BRAC PUBLIC TRANSPORTATION REPORT

June 2009

Maryland Transit Administration

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Maryland Transit Administration

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BRAC Public Transportation Report

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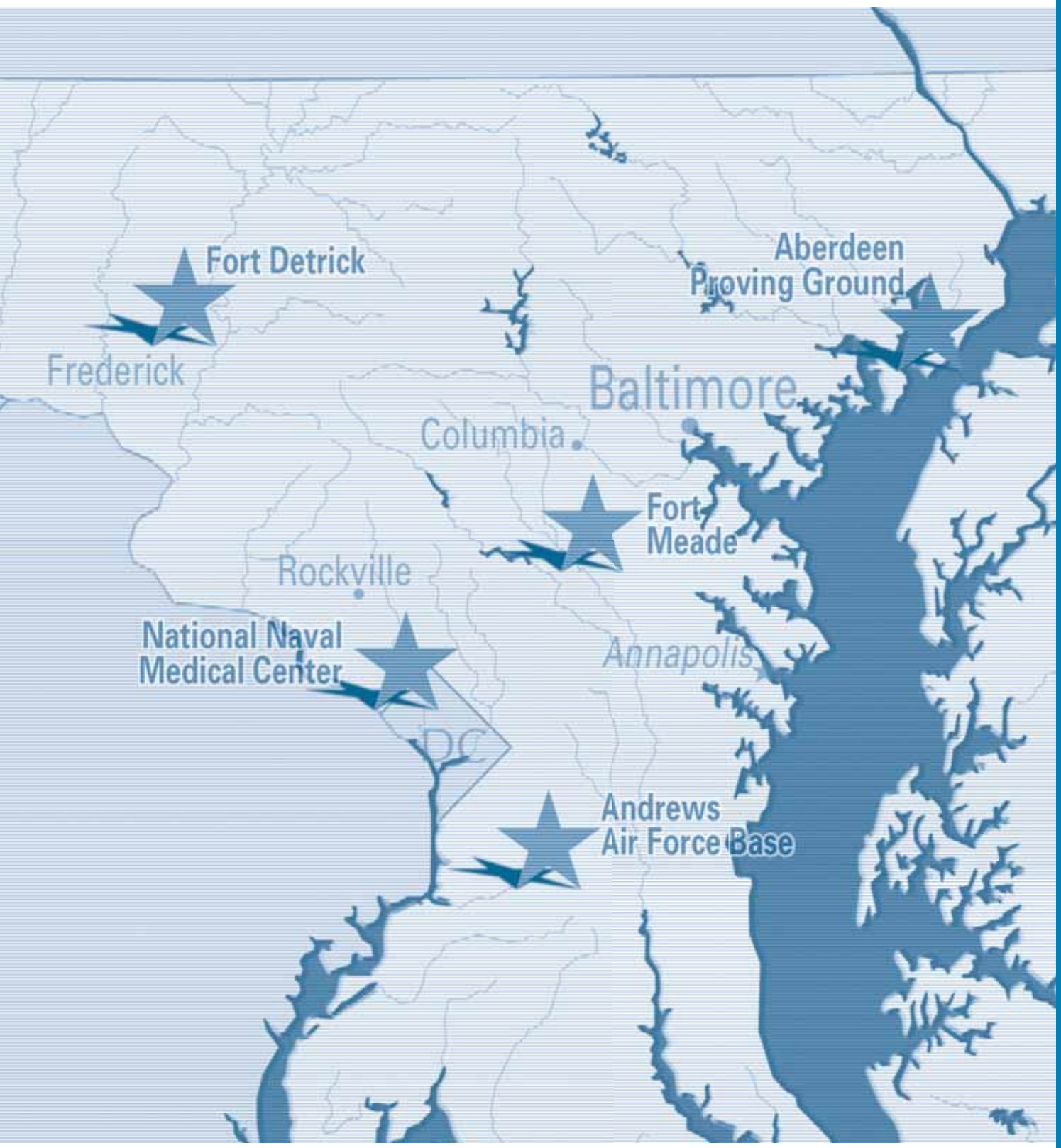
EXECUTIVE SUMMARY



Executive Summary

BRAC OVERVIEW / PURPOSE OF REPORT

The 2005 Base Realignment and Closure (BRAC) Commission, established by Congress with the aim of achieving more efficient military operations, recommended a series of military relocations and alignments for Maryland installations. The final result required the reassignment of military personnel from installations in several other states to Andrews Air Force Base (AAFB), Fort Meade, Fort Detrick, Aberdeen Proving Ground (APG), and the National Naval Medical Center (NNMC). These locations are shown in **Figure 1**. A net increase of more than 19,000 personnel is included in this reassignment to Maryland installations. An additional number of unspecified support personnel, family and contractors is also anticipated to be relocated with estimates ranging as high as 45,000 new jobs entering the State by 2011. As part of the BRAC effort, the Secretary of Defense must implement the recommendations no later than September 15, 2011.

To prepare for the effects of BRAC, Maryland initiated a State Subcabinet and developed a state-wide BRAC Action Plan to examine the impacts to transportation, infrastructure, housing, schools, workforce and financial and regulatory issues. In addition, local jurisdictions prepared their own BRAC action reports. These, and other BRAC-related reports, have identified transportation needs and offered highway, roadway, intersection and transit recommendations. As a supplement to these recommendations, the Maryland Transit Administration (MTA) developed this BRAC Public Transportation Report to specifically focus on the provision of transit as a means to address the impending BRAC influx. This report focuses on the provision of transit and ridesharing services now available to the five BRAC-impacted military installations and documents all current public transportation planning efforts by local governments, transit agencies and military installations in Maryland.

EXISTING AND PROPOSED SERVICES

Table 1 reflects a summary of all existing and proposed services near each of the BRAC installations. Existing services are those that provide direct or connective service to the installations. For example, any service that includes a stop at one of the access gates is included as serving the installation. Also included is any rail service with a bus connection to the installation.

Proposed services are indicated for those agencies that are planning specific improvements to existing services or the creation of new services due to BRAC-related growth. Potential service improvements related to the regular monitoring of routes and demand or future service modifications are not included, even if these improvements may serve BRAC installations.

A description of the existing and proposed transportation services are presented in each of the five BRAC installation chapters.

Table 1: BRAC Existing and Proposed Services

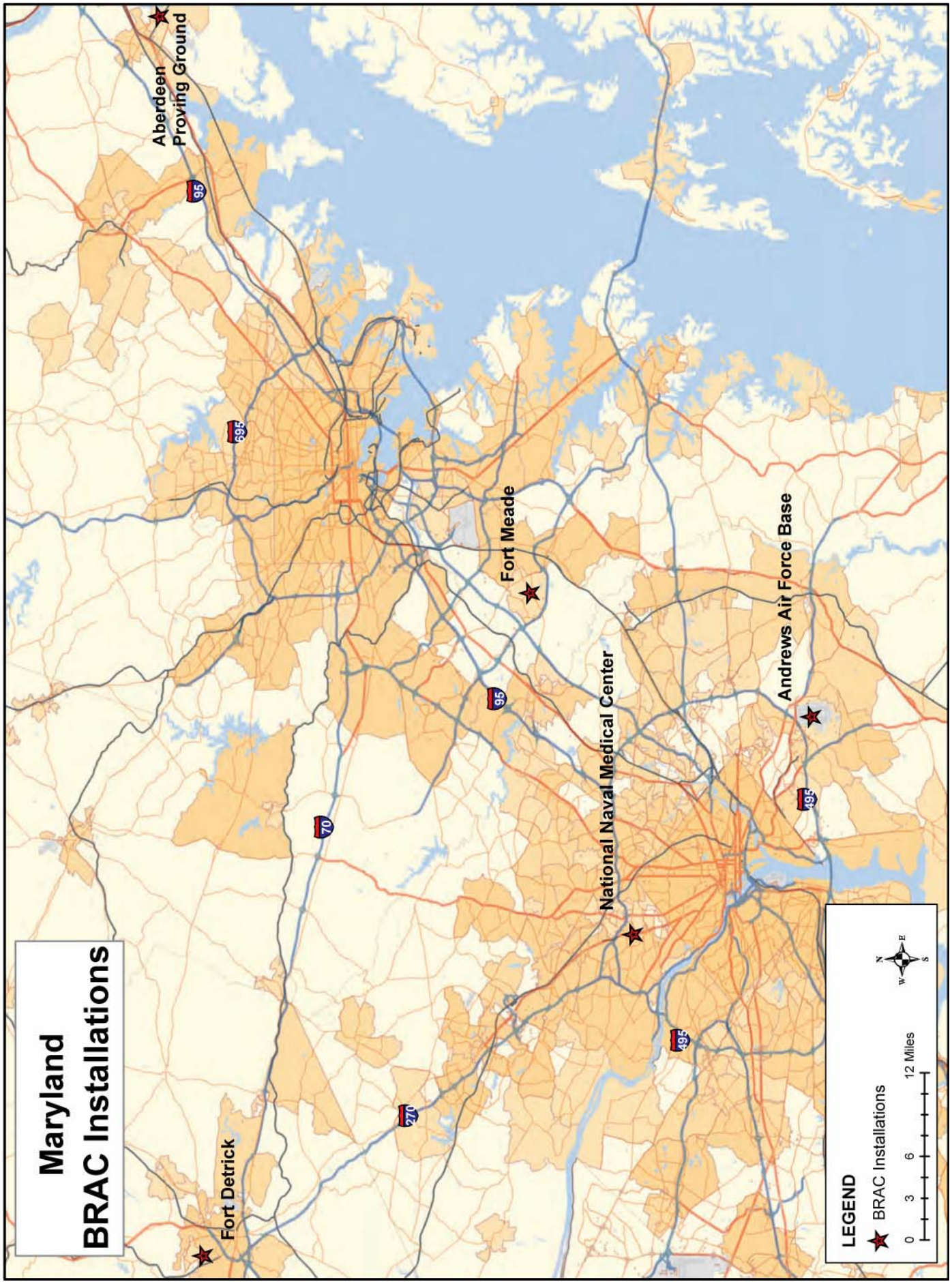
Transit Provider	APG		AAFB		NNMC		Fort Detrick		Fort Meade	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
MTA										
Local Bus										
Commuter Bus		Yes				Yes				Yes
MARC	Yes	Yes			Yes		Yes		Yes	
Annapolis Transit/ A.A. County										Yes
Bethesda Circulator										
Connect-A-Ride									Yes	Yes
DART First State										
Harford Transit	Yes									
Howard Transit										Yes
Montgomery County Ride On					Yes					
Prince George's County 'The Bus'			Yes							
Frederick County TransIT							Yes			
WMATA										
Metrobus			Yes		Yes					
Metrorail			Yes		Yes					

BRAC INSTALLATION CONCLUSIONS

Aberdeen Proving Ground (APG)

APG is currently served by the MARC commuter rail service, providing five trips each weekday to Baltimore, with additional rail service via Amtrak. The MTA also operates a commuter bus route from Aberdeen to Baltimore and Harford Transit operates four routes near APG. The main topics regarding APG are future MARC commuter train service improvements, the potential improvement of the Aberdeen Rail Station, the connection of the Aberdeen Rail Station and APG and internal circulation within APG. Commuter service to APG from Baltimore and Washington, DC is available on MARC and Amtrak trains. Efforts are currently underway to add peak period trips to and from APG as trips are now focused on service to Baltimore from Aberdeen. This beginning of a shift in Aberdeen from an origin station to a destination station also impacts the potential upgrade of the station as the sometimes competing forces of commuter parking and transit-oriented development vie for prominence.

Figure 1


Maryland
BRAC Installations
Aberdeen
Proving Ground
Fort Meade
National Naval Medical Center
Andrews Air Force Base
Fort Detrick
95
695
70
270
495
LEGEND
BRAC Installations
0 3 6 12 Miles
N
E
S
W

In addition to potential MARC improvements, commuter bus service from Baltimore and Delaware has been proposed. This commuter service would be the first from Delaware to Maryland and would either require the shared or full funding from Delaware. The proposed commuter bus services are:

- Baltimore (via Baltimore Travel Plaza and White Marsh) to APG
- Churchman's Crossing, Delaware (via Elkton) to APG

Recommendations for proposed local bus connections to APG and the Aberdeen Rail Station, as well the greater Aberdeen vicinity are also currently being discussed by Harford County officials as part of an amended Transit Development Plan (TDP).

Andrews Air Force Base (AAFB)

AAFB is currently served by two 'The Bus' routes and six WMATA Metrobus lines that are within the vicinity of the base. AAFB has begun the development of a Transportation Management Plan (TMP), as required by the National Capital Planning Commission (NCPC), which will quantify the potential transit demand on and off base and produce recommendations to accommodate that demand.

Increased coordination between AAFB and the various transportation agencies, including MTA, is occurring presently. Indications are that it will continue as more information is obtained regarding the relocations from Crystal City, Virginia and other locations.

Transportation actions identified to support the BRAC implementation include:

- WMATA's region-wide BRAC Transit Study to evaluate where service gaps may occur as a result of the influx of BRAC employees to the Washington region. This study is due to be completed in 2009.
- Marketing of rideshare and vanpooling to the Crystal City employees, including the potential creation of an AAFB Rideshare Coordinator position.
- Elements of the TMP, to include pedestrian access improvements from the local bus stops to the gate(s), improvements to the existing on-base shuttle circulator and the potential for shuttle connections to transit hubs off-base.

National Naval Medical Center (NNMC)

NNMC is directly served by the Metrorail Red Line, seven Ride On routes, and three Metrobus lines. NNMC is also served by government shuttle networks for the private use of patients, visitors and staff as space permits. These routes connect the Medical Center Metrorail Station with major buildings and parking areas.

In addition, Montgomery County conducts marketing for walking, biking, transit, carpooling, vanpooling and telecommuting.

Transportation actions identified to support the BRAC implementation include:

- The NNMC, with the Bethesda Urban Partnership, will investigate the feasibility of providing fast and frequent shuttle connections to Downtown Bethesda, through an extension of the current Bethesda Circulator service.

- NNMC will make a significant effort to implement measures to dissuade employees from driving to work alone or during peak commuter periods. These efforts include Town Hall meetings for leadership, development of a Commuter Solutions website, providing commuting alternatives at staff orientation, review of alternate work schedules/variable work and telecommuting, involvement in local and regional transportation initiatives (Medical Center Transportation Organization, Keep Montgomery County Moving, various MWCOG meetings, Montgomery County Rideshare Coordinator meetings and membership in ACT), enhancing bicycle and pedestrian access & facilities, increased parking management, consideration for Smart Parking systems, pursuing express bus services, brochure racks and increased coordination with NNMC tenants. NNMC will consider bus pull-offs on Jones Bridge Road as part of the gate improvements.
- Priority parking spaces will also be allocated for employees arriving by carpool or vanpool, or possibly those arriving during the less-congested times of the day.
- The Purple Line would serve a highly congested corridor in Prince George's and Montgomery counties connecting the Metrorail Red, Green and Orange lines to key employment, residential, and institutional destinations.
- WMATA is currently conducting a Medical Center Station Area Access Study, which includes the provision of an east side/NNMC station portal and a pedestrian tunnel underneath MD 355 connecting NIH and the Metrorail station to the NNMC campus.
- WMATA has also initiated a region-wide BRAC Transit Study to evaluate where service gaps may occur as a result of the influx of BRAC employees to the Washington region. NNMC is one of the three Maryland bases included in the study along with Andrews AFB and Fort Meade. This assessment will include evaluating pedestrian, bicycle, bus, and automobile access and developing a concept plan for improved access to the station site.

Fort Detrick

Fort Detrick is currently served by one MTA commuter bus route, one MTA commuter rail line, the MARC Brunswick Line which operates nine eastbound trips and ten westbound trips each weekday, and also by four TransIT routes. Recent improvements to Veterans Gate, the main gate serving the installation, have increased capacity and reduced queuing onto Seventh Street and Military Road.

BRAC legislation transferred management of an off-site location, the Forest Glen Annex (FGA), to Fort Detrick. An Environmental Assessment found the BRAC activities at FGA would have negligible impacts to public transit or rail access at or near the installation.

Transportation actions identified to support the BRAC implementation include:

- Fund reverse commuter service in support of BRAC related activities at Fort Detrick
- Improve pedestrian and bicycle access on the surface roads that surround Fort Detrick
- Encourage and market the existing ridesharing program offered though the Environmental Management Office at Fort Detrick

Fort Meade

Service to the Fort Meade area is currently provided by MARC commuter rail with Penn Line service to Odenton and Camden Line service to Savage combining for 22 morning trips and 23 evening trips each weekday. Additional service to the area is provided by Connect-A–Ride with two local bus routes.

Numerous proposals have been suggested for service options to Fort Meade and planning efforts are on-going and will continue through 2011. Transportation efforts related to Fort Meade include on-base circulation, connectivity to MARC stations, local connectivity and regional connectivity.

The Army has announced that it will address the internal circulation needs of Fort Meade. Transportation could include trips from the visitor center to employment locations and mid-day service throughout the base and to retail, banking and other services.

MARC connectivity using the NSA shuttle service between the Odenton MARC rail station for Fort Meade tenant unit employees is now operational. Fort Meade use of the NSA shuttle to and from the Savage MARC rail station is under consideration. Ongoing coordination is necessary especially as the three BRAC agencies moving to Fort Meade arrive by not later than September 2011. In addition to this shuttle service, other services have been proposed to connect Odenton and Savage MARC rail stations with Fort Meade, specifically those services proposed in the Howard County Transit Development Plan (TDP).

Local connectivity has been addressed by both Howard and Anne Arundel counties through proposed service routes in their TDPs.

Three commuter bus services have been proposed for Fort Meade:

- Greenbelt Metrorail Station to Fort Meade
- Gaithersburg to Fort Meade
- Harry S. Truman Park and Ride in Annapolis to Fort Meade

OVERALL CONCLUSIONS

Challenges for Transit

Parking Availability

Parking is currently free and available at all five BRAC installations, which creates an incentive for employees to drive alone. By 2012, the National Naval Medical Center (NNMC) Master Plan shows that parking will be constrained within the gates, partially to encourage more employees to use the Metrorail Red Line for their commute. Fort Meade may have limited on-base parking availability as well. All other bases will still have parking availability.

Park and Ride Capacity

The proposed commuter bus service to APG and Fort Meade has proposed stops at existing park and ride locations. These park and ride locations currently operate at or near capacity and added demand for parking from a new service may produce a situation where interested riders will not be able to find parking and, therefore, choose not to use the service.

Security and Agency Coordination

Security and direct access to the installations has been a primary challenge for any proposed transportation improvement. Significant movement towards resolution by the Fort Meade base commander has occurred; however, it remains under consideration at the other BRAC installations.

Two main security challenges are access to the installations by transit vehicles and access to the installations by passengers. An option currently being examined for adoption by BRAC installations is to have transit services terminate on-base with identification checks at the point of entry. Additionally, the possible requirement of any public transit service to use pre-screened drivers has been examined. At present, direct base access has been proposed for two of the BRAC installations – Fort Meade and APG.

One of the major challenges in the BRAC implementation is the high number of stakeholders involved. In terms of transportation issues, the primary stakeholders include federal, state and local governmental agencies and the military installations. In addition, a number of civic and public organizations, groups, alliances and consortiums (as listed in Appendix A) have an interest in transportation issues. In the course of the development of this report, the need for improved communication among stakeholders was cited by state and local agencies and public organizations. Some of the communication challenges mentioned have included:

- A lack of communication regarding the status of projects, especially on funding issues.
- The receipt of conflicting information regarding state and federal funding pools and earmarks that could be used to help fund locally-led projects.
- A lack of transparency among transportation agencies partially due to increased difficulty in obtaining project funding.

Ridesharing and Vanpool

Ridesharing and vanpool programs are administered through local county coordinators, a ridematching service for Maryland and metropolitan Washington, DC, operated by an organization called Commuter Connections; or in some cases, large employers that have their own on-site coordinators. Participant registration and enrollment in the system is necessary for the participant to receive subsidies and take advantage of the Guaranteed Ride Home (GRH) program. The GRH program is not available to everyone in Maryland, and where the program is available, potential users must meet conditions of residency and employment location requirements.

Greater marketing of vanpool programs and expansion of the GRH system could attract more participants. Also, a clearinghouse and improved websites for information could be useful in explaining these options to potential participants.

Marketing

The marketing of transit and alternative transportation options is vital to their success. Transit surveys reveal lack of awareness as a reason for not utilizing transportation options. Likewise, ridesharing and vanpooling are rarely treated as separate transportation alternatives, often folded into mobility options when discussed. An example to follow is the Metropolitan Washington Council of Government's Commuter Connection program.

In order to create awareness of the services for each installation, the local transit agency, the MTA and the BRAC installation may consider joint promotional materials to inform and educate employees about transit services. This may include promotional materials, targeted ridership programs and branding of specific routes that serve each location as base routes.

Funding

The 2005 BRAC legislation mandated actions, which in turn created transportation needs, but did not include federal funding sources to support the actions. The new needs resulting from BRAC are also competing with the other existing transportation needs. The MDOT website acknowledges that funding the important transportation needs will require working within the existing financial capabilities. MDOT recognizes it will need to work with the local counties in order to explore creative new funding mechanisms that can bolster the traditional funding sources.

The FY 2008-2013 Consolidates Transportation Program (CTP) includes $448 million allocated for BRAC projects in FY 2009, out of the total $1.73 billion budgeted over the capital program period. At the federal level, the Department of Defense (DOD) Defense Access Roads (DAR) Program provides the DOD a means to pay for public highway improvements resulting from sudden or unusual defense-generated impacts.

Maryland's projected shortfall in revenues for 2009 has led the State to defer funds originally budgeted for all modal agencies within MDOT.

Americans with Disabilities Act

The Maryland Department of Disabilities (MDOD) is leading an effort to gather representatives from all state agencies on a regular basis to discuss the issues and concerns of people with disabilities as a result of BRAC growth. Public transportation is just one of the components being discussed, along with housing, workforce development and education.

MDOD's goal is similar to MDOT's overall goal for BRAC-related projects, which is to promote seamless transit connections and customer convenience to and on military installations. One key objective is for all public transportation vehicles, stations, and facilities to be compliant with the Americans with Disabilities Act (ADA).

Enhanced Use Leases (EULs)

Enhanced Use Leases (EULs) are opportunities for developers to bid on the right to develop, operate and maintain facilities through a long-term ground lease on the BRAC installations. In return, the developers will provide in-kind consideration to the military for at least equal to the fair market value of the assets. EULs have been proposed at APG, Fort Detrick, and Fort Meade; however, transportation options have focused on government employees and not EUL tenants because of the lack of availability of EUL employment estimates and an expected timeframe of their arrival.

As the development of EULs progresses and as ancillary businesses locate near the installations, other routes or services may become necessary. However, all of the transportation options to EUL sites have not been fully explored since the total impact of the scope of the developments is not known.

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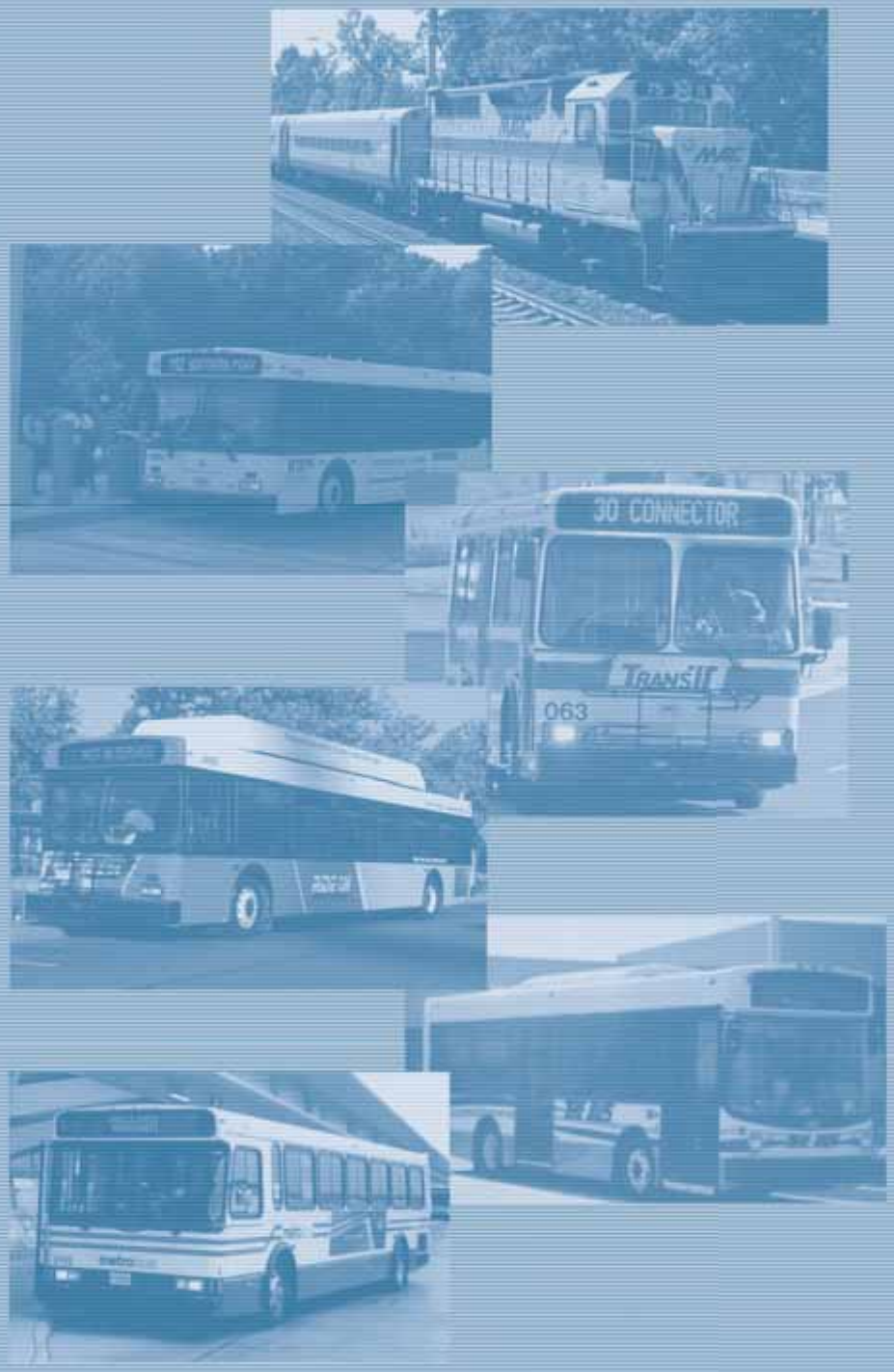
INTRODUCTION



Chapter 1: Introduction

1.1 BRAC OVERVIEW / PURPOSE OF REPORT

The 2005 Base Realignment and Closure (BRAC) Commission, established by Congress with the aim of achieving more efficient military operations, recommended a series of military relocations and alignments for Maryland installations. The final result required the reassignment of military personnel from installations in several other states to Aberdeen Proving Ground, Andrews Air Force Base, Fort Detrick, Fort Meade and the National Naval Medical Center. These locations are shown in **Figure 1** on page 3. A net increase of more than 19,000 personnel is included in this reassignment to Maryland installations. An additional number of unspecified support personnel, family and contractors is also anticipated to be relocated with estimates ranging as high as 45,000 new jobs entering the State. As part of the BRAC effort, the Secretary of Defense must implement the recommendations no later than September 15, 2011.

To prepare for the effects of BRAC, Maryland initiated a State Subcabinet to develop a statewide BRAC Action Plan to examine the impacts to transportation, infrastructure, housing, schools, workforce and financial and regulatory issues. In addition, local jurisdictions prepared their own BRAC action reports. Anne Arundel County, Baltimore City, Baltimore County, Cecil County, Frederick County, Harford County, Howard County and Prince George's County are among those that have completed their own action plans.

These, and other BRAC-related reports, have identified transportation needs and offered recommendations; however, these recommendations mostly pertained to highway, roadway and intersection issues, with few transit recommendations. As a supplement to these recommendations, the Maryland Transit Administration (MTA) developed this BRAC Public Transportation Report to specifically focus on the provision of transit as a means to address the impending BRAC influx. This report focuses on the provision of transit and ridesharing services now available to the five BRAC-impacted military installations and documents all current public transportation planning efforts by local governments, transit agencies and military installations in Maryland.

Funding for the transportation needs resulting from BRAC is competing with the other identified statewide transportation needs as well. Existing and potential state and federal funding sources are discussed in Section 7.2.4 of this report. The Maryland Department of Transportation (MDOT) website acknowledges that funding the transportation improvements will require working within the existing financial capabilities. MDOT also recognizes it will need to work with the local jurisdictions in order to explore creative new funding mechanisms that can bolster the traditional funding sources.

1.2 PUBLIC TRANSIT PROVIDERS

This section presents state and local transportation providers that operate in the vicinity of each of the BRAC-impacted installations. In addition, this section presents a description of ridesharing and vanpool operations.

1.2.1 Maryland Transit Administration (MTA)

The MTA is the 10th largest transit provider in the country offering transit services across six modes: local bus, commuter bus, light rail, metro subway, MARC commuter rail and Mobility paratransit. Local bus, light rail, metro subway and Mobility are primarily focused on service to the Baltimore metropolitan area, while commuter bus and commuter rail services are focused on Washington, DC and the city of Baltimore. Annual ridership on the MTA has increased 3.5 percent overall from FY 2006 to FY 2007. Across the modes, local bus has the highest MTA ridership with more than 64 million annual riders. The MARC commuter rail has an annual ridership of 7.5 million with the bulk of that ridership on the Penn Line. Commuter bus services to Washington, DC carry three million riders per year while commuter bus services to Baltimore carry 360,000 riders annually. Total system ridership of the MTA is over 96 million per year.

The MTA is currently conducting three corridor studies; two in the Washington area – the Purple Line and the Corridor Cities Transitway and one in Baltimore – the Red Line. Each of these corridors is planned as light rail or bus rapid transit. In addition, the MTA has approved a long-term Growth & Investment Plan for MARC commuter rail services.

1.2.2 Annapolis Transit

Annapolis Transit is operated by the Annapolis Department of Transportation and provides public transit service through three local shuttle and eleven fixed-route services. These routes serve Annapolis, Parole, Edgewater, Deale and BWI Airport. Annual ridership for FY 2008 was 1,331,000 trips.

The system operates on weekdays from 6:30 a.m. to 8:00 p.m. and on weekends from 10:00 a.m. to 6:00 p.m. Annapolis Transit provides a Free Fare Zone for the downtown area of the city of Annapolis. Anyone boarding any bus within the Free Fare Zone pays no fare if also traveling to any destination within the Free Fare Zone.

1.2.3 Bethesda Circulator

The Bethesda Circulator, formerly known as the Bethesda 8 Trolley, is a 2.1 mile fixed-route transit line operated by the Bethesda Urban Partnership (BUP), a non-profit organization. BUP is operated by an 11-member board comprised of local business leaders and residents. It is funded through revenue generated from the Bethesda Parking Lot District fees and the Urban District property tax.

The route operates two loops forming a 'figure 8' and centering on the Bethesda Metrorail Station with 270,000 annual trips. The northern loop operates as far north as Rugby Road, and the southern loop as far south as Bethesda Avenue. It operates Monday to Thursday from 7:00 a.m. to midnight, on Friday from 7:00 p.m. to 2:00

a.m. and on Saturday evenings from 6:00 p.m. to 2:00 a.m., with service every ten minutes.

The Bethesda Circulator shuttle route has been in existence since 1999 and previously operated as the 'Bethesda 8' by WMATA, and later by Montgomery County Ride On.

1.2.4 Connect-A-Ride

Connect-A-Ride is a fixed-route public transit service that operates in Anne Arundel, Howard, Montgomery and Prince George's counties. It is operated by the Corridor Transportation Corporation (CTC), a provider of public transportation in the Baltimore-Washington suburban region. The CTC also manages the Howard Transit fixed-route system. The CTC was created in 1987 through the efforts of the Greater Laurel business community, local and state agencies and elected officials. Annual ridership for FY 2008 was 657,000 trips.

Connect-A-Ride operates 12 routes and serves the Muirkirk and Odenton MARC rail stations, Arundel Mills Mall, the National Security Agency (NSA), Greenbelt Metrorail Station, Columbia Town Center and other major employment centers.

1.2.5 Delaware Authority for Regional Transit (DART) First State

DART First State is the statewide transit provider for Delaware and offers local and commuter bus service primarily to Wilmington and Newark in the northern end of the state and Dover in central Delaware. Limited service is also provided to Elkton in Cecil County, Maryland. The DART First State system operates 43 fixed-route bus routes most of which are within New Castle County. Rail service in New Castle County is available from Newark, Churchman's Crossing, and Wilmington on the SEPTA R2 line to Philadelphia under a contract between SEPTA and DART. No passenger rail service exists south of Newark, Delaware.

1.2.6 Frederick County TransIT

TransIT is a public transit provider operated by Frederick County. It operates six limited-service shuttle routes, nine connector routes, and paratransit. In FY 2008, TransIT provided 738,000 trips to local employment, medical, shopping and educational facilities.

1.2.7 Harford Transit

Harford Transit is a fixed-route public transit system that operates nine routes on weekdays and limited service on Saturdays. Harford Transit also provides para transit and demand response services five days and evenings per week for special populations. The routes connect major shopping and employment areas of Harford County. Of the nine routes, three operate strictly within the confines of the towns of Bel Air, Aberdeen, and Edgewood. The remaining routes connect the population centers along the US 40 corridor and Bel Air. Annual ridership for FY 2008 was 292,000 trips.

1.2.8 Howard Transit

Howard Transit is a public transit service which primarily serves as a neighborhood collector connecting to commuter bus, light rail, and commuter rail and major employment centers. It is managed and operated under contract by the CTC, which

also manages the Connect-A-Ride service in Howard, Prince George's and Anne Arundel counties. Howard Transit operates nine routes, of which two, the Purple and Silver, are within a 4-mile radius of Fort Meade. Howard Transit also serves the major employment centers of Arundel Mills Mall, the Mall in Columbia and BWI Airport. Annual ridership for FY 2008 was 860,000 trips. Howard Transit is currently developing a new five-year Transit Development Plan (TDP) which will outline future service improvements, expansions and modifications.

1.2.9 Montgomery County Ride On

Ride On is a fixed-route public transit service in Montgomery County operated by the Department of Transportation. It operates more than 80 routes via local neighborhood shuttles that serve as feeder buses to Metrorail stations to commuter routes into Washington, DC. In FY 2008 more than 28 million trips were made via Ride On services and it is the second largest Maryland provider of public transportation.

1.2.10 Prince George's County The Bus

The Bus is a public fixed-route transit system in Prince George's County and is operated by the Prince George's Department of Public Works and Transportation (DPW&T). In FY 2008 it ran nearly 3 million annual trips on 25 routes. These routes are primarily designed as a neighborhood system providing connecting feeder service to regional transit modes, most notably WMATA Metrorail stations. The Bus routes are concentrated in the Greenbelt, Upper Marlboro, Largo and Landover communities of Prince George's County. Service is offered on weekdays with no weekend service provided.

1.2.11 Washington Metropolitan Area Transit Authority (WMATA)

WMATA is the largest transit provider in the Washington, DC region, the second largest rail provider, and the fifth largest bus network in the country. It provides local bus, commuter bus, subway and paratransit service to Washington, DC and suburban Maryland and Virginia, serving a population of 3.5 million people within a 1,500 square mile area. It operates five Metrorail lines encompassing a system of 106.3 miles with 86 stations. It operates 171 bus lines divided into 338 different routes and comprising more than 12,000 bus stops. Combined system ridership exceeds 348 million per year, providing 215 million annual trips on rail and 133 million annual trips on bus.

1.3 RIDESHARING

Ridesharing is a cost-effective transportation management technique aimed at reducing congestion and increasing the capacity of the roadway. Ridesharing incorporates carpooling and vanpooling, and can involve the use of private automobiles or provided or shared vehicles such as vans, and works well when participants share similar work hours, origins and destinations. Coworkers of a large employer ridesharing in the same location generally represent the ideal situation. Often in these instances, large employers may offer in-house ridesharing and carpooling match services.

Some of the benefits of ridesharing include:

- Lowered/shared costs of commuting
- Access to HOV lanes
- Access to preferred or discounted parking (decreased parking demand)
- Reduced roadway congestion
- Conservation of energy
- Improved air quality

Within the state of Maryland, the local ridesharing programs are funded by the MTA through agreements with local jurisdictions. The ridesharing programs are administered through local coordinators in conjunction with the Commuter Connections program run by the Metropolitan Washington Council of Governments (MWCOG). The local coordinator is responsible for the marketing and promotion of the rideshare program and will provide either direct enrollment of interested individuals or the referral of these interested commuters. The ridematching service for Maryland and metropolitan Washington, DC is operated by Commuter Connections. A list of the local coordinators is located in Appendix C.

Registered users of ridesharing, vanpool, transit, walking or biking, who live and work in designated areas of the Washington, DC area, may be eligible to participate in the Guaranteed Ride Home (GRH) program which is managed by Commuter Connections. The GRH program is not available in the Baltimore region and other areas in Maryland. Where the program is available, potential users must meet conditions of residency and employment location. **Figure 1-1** shows the eligibility and coverage areas of the GRH program. Potential users must live in one of the counties shown and must work in the counties shown in crosshatching. For example, residents of Harford County working in Montgomery County would be eligible for the GRH program, while those working in Baltimore or Cecil counties would not be.

Rideshare Delaware is a division of DART First State that offers free ridematching for commuters working in Delaware, an emergency ride home program, and a variety of free services and tools to help employers put together a ridesharing program. At this time, Rideshare Delaware is considering an expansion of its program for Delaware residents to employers in the areas of Aberdeen and Cecil County. This expansion of service would require ongoing coordination with local Maryland counties, the MTA, DART First State and local employers.

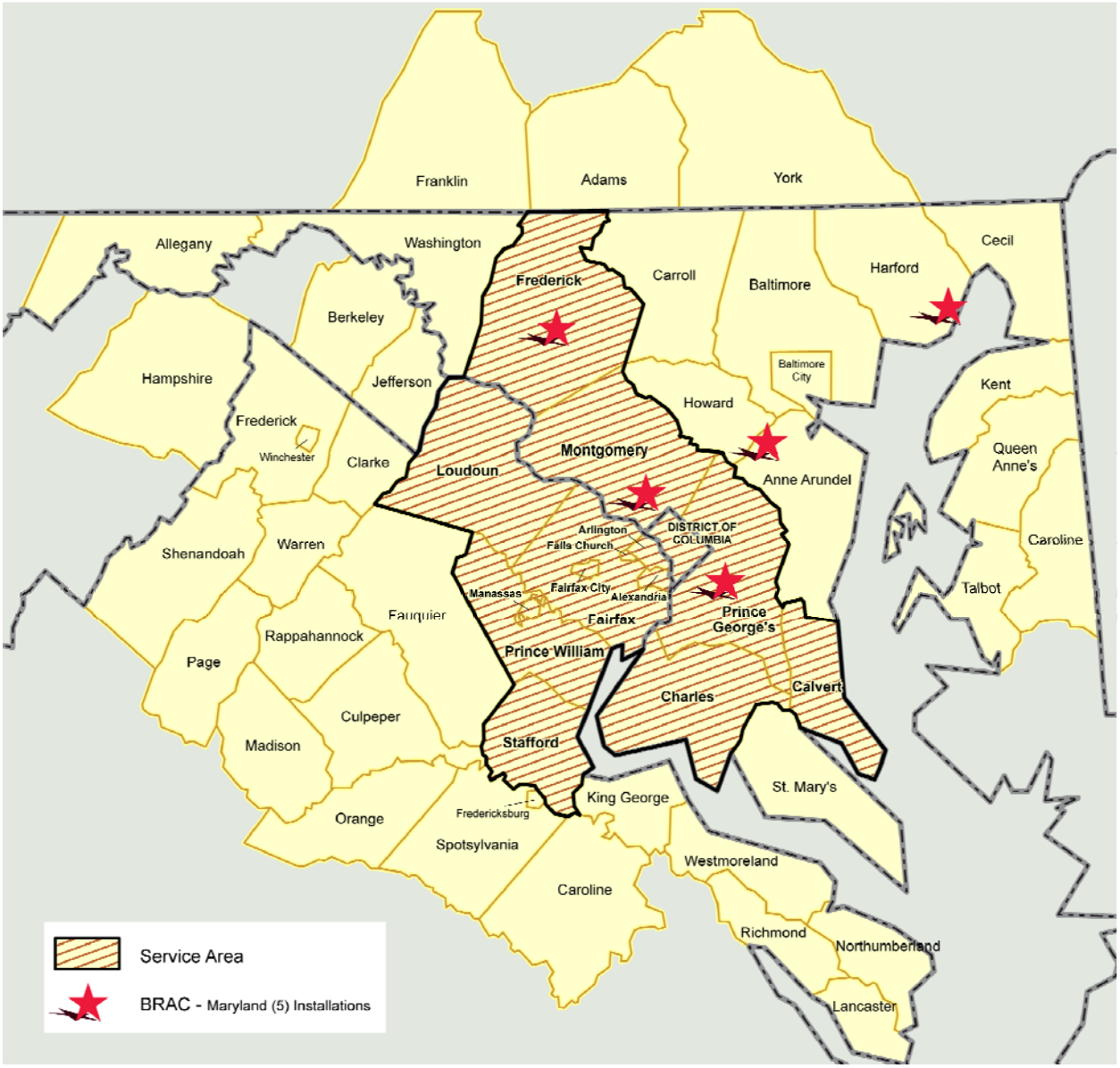
1.3.1 Commuter Incentives

Federal law currently allows federal employees the opportunity to receive up to $230 a month as a tax-free benefit towards the costs of public transportation commuting. This subsidy may potentially return to $120 a month in mid 2010. For vanpools to be eligible the van must seat at least 8 riders and there must be at least 4 registered users. The State of Maryland also provides tax benefits to employers for their employee's transit and vanpool commuting costs as part of the Commuter Choice program.

In addition to the Commuter Choice program, the State of Maryland also offers commuter discount plans for utilizing its toll facilities. These plans are as follows:

- Baltimore Region Commuter Plan (valid on Fort McHenry Tunnel, Baltimore Harbor Tunnel, Francis Scott Key Bridge, John F. Kennedy Memorial Highway and Thomas J. Hatem Memorial Bridge) – 50 trips for $20, valid for 60 days
- Bay Bridge Commuter Plan – 25 trips for $25, valid for 60 days
- Nice Bridge Commuter Plan – 25 trips for $15, valid for 60 days
- Business Accounts – offer toll discounts from 15 percent to 33 percent depending on usage level

Figure 1-1: Commuter Connections GRH Eligibility and Coverage Areas



(Revised May 2009)

1.4 STRUCTURE OF THE REPORT

This report is organized by BRAC-impacted military installations with chapters for Aberdeen Proving Ground, Andrews Air Force Base, National Naval Medical Center, Fort Detrick, and Fort Meade.

Chapter 1 presents the introduction to the report. Chapters 2 to 6 describe the existing transit services, current documented plans and discuss the challenges and opportunities facing each of the installations. These chapters were developed as stand-alone chapters, thus similar issues discussed in one chapter pertaining to one military installation may be repeated in another chapter pertaining to another military installation. Chapter 7 puts forth conclusions categorized into BRAC installation specific conclusions and general conclusions. Appendix A lists persons and offices/agencies that were contacted and interviewed or are involved in BRAC-related transportation initiatives. Appendix B offers a summary of documents reviewed. Appendix C lists the local rideshare coordinators supported by the MTA. Appendix D details a list of abbreviations.

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ABERDEEN PROVING GROUND

Chapter 2: Aberdeen Proving Ground

Aberdeen Proving Ground (APG), located in Harford County, is the Army's oldest active proving ground dating to 1917. APG is comprised of two principal areas, the northern Aberdeen area and the southern Edgewood area.

APG is home to more than 66 tenants including the U.S. Army Research, Development, and Engineering; U.S. Army Developmental Test Command; U.S. Army Aberdeen Test Center; and the U.S. Army Chemical Materials Agency. There are 15,500 employed by these 66 tenants, including more than 5,000 military personnel, 7,500 civilians and 3,000 contractors. An additional 2,100 family members live on the post.

While BRAC is expected to transfer 9,230 military positions to APG, 4,400 personnel are expected to move from APG to other installations. The result is a net BRAC-related gain of 4,830 military and positions. Another 10,000 to 15,000 contractor positions and accompanying support personnel and family members are also expected to increase the post population.

In addition, APG has aggressively sought to develop the post through Enhanced Use Lease (EUL) opportunities. EUL is a method for funding construction or renovations on military property by allowing a private developer to lease underutilized property with rent paid by the developer in the form of cash in-kind services. Proposed EUL projects at APG in Aberdeen and Edgewood include the development of nearly 2,000 acres.

2.1 EXISTING SERVICE

APG resides on the edge of the MTA service area and slightly beyond the DART service area neither of which provides direct service to APG at Aberdeen and at the Edgewood Area. The MARC Penn Line commuter rail service does stop at both the Aberdeen Rail Station and the Edgewood Rail Station providing convenient rail service to Baltimore, BWI's MARC Rail Station and Washington, DC's Union Station. This service and other transit services are shown in **Figure 2-1**, which illustrates all transit services within a four-mile radius of APG.

2.1.1 MTA

Commuter Bus

MTA commuter bus route No. 420 offers express bus service from Havre de Grace to the city of Baltimore via Aberdeen. The route operates as contract service to the MTA and offers southbound morning service to Baltimore and northbound return service in the afternoon. The morning service extends from 5:35 a.m. to 8:30 a.m. with five daily trips. The afternoon service runs from 12:50 p.m. to 6:56 p.m. with six daily trips.

MARC Commuter Rail

MARC commuter rail operates the Penn Line with service from Perryville, Maryland to Washington, DC via Baltimore with a stop at the Aberdeen and Edgewood Rail Stations. The service is operated on Amtrak's Northeast Corridor track and complements Amtrak service between Aberdeen and the Baltimore/Washington area. MARC commuter rail

operates the Penn Line between Perryville, Maryland and Washington, DC with stops at Aberdeen, Edgewood, Martin's State Airport, Baltimore and BWI Airport. Both the Aberdeen and Edgewood Rail stations serve APG.

There are four southbound morning trips from the Aberdeen Rail Station and one northbound morning trip to Aberdeen Rail Station. In the afternoon, there are four northbound trips to Aberdeen Rail Station and one trip from Aberdeen Rail Station.

In addition, MARC commuter rail passengers can use MARC tickets on one morning southbound Amtrak train and two afternoon northbound Amtrak trains.

2.1.2 National Railroad Passenger Corporation (Amtrak)

Amtrak's Northeast Corridor trains provide service to Aberdeen Rail Station. The Northeast Corridor is the busiest passenger rail line in the United States with service between Washington, DC and Boston including stops in Aberdeen, Baltimore and BWI Airport. The Amtrak Aberdeen service operates at Aberdeen Rail Station from 4:19 a.m. to 9:50 p.m. with six northbound trips and seven southbound trips. Through a cross-honoring agreement with the MTA, Amtrak allows monthly and weekly MARC ticket holders to use designated Amtrak trains for travel to the Baltimore and Washington, DC stations.

2.1.3 Harford Transit

Harford Transit is a fixed-route public transit system that operates nine routes on weekdays and limited service on Saturdays. Harford Transit also provides para transit and demand response services five days and evenings per week for special populations. The routes connect major shopping and employment areas of Harford County. Of the nine routes, three operate strictly within the confines of the towns of Bel Air, Aberdeen, and Edgewood. The remaining routes connect the population centers along the Route 40 corridor and Bel Air.

Four local bus routes are located within a four-mile radius of APG and three serve the Aberdeen Rail Station. These routes are shown in **Figure 2-1** and are discussed below.

Route 1 and 1A: this route operates from Harford Memorial Hospital to Harford Mall via the Aberdeen Rail Station and runs weekday from 6:15 a.m. to 6:11 p.m., operating 11 daily trips in each direction. There is limited Saturday service on routes 1 and 1A.

Route 2 and 2A: this route operates weekdays from Joppatowne Shopping Plaza to Harford Mall via the MD 24 Park and Ride and operates from 6:30 a.m. to 6:25 p.m., supporting 10 daily trips in each direction. There is limited Saturday service.

Route 4: also known as the Aberdeen Doodlebug, this route operates as a circulator shuttle serving the Aberdeen Rail Station, the Catholic Charities Senior Center and major shopping destinations. This route runs weekdays from 8:20 a.m. to 3:36 p.m., operating eight daily trips.

Route 6 and 6A: this route operates from the Aberdeen Rail Station to Edgewater via US 40, and runs weekdays from 5:13 a.m. to 6:39 p.m. with 15 daily trips in each direction. There is limited Saturday service on routes 6/6A.

Figure 2-1

Aberdeen Proving Ground
Area Transit Services
4 Mile Radius
Perryville Rail Station
MARC PENN LINE
Aberdeen Rail Station
ABERDEEN GATE
MARYLAND GATE
APG
MARC PENN LINE
LEGEND:
Cecil County Bus Service
MTA Bus Service
Harford Co Transit Bus Service
MTA MARC Train Station
Gate Entrance
AMTRAK Rail Service
0 0.25 0.5 1 Miles

2.2 CURRENT PLANS

This section notes the current plans for transit improvements related to BRAC and were developed by the State, local transit agencies, military or other organizations. These proposed transit improvements are shown in **Figure 2-2**.

2.2.1 MTA

2.2.1.1 Commuter Bus

Commuter bus services to APG have been studied by the MTA as part of the overall BRAC readiness efforts. The MTA has completed a BRAC Commuter Bus Study to examine which routes hold the best promise for commuters to APG. The Study concluded that the services which have the most potential are:

- Downtown Baltimore to APG: This route would operate from downtown Baltimore via I-395 and I-95 with stops at the Baltimore Travel Plaza in eastern Baltimore and the White Marsh Park and Ride in Baltimore County. It would operate six daily trips.

- Churchman's Crossing, Delaware to APG: This route would operate from Churchman's Crossing (Newark), along I-95 with stops in Elkton and the Chesapeake House Rest Area. The alignment and stops of this commuter route may change as planning efforts including the participation of the state of Delaware and DART First State continue. It would operate six daily trips and would require cost sharing from Delaware.

2.2.1.2 MARC Commuter Rail

As part of the MARC Growth & Investment Plan, several immediate and long-term recommendations are presented for the MARC system. Among those which directly relate to the Penn Line and Aberdeen Rail Station are:

- Add an afternoon and a late-evening train
- Initiate weekend service
- Purchase of double-decker rail cars
- 2010: increase peak, evening and weekend service
- 2015: increase headways to 15-20 minutes peak and 30 minutes off peak
- 2015: expand peak service to Aberdeen
- 2015: extend service to Elkton and Newark, Delaware
- 2015: connect with Red Line at West Baltimore and Bayview Medical Center
- 2020: provide expanded service aimed at BRAC and BWI Airport
- 2020: extend core service to Aberdeen with 20 to 30-minute peak and 60 minute off-peak headways

At this time, MTA remains committed to the implementation of the MARC Growth & Investment Plan; however, many projects and service improvements are deferred due to the current economic downturn.

Other MTA MARC studies conducted within the past year include:

Figure 2-2

Aberdeen Proving Ground
Proposed Transit Services
4 Mile Radius
Perryville Rail Station
Aberdeen Rail Station
ABERDEEN GATE
MARYLAND GATE
APG
Penn Line
LEGEND:
Churchman's Crossing to APG Visitor Center
1st Mariner Arena to APG Visitor Center
MTA MARC Train Station
Gate Entrance
AMTRAK Rail Service
0 0.25 0.5 1 Miles

- Aberdeen MARC Station. Construction of additional parking is underway.
- Aberdeen Rail Station Feasibility Study. This study compared the viability of upgrading the existing station with relocating the station to a point further south in conjunction with a potential multi-modal transportation center, being studied by the Chesapeake Science and Security Corridor (CSSC).
- MARC Penn Line Storage and Maintenance Yard. This effort involves investigating potential sites for a new yard near the Edgewood portion of APG, which would facilitate service expansion of MARC. The feasibility and options for site acquisitions are being explored with further planning and design to follow.
- Edgewood MARC Station. Design was completed and construction began on the rehabilitated station, new amenities and parking improvements.

2.2.2 APG/US Army

APG does not have any firm plans for transit improvements at this time; however, discussions are underway regarding the possibility of operating an internal bus route on the post. If operated, the Army would consider a connection to the Aberdeen Rail Station and possibly the Edgewood MARC Rail Station as well. The operation of this bus would also depend on Department of Defense (DOD) funding and any possible participation from contractor firms located at APG.

2.2.3 *Baltimore County*

Baltimore County identified more than 100 short and long-term action items as part of the Baltimore County BRAC Action Plan. Among the action items that relate to APG are:

- Complete and expand ongoing analysis of the *US 40 Corridor Study*
- Support attempts to develop corridor-wide transit solutions
- Support attempts to improve MARC services
- Conduct a study to assess the feasibility and cost of expanding the Martin State Airport MARC Rail Station at Middle River, a historic 1.9 million square foot facility, and developing a multi-modal center at the General Services Administration (GSA) depot
- Conduct a study to assess the potential of extending the future Green Line to the Martin State Airport MARC Rail Station at Middle River
- Conduct a study to assess Amtrak's relationships with other northeastern commuter rail systems
- Promote efficient use of MARC and Amtrak stations and incorporate sidewalk and bicycle access to rail stations

2.2.4 *Cecil County*

The Cecil County BRAC Action Plan notes two transit recommendations:

- Extend MARC service to Elkton and to Wilmington, DE providing a connection to SEPTA
- Link the DART No. 65 bus service to APG

2.2.5 *Chesapeake Science and Security Corridor (CSSC)*

The Chesapeake Science and Security Corridor is an organization interested in the economic viability of the corridor between Baltimore and Delaware. As such, the CSSC, working with its member jurisdictions of Harford, Cecil and Baltimore counties and city of Baltimore, has worked to advance transit initiatives for the corridor and increase transportation options, including the expansion of MARC commuter rail service. The CSSC has led, or is currently leading, more than 25 economic or transportation related studies since its inception in 2005. Their current BRAC-related study examines the feasibility of a multi-modal transportation center in the Aberdeen area, either at the current Aberdeen Rail Station location or a new site(s) outside the city limits of Aberdeen. This study is building off of the findings from MDOT's March 2009 Aberdeen Station Area Transit needs Assessment and Market Analysis report. Preliminary recommendations are that the existing station site would be most feasible, but the Final Report is not expected to be completed until July 2009.

2.2.6 DART First State

Currently there is no DART First State service expansions proposed for Cecil or Harford counties. In discussions with DART First State and the Wilmington Area Planning Council (WILMAPCO) there was interest in the extension of MARC commuter rail service to Newark, DE. Interest in commuter bus service along US 40 was also indicated but only as it pertained to a prelude to commuter rail service. Discussions among DART, WILMAPCO and MTA were held regarding commuter bus services.

2.2.7 Harford County

The Harford County BRAC Action Plan was developed to assist the county in responding to significant economic and social changes that will accompany BRAC actions at APG. Among the transit recommendations noted in this report are:

- Recommend funding and completion of Phase 2 of MD 755 streetscape improvements to serve Edgewood MARC Rail Station and APG access gate
- Educate public officials to the needs and requirements of the county's transportation and infrastructure system
- Implement Edgewood MARC Rail Station improvements
- Determine the location of multi-modal transportation center in conjunction with APG and the city of Aberdeen
- Coordinate with the city of Aberdeen and APG to meet post needs
- Increased MARC train service in the northbound and southbound directions

2.2.8 Harford Transit

Harford County completed their Transit Development Plan Update (TDP) in June 2008. Based on information regarding BRAC plans that was available at the time the TDP was updated, Harford Transit had no immediate plans to provide modified or increased transit service due to BRAC. However, since the TDP was published, MDOT prepared the *Aberdeen Station Area Transit Needs Assessment and Market Analysis* report which included a task on "Transit Needs Analysis". This summer the TDP will be amended to include the recommendations from this process, as mentioned in Section 2.2.5.

The Transit Needs Assessment focuses on a number of goals:

- To identify transit needs and multimodal connections in the Aberdeen area, particularly due to BRAC, projected population and ridership growth, and improvements anticipated in the MARC Growth and Investment Plan (MGIP).
- To determine whether the transit needs in the Aberdeen area can be accommodated at the existing Aberdeen MARC/Amtrak Station.
- To promote the use of mass transit by inbound and outbound commuters/local area residents and relieve congestion.

Potential transit improvements alternatives were developed based on how well they served the identified markets, the degree to which they address adopted local and State goals for transit, the service type, likely impacts on ridership, and capital and operating requirements. The proposed routes are:

- MTA Commuter Bus - Baltimore / White Marsh P&R / Aberdeen
- Rising Sun / Darlington / Aberdeen MARC
- Elkton / North East / Perryville / Havre de Grace / Aberdeen MARC
- Joppa / Edgewood MARC / Abingdon / Belcamp / Aberdeen MARC
- Street / Pylesville / Whiteford / Churchville / Aberdeen MARC
- Forest Hill (Marywood P&R) / Bel Air (Hickory Bypass P&R and MVA P&R) / Aberdeen MARC
- White Hall / Jarrettsville / Aberdeen MARC
- Middle River (Mace Mini P&R) / White Marsh P&R / Edgewood MARC / Aberdeen MARC
- Perry Hall / White Marsh P&R / Edgewood MARC / Aberdeen MARC

Priorities for implementation were recommended in the report; these will be refined in the TDP amendment.

2.2.9 State of Maryland

The Statewide BRAC Report of 2006, authored by the Maryland Department of Planning, summarizes impacts and recommendations of BRAC on a statewide level and offers several recommendations for APG and the Aberdeen area:

- Develop proximate and efficient transfer to base grounds from the existing or relocated Aberdeen Rail Station
- Explore a base shuttle system within APG
- Explore a variety of transportation demand techniques and utilize coordination and technologies to reduce single occupancy vehicle use
- Improve regional bus and/or rail between Baltimore and the existing or new Aberdeen Rail Station
- Increase mid-day and peak period service and explore operational limitations to improving MARC commuter rail
- Investigate the proposed multi-modal transportation center in Aberdeen for Harford Transit and MTA operations as well as a rail maintenance and storage facility
- Explore the feasibility of expanded MARC commuter rail service into Cecil County
- Reexamine the Perryman Access Study to provide access from the Perryman Peninsula to the state road network and to APG

- Incorporate sidewalk connections and bicycle access in local thoroughfare movements

The *Aberdeen Station Area Transit Needs Assessment and Market Analysis* report was finalized by MDOT in March of 2009, and is summarized in the previous sections.

2.3 RIDESHARING

Ridesharing and ride matching are available free for those living and working in Maryland through the Commuter Connections program which provides this service for the entire state. Working with this statewide program, a local program administrator is provided as part of the Harford County Commuter Assistance program which is part of the Harford County Department of Community Services. Harford County residents who are registered with the Commuter Connections program and work in the Washington DC metro area are eligible for the guaranteed ride home program.

Maryland employers may claim up to 50 percent of the eligible costs of providing commuter benefits up to a maximum of $50 per employee. This tax credit can be used towards the following expenses:

- Transit instruments – weekly/monthly passes, tokens, fare cards, vouchers
- Company vanpool program
- Guaranteed Ride Home program
- Cash In Lieu of Parking program

Rideshare Delaware is a division of DART First State and offers free ridematching for commuters working in Delaware, emergency ride home program and transportation benefit assistance to employers. At this time, Rideshare Delaware is considering an expansion of its program for Delaware residents to employers in the areas of Aberdeen and Cecil County. This expansion of service would require ongoing coordination with Maryland counties, the MTA, DART First State and local employers.

2.4 CHALLENGES AND OPPORTUNITIES

This section presents the challenges and opportunities identified for APG as determined through the compilation of this report.

2.4.1 Security and Agency Coordination

This topic serves as an umbrella for security measures related to public access of the installation. The need for transportation vehicles, such as buses, taxis and vanpools to gain access to APG is seen as a key component of the success of any proposed service. Buses originating from Aberdeen Rail Station, Harford County, Delaware or elsewhere would not be allowed entry to APG without secured access.

Aside from the security concern pertaining to the vehicle itself, the same security concerns also apply to the passengers. While these passengers would most likely be government employees or contractors commuting to work, the use of any proposed services by non-government personnel and civilians is under discussion. At this time,

security protocols for transit vehicles entering APG are being examined; however, to alleviate some security concerns it is possible that any service entering APG would have to terminate at APG. This would allow for a security check at the gate or prior to the gate.

In order for transportation services such as transit, carpooling and vanpooling to be successfully implemented, it will be necessary for local agencies, transit providers and the state to coordinate efforts. An example of military and transit agency coordination would be the Memorandum of Understanding reached between Naval Station Norfolk and the Transportation District Commission of Hampton Roads, which established procedures and responsibilities for on-base transit services.

2.4.2 Location of Multi-modal Transportation Center

For those using Aberdeen for the proposed multi-modal transportation center for MARC travel to Baltimore or Washington, DC, the new center would provide additional parking, more amenities and greater convenience in the form of adjacent services and retail.

2.4.3 Parking Availability

There are two main parking related concerns: the availability of on-post parking and connections to off-post parking at selected park and ride lots proposed to be designated for commuter services to APG.

The first concern is the presence of plentiful and free parking on-post. With no parking constraints, any alternative transportation program becomes less viable as an alternative commute option. This is especially true when prospective passengers would be required to drive to a park and ride, wait for the vehicle, and then proceed to the post. If another transfer is involved to enter the post, the odds of success are reduced further.

The second concern is the availability of parking at park and ride lots. The BRAC Commuter Bus Study has identified two routes for commuter service to APG, as follows:

- Baltimore (via Baltimore Travel Plaza and White Marsh Park & Ride) to APG
- Churchman's Crossing, Delaware (via Elkton Park & Ride) to APG

The BRAC Commuter Bus Study also noted parking constraints at Maryland park and ride lots and a more detailed parking study would be required.

2.4.4 Operation of Services

Providing seamless service means offering a smooth and convenient trip for the passenger. This service entails offering a trip with the fewest transfers and stops as possible, such as having the connections and transfers occur at the same stop without having to walk to another area, and having standardized payment and fare collection between transit services.

The operation of services to APG would need to be coordinated on a regional level to determine the best overall provider, the cost of each service to operate and the funding available.

2.4.5 Demand for Service

Estimating the demand for transportation services has been a challenge in preparing for BRAC growth. While the number of jobs relocating to APG is known, what is unknown is where the employees will choose to reside among a varied selection of geographical locations. As varied as these geographical locations are, the reasons to choose a specific location include the availability of affordable housing, low taxes, opportunities for spousal employment and commutation time. The extent of the probable geographic area ranges from southern Pennsylvania, to the Baltimore metropolitan area and to northern Delaware. However, as development on APG progresses with the development of EUL sites, and as ancillary businesses locate near APG, other routes or services may become necessary.

2.4.6 Connecting Edgewood and Aberdeen

APG can be thought of as two separate facilities; one is the northern portion of the post (Aberdeen) and one in the southern portion (Edgewood). As APG develops, an opportunity would exist to provide an on-post service that would link the two areas.

2.4.7 MARC and Amtrak Service

APG lies along the Amtrak Northeast Corridor with service provided by both MARC and Amtrak. However, the service is focused on commuters traveling to Baltimore and Washington, DC via MARC and to Philadelphia and New York via Amtrak. At present, six of the 24 MARC trips each weekday serve the Aberdeen and Edgewood Rail Station.

2.4.8 Marketing of Services

The marketing of transportation options for APG will be a vital component of its success. A variety of marketing strategies and media are available and would need to be considered to effectively promote alternative commuting options. The marketing of these options (bus, rail, carpooling or vanpooling) could be led by the state, local transit agencies or APG.

The challenge for APG will be to partner with local agencies and rideshare providers to advertise the transit options and reward transit behaviors with benefits such as preferred parking for rideshare users. The service must be reliable, clean, safe, on-time and serve both population and employment areas. The existing routes to APG serve areas that are fairly close to the post and would most likely appeal to those without cars. For others, the short drive and available free parking on-post would render the existing routes a less competitive option.

2.4.9 EUL Support

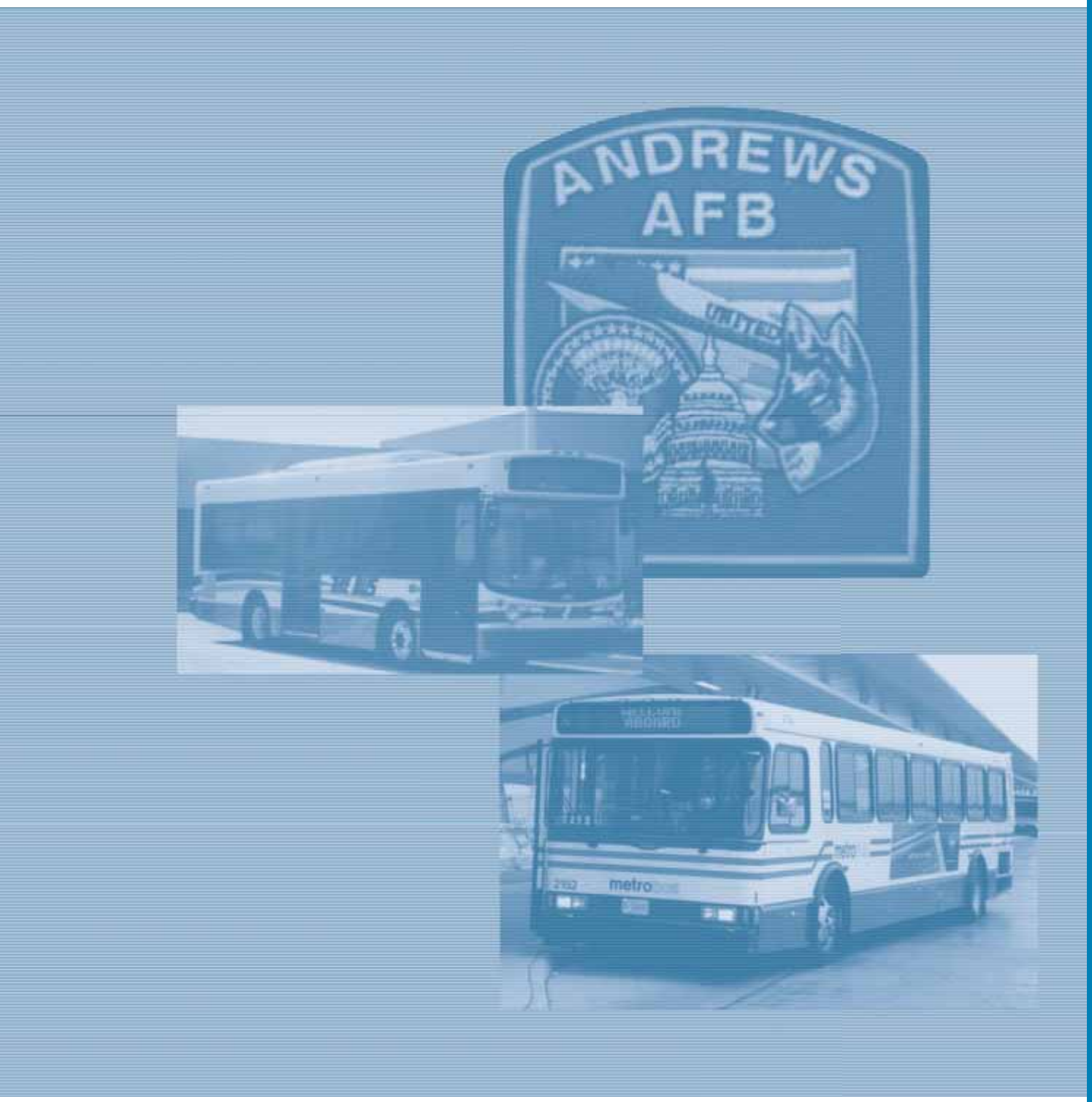
Engaging with potential EUL developers early is an opportunity that could increase the attractiveness, affordability and competitiveness of transit. Early coordination could result in well-designed transfer sites establishing transit in the forefront of design

rather than as an afterthought in the development process. Additionally, the support of the EUL could provide funding to begin or enhance services or facilities.

2.4.10 Expand Vanpooling

BRAC may provide an opportunity to expand participation in vanpool programs. Once widely used, participation in vanpool programs across the state has declined coinciding with the decrease in fuel costs in the 1990's. However, as fuel prices have increased, interest in vanpools is re-emerging. Presently, the MTA offers the Maryland Commuter Tax Credit Program for those participating in a vanpool program. This credit can be used towards the purchase or lease of a van, fuel, insurance, maintenance, and safety and equal access equipment. Since BRAC installations are served by limited transit service and may not have the critical mass needed for fixed route service, vanpools may be useful in meeting the need for transportation. Federal employees who participate in a registered vanpool can use their transit benefit, currently $230 until potentially returning to $120 in mid 2010, to cover their share of vanpool costs.

ANDREWS AIR FORCE BASE



Chapter 3: Andrews Air Force Base

Andrews Air Force Base (AAFB) is located east of the Capital Beltway in Prince George's County. AAFB is home to the 316th Wing, the Air Force District of Washington, the 89th Airlift Wing and Air Force One. AAFB hosts more than 20,000 active duty military personnel, civilian employees and family members. The 2007 Environmental Assessment (EA) stated that BRAC is expected to transfer 804 additional military personnel jobs with approximately 1,200 non-BRAC related positions arriving at AAFB within the next two to five years. Numerous other contractors and support personnel are also expected to increase the workforce population on the base.

3.1 EXISTING SERVICE

Transit service is provided to AAFB by Prince George's County's The Bus transit system, MTA, WMATA and the U.S. Air Force. None of the services provides direct access to the base. Proximate transit services to AAFB are shown in **Figure 3-1** and are discussed below.

3.1.1 MTA Commuter Bus

The MTA operates six commuter bus routes that pass through the vicinity of AAFB traveling to Washington, DC. These routes are the 903, 905, 909, and 913 that run along Branch Avenue, and the 902 and 904 that travel along Suitland Parkway. These routes are operated for the use of commuters with limited stops. These routes are within four miles of AAFB and are shown in **Figure 3-1**.

3.1.2 Prince George's County The Bus

The Bus routes that serve AAFB are the No. 20 and No. 30 routes.

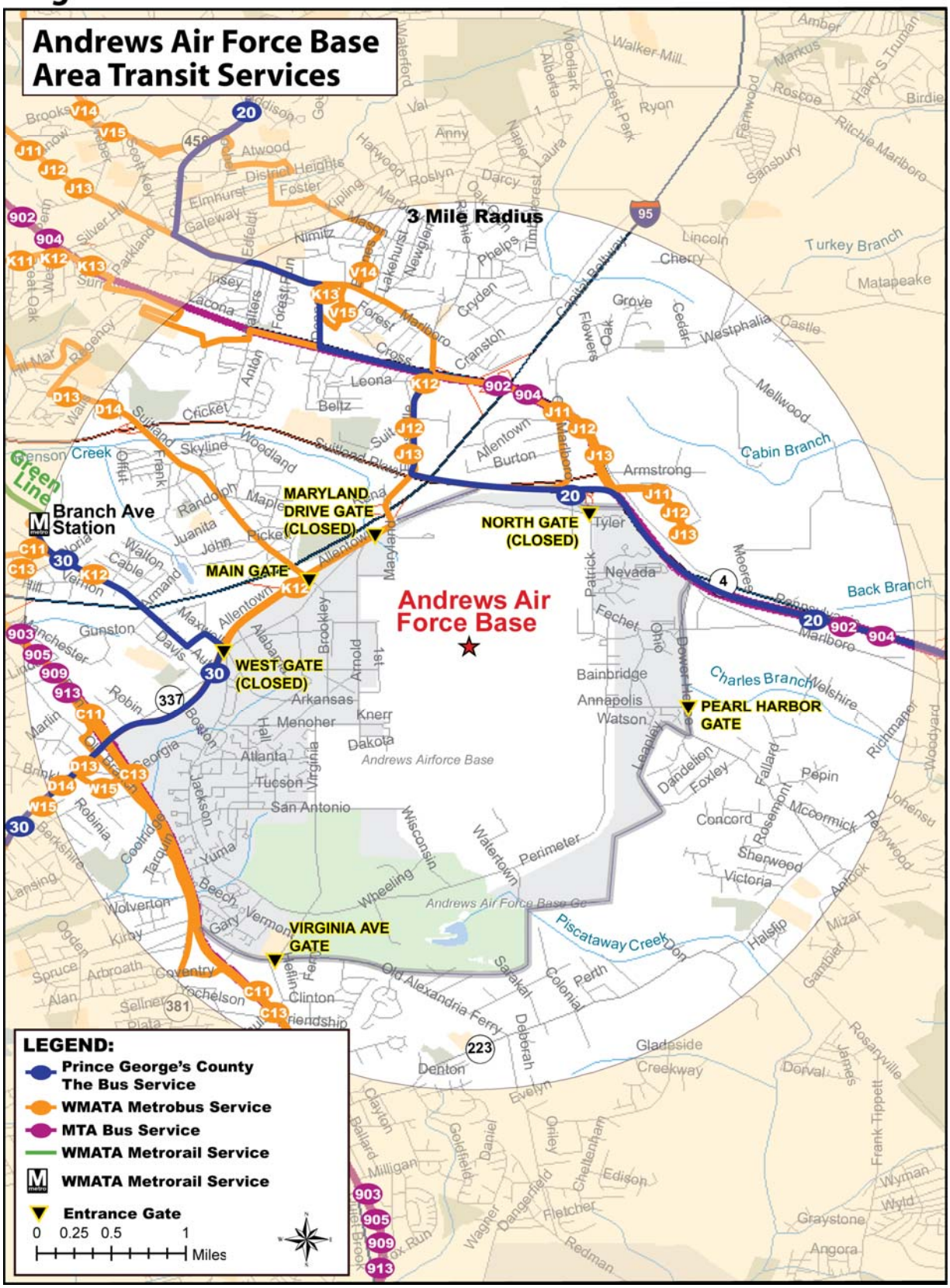
Route 20 runs from the Addison Road Metrorail Station to Upper Marlboro via Marlboro Pike. It operates from 6:00 a.m. to 11:48 p.m. on weekdays with 16 trips in each direction. The closest this route comes to an entrance of AAFB is at the intersection of Suitland Parkway and Pennsylvania Avenue near the North Gate of AAFB at Patrick Avenue. The North Gate is currently closed and inactive.

Route 30 runs from the Branch Avenue Metrorail Station to Clinton Fringe parking lot via Allentown Road and Temple Hill Road. It operates from 6:00 a.m. to 11:55 p.m. on weekdays with 16 trips in each direction. The nearest this route comes to an entrance of AAFB is the intersection of Allentown Road and Maxwell Drive about 1,000 feet from the West Gate at Robert M. Bond Drive/Command Drive. The West Gate is currently closed and inactive.

3.1.3 WMATA

WMATA operates both Metrorail and Metrobus services within the vicinity of AAFB. These are shown in **Figure 3-1** and discussed below.

Figure 3-1


Andrews Air Force Base
Area Transit Services
3 Mile Radius
Andrews Air
Force Base
Andrews Airforce Base
Andrews Air Force Base Ge
MARYLAND
DRIVE GATE
(CLOSED)
MAIN GATE
NORTH GATE
(CLOSED)
WEST GATE
(CLOSED)
PEARL HARBOR
GATE
VIRGINIA AVE
GATE
Branch Ave
Station
Green
Line
LEGEND:
Prince George's County
The Bus Service
WMATA Metrobus Service
MTA Bus Service
WMATA Metrorail Service
WMATA Metrorail Service
Entrance Gate
0 0.25 0.5 1
Miles

Metrorail
The Branch Avenue Metrorail Station lies approximately three miles from AAFB and is served by the Metrorail Green Line, Metrobus routes C11, C13, C12, C14, and K12 and The Bus Route 30. Commuter parking is available in 3,072 spaces. Trains operate on weekdays from 5:00 a.m. to 11:24 p.m. and from 7:00 a.m. to 2:24 a.m. on weekends.

Metrobus
The C11/C13 Clinton Line operates from the Branch Avenue Metrorail Station to the Clinton Park & Ride lot. It operates during peak hours on weekdays with 11 morning northbound and four morning southbound trips and five afternoon northbound and 13 afternoon southbound trips. Although this line travels along Branch Avenue, geographically adjacent to AAFB, no gates are located along this road. The closest stop near an entrance of AAFB is at the Old Branch Avenue and Old Alexandria Ferry Road intersection approximately 3,000 feet from the Virginia Avenue Gate.

The K12/ Forestville line operates from the Branch Avenue Metrorail Station to the Potomac Avenue Metrorail Station via Pennsylvania Avenue. The line runs from 5:07 a.m. to 1:00 a.m. with an average of 35 daily weekday trips and 17 daily trips on weekends in each direction. This line has stops near two AAFB gates, at Allentown Road and Command Drive near the now closed West Gate, and at Allentown Road and Suitland Parkway near the Main Gate. Passengers currently walk from the Metrobus stops along Allentown Road, then follow Westover Drive through the Main Gate to board the base-operated shuttle. The Main Gate is the only gate that the base shuttle serves.

The D13/D14 Oxon Hill-Suitland Line operates from the Suitland Metrorail Station to the Southern Avenue Metrorail Station and passes AAFB along Allentown Road. The line runs from 4:44 a.m. to 1:00 a.m. with 60 westbound trips and 63 eastbound trips on weekdays. Saturday service operates from 6:05 a.m. to 11:49 p.m. with 35 trips in each direction. Sunday service operates from 6:20 a.m. to 8:22 p.m. with 26 westbound and 23 eastbound trips. The closest stops near entrances to AAFB are along Allentown Road at the West Gate and also at the Main Gate entrance at Westover Drive, where passengers enter the base.

The J11/J12/J13 Marlboro Pike Line operates from Forestville to the Potomac Avenue Metrorail Station via Suitland Avenue and Pennsylvania Avenue. The line runs from 4:30 a.m. to 1:02 a.m. on weekdays with 30 westbound and 31 eastbound daily trips. Saturday service runs from 6:05 a.m. to 1:01 a.m. with 19 westbound trips and 18 eastbound trips. Sunday service runs from 6:48 a.m. to 12:57 a.m. with 18 trips in each direction. The closest stop near an entrance of AAFB is along Suitland Parkway at the North Gate at Patrick Avenue, which is currently closed and inactive.

The V14/V15 District Heights-Seat Pleasant Line operates from the Penn Mar Shopping Center to the Deanwood Metrorail Station. The line runs from 5:15 a.m. to 10:30 p.m. on weekdays with 31 northbound trips and 29 southbound trips. Saturday service runs from 8:10 a.m. to 9:35 p.m. with 13 northbound and 14 southbound trips. Sunday service runs from 9:15 a.m. to 7:01 p.m. with 10 trips in each direction. The closest stop near an entrance of AAFB is at the Penn Mar Shopping Center about 1.5 miles from the North Gate, which is currently closed and inactive.

The W15 Camp Springs-Indian Head Highway Line operates from Camp Springs to the Southern Avenue Metrorail Station. The line runs during peak periods and in the peak direction, from 5:29 a.m. to 8:30 a.m. northbound and from 4:00 p.m. to 7:14 p.m. southbound on weekdays. It operates seven daily trips in each direction. The closest stop near an entrance of AAFB is at the intersection of Allentown Road and Old Branch Avenue, about one mile from the West Gate at Command Drive.

3.1.4 Andrews Air Force Base

AAFB provides an on-base circulator shuttle bus. The shuttle operates from the Main Gate and makes stops at the wing headquarters building, the hospital, the Gateway Inn, the passenger terminal and the commissary. The bus runs approximately every 40 minutes from 6:30 a.m. until approximately 6:00 p.m.

3.2 CURRENT PLANS

This section notes the current plans for transit improvements related to BRAC that were developed by the State or local transit agencies, military or other organizations.

3.2.1 Andrews Air Force Base

The Environmental Assessment (EA) covering BRAC and non BRAC construction activities for AAFB noted the need for additional parking spaces as a result of the proposed new building to be constructed near the West Gate, which will house the BRAC relocations from Crystal City. AAFB has begun developing a Transportation Management Plan (TMP). The purpose of the TMP is to assess traffic patterns and parking conditions and to identify transportation needs for the future addition of personnel associated with the Department of Defense's 2005 BRAC actions and DoD Uniformed Facility Criteria 4-010-01 policy, dated Oct 8, 2003 (which states all employees are entitled to the same security as those on a military installation).

The TMP includes analysis of

- Travel modes
- Trip timing, frequency, and length
- Travel routes
- Identify alternative transportation opportunities
- Promote more efficient employee commuting patterns

TMP Goals

- Reduce single occupant vehicle commuting
- Encourage reduction in vehicular trips through bicycle commuting, ridesharing, new transit services, and enhanced pedestrian environment

The TMP is conducted in accordance with the NCPC comprehensive Plan and the Federal Transportation Management Program Handbook.

3.2.2 WMATA

In June 2008, WMATA initiated a study of BRAC-related impacts to transit service within the Washington region. The results of this study should be available in 2009.

An extension of the Metrorail Green Line from Greenbelt to BWI Airport has been proposed by several local officials, business and military persons. Interest in an extension of the Metrorail Green Line from Branch Avenue Station to AAFB and the proposed Westphalia development area has also been expressed. These projects are not in active planning by WMATA.

3.2.3 Prince George's County

Prince George's County DPW&T is currently finalizing its countywide Transit Service and Operations Plan (TSOP), which will recommend service adjustments and potential new routes, some of which could offer service to AAFB.

The Prince George's County *BRAC Plan of Action* identifies the following transit needs for the AAFB area:

- New bus service connecting AAFB via the Virginia Avenue gate, to serve areas of Clinton currently without bus service.
- New bus service between Branch Avenue Metrorail Station and Upper Marlboro via AAFB, connecting AAFB, Branch Avenue Metrorail Station, Rosaryville and Marlton as well as Upper Marlboro.
- New bus service between Suitland Metrorail Station and Largo Town Center Metrorail Station via the Westphalia Town Center and AAFB to provide additional connections between Andrews AFB and the proposed and emerging employment and housing opportunities in central county growth centers such as Westphalia.
- Bus service between Branch Avenue Metrorail Station, Westphalia Town Center and Upper Marlboro via AAFB.
- Bus service between currently unserved areas of south county and Branch Avenue Metrorail Station, via AAFB, to better connect currently unserved portions of the county to the regional rapid rail transit system.
- Extend existing bus service from Suitland and Southern Avenue Metrorail stations via AAFB to National Harbor.
- Extend bus service that currently connects to Naylor Road Metrorail Station via AAFB so to connect Clinton and Upper Marlboro via Woodyard Road and Old Marlboro Pike.
- Extend the existing Metrorail system to AAFB and Westphalia, either by: (1) Green line extension from Branch Avenue or (2) Blue line extension from Largo Town Center.
- Evaluate cost-effective ways to extend the proposed Purple Line from New Carrollton to AAFB and, eventually, to Branch Avenue Metrorail Station via Largo Town Center and Westphalia Town Center.

3.2.4 State of Maryland

The Statewide BRAC Report summarizes impacts and recommendations of BRAC on a statewide level. The report offered the following suggestions:

- Explore transportation demand management techniques to reduce the number of single occupancy vehicles and reduce vehicle congestion during peak periods
- Encourage increased use of local Metrorail transit by base employees and contractors through shuttle service and existing transit

3.3 RIDESHARING

Prince George's County currently operates a Ridesmart and Rideshare program and markets MWCOG's Commuter Connections program.

3.4 CHALLENGES AND OPPORTUNITIES

This section presents the challenges and opportunities identified for Andrews Air Force Base as determined through the development of this report.

3.4.1 Security and Agency Coordination

This topic serves as an umbrella for security measures related to public access of the installation. The need for transportation vehicles, such as buses, taxis and vanpools, to gain access to AAFB is viewed as a key component of the success of any proposed service. Buses originating from the Branch Avenue Metrorail Station, Baltimore, Washington, DC or elsewhere would not be allowed entry to AAFB without such access. Passengers would be forced to alight, presumably at the Main Gate Visitor Center; then clear security, and ultimately, find alternate transportation on post to their final destination.

Aside from the security concern pertaining to the vehicle itself, the same security concerns also apply to the passengers. While these passengers would most likely be government employees or contractors commuting to work, use of any proposed services by non-government personnel and civilians has not been resolved. At this time, security protocols for transit vehicles entering AAFB have not been resolved; however, to alleviate some security concerns it is possible that any service entering AAFB would terminate at AAFB. This would allow for a security check at the gate, or prior to the gate, at which time all non-authorized users would exit the vehicle.

In order for the alternative transportation methods to be successfully implemented to and from AAFB, it will be necessary for local agencies, transit providers, and the State to coordinate efforts. Communication and coordination between local transportation agencies needs to be improved in order to disseminate the ever changing flow of BRAC-related information regarding the relocation efforts.

3.4.2 Safe Pedestrian Access

Safe and adequate pedestrian access onto the base is of concern to AAFB representatives. The access of pedestrians using the transit systems and then traversing the base will be addressed in the ongoing TMP development.

3.4.3 Demand for Service

Estimating the demand for transportation services has been a challenge in preparing for BRAC growth. While the number of jobs relocating to AAFB is known, what is unknown is where the employees will choose to reside among a varied selection of geographical locations. As varied as these geographical locations are, the reasons to choose a specific location include the availability of affordable housing, low taxes, opportunities for spousal employment and commutation time. In addition, the uncertainty of the amount of growth that will occur in the Westphalia area presents difficulties in planning for the type of transit service expansions that may be needed near the base.

3.4.4 Dispersed Origins and Destinations

Employment locations at AAFB are dispersed throughout the base over large distances. These distances could increase the travel time of one-seat ride service, especially those at the end of the route, thereby limiting the attractiveness of the service. Transferring from one service to a base shuttle service could have a similar result as the extra time to transfer increases the overall travel time.

3.4.5 Parking Availability

Parking on AAFB for commuters is currently plentiful and unconstrained. The availability of free and convenient parking often discourages the use of public transportation and may hinder the attempt to increase transit commuting. Given the existing parking conditions and the unlikely possibility that less parking would be provided, it is important for any transportation options proposed to be fast, reliable, and as easy to use as possible.

3.4.6 Marketing

As part of the TMP, AAFB staff will develop a marketing strategy and brochure to inform incoming patrons of the available transit service and to encourage employees to try transit. The opportunity for success is enhanced by the influx of relocated employees originating from areas with strong transit usage and who are already accustomed to using transit services. This effort may have a stronger appeal than trying to convince employees who are not predisposed to riding transit.

3.4.7 Direct WMATA Service

Currently, WMATA is undertaking a BRAC Transit Study and a review of service to BRAC military installations. This study may include direct WMATA service to AAFB. This service could be similar to other existing services such as the Metrobus and W4 service from the Anacostia Green Line Metrorail Station onto Bolling AFB.

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NATIONAL NAVAL MEDICAL CENTER

National Naval Medical Center

Chapter 4: National Naval Medical Center

The National Naval Medical Center (NNMC) is located in Montgomery County along Rockville Pike south of the Capital Beltway and across from the National Institutes of Health (NIH). Both facilities are served by the Medical Center Metrorail Station.

The NNMC complex sits on 243 acres, housing 83 buildings and employing roughly 8,000 employees with roughly 497,000 patients and visitors per year. It is the Navy's third largest health care delivery system. It is the headquarters for the Navy's regional Health Care System encompassing facilities in five states.

In 2005, the BRAC Commission recommended the closure and realignment of Walter Reed Army Medical Center to NNMC creating a new combined facility. The combined facility is expected to be operational in September 2011 and would involve the addition of potentially 2,500 new personnel and 484,000 annual patients and visitor visits per year.

4.1 EXISTING SERVICE

NNMC is directly served by the Metrorail Red Line and numerous Ride On and Metrobus lines. Proximate transit services to NNMC are shown in **Figure 4-1** and are discussed below.

4.1.1 Bethesda Circulator

This service operates in a 'figure 8' loop circulating from Bethesda Avenue to Rugby Avenue centered on the Bethesda Metrorail Station. It operates from 7:00 a.m. to midnight, Monday to Thursday, from 7:00 a.m. to 2:00 a.m. Fridays, and from 6:00 p.m. to 2:00 a.m. Saturdays. It runs every 10 minutes.

4.1.2 Montgomery County Ride On

Route 30 serves NIH, the Medical Center Metrorail Station and the Bethesda Metrorail Station. It runs from 5:53 a.m. to 8:54 p.m. with 29 daily trips to the Bethesda Metrorail Station and 33 daily trips to NIH.

Route 33 operates from the Glenmont Metrorail Station to NIH via the Medical Center Metrorail Station. It runs from 5:58 a.m. to 7:20 p.m. with 15 daily trips towards the Medical Center and Bethesda Metrorail stations and 13 daily trips towards the Glenmont Metrorail Station. This route connects the Kensington Rail Station to NNMC and NIH.

Route 34 operates from Aspen Hill to the Friendship Heights Metrorail Station and directly serves the Medical Center Metrorail Station. It runs weekdays from 5:00 a.m. to 1:00 a.m. with 48 daily trips towards the Friendship Heights Station and 49 daily trips towards Aspen Hill. Weekends the alignment changes and it runs from the Wheaton Metrorail Station to the Friendship Heights Metrorail Station from 6:00 a.m. to 1:00 a.m. with 37 trips towards the Friendship Heights Metrorail Station and 18 trips towards the Wheaton Metrorail Station.

Route 36 operates from the Bethesda Metrorail Station to the Connelly School. It runs weekdays from 6 a.m. to 8 p.m. with 28 trips in each direction.

Route 46 operates from the Shady Grove Metrorail Station to the Medical Center Metrorail Station. It runs from 4:41 a.m. to 1:48 a.m. with 65 southbound trips and 67 northbound trips weekdays. Saturdays, it runs from 5:09 a.m. to 1:07 a.m. with 48 trips in each direction. Sundays it runs from 5:05 a.m. to 12:41 a.m. with 43 trips in each direction.

Route 47 operates from the Rockville Metrorail Station to the Bethesda Metrorail Station. It runs from 5:16 a.m. to 10:08 p.m. weekdays with 37 trips in each direction. It also runs weekends with Saturday service from 7:13 a.m. to 9:50 p.m. with 29 northbound and 28 southbound trips. Sundays it runs from 7:43 a.m. to 8:31 p.m. with 25 trips in each direction.

Route 70 is a peak period limited stop express service operating between the Milestone Center in Germantown and the Bethesda Metrorail Station. It runs weekdays from 5:15 a.m. to 9:42 a.m. in the mornings and from 2:57 p.m. to 7:48 p.m. in the evenings with 24 daily trips in each direction.

4.1.3 WMATA

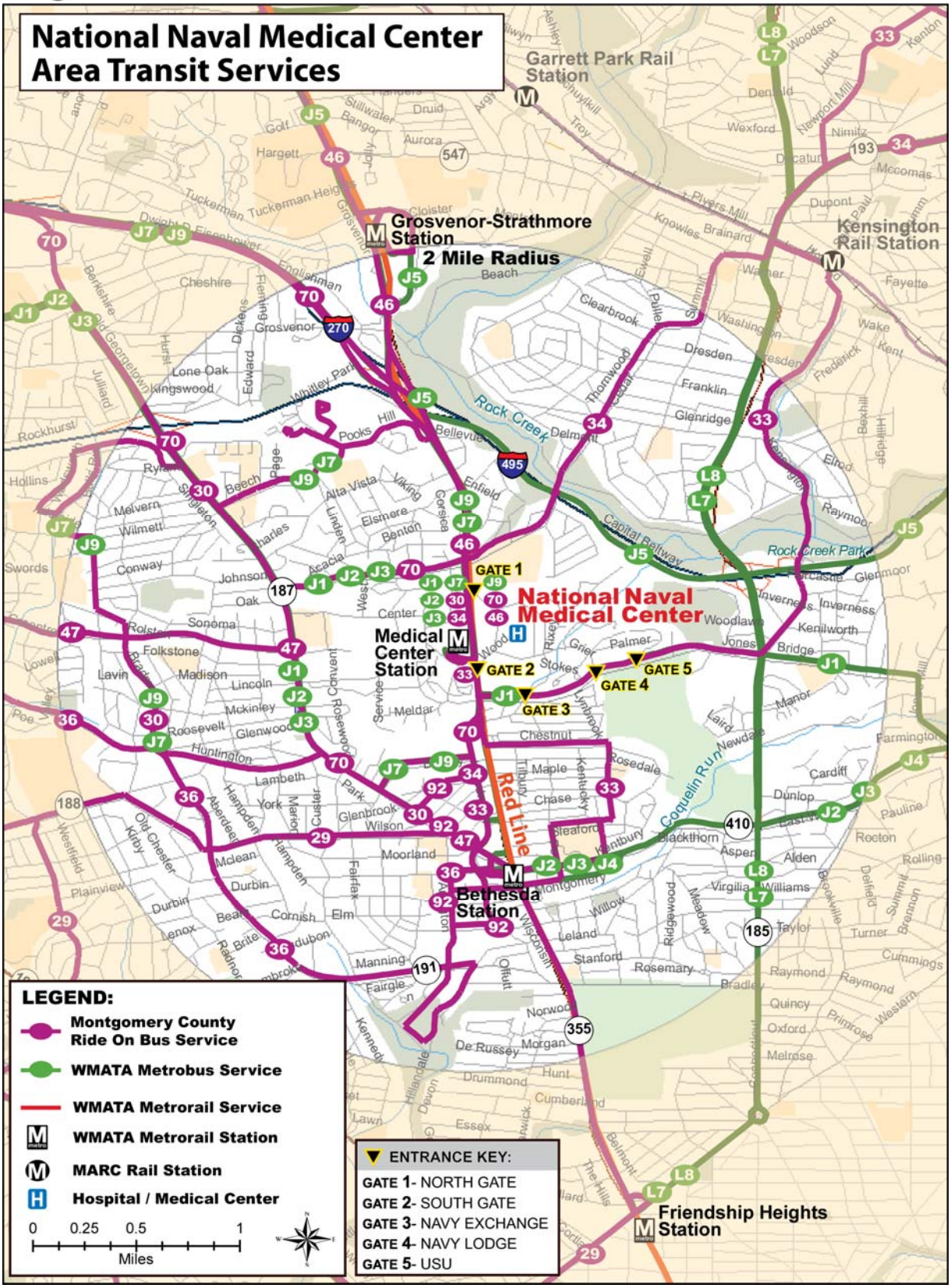
WMATA operates both Metrorail and Metrobus services near NNMC. These services are shown in **Figure 4-1** and discussed below.

Metrorail
The Medical Center Metrorail Station lies adjacent to the NNMC along Rockville Pike. The station is on the Red Line with the first trains departing from the Shady Grove Metrorail Station at 5:30 a.m. and from the Glenmont Metrorail Station at 5:12 a.m. The last train departs from the Shady Grove Metrorail Station at 12:25 a.m. and from the Glenmont Metrorail Station at 11:45 p.m.

Metrobus
The J1/J2/J3 Bethesda-Silver Spring Line operates from the Montgomery Mall Transit Center to the Silver Spring Metrorail Station and passes the Medical Center Metrorail Station along Rockville Pike. The line runs from 4:45 a.m. to 1:22 a.m. weekdays with 93 westbound trips and 88 eastbound trips. Saturdays it runs from 5:05 a.m. to 2:18 a.m. with 60 westbound and 56 eastbound trips. Sundays it runs from 5:33 a.m. to 12:57 a.m. with 44 trips in each direction. This line directly serves the Bethesda National Naval Medical Center.

The J7/J9 I-270 Express Line operates from the Lakeforest Transit Center to the Medical Center Metrorail Station and the Bethesda Metrorail Station. The J7 route runs northbound from 6:30 a.m. to 8:20 a.m. and southbound from 4:04 p.m. to 6:04 p.m. The J9 routes run southbound from 5:43 a.m. to 9:12 a.m. and northbound from 3:10 p.m. to 7:09 p.m. Their combined service schedule reflects peak hour weekday service.

Figure 4-1


National Naval Medical Center Area Transit Services
Garrett Park Rail Station
Grosvenor-Strathmore Station
2 Mile Radius
Kensington Rail Station
National Naval Medical Center
Medical Center Station
GATE 1
GATE 2
GATE 3
GATE 4
GATE 5
Red Line
Bethesda Station
Friendship Heights Station
Rock Creek
Rock Creek Park
Coquelin Run
LEGEND:
Montgomery County Ride On Bus Service
WMATA Metrobus Service
WMATA Metrorail Service
WMATA Metrorail Station
MARC Rail Station
Hospital / Medical Center
0 0.25 0.5 1
Miles
ENTRANCE KEY:
GATE 1- NORTH GATE
GATE 2- SOUTH GATE
GATE 3- NAVY EXCHANGE
GATE 4- NAVY LODGE
GATE 5- USU

4.1.4 NIH and NNMC Operated Routes

The NIH and NNMC operate free shuttle networks for use by patients, visitors and military personnel. NNMC and NIH employees are allowed to ride on a space-available basis. These routes connect the Medical Center Metrorail Station with major buildings and parking areas and are shown in **Figure 4-2**.

4.2 CURRENT PLANS

This section notes the current plans for transit improvements related to BRAC and were developed by the State or local transit agencies, military, or other organizations.

4.2.1 MTA

4.2.1.1 Commuter Bus

The MTA is currently conducting the Purple Line Study, a major investment study for a new light rail or bus rapid transit service. The Purple Line would serve a highly congested corridor in Prince George's and Montgomery counties connecting the Metrorail Red, Green and Orange lines to key employment, residential and institutional destinations.

As part of an MTA ICC Enhanced Transit Plan, four commuter bus routes were proposed. One of the four routes proposed providing service to NNMC from Columbia, in Howard County.

4.2.2 Bethesda

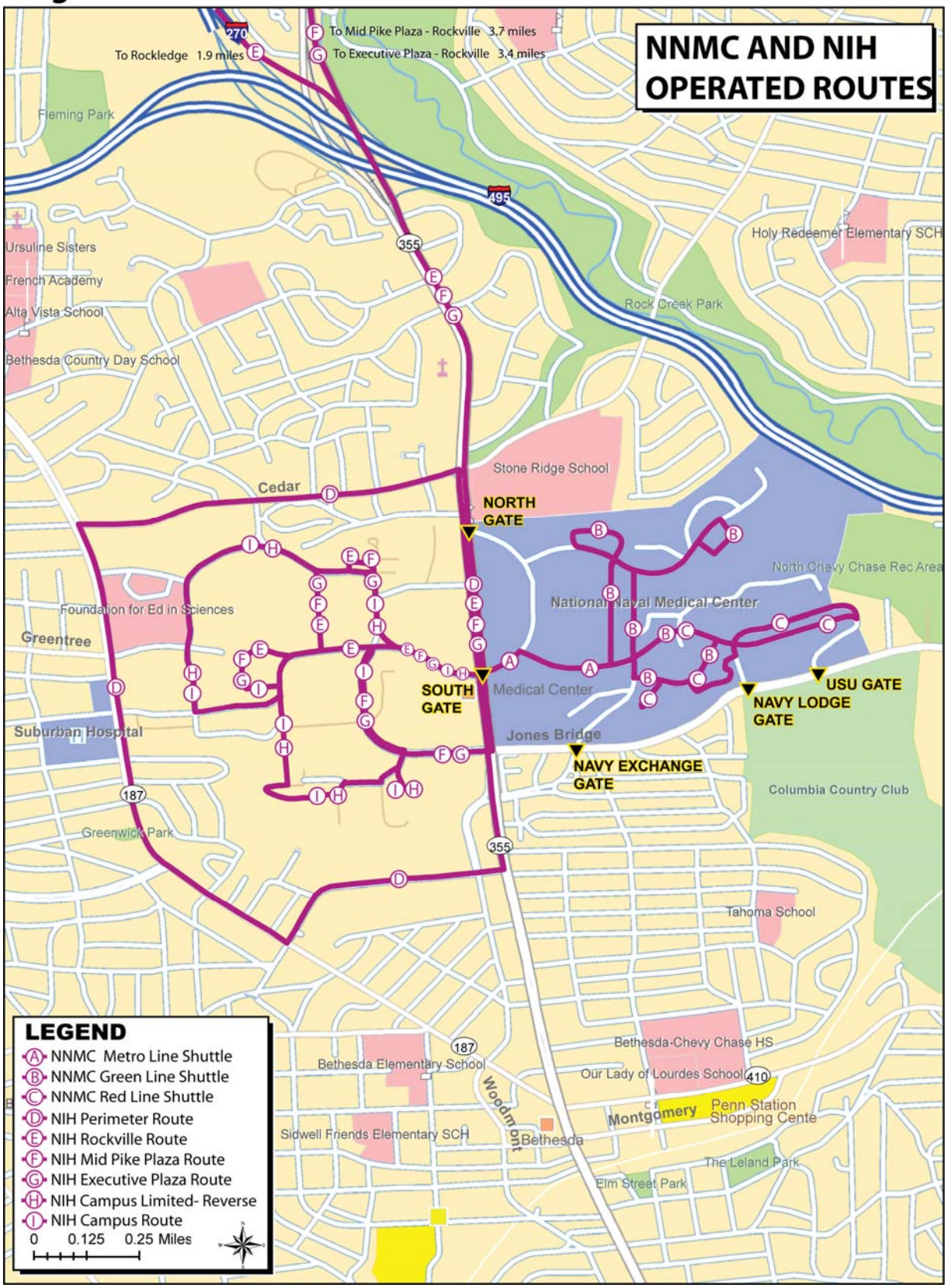
The Bethesda Urban Partnership, in conjunction with NNMC, is planning to investigate the feasibility of providing quick and frequent shuttle connections to Downtown Bethesda, through an extension of the current Bethesda Circulator service. This additional service would connect employees and visitors with extensive dining, shopping, services and amenities while helping to discourage single-occupant driving.

4.2.3 NNMC

The Navy developed a Master Plan Update in 2008 for NNMC, which includes the development of a Transportation Management Plan (TMP) as required by the National Capital Planning Commission (NCPC). The Navy submitted their draft TMP to the NCPC in November. Key public transportation elements of the plan are described below:

- On-Base shuttle enhancement – NNMC currently operates the Red Line and Green Line Shuttles, which are all internal to the campus. In addition, there is a Medical Center Metro Shuttle and two shuttles which operate between NNMC and WRAMC. The draft TMP and Master Plan both suggest that this service be enhanced by providing ten to fifteen-minute peak period shuttle headways with transit stop amenities including real-time shuttle bus arrival information, posted transit route maps and schedules, and shelter and seating. These amenities will enhance the user experience and attract riders to the shuttle system.

Figure 4-2


NNMC AND NIH OPERATED ROUTES
To Mid Pike Plaza - Rockville 3.7 miles
To Executive Plaza - Rockville 3.4 miles
To Rockledge 1.9 miles
Fleming Park
Ursuline Sisters
French Academy
Alta Vista School
Bethesda Country Day School
Holy Redeemer Elementary SCH
Rock Creek Park
Stone Ridge School
Cedar
NORTH GATE
North Chevy Chase Rec Area
National Naval Medical Center
Foundation for Ed in Sciences
Greentree
SOUTH GATE
Medical Center
USU GATE
NAVY LODGE GATE
Suburban Hospital
Jones Bridge
NAVY EXCHANGE GATE
Columbia Country Club
Greenwick Park
Tahoma School
Bethesda-Chevy Chase HS
Bethesda Elementary School
Our Lady of Lourdes School
Woodmont
Montgomery
Penn Station Shopping Cente
Sidwell Friends Elementary SCH
Bethesda
The Leland Park
Elm Street Park
LEGEND
NNMC Metro Line Shuttle
NNMC Green Line Shuttle
NNMC Red Line Shuttle
NIH Perimeter Route
NIH Rockville Route
NIH Mid Pike Plaza Route
NIH Executive Plaza Route
NIH Campus Limited- Reverse
NIH Campus Route
0 0.125 0.25 Miles

- Committees: NNMC will work towards the creation of a Base Transportation Committee (BTC) which would minimally consist of the Transportation Program Manager, and representatives for safety, facilities, security, the fire department, Uniformed Services University of Health Sciences, Armed Forces Radiobiology Research Institute, Joint Task Force, Navy Exchange, and the Directorate of Morale, Welfare, and Recreation. This group would work together to define and address commuting and transportation-related concerns cited by patients and staff members.

- The NNMC Transportation Program Manager will continue to support those transit and pedestrian improvements and encourage employees to use transit through the issuance of Smart Benefit Vouchers and Stored Value Cards.

- Other efforts that NNMC has and will take include - Town Hall meetings for agency leadership, development of a Commuter Solutions website, providing commuting alternatives at staff orientation, review of alternate work schedules/variable work and telecommuting, involvement in local and regional transportation initiatives (Medical Center Transportation Organization, Keep Montgomery County Moving, various MWCOG meetings, Montgomery County Rideshare Coordinator meetings and membership in ACT), enhancing bicycle and pedestrian access & facilities, increased parking management, consideration for Smart Parking systems, pursuing express bus services, brochure racks and increased coordination with NNMC tenants. NNMC will consider bus pull-offs on Jones Bridge Road as part of the gate improvements.

- Parking Management - In order to achieve the objective of the TMP, the NNMC will make a significant aggressive effort to implement measures which could dissuade employees from driving to work alone or during peak commuter periods. Priority parking spaces will be reserved for employees arriving by carpool or vanpool, or potentially for those arriving during the less-congested times of the day. The web page on the NNMC website, Commuter Solutions, lists the currently assigned preferential parking spaces reserved for carpoolers.

4.2.4 Montgomery County

Ride-On: Route 70 is a peak period limited-stop express service operating between Germantown and the Bethesda Metrorail Station. Route 70 has seen a 40 percent increase in ridership in 2008. Ride-On is planning to add two more buses during the peak periods, thus increasing peak frequency to every 10 minutes.

4.2.5 WMATA

WMATA is currently conducting a Medical Center Station Area Access Study that includes the provision of a new eastside entrance to the Medical Center Metrorail Station. The entrance would consist of a pedestrian tunnel beneath MD 355, connecting NIH to the NNMC campus. Various options are being developed and analyzed to quantify and compare overall construction costs, public safety, potential impacts to MD 355 and other cumulative effects. The study is scheduled to be completed in 2009.

WMATA has also initiated a regional-wide BRAC Transit Study to evaluate where service gaps may occur as a result of the influx of BRAC employees to the Washington, DC region. NNMC is one of the three Maryland bases included in the study, including AAFB and Fort Meade. The Medical Center Metrorail Station area is the primary transit hub for NNMC, and the BRAC Transit Study will involve an assessment of existing conditions within the vicinity of the station. This assessment will include evaluating pedestrian, bicycle, bus, and automobile access and developing a concept plan for improved access to the station site. Draft recommendations are currently under development. This is a coordinated but separate study from the Medical Center Station Area Access Study.

4.3 RIDESHARING

As suggested in the draft TMP, NNMC has created a full-time Transportation Program Manager position to coordinate and administer the TMP, including developing and distributing informational and promotional brochures regarding ridesharing and various transit services. The Transportation Program Manager will promote employee participation in carpooling and vanpooling. Currently, the NNMC employees interested in a carpool or vanpool are directed to the web link for Commuter Connections, which is a network coordinated by the Metropolitan Washington Council of Governments (COG). Commuter Connections provides an opportunity for NNMC employees to find a match for their commute not only from within NNMC but also from other institutes and offices in the Bethesda – Chevy Chase area. As discussed in the TMP, NNMC will seek to develop a Kiss and Ride area along MD 355 or Jones Bridge Road to help promote carpool/vanpool options with drivers who are not NNMC staff members.

As an additional resource, NNMC's website provides a webpage entitled Commuter Solutions**,** which is continually updated with current lists of all the commuting options for NNMC staff and contractors who work at the campus. This link provides information about the available public transit listed in the previous section, carpools (via Commuter Connections), military shuttles in the National Capital Region, commuter alerts in the form of live traffic web cams, parking availability within NNMC, external Park and Ride lot information and general transportation information.

4.4 CHALLENGES AND OPPORTUNITIES

This section presents the challenges and opportunities identified for NNMC as determined through the compilation of this report.

4.4.1 Safe Pedestrian Access

Based on an NNMC employee transportation survey in June 2007, 9.9 percent of employees commute via the Metrorail and another 2.5 percent take either Ride-On bus, are dropped off, bike or walk to work. This means that 12.4 percent of the employees surveyed access NNMC as a pedestrian and the primary connection involves the crossing of Rockville Pike between the South Gate and the Medical Center Metrorail Station. One of NNMC's goals, as mentioned in the draft TMP, is to increase the transit commute percentage to 30 percent by 2011. Rockville Pike is projected to

become more congested and the safety of this pedestrian movement will become of greater concern.

WMATA, in conjunction with the Bethesda Hospital Emergency Preparedness Partnership (BHEPP), is currently undertaking a Medical Center Station Area Access Study as discussed in Section 4.2.5.

4.4.2 Demand for Service

Estimating the demand for transportation services has been a challenge in preparing for BRAC growth. While the number of jobs relocating to NNMC is known, what is unknown is where the employees will choose to reside among a varied selection of geographical locations. As varied as these geographical locations are, the reasons to choose a specific location include the availability of affordable housing, low taxes, opportunities for spousal employment and commutation time.

4.4.3 Agency Coordination

In order for alternatives to single-occupancy vehicles such as transit, carpooling, and vanpooling to be successfully implemented, it will be necessary for local agencies, transit providers, and the State to coordinate efforts. This report represents the continuing efforts and conversations between NNMC, MDOT, and the MTA.

4.4.4 Parking Availability

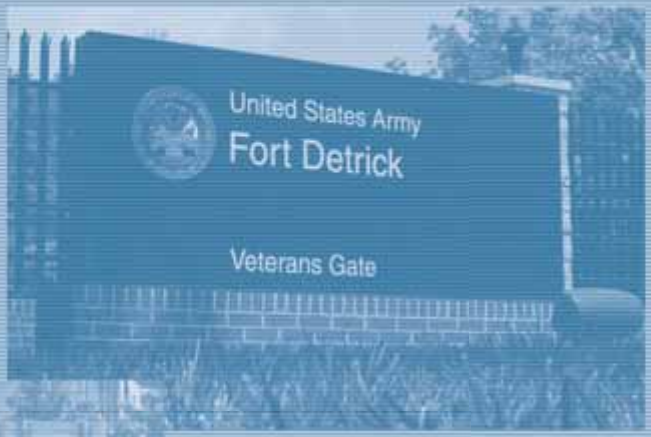
Parking at NNMC is currently available, convenient and free. However, spaces per employee will be substantially reduced from the existing 2,863 staff spaces to 2,462 staff spaces by 2011 based on the NCPC parking ratio requirement (1 space per 3 employees) for federal facilities within the National Capital Region. Patients and visitors will continue to have adequate parking. Generally speaking, free and available parking discourages the use of alternative modes of transportation. Given the parking reality, it is all the more important for any transportation options proposed to be fast, convenient, reliable and easy to use.

4.4.5 Marketing of Services

The marketing of transportation options for NNMC will be a vital component of its success. A variety of marketing strategies and media are available and would need to be considered to effectively promote alternative commuting options.

The marketing of transportation options at NNMC is facilitated through a well-established website and proactive transportation committees. The presence of retail and food vendors, located within the NNMC facility, provide the potential to reduce the need for off-facility trips, thereby reducing a potential impediment to utilizing transit options. Montgomery County provides extensive resources for marketing rideshare and transit.

FORT DETRICK



Chapter 5: Fort Detrick

Fort Detrick is located in the city of Frederick in Frederick County, Maryland. It is home to the U.S. Army Medical Research and Material Command, the National Cancer Institute, and the U.S. Army Medical Research Institute of Infectious Diseases. With more than 7,900 military, federal and contracted employees, it is the largest employer in Frederick County.

The 2005 BRAC Commission recommended the relocation of approximately 775 personnel from the U.S. Army Research Institute of Infectious Diseases and 200 from the National Institute of Allergy and Infectious Diseases. The number of expected BRAC-related relocations to Ft. Detrick is 225 personnel.

5.1 EXISTING SERVICE

Frederick County operates the TransIT bus system which provided 738,000 passenger trips in FY 2008. TransIT routes and other proximate transit services to Fort Detrick are shown in **Figure 5-1** and are discussed below.

5.1.1 MTA

The MTA operates commuter bus and commuter rail services in the Frederick area.

Commuter Bus
The No. 991 is a contracted commuter bus route that operates from Hagerstown in Washington County to the Rock Spring Business Park and to Shady Grove Metro in Montgomery County. The route operates in the morning to Montgomery County with 16 southbound trips every 15 minutes from 4:45 a.m. to 8:25 a.m. and 17 northbound afternoon trips from 1:10 p.m. to 8:09 p.m., including one mid-day return trip. The closest bus access to Fort Detrick is the Monocacy MARC Rail Station roughly 6 miles away.

MARC Commuter Rail
MARC commuter rail operates one line in western Maryland, the Brunswick Line. The Brunswick Line originates in Washington, DC and splits into two routes just south of the Point of Rocks MARC Rail Station. One route terminates in Martinsburg, West Virginia and the other terminates in Frederick, Maryland. The closest station to Fort Detrick is the downtown Frederick MARC Rail Station on the Frederick route. The Point of Rocks and Frederick MARC rail stations are served by Meet-the-MARC shuttles operated by TransIT.

The Brunswick Line operates from Monday to Friday only. Eastbound service operates in the morning with a total of nine trips, three of which originate from the downtown Frederick MARC Rail Station. Westbound service operates in the afternoon with a total of ten trips, three of which terminate at the downtown Frederick MARC Rail Station.

5.1.2 Frederick County TransIT

TransIT operates seven shuttle routes and nine Connector routes. Four of the Connector routes and three of the shuttle routes serve areas near Fort Detrick. These routes are shown in **Figure 5-1** and are discussed below.

30 – Frederick Towne Mall Connector is a route that connects the Transit Center located at the downtown Frederick MARC Rail Station with Frederick Towne Mall. It runs hourly from 5:30 a.m. to 9:45 p.m., 30 minute headways from 5:35 a.m. to 9:05 a.m. and 1:40 p.m. to 5:05 p.m., with 25 daily trips on weekdays. Saturdays, it runs hourly from 8:03 a.m. to 9:45 p.m. with 14 trips. This route passes Fort Detrick along Rosemont Avenue and the Main Gate into Fort Detrick at Rosemont Avenue and Ware Drive/Montevue Lane.

60 – FCC Connector is a route that operates from the Transit Center to Frederick Community College. It runs hourly from 5:55 a.m. to 9:40 p.m., 30 minute headways from 5:55 a.m. to 9:30 a.m. and 2:00 p.m. to 5:30 p.m., with 25 daily trips on weekdays. Saturdays, it runs hourly from 7:30 a.m. to 9:35 p.m. with 14 trips. The closest bus access to Fort Detrick is the intersection of 7th Street and Taney Avenue approximately 600 feet from the Main Gate.

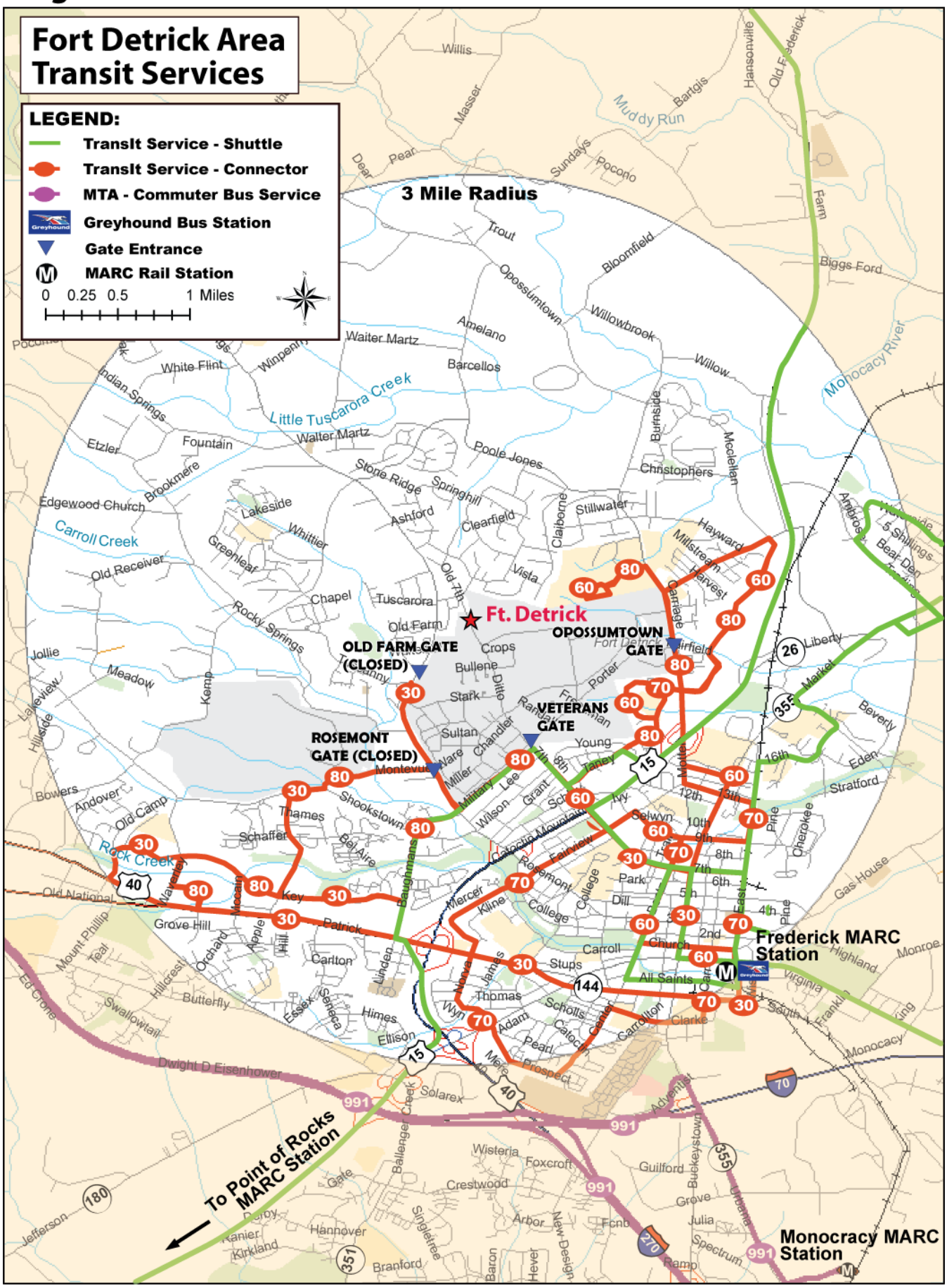
70 – Midtown Connector is a route that operates from the Transit Center to Frederick Shopping Center and Monocacy Shopping Center. The route operates hourly on weekdays from 5:30 a.m. to 9:40 p.m. with 17 daily trips. The closest bus access to Fort Detrick is the intersection of 7th Street and Taney Avenue approximately 600 feet from the Main Gate.

80 – North West Connector is a route that operates from the Frederick Towne Mall Shopping Center to the Frederick Community College. The route operates on weekdays from 7:00 a.m. to 9:55 p.m. with 23 daily trips. Service is provided every half hour during peak periods and hourly all other times. This route serves two Fort Detrick gates at Rosemont Avenue and Ware Drive/Montevue Lane and the Main Gate at 7th Street.

The Meet the MARC Shuttles are a network of three shuttle services that provide weekday feeder service to the MARC train, two of which serve Fort Detrick. The shuttles are:

- Point of Rocks Shuttle which operates from the Point of Rocks MARC Rail Station to the Frederick Shopping Center via the Fort Detrick Main Gate. It runs three morning trips and seven evening trips.
- Frederick Shuttle which operates from the Frederick MARC Rail Station via the Fort Detrick's Main Gate and the Frederick Towne Mall. It runs two morning and three evening trips via the #30 Connector.
- Walkersville Shuttle which operates from the Frederick MARC Rail Station to the Walkers Village Shopping Center. It runs three morning and three afternoon trips.

Figure 5-1


Fort Detrick Area Transit Services
LEGEND:
Transit Service - Shuttle
Transit Service - Connector
MTA - Commuter Bus Service
Greyhound Bus Station
Gate Entrance
MARC Rail Station
0 0.25 0.5 1 Miles
3 Mile Radius
Ft. Detrick
OPOSSUMTOWN GATE
OLD FARM GATE (CLOSED)
VETERANS GATE
ROSEMONT GATE (CLOSED)
Frederick MARC Station
Monocracy MARC Station
To Point of Rocks MARC Station
Little Tuscarora Creek
Carroll Creek
Rock Creek
Monocacy River
Muddy Run
Dwight D Eisenhower

5.2 CURRENT PLANS

This section notes the current plans for transit improvements related to BRAC that were developed by the State or local transit agencies, military, or other organizations.

5.2.1 MTA

5.2.1.1 MARC Commuter Rail

The Brunwick MARC line at the Frederick MARC Rail Station offers peak direction service towards Washington, DC in the morning, and returning from Washington, DC in the evening. In order to better serve the anticipated growth in the Frederick area, The MARC Growth & Investment Study has recommended increased peak headways by 2015 and some limited reverse-commute service during the peak periods by the year 2020.

5.2.2 Fort Detrick/US Army

As a result of BRAC legislation, the proposed actions identified in the Environmental Assessment (EA) for BRAC 05 Realignment at Fort Detrick, MD, involve constructing new facilities to accommodate the 225 personnel and functions of five organizations realigning and relocating to Fort Detrick. Fort Detrick identified three major facilities projects required to support the proposed action. These projects involve new construction that would provide approximately 183,100 square feet of office space.

The EA noted that increase in traffic due to construction vehicles and the increased traffic from additional workforce are not expected to be significant. Due to the relatively low number of additional personnel, no increase in transit ridership is expected as a result of implementing the action. The EA also noted that there are no plans to implement an internal shuttle in the immediate future.

The BRAC legislation also transferred management of an off-site location, the Forest Glen Annex (FGA), to Fort Detrick as well. The FGA is approximately one mile from the Forest Glen Metrorail Station in Montgomery County. The Silver Spring Metrorail Station also serves FGA via Montgomery County Ride-On Bus Route 2 and Route 4 to the installation. The FGA would experience an increase of approximately 220 personnel. The EA found the BRAC activities at FGA would have negligible impacts to public transit at or near the installation. The FGA TMP noted the following items that could reduce the additional personnel from arriving in single occupancy vehicles:

- Appointment of an Employee Transportation Coordinator (ETC)
- Ridesharing (Carpooling and Vanpooling)
- Encourage use of public transit
- Encourage use of regional Guaranteed Ride Home program
- Establish a Commuter Center (for information)
- Variable work hours
- Parking management

5.2.3 Frederick County

Frederick County identified short and long-term action items as part of the *Frederick County TDP* that will be important in order to prepare for BRAC, and to act as a guide

for transit growth in the County. The Frederick County TDP includes the TransIT improvements. Among the action items that relate to Fort Detrick are:

- *Specific short-term improvements*
  - Increase Paratransit service at peak times
  - Increase Saturday Connector service
  - Evaluate expanding the existing East County Shuttle Tuesday/Thursday service to provide more trips per day
  - Add Saturday and evening service to Walkersville Shuttle (Implemented July 2008)
- *Specific long-term improvements*
  - Provide all day 30-minute service frequency on Connector routes
  - Provide 15-minute service frequencies in peak hours on Connector routes
  - Expand Walkersville shuttle service
  - Expand the East County shuttle service to five days per week and implement a call-a-ride service on the route to serve eastern Frederick County
  - Add operations, maintenance and customer service staff to support increased operations
  - Adopt transit-friendly design standards for new development, including transit amenities and pedestrian access

Frederick County also identified transit action items as part of the *2008 Transportation Priorities* letter from the Board of County Commissioners of Frederick County and Frederick County's State Delegation to MDOT's Secretary. Only BRAC related priorities are listed in this summary:

- *Local Transit*
  - Funding to expand peak-period shuttle service to regional communities such as Urbana, Middletown and New Market
  - Allocate Frederick County's share of the $6.8 million BRAC related funding statewide for Locally Operated Transit Systems
- *Regional Transit*
  - Establish additional MTA Commuter Bus service from north of the City of Frederick to serve the Monocacy MARC Rail Station and Shady Grove Metrorail Station
  - Establish MTA Commuter Bus service from the Frederick area to the Baltimore area
  - MARC System - Fund improvements in the Frederick's MARC Commuter Rail service by adding additional passenger cars and locomotives and providing signal improvements along the MARC Brunswick Line to accommodate existing and increased ridership by increasing the frequency of service to the Frederick County MARC stations. Fund reverse commute service in support of BRAC related activities at Fort Detrick
  - I-270 Transitway Study – Frederick County requests funding to match developer and county contributions to conduct an engineering/corridor preservation study of the I-270 Transitway, an extension of the Corridor

Cities Transitway into Frederick County. This study would assess the current master plan alignment to determine if the alignment is suitable or whether alternatives should be considered. Station locations and other related facilities would also be evaluated
  - Fund the Fort Detrick Area Traffic Impact Study identified in the MD FY 2009-2013 CTP

5.2.4 Frederick County TransIT

TransIT recommendations for improvements are captured within the Frederick County TDP and Transportation Priorities Letter as noted above. In addition to the frequency improvements to bus service, both TransIT and the City of Frederick recommend making some routes bi-directional. Bi-directional routes would help serve Fort Detrick as well as the general transit community by providing reverse-commute service.

5.2.5 City of Frederick

The City of Frederick identified pedestrian improvements as part of the *Fort Detrick Bicycle, Pedestrian, and Transit Access Study.* This study is to become part of a regional BRAC action plan for central Maryland. The action items that relate to improving pedestrian and bicycle access on the surface roads that surround Fort Detrick (7th Street, Military Road, Opossumtown Pike, and Rosemont Avenue) include:

- *Pedestrian*
  - No right-turn on red
  - Signal re-timing
  - Signal retrofits
  - Pedestrian crossings
  - Transit access
- *Bicycle*
  - Left-turn lanes
  - Bicycle lanes
  - Off-street trails
- *Bicycle and Pedestrian*
  - Interchange improvements
  - Traffic calming
  - Access consolidation
  - Road diets
  - Site design
  - Demand management

5.3 RIDESHARING

Ridesharing and ridematching are available for those living and working in Maryland through the Commuter Connections program, which provides this service for the entire State.

The Environmental Management Office at Fort Detrick advertises a carpool program through their website. Participants can search the carpool database to find carpools that meet their needs. In collaboration with Frederick County TransIT and Commuter

Connections, incentives such as the Guaranteed Ride Home (GRH) Program are available to Fort Detrick participants who actively participate in the Fort Detrick Carpool Program.

5.4 CHALLENGES AND OPPORTUNITIES

This section presents the challenges and opportunities identified for Fort Detrick as determined through the development of this report.

5.4.1 Marketing of Services

The marketing of transportation options for Fort Detrick will be a vital component of its success. A variety of marketing strategies and media are available and would need to be considered to effectively promote alternative commuting options. The marketing of these options (bus, rail, carpooling, or vanpooling) could be led by the State, Frederick TransIT or Fort Detrick.

Enticing people to ride transit and use alternative transportation options has been challenging for many public transit agencies. The presence of free and convenient parking at Fort Detrick and easily accessible highways create a competitive environment for transit. However, an opportunity exists at Fort Detrick to work in partnership with local agencies and rideshare providers to strongly advertise the transportation options and reward transit behaviors, such as the preferred parking program for rideshare users. The services must be reliable, clean, safe and on-time.

5.4.2 Limited MARC Service

Frederick is connected to the MARC Brunswick Line at the Frederick MARC Rail Station and the Point of Rocks MARC Rail Station via the Meet the MARC shuttles. However, the MARC Brunswick Line is focused on commuters traveling to Washington, DC in the morning and returning in the evening.

5.4.3 Demand for Service

Estimating the demand for transportation services has been a challenge in preparing for BRAC growth. While the number of jobs relocating to Fort Detrick is known, what is unknown is where the employees will choose to reside among a varied selection of geographical locations. As varied as these geographical locations are, the reasons to choose a specific location include the availability of affordable housing, low taxes, opportunities for spousal employment and commutation time.

5.4.4 Providing Service to EULs

Thus far, transportation options have focused on Fort Detrick and its government tenants because of the availability of employee estimates and an expected timeframe of their arrival. As development of EULs begins and as tertiary businesses locate nearby, other routes or services may become necessary. All of the transportation options to the Fort Detrick EULs have not been fully explored as EULs are only in the planning stage; therefore, the total impact of the scope of the developments is not known.

The creation of EULs around Fort Detrick creates a partnership opportunity for transit, carpool and vanpool providers. Asking the EULs for support of rideshare and the GRH program is a critical step in the process. The GRH program is further discussed in Section 1.3.

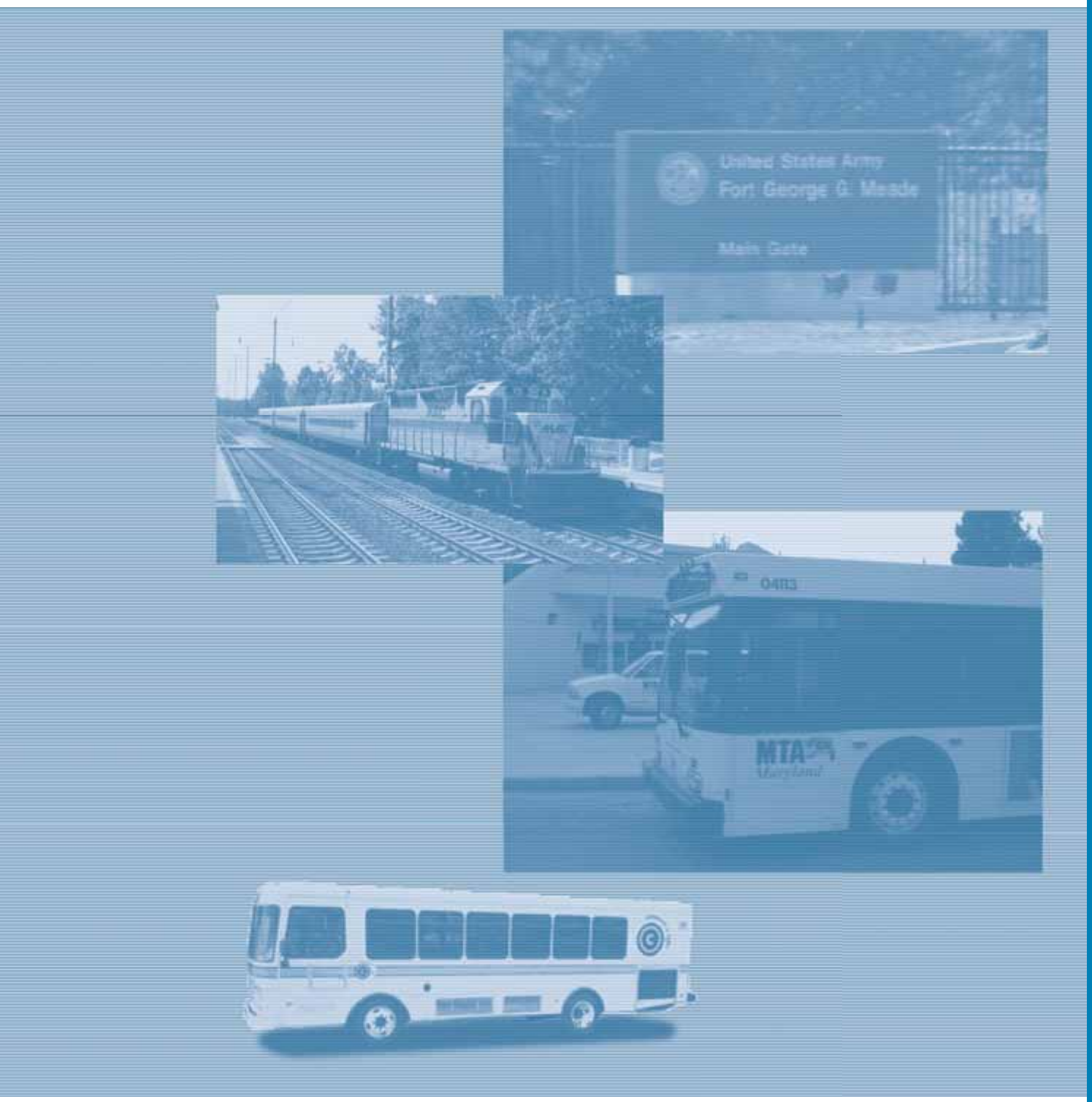
5.4.5 Parking Availability

The provision of free parking for Fort Detrick employees could be considered as an employee perk; however, free parking discourages the use of transit and alternative transportation options. Given the existing parking conditions and the unlikelihood that less parking would be provided, it is important for any transportation options proposed to be fast, reliable, and as easy to use as possible. Also, without parking constraints, the only incentives for not driving would be the cost of fuel and access to a vehicle.

5.4.6 Marketing / Expand Ridesharing

Fort Detrick has an established ridesharing program. The opportunity exists to market this service to the anticipated new employees and expand this program.

FORT MEADE



Chapter 6: Fort Meade

Fort Meade is a U.S. Army installation located on the western edge of Anne Arundel County, Maryland. It is situated between the metropolitan areas of Washington, DC and Baltimore, near the major employment generators of BWI Airport and Arundel Mills Mall.

At present, Fort Meade has the fourth largest workforce of Army installations within the country employing approximately 40,000 military, civilian and contractor personnel. It is home to several large government and military components including the National Security Agency (NSA), the Defense Courier School and the United States Environmental Protection Agency.

By 2011, three major agencies are to relocate to Fort Meade. The majority of relocations come from the Defense Information Systems Agency (DISA), with supplemental relocations from the Defense Media Activity, and the Adjudication and Office of Hearing and Appeals Offices. According to the Sage Policy Group, Inc., these agencies will result in a direct increase of over 5,700 military, civilian and contract jobs on-base, with an additional 4,900 family members expected to arrive in conjunction with these job assignments. An estimated 3,000 to 7,000 additional off-base jobs are anticipated as part of contract support.

The BWI Business Partnership, a membership organization of nearly 175 businesses and government agencies, works to provide smart commuter choices for employees and employers in the BWI Airport area. The BWI Business Partnership is the local sponsor of ridesharing in the Fort Meade area and assists with the matching of carpooling employees. It also manages an emergency ride home for NSA commuters who use car or van pools or transit a minimum of three days a week.

6.1 EXISTING SERVICE

There are several transit agencies and providers in the Fort Meade area. **Figure 6-1** shows Fort Meade and a 4-mile radius area which illustrates the closest transit services to the post.

6.1.1 MTA

6.1.1.1 Local Bus

The majority of MTA local bus routes are focused on the city of Baltimore. However, the No. 17 route, which provides service from the Patapsco Light Rail Station to BWI Airport, reaches just within the 4-mile radius of Fort Meade. Weekday service on this route operates from 5:43 am to 11:55 pm with 23 southbound trips and 22 northbound trips. Late night service is offered on this route, though the terminal points change to the University of Maryland Transit Center in downtown Baltimore City and BWI Airport. This service operates from 11:55 pm to 4:24 am with five trips in each direction.

6.1.1.2 MARC Commuter Rail

MARC commuter rail operates two lines between Baltimore and Washington, DC; the Penn Line and the Camden Line. The closest station to Fort Meade is the Odenton

MARC Rail Station on the Penn Line. The Savage MARC Rail Station is the closest Camden Line station to Fort Meade. The Jessup MARC Rail Station on the Camden Line also falls within a 4-mile radius of Fort Meade.

There are a combined total of 22 morning trips to Fort Meade area stations, 14 departing from Baltimore and eight departing from Washington, DC's Union Station. In the afternoon, there are a combined total of 23 trips to Fort Meade area stations, 14 departing from Baltimore and nine departing from Washington, DC's Union Station.

6.1.2 Annapolis Transit

Annapolis Transit is operated by the Annapolis Department of Transportation and provides public transit service via three local shuttle and 11 fixed-route services. These routes serve Annapolis, Parole, Edgewater, Deale and BWI Airport.

The closest that Annapolis Transit comes to Fort Meade is the C-60 route which offers service to BWI Airport, Arundel Mills Mall, and the Cromwell Light Rail Station. This route operates weekdays from 7:00 a.m. to 5:45 p.m.

6.1.3 Connect-A-Ride

Connect-A-Ride is a fixed-route public transit service that operates in Anne Arundel, Howard, Montgomery and Prince George's counties. It is operated by the Corridor Transportation Corporation (CTC), a provider of public transportation in the Baltimore-Washington suburban region.

Of the Connect-A-Ride services, the two closest routes that operate near the Fort Meade are Routes F and K. These routes can be found in **Figure 6-1**.

Route F, also called the NSA Express, and operates Monday through Friday from Laurel to the NSA Visitor Control Center Main Gate. This route operates two morning trips from Briarwood Drive and two return evening trips.

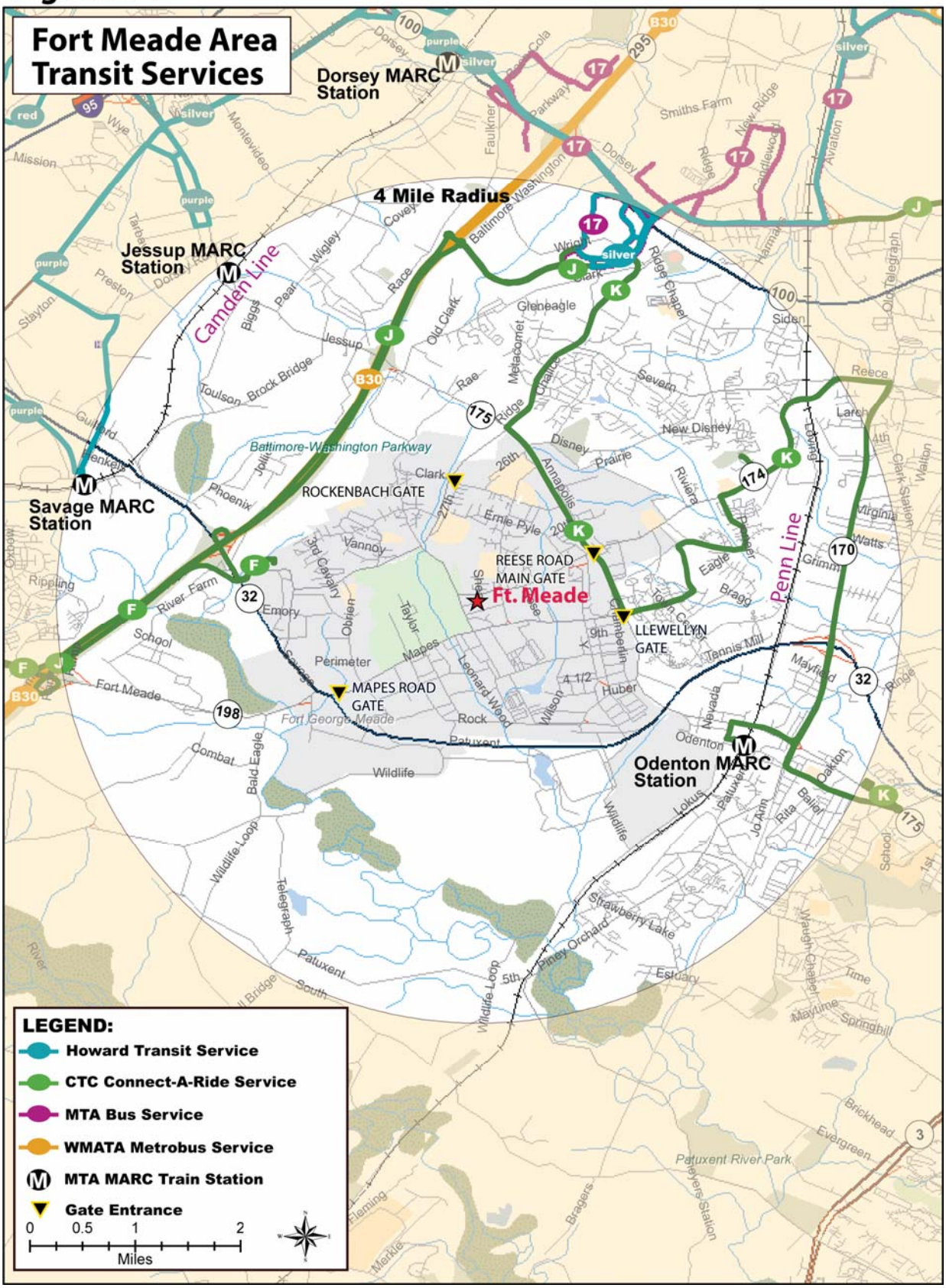
Route K operates from Arundel Mills Mall to the Odenton MARC Rail Station with hourly trips on Monday to Friday from 6:30 a.m. to 11:02 p.m., Saturday from 8:15 a.m. to 10:40 p.m., and Sunday from 9:13 a.m. to 9:59 p.m. The route serves Fort Meade at the Reece Road gate and the Odenton MARC Rail Station.

6.1.4 Fort Meade

There are several on-post transit services in the Fort Meade area. These services are generally targeted towards a specific population and operated for their exclusive use. Among these services are:

- MARC Shuttle – An existing NSA shuttle service became available for all Fort Meade employees within the past year, connecting with the Odenton MARC rail station. Utilization of the NSA shuttle service to the Savage MARC rail station in under consideration, depending on the success of the Odenton shuttle.
- Post Shuttle - this operates as a circular on-post route connecting outlying work and residential areas to the Post Exchange and post administration offices.
- Advanced Individual Training (AIT) School Shuttle - which operates as an internal on-post shuttle for the exclusive for the use of AIT students.

Figure 6-1


Fort Meade Area Transit Services
Dorsey MARC Station
4 Mile Radius
Jessup MARC Station
Camden Line
Savage MARC Station
Baltimore-Washington Parkway
ROCKENBACH GATE
REESE ROAD MAIN GATE
Ft. Meade
LLEWELLYN GATE
MAPES ROAD GATE
Fort George Meade
Odenton MARC Station
Penn Line
LEGEND:
Howard Transit Service
CTC Connect-A-Ride Service
MTA Bus Service
WMATA Metrobus Service
MTA MARC Train Station
Gate Entrance
0 0.5 1 2
Miles

6.1.5 Howard County

Howard Transit is a public transit service which primarily acts as a neighborhood collector connecting to commuter bus, light rail, and commuter rail. It is managed and operated under contract by the CTC, which also manages the Connect-A-Ride service in Howard, Prince George's and Anne Arundel counties.

The Purple Route operates from the Elkridge Corner Shopping Center to Laurel Mall with service to the Savage MARC Rail Station. The route operates weekday and Saturday service. Weekday service operates hourly from 6:00 a.m. to 9:55 p.m. with 12 daily northbound trips and 11 daily southbound trips. Saturday service operates every two hours from 9:00 a.m. to 9:46 p.m. with seven northbound trips and six southbound trips.

The Silver Route operates from the Mall in Columbia to BWI Airport with service to the Broken Land Park & Ride, Arundel Mills Mall, Dorsey MARC Rail Station, and BWI Airport Rail Station. The route operates weekday and weekend service. Weekday service operates hourly from 5:36 am to 10:59 pm with 17 daily eastbound trips and 16 daily westbound trips. Saturday service operates every hourly from 7:03 a.m. to 10:59 p.m. with 13 eastbound trips and 13 westbound trips. Sunday service operates every two hours from 9:03 a.m. to 6:59 p.m. with five eastbound trips and five westbound trips.

6.1.6 WMATA

WMATA is the largest transit provider in the Washington, DC region, the second largest rail provider and the fifth largest bus network in the country. It provides local bus, commuter bus, subway, and paratransit service to Washington, DC.

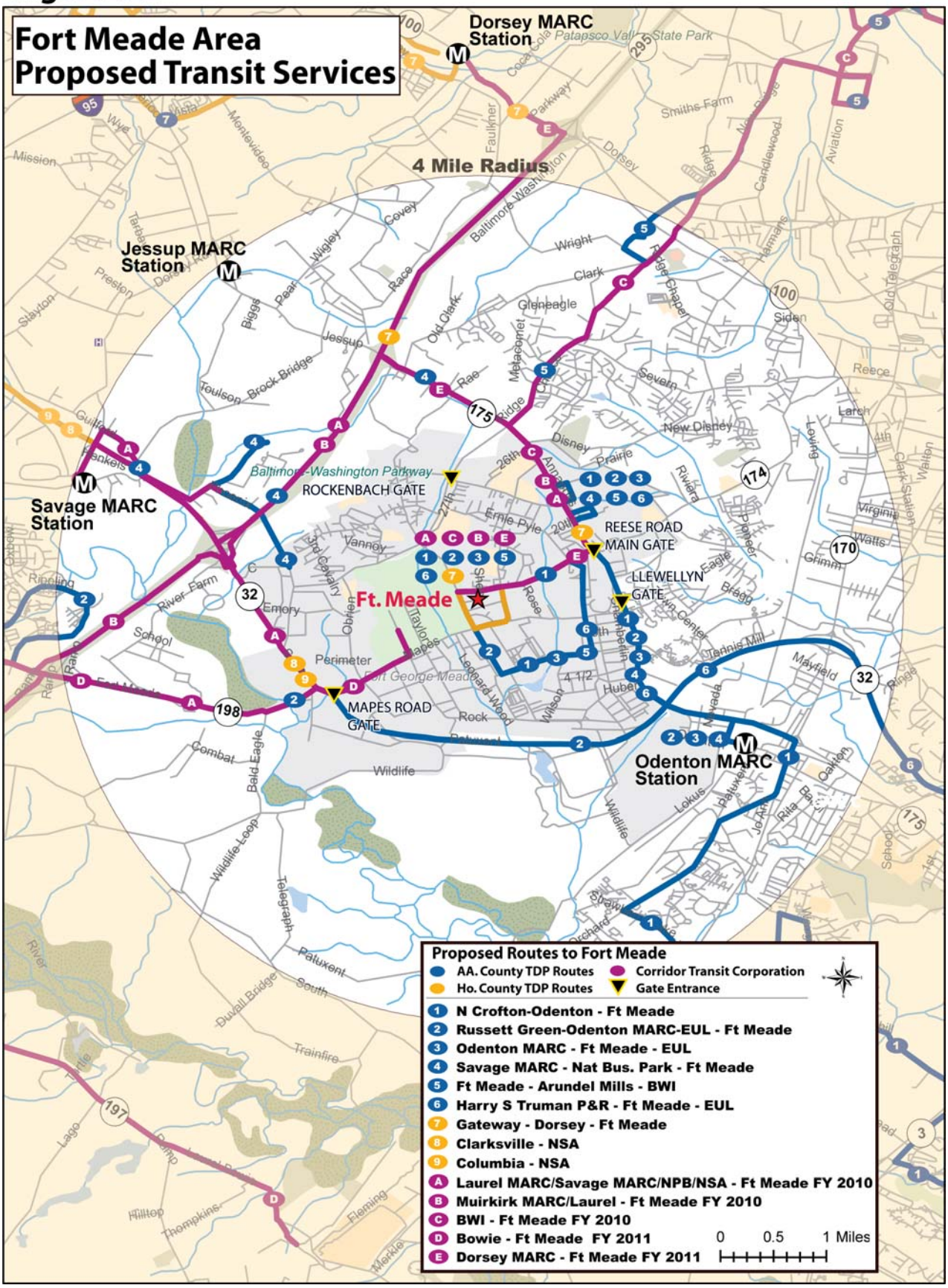
The B30 bus route operates express service from the Greenbelt Metrorail Station to BWI Airport. This service operates seven days a week with service every 40 minutes from 6:10 a.m. to 11:19 p.m. weekdays and from 8:45 a.m. to 11:21 p.m. weekends.

The closest Metrorail line to Fort Meade is the Green Line which terminates at the Greenbelt Metrorail Station off of the Washington Capital beltway. There is no connecting bus service to the Fort Meade area; however, the Greenbelt Metrorail Station is served by MARC commuter rail with service to the Savage MARC Rail Station.

6.2 CURRENT PLANS

This section notes the current plans for transit improvements related to BRAC that were developed by the State or local transit agencies, military, or other organizations. Transit services that have been proposed for Fort Meade are shown in **Figure 6-2**.

Figure 6-2


Fort Meade Area
Proposed Transit Services
Dorsey MARC Station
4 Mile Radius
Jessup MARC Station
Savage MARC Station
Odenton MARC Station
Ft. Meade
ROCKENBACH GATE
REESE ROAD MAIN GATE
LLEWELLYN GATE
MAPES ROAD GATE
Baltimore-Washington Parkway
Proposed Routes to Fort Meade
AA. County TDP Routes
Ho. County TDP Routes
Corridor Transit Corporation
Gate Entrance
1 N Crofton-Odenton - Ft Meade
2 Russett Green-Odenton MARC-EUL - Ft Meade
3 Odenton MARC - Ft Meade - EUL
4 Savage MARC - Nat Bus. Park - Ft Meade
5 Ft Meade - Arundel Mills - BWI
6 Harry S Truman P&R - Ft Meade - EUL
7 Gateway - Dorsey - Ft Meade
8 Clarksville - NSA
9 Columbia - NSA
A Laurel MARC/Savage MARC/NPB/NSA - Ft Meade FY 2010
B Muirkirk MARC/Laurel - Ft Meade FY 2010
C BWI - Ft Meade FY 2010
D Bowie - Ft Meade FY 2011
E Dorsey MARC - Ft Meade FY 2011
0 0.5 1 Miles

6.2.1 MTA

6.2.1.1 Commuter Bus

Commuter bus services to Fort Meade have been studied as part of MTA BRAC and Intercounty Connector (ICC) planning efforts. No final determination on routes, funding or service provider has been made. The following routes have been proposed by the MTA:

- Gaithersburg to Fort Meade: This ICC/BRAC route would operate from Gaithersburg along the Intercounty Connector roadway with connections to the Shady Grove Metrorail Station and various park and ride lots. It would operate six daily trips
- Greenbelt to Fort Meade: This route would operate from the Greenbelt Metrorail Station to Fort Meade. This route would provide access to the entire Metrorail service and would serve Fort Meade directly. It would operate six daily trips.
- Annapolis to Fort Meade: This route would operate from the Harry S. Truman Park and Ride lot to Fort Meade. It would operate six daily trips.

6.2.1.2 MARC Commuter Rail

As part of the *MARC Growth & Investment Plan*, several immediate and long-term recommendations were made for the MARC system. Among those which directly relate to Fort Meade are:

- Additional evening and late-night Penn Line trains
- Weekend Penn Line service
- Immediate additional mid-day Camden Line train
- 2010: increase Penn Line peak, evening and weekend service
- 2015: increase Penn Line headways to 15-20 minutes peak, 30 minutes off peak
- 2015: enhance service at Odenton MARC Rail Station
- 2015: additional peak and reverse peak Camden Line trains
- 2015: improve service and connecting bus service from the Savage MARC Rail Station to Fort Meade
- 2020: improve headways to 20 minutes on the Camden Line
- 2035: increase peak and off peak and weekend service on the Camden Line

At this time, MTA remains committed to the implementation of the MARC Growth & Investment Plan; however, many projects and service improvements are deferred due to the current economic downturn.

6.2.2 Anne Arundel County / CTC

A number of new routes have been proposed by Anne Arundel County's Office of Planning and Zoning to address the impacts of BRAC. These routes are shown in **Figure 6-2**. Most of these proposed routes would operate throughout the day with 19 daily trips, except the high frequency shuttle, Harry S. Truman, and Piney Orchard routes are proposed with 42, 12, and 6 daily trips, respectively. The latter two routes would operate during peak periods only. The proposed routes are:

- North Crofton / Odenton / Fort Meade / EUL
- Russett Green / Odenton MARC-EUL / Fort Meade
- Arnold / Severna Park / Odenton MARC Station
- High Frequency Shuttle: Odenton MARC Rail Station / Fort Meade / EUL
- Piney Orchard / Odenton MARC / EUL / Fort Meade
- Fort Meade / EUL / Arundel Mills / BWI Airport
- Harry S. Truman Park and Ride Lot / EUL / Fort Meade

The CTC also devised a proposed local bus plan entitled the "Meade Regional Shuttle Network", identifying several potential shuttle routes that would connect the following MARC stations with the Reece Road Gate or a future Operations and Transfer Center: Muirkirk, Bowie State, Savage, Laurel, Dorsey, BWI Airport and Odenton.

6.2.3 Baltimore Metropolitan Council

The Baltimore Metropolitan Council (BMC) *Regional Transportation Implication of BRAC* report presents an assessment of transportation implications for the Baltimore metropolitan area and recommendations for Fort Meade, among which are:

- Improve headways using the WMATA Greenbelt/BWI Express route
- Develop local bus service to serve communities and the proposed Central Maryland Transit Operations Center
- Implement the Fort Meade/BWI Airport route as proposed in the City of Annapolis/Anne Arundel County Transportation Development Plan

6.2.4 Fort Meade

As part of BRAC preparedness, Fort Meade is in the process of creating a coordination office for post transportation and commuting. Some of the issues the coordination office will attempt to address include:

- Security checks for transit vehicles and drivers
- Location of transit stops
- Expansion of shuttle service to support all government employees to the Odenton and Savage MARC rail stations
- Possible extension of the Post Shuttle to the Odenton MARC Rail Station
- Adoption of a Guaranteed Ride Home (GRH) program
- Formation of an on-post ridesharing program

6.2.5 Howard Transit

As part of the revised TDP for Howard County, a series of proposed routes has been developed that would operate to Fort Meade. These routes are shown in **Figure 6-2**. These proposed routes would operate at peak periods with seven to eight daily trips. The proposed routes are:

- Columbia – Gateway / Dorsey MARC Rail Station / Fort Meade
- Columbia – Town Center / NSA / EUL / Fort Meade
- Clarksville / NSA / EUL / Fort Meade

6.2.6 Prince George's County

The Prince George's County *BRAC Plan of Action* identifies two transit needs for the Fort Meade area:

- Bus service from Bowie to Fort Meade via Greenbelt, Maryland
- Extension of the WMATA Green Line to BWI Airport via Fort Meade

6.2.7 State of Maryland

The *BRAC Maryland Impact Analysis* notes the future improvement of sidewalk and bicycle access at the Odenton MARC Rail Station.

The Statewide BRAC Report summarizes impacts and recommendations of BRAC on a statewide level, and offers the following recommendations for the Fort Meade area:

- Seek improvements to regional bus and rail to serve commuters to Fort Meade
- Consider improvements to headways to serve commuters from Washington, DC on existing services such as the WMATA Greenbelt/BWI Express, MARC Penn Line, and MARC Camden Line
- Study feasibility of expanding MARC service
- Coordinate with WMATA, Fort Meade and others to develop a transfer shuttle from Odenton and Savage MARC rail stations
- Continue to develop local bus service and connections
- Conduct a feasibility study on extension of the WMATA Green Line to Fort Meade and BWI Airport
- Establish shuttle bus service from the Odenton MARC Rail Station to the proposed Central Maryland Transit Operations Center

6.2.8 WMATA

In June 2008, WMATA initiated a study of BRAC related impacts to transit service. The results of this study should be available in 2009.

6.3 RIDESHARING

Ridesharing and ridematching are offered at Fort Meade and administered through the BWI Business Partnership and the Annapolis Regional Transportation Management Association (ARTMA), which are the regional representatives for the program. The BWI Business Partnership assists in signing interested members or employers and assisting in ride matching through the MWCOG Commuter Choice program.

Fort Meade employees residing in areas outside the BWI Business Partnership coverage area are eligible to participate through the statewide Commuter Connections program.

In its Fort Meade BRAC Transit and Ridesharing Planning Study, Anne Arundel County also examined ridesharing strategies and estimated the numbers of feasible vanpools, carpools, and buspools from Northern Virginia and Southern Maryland to Fort Meade. The analysis provided cost estimates for ridesharing and found that vanpools may be

more cost-effective than buspools. The study also recommends creating a transit and ridesharing clearinghouse focused on Fort Meade.

A Ft. Meade BRAC Rideshare Roundtable discussion group comprised of local public and private sector organizations has been formed to brainstorm ways for all organizations to work together to attract higher rideshare participation amongst present and proposed Ft. Meade patrons and to identify TDM action issues. Subsequent discussions will be regularly scheduled to help administer these recommendations and action items.

6.4 CHALLENGES AND OPPORTUNITIES

This section presents the challenges and opportunities identified for Fort Meade as determined through the development of this report.

6.4.1 Security and Agency Coordination

This issue serves as an umbrella issue for security measures related to public access of the installation. The need for transportation vehicles, such as buses, taxis and vanpools to gain access to Fort Meade is seen as a key component of the success of any proposed service. Buses originating from the Odenton, Jessup, or Savage MARC rail stations, Baltimore, the Greenbelt Metrorail Station or elsewhere would not be allowed entry to Fort Meade without secured access. Passengers without proper identification would be forced to alight, presumably at the Main Gate Visitor Center, then clear security and find alternate on-post transportation to their final destination.

Aside from the security issues pertaining to the vehicle itself, the issue of security also applies to the passengers. While these passengers would most likely be government employees or contractors commuting to work, use of any proposed services by non-government personnel and civilians has not been resolved. At this time, security protocols for transit vehicles entering Fort Meade have not been resolved, however, to alleviate some security concerns it is possible that any service entering Fort Meade would terminate on Fort Meade. This would allow for a security check at the gate, or prior to the gate, at which time all non authorized users would exit the vehicle.

In order for the transportation services such as transit, carpooling, and vanpooling to be successfully implemented, it will be necessary for local agencies, transit providers, and the State to coordinate efforts. This report represents the continuing efforts and conversations between Fort Meade and the MTA which will require ongoing coordination.

6.4.2 Parking Availability

There are two main parking related concerns, the availability of on-post parking and connections to off-post parking at selected park and ride lots proposed to be used for commuter services to Fort Meade.

The first concern is the presence of plentiful and free parking on-base. At this time, with no parking constraints, any alternative transportation program becomes less viable as an alternative commute option. This is especially true when prospective

passengers would be required to drive to a park and ride, wait for the vehicle, and then proceed to the post. If another transfer is involved to enter the post, the odds of success are reduced.

The second concern is the availability of parking at park and ride lots. The BRAC Commuter Bus Study recommended three routes for service to Fort Meade which use park and ride facilities that are currently operating at or near capacity for commuter bus and Metrorail services to Washington, DC. Space constraints at these lots could inhibit the success of the proposed commuter bus routes to Fort Meade.

6.4.3 Marketing of Services

The marketing of transportation options for Fort Meade will be a vital component of its success. A variety of marketing strategies and media are available and would need to be considered to effectively promote alternative commuting options. The marketing of these options (bus, rail, carpooling or vanpooling) could be led by the State, local transit agencies or Fort Meade.

Enticing people to ride transit and use alternative transportation options has been challenging for many transit agencies. The competition of free and convenient parking at Fort Meade and easily accessible highways create an attractive option. However, an opportunity exists at Fort Meade to work in partnership with local agencies and rideshare providers to strongly advertise the transit options and reward transit behaviors, such as with preferred parking for rideshare users. The services must be reliable, clean, safe, and on-time. Also, without parking constraints, the only incentives for not driving would be the cost of fuel and access to a vehicle.

6.4.4 Operation of Services

Providing seamless service means offering a smooth and convenient trip for the passenger. This entails offering a trip with the fewest transfers and stops as possible, such as having the connections and transfers occur at the same stop without having to walk to another area, and having standardized payment and fare collection between modes and transit services.

The operator of any proposed service to Fort Meade would need to be coordinated on a regional level to determine the best overall provider, the cost of each service to operate and the funding available.

6.4.5 Too Much Proposed Service

There are always challenges when estimating the demand for transit services. The level of demand for BRAC service to Fort Meade is no different. Therefore, it is possible for a situation to emerge where there is more service than demand or duplicative service along certain corridors.

One area of concern for duplicative service exists at the connection between the Odenton and Savage MARC rail stations and Fort Meade. Currently, no public transit service exists, but multiple connections have been proposed by CTC, Howard County, and Anne Arundel County. Fort Meade itself is considering operating such a service, in conjunction with NSA. However, a final determination has yet been made on the demand for transit connections at either of these stations for service to Fort Meade.

The various plans may propose duplicated services because it is unclear who will provide the services. Each plan is not proposing that one service be operated by several providers, but that the service is provided by the most appropriate provider.

6.4.6 Are all Local Buses Accessible?

Every effort must be made to ensure that whenever possible all vehicles serving Fort Meade are accessible for the use of all people. This concern takes on greater importance considering the mobility needs of disabled soldiers and civilians who would utilize transit to access Fort Meade facilities.

6.4.7 Marketing

One of the opportunities at Fort Meade will be that many relocated employees will be arriving from areas employing strong transit usage; an enhanced opportunity exists to market services to those accustomed to benefiting from transit. This effort may have a stronger appeal to the seasoned transit patron than to those employees who area not predisposed to riding transit.

6.4.8 EULs to Support Transit

The creation of EULs in and around Fort Meade also creates a partnership opportunity for transit and alternative transportation providers. Asking the EULs to support ridesharing and the GRH program is a critical step in the process. In addition, as Fort Meade progresses with the development of its EUL, and other tertiary business locate near Fort Meade, other routes or services may become necessary.

6.4.9 Loss of Guaranteed Ride Home (GRH) Privileges

Some present employees of DOD agencies transferring from Virginia are now enrolled in the Commuter Connections GRH program. By working at Fort Meade, which is in the Baltimore region and just outside of the Washington GRH work area, these employees will lose the benefits of the Commuter Connections program. Expansion of the program to the Baltimore region, or inclusion of Fort Meade in the BWI Partnership Emergency Ride Home program could help rectify the loss of GRH privileges to these employees.

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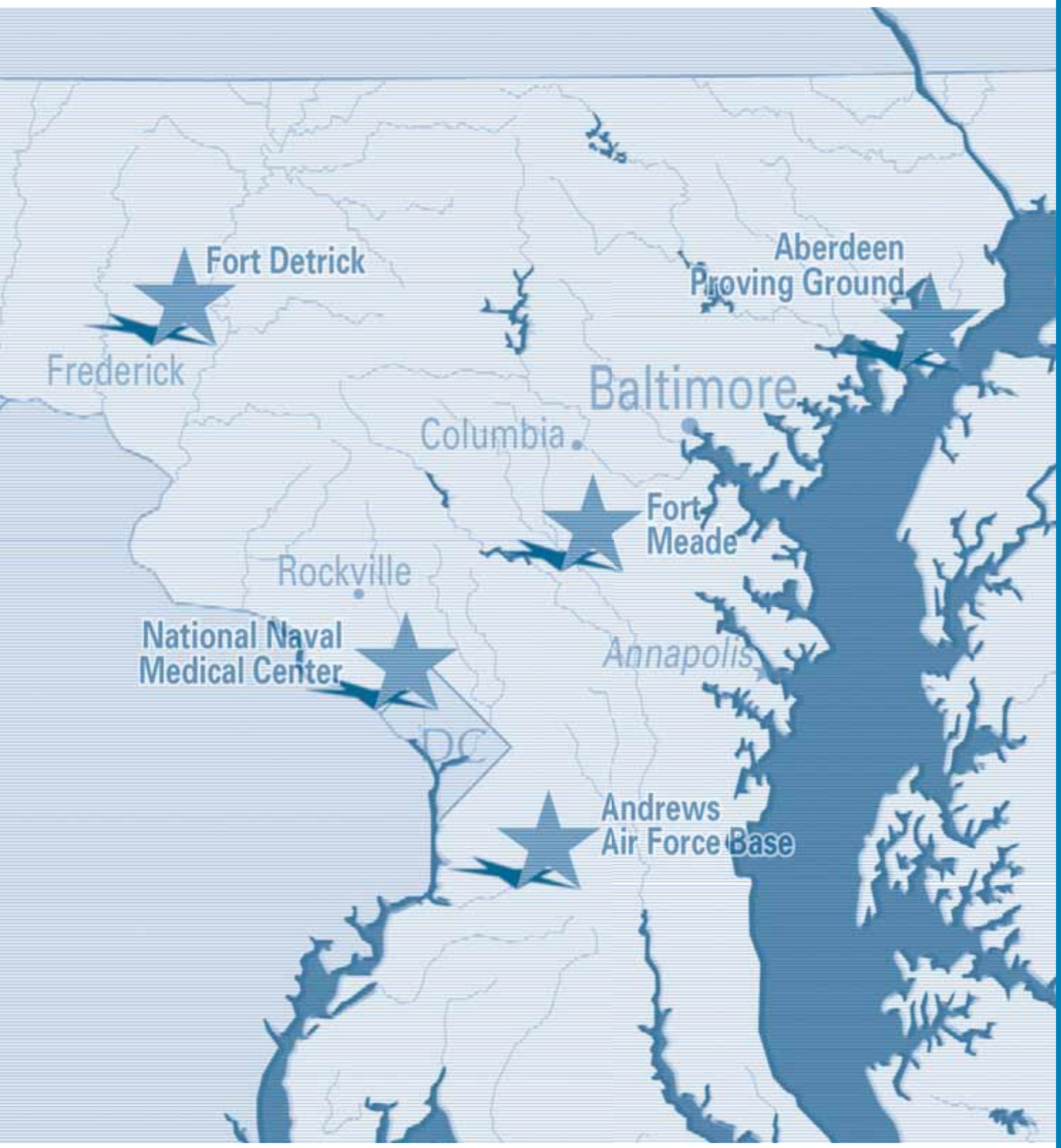
CONCLUSIONS



Chapter 7: Conclusions

The purpose of this report is to document all existing service within the vicinity of the five BRAC installations and all BRAC-related transit impacts and future improvement recommendations identified in plans throughout the state. This chapter presents general conclusions for each installation and for the state of Maryland in general.

7.1 BRAC INSTALLATION CONCLUSIONS

This section summarizes the challenges and highlights the current plans for transit improvements related to each BRAC installation as developed by the state, local transit agencies, military, or other organizations.

7.1.1 Aberdeen Proving Ground

APG is currently served by the MARC commuter rail service that operates five trips each weekday with additional rail service via Amtrak. The central challenges at APG are future MARC commuter train service improvements, the enhancement of the Aberdeen Rail Station, the connection of the station with APG, and internal circulation within APG. Commuter service to APG from Baltimore and Washington, DC is available on MARC and Amtrak trains with a total of five arriving and departing trains. Efforts are currently underway to add peak-period trips to and from APG as trips are now focused on service to Baltimore from Aberdeen. This shift in Aberdeen from an origination station to a destination station also impacts the potential upgrade or relocation of the station as the competing forces of commuter parking and transit-oriented development vie for prominence.

In addition to the potential MARC improvements, commuter bus service from Baltimore and Delaware has been proposed. This would be the first commuter service from Delaware to Maryland and would require funding by Delaware, or shared funding, depending on the nature of the service.

7.1.2 Andrews Air Force Base

In comparison with Fort Meade and APG, AAFB is receiving less of an influx of BRAC relocations, and to this point, the Air Force has not expressed the need for increased transit service for their future employees. AAFB is currently served by two 'The Bus' routes and six WMATA Metrobus lines that are within the vicinity of the base. However, AAFB has begun the development of a Transportation Management Plan (TMP), as required by the National Capital Planning Commission (NCPC), which will quantify the potential transit demand on and off base and produce recommendations to accommodate that demand. The Environmental Assessment (EA) conducted by the Air Force did not reveal any significant impacts on the natural or human environment that would occur if the proposed BRAC actions were implemented at AAFB. The existing parking on the installation is adequate to support the current needs and sufficient additional parking will be added in conjunction with the new buildings being built for the BRAC relocation.

Increased coordination between AAFB and the various transportation agencies, including MTA, is occurring and all indications are that communication will continue to

occur as more information is obtained regarding the relocations from Crystal City, Virginia and other locations.

Transportation actions identified to support the BRAC implementation include:

- WMATA's BRAC Transit Study, which will involve demand analysis and recommendation for several installations affected by BRAC within the greater Washington, DC metropolitan region, with the report being finalized in early 2009.
- Marketing of rideshare and vanpooling to the Crystal City employees, including the potential creation of an AAFB Rideshare Coordinator position.
- Elements of the TMP, to include pedestrian access improvements from the local bus stops to the gate(s), improvements to the existing on-base shuttle circulator and the potential for shuttle connections to transit hubs off base.

7.1.3 National Naval Medical Center

NNMC is directly served by the Metrorail Red Line, seven Ride On routes, and three Metrobus lines. The National Institutes of Health (NIH) and NNMC are also served by government shuttle networks for the private use of government employees, patients, and/or military personnel. Staff is served on the shuttles as space permits. These routes connect the Medical Center Metrorail Station with the NNMC campus.

Transportation actions identified in the NNMC TMP to support the BRAC implementation include:

- The NNMC, along with the Bethesda Urban Partnership, will investigate the feasibility of providing quick and frequent shuttle connections to Downtown Bethesda, through an extension of the current Bethesda Circulator service.
- Other efforts that NNMC has and will take include - Town Hall meetings for leadership, development of a Commuter Solutions website, providing commuting alternatives at staff orientation, review of alternate work schedules/variable work and telecommuting, involvement in local and regional transportation initiatives (Medical Center Transportation Organization, Keep Montgomery County Moving, various MWCOG meetings, Montgomery County Rideshare Coordinator meetings and membership in ACT), enhancing bicycle and pedestrian access & facilities, increased parking management, consideration for Smart Parking systems, pursuing express bus services, brochure racks and increased coordination with NNMC tenants. NNMC will consider bus pull-offs on Jones Bridge Road as part of the gate improvements.
- The NNMC will make an aggressive effort to implement measures which could dissuade employees from driving to work alone or during peak commuter periods. Priority parking spaces will be reserved for employees arriving by carpool or vanpool, or for those arriving during the less congested times of the day.
- The Purple Line would serve a highly congested corridor in Prince George's and Montgomery counties connecting the Metrorail Red, Green and Orange lines to key employment, residential, and institutional destinations.
- WMATA is currently conducting a Medical Center Station Area Access Study which includes the creation of an east side/NNMC station portal and a

pedestrian tunnel underneath MD 355 connecting NIH and the Medical Center Ride On and Metrobus station to the NNMC campus.

- WMATA has also initiated a regional-wide BRAC Transit Study to evaluate where service gaps may occur as a result of the influx of BRAC employees to the Washington region. NNMC is one of the three Maryland bases included in the study along with Andrews AFB and Fort Meade. This assessment will include evaluating pedestrian, bicycle, bus, and automobile access and developing a concept plan for improved access to the Medical Center Metrorail Station.

7.1.4 Fort Detrick

Fort Detrick is currently served by one commuter bus route and the MARC Brunswick Line, which operates nine eastbound trips and ten westbound trips each weekday. Four TransIT routes also serve the area. Due to the relatively low number of additional personnel, a minimal increase in transit ridership is expected at Fort Detrick. There are no plans to implement an internal base shuttle in the immediate future. The existing parking areas on the installation are generally adequate to support the current needs of Fort Detrick and new facilities will be built with associated parking lots. Recent improvements to Veterans Gate, the main gate serving the installation, have increased capacity and reduced queuing onto Seventh Street and Military Road.

BRAC legislation also transferred management of an off-site location, the Forest Glen Annex (FGA), to Fort Detrick. The BRAC activities at FGA are reported to have negligible impacts to public transit or rail access at or near the installation.

Transportation actions identified to support the BRAC implementation include funding reverse commute service in support of BRAC related activities at Fort Detrick, improving pedestrian and bicycle access on the surface roads that surround Fort Detrick, encourage and marketing the existing ridesharing program offered though the Environmental Management Office at Fort Detrick.

7.1.5 Fort Meade

Service to the Fort Meade area is currently provided by MARC commuter rail with Penn Line service to Odenton and Camden Line to Savage, combining for 22 morning trips and 23 evening trips each weekday. Additional service to the area is provided by Connect-A–Ride with two local routes.

Numerous proposals have been submitted for service options to Fort Meade and planning efforts are on-going and will continue through 2011. Transportation efforts related to Fort Meade include on-base circulation, connectivity to MARC stations, local connectivity, and regional connectivity.

The Army has announced that it will address the internal circulation needs of Fort Meade. Transportation could include trips from the visitor center to employment locations and mid-day service throughout the base and to retail, banking and other services.

MARC connectivity using an available shuttle service between the Odenton MARC rail station for Fort Meade tenant unit employees is now operational. Ongoing coordination is necessary especially as the three BRAC agencies moving to Fort Meade arrive by not later than September 2011. In addition to this shuttle service, other services have been proposed to connect Odenton and Savage MARC rail stations with Fort Meade, specifically those services proposed in the Howard County Transit Development Plan (TDP).

Local connectivity has been addressed by both Howard and Anne Arundel counties through proposed service routes in their TDPs.

Three commuter bus services which have been proposed for Fort Meade are:

- Greenbelt Metrorail Station to Fort Meade
- Gaithersburg to Fort Meade
- Harry S. Truman Park and Ride to Fort Meade

7.2 OVERALL CONCLUSIONS

7.2.1 Challenges for Transit

The use of transit and alternative transportation options to BRAC installations may ultimately be determined by cost and convenience to the user.

7.2.1.1 Parking Availability

Parking is currently free and available at all five BRAC installations, which creates an incentive for employees to drive alone. By 2012, the NNMC Master Plan shows that parking will be constrained within the gates. This will encourage more employees to use the Metrorail Red Line for their commute. Fort Meade may have limited on-base parking availability as well. All other bases will still have parking availability.

7.2.1.2 Park and Ride Capacity

The proposed commuter bus service to APG and Fort Meade has planned stops at existing park and ride locations. These park and ride locations currently operate at or near capacity and added demand for parking from a new service may produce a situation where interested riders will not be able to find available parking and choose not to use the service.

7.2.1.3 Security

The topic of security and direct access to installations has been a question for any proposed transportation improvement. Significant movement towards resolution has occurred at Fort Meade, and the issue remains under consideration at the other BRAC installations.

Security will ultimately be decided by the local installation commander who determines the overall security protocols for his or her installation based on local needs and assessments. Security protocols can and will differ across the BRAC installations.

There are two main security challenges; access to the installations by transit vehicles and access to the installations by passengers. Currently, military installations including Fort Lewis, Fort Benning, and Norfolk Naval Station have transit routes that terminate upon reaching the installation, eliminating the possibility of through-transit passengers. A boarding inspection of passengers at the point of entry of the installation prohibits those failing to provide proper identification or military clearance from entering the installation. This option is currently being examined for adoption by local BRAC installations where access by transit vehicles has been proposed.

Additionally, any transit service may be required to use pre-screened drivers. At present, direct access has been proposed for only two of the BRAC installations, APG and Fort Meade. No direct access service has been proposed for AAFB, Fort Detrick or NNMC.

7.2.2 Ridesharing and Vanpool

Ridesharing and vanpool programs are administered through local county coordinators, or in some cases, large employers who have their own on-site coordinators. Participant registration through the coordinators and enrollment in the system is required for the participant to receive subsidies and access to the GRH program, where available.

Greater marketing of the vanpool program and expansion of the GRH system could attract more participants. Also, a clearinghouse and improved websites detailing information could be useful in explaining alternative transportation options to potential participants.

7.2.3 Marketing

The marketing of transit, carpooling and vanpooling is vital to the success of these services. Transit surveys reveal that lack of awareness is a reason for not opting for such as transit alternatives.

In order to create awareness of the services for each installation, the local transit agency, the MTA and the BRAC installation may consider producing joint promotional materials to inform employees about transit services. This may include promotional materials, targeted ridership programs and branding of specific transit routes which serve each installation.

For ridesharing, vanpool and commuter information throughout the Washington, DC and suburban Maryland areas, the Commuter Connections program operates a website providing registration, information and additional resources. This website is not well known in the Baltimore Metropolitan Area, although county ridesharing coordinators will often direct people to the Commuter Connections website. MWCOG operates the central ridesharing database for the state of Maryland and greater Washington, DC area.

Should the Commuter Connections program expand to include the BRAC installations, the following could be considered part of the marketing services:

- Promotion of federal transit and vanpool subsidies
- Creation of a vanpool identity and promotional scheme
- Promotion of the service through the in-processing offices and hiring offices on base
- Expansion of the Guaranteed Ride Home program

7.2.4 Funding

The 2005 BRAC legislation-mandated actions created transportation needs. However, no federal funding sources are available for the resulting transportation needs, despite the misconception that such funding exists. Thus state and county governments must attempt to balance the cost of infrastructure improvements designed to support the influx of people against established statewide transportation needs. MDOT acknowledges that funding current and BRAC-related transportation projects will require working within existing financial budgets. MDOT recognizes it must partner with local counties in order to explore creative new funding mechanisms that could bolster the traditional funding sources.

The FY 2008-2013 CTP included $448 million budgeted for BRAC projects in FY 2009, out of the total $1.73 billion budgeted over the capital program period. Also, Maryland SB 206/HB 366 "The BRAC Community Enhancement Act", included provisions that would provide incentives to local jurisdictions to build public infrastructure in designated zones. These BRAC Zones would help focus development according to Smart Growth principles.

MDOT has identified some specific funding sources that could be used for BRAC-related projects. The DOD Defense Access Road (DAR) Program provides the DOD a means to pay for transportation improvements (primarily public highway improvements) resulting from sudden or unusual defense-generated impacts. The DAR eligibility criteria appears to have fallen short with respect to mitigating the regional infrastructure needs as a result of the BRAC actions, which could include public transportation accessibility improvements. However, MDOT and MTA will continue to explore the opportunity to use funds from this program. The Office of Economic Adjustment (OEA) also plays a role in BRAC-related transportation funding. In Maryland, OEA financial assistance has been provided to enhance key state agency staff and to conduct transportation planning studies, both within MDOT and the local jurisdictions. There have been several press releases and news articles announcing various OEA grants awarded within Maryland for BRAC planning efforts. Securing funds in a timely manner is important in order to shift the proposed transportation improvements from the planning phase into the implementation phase to coincide with the mandated 2011 BRAC timeframe.

Maryland's projected shortfall in revenues for 2009 has led to the State's deferring funds originally programmed for all modal agencies within MDOT. Not only are the BRAC-related transportation project funds cut, but the general transportation funds as well. These deferrals have led to speculation at the local level as to when and if any money will be allocated to support the BRAC growth.

7.2.5 Agency Coordination

One of the major challenges in the BRAC implementation is the high number of stakeholders involved. In terms of transportation issues, the primary stakeholders include federal, state and local governmental agencies and the military installations. In addition, there are an ever increasing number of civic and public organizations, groups, alliances and consortiums (as listed in Appendix A) that have an interest in transportation issues.

In the course of the development of this report, the need for improved communication among stakeholders was cited by state and local agencies and public organizations. Some of the communication challenges mentioned have included:

- A lack of communication regarding the status of projects, especially on funding issues.
- The receipt of conflicting information regarding state and federal funding pools and earmarks that could be used to help fund locally-led projects.
- A lack of final decision making among transportation agencies partially created by increased difficulty in obtaining project funding.

7.2.6 ADA

The Maryland Department of Disabilities (MDOD) is leading an effort to gather representatives from all state agencies on a regular basis to discuss the issues and concerns of people with disabilities as a result of BRAC growth. Public transportation is just one of the components being discussed, along with housing, workforce development and education.

MDOD's goal is similar to MDOT's overall goal for BRAC-related projects, which is to promote seamless transit connections and customer convenience to and on military installations. One key objective is for all public transportation vehicles, stations and facilities to be compliant with the Americans with Disabilities Act (ADA).

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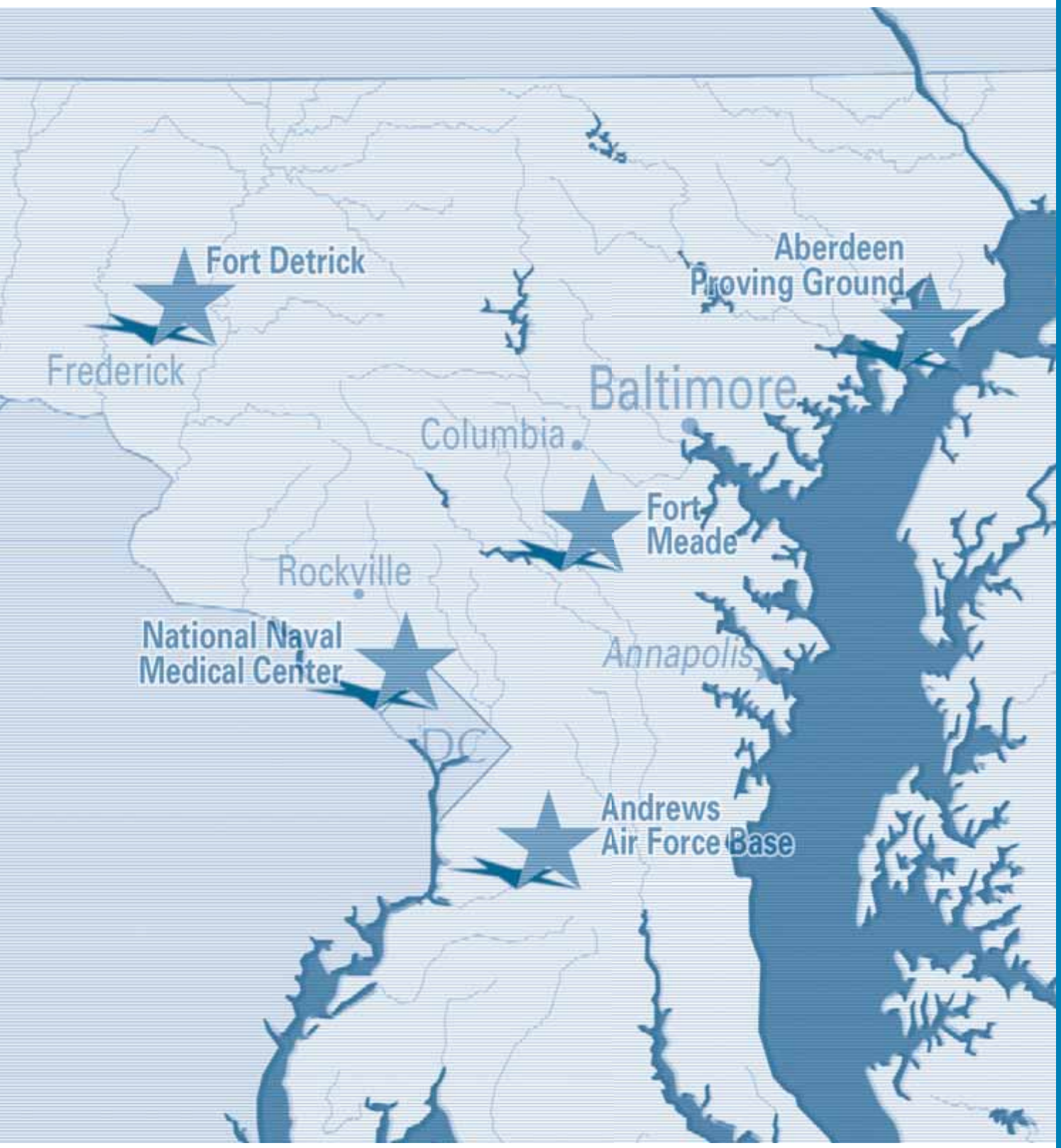
APPENDICES


Fort Detrick
Frederick
Aberdeen
Proving Ground
Baltimore
Columbia
Fort
Meade
Rockville
National Naval
Medical Center
Annapolis
DC
Andrews
Air Force Base

Appendix A

BRAC INTERVIEW / COORDINATION LIST

The following are jurisdictions and agencies contacted as part of this report.

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Appendix B

BRAC DOCUMENT SUMMARIES

Numerous documents were reviewed for the preparation of this report. Below is the complete list of the documents reviewed as of March 2009 for this report, with summaries of each appearing afterward.

- 2005 BRAC – State of Maryland Impact Analysis: 2006-2020
- 2006 Comprehensive Transportation Study for AAFB
- Aberdeen Station Area Transit Needs Assessment and Market Analysis Report
- Anne Arundel County TDP Update – Draft
- Anne Arundel County BRAC/Growth at Fort Meade Working Plan
- APG at the Ready
- APG BRAC Impacts on Seven Jurisdictions
- Baltimore County BRAC Action Plan
- Cecil County BRAC Action Plan - Recommendations of the Cecil County BRAC Advisory Panel Subcommittees – Final Draft
- Baltimore City's BRACtion Plan for 2007-2012
- BRAC Activities Affecting APG, AAFB, Bethesda Naval Hospital and Ft Meade and in the State of Maryland
- Statewide BRAC Report
- Commuter Rail Service Extension from Newark, DE to Elkton, MD Phase 1: Feasibility Study of Track A Extension
- Draft Environmental Assessment for FY07-11 BRAC Construction Requirements at Andrews Air Force Base, Maryland
- Draft Transportation Outlook 2035 – Baltimore Regional Transportation Plan
- Environmental Assessment for BRAC 05 Realignment at Fort Detrick, MD
- Final Environmental Assessment - Base Realignment and Closure Recommendations and Master Planning Activities – Walter Reed Army Medical Center – Forest Glen Annex, Maryland
- Final Environmental Impact Statement – Construction and Operation of New USAMRIID Facilities and Decommissioning and Demolition and/or Re-Use of Existing USAMRIID Facilities at Fort Detrick, MD
- Final Environmental Impact Statement for Implementation of Base Realignment and Closure 2005 and Enhanced use Lease Actions at Fort George G. Meade, Maryland
- Final Environmental Impact Statement for Activities to Implement 2005 Base Realignment and Closure Actions National Naval Medical Center - Bethesda, Maryland
- Five Years / Fifty Thousand Jobs – Acting Now on Regional Transportation
- Fort Detrick - A Community of Excellence (Presentation)
- Fort Detrick Bicycle, Pedestrian, and Transit Access Study
- Fort Meade Area Housing Demand from BRAC (Released Draft)
- Fort Meade BRAC Transit Rideshare Planning and Coordination
- Frederick Regional Bio-Medical Research & Defense Expansion and BRAC Action Plan
- Jurisdiction/Facility: Fort Detrick, MD (Fort Detrick)

- Frederick County's 2008 Transportation Priorities
- Frederick County TDP
- Harford County BPAC Action Plan
- Harford County TDP
- Howard County BRAC Task Force
- MARC Growth & Investment Plan
- MDOT - Ft Meade Local Coordination Meeting
- Methodology and Assumptions for Developing BRAC Recommendations
- Military Installation Area Profiles
- Prince George's County BRAC Action Plan - Executive Summary
- *Record of Decision on the Final Environmental Impact Statement (FEIS) for Base Realignment and Closure Actions at US Army Garrison Aberdeen Proving Ground – Harford and Baltimore Counties, Maryland*
- Regional Transportation Implications of BRAC
- Southern Maryland Mass Transportation Analysis
- State of Maryland BRAC Action Plan – Final Report

2005 BRAC – State of Maryland Impact Analysis: 2006-2020

Date: June 2007

Author: MD Department of Business and Economic Development

Summary: This report (written for the US Department of Labor) summarizes federal jobs gained and lost, infrastructure impacts, higher education requirements, and best practices associated with security clearances.

Recommendation(s):

AAFB:

- Explore transportation management demand techniques to reduce single occupancy occupant mode split and reduce vehicle congestion during peak periods
- Encourage increased use of local Metrorail transit by base employees and contractors through shuttle service and existing transit

NNMC:

- Encourage increased use of existing Metrobus transit through intersection improvements including medians and timed pedestrian signal heads
- Conduct feasibility study of bus transit in the vicinity of NNMC with particular emphasis on expansion of the number of bus transit bays at the Medical Center Metrorail Station or at a nearby station

APG:

- Continue the study of value pricing options and transportation demand management for I-95
- Reexamine the Perryman Access Study to provide improved access from the Perryman Peninsula to the state road network and to APG
- Explore expansion of a variety of rail and transit services in the Aberdeen area to meet forecasted demand associated with BRAC employee growth
- Further explore an Aberdeen multi-modal transit center
- Explore a variety of transportation management demand techniques and base shuttle services to reduce single occupancy vehicle use and reduce overall vehicle congestion including a "Vehicle Rate Reduction Cap" to manage vehicular congestion
- Incorporate sidewalk connections and bicycle access in local thoroughfare improvements
- Explore the feasibility of regular shuttle bus service to/from the existing/relocated MARC station to APG to encourage increased use of MARC and AMTRAK service by employees and contractors to APG

FORT MEADE:

- Incorporate sidewalk and bicycle access from Odenton MARC Rail Station
- Explore a variety of transportation management demand techniques and base shuttle services to reduce single occupancy vehicle use and reduce overall vehicle congestion including a "Vehicle Rate Reduction Cap" to manage vehicular congestion
- Explore expansion of a variety of rail and transit services
- Initiate feasibility study of WMATA Green Line to Fort Meade as a long-term horizon project

Jurisdiction/Facility: Statewide/AAFB, NNMC, APG and Fort Meade

2006 Comprehensive Transportation Study – Andrews Air Force Base

Date: February 2007

Author: Gannett-Fleming\Weston Solutions

Summary: This was included as Appendix II in the Prince George's County BRAC Action Plan. The findings and recommendations focused on various off-base recommendations, as well as some on-base roadway improvements.

Recommendation(s):

No transit recommendations.

Jurisdiction/Facility: Prince George's County /AAFB

Aberdeen Station Area Transit Needs Assessment and Market Analysis Report

Date: March 2009

Author: MDOT / Cambridge Systematics / KFH Group, Inc.

Summary: This study is the first of two phases and includes both the Market Analysis of Aberdeen Area and Transit Needs Assessment. This report addresses the existing conditions for the Transit Needs Assessment only.

The Transit Needs Assessment is focused on a number of goals:

(1) To identify transit needs and multimodal connections in the Aberdeen area, particularly due to BRAC, projected population and ridership growth, and improvements anticipated in the MARC Growth and Investment Plan (MGIP).

(2) To determine whether the transit needs in the Aberdeen area can be accommodated at the existing Aberdeen MARC/Amtrak Station.

(3) To promote the use of mass transit by inbound and outbound commuters/local area residents and relieve congestion.

The conclusions revealed from the transit market study indicate that most of the new jobs at APG will be filled by people with a choice of automobile over transit – often referred to as "choice riders." Attracting this group of people to transit could help alleviate projected increases in traffic at morning commuter approaches to the Aberdeen area at I-95/Exit 85 and various points along U.S. 40 and MD 7, 22, 24, 755, and 543. It is important that Harford Transit also serve people employed at the secondary or induced jobs at the retail establishments that will follow employment growth at the post; people who may be transit dependent.

The potential improvement strategies discussed in the report are summarized below.

Recommendation(s):

Rideshare Programs (High Priority)

- Strengthen the existing ridesharing programs (one offered by Harford County and another sponsored by APG) to support the new employees/staff moving to the area.

Transit Improvements Already Planned - Harford Co. Phase 1 of the TDP:

- New route alignments to allow for more direct routes combined with local circulator service in Bel Air, Edgewood, and Aberdeen.
- Expansion of County service hours on Routes 1, 2, and 6 to allow service from 5:00 a.m. to 8:00 p.m. to accommodate commuters. *(High Priority)*
- Expansion of local circulator service hours on Routes 3, 4, and 5 to allow service from 6:00 a.m. to 8:00 p.m. (also modify routes as noted in 1st bullet).

Transit Improvements Already Planned - Harford Co. Phase 2 of the TDP:

- Reducing all County service routes headways from 1 hour and 20 minutes to 1 hour for enhanced connectivity (Routes 1, 2, and 6).

MTA Commuter Bus Improvements

- Route D: Baltimore City to APG. This route would serve the Baltimore Transit Plaza along with the White Marsh Park and Ride Lot in Baltimore County. In essence, this is the reverse run of MTA's Commuter Bus Route 420. Based on this data, four morning and four evening runs would be offered during the peak hours, one run about every 20 minutes. *(High Priority)*

Commuter/Shuttle Bus Alternatives from Cecil County - each route would allot five morning and five evening trips weekdays from 6:00 a.m. to 8:00 a.m. and from 4:00 p.m. to 6:00 p.m. The frequency would be at a peak level, every 30 minutes.

- Route C-1 would originate from Rising Sun and would travel southwest along U.S. 1 into Harford County to Darlington and then south to the Aberdeen MARC Station. *(Moderate Priority)*
- An alternative alignment, Route C-1a was recommended by the Aberdeen Advisory Committee. This alternative would travel from Rising Sun down MD 222 along in western Cecil County to Perryville before traveling to the Aberdeen MARC Station.
- Route C-2 would originate from Elkton and travel along the U.S. 40 Corridor to the Aberdeen MARC Station making stops at North East, Perryville, and Havre de Grace. *(High Priority)*

Commuter/Shuttle Bus Alternatives from Harford County - each route would allot five morning and five evening trips weekdays from 6:00 a.m. to 8:00 a.m. and from 4:00 p.m. to 6:00 p.m. The frequency would be at a peak level, every 30 minutes.

- Route H-1 traverses along the U.S. 40 Corridor from Joppa to the Aberdeen MARC Station with stops at the Edgewood MARC Station, Abingdon, and Belcamp. *(Moderate Priority)*
- Route H-2 targets service from the northern part of Harford County where service currently does not exist. The route originates in Street and travels a short distance north to Pylesville, then along MD 165 to Whiteford, and then south on MD 136 to Churchville before terminating at the Aberdeen MARC Station. *(Moderate Priority)*
- Route H-3 concentrates service in the Bel Air region, which has the highest population totals in the County. To capitalize on existing infrastructure, the route begins in north Bel Air around Forest Hill at the Marywood Park and Ride Lot. Next it travels down U.S. 1 to the Hickory Bypass Park and Ride Lot and into Bel Air to the MVA Park and Ride Lot on MD 24 before traveling on to the Aberdeen MARC Station via either MD 24 or MD 543. *(High Priority)*

- Route H-4 creates a transit route option for the western portion of Harford County. This route concept would start in the White Hall area, travel to Jarrettsville, and then continue to the Aberdeen MARC Station. *(Moderate Priority)*

Commuter/Shuttle Bus Alternatives from Baltimore County - each route would allot five morning and five evening trips weekdays from 6:00 a.m. to 8:00 a.m. and from 4:00 p.m. to 6:00 p.m. The frequency would be at a peak level, every 30 minutes. (High Priority)

- Route B-1 would start in the Rosedale area at the Mace Mini Park and Ride Lot and would make a second stop in Baltimore County at the White Marsh Park and Ride Lot before heading to the Edgewood MARC Station and then the Aberdeen MARC Station.
- Route B-2 is very similar in design but would begin in Perry Hall and then travel to the White Marsh Park and Ride Lot prior to traveling to the Edgewood MARC Station and the Aberdeen MARC Station.

Commuter/Shuttle Bus Alternatives from APG to MARC Stations - each route would provide service from 6:00 a.m. to 7:00 p.m., with a 30 minute frequency. The service parameters were constructed to both meet the commuters at the MARC stations, as well as serve as an internal shuttle for employees without access to a vehicle, including carpool/vanpool participants. (High Priority)

- APG Aberdeen Shuttle
- APG Edgewood Shuttle

Enhanced MARC Service Alternatives

- Run three additional northbound and southbound trains to/from the Perryville, Aberdeen, and Edgewood Stations on the Penn Line.

Improvements to the Aberdeen Station:

- Bus bays for 14 vehicles to use the station at one time.
- Pedestrian & bicycle safety design features to mitigate bus-pedestrian-bike collisions
- Adequate pedestrian circulation to allow riders to transfer among vehicles especially to/from APG shuttles.

Jurisdiction/Facility: Harford County, City of Aberdeen, APG

Anne Arundel County TDP Update – Draft

Date: May 2008

Author: KFH Group (consultant for Anne Arundel County)

Summary: An analysis of current conditions in Anne Arundel County that may affect transit service from 2008 to 2012.

Recommendation(s): None

Jurisdiction/Facility: Anne Arundel County / Fort Meade

Anne Arundel County BRAC/Growth at Fort Meade Working Plan

Date: April 2008

Author: Anne Arundel County

Summary: The Anne Arundel County BRAC Task Force was established by County Executive John R. Leopold to provide focus on specific Anne Arundel

County issues regarding BRAC and growth at Fort Meade. The Task Force has 35 members representing citizen, business and government interests and is inclusive of six working subcommittees, one of which is transportation.

Recommendation(s):

Identified high priority transit needs include:

- *Increase MARC train service in the Odenton, Fort Meade and BWI Corridor*
- MARC Bi-Level rail cars
- Identify short term projects identified in MARC Investment Plan
- *Partner with Fort Meade and Howard County to develop Fort Meade Central Maryland Transit Facility (MOU signed 2006)*
- Expand Odenton MARC Rail Station
- Review Light Rail Expansion plans, including feasibility of extending BWI to Ft. Meade
- Capital funds for medium duty buses with AVL and Smart Card readers
- Support implementation of enhanced mass transit program between Fort Meade and surrounding counties, including Baltimore City and Annapolis

Identified medium priority transit needs include:

- Feasibility Study to extend support of Green Line Metro to Fort Meade

Jurisdiction/Facility: Anne Arundel County / Fort Meade

APG at the Ready

Date: September 2005

Author: Chesapeake Science and Security Corridor

Summary: This was a presentation describing quality of life, education, transportation attributes of Harford County and the Baltimore region.

Recommendation(s): None

Jurisdiction/Facility: Harford, Cecil and Baltimore counties / APG

APG BRAC Impacts on Seven Jurisdictions

Date: September 2007

Author: Sage Policy Group, Inc.

Summary: This report examines the changes in population and employment at APG due to BRAC and their implications to housing, educational facilities, transportation and infrastructure in the seven jurisdictions near APG.

Recommendation(s): None

Jurisdiction/Facility: Greater Aberdeen Area / APG

Baltimore County BRAC Action Plan

Date: June 2007 (Draft)

Author: Baltimore County

Summary: The Action Plan identifies over 100 short and long-term initiatives that will be important for Baltimore County to pursue in order to prepare for and maximize BRAC's economic opportunity. This plan will become part of a regional BRAC Action Plan for Central Maryland.

Recommendation(s):

- Complete and expand upon ongoing analysis of the Route 40 corridor to produce a more detailed assessment of development and transit opportunities available to BRAC-related growth
- Study and implement transportation improvements in the corridor to facilitate BRAC developments
- Support attempts to develop corridor-wide transit solutions, including possible transit consortium and redevelopment study
- Support attempts to improve MARC service in the CSSC and Fort Meade Regional Growth Management Committee, including service for people with disabilities
- Conduct a study to assess the feasibility and cost of expanding the Martin State Airport MARC Rail Station at Middle River and developing a multi-modal station at the GSA depot
- Conduct a study to assess the potential of extending the Green Line to Martin State Airport MARC Rail Station at Middle River
- Conduct a study to assess Amtrak relationships with other northeast commuter rail systems
- Promote efficient use of MARC/Amtrak stations and incorporate sidewalk and bicycle access to rail stations.

Jurisdiction/Facility: Baltimore / APG and Ft. Meade

Cecil County BRAC Action Plan - Recommendations of the Cecil County BRAC Advisory Panel Subcommittees – Final Draft

Date: July 2007

Author: Cecil County Government

Summary: This document serves as the Cecil County response to the regional Chesapeake Science and Security Corridor (CSSC) consortium. It includes recommendations from five Cecil County subcommittees: land use, transportation and infrastructure, education and workforce readiness, public safety, health, and community service and technology.

Recommendation(s):

- Upgrade Route 40 intersections
- Remove the I-95 toll
- Build new interchange in Cecil County off of I-95
- Improve connecting roads between Route 40 and I-95
- Extend rail service to Wilmington

Jurisdiction/Facility: Cecil County / APG

Baltimore City's BRACtion Plan for 2007-2012

Date: May 2007

Author: City of Baltimore

Summary: Building from the foundation established by the City's Comprehensive Master Pan, the BRACtion Plan articulates strategies for 1) population growth, 2) workforce development and education, 3) minority and women-owned business development, and 4) business attraction.

Recommendation(s):

- Kent Street improvements to link Light Rail with Westport development
- Examine feasibility of MARC Camden Station near Westport
- Create a Comprehensive Transportation Plan for SE Baltimore
- Advocate for expansion of MARC service from Penn Station to Aberdeen
- Construct East Side MARC station at East Baltimore Development Inc. site or Bayview Medical Center
- Actively support efforts to implement the Baltimore Regional Rail Plan and its Red and Green line priority segments
- Protect & create rights-of-way along existing and proposed rail lines
- Promote the Commuter Choice program to encourage transit use
- Develop a West Baltimore MARC Station Transit-oriented Development Plan

Jurisdiction/Facility: Baltimore City / APG

BRAC Activities Affecting APG, AAFB, Bethesda Naval Hospital and Fort Meade and in the State of Maryland

Date: March 2006

Author: Science Applications Intl. Corp (consultant to MD DBED)

Summary: The purpose of the report is to provide detailed information about the number and nature of position changes for each of the four installations, to the extent available. The report also provides estimates of the costs to construct or renovate military installations to provide the necessary infrastructure for the incoming missions.

This report summarizes and projects population and employment impacts of BRAC in Maryland.

Recommendation(s): None

Jurisdiction/Facility: Statewide / APG, AAFB, NNMC and Fort Meade

Statewide BRAC Report

Date: December 2006

Author: Maryland Department of Planning

Summary: This report summarizes statewide BRAC impacts and recommendations.

Recommendation(s):

NNMC:

- Initiate a feasibility study of bus transit in the vicinity of NNMC with emphasis on expansion of the Medical Station Metrorail Station
- Purple Line study should include an analysis of the proposed Jones Bridge Road alignment as it relates to BRAC employee relocations at NNMC

APG:

- Develop proximate and efficient transfer to base grounds from the existing or relocated Aberdeen Rail Station. Explore a base shuttle system with APG and transit demand techniques to utilize coordination and technologies in order to minimize single occupancy vehicle trips
- Improve regional bus and/or rail service between Baltimore and existing/new Aberdeen Rail Station and Edgewood MARC Rail Station to accommodate commutation to APG as the need arises. Increase peak period and mid-day service and explore operational limitation to providing improved MARC service
- Investigate the proposed relocated Aberdeen multi-modal station as a center for a Harford Transit and MTA operations as well as a rail maintenance and storage facility
- Explore the feasibility of expanded commuter rail service into Cecil County. This would extend into the Philadelphia region through inter-regional coordination with WILMAPCO

FORT MEADE:

- Seek to improve regional bus and rail service to serve commuters to Fort Meade from the Washington and Baltimore areas. Consider improvements to headways to serve commuters from Washington using existing services, such as the WMATA Greenbelt/BWI Express bus line, MARC Penn and/or Camden line service via Odenton and/or Savage MARC rail stations. Study the feasibility of expanding MARC service by addressing institutional and operation limitations that are currently preventing increased frequency of service to Odenton
- Coordinate with WMATA, Ft Meade, and other entities to develop proximate and efficient shuttle transfers to base grounds from the Odenton and Savage MARC rail stations. Explore a secure shuttle distribution service with and the base utilizing coordination and technologies as needed to reduce dwell times
- Continue to develop local bus service to connect communities and the proposed Central Maryland Transit Operations Center. Coordinate Corridor Transportation Corporation (CTC) operated by Howard County bus service and Howard Transit's Connect-A-Ride service to provide connections between Columbia and Ft Meade. Seek to implement the Ft Meade/BWI and Glen Burnie bus routes
- As a long-term transit project, conduct a feasibility study of an extension of the WMATA Green Line to Ft Meade and possibly BWI Airport
- Establish shuttle bus service at regular intervals to/from the Odenton MARC Rail Station and the proposed Central Maryland Transit Operations Center

Jurisdiction/Facility: Statewide / NNMC, APG and Fort Meade

Commuter Rail Service Extension from Newark, DE to Elkton, MD Phase 1: Feasibility Study of Track A Extension

Date: 2006

Author: PB (consultant to MTA)

Summary: This report assesses a range of alternatives to provide rail service to Elkton, MD from the north.

Recommendation(s):

- The report summarizes the costs and impacts of short-term and long-term solutions to providing service to and north of Elkton. It recommended using Amtrak trains for short-term service and notes the costly Alternative 5 extension of track A as the best for long-term service

Jurisdiction/Facility: Cecil County / APG

Draft Environmental Assessment for FY07-11 BRAC Construction Requirements at Andrews Air Force Base, Maryland

Date: June 2007

Author: Department of the Air Force

Summary: In support of the 2005 BRAC recommendations, AAFB proposes various actions such as new facility construction, demolition of aging facilities and infrastructure upgrades.

Recommendation(s):

- No transportation recommendations noted.

Jurisdiction/Facility: Prince George's County / AAFB

Transportation Outlook 2035 – Baltimore Regional Transportation Plan

Date: November 2007

Author: Baltimore Regional Transportation Board

Summary: This is the financially constrained long-range transportation plan for the Baltimore region.

Recommendation(s):

Committed transit projects listed in the Constrained Long-Range Plan:

- None

Regionally significant transit projects listed:

- Red Line- Social Security area to Bayview Medical Center

Preferred Alternative Transit, Management and Operations and Transportation Demand Management projects:

- Red Line- Social Security area to Bayview Medical Center
- MARC Penn Line – Perryville to Washington, DC via Baltimore
- MARC Camden Line – Downtown Baltimore to Washington, DC
- MARC System – Growth & Investment Plan
- MARC – East Baltimore station
- MARC – Martin State Airport MARC Rail Station at Middle River station relocation
- MARC – Aberdeen Rail Station relocation
- MARC – real-time surveillance, traveler information, signal operations and transit information

Jurisdiction/Facility: Baltimore region / APG

Environmental Assessment for BRAC 05 Realignment at Fort Detrick, MD

Date: January 2007

Author: Mobile District U.S. Army Corps of Engineers (with Technical Assistance from the Louis Berger Group, Inc.)

Summary: As a result of BRAC legislation the proposed actions in the EA involve constructing new facilities to accommodate the 225 personnel and functions of five organizations realigning and relocating to Fort Detrick. Fort Detrick identified three major facilities projects required to support the proposed action. These projects involve new construction that would provide approximately 183,100 SF of built space. Siting of new construction follows the *Installation Master Plan for Fort Detrick, Maryland*. The analysis did not reveal any significant impacts on the natural or human environment that would occur if the proposed action were implemented.

Recommendation(s):

Installation Transportation

- No effect – there are no plans to implement an internal shuttle in the future

Public Transportation

- Effects are not significant – no increase in transit ridership is expected during construction
- Effects are not significant – no increase in transit ridership is expected as a result of implementing the action

Jurisdiction/Facility: Frederick County / Fort Detrick

Final Environmental Assessment - Base Realignment and Closure Recommendations and Master Planning Activities – Walter Reed Army Medical Center – Forest Glen Annex, Maryland

Date: August 2008

Author: Mobile District U.S. Army Corps of Engineers (with Technical Assistance from Tetra Tech, Inc.)

Summary: This Environmental Assessment identifies, evaluates and documents the effects of facility construction, maintenance, management and renovation to accommodate the changes mandated by the BRAC Commission and under the proposed Real Property Master Plan for the installation.

The existing Forest Glen Annex Transportation Management Plan (TMP) from 1992 included components such as staggered work hours, transit and vanpool discounts, reserved carpool/vanpool spaces, free shuttle service to Metrorail, emergency rides for carpoolers and transit users and the construction of bus shelters.

The following is a list of some of the potential programs outlined in the TMP that Forest Glen Annex could adopt to reduce additional personnel from arriving in single-occupancy vehicles:

Recommendation(s):

- Employee Transportation Coordinator (ETC) could be appointed
- Ridesharing (Carpooling and Vanpooling)
- Mass Transit
- Guaranteed Ride Home
- Commuter Center (for information)
- Variable work hours
- Parking Management

Jurisdiction/Facility: Montgomery County / Fort Detrick

Final Environmental Impact Statement – Construction and Operation of New USAMRIID Facilities and Decommissioning and Demolition and/or Re-Use of Existing USAMRIID Facilities at Fort Detrick, MD

Date: December 2006

Author: U.S. Army Medical Research and Materiel Command; and U.S. Army Garrison, Fort Detrick, MD (with Technical Assistance from BSA Environmental Services, Inc.)

Summary: Final EIS discussed impacts regarding proposed actions at Fort Detrick. This report was completed prior to the *EA for BRAC 05 Realignment at Fort Detrick, MD*. (The Transportation section was the only portion available/reviewed for this summary.)

Recommendation(s):

- The small increment of traffic loading from operation of the new USAMRIID facilities is expected to result in minor impacts to major roads serving Area A of Fort Detrick.
- Recent improvements to the Veterans Gate, Opossumtown Gate, Old Farm Gate and ongoing improvements to installation roadways are expected to mitigate traffic congestion on the installation and in areas adjacent to Fort Detrick.
- The new parking lots associated with the new USAMRIID facilities will provide more than 1,700 vehicle spaces, which will adequately address the parking needs for the approximately 1,300 personnel projected at the proposed new facilities.
- Expanded telecommuting and carpooling opportunities for Fort Detrick employees will help alleviate Fort Detrick related traffic impacts.

Jurisdiction/Facility: Frederick County /Fort Detrick

Final Environmental Impact Statement for Implementation of Base Realignment and Closure 2005 and Enhanced Use Lease Actions at Fort George G. Meade, Maryland

Date: August 2007

Author: Mobile District U.S. Army Corps of Engineers (with Technical Assistance from The Louis Berger Group, Inc.)

Summary: Final EIS assessed the environmental effects of implementing Army transformation activities and EUL actions at Fort Meade. This proposal involves the arrival of about 5,695 workforce personnel (660 military, 3,324 civilian and 1,711 contractor personnel) at Fort Meade and the construction of new facilities. The EUL action involves leasing two parcels of land (173 acres) for 50 years to a private developer to construct administrative buildings for an estimated 10,000 personnel and providing a third parcel (367 acres) for in-kind development of two 18-hole golf courses. Three alternatives including the No Action Alternative are analyzed. The principal significant environmental consequences are to transportation, wastewater and natural resources.

Recommendation(s):

Ft. Meade Road Projects and Proposed Impact Mitigation Strategies :

- Installation Traffic Study

SMART GROWTH INITIATIVES (Transit, Bicycle, Pedestrian and Transportation):
State Projects:

- Additional parking at Odenton MARC Rail Station
- Improvement of regional bus and rail services for Ft. Meade commuters
- Multi-modal project planning study for I-95 corridor
- Study transportation demand management along the MD 32 corridor

County Priority Pedestrian/Bicycle, Additional Ridesharing and Transit Improvements:

- Odenton Small Area Plan
- Odenton Town Center Master Plan

Ridesharing and Transit Specific to Ft. Meade:

- Shuttle transfers to base from MARC/Metrorail stations
    - Ft. Meade: Shuttle services are proposed to operate from the MARC station to the installation, along with a variety of transit and ridesharing incentives.
    - New legislation, codified at 31 USC 1344(g), allows the government to provide shuttle service from mass transit points free of charge to federal employees.
    - Army design standards allow for only 60 percent parking spaces for building occupants, which encourages employees to seek commuter options.

In-kind service:

- Study of extension of WMATA Green Line to Ft. Meade and BWI airport

Jurisdiction/Facility: Anne Arundel, Howard, Montgomery and Prince George's counties / Fort Meade

Final Environmental Impact Statement for Activities to Implement 2005 Base Realignment and Closure Actions National Naval Medical Center - Bethesda, Maryland

Date: March 2008

Author: Department of the Navy

Summary: This FEIS evaluated the potential environmental effects of construction and operation of new facilities at the National Naval Medical Center (NNMC), Bethesda, Maryland.

Recommendation(s):

No public transportation recommendations.

Jurisdiction/Facility: Montgomery County / NNMC

Five Years / Fifty Thousand Jobs – Acting Now on Regional Transportation

Date: 2006

Author: The Goldseker Foundation

Summary: A paper from the Goldseker Foundation examines the transportation impacts of BRAC and presents recommendations on service and funding.

Recommendation(s):

- Invest in state-of-the-art rail equipment
- Expand MARC service from Baltimore
- Enhance MARC stations and add new ones
- Increase parking capacity throughout the MARC system
- Build a MARC maintenance shop and storage yard facilities
- Press Amtrak and Congress for corridor improvements
- Create transit villages at MARC stations
- Add direct commuter bus routes to Aberdeen and Fort Meade
- Add public bus routes on main roads to the military bases
- Add feeder bus lines and shuttles from rail stations
- Create multi-modal centers at rail stations

Jurisdiction/Facility: Regional / APG and Fort Meade

Fort Detrick - A Community of Excellence (Presentation)

Date: August 2008

Author: Eileen Mitchell, Deputy Commander, US Army Garrison, Fort Detrick

Summary: This presentation gives a brief history of the installation, laboratories under construction, proposed facilities expansion, Fort Detrick BRAC Recommendations, Enhanced Use Lease (EUL) sites and other construction was listed as well.

Recommendation(s):

No transportation/transit recommendations.

Jurisdiction/Facility: Frederick County /Fort Detrick

Fort Detrick Bicycle, Pedestrian, and Transit Access Study

Date: August 2008

Author: Kittelson & Associates, Inc. (consultant to the city of Frederick)

Summary: This study summarized area analysis and opportunities for improvement of the Fort Detrick bicycle, pedestrian and transit access. Descriptions of the project team's findings and recommendations, as well as public comments, are provided in accompanying documents. The project was funded through a grant from the Metropolitan Washington Council of Government Transportation Land-Use Connections Program. The results of the project are intended for use by the city of Frederick and its partners; Frederick County, TransIT and Fort Detrick, to enhance safety and non-motorized accommodation.

Recommendation(s):

Pedestrian

- *No right-turn on red*
- *Signal re-timing*
- *Signal retrofits*
- *Pedestrian crossings*
- *Transit access*

Bicycle

- *Left-turn lanes*
- *Bicycle lanes*
- *Off-street trails*

Bicycle and Pedestrian

- Interchange improvements
- Traffic calming
- Access consolidation
- Road diets
- Site design
- Demand management

Jurisdiction/Facility: Frederick County / Fort Detrick

Fort Meade Area Housing Demand from BRAC (Released Draft)

Date: November 2008

Author: Sage Policy Group, Inc.

Summary: This report estimated the likely impacts on housing demand associated with BRAC relocation to Fort Meade. Subsequent reports will address housing supply, transportation, affordability, and relocation patterns. One section of this report discusses commuting patterns as measured by the U.S. Census Bureau and the May 2008 survey of DISA workers affected by the relocation of positions. It found that 55 percent of DISA workers would commute at least 45 minutes, while Censes data indicate that fewer than 25 percent of Maryland commuters drove more than 45 minutes.

Jurisdiction/Facility: Anne Arundel County / Fort Meade

Fort Meade BRAC Transit Rideshare Planning and Coordination

Date: September 2007

Author: Anne Arundel County

Summary: This was a technical proposal prepared to identify origin and destination points, evaluate services and make transit recommendations.

Recommendation(s):

This was the proposal for the work. Recommendations will be available in the actual report.

Jurisdiction/Facility: Anne Arundel County / Fort Meade

Frederick Regional Bio-Medical Research & Defense Expansion and BRAC Action Plan

Date: May 2007

Author: Frederick Regional Expansion at Detrick (FRED) Commission

Summary: This document is a status report that becomes more detailed with successive iterations of continued attention to milestones, funding estimates and priorities. The plan is intended to be updated quarterly. The FRED Commission has four areas of focus – land use; transportation and infrastructure; education, technology, and workforce development; and public safety, health and citizens services. The transit recommendations include:

Recommendation(s):

Identify additional transit needs

- Determine demand for additional local transit service to serve Fort Detrick
- Determine demand for on-post transportation service

Expand transit services

- Increase TransIT's connector route service frequency to 30 minutes throughout the day to maximize system convenience as per the 2007 TDP
- Provide regional reverse-commute services, including MARC Train service, 991 Commuter bus service and local TransIT service
- Increase regional transit connections

Encourage carpooling to and from Fort Detrick

- Establish a park and ride lot on north side of Frederick, near the Route 15/Route 26 interchange to reduce traffic congestion
- Increase employer outreach efforts for the Fort Detrick community, including vanpool and carpool support

Jurisdiction/Facility: Frederick County / Fort Detrick

Frederick County's 2008 Transportation Priorities

Date: May 2008

Author: Board of County Commissioners of Frederick County

Summary: This is a letter from the Board of County Commissioners of Frederick County and Frederick County's State Delegation to MDOT's Secretary. A complete listing of Frederick County's Transportation Priorities was included with the letter (with BRAC-related projects highlighted). Only BRAC-related priorities listed in this summary:

Recommendation(s):

Local Transit

- Funding to expand peak-period shuttle service to regional communities such as Urbana, Middletown and New Market
- Allocate Frederick County's share of the $6.8 million BRAC-related funding statewide for Locally Operated Transit Systems

Regional Transit

- Establish additional MTA Commuter Bus service from north of the City of Frederick to serve the Monocacy MARC Rail Station and Shady Grove Metrorail Station
- Establish MTA Commuter Bus service from the Frederick area to the Baltimore area
- MARC System - Fund improvements in the Frederick's MARC Commuter Rail service by adding additional passenger cars and locomotives. Provide signal improvements along the MARC Brunswick line to accommodate existing and increased ridership by increasing the frequency of service to the Frederick County MARC stations. Fund reverse commute service in support of BRAC-related activities at Fort Detrick.

Jurisdiction/Facility: Frederick County /Fort Detrick

Frederick County TDP

Date: March 2007

Author: KFH Group

Summary: This report is a short-term plan to guide transit growth in the County.

Recommendation(s):

Specific short-term improvements are:

- Implement paratransit scheduling and routing software to increase trip grouping and efficiency
- Extend paratransit service hours in morning and late afternoon
- Increase paratransit service at peak times
- Increase Saturday Connector service
- Evaluate existing East County Shuttle service
- Add Saturday and evening service to Walkersville Shuttle

Specific long-term improvements are:

- Provide all day 30-minute service frequency on Connector routes
- Provide 15-minute service frequencies in peak hours on Connector routes
- Expand Walkersville shuttle service
- Expand East County shuttle service
- Add Eastside/Frederick Airport/MVA shuttle route

- Add operations, maintenance and customer service staff to support increased operations
- Adopt transit-friendly design standards for new development, including transit amenities and pedestrian access

Jurisdiction/Facility: Frederick County / Fort Detrick

Harford County BPAC Action Plan

Date: May 2008

Author: Harford County

Summary: The purpose of this plan was to assist the County in responding to the significant economic and social changes that will accompany BRAC actions at Aberdeen Proving Ground.

The transportation and infrastructure portion of the plan addressed actions in the areas of roads, transit, water and sewer utilities, waste-to-energy conversion. Only those actions related to transit are presented here.

Recommendation(s):

- Identify additional parking areas around the County where bus shuttle service can be used to transport people from parking area to Aberdeen Train Station
- Educate public officials to the needs and requirements of the County's transportation and infrastructure system
- Implement Edgewood MARC Rail Station improvements
- Amend OEA grant request to study feasibility of building Multi-Modal Transportation Center station at the current Aberdeen Train Station and/or reuse project for the current train station
- Coordinate with city of Aberdeen and APG about a shuttle system to meet on-post transit needs
- Support implementation of mass transit program between APG, Harford County, Cecil County, Baltimore City and Baltimore County
- Support extension of MARC train service levels northbound/southbound
- Support the extension of Purple Line as identified in the Baltimore Regional Rail Plan

Jurisdiction/Facility: Harford County / APG

Harford County TDP

Date: June 2008

Author: KFH Group, Inc. (Consultant to Harford County and MTA)

Summary: This report provides a summary of demographics and land uses, existing transportation services, service alternatives and conceptual service plans.

Recommendation(s):

- It is recommended that Harford County establish stops within their route structure to serve pedestrian access points at APG.
- Current demand does not warrant a route from Harford County into Cecil County, but this service option may come to fruition due to BRAC.
- Explore transit services to both APG and the future Aberdeen multi-modal transit center.

Jurisdiction/Facility: Harford County / APG

Howard County BRAC Task Force

Date: March 2008

Author: Howard County Government

Summary: This is a presentation of identified Howard County BRAC growth impacts and opportunities.

Recommendation(s):

- Monitor key growth indicators
- Work with state and regional jurisdictions to identify creative transportation solutions
- Continue to identify and address local issues

Jurisdiction/Facility: Howard County / Fort Meade

MARC Growth & Investment Plan

Date: September 2007

Author: PB (consultant to MTA)

Summary: This report provides the framework for MARC service and operations for the immediate, near-term and long-term. Recommendations are categorized into rail service, customer service and other.

Service Recommendation(s):

Immediate Term

- Add one afternoon train on Penn Line
- Add late evening train on Penn Line
- Initiate weekend service on Penn Line
- Add mid-day train on Camden Line
- Purchase additional seating capacity on Amtrak off-peak trains for MARC passengers

2010 Penn Line

- Lengthen existing trains to accommodate growing ridership demand
- Add peak and reverse-peak service
- Add late evening and weekend service

2015 Penn Line

- Increase peak, reverse-peak and off-peak service
- Improve reliability of service
- Expand peak service to Aberdeen and Martin State Airport

- Extend service to Elkton and Newark, DE

- Enhance service at Odenton and Aberdeen
- Develop Transit-oriented opportunities at several stations
- Connect with the Baltimore regional transit system
- Connect with Red Line at West Baltimore and Bayview Medical Center

2020 Penn Line

- Provide expanded service aimed at BRAC, BWI Airport and regional business travel markets
- Extend core service to Aberdeen with 20-30 minute peak and 60 minute off-peak headways
- Expand service to L'Enfant Plaza and Northern Virginia

2035 Penn Line

- Provide full 4-track operation

2010 Camden Line

- Add a mid-day train
- Lengthen trains to accommodate growing ridership demand

2015 Camden Line

- Add peak and reverse-peak trains
- Improve transfers and connecting bus service to Ft. Meade from Savage station

2020 Camden Line

- Provide 20 minute peak headways
- Provide mid-day service
- Extend service to L'Enfant Plaza and Northern Virginia

2035 Camden Line

- Increase peak and off-peak service
- Provide weekend service
- Extend service through Baltimore City to Bayview Medical Center

Jurisdiction/Facility: Statewide / AAFB, NNMC, APG and Fort Meade)

MDOT - Ft Meade Local Coordination Meeting

Date: May 2008

Author: MDOT Capital Planning

Summary: Presentation regarding transportation projects in Maryland related to Fort Meade.

Recommendation(s):

Transit

- Possible direct service on base
- Possible shuttles to Odenton and/or Savage MARC rail stations
- Commuter bus study routes under consideration

Jurisdiction/Facility: Statewide / Fort Meade

Methodology and Assumptions for Developing BRAC Recommendations

Date: June 2005

Author: George Mason University School of Public Policy

Summary: This report summarized population and employment impacts of BRAC on the northern Virginia region.

Recommendation(s):

None

Jurisdiction/Facility: Virginia

Military Installation Area Profiles

Date: 2006-2007

Author: Maryland Department of Planning

Summary: These reports present an overall of socio-economic and quality of life issues surrounding the BRAC military installations.

Recommendation(s):

None

Jurisdiction /Facility: Statewide / AAFB, APG, NNMC, Fort Detrick and Fort Meade

Prince George's County BRAC Action Plan - Executive Summary

Date: October 2007

Author: Prince George's County

Summary: The Prince George's County's BRAC Plan of Action reflects the best judgment of experts in the fields of land use, transportation, public facilities planning, education and training professionals, economic and community developers and many others based on the information available as of September 2007.

It is intended to be a fluid document designed to help the county and the state of Maryland anticipate areas where emphasis should be placed.

Recommendation(s):

Identified transit needs for short-term (0-3 years) and mid-term (4-6 years) time frames include:

- South Clinton – Branch Avenue Metrorail Station. New bus service connecting AAFB via Virginia Ave. to serve areas of Clinton currently without bus service.
- Branch Avenue Metrorail Station – Upper Marlboro. New bus service between Branch Avenue Metrorail Station and Upper Marlboro via AAFB, connecting AAFB, Branch Avenue Metrorail Station, Rosaryville and Marlton as well as Upper Marlboro.
- Greenbelt Metrorail Station – Konterra. New bus service between Greenbelt Metrorail Station and the new Konterra mixed-use development. Service would be also provided to the Muirkirk MARC Station and could connect housing in Prince George's County to employment growth projected for BRAC redeployments to Ft.

Meade-NSA and, secondarily, Aberdeen Proving Ground.

- Suitland Metrorail Station – Largo Town Center Metrorail Station. New bus service between Suitland Metrorail Station and Largo Town Center Metrorail Station via the Westphalia Town Center and AAFB to provide additional connections between AAFB and the proposed and emerging employment and housing opportunities in the central County growth centers such as Westphalia.
- National Harbor – Largo Town Center. Cross-county bus service between National Harbor, Branch Avenue Metrorail Station and Largo Town Center Metrorail Station.
- National Harbor – Northern Virginia/Eisenhower Avenue Metrorail Station. Bus service between National Harbor and Southern Avenue Metrorail Station in the County to the Eisenhower Avenue Metrorail Station in Alexandria. This service is an important link between National Harbor and the regional Metrorail system; and, thereby, to the entire metropolitan Washington region and should eventually be considered for conversion to fixed-guideway transit.
- Branch Avenue Metrorail Station – Upper Marlboro via AAFB & Westphalia Town Center. Bus service between Branch Avenue Metrorail Station, Westphalia Town Center and Upper Marlboro via AAFB.
- South County – Branch Avenue Metrorail Station. Bus service between the currently unserved areas of south County and Branch Avenue Metrorail Station, via AAFB, to better connect currently unserved portions of the County to the regional Metrorail transit system.
- Suitland – Southern Avenue Metrorail Station. Extend existing bus service from Suitland and Southern Avenue Metrorail stations via AAFB to National Harbor.
- National Harbor – Branch Avenue. Extend existing bus service to National Harbor and Branch Avenue and Allentown Roads from the current route, by connecting Southern Avenue, Suitland and Addison Road Metrorail stations via Silver Hill Road, Iverson Street, Livingston Road and Oxon Hill Road.
- Naylor Road Metrorail Station via AAFB. Extend bus service that currently connects to Naylor Road Metrorail Station via AAFB so to connect Clinton and Upper Marlboro via Woodyard Road and Old Marlboro Pike.
- Laurel area bus service restructuring. Restructure existing bus routes in the Laurel area to better serve those communities and provide additional and improved transit connections to Ft. Meade. Coordination will be required with CTC Transit Service – the transit service provider in the Laurel, Howard County and Anne Arundel County communities that connect to Ft. Meade.
- Bowie – Fort Meade via Greenbelt Metrorail Station. Extend existing bus service to provide a transit connection between northern Bowie and the Greenbelt Metrorail Station and aid transit connections to the Ft. Meade—NSA area.
- Bowie Area Bus Service Enhancements. Significantly improve existing bus service and provide new service in the Bowie area to provide better connections to the Metrorail and MARC systems and DOD-related employment opportunities at Ft. Meade.

Long-term service improvements (greater than 6 years) include:

- Cross-River Transit Extension. Evaluate fixed-guideway/Metrorail connection from Branch Avenue via National Harbor to Springfield-Franconia Metrorail Station near Ft. Belvoir.
- Green Line Extension. Extend the Green Line Metrorail from Greenbelt to BWI via Ft. Meade and communities in Northern Prince George's County like Beltsville, the emerging Konterra development and Laurel.
- Westphalia-AAFB Transit Extensions. Extend the existing Metrorail system to AAFB

and Westphalia, either by: (1) Green line extension from Branch Avenue or (2) Blue line extension from Largo Town Center.

- Purple Line Extensions. Evaluate cost-effective ways to extend the proposed Purple Line from New Carrollton to AAFB and, eventually, Branch Avenue Metrorail Station via Largo Town Center and Westphalia Town Center.
- Branch Avenue/MD 5. Evaluate fixed-guideway transit (bus rapid or light rail transit) along MD 5 (Branch Avenue)from Branch Avenue Metrorail Station to Charles County.

Jurisdiction/Facility: Prince George's County / AAFB and Fort Meade

Record of Decision on the Final Environmental Impact Statement (FEIS) for Base Realignment and Closure Actions at US Army Garrison Aberdeen Proving Ground – Harford and Baltimore Counties, Maryland

Date: August 2007

Author: Graig E. College, Deputy Assistant Chief of Staff, Installation Management

Summary: As a result of the BRAC Commission recommendations, various affects to APG include relocations to and from the installations. The Army's preferred Alternative to implement the BRAC Commission's recommendations to realign APG has two implementation aspects:

- The proposed departures (4,371) and proposed increases (8,774) result in an estimated net gain of 4,403 positions at APG.
- New construction, renovation of 22 buildings, and demolition of 72 buildings are estimated at 2,479,450 SF, 816,987 SF and 822,732 SF, respectively (net increase of 1,656,718 additional SF).

Recommendation(s):

On-Post Mitigation for Transportation Impacts

- Three APG entry/exit gates will be re-engineered to accommodate increased vehicular volumes
- Designing and constructing structural improvements to a number of intersections, turn lanes, and varying work-hour signals on APG's Northern Peninsula

Other Mitigation for Transportation Impacts

- Participate in regional planning studies
- Explore mass transit options – i.e. explore a shuttle service for employees from their place of work to a "mass transit facility"

Jurisdiction/Facility: Harford County / APG

Regional Transportation Implications of BRAC

Date: December 2006

Author: Baltimore Metropolitan Council of Governments

Summary: This report presents an assessment of regional transportation implications for the Baltimore metropolitan area along with recommendations for Fort Meade and APG.

Recommendation(s):

Ft. Meade

- Improve regional bus and/or rail service to serve commuters to Fort Meade from Baltimore and Washington, DC. Improve headways using WMATA Greenbelt/BWI Express bus line. Continue intra-and inter-regional coordination.
- Develop local bus service to connect communities and the proposed Central Maryland Transit Operations Center and Fort Meade. Implement the Fort Meade/BWI and Glen Burnie routes as proposed in the City of Annapolis/Anne Arundel County Transportation Development Plan. Coordinate with the CTC, Howard County and Connect-A-Ride. Restructure existing routes to better serve Ft. Meade with improved transfers. Coordinate with transit service providers for better service to Odenton.
- Develop proximate and efficient transfer to base grounds from the Odenton MARC Rail Station and/or the Central Maryland Transit Operations Center. Explore a secure shuttle distribution system with and within the installation.
- Improve and/or develop bicycle and pedestrian access at the Odenton MARC Rail Station and/or the proposed Central Maryland Transit Operations Center.

APG

- Improve regional bus and/or rail to serve commuters to APG from Baltimore and points south.
- Investigate the proposed relocation of the Aberdeen Rail Station.
- Explore expanded MARC service in conjunction with development of a Middle River multi-modal station.
- Explore expanded commuter rail service in Cecil County.
- Expand local bus service in the US 40 corridor. Use the existing Harford Transit's Route 6 in conjunction with the proposed Route 8 to serve stops between Edgewood and Havre de Grace.
- Develop proximate and efficient transfer to base grounds from the existing/relocated Aberdeen Rail Station. Explore a secure shuttle distribution service with and within the installation.

Jurisdiction/Facility: Baltimore region / Fort Meade and APG

Southern Maryland Mass Transportation Analysis

Date: 2008

Author: MDOT CTP FY2008-2013

Summary: Planning activities to identify and protect alignment for future development of high-capacity transit services in the US 301/MD 5 corridor from White Plains to the Branch Avenue Metrorail Station.

Recommendation(s): Corridor preservation underway

Jurisdiction/Facility: Southern Maryland /AAFB

State of Maryland BRAC Action Plan – Final Report

Date: January 2008

Author: Governor's Subcabinet and State Departments

Summary: The Governor, in partnership with the General Assembly, created the Governor's Subcabinet on Base Realignment and Closure, whose mission is to "coordinate State activities and work with the federal and local governments to prepare for and accommodate incoming households and jobs while sustaining and enhancing the quality of life throughout the State."

This report is intended to be a dynamic document that will be revised over the next four years as more information regarding the needs and requirements associated with BRAC are identified, collected and analyzed.

The Action Plan notes five categories or recommendations and/steps as follows: (1) promote transit options, (2) promote transportation alternatives such as transit, carpool and vanpool, (3) use transportation policy and projects to encourage Smart Growth, (4) conduct regional planning and outreach, and (5) provide customer service.

Recommendation(s):

- Implement the MARC Growth & Investment Plan, improve customer service for existing customers and provide for capacity and service expansions. Ongoing from 2007
- Promote seamless transit connections and customer convenience. 2007-2011
- Complete Smart Card implementation to provide for seamless connections for customers Statewide between MTA transit services, WMATA and local bus services. 2007-2011
- Provide continual ride-sharing coordination, promoting transit options, cost-effective carpooling and vanpooling. Ongoing from 2007
- Reinvigorate programs to increase transportation choices and revitalize older communities. Revive the Neighborhood Conservation Program, targeting transportation investments for revitalization, pedestrian and bicycle access, such as streetscaping for US 40 in Baltimore County and MD 755 in Harford County. Ongoing from 2007
- Expand pedestrian and bicycle access. Ongoing from 2007
- Promote Transit-oriented development projects along the MARC system; targeting

mixed-use, walkable, vibrant communities that will reduce auto-dependency. Ongoing from 2007

- Promote growth in targeted municipalities and growth areas through marketing and investments such as evaluation of additional MARC stations in Baltimore City and Baltimore County, Odenton Town Center and Savage MARC Rail Station. Ongoing from 2007
- Promote coordination between local and land use transportation policies. Ongoing from 2007

Jurisdiction/Facility: Statewide / APG

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Appendix C

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Appendix D

ABBREVIATIONS

AAFB	Andrews Air Force Base
ADA	Americans with Disabilities Act
AIT	Advanced Individual Training
APG	Aberdeen Proving Ground
ARTMA	Annapolis Regional Transportation Management Association
BPAC	BRAC Planning Advisory Council
BRAC	Base Realignment and Closure
BTC	Base Transportation Committee
BUP	Bethesda Urban Partnership
CSSC	Chesapeake Science and Security Corridor
CTC	Corridor Transportation Corporation
CTP	Consolidated Transportation Plan
DAR	Defense Access Road
DART	Delaware Authority for Regional Transit
DBED	Department of Business and Economic Development
DISA	Defense Information Systems Agency
DOD	Department of Defense
DOT	Department of Transportation
DPW&T	Department of Public Works and Transportation
EA	Environmental Assessment
ETC	Employee Transportation Coordinator
EUL	Enhanced Use Lease
FAQs	Frequently Asked Questions
FEIS	Final Environmental Impact Statement
FGA	Forest Glen Annex
FY	Fiscal Year
GRH	Guaranteed Ride Home
GSA	General Services Administration
HOV	High Occupancy Vehicle
ICC	Intercounty Connector
LOTS	Locally Operated Transit System
MTA	Maryland Transit Administration
MARC	Maryland Area Regional Commuter Train Service
MDOD	Maryland Department of Disabilities
MDOT	Maryland Department of Transportation

M-NCPPC	Maryland National Capital Parks and Planning Commission
MWCOG	Metropolitan Washington Council of Governments
NIH	National Institutes of Health
NCPC	National Capital Planning Commission
NNMC	National Naval Medical Center
NSA	National Security Agency
OEA	Office of Economic Adjustment
SEPTA	Southeast Pennsylvania Transit Authority
SOV	Single Occupancy Vehicle
TDP	Transportation Development Plan
TMP	Transportation Management Plan
TOD	Transit-oriented Development
TSOP	Transit Service and Operations Plan
WILMAPCO	Wilmington Area Planning Council
WMATA	Washington Metropolitan Area Transit Authority