



Transportation

Preface

Transportation planning is essential when planning for future growth, development, and infrastructure. Information related to road conditions, traffic volumes, and general usage is used to determine whether road construction or improvements are necessary. Hazardous intersections, roads, and other problem areas must be identified so that measures can be taken to improve these areas. Roads need to be planned in advance of development to insure travel is not hampered and to eliminate any problems on roads that currently exist.

Street System

Brunswick is connected to the County, State, and Interstate highway system, which allows for easy access from multiple directions. U.S. Route 340 is located to the northwest of the City, and provides highway access to Frederick. From Frederick access to U.S. Route 15, I-270, and I-70 is available. U.S. Route 340 also provides access to the south to Charles Town, West Virginia, and northern Virginia. Burkittsville Road/MD Route 17 provides access to Burkittsville, Middletown, Myersville, and also connects with MD Route 464. MD Route 464 extends to the east to Point of Rocks; another access point to U.S. Route 15, and additionally access to MD Route 28. Petersville Road/MD Route 17 provides access to northern Virginia directly from Brunswick by crossing the Potomac River. Additional State highway entrances are outside of the City limits at present time.

The street system in Brunswick is based loosely on a linear grid. Due to the steep slopes that run throughout Brunswick, this grid system is not complete. As a result, many of the streets that run east/west are disconnected.

The main road that runs north/south in Brunswick is Petersville Road (MD Route 17). Burkittsville Road (MD Route 17) runs south from Burkittsville, crossing U.S. Route 340, and continues south through Brunswick, ending once it crosses the Potomac River, at which point the road becomes the Berlin Turnpike. This is an arterial road with adequate shoulders and alignments. Other roads that are oriented north/south direction include Maple Avenue, Second Avenue and Ninth Avenue.

Maple Avenue has adequate width, but the topography on which it was built creates multiple problems with sight distances. Also Maple Avenue does not provide a direct connection south to the Downtown Commercial Core because it ends at East and West B Street.

Second Avenue connects with East A Street to the south and Souder Road to the north. Its vertical alignment, particularly between East B and East F Streets, is excessively steep. Second Avenue is also narrow providing no curbs, gutters, sidewalks, and minimal on street parking.

Ninth Avenue runs from East A Street to an intersection of Souder Road, Point of Rocks Road and Cummings Drive. Both Souder Road and Point of Rocks Road are designated as MD Route 464. Park Avenue provides Ninth Avenue with a direct connection to East Potomac Street.

Those four streets provide the only access north/south throughout the city without having to make multiple street changes to accomplish this travel. No single street connects to the Downtown Commercial Core, with the exception of MD Route 17 as it connects to Maryland Avenue via the traffic circle.

East-west connections throughout the City are extremely limited due to the topography as noted earlier. Only two roads run a majority of the way: Souder Road and Potomac Street. These two streets are arterials that accommodate larger volumes of traffic.

Rail Transportation

Brunswick is served by public rail transportation. The Maryland Commuter Rail (MARC) has three lines with the Brunswick Line serving Berkley and Jefferson counties in West Virginia, Frederick County and Montgomery counties in Maryland and Washington D.C. Four stops are located in Frederick County, two stops in Frederick City, one in Point of Rocks and the other in Brunswick. This line connects to Union Station allowing access to other rail services and bus services, which may be used to travel anywhere in the District and even to other parts of the United States.

Bus Transportation

Bus service in Brunswick is provided by County TransIT service. A shuttle bus makes six stops in Brunswick, Knoxville, and Jefferson, and then returns to the TransIT center. The entire route takes approximately one hour. The route is served twice in the morning and twice in the afternoon.

A proposal has been drafted to provide Brunswick with additional service within the next five years. The reasons for this are based on current rider numbers and the proposed Brunswick Crossing Planned Unit Development. With the additional residents that will be in Brunswick by 2015, it is estimated that service demand will increase exponentially. Also due to the design of Brunswick Crossing Planned Unit Development and the intent of creating a pedestrian friendly community design, additional transit would be logical for this area. It is expected that MARC use will increase and if a bus service were in place to transport residents to and from the MARC station, parking and traffic congestion could be significantly decreased.

Table 6.1
TransIT Rider Figures for Brunswick
From July 2009 to March 2011

Month and Year	Riders
July 09	639
August 09	667
September 09	579
October 09	632
November 09	557
December 09	637
January 10	569
February 10	466
March 10	907
April 10	919
May 10	833
June 10	894
July 10	743
August 10	803
September 10	793
October 10	824
November 10	783
December 10	703
January 11	565
February 11	637
March 11	724
Total Riders FY 10	8,299
Projected Riders FY 11	8,767

Image 6.1
MARC System Map



Source <http://www.mtmaryland.com>

Road Classifications

In the 2004 Master Plan road classifications were delineated according to the Frederick County Master Highway Plan, which was part of the County Comprehensive Plan.

This plan made five road categories: Freeway/Expressway, Major Arterial, Minor Arterial, Collector, and Local.

The classifications of streets were determined by multiple factors including use by local or through traffic, intensity of surrounding land uses and proposed land uses, the streets overall location, and the threshold of volume for the street.

U.S. Route 340 in the Brunswick vicinity was classified as a Freeway/Expressway. This road is limited in access with a constant speed limit of 65 MPH in the Brunswick Region. Additionally, this road provides access to U.S. Route 15, I-270, and I-70 to the northeast of Brunswick. U.S. Route 340 continues southwest to Charles Town and Route 7 in Virginia. This is the only major highway that is near Brunswick.

Arterials provide access to freeways and also provide inter- and intra- County access to other roads, which are not serviced by the Freeways. Major Arterials are defined as a four-lane road with a median. Minor Arterials only require a well-designated two-lane facility in rural areas, and four lanes in more urban areas.

Collector roads carry traffic from the local streets to the arterials, and from there, traffic can move to freeways. Many streets in Brunswick are classified as collector roads. Streets planned for the Brunswick Crossing Planned Unit Development on the Brunswick Street System Map page 129 are of collector status, as is Jefferson Pike and two new roads linking with Souder Road. The remaining streets in the City are local streets, which carry the least amount of traffic and have lower densities.

Transportation Plan Proposals

The proposals that are outlined in this Master Plan focus primarily on the road network which must meet future demand for travel from residents, commuters, and through traffic in the area. This Plan intends to 1) classify existing and planned roads according to their future function, 2) provide guidance to land owners and the general public by giving notice of the appropriate location of new roads and improvements to existing roads and 3) recommend improvements to the existing road network. In addition to traffic proposals, this Plan proposes alternative means of travel to automobile transportation.

The Master Plan road classifications are dependent on long-range land use patterns and development potential, and are not necessarily dependent on anticipated growth. Right-of-Ways and alignments must be reserved regardless of whether one or all of the properties within a growth area are developed in the near future.

Functional Classifications for Roads

The Master Plan proposes a hierarchy of roads to serve Brunswick. These road types are outlined in the Brunswick Design Manual. The function of a street is determined by several factors including, but not limited to, which type of traffic is served: local or through, the type and intensity of proposed land uses, the roads relationship to the overall traffic network, and the volume of traffic that the street is expected to handle. The purpose of this system is to ensure that development of the traffic system is logical and sufficient to serve the needs of those who use it, and to make sure that it complements the Land Use Section of this Plan.

Freeways/Expressways: are the primary and interstate limited access highways, which provide inter-regional connections. U.S. Route 340 is the only Freeway/Expressway in the Brunswick Region.

Arterials: provide primary access to the freeway system and supplement the freeway network in rural areas. Arterials are separated into two subsections Major and Minor Arterials.

Major Arterials: are designed to accommodate high traffic volumes. Design standards require a four-lane road with median.

Minor Arterials: carry less traffic than Major Arterials. Design Standards for Minor Arterials require well-designated two lane facilities. In addition, access from homes is denied on these roads.

Collectors: are the highest order of streets that can be utilized by residential areas. These roads carry large volumes of traffic and direct access from homes should not be permitted.

Local Roads: are streets that transport general residential traffic. They do not carry the same volumes that are recorded on higher-level streets. These roads should be safe for pedestrians. These roads connect to collectors to provide access to other areas of the City and then further to Arterials and further to Expressways/Freeways.

Service Roads: are limited use roads that provide access to non-residential development. The intent of this road is to limit access directly onto a collector or arterial.

Another classification is needed to describe the portion of West Potomac Street from west of Florida Avenue to Maryland Avenue. This section is currently defined as a Minor Arterial but due to several geographic and development patterns this road cannot support this classification. As a result this section should instead be classified to account for this while still complying with the intent of the Minor Arterial designation. A Downtown Business Arterial designation would be used only for the portion of West Potomac Street that has been outlined above. To accomplish this change it is recommended that the

Design Manual be updated immediately to implement this road type and solve many of the problems that are associated with this street's classification.

The City attempts to create a scenario where there is more access onto higher functioning roads. This alleviates any potential traffic problems, while creating better road conditions.

Roads and Intersection Improvements

Parts of the street system in the older sections of Brunswick are narrow in width, lack curbs, gutters, sidewalks, and are often located on extremely steep grades. A large number of intersections pose risks due to the number and angle of streets converging, and steep grades. A large number of these problems are impossible to solve due to the constraints presented by existing development and topography. Slight improvements can be made as development occurs in these areas. This is not entirely possible though, as most lots in the older sections of the City have already been developed to their full potential, making improvements extremely challenging and in some cases impossible.

To begin improving the existing street and sidewalk system in Brunswick, it is necessary to assess all of the streets, intersections, and sidewalks in the City to determine where improvements are needed and prioritize improvements. In the 1998 Frederick County Brunswick Regional Plan, the County identified the need for improving sight distance and installation of sidewalks along Souder Road (MD Route 464). This thoroughfare leads to the Brunswick Shopping Center as well as the Brunswick High School and Middle School. This area would be included with that assessment.

In 1995 the University of Maryland Transportation Studies Center performed a survey on behalf of the City through a grant that was obtained through the Maryland Office of Planning, and the Department of Transportation's local Transportation Planning Assistance Program. The survey inventoried the existing street pavement conditions, widths, curbs, gutters, sidewalks, and parking. The result was a street survey report with maps that summarized the findings of the survey and made recommendations regarding the priorities for making improvements. A schedule for improvements was also developed at that time.

The City should conduct a similar survey to determine the new problems that the City is facing. Over the past fifteen years many things have changed in Brunswick, with new growth and a larger population, infrastructure is being used more frequently. As a result, the tendency to become overburdened at a faster rate is possible. With an influx of residents utilizing more parking and traveling on roads more than in 1995, a study of similar magnitude should be conducted to reassign or reinforce priorities.

Property owners should take it upon themselves to repair portions of public property such as sidewalks and driveway aprons that become damaged, as required by the City Code of Ordinances. At a minimum, areas where this is true should be reported to help ensure that a problem will not develop into an even larger problem. Failure to do so may end up costing much more in the future.

Areas related to the Community Legacy Plan that deal with Transportation should be implemented. Through implementation of transportation priorities in the Legacy Plan the City will be able to correct problems and create a more appealing pedestrian and cyclist friendly environment. Funding should be obtained to revisit the Legacy Plan's recommendations and incorporate new parameters established as part of the Sustainable Communities Act of 2010.

Also, currently Souder Road runs east/west along the northern section of the City. The City will continue to work with the state to develop a sidewalk network along Souder Rd. Additionally Maryland State Highway Administration has plans to analysis pedestrian connectivity along MD Rte 17 leading into the downtown and Souder Road west of the shopping center.

Alternative Transportation

Alternative transportation is necessary to accommodate growth that is economically and environmentally friendly. With alternative transportation options, the City of Brunswick will be able to create an environment that is less dependent on automobiles (except high occupancy vehicles) and more pedestrian and cyclist-friendly. Through the action of creating bike paths and trails, pedestrian rest areas, crosswalks, bike racks, bike lockers, bus shelters, and pull-offs, this can be accomplished. In addition coordination with Frederick County TransIT and MARC will allow for more opportunities for mass transit to other areas in the County and surrounding Region. By incorporating all designs together, a neo-urban approach to current City transportation can be developed which will allow use by those who cannot drive or are not capable of providing their own transportation.

Additionally, incentives for car-pooling should be studied and outlined by the City. The majority of Brunswick's residents do not work solely in Brunswick according to the survey listed in the Appendix of this Plan. At the same time, almost 70% of respondents to the survey noted that they drove themselves to work in a privately owned vehicle. The City should coordinate efforts with Frederick County to help identify car-pool opportunities for Brunswick residents. By giving citizens more commuting options, Brunswick can market that ability and at the same time help the environment and benefit citizens with lower commuting costs.

Maryland State Highway Administration provides park and ride lots to accommodate commuting within the state. Eight lots are located in Frederick County with one being located adjacent to Brunswick and The Village of Rosemont. This lot has 46 spaces and allows for all day everyday parking. This lot is not currently serviced by a bus route.

This parking lot should be expanded for additional parking. This expansion would allow for more car-pooling, and can additionally be used as a parking area for bus transit into the City and to the MARC station. This is similar to the Washington Metro, which uses parking lots at some of its stations. These lots are designed to allow commuters to park

and ride to other locations. Considering the size of the MARC parking lot and other parking sources currently available in the Downtown Commercial Core, an express service from this lot to the MARC would be beneficial in supplying parking for the downtown while not actually utilizing land in this area.

Bicycle use in the City is currently only available on Local Roads. Due to traffic patterns and safety concerns, Collector and higher classified roads are, by necessity, not conducive to bicycle transportation due to the lack of exclusive bicycle lanes. However, with a park and path system applied throughout the City it will be possible to provide access around the City by bicycle without ever being on these higher classified roads.

A Bike Path system will be incorporated into Brunswick Crossing. In the 2004 Plan, a Bike Path was placed onto the Master Plan Map and explained in the text with the intention of providing a pathway that would lead from the Brunswick Swimming Pool/Little League Field to the Train Station and from the Train Station to the C&O Canal Towpath to points east and west. This Path, in addition to the proposed Brunswick Crossing Planned Unit Development Path System, is shown on the Brunswick Street System Map in the appendix on Page 129 and on the Brunswick Master Plan Map in the appendix on Page 127. These paths could link up to paths proposed in the Frederick County Bikeways and Trails Plan (1999). This Plan has a proposed natural surface trail for hikers, walkers, and equestrians, which follows Catoctin Creek from the Potomac River up to Myersville where it would follow Middle Creek to the Catoctin Trail. This Plan also shows the On-Street Bikeways in Brunswick along Souder Road, Point of Rocks Road, and Petersville Road.

To facilitate a Bike Path, it would be necessary to also include rest stops and locations to stow/park bicycles. This would be beneficial at the Train Station and possibly other historic locations in the City limits. The monies used to construct these facilities would be solicited from grant sources.

Transportation Goals, Objectives and Policies

Goals:

- Review the street system to allow for recommendations to improve circulation and safety within the City.
- Evaluate alternative forms of transportation.
- Provide adequate buffering and/or landscaping along Arterial roads to minimize noise and visual impacts on adjoining development as new development occurs.
- Improve accessibility and circulation in the Downtown Commercial Core.
- Evaluate Parking for the Downtown Commercial Core.

Objectives:

- Amend the Design Manual to accommodate changes to road systems within the City limits.
- Coordinate with other municipalities and the County to find alternative forms of transportation.
- Use the Capital Improvements Program to establish a routine Inspection and Maintenance Schedule for Streets and Alleys.
- Conduct a Parking Garage Study to determine the ability for the City to provide parking in the Downtown Commercial Core. This study will also look at other parking related issues in the City, and primarily focus on alleviating any problems that may exist.
- Undertake a traffic study to assess the condition of roads and prioritize improvements that are needed. Also the downtown should be studied for the parking needs that are now occurring and will continue with future growth.
- Undertake a study of the Downtown Commercial Core to improve its accessibility and circulation pattern. Included in the study will be an assessment of street intersections as to their need for improvements.
- Create alternative transportation areas, such as bike paths or trails to accommodate transportation that is more environmentally friendly.
- Coordinate with County for inclusion of Bus Shuttle System into the Frederick County Transportation Development Plan.

Policies:

- Coordinate transportation planning with the County and State when County and State roads are involved.
- Refer to SHA's Scenic Byway Design Guidelines whenever any type of road improvement occurs along the C&O Canal Scenic Byway.
- Work with developers to establish a Bus Shuttle System.
- Work with Federal, State, and County agencies for grant opportunities to expand and facilitate additional features for a Bike Path System in Brunswick.