



***Recommendations for Phase I
Service Improvements and
Capital Projects***

December 2011



The Central Maryland
Transportation Alliance

Follow Us to the Future

MARC Initiative – “Let’s Get to Work”

The *Central Maryland Transportation Alliance* is focused on improving and expanding transportation options for the citizens and businesses of Central Maryland. For the region to meet the economic, environmental and socioeconomic challenges of the coming decades, the State must prioritize existing and future revenue sources dedicated to maintaining, improving and expanding the transportation infrastructure. Prioritizing funding for transportation infrastructure will provide access to opportunities for jobs, housing, education and services. Access to opportunities will support economic development and job creation as the foundation for creating a sustainable and high-quality life style and an economically healthy and growing state.

The Transportation Alliance asks that this prioritization begin now and that beginning with the next fiscal year the Maryland Department of Transportation provide the funds needed to expand service on the MARC system, a system that can provide access to those opportunities throughout the Greater Baltimore/DC metropolitan area. The Transportation Alliance is recommending service expansion in four key areas – weekend service, later night weekday service, more robust service to points north of Baltimore, particularly Aberdeen Proving Grounds, and express off-peak daytime service between Baltimore and Washington. All of the increases in service can be implemented without capital improvements by increasing the share of MTA’s total operating budget that is allocated to the MARC program by 3%.

Case Statement:

Access to residential and employment opportunities are critical for economic growth and vitality as well as for attaining individual self-sufficiency and a high quality of life. Achieving these goals will require not only our continuing dedication to seeing that long-term solutions are implemented such as increased funding for transportation projects and construction of critical projects such as the Red Line and Purple Line, but also a commitment to finding opportunities to make near-term improvements to the system we have in place today.

The Central Maryland region suffers from years of inadequate investment in transportation infrastructure, resulting in aging highways and bridges and highly congested roads and highways that have not kept pace with demand generated from growth in residential and commercial activity outside the urban core. The public transportation system has not expanded to connect residential and employment centers and has been largely ineffective as a catalyst for the private sector to invest in development at transportation hubs.

The need to improve and expand our transportation system – everything from maintenance and upgrading of existing highway, rail and bridge infrastructure to expansion of public transportation, particularly rail – cannot be disputed, nor can the challenge of enacting legislation to increase revenue to replenish the State’s Transportation Trust Fund and insure that these funds

are used for Transportation projects only. If funding were immediately available, however, most transportation projects, given their long-term horizon, would do little to improve public transportation options today. And it is today that we must focus on as the economic growth and competitiveness of Central Maryland continues to suffer from the limitations of its existing transportation systems, and equitable access to opportunities for housing, education, jobs and services continues to be a challenge.

Whether through BRAC or other economic development initiatives, the job opportunities being created in the Region are NOT being created in the urban centers – namely Baltimore City and increasingly areas of Baltimore and Ann Arundel Counties. The largest employment growth is projected to occur over the next 5-10 years near Fort Meade, BWI Thurgood Marshall Airport, Martin State Airport, and Aberdeen Proving Ground. The transportation infrastructure that could connect job-ready residents to these areas exists, but in many cases issues such as infrequent rail service and the lack of transit connections from rail stations to employers nearby limit the ability of the system to connect people to jobs. Creating the infrastructure and the level of service to connect people with jobs and employers with a trained workforce will require resources and unflagging commitment over many years, and we must start today with improving the systems we have in place. We cannot wait for the 5, 10 or even 15 years it could take to plan, design, fund and construct new transit systems or highways. We must begin today.

To that end the Transportation Alliance is advancing a proposal to increase the reliability and efficiency of the one regional, rapid public transportation system currently in place – the MARC system. MARC has the ability to provide significant public transit access to major employment hubs in the Central Maryland region and provide the critical connection between Baltimore and Washington that supports the economic growth of the greater Baltimore/Washington “mega region.”

Why the MARC system?

The decentralization of economic growth and opportunity over several decades combined with the significant current and future economic growth in the region’s “suburban” counties due to BRAC led the Transportation Alliance to a focus on the MARC system as the system that could produce access and opportunity over a wide geographic area and connect population centers in urban areas with the job generators in the suburban counties. As importantly, the MARC system connects two major urban centers that are merely 40 miles apart – Baltimore and Washington.

Two MARC service lines operational today, the Penn Line and the Camden Line, already physically connect the Greater Baltimore Region to the Washington, DC region, from Perryville in Cecil County north of Baltimore to Union Station in DC. The attributes of MARC include:

- It’s an existing rail system with significant infrastructure

- It provides the opportunity to expand regional rail service for the Baltimore area via connections with the Red Line at two critical locations
- It is the rail system providing access to job-rich areas from Aberdeen to Baltimore and along the Baltimore/Washington Corridor
- It is the rail system connecting Greater Baltimore to the DC Metro
- Unlike many commuter rail systems, the MARC system serves two large center cities in Baltimore and Washington and trains run in both directions throughout the day
- It provides the opportunity to create value for private sector investment in TOD
- Of the fourteen State of Maryland designated TOD sites in Maryland five are at MARC rail stations, and four of the five are in the Central Maryland Region

The Transportation Alliance’s initial assessment strongly indicated that investment in improving the MARC system would result in exponential improvement in access to jobs, and for employers, access to a job-ready workforce. A mapping analysis of major employment hubs in the Baltimore/DC region revealed significant job-rich areas within ¼ to 1 mile of a MARC station (see Attached Exhibit A). While there would still be an issue of “the last mile,” i.e. the distance from the transit station to the employment center, an increase in MARC service, combined with shuttle bus service from the station to employment centers, would open up opportunities for employment that heretofore had been foreclosed due to lack of public transportation.

An improved and more robust MARC service would also result in a strong catalyst for private sector investment in Transit-Oriented Development. Without efficient and robust transit service, the development of TOD projects will continue to require heavy public subsidies in order for any private investor to realize an acceptable Rate of Return on Investment, particularly those TOD projects that include significant residential and retail as well as commercial/office uses.

Expansion of MARC Service - Methodology:

The Transportation Alliance engaged a consultant, Frank Russo, with significant experience in developing transit projects to further assess the feasibility of expanding the MARC system, and the costs associated with such an expansion. Mr. Russo’s bio is attached as Exhibit B. The study included the following areas:

- Evaluate the direct and indirect impacts of the Base Realignment and Closure Act (BRAC) and other economic trends on local economies; including its impact on demographics, jobs, supportive private development, and transportation access.
- Evaluate existing Maryland Area Regional Commuter (MARC) services to determine their ability to support BRAC related growth and other economic growth throughout the Baltimore/Washington region.
- Evaluate the potential for MARC service improvements
- Identify opportunities to expand MARC service with minimal capital cost
- Explore opportunities to attract private investment in MARC infrastructure and stations.

Mr. Russo's full report, "Feasibility Study – Expanding and Improving MARC," is attached as Exhibit C.

The study provided the support needed to develop a strategy for expanding MARC, tagged "Let's Get to Work." The Transportation Alliance's MARC proposal focuses on three critical elements of a robust rail service:

1. The need to increase the frequency and efficiency of rail service in order to provide access to job opportunities and to a trained and skilled workforce, from Perryville and Aberdeen north of Baltimore to Union Station in Washington, D.C. and all points in between.
2. The need to increase rail service to support other economic assets in the Baltimore/Washington region, including higher education, transit-oriented development projects and airports, particularly BWI.
3. The need to increase rail service as a catalyst for creating value for private sector investors and developers and public-private partnerships.

Proposed MARC Improvements: Operations

The first phase of service enhancements focuses on the MARC Penn Line for several reasons. The Penn Line runs on the Amtrak passenger rail that is part of the Northeast Corridor rail system and the Penn Line schedule is developed within the published schedule for all Amtrak passenger trains in the corridor. The Penn Line can access a large geographic area from Perryville north of Baltimore to Washington, D.C.'s Union Station given the Amtrak rail in place along the Corridor.

The Camden Line runs on CSX freight rail, connecting downtown Baltimore at Camden Yards with Union Station. The fact that the passenger service is running on freight rail limits the speed at which the trains can travel to a maximum of about 75 mph. The Penn Line trains running on passenger rail can approach 125 mph. Unlike Amtrak, CSX does not have a published schedule for its freight trains; rather, CSX has carved out narrow windows primarily during morning and afternoon commuter peak hours when it will not schedule freight trains, allowing the MARC passenger service to schedule its trains unimpeded by the freight schedule. While it was beyond the scope of this initial analysis to analyze the opportunity to increase these windows beyond weekday peak hours, the Camden Line provides the only transit service to growing communities in Howard and Prince George's counties and opportunities to expand service along this line should be analyzed in the near future.

The operating improvements described below do not require capital infrastructure improvements and, based on conversations with MTA, the additional service can be provided without needing to acquire additional rolling stock. Cost estimates for recommended service increases are broad estimates based on conversations with MTA staff. The increase in operating costs would be on a yearly basis.

1. **Weekend Service.** Providing MARC service on weekends is critical for creating truly sustainable mixed-use transit oriented development communities that attract private sector investment for privately owned and/or operated facilities and investment in public infrastructure including station development. Additionally, weekend service is needed to support employment hubs as the hours of the workplace increasingly fall outside of the traditional 9 to 5, Monday through Friday workweek. Proposed weekend schedule:

- Penn Line between Union Station and Penn Station, potentially up to Martin State Airport (4 morning and 4 afternoon/evening round trips daily)
 - a. All trains stop at BWI
 - b. Other intermediate stops TBD
 - c. Explore future service through to Perryville
- Explore future weekend service on Camden Line between Union Station and Camden Station.

Estimated Cost: \$5M. (An increase of 25% of the 2007 estimate of similar weekend service.)

2. **Weekday Late Night Service.** Adding later evening service between Union Station and Penn Station is needed for the same reasons as stated above for weekend service. Additionally, running trains later in the evening will serve the growing number of residents traveling between Baltimore and Washington, two cities only 40 miles apart, for leisure activities. Proposed late evening schedule:

- Penn Line between Union Station and Penn Station (1 round trip from Penn Station to Union Station then back again to Penn)
 - a. All trains stop at BWI, Odenton
 - b. Other Intermediate stops TBD
 - c. Explore future service through to Perryville
- Explore future Camden Line between Union Station and Camden Station

Estimated Cost: \$1M (Ball-park cost of adding one one-trip on the Penn Line)

3. **Weekday Peak Service between Baltimore and Perryville.** Service from Baltimore to Perryville, with stops at Martin State Airport and Aberdeen, is limited. While peak morning and evening service for commuters using the station at Martin State Airport is acceptable, service further north to Aberdeen and Perryville is too limited to support the growing economic development activity in and around Aberdeen Proving Grounds.

Many of the government employees relocated to the Proving Ground due to BRAC are currently commuting from Southeastern Pennsylvania, Delaware, and as far north as New Jersey. However, it is important to note that economic development professionals and the command at APG believe that many of these individuals now commuting from points north and outside of Maryland will either relocate closer to the post or leave their positions. Additionally, non-BRAC related growth is just beginning. “The GATE” development is attracting employees and visiting business people from throughout the region. There are two options for providing service to points north of Baltimore:

- Service to Perryville via shuttle between Perryville and Penn: 7 to 8 round trips throughout the day, M – F. Sample train schedules that include this shuttle service can be found on Exhibit D, MARC Shuttle Service A through P.
- Alternatively, extend existing service from Union now stopping at Penn, through to Perryville.

Estimated Cost: Option 1 – Shuttle Service \$8M (Ball-park cost of adding 8 round trips on the Penn Line. Some of the cost could be offset by deleting from the schedule the Penn to Perryville leg of the trains initiating from Union). It is unclear what the cost would be for implementing Option 2, but the assumption is that it would not be more than the cost of Option 1.

4. **Express Service weekdays off-peak between Baltimore and Washington via Penn Line.** Currently, anyone needing to travel to Baltimore or Washington during off-peak hours has the option of driving or taking the Amtrak train, the latter being more costly than the MARC fares. In particular, interviews with businesses and organizations needing to travel between the two cities for business find themselves with having to make the same choice – battle traffic and the cost of parking and drive, or take the Amtrak. Off-peak service will not only provide more options but also provide additional access to the residential, educational, service and recreational opportunities in the Baltimore/DC region. Enhanced service during the business day will facilitate face-to-face interactions, a key to economic development in innovation industries such as the “meds and eds” that are a core asset in Maryland. It also adds value for employers that locate near rail stations, an outcome that reinforces Smart Growth and TOD policies. The recommendation is:

- Service off-peak between Penn Station and Union Station dispersed throughout the day, totaling three round trips per day (can be scheduled as six one-way trips)

- One stop only at BWI airport. Sample train schedules that include possible times for express service can be found on Exhibit D, MARC Express Service 1 through 6.

Estimated Cost: \$3M (Ball-park cost of adding three round-trips on the Penn Line)

The total estimated cost for implementing all four service areas is **\$17M**. For the current fiscal year, the MARC program's operating budget is approximately 17% of the total operating budget for the MTA. Increasing the MARC operating budget by this amount will increase MARC's share of MTA's total operating budget to 20%.

Proposed MARC Improvements: Capital projects: There are several capital projects that should be given priority for funding of design and construction, with construction to be completed or substantially underway within the next five years. While these projects are not required in order to implement the expansion of service detailed above, they would greatly facilitate the ability to run a robust, efficient commuter service and create value for private investment. These priority projects are:

1. **Maintenance and Storage Facility** – the operation of the MARC system is severely hampered by the lack of a major maintenance and storage facility. While several sites north of Baltimore are being considered, there has been no decision to move forward nor have funds been identified for what is projected to be a \$150 - \$250M project. If the State is unable to move forward with acquisition and development of the site, serious consideration should be given to developing the site as a public-private partnership that would permit a private developer to build the facility and lease it back to the state.

While it is true that the lease payments would have to provide a reasonable ROI to the private partners and that the State's cost of funds is lower than private capital, the fact of the matter is that the state does not have the ability to fund the project in the foreseeable future. Additionally, it is often the case that private development could produce the facility at a lower cost and within a shorter time period than the State could as a publicly financed and constructed project.

2. **Bayview MARC Station** – A station at the Johns Hopkins Bayview Medical Campus has been on the drawing board for the better part of two decades. With over 6500 people working at the Campus, and growth of the medical facilities projected to continue over the next ten years, a MARC station will provide rail service to people needing to access the Campus to work or for medical services. Both the National Institutes of Health and Johns Hopkins Hospital have facilities both at Bayview and in the Washington DC area and MARC service would facilitate back and forth interaction. Additionally, the

Bayview station would facilitate travel from East Baltimore to stations north of the City., and provide a critical connection to the future Red Line station at Bayview.

The funding of design and construction of this station should be aggressively pursued independently of securing funding for the full design and construction of the Red Line. Opportunities for private investment for construction of the station as a component of a private developing adjacent to the station should also be explored.

3. **West Baltimore MARC station relocation** – the existing station in West Baltimore is a heavily used station with free surface parking for commuters. MTA is currently in preliminary design for building a new upgraded station in very close proximity to the existing station and in close proximity to the future Red Line station. The new location will improve service and boarding of trains as well as the movement of trains through the station.

Additionally, a larger more efficient MARC station will be a catalyst for private development around the MARC and Red Line stations, development that will support the surrounding neighborhoods as well as attract new residents and uses into the community. For this reason the funding of design and construction of this station should be aggressively pursued independently of securing funding for the full design and construction of the Red Line.

4. **BWI MARC station** – the existing MARC station not only does not provide any amenities for passengers it is an embarrassment to the State as a gateway to one of the strongest assets, BWI-Thurgood Marshall Airport. The significant improvements at the Terminals and the new spectacular rental car facility support and celebrate this asset. The MARC station should as well.

A new station will provide increased level of service and amenities for growing airport passenger service. Additionally, while we are aware of the environmental constraints at the station, the footprint of developable land at the current station location would support additional private investment above a new station house. We strongly encourage the state to explore private development of the site through a Request for Qualifications that would require the developer to address concerns over the environmental constraints, FAA regulations, and issues such as parking and transportation connectivity to the Airport Terminals.

5. **Equipment costs** – MTA has indicated that the additional service recommended by the Transportation Alliance can be implemented using existing rolling stock. While additional service from Penn Station north to Perryville can be implemented without

adding track, the addition of a 1 – 2 mile passing track would facilitate scheduling of the MARC service between the faster Amtrak passenger service. There is sufficient right-of-way to accommodate a passing track north of Penn Station.

Estimated Cost: \$10 – 15M/mile

6. **Penn Station Improvements** - passengers arriving at Penn Station are challenged to make connections between the various modes of transportation that converge at the Station due to the lack of clear and easily visible signage. Adding a wayfinding signage system would be an inexpensive and easily implemented way to facilitate connections between Amtrak, MARC, Light Rail, and bus service.

7. **System-wide Customer Amenities** – the MARC system is a key mode of transportation for commuters and travelers to BWI airport. Yet the cars lack the basic amenities found on most commuter rail systems. The addition of these amenities will provide the kind of consumer amenities that will attract more riders:

Cars outfitted with luggage storage

Cars outfitted with bike racks

Wi-Fi

Multi-modal Connections: Expanding MARC service in order to provide robust service will significantly expand access to opportunities for employment, housing, education and services. However, it will also be necessary to connect the station to the actual destination – i.e. provide transit connections between stations and hubs of economic activity, including employment, residential and TOD. Insuring this connectivity will facilitate access to the economic activity of many locations along the MARC system, including:

1. Aberdeen Proving Grounds (city of Aberdeen Station)
2. Odenton
3. Fort Meade (via Odenton, Savage and other MARC stations)
4. Savage
5. Dorsey
6. City of Laurel and Laurel Park
7. BWI
8. New Carrollton
9. Greenbelt
10. College Park