

2018 - 2022







Executive Summary



ES.1 Why Are We Completing the Plan?

Home to nearly 900,000 residents, Prince George's County hosts and supports a myriad of public transportation options to transport people to jobs, educational opportunities, school, medical appointments and regional activity centers. The County provides *TheBus* fixed route service through 28 lines and Call-A-Bus demand response service for residents over 60 years or with disabilities. *TheBus* service is complemented by Washington Metropolitan Area Transit Authority (WMATA) Metrorail and Metrobus service, which consists of 15 Metrorail Stations and 68 bus lines. WMATA also provides complementary paratransit service to its fixed route network, transporting qualified seniors and persons with disabilities through its MetroAccess system. Fixed route transit options are also available through the Regional Transit Agency of Central Maryland (RTA), which connects north county residents to Metrorail stations and regional transit hubs.

Even as the County experiences robust growth, the County operated *TheBus* and Call-A-Bus systems have not kept pace, with only minor changes since their start. Currently, *TheBus* system operates only on weekdays, and the last trip of the day on each route in the system ends between 7:30 and 8:30 PM.

Key decision makers within the Prince George's County Department of Public Works and Transportation (DPW&T) understand the need to improve *TheBus* and Call-A-Bus systems in order to "catch up" to the changes in the County and to support County economic development initiatives and Transit Oriented Development goals. This understanding became the impetus for the development of the Transit Vision Plan, and the transit improvement recommendations incorporated into the plan.

The Transit Vision Plan was built on a foundation of goals and objectives for transit, which in turn were based on The County's transit vision. This vision is outlined in Section 2 and is followed in Section 3 by the County's transit goals and objectives.



ES.2 County Transit Vision Statement

Department of Public Works & Transportation established the Transit Vision Statement at the beginning of the planning process to provide a foundation for the work to be completed in subsequent process steps. The County's Transit Vision is as follows:

Prince George's County is a premier destination with a first-class public transit system that enhances the quality of life and provides mobility options for all residents. This robust system supports transit oriented development, fuels economic development, and expands service to improve connectivity

between jobs, housing, retail, medical, recreational, and faith-based destinations. The transportation network features safe, pedestrian friendly streets, and convenient last-mile connections while supporting alternative transportation modes including taxis, bike share and ride-share services.

ES.3 Transit Goals and Objectives

The transit goals and objectives contained in this section are the measurable steps that translate the Transit Vision Statement into an implementable action plan. The transit improvement recommendations described in Chapter 4, in turn, flow from these goals and objectives. The goals and objectives are described here:



Goal 1

Enhance: Provide high quality, robust mobility options with effective and efficient service

- Objective 1: Develop a strategy for implementing service improvements to address gaps in existing service such as weekend service, later hours of service, and more frequent service.
- Objective 2: Develop a publicly operated transit system that is not a "one size fits all" system but rather a system that serves different parts of the County with different modes and service types that are appropriate to the specific land use and population/employment density of each part of the County.
- Objective 3: Utilize the full range of alternative modes/service types in those parts of the County where fixed-route transit is not likely to be successful based on densities and street network characteristics.
- Objective 4: Meet all objectives under this goal in the most cost-efficient manner in order to maximize resources and provide the highest level of transit service to County residents possible, in the most productive manner.

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Goal 2

Expand: Strengthen and expand the county's pedestrian and bicycle networks in order to enhance connectivity to the county's fixed route transit system

- Objective 1: Identify gaps in the County's pedestrian network relative to its fixed route network and develop strategies for closing these gaps.
- Objective 2: Support a County bicycle network plan that enhances connectivity to the fixed route transit system. Support implementation through coordination on future bike share locations.



Goal 3

Collaborate: Improve internal and external communication with county agencies and other stakeholders in order to increase transit supportive land use decisions and improve pedestrian accessibility to transit services

- Objective 1: Enhance the process that provides
 Department of Public Works and Transportation
 (DPW&T) an opportunity to review and provide
 feedback on site development applications.
- Objective 2: Enhance the process that provides DPW&T an opportunity to review and provide feedback on future development being reviewed by The Maryland-National Capital Park and Planning Commission (M-NCPPC).
- Objective 3: Continue to develop transit development strategies and policies in conjunction with M-NCPPC to support and guide Transit Oriented Development and land uses that reflect County land use and development goals and which support fixed route transit.
- Objective 4: Continue communication with DPW&T stakeholders regarding improved accessibility to existing bus stops on the County's fixed route transit system.
- **Objective 5:** Develop a transit network plan that supports and reflects existing land use as well as planned growth and development.



Goal 4

Engage: Improve internal and external communications to meet the evolving transit needs of the community

 Objective 1: Improve communications with passengers through an improved social media presence, enhanced software to provide real-time bus arrival information, and other avenues for providing real-time service updates.

ES.4 Planning Process

The Transit Vision Plan contained in this document is a five-year transit improvement program that reflects available funding for implementation. The full set of improvement recommendations cover both service and facility improvements. Because the full set of recommended transit improvements developed during the planning process exceeds available funding over the plan's five year time frame, the plan also includes a "Beyond Five Year" implementation time frame that will be implemented as funding becomes available. The planning process is summarized in Figure ES.1 and described in more detail following the figure.

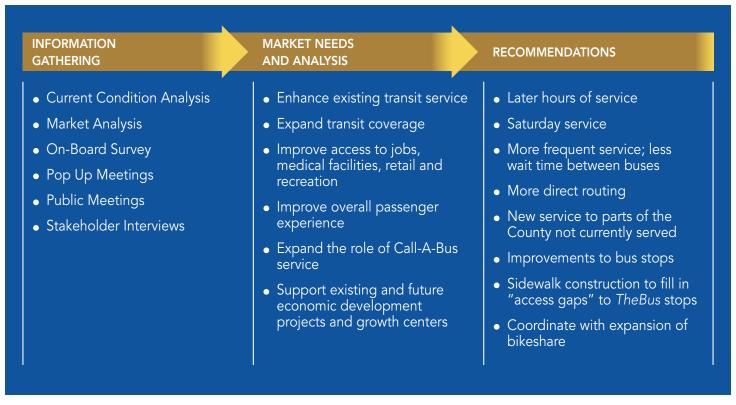


Figure ES.1 Transit Vision Plan: Process Steps

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ES.4.1 Information Gathering

The Transit Vision Plan planning process began with an extensive information gathering effort that started almost immediately and continued throughout the plan development. The key elements of the information gathering process are summarized below.

ES.4.1.1 Onboard Survey

One of the first information gathering efforts was a comprehensive onboard survey that covered approximately 50% of *TheBus* daily trips and encompassed the entire service day (the survey was also available for completion on the project website). Onboard survey results provided a detailed understanding of *TheBus* rider characteristics such as degree of auto ownership, trip purpose, and how riders get to their stops. Key findings include:

- The large majority of *TheBus* riders do not have access to a car for their trip (83% of survey respondents did not have access to an automobile for their trip)
- 65% of respondents are using TheBus to get to work and 65% of respondents access TheBus by walking.

- In assessing satisfaction and dissatisfaction with different areas of service provision, the area with the highest level of dissatisfaction was the lack of weekend service. The areas with the highest levels of satisfaction were vehicle condition and operator courtesy.
- Riders were also provided the opportunity to provide open-ended comments about *TheBus* service. The highest number of comments received requested weekend service while the second highest number of requests were for longer hours of service.

ES.4.1.2 Stakeholder Interviews

Interviews were held with key decision makers in the County, including with members of the County Council, and with senior staff from the County Economic Development Corporation, the Maryland National Capital Park and Planning Commission, and the County Health Department. The common themes heard from these stakeholders are summarized in Figure ES.2

Common themes about TheBus identified by all stakeholders

- Access to jobs and supporting nontraditional work hours should be an essential role of TheBus
- Basic levels of service for transit dependent residents is crucial
- TheBus is a key foundation in supporting business and economic development throughout the County
- TheBus should help create stronger connections to activity centers and large employment concentrations and should also support the transition to 24 hour activity centers, including hospitals and other medical facilities

- TheBus should help make the County less auto-centric
- County provided transit should support emerging growth centers and portions of County not served by fixed route transit
- The County should focus on improving the overall passenger experience of *TheBus* riders, including making bus stops more user friendly and improving access to bus stops

Figure ES.2 Common Themes Heard During Stakeholder Interview Process

ES.4.1.3 Public Outreach

The public outreach process consisted of two steps. The first was a series of "pop-up" meetings at high ridership stops throughout *TheBus* system. This first set of meetings was focused on introducing riders to the Transit Vision Plan process and to receive feedback on levels of satisfaction with *TheBus* and what were the greatest needs for transit improvements.

The second round of public meetings were held at locations throughout the County and were focused on receiving feedback on the preliminary transit

improvement recommendations. After reviewing the preliminary recommendations, riders were asked to provide their top three priorities for improvements to *TheBus* system. The highest priority was weekend service; the second highest priority was improved service frequency.

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ES.4.1.4 Current Conditions Analysis

The final component of the information gathering process was two detailed analyses that are described in greater detail in Chapters 2 and 3 respectively. Current Conditions, the first of these, is the subject of this section. The evaluation of the operations of each *TheBus* route was based on a series of minimum service standards covering different elements of route operations. These standards were developed as part of the project planning process and cover service frequency (wait time for passengers between

bus arrivals), hours of service, days of service, and route directness, and are further broken out by route category. Each *TheBus* route was categorized as a Major, Local, or Community route based on each route's ridership and service area characteristics. The service standards by route category are shown below in Table ES.1. More detail on the metrics used to categorize routes, and the route categories each *TheBus* route was assigned to are provided in Chapter 2.

Table ES.1 Service Standards by Route Category

Route Category	Service Component	Minimum Standard
	Weekday Service Frequency	Peak – 20 minute wait time between bus arrival
		Off-Peak – 30 minute wait time between bus arrival
	Weekday Hours of Service	First trip of day leaves no later than 5:30 AM Last trip of day leaves no earlier than 10:00 PM
	Saturday Service	Highest priority for expansion of service to Saturday
Major	Saturday Service Frequency	30 minutes all day
-	Saturday Hours of Service	First trip of day leaves no later than 6:00 AM
	Saturday Hours of Service	Last trip of day leaves no earlier than 9:00 PM
	Route Directness	Distance of actual routing between route terminals should be no greater than 1.5 times the distance of the most direct route between route terminals.
	Weekday Service Frequency	Peak – 30 minute wait time between bus arrival
		Off-Peak – 45 minute wait time between bus arrival
Local	Weekday Hours of Service	First trip of day leaves no later than 6:00 AM
		Last trip of day leaves no earlier than 9:00 PM
	Saturday Service	2nd highest priority for expansion of service to Saturday
Local	Saturday Service Frequency	45 minutes all day
	Saturday Hours of Service	First trip of day leaves no later than 6:00 AM
		Last trip of day leaves no earlier than 8:00 PM
	Route Directness*	Distance of actual routing between route terminals should be no greater than 1.5 times the distance of the most direct route between route terminals.
	Weekday Service Frequency	Peak – 30 minute wait time between bus arrival
		Off-Peak – 60 minute wait time between bus arrival
	Weekday Hours of Service	First trip of day leaves no later than 6:00 AM
		Last trip of day leaves no earlier than 8:00 PM
Community	Saturday Service	3rd highest priority for expansion of service to Saturday
Community	Saturday Service Frequency	60 minutes all day
	Route Directness*	Distance of actual routing between route terminals should be no greater than 1.5 times the distance of the most direct route between route terminals.
	Saturday Hours of Service	First trip of day leaves no later than 6:00 AM
		Last trip of day leaves no earlier than 8:00 PM

The current conditions evaluation shows that there are substantial service improvements required in order to meet minimum standards for both service frequency and hours of service. With regard to the service frequency standards, 15 of 28 routes will require improved service frequencies in the peak period in order to meet minimum service standards and eight routes will require improved off-peak frequencies in order to meet minimum standards.

With regard hours of service, most routes begin service early enough to meet the "first trip of the day" standard but all routes will require expansion of hours of service at the end of the day in order to meet the minimum standard.

Three routes were identified as being indirect based on minimum directness standards.

The transit service improvements that were recommended in response to the findings of the current conditions analysis are outlined in chapter 4.

ES.4.1.5 Market Analysis

A detailed market analysis was completed to assess how well the current fixed route transit network within the County serves areas of transit demand and transit need, as well as The County's major activity centers. Key findings are summarized below.

- The County's highest population densities occur in "inside-the Beltway" communities that are served by the County's fixed route transit network. Areas outside the Beltway with high population densities such as Bowie, Upper Marlboro, Laurel, Calverton, and Beltsville are also served by the County's fixed route transit network.
- Current employment density and employment density forecasts show that the geographic distribution of high employment densities correspond to the distribution of high population densities. These areas of high employment density are also covered by the fixed route transit network.
- Evaluation of MWCOG population and employment forecasts shows that the geographic distribution of the high population and employment densities within the County generally remains the same over the forecast years between 2015 and 2030, meaning dramatic geographic changes to the existing fixed route transit network to encompass new growth areas may not be required.
- Autoless households and households living in poverty are concentrated in "inside-the-Beltway" communities already served by transit. This leads to the same conclusions noted above, specifically that changes to the fixed route transit network to encompass areas of high need is not likely required.

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ES.5 Service Improvement Recommendations and Phased Implementation Plan

The improvement recommendations resulting from the range of analyses described in previous sections are outlined in Chapters 4 and 5. Chapter 4 describes a financially unconstrained full program of proposed improvements, presented by improvement type. Chapter 5 incorporates the full program of improvements into a phased implementation plan. Three implementation time frames (1-2 years, 3-4 years, and year 5) have been identified within the five-year time frame of this plan, with the additional improvement recommendations not included in the five-year plan incorporated into a "Beyond Five Year" implementation phase.

The phasing of recommendations contained in Chapter 5 is robust and reflects the County's desire to quickly implement improvements that will benefit both current and future *TheBus* riders. This phasing will require substantial additional funding as well aggressive revenue vehicle purchases.

The following tables summarize the phased implementation plan by County section. The tables further break out the recommendations within each County section by implementation time frame.

Table ES.2 shows improvements proposed for North County, Table ES.3 shows proposed improvements for Central County, and Table ES.4 shows improvements for South County.

Table ES.2 North County Transit Improvement Recommendations by Implementation Phase

	Route	Improvement	Cost	Route Category	Vehicle Requirement
		Short Term Implementation Phase			
		Improve Peak Frequency to 20 minutes from current 30 minutes	\$552,500	Major	2
1	Greenbelt - New Carrollton	Improve Off-Peak Frequency to 30 minutes from current 60 minutes	\$325,000	Major	0
10	Greenbeit - New Carrollton	Extend Weekday Operating Hours to 9:00 PM	\$180,050	Major	0
		Extend Service to Saturday	\$416,000	Major	0
		Improve Peak Frequency to 20 minutes from current 40 minutes	\$1,625,000	Major	5
10	Langley Park - Addison Road	Improve Off-Peak Frequency to 30 minutes from current 80 minutes	\$520,000	Major	0
10	Langley Fark - Addison Road	Extend Service to Saturday	\$624,000	Major	0
		Extend Weekday Operating Hours to 9:00 PM	\$163,475	Major	0
	First/Last Mile Connections	U.S. 301 - Bowie to Upper Marlboro	\$529,620		2 (1)
	Short Term Total - North County		\$4,935,645		7
		Mid Term Implementation Phase			
14	College Park - Prince George's Plaza	Improve Peak Frequency to 30 minutes from current 40 minutes	\$227,500	Local	1
		Improve Peak Frequency to 30 minutes from current 40 minutes	\$260,000	Local	1
15x	Greenbelt - New Carrollton	Extend Weekday Operating Hours to 9:00 PM	\$169,000	Local	0
		Extend Service to Saturday	\$169,000	Local	0
		Improve Peak Frequency to 20 minutes from current 30 minutes	\$455,000	Local	2
17	Callana Daylellara Massat Daisian	Extend Weekday Hours to 9:00 PM	\$142,675	Local	0
17)	College Park Ikea - Mount Rainier	Extend Service to Saturday	\$312,000	Local	0
		Extend to Greenbelt Metro	\$422,500	Local	1
	First/Last Mile Connections	MD 197 Service - Bowie to Laurel	\$529,620		2 (1)
	Mid Term Total - North County		\$2,687,295		5

	Route Improvement		Cost	Route Category	Vehicle Requirement
		Long Term Implementation Phase			
11	Cara hali	Extend Service to Saturday	182,000	Local	0
	Greenbelt	Extend Weekday Operating Hours to 9:00 PM	130,000	Local	0
12	West Hyattsville - Mount Rainier	Improve Off-Peak Frequency to 45 minutes from current 60 minutes	162,500	Local	1
		Improve Peak Frequency to 30 minutes from current 40 minutes	227,500	Local	1
13	West Hyattsville - Prince George's Plaza	Extend Service to Saturday	182,000	Local	0
	Time George 3 Traza	Extend Weekday Operating Hours to 9:00 PM	177,125	Local	0
14)	Callana Bark Britana Cannada Bland	Extend Service to Saturday	182,000	Local	0
14	College Park - Prince George's Plaza	Extend Weekday Operating Hours to 9:00 PM	81,575	Local	0
	First/Last Mile Connections	Bowie to Largo	529,620		2 (1)
	Long Term Total - North County		\$1,854,320		2
		"Beyond Five Years" Implementation Phase			
40	M	Extend Service to Saturday	\$182,000	Local	0
(12)	West Hyattsville - Mount Rainier	Split in Two to Make More Direct	\$438,750	Local	1
16	Greenbelt - New Carrollton	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$180,050	Major	0
17	College Park Ikea - Mount Rainier	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$142,675	Major	0
40		Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$163,475	Major	0
(18)	Langley Park - Addison Road	Split Route in Two with Overlap between Prince George's Plaza and Cheverly	\$910,000	Major	2
	"Beyond Five Years" Total - North C	ounty	\$2,016,950		3
	TOTAL - NORTH COUNTY - ALL	200	\$11,494,210		17

⁽¹⁾ First Mile/Last Mile Connection services will utilize paratransit vehicles. No fleet expansion required. First/Last mile vehicles not included in Total.

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Table ES.3 Central County Transit Improvement Recommendations by Implementation Phase

Route	Route Improvement		Route Category	Vehicle Requirement
	Short Term Implementation Phase			
	Improve Peak Frequency to 20 minutes from current 30 minutes	\$455,000	Major	2
21 New Carrollton - Upper Marlboro	Improve Off-Peak Frequency to 30 minutes from current 50-60 minutes	\$390,000	Major	0
	Extend Weekday Operating Hours to 9:00 PM	\$97,500	Major	0
24 Capitol Heights - Morgan Blvd	Extend Weekday Operating Hours to 9:00 PM	\$131,000	Local	0
27 Landover Metro - Dodge Park	Extend Route to New Carrollton	\$0	Local	0
	Improve Peak Frequency to 20 minutes from current 30 minutes	\$455,000	Major	2
32 Nalyor Road - Clinton Fringe P&R	Extend Weekday Operating Hours to 9:00 PM	\$135,200	Major	0
	Extend Service to Saturday	\$416,000	Major	0
First/Last Mile Connections	Westphalia Circulator	\$529,620		2 (1)
Short Term Total - Central County		\$2,609,320		4
	Mid Term Implementation Phase			
	Improve Off-Peak Frequency to 30 minutes from current 60 minutes	\$390,000	Major	2
20 Addison Road - Upper Marlboro	Extend Weekday Operating Hours to 9:00 PM	\$99,450	Major	0
	Extend Service to Saturday	\$416,000	Major	0
21 New Carrollton - Upper Marlboro	Extend Service to Saturday	\$520,000	Major	0
21x New Carrollton - PGCC	Extend Weekday Operating Hours to 9:00 PM	\$114,000	Local	0
New Carrollton - FGCC	Extend Service to Saturday	\$182,000	Local	0
22 Morgan Boulevard	Extend Route to New Carrollton	\$422,500	Community	1
23 Addison Road - Seat Pleasant	Split in Two - Improve Route Directness	\$910,000	Local	2
26 Largo - Morgan Boulevard	Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Local	1
28 Largo - Woodmore Town Center	Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Local	1
30 Branch Ave - Southern MD Hosp	Improve Peak Frequency to 30 minutes from current 50 minutes	\$455,000	Local	2
branch Ave - Southern MD Hosp	Improve Off Peak Frequency to 45 minutes from current 50 minutes	\$195,000	Local	0
Mid Term Total - Central County		\$4,158,950		9

Route	Improvement	Cost Route Categor	
	Long Term Implementation Phase		
Addison Road - Seat Pleasant	Improve Peak Frequency to 30 minutes from current 40 minutes	\$227,500 Local	1
Capitol Heights - Morgan Blvd	Extend Service to Saturday	\$273,000 Local	0
Laura Mannan Daulauran	Extend Service to Saturday	\$182,000 Local	0
Largo - Morgan Boulevard	Extend Weekday Operating Hours to 9:00 PM	\$131,300 Local	0
	Extend Service to Saturday	\$182,000 Local	0
Largo - Woodmore Town Center	Extend Weekday Operating Hours to 9:00 PM	\$195,975 Local	0
	Extend Service to Saturday	\$273,000 Local	0
Branch Ave - Southern MD Hosp	Extend Weekday Operating Hours to 9:00 PM	\$273,000 Local	0
	Improve Peak Frequency to 30 minutes from current 40 minutes	\$227,500 Local	1
Southern Avenue - Padgetts Corner	Extend Service to Saturday	\$182,000 Local	0
	Extend Weekday Operating Hours to 9:00 PM	\$182,000 Local	0
Long Term Total - Central County		\$2,329,275	2
	"Beyond Five Years" Implementation Phase		
Addison Road - Upper Marlboro	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$95,875 Major	0
New Carrollton - Upper Marlboro	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$130,000 Major	0
Marrie De la col	Improve Peak Frequency to 30 minutes from current 40 minutes	\$254,800 Commun	ity 1
Morgan Boulevard	Extend Weekday Operating Hours to 8:00 PM	\$81,250 Commun	ity 0
	Extend Service to Saturday	\$182,000 Local	0
Addison Road - Seat Pleasant	Extend Weekday Operating Hours to 9:00 PM	\$114,725 Local	0
Capitol Heights Metro	Extend Weekday Operating Hours to 8:00 PM	\$94,975 Commun	ity 0
	Extend Service to Saturday	\$91,000 Local	0
Landover Metro - Dodge Park	Extend Weekday Operating Hours to 9:00 PM	\$162,500 Local	0
	Further Extend Route to Largo	\$422,500 Local	1
Nalyor Road - Clinton Fringe P&R	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$254,800 Major	0
Southern Avenue - Padgetts Corner	Extend Route to Naylor Road Metro	\$455,000 Local	1
	Extend Service to Saturday	\$91,000 Commun	ity 0
Suitland - Capital Crossing Apts	Extend Weekday Operating Hours to 8:00 PM	\$48,750 Commun	ity 0
"Beyond Five Years" Total - Centra	l County	\$2,479,175	3
TOTAL - CENTRAL COUNTY	ALL PHASES	\$11,576,720	18

⁽¹⁾ First Mile/Last Mile Connection services will utilize paratransit vehicles. No fleet expansion required. First/Last mile vehicles not included in Total.

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Table ES.4 South County Transit Improvement Recommendations by Implementation Phase

				Category	Requirement
/		Short Term Implementation Phase			
35) (Carra Caria da Caraba da Ara Matara	Modify Route - Do Not Run into National Harbor in Peak	\$0	Local	0
33) (Camp Springs - Southern Ave. Metro	Extend Operating Hours to 9:00 PM	\$139,000	Local	0
:	Short Term Total - South County		\$139,000		0
		Mid Term Implementation Phase			
	Camp Springs - Southern Ave. Metro	Improve Off-Peak Frequency to 45 minutes from current 60 minutes	\$130,000	Local	1
35)		Extend Service to Saturday	\$273,000	Local	0
53 (Upper Marlboro	Extend Route to Suitland Metro or Branch Avenue Metro	\$780,000	Community	2
	First/Last Mile Connections	U.S. 301 - Brandywine to Upper Marlboro	\$529,620		2
	Mid Term Total - South County		\$1,712,620		3
		Long Term Implementation Phase			
36	Brandywine - Clinton Fringe P&R	Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Local	1
-	First/Last Mile Connections	Marlton - Brandywine - Southern MD Hospital	\$529,620		2 (1)
-	Long Term Total - South County		\$757,120		1
		"Beyond Five Years" Implementation Phase			
		Extend Service to Saturday	\$182,000	Local	0
36	Brandywine - Clinton Fringe P&R	Extend Operating Hours to 9:00 PM	\$98,150	Local	0
		Extend Peak Hour Trips to Branch Avenue	\$195,000	Local	1
(37)	Camp Springs - Southern Avenue	Extend Service to Saturday	\$182,000	Local	0
37		Extend Operating Hours to 9:00 PM	\$255,450	Local	0
<u></u>		Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Community	1
(53)	Upper Marlboro	Extend Operating Hours to 8:00 PM	\$35,100	Community	0
	First/Last Mile Connections	Accokeek Circulator	\$529,620		2 (1)
	"Beyond Five Years" Total - South C	ounty	\$1,704,820		2

⁽¹⁾ First Mile/Last Mile Connection services will utilize paratransit vehicles. No fleet expansion required. First/Last mile vehicles not included in Total.

Figures ES.3 to ES.6 provide an alternative means of presenting the recommendations. In this instance, recommendations for the entire County, for each implementation time frame, are summarized on a map. Figure ES.3 shows recommendations proposed for implementation in the short-term time frame,

Figure ES.4 shows recommendations slated for implementation in the mid-term, Figure ES.5 shows long-term recommendations and Figure ES.6 shows the recommendations proposed for implementation in the "Beyond Five Years" time frame.

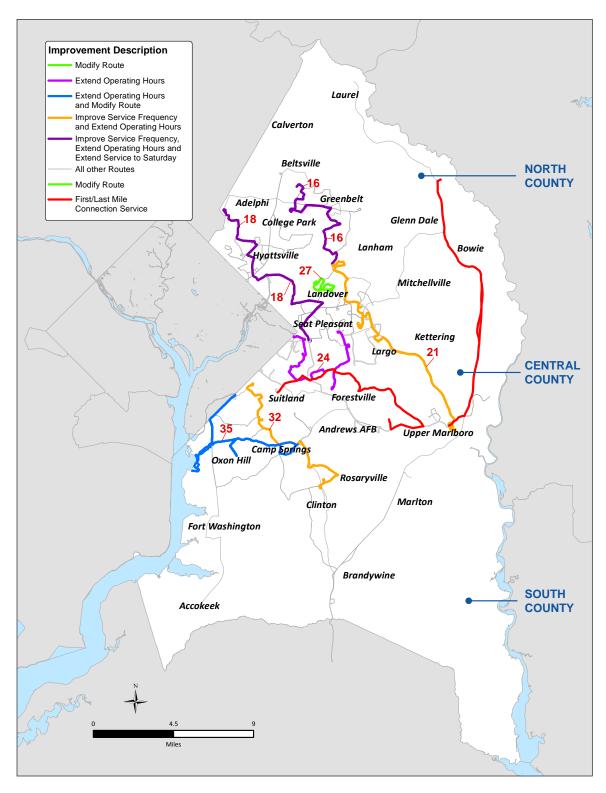


Figure ES.3 Countywide Service Improvement Recommendations - Short Term Time Frame

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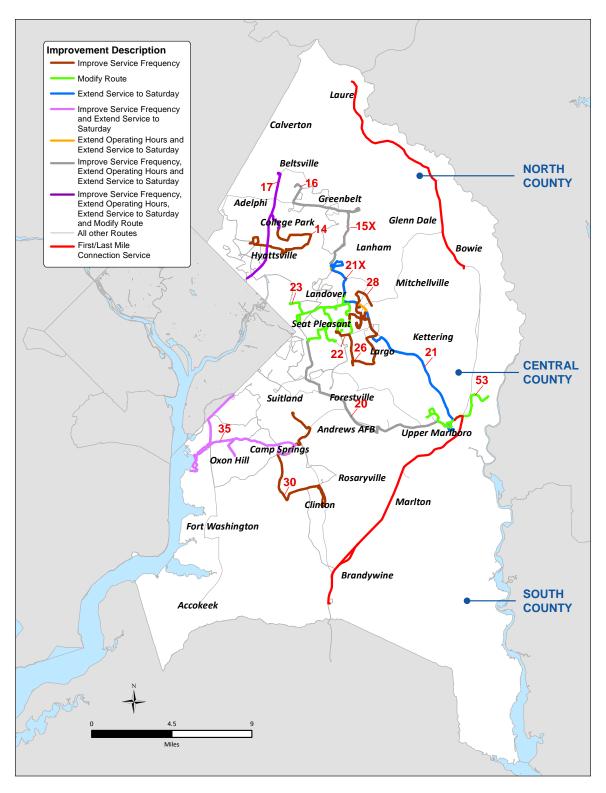


Figure ES.4 Countywide Service Improvement Recommendations - Mid Term Time Frame

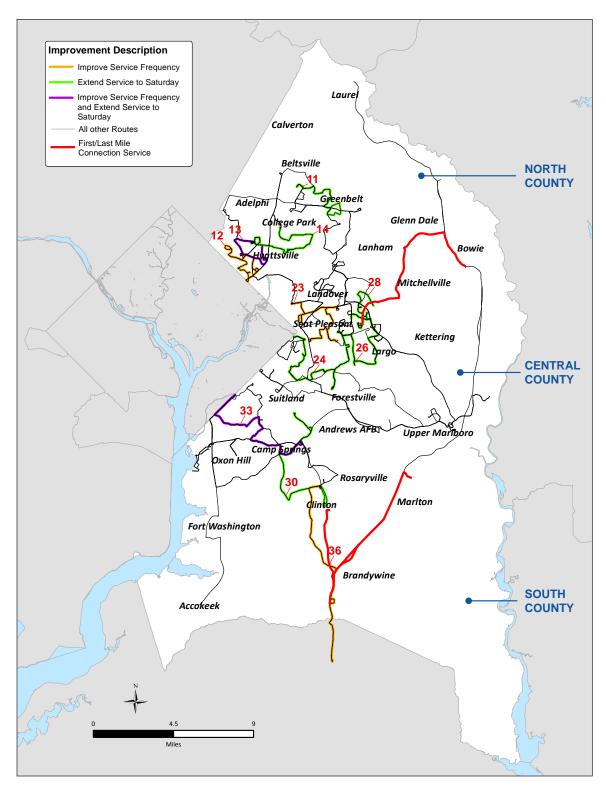


Figure ES.5 Countywide Service Improvement Recommendations - Long Term Time Frame

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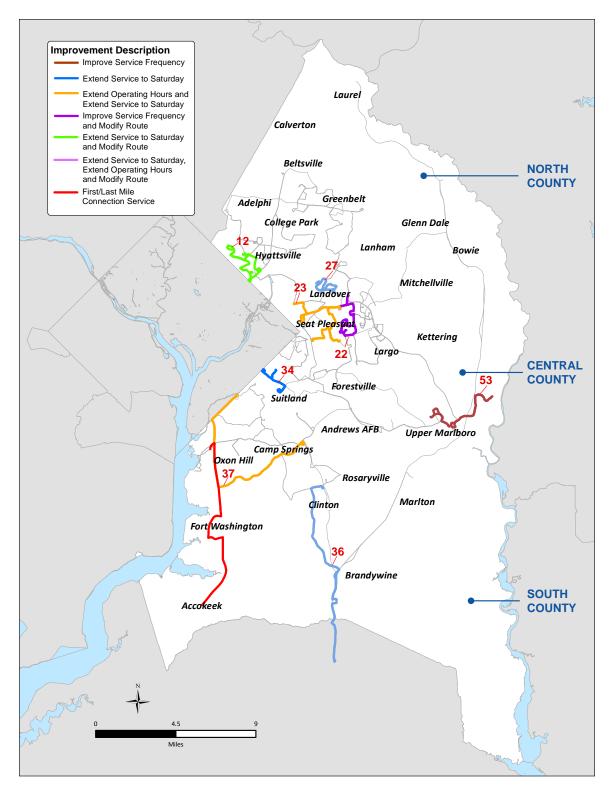


Figure ES.6 Countywide Service Improvement Recommendations - "Beyond Five Years" Time Frame

ES.6 Bike Share Network Strategy

Prince George's County launched its bike share program on June 1, 2018. The first phase of the program includes plans for thirty stations along the U.S. Route 1 corridor, including Riverdale Park, Hyattsville, Mount Rainier, College Park, Brentwood, and Bladensburg. Phase 1 also includes bike share stations in Largo and National Harbor. Three implementation phases were identified based on a Feasibility Study completed in 2016. Subsequent phases are planned for other areas of the County to expand the bike share network.

Station locations were identified using factors such as proximity to transit, population density, zero car households, employment density, attractions, bicycle infrastructure, and topography.

ES.7 Five Year Capital Implementation Plan

A key element of the five year implementation plan will be passenger and operations and maintenance facility improvements to complement the service recommendations. The section outlines the recommended capital improvements to be implemented over the five years of the plan.

ES.7.1 Fill In Gaps in the Sidewalk Network

24 miles of additional sidewalk were identified as necessary to address gaps where passenger stops in *TheBus* network are not connected to a sidewalk.

Table ES.5 summarizes the estimated number of miles that would be addressed each year as well as the estimated cost of each year's sidewalk construction.

Table ES.5 Sidewalk Construction to Fill Network Gaps: Years 1–5

Year of Expenditure	Miles of Sidewalk Constructed	Unit Cost per Mile of Sidewalk	Annual Capital Cost
Year 1	3	\$591,360	\$1,774,080
Year 2	3	\$591,360	\$1,774,080
Year 3	3	\$591,360	\$1,774,080
Year 4	3	\$591,360	\$1,774,080
Year 5	3	\$591,360	\$1,774,080
Total - Five Years			\$8,870,400
Beyond Five Years	9	\$591,360	\$5,322,240

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ES.7.2 Improve Bus Stops

The wait time at the bus stop is a key component of a rider's overall trip experience and therefore the County is closely focused on improving bus stops to make them more comfortable and inviting. Table ES.6 summarizes the estimated number of bus stops that will be improved during each year of the five year plan.

Year of Expenditure	Number of Stops Improved	Unit Cost per Stop Improvement	Annual Capital Cost
Year 1	20	\$11,300	\$226,000
Year 2	20	\$11,300	\$226,000
Year 3	20	\$11,300	\$226,000
Year 4	20	\$11,300	\$226,000
Year 5	20	\$11,300	\$226,000
Total			\$1,130,000

Table ES.6 TheBus Stop Improvements: Years 1-5

ES.7.3 Operations and Maintenance Facility

A new or expanded Operations and Maintenance Facility will be required to accommodate the fleet expansion associated with a number of the transit improvement recommendations outlined in previous sections. The estimated cost of a 100 bus facility would be approximately \$75 million to \$100 million based on experience in the design of other facilities. It is extremely important to note that this a very high level estimate and the final cost will be based on the specific characteristics of the facility.

ES.8 Five Year Revenue Vehicle Plan

The Bus revenue vehicle fleet will change in a number of different ways over the life of the five-year plan. This change will be based on three primary factors. The first factor is the change in the size of the fleet because of the addition of vehicles associated with service improvement recommendations.

The second factor is the need to replace vehicles in the current fleet due to vehicles reaching the end of their useful life. Replacing vehicles that are nearing the end of their useful life is a key element in providing reliable service to County residents. Vehicles utilized beyond their useful life are more prone to breakdowns during revenue service, negatively impacting riders on the vehicle that breaks down and also resulting in missed trips. Given that many routes in *TheBus* system run infrequently (up to an 80 minute wait time between buses in the off-peak on *TheBus* 18), a missed trip can have a dramatic negative affect on riders, in essence doubling the amount of time the passenger must wait for the bus. In addition to in-service breakdowns, buses in disrepair that cannot be put into service also result in missed trips, resulting in the same impact to riders.

The final factor impacting the revenue vehicle fleet is that the County will be transitioning from the predominant vehicle model in the current fleet, which is built by the vehicle manufacturing company Gillig. Because an existing contract for vehicle purchases with Gillig does not currently exist, a new vehicle type will be used to replace vehicles as they reach the end of their useful life. The change in the vehicle fleet is summarized below in Table ES.7.

	FY 19	FY 20	FY 21	FY 22	FY 23
Medium Duty Gillig 35'					
Total Fleet - Start of Year	95	82	70	62	40
Peak Pull Out	77	69	59	52	32
Retired	13	12	8	22	22
Replace	0	0	0	0	0
Expand	0	0	0	0	0
Total Fleet - End of Year	82	70	62	40	18
El Dorado - 5'					
Total Fleet - Start of Year	0	19	38	57	89
Peak Pull Out	0	13	32	47	72
Retired	0	0	0	0	0
Replace	13	12	8	22	22
Expand*	6	7	11	10	6
Total Fleet - End of Year	19	38	57	89	117

Table ES.7 TheBus Stop Improvements: Years 1–5

ES.9 Future Rapid Transit Corridors Strategy

Rapid transit corridors in the form of light rail, streetcar, or Bus Rapid Transit are moving forward in heavily traveled corridors throughout the Washington Region. These fixed guideway systems are critical for enhanced access, mobility and economic development. In addition, they are essential to provide mechanisms to support transit oriented development, connect to the fixed guideway networks of adjoining jurisdictions, and bridge the regional jobs/housing imbalance and as a meaningful tool to reduce vehicular congestion. Understanding the importance of these corridors, the Transit Vision Plan is recommending moving forward with the development of a master plan for a fixed guideway system within the County. This master plan would evaluate candidate corridors as well as assess feasible guideway improvements within each corridor. It would also include ridership forecasts, operating and capital cost estimates, potential funding strategies, and a phasing strategy for the master plan network.

It is important to note that the Transit Vision Plan improvement recommendations contained in earlier sections of this chapter form the foundation for transitioning over time to enhanced rapid transit service in major corridors within the County. Plan implementation would begin with the improvements to existing bus service, as outlined in this document, and then potentially transition first into premium high-frequency limited stop service without guideway improvements, such as WMATA MetroExtra service, and then finally continuing to full dedicated guideway service.

ES-22 Executive Summary

^{*} Includes required spares (20% spare ratio)

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Chapter 1

Transit Vision Plan Overview



Chapter Purpose: Provide an introduction to the Transit Vision Plan (TVP) and describe the process that was followed to Plan completion.

Chapter Sections

- Why we are completing the plan?
- County's transit vision.
- County's transit goals and objectives.
- Background on the County's transit network.
- Planning process followed.

1.1 Why Are We Completing the Plan?

Home to nearly 900,000 residents, Prince George's County hosts and supports a myriad of public transportation options to transport people to jobs, educational opportunities, school, medical appointments and regional activity centers. The County provides *TheBus* fixed route service through 28 lines and Call-A-Bus senior transportation service for residents over 60 years. *TheBus* service is complemented by Washington Metropolitan Area Transit Authority (WMATA) Metrorail and Metrobus service, which consists of 15 Metrorail Stations and 68 bus lines. WMATA also provides complementary paratransit service to its fixed route network, transporting qualified seniors and persons with disabilities through its MetroAccess system. Fixed route transit options are also available through the Regional Transit Agency of Central Maryland (RTA), which connects north county residents to Metrorail stations and regional transit hubs.

This integrated transportation system supports a dynamic and growing County. Some key facts about the County underscore this dynamism.

- The County experienced population growth of 6% between 2010 and 2016, according to the U.S. Census.
- Employment is forecasted to grow 13% by 2030.
- One of the County's largest employers, the MGM Grand, recently opened in 2016.
- Kaiser Permanente is expanding its regional headquarters adjacent to the New Carrollton Metrorail Station.
- The County recently completed its Land Use General Plan "Plan 2035", which identifies growth centers within the County where the Planning Department will use tools such as higher allowable densities and lower parking requirements to direct development. A key goal of the plan is that these growth centers become walkable, 24-hour centers where a resident can live and carry out their daily activities without a

- car. The success of these growth centers will be heavily dependent on a robust transit system to support this non-auto based lifestyle.
- Work force statistics show that a large number of County residents work in occupations with non-traditional work hours that require a transit system that supports more than just the traditional "9-5" commute.
- Fast residential and commercial growth is occurring in emerging centers of the County, including in Konterra, Westphalia, and Brandywine.
- The future Purple Line between New Carrollton and Takoma-Langley via College Park will increase access and economic development opportunities along the alignment.

Even as the County experiences robust growth, the County operated *TheBus* and Call-A-Bus systems have not kept pace, with only minor changes since their start. Currently, *TheBus* system operates only on weekdays, and the last trip of the day on each route in the system ends between 7:30 and 8:30 PM.

The Prince George's County Department of Public Works and Transportation understands the need to improve *TheBus* and Call-A-Bus systems in order to "catch up" to the changes in the County and to support County economic development initiatives and Transit Oriented Development goals. This understanding became the impetus for the development of the Transit Vision Plan, and the transit improvement recommendations incorporated into the plan.

The Transit Vision Plan was built on a foundation of goals and objectives for transit, which in turn were based on The County's transit vision. This vision is outlined in Section 2 and is followed in Section 3 by the County's transit goals and objectives.

Following the goals and objectives, a brief description of *TheBus* and Call-A-Bus systems, as well as the other transit systems operating in the County, is provided in Section 4. Section 5 contains a description of the planning process used to complete the Transit Vision Plan, and also describes the findings of the comprehensive information gathering process that was carried out throughout the planning process.

1.2 County Transit Vision Statement

The Department of Public Works & Transportation (DPW&T) established the Transit Vision Statement at the beginning of the planning process to provide a foundation for the work to be completed in subsequent steps of the planning process. The County's Transit Vision is as follows:

Prince George's County is a premier destination with a first-class public transit system that enhances the quality of life and provides mobility options for all residents. This robust system supports transit oriented development, fuels economic development, and expands service to improve connectivity

between jobs, housing, retail, medical, recreational, and faith-based destinations. The transportation network features safe, pedestrian friendly streets, and convenient last-mile connections while supporting alternative transportation modes including taxis, bike share and ride-share services.

1.3 Transit Goals and Objectives

The transit goals and objectives contained in this section are the measurable steps that translate the Transit Vision Statement into an implementable action plan. The transit improvement recommendations described in Chapter 4, in turn, flow from these goals and objectives. The goals and objectives are described here:



Goal 1

Enhance: Provide high quality, robust mobility options with effective and efficient service

- Objective 1: Develop a strategy for implementing service improvements to address gaps in existing service such as weekend service, later hours of service, and more frequent service.
- Objective 2: Develop a publicly operated transit system that is not a "one size fits all" system but rather a system that serves different parts of the County with different modes and service types that are appropriate to the specific land use and population/employment density of each part of the County.
- Objective 3: Utilize the full range of alternative modes/service types in those parts of the County where fixed-route transit is not likely to be successful based on densities and street network characteristics.
- Objective 4: Meet all objectives under this goal in the most cost-efficient manner in order to maximize resources and provide the highest level of transit service to County residents possible, in the most productive manner.



Goal 2

Expand: Strengthen and expand the county's pedestrian and bicycle networks in order to enhance connectivity to the county's fixed route transit system

- Objective 1: Identify gaps in the County's pedestrian network relative to its fixed route network and develop strategies for closing these gaps.
- **Objective 2:** Support a County bicycle network plan that enhances connectivity to the fixed route transit system. Support implementation through coordination on future bike share locations.





Goal 3

Collaborate: Improve internal and external communication with county agencies and other stakeholders in order to increase transit supportive land use decisions and improve pedestrian accessibility to transit services

- Objective 1: Enhance the process that provides
 Department of Public Works and Transportation
 (DPW&T) an opportunity to review and provide
 feedback on site development applications.
- Objective 2: Enhance the process that provides DPW&T an opportunity to review and provide feedback on future development being reviewed by Maryland-National Capital Park and Planning Commission (M-NCPPC).
- Objective 3: Continue to develop transit development strategies and policies in conjunction with M-NCPPC to support and guide Transit Oriented Development and land uses that reflect County land use and development goals and which support fixed route transit.
- Objective 4: Continue communication with DPW&T stakeholders regarding improved accessibility to existing bus stops on the County's fixed route transit system.
- **Objective 5:** Develop a transit network plan that supports and reflects existing land use as well as planned growth and development.



Goal 4

Engage: Improve internal and external communications to meet the evolving transit needs of the community

 Objective 1: Improve communications with passengers through an improved social media presence, enhanced software to provide real-time bus arrival information, and other avenues for providing real-time service updates.



1.4 Background - Prince George's County Transit Services

Improvements to *TheBus* network are a primary focus of the Transit Vision Plan but *TheBus* is part of an integrated transportation system that incorporates other transit providers, as well as the County's pedestrian network and an expanding bike share network. These networks, in turn, provide access to different transit options in the County. Other transit providers in the County, which interact with the *TheBus* and Call-A-Bus throughout the County, include Metrobus and Connect-A-Ride fixed route transit services, Call-A-Bus and Metro Access paratransit services, and the County's taxi cab operators. Each of these key elements of the integrated transportation network is described here.

1.4.1 Prince George's County TheBus

The County run *TheBus* fixed route bus network has 28 routes and is focused on providing intra-County service to local destinations and activity centers as well as providing connections to the County's Metrorail system. The system carries approximately 10,000 riders per day with individual route ridership

ranging from under 100 per day to nearly 1,000 per day. The current service runs Monday through Friday, with no service on weekends. The first trip of the day on most routes starts around 6:00 AM and the last trip of the day on most routes starts between 7 PM and 8 PM.

1.4.2 Prince George's County Call-A-Bus

The County run Call-A-Bus is a demand response curb-to-curb service that complements the *TheBus* fixed route transit system. The service is available to all County residents who are not served by existing rail or bus service, or are unable to use fixed route service because of a disability. Priority is given to seniors and to persons with disabilities. The service

is the County's complementary paratransit service offered in accordance with the Americans with Disabilities Act (ADA).

It should also be noted that numerous incorporated cities and towns within the County also run curb-to-curb demand response services for their residents.

1.4.3 Prince George's County Call-A-Cab

Call-A-Cab is a County supported assistance program that provides reduced-cost transportation for County-based seniors and persons with disabilities. The program allows eligible residents to purchase coupon books at a reduced cost that can then be used with participating cab companies. The program is available to eligible residents when *TheBus*, Metrobus, Metrorail or Call-A-Bus are not available.



1.4.4 WMATA Metrobus

WMATA Metrobus has 61 routes within the County and is primarily focused on regional trips that connect to a Metrorail station or cross jurisdictional boundaries into Montgomery County or the District of Columbia. These Metrobus routes carry approximately 95,000 riders per day, with individual daily route ridership ranging from approximately 200 to over 10,000 (it should be noted that the highest ridership Metrobus routes are inter-jurisdictional, running within both

Prince George's County and Montgomery County, or Prince George's County and the District of Columbia). Metrobus routes in the County have a wide range of service characteristics, with some routes running up to 18 hours per weekday while other routes provide peak period service only. This wide range also applies to days of service provided, with a number of Metrobus routes within the County running seven days per week while others are weekday service only.

1.4.5 Regional Transportation Authority of Central Maryland (RTA) Connect-A-Ride

The RTA provides fixed route service in Howard, Anne Arundel, and the northern portion of Prince George's County. Four RTA routes run in the County, with a hub at the Laurel Town Center. Route 502 runs to the Laurel Town Center hub from Howard County and the 503 runs from Anne Arundel County to the Laurel hub. Route 301 begins at Laurel Town Center and terminates in South Laurel. The 302 circulates in Laurel

and then runs south to the College Park Metrorail Station. Both the 301 and 302 run completely within Prince George's County. RTA services running within the County have weekday hours of service that are comparable to *TheBus*, but also run on weekends (the RTA 301 runs on Saturday while the 302 runs on both Saturday and Sunday).

1.4.6 WMATA MetroAccess

MetroAccess is a shared ride demand response service that serves people that are unable to used fixed-route transit due to a disability. The service provides daily trips throughout the Washington Metropolitan region, with rides offered in the same areas and during the same hours of operation as Metrorail and Metrobus. MetroAccess is the Washington region's complementary paratransit service.



1.4.7 Taxi Cabs

Taxicab service is a key component of Prince George's County's integrated transportation network, with the Call-A-Cab program being an important transportation option for the County's senior and disabled residents. Taxicab service in the County is provided by a range of

licensed operators, with payment based on a metered system. The industry is regulated by Prince George's County, who are responsible for vehicle and meter inspections, enforcement of the Taxicab code, and industry licensing.

1.5 Study Background

The Transit Vision Plan contained in this document is a five-year transit improvement program that reflects available funding for implementation. The full set of improvement recommendations cover both service and facility improvements. Because the full set of recommended transit improvements developed during the planning process exceeds available funding over the plan's five year time frame, the plan also includes a "Beyond Five Year" implementation time frame that will be implemented as funding becomes available.

The completion of the Transit Vision Plan consisted of three general steps that are summarized in Figure 1.1 and described in greater detail following the Figure.



Figure 1.1 Transit Vision Plan: Process Steps

1.5.1 Information Gathering

The Transit Vision Plan planning process began with an extensive information gathering effort that started almost immediately and continued throughout the plan development. The key elements of the information gathering process were as follows:

1.5.1.1 Onboard Survey

One of the first information gathering efforts was a comprehensive onboard survey that covered approximately 50% of *TheBus* daily trips and encompassed the entire service day (the survey was also available for completion on the project website). Onboard survey results provided a detailed understanding of *TheBus* rider characteristics such as degree of auto ownership, trip purpose, and how

riders get to their stops (rider characteristic results are summarized in Figure 1.2). The results also provided important information on rider satisfaction with different elements of *TheBus* service (summarized in Figure 1.3). Finally, riders were encouraged to provide additional comments to highlight special concerns or improvement priorities (a summary of comments received is provided in Figure 1.4).



72% of riders responding to the survey do not own a car and 83% do not have access to a car for their trip

53% of riders who responded have been riding *TheBus* for more than two years

47% of respondents use *TheBus* five days per week

65% of respondents use *TheBus* to get to work

65% of respondents walk to access TheBus

Figure 1.2 TheBus Rider Characteristics Based on Onboard Survey

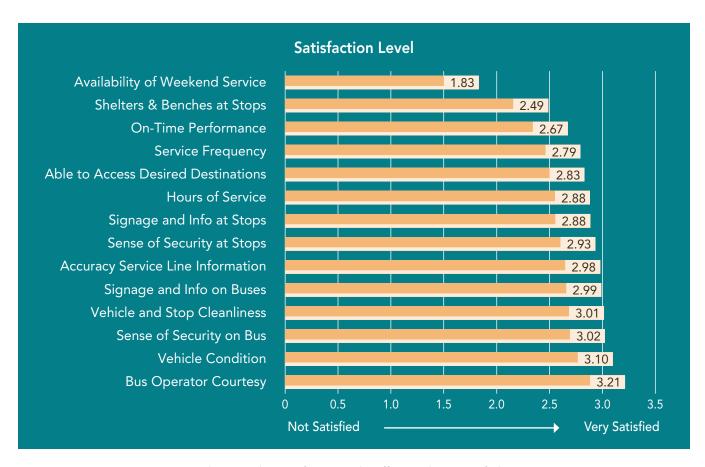


Figure 1.3 TheBus Rider Satisfaction with Different Elements of TheBus Service

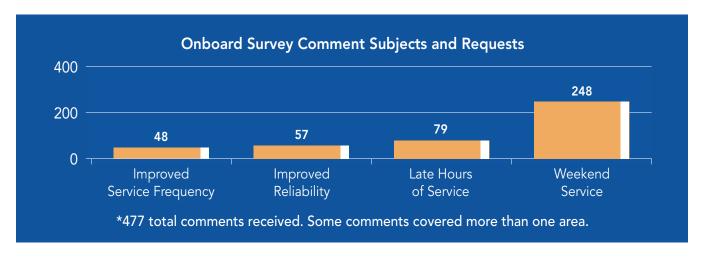


Figure 1.4 TheBus Rider Comments from Onboard Survey

1.5.1.2 Stakeholder Interviews

Interviews were held with key decision makers in the County, including with members of the County Council, and with senior staff from the County Economic Development Corporation, the MarylandNational Capital Park and Planning Commission, and the County Health Department. The common themes heard from these stakeholders are summarized Figure 1.5.

Common themes about *TheBus* identified by all stakeholders

- Access to jobs and supporting nontraditional work hours should be an essential role of TheBus
- Basic levels of service for transit dependent residents is crucial
- TheBus is a key foundation in supporting business and economic development throughout the County
- TheBus should help create stronger connections to activity centers and large employment concentrations and should also support the transition to 24 hour activity centers, including hospitals and other medical facilities

- TheBus should help make the County less auto-centric
- County provided transit should support emerging growth centers and portions of County not served by fixed route transit
- The County should focus on improving the overall passenger experience of *TheBus* riders, including making bus stops more user friendly and improving access to bus stops

Figure 1.5 Common Themes Heard During Stakeholder Interview Process

1.5.1.3 Public Outreach

The public outreach process consisted of two steps. The first was a series of "pop-up" meetings at high ridership stops throughout *TheBus* system. This first set of meetings was focused on introducing riders to the Transit Vision Plan process and to receive feedback on levels of satisfaction with *TheBus* and what were the greatest needs for transit improvements.

The second round of public meetings were held at locations throughout the County and were focused on receiving feedback on the preliminary transit improvement recommendations. After reviewing the preliminary recommendations, riders were asked to provide their top three priorities for improvements to *TheBus* system. The prioritization results are summarized in Figure 1.6

Improvement	Highest Priority	2nd Highest Priority	Third Highest Priority
Provide Weekend Service	29	6	5
Improve Service Frequency	6	10	15
Expand Hours of Service	7	20	5
Improve On-Time Performance and reliability	0	4	6
Modify Service to Make More Direct	3	5	7
Modify Call-A-Bus to Make More Efficient and Effective	2	2	1
Improve Access to Transit Through the Bike Share Program and Improved Sidewalk Connections	1	0	7

Figure 1.6 Highest Transit Improvement Priorities: Attendees at Public Meetings

1.5.1.4 Current Conditions Analysis and Market Analysis

The final component of the information gathering process was two detailed analyses that are the subject of Chapters 2 and 3 of this report. The first analysis (contained in Chapter 2) was an assessment of the current performance of each *TheBus* route. The second evaluation (contained in Chapter 3) was a market analysis that focused on identifying

geographic concentrations of transit need and transit demand and how well these concentrations are covered by the County's fixed route transit network.

A summary of the Market Analysis findings are provided in Figure 1.7

Areas Evaluated and Market Analysis Findings				
Subject Area	Finding			
Designated County Growth Areas	All designated growth areas except one, as outlined in Plan 2035, are served by the County fixed route transit network, either by <i>TheBus</i> , WMATA Metrobus, or the RTA (expanded service to the one center not served, Westphalia, is recommended as part of this plan).			
Transit Demand – Population Density	The heaviest population densities in the County are in communities inside and adjacent to the Capital Beltway, with other locations including Laurel, Camp Springs, and Oxon Hill. Each of these concentrations is currently served by the County's fixed route transit network.			
Transit Demand – Employment Density	The heaviest employment densities in the County generally are in the same parts of the County with the heaviest population densities. Each of these employment concentrations are currently served by the fixed route transit network.			
Transit Need – Autoless Households and Households Below the Poverty Line	The areas of highest transit need in the County are generally located inside and adjacent to the Capital Beltway and in Laurel. The areas of highest transit need in the County are served by the fixed route transit network.			

Figure 1.7 Market Analysis: Areas Evaluated and Findings

1.5.2 Identify Transit Needs

The findings from the information gathering process were used to identify the full range of transit needs in the County, which in turn formed the basis for the development of transit improvement

recommendations to address these needs. A summary of the transit needs identified during the planning process is provided in Figure 1.1 on page 1-9.

1.5.3 Develop Transit Improvements to Address Transit Needs

The Transit Vision Plan identifies a robust and comprehensive set of transit improvement recommendations that were developed based on the transit needs identified in the previous process step. The types of recommendations considered during the planning process are outlined in Figure 1.1. The full set of financially unconstrained recommendations is contained in Chapter 4. Chapter 5 contains a phasing plan for the five year time frame of this plan, reflecting the fact that funding is not available to implement the full set of recommendations outlined in Chapter 4 within the five-year time frame of the plan.

The actual service recommendations for each route are based on route categories that reflect the service area characteristics of each route (population density, employment density, and prevalence of low income residents), the number and type of activity centers served by the route, and each route's ridership characteristics. Each route category, and the criteria that were used to categorize each route into one of the three categories, are summarized in Chapter 2.

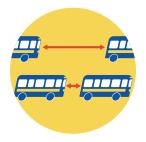
The route categories, in turn, provided the framework for the development of minimum standards for each transit improvement, for each route category. The minimum standards for each service improvement area, by route category, are also summarized in Chapter 2.

In addition to the assignment of each route to a route category, minimum service standards were also developed for each category. These standards are based on a review of the minimum standards in place for other transit systems within the Washington region, in conjunction with consideration of the specific characteristics of current *TheBus* service. The minimum service standards are shown in Chapter 2.

1.5.4 Transit Vision Plan: Remainder of Document

The structure of the remainder of the Transit Vision Plan is as follows:

- Chapter 2 Current Conditions: The focus of this chapter is current TheBus operations, with a specific focus
 on assessing how each TheBus route performs compared to a set of minimum service standards covering
 different elements of route operations. The standards were developed as part of the project planning
 process and cover service frequency, hours of service, days of service, and route directness.
- Chapter 3 **Market Analysis:** The focus of this chapter is to identify geographic areas of transit need and demand within Prince George's County and compare these areas of need and demand to current fixed route transit service coverage in order to identify new required services, or improvements to existing services, to meet these needs and demand.
- Chapter 4 Final Vision for Transit: This report chapter identifies the full set of transit improvements
 that were identified during the transit vision planning process, and which are proposed for ultimate
 implementation. The recommendations outlined here represent the County's full vision and aspirations for
 TheBus network if there were no constraints on the financial resources available to implement this vision.
- Chapter 5 **Phased Implementation Plan:** This chapter describes the phased implementation plan for the transit improvement recommendations identified in Chapter 4. This chapter translates the full aspirations for transit as outlined in Chapter 4 into a phased plan for implementation over the course of a five-year time frame.



Service Frequency Improvements



Hours of Service Expansion



Expansion of Service to Saturday

Chapter 2

Existing Conditions



Chapter Purpose: Describe current conditions on *TheBus* system in order to identify where minimum service standards for different elements of *TheBus* route operations are met, or not met. The evaluation contained in this chapter was part of the project's overall information gathering process and was used to identify transit needs and service improvements to address those needs.

Chapter Sections:

- Introduction
- Route Standards and Categories
- Service Frequency Evaluation
- Hours of Service Evaluation

- Route Directness Evaluation
- Ridership and Productivity Characteristics
- Summary

2.1 Introduction

The focus of this chapter is current *TheBus* operations and assessing how each *TheBus* route performs compared to a set of minimum standards covering different elements of route operations. *TheBus* network is comprised of 28 routes that are focused on providing intra-County trips to local destinations and activity centers as well as providing connections to the County's Metrorail system. The system carries about 10,000 riders per day.

TheBus is part of an integrated public transportation network within the County that includes two other fixed route transit operators besides *TheBus* (Metrobus and RTA Connect-A-Ride), two paratransit operators (County operated Call-A-Bus and WMATA operated Metro Access), and a network of bus stops and sidewalks that provide access to *TheBus* service. In addition, as a complement to the transit/transportation system, the County has just begun the development of a bike share network at key activity centers and Metrorail Stations throughout the County which will provide an additional non-auto means of accessing the County's public transit network.

The first phase of the bike share program includes plans for thirty seven (37) stations to improve on road/off road trail connectivity in the County along U.S. Route 1, Riverdale Park, Hyattsville, Mount Rainier, College Park, Brentwood, Bladensburg, Largo and National Harbor. The Department of Public Works launched the bike share program on June 1, 2018 with five (5) stations. Subsequent phases will expand stations into other areas of the County. These phases were identified based on a Bicycle Feasibility Study completed in 2016.





2.2 Route Standards and Categories

The evaluation of the operations of each *TheBus* route contained in this chapter is based on a series of minimum service standards covering different elements of route operations. These standards were developed as part of the project planning process and cover service frequency (wait time for passengers between bus arrivals), hours of service, days of service, and route directness, and are further broken out by route category. Each *TheBus* route was categorized as a Major, Local, or Community route based on each route's ridership and service area characteristics, as summarized in Table 2.1

Route Category	Daily ridership: Rank Compared to Other TheBus Routes (FY 17)	Service Area Population Density (1)	Service Area Employment Density (1)	Percent of Low Income Residents with ¼ Mile of Route (2)	Percent of Autoless Households Within ¼ Mile of Route (2)	Percent of Senior Residents (over 60) Within ¼ Mile of Route	Plan 2035 Regional Transit Districts Served (3)	Plan 2035 Local Centers Served (4)	Number of Major Activity Centers Served (5)	ls a "Transforming Neighborhoods Initiative Community Served? (6)
Major	Top 1/3 of TheBus Routes	Majority of Route > 4 HH/Acre	Majority of Route > 7 Jobs/Acre	>15%	>20%	>20%	2 or more	2 or more	>5	Yes
Local	Middle 1/3 of Routes	Majority of Route: 2 to 4 HH/ Acre	Majority of Route: 3 to 7 Jobs/Acre	10 to 15%	11-20%	11-20%	1	1	3-5	Yes
Community	Lowest 1/3 of Routes	Majority of Route <2 HH/Acre	Majority of Routes < 3 Jobs/Acre	<10%	>10%	>10%	0	0	<3	No

Table 2.1 Service Area and Ridership Characteristics by Route Category

- (1) No *TheBus* route runs in a service area that has a uniform population or employment density across the full length of the route. When measuring these criteria for each route, the route was assigned to a category based on whether a majority of the route's service area fell into the population and employment density range associated with each category (e.g. if a majority of a route's service area had a population density greater than 4 households per acre, that route was assigned to the "Major" route category for population density). Population and employment density, low income, autoless households and senior resident data all come from the U.S. Census.
- (2) The percentage threshold for this metric is based on the general percentage distribution within the County.
- (3) Regional Transit Districts are activity centers within the County that have been designated as growth centers in the County's Comprehensive Land Use Plan "Plan 2035". The County's zoning code rewrite, currently underway, will include provisions for supporting the transition of these activity centers into walkable 24-hour centers, including lower parking requirements, higher allowable densities, and building standards that support building to the sidewalk and the accommodation of auto parking behind buildings.
- (4) Local Centers are another "Plan 2035" activity center designation that are also targets for growth, though at a lower intensity than Regional Transit Districts.

- (5) Activity centers included in this group include hospitals and large-scale medical facilities, educational institutions, and shopping centers that are regional in nature (centers that have stores that would attract County residents beyond the local neighborhood; examples include The Shops at Iverson or Largo Plaza).
- (6) The Transforming Neighborhood Initiative is an effort by Prince George's County to focus on uplifting neighborhoods that face significant economic, health, public safety and educational challenges.

These route categories provided the framework for the development of the minimum standards for each service element, for each route category, used in this analysis. Routes and the category they have been assigned to are outlined in Table 2.2.

Category Category TheBus Route TheBus Route Greenbelt Metro - Greenway Center **(25)** Capital Heights Metro - Highview Place Local Community West Hyattsville Metro - Gwinn Britt Senior Center Local (26) Morgan Boulevard Metro – Largo Town Center Metro Local (27) West Hyattsville Metro - County Service Building Local Landover Metro - Kent Village Local 28 (14) Prince George's Plaza Metro-College Park Metro Local Largo Town Center Metro – Woodmore Town Center Local Greenbelt Metro - New Carrollton Metro Local Peak (30) Branch Avenue Metro – Southern Maryland Hospital Local (16) (32) New Carrollton Metro – Greenbelt Metro Major Clinton Fringe P&R - Naylor Road Metro Major 17) 33 Mount-Rainier - College Park Ikea Major Padgett's Corner Shopping Center - Southern Avenue Metro Local (18) (34) Takoma Langley – Addison Road Metro Major Suitland Metro - Capital Crossing Apartments Community 20 Addison Road - County Courthouse (Upper Marlboro) Major 35 Local Southern Avenue Metro - Camp Springs (21) New Carrollton - County Courthouse (Upper Marlboro) Major (35s) Oxon Hill P&R – Fort Washington Senior Residences Community Local (21x) New Carrollton Metro – Prince George's Community College Local Express (36) Clinton Fringe P&R - Mattawoman Beantown Road P&R Morgan Boulevard Metro - Chatsfield Way Community (37) Camp Springs – Southern Avenue Metro Local Peak 51 23) Addison Road Metro - Sheriff Road Local Upper Marlboro Circulator Community Capitol Heights - Morgan Boulevard Metrorail Station **(53)** Villages of Marlboro – Marlboro Meadow Local Community

Table 2.2 The Bus Routes Assigned to Each Route Category

The minimum service standards developed for each operational element, for each category, are contained in Table 2.3. These standards are based on a review of the minimum standards in place for other transit systems within the Washington region (e.g. Metrobus, Ride On), in conjunction with consideration of the specific characteristics of current *TheBus* service, service area characteristics such as population and employment density, fleet size and existing service frequencies. To provide context, service frequency and hours of service standards for these other local systems are provided in Table 2.4 (the table also includes *TheBus* service standards used during the TVP process).







 Table 2.3 Service Standards by Route Category

Route Category	Service Component	Minimum Standard		
	Weekday Service Frequency	Peak – 20 minute wait time between bus arrival Off-Peak – 30 minute wait time between bus arrival		
Maior	Weekday Hours of Service	First trip of day leaves no later than 5:30 AM Last trip of day leaves no earlier than 10:00 PM		
B.4. :	Saturday Service	Highest priority for expansion of service to Saturday		
Major	Saturday Service Frequency	30 minutes all day		
	Saturday Hours of Service	First trip of day leaves no later than 6:00 AM Last trip of day leaves no earlier than 9:00 PM		
	Route Directness	Distance of actual routing between route terminals should be no greater than 1.5 times the distance of the most direct route between route terminals.		
	Weekday Service Frequency	Peak – 30 minute wait time between bus arrival Off-Peak – 45 minute wait time between bus arrival		
	Weekday Hours of Service	First trip of day leaves no later than 6:00 AM Last trip of day leaves no earlier than 9:00 PM		
Local	Saturday Service	2nd highest priority for expansion of service to Saturday		
Local	Saturday Service Frequency	45 minutes all day		
	Saturday Hours of Service	First trip of day leaves no later than 6:00 AM Last trip of day leaves no earlier than 8:00 PM		
	Route Directness	Distance of actual routing between route terminals should be no greater than 1.5 times the distance of the most direct route between route terminals.		
	Weekday Service Frequency	Peak – 30 minute wait time between bus arrival Off-Peak – 60 minute wait time between bus arrival		
	Weekday Hours of Service	First trip of day leaves no later than 6:00 AM Last trip of day leaves no earlier than 8:00 PM		
C	Saturday Service	3rd highest priority for expansion of service to Saturday		
Community	Saturday Service Frequency	60 minutes all day		
	Route Directness	Distance of actual routing between route terminals should be no greater than 1.5 times the distance of the most direct route between route terminals.		
	Saturday Hours of Service	First trip of day leaves no later than 6:00 AM Last trip of day leaves no earlier than 8:00 PM		

 Table 2.4 Service Standards by Route Category - Washington DC Regional Transit Agencies

Agency	Service Type	Peak Frequency	Off-Peak Frequency	
	Service F	requency		
Metrobus	Radial	20	30	
	Local Network	15	60	
Arlington	Primary Network	15	15	
	Secondary Network	30	30	
Fairfax County	Full Day Routes	30	30	
Montgomery County	All Ride on Routes	15	30	
Prince George's County TheBus			30	
	Local Routes		45	
	Community	30	60	
	Hours o	f Service		
Metrobus	Radial	6:00 AM - 10:30 PM		
	Local Network	7:00 AM - 9:00 PM		
Arlington	Primary Network	18 hours/day		
	Secondary Network	7 hours/day		
Fairfax County	Full Day Routes	5:00 AM - 10:00 PM		
Prince George's County TheBus	Major Routes	5:30 AM - 10:00 PM		
	Local Routes	6:00 AM - 9:00 PM		
	Community	6:00 AM - 8:00 PM		

The following chapter sections provide a comparison of actual *TheBus* operations to the minimum service standards by route category.



2.3 Service Frequency Evaluation



This section contains an evaluation of peak and off-peak frequency for each *TheBus* route and compares those frequencies to the frequency standards developed for each route category. Service frequency, or wait time between buses, is one of the fundamental components of a transit service's attractiveness. The higher the frequency, or the less time a passenger has to wait for a bus to arrive, the more convenient and flexible the service is for riders to use, to the benefit both to riders who rely solely on transit for their mobility as well as for potential riders who have

other travel options. The service frequency evaluation results are outlined in Table 2.5, and highlight those instances where standards are not met.

Table 2.5 Comparison of Current Service Frequencies to Service Standards

TheBus Route	Peak Frequency	Meets Peak Period Standard?	Off-Peak Frequency	Meets Off-Peak Period Standards?					
Major Routes									
New Carrollton Metro – Greenbelt Metro	30	No	60	No					
Mount-Rainier – College Park Ikea	30	No	30	Yes					
18 Takoma Langley – Addison Road Metro	40	No	80	No					
 Takoma Langley – Addison Road Metro Addison Road – County Courthouse (Upper Marlboro) New Carrollton – County Courthouse (Upper Marlboro) 	20	Yes	60	No					
	30	No	50-60	No					
32 Clinton Fringe P&R – Naylor Road Metro	30	Yes	30	Yes					
	Local Routes								
11 Greenbelt Metro – Greenway Center	30	Yes	30	Yes					
West Hyattsville Metro – Gwinn Britt Senior Center	30	Yes	60	No					
West Hyattsville Metro – County Service Building	40	No	40	Yes					
14 Prince George's Plaza Metro- College Park Metro	45	No	45	Yes					
Greenbelt Metro – New Carrollton Metro	40	No	n/a	n/a					
New Carrollton Metro – Prince George's Community College	20	Yes	20	Yes					
23 Addison Road Metro – Sheriff Road	40	No	40	Yes					
Capitol Heights – Morgan Boulevard Metrorail Station	30	Yes	30	Yes					
 Addison Road Metro – Sheriff Road Capitol Heights – Morgan Boulevard Metrorail Station Morgan Boulevard Metro – Largo Town Center Metro Landover Metro – Kent Village Largo Town Center Metro – Woodmore Town Center Branch Avenue Metro – Southern Maryland Hospital Padgett's Corner Shopping Center – Southern Avenue Metro Southern Avenue Metro – Camp Springs Clinton Fringe P&R – Mattawoman Beantown Road P&R 	45	No	45	Yes					
27 Landover Metro – Kent Village	30	Yes	30	Yes					
Largo Town Center Metro – Woodmore Town Center	45	No	45	Yes					
30 Branch Avenue Metro – Southern Maryland Hospital	50	No	50	No					
Padgett's Corner Shopping Center – Southern Avenue Metro	30	Yes	30	Yes					
Southern Avenue Metro – Camp Springs	30	Yes	60	No					
	45	No	45	Yes					
37 Camp Springs – Southern Avenue Metro	20-30	Yes	n/a	n/a					
Community Routes									
22 Morgan Boulevard Metro – Chatsfield Way	40	No	40	Yes					
 Capital Heights Metro – Highview Place Suitland Metro – Capital Crossing Apartments 	30-35	Yes	30-35	Yes					
	30	Yes	30	Yes					
Oxon Hill P&R – Fort Washington Senior Residences	45	No	70	No					
51 Upper Marlboro Circulator	4-5	Yes	4-5	Yes					
53 Villages of Marlboro – Marlboro Meadow	50	No	50	Yes					

The analysis contained in Table 2.5 shows that there are multiple instances across all route categories, especially in the peak period, where service frequency standards are not met. These instances formed the basis for the service frequency improvement recommendations outlined in Chapter 4.

2.4 Hours of Service Evaluation



This section contains an evaluation of hours of service for each *TheBus* route and compares those hours of service to the hours of service standards developed for each route category. The first benefit of expanded hours of service accrues to the typical current *TheBus* rider, who does not own an automobile and thus is heavily dependent on transit for their mobility. Later hours of service would provide this typical rider with much greater flexibility in carrying out their daily activities, as well as in expanding employment opportunities. In addition, many County

residents do not have traditional "9-5" work hours and therefore later hours of service would be an important improvement in meeting their mobility needs. Finally, the different stakeholders interviewed during the information gathering process all identified later hours of service as vital to their mission and goals. The hours of service evaluation results are outlined in Table 2.6, and highlight those instances where standards are not met.

Table 2.6 Comparison of Hours of Service to Service Standards

	TheBus Route	Start of First Trip of Day	Meets Standard?	Start of Last Trip of Day	Meets Standard?						
	Major Routes										
16	New Carrollton Metro – Greenbelt Metro	5:30 AM	Yes	7:30 PM	No						
17	Mount-Rainier – College Park Ikea	5:30 AM		7:30 PM	No						
18	Takoma Langley – Addison Road Metro	5:30 AM	Yes	7:30 PM	No						
20	Addison Road – County Courthouse (Upper Marlboro)	6:00 AM	No	7:09 PM	No						
21	New Carrollton – County Courthouse (Upper Marlboro)	5:55 AM	No	8:00 PM	No						
32	Clinton Fringe P&R – Naylor Road Metro	5:30 AM	Yes	7:30 PM	No						
		Local Routes									
11	Greenbelt Metro – Greenway Center	5:18 AM	Yes	7:48 PM	No						
12	West Hyattsville Metro – Gwinn Britt Senior Center	5:30 AM	Yes	6:40 PM	No						
13	West Hyattsville Metro – County Service Building	6:00 AM	Yes	7:00 PM	No						
14	Prince George's Plaza Metro- College Park Metro	5:25 AM	Yes	7:40 PM	No						
15x	Greenbelt Metro – New Carrollton Metro	6:00 AM	Yes	7:00 PM	No						
21x	New Carrollton Metro – Prince George's Community College	6:55 AM	Yes	7:30 PM	No						
23	Addison Road Metro – Sheriff Road	6:00 AM	Yes	7:57 PM	No						
24	Capitol Heights – Morgan Boulevard Metrorail Station	5:25 AM	Yes	7:30 PM	No						
26	Morgan Boulevard Metro – Largo Town Center Metro	6:00 AM	Yes	7:20 PM	No						
26	Landover Metro – Kent Village	6:00 AM	Yes	6:45 PM	No						
28	Largo Town Center Metro – Woodmore Town Center	6:00 AM	Yes	6:40 PM	No						
30	Branch Avenue Metro – Southern Maryland Hospital	6:00 AM	Yes	6:45 PM	No						
33	Padgett's Corner Shopping Center – Southern Avenue Metro	6:00 AM	Yes	8:20 PM	No						
35	Southern Avenue Metro – Camp Springs	5:55 AM	Yes	5:55 PM	No						
36	Clinton Fringe P&R – Mattawoman Beantown Road P&R	6:00 AM	Yes	7:30 PM	No						
37	Camp Springs – Southern Avenue Metro	5:29 AM	Yes	6:35 PM	No						
		Community Routes									
22	Morgan Boulevard Metro – Chatsfield Way	6:00 AM	Yes	6:40 PM	No						
25	Capital Heights Metro – Highview Place	6:05 AM	Yes	6:55 PM	No						
34	Suitland Metro – Capital Crossing Apartments	5:50 AM	Yes	7:30 PM	No						
35s	Oxon Hill P&R – Fort Washington Senior Residences	9:00 AM	No	3:20 PM	No						
51	Upper Marlboro Circulator	6:00 AM	Yes	7:00 PM	No						
53	Villages of Marlboro – Marlboro Meadow	6:30 AM	No	6:30 PM	No						

The analysis contained in Table 2.6 shows that the standard for the AM start of the service is met in nearly all instances but that later hours of service will be required on all *TheBus* routes in order to meet the hours of service standards. These findings are reflected in the hours of service improvement recommendations contained in Chapter 4.

2.5 Route Directness Evaluation



Route directness, or how directly a route runs between its two terminals, is an important determinant of passenger convenience. The more direct a route is, the shorter the travel time for passengers to reach their destination. Route indirectness occurs when a route makes diversions to serve destinations off of the route spine, thus forcing all riders not going to the destination served by the diversion to experience the inconvenience and increased travel time associated with the diversion.

The standard used in assessing route directness is based on a ratio of the actual trip distance between the route's two terminals to the trip distance if the route took the most direct path available between the two terminals within the route's service area. The closer the ratio is to 1.0, the more direct the route is. The actual standard is that if a route with a ratio of actual trip distance to the most direct trip distance is greater than 1.5, then the route is considered indirect.



TheBus 17 Route Map

TheBus Route 17 operates between Mount Rainier and The College Park Ikea via U.S. Route 1



TheBus 22 Route Map

TheBus Route 22 is a local circulator serving neighborhoods in the vicinity of The Morgan Boulevard Metro Station

An evaluation of whether a route exceeds the route directness standard of 1.5 is outlined in Table 2.7. Those instances where the standard is exceeded are noted.

Table 2.7 Route Directness Evaluation for Each TheBus Route

	TheBus Route	Route Directness Ratio	Standard Met?					
Major Routes								
16	New Carrollton Metro – Greenbelt Metro	<1.5	Yes					
17	Mount-Rainier – College Park Ikea	<1.5	Yes					
18	Takoma Langley – Addison Road Metro	<1.5	Yes					
20	Addison Road – County Courthouse (Upper Marlboro)	<1.5	Yes					
21	New Carrollton – County Courthouse (Upper Marlboro)	<1.5	Yes					
32	Clinton Fringe P&R – Naylor Road Metro	<1.5	Yes					
	Local Rou	utes						
11	Greenbelt Metro – Greenway Center	<1.5	Yes					
12	West Hyattsville Metro – Gwinn Britt Senior Center	>1.5 (one-way loop)	No					
13	West Hyattsville Metro – County Service Building	<1.5	Yes					
14	Prince George's Plaza Metro- College Park Metro	<1.5	Yes					
15x	Greenbelt Metro – New Carrollton Metro	<1.5	Yes					
21x	New Carrollton Metro – Prince George's Community College	<1.5	Yes					
23	Addison Road Metro – Sheriff Road	>1.5	No					
24	Capitol Heights – Morgan Boulevard Metrorail Station	<1.5	Yes					
26	Morgan Boulevard Metro – Largo Town Center Metro	<1.5	Yes					
27	Landover Metro – Kent Village	<1.5	Yes					
28	Largo Town Center Metro – Woodmore Town Center	<1.5	Yes					
30	Branch Avenue Metro – Southern Maryland Hospital	<1.5	Yes					
33	Padgett's Corner Shopping Center – Southern Avenue Metro	<1.5	Yes					
35	Southern Avenue Metro – Camp Springs	<1.5	Yes					
36	Clinton Fringe P&R – Mattawoman Beantown Road P&R	<1.5	Yes					
37	Camp Springs – Southern Avenue Metro	<1.5	Yes					
Community Routes								
22	Morgan Boulevard Metro – Chatsfield Way	>1.5	No					
25	Capital Heights Metro – Highview Place	<1.5	Yes					
34	Suitland Metro – Capital Crossing Apartments	<1.5						
35s	Oxon Hill P&R – Fort Washington Senior Residences	<1.5	Yes					
51	Upper Marlboro Circulator	<1.5	Yes					
53	Villages of Marlboro – Marlboro Meadow	<1.5						

^{*} TheBus 35 route directness ratio for trips running through National Harbor is approximately 1.44. Though the standard is not exceeded, the lengthy trip through National Harbor for through riders to Camp Springs is inconvenient and identified a need for modification. More detail on the modifications to the 35 route is provided in Chapter 4.

Improvement recommendations to make each of the routes where the directness standard was not met more direct and convenient are included in Chapter 4 (including *TheBus* route 35). In the instance of the 22 and 23 routes, these recommendations also include extensions to connect them to important activity centers.

It should be noted that the three routes with indirect service are in the lower half of the system both in terms of ridership and productivity. While route directness is not the only factor impacting ridership and productivity, the inconvenience of the trips caused by multiple diversions does have a negative impact on these two metrics.





2.6 Ridership and Productivity

No minimum standards for route ridership and productivity were developed as part of the evaluation exercise, given the focus of the planning process on identifying route improvements and not on potential service cuts. This data is included, however, to provide context on each route's performance and to tie productivity and ridership to the recommendations made in Chapter 4.

Ridership and productivity data for each route are outlined in Table 2.8, in rank order from highest to lowest.

Table 2.8 Route Ridership and Route Productivity Ranked Compared to Other TheBus Routes

	Daily Boardings				Route P	roductivity	
TheBus Route	Route Type	Daily Boardings	Rank	TheBus Route	Route Type	Boardings Per Revenue Hour	Rank
32	Major	999	1	33	Local	21.4	1
24	Local	929	2	30	Local	21.1	2
18	Major	879	3	18	Major	20.3	4
16	Major	854	4	34	Community	20.3	4
21	Major	809	5	16	Major	18.7	5
20	Major	790	6	21x	Local	18.4	6
51	Community	612	7	32	Major	17.2	7
33	Local	607	8	51	Community	17.1	8
21x	Local	591	9	24	Local	16.3	9
35	Local	570	10	21	Major	15.8	10
30	Local	565	11	20	Major	15	11
34	Community	562	12	26	Local	14	12
17	Major	455	13	12	Local	13.8	14
11	Local	397	14	35	Local	13.8	13
13	Local	394	15	11	Local	13.3	15
23	Local	393	16	37	Local	12.6	16
26	Local	388	17	15x	Local	12.3	17
14	Local	325	18	14	Local	10.9	18
12	Local	305	19	17	Major	10.8	19
36	Local	275	20	25	Community	10	20
28	Local	245	21	13	Local	9.9	21
15x	Local	223	22	36	Local	9.7	22
22	Community	223	23	23	Local	9.3	23
27	Local	210	24	28	Local	9.3	24
25	Community	207	25	27	Local	8.5	25
37	Local	177	26	22	Community	8.5	25
53	Community	86	27	53	Community	6.6	27
35s	Community	27	28	35s	Community	4	28

^{*}Ridership Source: TheBus APC Ridership Report, September 2017

A review of the ridership data does not show any significant surprises. The highest ranked routes are dominated by routes falling into the "Major" route category.

Of interest is the high ridership on the "Local" route 24 (ranked #2), which runs in the District Heights area. The high ridership on this relatively short route reflects the connections to Metrorail at both ends of the line, high population density, and a large number of activity centers relative to the size of the service area. Expansion of service hours on the 24 route is proposed for the short-term time frame to reflect these conditions, though expansion to Saturday is held until the long-term time frame, partially due to the phasing priorities on other routes.

The first of the two "Community" routes in the top half of the ridership rankings is the 51, which is not a typical route in that it serves as a parking shuttle in Upper Marlboro, and thus does not play the same role as other routes in *TheBus* system. The second "Community" route in the top half of the system in terms of ridership is the 34, which is a local circulator carrying people from large adjacent apartment complexes to the Suitland Metro Station. This route, like the 51, has very unique characteristics that are generally different than other *TheBus* routes. Improvements to the 34 route are held until the "Beyond Five Years" time frame simply because of the priorities on other routes in the central portion of the County.

In terms of productivity, of interest is the two "Local" routes ranked #1 and #2, *TheBus* 33 and *TheBus* 30 (the 33 route runs between Camp Springs and the Southern Avenue Metrorail Station and the 30 route runs between Southern Maryland Hospital and the Branch Avenue Metrorail Station). Both of these routes have fairly high ridership yet run relatively infrequently (the 30 route runs at a 50 minute frequency all day and the 33 route runs every 40 minutes throughout the day). This combination of high ridership and infrequent service leads to the high productivity. Both of these routes are recommended for service improvements to meet standards in the mid and long-term time frames, including expansion to Saturday, later hours of service, and service frequency improvements.

The other productivity-related outlier is the 34 route, which is ranked 4th in productivity but is a "Community" route. Again, the special characteristics of the route, specifically high ridership and the ability to provide very convenient service with one bus in service due to short run times make this a route with special characteristics. One final note is *TheBus* 17 which has fairly low productivity but was identified as a "Major" route. This categorization as a "Major" route very much reflects its service area along the Route 1 corridor, which is a densely developed 24-hour center that also includes the University of Maryland College Park campus.

2.7 Summary

The evaluation contained in the previous sections show that there are substantial service improvements required in order to meet minimum standards for both service frequency and hours of service. With regard to the service frequency standards, 15 of 28 routes will require improved service frequencies in the peak period in order to meet minimum service standards and eight routes will require improved off-peak frequencies in order to meet minimum standards.

With regard hours of service, most routes begin service early enough to meet the "first trip of the day" standard but all routes will require expansion of hours of service at the end of the day in order to meet the minimum standard.

These findings are reflected in the improvement recommendations contained in Chapter 4.

Chapter 3

Market Analysis



Chapter Purpose: Identify geographic concentrations of transit demand and transit need within Prince George's County and compare these concentrations to the geographic coverage of the County's fixed route transit network to determine if these concentrations are adequately served by the public transportation network. This market analysis is one key element of the project's overall information gathering process.

Chapter Areas of Analysis:

- Introduction
- "Plan 2035" Activity Centers
- Demographic Data Identifying Transit Demand
- Demographic Data Identifying Transit Need
- Trip Pattern Data
- Major Destination Categories
- Future Development Status
- Summary Findings

3.1 Introduction

The focus of this chapter is to identify geographic areas of transit need and demand within Prince George's County and compare these areas of need and demand to current fixed route transit service coverage in order to identify new required services, or improvements to existing services, to meet these needs and demand. The analysis contained in the chapter is based on a series of maps displaying demographic, trip pattern, and activity center data that point to potential transit markets within the County, and which also display fixed route bus coverage within the County. The overlay of the transit network on the need and demand data allows for a comparison of potential markets to existing service in order to highlight potential gaps. An additional analysis highlights how well key activity centers and designated growth centers, as identified in the County's General Land Use Plan, "Plan 2035", are served by the existing fixed route system (these key activity centers have been identified in Plan "2035" as the County's key growth centers and have been further identified as the targets for focused public investment). The market analysis outlined in this chapter, as well as the current conditions data

outlined in Chapter 2, acted as the foundation for the development of the service recommendations outlined in Chapters 4 and 5 of this document.

Outlined first in Section 3.2 is a comparison of fixed route service coverage within the County to the range of activity centers identified in "Plan 2035" in order to highlight the degree to which these Countydesignated growth areas are covered by the County's fixed route transit system. Outlined in Section 3.3 is a range of demographic data showing populations of high transit demand. Demographic data is also used to highlight geographic concentrations of high potential transit need in Section 3.4. The analysis of demographic data is followed by analysis of trip pattern data in Section 3.5. Finally, Section 3.6 contains an analysis of the location of potential destinations within the County that would be accessed by transit such as schools and government offices. A summary of the chapter results as well as key conclusions is contained in Section 3.7.

3.1.1 Summary of Chapter 3 Findings

- Indicators of Transit Demand
 - The highest current population and employment densities within the County are primarily concentrated in "inside-the-Beltway" communities that are also served by the County's fixed route transit network. Communities outside the Beltway that also display high population and employment densities include Laurel, Bowie, Upper Marlboro, Marlton, Clinton, and Fort Washington. These "outside-the-Beltway" communities are also served by the fixed route transit network.
 - Population and employment density forecasts through 2030 show that the geographic distribution of areas of high population and employment density will generally not change, thus avoiding the need for a dramatic geographic expansion of the existing fixed route network to serve new areas of growth.
 - The evaluation of trip movements between key origins within the County and destined to other locations within the County, or to large activity centers outside the County, show that the largest trip generation occurs in the parts of the County with the highest population and employment densities. These portions of the County are served by the County's existing fixed route transit network.

Trip flow data also shows that the highest number of trips going to destinations within the County are generated in areas directly adjacent, or close to, those destinations. This pattern highlights the potential effectiveness of fixed route transit in providing access to important County activity centers. Designated growth areas within the County, as outlined in the County's long range land use master plan "Plan 2035", are, with very few exceptions, served by the County's fixed route network.

Indicators of Transit Need

Two of the three key indicators of transit need, autoless households and low income households, show that the highest concentrations of these two household groups are concentrated in "inside-the-Beltway" communities that are served by fixed route transit. Concentrations of these two indicators outside the Beltway are also typically served by the fixed-route network. The third metric of transit need "population over 65" is more widely distributed across the County, with many concentrations of elderly residents not covered by the fixed route transit system.

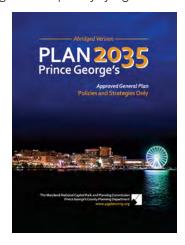
Final Conclusions

- Because the County's fixed route network already serves the areas of the County that will productively support fixed route service, service expansions to unserved portions of the County should be through service types other than fixed route service, including providing first and last mile connections to the fixed route network.
- Given the confluence between the geographic coverage of the fixed route network and key indicators of transit demand and need, a productive use of available financial resources would be improvements to existing service, specifically improved hours of service, improved service frequency, and Saturday service.

3.2 "Plan 2035" Activity Centers

A key framework for identifying potential required service improvements is the designated growth areas outlined in the County's long range land use master plan, "Plan 2035". Utilizing this framework directly supports the County's goal of explicitly tying service

improvements to land use and development patterns as well as to the County's overall land use goals. The map contained in Figures 3.1a and 3.1b shows the different types of activity center designations from "Plan 2035" and compares the



locations of these activity centers to the geographic coverage of the County's fixed route transit network. There are five activity center designations. The first is the "Regional Transit Districts", which represent the highest priority growth centers in the County. There are eight activity centers throughout the County that received this designation (please see Figures for more detail). The next four categories fall under an overall category called local centers. The subcategories under this overall category are "Local Transit Center" (eight centers), "Neighborhood Center" (nine centers), Campus Center (four centers) and Town Center (five centers).

The key finding when analyzing the information in the map is that with the exception of one Town Center, Westphalia, all of the activity centers identified in "Plan 2035" are served by at least one fixed transit service and in many instances are served by multiple services (Westphalia Town Center is the subject of a service improvement recommendation contained in Chapter 4). This finding is not surprising given the focus of "Plan 2035" on directing growth to areas of the County that are already developed and have infrastructure in place.

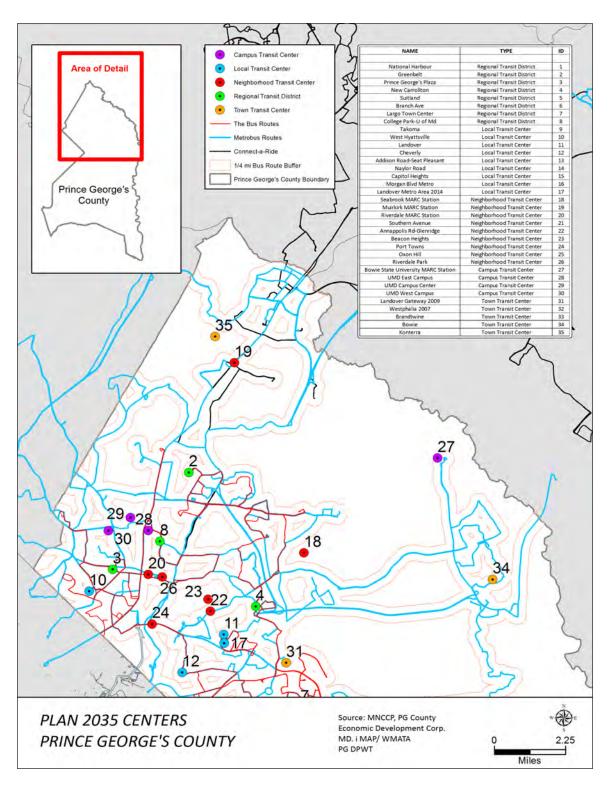


Figure 3-1a "Plan 2035" Designated Activity Centers and Prince George's County Fixed Route Transit Network – North County

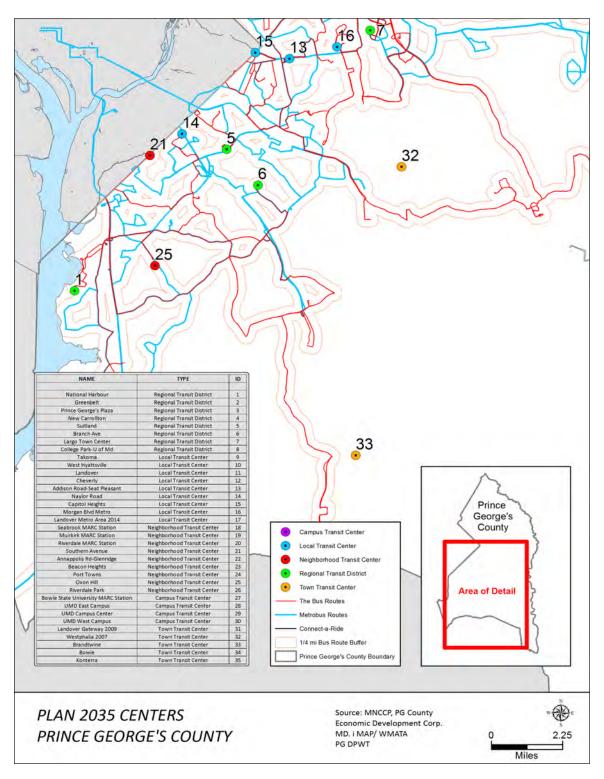


Figure 3-1b "Plan 2035" Designated Activity Centers and Prince George's County Fixed Route Transit Network – South County

3.3 Demographic Data Identifying Transit Demand

This section contains a series of maps presenting a range of Prince George's County demographic data that are focused on assessing potential transit demand. Indicators of transit demand include population density, employment density, and multifamily housing distributions.

3.3.1 Population Density Analysis

This subsection contains an analysis of population density within Prince George's County and is focused on a series of maps (Figures 3.2 through 3.7) that provide information on both current and forecasted population density in the County. Population density is an important means of identifying potential transit markets given that a certain density is necessary to productively support fixed route transit, while areas of the County with lower densities are best served by an alternative to fixed route transit that provides first and last mile connections to the County's fixed route network (see Chapter 4 for more detail).

A synopsis of the findings is provided first, given the large number of population density maps. A more detailed analysis of each individual map follows the synopsis.

Population Density Synopsis: The highest population density locations in the County are generally concentrated in parts of the County located inside the Washington Beltway or in areas directly adjacent to it. In addition, there are select areas outside the Beltway with high densities, including Laurel, Bowie and adjacent communities, Upper Marlboro, and smaller concentrations of density in Marlton, Clinton, Oxon Hill and Fort Washington. With the exception of Marlton, all of these high population density areas within the County are served by the current fixed route transit network.

These findings lead to three general conclusions:

- The portions of the County that would support cost-effective and productive fixed route transit are already served by the fixed route network. Therefore geographic expansion of the fixed route network would not be the most productive use of the financial resources available for service improvements.
- 2. The fixed route network already serves the areas of the County that will productively support fixed route service, so service expansions to unserved portions should be through service types other than fixed route service. These include alternative service to provide first and last mile connections to the fixed route network (see Chapter 4 for more detail).
- Given the confluence between the geographic coverage of the fixed route network and concentrations of high population density, a productive use of available financial resources would be improvements to existing service, specifically through improved hours of service, improved service frequency and Saturday service.

The first population density analysis is contained in Figure 3.2 and shows population density within the County based on the most recent available U.S. Census data. The map is also overlaid with the local fixed route transit network in the County, encompassing all three fixed route providers. Density is shown by varying shades of green, with the highest densities represented by the darkest shade of green. As the map shows, the majority of the most densely populated areas within the County are located inside or adjacent to the Washington Beltway. There are also some additional areas outside the Beltway in Bowie, Laurel, Kettering, Upper Marlboro, and Clinton that

exhibit high densities. Each of the densely populated areas except Marlton are served either by Metrorail or fixed route bus transit.

The one pocket of high density, in Marlton, that does not currently have fixed route transit service will be served with an alternative service providing first and last mile connections to the fixed route network (see Chapter 4 for more detail).

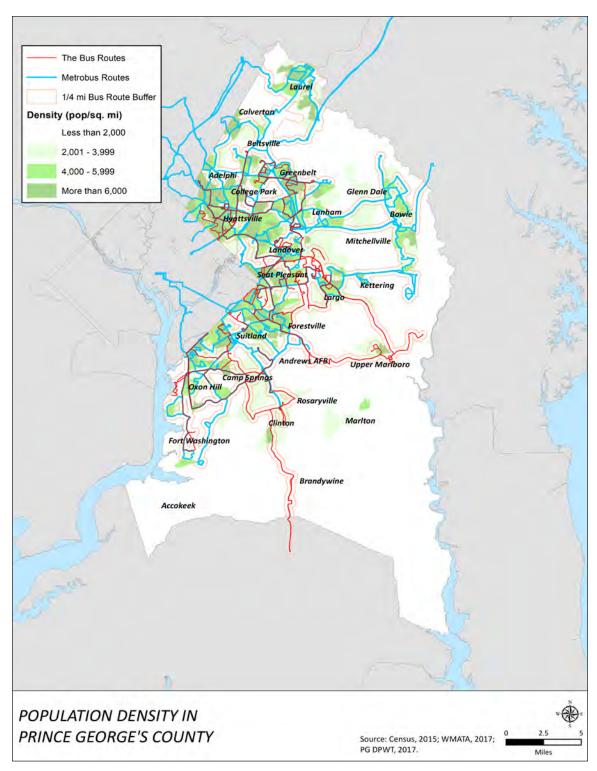


Figure 3.2 Prince George's County Current Population Density Based on U.S. Census

The map in Figure 3.3 is a variant of the map in Figure 3.2 and shows household density rather than population density. The data in Figure 3.3 follows the same patterns as that contained in Figure 3.2, with the highest household density concentrated inside, or adjacent to, the Capital Beltway and a select number of additional areas in others parts of the County. Areas outside the Beltway with high household densities include Bowie, Laurel, Kettering, Upper Marlboro, Clinton, and Marlton. As noted in the discussion of Figure 3.2, each of these areas, with the exception of Marlton, are served by fixed-route transit, thus highlighting the conclusions outlined in the Section synopsis.

One additional method for analyzing the data in Figure 3.3 is to evaluate what is considered the rule of thumb for the minimum household density (households per acre) required to productively support fixed route transit. Generally, the rule of thumb is that an area should have at least 3 households per acre for fixed-route transit to be effective and productive. A review of the map in Figure 3.3 shows that all of the areas within the County with household densities greater than three per acre, with the exception of Marlton, are served by fixed route transit, thus supporting earlier conclusions regarding the best use of limited resources to improve existing fixed route service rather than geographically expand the fixed route network to unserved portions of the County.

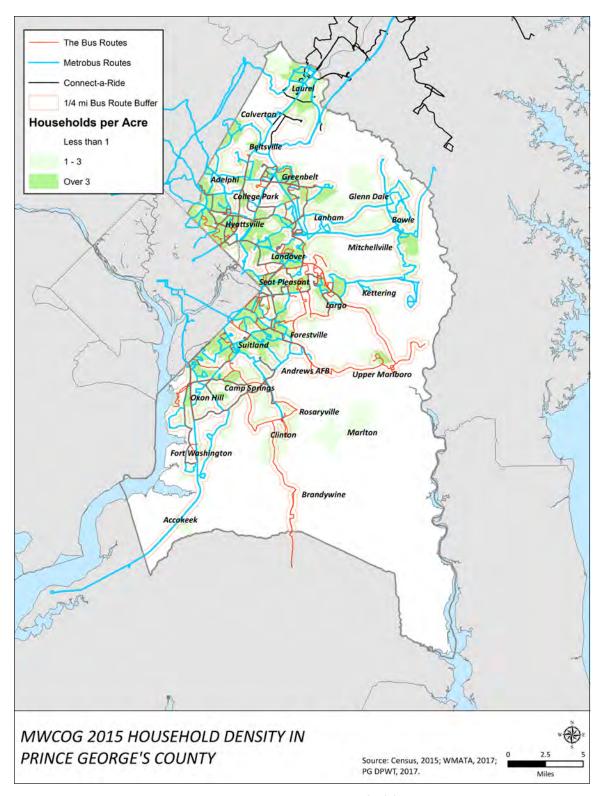


Figure 3.3 Prince George's County Current Household Density Based on U.S. Census

The next four maps (Figures 3.4. 3.5, 3.6 and 3.7) outline forecasted household density based on the Metropolitan Washington Council of Governments population and employment forecasts. Figure 3.4 represents 2015 data, Figure 3.5 represents 2020 forecast data, Figure 3.6 represents 2025 forecast data, and Figure 3.7 represents 2030 forecast data. The focus in the analysis of these four maps is to determine whether density patterns within the County are forecasted to change over the next 15 years, thus requiring a longer-term expansion of the fixed route network to provide service to new growth areas. The 2015 data patterns (Figure 3.4) are comparable to the household density data based on the U.S. Census presented in Figure 3.2. In MWCOG's 2020 forecast (Figure 3.5) the high household density

TAZs will grow around already dense areas such a Largo and Calverton. Relatively dense areas such as Rosaryville and Accokeek will also grow denser. The Brandywine area also shows an increase in TAZs with higher household densities. The 2025 data in Figure 3.6 and the 2030 data in Figure 3.7 generally show the same density patterns as the 2020 data, meaning the general land use pattern of high densities inside or adjacent to the Beltway as well as in Bowie, Laurel, Upper Marlboro, Marlton, and Brandywine and lower densities in the rest of the County is forecasted to remain in place. These household density maps support the conclusions drawn earlier regarding how best to use available financial resources to improve the County's fixed-route transit network.

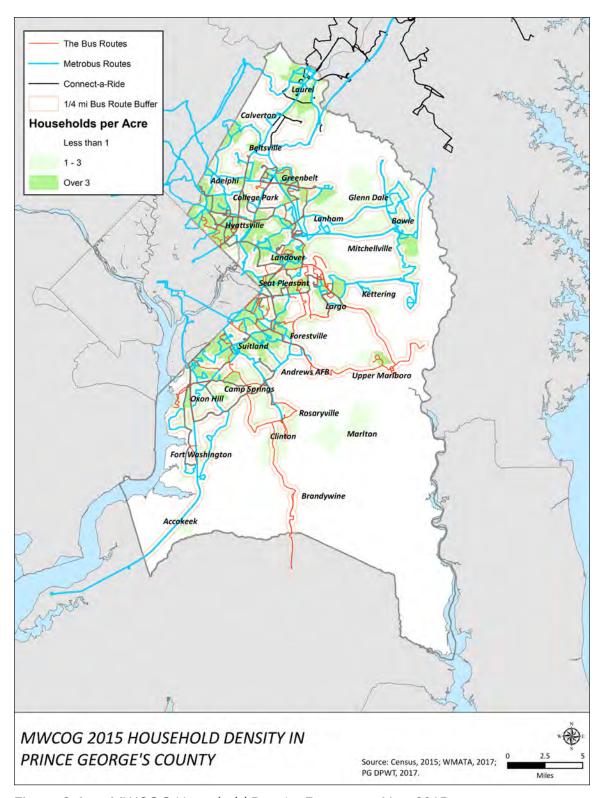


Figure 3.4 MWCOG Household Density Forecasts – Year 2015

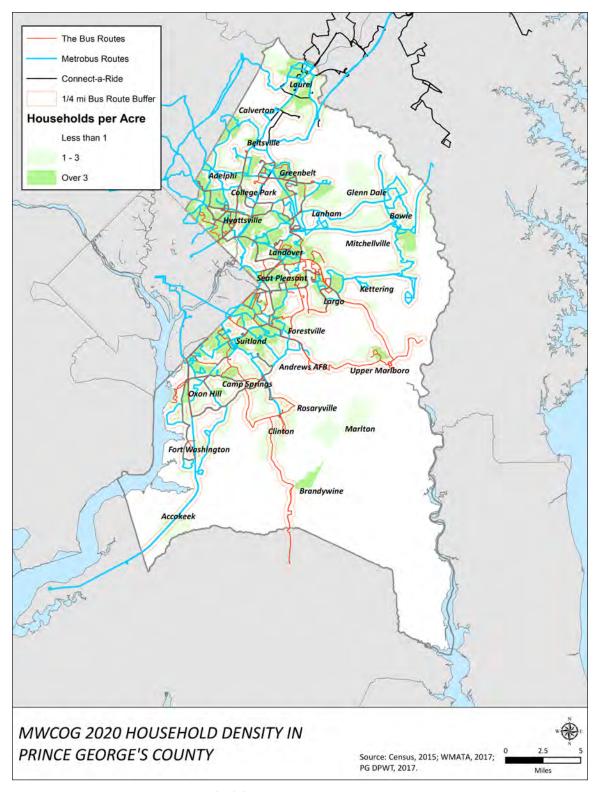


Figure 3.5 MWCOG Household Density Forecasts – Year 2020

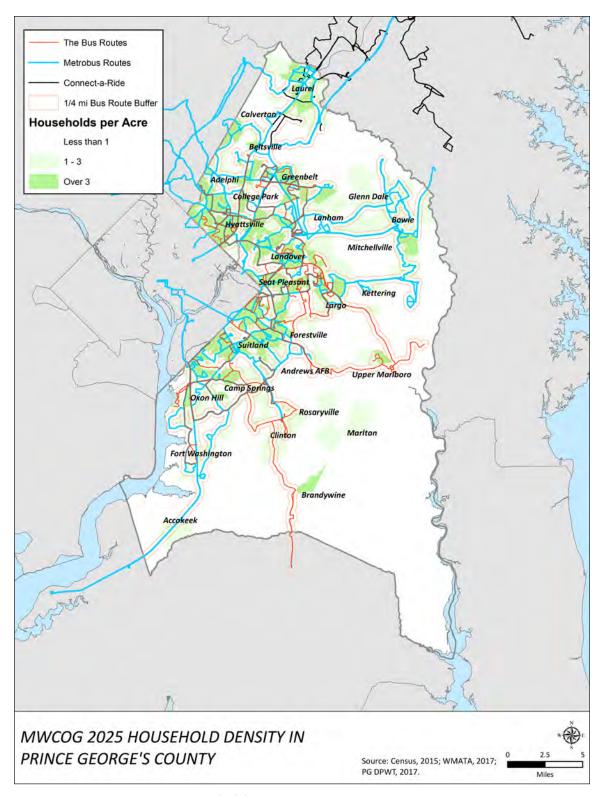


Figure 3.6 MWCOG Household Density Forecasts – Year 2025

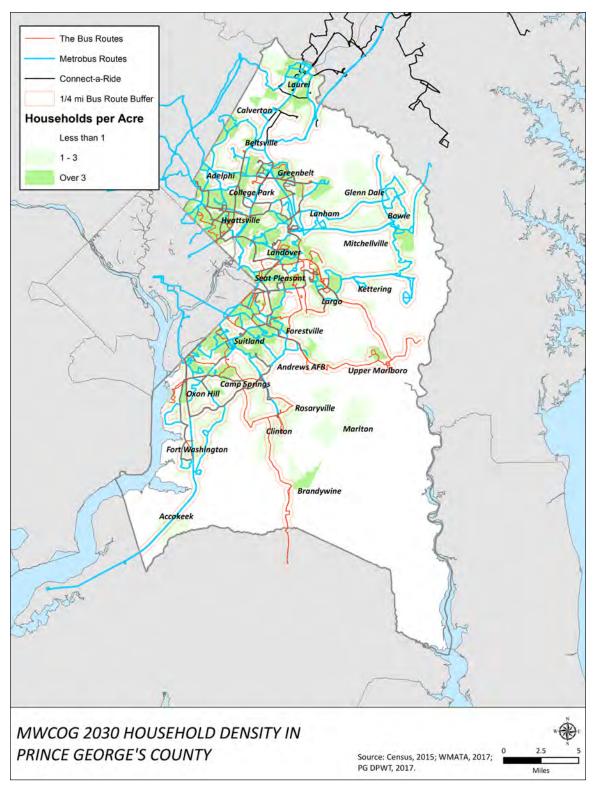


Figure 3.7 MWCOG Household Density Forecasts – Year 2030

3.3.2 Employment Density Analysis

The second transit demand analysis is an assessment of employment density within Prince George's County and is focused on a series of four maps (Figures 3.8, 3.9, 3.10 and 3.11). The data represented in the maps is drawn from the Metropolitan Washington Council of Governments population and employment forecasts. Figure 3.8 represents 2015 data, Figure 3.9 represents 2020 forecast data, Figure 3.10 represents 2025 forecast data, and Figure 3.11 represents 2030 forecast data. As with the population density forecasts reviewed in the previous subsection, the focus of the analysis for these maps is to assess whether employment density patterns are forecasted to change over the next 15 years, thus necessitating an expansion of the fixed route transit network to serve new employment growth areas within the County. A brief synopsis of the findings from the analysis of the employment density maps is provided first, and then a more detailed analysis of each individual time frame follows.

Employment Density Synopsis: Forecasted employment densities generally follow the same patterns as population and household densities, with the highest employment densities concentrated inside, and adjacent to, the Capital Beltway as well as in select additional areas outside the Beltway including Laurel, Beltsville and Calverton, Bowie, Upper Marlboro, Clinton, Rosaryville, Fort Washington and Oxon Hill. One area of high employment density that does not have comparable high population density is Andrews Air Force Base. All of these areas of high employment density are served by the County's current fixed route transit network.

As with the population density analysis in the previous section, the employment density analysis, specifically the fact that the highest employment densities in the County are served by the fixed route transit network, highlights the conclusions drawn in earlier sections regarding the best use of available financial resources to support fixed route service improvements.

When evaluating the individual forecasted employment density maps, with a specific focus on the changes in forecasted employment densities over the 15 years represented in the maps, the data shows that employment density patterns within the County generally remain the same throughout the evaluation time period. 2020 data shown in Figure 3.9 shows the same general distribution patterns as the year 2015 (Figure 3.8), with some increasing employment densities in Brandywine. These general patterns also remain in place in 2025, though with new density growth forecasted for the area east of Bowie between Bowie and the Anne Arundel County border. These 2025 patterns generally carry forward into 2030. As noted, all of the areas of high forecasted employment density within the County through 2030 are served by the fixed route transit network.

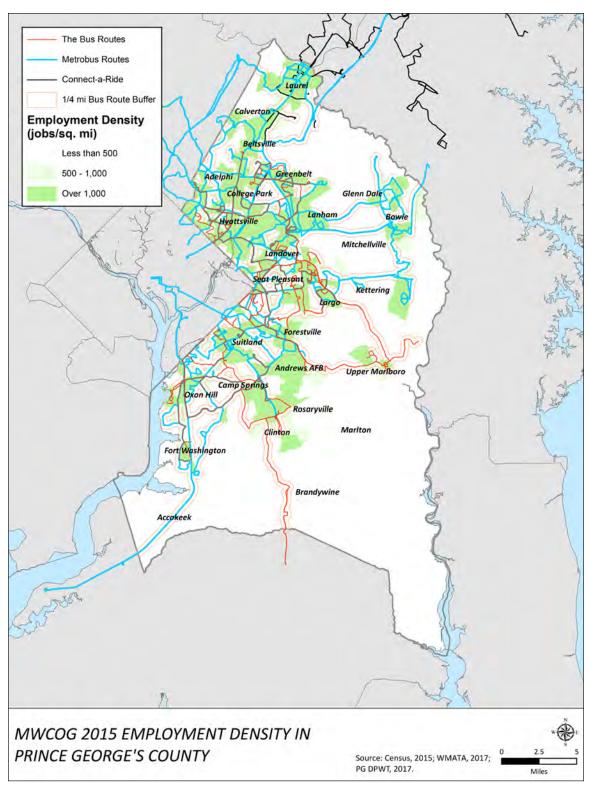


Figure 3.8 MWCOG Employment Density Forecasts – Year 2015

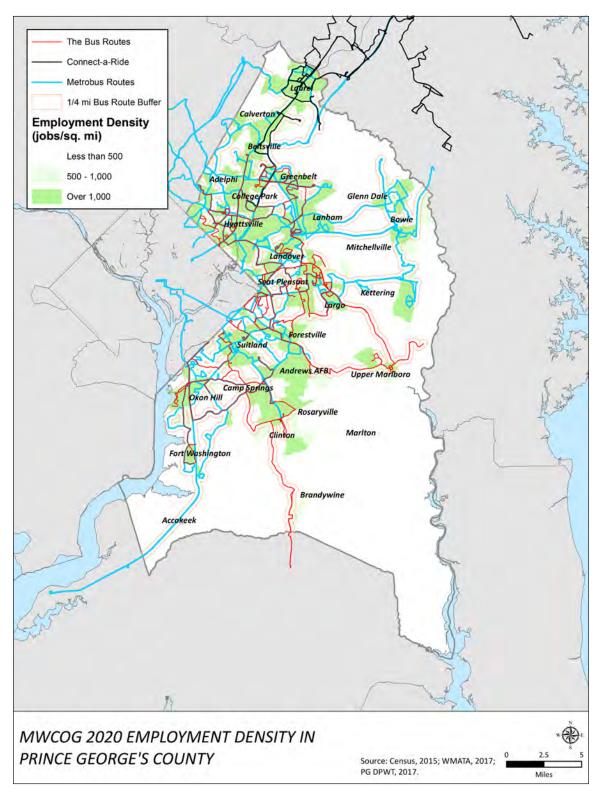


Figure 3.9 MWCOG Employment Density Forecasts – Year 2020

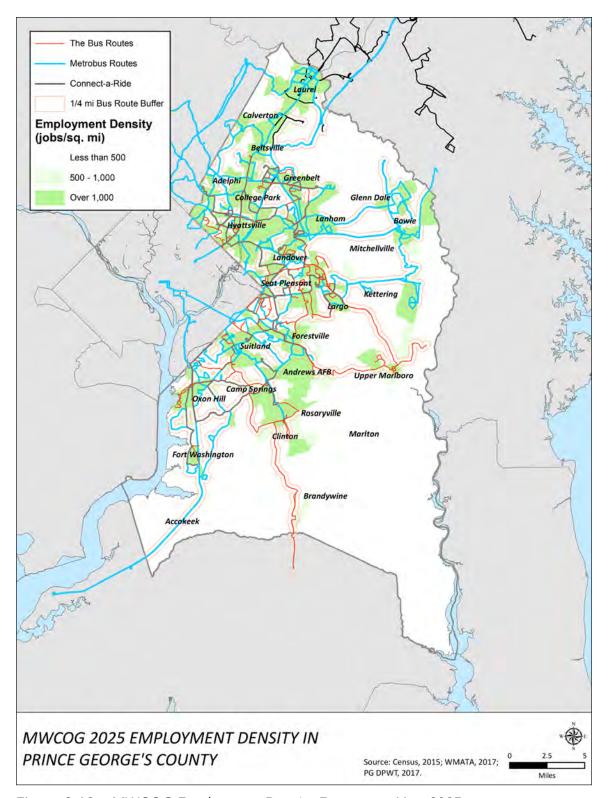


Figure 3.10 MWCOG Employment Density Forecasts – Year 2025

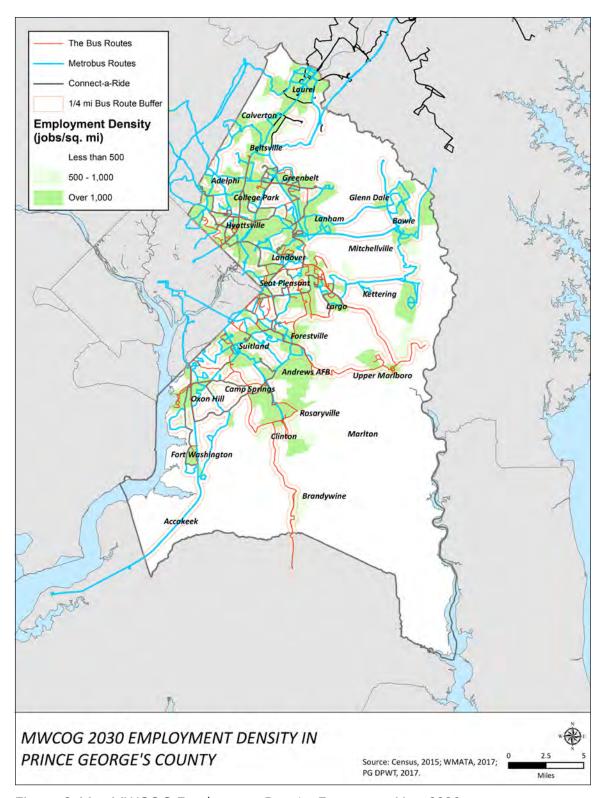


Figure 3.11 MWCOG Employment Density Forecasts – Year 2030

3.3.3 Multifamily Housing Distribution

This subsection contains data on the distribution of multifamily housing throughout the County. This multifamily housing data is another indicator of potential transit demand, as it signifies more ready access to fixed route transit service than single family homes on large lots. The data included in Figure 3.12 is based on U.S. Census data, with multifamily housing defined as housing units located within structures containing at least two housing units. As

with other demographic metrics evaluated above, the highest concentration of multifamily housing is inside and adjacent to the Capital Beltway. High outside-the-Beltway concentrations of multifamily housing occur in Laurel, Beltsville, Bowie, Upper Marlboro, Marlton and Oxon Hill. With the exception of Marlton, each of these high concentrations is served by the County's fixed route transit network.

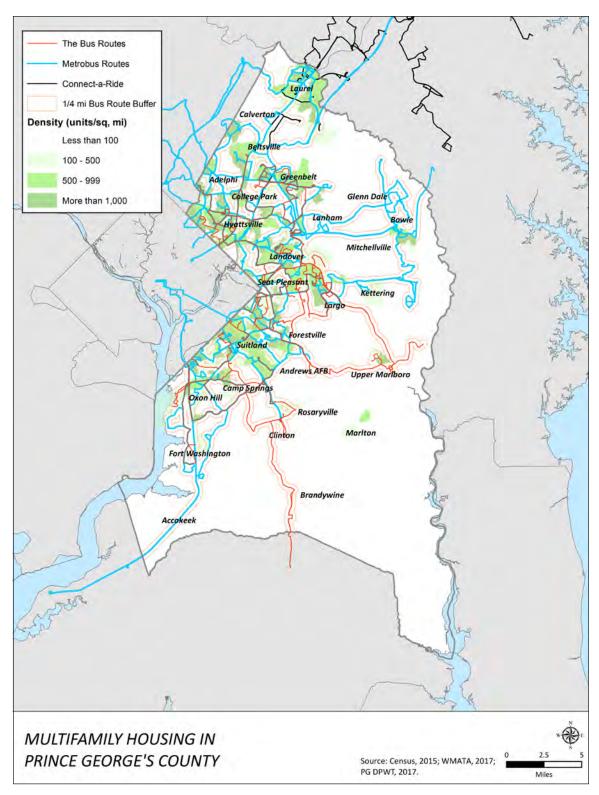


Figure 3.12 Prince George's County Current Multifamily Housing Distributions Based on U.S. Census

3.4 Demographic Data Identifying Transit Need

This subsection focuses on demographic data pointing to potential transit need, and includes data on four metrics, autoless households (Figure 3.13), density of autoless households (Figure 3.14), households living in poverty (Figure 3.15), and populations over 65 (Figure 3.16).

The first metrics evaluated, autoless households and the density of autoless households, are important metrics of need since households without a car available will have to rely on another form of transportation, most often transit, to meet their mobility needs.

The autoless household data presented in Figure 3.13 represents the percentage of autoless households within a census block group. The data in the map shows the highest percentage of autoless households inside and adjacent to the Capital Beltway, with outside-the-Beltway concentrations in Rosaryville and Fort Washington. In general, the areas of the County with the highest concentrations of autoless households are also served by the County's fixed route transit network.

The data in Figure 3.14 is a companion map to the map presented in Figure 3.13 and shows the density of autoless households throughout the County. The data in the map highlights the same general patterns as the data in Figure 3.13, with the heaviest densities of autoless households located inside and adjacent to the Washington Beltway, with smaller concentrations in Laurel, Bowie, and Rosaryville. Generally, all of the areas with high autoless household density are covered by the County's fixed route transit network.

The households living in poverty data displayed in Figure 3.15 follows the same distribution patterns as the other transit-need metrics, with households living in poverty concentrated inside and adjacent to the Beltway, with an additional concentration in Laurel. Each of these concentrations is covered by the County's fixed route transit network. The households living in poverty is an important indicator of need because low income households often do not have the financial wherewithal to own a personal vehicle and therefore rely on transit for their mobility needs.

The final analysis of potential transit need focuses on the concentrations of Prince George's County residents who are over 65 years old. This metric is an important indicator of potential transit need because as residents advance in age, their ability to drive may become diminished. The data for this metric is outlined in Figure 3.16. The data in the map shows a wide distribution of residents over 65 throughout the County but with specific concentrations in Fort Washington, Brandywine, Kettering, Mitchellville, and College Park. Many of these areas are not served by the fixed route transit network, but will be served by proposed services in lower density portions of the County providing first and last mile connections to the fixed route network (see Chapter 4 for more detail).

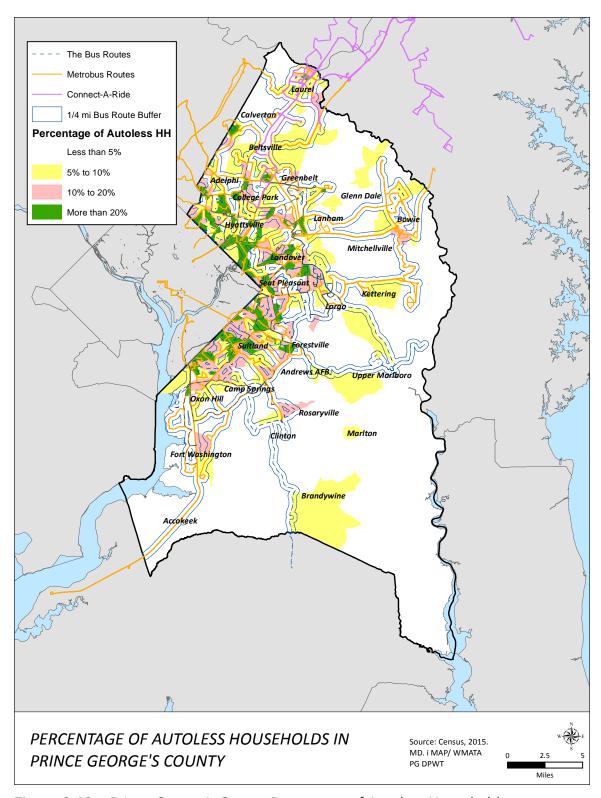


Figure 3.13 Prince George's County Percentage of Autoless Households Based on U.S. Census

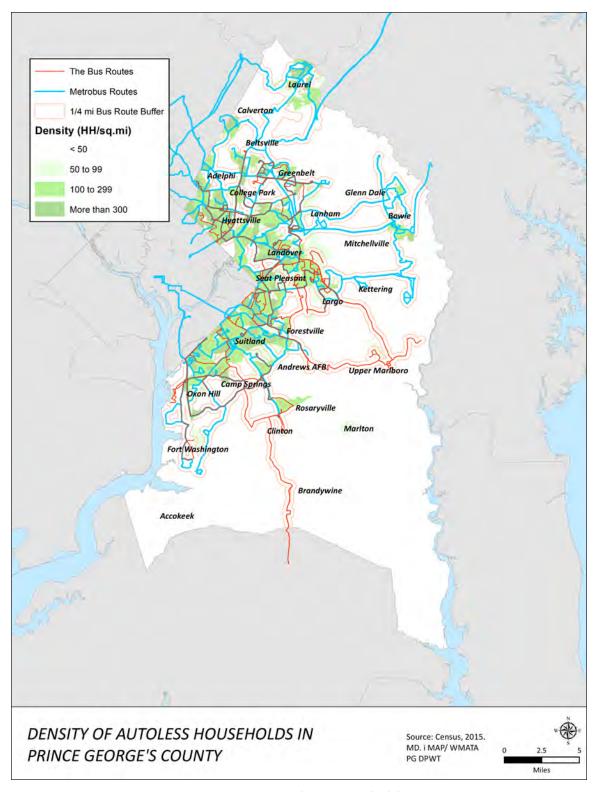


Figure 3.14 Prince George's County Autoless Households Density Based on U.S. Census

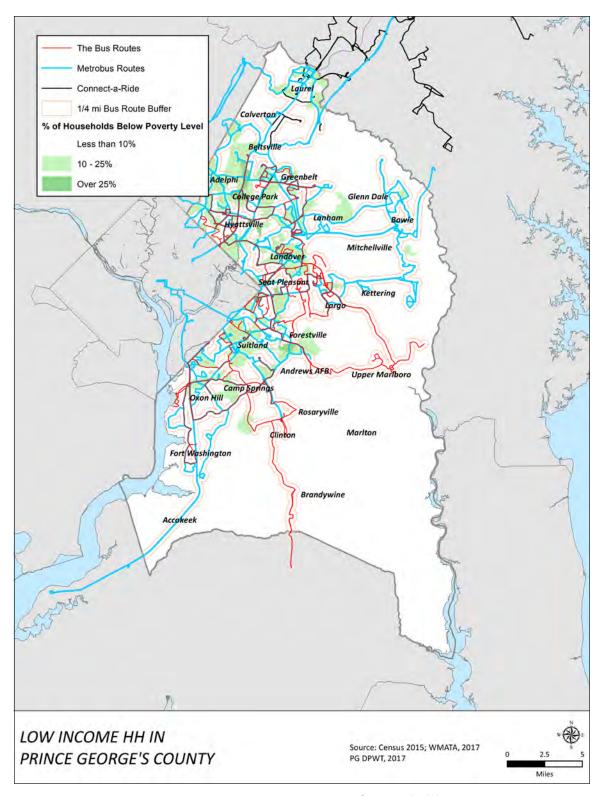


Figure 3.15 Prince George's County Percentage of Households Living in Poverty Based on U.S. Census

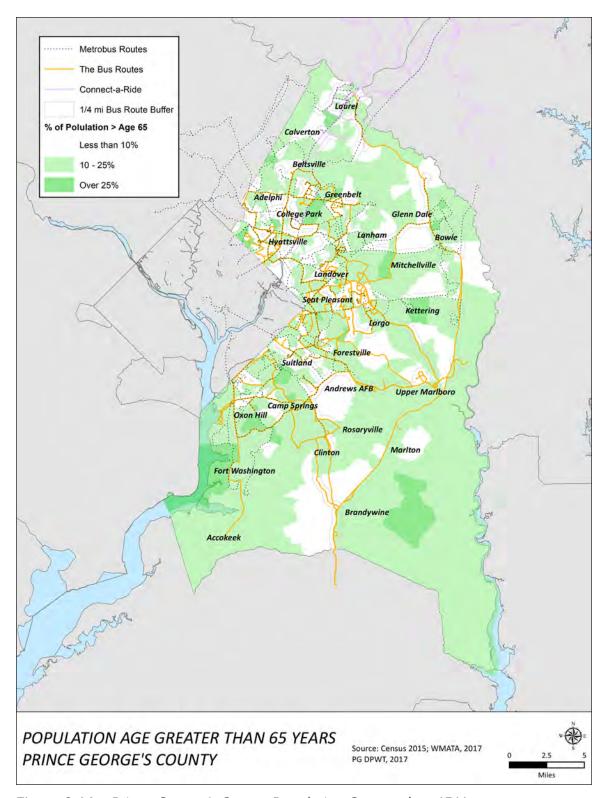


Figure 3.16 Prince George's County Population Greater than 65 Years

3.5 Trip Pattern Data

This section contains additional data outlining potential transit demand and focuses on the evaluation of two different types of travel flows:

- Travel flows from within Prince George's County to regional activity centers outside the County;
- Travel flows from within Prince George's County to key activity centers also located within the County (this data represents intra-County trip flows).

The data provides an understanding of where travel demand is occurring as well as whether that demand is served by the County's fixed route transit network. The data presented in the maps represents forecasted trip flows in 2020, based on the MWCOG 2020 trip table (note: data represents all trip purposes).

This section is broken out further into three subsections. The first focuses on travel flows to destinations outside the County, the second on travel flows to destinations within the County that are designated as Regional Transit Districts within the County's long-range Land Use Plan, "Plan 2035", and the third to a select number of destinations representing a range of different activity centers and uses.

Synopsis: The data reinforces conclusions drawn in previous sections of this chapter. The first overall trend seen in the trip flow data is that the greatest trip generation, relative to each of the destinations evaluated, occurs in the areas of the County with the highest population density, as described in Section 3.3 above. These portions of the County are also the areas that are served by the County's existing fixed route transit network. The second overall trend is that, generally, the highest number of trips going to destinations within the County are generated in areas directly adjacent, or close, to those destinations. This pattern highlights the potential effectiveness of fixed route transit in providing access to important County activity centers, if the transit service is convenient in terms of hours of service, service frequency, and days of the week service is provided.

3.5.1 Travel Flows from Prince George's County to Regional Activity Centers Outside the County

The maps contained in this subsection display travel flows with origins inside Prince George's County to destinations outside the County. The first three maps are focused on destinations in Washington DC (Figure 3. 17 shows trip flows to downtown Washington DC, Figure 3.18 shows trip flows to Capitol Hill and Figure 3.19 shows trip flows to the Navy Yard area). Each of the maps displays comparable patterns. Specifically, the origin of trips to the three DC destinations is concentrated inside, and adjacent to, the Beltway,

reflecting the heavier population densities in this portion of the County. Other areas generating large numbers of trips also align with the areas of higher population density and include Laurel, Bowie, Upper Marlboro, Marlton, Clinton and Fort Washington. These areas within the County generating the most trips to the District are served by the County's fixed route transit network.

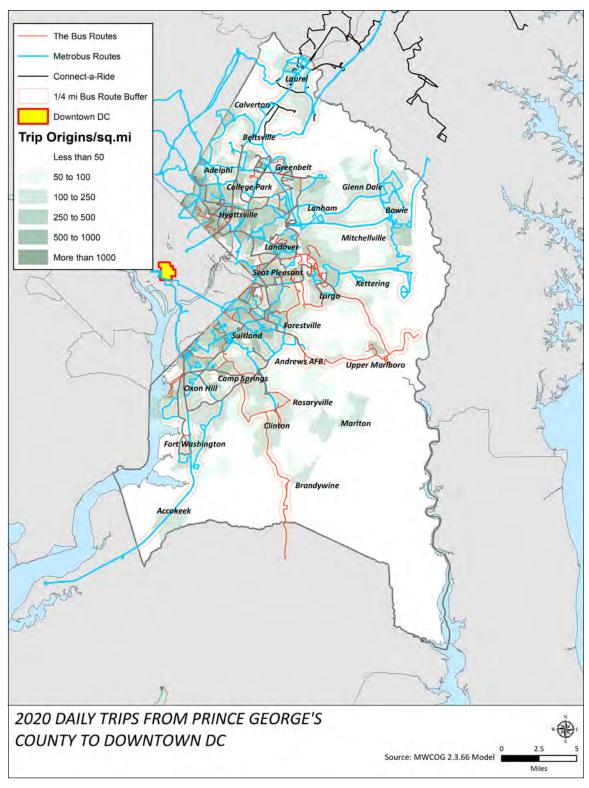


Figure 3.17 Trip Flows from Prince George's County Origins to Downtown District of Columbia Based on MWCOG Trip Table

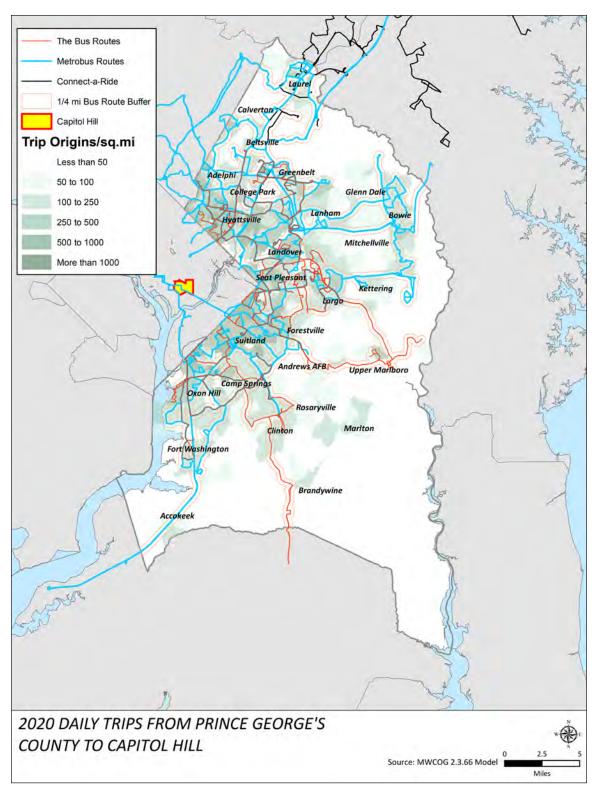


Figure 3.18 Trip Flows from Prince George's County Origins to Capitol Hill Based on MWCOG Trip Table

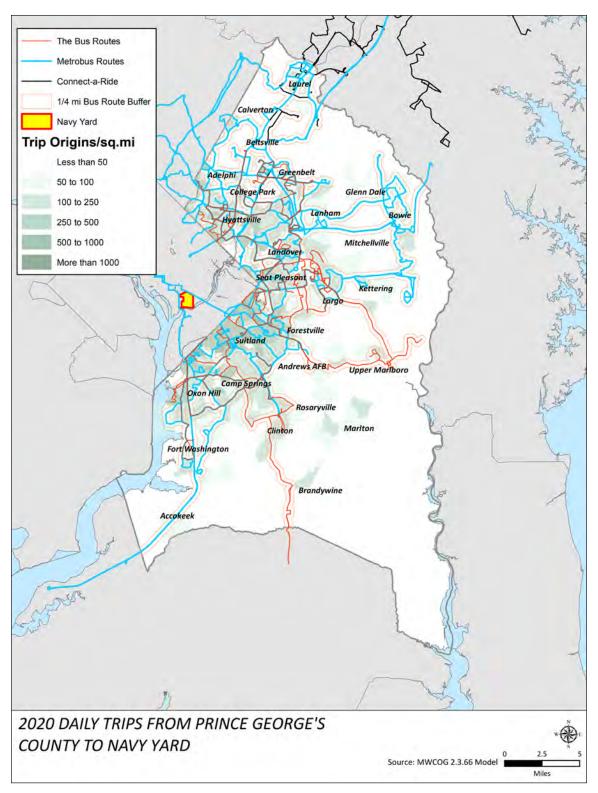


Figure 3.19 Trip Flows from Prince George's County Origins to Navy Yard Based on MWCOG Trip Table

The next five maps display trips originating in Prince George's County and traveling to major employment concentrations in Northern Virginia. Figure 3.20 provides data on trips going to the Pentagon, Figure 3.21 shows data on trips going to Crystal City, Figure 3.22 shows data on trips going to Arlington County, Figure 3.23 shows data on trips to eastern Alexandria and Figure 3.24 shows data on trips to Western Alexandria.

The data in Figure 3.20, for trips to the Pentagon, show very small trip flows for Transportation Analysis Zones (TAZs) in the County, with no TAZs producing more than 50 trips to the Pentagon. Those trips that are being made can be completed on transit via local bus and Metrorail to the Pentagon Station.

The data in Figure 3.21, for trips to Crystal City, show larger trip flows to Crystal City than the Pentagon. The highest concentration of trips originates inside and adjacent to the Beltway with some additional concentrations in Laurel, Bowie, Upper Marlboro, Clinton and Brandywine. As with access to the Pentagon, these trips to Crystal City can be made via a combination of local bus and Metrorail.

Trip flows to Arlington, as depicted in Figure 3.22, show the same general origin patterns as the trip flows to Crystal City, though the volumes of trips are higher than trips just to the Crystal City portion of Arlington. As with the other destinations evaluated, trips to Arlington can be made via a combination of local bus and Metrorail.

The final two maps representing trip flows to Northern Virginia show trips from Prince George's County to eastern and western Alexandria (Figures 3.23 and 3.24) respectively. The data in these figures shows that there are higher volumes of trips to eastern Alexandria, which likely reflects the higher employment concentrations in the Old Town area versus western Alexandria. The data also shows that the greatest number of trips to both destinations originate in the southern portion of the County inside the Beltway. The existing Metrobus NH2 service, which runs between Alexandria and National Harbor, serves some of the trip flows represented in the map but misses origins that occur farther north than where the NH2 terminates at National Harbor.

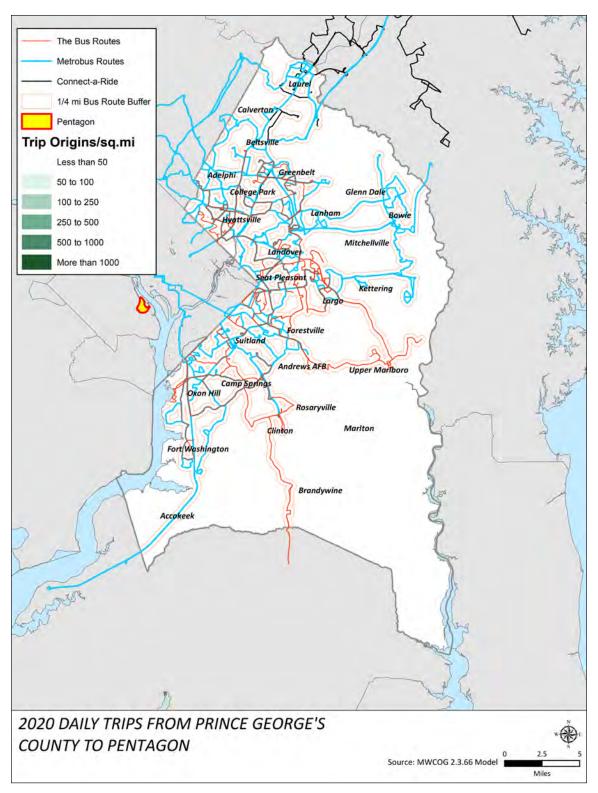


Figure 3.20 Trip Flows from Prince George's County Origins to the Pentagon Based on MWCOG Trip Table

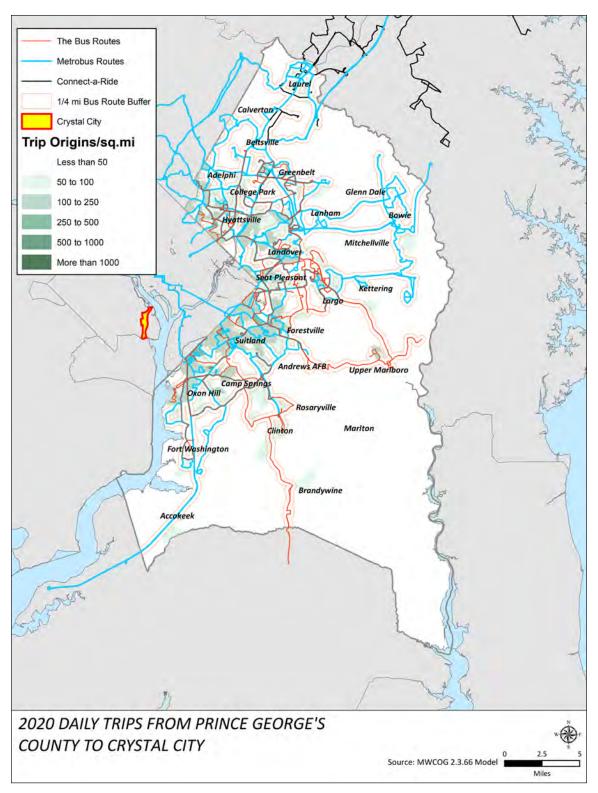


Figure 3.21 Trip Flows from Prince George's County Origins to Crystal City Based on MWCOG Trip Table

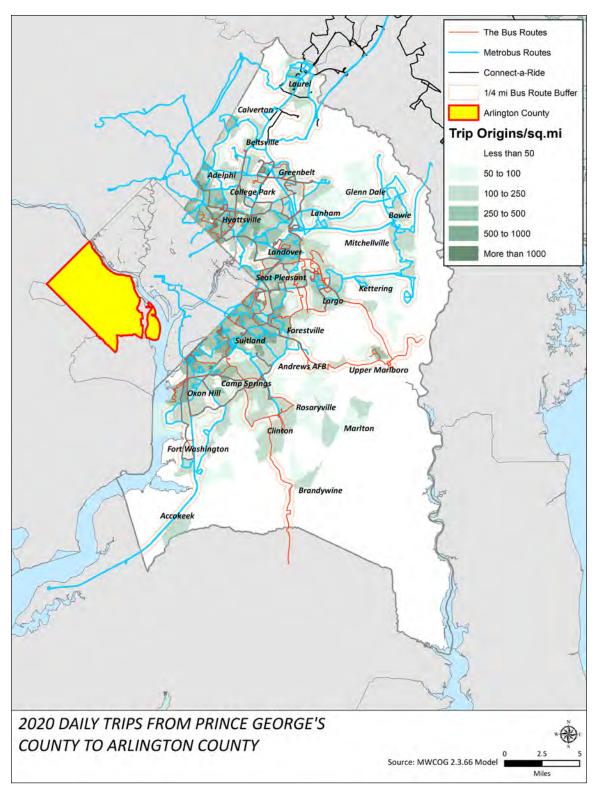


Figure 3.22 Trip Flows from Prince George's County Origins to Crystal City Based on MWCOG Trip Table

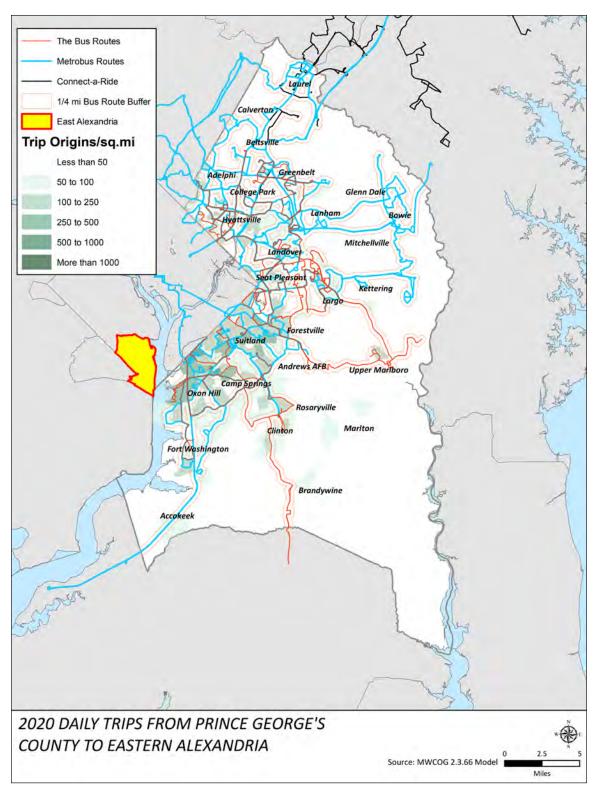


Figure 3.23 Trip Flows from Prince George's County Origins to Eastern Alexandria Based on MWCOG Trip Table

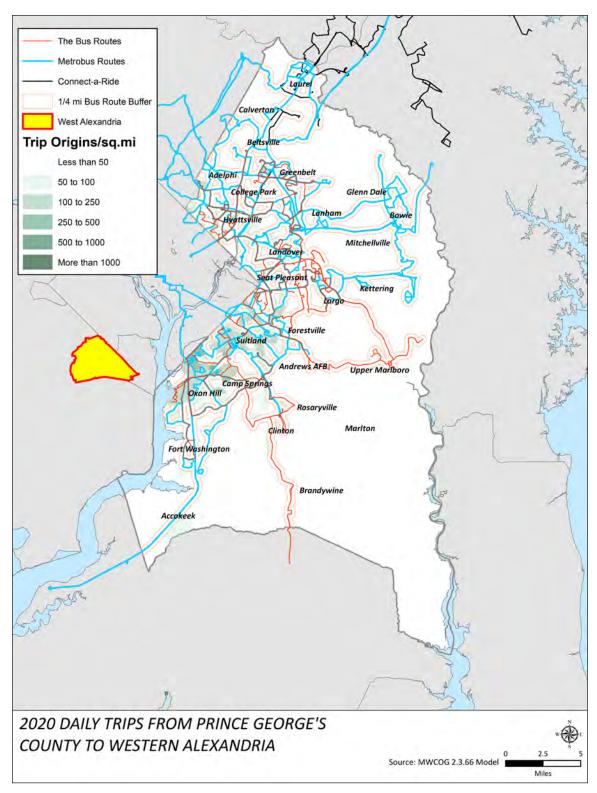


Figure 3.24 Trip Flows from Prince George's County Origins to Western Alexandria Based on MWCOG Trip Table

3-40

The final set of maps showing County origins to destinations outside the County relates to two destinations in Anne Arundel County, Fort Meade and Annapolis. These are shown in Figures 3.25 and 3.26 respectively.

The first map, in Figure 3.25, displays trip flows to Fort Meade from origins within the County. The data in the map shows the highest concentration of trip flows comes from the Laurel area, with no other portions of the County generating significant trips going to the

Fort Meade area. Access to Fort Meade using transit can be made via the Connect-a-Ride system, centered in Laurel in the northern portion of the County.

The data in Figure 3.26 shows trip flows from Prince George's County to Annapolis. The data shows the heaviest concentration of trip origins destined for Annapolis are in Bowie, with very minor flows from all other portions of the County.

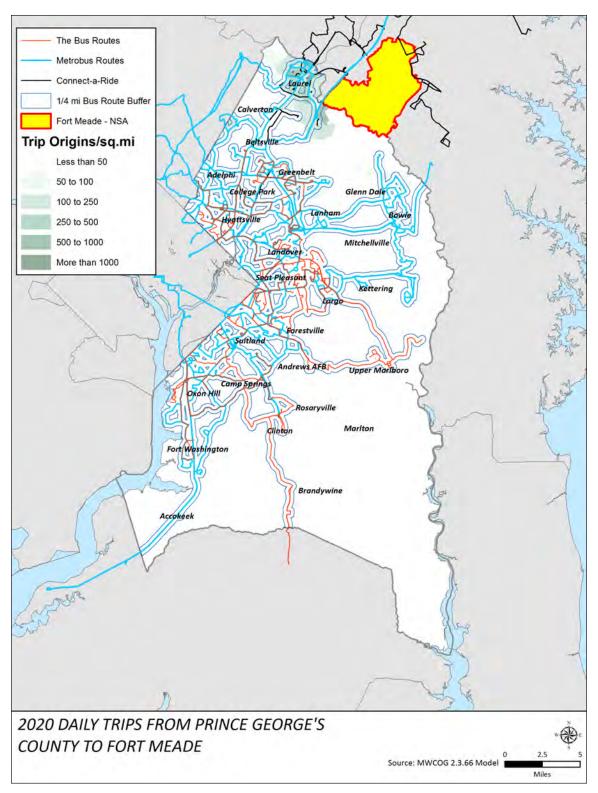


Figure 3.25 Trip Flows from Prince George's County Origins to Fort Meade Based on MWCOG Trip Table

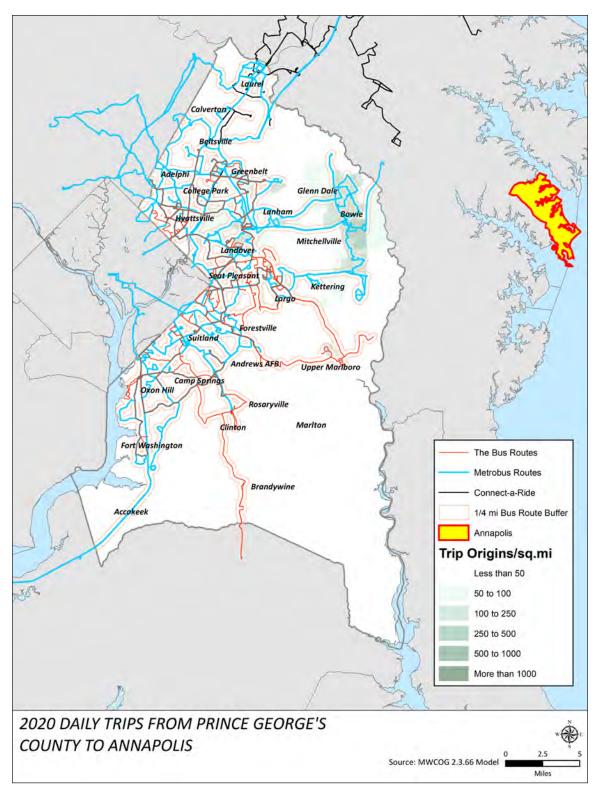


Figure 3.26 Trip Flows from Prince George's County Origins to Annapolis Based on MWCOG Trip Table

3.5.2 Trip Flows From Within Prince George's County to Activity Centers Identified as "Regional Transit Districts in "Plan 2035"

This set of maps show trip flows with origins in Prince George's County to activity centers located within the County that have been identified as the highest order activity center, Regional Transit District, in "Plan 2035". Evaluation of trip flows to each of these activity centers is outlined below but a key trend that consistently occurs for each destination is that the highest number of trips bound for the subject destination originate in areas that are adjacent to, or close by, the subject activity center. This trend highlights the opportunities provided by transit to increase access to these essential activity centers within the County if the service provided is convenient.

The first Regional Transit District evaluated is National Harbor, as shown in Figure 3.27. The data presented in the map shows two key patterns. The first is that the trips destined to National Harbor from within the County are generally concentrated in the southwestern portion of the County, typically in close proximity to National Harbor, including from Oxon Hill, Camp Springs, Clinton, and Fort Washington. The second is that many trip origins are concentrated in neighborhoods in this same southwest sector of the County, but inside the Beltway. Generally, the areas generating trips going to National Harbor are covered by the County's existing fixed route bus network.

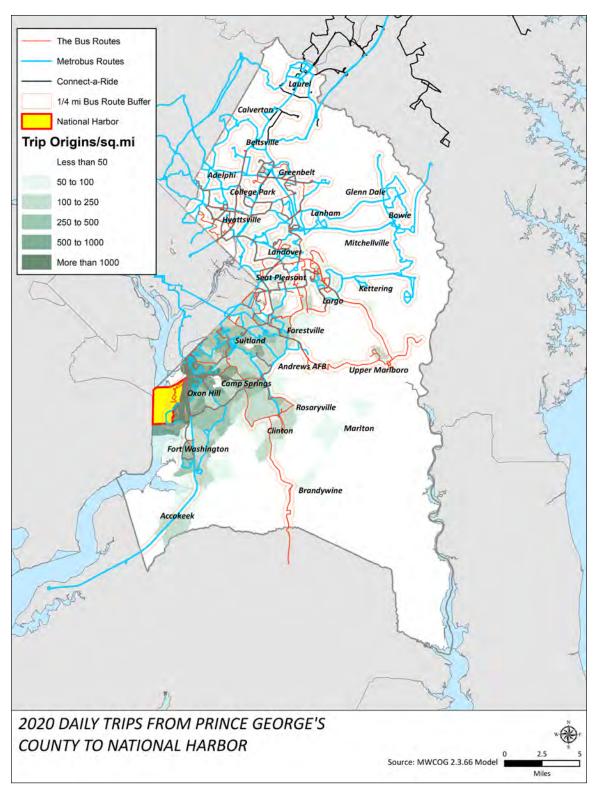


Figure 3.27 Trip Flows from Prince George's County Origins to National Harbor Based on MWCOG Trip Table

The second "Plan 2035" Regional Transit District evaluated is the Suitland Federal Center, shown in Figure 3.28. The data in the map shows that trips to the Federal Center from County origins are very concentrated in areas in close proximity to the Center, and in some instances from neighborhoods directly

adjacent to it. Areas farther away that generate trips to the Center include Upper Marlboro, Marlton, Brandywine, Bowie, and Hyattsville, Landover, and Largo. Generally, the areas of greatest trip generation are served by the County's existing fixed route transit network.

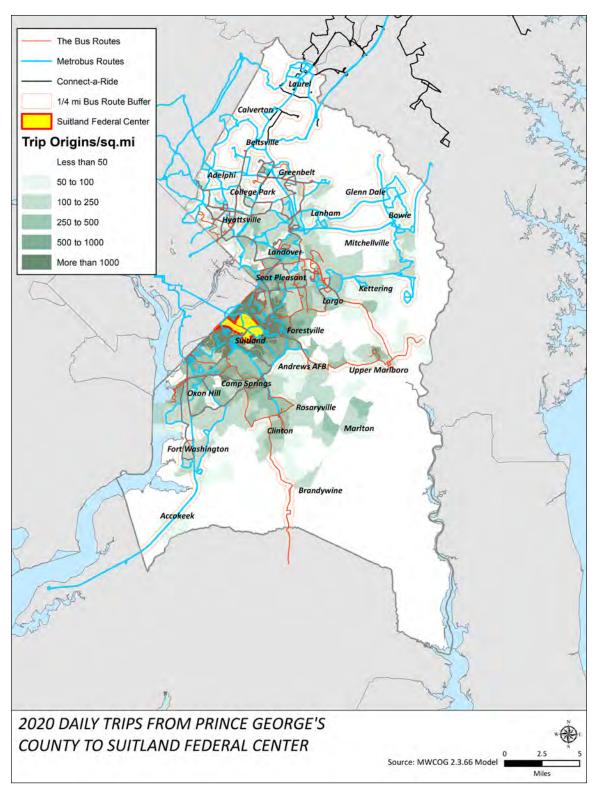


Figure 3.28 Trip Flows from Prince George's County Origins to Suitland Federal Center Based on MWCOG Trip Table

The next destination evaluated is Largo Town Center and Morgan Boulevard, as shown in Figure 3.29. Two key patterns predominate when reviewing the map. The first is the very heavy concentrations of origin trips in close proximity to the destination, including directly adjacent to it. The second is that Largo Town Center/Morgan Boulevard attracts trips from a

larger part of the County than the other destinations evaluated above. Largo is an important destination for trips originating from throughout the County but is also drawing a large number of trips from close-in areas. The portions of the County generating the most trips to the Largo Town Center are served by the County's fixed route transit network.

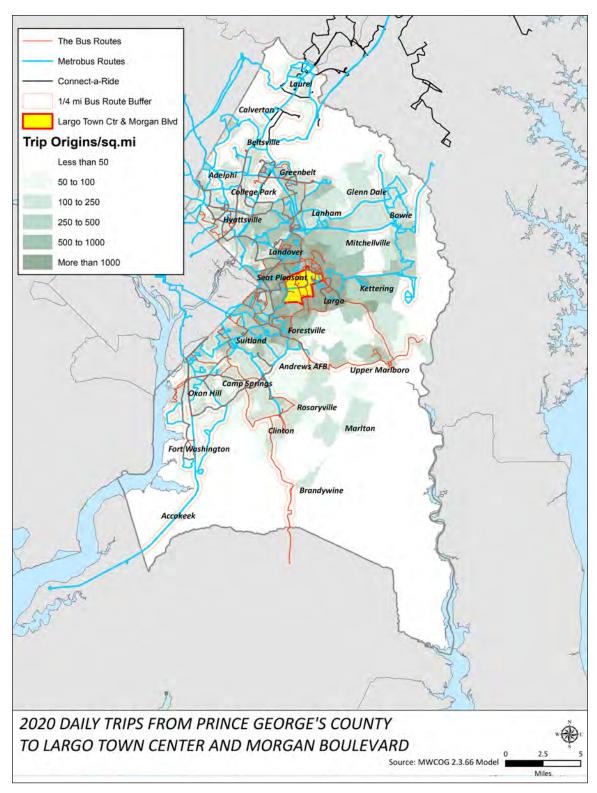


Figure 3.29 Trip Flows from Prince George's County Origins to Largo Town Center/ Morgan Boulevard Based on MWCOG Trip Table

Data in Figure 3.30 outlines trips originating in the County and going to the New Carrollton Regional Transit District. New Carrollton displays many of the same characteristics as the other Regional Transit Districts, with very heavy concentrations of trips adjacent or in very close proximity to the destination

but also trips originating farther out, though of note is that there is very little concentration of trip origins south of Upper Marlboro. New Carrollton is served by multiple fixed route transit services operated by both *TheBus* and Metrobus.

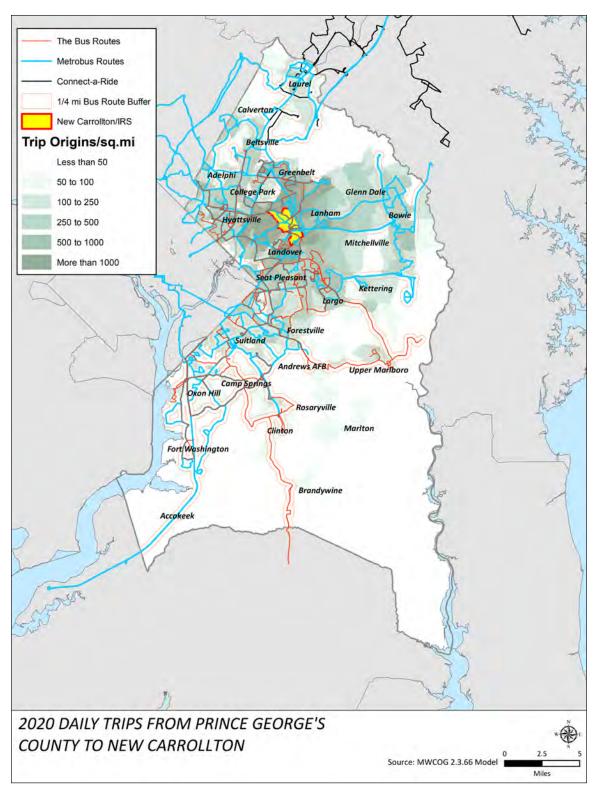


Figure 3.30 Trip Flows from Prince George's County Origins to New Carrollton Based on MWCOG Trip Table

Trips to Prince George's Plaza area are shown in Figure 3.31. The first pattern to note for Prince George's Plaza is comparable to other Regional Transit Districts evaluated above, with a heavy concentration of trips destined for the area originating

adjacent, or in close proximity, to the destination. The second is that the trip capture shed for the area does not extend much beyond its immediate area, unlike some of the larger destinations such as Largo Town Center and New Carrollton.

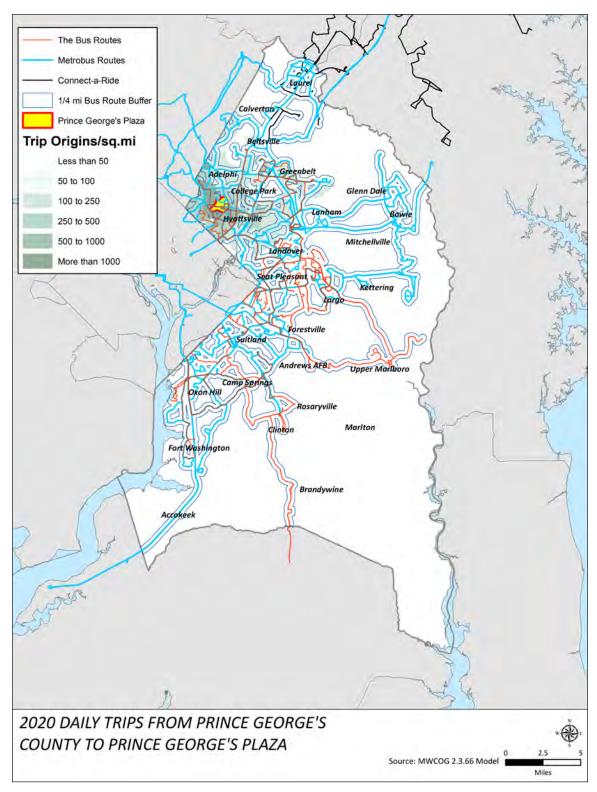


Figure 3.31 Trip Flows from Prince George's County Origins to Prince George's Plaza Based on MWCOG Trip Table

The data in Figure 3.32 shows trips originating in Prince George's County and destined for the College Park Regional Transit District. The same patterns that are present for the other Regional Transit Districts, specifically large trip flows to the destination and with heavy concentrations of these trip flows coming from

adjacent areas or from areas in very close proximity to College Park, also occur here. Of further note is that the heaviest trip flows are concentrated in the northern portion of the County, with very minimal trip flows coming from south of Upper Marlboro.

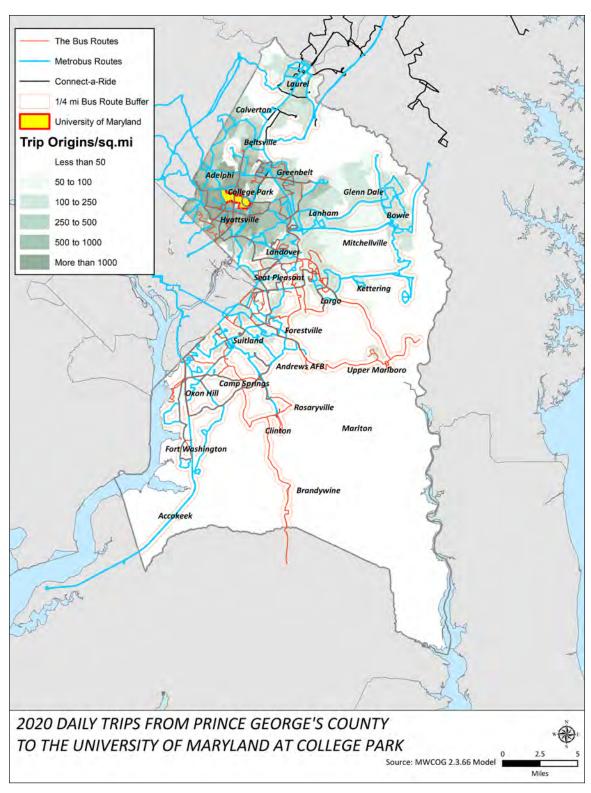


Figure 3.32 Trip Flows from Prince George's County Origins to College Park Based on MWCOG Trip Table

Figure 3.33 shows Prince George's trips to the Greenbelt Regional Transit District. The same trip flow patterns seen with the other Regional Transit Districts hold here as well. The heaviest density of trips is in close proximity and trip flows are concentrated in the

northern portion of the County, though the absolute number of trips is not as high as with the largest Regional Transit Districts such as Largo Town Center or New Carrollton.

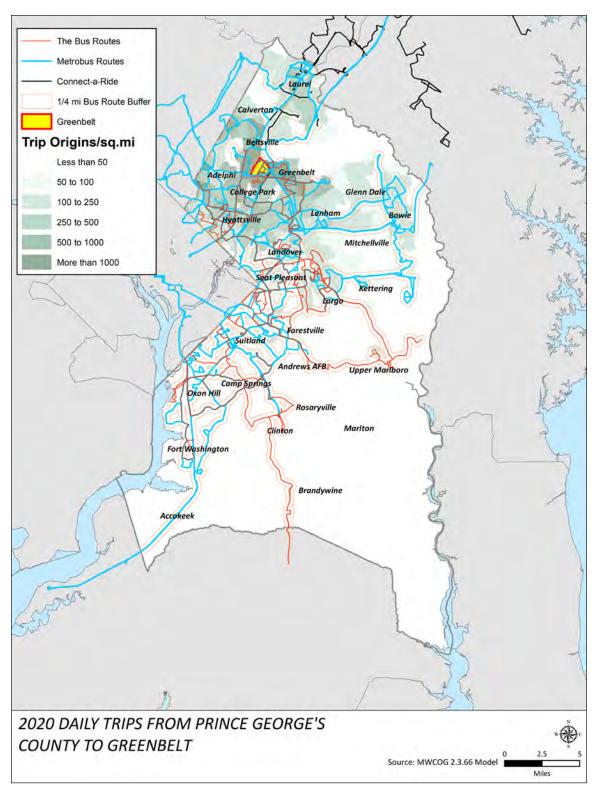


Figure 3.33 Trip Flows from Prince George's County Origins to Greenbelt Park Based on MWCOG Trip Table

3.5.3 Trip Flows From Within Prince George's County to Other Select Activity Centers within the County

The set of maps included in this sections displays origins within Prince George's County to select activity centers also located within the County. These maps are a companion set to the "Regional Transit District" maps evaluated in subsection 4.2. The destinations included here cover a range of activity centers meant to provide a sample of centers that are secondary to the Regional Transit Districts described above but are still important destinations for County residents.

The first of these "secondary" destinations is the Marlow Heights Shopping Center and Iverson Mall, as shown in Figure 3.34. These combined regional retail destinations show the same pattern as seen in "Regional Transit District Maps, with the origins of trips to the combined retail complex generally in very close proximity to the shopping centers. There are some trip origin concentrations a little farther out in Upper Marlboro, Clinton, and Rosaryville, though as noted, the heaviest concentrations are in close proximity to the destinations. This pattern again points to the opportunities for transit to provide greater access to these areas for local residents, if transit is convenient and flexible.

The next map contains data on origins for trips to Upper Marlboro. This map is shown in Figure 3.35. As with the other destinations evaluated, trips to Upper Marlboro from origins within the County are concentrated in close proximity to the County seat, with a few smaller concentrations located a little farther away from Upper Marlboro in Marlton, Rosaryville, and Largo.

Data in Figure 3.36, which shows the origins for trips to Bowie Town Center, displays the same general patterns for the other activity centers evaluated, with the highest trip concentrations in close proximity to the destination. Bowie does draw trips from farther out areas, though generally these areas are focused in the northern portion of the County, including Greenbelt, Hyattsville, Lanham, Upper Marlboro, and Landover.

Figure 3.37 shows Prince George's trips to the NASA Goddard Space Flight Center in the Greenbelt area. The same patterns for Prince George's origins present for other in-County destinations also hold here.

Figure 3.38 shows Prince George's trips to the Konterra area, an important growth area in the northernmost portion of the County. The same patterns as in the other maps hold here, with the heaviest concentration of trips coming from areas adjacent or in close proximity to Konterra, including heavy trip flows from adjacent Laurel.

The final map showing origins within Prince George's County to a destination also within Prince George's County is presented in Figure 3.39 and which shows trip flows to Bowie State University. The heaviest trip flows to Bowie State come from adjacent areas in Bowie as well Laurel. Smaller concentrations of trips to the University come from origins in the Greenbelt and Beltsville area.

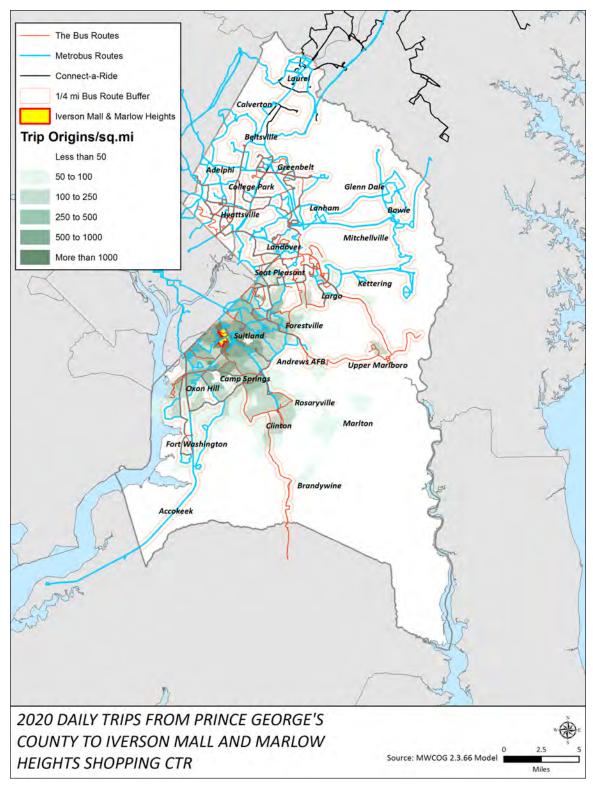


Figure 3.34 Trip Flows from Prince George's County Origins to Iverson Mall and Marlow Heights Shopping Center Based on MWCOG Trip Table

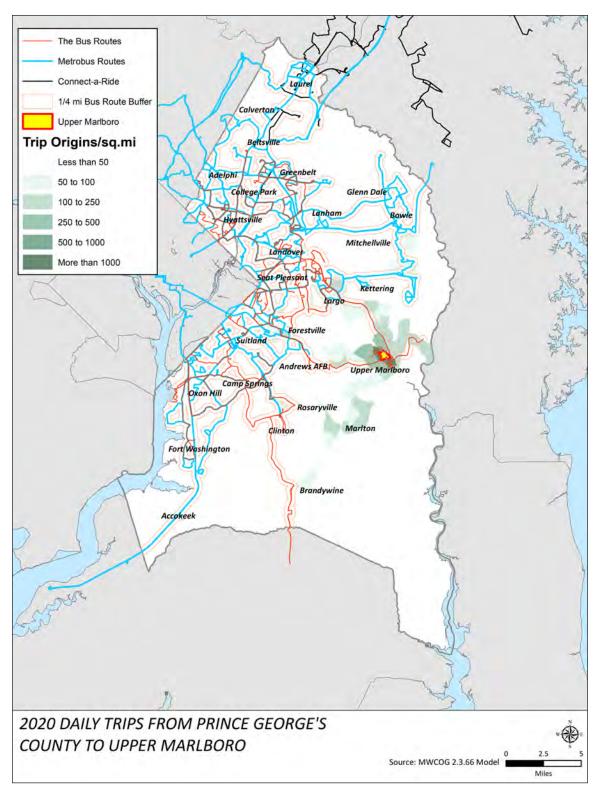


Figure 3.35 Trip Flows from Prince George's County Origins to Upper Marlboro Based on MWCOG Trip Table

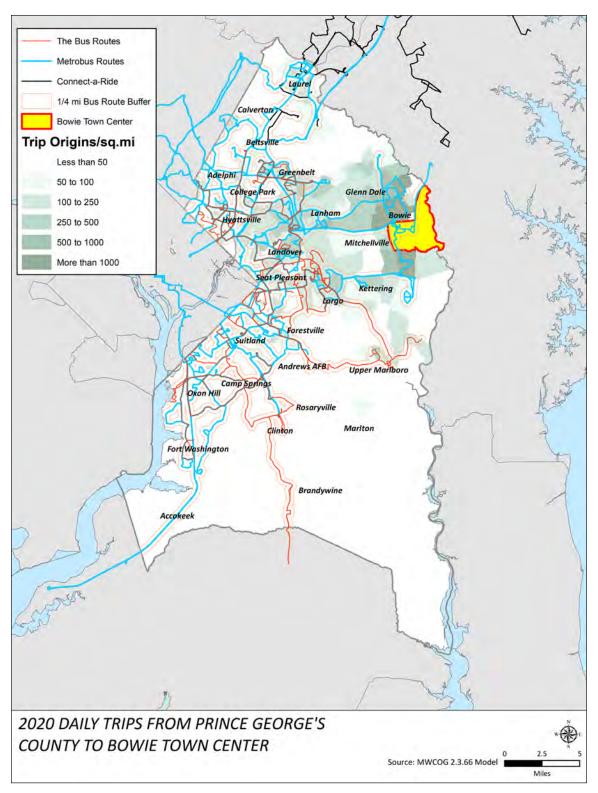


Figure 3.36 Trip Flows from Prince George's County Origins to Bowie Town Center Based on MWCOG Trip Table

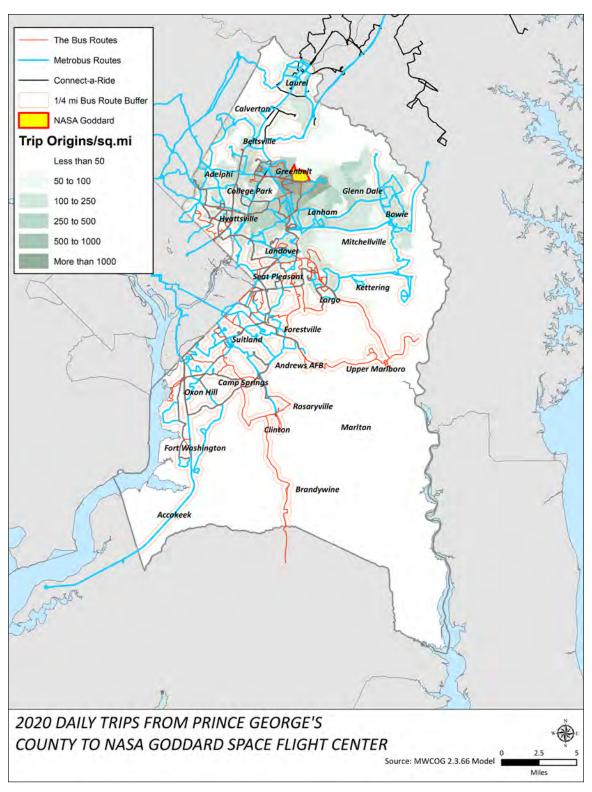


Figure 3.37 Trip Flows from Prince George's County Origins to the NASA Goddard Space Flight Center Based on MWCOG Trip Table

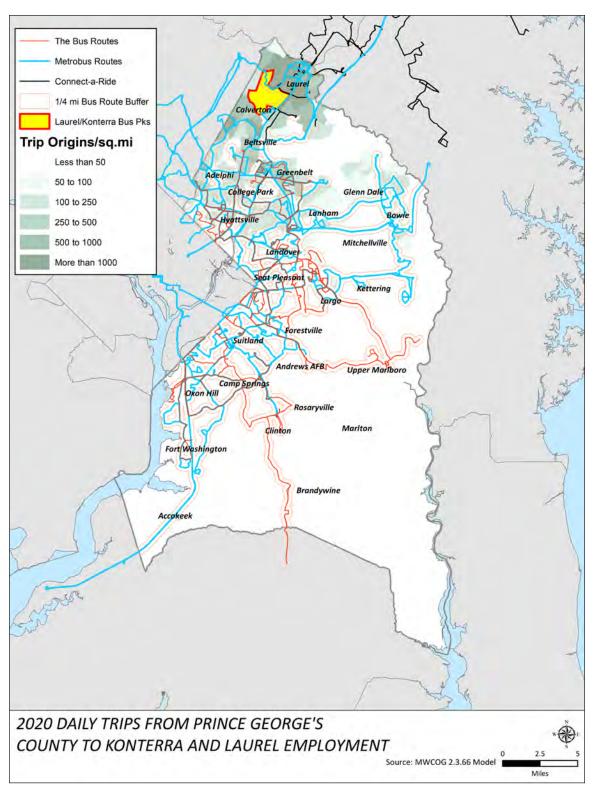


Figure 3.38 Trip Flows from Prince George's County Origins to Konterra Based on MWCOG Trip Table

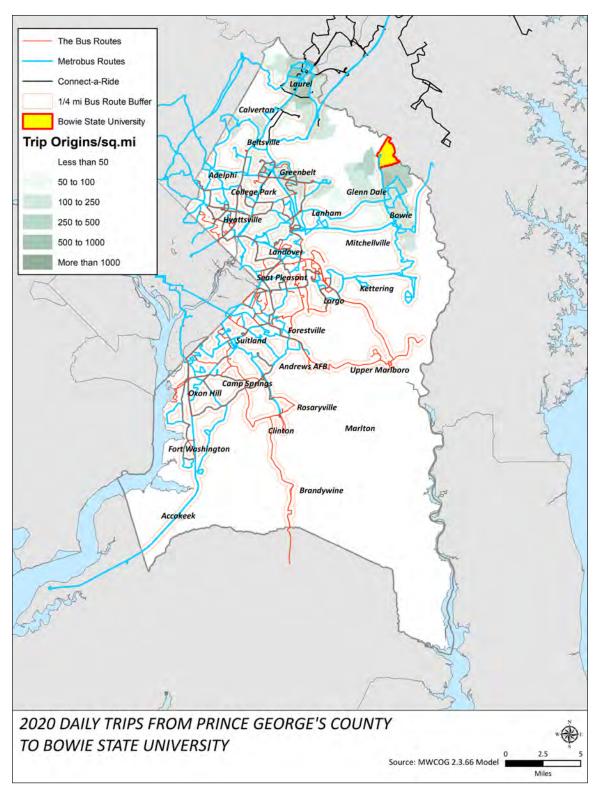


Figure 3.39 Trip Flows from Prince George's County Origins to Bowie State University Based on MWCOG Trip Table

3.6 Major Destination Categories

This section contains maps meant to supplement the data presented in previous sections and evaluates different destination categories that might typically be reached via transit, and compares those locations to the geographic coverage provided by the County's fixed route transit network.

The first map, shown in Figure 3.40 shows fixed route transit coverage relative to the location of Secondary schools within the County. The relevance of this map is that Secondary School students (high school students) are an important potential market for transit. The data in the map shows that a large majority of the County's Secondary Schools are served by fixed route transit, which is an important positive for this potential transit market. Secondary Schools in the southeastern portion of the County do not currently have service, as this portion of the County is not currently covered by fixed route service.

The second major destination category is government offices, as displayed in Figure 3.41. The data in the map shows that a large majority of the government offices within the County are served by fixed route transit. As with the Secondary Schools category, this is an important positive for those County citizens wishing to access government offices via transit.

The next map, contained in Figure 3.42, shows fixed route geographic coverage relative to Places of Worship in the County. The coverage of Places of Worship by the fixed route transit system is not as comprehensive as for the other categories evaluated above, especially in the southeastern portion of the County.

The final category map covers Colleges and Universities within the County, as represented in Figure 3.43. The data in the map shows that all of the higher education locations within the County are served by fixed route transit.

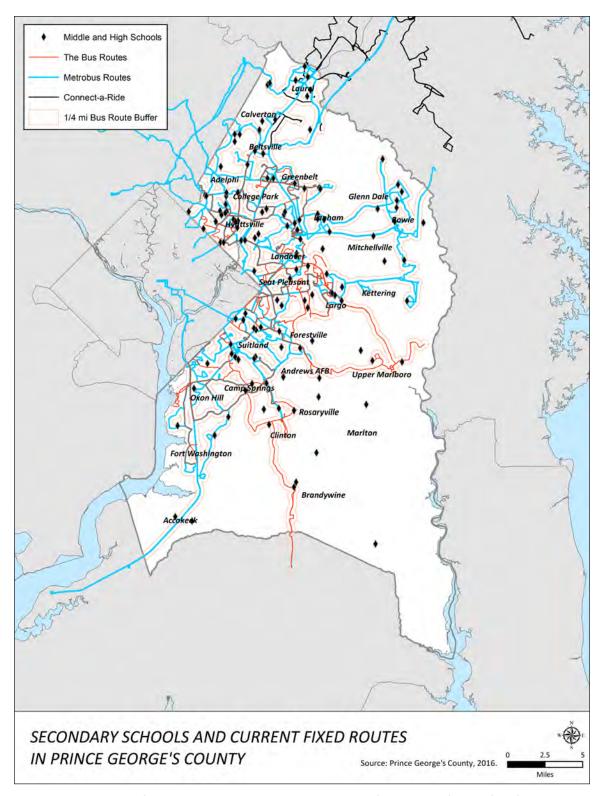


Figure 3.40 Fixed Route Transit Coverage Compared to Secondary School Locations

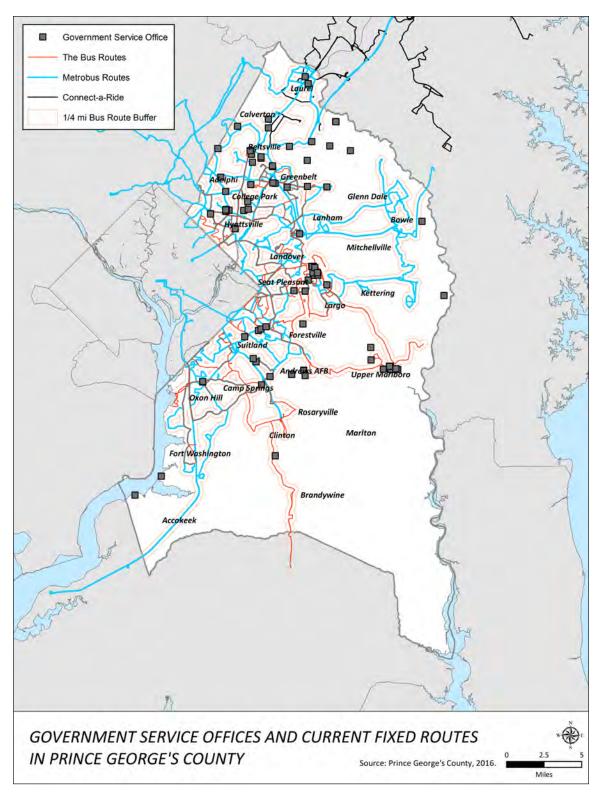


Figure 3.41 Fixed Route Transit Coverage Compared to Government Office Locations

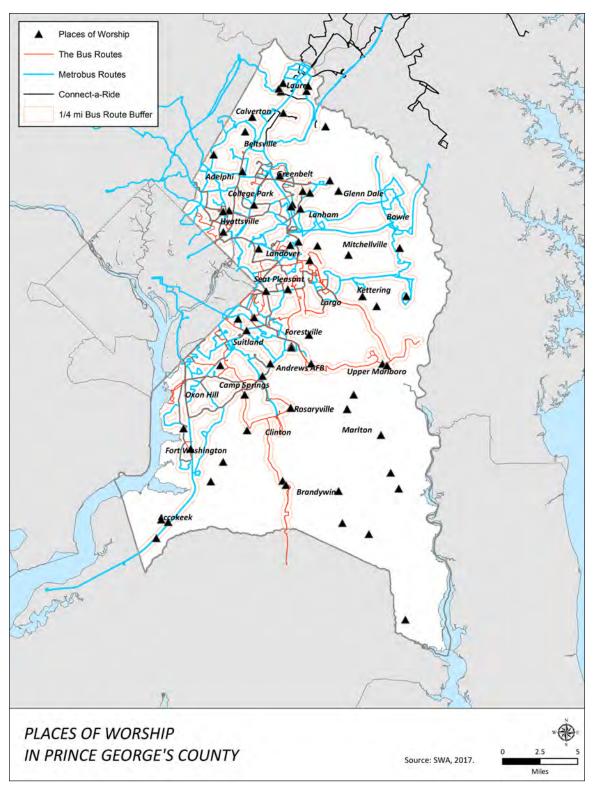


Figure 3.42 Fixed Route Transit Coverage Compared to Places of Worship

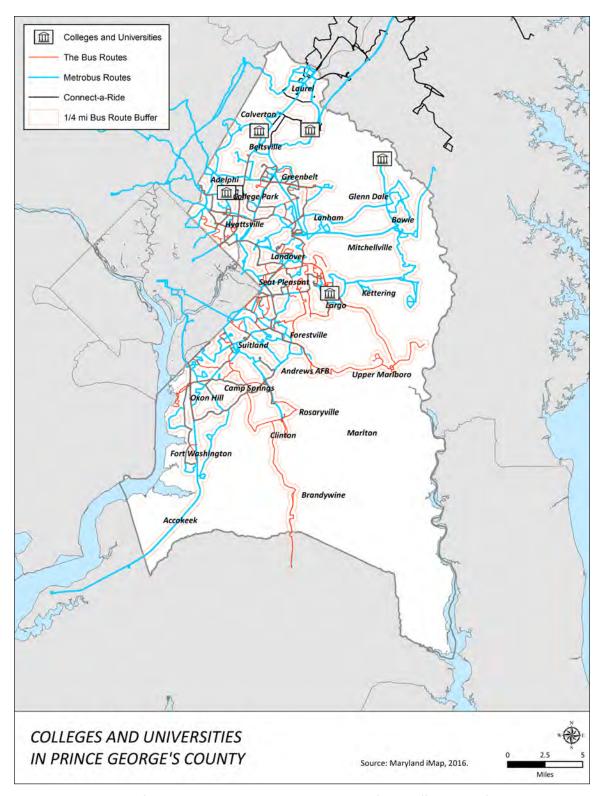


Figure 3.43 Fixed Route Transit Coverage Compared to Colleges and Universities

3.7 Future Development Status

The final map in this chapter is contained in Figure 3.47 and shows planned development within the County by development status, compared to the coverage of the existing fixed route transit system. The data shows that many of the planned developments are served by fixed route transit though many, especially in the southeastern portion of the County, are not served (proposed new services to provide first and last mile connections to the fixed route transit network will serve many of these new development areas, especially in Brandywine, Marlton, and Westphalia – see Chapter 4 for more detail).

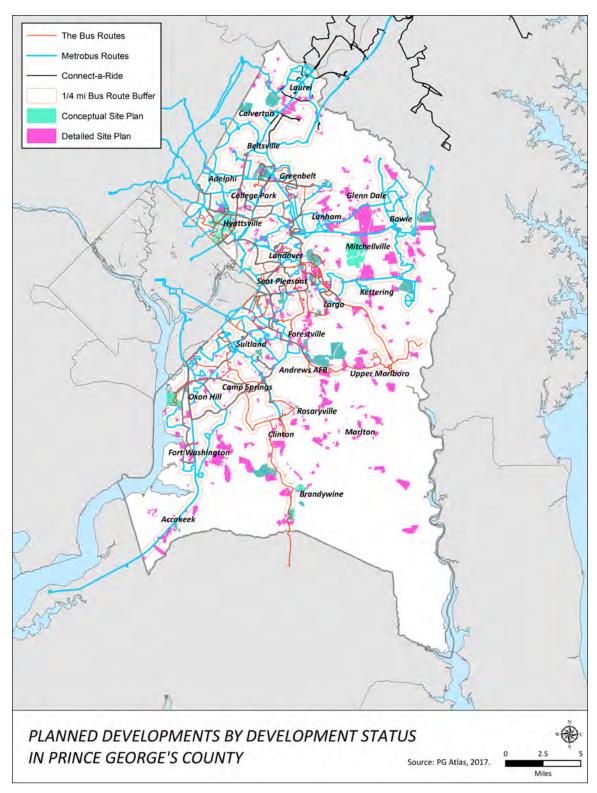


Figure 3.44 Fixed Route Transit Coverage Compared to Planned Development by Development Status

3.8 Summary Findings

Key patterns that can be identified from the analyses contained in the chapter include:

- A. The County's highest population and household densities primarily occur in the "inside-the-Beltway" portion of the County. On the whole, these areas are served by fixed route transit in terms of geographic coverage. Given the favorable transit market conditions inside the Washington Beltway, improvements to existing service (longer hours of service, more frequent service, weekend service) may be the most cost-effective approach to improving transit to the benefit of County residents.
- B. Most areas outside the Beltway with high population and household densities such as Bowie, Upper Marlboro, Laurel, Calverton and Beltsville are also served by transit. The same potential for improving existing transit services also applies to these parts of the County.
- C. Employment density forecasts from the Metropolitan Washington Council of Governments (MWCOG) show that the geographic distribution of high employment densities largely correspond to population densities. These areas of high employment densities are typically served by fixed route transit, though improvements in frequency, hours of service, and days of service may be warranted.

- D. Evaluation of MWCOG population and employment forecasts shows that the geographic distribution of the high population and employment densities within the County predominantly remain the same over the forecast years between 2015 and 2030, meaning dramatic geographic changes to the existing fixed route transit to encompass new growth areas may not be required.
- E. Autoless households and households living in poverty are concentrated in "inside-the-Beltway" communities already served by transit. This leads to the same conclusions noted above regarding how improvements to existing service may yield the most productive and cost-effective results.
- F. The trip flow analysis shows that trip origins within the County that are going to Washington DC destinations are chiefly concentrated in "inside-the-Beltway" communities and a few other areas such as Bowie, Upper Marlboro, Marlton, Brandywine, Oxon Hill, and Camp Springs. These areas are generally already served by fixed route transit.

- G. Origins for trips to Northern Virginia destinations are primarily concentrated in "inside-the-Beltway" communities. These destinations can be reached via transit through a combination of local bus and Metrorail.
- H. Prince George's origins for trips to destinations within Prince George's County are predominantly concentrated in areas directly adjacent, or in close proximity, to the destination. The largest destinations within the County include Largo Town Center, New Carrollton, and College Park, each of which is served by dense fixed route transit service.
- I. Secondary schools, higher education locations, and government offices within the County are generally served by the existing fixed route transit system. Places of Worship are more generally geographically dispersed throughout the County and therefore many lie outside the reach of the fixed route transit system.

J. Many areas of planned development are served by the existing fixed route transit system but other developments would require a geographic expansion of service to reach them. In most instances, the highest concentrations of future development will be served by an expansion of services focused on providing first/last mile connections to the fixed route transit network (see Chapter 4 for more detail).

Chapter 4

Final Vision for TheBus

All Transit Improvements: Financially Unconstrained



Chapter Purpose: This chapter describes the full set of transit improvements identified during the transit vision planning process. This set of improvements represents the County's financially unconstrained vision and aspirations for *TheBus*.

Chapter Sections:

- Introduction
- Transit Service Improvement Recommendations
 - Service Frequency Improvements
 - Saturday Service
 - Expanded Hours of Service
 - Route Modification and Extensions
 - Expansion of Service/First-Last Mile Connections
 - Administrative Staff Additions to Support Expanded Service

- Facility Recommendations
 - Passenger Facilities
 - Operations and Maintenance Facility

4.1 Introduction

This report chapter identifies the full set of transit improvements that were identified during the transit vision planning process, and which are proposed for ultimate implementation. The recommendations outlined here represent the County's full vision and aspirations for *TheBus* network if there were no constraints on the financial resources available to implement this vision.

Because financial resources are not available to immediately implement the full set of recommendations described here, an implementation phasing plan for the five year plan time frame is outlined in Chapter 5. This plan consists of three phases; short term (years 1 and 2), mid term (years 3 and 4), and long term (year 5). In addition, because not all recommendations will be implemented during the five year plan time frame, there is also a "beyond five years" implementation phase.

The process leading to the development of the full set of financially unconstrained recommendations is outlined in detail in Chapter 1.

The description of the program of transit improvement recommendations begins in Section 4.2.

4.2 Transit Service Improvement Recommendations

The recommendations described in this chapter section represent the full set of service improvements that together reflect Prince George's County's aspirations for the *TheBus* system, and covers recommendations related to:

- Improvements in service frequency, or the time between bus arrivals at a stop
- Improvements in weekday hours of service
- Expansion of service to Saturdays
- Modifying routes to make them more direct and convenient (in the short term these modifications can improve ridership by making service more convenient and attractive to current non-riders)
- Extending existing routes to key activity centers to strengthen connections within the County
- Utilizing paratransit vehicles to provide first and last mile connections in parts of the County that are not currently served by the County's fixed route system. If these services are successful, they may ultimately be converted to fixed route service.



In addition to these service recommendations the County will continue to implement additional bikeshare stations in close proximity to bus stops and Metrorail stations to enhance access to *TheBus* and to promote alternative methods of travel to and from activity centers.

The recommendations contained in this section cover the full financially unconstrained vision of service improvements in the County.

The actual service recommendations for each route are based on route categories that reflect each route's ridership characteristics, service area characteristics (population density, employment density, prevalence of low income residents, autoless households, and senior residents and, the number and type of activity centers served by the route), and the number of, "Transforming Neighborhood Initiative" communities served by each route. Each route category, and the criteria that were used to categorize the routes into one of the three categories, are described in greater detail in Chapter 2.

It is important to note that the criteria noted in the table are general guidelines for categorizing routes. Given the widely varying land use characteristics within the County and the wide range of ridership on different routes within *TheBus* system, routes generally do not meet all of the criteria associated with each category. Rather, assignment of a route to one of the three categories was based on the overall trend of the full set of criteria.

The route categories, in turn, provided the framework for the development of minimum standards for each service element, for each route category. The minimum standards for each service improvement area are also summarized in Chapter 2.

4.2.1 Improvements to Service Frequency

The first set of recommendations relates to service frequency, or the length of time between bus arrivals at a stop. Wait time between buses is one of the fundamental components of a transit service's attractiveness. The higher the frequency, or the less time a passenger has to wait for a bus to arrive, the more convenient and flexible the service is for riders to use.

Current *TheBus* riders, especially the large majority of current riders who do not have access to an automobile, would benefit greatly from more frequent service. Shorter wait times would provide them with much greater flexibility in carrying out their day-to-day activities, including getting to work, shopping, medical visits, and recreation. Further, improved frequencies would lower the amount of time they would need to dedicate to traveling to work and other activities, thus freeing their time to address other priorities and enhancing their quality of life.

Improved frequencies would also increase the ability to attract riders who have other travel and mobility options. The ability to attract these "choice" riders is an important foundation for many of the County's land use goals, including the growth of walkable, 24-hour centers where a person can reside without an automobile. The County's most recent comprehensive land use plan, "Plan 2035" has identified the growth of these non-auto centric centers as key land use goal.



Improved Wait Time Between Buses

The full set of frequency improvement recommendations is described in the following sections by route category. The geographic section of the County in which the improvements occur, is also noted for each improvement.

The first set of service frequency improvements is contained in Section 4.2.1.1 and outlines recommended improvements for the "Major" route category. These recommendations are summarized in Table 4.1 and also displayed in Figure 4.1.

The last column in Table 4.1 (and the other Recommendation tables contained in Chapter 4) provides a summary of needs addressed through implementation of the proposed improvement and thus also the benefits to be accrued through improvement implementation.

Vehicles required for off-peak service frequency expansions are noted in Tables 4.1 and 4.2 but actual additions to the vehicle fleet will not be required to meet these service changes because there are smaller

total vehicle pull out requirements in the off peak. Therefore, they are not added to the "additional vehicles required" total.

 Table 4.1 Frequency Improvement Recommendations - Major Routes

TheBus Route	Time of Day	Current Frequency	Proposed Frequency	Estimated Annual Cost	Additional Vehicles Required	Needs Addressed		
North County								
16	Peak	30	20	\$552,500	2	a, b, c, h, i		
16	Off-Peak	60	30	\$325,000	2	a, b, c, h, i		
17	Peak	30	20	\$455,000	2	a, d, h		
18	Peak	40	20	\$1,625,000	5	a, d, f, h, i		
18	Off-Peak	80	30	\$520,000	4	a, d, f, h, i		
Total - North County			\$3,477,500	9				
20	Off-Peak	60	30	\$390,000	2	e, f, g, h, i		
21	Peak	30	20	\$455,000	2	a, c, d, g, h, i		
21	Off-Peak	50-60	30	\$390,000	2	a, c, d, g, h, i		
32	Peak	30	20	\$455,000	2	e, i		
Total - Central County				\$1,690,000	6			
Total Service Frequency Improvements - Major Routes				\$5,167,500	15			

	Addressed Needs Key							
	a = Plan 2035 Regional Transit District served/24 hour center							
_	b = Medical facility served							
- - -	c = Major new development served							
_	d = Educational facility served							
_	e = Plan 2035 Local Center served							
	f = Transform Neighborhood Initiative community							
_	g = Major governmental facility							
_	h = Metro station/transit hub served							
_	i = High ridership route							

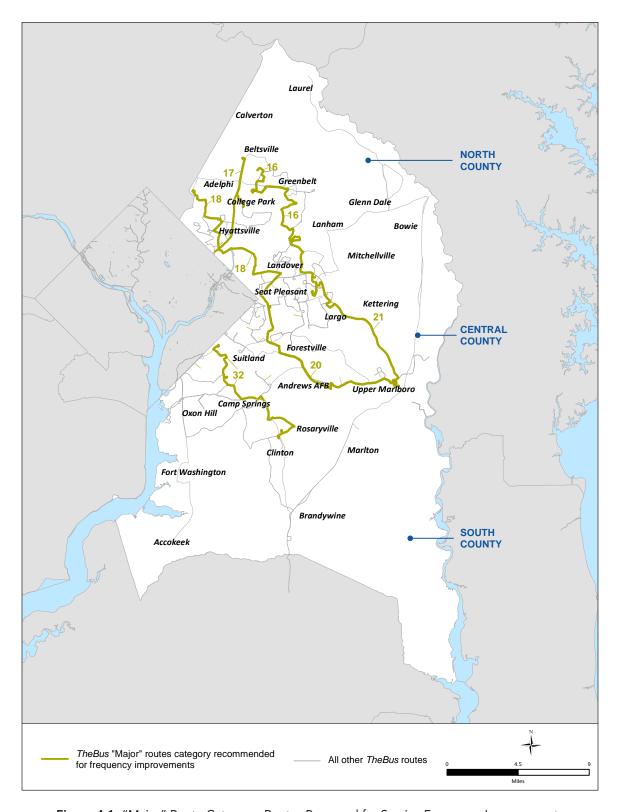


Figure 4.1 "Major" Route Category: Routes Proposed for Service Frequency Improvements

4.2.1.1 Service Frequency Improvement Recommendations: "Major Route Category"

TheBus Route 16

New Carrollton Metro - Greenbelt Metro

Improvement Recommendation:

- Improve peak period wait time between buses to 20 minutes from current 30 minutes
- Improve off-peak wait time between buses to 30 minutes from current 60 minutes

Major Destinations on Route:

- Greenbelt and New Carrollton Metrorail Stations
- Doctors Community Hospital
- Beltway Plaza, Shoppes at New Carrollton, and Carrollton shopping centers

TheBus Route 17

Mount-Rainier - College Park Ikea

Improvement Recommendation:

- Improve peak period wait time between buses to 20 minutes from current 30 minutes
- Off-peak standards for "Major" route category already met

Major Destinations on Route:

- College Park Metrorail Station
- University of Maryland, Dematha High School
- County Services Building in Hyattsville

TheBus Route 18

Takoma Langley - Addison Road Metro

Improvement Recommendation:

- Improve peak period wait time between buses to 20 minutes from current 40 minutes
- Improve off-peak wait time between buses to 30 minutes from current 80 minutes

Major Destinations on Route:

- Takoma Langley Transit Center
- Prince George's Plaza, Addison Road, Cheverly Metrorail Stations

TheBus Route 20

Addison Road - County Courthouse (Upper Marlboro)

Improvement Recommendation:

- Improve off-peak period wait time between buses to 30 minutes from current 60 minutes
- Peak standards for "Major" route category already met

Major Destinations on Route:

- Addison Road Metrorail Station
- Upper Marlboro
- Centre at Forestville, Pen Mar Shopping Center

TheBus Route 21

New Carrollton - County Courthouse (Upper Marlboro)

Improvement Recommendation:

- Improve peak period wait time between buses to 20 minutes from current 30 minutes
- Improve off-peak wait time between buses to 30 minutes from current 50-60 minutes

Major Destinations on Route:

- New Carrollton Metrorail Station
- Upper Marlboro
- Kaiser Permanente Regional Headquarters at New Carrollton and Future Hospital at Largo Town Center
- Prince George's Community College
- Boulevard @ Cap Center, Largo Town Center, Centre at Forestville, and Pen Mar Shopping Center

TheBus Route 32

Clinton Fringe P&R - Naylor Road Metro

Improvement Recommendation:

- Improve peak period wait time between buses to 20 minutes from current 30 minutes
- Off-peak standards for "Major" route category already met

Major Destinations on Route:

- Naylor Road Metrorail Station
- Shops @ Iverson, Marlow Heights Shopping Center, Walmart/Lowes Shopping Center on Woodyard Road

4.2.1.2 Service Frequency Recommendations: "Local" Route Category

The second set of service frequency improvements is contained in this report section and outlines recommended improvements for the "Local" route category. These recommendations are summarized in Table 4.2 and also displayed in Figure 4.2.

Table 4.2 Frequency Improvement Recommendations - Local Routes

TheBus Route	Time of Day	Current Frequency	Proposed Frequency	Estimated Annual Cost	Additional Vehicles Required	Needs Addressed	
North County							
12	Off-Peak	60	45	\$162,500	1	e, h	
13	Peak	40	30	\$227,500	1	a, e, h	
14	Peak	45	30	\$227,500	1	a, d, e, h	
15x	Peak	40	30	\$260,000	1	a, c, h	
Total - North	County			\$877,500	3		
			Central County	,			
23	Peak	40	30	\$227,500	1	e, h	
26	Peak	45	30	\$227,500	1	a, c, d, e, h	
28	Peak	45	30	\$227,500	1	a, c, h	
30	Peak	50	30	\$455,500	2	a, b, h	
30	Off-Peak	50	45	\$195,000	1	a, b, h	
33	Peak	40	30	\$227,500	1	e, h	
Total - Central County				\$1,560,500	6		
			South County				
35	Off-Peak	60	45	\$130,000	1	a, e, h	
36	Peak	45	30	\$227,500	1		
Total - South County				\$357,500	1		
Total Service Frequency Improvements - Local Routes				\$2,795,500	10		

a = Plan 2035 Regional Transit District served/24 hour center b = Medical facility served c = Major new development

- d = Educational facility served
- e = Plan 2035 Local Center served f = Transform Neighborhood
- Initiative community
- g = Major governmental facility
- h = Metro station/transit hub served
- i = High ridership route

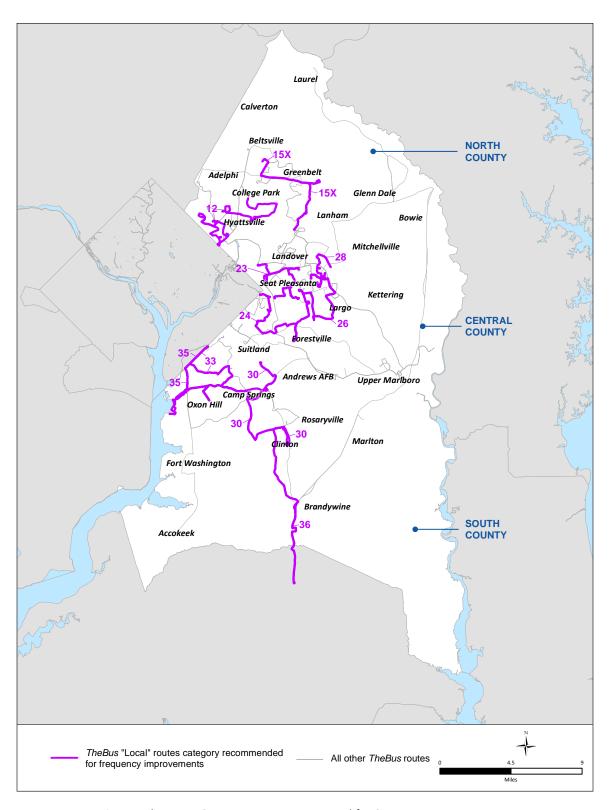


Figure 4.2 "Local" Route Category: Routes Proposed for Service Frequency Improvements

Greenbelt Metro - Greenway Center

Improvement Recommendation:

 No improvement recommendations: Peak and Off-Peak standards for "Local" Routes already met.

Major Destinations on Route:

- Greenbelt Metrorail Station
- Eleanor Roosevelt High School
- Federal Court at Greenbelt
- Greenway Shopping Center

TheBus Route 12

West Hyattsville Metro - Gwinn Britt Senior Center

Improvement Recommendation:

- Improve off-peak period wait time between buses to 45 minutes from current 60 minutes
- Peak standards for "Local" route category already met

Major Destinations on Route:

West Hyattsville Metrorail Station

The Bus Route 13

West Hyattsville Metro - County Service Building

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 45 minutes
- Off-peak standards for "Local" route category already met

Major Destinations on Route:

- Prince George's Plaza and West Hyattsville Metrorail Stations
- County Services Building, County Courts
- Mall at Prince George's Plaza

TheBus Route 14

Prince George's Plaza Metro-College Park Metro

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 45 minutes
- Off-peak standards for "Local" route category already met

Major Destinations on Route:

- Prince George's Plaza and College Park Metrorail Stations
- Riverdale MARC Station
- University of Maryland

TheBus Route 15x

Greenbelt Metro - New Carrollton Metro

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 40 minutes
- The 15x is a peak period service only

Major Destinations on Route:

- Goddard Space Flight Center
- Greenbelt and New Carrollton Metrorail Stations
- Kaiser Permanente Regional Headquarters at New Carrollton
- Beltway Plaza and Greenway Shopping Center
- Eleanor Roosevelt High School

TheBus Route 21x

New Carrollton Metro - Prince George's Community College

Improvement Recommendation:

 No improvement recommendations: Peak and Off-Peak standards for "Local" Routes already met.

Major Destinations on Route:

- New Carrollton Metrorail Station
- Kaiser Permanente Headquarters at New Carrollton
- Prince George's Community College
- Largo Town Center and Largo Plaza Shopping Center

TheBus Route 23

Addison Road Metro - Sheriff Road

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 40 minutes
- Off-peak standards for "Local" route category already met

Major Destinations on Route:

- Addison Road and Cheverly Metrorail Stations
- Prince George's Sports and Learning Complex

TheBus Route 24

Capitol Heights - Morgan Boulevard Metrorail Station

Improvement Recommendation:

• No improvement recommendations: Peak and Off-Peak standards for "Local" Routes already met.

Major Destinations on Route:

- Capital Heights and Morgan Boulevard Metrorail Stations
- Penn Station Shopping Center

The Bus Route 26

Morgan Boulevard Metro - Largo Town Center Metro

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 45 minutes
- Off-peak standards for "Local" route category already met

Major Destinations on Route:

- Morgan Boulevard and Largo Town Center Metrorail Stations
- Kaiser Permanente Headquarters at New Carrollton, Future hospital at Largo Town Center
- Boulevard @ Cap Center, Largo Plaza, Largo Town Center

The Bus Route 27

Landover Metro - Kent Village

Improvement Recommendation:

 No improvement recommendations: Peak and Off-Peak standards for "Local" Routes already met.

Major Destinations on Route:

- Landover Metrorail Station
- Dodge Plaza Shopping Center

Largo Town Center Metro - Woodmore Town Center

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 45 minutes
- Off-peak standards for "Local" route category already met

Major Destinations on Route:

- Largo Town Center Metrorail Station
- Future Hospital at Largo Town Center
- Woodmore Town Center
- Boulevard @ Cap Center Shopping Center

TheBus Route 30

Branch Avenue Metro - Southern Maryland Hospital

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 50 minutes
- Improve off-peak wait time between buses to 45 minutes from current 80 minutes

Major Destinations on Route:

- Branch Avenue Metrorail Station
- Southern Maryland Hospital

TheBus Route 33

Padgett's Corner Shopping Center - Southern Avenue Metro

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 45 minutes
- Off-peak standards for "Local" route category already met

Major Destinations on Route:

• Southern Avenue Metrorail Station

TheBus Route 35

Southern Avenue Metro - Camp Springs

Improvement Recommendation:

- Improve off-peak period wait time between buses to 45 minutes from current 60 minutes
- Peak standards for "Local" route category already met

Major Destinations on Route:

- Southern Avenue Metrorail Station
- National Harbor
- MGM Grand
- Tanger Outlets and Rivertowne Commons shopping centers

TheBus Route 36

Clinton Fringe P&R - Mattawoman Beantown Road P&R

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 45 minutes
- Off-peak standards for "Local" route category already met

Major Destinations on Route:

• Brandywine Crossing Shopping Center

TheBus Route 37

Camp Springs - Southern Avenue Metro

Improvement Recommendation:

• No improvement recommendations made. Peak standards for "Local" route category already met. The 37 route only runs in the peak period

Major Destinations on Route:

• Southern Avenue Metrorail Station

4.2.1.3 Service Frequency Recommendations: "Community" Route Category

The final set of service frequency improvements is contained in this section and outlines recommended improvements for the "Community" route category. These recommendations are summarized in Table 4.3 and also displayed in Figure 4.3.

 Table 4.3
 Frequency Improvement Recommendations - Community Routes

TheBus Route	Time of Day	Current Frequency	Proposed Frequency	Estimated Annual Cost	Additional Vehicles Required	Needs Addressed
			Central County			
22	Peak	40	30	\$227,500	1	e, h
			South County			
53	Peak	45	30	\$227,500	1	g
Total - Commun	ity Routes			\$455,000	2	

Addressed Needs Key

- a = Plan 2035 Regional Transit District served/24 hour center
- b = Medical facility served
- c = Major new development served
- d = Educational facility served
- e = Plan 2035 Local Center served
- f = Transform Neighborhood Initiative community
- g = Major governmental facility
- h = Metro station/transit hub served
- i = High ridership route

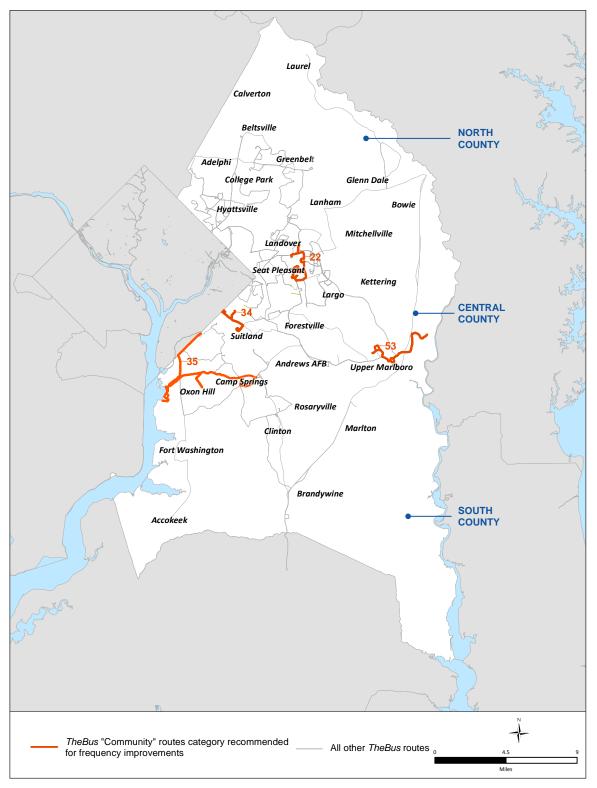


Figure 4.3 "Community" Route Category: Routes Proposed for Service Frequency Improvements

TheBus Route 22

Morgan Boulevard Metro - Chatsfield Way

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 40 minutes
- Off-peak standards for "Community" route category already met

Major Destinations on Route:

- Morgan Boulevard Metrorail Station
- Prince George's Sports and Learning Complex

TheBus Route 25

Capital Heights Metro - Highview Place

Improvement Recommendation:

 No frequency improvements proposed. Peak period and off-peak period standards for "Community" route category already met

Major Destinations on Route:

• Capitol Heights Metrorail Station

TheBus Route 34

Suitland Metro - Capital Crossing Apartments

Improvement Recommendation:

 No frequency improvements proposed. Peak period and off-peak period standards for "Community" route category already met

Major Destinations on Route:

• Suitland Metrorail Station

TheBus Route 35s

Oxon Hill P&R - Fort Washington Senior Residences

Improvement Recommendation:

 No frequency improvements are proposed. A separate proposal will transition the route from a fixed-route service to a service provided as a "First Mile/Last Mile Connection" service

Major Destinations on Route:

- National Harbor
- Fort Washington Medical Center

TheBus Route 53

Villages of Marlboro - Marlboro Meadow

Improvement Recommendation:

- Improve peak period wait time between buses to 30 minutes from current 50 minutes
- Off-peak standards for "Community" route category already met

Major Destinations on Route:

Upper Marlboro

4.2.2 Expand Service to Saturday

Currently, *TheBus* provides service Monday through Friday, with no service on Saturday or Sunday. Expansion of service to Saturday was identified as a key need through multiple sources during the information gathering process. Riders overwhelmingly identified it as their highest priority through the onboard survey, at the "pop-up" meetings held at the beginning of the process, and at the four public meetings held throughout the County. It was also consistently identified as one of the top priorities during the stakeholder interview process.

The importance of Saturday service is based on two related factors. The first is the profile of the majority of passengers using *TheBus*. This typical rider is someone who does not have access to an automobile and thus is heavily dependent on transit for their mobility. Saturday service would dramatically expand opportunities for these riders in terms of potential job opportunities as well as in completing other activities such as doctor's visits, shopping, and recreation. The expanded flexibility provided by Saturday service would be an important step in improving the typical rider's quality of life.

The second factor pertains to the County's work force characteristics. A large percentage of the County's residents work in occupations such as health care or leisure and hospitality that do not have traditional "9-5" work hours. The residents working in these types of jobs are often the same people who do not have regular access to an automobile and thus rely on transit for the full range of their trip needs, including access to work. Both of these factors combine to make Saturday service essential to their livelihoods.

Finally, the staff from the County's Economic Development Corporation indicated that the ability to serve non-traditional work hours is essential for County employers, who often lose good employees working non-traditional hours because of their difficulty in getting to work.



The highest priority for expansion of service to Saturday is for routes assigned to the "Major" route category. These are summarized in

Table 4.4. The cost estimates for expansion of service to Saturday for these routes is based on a span of service between 6:00 AM and 9:00 PM and a service frequency of 30 minutes.

The 2nd highest priority for expansion of service to Saturday is for routes assigned to the "Local" route category. These are summarized in Table 4.5. The cost estimate for these routes is based on a span of service of 6:00 AM to 8:00 PM and a service frequency of 45 minutes.

One Community route, *TheBus* 34, is proposed for expansion to Saturday based on its high ridership. The cost estimate for this route is based on a span of service of 6:00 AM to 8:00 PM and a service frequency of 30 minutes (which reflects its short trip time and the current weekday frequency of 15 minutes all day) The estimated cost for the 34 is also included in Table 4.5.

It should be noted that Prince George's County provides complementary Call-A-Bus service on weekdays for those County residents who do not have access to *TheBus* network. At this time it is assumed WMATA Metro Access, which currently operates on Saturdays, will be able to provide this complementary service for *TheBus* expansion of service to Saturday.

Table 4.4 Expansion of Service to Saturday: Operating Cost Estimate for the "Major" Route Category

TheBus Route	Estimated Annual Operating Cost	Needs Addressed	
	North County		
16	\$416,000	a, b, c, h, i	
17	\$312,000	a, d, h	
18	\$624,000	a, d, f, h, i	
Total - North County	\$1,352,000		
	South County		
20	\$416,000	e, f, g, h, i	
21	\$520,000	a, c, d, g, h, i	
32	\$416,000	e, i	
Total - South County	\$1,352,000		
Total - Major Routes	\$2,704,000		
Call-A-Bus Complementa	ırv Service		

Addressed Needs Key
a = Plan 2035 Regional Transit District served/24 hour center
b = Medical facility served
c = Major new development served
d = Educational facility served
e = Plan 2035 Local Center served
f = Transform Neighborhood Initiative community
g = Major governmental facility
h = Metro station/transit hub served
i = High ridership route

Note: Expansion of service to Saturday would not require a fleet expansion. Vehicles in the current fleet can be used to provide this service.

Table 4.5 Expansion of Service to Saturday: Operating Cost Estimate for the "Local" Route Category

TheBus Route	Estimated Annual Operating Cost	Needs Addressed
	North County	
11	\$182,000	a, d, h
12	\$182,000	e, h
13	\$182,000	a, e, h
14	\$182,000	a, d, e, h
15x	\$182,000	a, c, h
Total - North County	\$910,000	
	Central County	
21x	\$182,000	a, c, d, h
23	\$182,000	e, h
24	\$273,000	e, f, h, i
26	\$182,000	a, c, d, e, h
27	\$91,000	e, f, h
28	\$182,000	a, c, h
30	\$273,000	a, b, h
33	\$182,000	e, h
Total - Central County	\$1,547,000	
	South County	
35	\$273,000	a, e, h
36	\$182,000	
37	\$182,000	e, h
Total - South County	\$637,000	
Total - Local Routes	\$3,094,000	·
34	\$91,000	a, h

Note: TheBus Route 34 is designated as a "Community" route.

	Addressed Needs Key
a =	Plan 2035 Regional Transit District served/24 hour center
b =	Medical facility served
	Major new development served
d =	Educational facility served
e =	Plan 2035 Local Center served
f =	Transform Neighborhood Initiative community
g =	Major governmental facility
	Metro station/transit hub served
i =	High ridership route

4.2.3 Expand Weekday Hours of Service

Currently, the last trip on each *TheBus* route starts between 7:00 PM and 8:00 PM on weekdays. While the expansion of service to weekends was the highest priority identified through the onboard rider survey and the public meetings, later hours of service on existing service was also identified as very important. Later hours were also consistently identified as one of the top priorities during the stakeholder interview process.

Like Saturday service the importance of later hours relates to two key factors. The first is the profile of the majority of TheBus riders. This typical rider is someone who does not own an automobile and thus is heavily dependent on transit for their mobility. Later hours would provide the typical *TheBus* rider with much greater flexibility in carrying out their daily activities, as well as in expanding employment opportunities. A good example of this expanded opportunity is a parent who is constrained in the hours they can work (thus also constraining the types of job opportunities available to them) because they only have a limited window to pick up their child from day care. Later hours would also provide greater flexibility to complete other activities after work, thus reducing stress and improving rider quality of life.

The second factor pertains to the County's work force characteristics. Because many County residents do not have traditional "9-5" work hours, later hours of service would be an important improvement in meeting their mobility needs.

Finally, the different stakeholders interviewed during the information gathering process all identified later hours as vital to their mission and goals. County Council members highlighted the need of their constituents for greater flexibility in carrying out their daily activities, including access to jobs with non-traditional work hours. Members of the Planning Department highlighted the importance of transit in supporting their vision of walkable, 24-hour



activity centers. Finally, staff from the County's Economic Development Corporation indicated that the ability to serve non-traditional work hours is essential for County employers, who often lose good employees who work

non-traditional hours because of their difficulty in getting to work.

Outlined first are the recommendations for hours of service expansion for the routes assigned to the "Major" route category. These recommendations are based on a proposed span of service of 5:30 AM to 10:00 PM (full expansion to 10:00 PM will occur in phases). The cost estimate for the "Major" route category improvements are outlined in Table 4.16.

The second set of recommendations is for routes assigned to the "Local" route category. These recommendations are based on a proposed span of service of 6:00 AM to 9:00 PM. The cost estimate for the "Local" route category improvements are outlined in Table 4.7.

The final set of recommendations is for routes assigned to the "Community" route category. These recommendations are based on a proposed span of service of 6:00 AM to 8:00 PM. The cost estimate for the "Community" route category improvements are outlined in Table 4.8

Note: All cost estimates are based on each route's current service frequency.

4.2.3.1 Hours of Service Recommendations: "Major" Route Category

The first set of "hours of service expansion" improvements is contained in this section and outlines recommended improvements for the "Major" route

category. These recommendations are summarized in Table 4.10 and also displayed in Figure 4.4.

Table 4.6 Hours of Service Recommendations - Major Routes

TheBus Route	Estimated Annual Operating Cost	Needs Addressed
	North County	
16	\$309,075	a, b, c, h, i
17	\$261,950	a, d, h
18	\$366,275	a, d, f, h, i
otal - North County	\$937,300	
	Central County	
20	\$195,975	e, f, g, h, i
21	\$227,825	a, c, d, g, h, i
32	\$390,000	e, i
Total - Central County	\$813,800	
Total - Major Routes	\$1,751,100	

Addressed Needs Key

- a = Plan 2035 Regional Transit District served/24 hour center
- b = Medical facility served
- c = Major new development served
- d = Educational facility served
- e = Plan 2035 Local Center served
- f = Transform Neighborhood Initiative community
- g = Major governmental facility
- h = Metro station/transit hub
- i = High ridership route

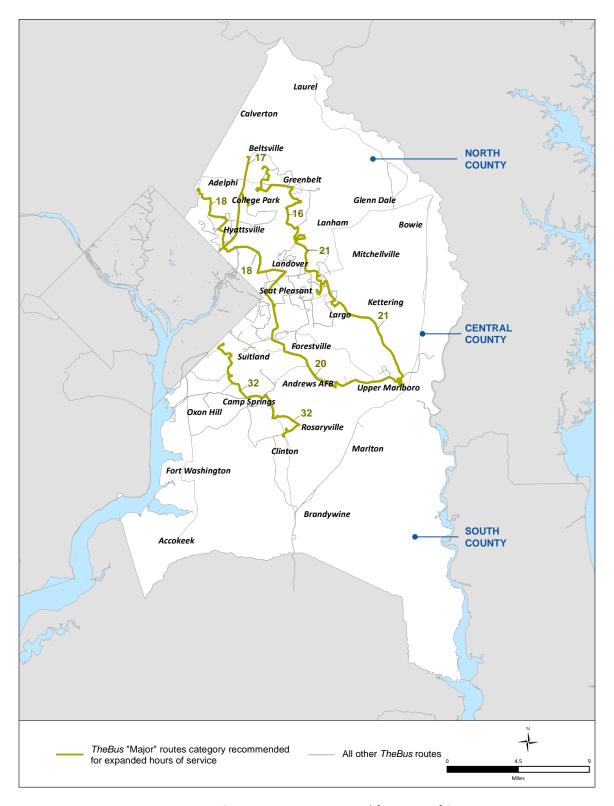


Figure 4.4 "Major" Route Category: Routes Proposed for Hours of Service Expansion

Current Hours of Service:

- Service begins at 5:30 AM in southbound direction
- Service begins at 6:00 AM in northbound direction
- Last trip of day begins at 7:30 PM in both directions

Proposed Hours of Service:

- Begin first northbound trip at 5:30 AM (no change to start of southbound trip)
- Expand PM hours of service so last trip of day leaves no earlier than 10:00 PM in both directions
- Hours of service expansion will be phased first phase will expand to 9:00 PM and second phase will further expand to 10:00 PM

The Bus Route 17

Current Hours of Service:

- Service begins at 5:30 AM in southbound direction
- Service begins at 5:45 AM in northbound direction
- Last trip of day begins at 7:15 PM in northbound direction and 7:30 PM in southbound direction

Proposed Hours of Service:

- Begin first northbound trip at 5:30 AM (no change to start of southbound trip)
- Expand PM hours of service so last trip of day leaves no earlier than 10:00 PM in both directions
- Hours of service expansion will be phased first phase will expand to 9:00 PM and second phase will further expand to 10:00 PM

TheBus Route 18

Current Hours of Service:

- Service begins at 5:30 AM in both directions
- Last trip of day begins at 7:50 PM in southbound direction and 7:45 PM in southbound direction

Proposed Hours of Service:

- No change to trip starts in the AM
- Expand PM hours of service so last trip of day leaves no earlier than 10:00 PM in both directions
- Hours of service expansion will be phased first phase will expand to 9:00 PM and second phase will further expand to 10:00 PM

TheBus Route 20

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 7:00 PM in eastbound direction and 6:40 PM in westbound direction

- Start first trip of day in both directions at 5:30 AM
- Expand PM hours of service so last trip of day leaves no earlier than 10:00 PM in both directions
- Hours of service expansion will be phased first phase will expand to 9:00 PM and second phase will further expand to 10:00 PM

TheBus Route 21

Current Hours of Service:

- Service begins at 5:55 AM in southbound direction and 6:08 AM in northbound direction
- Last trip of day begins at 7:15 PM in southbound direction and 6:05 PM in the northbound direction

Proposed Hours of Service:

- Start first trip of day in both directions at 5:30 AM
- Expand PM hours of service so last trip of day leaves no earlier than 10:00 PM in both directions
- Hours of service expansion will be phased first phase will expand to 9:00 PM and second phase will further expand to 10:00 PM

TheBus Route 32

Current Hours of Service:

- Service begins at 5:30 AM in both directions
- Last trip of day begins at 7:30 PM in both directions

- No change to trip starts in AM
- Expand PM hours of service so last trip of day leaves no earlier than 10:00 PM in both directions
- Hours of service expansion will be phased first phase will expand to 9:00 PM and second phase will further expand to 10:00 PM

4.2.3.2 Hours of Service Recommendations: "Local" Route Category

The second set of "hours of service expansion" improvements is contained in this section and outlines recommended improvements for the "Local" route category. These recommendations are summarized in Table 4.7 and also displayed in Figure 4.5.

 Table 4.7
 Hours of Service Recommendations - Local Routes

TheBus Route	Estimated Annual Operating Cost (Incremental Increase)	Needs Addressed
	North County	
11)	\$130,000	a, d, h
12	\$169,000	e, h
13	\$177,125	a, e, h
14	\$81,575	a, d, e ,h
15x	\$169,000	a, c, h
Total - North County	\$726,700	
	Central County	
21x	\$114,400	a, c, d, h
23	\$114,725	e, h
24	\$131,300	e, f, h, i
26	\$165,100	a, c, d, e, h
27	\$162,500	e, f, h
28	\$195,975	a, c, h
30	\$234,325	a, b, h
33	\$103,350	e, h
Total - Central County	\$1,221,675	
	South County	
35	\$139,100	a, e, h
36	\$98,150	
37	\$255,450	e, h
Total - South County	\$492,700	
Total - Local Routes	\$2,441,075	

Addressed Needs Key

- a = Plan 2035 Regional Transit District served/24 hour center f = Transform Neighborhood Initiative community
- b = Medical facility served
- c = Major new development served
- d = Educational facility served
- e = Plan 2035 Local Center served

- g = Major governmental facility
- h = Metro station/transit hub served
- i = High ridership route

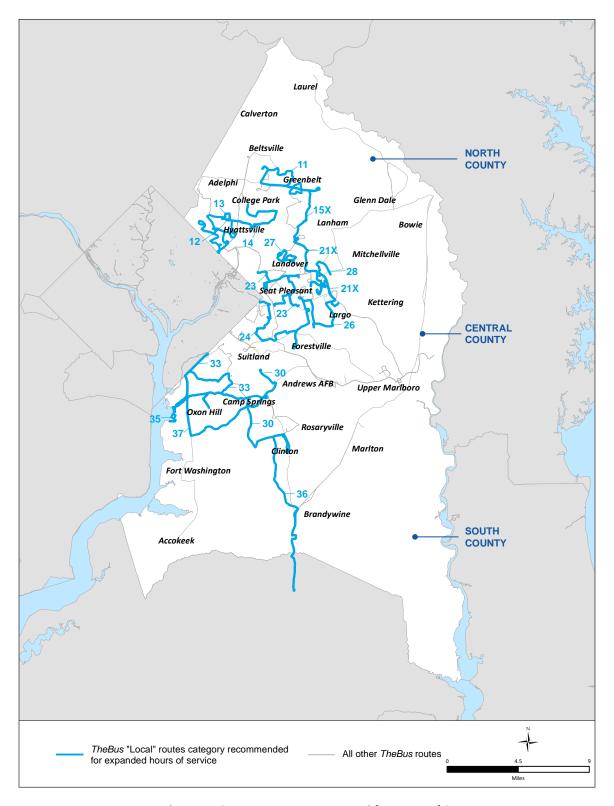


Figure 4.5 "Local" Route Category: Routes Proposed for Hours of Service Expansion

Current Hours of Service:

- Service begins at 5:18 AM at Greenbelt (service is a loop)
- Last trip of day begins at 7:48 PM

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM

TheBus Route 12

Current Hours of Service:

- Service begins at 5:30 AM at West Hyattsville (service is a loop)
- Last trip of day begins at 6:42 PM

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM

TheBus Route 13

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 6:40 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

The Bus Route 14

Current Hours of Service:

- Service begins at 5:25 AM in both directions
- Last trip of day begins at 7:40 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

TheBus Route 15x

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 7:00 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

TheBus Route 21x

Current Hours of Service:

- Service begins at 6:55 AM in the southbound direction and 9:02 AM in the northbound direction
- Last trip of day begins at 7:30 PM in the southbound direction and 8:00 PM in the northbound direction

- Start AM trips in both directions at 6:00 AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

Current Hours of Service:

- Service begins at 6:00 AM in the northbound direction and 6:07 AM in the southbound direction
- Last trip of day begins at 7:50 PM in southbound direction and 8:10 PM in the northbound direction

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

The Bus Route 24

Current Hours of Service:

- Service begins at 5:25 AM in the westbound direction and 6:00 AM in the eastbound direction
- Last trip of day begins at 7:30 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

TheBus Route 26

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 7:20 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

TheBus Route 27

Current Hours of Service:

- Service begins at 6:00 AM in the northbound direction and 6:15 AM in the southbound direction
- Last trip of day begins at 6:30 PM in the northbound direction and 6:45 PM in the southbound direction

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

TheBus Route 28

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 6:45 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

TheBus Route 30

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 6:45 PM in both directions

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 7:20 PM in the northbound direction and 8:00 PM in the southbound direction

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM in both directions

TheBus Route 35

Current Hours of Service:

- Service begins at 5:55 AM at Southern Avenue (service is a loop)
- Last trip of day begins at Southern Avenue at 6:10 PM

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM

TheBus Route 36

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 7:30 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 9:00 PM

TheBus Route 37

Current Hours of Service:

- Service begins at 5:29 AM in the northbound direction (the 37 route is a peak only service that runs in the peak direction only)
- Last trip of day begins at 6:35 PM in the southbound direction

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last southbound trip of day leaves no earlier than 9:00 PM

4.2.3.3 Hours of Service Recommendations: "Community" Route Category

The final set of "hours of service expansion" improvements is contained in this section and outlines recommended improvements for the "Community" route category. These recommendations are summarized in Table 4.8 and also displayed in Figure 4.6.

Table 4.8

TheBus Route	Estimated Annual Operating Cost (Incremental Increase) Needs Address	
	Central County	
22	\$81,250	e, h
25	\$94,575	e, h
34	\$48,750	a, h
Total - Central Routes	\$224,575	
	South County	
53	\$35,100	g
Total - Community Routes	\$259,675	

		Addressed Needs Key
а	=	Plan 2035 Regional Transit District served/24 hour center
b	=	Medical facility served
С	=	Major new development served
d	=	Educational facility served
е	=	Plan 2035 Local Center served
f	=	Transform Neighborhood
		Initiative community
g	=	Major governmental facility
h	=	Metro station/transit hub served
i	=	High ridership route

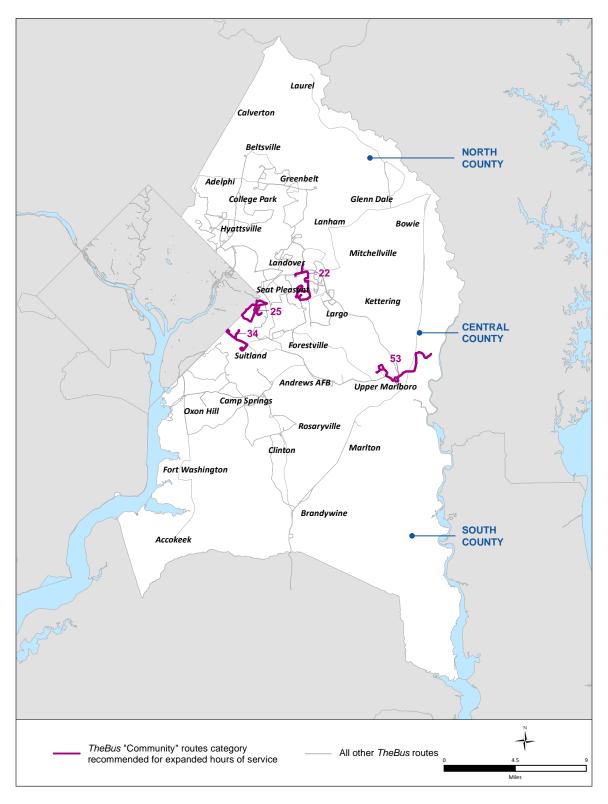


Figure 4.6 "Community" Route Category: Routes Proposed for Hours of Service Expansion

TheBus Route 22

Current Hours of Service:

- Service begins at 6:00 AM in both directions
- Last trip of day begins at 6:40 PM in both directions

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 8:00 PM in both directions

TheBus Route 25

Current Hours of Service:

- Service begins at 6:05 AM in the westbound direction and 6:15 AM in the eastbound direction
- Last trip of day begins at 6:25 PM in westbound direction and 6:55 PM in the eastbound direction

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves no earlier than 8:00 PM in both directions

TheBus Route 34

Current Hours of Service:

- Service begins at 6:00 AM from the Suitland Metro Station (the 34 route is a loop)
- Last trip of day begins at 7:30 PM

Proposed Hours of Service:

- No change to trip start in AM
- Expand PM hours of service so last trip of day leaves Suitland no earlier than 8:00 PM

TheBus Route 53

Current Hours of Service:

- Service begins at 6:30 AM from Marlboro Meadows (the 53 route is a loop)
- Last trip of day begins at 6:30 PM

- Expand AM service so first trip of the day leaves at 6:00 AM
- Expand PM hours of service so last trip of day leaves Upper Marlboro no earlier than 8:00 PM

4.2.4 Modify or Extend Existing Services

One of the key themes heard during the plan's information gathering process, especially from the County Planning Department and the Economic Development Corporation, was the need to strengthen connections to key activity centers within the County, including growth centers identified in the County's Comprehensive Land Use Plan "Plan 2035". In addition, the detailed analysis of each *TheBus* route completed during the Current Conditions Analysis identified a number of routes that had indirect routing and multiple diversions that add travel time and inconvenience for riders attempting to get to their end destination.



The focus of the recommendations included in this chapter section are modifications or extensions of existing routes to strengthen their connections to major activity centers or to make them more direct and convenient.

The estimated annual operating cost of the recommendations as

well as the additional number of vehicles required to accommodate the new routing is summarized for each recommendation in Table 4.9. More detailed descriptions of each recommendation, along with maps showing the proposed routing changes, follow the table.

Table 4.9 Operating Cost and Additional Vehicle Requirements:

Route Extensions and Modifications

TheBus Route	Description	Annual Cost	Additional Vehicles	Needs Addressed
	North Coun	ty		
12	Split in Two	\$438,750	1	e, h
17	Extend to Greenbelt	\$422,500	1	a, d, h
18	Split with Overlap	\$910,000	2	a, d, f, h, i
Total - Nort	h County	\$1,771,250	4	
	Central Cour	nty		
22	Extend to New Carrollton	\$422,500	1	a, c, e, f, h
23	Split in Two Routes	\$910,000	2	a, c, d, e, h
27	Extend to New Carrollton (short term)	\$0	0	a, c, e, f, h
27	Extend to New Carrollton and Largo Town Center (longer term)	\$422,500	1	e, h
33	Extend to Naylor Road Metro	\$455,000	1	a, e, h
Total - Cent	tral County	\$2,210,000	5	
	South Coun	ty		
35	Peak Route Pattern – Do Not Serve Heart of National Harbor	\$0	0	a, h
36	Extend Peak Hour Trips to Branch Avenue Metro	\$195,000	1	a, g, h
53	Extend to Suitland Metro	\$780,000	2	
Total - Sout	h County	\$975,000	3	
Total - Rout	e Extensions and Modifications	\$4,956,250	12	

Addressed Needs Key
a = Plan 2035 Regional Transit District served/24 hour center
b = Medical facility served
c = Major new development served
d = Educational facility served
e = Plan 2035 Local Center served
f = Transform Neighborhood Initiative community
g = Major governmental facility
h = Metro station/transit hub served
i = High ridership route

West Hyattsville Metro - Gwenn Britt Senior Center

The current route 12 runs between the West Hyattsville Metrorail Station and Mount Rainier in the Hyattsville portion of the County. The current routing is circuitous with large one-way loops as well as diversions off of the main route. This indirect routing adds travel time to trips and creates inconveniences for current and potential new riders. This increased travel time may also suppress ridership potential in a densely developed area that is otherwise quite conducive to transit.

Recommendation:

Split this route in two in order to provide more direct trip paths to the major destinations within the route's service area. The proposed new routes are shown in Figures 4.7 and 4.8. The estimated cost and additional vehicle requirement is shown in Table 4.9.

TheBus Route 13

West Hyattsville Metro - County Service Building

The route 13 is a bi-directional local circulator loop running between the West Hyattsville Metrorail Station, U.S. Route 1 and the Prince George's Plaza Metrorail Station.

Recommendation:

This recommendation does not entail any change in routing but rather a simple renaming of the loops to provide greater distinction between the clockwise and counter-clockwise loops.

TheBus Route 17

Ikea College Park - Mount Rainier

This route currently runs between Mount Rainier and a northern terminal at the Ikea shopping center just north of the Capital Beltway off of U.S. Route 1.

Recommendation:

Extend the current route beyond lkea to a new northern terminal at the Greenbelt Metrorail Station in order to provide stronger connections between the northern end of Route 1 and bus and rail services at the Greenbelt Metrorail Station. With this connection, the potential to skip the College Park Metrorail station will also be considered closer to implementation (The College Park Station is served by a number of Metrobus services running on Route 1). The proposed extension is shown in Figure 4.9. The estimated annual operating cost and additional vehicle requirement is shown in Table 4.9.

The Bus Route 18

Takoma – Langley – Addison Road Metro – Split Route with Overlap between Prince George's Plaza and Cheverly

TheBus 18 runs between the Takoma-Langley Transit Center and the Addison Road Metrorail Station via the Prince George's Plaza and Cheverly Metrorail Stations. The route is one of the heaviest ridership routes in the system and is also the longest. On-time performance is an ongoing issue.

Recommendation:

Split TheBus 18 into two routes to improve reliability, with an overlap in the two routes between the Prince George's Plaza Metrorail Station and the Cheverly Metrorail Station. This recommendation would provide the added benefit of doubling the service frequency on the common portion of the alignment between Prince George's Plaza and Cheverly. Other than the split, there would be no change in the route's current routing. The proposed split is shown in Figure 4.10. The estimated annual operating cost and additional vehicle requirement is shown in Table 4.9. (Note: The cost estimate is based on the current service frequency of 40 minutes in the peak and 80 minutes in the off-peak)

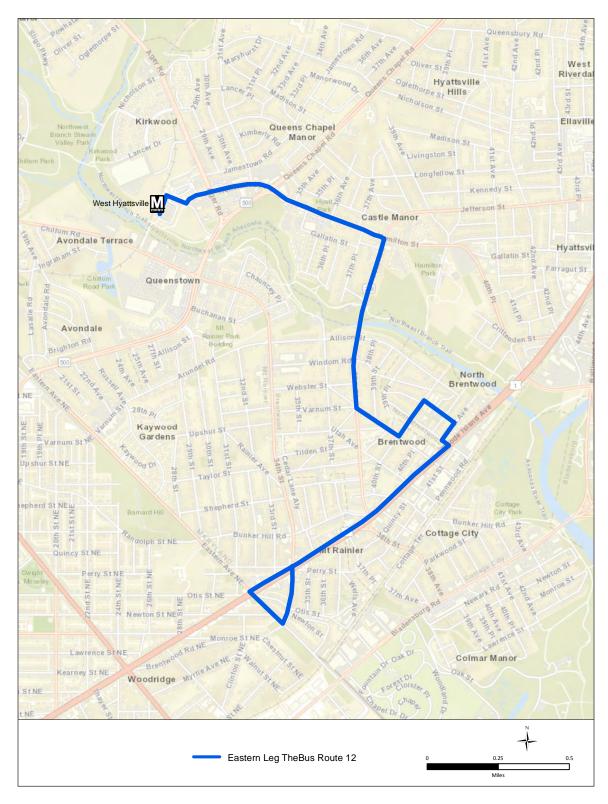


Figure 4.7 TheBus 12 Split: New Eastern Route

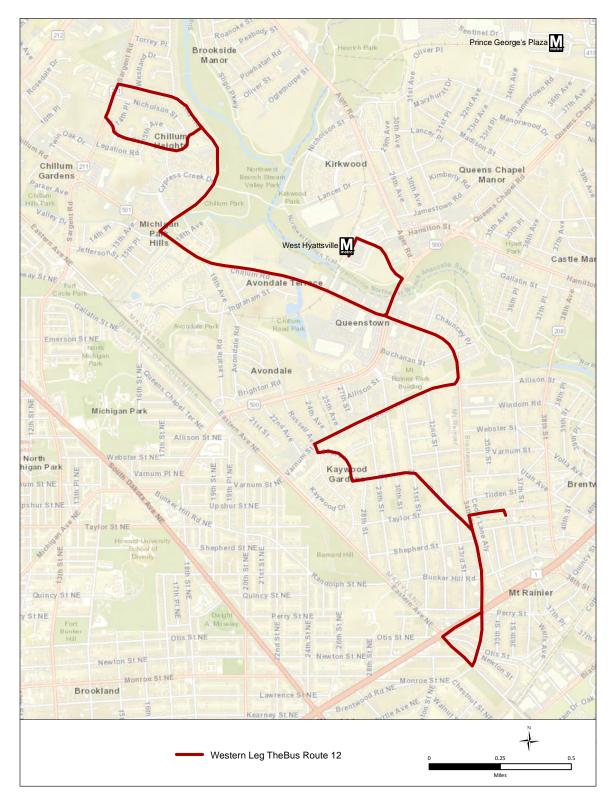


Figure 4.8 The Bus 12 Split: New Western Route

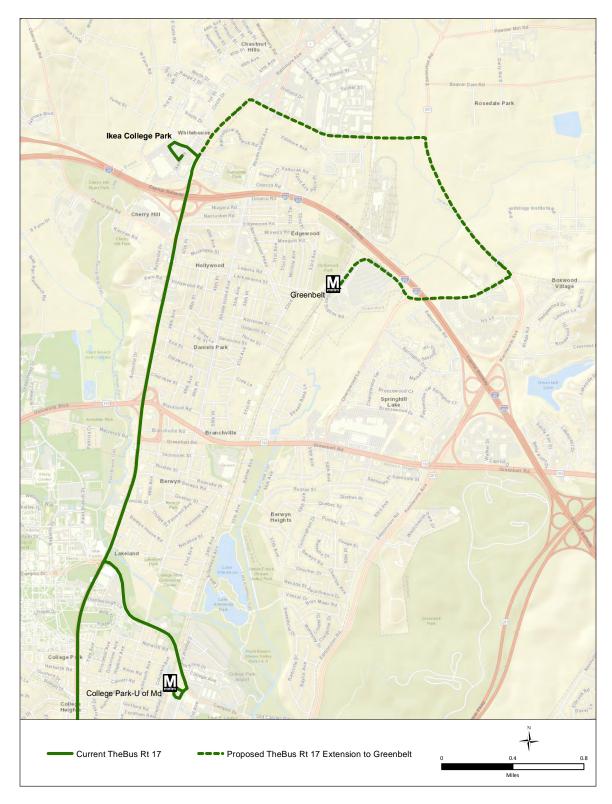


Figure 4.9 The Bus Route 17: Extension to Greenbelt

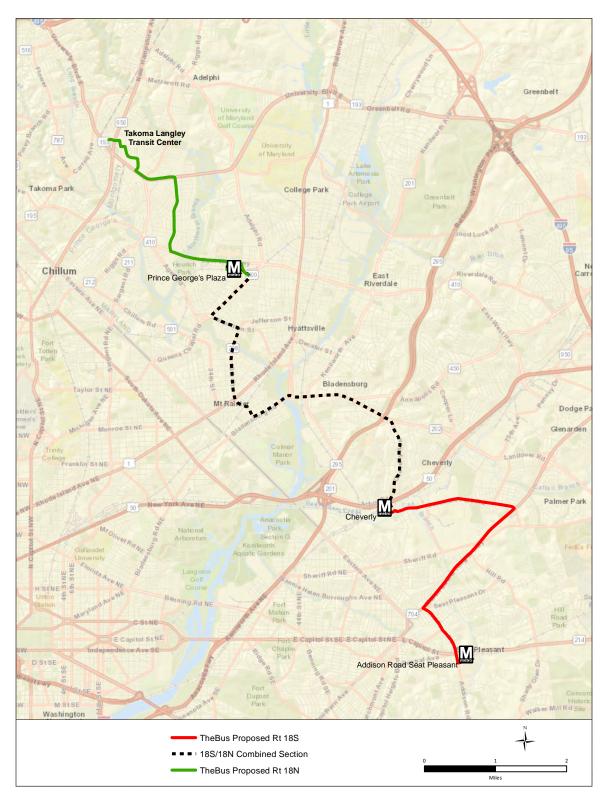


Figure 4.10 TheBus Route 18: Route Split to Improve Reliability

TheBus Route 18 (Longer Term)

Takoma – Langley – Addison Road Metro – Split Route at Prince George's Plaza with No Overlap, Extension of Northern Route to Greenbelt (longer term modification to route 18)

This recommendation would occur in a longer term time frame and would be the next step beyond the split of the route described in the previous section.

Recommendation:

This recommendation is a longer term approach to the Route 18 split described above, and would incorporate a route extension to increase connectivity to Greenbelt. In this longer term alternative there would be no overlap between the northern and southern routes, but rather the route would split at Prince George's Plaza such that the southern portion of the route would run between the Addison Road Metrorail Station and the Prince George's Plaza Metrorail Station. The northern route would begin at Prince George's Plaza station and rather than terminating at the Takoma-Langley Transit Center, as the route does today, it would be extended north and east to connect to the Greenbelt Metrorail Station. This would provide a cross-county connection across the northern portion of the County, and would also provide bus service along Metzerott Road. The split is shown in Figure 4.11.

TheBus Route 21x

New Carrollton Metro – Prince George's County Community College

The current 21x runs between the New Carrollton Metrorail Station and Prince George's Community College. Currently the route runs past the old Landover Mall, which is now abandoned.

Recommendation:

Re-route the route so that it would run via Woodmore Town Center, providing access to another important activity center in this part of the County (Woodmore Town Center includes a Wegman's as well as other retail stores. It also includes a large residential component. The re-route would also provide direct access from Woodmore Town Center to the New Carrollton Metrorail Station and surrounding employment

areas). The route would restart its current alignment at the intersection of St. Joseph's Drive and Landover Road (see Figure 4.12). There would be no change in operating cost or vehicle requirements associated with this reroute.

TheBus Route 22

Morgan Boulevard Metro – Chatsfield Way – Convert Current Route into Two Loops

The current route 22 is a local circulator centered on the Morgan Boulevard Metrorail Station. The route is quite circuitous and has a number of diversions, thus resulting in inconvenience for many riders who are forced to go through these loops and diversions before reaching their destination.

Recommendation:

Split the route into two loops such that each loop starts/ends at the Morgan Boulevard Station (see Figure 4.13). Today a rider going north of the station to destinations along Brightseat Road or the Prince George's Sports and Learning Complex are forced to sit through diversions along local streets around the station before the bus starts toward their ultimate destination (this diversion adds up to six minutes to their trip). This change would allow a rider to board the most direct loop to their destination without being forced through long and inconvenient diversions. As part of this recommendation, the diversion along Jericho City Drive would also be removed given that school once served along this loop has been closed. These changes can be made based on existing recovery time and the travel time savings from not running through the Jericho City Drive loop. Therefore, there would be no additional operating cost or vehicle requirements associated with this change.

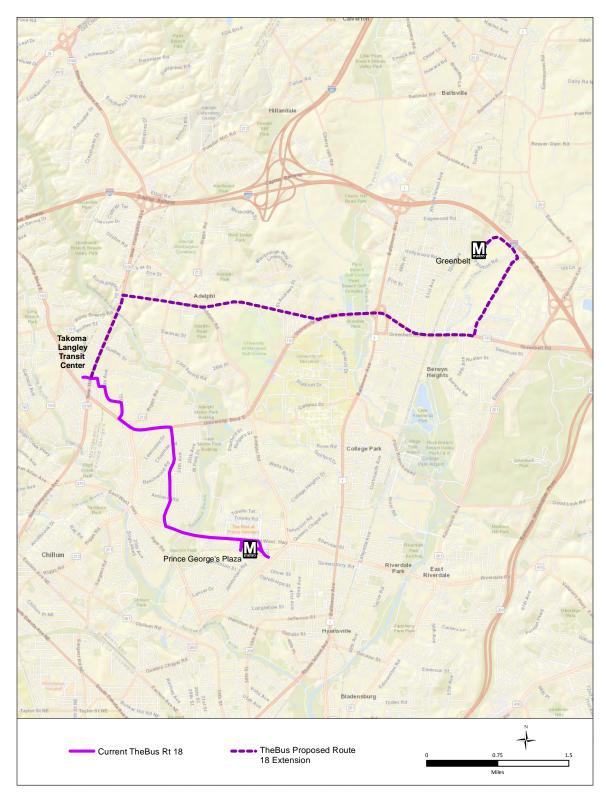


Figure 4.11 TheBus Route 18: Route Split at Prince George's Plaza - Extend Northern Leg to Greenbelt

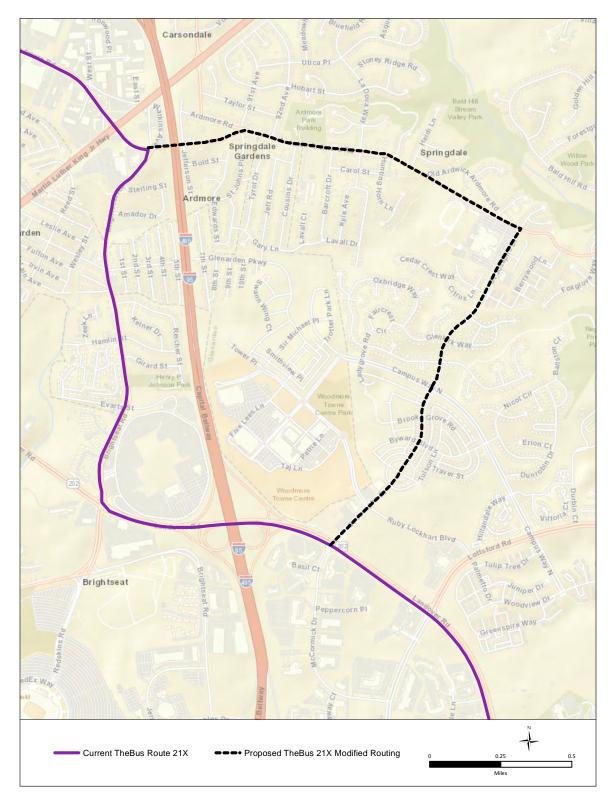


Figure 4.12 TheBus Route 21x: Reroute to Serve Woodmore Town Canter

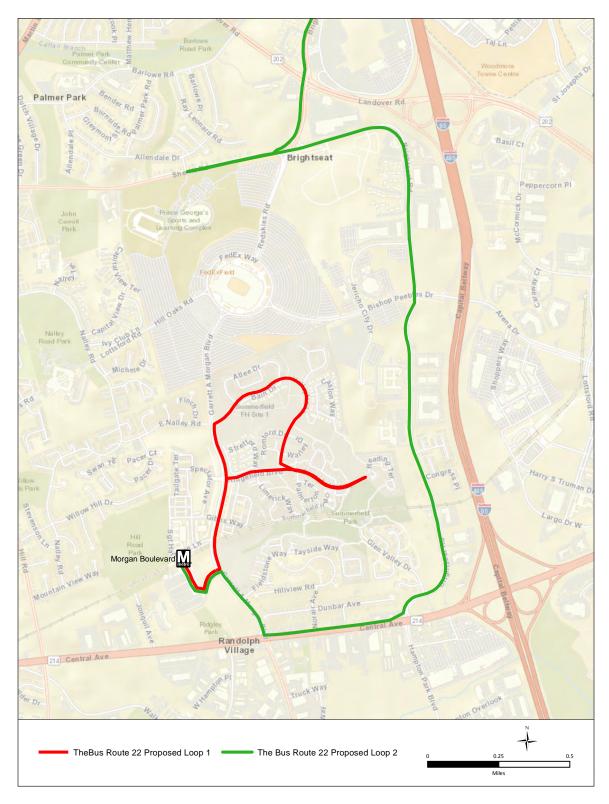


Figure 4.13 TheBus Route 22: Split Into Two Routes to Provide More Direct Service

Morgan Boulevard Metro – Chatsfield Way - Extend Route to New Carrollton

This recommendation would be an additional route modification to *TheBus* 22 and would involve an extension beyond its current terminal to increase connectivity to a major activity center.

Recommendation:

Modify the Route 22 further by extending the route to New Carrollton to provide greater connectivity to a major County activity center as well as greater north/south connectivity (a need noted during stakeholder interviews as well as by current riders). The extension is shown in Figure 4.14. The additional operating cost and vehicle requirements associated with the extension is shown in Table 4.9.

TheBus Route 23

Addison Road Metro – Sheriff Road – Split Route in Two to Provide More Direct Service

The current 23 runs between the Addison Road Metrorail Station and the Cheverly Metrorail Station with multiple diversions that result in additional travel time for riders who are forced to ride through these diversions before reaching their ultimate destination. These diversions add travel time and create inconvenience for current and potential riders and may suppress route ridership.

Recommendation:

Split the route into two routes to provide more direct routing for current and potential new riders. In addition to the split, each of the new routes would also be extended to provide greater connectivity to important County activity centers. The new eastern leg of the reconfigured Route 23 would be extended beyond the Prince George's Sports and Learning Complex to Largo Town Center (shown in Figure 4.15). This new route would now run between the Addison Road Metrorail Station and the Largo Town Center Metrorail Station.

The new western leg of the reconfigured route would be extended beyond Walker Mill Drive & Possum Court to Prince George's Community College (shown in Figure 4.16). This new route would now run between the Cheverly Metrorail Station and Prince George's Community College.

The proposed new routes are shown in Figures 4.15 and 4.16. The estimated cost of this split into two routes is summarized in Table 4.9.

TheBus Route 27

Landover Metro - Kent Village

The route 27 is a local circulator focused on the Landover Road Metrorail Station with no other connections beyond the station.

Recommendation:

This recommendation consists of phasing of potential extensions that would be implemented in steps. Each extension is described below:

- In the first step the route would be extended to New Carrollton. In this instance the route would run its current routing but then be extended north to the New Carrollton Metrorail Station to provide additional connections to this important County activity center.
- In the second implementation step, the route would be extended at its eastern end to the Largo Town Center Metrorail station, via the Prince George's Sports and Learning Complex. Given the length of this single route, the extension to Largo Town Center would also result in the split of the route into two.

The two extensions are shown in Figure 4.17. The costs and additional vehicle requirements for the full implementation of this change are shown in Table 4.9 (Note: The cost estimate for this modification is based on the current hours of service and the current service frequency of 30 minutes throughout the day).

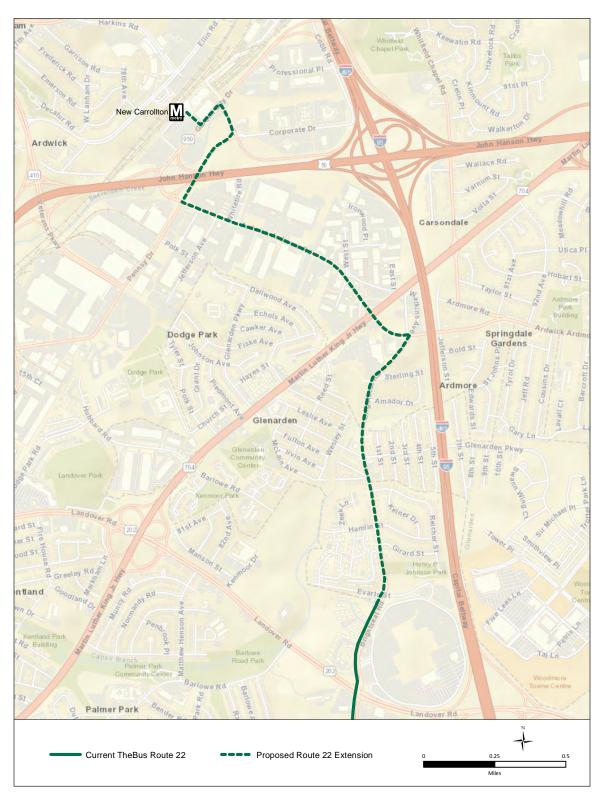


Figure 4.14 TheBus Route 22: Extend to New Carrollton to Increase Connectivity

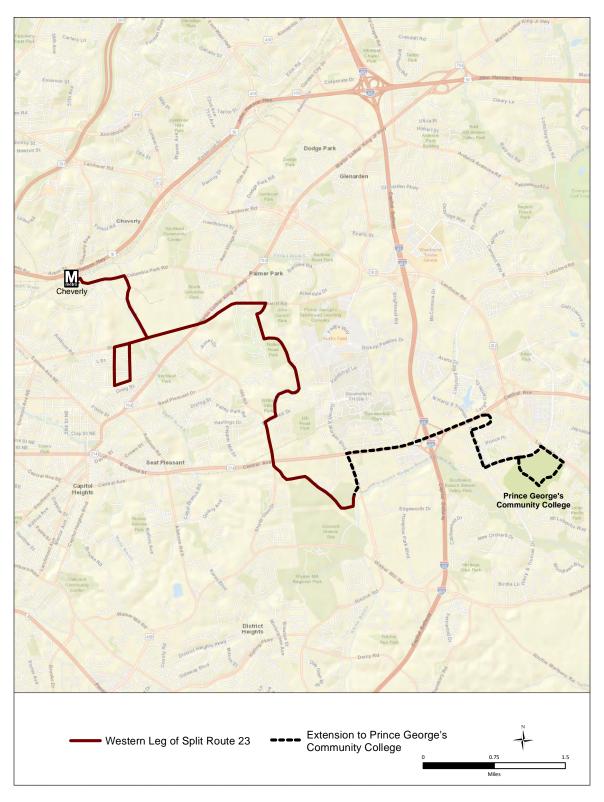


Figure 4.15 TheBus Route23: Split Route to Provide More Direct Service; Western Leg Extended to Prince George's Community College

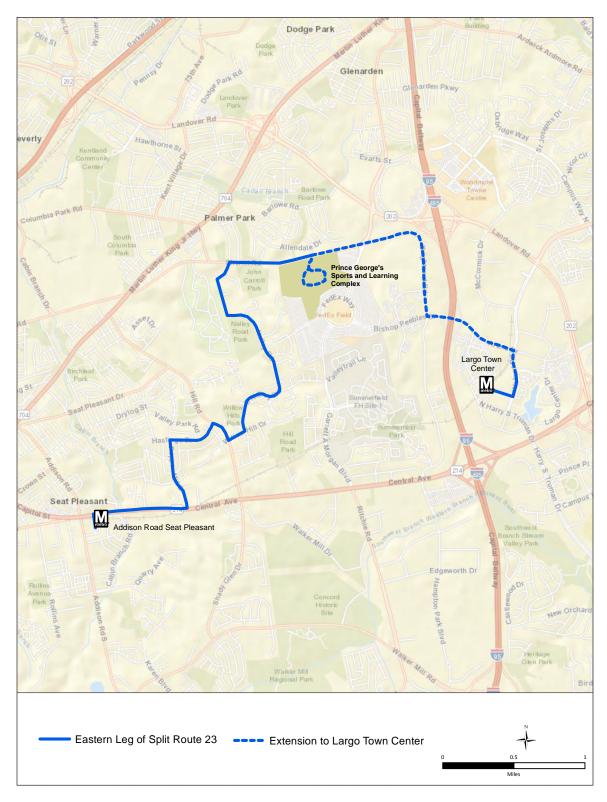


Figure 4.16 TheBus Route23: Split Route to Provide More Direct Service; Eastern Leg Extended to Largo Town Center

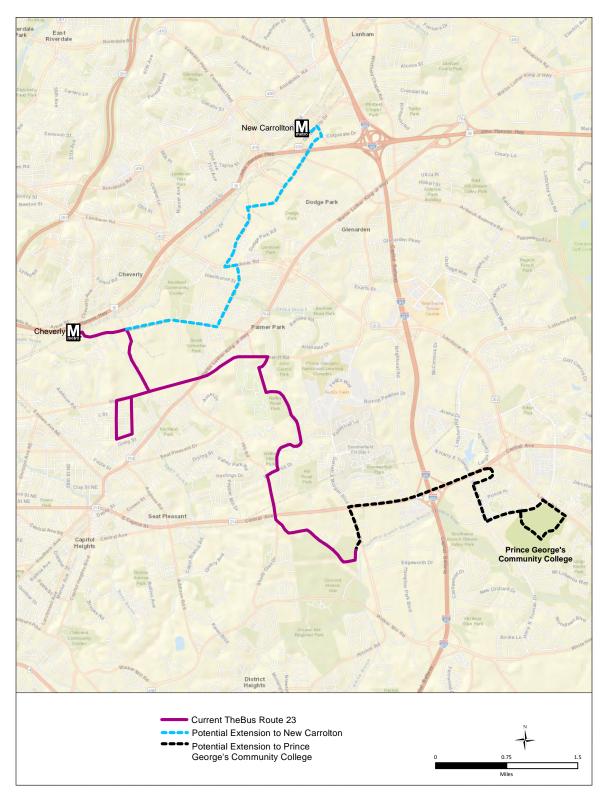


Figure 4.17 TheBus Route 23: Shorter Term Extension to New Carrollton, Longer Term Extension to Largo Town Center

Padgett's Corner Shopping Center – Southern Avenue Metro

The current route 33 runs between the Padgett's Corner Shopping Center in Camp Springs and the Southern Avenue Metrorail Station.

Recommendation:

This recommendation would extend the current 33 route to the Naylor Road Metrorail Station to provide a bus connection that would otherwise require a transfer to the Metrorail system to complete. This would provide added convenience for riders making this connection.

The potential extension is shown in Figure 4.18. The costs and additional vehicle requirements are shown in Table 4.9 (Note: The cost estimate is based on the current hours of service and the current service frequency of approximately 40 minutes throughout the day).

TheBus 35

Southern Avenue Metro - Camp Springs

Currently route 35 serves two key markets; the MGM Grand and National Harbor and Camp Springs via Oxon Hill Road and Brinkley Road. Riders going to Camp Springs must first make a loop through National Harbor that adds 12 minutes to their trip before heading on to their final destination.

Recommendation:

This recommendation is to run two different route patterns on TheBus route 35, one in the peak period, and one in the off-peak to take into account the two markets served by route. For trips starting at Southern Avenue and running southbound, the peak period pattern would not run all the way into the heart of National Harbor but rather would serve only the Oxon Hill Park and Ride and the MGM Grand Casino. This modification will mitigate the inconvenience of peak southbound riders destined for Camp Springs having to go through the diversion to National Harbor. In the offpeak direction, the current southbound routing through the heart of National Harbor would remain in place. It should be noted riders who wish to go to the heart of National Harbor in the peak period will have access to the Metrobus NH1, which has a comparable routing the TheBus route 35.

TheBus 36

Clinton Fringe Park and Ride – Mattawoman-Beantown Road Park and Ride

The current 36 route runs from the far southern portion of the County to the Clinton Fringe Park and Ride. Riders are then required to transfer to other *TheBus* routes running from the Park and Ride.

Recommendation:

This recommendation is to extend peak period route 36 trips to the Branch Avenue Metrorail Station to provide a direct connection to the Metrorail System.

The extension is shown in Figure 4.20. The costs and additional vehicle requirements are show in Table 4.9 (Note: The cost estimate is based on the route's current 45 minute service frequency. It was assumed that the extended trips would occur between 6:00 AM and 9:00 AM and between 3:30 PM and 6:30 PM).

TheBus 53

Village of Marlboro - Marlboro Meadows

The current route 53 is a local circulator providing connections between Upper Marlboro and local adjacent local neighborhoods. Riders wishing to go further than Upper Marlboro are required to transfer to another *TheBus* route to continue on.

Recommendation:

This recommendation is to extend the route 53 to the Suitland Metrorail Station to provide a connection to the Metrorail Green Line.

The extension is show in Figure 4.21. The costs and additional vehicle requirements are show in Table 4.9 (Note: The cost estimate is based on the route's current hours of service and 50 minute service frequency).

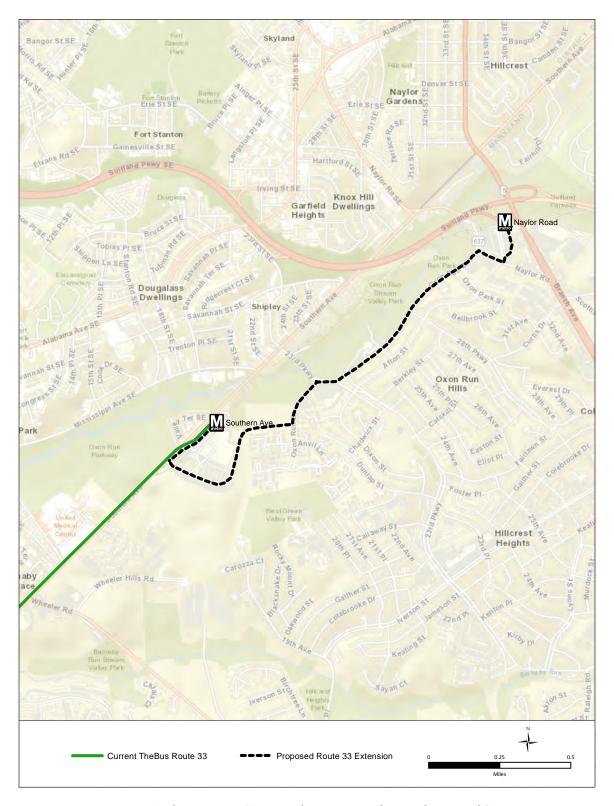


Figure 4.18 TheBus Route 33: Extend Route to Naylor Road Metrorail Station

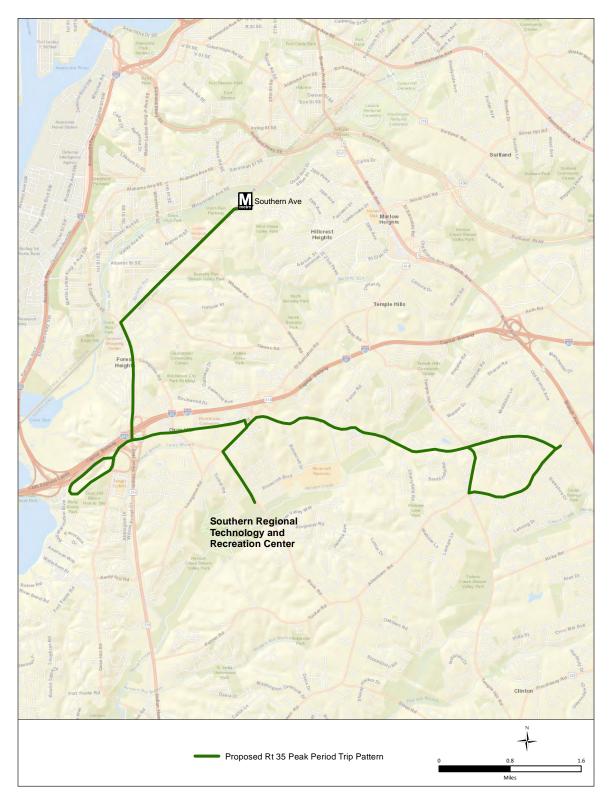


Figure 4.19 TheBus Route 35: Peak Period Trip Pattern

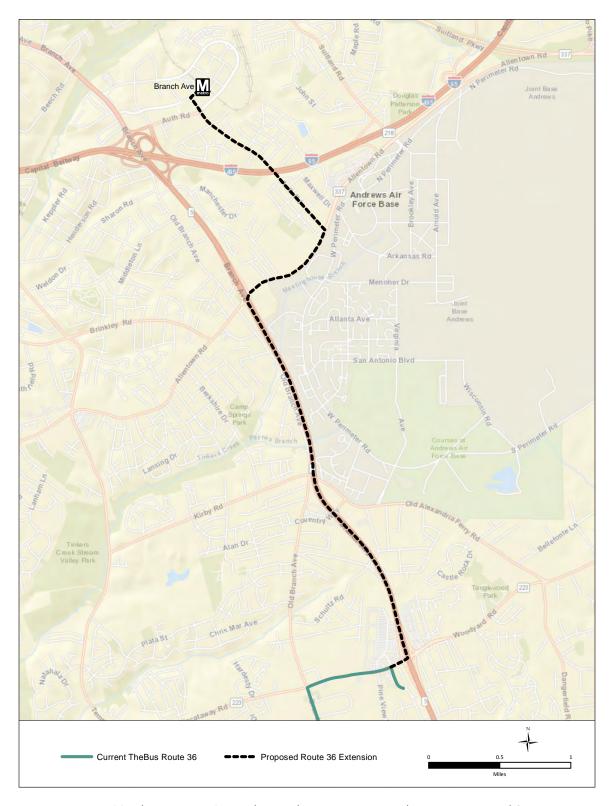


Figure 4.20 TheBus Route 36: Peak Period Extension to Branch Avenue Metrorail Station

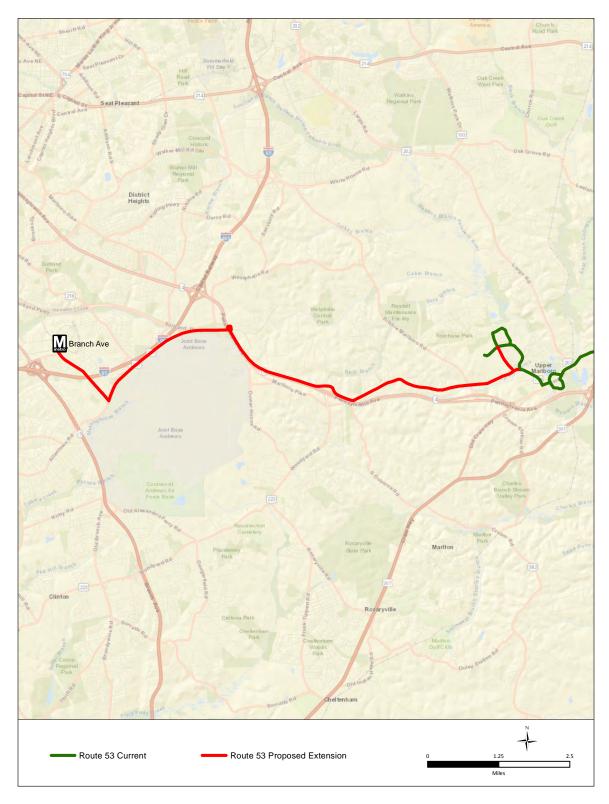
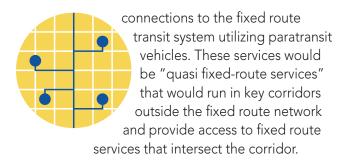


Figure 4.21 TheBus Route 53: Extension to Branch Avenue Metrorail Station

4.2.5 Utilize Paratransit Vehicles to Provide First Mile - Last Mile Connections

Prince George's County has a wide range of land uses and population and employment densities and it is difficult to serve many of the lower density parts of the County with fixed route transit, even though there is a need and demand for transit connections in these areas. The improvements outlined in this section are focused on providing first and last mile connections to the fixed route network in these lower density portions of the County.

The focus of these new "First Mile/Last Mile Connection" services would be to provide



The proposed corridors where this hybrid service would run are summarized in Table 4.10 and described in greater detail below following the table.

Table 4.10 Estimated Operating Cost: First/Last Mile Connections Utilizing Call-A-Bus

Proposed Call-A-Bus Service	Estimated Annual Cost
North	County
Maryland 197 – Bowie to Laurel	\$529,620
U.S. 301 – Bowie to Upper Marlboro	\$529,620
Bowie to Largo	\$529,620
Total North County	\$1,588,860
Centra	County
Westphalia Circulator	\$529,620
South	County
U.S. 301 – Brandywine to Upper Marlboro	\$529,620
Marlton-Brandywine-Southern Maryland Hospital	\$529,620
Fort Washington – Accokeek Circulator	\$529,620
Total South County	\$1,588,860

Maryland 197 Service – Laurel Town Center to Bowie Town Center: This "First Mile/Last Mile Connection" service would provide connections along MD Route 197 between Laurel Town Center and Bowie Town Center. The service would provide connections to employment, shopping, health care and the fixed route network in these two key activity centers. A general alignment of the service, with connections to the fixed route network, is shown in Figure 4.22.

U.S. 301 Service – Bowie to Trade Zone Avenue to Upper Marlboro: This service would provide connections along the U.S. 301 corridor between Bowie Town Center and Upper Marlboro and would provide access to important activity centers along the corridor. This would include access to shopping, recreation, employment, and health care in Bowie, employment in the industrial zone centered on Trade Zone Avenue, and to government and court-related activities in Upper Marlboro. It would also provide access to the fixed route network in Bowie, along Central Avenue, and in Upper Marlboro. A general alignment of the service is shown in Figure 4.23.

Westphalia Circulator Service – Westphalia to Suitland Metrorail Station: This service would provide connections between the growing Westphalia area of the County and the Suitland Metrorail Station. With growth occurring in Westphalia, demand on this service would be gauged to determine if longer term, this service should be transitioned to a fixed-route service. A general alignment of the service is shown in Figure 4.24.

U.S. 301 Service – Brandywine to Marlton to Upper Marlboro: This service would be a companion to the north County U.S. 301 service described above, and would provide connections to Upper Marlboro from Brandywine and Marlton, including transit connections in Upper Marlboro. A general alignment of the service is shown in Figure 4.25.

Bowie to Largo Town Center: This service would provide connections between two key activity centers in the County, Largo Town Center and Bowie Town Center. This would provide access for Bowie residents to the Blue Line at Largo Town Center as well as the hospital center in Largo Town Center currently being developed. This would also provide important connections to the fixed route transit system in Bowie, along Landover Road, and at the Largo Town Center Metrorail station. A general alignment of the service is shown in Figure 4.26.

Marlton to Brandywine to Southern Maryland Hospital: This service would provide connections from the southern portion of the County to the Southern Maryland Hospital Center in Clinton. This service would provide important connections to health care at the hospital center as well as to the fixed route transit network centered in Clinton. A general alignment of the service is shown in Figure 4.27.

Fort Washington - Accokeek Circulator: This service would be concentrated along the MD Route 210 corridor and would provide connections from the southeastern portion of the County to the fixed route transit system at the Fort Washington and Oxon Hill Park and Rides. A general alignment of the service is shown in Figure 4.28.

Replace TheBus 35s: The current TheBus 35s is a mid-day service running between Fort Washington and National Harbor. The service is very infrequent, running every 75 minutes, and is the lowest ridership route in the fixed-route network. This recommendation is to replace the 35s with a "First Mile/Last Mile Connection" service providing access to the fixed route network at the Oxon Hill Park and Ride.

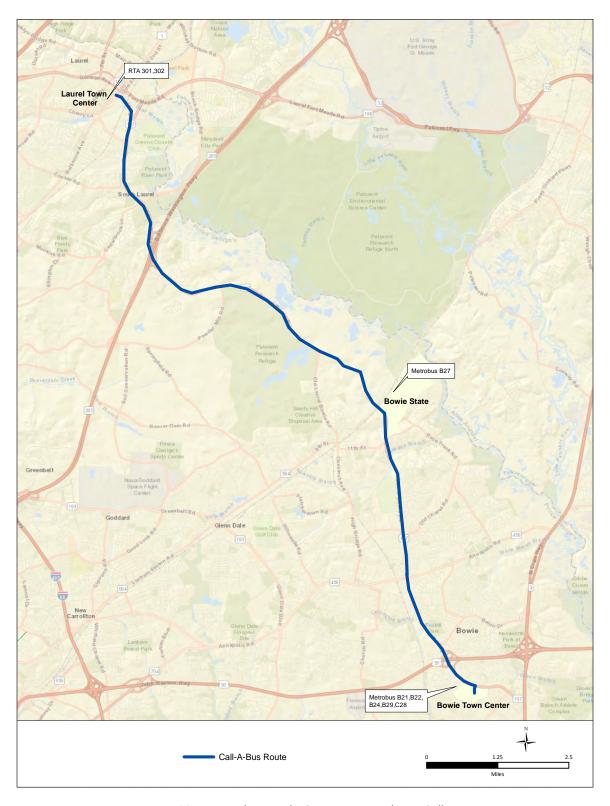


Figure 4.22 First and Last Mile Connections Utilizing Call-A-Bus: Laurel to Bowie via MD 197

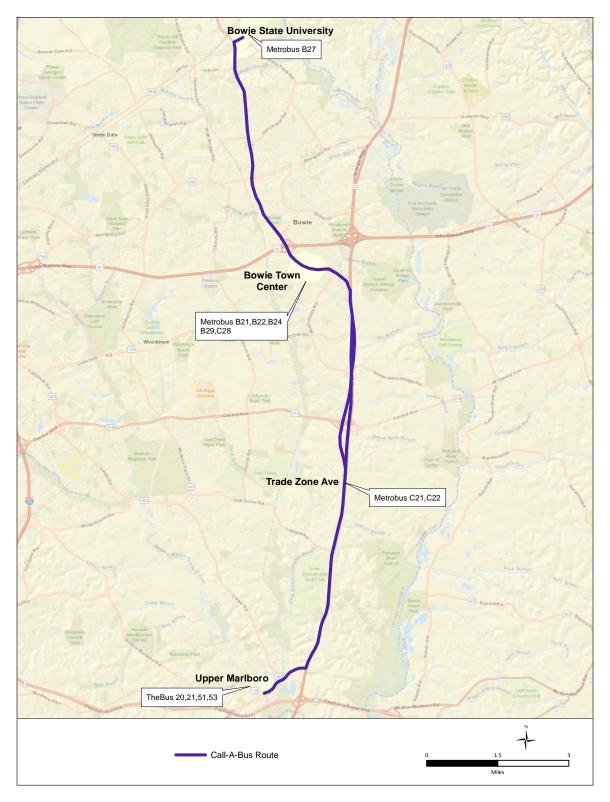


Figure 4.23 First and Last Mile Connections Utilizing Call-A-Bus: Bowie to Upper Marlboro

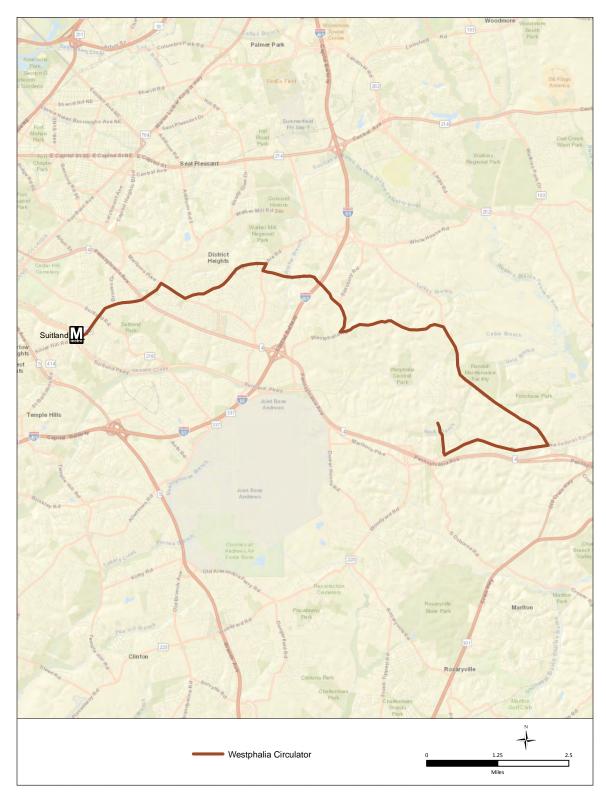


Figure 4.24 First and Last Mile Connections Utilizing Call-A-Bus: Westphalia Circulation

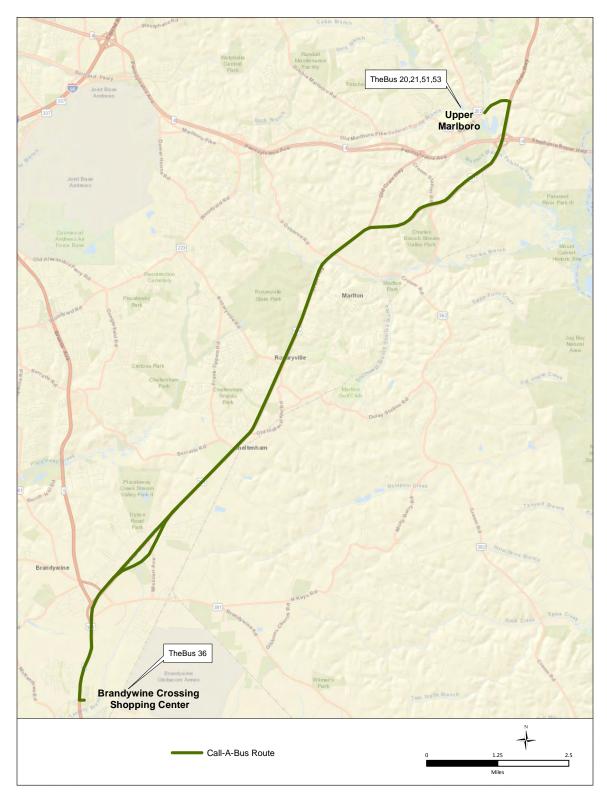


Figure 4.25 First and Last Mile Connections Utilizing Call-A-Bus: Brandywine to Upper Marlboro

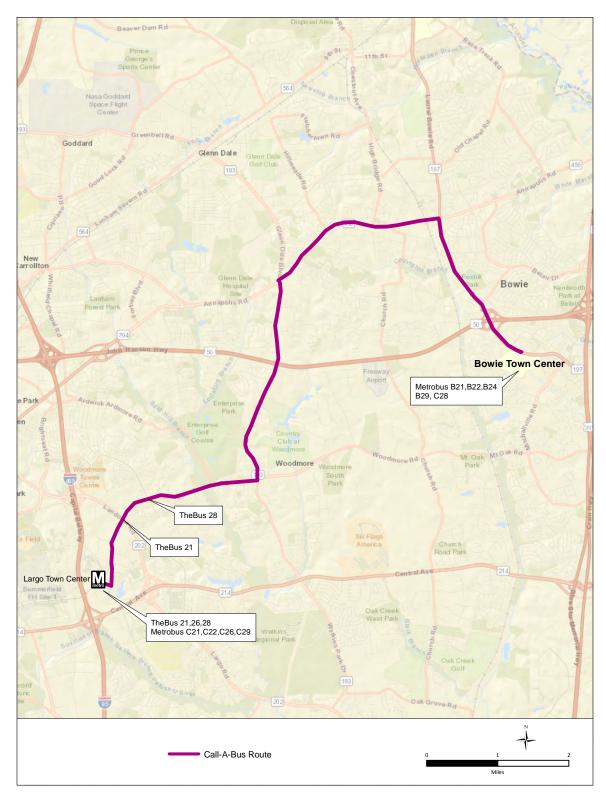


Figure 4.26 First and Last Mile Connections Utilizing Call-A-Bus: Bowie to Largo Town Center

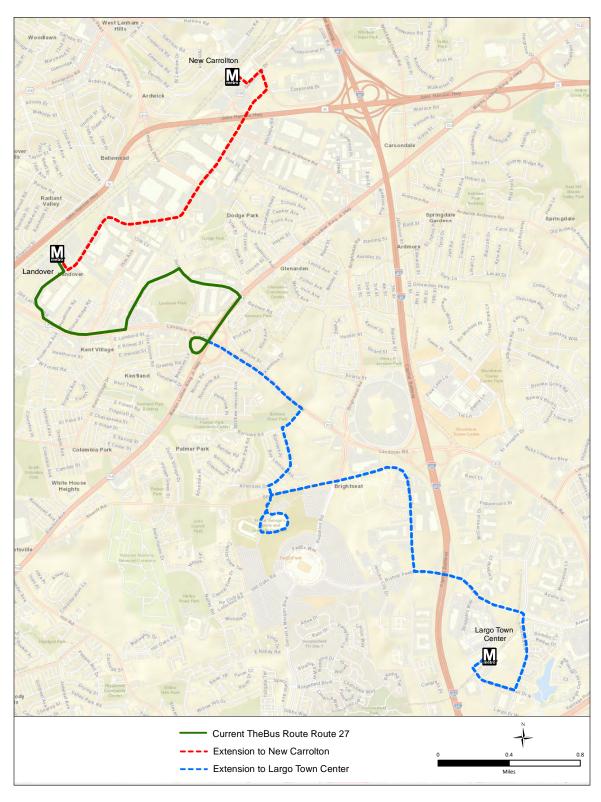


Figure 4.27 First and Last Mile Connections Utilizing Call-A-Bus: Marlton to Brandywine to Southern Maryland Hospital

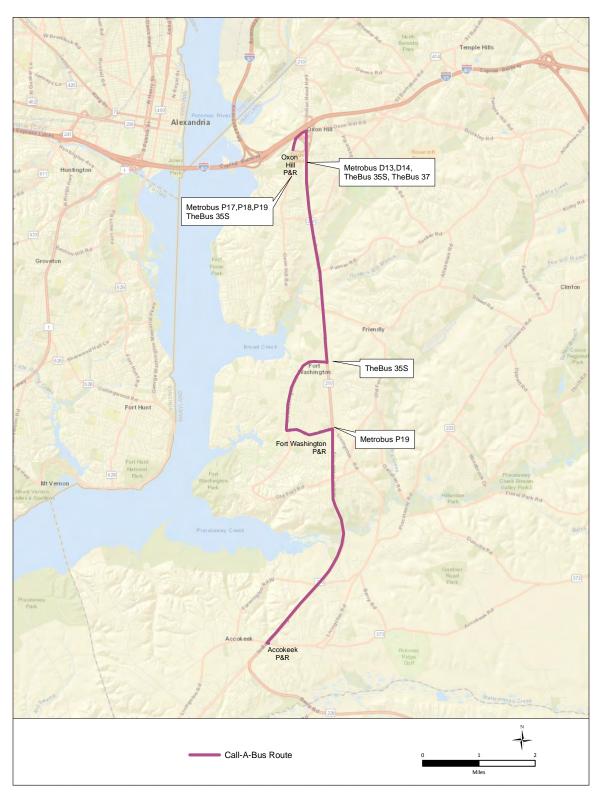


Figure 4.28 First and Last Mile Connections Utilizing Call-A-Bus: Fort Washington - Accokeek Circulation

4.2.6 Administrative Staff to Support Proposed Recommendations

As *TheBus* system expands based on the recommendations described in the previous pages, additional administrative staff will be required. It is assumed four additional staff will be required over the

life of the plan based on the service expansion. A fully loaded cost including salary and benefits per staff person is \$90,000, for a total of \$360,00.

4.3 Facility Recommendations

Section 4.2 contained recommendations related to the service provided to *TheBus* riders. This section covers recommendations related to two different facility types. The first are facilities that would be installed to enhance the passenger experience and include improvements that would strengthen access to transit stops, as well as additional amenities at stops themselves in order to improve the passenger waiting experience. The second facility recommendation relates to a new Operations and Maintenance Facility that would be required to accommodate the expanded fleet necessary to implementing the "expanded service frequencies" and "route extension and modification" recommendations described in the previous sections.

Each of these recommendations is outlined in greater detail below:

4.3.1 Passenger Facility Improvements

Bike Share Expansion – The installation and expansion of bike share facilities that has recently begun in the County will not be the responsibility of the staff implementing the recommendations included in this plan but it is an important County initiative. Coordination and support from *TheBus* staff will be provided in the identification of potential locations that would support *TheBus* service and the recommendations outlined in the previous sections.

Close Gaps in the Sidewalk Network - An analysis was completed during the Transit Vision Plan process to identify transit stops throughout the County that

are not connected to the sidewalk network. The analysis shows that 24 miles of sidewalk are required to provide sidewalk access to all stops in *TheBus* network.

It is proposed that 24 miles of sidewalks be constructed during the 5-year life of this plan as well as in the years beyond to close the most strategic gaps in the network. The capital funds required for this construction are outlined below in Table 4.11.

Table 4.11 Estimated Cost: Additional Sidewalks to Address Gaps

Miles of Sidewalk Constructed	Cost Per Mile	Total Capital Cost		
24	\$591,360	\$14,192,640		

Bus Stop Improvements – The wait at the bus stop is a key element of the rider's overall trip experience and thus the County has identified bus stop improvements as an essential element of the overall improvements recommended in this plan. These bus stop improvements would be implemented at additional stops in *TheBus* network and would generally consist of the following amenities:

- Shelter
- Bench
- Trash Receptacle
- Passenger information (system map and schedule information)

It is proposed that 100 stops be improved during the life of this plan. The estimated capital cost of this initiative is outlined in Table 4.12.

Table 4.12 Estimated Cost: Bus Stop Improvements

Number of Stops to Be Improved	Estimated Cost per Stop	Total Capital Cost	
100	\$11,300	\$1,130,000	

4.3.2 Operations and Maintenance Facility

The "improvement in service frequency" and "route modification and extension" recommendations outlined in earlier sections will require an expansion in the size of *TheBus* fleet. The current *TheBus* Operations and Maintenance facility is at full capacity so the implementation of recommendations requiring fleet expansion will require a new operations and maintenance facility, or the expansion of the current facility (in the short term, arrangements with WMATA Metrobus or the Regional Transit Agency may allow for some fleet expansion without the development of a new Operations and Maintenance Facility but the full implementation of the recommendations included in this document will ultimately require a new facility).

The general steps to the planning and construction of this facility are as follows:

- Determine the number of facilities that will be in operation. The possibilities include:
 - Retention of the existing site and the construction of a new facility at a different location within the County.
 - Build an entirely new facility to accommodate the entire fleet.
 - Expand at the existing facility and accommodate the entire fleet at the current location.

- Once the decision is made regarding how to accommodate the fleet and the number of facilities to be operated, the next step in the process will be to complete site selection.
 Considerations in this process will include required site size, site access, adjacent uses, and operational considerations such as the desire to minimize deadhead mileage.
- If the use of Federal money is anticipated in the planning or development of the facility, the National Environmental Policy Act will need to be followed to determine the environmental impact of the facility. There are different classes of environmental documentation depending on the anticipated impact. It is likely that this type of facility would require an Environmental Assessment, which has a less rigorous process than an Environmental Impact Statement. The environmental impact process would be completed in conjunction with the facility conceptual design.

- Once a site is selected, the next step in the process would be facility design. Design is typically done in phases, with the first milestone being 30% design. 30% design will yield a preliminary cost as well as an overall site plan and building layout. More detailed design would then be completed to refine costs and develop contract documents for construction.
- The next process step would be the identification of the method for project delivery. One option is design-build, in which the contractor would take over design after 30% design and complete final design as well as facility construction. The other option would be for the County to take
- design through 100% and then bid the project to contractors. Each approach has advantages and the final approach would be based on the specific circumstances of the project.
- The final step in the process would be facility construction.

The planning, design and construction process would take five to six years and a very broad estimated cost of a facility to accommodate 100 vehicles would be \$75 million to \$100 million based on the consultant team's experience with other facilities (it is extremely important to note that this estimated cost is at a very high level and the final facility cost will be based on the specific characteristics of the facility).

Chapter 5

Phased Implementation Plan for Improvement Recommendations



Chapter Purpose: Describe the phased implementation plan for the transit improvement recommendations identified in Chapter 4. This chapter translates the full aspirations for *TheBus* as outlined in Chapter 4 into a phased plan that reflects the actual funding available for implementation over the course of the five-year time frame of the plan.

Chapter Sections:

- Introduction
- Service Improvement Recommendations North County
- Service Improvement Recommendations Central County
- Service Improvement Recommendations South County
- Bike Share Network Strategy
- Five Year Capital Implementation Program
- 5 Year Revenue Vehicle Plan
- Rapid Transit Corridors Strategy

5.1 Introduction

Chapter 4 described a robust and comprehensive program of transit improvements that represents the County's full aspirations for *TheBus* system. Because implementation of the vision outlined in Chapter 4 exceeds available funding, a phased implementation plan is required. The phased plan is the subject of this chapter.

Three implementation time frames (1-2 years, 3-4 years, and year 5) have been identified within the five-year time frame of this plan, with the additional improvement recommendations not included in the five-year plan incorporated into a "Beyond Five Year" implementation phase.

The phasing of recommendations contained in this chapter is robust and reflects the County's desire to quickly implement improvements that will benefit both current and future *TheBus* riders. This phasing will require substantial additional funding as well aggressive revenue vehicle purchases.

The phasing plan is presented here in two different configurations. The first configuration is by geographic portion of the County, and then further broken out by implementation time frame within each County section. This configuration is displayed in Tables 5.1, 5.2. and 5.3 (North County, Central County, and South County respectively).

5.2 Service Improvement Recommendations – North County

This section contains the transit service improvements recommended for implementation in the north section of the County. Recommendations in the short term in this County section are focused on improvements on two of the north county routes that fall into the "Major" route category, the 16 and 18. Recommendations for these two routes cover service frequency, hours of service expansion, and extension of service to Saturday. In addition to improvements to *TheBus* routes, the U.S. 301 Bowie to Upper Marlboro "First Mile/Last Mile Connection" service is also proposed for implementation in the short term.

The mid-term and long term implementation phases continue implementation of service frequency, hours of service expansion, and extension of service to Saturday improvements on the remaining North County routes and also include additional "First Mile/Last Mile Connection" services.

Route extensions and modifications to routes within the northern portion of the County are recommended for implementation in the "Beyond Five Years" time frame, which are improvements that would be implemented after the five-year time frame of this plan is completed.

Table 5.1 North County Transit Improvement Recommendations by Implementation Phase

	Route	Improvement	Cost	Route Category	Vehicle Requirement
		Short Term Implementation Phase			
		Improve Peak Frequency to 20 minutes from current 30 minutes	\$552,500	Major	2
16	Greenbelt - New Carrollton	Improve Off-Peak Frequency to 30 minutes from current 60 minutes	\$325,000	Major	0
10	Greenbert - New Carrollton	Extend Weekday Operating Hours to 9:00 PM	\$180,050	Major	0
		Extend Service to Saturday	\$416,000	Major	0
		Improve Peak Frequency to 20 minutes from current 40 minutes	\$1,625,000	Major	5
18	Langley Park - Addison Road	Improve Off-Peak Frequency to 30 minutes from current 80 minutes	\$520,000	Major	0
10	Langley Park - Addison Road	Extend Service to Saturday	\$624,000	Major	0
		Extend Weekday Operating Hours to 9:00 PM	\$202,800	Major	0
	First/Last Mile Connections	U.S. 301 - Bowie to Upper Marlboro	\$529,620		2 (1)
	Short Term Total - North County		\$4,974,970		7
		Mid Term Implementation Phase			
14	College Park - Prince George's Plaza	Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Local	1
		Improve Peak Frequency to 30 minutes from current 40 minutes	\$260,000	Local	1
15x	Greenbelt - New Carrollton	Extend Weekday Operating Hours to 9:00 PM	\$169,000	Local	0
		Extend Service to Saturday	\$182,000	Local	0
		Improve Peak Frequency to 20 minutes from current 30 minutes	\$455,000	Local	2
17	College Park Ikea - Mount Rainier	Extend Weekday Hours to 9:00 PM	\$142,675	Local	0
17	College I dik iked - Mourit Malfilel	Extend Service to Saturday	\$312,000	Local	0
		Extend to Greenbelt Metro	\$422,500	Local	1
	First/Last Mile Connections	MD 197 Service - Bowie to Laurel	\$529,620		2 (1)
	Mid Term Total - North County		\$2,700,295		5

			Category	Requirement
	Long Term Implementation Phase			
Constants als	Extend Service to Saturday	\$182,000	Local	0
reenbeit	Extend Weekday Operating Hours to 9:00 PM	\$130,000	Local	0
Vest Hyattsville - Mount Rainier	Improve Off-Peak Frequency to 45 minutes from current 60 minutes	\$162,500	Local	0
	Improve Peak Frequency to 30 minutes from current 40 minutes	\$227,500	Local	1
Vest Hyattsville - Prince George's Plaza	Extend Service to Saturday	\$182,000	Local	0
	Extend Weekday Operating Hours to 9:00 PM	\$177,125	Local	0
College Park - Prince George's Plaza	Extend Service to Saturday	\$182,000	Local	0
	Extend Weekday Operating Hours to 9:00 PM	\$81,575	Local	0
First/Last Mile Connections	Bowie to Largo	\$529,620		2 (1)
ong Term Total - North County		\$1,854,320		1
	"Beyond Five Years" Implementation Phase			
	Extend Service to Saturday	\$182,000	Local	0
Vest Hyattsville - Mount Rainier	Split in Two to Make More Direct	\$438,750	Local	1
	Extend Weekday Operating Hours to 9:00 PM	\$169,000	Local	0
Greenbelt - New Carrollton	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$129,025	Major	0
College Park Ikea - Mount Rainier	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$119,275	Major	0
and Delinality Deal	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$163,475	Major	0
angley rark - Addison Koad	Split Route in Two with Overlap between Prince George's Plaza and Cheverly	\$910,000	Major	2
Beyond Five Years" Total - North Cou	nty	\$2,111,525		3
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/est Hyattsville - Prince George's Plaza ollege Park - Prince George's Plaza irst/Last Mile Connections ong Term Total - North County /est Hyattsville - Mount Rainier reenbelt - New Carrollton ollege Park Ikea - Mount Rainier angley Park - Addison Road	Extend Weekday Operating Hours to 9:00 PM Improve Off-Peak Frequency to 45 minutes from current 60 minutes Improve Peak Frequency to 30 minutes from current 40 minutes Extend Service to Saturday Extend Weekday Operating Hours to 9:00 PM Extend Service to Saturday Extend Weekday Operating Hours to 9:00 PM Extend Weekday Operating Hours to 9:00 PM Bowie to Largo "Beyond Five Years" Implementation Phase Extend Service to Saturday Split in Two to Make More Direct Extend Weekday Operating Hours to 9:00 PM Extend Service to Saturday Split in Two to Make More Direct Extend Weekday Operating Hours to 9:00 PM to 10:00 PM Interenbelt - New Carrollton Extend Weekday Operating Hours from 9:00 PM to 10:00 PM Extend Weekday Operating Hours from 9:00 PM to 10:00 PM Extend Weekday Operating Hours from 9:00 PM to 10:00 PM Extend Weekday Operating Hours from 9:00 PM to 10:00 PM Extend Weekday Operating Hours from 9:00 PM to 10:00 PM Extend Weekday Operating Hours from 9:00 PM to 10:00 PM Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	Extend Weekday Operating Hours to 9:00 PM \$130,000 Improve Off-Peak Frequency to 45 minutes from current 60 minutes \$162,500 Improve Peak Frequency to 30 minutes from current 40 minutes \$227,500 Improve Peak Frequency to 30 minutes from current 40 minutes \$227,500 Extend Service to Saturday \$182,000 Extend Weekday Operating Hours to 9:00 PM \$177,125 Extend Service to Saturday \$182,000 Extend Weekday Operating Hours to 9:00 PM \$81,575 Extend Weekday Operating Hours to 9:00 PM \$81,575 Extend Weekday Operating Hours to 9:00 PM \$1,854,320 Extend Service to Saturday \$182,000 Extend Weekday Operating Hours to 9:00 PM \$1,854,320 First Hyattsville - Mount Rainier Extend Service to Saturday \$182,000 Split in Two to Make More Direct \$438,750 Extend Weekday Operating Hours to 9:00 PM \$169,000 Irreenbelt - New Carrollton Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$129,025 Ollege Park Ikea - Mount Rainier Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$119,275 Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Split Route in Two with Overlap between Prince George's Plaza and Cheverly \$910,000	Extend Weekday Operating Hours to 9:00 PM \$130,000 Local Vest Hyattsville - Mount Rainier Improve Off-Peak Frequency to 45 minutes from current 60 minutes \$162,500 Local Improve Peak Frequency to 30 minutes from current 40 minutes \$227,500 Local Improve Peak Frequency to 30 minutes from current 40 minutes \$227,500 Local Extend Service to Saturday \$182,000 Local Extend Weekday Operating Hours to 9:00 PM \$177,125 Local Extend Weekday Operating Hours to 9:00 PM \$81,575 Local Extend Weekday Operating Hours to 9:00 PM \$81,575 Local Extend Weekday Operating Hours to 9:00 PM \$81,575 Local Extend Weekday Operating Hours to 9:00 PM \$182,000 Local First Hyattsville - Mount Rainier Extend Service to Saturday \$182,000 Local Split in Two to Make More Direct \$438,750 Local Extend Weekday Operating Hours to 9:00 PM \$169,000 Local Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$129,025 Major First Hyattsville - Mount Rainier Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$119,275 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to 10:00 PM \$163,475 Major Extend Weekday Operating Hours from 9:00 PM to

⁽¹⁾ First Mile/Last Mile Connection services will utilize paratransit vehicles. No fleet expansion required. First/Last mile vehicles not included in Total.



5.3 Service Improvement Recommendations – Central County

The improvement phasing for the central portion of the County follows the same patterns as in the northern section of the County. Improvement recommendations slated for implementation in the short term cover most of the Central County routes falling into the "Major" route categories and include service frequency improvements, hours of service expansion, and extension of service to Saturday. In addition to improvements to *TheBus* service, one Central County "First Mile/Last Mile Connection" service is proposed for short-term implementation.

Recommendations slated for implementation in the mid-term and long-term time frame cover service frequency, hours of service expansion, and extension of service to Saturday improvement recommendations as well as route modification recommendations, predominantly on "Local" routes.

Improvements recommended for implementation outside the five-year time frame of the plan cover the same service improvement areas contained in the other time-frames.

Table 5.2 Central County Transit Improvement Recommendations by Implementation Phase

Route	Improvement	Cost	Route Category	Vehicle Requirement
	Short Term Implementation Phase			
	Improve Peak Frequency to 20 minutes from current 30 minutes	\$455,000	Major	2
21 New Carrollton - Upper Marlboro	Improve Off-Peak Frequency to 30 minutes from current 50-60 minutes	\$390,000	Major	0
	Extend Weekday Operating Hours to 9:00 PM	\$130,000	Major	0
24 Capitol Heights - Morgan Blvd	Extend Weekday Operating Hours to 9:00 PM	\$131,300	Local	0
27 Landover Metro - Dodge Park	Extend Route to New Carrollton	\$0	Local	0
	Improve Peak Frequency to 20 minutes from current 30 minutes	\$455,000	Major	2
32 Nalyor Road - Clinton Fringe P&R	Extend Weekday Operating Hours to 9:00 PM	\$254,800	Major	0
	Extend Service to Saturday	\$416,000	Major	0
First/Last Mile Connections	Westphalia Circulator	\$529,620		2 (1)
Short Term Total - Central County		\$2,761,720		4
	Mid Term Implementation Phase			
	Improve Off-Peak Frequency to 30 minutes from current 60 minutes	\$390,000	Major	2
20 Addison Road - Upper Marlboro	Extend Weekday Operating Hours to 9:00 PM	\$99,450	Major	0
	Extend Service to Saturday	\$416,000	Major	0
21 New Carrollton - Upper Marlboro	Extend Service to Saturday	\$520,000	Major	0
AL C. III. DOCC	Extend Weekday Operating Hours to 9:00 PM	\$114,400	Local	0
(21x) New Carrollton - PGCC	Extend Service to Saturday	\$182,000	Local	0
22 Morgan Boulevard	Extend Route to New Carrollton	\$422,500	Community	1
23 Addison Road - Seat Pleasant	Split in Two - Improve Route Directness	\$910,000	Local	2
26 Largo - Morgan Boulevard	Improve Off-Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Local	1
28 Largo - Woodmore Town Center	Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Local	1
20 Decelor Control MD11	Improve Peak Frequency to 30 minutes from current 50 minutes	\$445,500	Local	2
30 Branch Ave - Southern MD Hosp	Improve Off Peak Frequency to 45 minutes from current 50 minutes	\$195,000	Local	0
Mid Term Total - Central County		\$4,159,850		9

Route	Improvement	Cost	Route Category	Vehicle Requireme
	Long Term Implementation Phase			
Addison Road - Seat Pleasant	Improve Peak Frequency to 30 minutes from current 40 minutes	\$227,500	Local	1
Capitol Heights - Morgan Blvd	Extend Service to Saturday	\$273,000	Local	0
M. D. L. J.	Extend Service to Saturday	\$182,000	Local	0
Largo - Morgan Boulevard	Extend Weekday Operating Hours to 9:00 PM	\$165,100	Local	0
	Extend Service to Saturday	\$182,000	Local	0
Largo - Woodmore Town Center	Extend Weekday Operating Hours to 9:00 PM	\$195,975	Local	0
	Extend Service to Saturday	\$273,000	Local	0
Branch Ave - Southern MD Hosp	Extend Weekday Operating Hours to 9:00 PM	\$234,325	Local	0
	Improve Peak Frequency to 30 minutes from current 40 minutes	\$227,500	Local	1
Southern Avenue - Padgetts Corner	Extend Service to Saturday	\$182,000	Local	0
	Extend Weekday Operating Hours to 9:00 PM	\$103,350	Local	0
Long Term Total - Central County		\$2,245,750		2
	"Beyond Five Years" Implementation Phase			
Addison Road - Upper Marlboro	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$96,525	Major	0
New Carrollton - Upper Marlboro	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$97,825	Major	0
Mayrea Baylayard	Improve Peak Frequency to 30 minutes from current 40 minutes	\$227,500	Community	1
Morgan Boulevard	Extend Weekday Operating Hours to 8:00 PM	\$81,250	Community	0
All' - Deel CoulDiscoul	Extend Service to Saturday	\$182,000	Local	0
Addison Road - Seat Pleasant	Extend Weekday Operating Hours to 9:00 PM	\$114,725	Local	0
Capitol Heights Metro	Extend Weekday Operating Hours to 9:00 PM	\$94,975	Community	0
	Extend Service to Saturday	\$91,000	Local	0
Landover Metro - Dodge Park	Extend Weekday Operating Hours to 9:00 PM	\$162,500	Local	0
	Further Extend Route to Largo	\$422,500	Local	1
Nalyor Road - Clinton Fringe P&R	Extend Weekday Operating Hours from 9:00 PM to 10:00 PM	\$135,200	Major	0
Southern Avenue - Padgetts Corner	Extend Route to Naylor Road Metro	\$455,000	Local	1
	Extend Service to Saturday	\$91,000	Community	0
Suitland - Capital Crossing Apts	Extend Weekday Operating Hours to 8:00 PM	\$48,750	Community	0
"Beyond Five Years" Total - Central	County	\$2,300,750		3
TOTAL - CENTRAL COUNTY - ALL P	HASES	\$11,467,670		18

⁽¹⁾ First Mile/Last Mile Connection services will utilize paratransit vehicles. No fleet expansion required. First/Last mile vehicles not included in Total.

5.4 Service Improvement Recommendations – South County

The phasing of improvement recommendations in the southern portion of the County follows the same patterns as the other sections of the County. Of note is that three "First Mile/Last Mile Connections" services are proposed for implementation in this section of the County.

 Table 5.3
 South County Transit Improvement Recommendations by Implementation Phase

	Route	Improvement Cost			Vehicle Requirement
		Short Term Implementation Phase			
25	Caren Cravinge Cauthour Ava Matra	Modify Route - Do Not Run into National Harbor in Peak	\$0	Local	0
33	Camp Springs - Southern Ave. Metro	Extend Operating Hours to 9:00 PM	\$139,100	Local	0
	Short Term Total - South County	\$139,100		0	
		Mid Term Implementation Phase			
35)	Camp Springs - Southern Ave. Metro	Improve Off-Peak Frequency to 45 minutes from current 60 minutes	\$130,000	Local	0
33	Camp Springs - Southern Ave. Metro	Extend Service to Saturday	\$273,000	Local	0
53	Upper Marlboro	Extend Route to Suitland Metro or Branch Avenue Metro	\$780,000	Community	2
	First/Last Mile Connections	U.S. 301 - Brandywine to Upper Marlboro	\$529,620		2 (1)
	Mid Term Total - South County		\$1,712,620		2
		Long Term Implementation Phase			
36	Brandywine - Clinton Fringe P&R	Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Local	1
	First/Last Mile Connections	Marlton - Brandywine - Southern MD Hospital	\$529,620		2 (1)
	Long Term Total - South County				1
		"Beyond Five Years" Implementation Phase			
	'	Extend Service to Saturday	\$182,000	Local	0
36	Brandywine - Clinton Fringe P&R	Extend Operating Hours to 9:00 PM	\$98,150	Local	0
		Extend Peak Hour Trips to Branch Avenue	\$195,000	Local	1
27		Extend Service to Saturday	\$182,000	Local	0
37)	Camp Springs - Southern Avenue	Extend Operating Hours to 9:00 PM	\$255,450	Local	0
<u></u>	11 NA II	Improve Peak Frequency to 30 minutes from current 45 minutes	\$227,500	Community	1
53	Upper Marlboro	Extend Operating Hours to 8:00 PM	\$35,100	Community	0
	First/Last Mile Connections	Accokeek Circulator	\$529,620		2 (1)
	"Beyond Five Years" Total - South C	ounty	\$1,704,820		2
	TOTAL - SOUTH COUNTY - ALL PHA	ASES	\$4,313,660		6

⁽¹⁾ First Mile/Last Mile Connection services will utilize paratransit vehicles. No fleet expansion required. First/Last mile vehicles not included in Total.

5.5 Improvement Recommendations by Implementation Time Frame

This chapter section presents the second configuration of the phased implementation plan, and summarizes service improvements by the short-term, mid-term, and long-term implementation time frames that make up the overall five-year time frame

of the plan. This summary is outlined in maps, with a summary map for each time frame.

The maps are contained in Figures 5.1, 5.2, 5.3 and 5.4.







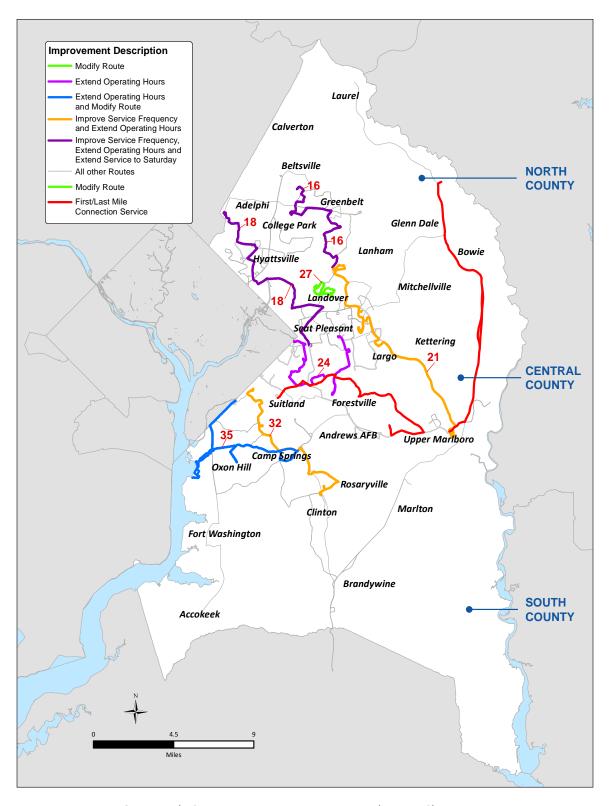


Figure 5.1 Countywide Service Improvement Recommendations - Short Term Time Frame

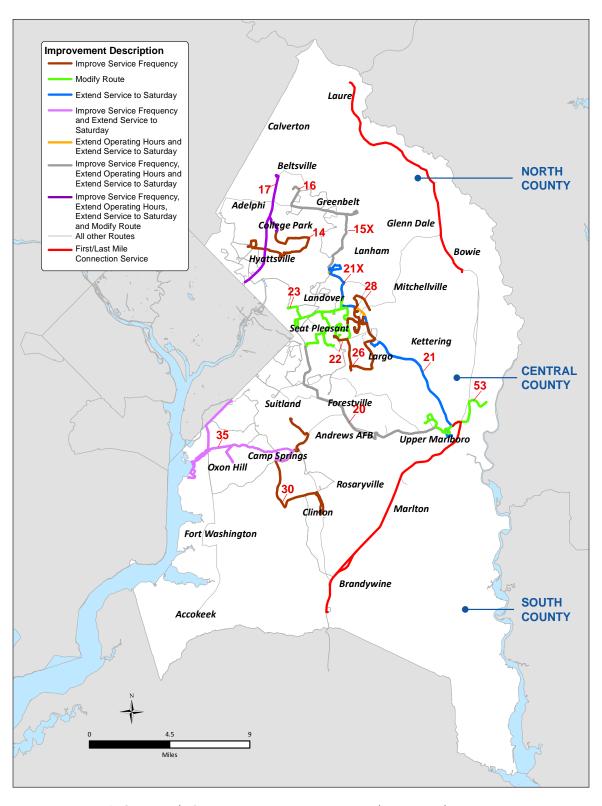


Figure 5.2 Countywide Service Improvement Recommendations - Mid Term Time Frame

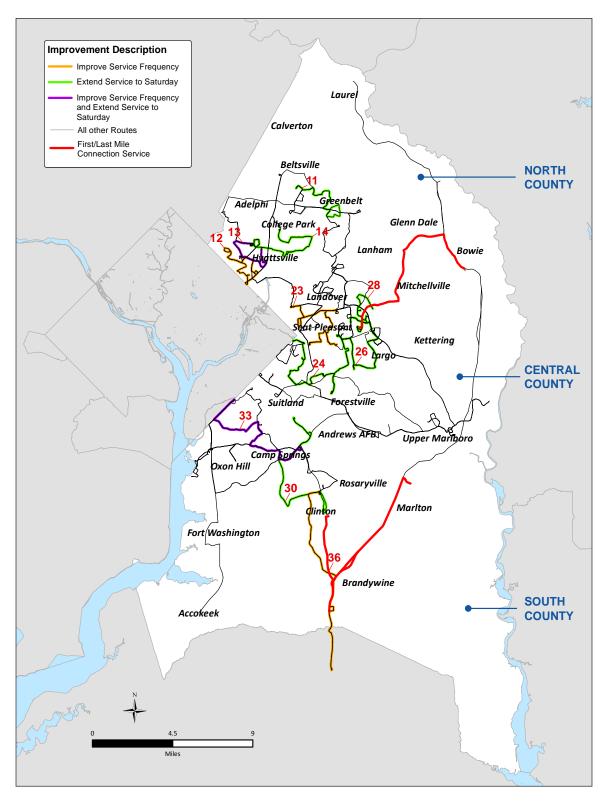


Figure 5.3 Countywide Service Improvement Recommendations - Long Term Time Frame

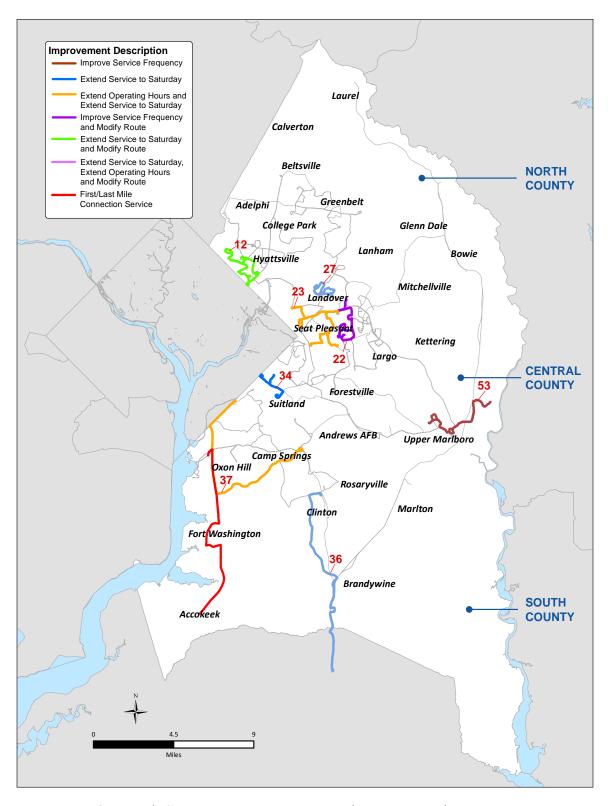


Figure 5.4 Countywide Service Improvement Recommendations - "Beyond Five Years" Time Frame

5.6 Bike Share Network Strategy

The County is currently implementing and expanding its bike share network. Bike share is an initiative of the County's Pedestrian and Bicycle Safety Program, which is focused on ensuring the inclusion of bicycle and pedestrian facilities in roadway projects to improve access, mobility and safety. To provide a range of transportation options that support mobility, health and access to jobs, the program integrates bike share stations throughout the DC Metropolitan region.

In Prince George's County, the first phase of the bike share program includes plans for thirty seven (37) stations along U.S. Route 1, Riverdale Park, Hyattsville, Mount Rainier, College Park, Brentwood, Bladensburg, Largo, and National Harbor. The Department launched the bike share program on June 1, 2018 with five (5) stations. Subsequent phases are planned for other parts of the County in order to expand the bike share network. These phases were identified based on a Bicycle Feasibility Study completed in 2016.

5.7 Five Year Capital Implementation Plan

A key element of the five year implementation plan will be passenger and operations and maintenance facility improvements to complement the service recommendations described in the previous sections. The chapter section outlines the recommended capital improvements to be implemented over the five years of the plan.

5.7.1 Fill In Gaps in the Sidewalk Network

Chapter 4 outlined the total miles of gaps in the sidewalk network that would need to be filled in order to have all *TheBus* stops connected to the network. Table 5.4 summarizes the estimated number of miles that would be addressed each year as well as the estimated cost of each year's sidewalk construction. It should be noted that the total miles of gaps identified

would not be filled completely during the five year length of this plan, based on the estimated number of miles that could be constructed each year. Those gaps not addressed in the five-year time frame will be carried forward into the "Beyond Five Years" implementation time frame.

Table 5.4 Sidewalk Construction to Fill Network Gaps: Years 1–5

Year of Expenditure	Miles of Sidewalk Constructed	Unit Cost per Mile of Sidewalk*	Annual Capital Cost
Year 1	3	\$591,360	\$1,774,080
Year 2	3	\$591,360	\$1,774,080
Year 3	3	\$591,360	\$1,774,080
Year 4	3	\$591,360	\$1,774,080
Year 5	3	\$591,360	\$1,774,080
Total - Five Years			\$8,870,400
Beyond Five Years	9	\$591,360	\$5,322,240

^{*} Based on a cost of \$14.00/square foot provided by County DPW&T. Also assumes an 8-foot wide sidewalk.

5.7.2 Improve Bus Stops

The wait time at the bus stop is a key component of a rider's overall trip experience and therefore the County is closely focused on improving bus stops to make them more comfortable and inviting. Table 5.5

summarizes the estimated number of bus stops that will be improved during each year of the five year plan. No stops are recommended for improvement in the "Beyond Five Years" time frame.

Table 5.5 TheBus Stop Improvements: Years 1–5

Year of Expenditure	Number of Stops Improved	Unit Cost per Stop Improvement	Annual Capital Cost
Year 1	20	\$11,300	\$226,000
Year 2	20	\$11,300	\$226,000
Year 3	20	\$11,300	\$226,000
Year 4	20	\$11,300	\$226,000
Year 5	20	\$11,300	\$226,000
Total			\$1,130,000

5.7.3 Operations and Maintenance Facility

A new or expanded Operations and Maintenance Facility will be required to accommodate the fleet expansion associated with a number of the transit improvement recommendations outlined in previous sections. The estimated cost of a 100 bus facility would be approximately \$75 million to \$100 million based on experience in the design of other facilities. It is extremely important to note that this a very high level estimate and the final cost will be based on the specific characteristics of the facility.

5.8 Five Year Revenue Vehicle Plan

TheBus revenue vehicle fleet will change in a number of different ways over the life of the five-year plan. This change will be based on three primary factors. The first factor is the change in the size of the fleet because of the addition of vehicles associated with service improvement recommendations.

The second factor is the need to replace vehicles in the current fleet due to vehicles reaching the end of their useful life. Replacing vehicles that are nearing the end of their useful life is a key element in providing reliable service to County residents. Vehicles utilized beyond their useful life are more prone to breakdowns during revenue service, negatively impacting riders on the vehicle that breaks down and also resulting in missed trips. Given that many routes in TheBus system run infrequently (up to an 80 minute wait time between buses in the offpeak on TheBus 18), a missed trip can have a dramatic negative affect on riders, in essence doubling the amount of time the passenger must wait for the bus. In addition to in-service breakdowns, buses in disrepair that cannot be put into service also result in missed trips, resulting in the same impact to riders.

The final factor impacting the revenue vehicle fleet is that the County will be transitioning from the predominant vehicle model in the current fleet, which is built by the vehicle manufacturing company Gillig.

Because an existing contract for vehicle purchases with Gillig does not currently exist, a new vehicle type will be used to replace vehicles as they reach the end of their useful life.

Two summaries are outlined here in order to provide an understanding of the changes in the vehicle fleet over the five year life of the plan.

The first summary, contained in Figure 5.4, shows the change in the size of the fleet based on fleet additions to support the service improvements outlined in the previous pages. It is important to note two additional points. The first is that the expansion numbers in the Figure represent vehicles required for revenue service as well as spare vehicles. The second point is that the vehicles shown represent fixed-route vehicles only. Vehicles used for the various First Mile/Last Mile Connection services will be paratransit vehicles coming from the existing fleet.

The second summary, contained in Table 5.5, shows the change in the composition and size of the fleet based on the expansion of the fleet to support service improvement as well as the retirement and replacement of vehicles as they reach the end of their useful life.

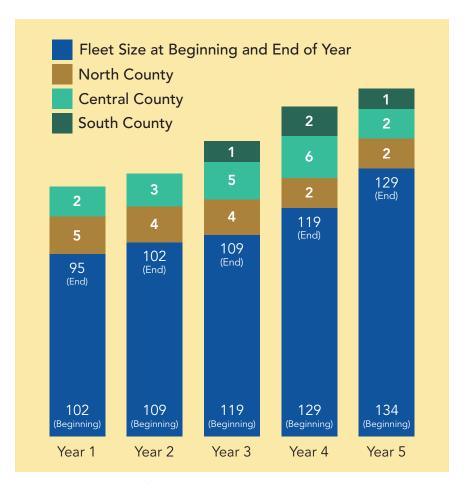


Figure 5.5 Fleet Composition over Five Year Time Frame

Table 5.6 The Bus Stop Improvements: Years 1–5

	FY 19	FY 20	FY 21	FY 22	FY 23
Medium Duty Gillig 35'					
Total Fleet - Start of Year	95	82	70	62	40
Peak Pull Out	77	69	59	52	32
Retired	13	12	8	22	22
Replace	0	0	0	0	0
Expand	0	0	0	0	0
Total Fleet - End of Year	82	70	62	40	18
El Dorado - 5'					
Total Fleet - Start of Year	0	19	39	57	89
Peak Pull Out	0	13	32	47	72
Retired	0	0	0	0	0
Replace	13	12	8	22	22
Expand*	7	7	10	10	5
Total Fleet - End of Year	20	39	57	89	116
Total - Combined Fleets	102	109	119	129	134

^{*} Includes required spares (20% spare ratio)

5.9 Future Rapid Transit Corridors Strategy

Rapid transit corridors in the form of light rail, streetcar, or Bus Rapid Transit are moving forward in heavily traveled corridors throughout the Washington Region. These fixed guideway systems are critical for enhanced access, mobility and economic development. In addition, they are essential to provide mechanisms to support transit oriented development, connect to the fixed guideway networks of adjoining jurisdictions, and bridge the regional jobs/housing imbalance and as a meaningful tool to reduce vehicular congestion. Understanding the importance of these corridors, the Transit Vision Plan is recommending moving forward with the development of a master plan for a fixed guideway system within the County. This master plan would evaluate candidate corridors as well as assess feasible guideway improvements within each corridor. It would also include ridership forecasts, operating and capital cost estimates, potential funding strategies, and a phasing strategy for the master plan network.

It is important to note that the Transit Vision Plan improvement recommendations contained in earlier sections of this chapter form the foundation for transitioning over time to enhanced rapid transit service in major corridors within the County. Plan implementation would begin with the improvements to existing bus service, as outlined in this document, and then potentially transition first into premium high-frequency limited stop service without guideway improvements, such as WMATA MetroExtra service, and then finally continuing to full dedicated guideway service.