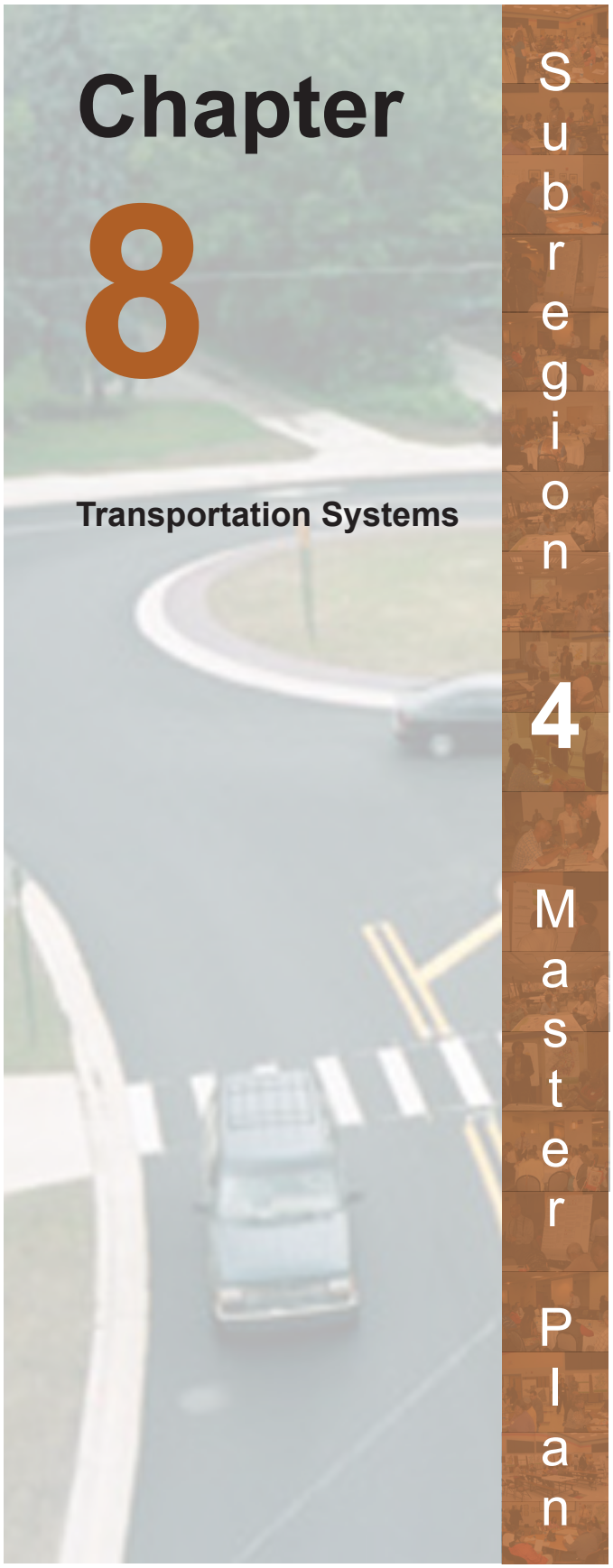
Chapter 8

Transportation Systems



Subregion 4 Master Plan

The Subregion 4 area has a comprehensive, efficient, and user-friendly multimodal transportation network that accommodates transit, automobiles, pedestrians, and bicyclists. This multimodal transportation network of transit, bicycle facilities, sidewalks, trails, and roads 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.

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 to the Capital Beltway, 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 and Table 8-1.) 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

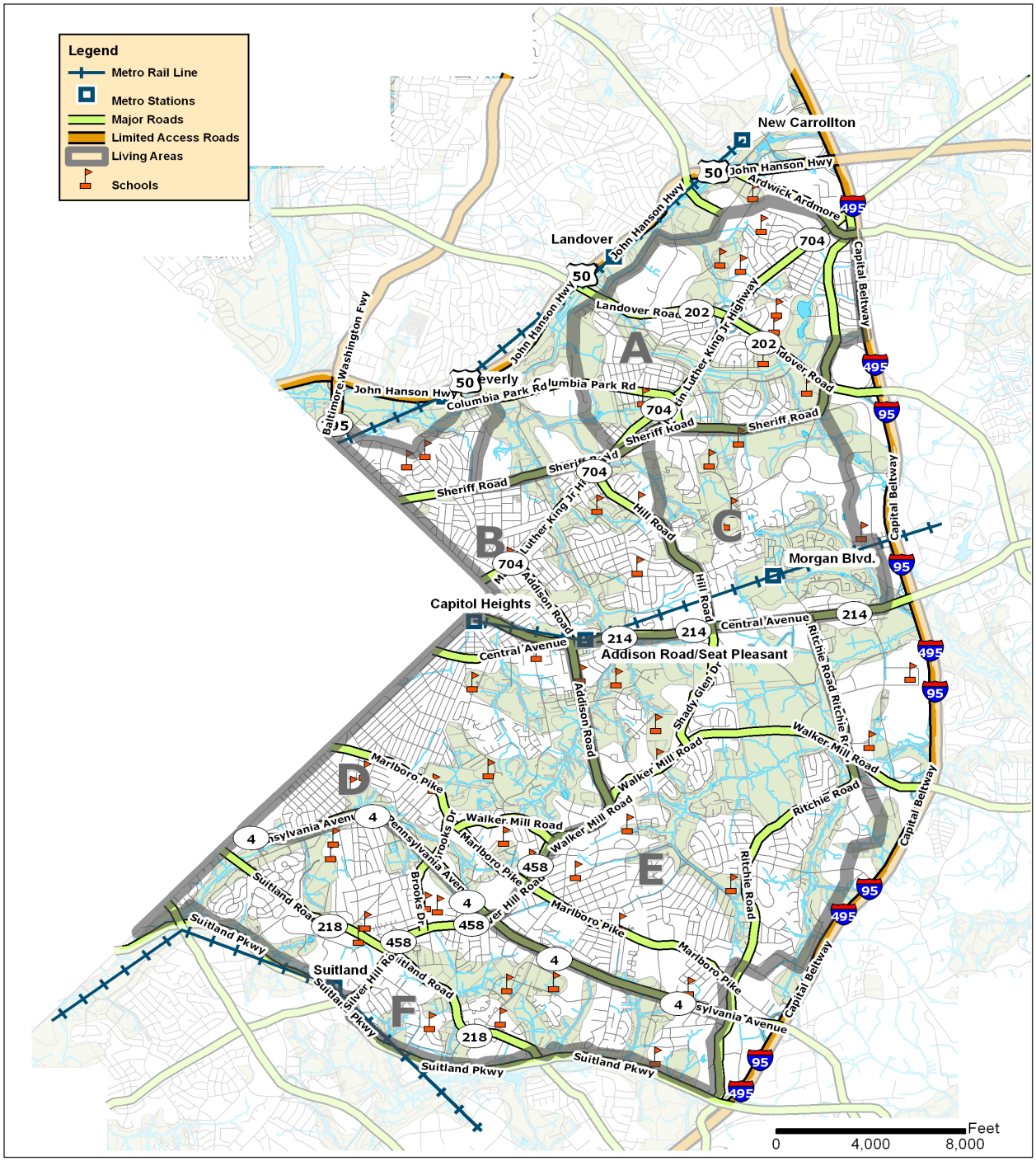
A key element of the Subregion 4 economy is its industrial activities. These activities generate significant amounts of truck traffic. Although accommodation of truck transportation is essential, the increased truck traffic along some residential streets and neighborhoods in close proximity to the industrial uses has been the source of great community concern. The AADT truck volumes along major roadways in Subregion 4 are shown in Exhibit 10-4 (to be added).

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 along the Orange Line; Capitol Heights, Addison Road, 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 midnight 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 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. WMATA's Metrobus routes' hours of operation 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.



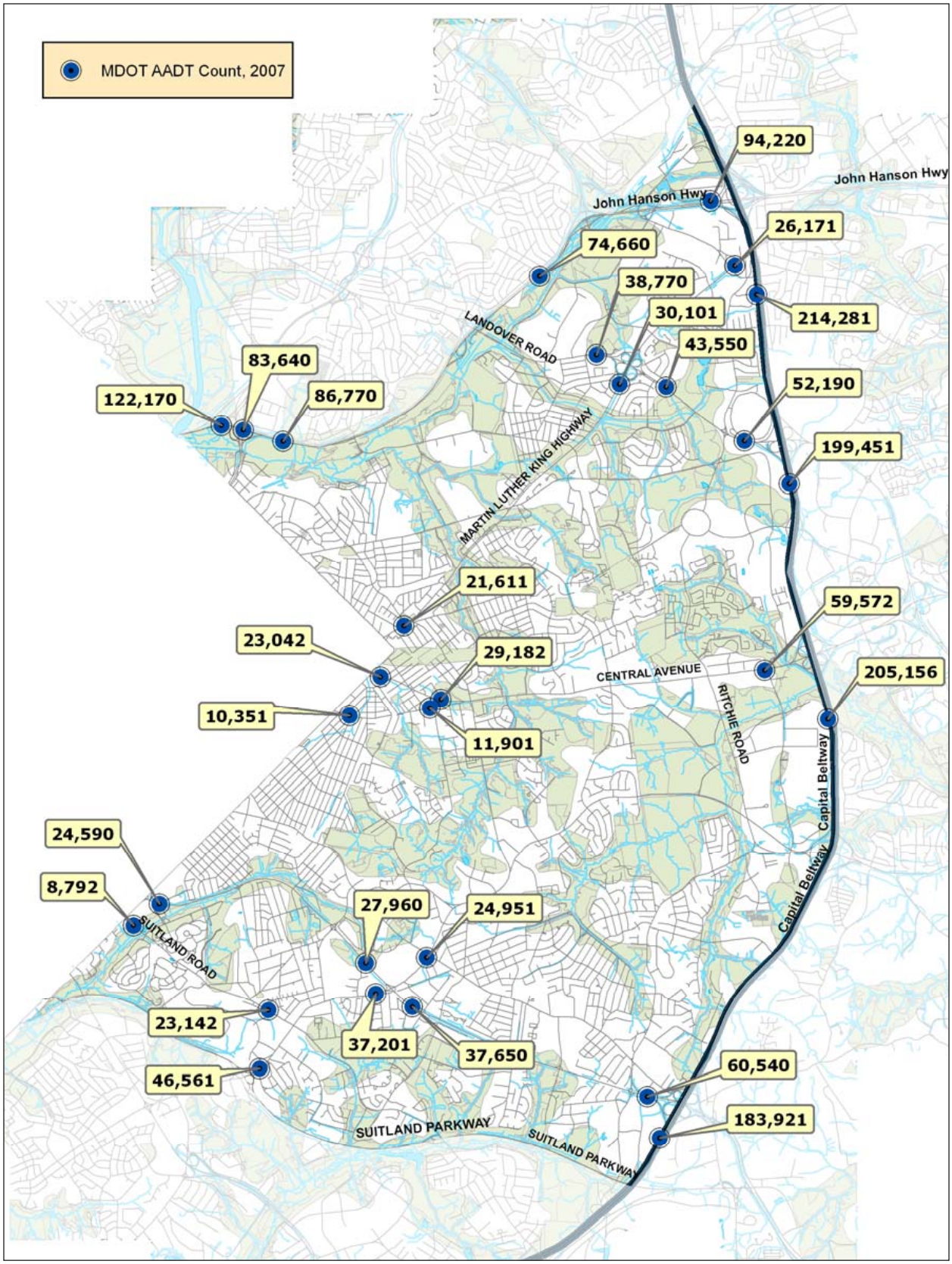
Map 8-1: Existing Transportation System

Table 8-1: Existing Transportation System

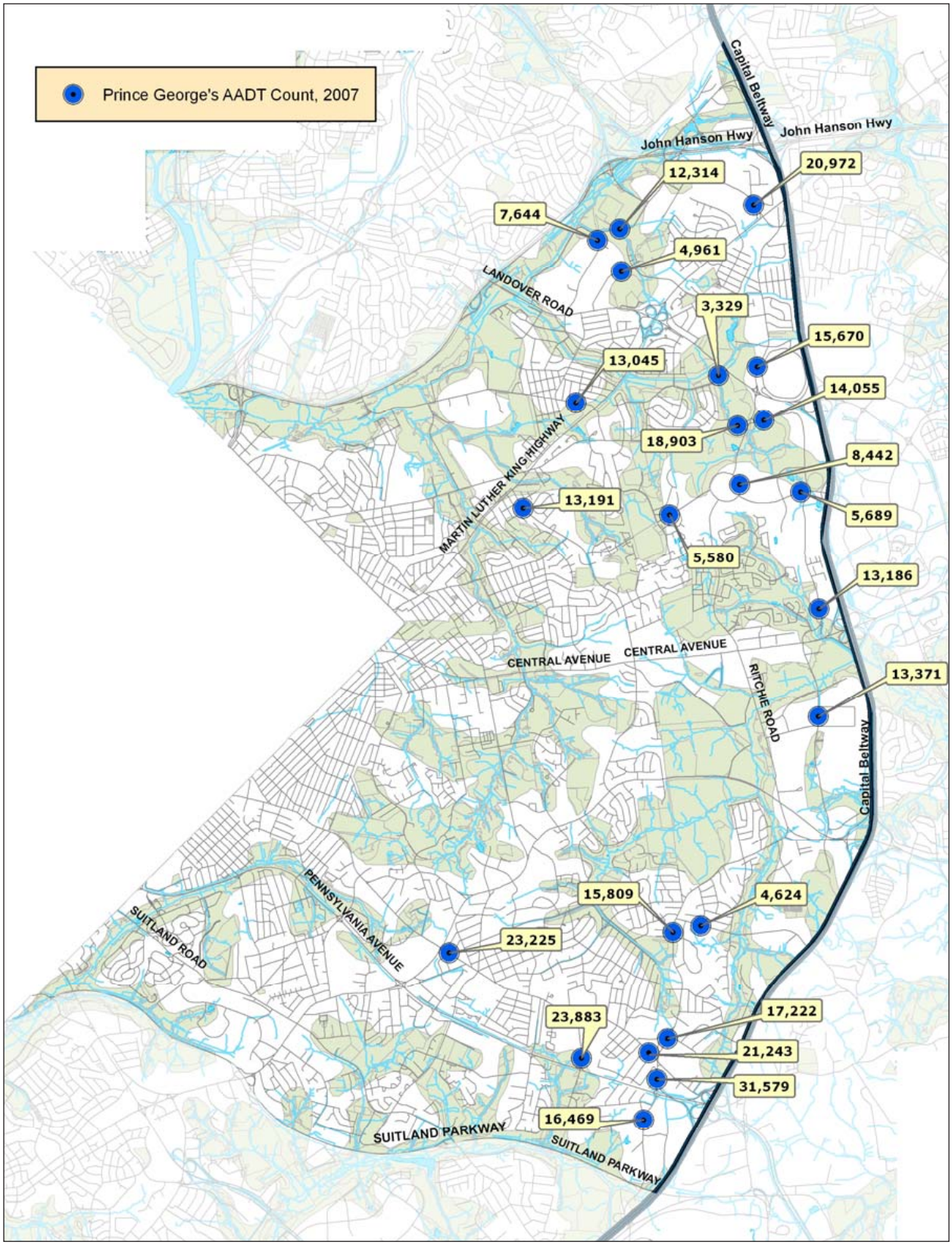
Roadway	Count Location	Roadway Classification	Existing Lanes (Bi-directional)
Pennsylvania	East of DC Border	Expressway	4
	West of Silver Hill Road		4
	East of Silver Hill Road		4
	West of Capital Beltway		4
Central Avenue	East of DC Border	Arterial	2
	West of East Capitol Street		2
	West of Capital Beltway		6
Martin Luther King Jr. Highway	North of DC Border	Arterial	6
	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 Darcy 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

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

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



Map 8-2: Existing Annual Average Daily Traffic—Prince George's County Roads



Map 8-3: Existing Annual Average Daily Traffic—Maryland Department of Transportation Roads

Table 8-2: 2007 Truck Traffic—Percentage of AADT on Selected Routes

AADT Count Location	Percentage Truck Traffic (AADT)	
	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)

Table 8-3: Prince George's County "TheBus" Routes

18	Martin Luther King Hwy, 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 Hwy
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

In addition to Metrorail and bus service, transit service in the subregion is also provided by the MARC's (Maryland Area Rail Commuter) Penn Line, with a stop at the New Carrollton Metro Station. This commuter line provides peak period weekday commuter transit service between Baltimore and D.C.'s Union Station with an additional stop at the Baltimore–Washington Thurgood Marshall International Airport. Subregion 4 is also served by Maryland Transit Authority (MTA) Commuter Bus Route 921, which provides service between the New Carrollton Metro Station and Annapolis. Prince George's County also operates demand responsive door-to-door service called Call-A-Bus. This service is offered primarily to the county's disabled and senior citizens.

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

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

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). 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 8-5 identifies the existing AADT, the recommended daily service volumes, and the resulting LOS for key roadway segment(s) within and serving the Subregion 4 area.

Future Conditions

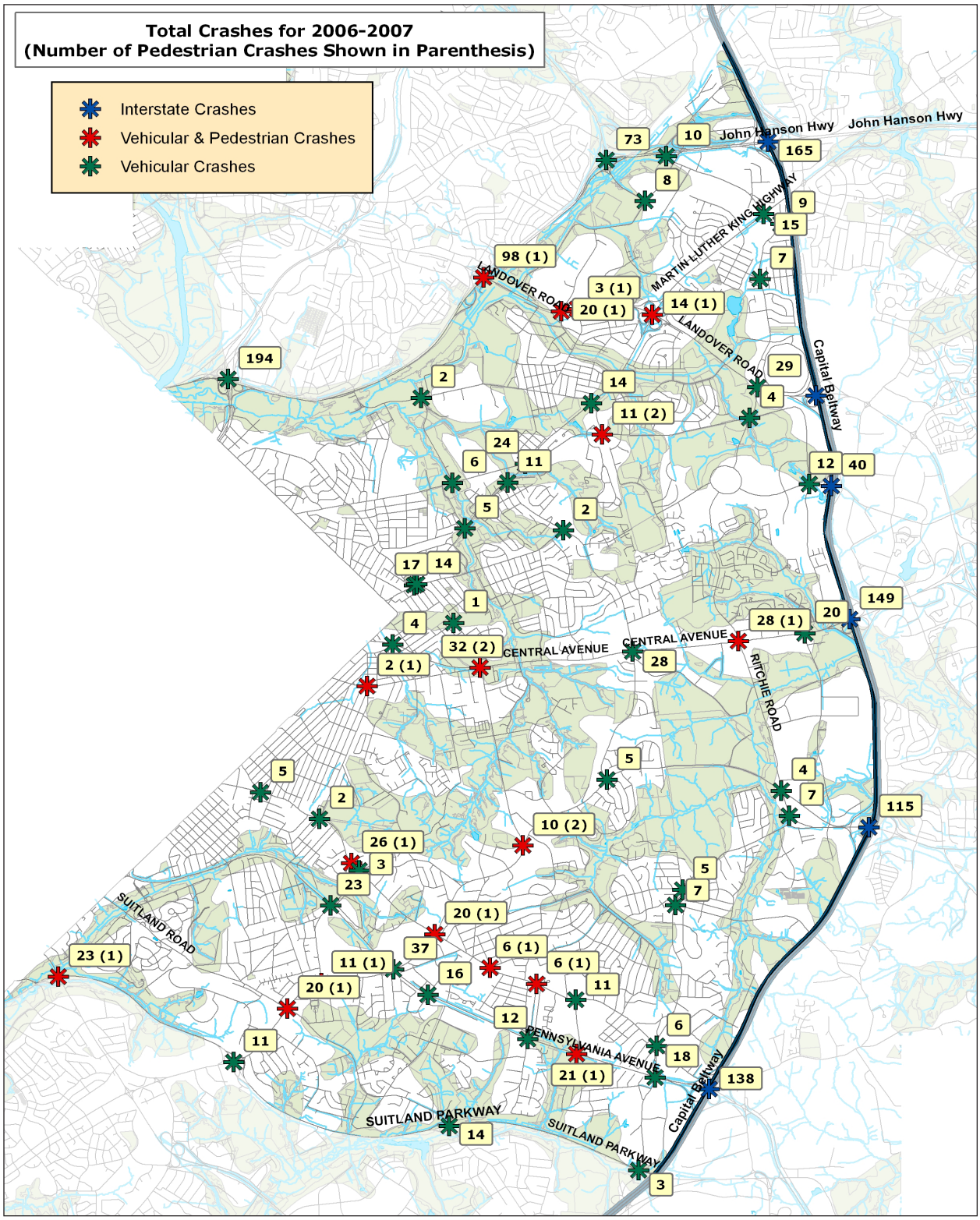
Planned and Programmed Transportation Improvements

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 8-6 and 8-7.

Approved and Ongoing Planning Efforts

The complete listing of the approved and ongoing master plans and planning studies covering different parts of the Subregion 4 area and/or applicable to the entire Subregion 4 area are documented below:

- *Preliminary Countywide Master Plan of Transportation (adopted).*
- *The Approved New Carrollton Transit District Development Plan.*
- *Marlboro Pike Preliminary Sector Plan and Proposed 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.*



Map 8-4: Vehicular Accidents 2006-2007

Table 8-5: Level of Service for Major Roads—Existing Conditions

Road ID	Route. No.	Route	Link: From	To	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	B
A-22	MD 704	Martin Luther King, Jr. Highway	D.C. Line	Beltway	6	30,100	0.37	B
A-31		Morgan Blvd/ Redskins Road	Walker Mill Road	Evarts Street	6	25,125	0.31	B
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	B
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	C
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	B
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

Road ID	Route. No.	Route	Link: From	To	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

Table 8-6: Maryland SHA Consolidated Transportation Plan Projects 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/I-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).	Construction
MD 4 Pennsylvania Avenue, I-95 (Capital Beltway to MD 223)	Upgrade existing MD 4 to a multi-lane freeway from MD 223 to I-95/I-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
I-95/I-495 Capital Beltway, MD 202 to MD 214	Convert the I-95/I-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).	Construction

Table 8-7: Prince George's County Capital Improvement Program Projects 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 MD 214 initially as a roadway.	On-going
Ritchie Road/ Forestville Road	To construct a 4-lane urban roadway with pedestrian and bikeway enhancements.	Design

- *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 project 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 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 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 Master Plan of Transportation (MPOT) network (representing the " base" condition) and the proposed 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 Metrorail Station with stops at FedEx Field, the Morgan Boulevard Metro Station, Central Avenue Corridor, and Addison Road Metro Station. This scenario is represented as the Subregion 4 buildout.

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

Table 8-8: Level of Service for Major Roads—Base Condition

Road ID	Route No.	Route Name	Link: From	To	Lanes	Max ADT	Max V/C	LOS
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	C
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	C
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	C
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	B
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

Road ID	Route No.	Route Name	Link: From	To	Lanes	Max ADT	Max V/C	LOS
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	B
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
E-3	MD 4	Pennsylvania Avenue	D.C. line	I-495	6	55,500	0.54	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/ I-495	Capital Beltway	North of Suitland Parkway		10	256,500	1.08	F
F-5	I-95/ I-495	Capital Beltway	South of MD 214		10	247,175	1.04	F
F-5	I-95/ I-495	Capital Beltway	South of MD 202		10	241,800	1.02	F
F-5	I-95/ I-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
		Benning Road	Marlboro Pike	D.C. Line	2	21,725	1.36	F

Table 8-9: Level of Service for Major Roads—Buildout Condition

Road ID	Route. No.	Route Name	Link: From	To	Lanes	Max	Capacity	Max V/C	LOS
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	C
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	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	C
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	E
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
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

Road ID	Route. No.	Route Name	Link: From	To	Lanes	Max	Capacity	Max V/C	LOS
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	A
E-3	MD 4	Pennsylvania Avenue	D.C. line	I-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	C
F-4	US 50	John Hanson Highway	D.C. line	I-495	6	143,500	138,460	1.04	F
F-5	I-95/ I-495	Capital Beltway	North of Suitland Parkway		10	261,400	236,810	1.10	F
F-5	I-95/ I-495	Capital Beltway	South of MD 214		10	247,450	236,810	1.04	F
F-5	I-95/ I-495	Capital Beltway	South of MD 202		10	239,925	236,810	1.01	F
F-5	I-95/ I-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	E
		Benning Road	Marlboro Pike	D.C. Line	2	22,350	15,930	1.40	F

Transportation Recommendations

Goals

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, the primary goal of this plan, unlike the pervious 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, is to provide transportation choices for residents, employees, visitors and business 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-of-way and accommodate those needs in the most efficient way. The most efficient modes of travel are those that require the least resources per person-trip. 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), 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 single-occupant 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.

Other transportation goals:

- Implement the land use, growth, and development recommendations of this master plan.
- 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 transit-oriented development 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 adopted Countywide Master Plan of Transportation.
- 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 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 about transportation issues, projects, and process.

Strategies

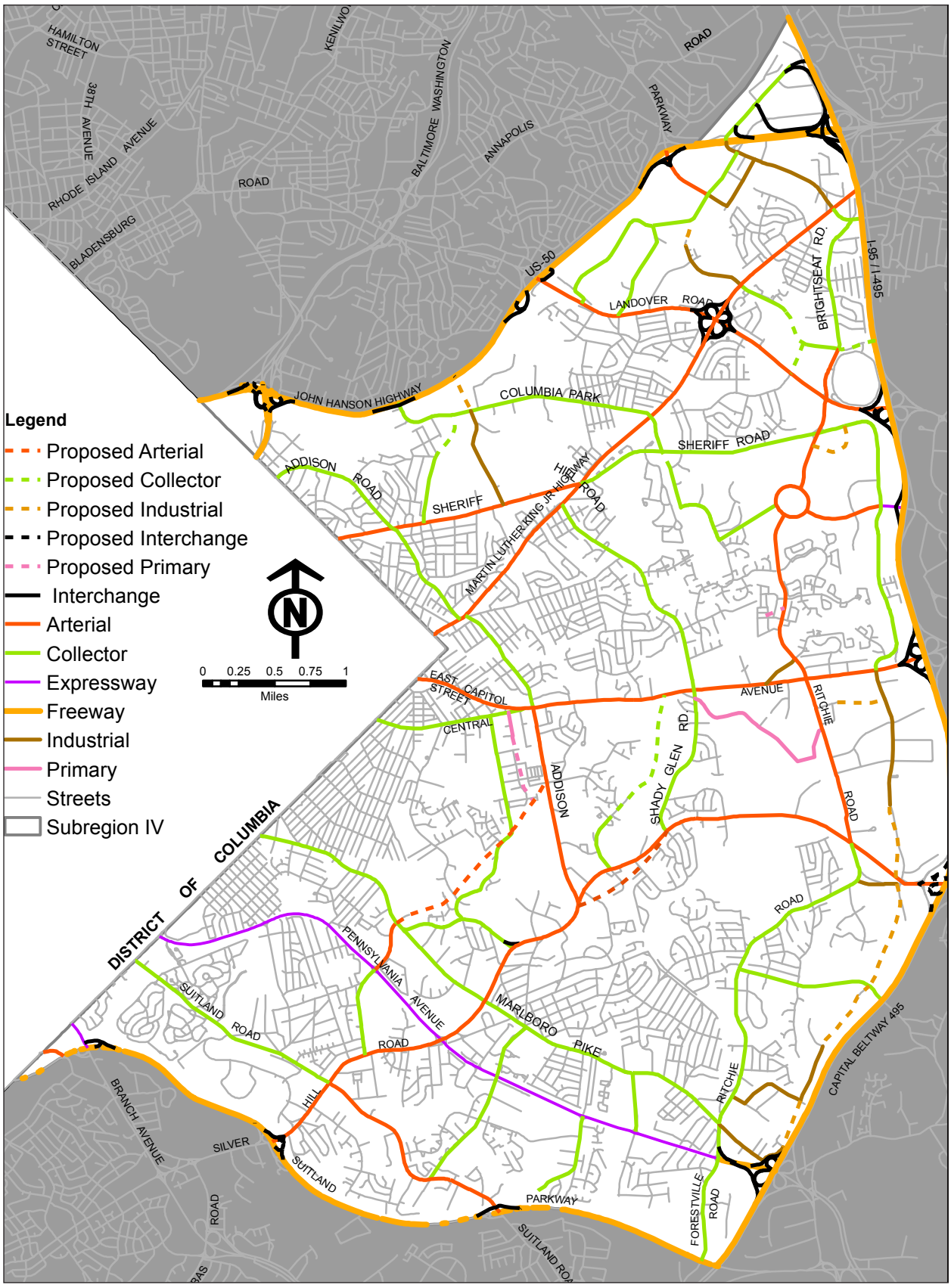
- Coordinate with affected federal, state, county, and other providers of transportation services to plan and fund the recommend transportation facilities and services.
- Involve community members in development and identification of the most effective and efficient transportation enhancements that are recommended by this plan.
- Implement educational programs that support a range of transportation choices and emphasis 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, while achieving 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.

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 Master Plan of Transportation 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 are shown in Map 8-5 and Table 8-10.
- 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.
  - ◊ Specific recommendation includes 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 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.
  - ◊ 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 pedestrian environment by recommending specific physical improvements such as traffic calming, pedestrian-scale street lighting, pedestrian and biker signal improvements, and street crossing improvements.



Map 8-5: Existing and Proposed Roadways

Table 8-10: 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-29	Evarts Street/Campus Way		Brightseat Road to Harry S Truman Drive	120	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-34	Brooks Drive		Pennsylvania Avenue to Addison Road	120	4 to 6
A-35	Walker Mill Road		Silver Hill Road to Beltway	120	4 to 6
A-39	Ritchie Marlboro Road		Pennsylvania Avenue to Capital Beltway	100-120	4 to 6
A-40	Silver Hill Road	MD 458	Branch Avenue to Walker Mill Road	120	4 to 6
C-226	Ardwick-Ardmore Road		Annapolis Road to south of Elsie Court	80	2 to 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 Dr.	80	2

Road ID	Facility Name	Route ID	Project Limits	Right of way (feet)	Lanes
C-404	Marblewood Avenue		Sheriff Road to Columbia Park Road	80	2
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-428	Rollins Avenue/Suffolk Avenue		Walker Mill Road to Central Avenue	80	2 to 4
C-429	Karen Boulevard		Walker Mill Road to Central Avenue	80	2 to 4
P-207	Cheverly Avenue		Columbia Park Road to Landover Road	70	2

Road ID	Facility Name	Route ID	Project Limits	Right of way (feet)	Lanes
P-209	Finns Lane		Annapolis Road to Riverdale Road	70	2 to 4
P-210	Harkins Road		Annapolis Road to Ellin Road /85th Avenue	80	4
P-300	Hall Road		Central Avenue at Jennings Mill Drive to Central Avenue west of Pennsbury Drive	60	2
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
I-203	Riverdale Road		Kenilworth Avenue to East West Highway	70	2
I-204	Tuxedo Road/ Arbor Street		B-W Parkway Ramp to Cheverly Avenue	70	2
I-206	Tanglewood Drive/ Buchanan Street		Alt US 1 to Kenilworth Avenue	70	2
I-207	46th Avenue		Decatur Street to Lafayette Place	70	2
I-308	Ruby Lockhart/ Palmetto Drive/ Woodview Drive		St. Joseph's Drive to Campus Way N	70	4
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
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 Park Boulevard/Kaverton Rd.		Marlboro Pike to Central Avenue	70	2 to 4
I-415	Ritchie Road Spur		Ritchie Road to Hampton Park Boulevard	70	2 to 4

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, on a more local level it is essential that transportation systems 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 traffic-calming 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 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 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.
- Emphasis is placed on linking the population and economic growth rates with the availability of transportation funds to support it and ensuring 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.
- 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.
- Using both traditional and innovative methods, essential street, road, and highway projects are implemented 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 as well as 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 features 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.

- Mainly through the National Environmental Protection Act (NEPA) process and in coordination with the Approved Countywide Green Infrastructure Plan, street, road and highway projects are implemented 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 stream crossings are 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.

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 Countywide Master Plan of Transportation (MPOT).
- TPGDs are proposed 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 Approved General Plan. These goals include concentrating development in the Developed and Developing Tiers, particularly in these tiers' centers and corridors; and attracting quality transit-oriented development to Metro and commuter rail stations, and other transit service nodes in Prince George's County.

- The MPOT recognizes and assumes that, in some limited circumstances, county growth and development policy may require site-specific exceptions to the APF requirements in very specifically defined areas of the county. 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
- Within the planned centers and in new developments in the subregion, utilize a grid pattern of public and private streets to efficiently connect land uses to transit services. 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 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 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 largely 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 state.
- The Maryland Department of Transportation has designated the Purple Line—from Bethesda to an interim terminal at New Carrollton—as a priority transit project and will request federal financial assistance for construction of the initial 16.4-mile segment in fall 2009.
- The Department of Public Works and Transportation 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 in the county. Of these, seven Metro stations and the New Carrollton MARC commuter rail station 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 medium-term 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 the adopted MPOT recommends extension of the planned Purple Line, 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 (light rail transit) 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 and could serve as an essential catalyst for the high-quality, TOD that is desired within the planned centers.

Bus Transit

Metrobus

In addition to Metrorail, WMATA also operates bus routes that provide link to Metrorail stations. Subregion 4 is served by 19 Metrobus routes, although 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. Exhibit 8-13 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 6:00 a.m. to 7:00 p.m. Service on some routes extends slightly beyond these hours. Time between buses (headway) averages from 30 to 40 minutes during most of the span of service. However, during mid-day, the time between buses on some routes can average up to an hour.

DPW&T is responsible for developing, updating and implementing the county bus service plan, the Five-Year TSOP. adopted.

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 and or modifications recommended by the TSOP. DPW&T is responsible for developing and updating 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. The TSOP update for the next five years is still under review at this time. 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 the table below may therefore change before the final TSOP is adopted.

The recommended bus service modifications for Subregion 4 are listed in Tables 8-11 and 8-12. 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 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)..

Strategies

- Incorporate the Maryland Department of Transportation 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 long-range 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 Metrorail.
    - ○ Prince George's Community College.
    - ○ Westphalia Town Center.
    - ○ Andrews Air Force Base (possible future station).
    - ○ Suitland Metrorail and Federal Center or Branch Avenue Metrorail.
    - ○ Oxon Hill Regional Center.

Table 8-11: 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

Route(s)	Name	Service Area*	TSOP Recommendations
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.

Table 8-12: 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 frequency • Extend 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 minutes • Extend 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 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 to 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 Capital 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

Route	Service Area*	TSOP Recommendations
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 are shown as TheBus routes. However, once the review of the updated TSOP is completed, final new service recommendations may change and may include all TheBus service or a combination of new TheBus and Metrobus service.

- 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, the Department of Public Works and Transportation, and the Washington Metropolitan Transit Authority.

- 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 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 Metrorail Station via US 50 to Bowie Center.

◊ From Branch Avenue Metrorail 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 the Prince George's County Department of Public Works and Transportation, 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.

- Potential transit and transfer centers in the subregion.
- 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:

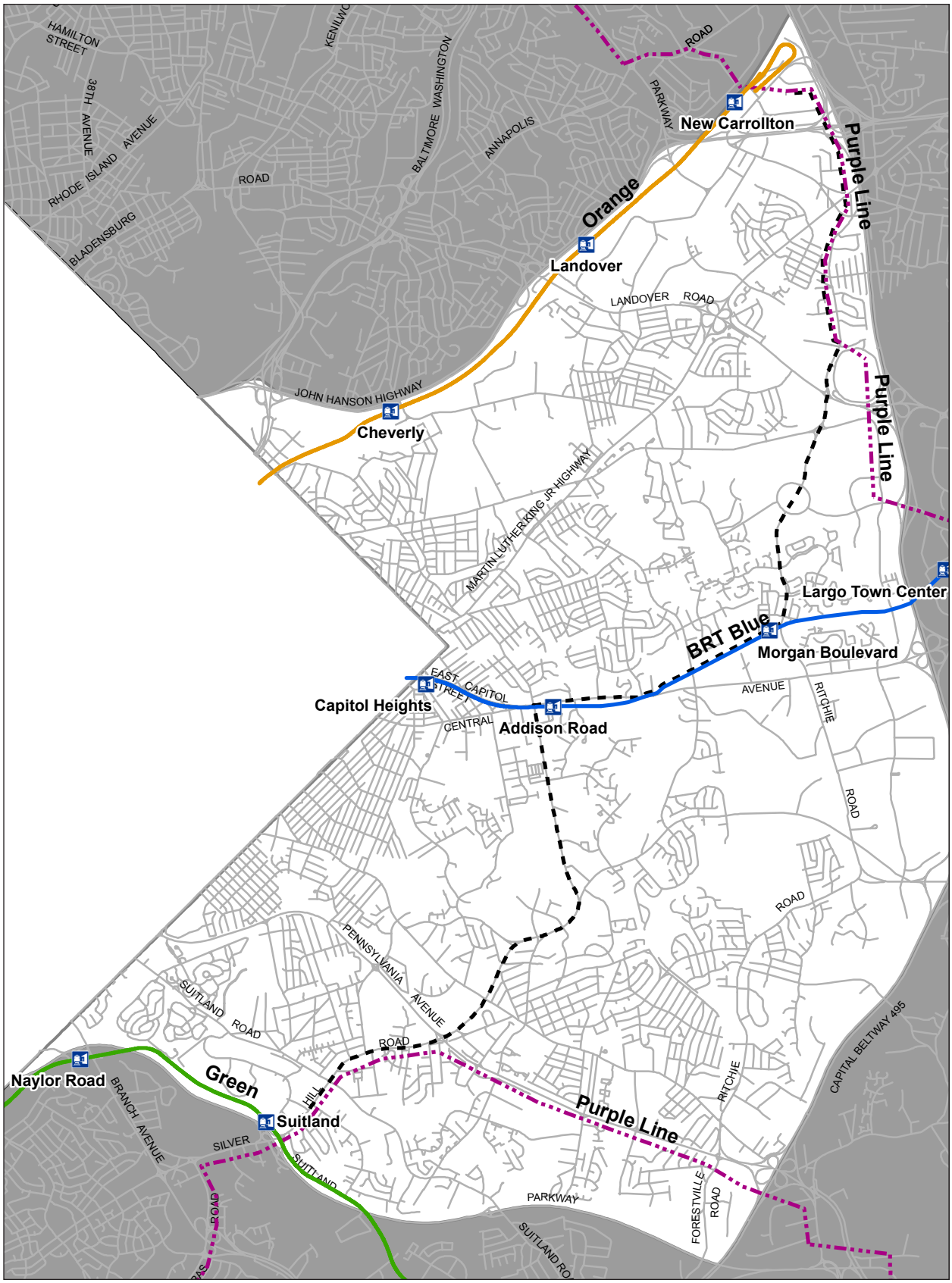
◊ Woodmore Town Center

◊ FedEx Field

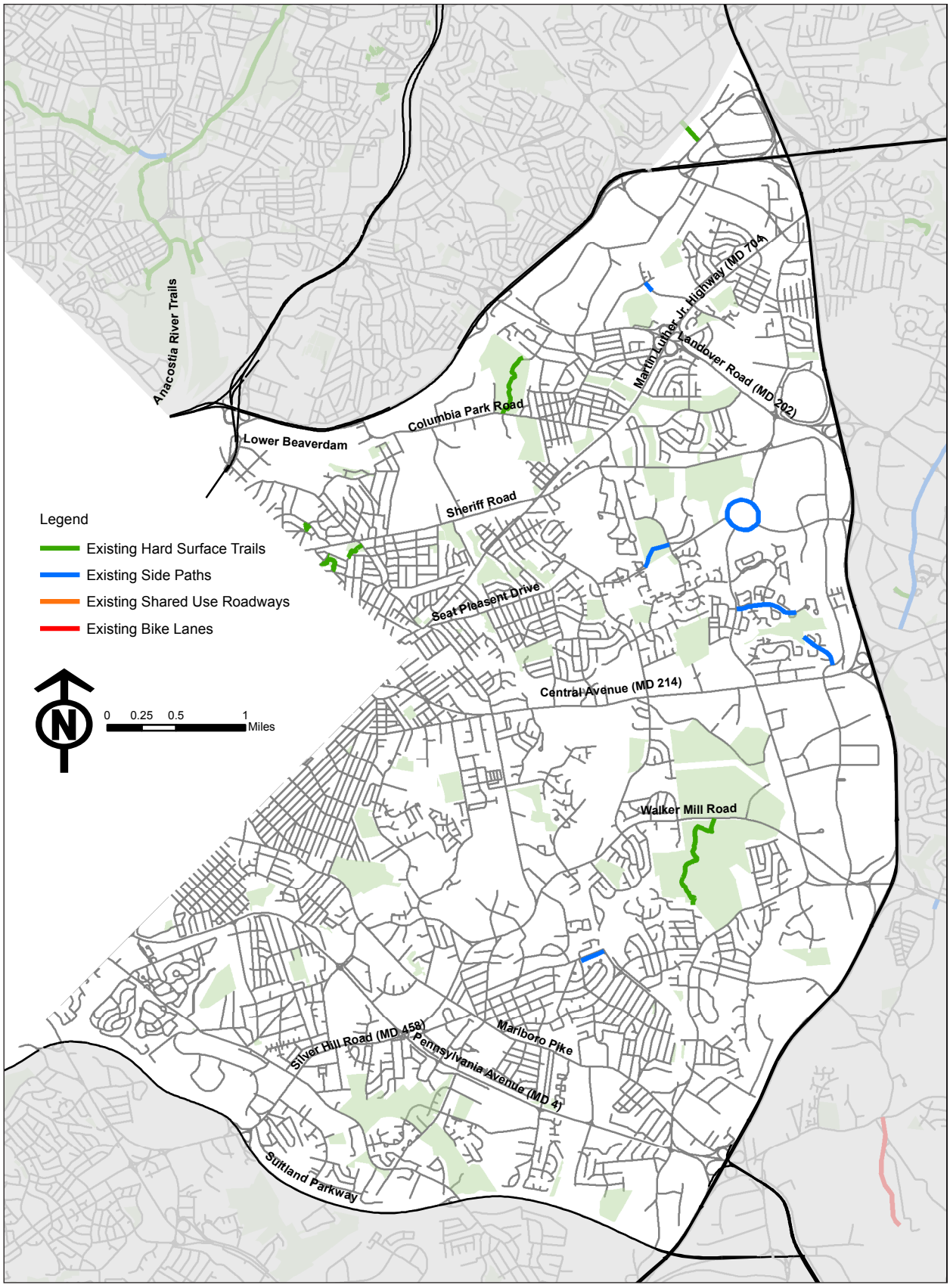
◊ Landover Gateway

◊ Morgan Boulevard Activity Center

◊ Largo Town Center.



Map 8-6: Existing and Recommended Fixed Guideway Transit:



Map 8-7: Existing Bikeways and Trails

Pedestrian, Bicycle and Trails

Improved multimodal access and TOD were identified as objectives of the 2002 Approved General Plan. A comprehensive network of trails, sidewalks, and bikeways can provide alternatives to the automobile for some trips. 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.) Additional connections are necessary to ensure that children have safe routes when walking to school and neighborhoods are safe and that 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 Metro.
- 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.
- 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.
- Improve pedestrian and bicycle access to Metro.
- Need for retrofit sidewalk construction along roads to Metro, 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 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 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-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; and trail construction within Walker Mill Regional Park.

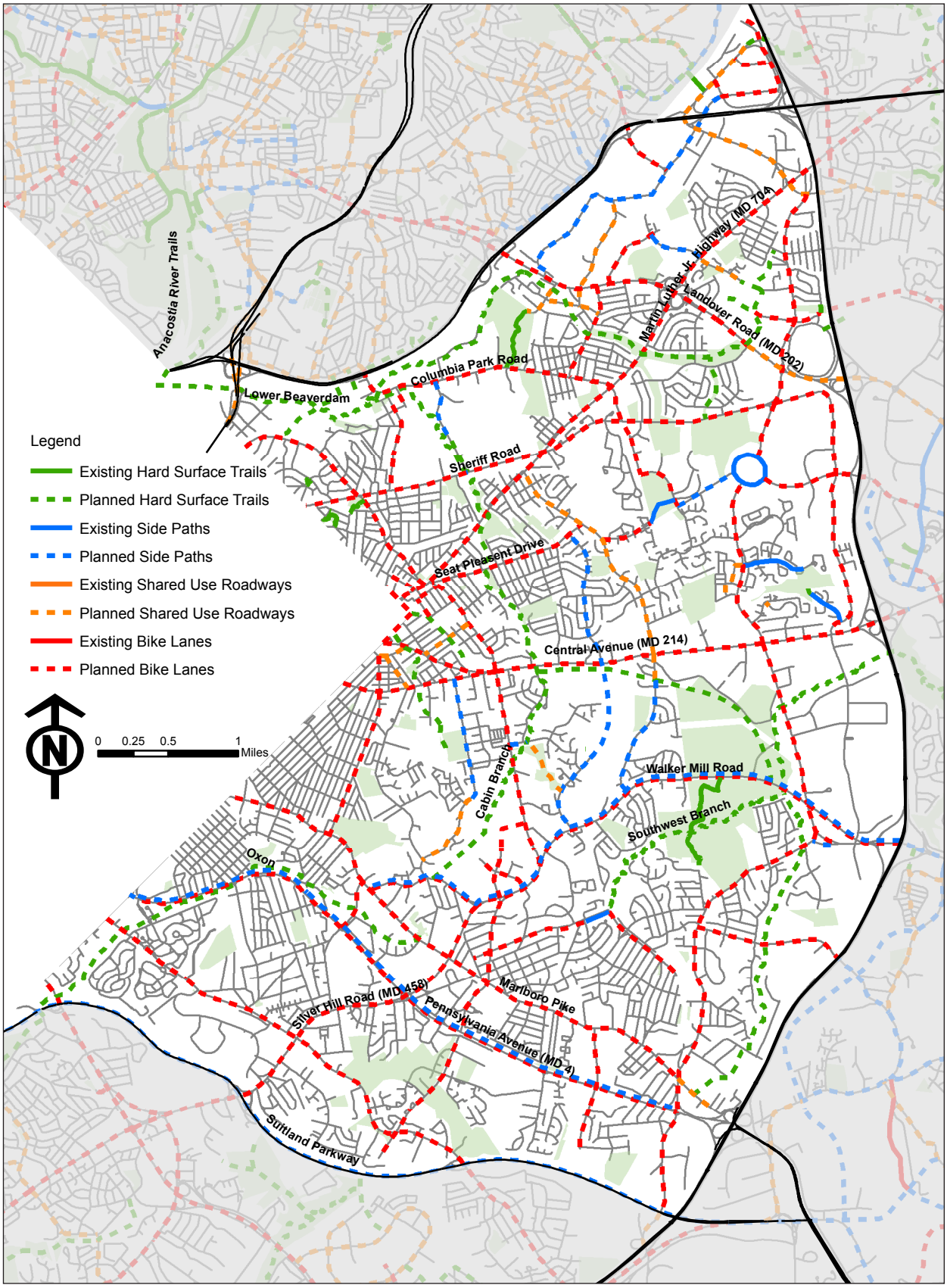
Policy 1
Incorporate appropriate pedestrian-oriented and transit-oriented development features in the centers.

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 Metrorail stations and schools, and provide for increased nonmotorized connectivity between neighborhoods. (See Map 8-8.)

Policy 3
Develop bicycle-friendly roadways in conformance with the latest standards and guidelines, including the 1999 American Association of State Highway and Transportation Officials (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.



Map 8-8: Proposed Trail Network