Part III: Infrastructure Elements

ibregion 4 A Plan for the Heart of Prince George's

Approved Subregion 4 Master Plan and Sectional Map Amendment

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Environment

Chapter

Introduction

Prince George's County's environmental infrastructure is an interconnected system of public and private lands that contain significant areas of woodlands, wetlands, water supply reservoirs, and wildlife habitats. This plan seeks to restore the ecological functions of these systems through environmentally sensitive design and the use of technologies and techniques that will mitigate existing problems while preventing future problems.

Background

In developing a master plan, the condition of natural features must be assessed to ensure that environmental resources are effectively protected, preserved, and enhanced. This is especially true in Subregion 4 where areas were developed for years without fully recognizing the impacts that development was having on the environment and the region's natural resources. Consequently, streams were piped and channelized and stream buffers were removed. These actions have contributed to the degradation of water quality in local streams, the Anacostia River, the Potomac River, and the Chesapeake Bay.

Large portions of the region were developed before the enactment of stormwater management regulations. Limited stormwater management controls, combined with large areas of impervious surfaces and a relatively low percentage of tree and forest coverage, have contributed to very poor water quality in Subregion 4. Drainage problems also are common.

The region also suffers from illegal dumping into streams, parks, and open spaces. As the region's green infrastructure is restored and public areas are made more green, the hope is that the people who live, work, and visit Subregion 4 will have opportunities to reconnect with the environment, and this will lead to a decrease in illegal dumping.

The Subregion 4 Master Plan provides an opportunity to restore ecological functions, while reintegrating natural features into neighborhoods and commercial areas, improving the quality of the water and the air, and providing economic and recreational opportunities for residents.

There are many environmental issues and challenges facing Subregion 4. However, the area boasts many attributes that can positively affect the environment. Watershed restoration, stormwater management, and other projects can be implemented in the years ahead.

Subregion 4 is located entirely within the Developed Tier, as defined in the 2002 General Plan. Although the majority of the region is developed, significant areas of woodlands and open space remain in many places as remnants of natural areas adjacent to developed areas and also as parks and stream valleys.

Urban forests are important to Subregion 4 and provide many benefits to communities. Urban forests are located on public or private lands in cities and towns and include trees that grow individually, in small groups to form tree canopies, or in forested conditions. They reduce the overall temperature of built spaces, provide oxygen, remove pollutants from the air, and improve water quality by absorbing pollutants from stormwater run-off when strategically planted or preserved. Trees also provide beauty and a sense of proportion to the built environment.

About 55 percent of the subregion is in the county's green infrastructure network, or six percent of the county's entire network. The subregion also contains two of the county's special conservation areas, including one of the 12 remaining magnolia bogs in the Washington, D.C., area. Restoring this network will provide many benefits to the region and support many of the goals in this functional master plan.

Green Infrastructure

The 2005 *Approved Countywide Green Infrastructure Plan* identified a comprehensive framework for conserving significant environmental ecosystems in Prince George's County.

The network is divided into three categories: regulated areas of countywide significance, evaluation areas, and network gaps.

- Regulated areas include environmentally sensitive features such as streams, wetlands, 100-year floodplains, severe slopes, and buffers that are protected during the development review process.
- Evaluation areas contain environmentally sensitive features such as interior forests, colonial waterbird nesting sites, and unique habitat that are not currently protected.
- Network gaps are areas critical to connecting the regulated and evaluation areas.

The Green Infrastructure Plan states that boundaries of the network should be examined and refined during the master plan process to identify areas of local significance, as well as opportunities to improve the connectivity of the network and to protect important natural resources.

During the preparation of the countywide green infrastructure network, all of the regulated areas within the Developed Tier were included because the remaining resources are limited. Outside of the Developed Tier, the regulated areas were removed from the network if the existing vegetation was less than 200 feet wide or if gaps greater than 600 feet existed. These classifications provided the

196 | Part III: Infrastructure Elements Environment designation of "countywide significance" to the network. During the preparation of the Subregion 4 Master Plan, the green infrastructure network was reevaluated; no areas of local significance needed to be added to the network.

Primary and Secondary Corridors

The Subregion 4 planning area drains into both the Patuxent River (to the east) and the Potomac River (to the west). The Southwest Branch watershed drains to the Patuxent River and contains the Southwest Branch and Ritchie Branch stream systems. Several watersheds drain to the Potomac including the Upper and Lower Anacostia, Oxon Run, Henson Creek, and Lower Beaverdam Creek watersheds. The Lower and Upper Anacostia watersheds, along with the Oxon Run and Henson Creek, represent small portions of the drainage area of Subregion 4. The Lower Beaverdam Creek watershed contains the largest drainage area and includes the Cabin Branch and Beaverdam Creek stream systems.

Subregion 4 contains three primary and three secondary environmental corridors that can be expanded as shown on Map 7-1 on page 198. The primary corridors are Beaverdam Creek, Cabin Branch, and Southwest Branch. Secondary corridors include Cattail Branch, Ritchie Branch, and Watts Branch. These corridors include the main stems of major waterways in the region, and each receives most of the runoff from surrounding land uses.

Connecting these corridors is critical to the longterm viability and preservation of the green infrastructure network and also will serve to preserve the region's water quality. Conservation and preservation of these corridors, particularly the headwater areas, will help to improve water quality downstream.

Table 7-1 provides water quality detail for the primary corridors. As the table shows, all of the streams in the region are degraded.

Only 23 percent of the subregion's total land area is vegetated and much of it is highly impervious. However, important connections can be created or preserved. This plan includes strategies to address the greening of existing and proposed infrastructure by using the built environment to mitigate the negative effects of conventional development.

Public and private investments are needed to achieve this goal, and areas in need of restoration should be identified and targeted for mitigation. As development and redevelopment within this planning area occur, opportunities will arise to restore lost habitat and improve water quality.

Special Conservation Areas

The Green Infrastructure Plan identifies special conservation areas (SCAs) of countywide significance. Two of the 13 SCAs in Prince George's

Table 7-1: Primary Environmental Corridors in Subregion 4						
Corridor	303(d) List Categories ²					
Anacostia	Beaverdam Creak	Very Poor	Very Poor	Bacterial, Biological, Nutrients, Sediments,		
	Cabin Branch	Very Poor	Very Poor	Metals, Toxics, Trash		
Western BranchSouthwest BranchVery PoorVery PoorBiochemical O Demand						
¹ Approved Countywide Green Infrastructure Plan, 2005. ² Maryland Dant, of the Environment, 2006. This is Maryland's list of impeired surface waters						

submitted in compliance with section 303(d) of the 1972 federal Clean Water Act.

Map 7-1: Green Infrastructure—Primary and Secondary Corridors



198 | Part III: Infrastructure Elements Environment County are located in Subregion 4: the Anacostia River and the Suitland Bog.

Main Stem of the Anacostia River

The Anacostia River main stem is tidal all the way through the District of Columbia to Prince George's County, until the confluence of the Northeast and Northwest Branches near Bladensburg. The watershed of the Anacostia encompasses approximately 175 square miles in Montgomery and Prince George's County, as well as the District of Columbia. This highly developed urban waterway is an important historic spawning ground for fish, such as the alewife herring, blueback herring, hickory shad, white perch, striped bass, yellow perch, American eel, and sea lamprey. These species spend most of their lives in saltwater but return to fresh water to spawn.

For the past ten years, the Anacostia main stem and the freshwater tributaries immediately upstream have been the target of intense retrofitting efforts to remove stream blockages, improve streambank stability, replant lost stream buffers, and improve water quality. These efforts have aimed to reopen historic spawning grounds and replace important portions of the green infrastructure network that were denuded as the metropolitan area developed and expanded.

The Anacostia is a well-studied river and various documents have been produced regarding its current ecological state and future restoration strategies. A Watershed Restoration Action Strategy is currently in development for the Anacostia, and this work is supported by the associated stream corridor assessments performed for the entire watershed including all of the Anacostia's tributaries. Potential areas of restoration have been identified and are included in a countywide database of mitigation sites held by The Maryland-National Capital Park and Planning Commission (M-NCPPC).

An interim report summarizing the key findings of the Anacostia River Watershed Restoration Plan was submitted to Congress in November 2008. The plan is a comprehensive attempt to restore the watershed as quickly as possible in a meaningful and cost-effective way. The first phase of the plan, completed in 2008, sets forth a framework and applies concepts to the Sligo Creek subwatershed in Montgomery County as a case study. The second phase, completed in 2009, applies the framework to the remaining 13 subwatersheds, including areas within Subregion 4. Restoration actions identified in the plan will be implemented during the next decade.

Suitland Bog

A bog is a wetland area having peat and moss in which shrubs, herbs, and sometimes trees grow. Suitland Bog is a unique wetland because it hosts a variety of carnivorous plants, including the pitcher plant and two types of sundews, as well as over 40 plants on the Maryland Natural Heritage's "Rare, Threatened, and Endangered Plants of Maryland" list.

Suitland Bog is located in the southeastern portion of Subregion 4 with a public entrance along Suitland Road and includes approximately 60 acres of wetland habitat. The site is owned by M-NCPPC.

Encroachment is the most important impact that could affect Suitland Bog causing habitat loss, sedimentation, and alteration of surface or ground water flow patterns. The Green Infrastructure Plan recommends that actions taken within the Suitland Bog watershed should attempt to maintain ground water flow to the bog, limit surface water flooding, and reduce or eliminate sediment reaching the bog.

Wildlife Habitat

Subregion 4 is home to a limited amount of terrestrial habitats, including tracts of woodlands, grasslands, and wetlands that support a diversity of wildlife. Woodlands are important because they help to reduce runoff, erosion, and air pollution, and they provide habitats for wildlife. Disturbing these habitats can cause the wildlife to relocate to developed areas and cause problems for area residents. It is important to allow wildlife to move freely in the landscape to reduce conflicts.

Goals

- Recognize the importance of connected ecological systems by protecting, preserving, and enhancing the green infrastructure network.
- Implement the subregion plan's desired development pattern while protecting environmentally sensitive features and

upholding the intent of the county's environmental policies and regulations.

Policy 1

Protect, preserve and enhance the green infrastructure network in Subregion 4.

Strategies

- Protect green infrastructure environmental corridors by focusing development outside the network. Implement this during the review of land development proposals to ensure the highest level of preservation and restoration possible, with limited impacts for essential development elements.
- Assess the potential to acquire land parcels in designated network gap areas to further protect and expand the network.
- Evaluate land development proposals in the vicinity of SCAs (Anacostia River, Suitland Bog) to ensure that SCAs are not impacted and that green infrastructure connections are either maintained or restored.
- Limit impacts to the green infrastructure network to those necessary for the reasonable development of properties.
- Provide mitigation of impacts to the regulated areas within the development site, drainage area, subwatershed, or watershed by first exhausting the mitigation areas identified in the countywide mitigation database and then seeking other opportunities within the river basin.

Policy 2

Minimize the impacts of development on the green infrastructure network and SCAs.

Strategies

- Protect and enhance water quality upstream of the Suitland Bog by requiring the preservation or establishment of 75-foot-wide buffers on streams that feed the hydrology of the bog.
- Require the retrofitting of existing or installation of new water quality structures to ensure that water quality is maintained or enhanced above the Suitland Bog.

Water Quality and Stormwater Management

Some of the most challenging resource problems in Subregion 4 relate to water quality and stormwater runoff. Subregion 4 is made up of three major watersheds: the Potomac, the Anacostia, and the Patuxent. The Potomac River basin is divided into several subbasins, including Oxon Run Creek, Henson Creek, and other unnamed minor watersheds.

The Anacostia River basin comprises the Lower Anacostia and Lower Beaverdam Creek, the latter of which consists of the Cattail Branch and other small and unnamed streams and watersheds. The Patuxent River basin is the least polluted of the three, based on existing condition ratings.

Some of the major challenges to water quality in Subregion 4 include:

- An influx of floating trash, pesticides, oil, and toxic chemicals carried into the river from direct water run-off (nonpoint source pollution).
- A legacy of high levels of impervious surfaces from development that was built without stormwater management treatments or controls.
- High levels of bacteria carried into the river from stormwater runoff and leaks from an aging sanitary sewer system.
- A high percentage loss of forests, wetlands, and other sensitive environmental features capable of absorbing stormwater runoff and certain pollutants.
- Increasing development pressures without a comprehensive plan for stormwater management.
- Eroded stream banks.

As a result of these problems, intense retrofitting and innovative methods are needed in Subregion 4, including stream bank stabilization, reducing the amount of impervious area, increasing the vegetative cover in stream bank buffer areas, and coordinating efforts to improve water quality. Implementing these solutions will require further evaluation of problem areas, including encroachments into sensitive environmental areas.

Table 7-2 on page 202 summarizes these problem areas and the types of interventions they may require. They are also shown on Map 7-2 on page 201, along with a depiction of channelized streams.



1	Table 7-2: Stormwater Management, Flooding, and Tree Cover Problem Areas in Subregion 4						
Problem Area	Description	Flooding Issues	Inadequate Tree Cover	Inadequate Stormwater Management	Notes		
1	Beaverdam Creek tributaries	Yes (substantial flood-prone areas)	Yes (further evaluation needed)	Yes (need for possible retrofits)			
2	Beaverdam Creek tributaries	Yes (further evaluation needed)	Yes (further evaluation needed)		Area is substantially developed and paved and has piped streams; evaluate flooding, water quality, and stormwater management facilities; add tree cover as development and redevelopment occurs.		
3	Cattail Tributary (Beaverdam Creek)	Yes (some building footprints within 100-year floodplain)	Yes (further evaluation needed)		Area has some encroachments into expanded stream buffer areas; add tree cover as development and redevelopment occurs.		
4	Beaverdam Creek (in entirety)	Yes (building footprints are within 100-year floodplain)			Evaluate area for encroachments into green infrastructure evaluation areas.		
5	Lower Beaverdam Creek	Yes (some building footprints within 100-year floodplain)	Yes (further evaluation needed)		Area has substantial environmental constraints; evaluate for flooding, tree cover and potential water quality improvements.		
6	Southwest Branch tributaries (Patuxent River basin)	Yes (limited building footprints within 100-year floodplain)	Yes (further evaluation needed)		Area west of the Beltway has marginal encroachments into green infrastructure regulated areas and 100-year floodplain; evaluate for tree cover, noise mitigation (Capital Beltway), and flooding issues.		
7	Southwest Branch tributary (Patuxent River basin)	Yes (some building footprints within 100-year floodplain)	Yes (stream buffers lack tree cover)		Area is substantially developed and has encroachments into stream buffers for roads and parking; evaluate need for tree cover.		

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(Cont'd)								
1	Table 7-2: Stormwater Management, Flooding, and Tree Cover Problem Areas in Subregion 4							
Problem Area	Description	Flooding Issues	Inadequate Tree Cover	Inadequate Stormwater Management	Notes			
8	Southwest Branch tributary (Patuxent River basin)	Yes (some building footprints within 100-year floodplain)	Yes (further evaluation needed)		Area includes expanded stream buffer areas; evaluate for potential flooding and tree cover.			
9	Southwest Branch tributary (Patuxent River basin)	Yes (some building footprints within 100-year floodplain)	Yes (further evaluation needed)		Areas along Waterford Drive, Starboard Drive and Tulip Avenue have substantial environmental impacts; portion of area within Andrews Air Force Base, Air Installation Compatible Use Zone Study (AICUZ), a noise concern; evaluate flooding, noise and tree cover.			
10	Oxon Run tributary (Potomac River basin)	Yes (some building footprints within 100-year floodplain)			Developed areas along Fairhill Drive, Green Drive, and adjacent streets are within 100-year floodplain and expanded stream buffer; evaluate for flooding and drainage problems as development and redevelopment occurs.			
11	Henson Creek tributary (Potomac River basin)	Yes (some building footprints within 100-year floodplain)			Stream buffer is partially piped but remains open in a wooded area of the north; area does not have significant encroachments into green infrastructure regulated areas.			
12	Lower Anacostia River tributary (Anacostia River basin)	Yes (some building footprints within 100-year floodplain)		Yes (need for possible retrofits)	Stream is piped to support roads, parking and other infrastructure; evaluate for flooding and water quality problems.			

Tributary Action Items

The Chesapeake Bay Tributary Action Items are a product of the Chesapeake Bay Agreement. The strategies provide approaches to reduce nutrient pollution loads in subwatersheds that drain to the bay by 40 percent. The Maryland Tributary Strategy was completed in 2004 and includes targets for nutrient reductions from stormwater, septic systems, growth management, agriculture, point sources, and air sources.

Subregion 4 lies in two "tributary watersheds" (basins) identified in the plan: the Middle Potomac and the Patuxent. The state is encouraging the use of tributary action items as implementation tools for waters with approved total maximum daily loads (TMDLs).*

Water Resources Functional Plan

Prince George's County is developing a countywide Water Resources Functional Master Plan that will address stormwater issues by watershed. It will address, in particular, how much development the county's watersheds can accept before nutrient load thresholds (i.e., the amount of nitrogen and phosphorus discharged from wastewater treatment plants and stormwater runoff) are exceeded. The water resources plan will provide countywide recommendations regarding stormwater design and the use of environmental design techniques.

Stream Restoration

Limited stormwater management controls, combined with a high percentage of impervious surfaces and a low percentage of tree and forest coverage, have degraded water quality in Subregion 4. As areas surrounding streams are developed, the increase in impervious surfaces furthers the degradation of these receiving waterways. Watersheds with increasing amounts of impervious surfaces are known to contribute to the "urban stream syndrome," which is a suite of symptoms including erosion of banks and channels, "flashy" (quick to rise and subside in response to rain events) hydrology, and degraded habitat for aquatic plants and animals. Replacing impervious surfaces with various stormwater management practices during redevelopment can help to relieve degraded streams from the negative impacts of stormwater runoff. A strategic stormwater management plan at the time of redevelopment will help to guide remediation and restoration of these impacted stream systems.

Environmental Site Design

Environmental Site Design (ESD) processes have been identified as ways to improve water quality throughout Prince George's County, and these methods can be applied in Subregion 4.

Some examples of ESD include the use of:

- Systems that filter stormwater from parking lots and impervious surfaces, such as bioretention cells, filter strips, and tree box filters.
- Systems that retain (or store) stormwater and slowly infiltrate water, such as subsurface collection facilities under parking lots, bioretention areas, and infiltration trenches.
- Modifications to infrastructure to decrease the amount of impervious surfaces, such as curbless, gutterless, and reduced-width streets.
- Low-tech vegetated areas that filter, direct, and retain stormwater, such as rain gardens and bioswales.
- Innovative materials that help break up (disconnect) impervious surfaces or are made of recycled material, such as porous concrete and permeable pavers.
- Water collection systems, such as subsurface collection facilities, cisterns, or rain barrels, that can also be designed for reuse of collected water.
- Native and site-appropriate vegetation.
- Viable, existing trees transplanted to appropriate areas to expedite streambank stabilization, restore tree canopy, establish wildlife habitat, or create vegetated buffers.

^{*} A TMDL quantifies the maximum amount of pollutant, such as nutrients, that a water body, such as a river or a lake, can receive without causing water quality impairment. TMDLs are prepared by the Maryland Department of the Environment and approved by the U.S. Environmental Protection Agency.

Goals

The following goals, policies, and strategies are key to achieving the vision of this master plan:

- Preserve, protect, and enhance surface and ground water features and restore lost ecological functions.
- Protect and restore ground water recharge areas, such as wetlands and the headwaters areas of streams.
- Reduce dumping in and around streams.
- Reduce the negative effects of stormwater runoff.

Policy 1

Restore and enhance water quality in areas that have been degraded, and preserve water quality in areas not degraded.

Strategies

- Prepare a strategic watershedwide plan for addressing stormwater quantity and quality.
- Maintain, enhance, and restore woody buffers around streams to preserve and protect water quality.
- Undertake water quality demonstration projects on county property (for example, at schools, parks, libraries) using ESD and other innovative techniques.
- Use conservation landscape techniques to be evaluated during the development review process.
- Assess potential drainage problem areas and areas within the 100-year floodplain for retrofit projects.

Policy 2

Improve the base of information needed for the county to undertake and support stream restoration and mitigation projects.

Strategies

- Continue the collection of stream mitigation data for addition to the countywide mitigation database, using stream corridor assessments.
- During the review of land development proposals, consult the countywide mitigation database and require the restoration of streams

as close to the development site as legally possible.

 Coordinate data contributions for possible mitigation sites (e.g., county, state, and federal agencies, citizens, nonprofits).

Policy 3

Require on-site management of stormwater through the use of environmentally sensitive stormwater management techniques (i.e., fully implement the requirements of ESD) for all development and redevelopment activities.

Strategies

- Require the use of shared environmentally sensitive stormwater management facilities where appropriate.
- Increase stormwater storage in appropriate areas, such as open space and preserved and constructed wetlands.

Policy 4

Assure that adequate stream buffers are maintained and enhanced and utilize design measures to protect water quality.

Strategies

- Maintain and enhance adequate woody vegetated buffers around streams to preserve and protect water quality.
- Identify possible locations for additional bioretention features to serve one or more properties.
- Enhance buffers through the Woodland Conservation Ordinance required during the review of land development proposals.
- Require street tree plantings be incorporated as a stormwater management feature.

Air Quality and Greenhouse Gas Emissions

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). Some GHGs, such as water vapor, carbon dioxide, methane, nitrous oxide, and ozone, occur naturally but are also emitted to the atmosphere through human activities. Other GHGs, such as fluorinated gases, are created and emitted solely through human activities.

Approved Subregion 4 Master Plan and Sectional Map Amendment The 2002 General Plan addresses air quality in relation to the Developed Tier by enhancing environmental features and green infrastructure elements and by reducing miles traveled through smart development techniques. Since 2002, climate change and greenhouse gas emissions have emerged as major issues at the international, national, and local levels.

The Washington metropolitan area is a nonattainment area for ground-level ozone, an invisible gas formed when volatile organic compounds and nitrogen oxides react in sunlight. The primary 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. Motor vehicles alone account for 30 to 40 percent of the pollutants that cause ground-level ozone in the metropolitan region.

The Maryland Climate Action Plan, developed in August 2008, recommends a 90 percent reduction in GHG emissions by 2050. Also in 2008, the County Council adopted resolution CR-24-2008 with the goal of reducing countywide GHG emissions below 80 percent of 2008 levels by 2050 (CR-24-2008).

The county has an important role to play in reducing GHG emissions and preparing for the impacts of climate change through policies and actions in the areas of land use planning, transportation, woodland conservation, and energy use.

Prince George's County has created the position of a County Energy Manager, whose responsibilities include the creation of an inventory to account for county GHG emissions. The Department of Environmental Resources is developing a program to implement reduction strategies and is monitoring progress toward its goals.

Goals

The following goals, policies, and strategies are key to achieving the vision of this master plan:

- Improve air quality in Subregion 4.
- Increase public awareness of air quality and GHG emissions.

- Increase public transportation use and minimize motor vehicle trips by concentrating growth in centers and along corridors.
- Increase the use of clean energy sources, such as solar and wind power.

Policy

Reduce air pollution to support public health and wellness by placing a high priority on transitoriented development and transportation demand management (TDM) projects and programs.

Strategies

- Assist in the development of a Strategic Climate Action Plan that examines Prince George's County GHG emissions and reduction strategies.
- Engage in outreach to educate and raise awareness regarding how residents and businesses can address air quality and climate change at the subregion level.
- Reduce air pollution and energy use by placing a high priority on TDM projects, transit, and mixed-use development.
- Encourage the use of clean energy sources, such as solar and wind power.
- Design development and redevelopment projects to minimize the need for motor vehicle trips.
- Provide a continuous network of sidewalks, trails, and bikeways to facilitate pedestrian use and access.

Noise Intrusion

Noise is defined as any form of unwanted sound. Noise is a composite of all background sounds that emanate from point and nonpoint sources and are transferred to a receptor or receiver. The amount of noise transmitted can vary considerably due to elevations, the existence of barriers, and project design.

Federal and state ordinances and guidelines have been developed to ensure the reduction of noise levels to acceptable standards. The consensus of these standards is that 65 "A-weighted" decibels (dBA Ldn) is the maximum noise level generally acceptable for residential areas. During the review of residential development applications, this noise level is measured using a nighttime factor that results in a noise threshold being adjusted to account for human sensitivity to noise at night (65 dBA Ldn).

Areas of Subregion 4 are affected by high levels of noise produced by military aircraft operations at Joint Base Andrews. The most recent air instillation compatible use zone (AICUZ), completed in 2007, delineates noise zone contours in five-decibel (dB) increments, ranging from 65 dBA Ldn to at or above 80 dBA Ldn.

Noise zones extend nearly as far north as Central Avenue (MD 214) and as far west as Penn-Mar Shopping Center on Marlboro Pike. Of the areas in the flight path, Subregion 4 experiences the lowest levels of noise exposure from aircraft operations (i.e., 65-70 dBA Ldn). For noise comparison purposes, traffic on the Capital Beltway generates a noise level of approximately 65 dBA Ldn during rush hour in a location within 1,000 feet of the roadway.

Guidelines provided by the AICUZ study address land use compatibility for each specific noise zone. Residential and retail commercial uses, for example, within the 65 dBA Ldn and 70 dBA Ldn noise zones are generally compatible provided noise attenuation measures are incorporated into design and construction of the structures. Recommended prohibited uses within the affected noise areas are nature exhibits, amphitheaters, and places of public assembly.

Local highways generate noise according to the speed and volume of traffic carried, as well as other factors including noise reception location and topography. Freeways are normally the noisiest facilities. The use of sound-deadening barriers or other sound attenuation measures can reduce noise to acceptable residential levels, such as 65 dBA Ldn (average decibels, with day-and-night levels considered) for outdoor activity areas and 45 dBA Ldn for indoor living areas.

Goal

The following goals, policies, and strategies are key to achieving the vision of this master plan:

 Coordinate land use, economic planning, and environmental planning to reduce or mitigate the effects of noise pollution.

Policy

Reduce adverse noise impacts so that the State of Maryland's noise standards are met.

Strategies

- Evaluate development and redevelopment proposals in areas subject to high levels of noise using Phase I noise studies and noise models. Phase I noise studies determine base-line noise levels acceptable for a planned area.
- Provide for the use of noise reduction measures when and where noise issues are identified through the development review process.
- Work with the State Highway Administration to ensure that as state roads are upgraded, appropriate noise reduction measures are incorporated into roadway design.
- Achieve compatible land uses and development in areas subject to noise that exceeds acceptable standards.
- Provide for adequate setbacks for development exposed to existing and proposed noise generators and roadways of arterial classification or greater.
- Restrict hours of operation for uses that produce excessive noise.

Green Buildings/ Sustainability

The 2002 General Plan includes a goal to reduce overall energy consumption and implement more environmentally sensitive building techniques throughout the county.

Green building is the practice of increasing the efficiency with which buildings use resources energy, water, and materials—while reducing impacts on human health and the environment during the building's lifecycle through better siting, design, construction, operation, maintenance and removal.

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^{*} The Leadership in Energy and Environmental Design (LEED) Green Building Rating System[™] is a voluntary national standard developed by the U.S. Green Building Council for the design, construction, and operation of high performance green buildings.

In September 2007, the County Executive established a Green Building Executive Steering Committee and Energy Efficiency Council as part of the county's "Going Green" initiative. The committee evaluated the feasibility of green building goals and developed the following goal-specific implementation guidelines, actions, and financial strategies:

- Reduce energy consumption per square foot in all existing county buildings by 20 percent by the year 2015.
- Design and construct all new county buildings and public schools in accordance with the Leadership in Energy and Environmental Design (LEED)* silver rating.
- Establish incentives for both new and existing private commercial buildings to achieve a LEED silver rating or an equivalent rating under a comparable green building performance measure.
- Establish a green building education and outreach program.
- Ensure that a sufficient number of development and permit review staff possess LEED accreditation, are able to sign off on tax credits and certifications, and adequately assist commercial developers or large-scale property owners in meeting performance measures.

LEED has developed standards for Neighborhood Development (LEED-ND) that allows for evaluation and certification of neighborhoods regarding their level of energy and environmental design.

Goal

The following goals, policies, and strategies are key to achieving the vision of this master plan:

• Encourage the use of green building techniques that reduce energy and resource consumption.

Policy 1

Implement environmentally sensitive building techniques that reduce overall energy consumption.

Strategies

 Promote environmentally sensitive building techniques as designated by the U.S. Green Building Council.

- Require the use of the latest environmental technologies in building and site designs.
- Encourage the reuse and redesign of existing buildings when redevelopment occurs to incorporate energy and building material efficiencies.
- Reduce energy consumption through the use of more effective and energy efficient indoor and outdoor lighting and air movement systems.
- Establish incentives for new and existing commercial buildings to achieve a LEED silver rating or an equivalent rating under a comparable green building performance measure.

Policy 2

Implement land use policies that encourage infill and support TOD and walkable neighborhoods.

Strategy

 Direct development and infill to existing areas rather than "greenfields."

Policy 3

Increase the county's capacity to support sustainable development.

Strategies

- Design and construct all new county buildings and public schools in accordance with the LEED silver rating per the Executive Order.
- Ensure that a sufficient number of development and permit review staff possess LEED accreditation, are able to sign-off on tax credits and certifications, and adequately assist commercial developers or large-scale property owners in meeting performance measures.
- Implement the recommendations of the county's Green Building Executive Steering Committee and Energy Efficiency Council.

Chesapeake Bay Critical Area

The Maryland General Assembly enacted the Chesapeake Bay Critical Area law in 1988 to foster more sensitive development along the shorelines and tidal tributaries of the Chesapeake Bay in order to minimize the damage to natural habitats and degradation of water quality. Statewide goals for protection of the critical area include minimizing water quality impacts from pollutants in runoff; conserving fish, wildlife, and plant habitat; and establishing land use development policies that accommodate limited growth while also addressing adverse environmental impacts inherent to human activity.

There is a very small portion (approximately 14 acres) of the Chesapeake Bay Critical Area in Subregion 4. This area extends into the upper tidal portions of the Anacostia River. All of the critical area in the region is within the designated green infrastructure network. This portion is within the Intense Development Overlay Zone of the critical area which acknowledges the existing development in the area. Many of the recommended actions in this chapter also support and encourage the protection and resource enhancement of the critical area.

Goal

The following goals, policies, and strategies are key to achieving the vision of this master plan:

 Protect, restore, and enhance the Chesapeake Bay Critical Area.

Policy

Ensure that the Chesapeake Bay Critical Area is protected to the maximum extent possible through the implementation of water quality and other related measures.

Strategies

- Continue to enhance the county's critical area protection program in response to local, regional, and statewide initiatives and legislative changes.
- Ensure that proper enforcement of the regulations takes place within the critical area.

Tree Canopy and Green Space

Tree cover in Prince George's County and the Developed Tier has decreased as the county has

developed. Between 1938 and 2000, the amount of woodland acreage in what is now the Developed Tier decreased from 19,898 to 13,661 acres, or from 37 to 26 percent, of the Developed Tier's total land area.*

The General Plan priority is to focus new growth to the Developed Tier to take advantage of the "grey infrastructure" (roads, sewer lines, etc.). Doing this reduces the costs of development to communities and the county. Fewer roads must be built and maintained and fewer long-term infrastructure costs will be incurred. However, such development impacts the environment. Tree and woodland cover in the Developed Tier and Subregion 4 fell from 2000 to 2005, mainly due to new development projects. For example, this increases ground level temperatures and reduces the interception of rainwater that woodlands and tree canopy provide.

Tree cover is important because it helps to reduce the temperature of the built environment, removes pollutants from the air, and can serve to improve water quality by absorbing pollutants from stormwater runoff when strategically planted or preserved.

Between 2000 and 2005, the Developed Tier lost approximately 200 acres of tree canopy and Subregion 4 lost approximately 150 acres of that total. In order to maintain the 26 percent tree canopy goal stated in the 2002 General Plan, a concerted effort is needed to replace the lost canopy coverage.

The county's Woodland Conservation and Tree Preservation Ordinance seeks to preserve woodlands in conjunction with floodplains, wetlands, stream corridors, and steep slopes and emphasizes the preservation of large, contiguous woodland tracts. The ordinance also includes a Wildlife Habitat Conservation Policy requiring that the effects to wildlife habitat within woodland conservation areas be minimized in development plans.

Tree cover can be increased through forestation of stream corridors, stream buffers, and floodplains and through planting trees in public and private spaces. As development and redevelopment occur, trees should be planted and preserved, and communitysponsored tree planting efforts should be encouraged so that the tree canopy can expand over time.

^{*} The 2000 figure cited here was projected in 1999 as part of the Environmental Inventory Technical Summary.

Prince George's County also would benefit by using technology to focus tree planting efforts. One of the best approaches to building and maintaining an urban forest canopy is to have an organized, proactive management program. This can include a tree inventory, tree management plan, and related software that enables county staff to prioritize, schedule, and budget effectively. A tree management plan also provides citizen volunteers and residents accurate information about their urban forest and encourages them to participate in its care.

Goals

The following goals, policies, and strategies are key to achieving the vision of this master plan:

- Achieve the 2002 General Plan goals of meeting or exceeding 26 percent forest and tree cover in the Developed Tier by 2025.
- Improve the connectivity of green space, and enhance and protect existing tree canopy.

Policy 1

Preserve, restore, and enhance the existing tree canopy.

Strategies

- Require a minimum of ten percent tree canopy coverage on all new development and redevelopment projects.
- Encourage the preservation of existing specimen trees (defined as trees 30 inches or greater in diameter at breast height) at the time of development review.
- Increase the percentage of urban tree canopy by planting trees and other vegetation in public and private open spaces, along roadways, in median strips, and in residential communities.
- Ensure that root space is sufficient for longterm survival.
- Require a diversity of native stock trees when planting street, landscape, and lawn trees to promote ecosystem health and resiliency against disease and insects.

Policy 2

Improve the county's capacity to support increases in the tree canopy.

Strategies

- Support community- and site-based strategies to increase the tree canopy.
- Work with municipalities and large civic associations to develop a tree management program to prioritize, schedule, and budget urban tree planting on public land.
- Provide accurate information to the public in support of community-based tree planting programs.
- Establish new tree canopy guidelines to increase planting, reforestation, and afforestation.
- Encourage the development of communitybased tree planting programs and utilize county tree planting incentive programs, such as ReLeaf, the Annual Arbor Day grant, and the annual Gorgeous Prince George's tree giveaway for local community and municipality associations.
- Increase landscape buffers in common areas and along curbs and sidewalks.
- Establish a tree stewards' program to assist county agencies with planting and maintenance of trees in public areas.

Transportation Systems

Chapter

Introduction

The Subregion 4 planning area has a comprehensive, efficient, and user-friendly multimodal transportation network that accommodates transit, automobiles, pedestrians, and bicyclists. This multimodal transportation network is integrated with land use development to serve the Subregion 4 area, with an emphasis on accessibility to the centers, corridors, and other key destinations from the surrounding communities for all users. The recommended transportation plan also plays an important role in attracting quality development that is envisioned in the sector plans and the 2002 General Plan policies for centers.

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Background Existing Roadway System

The plan area is currently served by an excellent transportation system, with direct access to the Capital Beltway (I-495/I-95). In addition, major roadways serving the subregion area are the John Hanson Highway (US 50), Suitland Parkway, Pennsylvania Avenue (MD 4), Central Avenue (MD 214), Landover Road (MD 202), Martin Luther King, Jr. Highway (MD 704), Silver Hill Road (MD 458)/Walker Mill Road, Forestville Road/Ritchie Road/Garrett Morgan Boulevard, Addison Road, Shady Glen Drive/Hill Road, Brightseat Road/Ardwick-Ardmore Road, Sheriff Road, Columbia Park Road, and Marlboro Pike. (See Map 8-1 on page 213 and Table 8-1 on page 216.) All these facilities provide local or regional mobility and access to destinations inside and outside the Subregion 4 area. It is important, however, to note that the existing road network is marginal in providing direct and continuous access and mobility within the subregion in the north/ south direction. Another concern is with regard to the lack of convenient and pleasant local street grids, especially within the designated centers and areas close to the seven Metro stations. The most recent available average annual daily traffic (AADT) and average daily traffic (ADT) volumes along these major roadways are shown in Maps 8-2 and 8-3.

Truck and Freight Movement

A key element of the Subregion 4 economy is its industrial activities. These activities generate significant amounts of truck traffic. Although accommodation of truck transportation is essential, the increased truck traffic along some residential streets and neighborhoods in close proximity to the industrial uses has been the source of great community concern. The AADT truck volumes along major roadways in Subregion 4 are shown in Table 8-2 on page 218.

Another mode of freight transportation, railroad, is not significant within Subregion 4. Currently, only an average of two freight trains per day travel across the subregion and there are only two at-grade rail crossings within the subregion: one is along Cabin Branch Road with an AADT of 4,550, and the other is along Columbia Park Road with an AADT of 11,060.

Existing Transit System

The planning area has excellent public transit service offered by three Metrorail lines (Blue, Orange, and Green). Seven Metrorail stations (Cheverly, Landover, and New Carrollton on the Orange Line; Capitol Heights, Addison Road-Seat Pleasant, and Morgan Boulevard on the Blue Line; and Suitland on the Green Line) are within the subregion. Although located outside the subregion, the Naylor Road and Branch Avenue Stations on the Green Line, and Largo Town Center on the Blue Line, are also easily accessible. Metrorail operates between 5:00 a.m. to midnight on weekdays and from 7:00 a.m. to 3:00 a.m. on weekends. The frequency of service ranges generally from six minutes during weekday peak periods to 12 to 20 minutes during other time periods.

The Washington Metropolitan Area Transit Authority (WMATA) and the county's Department of Public Works and Transportation (DPW&T) provide bus routes that connect various neighborhoods, communities, employment, and commercial centers within the subregion to each other and to the remainder of the county and the region via the connections to the existing Metrorail stations. Hours of operation for WMATA's Metrobus routes vary considerably depending on the route. The typical frequency of service or bus headway for Metrobus routes serving the plan area varies from 20 to 30 minutes during morning and evening peak hours, and from 30 to 60 minutes during off-peak hours. Almost all of DPW&T's TheBus routes operate on weekdays, with no service on Saturdays, Sundays, and major holidays, and the service is generally limited to hours between 6:00 a.m. and 7:00 p.m. The headway for TheBus routes operating within the subregion is generally between 30 to 40 minutes during peak periods and is increased to 60 minutes during off-peak hours.

In addition to Metrorail and bus service, transit service in the subregion is also provided by the Maryland Area Rail Commuter's (MARC) Penn Line, with a stop at the New Carrollton Metro Station. This commuter line provides peak period weekday commuter transit service between Baltimore and the District of Columbia's Union

Map 8-1: Existing Transportation System







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Table 8-1: Existing Transportation System						
Roadway	Count Location	Roadway Classification	Existing Lanes (Bi-directional)			
Pennsylvania	East of DC Border	Expressway	4			
	West of Silver Hill Road		4			
	East of Silver Hill Road		4			
	West of Capital Beltway		4			
Central Avenue	East of DC Border	Arterial	2			
	West of East Capitol Street		2			
	West of Capital Beltway		6			
Martin Luther King Jr.	North of DC Border	Arterial	6			
Highway	North of Sheriff Road		6			
	South of Landover Road		6			
	North of Landover Road		6			
	South of Capital Beltway		6			
Landover Road	West of John Hanson Highway	Arterial	6			
	East of John Hanson Highway		6			
	West of MLK Jr. Highway		6			
	East of MLK Jr. Highway		6			
	West of Capital Beltway		6			
Columbia Park Road	South of Cheverly Metro Entrance	Collector	4			
	West of MLK Jr. Highway		4			
Suitland Parkway	East of Branch Avenue	Freeway	4			
Suitland Road	South of DC Border	Collector	2			
	North of Silver Hill Road		2			
	South of Silver Hill Road	Arterial	2			
	North of Suitland Parkway		2			
Marlboro Pike	East of Southern Avenue	Collector	4			
	East of Larchmount Avenue		4			
	East of Silver Hill Road		4			
	West of Forestville Road		4			
Ritchie Road	South of Central Avenue	Arterial	4			
	South of D'Arcy Road	Collector	2			
Forestville Road	North of Marlboro Pike	Collector	4			
	South of Marlboro Pike		4			
	South of Pennsylvania Avenue		2			
Silver Hill Road	South of Suitland Parkway	Arterial	6			
	South of Suitland Road		6			
	South of Pennsylvania Avenue		6			
	North of Pennsylvania Avenue		6			

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(Cont'd)

	Table 8-1: Existing Transportat	ion System	
Roadway	Count Location	Roadway Classification	Existing Lanes (Bi-directional)
Walker Mill Road	South of County Road	Arterial	6
	South of Addison Road		4
	West of Ritchie Road		2
Addison Road	North of Walker Mill Road	Arterial	2
	North of Central Avenue	Collector	2
	North of Sheriff Road		2
Sheriff Road	West of Addison Road	Arterial	4
	West of MLK Jr. Highway		4
	West of Redskins Road	Collector	4
Ardwick-Ardmore Road	West of MLK Jr. Highway	Industrial	4
Larchmount Avenue	North of Marlboro Pike	Local Road	2
Rollins Avenue	North of Walker Mill Road	Local Road	2
	South of Central Avenue		2
Shadyside Avenue	South of Pennsylvania Avenue	Local Road	2
John Hanson Highway (US 50)	West of Baltimore Washington Parkway	Freeway	6
	East of Baltimore Washington Parkway		4
	East of Kenilworth Avenue		4
	West of Landover Road		4
	East of Landover Road		4
	West of Capital Beltway		6
Capital Beltway (I-95)	North of Suitland Parkway	Freeway	8
	South of Central Avenue		8
	South of Landover Road		8
	South of MLK Jr. Highway		8
	North of John Hanson Highway		8
Shady Glen Drive	North of Walker Mill Road	Collector	2
	South of Central Avenue		2
Hill Road	South of MLK Jr. Highway	Collector	2
Brooks Drive	North of Silver Hill Road	Collector	2
	South of Marlboro Pike	Arterial	4
Brightseat Road	North of Central Avenue	Collector	4
	East of Sheriff Road		2
	North of Landover Road		6
Redskins Road	South of Sheriff Road	Arterial	6
Hill Oaks Road	East of Nalley Road	Collector	4

(Cont'd)

Table 8-1: Existing Transportation System						
Roadway	Count Location	Roadway Classification	Existing Lanes (Bi-directional)			
Bishop Peebles Drive	West of Brightseat Road	Arterial	6			
Garrett A. Morgan Boulevard	North of Central Avenue	Arterial	6			
Cabin Branch Drive	North of Sheriff Road	Collector	2			
East Capitol Street	East of DC Border	Arterial	6			
	West of Central Avenue	Arterial	6			
Regency Park	North of Suitland Road	Collector	4			
Walters Lane	South of Pennsylvania Avenue	Collector	2			
Donnell Drive	South of Pennsylvania Avenue	Local Road	2			
	North of Pennsylvania Avenue	Arterial	6			
75th Avenue	South of Pennsy Drive	Collector	2			
Kent Village Drive	South of Landover Road	Local Road	2			
	Source: 2010 Approved	Countywide Master Pl	an of Transportation.			

Table 8-2: 2007 Truck Traffic—Percentage of AADT on Selected Routes					
	Percentage Truc	k Traffic (AADT)			
AADT Count Location	Single	Double			
	Percentage (No. of Trucks)	Percentage (No. of Trucks)			
John Hanson Highway after the D.C. border	4.7 (5742)	1.4 (1710)			
John Hanson Highway after Kenilworth Avenue	8.2 (7115)	2.4 (2083)			
John Hanson Highway after Landover Road	7.3 (5450)	2.7 (2016)			
John Hanson Highway after the Capital Beltway	5.2 (4899)	1.7 (1602)			
Landover Road before Martin Luther King Jr Boulevard	4.5 (1745)	1.1 (427)			
Martin Luther King Jr Boulevard after the D.C. border	3.6 (778)	0.3 (65)			
Martin Luther King Jr Boulevard before Landover Road	6.9 (2077)	1.7 (1602)			
Martin Luther King Jr Boulevard after the Capital Beltway	5.1 (1335)	1.3 (340)			
East Capital Street before Central Avenue	4.0 (1167)	0.4 (117)			
Central Avenue before the Capital Beltway	4.7 (2800)	1.4 (834)			
Pennsylvania Avenue after the D.C. border	3.2 (787)	0.5 (123)			
Pennsylvania Avenue before Silver Hill Road	3.5 (979)	0.5 (140)			
Pennsylvania Avenue after Silver Hill Road	3.1 (1167)	0.8 (301)			
Pennsylvania Avenue before the Capital Beltway	4.0 (2422)	1.0 (605)			
Suitland Road after the D.C. border	3.6 (317)	0.4 (35)			
Capital Beltway above Suitland Parkway	7.3 (13426)	7.4 (13610)			
Capital Beltway below Central Avenue	3.6 (7386)	4.3 (8822)			
$C_{1} = 2010 A_{11} = 10 C_{11} + 1 M_{12} = D_{12} + C_{12} + C_{13}$					

Source: 2010 Approved Countywide Master Plan of Transportation.

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Summaries of the existing TheBus and WMATA routes are shown in Tables 8-3 and 8-4.

Pedestrian Facilities

Sidewalks are available along most major roadways in the subregion. However, there are some roadway sections where sidewalks are missing, limited to only one side of the roadway, or are in poor physical condition. A field investigation indicates that the majority of roadways with missing sidewalks are located within Zone 2 and in the general vicinity of the Landover Metro Station.

Accident Analysis

Review of the available accident data collected by the Maryland Department of Transportation (MDOT) for 2006-2007 revealed 20 vehicular collisions involving pedestrians had occurred at various locations within Subregion 4 area (see Map 8-4 on page 222). The majority of these pedestrian-involved vehicular collisions occurred along Marlboro Pike, Addison Road, and Sheriff Road.

Evaluation of Existing Conditions

To assess the existing conditions on Subregion 4 area roadways, the ratio of observed ADT volumes to the daily service volumes for each roadway segment were calculated. This ratio typically defines a range of operating conditions and is used to describe the congestion level or level-of-service (LOS) experienced by drivers along a given roadway.

LOS ranges from A (free-flow conditions) with little or no congestion, to F (which describes failure or stop-and-go conditions). The General Plan recommends LOS E or better, for all areas within the Developed Tier, which includes the entire Subregion 4 planning area. Tables 8-6 identifies the existing AADT, the recommended daily service volumes, and the resulting LOS for key roadway segments within and serving the Subregion 4 area.

Future Conditions

Planned and Programmed Transportation Improvements

A review of the planned transportation related improvements that are either funded through the state's Consolidated Transportation Program (CTP) or the county's Capital Improvement Program (CIP) indicates several projects within Subregion 4 or in close proximity of the planning area with allocated funding for construction, design, and/or planning. The specifics of these projects are listed in Tables 8-7 and 8-8.

Approved and Ongoing Planning Efforts

The following is a complete list of the approved and ongoing master plans and planning studies covering all or different parts of the Subregion 4 area:

- The 2010 Approved New Carrollton Transit District Development Plan.
- The 2009 Approved Countywide Master Plan of Transportation.
- The 2009 Marlboro Pike Sector Plan and Sectional Map Amendment.
- The 2009 Approved Landover Gateway Sector Plan and Sectional Map Amendment.
- The 2006 Approved Suitland Mixed-Use Town Center Development Plan.
- The 2005 Approved Sector Plan and Sectional Map Amendment for the Tuxedo Road/Arbor Street/Cheverly Metro Area.
- The 2004 Approved Sector Plan and Sectional Map Amendment for Morgan Boulevard-Largo Town Center.
- The 2002 Prince George's County Approved General Plan.

	Table 8-3: Prince George's County "TheBus" Routes
18	Martin Luther King, Jr. Highway, Addison Road, Addison Rd-Seat Pleasant Metro Station
20	Addison Rd-Seat Pleasant Metro Station, Walker Mill Rd, Addison Road, Donnell Drive
21	New Carrollton Metro Station, Ardwick-Ardmore Road, Brightseat Road, Landover Road, Prince George's Community College
22	Ardwick-Ardmore Road, Morgan Boulevard Metro Station, Former Landover Mall, Prince George's Sports and Learning Complex, Sheriff Road
23	Cheverly Metro Station, Cabin Branch Drive, Sheriff Road, Cedar Heights Drive, Central Avenue, Hill Road, Martin Luther King, Jr. Highway
24	Capitol Heights Metro Station, East Capitol Street, Rollins Avenue, Walker Mill Road, Marlboro Pike, Pennsylvania Avenue
25	Capitol Heights Metro Station, Southern Avenue, Capitol Heights Blvd, Central Avenue, East Capitol Avenue
27	Landover Metro Station, Landover Road, Pennsy Drive, 75th Avenue, Dodge Park Road
34	Suitland Road, Silver Hill Road, White Hall Apartments, Capital Crossing Apartments
	Source: DPW&T.

Table 8-4: WMATA Bus Routes				
Route	Route Name	Points served		
A11-A12	Martin Luther King, Jr. Highway Line	Prince George's Hospital, Landover Metro Station, Former Landover Mall, Martin Luther King Hwy & Columbia Park Rd, Addison Rd-Seat Pleasant Metro Station		
C21-C22-C29	Central Avenue Line	Collington Center, Bowie Health Center, Pointer Ridge, Six Flags America, Addison Rd-Seat Pleasant Metro Station		
D13-D14	Oxon Hill– Suitland Line	Suitland Station, Andrews Air Force Base, Marlow Heights Shopping Center, Southern Avenue Metro Station		
F12	Ardwick Industrial Park Shuttle Line	Cheverly Metro Station, Kent Village Drive, Landover Metro Station, Ardwick-Ardmore Road, New Carrollton Metro Station		
F14	Sheriff Road– Capitol Heights Line	Addison Rd-Seat Pleasant Metro Station, Capitol Heights Metro Station, Addison Road, Sheriff Road, Martin Luther King Hwy, New Carrollton Metro Station		
V12	District Heights– Suitland Line	Pennsylvania Avenue, Brooks Drive, Shadyside Avenue, Addison Rd-Seat Pleasant Metro Station, Suitland Metro Station		
V14-V15	District Heights– Seat Pleasant Line	Penn Mar Shopping Center, Atwood Street, Rollins Avenue, Addison Rd-Seat Pleasant Metro Station, Seat Pleasant Drive, Hill Road		
J11-J12-J13	Marlboro Pike Line	Marlboro Pike, Larchmont Avenue, Central Avenue, Forestville Road, Addison Rd-Seat Pleasant Metro Station		
P12	Eastover– Addison Road Line	Central Avenue, Walker Mill Road, Shady Glen Drive, Silver Hill Road, Addison Rd-Seat Pleasant Metro Station		
K11-K12-K13	Forestville Line	Silver Hill Road, Pennsylvania Avenue, Regency Pkwy, Walters Lane, Andrews AFB		
		Source: WMATA.		

Table 8-5: Accidents Per 100 Million Vehicle Miles Traveled (acc./100mvm) in Subregion 4								
Roadway Name *	Average Daily Traffic (ADT)	Number of Accidents	Section Length (miles)	Days of Study	Rate (acc./100mvm)			
Marlboro Pike	25,550	85	3.8	730	151.3			
US 50 John Hanson Highway	93,200	375	4.0	730	139.7			
Landover Road	52,200	63	1.9	730	88.2			
Sheriff Road	20,250	20	1.7	730	80.6			
Central Avenue	59,572	112	3.6	730	72.5			
Martin Luther King, Jr. Highway	30,100	62	4.3	730	66.5			
Pennsylvania Avenue	60,540	127	4.8	730	60.8			
Addison Road	22,050	11	1.4	730	54.3			
Silver Hill Road	46,575	31	2.2	730	42.3			
Suitland Road	23,100	20	3.1	730	39.0			
Capital Beltway	234,700	607	9.4	730	38.2			

*Limits as depicted in Table 8-6 on page 223 in the Subregion 4 Master Plan Equation: Accidents x 100,000,000/ADT x Section Length x Days of Study

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Table 8-6: Level of Service for Major Roads—Existing Conditions								
Road ID	Route. No.	Route	Link: From	То	Lanes	Max ADT	Max V/C	LOS
A-20	MD 202	Landover Road	US 50	Barlowe Road	6	52,200	0.65	C
A-21		Sheriff Road	D.C. Line	Martin Luther King, Jr. Highway	4	20,250	0.38	В
A-22	MD 704	Martin Luther King, Jr. Highway	D.C. Line	Beltway	6	30,100	0.37	В
A-31		Morgan Blvd/ Redskins Road	Walker Mill Road	Evarts Street	6	25,125	0.31	В
A-32	MD 214	East Capital Street/Central Avenue	D.C. line	Beltway	6	59,575	0.74	D
A-33		Addison Road South	Walker Mill Road	Central Avenue	2	22,050	0.82	D
A-40	MD 458	Silver Hill Road	Suitland Parkway	Walker Mill Road	6	46,575	0.58	C
A-41		Suitland Road	MD 458	MD 337	2	20,750	0.77	D
C-400		Brightseat Road	Evarts Street	Ardwick- Ardmore Road	2	15,675	0.98	E
C-402		Pennsy Drive	MD 202	Ardwick- Ardmore Road	4	12,300	0.39	В
C-404		Marblewood Avenue	Sheriff Road	Columbia Park Road	2	0	0.00	A
C-405		Sheriff Road	Redskins Road	MD 704	4	18,900	0.59	С
C-407		Hill Road	MD 704	MD 214	2	13,200	0.83	D
C-408		Addison Road	MD 214	D.C. Line	2	17,000	1.07	F
C-410		Marlboro Pike	Forestville Road	D.C. Line	4	25,550	0.80	D
C-411		Columbia Park Road	US 50	MD 704	4	26,350	0.83	D
C-412		Brightseat Road	Central Avenue	Redskins Road	4	14,050	0.44	В
C-414		Shady Glen Drive	Walker Mill Road	MD 214	2	8,200	0.51	C
C-415		Suitland Road	D.C. line	MD 458	2	18,025	1.13	F
C-422		Brooks Drive	MD 4	MD 458	2	14,975	0.94	E

Table 8-6: Level of Service for Major Roads—Existing Conditions										
Road ID	Route. No.	Route	Link: From	То	Lanes	Max ADT	Max V/C	LOS		
C-426		Ritchie/ Forestville Road	Allentown Road	Walker Mill Road	4	25,125	0.79	D		
C-427		Walker Mill Road	Marlboro Pike	MD 458	4	8,225	0.26	A		
E-3	MD 4	Pennsylvania Avenue	D.C. line	I-495	4	60,550	0.89	E		
E-6	MD 202	Landover Road	Barlowe Road	Beltway	6	52,200	0.51	C		
F-4	US 50	John Hanson Highway	D.C. line	I-495	4	122,175	1.34	F		
F-5	I-95/ I-495	Capital Beltway	North of Suitland Parkway		8	183,925	0.98	E		
F-5	I-95/ I-495	Capital Beltway	South of MD 214		8	205,150	1.10	F		
F-5	I-95/ I-495	Capital Beltway	South of MD 202		8	199,450	1.07	F		
F-5	I-95/ I-495	Capital Beltway	South of MD 704		8	214,275	1.15	F		
F-7		Suitland Parkway	D.C. line	Silver Hill Road	4	0	0.00	A		
I-400		Ardwick- Ardmore Road	US 50	Beltway	4	20,975	0.66	D		
I-404		Hubbard Road	MD 704	Pennsy Dr.	2	0	0.00	A		
I-413		Hampton Park Boulelvard	Marlboro Pike	MD 214	2	13,375	0.84	D		
		Benning Road	Marlboro Pike	D.C. Line	2	12,050	0.76	D		

(Cont'd)

Table 8-7: Maryland SHA Consolidated Transportation PlanProjects that Impact Subregion 4							
Project Name, Location	Description of Project	Current Status					
I-95/I-495 Capital Beltway, MD 202 to MD 214	Convert the I-95/495 interchange at Arena Drive from a part time interchange to a full time interchange to handle the existing and proposed growth in the vicinity of FedEx Field and the Largo Town Center Metro Station (2.80 miles).	Complete					
MD 4 Pennsylvania Avenue, I-95/495 (Capital Beltway to MD 223)	Upgrade existing MD 4 to a multi-lane freeway from MD 223 to I-95/495 (Capital Beltway) (3.08 miles). Interchanges at Westphalia and Dower House Roads are not funded in the current program. Bicycles and pedestrians will be accommodated where appropriate.	Planning					
MD 4-Pennsylvania Avenue, Interchange at Suitland Pkwy	Construct a new interchange at MD 4 and Suitland Parkway. Bicycles and pedestrians will be accommodated where appropriate.(BRAC-related)	Design					
MD 202-Largo Road, Campus Way South to Brightseat Road	Improve the MD 202 intersection at Brightseat Road. This improvement will enhance capacity, operations, and safety of the intersection. Sidewalks will be included where appropriate.	Design					
Source: Maryland Department of Transportation.							

Table 8-8: Prince George's County Capital Improvement ProgramProjects that Impact Subregion 4							
Project Name, Location	Description of Project	Current Status					
Hill Road Phase III Improvements, Landover, MD	Design roadway improvements to enhance safety and capacity and improvements to the Hill Road/MD 704 intersection.	Design					
Suitland Road, Suitland, MD	To improve Suitland Road from Allentown Road to Suitland Parkway, including resurfacing, bridge replacement and streetscape improvements.	Design					
Street Tree Removal and Replacement	To remove and replace street trees as needed on county- maintained public rights-of-way.	On-going					
Rehabilitation of Storm Drainage Channels	The repair and replace storm drain channels throughout the county.	On-going					
Developer contribution projects	To provide funding for a variety of street improvements as part of the county's adequate public facilities ordinance.	On-going					
Curb and Road Rehabilitation	To provide for needed rehabilitation of county roads, streets, curbs, and sidewalks.	On-going					
Bridge Repair and Replacement	To replace, repair or rehabilitate deteriorated bridges within the county.	On-going					
Addison Road II	To reconstruct the roadway from Walker Mill Road to Central Avenue (MD 214).	On-going					
Ritchie Road/ Forestville Road	The interim resurfacing and concrete work on Ritchie Road from Alberta Drive to Parston Drive and on Forestville Road from Parston Drive to Pennsylvania Avenue (MD 4) has been completed. Future improvements to the roadway, which are programmed in the out years, include widening Ritchie Road from Alberta Drive to Marlboro Pike and widening Forestville Road from Marlboro Pike to MD 4 to 4-lane urban roadway with pedestrian and bikeway enhancements.	On-going					
Source: M–NCPPC.							

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- The 2000 Approved Sector Plan and Sectional Map Amendment Addison Road Metro Town Center and Vicinity.
- The 1993 Approved Master Plan and Sectional Map Amendment for Landover And Vicinity (Planning Area 72).
- The 1985 Approved Master Plan for Suitland-District Heights and Vicinity (Planning Areas 75A and 75B).
- The 2006 Central Avenue Transit-Oriented Development Corridor Development Strategy.

Each of these plans recommends transportation network improvements that were determined (at the time of approval) to be sufficient to handle through traffic and traffic from the ultimate buildout of land uses recommended within each planning area. The recommended improvements were to be staged over time as warranted by travel demand and funding availability. However, many of these recommended transportation infrastructure improvements have remained unfunded over the years.

The existing transportation network also contains many older roadways that were not designed to function as commuter through routes or to accommodate the existing and projected traffic volume demands. Most of these facilities now require upgrades, but public funding to provide for the needed improvements to roads and transit is severely reduced because of funding limitations. As a result, the funding for the needed infrastructure improvements has mostly been provided by development through the application of the existing adequate public facilities (APF) test. However, the application of the APF test is also limited to the evaluation of the impact on the transportation network in the area immediately surrounding new development. Consequently, it has provided funding for only a limited portion of a roadway, or one to two intersection improvements, if and when the approved development actually occurs. The APF test is not a financing strategy in and of itself.

Key Transportation-Related Planning Issues and Concerns

At listening sessions, public workshops, community and stakeholder meetings, and from staff and consultant analyses, a number of issues and concerns relating to the existing and future of the subregion transportation network were identified during the preparation of the plan. Although all the identified issues and concerns are considered in the recommended transportation policies, objectives, strategies, and recommendations, the following have been identified as the key issues:

- Preserving and improving the transportation choices for existing and established communities.
- Improving multimodal mobility at the centers and along major corridors, with an emphasis on safety, pedestrian connectivity, bicycle accessibility, and transit use.
- Reduce dependency on the use of automobiles.
- Include a system of crosswalks connected to an attractive and safe pedestrian network that encourages walking through the planning area and especially at the planned centers.
- Capitalize and identify ways to provide investments in transportation infrastructure.
- Promote transit-oriented development (TOD), transit-supporting, transit-serviceable, and pedestrian-oriented development at the centers and neighborhoods.
- Improve pedestrian and vehicular connections between the established neighborhoods and the Metro stations.
- Explore ways to provide flexibility in addressing transportation needs and the need to mitigate traffic congestion, especially outside of the planned centers and along major corridors.
- Explore ways to reduce disproportionate amounts of through traffic, truck traffic, and speeding along some of the residential streets.

Evaluation and Assessment

In order to plan for the needed transportation infrastructure for Subregion 4 that will accommodate the projected traffic demand, an assessment of the planned transportation network was conducted.

The assessment of the Subregion 4 Master Plan buildout conditions was done using the Planning Department's regional four-step comprehensive modeling process, known as the TransForM model, consisting of:

- Trip generation (how many trips are generated?)
- Trip distribution (where do the trips go?)
- Mode choice (what travel mode is used for each trip?)
- Trip assignment (what is the route of each trip?)

The TransForM model uses the projected future population, household growth, and employment throughout the Washington metropolitan region and within Subregion 4, as well as the compiled information about the future transportation system consisting of the planned highway, transit and high-occupancy vehicle lane networks, based on the transportation plan scenario being analyzed.

Among the TransForM outputs are a set of tables that show trip interchanges (the number of trips between each origin and destination) by mode. Another important model output is the forecast of future daily traffic volumes, which is discussed in greater detail below. These volumes are based on the full buildout of the recommended land uses for this plan. The land use component for this analysis also includes the buildout of the Westphalia, Bowie, Henson Creek, Branch Avenue, and Landover Gateway (including Woodmore Town Center) master plans or sector plans. The two transportation networks tested using the model consist of the Countywide Master Plan of Transportation (MPOT) network (representing the "base" condition) and the Subregion 4 transportation network, which includes several highway improvements recommended by the Landover Gateway Sector Plan, as well as a new proposal for a rapid bus service from the proposed Purple Line extension at Landover Gateway south to the Suitland Metro Station with stops at FedEx Field, the Morgan Boulevard Metro Station, Central Avenue Corridor, and Addison Road-Seat Pleasant Metro Station. This scenario is represented as the Subregion 4 buildout.

The projected land-use data by the Prince George's County-Traffic Analysis Zone (PG-TAZ), the forecasted ADT, and resulting LOS for key roadway segments within the Subregion 4 area are presented in Table 8-9 on page 229 for the base condition and Table 8-10 on page 231 for the buildout condition.

As indicated from the information contained in these tables, under the buildout condition only, a handful of links within Subregion 4 were determined to operate below the policy LOS E. A more detailed analysis of these roadway links supports the findings that with the recommended transportation improvements and strategies, acceptable service levels for all roadways in the Subregion 4 area are achievable.

Transportation Recommendations

The consequences of years of travel growth within and through the subregion include greater traffic congestion, longer travel times between destinations, noticeable traffic jams caused by minor incidents, more road rage as people are delayed, and threats to air quality, even as the exhaust from each individual car has become much cleaner. The competition for vehicle space also has consequences for residential neighborhoods. To avoid the congested arterials, increasing numbers of cars travel at excessive speeds on local neighborhood streets. Neighborhood safety and livability are reduced, and residents become frustrated and angry about the traffic in front of their homes. Increasing traffic volumes also have consequences for economic health as truck delays increase the costs of doing business.

As a result, unlike the previous planning efforts where the goal was to accommodate existing travel demand and the vehicle traffic it generated as best as possible with the available resources, the primary goal of this plan is to provide transportation choices for residents, employees, visitors, and businesses within the subregion area. This is a more proactive approach to transportation planning. It sets transportation priorities and recommends a variety of programs and strategies to serve expected travel demand.

The plan recognizes that the transportation system must address the needs of all users of the right-ofway and accommodate those needs in the most efficient way. The most efficient modes of travel are those that require the least resources per persontrip. To illustrate this point, a single-occupant vehicle (SOV) consumes approximately 20 lane feet (20 linear feet of one travel lane) of roadway (assuming a 10-foot car with 10 feet of headway),
	Table 8-9: Level of Service for Major Roads—Base Condition							
Road	Route	Route	Li	nk:	Lanes	Max	Max	LOS
ID	No.	Name	From	То		ADT	V/C	
A-20	MD 202	Landover Road	US 50	Barlowe Road	6	61,425	0.76	D
A-21		Sheriff Road	D.C. Line	Martin Luther King, Jr. Highway	4	30,400	0.56	С
A-22	MD 704	Martin Luther King, Jr. Highway	D.C. Line	Beltway	6	62,500	0.77	D
A-31		Morgan Boulevard/ Redskins Road	Walker Mill Road	Evarts Street	6	45,900	0.57	С
A-32	MD 214	East Capitol Street/ Central Avenue	D.C. line	Beltway	6	60,700	0.75	D
A-33		Addison Road South	Walker Mill Road	Central Avenue	6	40,200	0.50	С
A-40	MD 458	Silver Hill Road	Suitland Parkway	Walker Mill Road	6	59,150	0.73	D
A-41		Suitland Road	MD 458	MD 337	4	28,900	0.54	C
C-400		Brightseat Road	Evarts Street	Ardwick- Ardmore Road	4	25,900	0.81	D
C-402		Pennsy Drive	MD 202	Ardwick- Ardmore Road	4	14,500	0.45	C
C-404		Marblewood Avenue	Sheriff Road	Columbia Park Road	2	10,900	0.68	D
C-405		Sheriff Road	Redskins Road	MD 704	4	36,800	1.15	F
C-407		Hill Road	MD 704	MD 214	4	13,350	0.42	В
C-408		Addison Road	MD 214	D.C. Line	2	21,125	1.33	F
C-410		Marlboro Pike	Forestville Road	D.C. Line	4	37,900	1.19	F
C-411		Columbia Park Road	US 50	MD 704	4	35,000	1.10	F
C-412		Brightseat Road	Central Avenue	Redskins Road	4	28,800	0.90	E
C-414		Shady Glen Drive	Walker Mill Road	MD 214	4	17,500	0.55	C
C-415		Suitland Road	D.C. line	MD 458	4	14,150	0.44	В
C-422		Brooks Drive	MD 4	MD 458	4	18,700	0.59	C
C-426		Ritchie/ Forestville Road	Allentown Road	Walker Mill Road	4	23,500	0.74	D
C-427		Walker Mill Road	Marlboro Pike	MD 458	4	5,200	0.16	A
C-430		Benning Road	Marlboro Pike	D.C. Line	2	21,725	1.36	F
E-3	MD 4	Pennsylvania Avenue	D.C. line	I-495	6	55,500	0.54	C

	Table 8-9: Level of Service for Major Roads—Base Condition								
Road	Route	Route	Li	nk:	Lanes Max	Max	LOS		
ID	No.	Name	From	То		ADT	V/C		
E-6	MD 202	Landover Road	Barlowe Road	Beltway	6	56,300	0.55	C	
F-4	US 50	John Hanson Highway	D.C. line	I-495	6	121,350	0.88	E	
F-5	I-95/ 495	Capital Beltway	North of Suitland Parkway		10	256,500	1.08	F	
F-5	I-95/ 495	Capital Beltway	South of MD 214		10	247,175	1.04	F	
F-5	I-95/ 495	Capital Beltway	South of MD 202		10	241,800	1.02	F	
F-5	I-95/ 495	Capital Beltway	South of MD 704		10	250,625	1.06	F	
F-7		Suitland Parkway	D.C. line	Silver Hill	4	75,100	0.82	D	
I-400		Ardwick- Ardmore Rd	US 50	Beltway	4	22,800	0.72	D	
I-404		Hubbard Road	MD 704	Pennsy Dr	2	11,275	0.71	D	
I-413		Hampton Park Blvd	Marlboro Pike	MD 214	4	27,500	0.86	E	
						Source	: M-N	CPPC.	

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	Table 8-10: Level of Service for Major Roads—Buildout Condition								
Road	Route	Route	Li	nk:	T	М	0	Max	LOC
ID	No.	Name	From	То	Lanes	Max	Capacity	V/C	LUS
A-20	MD 202	Landover Road	US 50	Barlowe Road	6	65,050	80,770	0.81	D
A-21		Sheriff Road	D.C. Line	Martin Luther King, Jr. Highway	4	34,000	53,850	0.63	С
A-22	MD 704	Martin Luther King, Jr. Highway	D.C. Line	Beltway	6	60,375	80,770	0.75	D
A-31		Morgan Boulevard/ Redskins Road/Ritchie Road	Walker Mill Road	Evarts Street	6	53,100	80,770	0.66	D
A-32	MD 214	East Capitol Street/Central Avenue	D.C. line	Beltway	6	63,800	80,770	0.79	D
A-33		Addison Rd South	Walker Mill Road	Central Avenue	6	41,350	80,770	0.51	С
A-40	MD 458	Silver Hill Road	Suitland Parkway	Walker Mill Road	6	65,975	80,770	0.82	D
A-41		Suitland Road	MD 458	MD 337	4	31,000	53,850	0.58	C
C-400		Brightseat Road	Evarts Street	Ardwick- Ardmore	4	26,900	31,870	0.84	D
C-402		Pennsy Drive	MD 202	Ardwick- Ardmore Road	4	24,975	31,870	0.78	D
C-404		Marblewood Avenue	Sheriff Road	Columbia Park Road	2	14,050	15,930	0.88	Е
C-405		Sheriff Road	Redskins Road	MD 704	4	35,300	31,870	1.11	F
C-407		Hill Road	MD 704	MD 214	4	23,450	31,870	0.74	D
C-408		Addison Road	MD 214	D.C. Line	2	20,400	15,930	1.28	F
C-410		Marlboro Pike	Forestville Road	D.C. Line	4	36,900	31,870	1.16	F
C-411		Columbia Park Road	US 50	MD 704	4	45,900	31,870	1.44	F
C-412		Brightseat Road	Central Ave	Redskins Road	4	36,800	31,870	1.15	F

(Cont	'd)								
Table 8-10: Level of Service for Major Roads—Buildout Condition									
Road Route		Route	Li	nk:	Lanes	Max	Capacity	Max	105
ID	No.	Name	From	То	Lancs	IVIAX	Capacity	V/C	LUS
C-414		Shady Glen Drive	Walker Mill Road	MD 214	4	23,400	31,870	0.73	D
C-415		Suitland Road	D.C. line	MD 458	4	15,575	31,870	0.49	C
C-422		Brooks Drive	MD 4	MD 458	4	20,925	31,870	0.66	D
C-426		Ritchie/ Forestville Road	Allentown Road	Walker Mill Road	4	25,350	31,870	0.80	D
C-427		Walker Mill Road	Marlboro Pike	MD 458	4	7,150	31,870	0.22	А
C-430		Benning Road	Marlboro Pike	D.C. Line	2	22,350	15,930	1.40	F
E-3	MD 4	Pennsylvania Avenue	D.C. line	I-95/495	6	55,400	102,200	0.54	C
E-6	MD 202	Landover Road	Barlowe Road	Beltway	6	60,750	102,200	0.59	С
F-4	US 50	John Hanson Highway	D.C. line	I-95/495	6	143,500	138,460	1.04	F
F-5	I-95/ 495	Capital Beltway	North of Suitland Parkway		10	261,400	236,810	1.10	F
F-5	I-95/ 495	Capital Beltway	South of MD 214		10	247,450	236,810	1.04	F
F-5	I-95/ 495	Capital Beltway	South of MD 202		10	239,925	236,810	1.01	F
F-5	I-95/ 495	Capital Beltway	South of MD 704		10	252,300	236,810	1.07	F
F-7		Suitland Parkway	D.C. line	Silver Hill	4	75,800	91,100	0.83	D
I-400		Ardwick- Ardmore Rd	US 50	Beltway	4	21,700	31,870	0.68	D
I-404		Hubbard Road	MD 704	Pennsy Drive	2	17,500	15,930	1.10	F
I-413		Hampton Park Boulevard	Marlboro Pike	MD 214	4	27,650	31,870	0.87	Е
							Source	: M-N	CPPC.

232 | Part III: Infrastructure Elements Transportation Systems where a standard bus carrying one person in each seat consumes about 60 linear feet of roadway, which is 1.5 lane feet per person (assuming a 40-seat bus that is 40 feet long, with 20 feet of headway). This means that 40 persons in 40 singleoccupant cars require 800 feet of roadway, while 40 persons in one bus require only 60 feet of roadway. In other words, a person riding a bus is 12 times more efficient in the use of the roadway and takes up less than eight percent of the space than a person driving an SOV. Bicycling and walking are also more efficient than the SOV. They use no gasoline, cause no pollution, and require much less expensive facilities than those needed to support automobile, truck, and bus traffic.

Goals

- Provide a safe, affordable, and attractive multimodal transportation system in the Subregion 4 area that:
 - Supports the development pattern, and the land uses associated with that development pattern, recommended by this master plan.
 - Reflects the 2002 General Plan goals and policies for the Subregion 4 area.
- Develop a comprehensive and accessible trail network designed to meet the recreational needs of all pedestrians and bicyclists.
- Provide sidewalks, neighborhood trail connections, and bicycle-friendly roadways to accommodate nonmotorized transportation (bicycling and walking) as the preferred mode for some short trips, particularly to transit stops and stations, schools, and within neighborhoods and centers.
- Provide for TOD consistent with the General Plan goals for the growth centers and corridors.
- Utilize "complete street" and "context-sensitive" concepts to promote travel by alternative modes (transit, biking, and walking) as viable alternatives to the automobile in the neighborhoods and growth centers.
- Explore funding and secure the implementation of the recommended rapid bus service for the heart of the Subregion 4 area by connecting the planned extension of the Purple Line to the Suitland Metro Station.

- Support the Purple Line as light-rail transit from Bethesda to New Carrollton and its extension to National Harbor as recommended in the MPOT.
- Improve pedestrian safety in the vicinity of Metro stations and along major road corridors.
- Develop new roads and retrofit existing roads in conformance with the 1999 American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities to the extent feasible and practical.
- Identify priority sidewalk corridors to parks, schools, Metro stations, and other activity centers where sidewalk construction is necessary to meet existing pedestrian needs.
- Provide trail and pedestrian connections from Subregion 4 to the existing Anacostia Tributaries Trails Network and the planned Anacostia Riverwalk in Bladensburg and Washington, D.C.
- Improve bicycle facilities around Metro stations in Subregion 4. Facilities needed include bicycle racks, lockers, and striping for designated bike lanes.
- Develop walkable and transit-oriented communities through the provision of a comprehensive network of sidewalks and neighborhood trails.

To fulfill the stated goals in the most effective way, this chapter includes a number of specific policies and strategies that are grouped into the following areas:

- Coordination and Involvement.
- Highway Classification and Description.
- Freight and Truck Movement.
- Parking and Demand Management.
- Transportation Function.
- Public Transportation.
- Pedestrian and Bicycle.

Policy 1

Carry out a public involvement process and coordinate with appropriate agencies to provide information and develop standards regarding transportation issues, projects, and process.

Strategies

- Establish a transportation work group with affected federal, state, county, and other providers of transportation services to plan and fund the recommend transportation facilities and services.
- Involve community members in development and identification of the most effective and efficient transportation enhancements that are recommended by this plan.
- Implement educational programs that support a range of transportation choices and emphasize safety for all modes within the subregion area.
- Encourage walking by developing education programs for both motorists and pedestrians and increasing public awareness of the benefits of walking and bicycling and of available resources and facilities.
- Assist with the development of a strong school curriculum and program on transportation safety and travel choices with emphasis on neighborhood livability and personal safety.

Policy 2

Support the development level recommended by this master plan with a transportation system that reflects the policy service levels in the 2002 General Plan. The transportation system must have efficient access to residential, commercial, and employment areas with improvements to existing roadways and new roadways, and minimizing dislocation and disruption resulting from the implementation of these recommendations. Explore the feasibility of creating parallel routes to Central Avenue, as proposed in the 2006 *Central Avenue Transit-Oriented Development Corridor Development Strategy*, to provide improved local access for vehicle, pedestrian, bicycle, and transit trips occurring along the corridor.

Strategies

- Maintain, improve, and construct the recommended transportation network as required by current and future development.
- Designate a system of roadways that supports the movement of traffic consisting of regional, interregional, and local trips. The recommended classification is in accordance with the MPOT designations.

- Adopt the recommended highway network required to support the buildout of the recommended land use plan for Subregion 4 including the planned growth center as shown in Map 8-5 on page 235 and Table 8-11 on page 236.
- Promote and evaluate the need for provision of on-street parking to serve adjacent land uses and improve safety of pedestrians and bicyclists when requested by the community and when making any changes to the roadways.
 - Specifically include the provision of on-street parking along Larchmont Avenue and Sheriff Road during off-peak hours.
- Explore ways to provide street connections to established neighborhoods and direct pedestrian and bike connections to nearby public transit, schools, and recreational facilities as part of any new development and redevelopment.
- Explore and promote plans to signalize intersections of neighborhood streets and streets with higher commuter traffic, when warranted, and to facilitate the safe movement of traffic and pedestrians along each street, as well as turning traffic to and from the neighborhood streets.
 - Specific recommendations include: Central Avenue at Maryland Park Drive; Central Avenue at new north/south connection to Rollins Avenue; and Central Avenue at Norair Avenue.
- Use a combination of enforcement, engineering, and education efforts to calm vehicle traffic along residential streets, as well as Walker Mill Road.
- Implement measures that preserve and enhance neighborhood livability of local streets within the established neighborhoods.
 - Specific recommendations include installation of overhead lighting along Suitland Road, Silver Hill Road, and Marlboro Pike.
- Promote reduction of traffic speed through enforcement, signage, and design in high pedestrian activity areas, in the vicinity of schools, and along residential streets.

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SYSTEMS

Approved Subregion 4 Master Plan 235 and Sectional Map Amendment

	Table 8-11: Recommended Highway Improvements at Buildout							
Road ID	Facility Name	Route ID	Project Limits	Right of way (feet)	Lanes			
F-4	John Hanson Highway	US 50/ US 301	D.C. line to Capital Beltway	300	6 to 8			
F-5	I-95/I-495	I-95/ I-495	Suitland Parkway to John Hanson Highway	300	10			
F-7	Suitland Parkway	NPS Facility	D.C. line to Pennsylvania Avenue	Varies	4 to 6			
E-3	Pennsylvania Avenue Extended	MD 4	D.C. line to Beltway	200	4 to 6			
A-20	Landover Road	MD 202	Annapolis Road to Beltway	120	6			
A-21	Sheriff Road		D.C. line to Martin Luther King, Jr. Highway	100	4			
A-22	Martin Luther King, Jr. Highway	MD 704	D.C. line to Annapolis Road	120–150	4 to 6			
A-31	Ritchie Road/Morgan Boulevard/ Redskins Road/Brightseat Road		Walker Mill Road to Evarts Street	120	6			
A-32	E. Capitol Street/ Central Avenue	MD 214	D.C. line to Beltway	120–150	6 to 8			
A-33	Addison Road South		Walker Mill Road to Central Avenue	120	4 to 6			
A-35	Walker Mill Road		Silver Hill Road to Beltway	120	4 to 6			
A-35	Walker Mill Road		I-95/I-495 to Ritchie Road (A-31)	120	6			
A-35	Walker Mill Road		Ritchie Road (A-31) to Shady Glen Drive (C-414)	70–80	2 to 4			
A-40	Silver Hill Road	MD 458	Branch Avenue to Walker Mill Road	120	4 to 6			
MC- 401	Evarts Street		Brightseat Road to Capital Beltway	100	4			
C-347	Ardwick-Ardmore Road		Martin Luther King, Jr. Highway to Lottsford-Vista Road	80	2 to 4			
C-400	Brightseat Road		Evarts Street to Ardwick-Ardmore Road	80	4			
C-401	Barlowe Road/Evarts Street		Martin Luther King, Jr. Highway to Brightseat Road	80	4			
C-402	Pennsy Drive		Landover Road to Ardwick- Ardmore Road	70	2			
C-403	75th Avenue		Landover Road to Pennsy Drive	80	2			
C-404	Marblewood Avenue		Sheriff Road to Columbia Park Road	80	2			

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Table 8-11: Recommended Highway Improvements at Buildout							
Road ID	Facility Name	Route ID	Project Limits	Right of way (feet)	Lanes		
C-405	Sheriff Road		Martin Luther King, Jr. Highway to Redskins Road	80	2 to 4		
C-406	Belle Haven Drive/Hill Oaks Road/Nalley Rd.		FedEx Way to Martin Luther King, Jr. Highway	70–80	4		
C-407	Hill Road		Central Avenue to Martin Luther King, Jr. Highway	80	4		
C-408	Addison Road		D.C. line to Central Avenue	70–80	2		
C-409	Central Avenue/ Old Central Avenue	MD 332	D.C. line to Addison Road	80	2 to 4		
C-410	Marlboro Pike		D.C. line to Forestville Road	80–100	2 to 4		
C-411	Columbia Park Road		John Hanson Highway to Martin Luther King, Jr. Highway	80	2 to 4		
C-412	Brightseat Road		Central Avenue to Redskins Road	80	4		
C-413	Garden City Drive	MD 950	Ardwick-Ardmore Road to Beltway Ramps	80	4		
C-414	Shady Glen Drive		Walker Mill Road to Central Avenue	80	2 to 4		
C-415	Suitland Road	MD 218	D.C. line to Silver Hill Road	80	2 to 4		
C-422	Brooks Drive		Silver Hill Road to Pennsylvania Avenue	80	2 to 4		
C-423	Regency Parkway		Marlboro Pike to Suitland Road	80-100	2 to 4		
C-424	Walters Lane		Cul-de-sac to Pennsylvania Avenue	80	2 to 4		
C-425	Donnell Drive		Pennsylvania Avenue to Marlboro Pike	100	4		
C-426	Ritchie Road		Allentown Road to Walker Mill Road	80	2 to 4		
C-427	Walker Mill Road		Marlboro Pike to Silver Hill Road	80	2 to 4		
C-429	Karen Boulevard		Walker Mill Road to Central Avenue	80	2 to 4		
C-430	D'Arcy Road		Capital Beltway to Ritchie- Forestville Road	80	4		
P-400	Main Street		Central Avenue to Rollins Avenue	60	2		
P-401	M-NCPPC Access Road		Morgan Boulevard to M-NCCPC Property	60	2		
P-402	Walker Mill Drive/ Old Ritchie Road		Shady Glen Road to Ritchie Road	60	2		
P-403	Rollins Avenue/Suffolk Avenue		Walker Mill Road to Central Avenue	60	2		
I-400	Ardwick-Ardmore Road		John Hanson Highway to Beltway	70	2 to 4		
I-401	Truck Way Extended		Hampton Park Boulevard to Truck Way	70	2		

	Table 8-11: Recommended Highway Improvements at Buildout							
Road ID	Facility Name	Route ID	Project Limits	Right of way (feet)	Lanes			
I-402	Morgan Boulevard/ MD 214 Access Road		Morgan Boulevard to Central Avenue	70	2			
I-403	Cabin Branch Drive		Sheriff Road to John Hanson Highway	70	2 to 4			
I-404	Hubbard Road		Pennsy Drive to Martin Luther King, Jr. Highway	70	2 to 4			
I-405	Jefferson Avenue		Pennsy Drive to Ardwick- Ardmore Road	70	2 to 4			
I-412	Brightseat Business Park Road		Redskins Road to Brightseat Road	70	2 to 4			
I-413	Hampton Boulevard		D'Arcy Road to Central Avenue	70	2 to 4			
I-414	Kaverton Road		D'Arcy Road to Marlboro Pike	70	2 to 4			
I-415	Ritchie Road Spur		Ritchie Road to Hampton Park Boulevard	70	2 to 4			
	Source: M-NCPPC.							

- Specific recommendations include the installation of new signage on Sheriff Road to direct trucks to industrial parks and industrial areas south of Columbia Park Road.
- Promote the implementation of measures that will increase pedestrian safety and convenience by identifying and analyzing high pedestrian collision locations.
 - Specific recommendations include additional geometric improvements at the intersection of Pennsylvania Avenue at Silver Hill Road, and provision of pedestrian amenities at the intersections of Marlboro Pike at Kipling Parkway, Marlboro Pike at Walter Lane, Suitland Road at Silver Hill Road, Pennsylvania Avenue at Donnell Drive, Silver Hill Road at Brooks Drive, Branch Avenue at Suitland Parkway, and Suitland Road at Shadyside Avenue.
- Improve the quality of the pedestrian environment by recommending specific physical improvements such as traffic calming, pedestrian-scale street

lighting, pedestrian and biker signal improvements, and street crossing improvements.

Policy 3

Maintain the design capacity and traffic flow efficiency of planned roadways.

Strategies

- Control access consistent with the function of the roadway through subdivision, site plan, and permit review.
- Obtain adequate rights-of-way through direct dedication where possible, or through other strategies of corridor preservation.
- Discourage traffic-intensive development at locations that require direct driveway access adjacent to major intersections and/or interchanges.

Policy 4

Facilitate the safe and orderly movement of traffic. Although it is essential that through traffic be accommodated on certain facilities, it is essential that transportation systems on a local level are provided that allow trips between land uses within a community to be made on local streets without the use of collector or higher classification roadways.

Strategies

- Minimize where possible the amount of through traffic and truck traffic along residential streets and established neighborhoods through the implementation of appropriate trafficcalming measures.
- Encourage street connections between adjacent subdivisions. Such connections are needed for the efficient delivery of public services and are desirable in giving residents, in otherwise isolated neighborhoods, safe access to major roads by consolidating access at signal-controlled intersections or less busy streets. When they are needed to slow vehicle speeds or discourage use of a street by traffic from outside the immediate area, traffic-calming strategies should be considered during implementation of any such street connection.

Policy 5

Ensure the transportation facilities are adequate prior to approval of any new development within established neighborhoods and in the designated centers in accordance with the procedures provided in the County Code.

Strategies

Established Neighborhoods

- Include in street, road, and highway project planning the consideration of implementing high-occupancy vehicle lanes, bus pull-off bays, sidewalks, signage, and other enhancements where appropriate, along routes that provide access to rail transit stations, that serve current or future bus or bus rapid transit service, and that serve multifamily, compact, or infill development, with emphasis on General Plan corridors.
- Increase the connectivity of bikeways established within street, road, or highway rights-of-way, especially in the vicinity of current or future transit stations and bus services and in areas of multifamily, compact, or infill development, with emphasis on General Plan corridors as well as off-road trails and trail systems.

- Ensure consistency with environmental justice principles by implementing the complete streets policy widely and equitably, thereby benefiting low-income and minority populations, as well as the elderly and disabled.
- Implement transportation demand management (TDM) practices that reduce trips (through park-and-ride lots and other strategies) and trip length, manage routes and peak-period travel, and generally focus on changing travel behavior.
- Improve network connectivity and system integrity by eliminating gaps that impede transit service and improving safety for all users using engineering, education, and enforcement to reduce traffic accidents.
 - Revise the Planning Board's "Guidelines for the Analysis of the Traffic Impact of Development Proposals" to include all links with 20 percent or more of site-generated traffic in a traffic impact study area.
 - To support construction of off-site transportation improvements by developer applicants, consider legislation to reference the third-party right-of-way acquisition language in Section 23-142(f) of the Road Ordinance within Section 24-124 of the Subdivision Ordinance.
 - All streets where bus service is anticipated should be constructed to at least a primary residential street (60-foot right-of-way) standard and publicly maintained.
- Improve transportation system performance through transportation system management strategies, keeping commuter traffic on expressways and arterials and preventing encroachment of through traffic into residential neighborhoods.
 - At signalized intersections, require a minimum of two lanes on each approach.
 - In the design of internal residential subdivision streets, apply the traffic volume criteria from the DPW&T Neighborhood Traffic Management Program and the trip generation rates from the Planning Board's "Guidelines for the Analysis of the Traffic Impact of Development Proposals" to determine:

- Number of subdivision access points
- Street typical sections
- Maximum length of culs-de-sac
- Dead-end "stub" streets connecting to adjacent vacant parcels should be designed to primary residential street (60-foot right-of-way) standards.
- Emphasize linking the population and economic growth rates with the availability of transportation funds to support it. Ensure that land development projects are approved on the condition that developer contributions sufficiently provide for the construction or expansion of the transportation infrastructure needed to maintain an acceptable LOS and transit mode share.
 - Construct road improvements on an incremental basis as the demand for capacity increases and as funding becomes available.
 - Consider requiring that subdivision plan approval be contingent upon adequate provisions for right-of-way needs to accommodate long-term transportation demand.

- Amend the Subdivision Ordinance to require lots adjacent to roads of major collector or higher classification to front on interior streets or service roads.
- Maintain three travel lanes and a left turn lane on Central Avenue, in front of the residences along the 7300 block, onto Hill Road.
- Narrow the median in the Central Avenue right-ofway. The new street section should accommodate the third travel lane along Central Avenue eastbound, as well as its transition to a left-turn lane for northbound traffic to Hill Road. Land gained from this narrowing of the median would be used to create an 18 to 20-foot-wide twoway driveway as an extension of the existing Walker Mill Road, which currently is terminated with a cul-de-sac just west of its intersection with Shady Glen Road. A raised concrete curb could separate this roadway from Central Avenue. The existing access to Central Avenue from these homes would be eliminated and Walker Mill Road would serve as their primary access roadway. (See illustration below.)



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- Consider adding to the Planning Board's "Guidelines for the Analysis of the Traffic Impact of Development Proposals" a test of the proposed development's propensity to minimize (or generate) vehicle trips and vehicle miles of travel based on its ability to accommodate all modes of travel and its proximity to or distance from General Plan centers and priority funding areas.
- Implement essential street, road, and highway projects, through both traditional and innovative methods, using federal, state, and local financial resources, public/private partnerships, and developer funding when traffic impacts from development or redevelopment projects are assessed.
 - Develop and continually evaluate funding strategies, such as impact and adequate public facilities fees, value pricing, and other staging strategies, to be considered by policy makers as policy options for implementing the Subregion 4 Master Plan.
 - Consider channeling parking revenues to transportation improvements and pricing parking spaces in a way that limits free parking, reflects the true cost of parking, and prices on-street parking to make it more costly than or at least as expensive as parking in lots and garages.
 - Seek opportunities with developers and federal, state, and county stakeholders to engage in public/private partnerships that provide benefits for all parties, including the traveling public.
 - As part of the development process, consider rewarding proposed developments that enhance multimodal travel and impose fees for proposed developments that reinforce reliance on the automobile, based on information added to the traffic impact analysis that tests the proposed development's ability to minimize vehicle trips and vehicle miles traveled.
 - Consider future pricing strategies that redistribute traffic volumes to non-peak hours, manage through trips, free up capacity for goods movement, and provide income streams for transit and other congestion-

reducing enhancements to the transportation system.

- Implement street, road, and highway projects mainly through the National Environmental Protection Act (NEPA) process and in coordination with the *Countywide Green Infrastructure Plan*, in a manner that protects the natural environment, minimizes dislocation and disruption, and is consistent with the county's environmental stewardship goals. Implement the transportation network in an environmentally sensitive manner by:
 - Minimizing the crossings of streams and wetlands, where possible, by careful planning or road locations.
 - ♦ Maximizing use of existing stream crossings.
 - Coordinating the road network between parcels to limit the need for stream crossings and other environmental impacts.
 - Crossing streams (where unavoidable) at right angles except where prevented by geologic features.
 - Constructing stream crossings using clear span bridges or, where bridges cannot be used for design reasons, bottomless culverts or other low-impact crossing structures that have a width that matches or exceeds the natural width of the stream and that minimize the impact to stream habitats, fish, and other stream organisms.
 - Using drainage structures, such as water turnouts or broad-based dips, on both sides of a crossing as needed to prevent road and ditch runoff from directly entering the stream.
 - Retrofitting stream crossings (where necessary) in a manner that removes fish blockages.
- Improve safe vehicular access to and from existing residential properties while maintaining efficient traffic flow along adjacent rights-of way.

Growth Centers

• Explore and promote strategies that would improve the traffic operation within the center, such as the establishment of a Transportation

Demand Management District in accordance with Subtitle 20A of the County Code, or the designation of a Transportation Priority Growth District (TPGD), in accordance with the recommendations of the MPOT.

- Propose TPGDs as a means of managing the adverse impact of traffic congestion that may be caused by infill development or redevelopment that is otherwise desirable because it helps achieve the core goals of the 2002 General Plan. These goals include concentrating development in the Developed and Developing Tiers, particularly in these tiers' centers and corridors; and attracting quality TOD to Metro and commuter rail stations, and other transit service nodes in Prince George's County.
- Allow site-specific exceptions to the APF requirements in very clearly defined areas of the county, as recognized by the MPOT. TPGDs are intended to provide for innovative and flexible transportation and traffic management to attract—not to discourage—the development envisioned to implement the General Plan and in the Subregion 4 Master Plan.
- Explore the need for additional projects in the CIP or CTP that would address any reported inadequacies.
- Explore the opportunity to ensure alternative and innovative financing mechanisms to construct the needed improvements.

Policy 6

Integrate transit with streets and roadways to ensure that new land uses and redevelopment in this plan will increase transit usage and ridership sufficiently to justify the eventual expansion of major transit services into this portion of the county.

Strategy

Utilize a grid pattern of public and private streets to efficiently connect land uses to transit services within the planned centers and in new developments in the subregion. Review development within these areas to ensure that efficient connections to transit services are incorporated or maintained.

Transit Fixed Guideway Transit

The fixed guideway transit network recommendations of the 2009 MPOT that pertain to Subregion 4 are intended to help the county achieve the specific development patterns envisioned by the General Plan for this part of the Developed Tier. The plan recommends that transit serve a defining role in attaining county growth and development priorities for the Developed Tier in general and for General Plan centers and corridors in Subregion 4.

Since the 1982 MPOT and 2002 General Plan were approved, a number of important transit system improvements have occurred that affect the fixed guideway transit options for this subregion:

- The Metrorail system has been completed and a variety of future extensions are under active consideration, including a possible Metrorail Green Line extension from Greenbelt to Fort Meade or Baltimore–Washington International Thurgood Marshall Airport.
- The first Metrorail expansion, the Blue Line extension from Addison Road-Seat Pleasant Metro Station in Subregion 4 to Largo Town Center opened to the public in Prince George's County in 2004.
- The Woodrow Wilson Bridge replacement project has now been completed, and the new bridge includes provisions for fixed guideway rail transit service from Northern Virginia to Prince George's County, which the county has designated as a priority in the joint signature letter to the District of Columbia and the States of Maryland and Virginia.
- MDOT has designated the Purple Line—from Bethesda to an interim terminal at New Carrollton as a priority transit project and requested federal financial assistance for construction of the initial 16.4-mile segment in fall 2009.
- DPW&T has completed a draft update of the Five-Year Transit Service and Operations Plan (TSOP) for Metrobus and TheBus service and service expansions in the county. (See "Bus Transit," below.) The TSOP thus serves as the short- to medium-term, bus service and operations planning and complement to the long term,

strategic fixed guideway transit recommendations contained in MPOT.

The county transportation network consists of rail and bus transit services and facilities that interact differently in different parts of the county. Further, county transit resources, and consequently the rail and bus mobility options that are available to county residents and workers, are not evenly distributed throughout the county transportation system. The Developed Tier has all but one of the county's 15 Metro stations, four MARC stations, and most of the regional (Metrobus) and county-operated (TheBus) bus service. Of these, seven Metro stations, the New Carrollton MARC commuter rail station, and the majority of bus lines are located in Subregion 4.

Transit is envisioned as a linchpin of smart growth, particularly TOD in Developed Tier communities such as Subregion 4. Smart growth is a long-term policy to which Prince George's County and the State of Maryland are committed. Unless development is sited at sufficient densities to capitalize on all of the county's transportation system assets, particularly the transit infrastructure, the preferred development pattern may never be achieved or may remain fiscally unattainable. Smart growth and TOD both require a strategic transportation policy that integrates transit facilities and systems with accompanying land use policies that are appropriate to each tier and each center, particularly for metropolitan and regional centers.

However, there is a parallel need to ensure the operational integrity of transit as a part of the countywide transportation network. It is, therefore, important to:

- Assess the capacity of the transit system segments to accommodate the development that is desired at each center.
- Ensure that the county's near- and mediumterm transit system planning in the TSOP developed by DPW&T is coordinated with the longer term, strategic transit recommendations in MPOT.
- Account for the impacts of development policies (especially land use densities and mixes) on the entire transit system.

Additional development in the Developed Tier will require significant investment in transit and pedestrian connectivity facilities, such as sidewalks and streetscape amenities, to complement existing and planned infrastructure. Future land use plans may, therefore, have to be reviewed or modified to ensure the optimum combination of land uses, mixes, and densities on the one hand, and appropriate and adequate transportation infrastructure on the other.

Even though the subregion is currently being served by Metrorail, and MPOT recommends extension of the planned Purple Line (light rail transit), there is a need for transit service as a means of relieving future traffic congestion within Subregion 4. Although much of the focus in the county at this time is on the Purple Line from Bethesda to New Carrollton, a new rapid bus line is needed to achieve the planned growth and required accessibility by transit in the subregion. A rapid bus line could serve as an essential catalyst for the high-quality, TOD that is desired within the planned centers.

Bus Transit Metrobus

The Washington metropolitan area is requesting federal funding that would support the development of priority bus corridors to service the region. A priority bus corridor is currently recommended for travel from Addison Road-Seat Pleasant Metro Station to the Southern Avenue Metro Station. The proposed route would support development envisioned for the Walker Mill area.

In addition to Metrorail, WMATA also operates bus routes that link to Metrorail stations. Subregion 4 is served by 19 Metrobus routes; however, several routes are designed as pairs where two routes follow the exact route except for minor variations. Counting these pairs (and one triple) as one route, Subregion 4 is served by ten distinct routes.

TheBus

TheBus is the transit service operated by Prince George's County. Subregion 4 is served by nine TheBus routes. Table 8-3 on page 220 lists the routes and provides a list of major points served by each route. TheBus service operates only on weekdays and does not currently provide service on weekends or major holidays. On most routes that serve Subregion 4, service runs from approximately

	Table 8-12: Subregion 4 Master Plan Metro Bus Recommendations						
Route(s)	Name	Service Area*	TSOP Recommendations				
A11-A12	Martin Luther King, Jr. Highway Line	Prince George's Hospital, Landover Metro Station, Former Landover Mall, Martin Luther King, Jr. Highway and Columbia Park Rd, Addison Rd–Seat Pleasant Metro Station	Retain existing service as currently operated				
C21- C22-C29	Central Avenue Line	Collington Center, Bowie Health Center, Pointer Ridge, Six Flags America, Addison Rd-Seat Pleasant Metro Station	Retain existing service as currently operated				
D13-D14	Oxon Hill– Suitland Line	Suitland Station, Andrews Air Force Base, Marlow Heights Shopping Center, Southern Avenue Metro Station	Reroute: Southern Avenue Metrorail station to Suitland Metrorail station via Oxon Hill to Oxon Hill Park-and-Ride				
F12	Ardwick Industrial Park Shuttle Line	Cheverly Metro Station, Kent Village Drive, Landover Metro Station, Ardwick–Ardmore Road, New Carrollton Metro Station	Retain existing service as currently operated				
F14	Sheriff Road– Capitol Heights Line	Addison Road–Seat Pleasant Metro Station, Capitol Heights Metro Station, Addison Road, Sheriff Road, Martin Luther King, Jr. Highway, New Carrollton Metro Station	 Extend span of service by 4 hours, Saturday a.m. Extend span of service by approx. 92 minutes, Saturday p.m. 				
V12	District Heights– Suitland Line	Pennsylvania Avenue, Brooks Drive, Shadyside Avenue, Addison Road-Seat Pleasant Metro Station, Suitland Metro Station	Retain existing service as currently operated				
V14-V15	District Heights–Seat Pleasant Line	Penn Mar Shopping Center, Atwood Street, Rollins Avenue, Addison Road–Seat Pleasant Metro Station, Seat Pleasant Drive, Hill Road	 Extend span of service by 60 minutes in a.m., Saturday. Extend span of service by 90 minutes in a.m., Sunday 				
J11- J12-J13	Marlboro Pike Line	Marlboro Pike, Larchmont Avenue, Central Avenue, Forestville Road, Addison Road–Seat Pleasant Metro Station	Retain existing service as currently operated				
P12	Eastover– Addison Road Line	Central Avenue, Walker Mill Road, Shady Glen Drive, Silver Hill Road, Addison Road– Seat Pleasant Metro Station	Extend to National Harbor and Oxon Hill				
K11- K12-K13	Forestville Line	Silver Hill Road, Pennsylvania Avenue, Regency Parkway, Walters Lane, Andrews AFB	Retain existing service as currently operated				

* Not all points listed under service area are served by all buses operating on a given route or line. On weekdays, current (as opposed to proposed) Metrobus service hours vary considerably depending on route. Some routes, such as A11-A12, start service around 5:00 a.m. and end after midnight, similar to the service span of Metrorail. On Saturdays, most service starts up to an hour later than on weekdays and ends an hour earlier, while service on Sundays may start a further hour later and end an additional hour sooner. Time between buses (the headway) averages 20 minutes during peak hours and 30 minutes during off-peak hours. On less frequent service, time between buses averages 30 minutes during peak hours and one hour in off-peak hours.

Source: M-NCPPC.

	Table 8-13: Subregion 4 Master Plan TheBus Recommendations					
Route	Service Area*	TSOP Recommendations				
18	Martin Luther King, Jr. Hwy, Addison Road, Addison Rd-Seat Pleasant Metro Station	Increase service frequencyExtend service to Saturdays				
20	Addison Rd–Seat Pleasant Metro Station, Walker Mill Rd, Addison Road, Donnell Dr.	Retain existing service as currently operated				
21	New Carrollton Metro Station, Ardwick– Ardmore Road, Brightseat Road, Landover Road, Prince George's Community College	Extend span of service by 30 minutesExtend service to Saturdays				
22	Ardwick–Ardmore Road, Morgan Boulevard Metro Station, Former Landover Mall, Prince George's Sports and Learning Complex, Sheriff Road	Retain existing service as currently operated				
23	Cheverly Metro Station, Cabin Branch Drive, Sheriff Road, Cedar Heights Drive, Central Avenue, Hill Road, Martin Luther King, Jr. Highway	Extend span of service by 30 minutes				
24	 Capitol Heights Metro Station, East Capitol Street, Rollins Avenue, Walker Mill Road, Marlboro Pike, Pennsylvania Avenue Route expansion: Morgan Boulevard Metrorail station Capitol Heights Metrorail station via new Steeplechase development project Extend service to Saturdays Extend span of service by 30 minutes 					
25	Capitol Heights Metro Station, Southern Avenue, Capitol Heights Blvd, Central Avenue, East Capitol Street	 Extend span of service by 90 minutes in the evening (westbound). Extend span of service by 60 minutes (eastbound). 				
27	Landover Metro Station, Landover Road, Pennsy Drive, 75th Avenue, Dodge Park Road	Retain existing service as currently operated				
34	Suitland Road, Silver Hill Road, White Hall Apartments, Capital Crossing Apartments	Extend span of service by 20 minutes				
New Service*	 New Service to central county from Morgan Boulevard Metrorail station via Ritchie Marlboro Road New service to Branch Avenue Metrorail station from: currently unserved areas south of Woodyard Road; currently unserved areas in South Clinton; currently unserved areas in Camp Spring New service to employment centers and residential areas in New Carrollton and Largo via Springdale and Washington Business Park. New Service to south and central county employment centers from Largo Town Center via Branch Avenue Metrorail station. New Service to south and central county employment centers from Suitland Metrorail station via Westphalia Town Center. New Service to employment, residential and other generators in Upper Marlboro from Largo Town Center via Central Avenue, Beechtree and Oak Creek. 					
[*] All new	bus service recommendations shown are TheBus r	outes.				

Source: M-NCPPC.

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Map 8-6: Existing and Recommended Fixed Guideway Transit



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Transit Service Enhancements Recommended by the DPW&T Transit Service Operations Plan

The existing transit service within the subregion needs to be complemented by the proposed Metrobus and TheBus service and service expansion or modifications recommended by the TSOP. DPW&T is responsible for developing, updating, and implementing the county's bus service plan, the Five-Year TSOP. The bus service and operations planning and policies that are reflected in each TSOP are incorporated by reference in the MPOT. Although the current draft TSOP proposes a significant expansion of TheBus service, including extension of some service to weekends, the preliminary TSOP recommendations noted in Table 8-12 on page 244 may therefore change.

The recommended bus service modifications for Subregion 4 are listed in Tables 8-12 and 8-13. Implementation of these transit service changes will help in achieving a greater share of transit trips and reduce dependency upon the private automobile, especially in the established neighborhoods and centers where most of the growth is planned.

Other Transit

Additional transit options in Subregion 4 include the MARC Penn Line, which serves New Carrollton Station and provides morning and evening peak hour service between Baltimore and Union Station in the District of Columbia. One MTA Commuter Bus route —Route 921—provides a connection from New Carrollton Metro Station to Annapolis. Several additional MTA routes that pass through the study area do not currently stop in Prince George's County.

Policy 1

Encourage a mass transit system of bus and rail service, including public parking facilities, that provides efficient and user-friendly service to supplement and, within centers and along corridors, supplant the private automobile.

Policy 2

Capitalize fully on the economic development and community revitalization potential of circumferential transit (Purple Line) alignments within and through Prince George's County, as well as a new rapid bus service extending from Landover Gateway to the Suitland Metro Station (see Map 8-6 on page 246).

Strategies

- Incorporate the MDOT selected alignment for the Purple Line initial segment—from Bethesda to the interim terminal at New Carrollton—as a Prince George's County transportation submission for the metropolitan region's constrained longrange plan.
- Extend the Purple Line as light rail transit to National Harbor and conduct detailed TOD assessments of all proposed stations on the Purple Line extension.
 - Conduct a feasibility study of Purple Line extensions options that serve:
 - Largo Town Center Metro.
 - Prince George's Community College.
 - Westphalia Town Center.
 - Joint Base Andrews (possible future station).
 - Suitland Metro and Federal Center or Branch Avenue Metro.
 - Oxon Hill Regional Center.
 - National Harbor.
 - Transit operations and TOD potential of other sites along the recommended extension.
 - Coordinate an alternate alignments study for the Purple Line, particularly those that serve and encourage TOD in the Developed Tier, with MDOT, DPW&T, and WMATA.
- Ensure that all Purple Line stations that also serve Metrorail and MARC stations are fully integrated with those lines and systems.

- Ensure that master and sector planning efforts for areas of the county that are served by Purple Line stations fully reflect the need to:
 - Capitalize on this expanded public sector investment in the county rail transit system.
 - Use the Purple Line to achieve county growth, development, and TOD goals and priorities, particularly in the Developed Tier and at General Plan centers.
- Extend a new rapid bus service from Landover Gateway south to the Suitland Metro Station with stops at FedEx Field, the Morgan Boulevard Metro Station throughout the Central Avenue Corridor, the Addison Road-Seat Pleasant Metro Station, and along Walker Mill and Silver Hill Roads.

Policy 3

Develop a comprehensive rail transit network for Prince George's County that fully exploits the service, development, and growth potential of all existing (Metrorail and MARC) and any future (Purple Line) stations in Subregion 4.

Strategies

- Undertake systems and facilities engineering and corresponding TOD planning for fixed guideway transit extensions:
 - From New Carrollton Metro Station via US 50 to Bowie Town Center.
 - From Branch Avenue Metro Station via MD 5 to Waldorf.
- Encourage a mass transit system of bus and rail service, including public parking facilities, that provides efficient and user-friendly service to supplement and, within centers and along corridors, supplant the private automobile.

Policy 4

Develop a comprehensive transit network for Prince George's County that fully exploits the service, development, and growth potential of all existing and future bus service corridors in Subregion 4.

Strategies

- Coordinate new and revised bus service transit recommendations for Subregion 4 with DPW&T, WMATA, and the Maryland Transit Administration of MDOT. Conduct a comprehensive evaluation of proposed and recommended bus service improvements, including:
 - Service area characteristics.
 - ♦ Current service area demand.
 - ♦ Future demand.
- Develop potential transit and transfer centers in the subregion.
- Coordinate overall subregion and bus transit system connectivity with existing and proposed Metrobus and TheBus service as recommended in each current Five-Year TSOP.
- Conduct a comprehensive evaluation of the need for, and innovative ways to finance, the recommended shuttle bus service, including at a minimum:
 - ♦ Woodmore Town Center
 - ♦ FedEx Field
 - ♦ Landover Gateway
 - Morgan Boulevard Metro Center
 - Largo Town Center

Pedestrians, Bicycles, and Trails

Improved multimodal access and TOD were identified as objectives of the 2002 General Plan. A comprehensive network of trails, sidewalks, and bikeways can provide alternatives to the automobile. Planning for a comprehensive network of trails, sidewalks, and bikeways can help to ensure that neighborhoods are walkable and that school children have safe routes on which to walk to school. This is particularly important in urban areas where it becomes more practical for some trips to be made by walking or bicycling due to a higher density and diversity of land uses. Similarly, trail connections to Metro stations can reduce the need for parking by enabling nearby residents to walk to their nearest station, as opposed to having to always drive to the station's parking garage or lot.

Currently, the sidewalk network in Subregion 4 is fragmented or missing in many areas. (See Map 8-7.)

Map 8-7: Existing Trail Network



Map 8-8: Proposed Trail Network



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Additional connections are necessary to ensure that children have safe routes when walking to school and neighborhoods are safe and accessible for pedestrians. Accommodations for pedestrians must be evaluated comprehensively for Subregion 4. Appropriate park trail corridors need to be identified, sidewalk retrofit opportunities should be explored, and accommodations for bicycles and pedestrians need to be provided as road improvements are made. To achieve these goals, this subregion plan will recommend appropriate park trail corridors for both recreation and transportation, sidewalk retrofit projects in order to provide safe access to schools and mass transit, and neighborhood trail connections to join communities with recreation, jobs, and neighboring areas. This proposed network of trails, sidewalks, and bikeways will make it more feasible for area residents to make some trips by walking and bicycling. Issues that have been identified by the community through adopted and approved master plans and other recent planning efforts in the area include:

- Pedestrian safety improvements needed in the vicinity of the Addison Road-Seat Pleasant Metro Station.
- Lack of bicycle and pedestrian amenities.
- Incomplete sidewalk network.
- Need for sidewalks and pedestrian safety features along Central Avenue.
- Lack of pedestrian connections between Metro stations and adjacent neighborhoods.
- No off-road trail options to Metro stations.
- Lack of pedestrian crosswalks at key locations.
- Lack of pedestrian access to parks.
- Lack of safe routes to schools for children.
- Pedestrian safety improvements needed at MD 202 and Brightseat Road.
- Provision of recreation trails in conformance with previously approved master plans.
- Need to improve pedestrian and bicycle access to Metro stations.
- Need to retrofit sidewalk construction along roads to Metro stations, schools, parks, and other activity centers.

Trails and sidewalks can be implemented through a variety of methods. Trails and road frontage improvements can be completed through the development process. Stream valley dedication and trail construction can be required as part of new residential development. In addition, road frontage improvements, such as sidepaths or sidewalks, can be required as individual properties are developed.

Trails, sidewalks, and bikeways can also be completed through the capital improvement program (CIP). The CIP can include trail construction projects, as well as road construction projects that include accommodations for bicycles and pedestrians. Similarly, there are limited funds at both the state and county level for retrofit sidewalk construction. It is important for communities to identify the priority needs for sidewalk connections to schools and Metro stations for the use of these limited funds. Federal funds can also be acquired for trail construction through the transportation enhancement program and recreational trails program.

Trails and pedestrian facilities that have been implemented in Subregion 4 in recent years include:

- Wide sidewalks along Morgan Boulevard from Central Avenue (MD 214) to FedEx Field.
- Sidepath along Redskins Road from Brightseat Road to FedEx Field.
- Sidepath and wide sidewalk construction along Arena Drive from I-95/495 to FedEx Field.
- Neighborhood trail network in the Summerfield development.
- Wide sidewalk connection from Summerfield at Morgan Station to the Morgan Boulevard Metro (approved for construction through approved Preliminary Plan 4-03124, Condition 8c).
- Wide sidewalk along the south side of Ritchie-Marlboro Road at the I-495 interchange.
- Wide sidewalk and streetscape improvements along Sheriff Road from Redskins Road to MD 704.
- Sidewalk construction along Silver Hill Road in the vicinity of the Suitland Metro Station; and trail construction within Walker Mill Regional Park.

Policy 1

Incorporate appropriate pedestrian-oriented and TOD features in the centers.

Strategies

- Provide continuous sidewalks and designated bike lanes along roadways.
- Work with the development community to create a comprehensive sidewalk and trail network within the planned centers and along major corridors. Include pedestrian amenities and safety features to ensure that Subregion 4 is a walkable, pedestrian-friendly environment. Supplement the sidewalk network by utilizing stream valleys and other greenway corridors as trails and pedestrian walkways.

Policy 2

Provide sidewalks and neighborhood trail connections within existing communities to improve pedestrian safety, allow for safe routes to Metro stations and schools, and provide for increased nonmotorized connectivity between neighborhoods. (See Map 8-8 on page 250.)

Policy 3

Develop bicycle-friendly roadways in conformance with the latest standards and guidelines, including the 1999 AASHTO Guide for the Development of Bicycle Facilities.

A detailed listing of pedestrian, bicycle, and trails recommendations can be found in Chapter 5, Living Areas and Industrial Centers.

Introduction

Public facilities are provided in locations that serve and promote a more livable community. Schools are not overcrowded and are convenient to foster learning. Police, fire, and rescue services are located where response time is minimal, and library services are located in proximity to users. There is a variety of high quality, safe, and convenient recreational facilities to service all residents. Recreational opportunities contribute to community desirability and are critical to creating a preferred and livable community.

Schools

In Subregion 4, there are a total of 39 public schools: 30 elementary schools, 5 middle schools, and 4 high schools (See Table 9-1 on page 255). Subregion 4 is also home to an early childhood center, alternative schools, a visual and performing arts center, and school administrative facilities, as well as at least 13 former school buildings still



Approved Subregion 4 Master Plan and Sectional Map Amendment

Map 9-1: Public Facilities



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Table 9-1:Prince George's County Public School Facilities in Subregion 4							
Name	City	Building Size (Sq. Feet)	Acreage				
Elementary Schools							
Berkshire	6201 Surrey Square Lane	District Heights	44,315	10			
Bradbury Heights	1401 Glacier Avenue	Capitol Heights	79,457	5			
Capitol Heights	601 Suffolk Avenue	Capitol Heights	44,764	10			
Carmody Hills	401 Jadeleaf Avenue	Capitol Heights	52,366	9.2			
Columbia Park	1901 Kent Village Drive	Landover	57,372	8			
Concord	2004 Concord Lane	District Heights	43,984	9.4			
Cora L. Rice	950 Nalley Road	Landover	83,482	32.5			
District Heights	2200 County Road	District Heights	54,415	8.4			
Dodge Park	3401 Hubbard Road	Landover	50,499	10			
Doswell E. Brooks	1301 Brooke Road	Capitol Heights	46,508	10.6			
Francis Scott Key	2301 Scott Key Drive	District Heights	86,814	12.4			
Glenarden Woods	7801 Glenarden Parkway	Glenarden	52,061	12.6			
Highland Park	6501 Lowland Drive	Landover	61,555	10.4			
John Carroll	1400 Nalley Terrace	Landover	56,505	10			
John Eager Howard	4400 Shell Street	Capitol Heights	59,997	10			
John H. Bayne	7010 Walker Mill Road	Capitol Heights	49,779	4			
Judge Sylvania W. Woods, Sr.	3900 Church Street	Glenarden	84,660	15.5			
Kenmoor	3200 82nd Avenue	Landover	43,997	9			
Longfields	3300 Newkirk Avenue	Forestville	52,565	11.7			
Matthew Henson	7910 Scott Road	Landover	57,857	10.1			
North Forestville	2311 Ritchie Road	Forestville	57,949	14.2			
Oakcrest	929 Hill Road	Landover	46,152	13.5			
Robert R. Gray	4949 Addison Road	District Heights	74,520	8.1			
Samuel P. Massie	3301 Regency Parkway	Forestville	97,243	51			
Seat Pleasant	6411 G Street	Capitol Heights	42,888	4.4			
Suitland	4650 Homer Avenue	Suitland	76,333	7			
Thomas Claggett	2001 Addison Road	District Heights	61,175	10			
William Beanes	5108 Dianna Drive	Suitland	56,175	12.2			
William Paca	7801 Sheriff Road	Landover	54,868	10.9			
William W. Hall	5200 Marlboro Pike	Capitol Heights	100,000	53			
	Middle Schoo	ols					
Andrew Jackson	3500 Regency Parkway	District Heights	151,613	15.4			
Drew Freeman	2600 Brooks Drive	Suitland	142,413	18.4			
G. James Gholson	900 Nalley Road	Landover	115,868	32.5			
Kenmoor	2500 Kenmoor Drive	Landover	128,381	24.5			
Walker Mill Middle	800 Karen Boulevard	Capitol Heights	129,348	37.8			

Table 9-1: Prince George's County Public School Facilities in Subregion 4						
Name	Address	City	Building Size (Sq. Feet)	Acreage		
	High School	ls				
Central	200 Cabin Branch Road	Capitol Heights	168,366	60.5		
Fairmont Heights	1401 Nye Street	Capitol Heights	174,128	15.1		
Forestville Military Academy	7001 Beltz Drive	Forestville	193,222	28.6		
Suitland	5200 Silver Hill Road	District Heights	344,875	24.5		
	Other School Fa	cilities				
Bonnie F. Johns Educational Media Center	8437 Landover Road	Landover				
Edgar Allan Poe Alternative Elementary School	2001 Shadyside Avenue	Suitland				
H. Winship Wheatley Early Childhood Center	8801 Ritchie Road	Capitol Heights				
Instructional Services Support Center (ISSC)	9201 East Hampton Drive	Capitol Heights				
Jefferson Building	7600 Jefferson Avenue	Landover				
Lyndon Hill Elementary School	6181 Central Avenue	Capitol Heights				
Thomas G. Pullen Visual and Performing Arts Center	700 Brightseat Road	Landover				
Source: Prince George's C	County Public Schools(PGCPS), Educational Facili	ties Master Plan 2	2007-2008.		

maintained by the Prince George's County Public Schools (PGCPS) and used for other purposes. One of those former school facilities is the Bonnie F. Johns Educational Media Center, located at 8437 Landover Road.

The Department of School Improvement and Accountability is headquartered in the subregion at the Jefferson Building in Landover. The Instructional Support and Services Center is located at 9201 East Hampton Drive in Capitol Heights.

Of the 39 comprehensive schools in Subregion 4, only two exceed the state-rated capacities: Glenarden Woods Elementary School at 110 percent of capacity and Central High School at 105 percent of capacity. Moreover, three schools within the subregion are below 50 percent capacity: Bradbury Heights Elementary at 49 percent, John Carroll Elementary School at 42 percent, and Thomas Claggett Elementary School at 38 percent (see Table 9-2 on page 257).

During the 2008-2009 school year, enrollment in the region's elementary schools was at 70 percent of capacity; middle schools were at 73 percent of capacity; and high schools at 96 percent of capacity. Expressed in terms of available seats, the schools in Subregion 4 had 4,947 available seats in elementary schools, 1,218 in middle schools, and 241 in high schools.

Population projections show an increase by 2017, which is not consistent with current enrollment

Table 9-2: Subregion 4 School Enrollment and Capacity 2008-2009								
Name	2008-09 Enrollment	State-Rated 2008-09 Perce Capacity Of Capacit		2008 Available Seats				
Elementary Schools								
Berkshire	275	546	50	271				
Bradbury Heights	319	656	49	337				
Capitol Heights	242	316	77	74				
Carmody Hills	309	550	56	241				
Columbia Park	311	525	59	214				
Concord	352	456	77	104				
Cora L. Rice	478	709	67	231				
District Heights	496	502	99	6				
Dodge Park	365	567	64	202				
Doswell E. Brooks	356	434	82	78				
Francis Scott Key	503	749	67	246				
Glenarden Woods	506	460	110	-46				
Highland Park	357	433	82	76				
John Carroll	189	454	42	265				
John Eager Howard	258	433	60	175				
John H. Bayne	497	550	90	53				
Judge Sylvania W. Woods, Sr.	586	748	78	162				
Kenmoor	311	433	72	122				
Longfields	359	406	88	47				
Matthew Henson	311	454	69	143				
North Forestville	274	441	62	167				
Oakcrest	357	456	78	99				
Robert R. Gray	404	748	54	344				
Samuel P. Massie	594	725	82	131				
Seat Pleasant	298	362	82	64				
Suitland	561	748	75	187				
Thomas Claggett	183	478	38	295				
William Beanes	477	595	80	118				
William Paca	359	685	52	326				
William W. Hall	535	750	71	215				
Subregion 4 Elementary School Total	11,422	16,369	70	4,947				

Table 9-2: Subregion 4 School Enrollment and Capacity 2008-2009							
Name	2008-09 Enrollment	State-Rated Capacity	2008-09 Percent Of Capacity	2008 Available Seats			
Middle Schools							
Andrew Jackson	531	816	65	285			
Drew Freeman	696	1,050	66	354			
G. James Gholson	742	990	75	248			
Kenmoor	674	795	85	121			
Walker Mill	606	816	74	210			
Subregion 4 Middle School Total	3,249	4,467	73	1,218			
	Hig	zh Schools					
Central	1,172	1,118	105	-54			
Fairmont Heights	1,008	1,139	88	131			
Forestville Military Academy	931	1,015	92	84			
Suitland	2,555	2,635	97	80			
Subregion 4 High School Total	5,666	5,907	96	241			
Source: Prince George's County Public Schools (PGCPS), Educational Facilities Master Plan 2007–2008.							

projections. By 2017, the subregion is projected to gain 267 elementary school students, an estimated one-percent increase in enrollment from 2008-2009. However, during the same period, middle and high school enrollments are projected to decrease through 2017. Middle schools in Subregion 4 are projected to be at 52 percent capacity in 2017 with 935 fewer students and high schools are projected to be at 71 percent capacity in 2017 with 1,496 fewer high school students. (See Table 9-3 on page 259).

Subregion 4 contains a substantial share of the county's excess public school capacity. This excess capacity may present an opportunity to alleviate overcrowding in other areas near the subregion and accommodate residential growth.

The Maryland Public School Construction Program evaluates systemic capacity when determining the suitability of proposed new schools for state funding, with a preference towards redrawing the boundaries of overcrowded or underutilized schools in place of new construction.

In November 2007, PGCPS presented the Prince George's County Board of Education (BOE) with a list of school facilities within the county that could accommodate pre-kindergarten through 8th grade (K–8) curriculum. The list included several schools in Subregion 4. On January 23, 2009, PGCPS presented BOE with a proposal to consolidate or reprogram several schools. BOE approved the first phase of this plan to relieve overcrowding in county schools, as well as expand enrichment and specialty programs on March 26, 2009. Through the approval of this plan, four schools within Subregion 4 were recommended for consolidation and three will be converted to kindergarten–8th grade curriculum at the beginning of the 2009-2010 school year.

Table 9-3: Projected School Enrollment and Capacity, 2017								
Name	2008-09 Enrollment	2017 Projected Enrollment	2008-2017 Change In Enrollment	Enrollment Capacity (SRC)	2008* Available Capacity	2017* Available Capacity		
Elementary Schools								
Berkshire	275	279	4	546	271	267		
Bradbury Heights	319	303	-16	656	337	353		
Capitol Heights	242	350	108	316	74	-34		
Carmody Hills	309	334	25	550	241	216		
Columbia Park	311	301	-10	525	214	224		
Concord	352	226	-126	456	104	230		
Cora L. Rice	478	466	-12	709	231	243		
District Heights	496	469	-27	502	6	33		
Dodge Park	365	338	-27	567	202	229		
Doswell E. Brooks	356	437	81	434	78	-3		
Francis Scott Key	503	560	57	749	246	189		
Glenarden Woods	506	372	-134	460	-46	88		
Highland Park	357	270	-87	433	76	163		
John Carroll	189	197	8	454	265	257		
John Eager Howard	258	268	10	433	175	165		
John H. Bayne	497	408	-89	550	53	142		
Judge Sylvania W. Woods, Sr.	586	634	48	748	162	114		
Kenmoor	311	401	90	433	122	32		
Longfields	359	317	-42	406	47	89		
Matthew Henson	311	399	88	454	143	55		
North Forestville	274	254	-20	441	167	187		
Oakcrest	357	468	111	456	99	-12		
Robert R. Gray	404	426	22	748	344	322		
Samuel P. Massie	594	682	88	725	131	43		
Seat Pleasant	298	326	28	362	64	36		
Suitland	561	580	19	748	187	168		
Thomas Claggett	183	291	108	478	295	187		
William Beanes	477	441	-36	595	118	154		
William Paca	359	336	-23	685	326	349		
William W. Hall	535	556	21	750	215	194		
Subregion 4 Elementary School Total	11,422	11,689	267	16,369	4,947	4,680		

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Table 9-3: Projected School Enrollment and Capacity, 2017							
Name	2008-09 Enrollment	2008-09 Enrollment20172008-2017EnrollmentProjected EnrollmentChange In EnrollmentCapacity 		2008* Available Capacity	2017* Available Capacity		
Middle Schools							
Andrew Jackson	531	443	-88	816	285	373	
Drew Freeman	696	485	-211	1,050	354	565	
G. James Gholson	742	406	-336	990	248	584	
Kenmoor	674	556	-118	795	121	239	
Walker Mill	606	424	-182	816	210	392	
Subregion 4 Middle School Total	3,249	2,314	-935	4,467	1,218	2,153	
		High S	Schools				
Central	1,172	1,160	-12	1,118	-54	-42	
Fairmont Heights	1,008	842	-166	1,139	131	297	
Forestville Military Academy	931	555	-376	1,015	84	460	
Suitland	2,555	1,613	-942	2,635	80	1,022	
Subregion 4 High School Total	5,666	4,170	-1,496	5,907	241	1,737	
*2008 and 2017 available capacity is derived by subtracting 2008 SRC from 2008-09 actual and 2017 projected enrollments.							

Source: PGCPS, Educational Facilities Master Plan 2007-2008.

Berkshire Elementary, John Carroll Elementary, John Edgar Howard Elementary, and Matthew Henson Elementary Schools were recommended for consolidation and their attendance areas are to be incorporated into one or more nearby schools with available capacity. As a result, the consolidated school facilities are to be emptied and these schools are to cease operation at the end of the 2008-2009 school year.

Three elementary and middle schools within the subregion will be converted to K–8 grade curriculum. These schools are Andrew Jackson Middle School, Samuel Massie Elementary School, and William W. Hall Elementary School. They will open as K–8 grade curriculum schools at the beginning of the 2009-2010 school year.

School Facility Conditions

In May 2008, Parsons 3D/International, in association with three subcontractors, completed a

facilities condition assessment of public schools within the county. It explored the physical conditions of each school, both internal and external. Parsons identified which schools required improvements based upon age and the cost of renovation versus the replacement of the facility. The study measured schools based upon a facilities condition index (FCI), which is a measurement of a facility's condition represented by the ratio of the cost to correct a school facility's deficiencies to the current replacement value of the facility.

Schools with an FCI of 0-40 percent are considered to be in good condition. Schools with an FCI of 40-75 percent are considered to be in fair condition. Lastly, schools with a FCI greater than 75 percent are considered to be in poor condition. Schools constructed since 1993 were not evaluated.

Table 9-4 on page 261 includes the FCI of the public schools and other school facilities which

Table 9-4: School Facility Conditions: 2008 Parsons 3DI Study							
Name	2008 3DI FCI (see text for definitions)	2008 3DI Rating	Year School Constructed				
Elementary Schools							
Berkshire	69.63%	Fair	1964				
Bradbury Heights	49.97%	Fair	1929,1991				
Capitol Heights	57.48%	Fair	1959				
Carmody Hills	5.50%	Good	1958				
Columbia Park	70.67%	Fair	1928				
Concord	62.53%	Fair	1968				
Cora L. Rice	NR	NR	2002				
District Heights	63.51%	Fair	1955				
Dodge Park	55.12%	Fair	1965				
Doswell E. Brooks	70.54%	Fair	1953				
Francis Scott Key	NR	NR	1998				
Glenarden Woods	72.60%	Fair	1960				
Highland Park	12.33%	Good	1928, 1999				
John Carroll	42.61%	Fair	1971				
John Eager Howard	62.75%	Fair	1968				
John H. Bayne	49.83%	Fair	1963				
Judge Sylvania W. Woods, Sr.	NR	NR	1999				
Kenmoor	65.60%	Fair	1966				
Longfields	63.73%	Fair	1969				
Matthew Henson	74.39%	Fair	1969				
North Forestville	61.44%	Fair	1954				
Oakcrest	58.13%	Fair	1966				
Robert R. Gray	NR	NR	2001				
Samuel P. Massie	NR	NR	2003				
Seat Pleasant	64.65%	Fair	1971				
Suitland	NR	NR	2005				
Thomas Claggett	57.79%	Fair	1971				
William Beanes	71.44%	Fair	1972				
William Paca	65.32%	Fair	1963				
William W. Hall	NR	NR	2005				
Middle Schools							
Andrew Jackson	40.23%	Fair	1971				
Drew Freeman	66.88%	Fair	1960				
G. James Gholson	NR	NR	2002				
Kenmoor	69.49%	Fair	1973				
Walker Mill	63.03%	Fair	1970				

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Table 9-4: School Facility Conditions: 2008 Parsons 3DI Study						
Name	2008 3DI FCI (see text for definitions)	2008 3DI Rating	Year School Constructed			
High Schools						
Central	32.93%	Good	1961			
Fairmont Heights	62.46%	Fair	1951			
Forestville Military Academy	31.63%	Good	1965			
Suitland	58.57%	Fair	1951			
Other School Facilities						
Jefferson Building	NR	NR	NP*			
H. Winship Wheatley Early Childhood Center	72.06%	Fair	1970			
Bonnie F. Johns Educational Media Center	69.57%	Fair	NP*			
Edgar Allan Poe Alternative Elementary School	37.20%	Good	1967			
Suitland High School Annex	75.14%	Poor	1956			
Thomas G. Pullen VPA	65.38%	Fair	1967			
Instructional Services Support Center (ISSC)	NR	NR	NP*			
Lyndon Hill Elementary School	65.09%	Fair	1938			
Source: Parsons 3D/International 2008						

serve Subregion 4 and identifies the year in which each building was constructed. Five of the schools/ school facilities evaluated were rated in good condition and 31 schools/school facilities were rated in fair condition. One school facility in the study area was rated poor. Ten schools were not evaluated. Suitland High School and Suitland High School Annex were rated separately in the Parsons 3DI study.

Population Projections and Their Impact on Public Schools

Elementary schools are built to accommodate approximately 740 students, middle schools 900–1,000 students, and high schools 1,500–2,200 students. K–8 grade curriculum schools generally accommodate a maximum of 1,000 students, depending on the school facility. Elementary schools have a neighborhood orientation while middle schools and high schools have a more regional orientation.

Table 9-5 on page 263 shows the current pupil yield rates for each dwelling unit type. For planning purposes, elementary, middle, and high school pupil yield rates for single-family detached dwelling units were used.

Metropolitan Washington Council of Governments' Round 7.1 Cooperative Forecasts show in 2010 there will be an estimated 53,923 dwelling units within the study area. By 2030, there will be an increase of 4,646 dwelling units, bringing the forecasted total of housing units within Subregion 4 to 58,569.

Based on the county's Round 7.1 forecasts and pupil yield factors, the housing unit growth is projected to yield an additional 743 elementary, 604 middle, and 650 high school students. Table

Table 9-5: Pupil Yield Rates, 2009								
Dwelling Unit Type Elementary Middle High								
Single-family Detached	0.16	0.13	0.14					
Single-family Attached	0.14	0.11	0.10					
Multifamily, Garden-style	0.14	0.06	0.09					
Multifamily with Structured Parking	0.04	0.04	0.03					
Source: PGCPS and Prince George's County Planning Department (PGCPD), 2009.								

Table 9-6: Subregion 4 Study AreaProjected 2030 School Enrollment and Capacity Needs							
SchoolsState Rated Capacity2008 2008 EnrollmentExisting Excess Seats/ DeficitProjected 2030 Seats NeededEnrollmentProjected 2030 Seats Deficit							
Elementary	16,369	11,422	4,947	743	12,165	4,204	
Middle	4,467	3,249	1,218	604	3,853	614	
High	5,907	5,666	241	650	6,316	-409	
Source: PGCPS and Prince George's County Planning Department (PGCPD), 2008.							

9-6 shows the state-rated capacity, 2008 enrollment, existing and projected excess seats and deficit seats, and enrollment in 2030 for the subregion.

Land Scarcity and Urbanization

Another aspect of school planning that has long-term ramifications is the decision to place needed schools on sites capable of supporting larger facilities. William W. Hall and Samuel P. Massie Elementary Schools were built after 2003 on large sites shared with parks. However, the Cora L. Rice Elementary/G. James Gholson Middle School complex sits in the dead center of a 32.5-acre parcel, rendering the property unable to accommodate another school. Kenmoor Elementary and Middle Schools sit on PGCPS properties that total approximately 33 acres. Both sites have acreage that would be better suited for a high school. Because these large sites were utilized by smaller schools, PGCPS is planning to acquire 29 acres of parkland to build the new Fairmount Heights High School.

Suburban School Facilities in Urbanized Areas

BOE Order 7100 (2004) reaffirmed a long-standing policy that new elementary school sites will be a minimum of 10 acres, new middle school sites will be a minimum of 20 acres, and new high school sites will be a minimum of 35 acres. This policy reflects 1960s- and 1970s-era beliefs about school facilities, beliefs established when suburbs were developing in greenfields, land and construction were relatively affordable, and low-density housing was considered the ideal use of the built environment. Subregion 4 has numerous communities that are completely built out, with suburban schools completely surrounded by development. Suburban-scale schools may break up the continuity and pedestrian connectivity of a community.

Approved Subregion 4 Master Plan 263 and Sectional Map Amendment As the county becomes more urbanized, land becomes scarcer, and the inventory of available land becomes insufficient to allow for a land-consumptive suburban school model. Consequently, an urban school model is needed to meet demand for neighborhood schools in these areas.

In redeveloping areas, large swaths of open space set aside for student recreational use may be better used for other purposes. These fields could be used as public open space, parks, for additional schools, sold/ leased to the private sector, or put to another use. Despite a deficiency in parkland, higher real estate cost, and the general discrediting of so-called "sprawl schools" in the 21st century, BOE policy continues to plan for significant tracts of land for schools, with large, often unused play fields and extensive surface parking.

In centers and corridors, insufficient land exists to allow suburban school models; urban school models are necessary to meet demand for neighborhood schools in these areas. The County Council and Planning Board have recommended urban-scale schools in the 2007 Westphalia Approved Sector Plan, and such schools are key elements in the Subregion 1 Master Plan, Branch Avenue Corridor Sector Plan, and Landover Gateway Sector Plan efforts. Planning Department staff will continue to work with PGCPS to develop an acceptable urban school model that delivers the same educational opportunities to children that reside in livable and sustainable urban communities as those who live in suburban communities.

PGCPS has been willing to adjust minimum site size when constraints dictate. Bradbury Heights Elementary School was built in 1991 on just five acres. Robert R. Gray Elementary School was built in 2001 on 8.1 acres. The Robert R. Gray model, 74,520 square feet on two floors, is the standard model used by PGCPS for planned elementary schools. Bladensburg High School was built in 2005 on 21.4 acres. The preferred location for the new Fairmount Heights High School is on 30 acres and may provide a potential urban model for high schools. A new Hyattsville area elementary school is proposed for an approximately four-acre site with a shared play field.

Goal

Provide residents with public schools that are conveniently located, of adequate size, feature stateof-the-art technology and quality instructional opportunities, and serve as active centers for their communities.

Policy 1

Establish a standard minimum site size for new construction, rehabilitation, and the adaptive reuse of structures for schools within urban settings.

Strategies

- Integrate an urban school model into school planning that would satisfy the needs of residents and future enrollment.
- Review standards for school facilities and sites to identify building footprints that support education programs in multistory buildings.
- Construct urban schools in areas where schools are needed, yet available developable land is limited, to achieve a school system that operates at 100 percent of capacity or less at every school.

Policy 2

Preserve, retain, and support existing public schools, school facilities, school sites, and properties owned by BOE.

Strategies

- Renovate existing school facilities according to the greatest need based on the facilities condition assessment.
- Implement the BOE's plan to consolidate, convert, and reprogram designated schools to relieve overcrowding in county public schools, as well as expand enrichment and specialty programs.
- Review existing school land availability to determine if future schools can be co-located to take advantage of large, underutilized parcels.
- Replace the existing 900-seat capacity Fairmount Heights High School in the South Columbia Park area with a new school designed to expand to 1,600 seats to accommodate future growth. The new school should be built (incorporating urban school design features) with a LEED silver rating or the equivalent in the South Columbia Park area.
Policy 3

Provide safe connections to schools within Subregion 4.

Strategies

- Provide continuous sidewalks throughout Subregion 4, particularly around schools and public spaces.
- Improve pedestrian street crossings to ensure better visibility, particularly around schools and public spaces.
- Create attractive, active, pedestrian-oriented streetscapes near schools that provide safe pathways and enhanced connectivity for pedestrians and bicyclists.
- Design streetscapes with buffers between sidewalks and heavily trafficked roads.

Libraries

There are three branches of the Prince George's County Memorial Library System (PGCMLS) in Subregion 4 (see Table 9-7). The Spauldings and Glenarden Branches are considered to be underutilized, while the Fairmount Heights Branch is generally thought to be undersized and inadequate to serve the greater, highly populated region.

A recent study conducted by M-NCPPC staff explored the demand for internet and computer services at public libraries in the county. Library service centers providing limited library services and public internet access computers located in community centers could be used to help satisfy demand in neighborhoods that are considered underserved, such as portions of Capitol Heights and Suitland. A new central library is recommended in the core of the Landover Gateway Sector Plan area.

Goal

Provide all residents with adequate and convenient access to public library facilities.

Policy 1

Improve existing library facilities and services to meet the needs of community residents.

Strategy

 Continue to improve upon and meet the increasing demand for computing and internet technology.

Policy 2

Locate libraries in close proximity to residential areas.

Strategies

- Monitor the need to build an additional library facility in Subregion 4 to support future changes in population, particularly if a library is not built in Landover.
- Consider creating library service centers within existing community centers in underserved areas to better serve surrounding neighborhoods.

Policy 3

Develop strategies to increase patronage at underutilized libraries.

Strategies

- Develop new programs and services to meet the needs of area residents.
- Increase marketing and publicity of library offerings, events, and hours to the communities that they serve.
- Create partnerships with local organizations and institutions to offer programs and increase awareness of library offerings.

Table 9-7: Libraries						
Name	Address	City	Size (Sq. Feet)	Year Opened		
Fairmount Heights	5904 Kolb Street	Fairmount Heights	16,887	1974		
Glenarden	8724 Glenarden Parkway	Glenarden	9,238	1979		
Spauldings	5811 Old Silver Hill Road	District Heights	24,000	2006		
Source: Prince George's County Memorial Library System.						

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Public Safety Police

The Prince George's Police Department (PGPD) District III boundaries are contiguous with Subregion 4. The District III headquarters is adjacent to PGPD headquarters at 7701 Barlowe Road in Palmer Park. The police services complex is 128,608 square feet.

The 2008 Approved Public Safety Facilities Master Plan recommends that this facility be renovated in the long-term (after 2021). Because of the urbanized nature of the region, response times have increased and there has become a need for a second station to be located in or around Capitol Heights.

Capitol Heights, District Heights, Fairmount Heights, Glenarden, and Seat Pleasant have municipal police departments that provide additional first response capability within their respective town limits and supplement the efforts of PGPD. As of 2007, these five departments had 41 sworn officers.

Office of Public Safety Communications

The Office of Public Safety Communications is located in a former elementary school at 7915 Anchor Street, off of Central Avenue near the Morgan Boulevard Metro Station. There is discussion of relocating this facility to Bowie; no final decision has been made at this time.

Maryland-National Capital Park Police

The 2008 Approved Public Safety Facilities Master Plan recommends moving The Maryland-National Capital Park Police headquarters from Riverdale to Walker Mill Regional Park. The proposed 2009–2013 Capital Improvement Program for M-NCPPC requests \$3.075 million on top of \$4.925 million appropriated in 2008 for completion of this project.

Table 9-8: Fire/EMS Stations					
Co.	Name	Address	City	Apparatus	2008 PSDMP
5	Capitol Heights	6061 Central Avenue	Capitol Heights	2 Engines; 1 Ambulance; 1 Medic; 1 Truck; 1 Metro Support Unit	Renovate
8	Seat Pleasant	6305 Addison Road	Seat Pleasant	2 Engines; 1 Ambulance; 1 Rescue Squad	None
17	Boulevard Heights	4101 Alton Street	Capitol Heights	2 Engines; 1 Ambulance; 1 Truck	None
26	District Heights	6208 Marlboro Pike	District Heights	2 Engines; 1 Ambulance; 1 Truck	Relocate to New Facility
33	Kentland	7701 Landover Road	Landover	2 Engines; 1 Tower; 1 Mini-Pumper; 1 Rescue Engine; 1 Ambulance	Renovate/ Replace
37	Ritchie	1415 Ritchie Marlboro Road	Capitol Heights	2 Engines; 1 Mini-Pumper	None
38	Chapel Oaks	5544 Sheriff Road	Capitol Heights	2 Engines; 1 Ambulance	None
			Source: Pri	nce George's County Fire/El	MS Department.

Fire and Emergency Medical Services

Fire and emergency medical services (EMS) are provided by the Prince George's County Fire/EMS Department (PGFD). This department is one of the two largest combination fire/EMS departments in the United States, with both career and volunteer elements. There are seven fire/EMS stations in Subregion 4. Three of the seven stations rank in the top ten in the U.S. for EMS calls for service, and two for fire calls for service. Subregion 4 stations responded to 18,959 EMS calls for service in 2007, nearly 20 percent of all calls in the county. They also responded to 5,901 fire calls, 19 percent of all the county's calls. (*Prince George's County Fire/EMS Department, 2007 Annual Report. Largo, MD: 2008.*)

Planning Efforts

On March 25, 2008, the County Council approved the 2008 *Approved Public Safety Facilities Master Plan.* Among the highlights of this plan are new fire/EMS stations at the intersection of Shady Glen Drive and Central Avenue, and at the intersection of Marlboro Pike and Silver Hill Road in District Heights. The plan also recommended renovations at the Capitol Heights Fire/EMS station and the relocation or renovation of the Kentland Fire/EMS Station. The *Approved Landover Gateway Sector Plan and Sectional Map Amendment* recommends a new fire/EMS station near the intersection of Landover and Brightseat Roads to serve Landover Gateway.

Goals

- Locate police and fire and rescue facilities and services that meet the size and location needs of the community to minimize response time.
- Provide fire and rescue facilities that meet the needs of the community based upon established county standards and able to accommodate modern vehicles and equipment.

Policy 1

Develop and maintain facilities that allow public safety personnel to respond to needs as quickly and efficiently as possible.

Strategies

 Relocate The Maryland-National Capital Park Police Headquarters from Riverdale to Walker Mill Regional Park.

- Locate an additional police station in or near Capitol Heights to reduce response time and crime.
- Relocate the Office of Public Safety Communications from 7915 Anchor Street, off of Central Avenue, to Bowie.

Policy 2

Reduce citizen fear of and susceptibility to crime and address public safety issues in neighborhoods.

Strategies

- Create crime prevention programs that get entire communities involved, and raise awareness of these programs in neighborhoods. Support volunteer efforts, such as neighborhood watch and clean-up/fix-up days.
- Incorporate Crime Prevention through Environmental Design (CPTED) measures in all new development and redevelopment to foster "eyes on the street."
- Construct sidewalks, bicycle lanes, traffic calming devices, and streetlights where appropriate.

Parks and Recreation

M-NCPPC provides parks and recreational programs to the residents of Prince George's County. M-NCPPC currently divides park and recreation facilities into six categories:

- Neighborhood Park and Recreation Areas includes mini-parks, playgrounds, parks, recreation centers, and park/schools with acreage of less than 20 acres. Parks serve residents in the immediate vicinity. Recreation centers are smaller, unstaffed spaces that generally provide basic community meeting space.
- 2. Community Park and Recreation Areas—includes community center buildings, parks, recreation centers, and cultural centers between 20 and 200 acres. Neighborhood and community park areas are classified as local parks. A community center is fully staffed and provides multiple activities and uses, including a gym and fitness room.
- 3. Regional Park and Recreation Areas—includes stream valley parks, regional parks (parks with more than 200 acres), cultural arts centers, and
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Table 9-9: Existing Park Facilities in Subregion 4					
PARK ID#	Owner	Park Name	Acreage		
P19	M-NCPPC	Booker T. Homes Neighborhood Park	6.22		
P60	M-NCPPC	Bradbury Community Recreation Center	25.80		
P20	M-NCPPC	Brooke Road Neighborhood Recreation Center	16.73		
P08	M-NCPPC	Capitol Heights Neighborhood Park	7.23		
P02	M-NCPPC	Capitol Heights South Neighborhood Mini-Park	0.86		
P44	M-NCPPC	Cedar Heights Community Center Park	11.78		
P09	M-NCPPC	Cedar Heights Neighborhood Playground	1.70		
P65	M-NCPPC	Columbia Park Community Center Park	8.19		
P00	M-NCPPC	Deanwood Park Neighborhood Playground	1.34		
P37	M-NCPPC	Dillon Park Neighborhood Playground	2.16		
P31	M-NCPPC	Dodge Park Neighborhood Park/School	13.60		
P21	M-NCPPC	Dupont Heights Neighborhood Park	12.97		
P11	M-NCPPC	Fairmount Heights Neighborhood Playground	4.23		
P42	M-NCPPC	Fairmount Heights North Neighborhood Playground	4.71		
P61	M-NCPPC	Glenarden Community Center Park	12.09		
P07	M-NCPPC	Hartman-Berkshire Neighborhood Playground	3.92		
P25	M-NCPPC	Henry P. Johnson Neighborhood Park	7.31		
P13	M-NCPPC	Highland Gardens Neighborhood Playground	4.51		
P14	M-NCPPC	Highland Park Neighborhood Park/School	9.96		
P58	M-NCPPC	Hill Road Community Park	43.30		
P03	M-NCPPC	Hutchinson Commons Neighborhood Mini-Park	1.00		
P90	M-NCPPC	J. Franklyn Bourne Aquatic Center	19.43		
P30	M-NCPPC	Jesse J. Warr, Jr. Neighborhood Recreation Center	11.54		
P33	M-NCPPC	John Carroll Community Park/School	28.51		
P66	M-NCPPC	John E. Howard Community Center Park	12.58		
P68	M-NCPPC	Kentland Community Center Park (and PG Ballroom, P69)	84.61		
P29	M-NCPPC	Kentland Neighborhood Recreation Center	15.87		
P15	M-NCPPC	Maryland Park Neighborhood Playground	4.07		
P23	M-NCPPC	Millwood Neighborhood Recreation Center	15.61		
P16	M-NCPPC	Nalley Road Community Park/School	36.94		
P04	M-NCPPC	North Forestville Neighborhood Mini-Park	0.79		
P32	M-NCPPC	North Forestville Neighborhood Park/School	1.94		
P62	M-NCPPC	Oakcrest Community Park School Center	52.89		
P63	M-NCPPC	Palmer Park Community Center Park	44.17		
P35	M-NCPPC	Park Berkshire Neighborhood Park/School	10.02		
P64	M-NCPPC	Peppermill Village Community Center Park	11.36		

PUBLIC FACILITIES

(Cont'd)

Table 9-9: Existing Park Facilities in Subregion 4				
PARK ID#	Owner	Park Name	Acreage	
P92	M-NCPPC	Prince George's Sports and Learning Complex	80.03	
P67	MUNI	Seat Pleasant Community Center	1.35	
P05	M-NCPPC	Seat Pleasant Heights Neighborhood Mini-Park	0.80	
P26	M-NCPPC	Seat Pleasant Neighborhood Park	15.09	
P36	M-NCPPC	Seat Pleasant Neighborhood Park/School	0.89	
P59	M-NCPPC	South Forestville Community Park	23.27	
P80	COUNTY	Sugar Ray Leonard Boxing Center	0.24	
P84	M-NCPPC	Suitland Bog Conservation Area	68.03	
P39	M-NCPPC	Suitland Community Park	109.24	
P50	M-NCPPC	Suitland Community Park School Center	56.05	
P71	M-NCPPC	Suitland Road Community Room	0.00	
P46	M-NCPPC	Summerfield Community Park	37.30	
P91	M-NCPPC	Theresa Banks Aquatic Center	1.00	
P79	M-NCPPC	Walker Mill Regional Park (and Concord Manor, P72)	504.60	
P38	M-NCPPC	William Beanes Community Center Park	13.41	
Total Developed Acreage				
P78	M-NCPPC	Cabin Branch Stream Valley Park	5.37	
Total Stream Valley Park Acreage			5.37	
P18	M-NCPPC	Barlowe Road Neighborhood Park/School	16.21	
P10	M-NCPPC	Columbia Park Neighborhood Playground	1.61	
P22	M-NCPPC	Dodge Park Community Park	27.29	
P43	M-NCPPC	Fairfield Knolls Neighborhood Park	14.37	
P12	M-NCPPC	Forestville-Ritchie Neighborhood Playground	2.89	
P34	M-NCPPC	Kenmoor Neighborhood Park/School	5.05	
P45	M-NCPPC	Keystone Forest Neighborhood Playground	4.67	
P17	M-NCPPC	Oakland Neighborhood Park	6.24	
P48	M-NCPPC	Palmer Park Neighborhood Park	5.12	
R23	M-NCPPC	Ritchie Run Neighborhood Park	18.43	
P24	M-NCPPC	Rollins Avenue Neighborhood Park	19.11	
P73	M-NCPPC	South Columbia Community Park	29.59	
P06	M-NCPPC	Suitland Neighborhood Mini-Park	0.71	
P28	M-NCPPC	Suitland-District Heights Community Park	21.42	
P75	M-NCPPC	Willow Hills Neighborhood Park	10.02	
Total Undeveloped Acreage				
Source: M-NCPPC, Department of Parks and Recreation.				

service facilities. These facilities serve residents of an entire region within the county.

- 4. Countywide Park and Recreation Areas—includes river parks, historic sites and landmarks, hiker/ biker/equestrian trails, unique natural features, conservation areas, and service facilities. Parks in this category are available to all county residents.
- 5. Urban Park and Recreation Areas—includes urban parks and urban nature centers that serve county residents with severely limited access to outdoor nature areas.
- 6. Special Park and Recreation Areas—includes aquatic facilities, ice rinks, golf courses, shooting centers, athletic complexes, equestrian centers, airports, marinas, and reclamation areas. These facilities are available to all county residents.

In Prince George's County, these six categories fit into two basic park types: local parks, which includes those parks under 200 acres in size that serve neighborhood and community needs; and regional parks, which includes those parks that are 200 acres or greater in size, as well as any countywide or special facilities as described above.

In Subregion 4, there are approximately 971 acres of local parkland consisting of neighborhood and community parks, and 678 acres of regional parkland (i.e., Walker Mill Regional Park, the Suitland Bog Conservation Area, and several aquatics centers). There are five recreation centers in Subregion 4 (i.e., Brooke Road, Millwood, Kentland, Jesse J. Warr, Jr., and Bradbury) and six community centers (i.e., Cedar Heights, Glenarden, Palmer Park, Peppermill Village, Seat Pleasant, and Kentland). M-NCPPC also owns and operates a ballroom, the historic Concord Manor, a boxing center, several aquatics centers, and the Sports and Learning Complex.

Subregion 4 has 27 neighborhood parks, typically composed of a multiage play area, tennis and/or basketball courts, play fields, picnic areas, and parking. There are seven community parks within Subregion 4, which typically contain competitivesized athletic fields for organized play in addition to the amenities of neighborhood parks. Subregion 4 also contains the Cabin Branch Stream Valley Park.

In total, Subregion 4 currently has 1,649 acres of local and regional parkland at 51 developed park

sites (1,461 acres) and 16 undeveloped sites (188 acres). Fourteen of the sites are park/school sites, where a school and a community center are colocated. Of this total, almost all of the land is owned by M-NCPPC, with no federally owned land and less than one percent county-owned land.

Subregion 4 residents have access to an array of parkland and recreational opportunities. During the master plan/SMA process, residents noted that recreational amenities at some parks were in poor condition, some of the community centers and recreation buildings were not American with Disabilities Act (ADA)-accessible, and there was not enough parkland in Subregion 4.

The parks and recreational amenities owned by M-NCPPC are maintained on a regular basis. This includes such diverse items as cutting the grass at athletic fields, replacing older play equipment and picnic pavilions, keeping the electrical/HVAC systems in working order at recreation centers and historic buildings, and repairing the pavement at outdoor courts and trails. M-NCPPC has a comprehensive renovation, expansion, and code compliance program under which several buildings are upgraded each year countywide. Over the next six years, eight recreation centers in Subregion 4 are slated to be improved under this program, and two other sites will receive new buildings.

Because the entire sector plan area is in the Developed Tier, there are few large undeveloped parcels suitable for park development. This problem is exacerbated by the practice of locating communitywide stormwater management facilities on parkland when land is not available elsewhere. This reduces the area available for parkland and recreational facilities. Environmental regulations also limit the potential of park improvements and add substantial cost to developing park facilities. M-NCPPC is trying to acquire more parkland in the Subregion 4 area, as shown on Map 9-3 on page 272. Additionally, several parcels of undeveloped parkland are scheduled to be improved with amenities, such as innovative play areas and athletic fields over the next few years.

Open Space Standards

The 2002 General Plan included a standard of 15 acres of local parkland and 20 acres of regional

Map 9-2: Existing Parks



Map 9-3: Proposed Park Acquisitions



272 | Part III: Infrastructure Elements Public Facilities parkland for every 1,000 residents. Based on the most current population figures (year 2005) of 265,454 residents in Subregion 4, the current parkland need is 9,291 acres and the projected need in year 2030 is 11,053 acres. With our current parkland total of 1,649 acres, the subject area lacks adequate parkland now and the shortfall by 2030 will be over 9,400 acres. To mitigate this shortage, 17 new sites have been identified as potential future parks that would add over 236 acres of parkland to the subregion (See Map 9-3).

Due to the density of this part of the county and the lack of available undeveloped parcels of land, it may not be possible that enough acres of parkland will ever be acquired within Subregion 4 to meet the standards outlined in the General Plan. When this occurs, one logical option is to add recreational facilities and amenities to undeveloped parcels already existing within the inventory.

Rollins Avenue Neighborhood Park is currently under design and will offer features of interest to all age groups. It will be ADA-accessible and will offer special amenities for those with physical challenges. Ritchie Run Neighborhood Park is scheduled to begin design in 2011.

Several developed parks in the area, such as Booker T. Homes Neighborhood Park, Cedar Heights Neighborhood Playground, and Seat Pleasant Heights Neighborhood Mini-Park are currently in design for renovation.

Cedar Heights Community Center, Glenarden Community Center, Theresa Banks Aquatic Center, J. Franklyn Bourne Aquatic Center, John E. Howard Community Center, Palmer Park Community Center, Peppermill Village Community Center, and the Seat Pleasant Community Center are all in design or under construction for renovation or code compliance repairs.

A new gymnasium is currently under construction at North Forestville Neighborhood Park/School. Jesse J. Warr, Jr., Neighborhood Recreation Center is receiving a new recreation building.

Beginning fall 2009, Walker Mill Regional Park will undergo major changes over the next few years that will make it one of the nicest parks, offering a combination of amenities not available at any other park in our system.

The first renovations will occur on the south side of Walker Mill Road. The existing soccer/football field will be converted to an artificial turf field, and a new adventure playground will be installed on top of the knoll to replace the old equipment that has been removed. Additional parking spaces will be added, along with a loop trail, a trail connection to Richville Drive, picnic pavilions, and a restroom/concession building. A maintenance yard completes the renovations planned for the south side of the park.

The north side of the park consists of the Concord Historic Site (75A-001), an active recreation area, and a passive recreation area. Concord Manor will undergo a multimillion dollar renovation, including a new annex, which will be a venue for large events such as receptions, parties, and business events. Three old barns will be renovated and re-purposed into an African-American Heritage Center, an outdoor education center, and an agricultural demonstration building. A concert pavilion and an open festival grounds area will also be included in this historic envelope.

The active recreation area will include a golf element (e.g., "First Tee" three-hole golf area, driving range, and miniature golf), a skate park, a splash pad, a play area, and an open plaza with parking. A club house/ multipurpose building will serve this area of the park.

The passive recreation area will feature an extensive system of trails to connect all the parts of the north side of the park with each other, as well as with the residential communities to the north and west. A section of the historic Chesapeake Beach Railroad will be converted to a trail and incorporated into this trail system.

Security at this regional park will be enhanced by the presence of the new Maryland-National Capital Park Police headquarters, which is being installed near Ritchie Road and will replace the current facility in Riverdale.

Over 20 million dollars will be spent on upgrades to the Walker Mill Regional Park over the next six years.

Another method of mitigating the lack of parkland in Subregion 4 is to add more recreational programming at the existing facilities to meet the desires and needs of the community. Subregion 4 is blessed with an abundance of community centers, which are fully-staffed facilities that provide multiple activities and spaces, such as a gym, fitness room, and multipurpose activity space.

A third method of providing more "green space" in the highly urbanized parts of the county is to add small urban parks, also known as pocket parks. This plan suggests the inclusion of urban squares, civic greens, and plazas, which would allow for greater alternatives to the existing park models and provide the county different means through which to meet the minimum open space requirements. These urbanscale parks would create pockets of public community space and provide residents with the opportunity to enjoy the outdoors without traveling great distances to the larger, regional-scale parks. These small green spaces would be situated at prominent locations within urban neighborhoods and would be designed to function as neighborhood parks.

Proposed Park Acquisitions

The following proposed park acquisitions are identified on Map 9-3:

- 1. Parcel 59—Addition to Ridgeley Rosenwald School Historic Site
- 2. Addition to Ritchie Run Neighborhood Park
- 3. Connect Rollins Avenue Neighborhood Park and Capitol Heights Neighborhood Park
- 4. Parcel 211-New Park
- 5. Parcels 201, 231 and 234-New Park
- 6. Parcels A and 165—Addition to William Beanes Community Center Park
- 7. Parcel 132-New Park
- 8. Parcel A— Parcel Adjacent to Columbia Park Community Center Park
- 9. Parcel 87—Parcel Adjacent to Kentland Neighborhood Recreation Center
- 10. Parcel 16 New Park
- 11. Outlot 1—Parcel adjacent to Summerfield Community Park
- 12. 4.2-Acre Addition to H.P. Johnson Neighborhood Park
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- 13. Urban park at former Landover Mall Site
- 14. 14-Acre Addition to John Carroll Community Park/School
- 15. 5-Acre Addition to Highland Park Neighborhood Park/School
- 16. Lots 1 14, Block 6—Addition to Maryland Park Neighborhood Playground
- 17. Parcel 5-New Urban Park

Parks and Recreation Recommendations Goal

Provide adequate and appropriate park and recreation opportunities in Subregion 4 in an effort to encourage active and healthy lifestyles for the residents.

Policy 1

Create new parks and improve upon existing neighborhood and community parks.

Strategies

- Evaluate the creation of urban squares, civic greens, and plazas into portions of Subregion 4 outside of major centers to provide more open space.
- Evaluate the acquisition of parcels adjacent to existing parks to expand and improve connectivity to existing parks (Map 9-3).
- Integrate underutilized open space on school properties into the parks network, where appropriate (Map 9-3).
- Protect Ridgeley School's setting by securing the property fronting MD 214 and maintain it as a buffer between the school and the highway.

Policy 2

Provide parks and recreation facilities that meet the changing needs and interests of the community.

Strategies

- Renovate and upgrade older parks to accommodate changing recreational demands in established neighborhoods.
- Work with developers to create the most appropriate type of park/open space as Subregion 4 is developed.

- Revise the site plan review process to include specific direction for the open space/recreation requirement based on the project.
- Create partnerships with private entities, where possible, to develop recreational amenities within the sector area.

Policy 3

Provide community and recreation centers that are accessible, adequate in size, and affordable to the residents they serve.

Strategies

- Create programs and provide facility planning for the region's youth.
- Evaluate the need for a community center in the vicinity of District Heights.
- Undertake the acquisition and adaptive reuse of existing public facilities for recreational purposes as a means of redevelopment or economic revitalization of an emerging area.

Policy 4

Utilize existing natural features and the green infrastructure network as opportunities to increase parkland and open space.

Strategies

- Continue to develop stream valleys as a resource where trail connections can be built to create walkable access to parks.
- Review potential location for parks in relation to the Green Infrastructure Plan.
- Maintain undeveloped parks as open space or wooded buffers, especially in cases where they are too small for active use or contain natural features, such as wetlands or steep slopes, that make them undesirable for park development.

Policy 5

Assure that environmental regulations support the expansion and function of parkland.

Strategies

- Review environmental regulations that limit and add substantial cost to developing park facilities.
- Review the requirements for communitywide stormwater management facilities and avoid locating these on parkland.

Solid Waste Management/ Recycling

The Waste Management Group, a section of the Department of Environmental Resources (DER), manages solid waste in Prince George's County. The county contracts with private waste haulers to collect the waste in all of Subregion 4. The county's primary waste acceptance facility is the Brown Station Road Municipal Solid Waste Facility about four miles north of Upper Marlboro. The facility will reach its permitted capacity in 2011.

The county has decided not to develop a new landfill within the county and instead intends to ship its refuse to one of the large, commercial landfills operating in the mid-Atlantic region. Consequently, the county needs to develop a transfer facility where refuse would be consolidated for shipment. The current preferred site for the new facility is off Maude Savoy Brown Road southeast of Upper Marlboro in Subregion 6.

The county has an aggressive recycling program that as of 2008 achieves a recovery rate of 39 percent. A trash and recycling drop off convenience center is located on Missouri Avenue in Brandywine and on Brown Station Road in Upper Marlboro. A countyowned yard waste composting facility is located off Maude Savoy Brown Road southeast of Upper Marlboro.

Goal

Provide for adequate solid waste disposal.

Policy

Implement measures to reduce the solid waste and prolong the life of the existing landfill.

Strategies

- Support the development and utilization of solid waste recycling and energy recovery systems.
- Develop an educational program to inform the public of the importance of recycling.

Water and Sewer Facilities

DER designates areas eligible for public water and sewer service in the county's Water and Sewer Plan. In general, the Developed and Developing Tiers are eligible for service and the Rural Tier is not. Prince George's County developed a ten year water and sewer plan that was completed in 2008 and is constantly amended.

The purpose of the functional plan is to analyze the relationship between existing and future development, identify the drinking water sources and wastewater facilities needed to serve future development, and define measures to limit or control the stormwater and nonpoint source water pollution that will be generated by new development. The water and sewer section in this chapter is intended to inform the countywide plan.

Drinking Water

Public water in Subregion 4 is provided by the Washington Suburban Sanitary Commission (WSSC) from its system of reservoirs along the Patuxent River and from direct withdrawals from the Potomac River. No specific concerns have been raised about WSSC's future ability to provide drinking water to its service area, including Subregion 4. The countywide water resources functional plan is expected to provide a more detailed discussion of future water supplies.

Wastewater

The majority of sewage originating in Subregion 4 is treated at the Blue Plains Wastewater Treatment Plant (WWTP) operated by the District of Columbia Water and Sewer Authority. Blue Plains WWTP is located in southwest Washington, D.C., adjacent to the U.S. Naval Research Lab facilities on the Potomac River.

The Blue Plains WWTP has been the principal wastewater treatment facility for the Washington Metropolitan area since its original construction in 1938. Service to Prince George's and Montgomery Counties is provided under the terms of the Blue Plains Intermunicipal Agreement of 1985.

Goals

 Provide adequate public water and sewer service to areas eligible for service. Ensure that sewer capacity at the wastewater treatment plants serving Subregion 4 is sufficient to meet the county's future needs.

Policy 1

Operate water treatment facilities to meet or exceed state effluent standards.

Strategy

 Promote countywide water conservation to minimize water and sewer service demands.

Policy 2

Limit the increase of the region's impervious surfaces without unduly limiting development in accordance with the comprehensive plan.

Strategy

• Complete and implement the recommendations of the *Countywide Water Resources Functional Master Plan*.