



CHAPTER 7: TRANSPORTATION

GOALS

As previously detailed in Chapter 2, Union Bridge has set forth the following goals:

- To mitigate impacts and hazards of heavy industrial traffic on the main streets
- To improve the safety, efficiency and options for all modes of transportation within the community's existing and future transportation network to the maximum extent feasible
- To provide bicycle/pedestrian links between neighborhoods and destinations within the community
- To promote alternative transportation options within the existing and future transportation network to the maximum extent feasible and safe

CURRENT CONDITIONS

1 Summary of Existing State, County & Local Roads

A ROADS

STATE ROADS

MD 75 (Green Valley Road) is a two-lane, undivided highway that intersects both east and southwest of the Union Bridge town limits. Its 44-foot cross section allows for two 12-foot lanes and 12-foot stabilized shoulders, except on the bridge over Little Pipe Creek where the shoulders narrow to five feet. This is the principal route connecting Union Bridge to New Windsor and MD 31 to the southeast, and New Market and I-70 to the southwest. The posted speed limit is 55 miles per hour. MD 75 had a 2005 average daily traffic (ADT) of 4,275 vehicles per day at the Little Pipe Creek Bridge and 1,975 vehicles per day at the Frederick County line. MD 75 is classified as a rural major collector by the State of Maryland.

Within the incorporated Union Bridge town limits, Main Street south (MD 75) has a 28-foot cross section permitting two 12-foot marked travel lanes with curb and sidewalk on both sides. In places within the historic core of the town, the sidewalk is only three feet wide (less than current Americans with Disabilities standards) due to encroachment by porches. Sidewalks along Main Street were improved and connected to destinations with the Main Street Revitalization efforts completed in 2004.

Main Street and Broadway is the only signalized intersection. The signal is a simple pre-timed, two-phase operation with pedestrian actuation. The speed limit on Main Street is reduced to 30 miles per hour within



the town limits. This portion of Main Street continues the major collector classification. The entire roadway is also designated as a scenic byway by the State of Maryland.

COUNTY AND LOCAL ROADS

Bark Hill Road is a two-lane, undivided rural highway with a 22-foot cross section providing two 11-foot travel lanes with no stabilized shoulder area. Bark Hill Road provides the northeast extension of Union Bridge Road running from the Union Bridge - Main Street intersection in town, to Middleburg Road - Uniontown Road. This provides a connection to Uniontown and ultimately to Westminster to the east. The posted speed limit on Bark Hill Road is 40 miles per hour. Bark Hill Road has a 2001 ADT of 1,480 vehicles per day just east of Union Bridge Road. This increases to 2,289 vehicles per day south of Middleburg Road. Bark Hill Road is classified as a major collector by Carroll County.

Union Bridge Road runs north as the extension of Main Street. It has a cross section within the town limits of 22-feet, providing two 11-foot travel lanes with no shoulder. The posted speed limit is 25 miles per hour. There are no curbs, gutters, or sidewalks. Outside of the corporate limits, the 22-foot cross section continues with two 11-foot lanes with no stabilized shoulder area, and the speed limit increases to 40 miles per hour. Significant vertical and horizontal curves affecting traffic speed and flow were noted. Union Bridge Road is classified as a major collector by Carroll County. It has a 2001 ADT of 2,526 vehicles per day south of Bark Hill Road in the vicinity of the town limits. This volume declines to 872 vehicles per day north of Main Road.

Broadway, which runs east and west, is a combination business and residential street. The intersection of Broadway with Main Street is the principal business intersection in the community and the only signalized location in Union Bridge. The signal has a two-phase operation. Broadway has a 35-foot cross section providing two travel lanes with parking on both sides. Curbs and sidewalks are provided on both sides. Sidewalk condition varies

What does Functional Classification Mean?

Roads in Carroll County are classified based on the objective to develop a functional classification system that is tailored to Carroll County's road networks, comprehensive in nature, and compatible with the MD State Highway Administration's (SHA) arterial matrix and Federal Highway Administration's (FHWA) guidelines.

Carroll County's Rural Functional Classification Criteria consists of the following six functional classes: principal arterials, intermediate arterials, minor arterials, major collectors, minor collectors, and local roads.

Principal Arterial – A principal arterial links large population or employment centers. Principal arterials can range from expressways to two-lane roadways. They are inter-county or interstate oriented and indicative of long travel lengths.

Intermediate Arterial – An intermediate arterial supplements the principal arterial system. Intermediate arterials provide service to trips of a moderate length while distributing travel to smaller geographic areas than those served by principal arterials.

Minor Arterial – Minor arterial roadways provide a lower level of mobility while placing more of an emphasis on land access than the other arterial classifications. These roadways typically provide a link to the collector roadway system and connect small population centers to the overall arterial system.

Major Collector – A major collector provides service for both land access and movement within residential, commercial, industrial, or agricultural areas. They are the links from the land uses to the arterials. Major collector roads provide service to areas not on an arterial route and to other important traffic generators such as schools, parks, etc.



from good to poor. Broadway is classified as a local street. No ADT figures are available.

Bucher John Road is an extension of West Locust Street outside of the Union Bridge corporate limits. Bucher John Road has a 22-foot cross section providing two 11-foot travel lanes with no stabilized shoulder area. Bucher John Road is classified by Carroll County as a local road, with a 2006 ADT varying from 575 vehicles per day south of Main Road to 1,248 vehicles per day south of Good Intent Road. The posted speed limit is 35 miles per hour.

Locust Street intersects Main Street (MD 75) dividing Locust into east and west segments. West Locust Street provides access to the fire hall. West Locust Street has a 20-foot paved cross section with curb and sidewalk on one side. West Locust is classified as a local street, and parking is restricted. East Locust Street has a 24-foot paved cross section with no stabilized shoulders or sidewalks. No ADT figures are available. East Locust is classified as a local street.

Main Road connects Bucher John Road to Union Bridge Road. This rural road has a 20-foot cross section providing two ten-foot travel lanes with no stabilized shoulders. East of Bucher John Road, Main Road has a 2006 ADT of 125 vehicles per day east of Bucher John Road. Main Road is classified as a local road by Carroll County with a posted speed limit is 35 miles per hour.

Main Street to the south is the extension of MD 75. To the north, Main Street is a residential street with two 11-foot travel lanes, and grass shoulder areas. Sidewalks exist on the west side of the road from Elmer Wolfe Elementary School south to the railroad tracks, at which point sidewalks exist on both sides of the road to just before the southern Town limit. This section serves the elementary school and connects to Union Bridge and Bark Hill Roads. The posted speed limit is 25 miles per hour. No ADT numbers are available for this section. This section of Main Street is classified as a local street.

Quaker Hill Road is an extension of East Locust Street. It has a 22-foot paved cross section providing two 11-foot travel lanes with no stabilized shoulder area. It is classified as a local street with a 2006 ADT of 708 vehicles per day north of Shepherd's Mill Road. Quaker Hill Road has a posted speed limit of 40 miles per hour. Approximately eight percent of the daily traffic is attributed to heavy trucks.

Shepherd's Mill Road links MD 75 with Quaker Hill Road running a distance of 1.06 miles. It was constructed in 2003 and placed into service in January 2004 to serve as the primary route for truck traffic into and leaving the Lehigh Cement plant. A parallel rail spur was constructed to reroute rail cars into the plant this way as well. The road also serves as a second point of access into Town in the event that the Main Street bridge over Little Pipe Creek is flooded. Eventually, it also will serve the industrial area that borders it once that land is developed. This rural roadway has a 32-foot cross section providing two twelve-foot travel lanes with four-foot shoulders. ADT's taken in 2006 showed 1,083 vehicles per day at MD 75 and 846 at Ladiesburg Road. Shepherd's Mill Road is classified as a rural minor collector by Carroll County with a posted speed limit of 40 miles per hour.

SCENIC BYWAYS

The Old Main Streets State Scenic Byway passes through Union Bridge, following MD 75 from the county line in the south, through town along Main Street, then east towards New Windsor. The Maryland State Highway Administration partnered with Carroll County to designate the Old Main Streets Scenic Byway in 1999. It is virtually the only State Scenic Byway in the county, and as such is worthy of strategies that



encourage sensitivity when making decisions concerning the visual quality, historic resources and community character surrounding and in the vicinity of this resource.

It should be noted that the scenic byway designation is non-regulatory and has no funding associated with it at this time. The Town could benefit from the designation simply by virtue of the fact that visitors following the route may pass through and/or stop in town. However, many of the economic benefits that can accrue to towns located along scenic byways are only applicable once the jurisdictions located along the byway have written a corridor management plan and put in place certain oversight mechanisms. Should the Town decide to partner with the other jurisdictions along the byway to draft and adopt a corridor management plan, it could create opportunities for economic development, heritage tourism, or other revitalization efforts that are based on heritage and scenic resources.

2 Inventory of Pedestrian & Bicycle Facilities & Services

Within the corporate limits of the Town, sidewalk facilities are limited to Main Street and several side streets. Sidewalks are located on both sides of Main Street and are in good repair. Sidewalks are available through the business and residential areas east and west of Main Street from Farquhar to Whyte Streets; however, it is often limited to either the right or left side of the street. These side-street sidewalks are constructed of concrete, asphalt, or bricks, and many are in need of repair and the installation of handicap ramps. An inventory of the presence and condition of sidewalks in the downtown was conducted in 2004. The resulting 2005 Sidewalk Maintenance Program report recommended a phasing plan for repairing and replacing sidewalks. Currently the Town's plan remains unfunded.

The town has two busy intersections at Main Street and Broadway, and Main and Locust streets. The intersection of Main and Broadway is fully signalized with a clearly-marked pedestrian crosswalk and is handicap accessible. The intersection at Main and Locust streets has delineated pedestrian crosswalks and a flashing traffic signal activated by emergency vehicles.

Although there are no facilities within the study area that promote bicycle travel, the Town of Union Bridge established a walking/fitness trail and bicycle path through the Little Pipe Creek Greenway Park located on the east side of the town. The paved trail is 5-foot wide and approximately 2,500 linear feet in length (see map number 7 "Parks & Local Circulation"). The portion of Route 75 between New Windsor and Union Bridge is designated and marked as a state bicycle route by the State of Maryland.

A proposed greenway would support pedestrian and bicycle travel and follow the Little Pipe Creek stream valley. Little Pipe Creek Trail is a proposed County project that would link Union Bridge and New Windsor along a 3.5 mile trail. The 8 to 10 foot wide trail would parallel existing road rights of way and would provide a non-motorized transportation alternative for area residents.

3 Inventory of Other Transportation Facilities and Services

The following is a description of other transportation facilities and services that serve residents of the study area in some capacity.



A MARYLAND MIDLAND RAILWAY

Based in Union Bridge, the Maryland Midland Railway provides rail freight service to central Carroll and Frederick Counties. Maryland Midland Railway's network consists of a main line running between Highfield in the west to Emory Grove in the east. From these points, the line connects to CSX Railroad lines, providing nationwide linkages. From their Keymar junction just west of Union Bridge, the line also can provide connections south to Woodsboro and north Taneytown.

Union Bridge is Maryland Midland's headquarters, primary yard and repair facilities. As of October 2007, 5,000 tons of material are transported daily.

B PARK & RIDE LOTS

Park and ride lots are intended for commuters who transfer from their own vehicles to alternative means of getting to work: carpools, vanpools, etc. There are seven park and ride lots located in Carroll County. Six of the facilities are state owned; the seventh, near Sandymount Park, is owned by the County. None are accessible to commuters from Town or GA since all are located in the southern and eastern portions of the county. The Warehime Municipal Lot functions as a de facto park and ride location, providing approximately 20 parking spaces with a 72-hour limit.

C RIDESHARING OPPORTUNITIES

The Maryland Mass Transit Administration (MTA) has developed a free ride-matching service. This program has been designed to assist residents and employees with their commute to and from work by offering alternatives to driving alone. Currently, the primary focus is being placed on car pooling and van pooling.

D LOCAL TRANSIT OPPORTUNITIES

The Carroll Transit System began in 1972 as the Carroll County Senior Overland Service and was started by the Carroll County Bureau of Aging. In 1988 Carroll Transit became a private, non-profit corporation with a primary mission of providing reliable, efficient, and safe, transportation to older adults, persons with disabilities, economically disadvantaged, and transportation dependent citizens of Carroll County. In January 2003, the trade name was changed to Carroll Area Transit System (CATS). The name change was made to reflect its broader mission to provide services to the general public. The name change improved public perception and vehicle recognition, public awareness, and increased marketing opportunities. The public response has far exceeded expectations, with many positive comments and an increase in businesses purchasing advertising space on fleet vehicles.

The system operates Monday through Friday from 7 a.m. to 5 p.m. on a demand-response system. Sunday service is provided in the Westminster area on a limited basis for individuals needing transportation to churches in the Westminster area. Persons requiring transportation are requested to call 24 hours in advance to schedule their rides. Riders will normally share a vehicle with other passengers coming from the same general area, going in the same direction. Every attempt is made to accommodate passengers calling for same-day pick-up.



Transportation is provided to all five Carroll County Senior Centers and the Westminster Supper Club. The demand-response transportation is available to seniors and our disabled population on a primary-service basis and to the general population on a space-available basis. Demand-response service provides door-to-door service for all passengers. This agency provides coordinated service to and for 13 service agencies and 12 service providers in Carroll County.

E LOCAL PARATRANSIT OPPORTUNITIES

Locally paratransit services are provided by Butler Mobility for specialized transit services and also by CATS which has 18 lift equipped vehicles providing 37 wheelchair positions. The service currently provides transportation to medical appointments for nursing home residents and serves two dialysis clinics, one in Carroll County and one in Baltimore County. The fare for individuals going to a dialysis center is reduced. At least one vehicle goes into Baltimore City everyday, transporting passengers to hospitals and medical facilities. Transportation is also provided for the impaired to physical therapy and counseling facilities such as the YMCA, Health Department and various clinics, and educational and training facilities such as McDaniel College and Carroll Community College. Business Employment Resource Center (BERC) clients are picked up at their home, transported to daycare facilities (if necessary) and then to the training or job site. At the end of the day, this process is reversed. Paratransit services transport many individuals to and from their place of employment allowing them to become productive citizens of Carroll County.

4 Planned Major Streets within the 1990 Union Bridge and Environs Community Comprehensive Plan

Planned major streets are proposed in order to provide access, redundancy, and logical connections between developed and/or geographic areas. Numerous new roadways and roadway connections were proposed within the *1990 Union Bridge and Environs Community Comprehensive Plan*, most notably, Shepherd's Mill Road, which has since been completed. The following is a list of Planned Major Streets contained in the 1990 Plan:

- Proposed Route 77
- Route 77 / Union Bridge Road connection
- MD 75 / Ebert Road connection
- South Main Street / George Street connection
- Bucher John Road relocated

The extension of MD Route 77 has been on the books since April 1977. Continually increasing truck traffic as well as existing and planned residential development will continue to tax the existing road network. Currently westerly routes from Union Bridge are facing sharply increased demand and have not seen any significant improvements or upgrades. Changing conditions since the 1977 analysis should be considered through additional study to develop the most appropriate and viable solution for this corridor.

Some of these proposed roadways, if retained during the update of the plan, will most likely be privately funded through the development of the residential, industrial, and commercial sites on which they are contained.



ANALYSIS OF COMMUNITY NEEDS

Road improvement needs, pedestrian and bicycle needs, transit, and rideshare are aspects of transportation contributing to the overall network to be evaluated. To analyze these needs for transportation, several things were considered, including community survey and workshop results, current levels of service on roadways, existing conditions for services, and needs for improved safety and/or hazard mitigation.

Heavy tractor-trailer trucks regularly use the main streets of town and up until fall 2007 railcars traveled the length of Farquhar Street to move materials to and from the Lehigh Cement plant. Removing this heavy industrial traffic from the town's main streets would be a benefit to the health, safety, and quality of life for the residents of the town.

Most of the existing road structures are in good physical condition with adequate roadway capacity. While the roads through the study area have not been cited as problematic in terms of vehicular accidents, vehicles traveling in excess of the posted speed limit create safety concerns for residents along these roads. Therefore, the potential traffic impact of the proposed new residential developments creates concern.

The overall amount of truck traffic in the downtown area and on roadways not specifically designed for it also remains an issue. Some major roadways throughout the study area have actually seen a slight decrease in the overall vehicle trips generated within the past five years, an indication that the completion of Shepherd's Mill Road in January 2004, which carries between 846 and 1,083 trips per day, has had an impact on the overall roadway network. The addition of other commercial trucking and equipment operations at the north end of Main Street continues to modify truck traffic patterns throughout the community.

All of the proposed new roads and road relocations contained in the 1990 plan sought to create a road network with multiple routes in, around and through town. Based on areas of proposed residential and industrial development, these connector roads, once constructed, will ease the traffic burden on the town's principal artery, Main Street. They remain an essential part of the successful implementation of the Union Bridge Community Comprehensive Plan.

The pedestrian network in the Town of Union Bridge is inconsistent. Some areas are well-served by sidewalks that are in good condition, while other areas have no sidewalk connections, have sections that do not meet contemporary accessibility codes or have sidewalks that are in poor condition. Most notably, there are no sidewalks that extend north of Elmer Wolf Elementary School and no sidewalks that connect the town with the Community Center. Additionally, many existing sidewalks do not have handicap accessibility ramps. The *2005 Sidewalk Maintenance Program Report* identified problem areas in the town and recommended ways to address them.

At present, there are no facilities within the study area that promote safe bicycle travel. When surveyed, residents felt that a pedestrian and bicycle path was the most needed recreational facility for the study area.

Carroll Area Transit System (CATS) is the only transit system available and utilized in the study area. According to the community survey, a large portion of the residents commute to work outside of Carroll County. With no alternative transportation options, commuters and residents are faced with increased peak-hour traffic on MD 75, which is the only main road through Union Bridge. There are no designated park-and-ride facilities existing for ridesharing in the Union Bridge area.



RECOMMENDED ACTIONS

- 1 *Work with Lehigh, Maryland Midland and the County to continue work towards eliminating rail service on Farquhar Street and routing truck traffic to the appropriate roadways*

The new rail line that runs parallel to Shepherd's Mill Road and serves Lehigh, is now fully operational. This has eliminated the need for rail service on Farquhar Street as of fall 2007. The rehabilitation and reconstruction of Farquhar Street is slated to begin in spring 2008. Given the construction of Shepherd's Mill Road and its apparent effect on local traffic patterns, additional strategic connections should be explored to the north, south, and west of the Town in order to relieve any remaining roadways that are not adequately equipped to handle such traffic.

- 2 *Investigate and employ traffic calming options and determine where they may be applicable*

As neighborhoods grow, and as local traffic volume and speeds increase, it can be assumed that the Town of Union Bridge will be approached to implement some traffic control devices. Toward that end, it is recommended that a policy for selecting areas appropriate for traffic calming be proposed. Included in that policy should be some recognition of the types of traffic calming to be allowed in the Town.

- 3 *Ensure that recommendations from traffic studies are implemented as conditions for approval in the subdivision and site plan process*

Along with public water, sewer, schools, and emergency services, the impact development has on the overall roadway network should also be of paramount concern. Mitigation, either minimizing the impact or even improving the traffic conditions as a result of development, is the top priority when determining the scope of a traffic study. These studies generally examine horizontal and vertical alignment, speeds, lane widths, condition of paving, average daily trips (ADT), peak trips, and any other criteria deemed necessary. Traffic studies should be required for any major subdivision or site plan and the subsequent outcomes from those studies should be tied to the approval process.

- 4 *Address planned major streets to ensure that current and future conditions are included in planning assessments*

Among the needed improvements to the community road network are improved access route, particularly for truck traffic to the west and north. Currently, Union Bridge Road and Route 75 are the primary conduits, each providing significant limitations as a major truck route. Anticipated residential growth will continue to increase the challenges and existing conflicts. While the proposed alignment of Route 77 may likely need to be revisited, the need for improved traffic flow remains. The Town should re-open the dialog with the County and State to begin updating the needed studies and planning to develop a viable plan for Route 77 Extended to include all of the current and anticipated changes in the Union Bridge growth area.



This will require getting the RT 77 Extended proposal onto the transportation priorities list, a status that the town will have to advocate for with the County and the State. This process will also provide extensive opportunities for all community stakeholders to be involved in the planning discussions.

5 Seek funding to implement the recommendations contained in the 2005 Sidewalk Maintenance Program report

Sidewalks connecting residential areas to commercial areas and downtown are important to the overall connectivity of a community. Areas where sidewalks could be improved or constructed to help provide access for pedestrians to these locations are identified in the *2005 Sidewalk Maintenance Program for the Town of Union Bridge*. This report identifies the overall scope of the program as well as segments throughout the Town where sidewalks do not exist, where sidewalks are in deteriorating condition and need to be replaced, where slopes or high banks exist, where additional easements may be needed, and where certain replacement materials (i.e. concrete, brick) should be used. Upgrading of the sidewalk network would provide a more usable alternate means of travel within the downtown area and could also help to reduce traffic congestion. Concurrent with this plan, the Town has already begun exploring funding options available through Safe Routes to Schools grant programs, sidewalk retrofit monies, and other community reinvestment programs aligned with “healthy communities” and “aging in place” initiatives.

6 Consider the impact of roadway improvements and adjacent development in the vicinity of State Scenic Byways

The Old Main Streets State Scenic Byway is virtually the only State scenic byway in the county. It is worthy of strategies that encourage sensitivity when making decisions concerning the visual quality surrounding this resources. SHA’s *Scenic Byway CSS Guidelines* should be consulted whenever any type of roadway improvement occurs along the byway. Additionally, because of the quality and quantity of historic and scenic resources throughout the community, utilizing these guidelines when reviewing transportation projects adjoining the Scenic Byway areas will serve to help realize other plan goals relative to preserving community and historic character.

7 Address the need for bicycle and pedestrian facilities

Consideration should be given to revising the Town’s site plan and subdivision regulations to also place an emphasis on bicycle and pedestrian facilities in new developments and exploring ways to retrofit these facilities into the existing built environment. The pedestrian element of the *2005 Land Preservation, Parks & Recreation Plan* also involves the connection, on a larger scale, via sidewalks, alleys and trails, of points of interest and destinations in and around the GA. The goal of a bicycle/pedestrian trail system is to improve circulation while giving local citizens the opportunity to enjoy local amenities and conveniences without having to drive their automobiles.



FISCAL IMPLICATIONS & ANTICIPATED CIP PROJECTS

The recommendations contained in this plan may be policy-oriented or action-oriented, and their implementation may be the responsibility of the Town, the County, other public agencies, private landowners and developers, or a combination of these. This section is designed to identify the potential fiscal impacts to the Town and/or County of each of the recommendations. There could be “No Fiscal Impact,” meaning the Town or County would not incur direct or predictable expenses as a result of implementing the recommendation, an “Undetermined Impact,” meaning there likely would be a cost associated with implementing the recommendation but that cost can not be determined at this time for various reasons, or a “Fiscal Impact,” which likely would be incurred by the Town or County if the recommendation were implemented. For recommendations that have an identified fiscal impact, the cost of implementing that recommendation is estimated to the best degree possible.

- 1 Work with Lehigh, Maryland Midland and the County to continue work towards eliminating rail service on Farquhar Street and routing truck traffic to the appropriate roadways*

Undetermined Impact: The majority of the costs associated with the rehabilitation and repair of Farquhar Street will be the responsibility of the County and Maryland Department of Transportation. The County also performed the engineering work. The County’s share of the costs total \$155,000. The State of Maryland is providing \$166,000 in the form of a grant. The Town and/or residents may have costs associated with the replacement of water and sewer mains or individual service lateral connections. Further information will be required to finalize these costs.

- 2 Investigate and employ traffic calming options and determine where they may be applicable*

No Fiscal Impact

- 3 Ensure that recommendations from traffic studies are implemented as conditions for approval in the subdivision and site plan process*

No Fiscal Impact

- 4 Address planned major streets to ensure that current and future conditions are included in planning assessments*

Fiscal Note: There are three planned roadway projects contained in the Union Bridge & Environs Community Comprehensive Plan. The first two would have “No Fiscal Impact” and the third would have an “Undetermined Impact”:

- The unnamed connector road running between Union Bridge Road and the future Route 77 Extended, which will be a developer-funded road included and /or completed with the development of the Bowman and Clemson-Wilson properties;
- The unnamed connector road between South Main Street and George Street, which also would be a developer-funded road constructed during the development of the affected parcels;



- The re-analysis, design, engineering and construction of the proposed Route 77 Extended. The preliminary study for this roadway is more than 30 years old. However, some of the issues that it was intended to address at that time may remain. Updated studies to assess current conditions and future needs will be required, as well as development of all steps to prepare for and construct the needed roadway improvements. The original analysis called for an approximately 4-mile long roadway, with two 12-foot wide travel lanes with 10-foot wide shoulders and a total right of way width of 100 feet. There were three proposed alignments, each with slightly varying length and land acquisition needs.

Current construction estimates might range from \$5,836,496 to \$6,107,963, exclusive of land acquisition costs. This includes construction of a new 24-foot wide road way at \$246 per linear foot, minimum estimated engineering cost of \$150,000 and a 10% contingency for minor utility relocations and other incidentals. All costs would likely increase if final proposals include significant engineering problems, major intersections or other structures in sensitive areas. Land acquisitions costs would be in addition to these estimates. Based on projections of the various alignments, approximately 50 acres of land would be required and estimates would begin at \$6,250,000 at a typical \$125,000 per acre.

5 Seek funding to implement the recommendations contained in the 2005 Sidewalk Maintenance Program report

Undetermined Impact: There would be time required to research and then prepare applications for possible funding sources available to the Town. Based on estimates, that work would take at least one week's time (40 hours), and may take longer. Currently, those contract services are provided to the Town and would cost approximately \$800 per 40-hour block of time.

Currently, construction costs for priority sections would need to be estimated at approximately \$3 per square foot to remove and dispose of existing sidewalks and \$5 per square foot to construct new sidewalk. In areas where curbing would need to be replaced, current estimates would run \$30 per linear foot to remove existing curbing and replace it with new. The projects may be able to be completed more cost effectively if smaller projects are grouped to create larger sections.

6 Consider the impact of roadway improvements and adjacent development in the vicinity of State Scenic Byways

No Fiscal Impact

7 Address the need for bicycle and pedestrian facilities

Undetermined Impact: The cost to construct trails ranges from \$100,000 per mile for a 6 foot-wide trail located on parkland to \$500,000 per mile (including acquisition, construction, and shoulder widening) for an 8 to 10 foot-wide trail located alongside a road. Because the trails in this plan could be constructed in whole or in part by developers, the State Highway Administration and/or the County, it is difficult to determine the

UNION BRIDGE COMMUNITY COMPREHENSIVE PLAN



direct fiscal impact that implementing this recommendation would have on the Town and/or the County.

Fiscal Note: The Little Pipe Creek Trail is estimated to cost \$2,194,000, including acquisition, design and engineering, and construction.