

II. DEVELOPMENT OF OUR TRANSPORTATION SYSTEM

This section summarizes the basic components of seven travel modes that make up the public and private transportation system of the Baltimore region. A multimodal transportation network that developed over many years and includes the following components serves the Baltimore metropolitan area:

- A. *Highway Transportation*
 - *More than 11,000 miles of streets and highways*
 - *2,112 bridges*
- B. *Public Transportation*
 - *Regularly scheduled bus service*
 - *Central Light Rail*
 - *Baltimore Metro Subway*
 - *Maryland Rail Commuter (MARC) trains*
- C. *Water Transportation*
 - *Port of Baltimore*
- D. *Air Transportation*
 - *Baltimore/Washington International Airport*
 - *Martin State Airport*
 - *14 public use general aviation airfields*
- E. *Railroad Transportation*
 - *Freight service*
 - *Amtrak passenger service*
- F. *Bicycle and Pedestrian Transportation*
 - *Network of hiker/biker trails*
- G. *Specialized Transportation*
 - *“Mobility” paratransit service*

A. Highway Transportation

The regional highway network is the core of our modern transportation system. There are 2,112 bridges and more than 11,000 miles of streets and highways in the Baltimore region. These consist of 5 different functional types of roadways — freeways, principal arterials, minor arterials, collectors, and local streets.

The Maryland State Highway Administration (SHA) and Maryland Transportation Authority (MdTA), two modal administrations within the Maryland Department of Transportation (MDOT), have jurisdiction over interstate and state routes within the region. Toll crossings at the Susquehanna River, Patapsco River, and Chesapeake Bay along with I-95 in Baltimore City and I-95 from I-895 to Delaware are the responsibility of the MdTA. Most of the remaining interstate and state highways are the responsibility of the SHA. Baltimore City is responsible for the majority of highways within the City limits, including the portion of I-83 called the Jones Falls Expressway (JFX). The interstate highway network bisects or services all the jurisdictions within the region. Currently, 31 percent of the region’s vehicle miles traveled (VMT) occur on the interstate/freeway system. Figure II-1

Figure II-1

and all figures/maps in this document are available on the BMC webpage, <http://www.baltometro.org/mambo/content/view/399/322/>.

displays the existing highway system of the Baltimore region. The Baltimore region network consists of 23,680 lane miles, which comprises 37 percent of all lane miles in the state of Maryland.

B. Public Transportation

Maryland Transit Administration Services



Metro Subway

Maryland Transit Administration's (MTA) Metro Subway system provides high-speed heavy rail transit service in a 15.5-mile corridor from Owings Mills in western Baltimore County through downtown Baltimore to Johns Hopkins Hospital. The service operates Monday through Friday from 5:00 A.M. to midnight, and on Saturdays from 6:00 A.M. to midnight. Sunday service was reinstated in September 2001, and all stations are open during operating hours. Headways are eight-minutes during morning and afternoon peak periods, and ten to twenty minutes other times. Parking is available at Metro stations between Owings Mills and Mondawmin. Parking is free at these Metro stations. Figure II-2 depicts existing MTA bus and rail routes, and other non-MTA routes.

Light Rail

MTA's Central Light Rail Line provides medium-speed transit service in a 30-mile north-south corridor from Baltimore County to Anne Arundel County. The main line runs between Hunt Valley and Glen Burnie, with recent extensions to Penn Station north of downtown Baltimore and to Baltimore/Washington International Airport (BWI) in Anne Arundel County. Light Rail serves the area by linking communities in the northern and southern suburbs with the downtown core, and provides Baltimore City residents access to suburban job centers, such as those located at the BWI Airport, the BWI Business District, and the Hunt Valley office park.

Free parking is provided at 12 of the 32 Light Rail stations. The service operates Monday through Saturday from 5:00 A.M. to 1:30 A.M., and Sundays and holidays from 11:00 A.M. to 9:00 P.M. The service has 17-minute headways. Headways are reduced between the Linthicum and Mount Royal stops due to the overlap created by service to Penn Station and BWI Airport.

Maryland Rail Commuter (MARC)

MTA's Maryland Rail Commuter (MARC) service provides high-speed, medium-frequency commuter rail service in the Baltimore region and beyond. The 187-mile system is a commuting option for residents of Central and Northeast Maryland, the Baltimore/Washington Corridor, and the Martinsburg, West Virginia/Washington corridor. MARC service is operated under contract with the Amtrak and CSX Transportation. Parking is available at most MARC stations; some stations offer free parking.

In the Baltimore region, MARC trains operate in two existing rail corridors totaling 77 miles, with stations in all jurisdictions except Carroll County. The Penn Line runs between Perryville in Cecil County and Union Station in Washington D.C., and stops at eight stations in the region. The Camden Line runs from Camden Station in Baltimore City to Union Station, and stops at six stations in the region.

Figure II-2

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The Penn Line service from Penn Station to Perryville is limited to southbound travel during the morning peak period and northbound travel during the evening peak period. However, free connecting bus service is offered to MARC riders mid-day northbound from the BWI Rail Station to Baltimore Camden Station, continuing on to Perryville. Connecting mid-day bus service is also provided between the Odenton Station on the MARC Penn line and selected Camden line stations.

Bus

MTA operates regularly-scheduled bus service in all jurisdictions of the region except Carroll County. MTA operates peak and off-peak bus service on more than 60 local and express routes in Baltimore City, Anne Arundel County and Baltimore County, and one neighborhood shuttle in the Hampden area of Baltimore City. MTA also provides several commuter bus routes primarily during peak hours in all jurisdictions except Carroll County; 11 routes serve downtown Baltimore, and four routes serve Washington, D.C. In rail corridors, MTA local bus services are coordinated with the Baltimore Metro Subway, Light Rail, and MARC commuter rail services. MTA also provides the paratransit service Mobility within a quarter mile of any fixed-route service in Baltimore City, Baltimore County, and Anne Arundel County.

Non-MTA Transit Services

Locally-Operated Transit Systems

In addition to the transit services operated by MTA, there are four locally-operated transit systems (LOTS). Annapolis Transit operates six fixed routes and one deviated fixed route in the Annapolis and Parole area, as well as the Annapolis Trolley that links satellite parking lots with the downtown area. Carroll Transit System provides one deviated fixed-route bus loop in Westminster, and demand response service in the rest of Carroll County. Harford County Transportation Services (HCTS) manages five local fixed routes connecting Bel Air, Edgewood, Aberdeen, Havre de Grace, and Joppatowne. HCTS also provides one job access reverse commute route from Baltimore City along the I-95/US 40 corridor, and demand response service in other parts of Harford County. Howard Transit provides eight fixed routes serving the Columbia and Ellicott City area, and demand response paratransit service.

Other Local Bus Services

Connect-A-Ride, Spirit Shuttle/The Link, Career Caravan, and Nixon Shuttle are other transit services in the region. Connect-A-Ride primarily serves Laurel with seven bus routes in the Baltimore region connecting Columbia, Glen Burnie, and Odenton. The BWI Business Partnership manages two Spirit Shuttle bus routes, and a third route called The Link. Two Spirit Shuttle routes provide service to the MARC commuter rail stations, and to numerous worksites in the US 1 Corridor, Columbia Gateway, and BWI area. The Link shuttle connects the BWI Business District Light Rail station and BWI MARC/Amtrak Rail station, with continuing service to Arundel Mills Mall. The BWI Business Partnership also manages Career Caravan, a job access deviated fixed route shuttle service from Baltimore City to jobs in Howard County. Nixon Shuttle Services operates the Severn Shuttle in northwest Anne Arundel County, with service to the Cromwell Light Rail station and Arundel Mills Mall.

Motorcoach Bus Terminals

The Baltimore region is served by two inter-city motorcoach terminals: the Central Bus Terminal on Fayette Street in downtown Baltimore, and the Baltimore Travel Plaza Bus Terminal on O'Donnell Street at I-95 in southeast Baltimore.

C. Water Transportation

The Port of Baltimore is the region’s major maritime facility. The Maryland Port Administration (MPA) is responsible for the overall management, safety, operation and marketing of the port’s facilities. Baltimore’s location 150 miles inland allows overnight truck access to more than 30 percent of the nation’s population, or a one or two-day trip for rail traffic.

The marine terminals at the Port of Baltimore include both publicly and privately owned and operated facilities. Dundalk Marine Terminal is the second largest terminal on the North Atlantic coast and the largest general cargo facility in the port. Seagirt Marine Terminal, which opened in 1990, is the newest and most modern container terminal.

D. Air Transportation

Baltimore/Washington International Airport (BWI) and Martin State Airport (MTN), as well as a system of private and municipal general aviation airports serve the air transportation needs of the Baltimore region. Like BWI, MTN is owned and operated by the Maryland Aviation Administration (MAA). Over the last few years, BWI has maintained a consistent, one-third market share of passenger use of the regional airport system which also includes Dulles and Reagan National Airports. Figure II-3 displays existing airport facilities. In 1999, BWI ranked 27th nationwide in terms of passenger traffic. In 2000, BWI handled 19.6 million passengers, a 39 percent increase from 1997. This high rate of increase has helped make BWI one of the fastest growing airports in the world. Table II-1 displays passenger market share at BWI Airport.

Table II-1 Passenger Market Share at BWI Airport: 1998-2000

	1998	1999	2000
Passengers	15,003,819	17,437,663	19,602,609
Regional Market Share	32.3%	33.5%	35.4%

Source: Maryland Aviation Administration

Over the next five years, MAA will spend \$1.8 billion to improve BWI, meaning easier road access, improved parking, new gates, moving walkways, and faster connections to rail service.

Improving Roadway Access. The main access roads at the airport are being widened to reduce traffic congestion in front of the main terminal. Improvements include three skywalk bridges from the garage to the terminal, eliminating the need for pedestrians to cross the roadway and disrupt traffic flow.

Building a New Central Garage. A new garage facility will provide an additional 8,400 spaces and has been designed to include a “smart parking” feature which will guide travelers to open spaces.

Consolidated Rental Car Facility. A new rental car facility is being constructed to replace the existing area in the terminal parking garage. This consolidated rental car facility will provide convenient one-stop rental car shopping while freeing up over 1,000 prime parking spots in the garage.

Terminal Improvements. The airlines’ need for gate space is at a record high. A recently-constructed concourse will expand into a 16-gate facility. A new four-gate Concourse “F” is proposed adjacent to the International Terminal. These gates will serve both domestic and international travel and will be equipped to serve larger international aircraft.

Rail Connections. A monorail-style people mover system will connect the terminal with parking facilities, the new rental car facility, and the BWI Amtrak/MARC rail station.

Figure II-3

and all figures/maps in this document are available on the BMC webpage, <http://www.baltometro.org/mambo/content/view/399/322/>.

MTN, located in Baltimore County, is the largest general aviation airport in the State, primarily serving local businesses and pilots. It provides a base for the Maryland Air Guard, the aviation components of the Maryland State Police, and the Baltimore County and City Police Departments. MTN also serves as a reliever for BWI. Most of the other public use general aviation (GA) facilities are limited in scope, basically existing to serve the needs of aviation enthusiasts. Table II-2 lists the locations of these GA facilities.

Table II-2 Public Use General Aviation Facilities

Airport	Jurisdiction	Ownership
Jack B. Poage Field (Carroll County Airpark)	Carroll County	Public
Tipton Airfield	Anne Arundel County	Public (under development)
Clearview Airpark	Carroll County	Private
Essex Skypark	Baltimore County	Private
Fallston Airport	Harford County	Private
Harford County Airpark	Harford County	Private
Haysfield	Howard County	Private
Keymar Airport	Carroll County	Private
Lee Airport	Anne Arundel County	Private
Schmidt's Airfield	Anne Arundel County	Private
Wolf Airport	Carroll County	Private
Suburban Airport	Anne Arundel County	Private
Phillips Army Airfield	Harford County	Military (possible joint use)

E. Railroad Transportation

Railroads provide important long-haul connections between shippers and consignees. Several railroads, including Class I, local, and two switching and terminal rail companies, serve the region. Amtrak (National Railroad Passenger Corporation) provides high-speed rail service between Washington, Baltimore, New York, and other destinations in the Northeast Corridor.

F. Bicycle And Pedestrian Transportation

Bicycling and walking are permitted along most of the region's roadways, with interstate highways being the major exception. SHA is increasingly working to accommodate bicycle and pedestrian travel in the design of roadway projects, although very few designated on-road bicycle facilities currently exist.

There are a number of very popular multi-use trails in the region, such as the Northern Central Rail Trail, the Baltimore-Annapolis Trail, and the BWI Trail. While these trails are currently used primarily for recreational purposes, many key origin and destination points are in proximity to some of the trails, indicating significant commuting potential. While many of the denser parts of the

region have comprehensive sidewalk networks, the more rural and recently developed areas have been designed primarily for the automobile, as pedestrian facilities such as sidewalks and crosswalks are not consistently included in roadway projects and many intersection designs include free-flowing turn lanes. Even in the areas with comprehensive sidewalk networks, there are still significant needs. For example, there are many gaps in terms of meeting Americans with Disabilities Act of 1990 (ADA) requirements and many sidewalks are obstructed by utility poles or other structures.

The linkage of the bicycle and pedestrian modes to transit is improving. MTA and SHA are currently working to improve bicycle and pedestrian access in the areas surrounding rail stations in the region. MTA generally permits bicycles on Metro and Light Rail trains, and is exploring the use of bicycle racks on MTA buses as well as ways to accommodate bicycles on MARC trains. A number of transit stations are equipped with bicycle lockers or racks, and there are plans to install additional ones. Among local transit providers, Annapolis Transit has installed racks on buses.

G. Specialized Transportation

ADA requires transit facilities and fixed-route transit service to be fully accessible to persons with disabilities. These individuals are also often unable to use conventional fixed-route transit. Fixed route service may not operate in some areas or the service may not be available at a particular time of day or on weekends. Some individuals need assistance getting from their homes into a transit vehicle. All transit vehicles built and purchased (with Federal funds) after August 1990 must be lift-equipped. Facilities such as transit stations and bus stops also must be accessible. Paratransit service must be provided in corridors served by fixed transit routes. Paratransit services supplied by fixed-route transit service providers are controlled by ADA regulations. As of January 1997, all MTA and local fixed-route transit service providers in the Baltimore region were in compliance with ADA requirements.

Many public agencies, non-profit organizations, and private-for-profit companies own and operate an array of transit vehicles and services. Statewide efforts are currently underway to quantify and coordinate paratransit services provided by human service agencies.