreation.

There is also an important need to provide connections to parks located just outside the planning area. This Plan supports the *Countywide Park Trails Plan* proposal for a mid-county greenway trail corridor