LAND USE

This Plan's land use recommendations provide for up to 23 million square feet of commercial development with approximately 69,700 jobs and 15,100 housing units.

Within the area of the Sector Plan, this results in a ratio of 4.6 jobs for each housing unit. In the entire Germantown planning area with approximately 32,000 housing units, the Plan will create 1.5 jobs per housing unit. The County wide goal is 1.6 jobs to each housing unit.

This Plan builds a pattern of density focused at the Town Center, stepping down to surrounding communities. The overall pattern will:

- Concentrate the highest density, 2.0 FAR, at the Town Center transit station
- Develop most of the employment corridor properties with mixed-use at an average density of 1.0 FAR
- Limit the average density to between 0.5 and 0.75 FAR for transit served properties north of MD 27 that adjoin existing residential communities.
- Develop areas not served by CCT or MARC at average densities of 0.3 to 0.5 FAR.

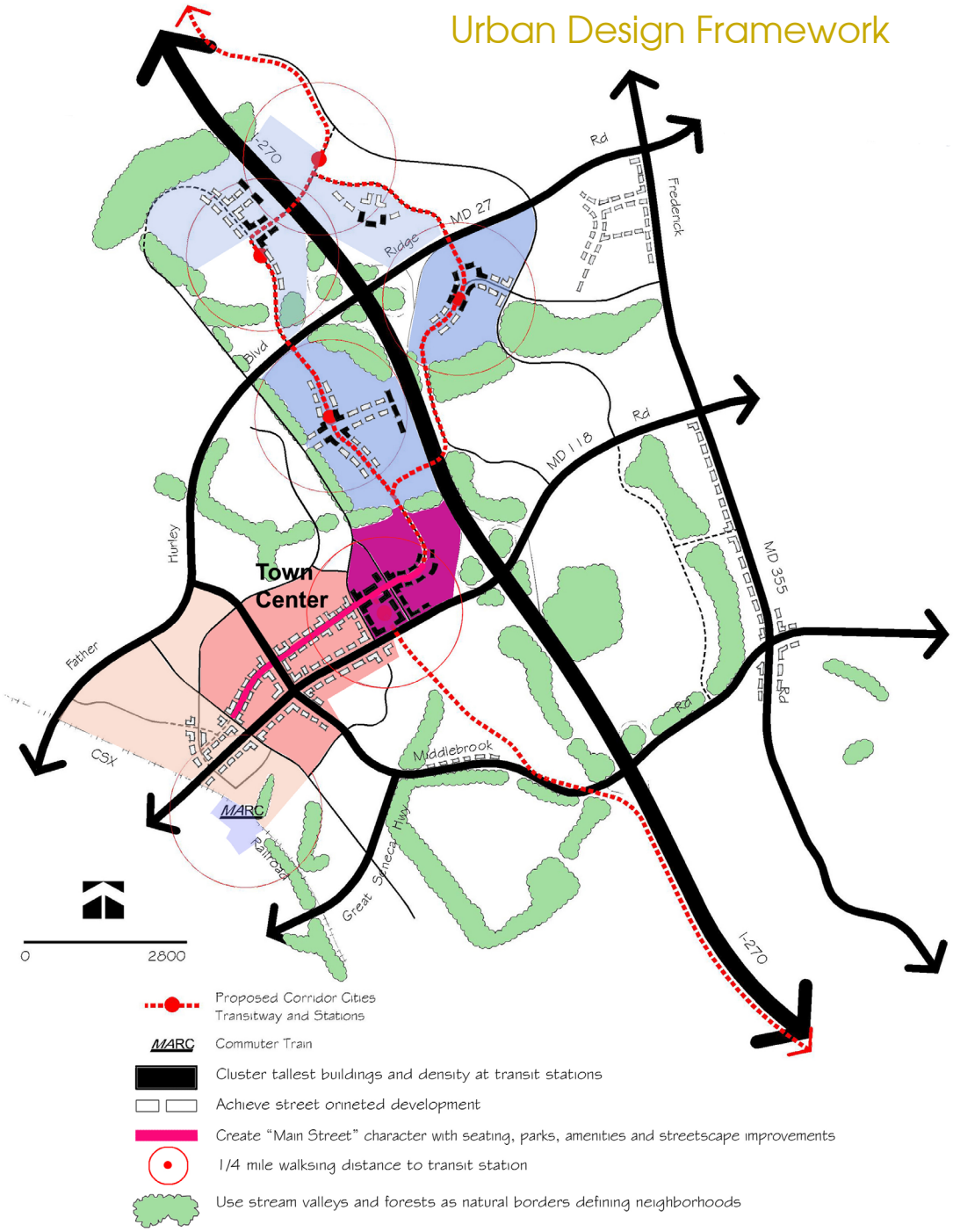
This Plan recommends the Transit Mixed-Use Zone (TMX-2) on sites located in a Transit Station Development Area, which is defined by the Zoning Ordinance as "an area near a metro transit station, or along an existing or proposed transit right-of-way, which is not located within a central business district, which has been designated as a Transit Station Development Area by an approved and adopted master plan or sector plan." TMX permits a broad range of uses that can provide the variety to create a cohesive transit-served community with employment and housing options.

The Plan's vision is best implemented through the TMX Zone's optional method of development that ensures new projects are consistent with the Sector Plan and accompanied by appropriate facilities and amenities.

Existing and Proposed Development			
	Existing Development	1989 Master Plan	Proposed 2008 Plan
Dwellings	6,075	5,845	15,100
Commercial (sf)	13,990,000	20,345,500	23,000,000
Jobs	23,030	59,850	69,700

Casual dining along Century Boulevard in the Town Center.

Urban Design Framework



URBAN FORM

Design Framework

This Plan concentrates the highest densities and building heights in Germantown's Town Center. Compact mixed-use development at slightly lower densities is recommended at each of the other transit stations. Design is critical to achieving quality of place and creating spaces that are vibrant, secure, and active. The streets, spaces, and centers of these transit neighborhoods will build community identity. In each of these areas, this Plan recommends:

- Clustering development at transit stations to encourage use of transit, provide convenience, and create a focus of activity.
- Connecting streets, bikeways, and pedestrian routes to encourage walking and improve access.
- Expanding the natural open spaces and urban gathering spaces as amenities, recreation spaces, and conservation areas.
- Incorporating historic, cultural, and nature-oriented themes into development to strengthen community identity.

Centers

This Plan redirects the character of land use in the Germantown employment corridor from a suburban pattern of low-rise buildings and large areas of surface parking into compact, walkable places with lively streets, activating uses, businesses and houses. Transit-oriented centers will be defined by walkable block lengths and inviting public spaces. Development is subject to design guidelines that establish a street-oriented pattern and require compatibility with nearby existing residential areas.

The guidelines will also encourage new development and redevelopment inspired by Germantown's history, natural areas, and other unique community features.

The design guidelines to implement this Sector Plan must address the following principles:

- Compact Centers

Concentrate development at transit stations creating compact, walkable centers. Place highest densities nearest transit stations, transitioning down to lower densities adjacent to existing residential communities.

- Street-Oriented Development

Locate buildings adjacent to the street to form a building line of the sidewalk and street that form public spaces. Provide front entrances along the street to improve pedestrian convenience, activate the street, and reduce walking distances. Provide street level retail uses along streets

Building heights stepping down toward residential neighbors.

Heights are lower at street level and higher in the rear portions of the property.

Provide wide sidewalks for seating

Activate streets with retail storefronts

Integrate parking with building design

where active street activity is desired. Place retail, restaurants, and other uses at highly visible locations along boulevards and main streets and adjacent to urban open spaces to add vitality and convenience. Design retail storefronts with large, clear glass windows for merchandise display that promote retailing and add visual interest to the street.

- Building Form and Facade Design

BuildingsReduce building bulk and mass through building design and facade treatment to improve light on the street, minimize shadows, and create a pedestrian scale along the street. Reduce building bulk by encouraging narrow building footprints and upper floor setbacks over 60 feet (four to five stories) from street level. Orient buildings along the street with articulated facades and architectural elements that de-emphasize horizontal mass and bulk. Use building form and details that are compatible with adjacent residential communities.

To achieve the building line where the street activity can frame the sidewalk, the height of the building walls fronting the sidewalk should have a minimal setback, if any, and be at least three floors high with active uses on each floor. There should be a maximum amount of windows to provide interest along pedestrian spaces and to improve the visibility of those spaces. This design approach animates the street even in the nighttime hours when interior light cascades onto public spaces.

- Building Heights and Transitions

Retail Locate the tallest buildings in Germantown, up to 180 feet (15 stories) at the Town Center transit station and adjacent properties. Other districts should have defined centers created by locating the tallest buildings at transit stations.

Use minimum building heights to enhance value, efficiency, and compactness. Decrease building heights stepping down from the center as a transition to adjoining residential communities and to create compatible relationships. Provide varied building heights and roof designs to create a visually interesting skyline.

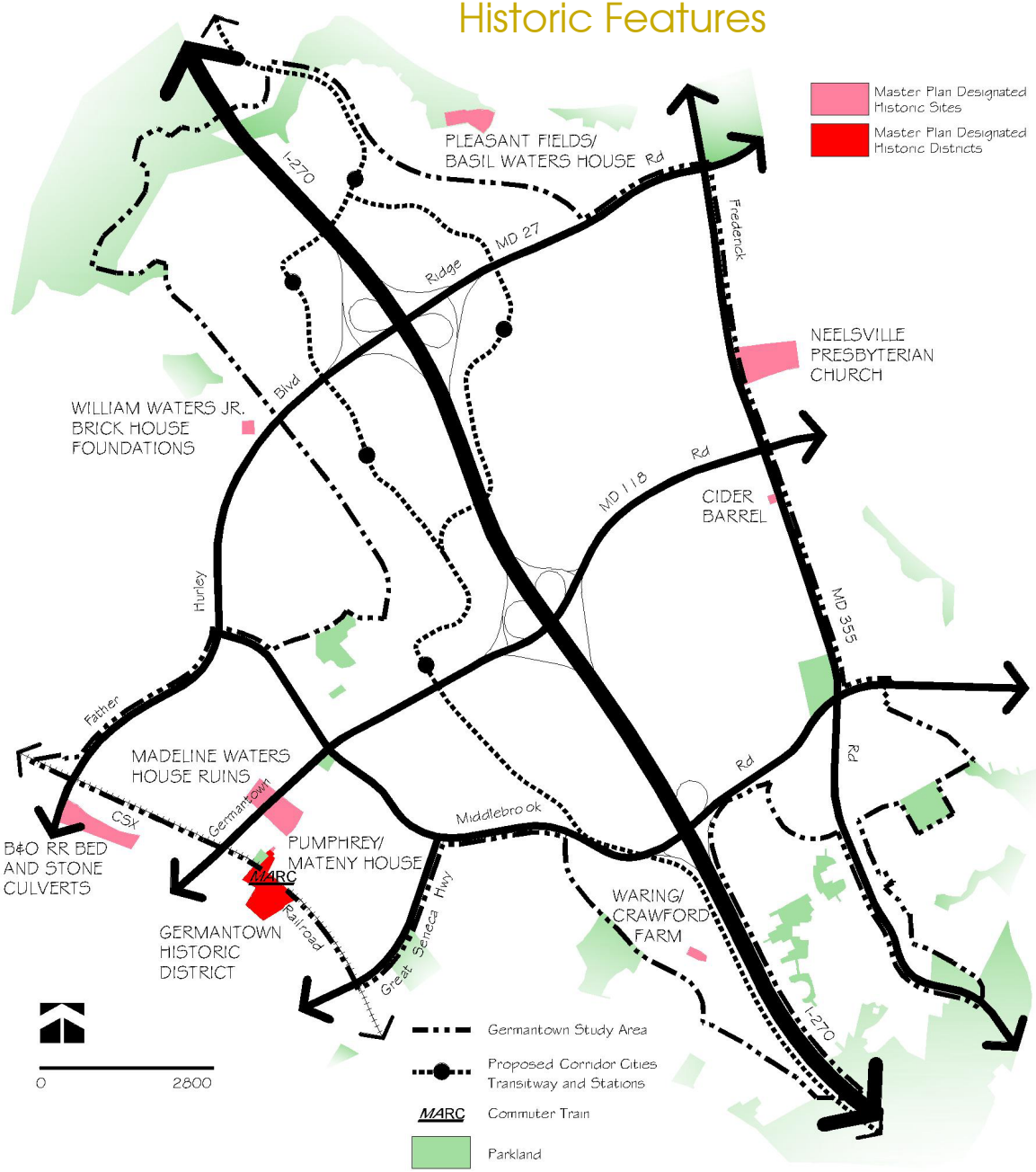
- Parking

Locate parking on the street, in mid-block structures or in structures lined with street activating uses. Surface parking, where necessary, should be located behind or to the side of development and screened with building extensions, low walls, or evergreen hedges.

Parking should not exceed the minimum required in the Zoning Ordinance. Encourage shared use parking and, if feasible, develop private/public parking facilities.

Establish a parking lot district in the Town Center to promote urban development by consolidating parking facilities. Evaluate providing public structured parking at the Upcounty Regional Services Center and the police station.

Historic Features



Historic Features

Design features should commemorate Germantown's history, families, and industries to tie together the past and future. Many Germantown residents and employees are unaware of the Germantown Historic District just outside the Plan boundaries or of the Plan area's designated historic sites. Designated historic sites should be protected and integrated into the community with compatible adjacent land uses. Adjacent site and building design should enhance, not diminish the historic setting. Connect activity centers to historic features in Germantown's parks and greenways and insert historic references, where appropriate, in new development or redevelopment, signage, and public art.

See Appendices 10, 11 and 12 for further information.

- Public Amenities

Public amenities will be created as part of redevelopment and will include but are not limited to fountains, seating, lighting, pavement, artwork and extensive plantings. Together they should provide options for active and passive participation, should be visible and accessible, and should consider environmental function in their design. Design elements should seek to incorporate historic, cultural, and natural themes to reinforce community identity.

Expand the grid of streets with access to Century Boulevard and Crystal Rock Drive

Provide streetscape and pedestrian friendly street design

- Community Facilities

Completing New community facilities are recommended to support the additional workers and residents of Germantown. These facilities include:

- o the Town Center urban park behind the Library
- o a family-oriented public park in the Town Center
- o improvements to the Town Common at BlackRock to transform it into a community gathering place
- o development of the District 5 Police and Fire Station with additional space for police activities and workforce housing
- o a new urban recreation center with outdoor space to serve residents on the east side of I-270.
- o a new elementary school on the Waring Station Road school site, if needed.

Connections

An expanded network of roadways, streets, mid-block pedestrian connections, sidewalks, trails, and bikeways will link the community to desired destinations such as transit, schools, and commercial services. Roadway and street designs should promote pedestrian use with investment in streetscape elements including pedestrian crossing markings and signals, landscaping, street trees, and benches.

- Street Network

An interconnected street network is proposed for all districts and large parcels. New streets with short block lengths, approximately 250 to350 feet in length, will promote walking and allow mid-block pedestrian crossings to bring people out to the sidewalks. These spaces need to be animated, visible, and be well lit.

- Street Character

Street character is defined by activities that occur on the sidewalks and how they interact with the uses in the buildings framing the space. All of the design elements should come together to create vibrant pedestrian spaces, both public and private, that are active at different times during the day and through all seasons.

Lighting, signage, and windows all play a major role. Street furniture is only a small part of the street character. Trees trimmed higher to allow visibility to first floor storefronts and appropriate building elements that frame entries, are the kind of details that enhance the pedestrian experience.

This Plan will establish tree-lined boulevards and main streets that will enhance Germantown's identity and provide tree cover and environmental benefits. Improvements include installing closely spaced street trees and landscaped medians, providing special walkway and paving materials where appropriate, and using pedestrian scaled lighting and other furnishings.

- Trails, Bikeways, and Sidewalks

Connect trails, bikeways, and sidewalks through all districts promoting an alternative to vehicle use and improving access to destinations such as transit stations, schools, commercial services, parks, and natural areas.

Public Spaces

This Plan adds to the network of diverse public spaces in Germantown, providing for public spaces in each district that help uniquely define it. Public and private open spaces should incorporate green design and be organized and connected to the larger greenbelt system at the edges of Germantown and beyond.

The following describes the hierarchy of Germantown's public spaces.

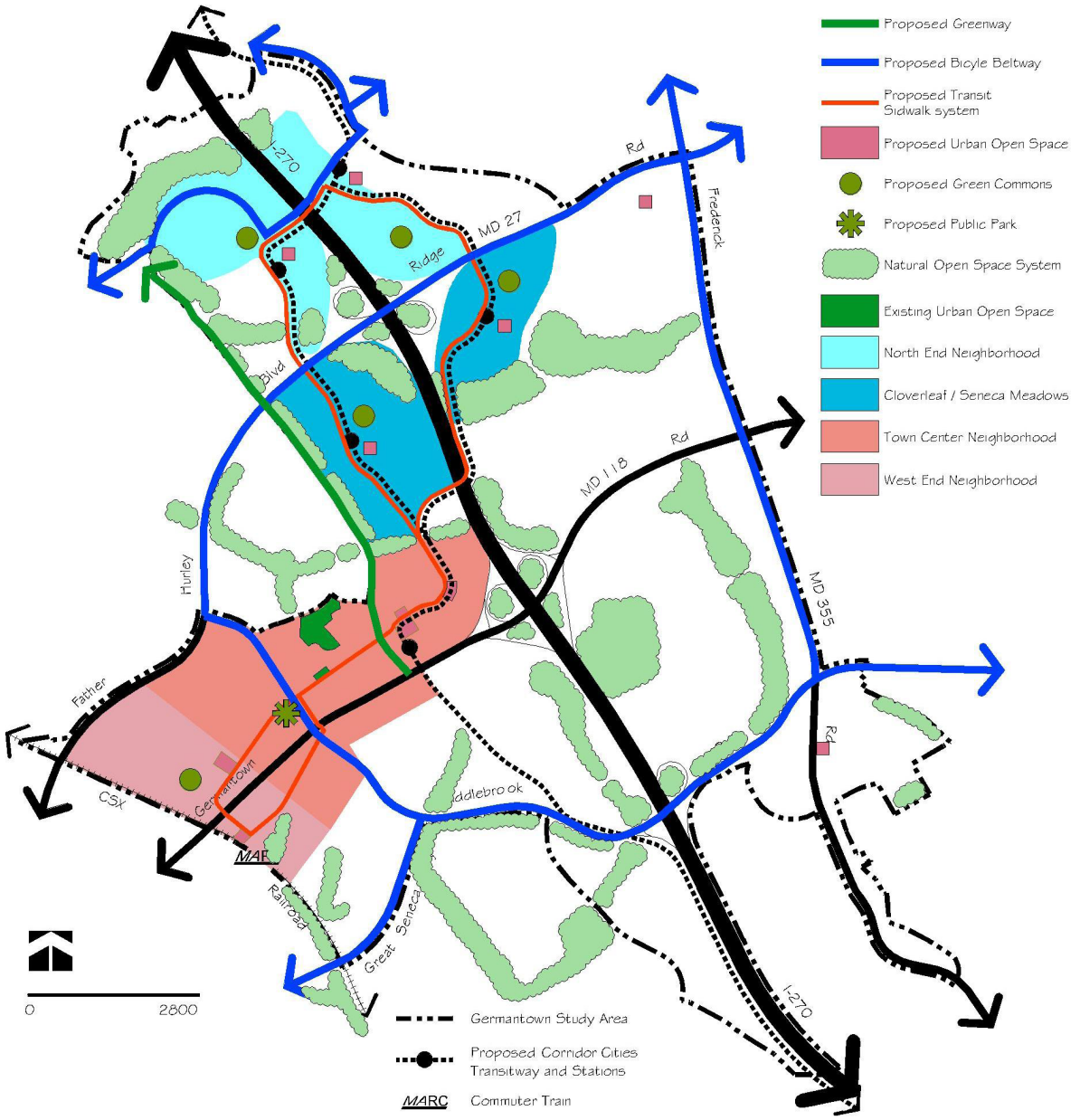
- Natural Area Network

This Plan expands Germantown's natural area network by protecting forest stands, wetlands, streams, and scenic vistas through regulatory measures, design recommendations, dedication, and acquisition. The recommended trails system connects the surrounding greenbelt regional parks to the transit-oriented centers.

- Public Parks

Public parks are proposed as focal points of activity within each district. They are placed in visible and centrally located sites within mixed-use neighborhoods and along pedestrian routes. Parks should contain a variety of interactive activities, walkways, moveable tables and chairs,

Urban Open Space, Parks, and Trails



shade trees, and special features such as public art and historic elements that celebrate Germantown's history.

- Green Commons

A green common in every district has been designated to provide residents and workers a place to enjoy nature, exercise, walk, and enjoy social gatherings. Special features should be included such as fountains, artwork, gazebos and other amenities. Privately provided green areas for public use should be integrated into neighborhood designs and privately maintained by property owners or by the proposed urban service district.

- Plazas and Gathering Places

Each district should contain a variety of plazas, gathering places, and urban spaces within each district. Such spaces should be defined by buildings and activated by retail or restaurants. Smaller spaces or "eddies" created through openings in the building wall along a sidewalk can offer great spaces for retail to open onto where people can sit and enjoy the activity passing by. Urban spaces, where appropriate, should provide seating with moveable tables and chairs, landscaping, lighting, public art, and other amenities that contribute to one's enjoyment. Historic and cultural themes should be incorporated into designs. Transit station areas require additional features such as shelters and transit information kiosks. Plazas, gathering places, and urban spaces should be privately developed for public use and maintained by the property owner or by the proposed maintenance district.

Provide seating, shade, play equipment, and other amenities

HOUSING

New transit options in the up-County create opportunities for increased housing, including affordable housing and workforce housing at future transit stations. This Plan adds housing to employment areas that previously excluded housing.

Housing Incentives

- Emphasizing mixed-use buildings and mixed-use communities that place housing above retail and other ground floor uses
- Establishing higher densities and a minimum building height of three stories means more opportunity for residential units above commercial spaces
- Lowering parking requirements, which reduces building costs and lowers residents' monthly expenses
- Requiring a mix of unit types provides diversity in the housing product
- Identifying County-owned property for affordable housing opportunities

The Germantown Planning Area was one of the first areas where the Moderately Priced Dwelling Unit (MPDU) program was implemented in 1976. Germantown contributed over a fourth of the County's stock of MPDUs through the period of the 1970s and 1980s. Except for those acquired by HOC, the price controls on these units have now lapsed; they are no longer registered MPDUs. Approximately 323 MPDUs expired in between 1987 and July 2008.

Housing Within the Sector Plan Area

	Total Units	Market Rate	MPDUs @ 12.5 %
Existing dwelling units	6,591	6,054	537
Proposed dwelling units	8,510	7,446	1,064
TOTAL	15,101	13,500	1,601

This Plan provides for approximately 15,101 dwelling units with approximately 12.5 percent of these units added to the MPDU inventory. The total number of MPDUs to be created doesn't total exactly 12.5 percent (1,880 units) because of how MPDUs are calculated in the Town Sector zone.

The Plan designates a County-owned parcel at Crystal Rock Drive and Century Boulevard for workforce housing as the police and fire facilities are updated. Workforce housing is defined as housing that is affordable to residents earning between 80 and 120 percent of the Washington, D.C. metropolitan area median income.

- Build transit and employment-oriented workforce housing that reduces the costs associated with getting to work. Ideal sites include the Town Center and locations along the CCT alignment and near the existing MARC station.
- New housing should be suitable for both young and old, and for those with all ranges of physical ability. Units will be served by elevators and have at-grade entrances, wide hallways to accommodate wheelchairs, and other features. Local and national research indicates that seniors don't plan on leaving their current homes, so new construction and renovations will be designed to allow residents to age in place. Decentralized support services will provide home assistance to allow residents to stay at home as long as possible and minimize the need to create age restricted communities.
- A commitment to no net loss of affordable housing will help preserve existing affordable and workforce housing especially the existing subsidized rental units and MPDUs such as properties owned, operated or financed by the Housing Opportunities Commission.

Senior Housing Units in Germantown

Location	Name	Units or Beds
Within Sector Plan Area	Churchill Senior Living New Covenant Village	121 independent 133 independent[1] 46 assisted[1] 88 independent[2]
Outside Sector Plan Area	Willow Manor King Crossing	102 independent 110 independent
TOTAL UNITS		600

[1] approved July 2008; unbuilt [2] 2007/2008 construction, now being leased

Transportation Framework

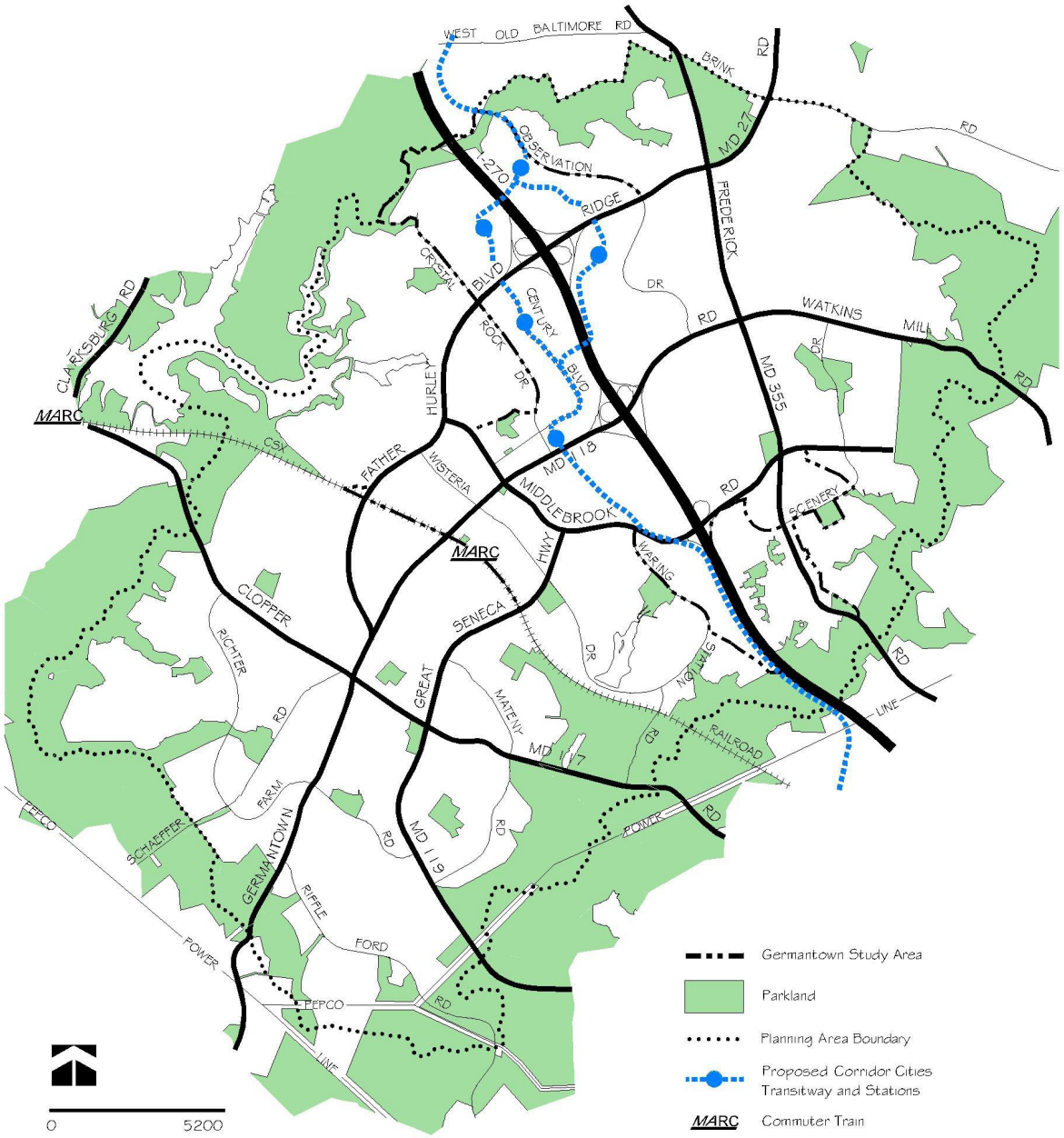
This Sector Plan is transit and pedestrian-oriented. Both the overall planning framework and the design of each district emphasize public transportation, walking, and biking. The development pattern requires building the Corridor Cities Transitway (CCT) to support the recommended densities and link the centers to each other and the regional transportation system. The CCT's route and stations establish a framework that focuses the highest density at the Town Center station with lower densities at other stations. The Plan recommends a CCT loop to serve districts and increase employment on both sides of I-270. Roadway design must also accommodate transit. MARC station improvements are recommended to provide better access for pedestrians, bus patrons, and up-County commuters.

Major changes are recommended for I-270, state highways, and other major roadways. I-270, MD 355, MD 118, MD 27, Great Seneca Highway, Father Hurley Boulevard, Crystal Rock Drive, Middlebrook Road, and Observation Drive are major transportation arteries. They tend to divide the areas through which they pass and are built at a scale and for operations that discourage pedestrians in favor of vehicle traffic. This Plan supports additional lanes for I-270 to serve through traffic better by providing lanes for transit and high-occupancy vehicles. It recommends changing other roadways to accommodate pedestrians, bicyclists, and transit.

A dense grid of local and arterial roads will disperse traffic and improve circulation, access, and the pedestrian environment. One-way pairs can also be used to improve circulation.

A detailed streetscape plan will implement this Plan and provide consistent standards for street trees, lighting, sidewalks and crossings, furnishings, bike accommodations, and on-street parking.

Proposed Corridor Cities Transitway Alignment



TRANSPORTATION

Major enhancements and changes to the transportation system are necessary to achieve the Plan's vision. It proposes a layered network of transit, roadways, bike and pedestrian facilities to support and serve the businesses, institutions, and residents of the planning area. Transportation demand management is a preferred means for maintaining transportation capacity.

Transit

Germantown will become a transit center. Along with MARC and bus service, the Corridor Cities Transitway will provide redevelopment capacity and travel options. The CCT will also be a force in shaping the Germantown community, forming and connecting distinct centers. It is vital to make pedestrian connections to these facilities.

Corridor Cities Transitway

The CCT is a pivotal infrastructure investment for Germantown and the entire north County. This Plan is focused on delivery of the transit line. The densities proposed are determined by the location of the proposed transit stops. The phasing of development is linked to delivery of the transit service. There are several key links in the CCT transit alignment:

- Century Boulevard through the Town Center will be the hub of the CCT in Germantown. Locate the Town Center transit station on the Bellmead property where station access is greatest by pedestrians and bus riders. The CCT transit line enters Germantown from the south on the west side of I-270 and follows a separate right-of-way over Middlebrook Road. The greatest number of transit support facilities will occur at the Town Center station including bus bays and kiss-and-ride spaces.
- From the Town Center station, and through the Cloverleaf and North End districts, Century Boulevard will be a transit- and pedestrian-oriented street, with four vehicle lanes, pedestrian or bike facilities, and planted green panels on both sides.
- After crossing to the east side of I-270 to the Dorsey Mill station, the transitway will turn north in the median of Observation Drive to Clarksburg.
- An eastern segment of the CCT will cross I-270 from south of the Cloverleaf station to Seneca Meadows Parkway and the future Seneca Meadows station. The transit alignment then turns north crossing over MD 27 to the location where the western alignment and eastern alignment rejoin, just west of the Dorsey Mill station.
- The planned CCT alignment serves the west side of I-270 in the near-term and the east side of I-270 in the long-term.
- The Town Center CCT station is located on the Bellmead property to maximize access by pedestrians and bus riders.
- The CCT station previously considered along Middlebrook Road has been deleted.
- Transit stations along the CCT should be designed to provide convenient and safe pedestrian access and each should incorporate public art that conveys community identity and a sense of place.
- Potential CCT eastern alignments should be evaluated for ways to better serve the Montgomery College Campus for future phases of the CCT.

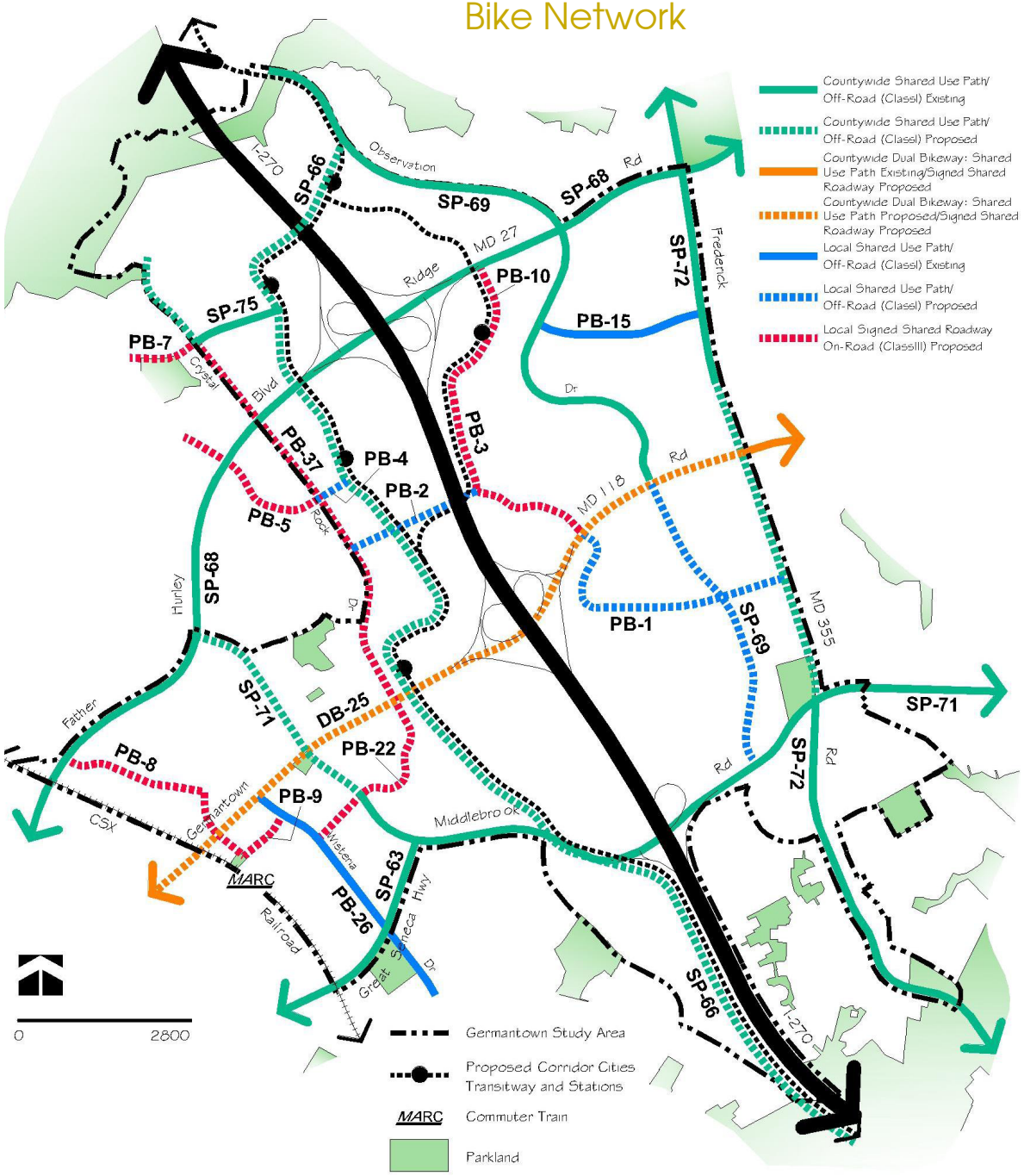
Bus Transit and MARC

- Initiate a circulator bus providing frequent service between the Town Center, MARC station, and transit neighborhoods. This service may be funded by Phase I of the proposed urban service district.

MetroRapid bus rapid transit in Los Angeles, CA

- Expand access to MARC service for patrons who walk to the station by concentrating residential development near the station. Include additional MARC parking in garages where MARC surface parking exists complying with design guidelines for location and height to minimize impact to the adjoining Germantown Historic District.

Bike Network



Bike and Pedestrian Routes

Germantown's existing and planned bicycle facilities include shared use paths, shared use roads, and park trails. In addition to bicycle facilities, sidewalks and trails will connect transit stations, residential, and commercial areas. Redevelopment must reinforce pedestrian-oriented design, particularly in the centers. In certain neighborhoods, specific pedestrian paths are recommended to connect to the Town Center and to other transit station areas.

- Remove the Park Access Road recommended in the 1989 Plan from Crystal Rock Drive to Black Hill Regional Park; retain unpaved trail sections.
- Extend the natural surface trail along the Seneca Greenway from the trailhead parking lot on MD 355 to the proposed Upcounty Corridor Trail.
- Install a missing bikeway connection from Pinnacle Drive to Celebration Way in the Town Center.
- Provide a Bicycle Beltway that connects Germantown to parks and trails to the north, south and east. Close the gap between Middlebrook Road east of MD 355 and Brink Road by building the bikeway along the master plan alignment for M-83, or an alternative if M-83 is not built.

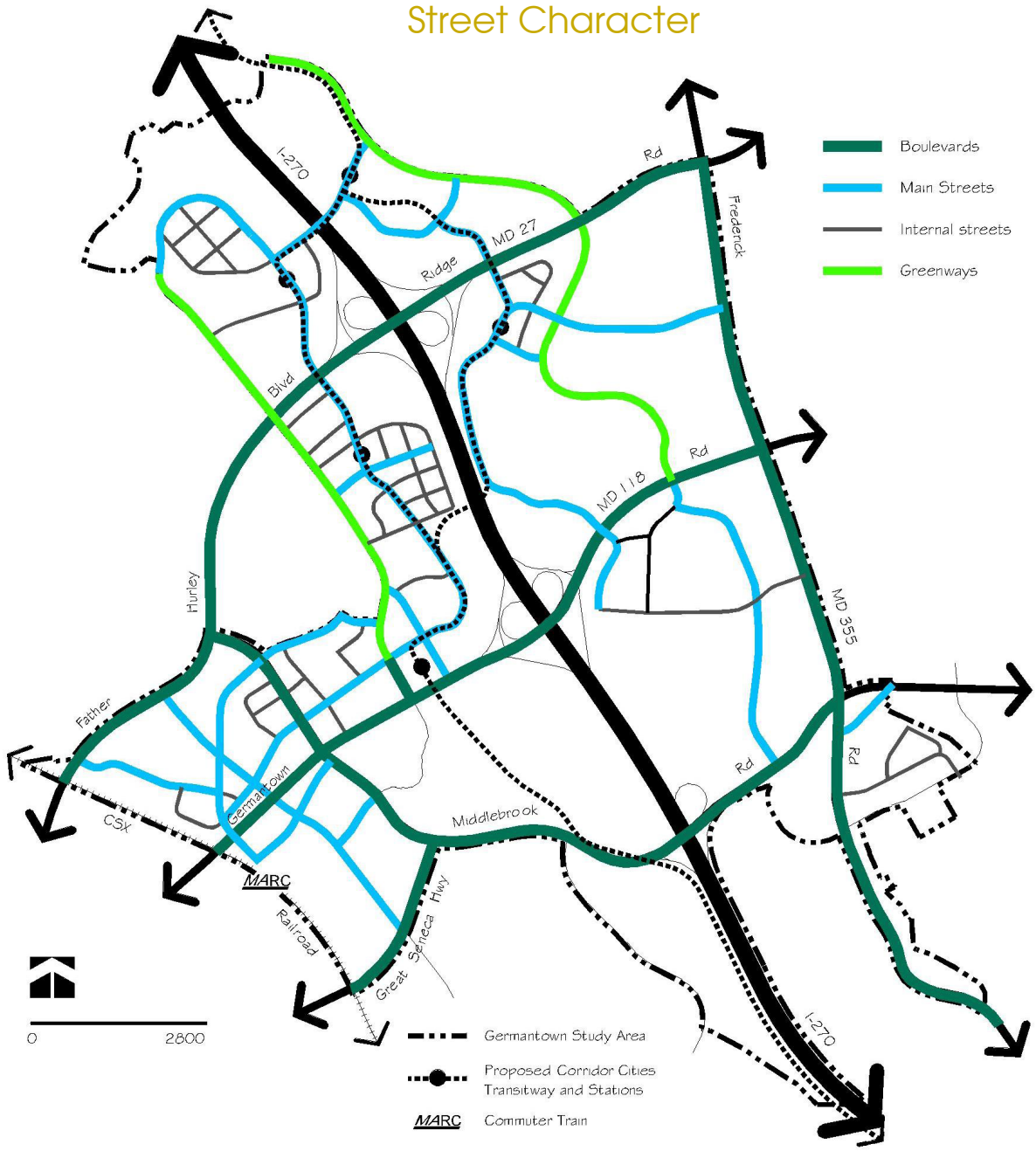
Street Character

- Pedestrian-friendly Intersection Design

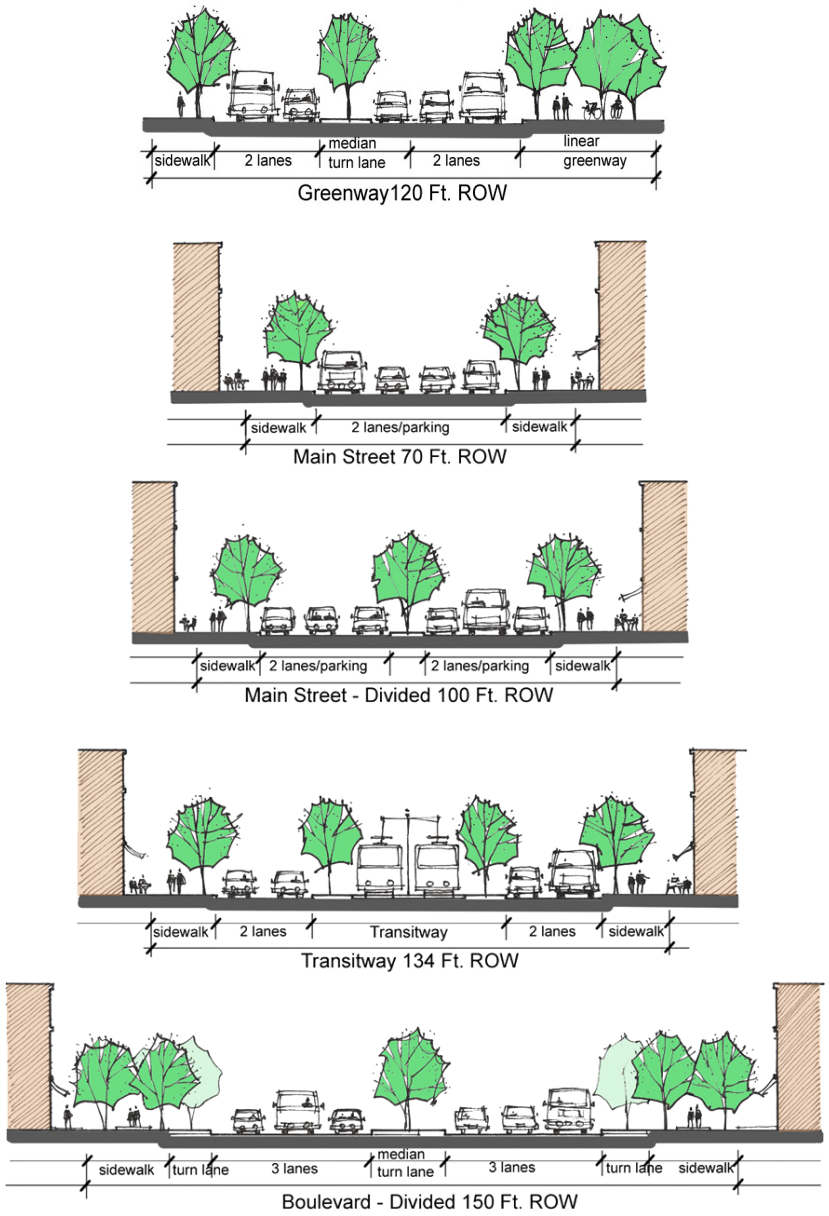
Widening street intersections is inconsistent with creating Germantown as a transit-served, pedestrian-scaled community; intersections in the Town Center generally should not be widened unless needed for pedestrian safety, improved bus access or bicycle access and safety. Elsewhere, if lane widening is required for transportation capacity notably in the vicinity to I-270 interchanges, do not exceed 60-foot crossings without a landscaped median for pedestrian refuge. Crosswalks should be marked and should provide adequate crossing time to accommodate pedestrians of all ages and abilities safely.

- Parking

Parking policy should encourage transit ridership, require fewer parking spaces, and take advantage of shared parking. Projects should include flex cars and spaces, use structured parking, and screen parking from the street.



Street Cross Sections



Street Network

The street network is proposed to serve regional and through traffic with highways, but also to fill in a complete network of local roads, accommodate exclusive transit routes, and create pedestrian and bike routes that create a range of transportation alternatives. The goal is to create as close to a grid pattern as possible to allow local traffic options for getting places without using main roads. A sound grid pattern of streets also allows for other means of transport.

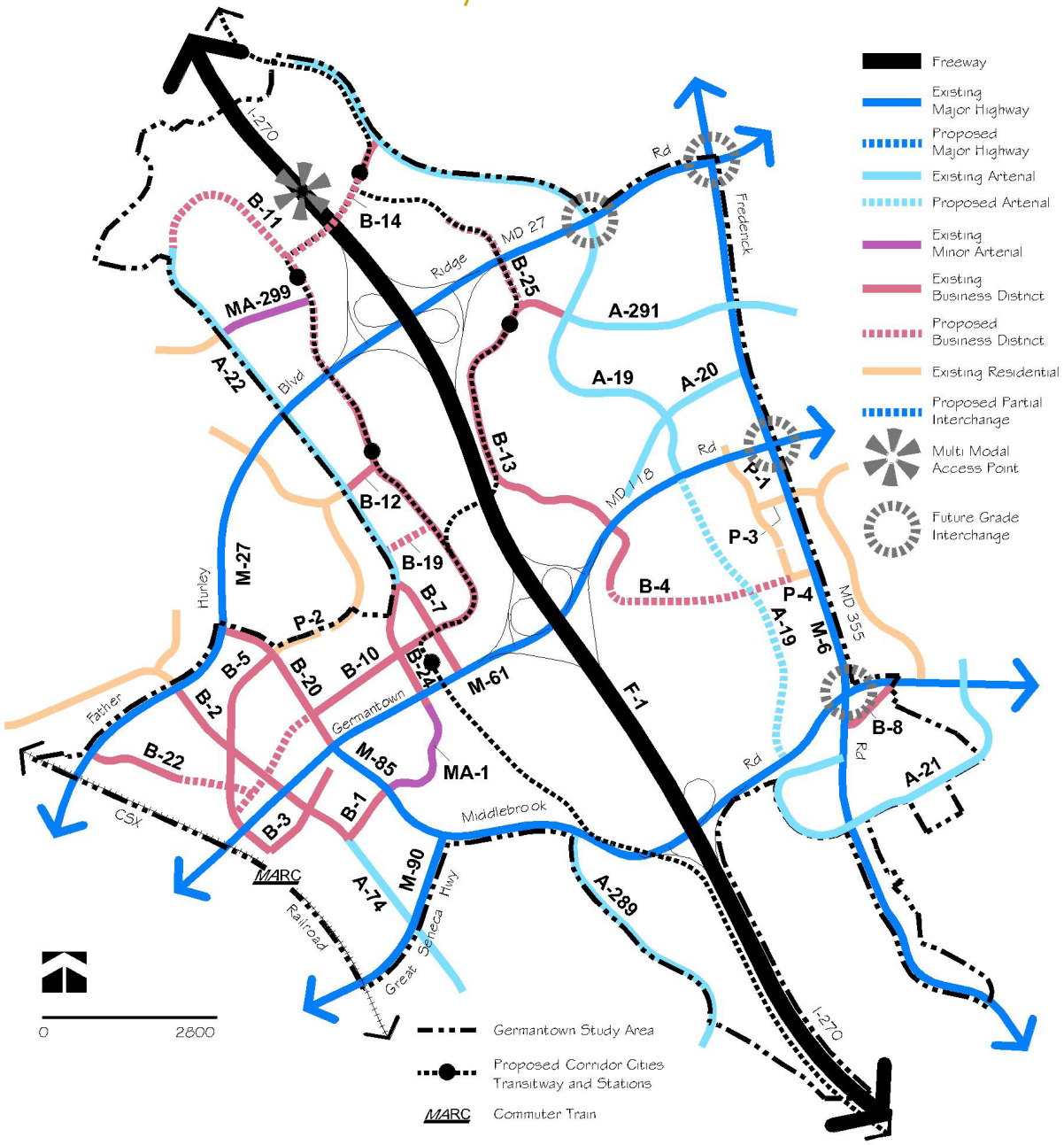
Highways

This Plan supports the planned widening I-270 to a 12-lane facility with some preferential treatment to transit vehicles and high-occupancy vehicles. The Maryland State Highway Administration is studying options that include express toll lanes.

Along the MD 355 corridor, traffic congestion will be severe at intersections with Ridge Road (MD 27) and other east-west routes. This Plan carries forward the 1989 Plan recommendation for a grade-separated interchange at MD 27 and adds grade-separated interchanges at Middlebrook Road and MD 118.

An urban network alternative to grade-separated interchanges is also possible. This pattern of at-grade, one-way couplets around a town square feature is applied where major highways meet. Preliminary analyses indicate that this approach could provide capacity comparable to the proposed grade-separated interchanges. The urban network has a lower capital cost,

Roadway Network



but requires a substantial and coordinated redevelopment. The Plan recommends that the urban network concept be studied further, either as a supplement to this Plan or as part of a project planning study.

The Montgomery County Department of Transportation's (DOT) study of Midcounty Highway Extended (M-83) is expected to be completed in early 2010. The road's alignment is outside the Plan area but for purposes of analysis, has been assumed to be part of the regional transportation network.

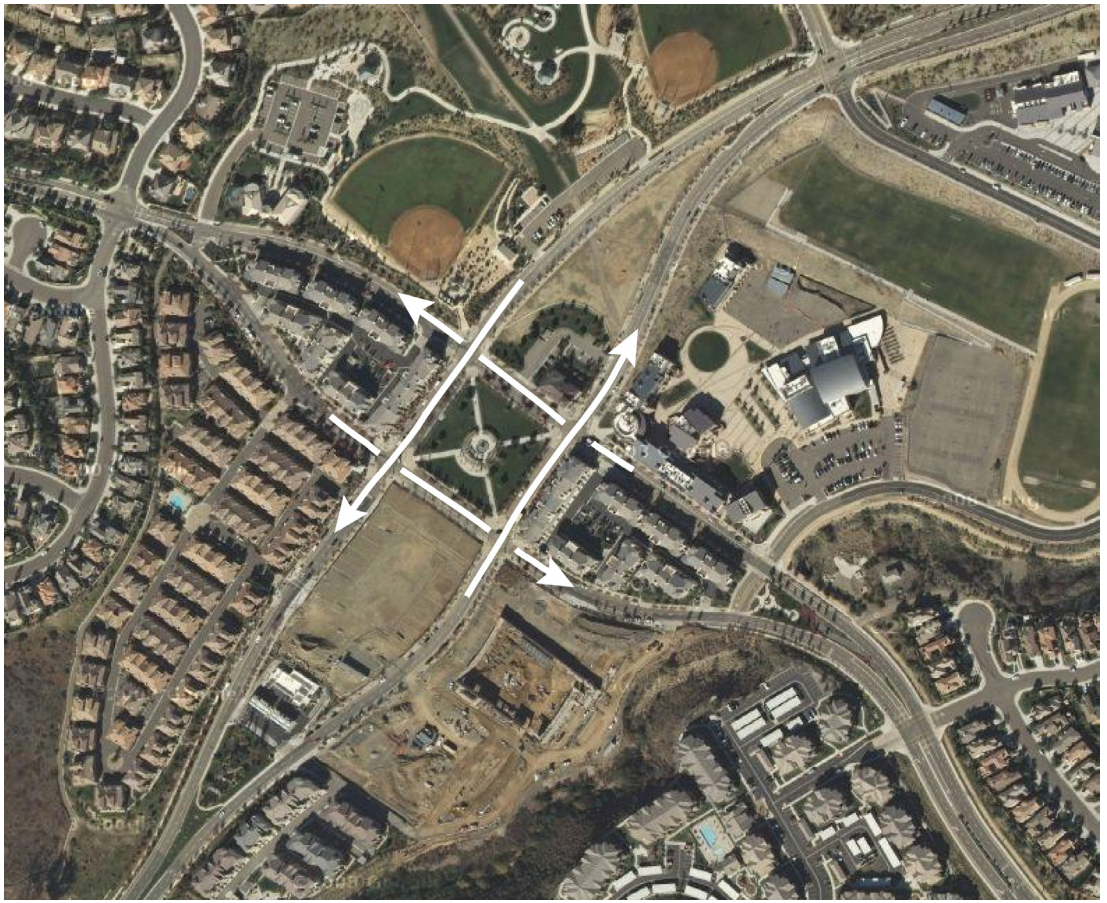
One alternative to a new right-of-way for Midcounty Highway is improving MD 355. MC-DOT has found that the current 150-foot right-of-way and maintaining existing development would not meet capacity need. The study will be expanded to examine a 250-foot right-of-way. Staging in this Plan will link the ultimate right-of-way width to the County Council's decision on the Midcounty Highway study.

Arterial Road Network

There are several gaps in the road network that serves local traffic. To meet the demands anticipated as a result of new development, this Plan recommends new roads as well as extending and widening existing roads. Development of a more robust street grid will enhance pedestrian and automobile access, particularly to CCT and MARC stations.

This Plan adds three new roads to the 1989 Germantown Plan network.

- Direct access for the Dorsey Mill transit station to and from the north along I-270. This access can be provided by either direct access ramps at the Dorsey Mill Road interchange or a revision to the Father Hurley Boulevard interchange. The new access would improve intermodal connection between future managed lanes and bus service on I-270 and the future transit service supplied by the CCT along Century Boulevard. This access would also reduce congestion at the junction of Father Hurley Boulevard with Crystal Rock Drive, reduce commercial use of Kinster Drive, and provide better access to businesses along Century Boulevard.
- A crossing of I-270 will be created for the Corridor Cities Transitway on Dorsey Mill Road which will improve multi-modal access, east-west travel, and traffic distribution.
- Connect Observation Drive through the Montgomery College campus from MD 118



An urban transportation network of four one-way streets around a village green designed by Calthorpe Associates for San Elijo Hills, CA.

to Middlebrook Road. Use the existing right-of-way of Observation Drive within an 80-foot right-of-way to include a four-lane roadway (with off-peak parking) and a continuous shared use, north-south bike and pedestrian path.

- Reclassify the following major highways to controlled major highways to reflect their existing and anticipated character and function. The existing street tree location, spacing, maintenance, and replacement should be maintained for these roadways:
  - Great Seneca Highway
  - Father Hurley Boulevard
  - Ridge Road
  - Frederick Road

Local Street Network

Creating a grid pattern provides vehicle travel alternatives at a scale that can also serve walkers and cyclists. The Germantown grid is designed to facilitate transit connections. The Plan's recommendations to reclassify many local roads from industrial to business reflects the changing character of Germantown and provides the opportunity to create design speeds, lane widths, and streetscaping that serve both vehicles and pedestrians.

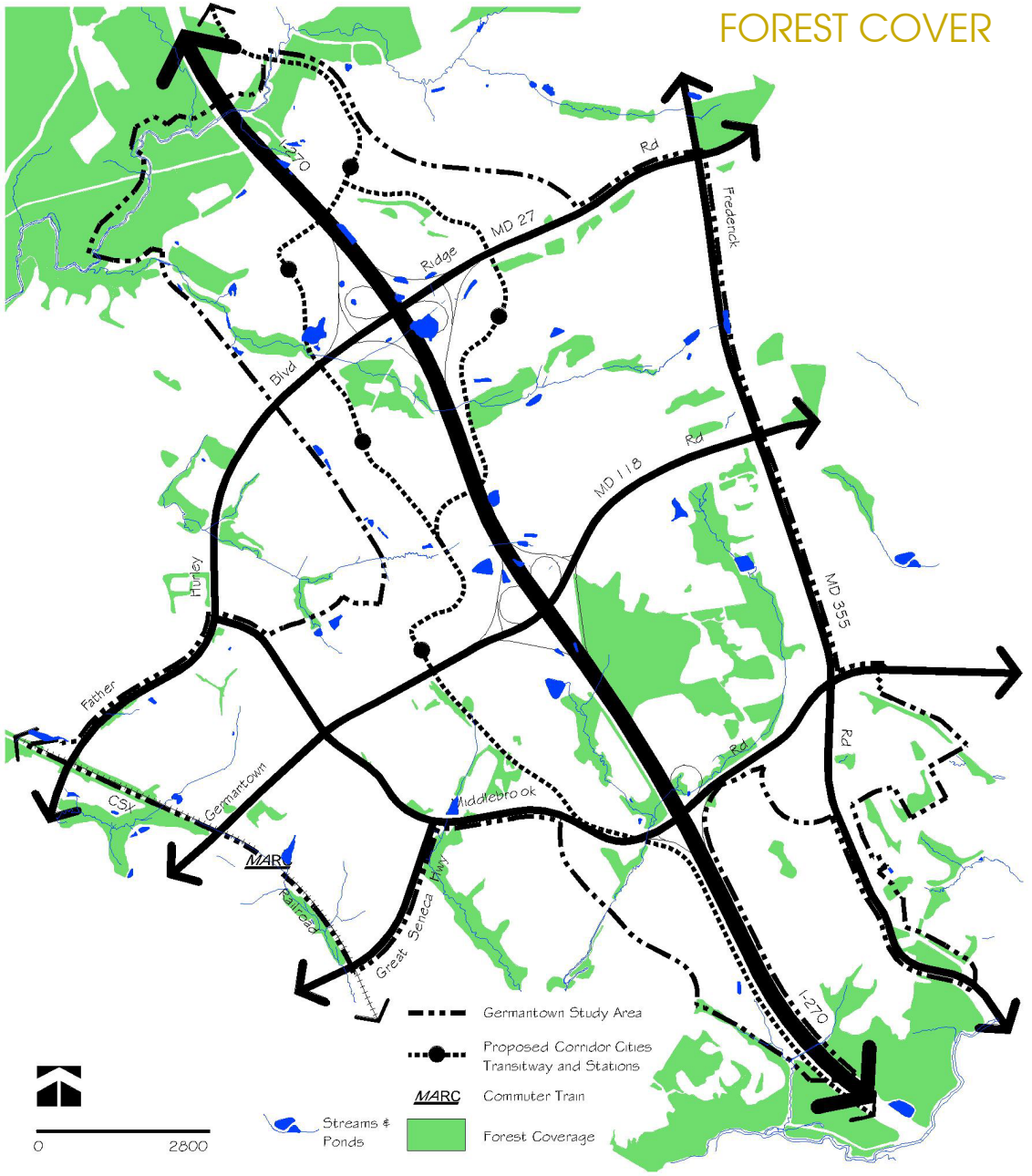
- Add Walter Johnson Road (B-3) to the Sector Plan along with Bowman Mill Road (B-16) to facilitate MARC station access.
- Remove Blunt Road's proposed cul-de-sac and connect it to Middlebrook Road.
- Extend Century Boulevard west across Wisteria Drive to Waterford Hills Boulevard and Waters Road.
- Continue Waterford Hills Boulevard (B-22) south to connect to Century Boulevard (B-10).
- Extend Waters Road (B-5) to connect to Germantown Road.
- Connect Crystal Rock Drive and Century Boulevard with two new roads (B-17 and B-19).
- Reclassify Kinster Road (MA-299) and the southwestern portion of Crystal Rock Road (MA-1) as minor arterial roadways to reflect their arterial function in a predominantly residential setting.
- Extend Cider Press Place (MA-4) to connect to Observation Drive and MD 355.
- Reclassify the following industrial roads to business streets to reflect their anticipated commercial and mixed-use character and function.
  - Aircraft Drive
  - Century Boulevard
  - Cloverleaf Center Drive
  - Crystal Rock Road
  - Dorsey Mill Road
  - Goldenrod Lane
  - Seneca Meadows Road (formerly Goldenrod Lane)
- Evaluate a circulation pattern during the design of the Town Center transit station that converts Crystal Rock Drive into a one-way street northbound between MD 118 and Aircraft Drive, and converts Aircraft Drive into a one-way street southbound between Crystal Rock Drive and MD 118. Channel northbound traffic on Crystal Rock Drive to allow for a longer queue for traffic from I-270 and achieve bus door access on the right side adjacent to the Transit Center as buses circulate around the Bellmead property and transit station.

ENVIRONMENTAL RESOURCES

The 1989 Germantown Master Plan created an expansive greenbelt border protecting the important major streams. The Plan protected streams in the interior of Germantown, including the Town Center and the employment corridor addressed in this Plan, through stream buffers and regulation but with no other specific recommendations for protecting the tributaries that are the lifeblood of those streams.

Development proposed in this Sector Plan—mixed-uses oriented to transit stops—can achieve many environmental objectives. New centers, connections, and green spaces and buildings will enhance and connect with the existing greenbelt, forests, and stream valley parks. Development within these centers should be designed and built using exemplary green building standards to integrate the natural and built environments. A green Germantown will manage its stormwater, forest resources, and water quality to achieve an environmentally, socially, and fiscally sustainable community.

The Maryland Economic Growth, Resource Protection, and Planning Act of 1992 directs that this Sector Plan, through its links to subdivision and zoning regulations, protect streams and their buffers, 100-year floodplains, steep slopes, and habitats of threatened and endangered species.



Environmental Framework

- Germantown's greenbelt, forest stands, and wetlands will shape the pattern of new development and provide significant natural resources.
- A connected system of public and private open spaces will serve both recreation and open space functions as well as protecting significant areas of forest, wetlands, water supply recharge areas, and wildlife habitat.
- Protection of water quality in tributaries of Little Seneca Lake requires special attention to the effects of development on stream buffers and enhancing water quality. Little Seneca Lake is an important regional recreational resource and emergency drinking water supply for the Washington Region. Stormwater must be managed with techniques that intercept, retain, infiltrate, treat, and re-use stormwater at multiple points throughout the development. Stormwater management should be dispersed rather than concentrated in regional stormwater facilities.
- Developing Germantown in an urban pattern will provide the opportunity for creative green design and building options that enhance environmental quality.

Forest Resources

- Outstanding forest resources on the Montgomery College campus and the North End should be retained to prevent fragmentation of upland forests.
- Increase tree canopy coverage from the 2008 level of 20 percent to 30-40 percent by 2038. Establish additional tree canopy and vegetation in critical stream and wetland buffer areas, especially where forested buffers can be connected.

Open Spaces

- Create an open space system that connects destinations, preserves existing natural areas, incorporates green functions, and provides opportunities for non-motorized transportation and recreation.

Water Quality

- Protect wetlands and their associated buffers — including springs and seeps — by using conservation easements during the development review process. Restore and/or enhance such wetlands by ensuring adequate hydrology to support the wetlands and their functions.
- Restore forested stream and wetland buffers in combination with land acquisition programs to preserve, enhance, or restore riparian buffers and special habitat areas.
- Direct wetland mitigation within the study area using the criteria identified in the *Seneca Creek Environmental Resources Inventory* (M-NCPPC 2007).
- Implement stormwater retrofit and stream restoration projects to help manage or remediate impacts of uncontrolled impervious areas. See the Great Seneca and Muddy Branch Watershed Study (MCDEP 2008) for a list of priority restoration and retrofit projects. Project implementation must be coordinated with the County's Department of Environmental Protection.

Stormwater

- Minimize stormwater runoff using site design techniques such as vegetated riparian buffers, urban tree canopy, and minimizing impervious surfaces. Refer to the County's stormwater management regulations and guidelines for specific recommendations.
- Minimize impacts with comprehensive stormwater management approaches including green roofs, rain gardens, innovative stormwater outfalls, green streets, cisterns, rain barrels, grass swales, street trees, vault retention and infiltration systems, and stream restoration to the fullest extent possible during the development review process.
- Use biofiltration swales adjacent to streets that are outside of high pedestrian, transit served areas.

Green Design and Buildings

- Reduce parking requirements for high density, transit-oriented development to reduce the area of impervious surfaces. Use innovative stormwater management methods or technologies to allow a high percentage of surface water to infiltrate the soil.
- Design new buildings to reduce carbon emissions through energy efficiency, on-site sources of renewable energy, and recycling of waste materials from construction and demolition to the fullest extent possible as part of compliance with County law to achieve LEED certification level or equivalent.
- Provide a safe, attractive, and continuous network of sidewalks and bikeways throughout the study area.
- Develop streets that are designed to give priority to pedestrians and bicyclists.
- Support transportation recommendations for transit and parking and the highest possible mode share split and a reduction in vehicle miles travelled
- Locate new residential neighborhoods away from noise sources such as highways and support noise-compatible site design for projects adjacent to existing and proposed noise generators, including arterial roads and highways.

HISTORIC RESOURCES

Germantown's historic resources contribute to community identity and quality of place. Historic buildings and the historic district are linked to the rest of Germantown through pedestrian paths, active use, and cultural events. New construction and public spaces must be compatible with historic resources and incorporate historic themes and design elements.

Community Identity

Enhance and celebrate historic and cultural facilities.

Historic sites contribute to community identity and bolster the quality of place envisioned for Germantown's future.

Landmark historic sites along MD 355 such as the Cider Barrel and Neelsville Church provide a sense of place and wayfinding aids for residents and visitors. The historic Cider Barrel should be relocated to public property such as the police and fire site, the Upcounty Regional Services Center, or along the Century Boulevard promenade.

Cultural Activity

Cultural events and activating uses, including weekend markets and holiday events, enliven the areas in and around the MARC station in the heart of the Germantown Historic District. Rail transport has been an essential part of Germantown's history and will continue to be important to its future. The compact community envisioned for Germantown will be compatible with the historic railroad community resources. The introduction of mixed-use activity near the train station will enhance community life in and near the MARC station to serve commuters' and residents' needs.

Other historic approaches include the following:

- Dedicating the historic Pleasant Fields/Basil Waters House as a center for community events and educational exhibits.
- Connecting transit station activity centers to designated historic sites and cultural features in parks.
- Establishing pedestrian connections between residential areas and the MARC station can promote train use, decrease the need for parking, and increase the visibility of the historic district.
- Protecting historic sites by integrating these resources into the community with compatible land uses.

Pumphrey-Mateney House: Historic site near the MARC station

Neelsville Presbyterian Church along MD 355

Design Direction

New development and construction should be compatible with and defined by historic resources that establish community identity. Design elements relating to community history of railroad and other themes should be incorporated into public spaces and new construction to reinforce community identity.

Historic Themes:

- A Native American Hunting and Gathering Ground (10,000 B.C. – 1607 A.D.)
- The Waters Family and Early Agrarian Founders (18th Century – Early 20th Century)
- Water and Steam Powered Mills (mid-18th Century – 1920s)
- The Germans Behind Germantown (1830s – 1870s)
- A Settlement that Followed Transportation (Pre-1600 – Present)

Designated historic sites should be protected and integrated into the community with compatible adjacent land uses.

Historic Pleasant Fields / Basil Waters House is used for community events.