2008 Cumberland Trails & Bikeway Master Plan

City of Cumberland, Maryland

Adopted by Mayor and City Council of Cumberland as a supplement to the 2004 City of Cumberland Comprehensive Plan
2nd of September 2008

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Thank you to those who submitted comments on the Draft Master Plan, and to those who attended the Public Workshop and Public Hearing.

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Disclaimer: *The figures and maps contained in this plan were created using the City of Cumberland Geographic Information System digital data, but this is a secondary product and has not been verified and is not authorized by the City of Cumberland.*

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EXECUTIVE SUMMARY

The City of Cumberland enjoys a unique position in cycling as the meeting point for the C&O Canal Towpath Trail and the Great Allegheny Passage – Cumberland to Pittsburgh Trail at the Canal Place National Park. Both are successful regional and national trails that draw cyclists to and through the City. This document, the *Cumberland Trails and Bikeway Master Plan* here after referred to as the Plan, is to serve as a companion to the 2004 Comprehensive Plan by focusing on bicycle facility goals. The Plan expands upon the 2004 plans stated bicycle and recreation goals, objectives, and action items, and provides recommendations that further the overall goals and vision of the City of Cumberland as *A City that is an excellent place to live, an enjoyable place to visit, and a supportive place to build a profitable business*, while also helping Cumberland to become a welcoming and inviting city for bicycle users. The Plan is a guide for the creation of a bicycle network that will expand upon the already successful regional trail networks in the city and provide recreation and transportation bicycle facilities for use by local residents and tourists.

The Plan is divided into four main sections:

- Introduction

  This Section provides an overview of the goals and objectives of the Plan, summarizes the Master Plan process, and explains how to use this document.

- Inventory and Analysis

  This Section collects and analyzes information relevant to the goals, objectives, and recommendations of this Plan. This validates that the recommendations of this Plan are consistent with the overall goals for the future vision of the City of Cumberland, recreation and open space objectives, and transportation goals at the city, county, and state level. This helps the Plan to be consistent with other advocate and government organizations enabling bicycle goals to move forward.

- Goals, Objectives, and Guidelines

  This Section provides recommendations and goals for bicycle objectives for the City using the information gathered and analyzed during the previous section. The objectives are; route recommendations of bicycle facilities, bicycle amenities, and measures for promotion and encouragement of safe and responsible bicycle travel for recreation and transportation goals. Standard design guidelines are discussed to facilitate ease of future projects and the implementation process.

- Implementation

  This Section provides probable cost estimates and phasing recommendations that will help to turn goals and objectives into achievement and finished projects. Potential funding mechanisms are outlined to guide the process of short to long term project implementation.

The recommendations of the Plan are categorized into four overall goals for achieving successful bicycle facilities in the City.

- Bicycle Routes

  Establish a bicycle transportation network through the City of Cumberland that links neighborhoods, local and tourist destinations, and provides recreational and transportation opportunities for residents and tourists.

- Bicycle Amenities

  Provide bicycle amenities throughout the City of Cumberland so local residents and tourists are able to easily navigate the City, comfortably and conveniently explore Cumberland businesses and attractions, and recognize Cumberland as a City that welcomes bicycle users.

- Encouragement

  Establish the City of Cumberland as a welcoming and inviting place that; provides safe recreation and alternative transportation bicycling routes, encourages bicycle use, provides incentives for bicycle related events for local residents and tourists, and considers bicycle needs in related City projects.

- Education and Safety

  Create a safe environment for bicycle travel in the City of Cumberland through increased enforcement of traffic laws and continued education and training of cyclists and motorists on safely sharing the road.

SECTION I:

INTRODUCTION

Overview

The Plan was developed with the understanding and desire to achieve three overall project objectives.

1. Provide citizens with improved bicycle access to all neighborhoods and major public facilities and services.
2. Provide citizens with direct bicycle access to the regional trail network.
3. Provide access to major destinations for tourists riding the regional trails.

The Vision for bicycling goals in the City is for Cumberland to be recognized as:

"*Cumberland, Maryland, the most bicycle friendly Victorian Era City in the country."*

The vision statement draws upon the City's historic and cultural attractions capturing the goals and objectives of the Plan to see Cumberland as a bicycle friendly city providing recreational and alternative transportation options that are safe and convenient for local residents and tourists. The vision statement also solidifies the City's vision for 2020 as stated in the 2004 Comprehensive Plan of Cumberland as "A City that is an excellent place to live, an enjoyable place to visit, and a supportive place to build a profitable business."

Master Plan Process

The Master Plan process involved public involvement and coordination with local citizens, cycling advocates and groups, and downtown business interests. There is overwhelming support for the Plan. The Plan was developed through the following stages:

- Project initiation, inventory and analysis
- Public participation workshop
- Draft version of the Master Plan preparation
- Public review and comment period on Draft version of the Plan
- Mayor and City Council of Cumberland conducted a public hearing to seek comments on the Draft version of the Plan
- Continual evolvement and refinement of the Plan recommendations, assessment of Draft review comments, and incorporation of revisions into Final Plan.
- Final Master Plan submission and adoption of the Plan by the Mayor and City Council of Cumberland

Public Workshop

A public participation workshop was held on April 26, 2008 at the Braddock Middle School with 20 attendees. Workshop participants viewed a presentation on the master plan with initial thoughts from the inventory and analysis before breaking into working groups to voice their concerns and ideas with the Plan consultant and City officials. The following is the consensus of concerns discussed during the workshop.

- Most bicycle riders were recreational users, though with increasing gas prices more commuters are anticipated.
- The plan should provide new bike parking at: YMCA, local schools (if bike riding is allowed at the school), commercial / retail areas (grocery store, post office, etc.). Provide bike lockers downtown.
- The plan should provide supporting facilities: welcome signage, public showers / restrooms (downtown), cleaning / minor maintenance stations, and more public parking.
- The plan should provide new camping & hiking with access from the regional trails.
- Cross promotion with mountain bike and ATV recreation users.
- Increase the effort on bike education programs.
- Problem intersection at Baltimore St. regional trail crossing should be addressed.
- The plan should propose Centre and Mechanic St as north-south downtown bike routes.
- The plan should have a potential City Bike Loop, Cumberland Beltway. Downtown to Industrial Blvd to Messick Rd to Williams Rd to Willowbrook Rd to Shades Ln to Naves Cross Rd to Bedford St to Downtown.
- Problem areas identified: Virginia Ave CSX rail bridge crossing, Steep slopes, CSX rail yard, Wineow St, railroad crossings
- Destinations for residents & tourists: Allegany College, Downtown, historic area of Washington St, Post Office, Grocery (retail), Riverside Park, Lover's Leap (Wills Mountain State Park), Mason Sports Complex, Constitution Park
- The plan should eliminate the Valley St crossing of the Great Allegheny Passage.

Public Comment Period and Public Hearing

The Mayor and City Council of Cumberland conducted a public hearing to seek public comments on the Draft version of the Plan on August 12, 2008. The Draft version of the Plan was made available for a 30 day public review and comment period prior to the public hearing. Advertisements were placed in the local newspaper, and copies of the Plan were made available at the Washington Street and South Cumberland libraries and in City Hall for public inspection. Project stakeholders were also contacted by the City Planner by email with a link to an electronic copy of the Plan. All comments received were reviewed by the Plan consultant and the City Planner to determine potential revisions to the Draft Plan.

How to Use this Plan

This Plan contains recommendations for implementation of bicycle improvements throughout the city. The Plan serves as a guide for proposed bicycle improvements and establishing priority levels for those improvements. By prioritizing recommendations, and identifying potential costs and funding sources the Plan guides future coordination, design, and construction of individual projects throughout implementation. Since there are short to long term recommendations, the Plan should be revisited in 8-10 years to determine if an update is needed and to re-assess the status of recommendations.

SECTION II:

INVENTORY AND ANALYSIS

Previous Studies

Previous planning studies were reviewed to identify and assess previous bicycle facility recommendations and validates that the goals and objectives of this Plan are working in conjunction with goals at the county, regional, and state levels.

2004 City of Cumberland Comprehensive Plan Update

The *2004 City of Cumberland Comprehensive Plan Update* contains recommendations for bike access as well as other improvements which may improve bicycle awareness if those aspects are taken into account. Notable Objectives and Action items are listed following this paragraph. The recommendations section of this Plan will address many of these items as well.

> *"Action 3.5.3*
> *Develop distinctive signage and landscaping features at gateway entrances to Cumberland, coordinated with the signage treatment in place in the downtown.*
>
> *Objective 4.5*
> *Promote pedestrian and bicycle travel as alternatives to the automobile and as a recreational activity for visitors and residents.*
>
> *Action 4.5.1*
> *Develop a strategy to target sidewalk improvements based upon condition and role in neighborhood revitalization (see also Action 7.4.2).*
>
> *Action 4.5.2*
> *Evaluate progress made in implementing the pedestrian circulation and linkages recommendations of the Downtown Design and Development Plan. Update the recommendations by identifying and programming pedestrian improvement priorities for the next five years, including improved connections from the downtown to Washington Street and to Cumberland Street as part of the Arts and Cultural District.*
>
> *Action 4.5.3*
> *Support the completion of the Great Allegheny Passage and efforts to develop other regional multi-use trails (e.g., a greenway trail along the Potomac River west of Cumberland as proposed by the Maryland Atlas of Greenways, Water Trails and Green Infrastructure.*
>
> *Action 4.5.4*
> *As part of Action 4.5.3, establish clearly demarcated access from the terminus of the Great Allegheny Passage across Baltimore Street to Canal Place and along Baltimore Street to the downtown mall. Provide bicycle parking facilities and signage to orient bikers to the City.*
>
> *Action 4.5.5*
> *Establish designated bikeways or bicycle compatible roadways where feasible as part of street reconstruction projects.*

Action 4.5.6
Where feasible, improve the compatibility of streets for bicycles by replacing older drainage grates, providing wide curb lanes and/or smooth shoulders, and eliminating roadside hazards."

Cumberland Area Long-Range Transportation Plan (September 28, 2005)

The *Cumberland Area Long-Range Transportation Plan (September 28, 2005)* documents long range transportation objectives and projects through the year 2030 for the Cumberland area. A few noteworthy recommendations involve bicycle and trail access or the potential to improve bike access. In addition capital improvement projects noted in the Constrained Long-Range Plan (CLRP) should take into account provisions for on-road bicycle facilities because these noted improvement locations are generally areas with traffic problems that also impede bicycle use under the current conditions.

Chapter 3, Trail System Plan, highlights the desire to further enhance recreational trail opportunities in greenway areas as highlighted in the Alleghany County Open Space Plan.

City of Cumberland Streets Department

"Of the $14.1 million programmed between 2005 and 2007, approximately 52 percent is dedicated to system preservation and maintenance projects and 48 percent is dedicated to capital expansion and improvements, most of which is related to the Rolling Mill Access Improvements. During this period, there was no annual growth in the expenditures for roads in the City, and no annual change in the revenue dedicated to the street system. Based on these observations of the current program and the static nature of expenditures and funding, the City of Cumberland is forecast to expend an additional $103.5 million between 2009 and 2030 on its street program, with approximately $53.9 million (52 percent) dedicated to system preservation and maintenance and $49.6 million (48 percent) dedicated to capital expansion and improvement.

For this CLRP, the City of Cumberland submitted four priority long-term capital improvement projects with costs totaling approximately $3.1 million. These constrained projects include:

Baltimore Street and Mechanic Street Roundabout $1,000,000
Bishop Walsh Road, Seton Drive Intersection Improvements $100,000
Baltimore Street Bridge $1,000,000
Baltimore Street/Baltimore Avenue/Front/Park Intersection $1,000,000
Total $3,100,000"

1998 Downtown Design and Development Plan

This plan has many specific recommendations within the "pedestrian circulation and linkages" section. Many of the plan's recommendations have been implemented. The plan does have specific improvement recommendations at the Mechanic St and Baltimore St intersection / Baltimore St Bridge area; including roundabout and increase left turn lane scenarios. The City is currently contemplating an update of the Downtown Design and Development Plan within the next year. Any update and traffic improvement recommendations should take into consideration the important pedestrian and bicycle connections that need to occur in this key location. A safe linkage between the Great Allegheny Passage crossing, Baltimore St Pedestrian Mall, Washington St, and to Riverside Park needs to be considered within any plan update. See the *Recommendations* area in Section III of this Plan for further discussion.

Community Legacy Five Year Plan of Action (FY08-FY13) – Updated 2007

This plan links together diverse planning documents to provide an "overall comprehensive vision and approach to community revitalization" and promote the 2004 Comprehensive Plan's vision of Cumberland as *A City that is an excellent place to live, an enjoyable place to visit, and a supportive place to build a profitable business.* There are a number of stated visions for the City which addresses bicycle related improvements. The Access Strategy Vision includes;

10. Pedestrian/Biking Enhancements - Provide improvements to the pedestrian and biking facilities throughout the city, including ADA accessible routes, bike trails and amenities, and other recommended actions

The Economic Development Vision includes;

21. Tourism - Continue to build Cumberland as a center for visitation to and within the region based upon cultural/heritage tourism, outdoor recreation, and special attractions and events

Allegany County – Local Land Preservation, Parks and Recreation Plan – March 2006

This plan highlights the parks and recreation components of the Alleghany County Open Space Plan. There are two specific recommendations in the plan that are trail type facilities occurring within the City limits.

Chapter III.A.1.c.

"The County will work with the City of Cumberland to acquire and develop a tourist-oriented park in the Narrows that would be tied directly to the Canal Place development project and would also serve to protect the scenic overlook and the floor of the gap. Although this project has remained dormant since the late 1990's, it remains a goal of the County's Comprehensive Plan and is listed as Objectives 3.3 and 3.4 of the City of Cumberland's Comprehensive Plan."

Chapter III.A.1.f.

"The County and the City of Cumberland have been urged by local archaeological groups to acquire a surviving portion of Braddock's Trail, dating from the French and Indian War. While mostly located within the City, a convenient access point atop Haystack Mountain is within County jurisdiction."

Maryland Department of Transportation – Twenty Year Bicycle & Pedestrian Access Master Plan - October 2002: Technical Appendix: Bicycle and Pedestrian Needs Inventory

District 6: Needed Locations for Bicycle and Pedestrian Improvements.

As part of the state Bicycle & Pedestrian Master Plan a technical appendix with an inventory and analysis of state roads for pedestrian and bicycle needs was prepared. A review of this section indicates bicycle facility improvement needs for numerous state roads in the City of Cumberland area. Facilities were evaluated using the Bicycle Level of Comfort (BLOC) model which provides a grading system (A-F, with A being best and F worst) for rating bicycle riding conditions on each roadway segment. The report classified roadways as Tier 1 or 2 Maryland State Highway Bicycle Improvement Needs, with Tier 1 having the greatest need.

Tier 1
Alt. US 40 from N. Mechanic St to I-68
(Henderson Ave to Baltimore Ave to Exit 44 (Willow Brook Rd)
1.86 Miles BLOC = E Area in a Priority Funding Area

Tier 2
MD 51 from downtown (exit 43) to W. Old Town Rd
(Industrial Blvd to W. Old Town Road)
0.47 Miles BLOC = F Area in a Priority Funding Area

Peer Review

A peer review of comparable cities was conducted as part of the inventory and analysis portion of the Plan. The peer review was a suggestion from multiple participants at the public workshop. The Cumberland City Planner determined a list of six suggested peer review cities. To insure that cities selected had already achieved a level of success with bicycle facilities, only cities which are designated as bicycle friendly communities were considered. The remaining criterion for peer city selection was the presence of key characteristics similar to Cumberland. The selection criteria are as follows:

1. Bicycle Friendly Community designation from the League of American Bicyclists.
2. Similar in size and population.
3. Similar steep topographic constraints within the city.
4. Similar economic constraints.

The bicycle network planning documents and city websites were reviewed for each of the peer review cities. The level of implementation varied throughout the cities. Due to the nature of the peer review many of the noted key items are recommendations which may not be constructed. Throughout the peer review it became clear that there is a great deal of overlap in successful bicycle facilities throughout cities due to industry standards, and cities, like Cumberland, looking at proven measures for success to guide in their process. The summary contains items which have the highest degree of relevance as potential recommendations for the City of Cumberland. The summary items are grouped within categories similar to the recommendation categories of this Plan. The sources for the peer review summary items are city municipal websites and the cited city planning document listed under the *Plan* heading.

Auburn, Alabama

Plan

- Auburn 2020. Imaging a Better Community. Auburn Bicycle Plan – 5/5/1998
- Prepared by City Bicycle Task Force.

Bicycle Facilities, Design Standards & Recommendations

- Recommended routes according to AASHTO Standards. Street by Street recommendations not part of their plan, encouraged to occur during design work
- Route maintenance, inspection, and cleaning of bicycle routes
- Provide bike racks throughout the city
- Sponsor bicycle events; bicycle rodeos, bike races
- CSX rail tracks through town with crossings
- Several Major Highways through town
- Joint bike lane, and bike path projects between the City of Auburn and Auburn University
- Provide provisions for bicycle facilities as part of ongoing and future transportation work programs and capital improvement projects
- Include bicycle facilities within City Parks and Recreation projects and as part of the Parks and Recreation capital improvement program
- Published Auburn Bicycle Tours Guide which highlights numerous themed trips with maps, a narrative description of the route highlights, appropriate rider skill level, length, parking locations and destinations along the trip. Guide has advertisements for local business in the back. Routes are on street and on street with bicycle facilities.
- Auburn University has campus bike network

Continued Management, Public Involvement, and Encouragement

- Bicycle Coordinator in place to implement and oversee goals and objectives
- Bicycle Advisory Board with rotating volunteers to work with Coordinator
- Bicycle support staff within the City
- Provides for annual open public meetings allowing continued public comments
- City initiatives to encourage bicycle use as alternative mode of transportation
- 2008 Bike Challenge to encourage bike riding and physical fitness and health improvements.

Education and Enforcement

- Wide distribution of bicycle safety information to the public
- Coordination of bicycle safety public outreach with local bicycle events
- Bicycle safety information as part of high school and college driver education programs
- Work with Local Police Department for education to officers
- Use of accident data for continual improvement of bike facilities
- City Parks and Recreation hold open bicycle traffic safety courses open to all ages as part of the regular program
- WaCaDa campaign with Auburn University to promote safety between pedestrian, bicycle, and vehicular modes of transportation.

Bloomington, Indiana

Plan

- Bicycle and Pedestrian Transportation & Greenways System Plan, March 2008

Bicycle Facilities, Design Standards & Recommendations

- Bike routes have themes which relate to interesting facts about the route to make the route easy to remember for users.
- City has established major cycling events which draw visitors and generates income
- General Design guidelines for bicycle facilities for typical conditions which references Indiana DOT and AASHTO bicycle stand guidelines as well. Guidelines do not provide recommendations for specific suggested routes or situations
- Recommends the use of physically separated multi-use paths where feasible.
- Recommend use of public art to enhance facilities
- Link major destinations
- Establish a bike route / pathway hierarchy
- Greenways along environmental features; streams, rivers, etc.

Continued Management, Public Involvement, and Encouragement

- Incentives for the bicycle commuters
- Develop land acquisition program to identify and purchase property to link key destinations where on-road facilities are not feasible. Develop trails.
- Provide incentives for employers to promote bicycle commuting and provide facilities such as bike parking, showers, changing facilities, lockers, bike to work day etc.
- Sponsorship of routes as a potential funding source
- Promote bicycle related business
- Bicycle & Pedestrian Transportation and Greenways System Coordinator (City Staff)

Education and Enforcement

- Regular educational and awareness programs are conducted
- Collect and analyze accident and crime data, to help in redesign if necessary of high accident areas
- Police patrol on bikes in downtown area
- Regular maintenance sweeping routes
- Encouragement of adopt-a-trail type programs for portions of routes

<u>Brunswick, Maine</u>

Plan

- Brunswick Bicycle & Pedestrian Improvement Plan, Oct. 1998; updated Sept. 2004

Bicycle Facilities, Design Standards & Recommendations

- Brunswick Bicycle and Pedestrian Advisory Committee formed from Town Council appointed citizens with support form City Planning department
- Plan focuses on engineering and planning recommendations while acknowledging importance of education and encouragement actions
- Recommended locations of physical improvements
- Recommendations of standard bike facilities including; shared lane, wide outside lane, paved shoulder, bicycle lane, multi-use path, & traffic calming devices (although no specific traffic recommendations were made just that they should be considered in certain locations)
- Specific Critical areas are outlined requiring additional improvements

Continued Management, Public Involvement, and Encouragement

- Recommendation of a city bicycle & pedestrian coordinator for continued management and coordination

Education and Enforcement

- Production of pamphlets for education events
- Volunteer opportunities
- Continued school zone improvements

Burlington, Vermont

Plan

- Included with the 'Transportation System Plan' section of the Burlington Municipal Development Plan – 2006

Bicycle Facilities, Design Standards & Recommendations

- Revise city wide street classifications
- Access, neighborhood, and design objectives
- Bicycle facilities incorporated with planned major roadway construction projects

Continued Management, Public Involvement, and Encouragement

- Encourages development of an overall transportation system where bicycling (along with other alternative modes) competes with automobile as the prevalent mode of transportation
- Bicycle improvements are integrated with / as a part of overall transportation improvements
- Develop policy and improvements to "focus on the user"
- "Cycle the City theme-loop"
- A community bicycle hazards reporting mechanism

Education and Enforcement

- Further establishment and enforcement of truck routes
- Police officers on bicycle for community patrol

Charlottesville, Virginia

Plan

- Charlottesville Bicycle and Pedestrian Facilities Master Plan – 2003

Bicycle Facilities, Design Standards & Recommendations

- General design guidelines for off-street greenway trails and how to make them accessible
- Land acquisition recommendations for greenway open space at environmentally sensitive areas, floodplains etc.
- General description of design standards and components of various trail types and amenities. A how-to guide.
- Equal emphasis to on-road and off-road trails and routes.

- Bike racks throughout downtown pedestrian mall. Bike lockers as part of parking lots / parking garage downtown.
- Recommendations per street for on-road facility; signage, striping etc.

Continued Management, Public Involvement, and Encouragement

- Recommended immediate installation of a "demonstration project" as public relations to show the possibilities and principles of bicycle facilities in action.
- Recommendations to "maintain the momentum" of the master plan
- Master plan celebration
- Encourage incentives for business to provide bike to work days
- Bicycle events for economic development
- Recommend coordination or management group or individual to continue advocacy of master plan recommendations

Education and Enforcement

- Interpretive historic signage for education and trail enhancement

<u>Chattanooga, Tennessee</u>

Plan

- Chattanooga Urban Area Bicycle Facilities Master Plan – 2002

Bicycle Facilities, Design Standards & Recommendations

- Conducted a peer review
- Existing conditions analysis of potential routes, suitability designation
- A mixed distribution of bicycle facilities to provide opportunities for all skill levels of riders

Continued Management, Public Involvement, and Encouragement

- Encouragement of end facilities bike racks, lockers, and showers.
- Coordinate improvements and recommendations with other City departments
- Training sessions for City staff
- Adult rider advocacy
- Maintain facilities
- Bicycle Advisory Committee at each neighborhood

Education and Enforcement

- Bike police patrol in urban areas
- Youth safety education
- Adult driver education through mailings, pamphlets, etc.

<u>Louisville, Kentucky</u>

Plan

- Bicycle Friendly Louisville Plan - 2005

Bicycle Facilities, Design Standards & Recommendations

- Recommendations and goals grouped into the 5 E's with priority routes

Continued Management, Public Involvement, and Encouragement

- "Bike Louisville" website portion of city website
- Continue to update the in-progress and finished recommendations of the bike plan
- Community cycling events and festivals
- Cycling events and bike to work promotion
- Assessment of achievements

Education and Enforcement

- Ad campaigns and public services announcements to promote education
- Youth bicycle program
- Bicycle handling and new rider programs
- Coordination with law enforcement

Peer Review Summary

The Peer Review identified numerous similarities in cities with successful plans, their plan recommendations, and continued involvement, encouragement and implementation of bicycle facility improvements. The following is a list of key relevant aspects which all, or the majority of, the seven peer review cities share:

- All. On-street improvements are in accordance with standard design guidelines; AASHTO or state transportation guidelines.
- All. Encourage cycling through a variety of methods targeting recreation, tourism, and alternative transportation users.
- All. Emphasize rider education programs to promote safe bike use for all age groups.
- All. None of the cities with pedestrian malls provide a designated bikeway in the mall. Further discussion of this topic is included in *Section III. Recommendations, objective A.20 Baltimore Street Pedestrian Mall.*
- Majority. Have an advisory committee / group or individual (city staff) to continue to promote and oversee bicycle improvements, issues / concerns and plan recommendations.
- Some. Incorporate themes or educational signage with bike routes and amenities to add interest for users.
- Some. Have website or pages associated with the City or Parks and Recreation to promote bike use, bike events, and distribute information.
- Some. Specifically indicate to provide additional routine maintenance, and cleaning of bike routes for increased safety.

Physical Conditions

An assessment of physical conditions of streets, potential routes, and destinations was conducted as part of the Plan. The *Physical Conditions* heading is a summary of noted conditions which may impact bicycle improvements. The summaries and descriptions of this heading are divided into three sections; key destinations, city-wide physical conditions, and neighborhood based physical conditions. The assessment was focused upon investigation of potential key routes which may serve to link neighborhoods and key destinations. Noted road classifications and problem intersections are from the 2004 Comprehensive Plan, figure 9 Transportation Plan.

Key Destinations

Below is a list of significant local and tourist destinations throughout Cumberland. There are other local destinations not listed below which may be addressed later in the Plan. The grouping of destinations below is by general location and is used to identify; potential bicycle facilities improvements that may be able to serve the largest number of riders possible and potential constraints or shared destination opportunities. Figures 1, 2, and 3 show destination locations.

Key	Destination	Address	Users
1	Allegany County Museum (Current Location)	81 Baltimore St	Tourist
2	Saville Gallery (Allegany Arts Council Office)	9 Centre St	Tourist
3	New Embassy Theater	49 Baltimore St	Tourist
4	Windsor Hall	39 Baltimore St	Tourist
5	Downtown Cumberland Information Center	64 Baltimore St	Tourist

- All are located within Baltimore St mall area and could be served by improved and additional bike parking areas throughout the mall. The existing bike racks at Mechanic St, Liberty St, Centre St, and George St could be improved to make them more visible to riders.
- Potential Access from Mechanic St, Centre St, and Queen City Dr / Baltimore Ave

Key	Destination	Address	Users
6	Allegany County Chamber of Commerce	24 Frederick St	Tourist
7	City Hall	57 N. Liberty St	Local
8	Cumberland Public Safety Building	20 Bedford St	Local
9	Cumberland Neighborhood Housing Services	400 N. Mechanic St	Local
10	North Centre Street Playground	510 N. Centre St	Local

- Located within the downtown area.
- Potential for bike parking located within existing parking lots to encourage bike to work opportunities.
- Potential access from Mechanic St, Centre St, and Frederick St, Bedford St.

Key	Destination	Address	Users
11	Allegany County Administrative Building	701 Kelly Rd	Local
12	Riverside YMCA	601 Kelly Rd	Both

- Access limited to along Kelly Rd due to isolation from remainder of neighborhood due to steep topography.

Key	Destination	Address	Users
13	Canal Place	Downtown	Tourist
14	Western MD Scenic Railroad Terminal (Canal Place)	13 Canal St	Tourist
15	Riverside Park (George Washington Headquarters)	40 Greene St	Tourist
16	Zero mile marker National Highway	Greene St	Tourist
17	U.S. District Courthouse (Future Allegany Co. Museum site)	3 Pershing St	Tourist

- These are all destinations where Canal Place serves as the connection hub and provides a current good level of accessibility for pedestrians, and less so for bicycles. Though the bicycle connection could be improved upon and strengthened.
- Bike parking is available at Canal Place
- Bicycle connections from Canal Place to downtown, and the neighborhoods should be strengthened.

Key	Destination	Address	Users
18	Thrasher Carriage Museum	210 S. Centre St	Tourist
19	Amtrak Station	2 Queen City Pavement	Tourist
20	Old YMCA Recreation Center	205 Baltimore Ave	Local

- These are located near the downtown area with potential connection to the Baltimore St mall area is limited to the Baltimore St and Queen City Dr intersection due to existing railroad tracks.

Key	Destination	Address	Users
21	C. William Gilchrist Museum of the Arts	104 Washington St	Tourist
22	Gordon-Roberts House	218 Washington St	Tourist
23	Whiting House Museum	632 Washington St	Tourist
24	Cumberland Theater	103 N. Johnson St	Tourist
25	Washington Street Library	31 Washington St	Local
26	Allegany County Courthouse	30 Washington St	Local
27	Allegany County Board of Education	108 Washington St	Local
28	West Side Elementary School	425 Paca St	Local
29	Allegany High School	616 Sedgewick St	Local

- Steep topography exists in the area, mainly to the north, which makes travel to Whiting House Museum more difficult.

Key	Destination	Address	Users
30	Allegany College Campus	12401 Willowbrook Rd	Local
31	Western MD Health System Hospital (Future campus)	12500 Willowbrook Rd	Local
32	Allegany County Health Department	12501 Willowbrook Rd	Local
33	Tri-State Zoo (at Christie Rd)	10105 Cottage Inn Ln	Both
34	Constitution Park	450 Reservoir Ave	Both

- Road improvements currently under construction along Willowbrook Rd at the entrance to the Western MD Health System Hospital are scheduled to include bicycle facilities.
- Willowbrook Rd is part of a potential Cumberland Bike Loop route.
- There is a potential for a new off road trail at Constitution Park which would provide a connection and link from the park to Willowbrook Rd and neighborhood.
- Tri-State Zoo is isolated from the remainder of the City. There could be a potential for an off road trail route to connect the zoo to the Willowbrook Rd. This would require coordinating with Allegany College and the Cumberland County Club. An on-road route along Country Club Rd could be provided. The property abuts current City limits, but is not within the City boundaries.

Key	Destination	Address	Users
35	Fort Hill High School (Greenway Ave Stadium)	500 Greenway St	Local
36	Washington Middle School	200 N. Massachusetts Ave	Local
37	Constitution Park	450 Reservoir Ave	Both

- North – south routes Greenway Ave and Kentucky Ave are local roads with lower traffic and could provide access to schools through bike route and directional signage.
- It is our understanding that, at this time, each school administration decides whether or not bike riding is allowed at their particular school. At the time of preparation this Plan it is not allowed. If this changes, the potential for additional bike routes linking surrounding neighborhoods to schools should be considered as part of future safe routes to school program.
- Constraints are limited to traffic and on street parking on Williams Rd and Oldtown Rd.

Key	Destination	Address	Users
38	Wills Mountain State Park (Lover's Leap Overlook)	Off Piedmont Ave	Tourist
39	Braddock Middle School	909 Holland St	Local
40	Northeast Elementary School	11001 Forest Ave	Local
41	Carver Community Center	340 Frederick St	Local
42	Jaycee Recreation Area	545 Furnace St	Local

- Valley St provides a connection into the neighborhood as well as connecting to the downtown and to the regional trails at the Valley St bridge.
- Columbia Ave and Fairview Ave provide connections between the destinations and Valley St, and Piedmont Ave and Holland Ave.

Key	Destination	Address	Users
43	Human Resources Development Commission (Future)	125 Virginia Ave	Local
44	South Cumberland Library	100 Seymour St	Local
45	South Penn Elementary School	500 E. Second St	Local

- All are linked by First St (Collector Rd) or Second St (Local Rd)

Key	Destination	Address	Users
46	John Humbird Elementary School	120 E. Mary St	Local
47	C. Eugene Mason Sports Complex	708 Mason Recreation Rd	Local

- Mason Sports complex is connected to the C&O Canal Towpath, easily linking the downtown area as well as the North End and West Side neighborhoods via downtown and the towpath.
- The South End neighborhood, south of Industrial Blvd and the CSX Transportation area, is easily navigable from the local roads.
- The Mason Sports Complex is disconnected via direct bicycle connection from the area north of Industrial Blvd due to the Virginia Ave CSX Bridge and traffic problems there.

Key	Destination	Address	Users
48	Rolling Mills	Park Street	Local

- An approximately ten block section along Park St contains multiple local destinations including; U.S. Post Office, grocery, and other commercial / retail.
- The area is absent of bike racks.
- The area can be accessed from the nearby surrounding residential from by side, local, streets.
- The area is easily accessible from the Baltimore St / downtown area.

Figure 1: Destinations

Figure 2: Destinations

Figure 3: Destinations

City-Wide Physical Conditions

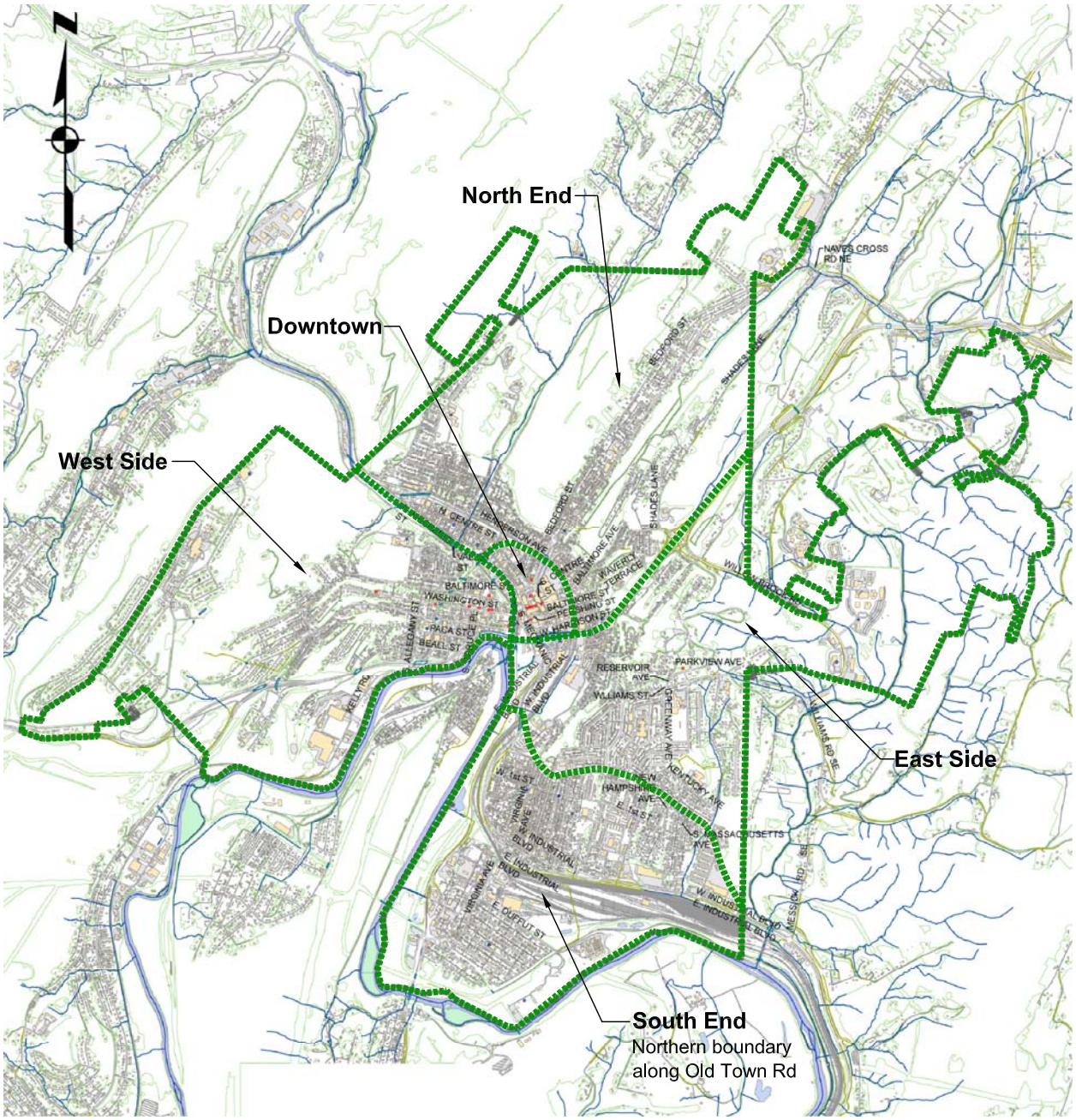
There are a number of general impediments that are city-wide and not neighborhood specific. In general local roads and roads with low volumes of traffic will provide safe bicycle routes without the addition of on-road bicycle facilities. Bicycle travel and accessibility on these roads can be improved through the education and encouragement improvements. Therefore this assessment directed its focus on collector and arterial roads. It should be noted that the City has indicated that replacement of storm drain grates to bicycle friendly grates is now scheduled as a current project and therefore is not noted in the physical conditions. Grate replacement is recommended throughout the downtown area and along recommended bike routes at a minimum, for any areas that may not have been included in the aforementioned project.

- Steep slopes make numerous areas potentially difficult to navigate by bicycle, although the downtown area, and south end neighborhood (south of the CSX tracks) are flat without major topographic constraints.
- There are many narrow streets having constraints for which street widening would result in unwanted impacts affecting community quality of life, regardless of available public right of way.
    - Many streets have buildings and sidewalks adjacent to the road that would prohibit street widening without adversely impacting sidewalk width and pedestrian access
    - Many streets with adjacent steep slopes that may make widening cost prohibitive due to grading and/or impacts to existing or the need for new retaining walls.
    - Many streets in residential areas have mature street trees that for any widening would need to be removed which would have negative impacts to neighborhood quality and character
    - Some two-way streets have sufficient existing width to provide one bike lane and serve as a one way bike route. They may also function as, two-way shared lane or signed bike routes without designated bike lanes.

Neighborhood Based Physical Conditions

See figure 4 for neighborhood boundaries for the purposes of the descriptions which follow.

Figure 4: Neighborhoods



Downtown

The downtown area contains the majority of the key destinations. Bicycle navigation through the downtown is currently difficult due to traffic, parking locations, system of one way streets, and truck traffic.

Bicycle Parking

- There is scattered bike parking in the downtown, primarily Baltimore St mall area. There are also a range of styles with no consistent standard.
- Visibility of the racks is an issue in many of the placements creating concern for riders to locate bike racks from a distance and potential frustration for tourists or new riders unfamiliar with the area.
- The majority of locations contain only one rack which may be insufficient.
- Bike racks are located in the Canal Place area as well. There may be a potential for bike lockers here if there is sufficient demand.

Mechanic St. and Centre St. - main north-south, one way routes

- Both streets provide sporadic on street parallel parking throughout their lengths. Parking occurs in random rotations on both sides of the streets. This has the potential to confuse bike or provide an unsafe condition for riders as traffic shifts.
- Some areas may require widening if a bike lane were to be added.
- Sufficient road paving width exists for one parallel parking, one bike lane and one travel lane throughout the majority of the route.
- Designated turning lanes are present at most intersections.
- Centre St from Pershing St to Harrison St has on street angled parking on both sides which would cause unsafe conditions for bike lanes.

Queen City Dr

- The truck traffic route, though designated to Queen City Dr, was noticed to be frequent on Mechanic St. past the Queen City Dr intersection.
- For truck traffic the following should be addressed; turning radii at Queen City Dr intersections, truck route signage, and enforcement of truck route.

East –West Streets

- Since downtown is a long rectangle with impediments on the north (railroad tracks and grade difference) and the south (Wills Creek). East west travel between potential north-south routes should not require signage or lane striping except at key connections to adjacent neighborhoods.

Downtown Bridge Crossings

- Baltimore St.
    - This has strong potential as a bicycle route due to the regional trail crossing, and strong connections to downtown, Canal Place, Washington St. historic district.
    - Traffic improvements listed in Cumberland Area Long-Range Transportation Plan, for the Baltimore Street and Mechanic Street proposed Roundabout, and Baltimore Street Bridge improvements should include bike lanes and consider bike circulation through this key area.
    - A traffic and road assessment, and recommended improvements at the Greene / Washington / and Baltimore Street intersection are included in the 1998 Downtown Design and Development Plan.

    - Many citizens commented that the bike lane crossing for the Great Allegheny Passage on the bridge is dangerous and vehicles do not recognize cyclists.
    - Both sides of the bridge are problem intersections.
    - Traffic for the Right and Left turn lanes on Baltimore St routinely queues on the bridge past the regional trail crossing block the bike route.
    - Removal of parallel parking existing on the bridge on the north-west side could provide additional lane width for potential bike lane striping although replacement of the lost parking spaces should occur if this option were implemented.
- Valley St.
    - Existing at grade trail crossing for the Great Allegheny Passage with pavement striping is a noted safety concern by local citizens. The crossing does provide a potential direct bike connection between downtown and neighborhoods and the regional trails.
    - Bridge has the existing width to support bike lanes.
- Market St.
    - Bridge is steep and narrow and should be avoided as a bike route.
    - Baltimore St and Valley St bridges provide sufficient bike connections to both ends of downtown and the west side neighborhood making a Market St connection redundant.

North End

Downtown connections - Baltimore St and Queen City Dr intersection

- Problem intersection with the convergence of multiple streets on the east side of the railroad tracks.
- This would provide a direct connection to downtown and Baltimore St mall area if a safe bicycle crossing was in place.
- Existing underpass provides a separate safe pedestrian crossing over Queen City Dr and the railroad tracks though not practical for bicyclists due to the stairs.

Shades Ln.

- This was suggested bike route during Public Workshop
- Poor paving conditions, should be re-paved if designated a bike route
- 25 mph posted, open section, collector road
- Narrow with some areas of limited sight distance.

Bedford Rd and Frederick St – one way streets

- Bedford Rd has areas of steep adjacent topography and retaining walls on the west side which would make widening cost prohibitive.
- Provides a direct connection to and from downtown and has the potential for a good commuter route.
- Frederick St has areas of parking on both sides of the streets and rotating between sides of the street.
- Bedford Rd is consistent with one travel lane and parallel parking on east side.
- Intersection confusion at downtown intersection with Centre St

Shriver Ridge and Topographic constraints

- The neighborhood is divided between north and south by Shriver Ridge, the areas between Valley Rd and Bedford St. The area is identified as potential future residential by the 2004 Comprehensive Plan

Alt. US 40 from N. Mechanic St to I-68 Henderson Ave to Baltimore Ave to Exit 44

- Provides a continuous connection throughout the neighborhood, is relatively manageable in terms of topography the steeper areas occurring primarily on Baltimore Ave though topography is not prohibitive to bicycle travel, and the route is listed as a Tier 1 SHA improvement route, which would help in funding of any potential improvements.
- However, numerous impediments other than topography do exist.
    - Storm drain inlet grates are not bicycle friendly
    - Utility poles are located along one or both sides of the road immediately at the back of curb or up to 3' feet from back of curb making road widening for bicycle facilities cost prohibitive
    - On street parallel parking on Baltimore Ave from Henderson Ave to Goethe St
    - Immediately adjacent residential and sidewalks between railroad overpass and past Knox St could adversely impact pedestrian access if widened for bike lanes.
    - Poor paving conditions, especially on Baltimore Ave. Locations that with concrete curb & gutter have areas where bituminous and concrete paving do not meet flush. Area would need re-paving to provide safe bicycle conditions
- Closed section, arterial roadway, state route

West side

- General. The west side neighborhood has some of the steepest topography in the City mostly occurring on local roads, with some exceptions.

- Washington St historic district
    - Wide Street with parallel parking on both sides.
    - Begins to get steeper further from downtown.
    - A key area for bike route primarily geared towards tourists. The frequent traffic and parallel parking on both sides increase the potential for "dooring" accidents if bike lanes were installed, this would probably be compounded by the historic nature of the route and the sightseeing aspect.
    - No bike parking areas are present to encourage further enjoyment of the area on foot.
    - Wide sidewalks provide potential for bike parking areas without limiting pedestrian travel.

- Kelly Rd to Riverside YMCA and Allegany Co Office Complex
    - Storm drain grates should be replaced with bike friendly grates as part of City's scheduled replacements.
    - Considerable amount of rocks and debris exist, should be cleaned on a more regular basis if established as a bike route.
    - Sufficient width for lanes although the volume of traffic may make signage and route identification sufficient.

South End – South of CSX Tracks

- There are low volumes of traffic in this area making it well suited for on-street parking. The low traffic volume also makes the area easily navigable by bicycle.
- The area has good connectivity to the C&O Canal Towpath.
- Roberts St and Candoc Ln Intersection
    - There is a user worn path from the intersection to the C&O Canal Towpath
- Virginia Ave
    - The Virginia Ave CSX bridge is a traffic, pedestrian, and bike problem area. This is the only connection between the south and north side of the south end neighborhood.
    - Three problem intersections; Offutt St, Elder St, and Mary St / River Ave

South End – North of CSX Tracks

- This area is mostly local roads between Industrial Blvd and Oldtown Rd, with the exception of Virginia Ave.
- First St.
    - Three of the key destinations are located along First St.
    - Wide street with parallel parking allowed, though most residences have driveways on the north-south roads. Some areas on 90 degree parking on the south side of the street.

East Side

- General. Area has some steep topography though most area manageable at 10% or less.
- Key neighborhood destinations are in groups; with the two schools being along Greenway Ave and Kentucky Ave, and Constitution Park, Allegany College, and Western Maryland Health system being around the Willowbrook Rd area.
- Oldtown Rd
    - Collector road with three problem intersections.
    - Potential to be widened to provide bike lanes although sidewalks directly at the curb line would increase cost due to sidewalk replacement.
- Maryland Ave
    - Collector road, with parking and sidewalks and building immediately adjacent
- Louisiana Ave
    - Residential collector road, grass strip between road and sidewalk, could be widened for bike lanes.
    - Potential widening could eliminate some mature street trees with would negatively impact neighborhood character
- Williams Rd
    - Segment between Willowbrook Rd and McKenzie Ln is too steep for a bicycle connection from Constitution Park to the Willowbrook Rd destinations.

SECTION III:

GOALS, OBJECTIVES, AND GUIDELINES

Recommendations

The recommended goals and objectives of this Plan have been organized by categories. Four categories have been established to group related improvements and set priorities. Definitions of frequently used terms for bicycle facilities and how they relate to the recommendations is included within the *Design Guidelines* portion of this section of the Plan, following the *Recommendations*. The categories of recommendations are:

A. Bicycle Routes

- On-road bicycle routes
- Multi-use off-road recreational trails
- Additional connections and links between the City and regional trail network.

B. Bicycle Amenities

- Bicycle Parking opportunities
- Bicycle related opportunities
- Bike route signage. Signage is also addressed under *Design Guidelines*

C. Encouragement

- Enhance the City of Cumberland's position as a hub of regional recreational trails.
- Promote bicycle events to capitalize on historic and cultural attractions
- Promote tourism and local businesses to trail riders
- Promote bicycle use to local residents and tourists for recreation activities and as an alternative mode of transportation

D. Education and Safety

- Provide Adult rider education
- Coordinate with law enforcement and parks and recreation

A. Bicycle Routes

Goal:

Establish a bicycle transportation network through the City of Cumberland that links neighborhoods, local and tourist destinations, and provides recreational and transportation opportunities for residents and tourists.

This section identifies potential bike friendly routes that connect points of interest and destinations throughout the city. Bike lanes are recommended on roads where sufficient width exists or widening may be feasible. Bike route designation and signage is recommended on roads where width is insufficient or widening appears un-feasible due to cost or negative impacts. The majority of the recommended objectives of the *Bike Routes* heading are signed bike routes; due to narrow streets, limited right of ways, significant cost implications, and potential loss of on-street parking. Many noted future trail opportunities have the potential to be off-road trail connections. Local roads with low volumes of traffic throughout the City function as effective bike routes without providing on-road facilities, such as bike lanes or designating them as "bike routes", although directional signage may be appropriate along these routes to direct riders less familiar with the City. The majority of streets in Cumberland are classified as local roads. Improved riding conditions along local roads will come from encouragement of bike riding, and public education and outreach on the rules of the road and the benefits of bike riding, these types of recommendations and objectives occur under; *C. Encouragement* and *D. Education and Safety*.

Objectives:

1. **On-road - Downtown / Mechanic St and Centre St.** Provide on-street bike lanes in the downtown on Mechanic St and Centre St from their intersection on the north to Harrison St, to the south, to create a downtown loop. There is currently parking on the east and west sides of the street, in some locations on both sides at the same time. Preliminary planning for the purposes of this Plan indicate bike lanes could be provided without road widening or loss of quantity of parking spaces. If further design indicates bike lanes would cause a significant loss of parking in the downtown area the route should be considered as a signed, designated bike route, including share the road signage. Also see figure 5.

    a. Although the Mechanic St route could be viewed as a parallel route to the Great Allegheny Passage it does provide connections to downtown destinations and neighborhood businesses that the Great Allegheny Passage does not thereby providing added benefit.
    b. On the majority of route streets are wide enough in their current conditions to provide; one lane of parallel parking (8' width), a striped bike line (5' width) and signage, and one vehicular travel thru lane (width varies). Consider consolidating parking, where feasible, to one side of the street, this should not decrease the overall number of parking spaces downtown.
        i. Center St from Mechanic St to Bedford St
        ii. One way portion of Mechanic St, north of Bedford St.

c. As a long term solution continue to investigate improved access thru the Mechanic St and Baltimore St intersection and bridge area and into the Baltimore St mall area as part of the noted future transportation improvement CLRP project in the *Cumberland Area Long-Range Transportation Plan;* see section II of this Plan.
d. Pershing St may be an alternative to close the downtown loop that may be easier due to traffic and lane configurations on Harrison St, though it provides a less direct route into Canal Place.
e. Valley St bridge provides a route from the regional trails to the downtown loop. Signage indicating the downtown loop should be present at the regional trail crossing on the Valley St bridge. This will enhance the connection from the City to the regional trail system. For additional information see objective *A.21. Valley St. Bridge and Great Allegheny Passage Crossing*.
f. As discussed in the *Downtown* portion of *Section II Inventory and Analysis* truck traffic has been a noted problem at the Mechanic St and Queen City Dr intersection (Queen City Dr being the designated truck route). The turning movement analysis shows that turning movements and stopped vehicles on Queen City Dr should not prohibit use of the truck route. Improvements to truck traffic should be enforcement of truck route, potential moving back of stop bar on Queen City Dr to give a few more feet to truck movements, and additional signage on Mechanic St to indicate all truck traffic must use Queen City Dr. See figure 6.

Objective: A.1. – On-road – Downtown / Mechanic St and Centre St.			
Mechanic St			
From	*To*	*Approx. Width*	*Notes*
Centre St	Valley St	23' – 24.5'	Bike lane and signage, street widening in some locations from 1'-2' may be necessary.
Valley St	Queen City Dr	24.3' – 27.4'	Bike lane and signage, existing width sufficient
Queen City Dr	Bedford St	24' – 26.4'	Bike lane and signage, existing width sufficient
Bedford St	Baltimore St	44'	Two-way traffic, signed route only, shared lane marking, or widening on the east side along the existing parking garage (assumed to be less traveled by pedestrians)
Baltimore St Intersection		44'	Investigate improved bicycle access thru the intersection and into the Baltimore St mall area as part of intersection improvement see objective A.22.
Baltimore St	Harrison St	24'-25.5'	Two-way traffic, one bike lane (southbound) and signage, road centerline re-striping necessary, consider including bicycle improvements with future road re-surfacing maintenance project.
Centre St			
From	*To*	*Approx. Width*	*Notes*
Mechanic St	Valley St	23.1'-24'	Bike lane and signage, street widening in some locations from 1'-2' may be necessary.
Valley St	Queen City Dr	28'-30'	Bike lane and signage, existing width sufficient
Queen City Dr	Market St	23.7'-28.3'	Bike lane and signage, existing width sufficient
Market St	Bedford St	22'-24.8'	Bike lane and signage, street widening in some locations from 1'-2' may be necessary. Sufficient width near the Bedford St intersection, remainder of street 22'-23' width
Bedford St	Frederick St	36.5'	Bike lane and signage, existing width sufficient.
Frederick St	Dexter Pl	11'	Shared use bike route and signage through downtown and Baltimore St mall area
Dexter Pl	W Union St	22'-24'	Bike lane and signage, street widening in some locations from 1'-2' may be necessary.
W Union St	Harrison St	40'	Bike lane and signage. Consolidate on-street angle parking to on side of the street would be needed to provide a safer route, this also requires intersection modifications of the parking bump out at Harrison St

Figure 5: **Objective: A.1. - On-road - Downtown / Mechanic St and Centre St**
Objective: A.10 - On-road - Washington Ave
Objective: A.20 - Baltimore Street Pedestrian Mall

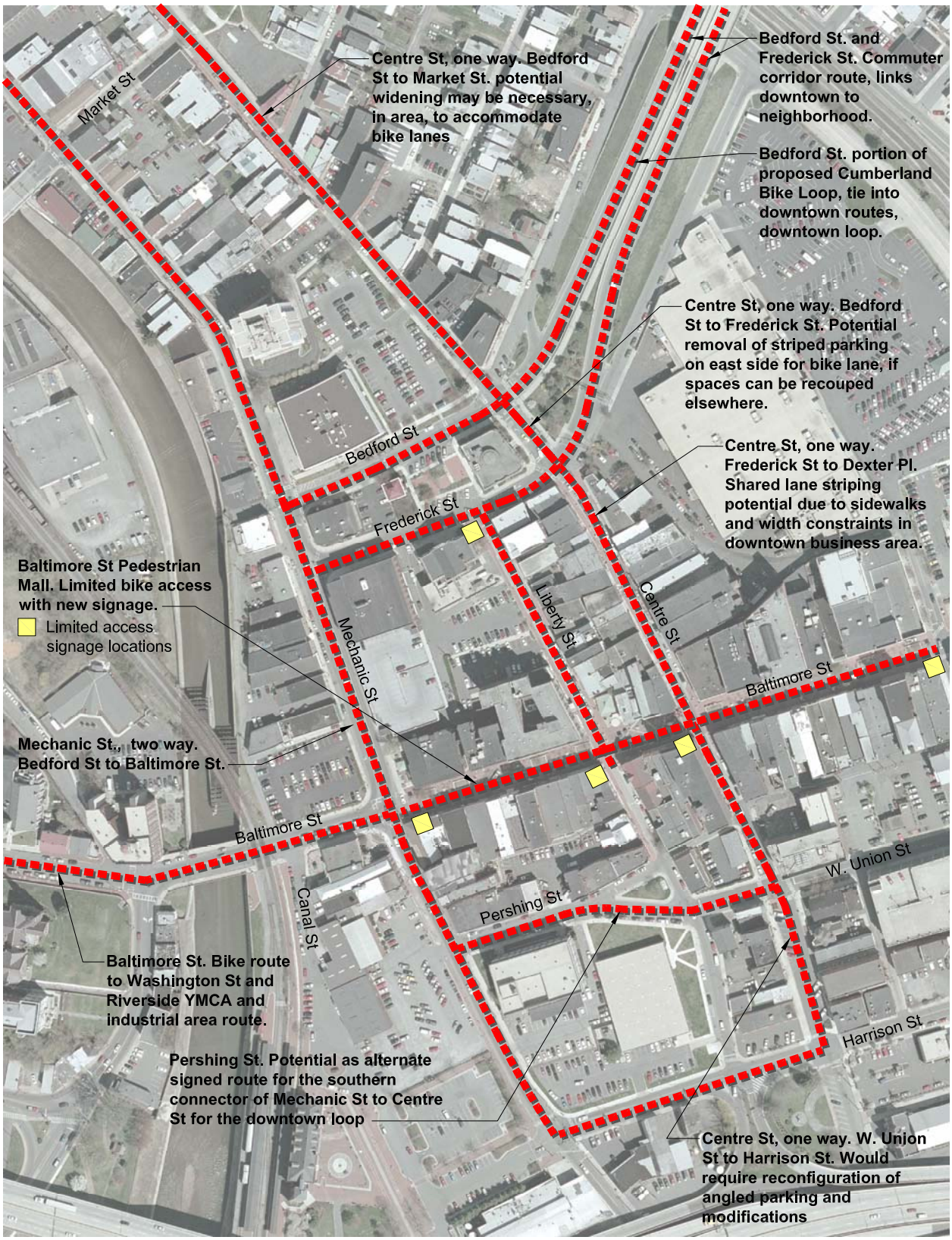
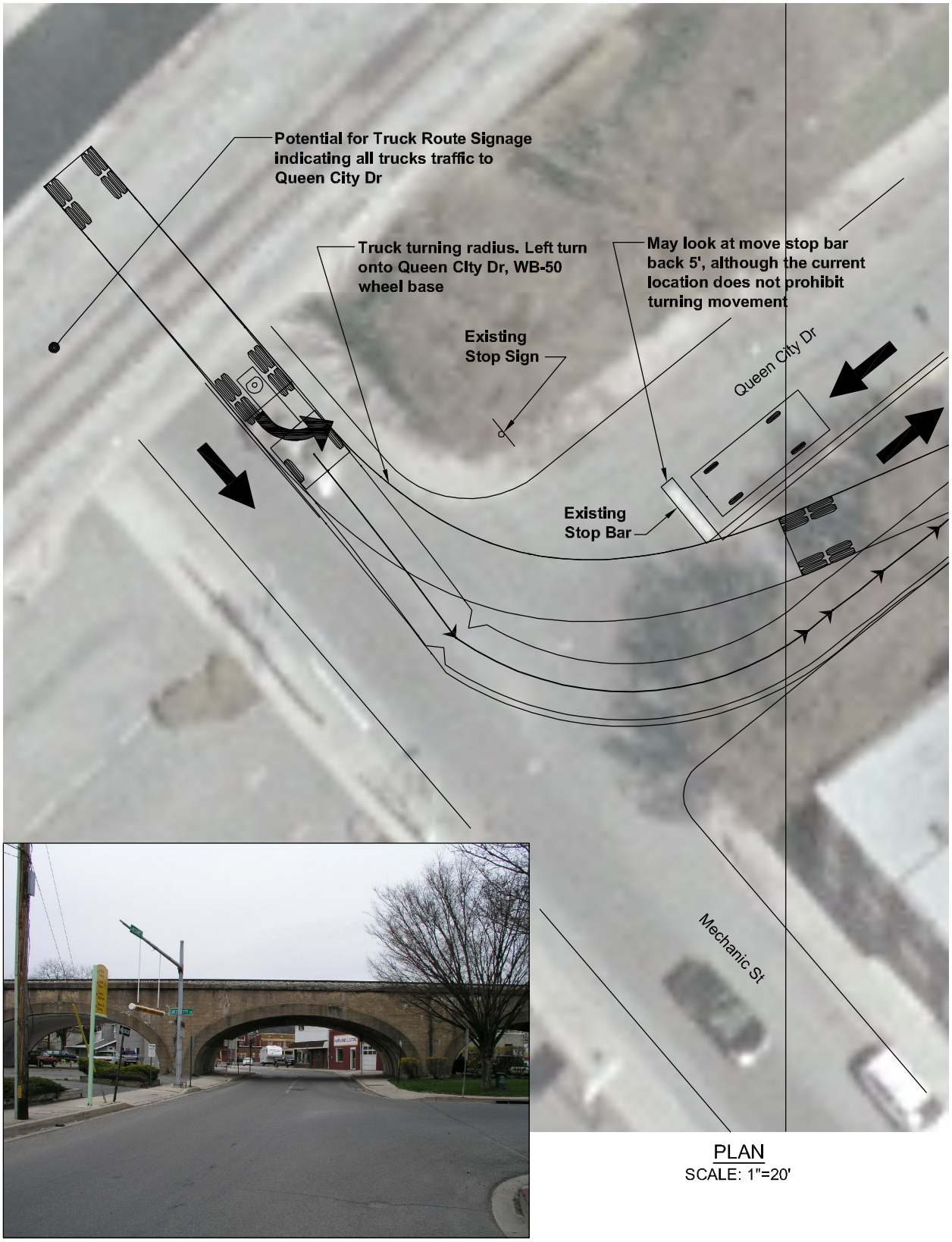


Figure 6: **Objective: A.1. - On-road - Downtown / Mechanic St and Centre St**



PLAN
SCALE: 1"=20'

2. **On-road – Virginia Ave.** Provide on-street bike lanes on Virginia Avenue from First St to River Ave to Canal Parkway, see objective *Future Regional Trail Connection.* Also see figure 7. a. A bike route facility should be considered as an alternate solution if road widening associated with bike lanes is deemed too costly.

    a. Provide a separate bike lane as part of any bridge replacement or traffic improvement projects at the Virginia Ave CSX bridge.
    b. One bike lane (northbound) may be sufficient, and more feasible due to street widths, from First St to Industrial Blvd. Bike lanes in both directions should be investigated from Industrial Blvd south due to the lack of any other north-south connector roads.
    c. Bicycle lane consideration should be included in the City's proposed Major Capital Projects for FY' 09 Virginia Avenue Improvements if feasible, or as part of any other future transportation improvements projects.
    d. Road widening for bike lanes from Queen St south to River Ave is recommended for 2-3' each side of road. The majority of this length has an 8'-9' grass strip between the curb and sidewalk that could accommodate widening for bike lanes.

Objective: A.2. – On-road – Virginia Ave			
Virginia Ave			
From	*To*	*Approx. Width*	*Notes*
First St	Industrial Blvd	24'-25.4'; 8' sidewalks both sides	Bike lane and signage, street widening may be necessary. One bike lane (northbound) is most feasible with 2'-3' widening; Arch St could serve as a signed route to loop back to Virginia Ave.
Industrial Blvd	Industrial Blvd	30'	Bike lane and signage, may require widening
Industrial Blvd	Queen St	25'	Bike lane and signage as part of any future CSX bridge replacement or enhancement transportation project.
Queen St	Offut St	27.3'-28.2'	Two-way. Bike lane and signage, street widening may be necessary.
Offut St	Mary St	27.7'-29'	Two-way. Bike lane and signage, street widening may be necessary.
River Ave			
From	*To*	*Approx. Width*	*Notes*
Mary St	Roberts St	28.7'-29'	Two-way. Bike lane and signage, street widening may be necessary.
Roberts St	Canal Parkway	38'	Two-way. Bike lane and signage, street widening may be necessary.

Figure 7: **Objective: A.2. - On-road - Virginia Ave**
Objective: A.11 - On-road - Offutt St
Objective: A.17 - Future Regional Trail Connection

3. **On-road – Cumberland Bike Loop.** Provide a city bike loop from downtown on Industrial Blvd to Messick Rd to Williams Rd to Willowbrook Rd to Shades Ln to Naves Cross Rd to Bedford St to Downtown. See other recommendations for Shades Ln and Bedford St improvements. The bike loop would provide a dual purpose route serving commuters and recreational riders, linking downtown, neighborhoods, key destinations along Willowbrook Rd, and access to potential off-road trail at Constitution Park (objective A.12). See figures 8, and 9.

    a. Work with the SHA for potential bike route designation along Industrial Blvd. The majority of the route has paved shoulders.
    b. Work with the SHA so that provisions for bicycles and pedestrians are incorporated into their planned improvements for the Messick / Williams / Willowbrook Rd corridor, as well as Highway 51.
    c. Investigate potential short and long term solutions for improvements at the Industrial Blvd and Virginia Ave intersection as well as the Industrial Blvd and Mechanic St / downtown below I-68 area.
    d. Work with the County for bicycle route network for the portion of the bike loop outside city limits, Messick Rd to Williams Rd to Willowbrook Rd. This area may be able to provide a separate off-road path and connect to future greenway trails, see objective A.14. Off-Road Greenway Trails.

4. **On-road – Alt. Rt. 40, Henderson Ave.** Henderson Ave from N. Mechanic St. to Baltimore Ave. As a long term potential route, continue to monitor this route as part of any regional or statewide links, see *Section IV Implementation*, funding TSIP, and if necessary work with SHA on a potential designation as bike route This route is identified as a Tier 2 Location in the 2002 SHA bicycle needs inventory for district 6 improvements. This route would provide connections along the north end neighborhood and potential connections to the City from future regional state wide connections if they are planned. Local roads provide current neighborhood connections between Bedford St and Piedmont Ave.

5. **On-road – Alt. Rt. 40, Baltimore Ave.** Baltimore Ave from Henderson Ave to I-68 exit 44 / Willowbrook Rd. Work with SHA on a potential designation as bike route. This route is identified as a Tier 2 Location in the 2002 SHA bicycle needs inventory for district 6 improvements. Constraints may necessitate the route to be signed bike route and not bike lanes. An alternate route to this would be Marlon St to Waverly Ter to Baltimore St., although equally as steep as Baltimore Ave and narrower the route has less vehicular travel, and may be easier for cyclists, though not a state route. Either route would provide a direct connection to the Baltimore St pedestrian mall area, at the Baltimore St and Queen City Dr intersection. This would provide a shorted version of the Cumberland Bike Loop, providing a more direct connection for commuters to the downtown area from the Willowbrook Rd area.

    a. Steep slopes, and retaining walls exist adjacent to the majority of the length of the road would prohibit any road widening to add bike lanes.
    b. A portion of a connector route, continuing along Willowbrook Rd, to link to east side neighborhood destinations including; Constitution Park, Allegany College, Allegany County Health Department, and Western Maryland Health System.
    c. Along Baltimore Ave. Investigate road repaving or isolated surface paving repairs along the route to coincide with any bike route signage due to poor existing conditions, in particular at the gutter pan.

d. The section from I-68 exit 44 / Willowbrook Rd should be considered separately as a portion of the Cumberland Bike Loop, objective A.3.

6. **On-road – Riverside YMCA and Industrial Area.** Provide bike lanes and/or bike route directional signage from Washington St to Lee St to Beal St to Kelly Rd to the Riverside YMCA and Allegany County Office Complex. Provide bike route directional signage from Washington St to Allegany St to Beal St to tie into Kelly Rd to Riverside route to link destinations, Washington St , West Side Elementary School, Riverside YMCA.

    a. Replace storm drain grates with bicycle friendly grates, if not part of current inlet grate replacement project.
    b. Investigate the re-paving of some portions of Kelly St for a safe bicycle route.

7. **On-road – Shades Ln.** Provide signed bike route on Shades Ln from Baltimore Ave to Naves Cross.

    a. Road re-paving should be considered to improve conditions for road use as a bike route.

8. **On-road – Bedford St and Frederick St.** Provide a bike route on Bedford St and Frederick St, from Naves Rd to Centre St. The Bedford St route would serve as a portion of the Cumberland Bike Loop while both streets together would serve as a commuter corridor route providing a link to connect downtown and the neighborhood.

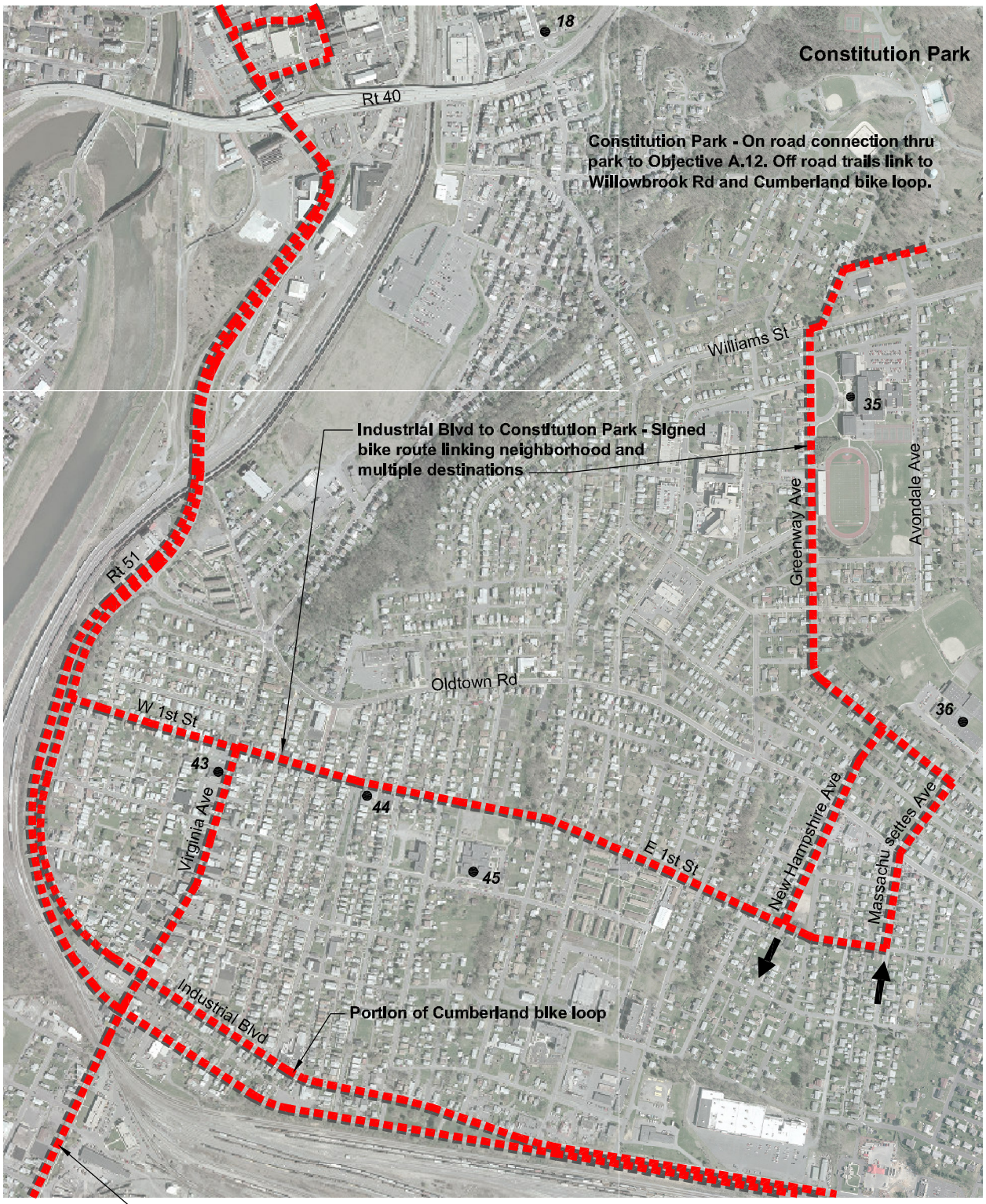
    a. Bedford St. Provide a signed bike route.
        i. A bike lane would require street widening due to narrow widths (22'-25') and on-street parking. This may not be feasible due to limited availability of area for widening due to numerous adjacent constraints on the north side, including; steep slopes, utility poles, retaining walls, and stairs.
    b. Frederick St. Provide on-road bike lanes.

9. **On-road – Industrial Blvd. to Constitution Park.** Provide an on-road route from Industrial Blvd along First St to Massachusetts Ave to Kentucky Ave to Greenway Ave to Williams Rd to Constitution Park. New Hampshire to First St (Southbound). Provides a link between multiple local destinations; HRDC (future), South Cumberland Library, South Penn Elementary School, Washington Middle School, Fort Hill High School and Greenway Ave Stadium, and Constitution Park. See figure 8.

    a. Parallel parking occurs on both sides on First St from Virginia Ave to Massachusetts Ave. Parking demand should be analyzed, since this is a residential area, to see if consolidating parking to one side, or eliminating as a potential way to accommodate bike lanes.
    b. 90 degree parking occurs on the south side of First St from Memorial Ave to Blackston Ave which could conflict with bike travel on the that side of the street due to limited visibility when backing out of the parking spaces.
    c. Road widening could occur, if necessary, to accommodate bike lanes since there are few constraints; no adjacent sidewalks, utility poles on the south side are generally 5'-7' off of the road.

Objective: A.9. – On-road – Industrial Blvd. to Constitution Park.			
First St			
From	*To*	*Approx. Width*	*Notes*
Virginia Ave	W. Industrial Blvd	18'-18.5'	One way, west. Bike route signage to connect to Cumberland Bike Loop. Widening for bike lane not feasible due to close sidewalks and buildings.
Virginia Ave	Race St / Seymour St	30'-30.3'	Two-way. Bike route signage. Investigate potential for providing bike lanes by parking consolidation and / or road widening
Race St / Seymour St	Memorial Ave	25.2'-28'	Two-way. Bike route signage. Investigate potential for providing bike lanes by parking consolidation and / or road widening
Memorial Ave	Somerville Ave	32.67'	Two-way. Bike route signage. Investigate potential for providing bike lanes by parking consolidation and / or road widening
Somerville Ave	Massachusetts Ave	24'-28'	Two-way. Bike route signage. Investigate potential for providing bike lanes by parking consolidation and / or road widening
Massachusetts Ave			
From	*To*	*Approx. Width*	*Notes*
First St	Oldtown Rd	22'-24'	Two-way. Bike route signage.
Oldtown Rd	Kentucky Ave	30'	One way. Bike route signage.
Kentucky Ave			
From	*To*	*Approx. Width*	*Notes*
Massachusetts Ave	Greenway Ave	30'-31'	Two-way. Bike route signage.
Greenway Ave			
From	*To*	*Approx. Width*	*Notes*
Kentucky Ave	Williams Rd	28'-40'	Two-way. Bike route signage.
New Hampshire Ave			
From	*To*	*Approx. Width*	*Notes*
Kentucky Ave	Oldtown Rd	28'	One way. Bike route signage.
Oldtown Rd	First St	27'-28'	Two-way. Bike route signage.

Figure 8: **Objective: A.3. - On road - Cumberland bike loop**
Objective: A.9. - On road - Industrial Blvd to Constitution Park



10. **On-road – Washington St.** Provide a bike route along Washington St from the Baltimore St bridge to Fayette St and Greene St.

    a. Parallel parking both sides of street.
    b. Any road widening that may improve bike travel may negatively impact the historic character and existing wide brick sidewalks.
    c. Road repaving may be beneficial due to poor existing conditions, the number of destinations along this route, the historic quality of the route for tourists.

Objective: A.10. – On-road – Washington St.			
Washington St			
From	*To*	*Approx. Width*	*Notes*
Greene St	Prospect Sq	33.6'-35.5'	Two-way traffic. Bike route and signage.
Prospect Sq	Lee St	30'-35'	Two-way traffic. Bike route and signage.
Lee St	Allegany St	30'	Two-way traffic. Bike route and signage.
Allegany St	Kiefer Ave	30'	Two-way traffic. Bike route and signage.

11. **On-road – Offutt St.** Provide a signed route from C. Eugene Mason Sports Complex and C&O Canal Towpath to Virginia Ave proposed bike lanes. 30' existing street width. A signed directional route will alert regional trail riders of the City's bicycle network. Also see figure 2.

12. **Off-road trails – Constitution Park.** Provide new multi-use trails at Constitution Park. Trails should be designed to accommodate pedestrians and cyclists. Trails should be designed using switchbacks to navigate the steep slopes in the park and provide a running trail slope of five percent or less for ADA accessibility. Trail layout should also avoid the removal of existing trees and forest to the greatest extent possible. The trail will provide a connection from Willowbrook Rd through the park with neighborhood connections at the southern end Williams Rd. See figure 9.

    a. 0.6 – 1.0 mile trail. Approximate 162' elevation difference from the top of the Park to Willowbrook Rd with a 5% maximum trail gradient to provide ADA accessibility.
    b. Due to steep adjacent slopes trail width should be a minimum of 10' to permit two-way travel and passing.

13. **Off-road – Braddock's Trail.** Work with Allegany County for the property acquisition of the surviving portion of Braddock's Trail for development into a pedestrian & bicycle historic trail with connection through the City to the Washington Street historic district and Washington Street & Emmanuel Episcopal Church (historic site of Fort Cumberland). See figure 11.

    a. Consult with local historians on route and the potential for an interpretive historical narrative signage system.
    b. Below are links to historical related site discussing Braddock's Trail
        i. http://www.frenchandindianwar250.org/visit/braddock_trail.aspx?c=visit
        ii. http://www.route40.net/history/braddock-lacock.shtml

14. **Off-road Greenway trails.** Pursue potential Greenway trail developments with Maryland DNR and Allegany County. Investigate the potential for other additional greenway trail connections outlined in Objective 5.3 of the 2004 Comprehensive Plan. See figure 9.

    a. Evitts Creek, 100 year floodplain area. Potential link from Industrial Blvd to Allegany College, and Cumberland Country Club area. See figure 9.
    b. Pursue feasibility of off-road trail projects at Willis Mountain State Park. Terrain on Willis Mountain has the potential for single-track mountain bike trails to provide an additional range of recreation opportunities, or ATV recreation trails for cross promotion with other recreational trail users.

15. **Off-road Neighborhood trails.** Investigate potential for trail project development and land acquisition in conjunction with preservation of culturally significant views / viewshed protection areas to augment the 2004 Comprehensive Plan Objectives 3.3, and 3.4. Identified viewshed protection areas are Wills Mountain, Haystack Mountain, and Shriver Ridge. See figure 11.

    a. In the case of Haystack Mountain and Shriver Ridge both areas are identified as future development areas so future greenway trail planning should fit the development needs while protecting views and providing trail connections to the rest of the community.

16. **Potential Regional Trail Connection.** Pursue the potential conversion of the existing rail bridge near the Mechanic St and Centre St intersection on the north-west side of downtown. The bridge is currently not used and would provide a connection with the Great Allegheny Passage near mile marker one, the downtown area, and the western portion of the north end neighborhood. See figure 10.

    a. Perform a structural bridge investigation to explore the feasibility of rehabilitating the bridge for use as a trail crossing bridge.
    b. Investigate the potential for property acquisition or easement for a trail connection from Mechanic St through the existing private parking lot to the potential trail bridge crossing.
    c. Approach CSX Transportation about the potential for conversion of the existing bridge and an at grade rail crossing to connect to the regional trail.

17. **Future Regional Trail Connection.** Provide a new connection point to the C&O Canal Towpath Trail at the proposed tie in location for the Knobley Tunnel Rail to Trail project currently under development providing a link to West Virginia towns of Ridgely and Carpendale. This would provide connections to the Virginia Ave historic district, a second access point to the south end neighborhood, and provide additional trail access to the City south and east of Canal Place. See figure .

    a. Proposed trail signage and marking at the Canal Parkway trail crossing.
    b. Potential land acquisition and coordination with the National Park Service on the connection portion between the C&O Canal Towpath and Canal Parkway.
    c. Virginia Ave to River Ave to Canal Parkway crossing to shared use pathway to towpath connection.

Figure 9: **Objective: A.3. - On road - Cumberland bike loop**
Objective: A.12. - Off road trails Constitution Park
Objective: A.14. - Off road greenway trails

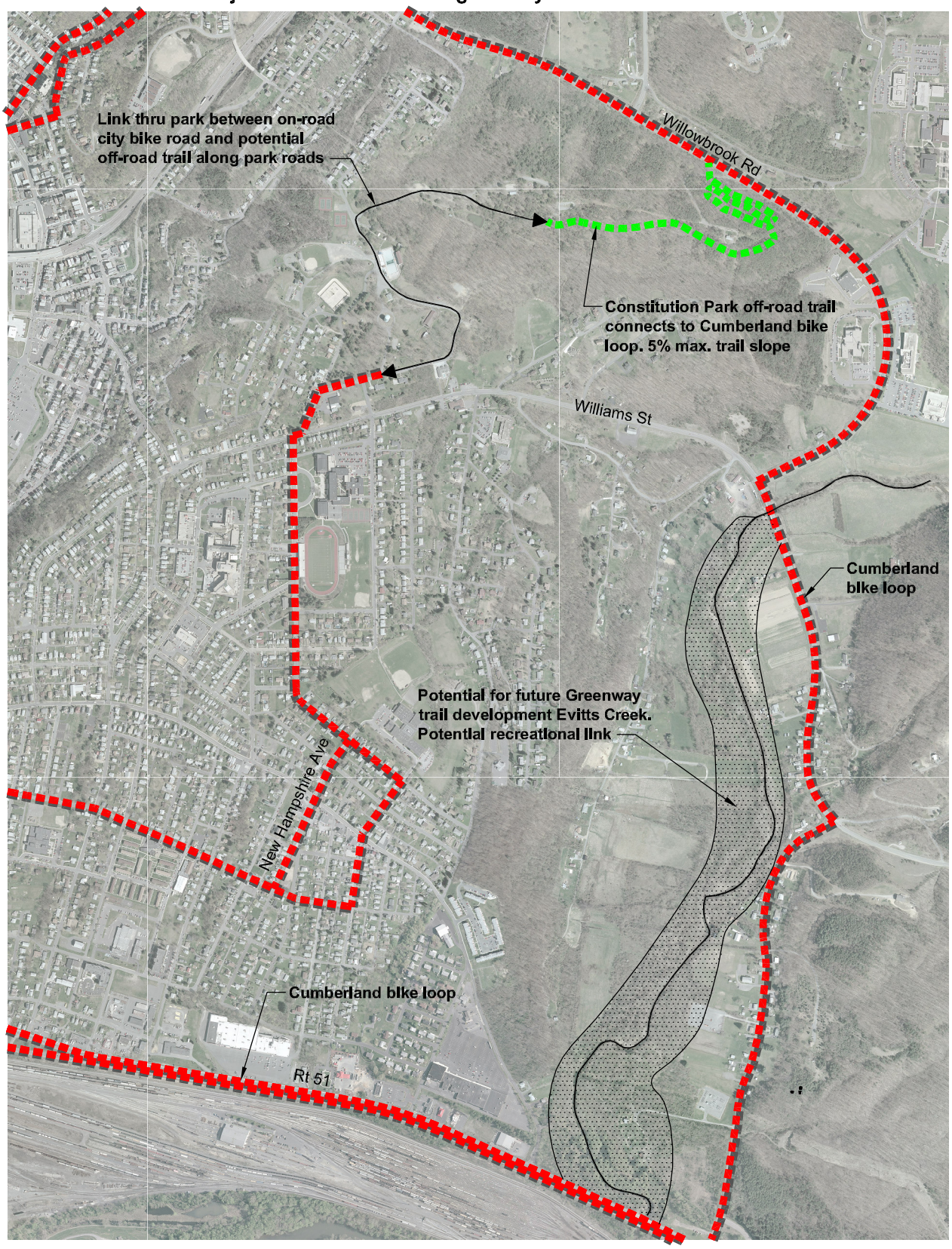
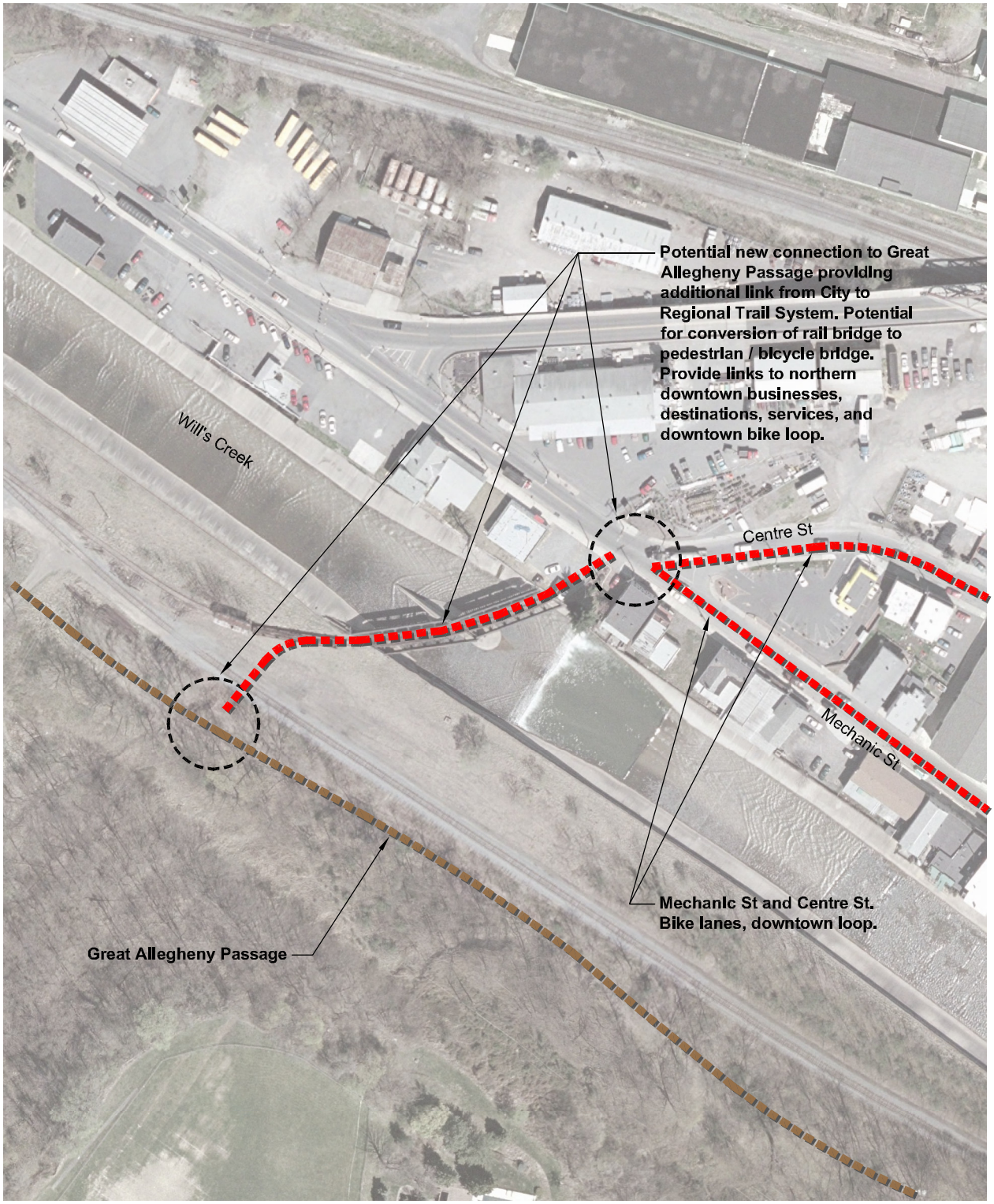


Figure 10: **Objective: A.16. - Potential Regional Trail Connection**



18. **Future North End Neighborhood Connections.** In addition to objective A.12. Establish a plan for the future connection of Bedford St and Valley Rd and Valley Rd to Holland St to provide additional linkages throughout the neighborhood as a City goal to be provided as part of any potential future development in these areas. Both areas are Development / Investment Opportunity Site in the 2004 Comprehensive Plan figure 4. The connection may be an on-road or off-road trail depending upon how the areas are ultimately developed. Insure that steep topography in the area is traversed in a manner to provide bicycle access and ADA accessibility for pedestrians. See figure 11.

19. **Future West Side Neighborhood Connection.** Investigate a future trail connection from Bishop Walsh School (Bishop Walsh Rd area) to Allegany High School (Fayette St area) in conjunction with, or separate from, the *Off-road – Braddock's Trail* objective.

20. **Baltimore Street Pedestrian Mall.** A Draft Plan review comment from the Downtown Development Commission (DDC) indicated that they are currently discussing whether or not to accommodate bicycle traffic on the mall, and discussion of potential examples. Below is a list of the pros and cons associated with different methods of allowing mall access to bicycles, and peer review research on the subject. The list is followed by this Plan's recommendation for addressing bicycles in the mall.

    a. *Pros:*
        i. This would provide a connection between the bike routes of Mechanic and Centre Street, culminating a historic downtown bike loop in the mall.
        ii. Allowing access may draw more people to the mall and help create a more vibrant environment for businesses and pedestrians. This is especially true of tourists on the regional trail who would be able to browse the mall and downtown. They could then park their bike and continue their exploration of the City and visit businesses.
    b. *Cons:*
        i. Allowing bike access presents a greater safety hazard with an increased potential for bike and pedestrian conflicts. Especially considering the increased speed in which a bicycle can travel relative to a pedestrian.
        ii. A dedicated bike lane, or similar scenario, which would attempt to separate pedestrian and bicyclists into their own user zones would present numerous cost and enforcement constraints.
            1. A bike lane or bike travel zone would need to be a minimum of 8' width and probably denoted with a contrasting brick pattern. This would be a labor intensive and cost prohibitive installation which would also decrease the area for outdoor seating of restaurants and pedestrian traffic.
            2. It would potentially be very difficult to keep bicyclist in the bike lane, or designated area, since the mall is wide open area. Bicycle travel is generally more difficult outside a bike lane or off-road trail due to other factors such as vehicles, and non-improved surfaces. So a dedicated area or lane may prove to be inefficient use of funds because bicyclists do not use it.
            3. A designated area or lane may also be an accessibility problem for visually impaired pedestrian unless a detectable warning paver scenario is used along the length of the area or lane.

c. Research:

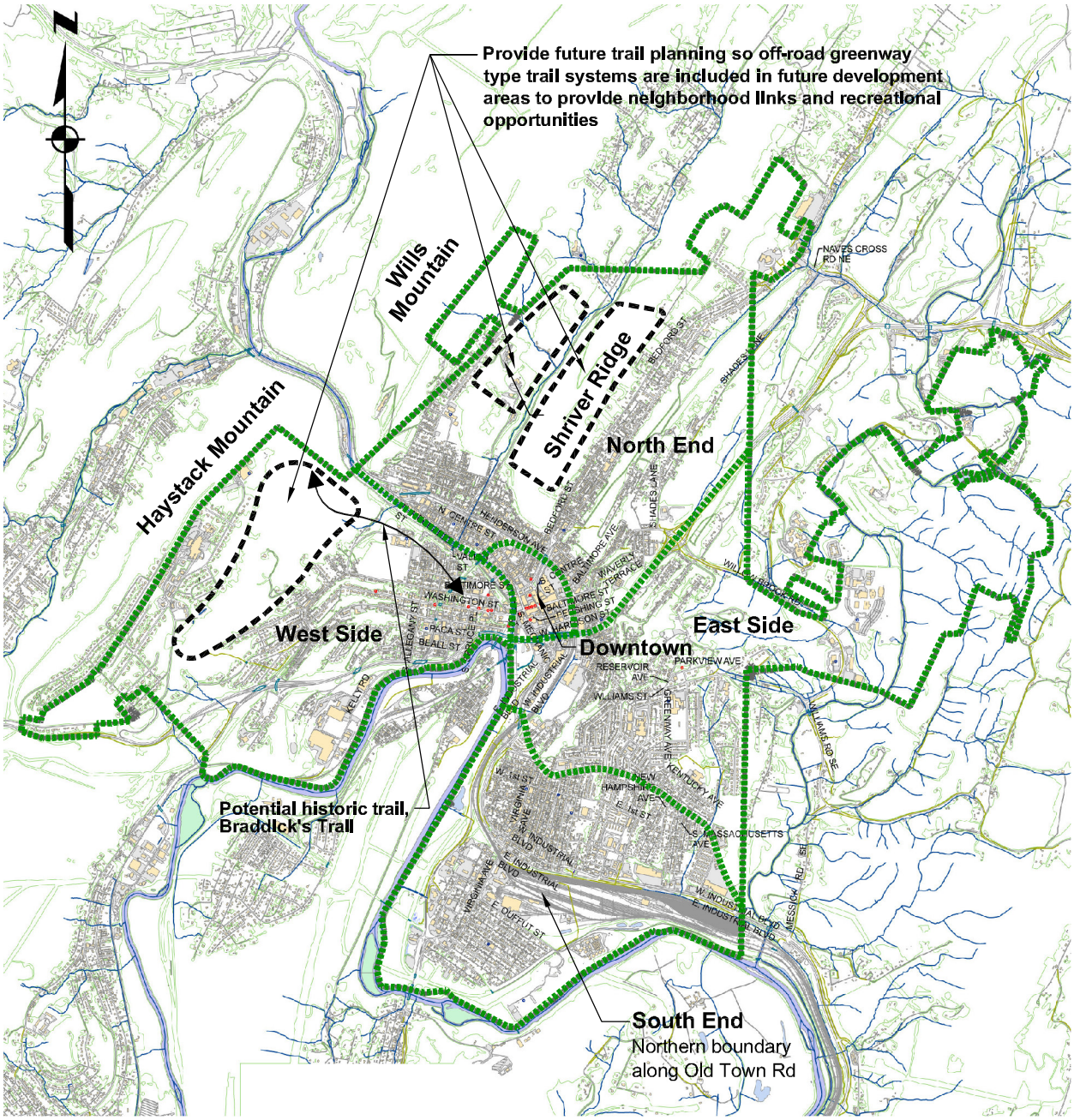
i. None of the peer review cities indicate they have a designated bike route or path through a pedestrian mall. All, with pedestrian malls, emphasize bike connections to get riders to the pedestrian mall which is treated like a destination along the length.

ii. Some European cities have systems with designated bike portion of sidewalks with different paving patterns, and signage etc. Although they would also have the *cons* listed above.

iii. http://www.bicyclinginfo.org/bikesafe/case_studies/casestudy.cfm?CM_NUM=44&CS_NUM=102 contains a link to a case study discussing bicycle treatments on a former pedestrian mall – Eugene, OR. Their pedestrian mall was a walk your-bike enforcement through city ordinance. The addition of bike treatments was part of conversion of some segments to city streets to promote downtown revitalization.

With the potential benefits of allowing bicycle access in the mall; limited, low speed, bicycle access at off-peak hours should be allowed in the mall. The access should be allowed by placement of new signage at the entrances to the mall which indicate times when bicycle access is allowed and when it is limited to “walk your-bike” access. Limiting access to off-peak hours, such as before 10:30 am, would minimize the potential for pedestrian and bicycle conflicts during heavy pedestrian traffic times, i.e. the lunch crowd, etc while still providing a way to potential bring more people to the downtown and mall area. Signage should also indicate that bicyclist yield to pedestrians at all times. Also see figure 5. Implementation should be monitored through enforcement to insure that cyclists who use this limited access scenario obey the low speed portion; Low speed should be considered as a speed close to average pedestrian speed. Business owners may be able to participate in the enforcement through a “neighborhood watch” type of scenario where they keep a close eye on what is going on.

Figure 11: **Objective: A.13. - Off road - Braddock's trail**
Objective: A.15. - Potential regional trail connection
Objective: A.18. - Future north end neighborhood connections

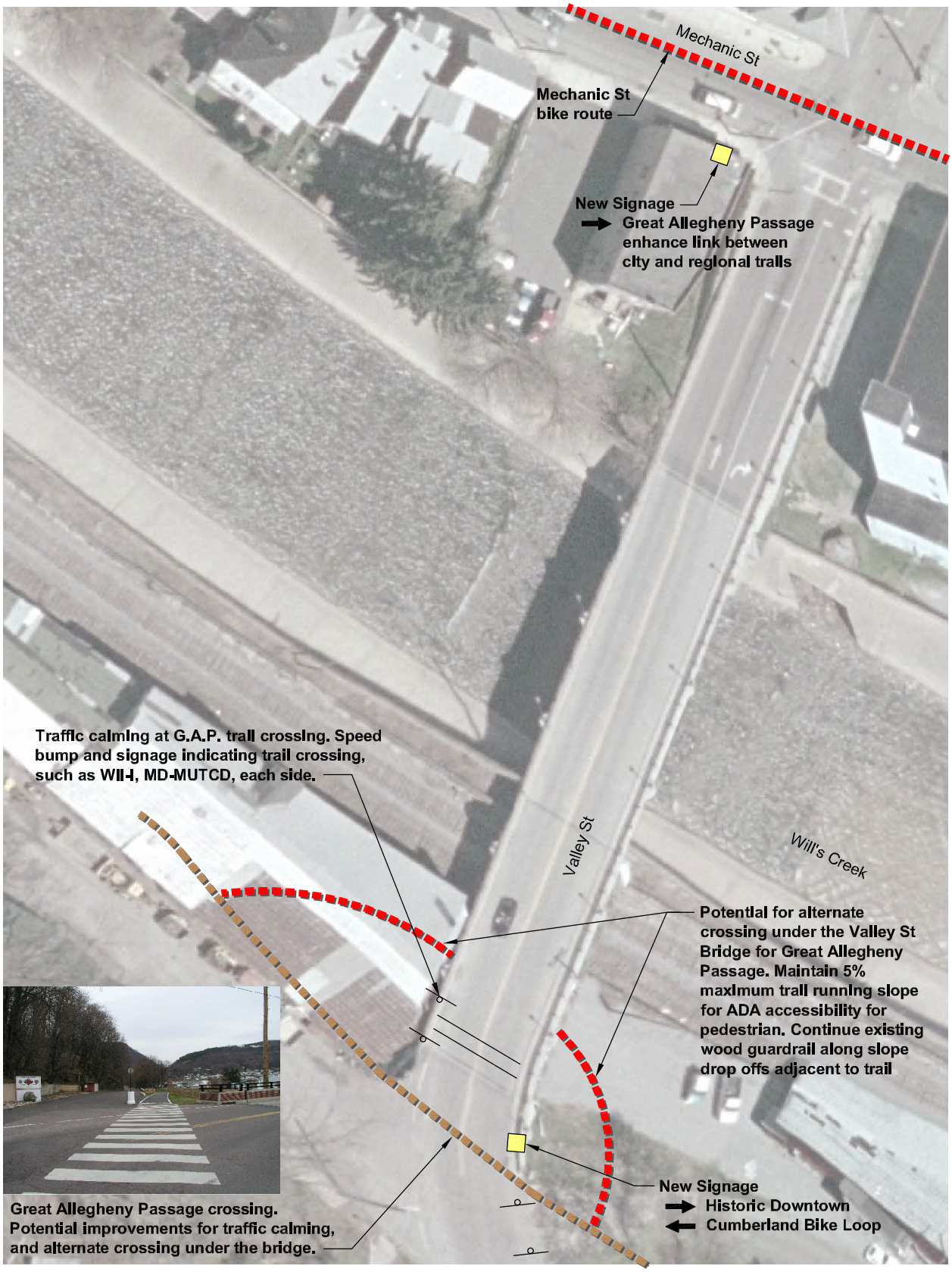


21. **Valley St Bridge and Great Allegheny Passage crossing.** Draft Plan and public workshop comments have indicated that the current at grade trail crossing of the Great Allegheny Passage at the Valley St Bridge is a major safety concern. The long term potential for routing the trail under the bridge should be investigated as a solution. In that scenario the current access to Valley St should be maintained to continue to provide connections from the trail to neighborhoods and the city. A short term, less expensive, solution should be a traffic calming device at the crossing to increase motorist awareness of trail crossings. The area also should have additional directional signage to alert riders of link from / to city and regional trails. See figure 12.

22. **Baltimore St Bridge.** This is a critical connection point area providing access and links from the regional trail crossing on Baltimore St to downtown, the Baltimore St Pedestrian Mall, the Washington St area, and to the Riverside Park area. There are currently numerous problems which impact traffic, bike, and pedestrian flow. The area is addressed with recommended traffic related improvements in the Cumberland Area Long-Range Transportation Plan and 1998 Downtown Design and Development Plan. The City is currently contemplating an update of the later plan within the next year. Any update and traffic improvement recommendations should take into consideration the important pedestrian and bicycle connections that need to occur in this key location. Inclusion of bike lanes should be investigated if widening or major revisions are recommended, which would yield better longer term solutions. Comments received on the Draft Plan indicated the desire to further address potential hazards, and safety concerns with bicycle crossing on the trail and access across the bridge. This Plan's recommendation is to focus on lower cost alternatives which could be implemented sooner.

    a. Coordinate and provide input on proposed future wayfinding, or kiosk improvements planned by the Great Allegheny Passage in this location to insure the links to City destination are properly included.
    b. As a part of 22.a. above, or as a separate information sign located at the regional trail crossing on Baltimore St provide information to tourist riders of the opportunities to "Explore Downtown Cumberland" and "Bike on the Bricks" as discussed in *A.20. Baltimore Street Pedestrian Mall*
    c. Related objective *B.4. Downtown Bicycle Parking* and its referenced figure will help increase visibility of the Baltimore St Pedestrian Mall and bike parking from the trail crossing. Signage stating "Downtown Public Bike Parking" with a directional arrow will provide a second reinforcement to tourist riders of downtown opportunities.
    d. Provide improvements to calm traffic and further prevent traffic from blocking the regional trail crossing on Baltimore St. There are existing measures in place to help make this a safe trail crossing including a flashing trail crossing light and signage, and signage for "Do Not Block Intersection" in front of Canal St. Additional signage and pavement markings should be provided to further alert motorist to the regional trail crossing as well as alert motorists not to block the trail crossing.
    e. The sidewalk on the northern side is currently signed as a combined pedestrian and bicycle use.

Figure 12: **Objective: A.21. - Valley St Bridge and Great Allegheny Passage crossing**



B. Bicycle Amenities

Goal:

Provide bicycle amenities throughout the City of Cumberland so local residents and tourists are able to easily navigate the City, comfortably and conveniently explore Cumberland businesses and attractions, and recognize Cumberland as a City that welcomes bicycle users.

This section identifies the location for bicycle amenities that improve the enjoyment of cycling throughout the city, provide ample opportunities to use bicycles as a mode of transportation, and provide tourists with the resources they need to explore Cumberland's destinations, businesses, and attractions.

Objectives:

1. **Gateway Enhancements.** The 2004 Comprehensive Plan states *Action 3.5.3 Develop distinctive signage and landscaping features at gateway entrances to Cumberland, coordinated with the signage treatment in place in the downtown.* There are seven Gateways identified in the 2004 Comp. Plan; Bedford St & Frederick St (Ex. Sign) Industrial Blvd. (Ex. Sign), I-68 Exit 44 Willow Brook Road & Baltimore Ave, Alt. Rt. 40, I-68 Exit 43C, 43a, 42 – Greene St. Use this improvement as an opportunity to promote bicycle opportunities in the City by incorporating a bicycling related phrase, symbol, or list into the new signage design that recognizes the City's opportunities for bicycling. This could be similar to the existing Historic Downtown Cumberland sign at Baltimore St and Queen City Dr which list attractions.

2. **Bicycle Cleaning / Minor Maintenance Facility.** Investigate the potential of a bicycle wash cleaning station and / or a minor maintenance facility at or near Canal Place with easy access to downtown and the regional trails. Inquire with the National Park Service about potential partnering strategies for implementation. Coordinate with the Great Allegheny Passage to insure no overlap with their ongoing or planned improvement projects.

3. **City wide – Bicycle Parking.** Provide additional bicycle parking facilities.

    a. Bike Parking area to serve multiple destinations at Washington St, west of the Cumberland St intersection. Wide side walks along Washington St provide the opportunity to for bike racks without preventing pedestrian travel.
    b. Bike parking areas at local parks and recreation facilities; Riverside YMCA, Constitution Park, Mason Sports complex.
    c. Bike parking areas at public destinations; public library, post office, public schools (if allowed)
    d. Encourage and provide incentive for local commercial businesses and retail areas to provide bicycle parking facilities, either outdoor or indoor.

4. **Downtown Bicycle Parking.** Provide additional bike parking in the downtown area to serve multiple key local and tourist destinations. Consider bicycle lockers located in existing parking lots to provide bike parking for riders who may be traveling with bike bags or luggage not easily secured at a bike rack. See figure 13.

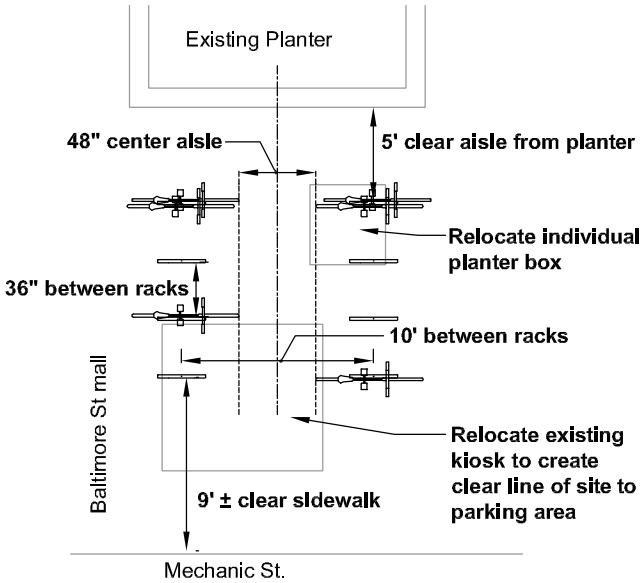
    a. The west end of the Baltimore St and downtown is easily visible from the Great Allegheny Passage crossing on Baltimore St. This visibility makes for an ideal location for a major bike parking area. The location of the existing kiosk blocks the line of sight to the existing single bike rack in this location. Relocate the existing kiosk, and existing square planter box to provide a highly visible bike parking area with multiple racks. The installation should be coordinated to occur near the same time as the proposed visitor orientation improvements planned by the Great Allegheny Passage at the trail crossing on Baltimore St.
    b. Each of the ends of the of the Baltimore St mall area should have easily visible bike parking areas. N & S. Liberty St, Centre St, and George St. There are numerous bump out brick paving areas at intersections and end of parallel parking rows that could be utilized for group of three or four bike racks without impeding pedestrian circulation, in some area trash receptacles or small planters would need to be relocated.
    c. Consider providing bike lockers. Bike lockers would fit best in an existing parking lot with a group of bike lockers replacing two or three parking spaces. As bike lockers are envisioned to serve primarily tourist regional trail riders an informal survey of regional trail riders may provide insight into the demand which may be served by a small number of lockers. If the informal survey shows that lockers are warranted consider providing in existing parking lot near downtown and Canal Place.

5. **Camping Opportunities.** Investigate the potential for land acquisition or public – private partnership to provide potential tent camping near the Jaycee Recreation Area along Valley Rd. The area is targeted as potential future residential use as noted on the 2004 Comprehensive Plan figure 4 Concept Plan: Development Opportunities.

    a. The area would have an easy connection to downtown and the Great Allegheny Passage crossing on Valley Rd to serve potential tourists.
    b. The addition of off-road trail or other amenities may make the site more attractive to potential users.

Figure 13: **Objective: B.4. - Downtown Bicycle Parking**

Potential Bike Rack Parking Areas



Example of potential Bike Parking Area layout at Mechanic St and Baltimore St 8 bike racks, 16 bike spaces

Layout shows recommended spaces and clear aisles between bike racks.

6. **Wayfinding Signage.** Signage for way finding purposes is generally addressed as an addition to standard bike route signage (which is discussed in the *Design Guidelines* heading) and is used to designate routes either by area / neighborhood and or provide directional indication of an upcoming destinations or adjacent trails. This can prove beneficial for local residents and tourists to safely and effectively navigate the city, and was indicated by numerous citizens as a desired outcome during the Public Workshop. There was much discussion, at the Public Workshop, of the desire for a potential color coded route system, or letter coded, based upon neighborhoods. The peer review indicated that a word designation indicating a destination or theme is far more common and appears to be the standard. The use of a color or letter designation would require that riders already know what the abbreviations stand for, where a word designation is universal without a translation. This would also avoid concerns from the Public Workshop of use of school rivalry colors etc. Signage route theme recommendations are word or phrase based on route destination or neighborhood. Below, in italics, are recommendations for specific route theme designations. Directional signage recommendations to guide riders to destinations are shown if figure 14, 15, and 16 with corresponding descriptions in the *Directional Destination Signage* chart.

    a. *Historic Downtown Cumberland Bike Loop* - Mechanic St and Centre St
    b. *Cumberland Bike Loop* – Objective A.3. Route
    c. *Riverside* - Kelly Rd, objective A.6. Route
    d. *Washington St Historic District* – Washington St, Objective A.10. Route

Directional Destination Signage – objective B.6.		
Key	**Description**	
1	←	Downtown Bicycle Parking
	←	Historic Downtown Bike Loop
2	↑	Washington St Historic District
	←	Riverside Park 0.1
	←	Zero Mile Marker 0.1
3	→	Great Allegheny Passage
	↑	Canal Place
	→	Washington St Historic District
	→	Riverside Park
4	←	Riverside Route
	↑	Whiting House Museum 0.4
5	←	Westside Elementary School
	↑	Whiting House Museum 0.3
6	←	Riverside YMCA 0.4
	→	Riverside YMCA 0.4
7	←	Historic Baltimore St Pedestrian Mall
	←	Downtown Bicycle Parking
8	→	Great Allegheny Passage
	↑	Historic Downtown Bike Loop
9	← →	Historic Downtown Bike Loop (Both sides of Great Allegheny Passage at Valley St crossing)
10	↑	Great Allegheny Passage
11	←	Historic Downtown Bike Loop
12	↑	Historic Downtown Bike Loop
	↑	Downtown Bicycle Parking
13	→	Carver Community Center 0.4
14	←	Great Allegheny Passage
15	↑	Human Resources Development Commission 0.2
	↑	South Cumberland Library 0.4
	↑	South Penn Elementary School 0.5
	↑	Constitution Park 2.1
16	← →	Human Resources Development Commission
	← →	C&O Canal Towpath 1.1
	← →	C. Eugene Mason Sports Complex 1.0
17	← →	South Penn Elementary School
18	← →	C. Eugene Mason Sports Complex
	↑	C&O Canal Towpath
19	← →	Constitution Park Trail
	↑	Cumberland Bike Loop
20	← →	Cumberland Bike Loop
	↑ →	Historic Downtown Bike Loop

Figure 14: Objective: B.6. - Wayfinding signage

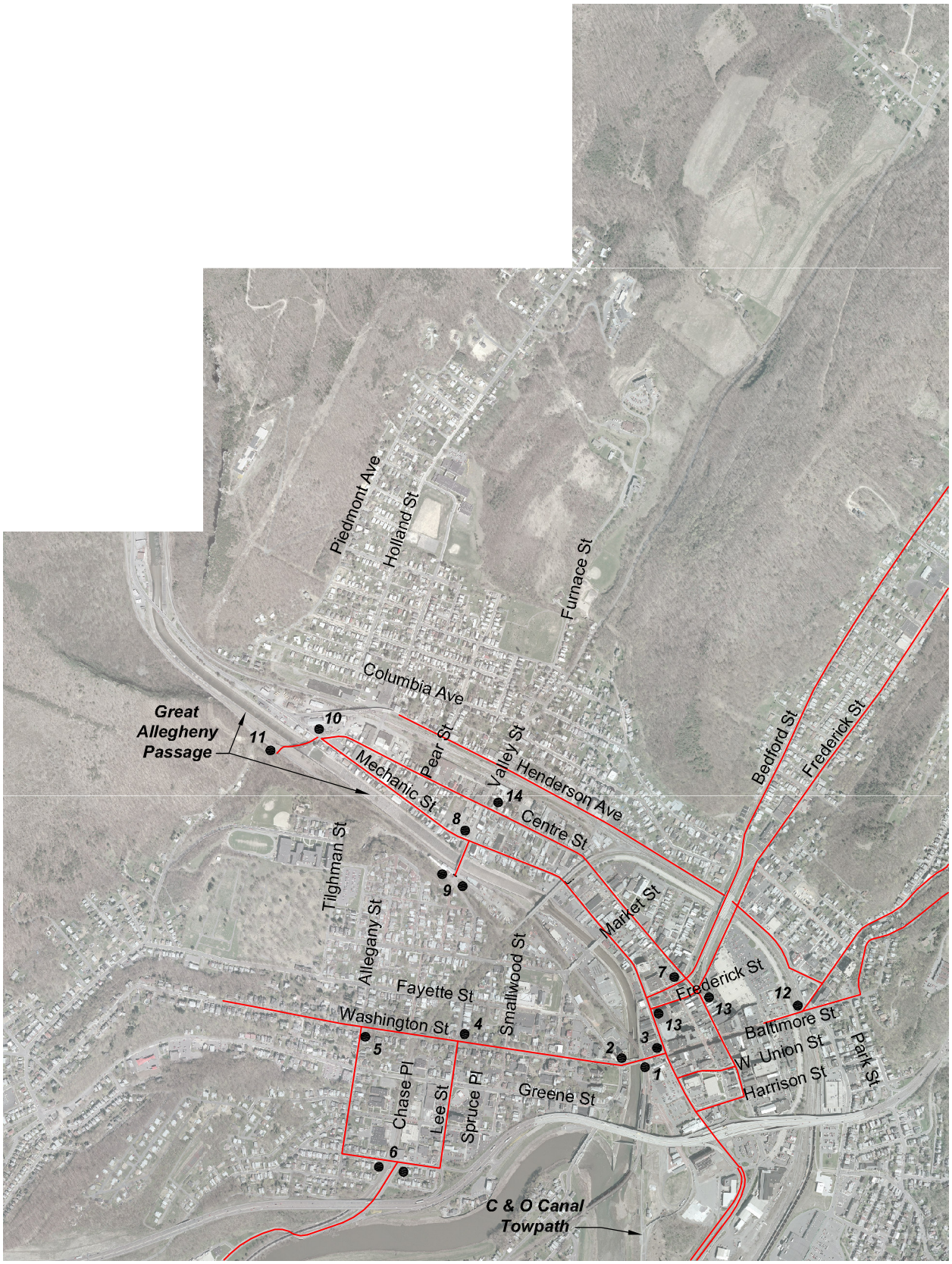


Figure 15: Objective: B.6. - Wayfinding signage

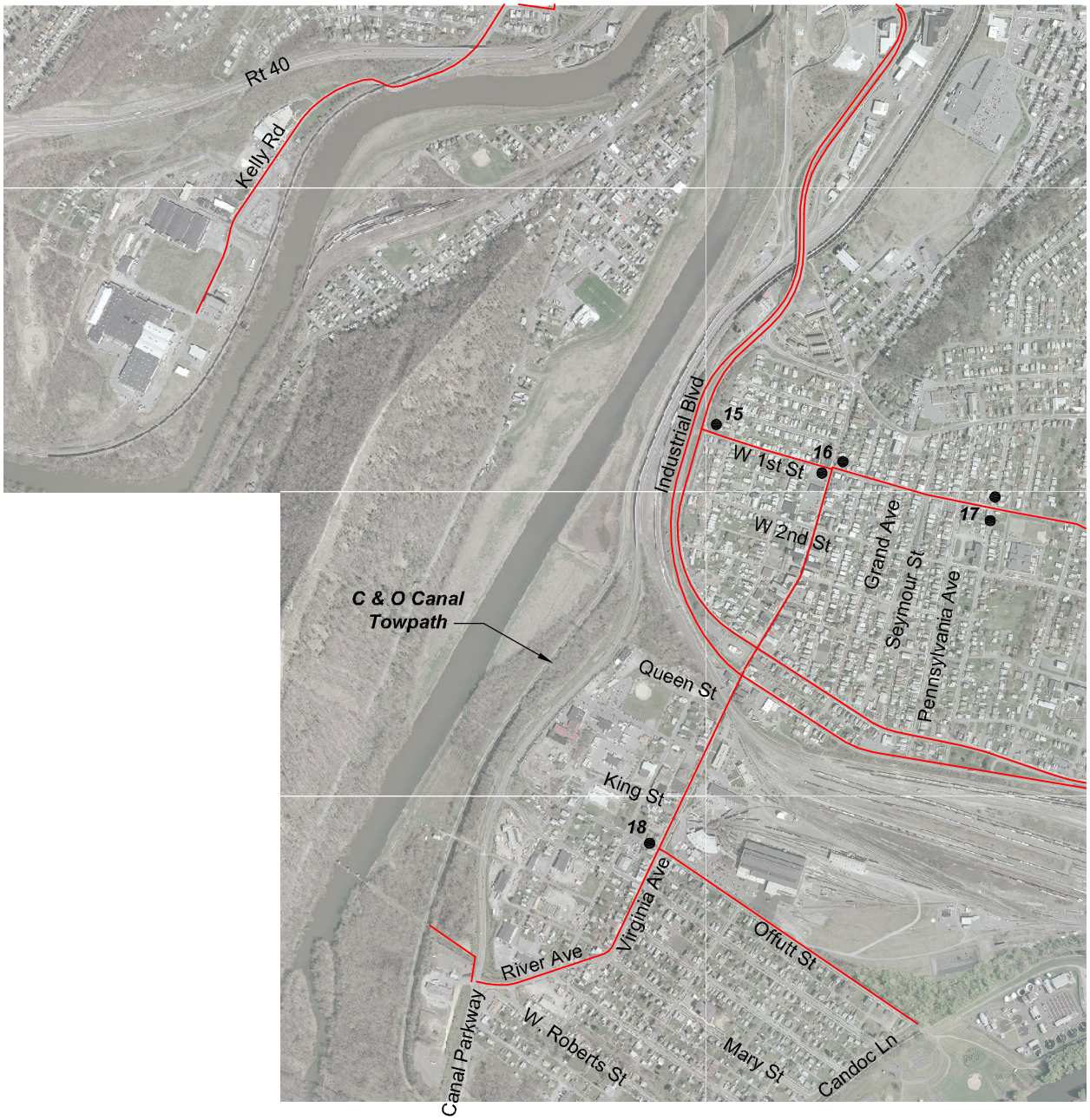
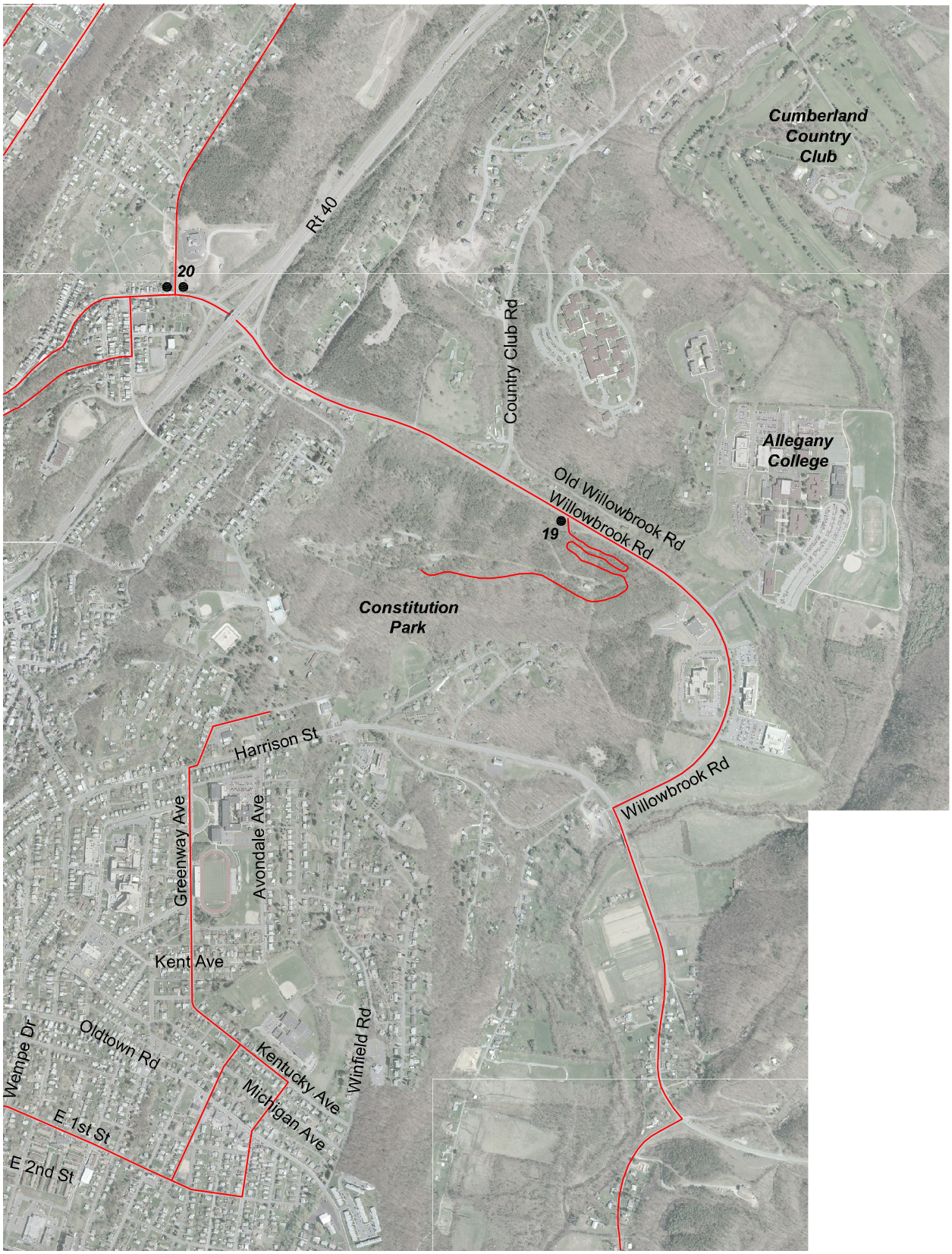


Figure 16: Objective: B.6. - Wayfinding signage



7. **Trail Enhancement Rest Stops.** Consider inclusion of trail enhancements rest stops along bike routes. Enhancement stops should include a bench, one bike rack, and historic interpretive signage. The stops would provide a break on steeper routes for less experienced riders. Historic signage can serve as educational opportunities for local citizens and as historic themed educational bike routes that attract tourist riders of the regional trails and provide them with an additional way to explore the City of Cumberland. As an alternative to historic signage or incorporated with the signage, public art displays could be incorporated at enhancement rest stops. This could be used to create a changing theme with temporary public art installation that would provide incentives for local residents and tourists to explore the same routes with new experience each year. The public art could work with local artists or students to develop the displays. Potential locations for rest stops with possible historic interpretive signage themes are included in the list below. Also see *Design Guidelines* sketch.

    a. Washington St. – historic signage with a potential architectural theme
    b. Willowbrook Rd and Constitution Park trail (objective A.12.) – would serve as a trail head and could have a park history theme.
    c. Mechanic St and potential regional trail connection (objective A.16.) – would serve as a gateway for city to regional trail system link and could have a transportation history of the bridge theme.
    d. Williams Rd at Evitts Creek crossing – would serve as a rest along the Cumberland Bike Loop (objective A.3.) and could have a water resources environmental theme.
    e. Kentucky Ave or Greenway Ave – would serve as a rest along steep portion of street and could have a local schools history theme.
    f. Neighborhood theme stops could be included at; Virginia Ave, 1st Ave, Frederick St, and Kelly Rd.

C. Encouragement

Goal:

Establish the City of Cumberland as a welcoming and inviting place that; provides safe recreation and alternative transportation bicycling routes, encourages bicycle use, provides incentives for bicycle related events for local residents and tourists, and considers bicycle needs in related City projects.

This section identifies methods to encourage riders to use bicycle facilities throughout the City, and provides a forum for continued public involvement in the long and short term bicycle goals for Cumberland. Canal Place and the regional trails now draw a large number of residents and tourists on their bikes inside the City limits. The objectives outlined below will help these riders know that the rest of the City is just as welcoming and easily navigated. They also encourage those that are not familiar with the existing regional trails to use their bicycles for recreation and transportation. At the Public Workshop, and throughout the process of preparing the Plan, numerous residents have been vocal of their ideas and support of Cumberland as a city that is bike friendly. An outlet for their continued involvement will turn the Plan from a document with recommendations to an evolving handbook for success with new ideas. Public outreach and events will also serve to achieve 2004 Comprehensive Plan *Objective 4.5 Promote pedestrian and bicycle travel as alternatives to the automobile and as a recreational activity for visitors and residents.*

Objectives:

1. **Continued Advocacy for Bicycle Improvements.** Form the Cumberland Bicycle Advisory Committee (CBAC). The CBAC should be a volunteer group that serves as a bicycle advocacy group to promote the recommendations of the Plan, provide continuing coordination with local allied groups (such as; Downtown Development Commission, Allegheny Highland Trails of MD, Western Maryland Wheelmen, concerned citizens, and cycling advocates), facilitate and allow for continued public involvement and comments on cycling issues in the City, and promote and advise the City government on current bicycle issues. The chair for the CBAC should be a City employee to better communicate the recommendations of the group.

    a. Hold bi-monthly or quarterly meetings to keep up to date on issues and insure progress is made.
    b. Hold bi-annual meetings open to the public to provide a venue to keep people informed of initiatives and obtain citizen input.

2. **Cycling Events.** Develop Cycling Events that promote tourism, encourage riders, familiar with the regional trails but unfamiliar with Cumberland, to spend time in the City, and provide unique recreational and cultural opportunities for residents and tourists. Cycling Events should also be organized to promote local businesses and increase the visibility of cycling throughout the City. The CBAC should help in the development, coordination, and organization of events.

    a. Promote National Bike Month in May. The League of American Bicyclists has more information on Bike Month including suggestion events on their website (the official Bike Month site) at: http://www.bikeleague.org/programs/bikemonth/
    b. Work with the Downtown Businesses to promote bike events to draw tourists and residents to the downtown area and encourage cycling.
    c. Guided Historic Tours that highlight various destinations throughout the city.

3. **Bike Friendly Designation.** Pursue designation as a Bike Friendly Community (BFC) from the League of American Bicyclists. The goal of designation as a BFC received encouragement of the Western Maryland Wheelmen cycling club, representing about 50 local riders, during the preparation of the Plan. The designation involves a two-part application, with part one needing approval prior to submission of part two. There are no communities in Maryland designated as BFC (as of the writing of this Plan according to the League's website). The designation is awarded bi-annually. Designation goes to communities with established records in two or more of the five categories of; engineering, education, encouragement, enforcement, and evaluation & planning. As part of the Plan, a review of the part two application took place to insure that the recommendations of the Plan help towards the long term goal of BFC designation.

    a. Since the City already has an established off-road regional trail system through the City as well as a number of other requirements on the BFC application it may be beneficial to submit the part one application soon. Even if not approved to submit part two of the application, the submission could serve as a learning process to receive potential feedback from the League of American Bicyclists, and potentially help direct and add additional information for the phasing section of the recommendations of this Plan.
    b. After BFC designation; insure that a bicycle coordinator is in place, or designate a project lead at the City to fill out any annual documentation to maintain the designation.

4. **Integration with local code and ordinance.** Consider providing additional requirements in the City Zoning Ordinance, Section 9. Cluster Development, to further define and require provisions for multi-use, ADA accessible trails to be provided as part of the open green space requirements. The trail system should connect to regional or City wide trails or public streets. The second figure under 9.02, (2) of the current ordinance shows callouts for "subdivision trail connection" though no requirements are outlined. The City should also consider providing clarification on how the maintenance responsibility and ownership of these proposed trails would be addressed.

5. **Bicycle Promotion.** Promote bicycle travel as alternate modes of transportation such as a "Bike to Work Day" coordinated and sponsored by local businesses. This could also be tied into the *D. Education and Safety* objectives with demonstrations held at the Baltimore St pedestrian mall to show novices riders how to safely operate their bike to commute to work. Also explore incentives to help employers promote bicycle facilities. Examples could include a cost sharing program to provide publicly accessible bike racks located at employers place of business.

6. **Bicycle Maps.** Develop bicycle route maps to make it easy for all levels of riders to know where to ride, and how to get to destinations.

    a. During the peer review it was noted that Auburn, Alabama has published a bicycle tours guide that is available on their website that is a good example of the level of detail and information that is included to guide those riders less familiar with the City to notable destinations. http://www.auburnalabama.org/cycle/
    b. Provide maps at easily accessible locations such as the City website, local bike shops, downtown businesses, and the visitor center at Canal Place.

7. **Integration with other City transportation projects and improvements.** Continue to integrate and consider the inclusion of bicycle facility improvements as a part of future City Transportation projects, along all roads not just the recommended routes in this Plan. Additional routes that may connect destinations or to routes in this Plan are recommended.

8. **"Bike Cumberland" website.** Consider incorporating a separate page or website into the city website to promote bicycle use and disseminate related information. The page should provide information for local residents and tourists. Examples of information which could be included are:

    a. Making route maps available for print and download.
    b. List bike safety and rules of the road tips.
    c. Listing public bike related events.
    d. Listing of businesses that accommodate tourists using the regional trails.
    e. A list of employers who acknowledge they are bike friendly places to work; providing bike racks, or showers, or incentives for bike commuters.

D. Education and Safety

Goal:

Create a safe environment for bicycle travel in the City of Cumberland through increased enforcement of traffic laws and continued education and training of cyclists and motorists on safely sharing the road.

This section identifies ways to increase bike safety and enforcement. Many cyclists will not ride on the road unless they feel safe. Riders of all ages and abilities need to be familiar with the correct operating procedure and the rules of the road from the perspective of the vehicle driver as well as the bicyclist to insure a safe transportation system for all users.

Objectives:

1. **Continue to Promote Bicycle Safety.** Work with local schools and law enforcement on bicycle safety. There is the potential for events in the downtown area with hands on bicycle safety events that cover safe bicycle operations. This would be an easy way to promote downtown and local businesses and help to promote education.

2. **Visibility.** Promote community bike rides to increase visibility of riders throughout the city. A large group of riders is memorable compared with a single rider, and this may help drivers become more aware of bicyclists presence throughout the City, not just near the regional trails and Canal Place, through visual recognition.

3. **Facility Maintenance.** Perform regular cleaning and maintenance on streets which have bike lanes or are bike routes to provide a safe riding situation. Consider adding this to the existing Cumberland “Adopt-A-Street’ program.

4. **Enforcement.** Work with local law enforcement for the potential use of police officers on bicycle and increased enforcement of traffic laws at key high vehicle and bicycle traffic areas.

5. **Monitor accident data.** Monitor and record bicycle accident data to provide ways to continually improve bicycle facilities and identify un-safe situations and areas that perform at a sub par level.

6. **Coordinate with Parks and Recreation.** Work with the Parks and Recreation Department to include bicycle safety courses and workshops in their adult and youth programs.

    a. Courses could include a recreational touring ride to City park facilities after the safety demonstration to highlight other recreation opportunities.

Design Guidelines

The design guidelines are divided into two parts. The first is a summary of each of the facility types with a description and reference standards, as well as definition of facilities mentioned in the recommendations. The second are design guideline sketches for a range of bicycle facilities.

On-road facilities and signage

In general on-road bicycle facilities should be designed in accordance with industry standard design guidelines which have been developed to provide safe bicycle facilities for numerous road and traffic conditions. Due to the increase in the desire for alternative transportation options, the popularity of cycling for recreation and commuting use, and Maryland's commitment to state wide bicycle and pedestrian access as stated in the vision for the MDOT Twenty Year Bicycle & Pedestrian Access Master Plan many of the cited sources for guidelines may be revised or new solutions or trends may emerge from the field, therefore it would be prudent to stay current of any updates on the standard resources for bicycle facilities listed below.

Guide for the Development of Bicycle Facilities – American Association of State Highway and Transportation Officials (1999)

Maryland SHA Bicycle and Pedestrian Design Guidelines – most recent edition

Maryland Manual on Uniform Traffic Control Devices (MUTCD) - 2006 Edition (Interim Edition) or most recent edition – all route signage should conform to standard signage, see sketch no. 6.

In addition a number of potential routes in Cumberland are on state highways which require compliance with *Accessibility Policy & Guideline for Pedestrian Facilities along State Highways – State Highway Administration – (Dec. 2005)* to provide facilities that are safe and accessible for all pedestrians.

Intersections

Bike lanes at intersections and intersection approaches should be further analyzed during each phase of engineering for specific routes implementation. Bike lane configurations at intersections should consider all traffic issues and the possibility of addressing vehicular traffic deficiencies at the same time as a method for cost saving. Guidance for bike lane configurations for typical intersections, which cover the majority of the intersections associated at the recommended routes of this Plan, can be found in the *Maryland SHA Bicycle and Pedestrian Design Guidelines* and the *Maryland MUTCD.*

Definitions of Bicycle Facilities mentioned in the Plan recommendations

Bike Lane

Bike Lanes are separate bicycle travel lanes separated from the vehicular travel lane by solid white line striping, minimum 5". Typical lane width is 5'. Bike lanes are designated with pavement markings with bicycle symbols and marking arrows. Bike lanes are typically signed with a bike lane sign (R3-17). The Maryland MUTCD provides further guidance on pavement markings and signs.

Bike Route

Bike Routes are planned and designated signed shared roadways that are not recommend having any pavement marking improvements. Bike route signs are MUTCD sign D11-1. As mentioned in the recommendations directional wayfinding is beneficial along these recommended routes and can be designated with the subassembly MUTCD sign D1-1a. Bike Routes account for the majority of the recommended routes in this Plan.

Shared Roadways

Shared roadways are typical roadways with high volumes of traffic where shared lane pavement markings and signage are added to increase the routes safe uses for bicycle travel. The Maryland MUTCD provides guidance on the pavements markings and 'share the road' type signage. Along certain routes coordination with the SHA is recommended to determine the appropriate application and implementation of this strategy.

<u>Off-road facilities</u>

Off-road, greenway trails should be designed and constructed to minimize environmental impacts, including but not limited to, forest, rare, threatened and endangered species, non-tidal wetlands, waterways, floodplains, and steep slopes.

- Trails should be designed with running slopes of 5% maximum, to provide ADA accessibility without providing ramps, and to provide trails that are at a difficulty level that the majority of bicyclists, regardless of ability, can use and enjoy.
- Trail cross-slopes should be 2% to provide positive drainage along the trail.
- Trails should be routed to provide a trail flow that is accommodating to the largest number of riders, unless separate legs or routes are provided specifically for more experienced riders seeking a higher degree of difficulty.
- Erosion can seriously degrade and ruin improperly designed off-road trails, especially on trails that are not bituminous or concrete paving and trails in steep topographic areas, such as Constitution Park, Wills Mountain, Haystack Mountain. Therefore trails should be designed to minimize potential trail erosion by maximizing sheet flow of water across the trail and eliminating, or minimizing, the length of trail where water flows along the trail. In segments where water flows along the trail it may be appropriate to incorporate the use of grade reversals in the layout to minimize long lengths of trail with water flowing and provide low points where collected water drains off the trail.

Bike Parking

Bike Racks

There is currently not a consistent, efficient bike rack style present in the City. Utilizing the same style rack throughout the City will maintain a uniform, clean, and organized appearance, though special themed shaped style racks may be appropriate and add character if correctly selected for the application location. In providing new bike racks whether the standard city style or a themed style is selected the rack should be a model which is able to support the bike at two points. See sketch no. 4.

- A sample list of bike rack manufacturers is listed below, other manufacturers may provide similar products.
    - Dero Bike Rack Co. 2657 32nd Ave S, Minneapolis, MN 55406 http://www.dero.com/index.html
    - Huntco Supply, LLC P.O. Box 10385 Portland, OR 97296-0385, 800.547.5909 http://huntco.com/index.html
    - Call CycleSafe 947 Forest Hills Ave, Suite C Grand Rapids, MI, 888-950-653149546 http://www.cyclesafe.com/Homepage.tab.aspx
    - Palmer Group, 1072 Folsom St., #328, San Francisco, CA 94103, 888-764 2453 http://www.bikeparking.com/index.html

Invert “U” type bike rack providing two points of support for the bike. Two bike parking spaces per rack.

Image: Bike rack, Dero Bike Rack Co. 2657 32nd Ave S, Minneapolis, MN

Themed type bike rack, bicycle shape shown. The inner harbor area of Baltimore, MD has individual racks of these, bike shaped, rack installed which serve as public art in addition to bike racks. A bike shape would obviously promote and make bike use more visible.

Image: Bike rack, Dero Bike Rack Co. 2657 32nd Ave S, Minneapolis, MN

Bike Lockers

There are many manufactures of bike locker products. The majority are modular units that can be combined to create any number of lockers in one location. A number of bike lockers now provide a see through window portion to enable maintenance personnel and users to see if they are in use and potentially increase safety. Bike lockers should have a clear zone at their doors so someone who is loading their bike does not block pedestrian or vehicle circulation. See sketch no. 4. Many of the manufacturers listed under bike racks also produce bike lockers.

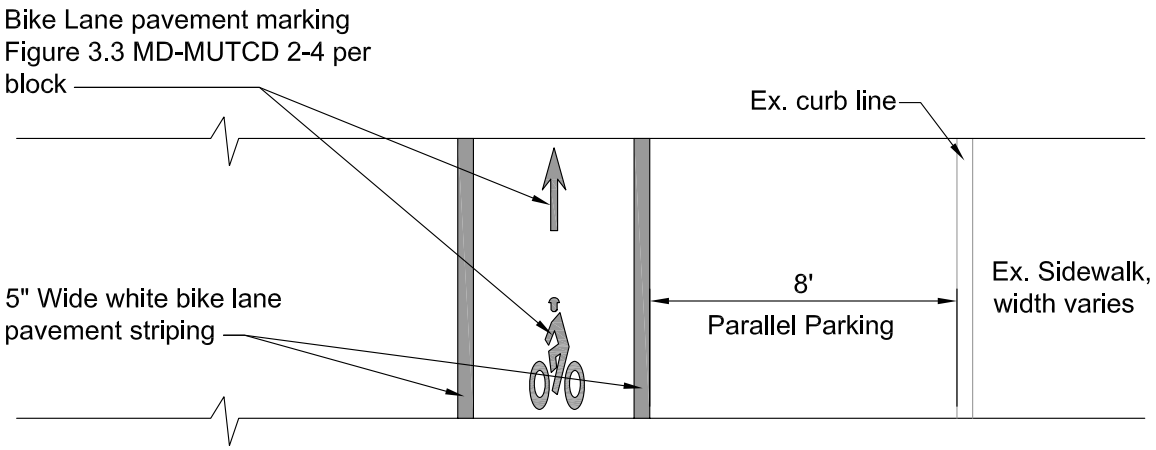
Bike lockers with windows for visibility into the bike racks. Bike lockers can be coin operated.

Image: Bike locker, CycleSafe 947 Forest Hills Avenue, Suite C • Grand Rapids, MI 49546

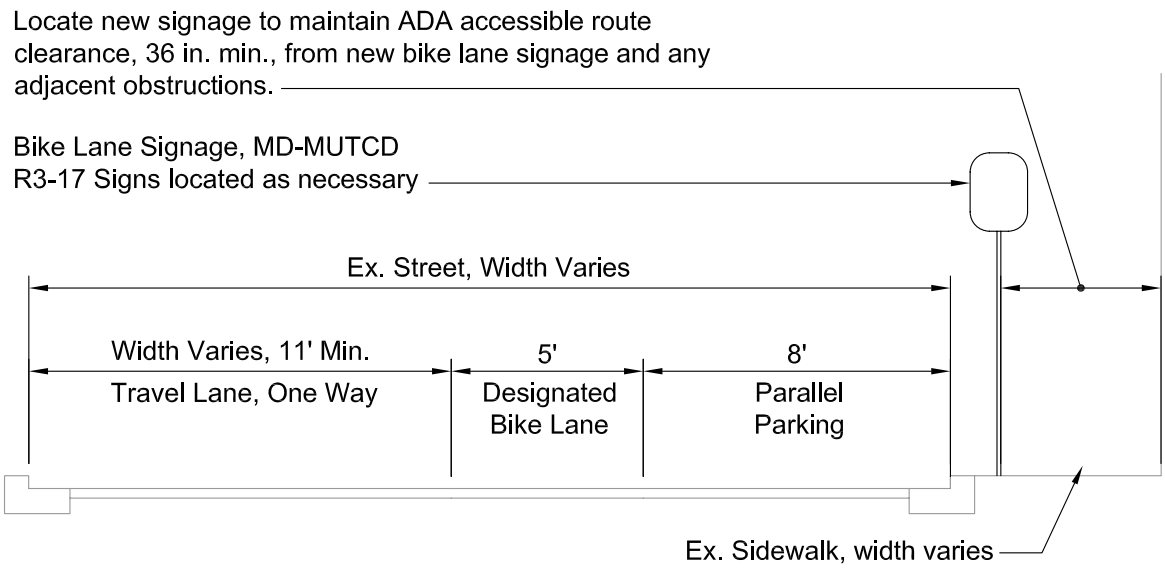
When providing bike lockers along or near sidewalks to insure that pedestrian circulation is not impacted through the placement of the lockers of the area for loading with the locker door is open. Note; in the picture the bike locker protrude into the sidewalk leaving a very narrow portion of sidewalk next to the curb which could prevent ADA accessibility along the walk.

Image: Bike locker, CycleSafe 947 Forest Hills Avenue, Suite C • Grand Rapids, MI 49546

Design Guidelines



Plan



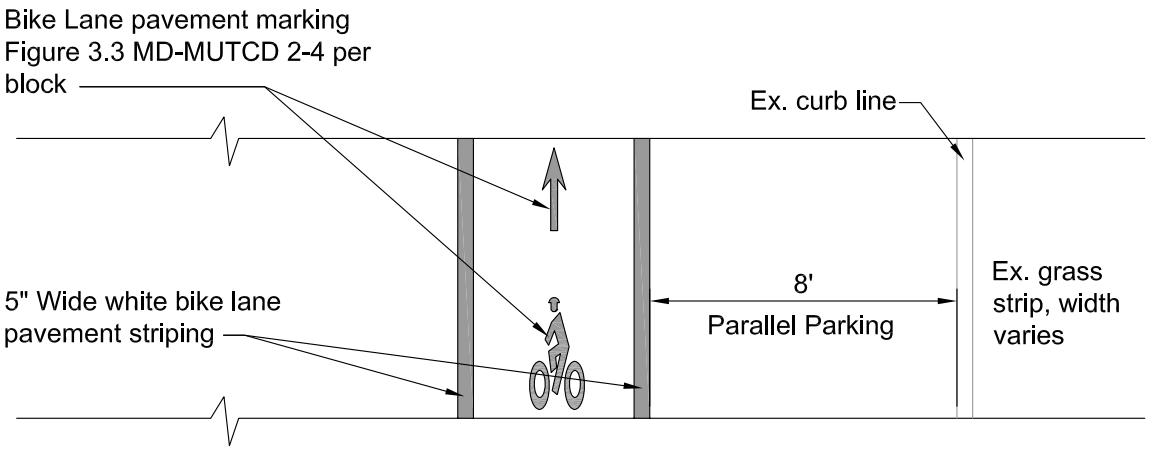
Section

Notes:

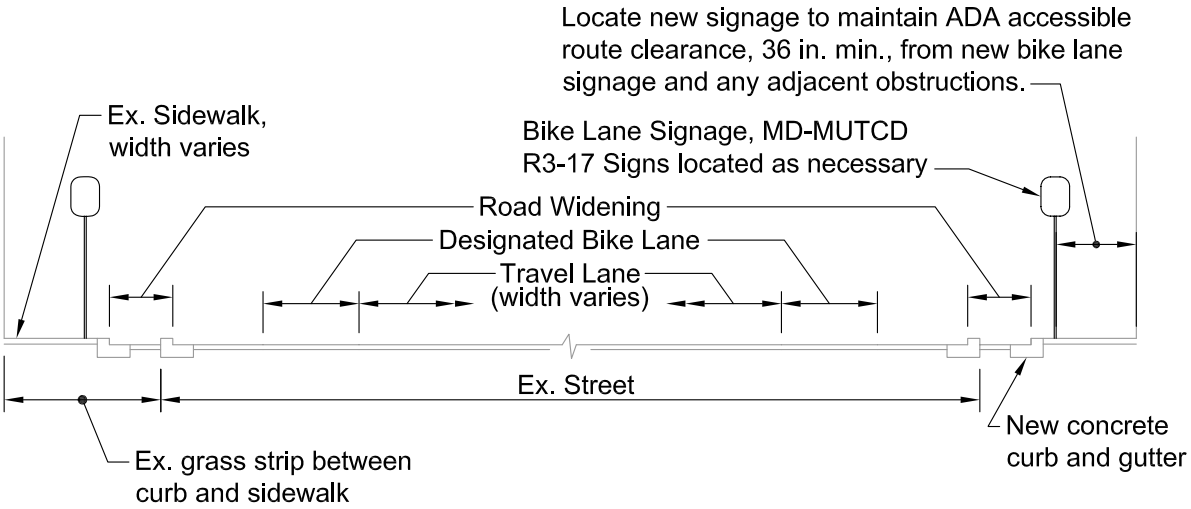
1. Recommended in the Plan for Mechanic St and Centre St as Objective A.1.
2. Where appropriate additional directional or wayfinding should be placed at intersectings bike routes, locations to direct riders to nearby destinations, and to direct riders to areas of bike parking.

Designated Bike Lane. Closed Section One-Way Street with Parallel Parking	**Sketch No: 1**

Design Guidelines



Plan
Typical for both sides of street

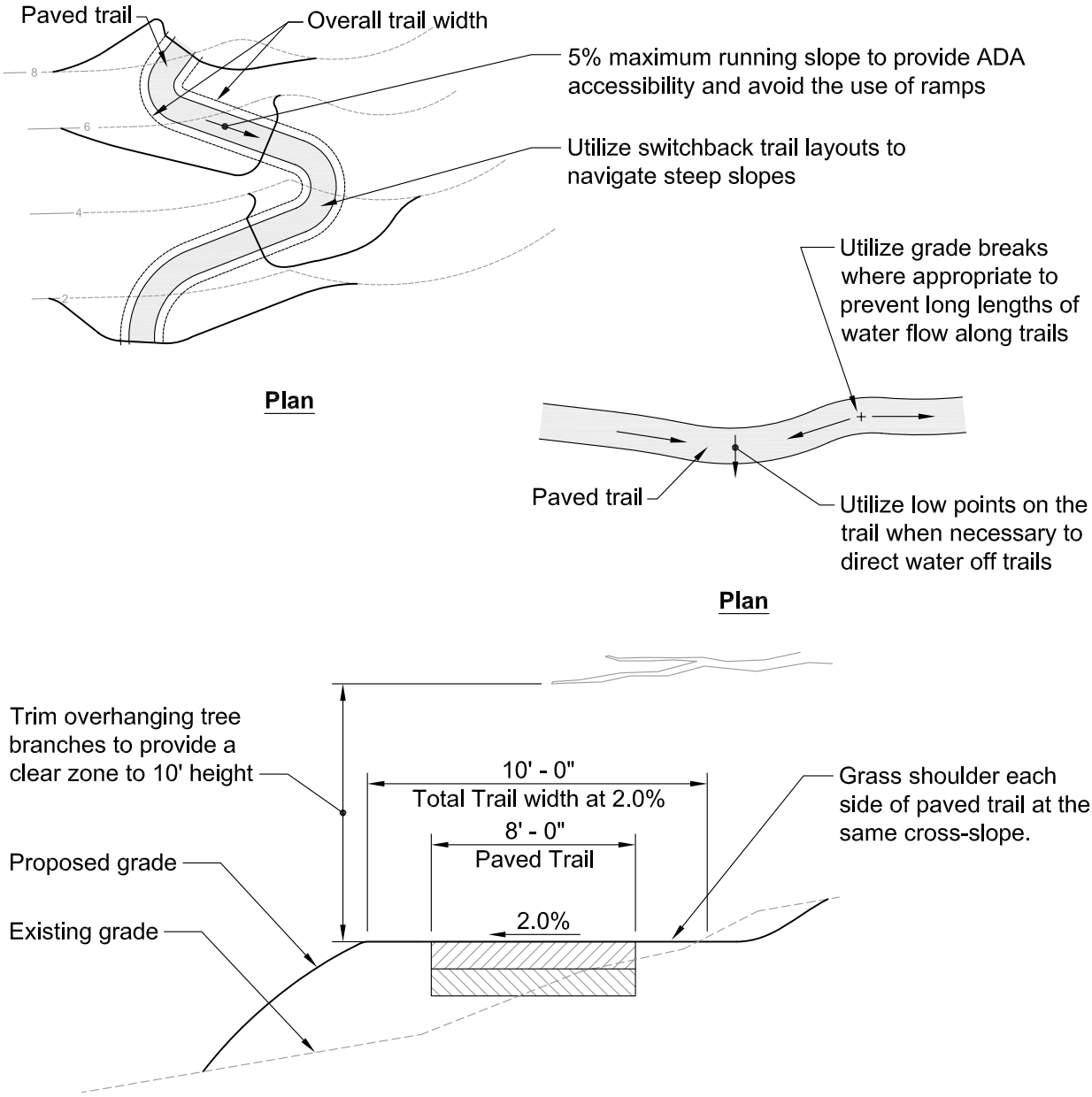


Section

Notes:
1. Sketch shows proposed road widening of existing road to accommodate bike lanes.
2. Recommended in the Plan for Virginia Ave as Objective A.2. where space permits.
3. Bike lanes configuration shown should be used only where current on-street parking does not need to eliminate to accommodate them or where parking can be off-set at a nearby location.

Designated Bike Lane. Closed Section Two-Way Street with Parallel Parking	**Sketch No: 2**

Design Guidelines

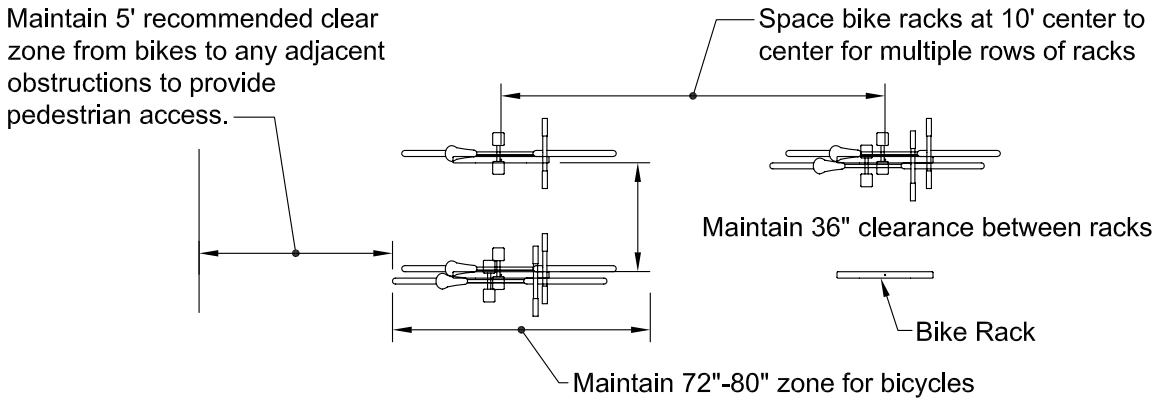


Notes:

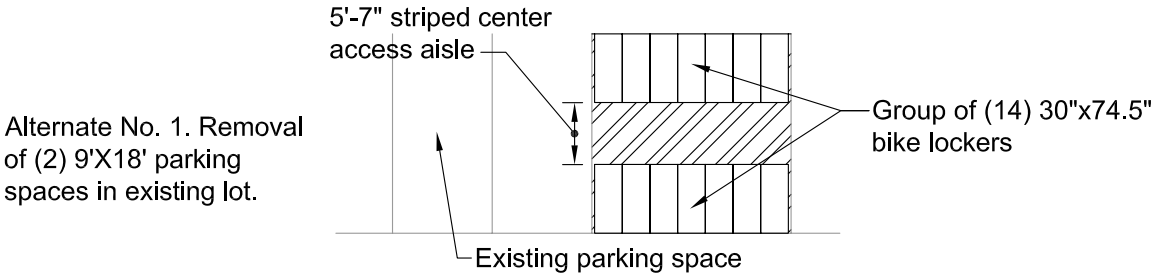
1. Trail should be a 10'-0" total width to allow ease of two-way bike travel and passing
2. Paved width portion can be narrower than overall 10'-0" width to reduce cost with the level grass shoulders adjacent to the trail to create and overall usable trail width of 10' minimum. A paved trail portion of 8'-0" is recommended.

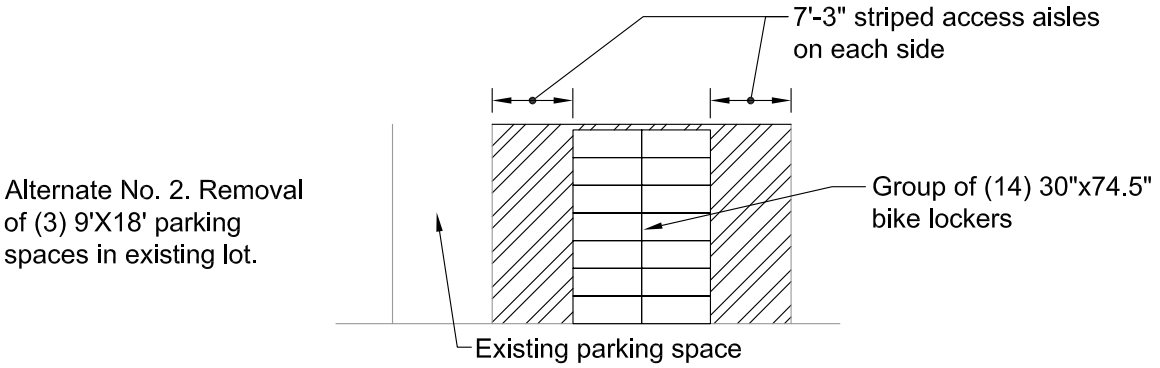
Off Road Trail (Greenway Trail)	**Sketch No:** **3**

Design Guidelines



Bike Racks





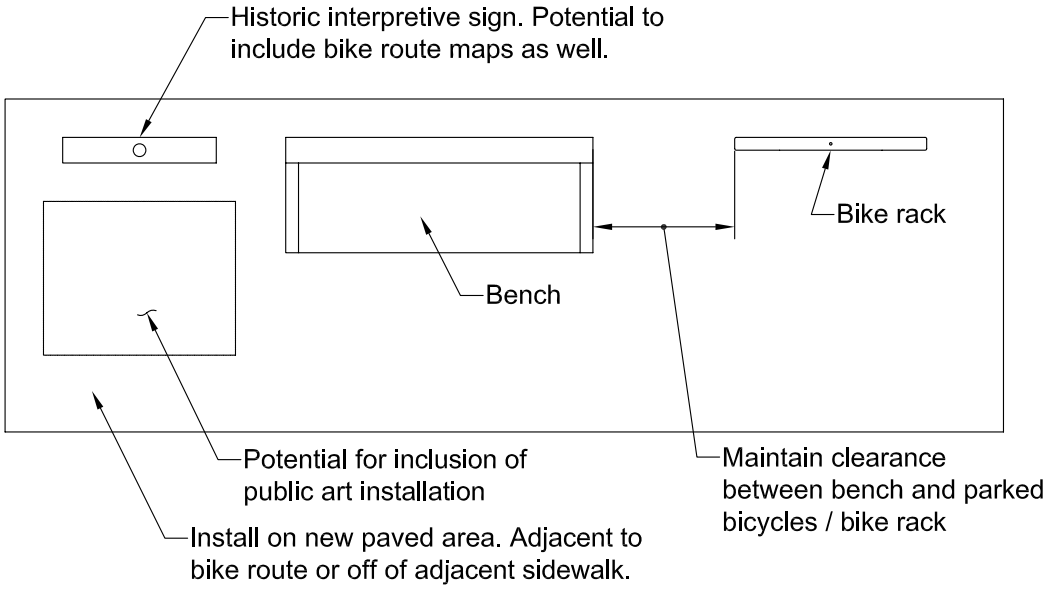
Bike Lockers

Notes:

1. Restripe existing parking spaces as bike access areas for installation of bike lockers.
2. Locate bike lockers in an area with positive drainage away from bike lockers.
3. Locate bike lockers in highly visible areas to avoid potential of creating un-safe conditions or hiding places.
4. Bike rack parking areas should be located in areas easily visible for bicyclists.

Bicycle Parking Facilities	**Sketch No:** **4**

Design Guidelines



Plan

Example of Historic interpretive sign style located at Canal Place. Could be two-sided signs with bike route network map on the reverse side.

Notes:

1. See objective B.7. trail enhancement rest stops
2. Benches should match city standard style bench and fit within the style of the bike rack and sign.

Trail Enhancement Rest Stops	Sketch No: 5

Design Guidelines

Trail designation, route theme, or logo add on to sign. See objective *B.6. Wayfinding Signage* for suggested route theme names.

Directional arrow where bike route changes direction. MD-MUTCD signs M7-1 thru M7-7.

Example sign photo in Baltimore City with named route designation

Example Configuration

Bicycle Route Guide (D11-1) or Bicycle Lane (R3-17) sign, dependent upon facility type implemented.

Information sub-plate to bike route sign. Indicates route Destination or links to other routes / trail connections. Potential locations and directional destination labels are included in objective *B.6. Wayfinding Signage,* Directional Destination Signage chart, and Figures 14-16. Single or multiple destinations.

Sign Types:

1. Bicycle Route Guide sign subplates: D1-1a, D1-b for informational / directional guidance to destinations.
2. Watch for Bikes W11-1(1) and Hiker Biker Trail Crossing W11-1(2) are potential additions at Great Allegheny Passage trail crossings at Baltimore St and Valley St to increase safety of existing trail crossings.
3. Bicycle parking signage is D4-3, and is recommended at the downtown locations in objective B.6. where high use bike park facilities are located.
4. Additional signage may be deemed neccessary during bicycle facitliy design and coordination with any traffic related improvements.

Notes:

1. Application, placement and design of signs including, but not limited to; size, color, fonts, symbols, and wording should be in accordance with the latest edition of the MD-MUTCD, and specifically chapter 9B, Sections 9B.01 and 9B.02
2. In addition to note no. 1. Sign placement should occur at beginning and ends of routes, route directional changes, recommended locations for directional wayfinding to destinations as discussed in objective B.6., and every 0.25 -0.50 miles.
3. Figure numbers referenced above for signs are MUTCD figures.

Signage	**Sketch No:** **6**

SECTION IV:

IMPLEMENTATION

Probable Costs

The probable costs for recommendations of the Plan are based upon dollar amounts at the time of writing of the Plan, mid 2008. When planning the design and funding of future projects an escalation factor should be added to the probable costs listed here. Two cost tables are shown below; a unit costs breakdown, and a cost per recommendation objective. A design costs category is included and costs are listed for applicable, large cost objectives, in the event a consultant is hired to perform the design work. The majority of the objectives leaves this category blank and assumes the City Engineering Department will handle design.

Probable Unit Costs

Facility Type	Cost	Unit	Notes
Bike Lane Pavement Markings (Striping)	$1.40	Per LF	5” wide white thermoplastic tape bike lane striping.
Bike Lane Pavement Markings (Symbol)	$80	Each	Bike symbols and arrows
Off-Road Bike Trail	$33.00	Per LF	Based upon an assumed 8’ bituminous trail with a 2’ average depth of grading 5’ each side of the trail. Silt fence erosion control measures. Seed and mulch 5’ disturbed area outside of trail.
Road Widening for Bike Lane (Assumed 2’ width, 1 side of road w/ adjacent sidewalk)	$66.00	Per LF	Based upon removal of existing concrete curb & gutter and 6’ wide existing concrete sidewalk behind curb line. New bituminous paving, concrete curb & gutter, and 6’ concrete sidewalk.
Road Widening for Bike Lane (Assumed 2’ width, 1 side of road w/o sidewalk)	$40.00	Per LF	Based upon removal of existing concrete curb & gutter. New bituminous paving, and concrete curb & gutter.
Bike route and bike lane signage	$150.00	Each	Assumes standard type and size sign.
Individual Bike Rack	$200.00	Each	One bike rack plus installation onto existing surface
Individual Bike Locker	$1,500	Each	Bike locker for one bike
Road Re-Surfacing	$1.80	Per SY	Asphalt Paving overlay
Trail Amenity / Informational Signage	$500.00	Each	Non-standard signage; historical or trail information signs, etc.
Benches	$1,200	Each	City bench

Probable Objective Costs

Objective	Description	Notes	Cost*	Design Cost**
A.1.	On-road - Downtown / Mechanic St and Centre St	Mechanic St, Bike Lane - 5,230 LF	$12,500	
		Centre St, Bike Lane – 5,530 LF	$14,500	
A.2.	On-road – Virginia Ave	Road Widening & Bike Lane - 3,400 LF	$320,000	
A.3	On-road – Cumberland Bike Loop	Industrial Blvd, Signed Route – 15,000 LF (Assumes 7 Signs)	$1,350	
		Messick Rd, Signed Route – 4,000 LF (Assumes 4 Signs)	$1,000	
		Williams Rd, Signed Route – 3,000 LF (Assumes 3 Signs)	$1,000	
		Willowbrook Rd, Signed Route – 7,700 LF (Assumes 6 Signs)	$1,200	
		Shades Ln, Signed Route – Included as A.7. cost	$1,000	
		Bedford St, Signed Route – Included in A.8. cost	$1,000	
A.4.	On-road – Alt. Rt. 40, Henderson Ave	Signed Route – 5,000 LF (Assumes 5 Signs)	$1,000	
A.5.	On-road – Alt. Rt. 40, Baltimore Ave	Signed Route – 4,000 LF (Assumes 5 Signs)	$1,000	
A.6.	On-road – Riverside YMCA and Industrial Area	Signed Route – 6,000 LF (Assumes 16 Signs)	$2,760	
A.7.	On-road – Shades Ln	Signed Route – 8,630 LF (Assumes 5 Signs)	$1,000	
		Road re-surfacing – 20,000 SY	$41,400	
A.8.	On-road – Bedford St and Frederick St	Bedford St, Signed Route– 12,600 LF (Assumes 5 Signs)	$1,000	
		Frederick St, Signed Route – 11,500 LF (Assumes 5 Signs)	$1,000	
A.9.	On-road – Industrial Blvd. to Constitution Park	Signed Route – 11,100 LF (Assumes 12 Signs)	$2,500	
A.10.	On-road – Washington St	Signed Route – 3,500 LF (Assumes 5 Signs)	$1,000	
A.11.	On-road – Offutt St.	Signed Route – 2,600 LF	$1,000	
A.12.	Off-road trails – Constitution Park	5,280 LF paved trail	$200,000	$20,000

Objective	Description	Notes	Cost*	Design Cost**
A.13.	Off-road – Braddock's Trail	Continued route specific planning		
A.14.	Off-road Greenway trails	Continued route specific planning		
A.15.	Off-road Neighborhood trails	Continued route specific planning		
A.16.	Potential regional trail connection	Cost for Structural Bridge Investigation and Recommendations only.	$20,000	
A.17.	Future Regional Trail Connection	Off-road trail & directional signage – 660 LF	$26,000	$4,000
A.18.	Future North End Neighborhood Connections	Assumed Off-road trail & directional signage – 4,600 LF	$175,000	$17,500
A.19.	Future West Side Neighborhood Connections	Assumed Off-road trail & directional signage – 4,000 LF	$152,000	$15,200
A.20.	Baltimore Street Pedestrian Mall	4 New Signs	$1,610	
A.21.	Valley St Bridge and Great Allegheny Passage crossing	A) New traffic calming measures	$3,500	
		B) New trail crossing under bridge – 250 LF	$15,000	
A.22.	Baltimore St Bridge	Additional Directional signage	$1,500	
B.3.	City wide – Bicycle Parking	3 Racks; Cost per each location	$700	
B.4.	Downtown Bicycle Parking	Bike Racks 6 locations, 28 Racks	$6,500	
		14 Bike Lockers	$26,000	
B.7.	Trail Enhancement Rest Stops	Historic Signage, bench, bike rack, paving (cost each stop; 9 total suggested see Section III, B.7.)	$3,500	

*****Probable Costs listed include a 15% contingency and exclude mobilization, general conditions, maintenance of traffic (if necessary), and escalation.
******If necessary or not completed in-house by City Engineering Department. Based upon 8-15% of the subtotal cost depending upon the size of the project.

Phasing

The phasing section is broken into several parts. The A and B Objective Phasing parts prioritize the recommended improvement objectives within the *A. Bicycle Routes*, and *B. Bicycle Amenities* sections of the Plan. The C and D Objective Phasing parts prioritize the recommended improvement objectives with the *C. Encouragement*, and *D. Education and Safety* sections of the Plan. The conclusion of the phasing section discusses potential kickoff projects to sustain the momentum of the Plan.

A and B Objectives Phasing

The *A and B Objectives Phasing Chart* lists plan objectives with categories that they are rated in. Each category is assigned a score and the total scores are used to rank low, medium, and high priorities. A description of the categories and how they are scored follows below.

Category Descriptions and Scoring

- *Cost.* This is based upon the cost listed in the Probable Cost discussion earlier in this section. Lower cost objectives are given a higher priority as they are easier to implement and would involve less work in obtaining funding.
    - Scores are; 3 = $0 - $9,999, 2 = $10,000 - $24,999, 1 = greater than $25,000, objectives which require additional planning are given a score of 1

- *Users.* Does the objective cater to recreational riders, commuters, or both? Or the alternate question does the objective cater to local residents, tourists, or both?
    - Scores are; 2 = both, 1 = only one

- *Links.* How many local and tourist destinations are served by the route?
    - Scores are; 2 = 3 or more destinations, 1 = 1-2 destinations, 0 = no specific destinations served

- *Connections.* Does the recommendation provide a direct connection or impact to the regional trails, Great Allegheny Passage and C&O Canal Towpath?
    - Scores are: 2 = yes, 1 = no or indirect

- *Score.* Total of the numerical scores from the preceding categories for each objective.

- *Priority.* Higher scores equal high priority objectives as they provide the most benefit based upon the above criteria. A objective rankings: 3-4 = Low, 5-6 = Medium, 7-8 = High. B objective rankings: 2-4 = Low, 5-8 = High

A and B Objectives Phasing Chart

Objective	Cost	Users	Links	Connections	Score	Priority
A.1.	1	2	2	2	7	High
A.2.	1	1	0	2	4	Low
A.3	3	2	2	1	8	High
A.4.	3	1	0	1	5	Medium
A.5.	3	1	0	1	5	Medium
A.6.	3	1	1	1	6	Medium
A.7.	3	1	0	1	5	Medium
A.8.	3	2	2	1	8	High
A.9.	3	2	2	1	8	High
A.10.	3	2	2	1	8	High
A.11.	3	2	1	2	8	High
A.12.	1	1	1	1	4	Low
A.13.	1	2	0	2	5	Medium
A.14.	1	1	0	1	3	Low
A.15.	1	1	0	1	3	Low
A.16.	2	2	0	2	6	Medium
A.17.	1	2	1	2	6	Medium
A.18.	1	1	0	1	3	Low
A.19.	1	1	0	1	3	Low
A.20.	3	2	2	1	8	High
A.21.	3	1	0	2	6	Medium
A.22.	2	2	1	2	7	High
B.1.	1	1	-	1	3	Low
B.2.	1	1	-	1	3	Low
B.3.	3	1	-	1	5	High
B.4.	3	2	-	1	6	High
B.5.	1	1	-	1	2	Low
B.6.	1	2	-	1	3	Low
B.7.	3	2	-	2	7	High

C and D Objectives Phasing

The recommended objectives within the C. Encouragement, and D. Education and Safety categories are generally non-physical, planning type improvements that would be difficult to assign a scoring system to. Therefore the *C and D Objectives Phasing Chart* categories are the objective, the priority level, and written description of why it is categorized at that particular priority level.

C and D Objectives Phasing Chart

Objective	Priority	Why?
C.1.	High	This is a low to no cost objective which facilitates future public participation, helps to maintain the long term momentum of the Plan by having an advocacy group, can help take the lead in organizing some of the *Encouragement* activities, and is listed on the part one application for Bike Friendly Community (BFC) designation from the League of American Bicyclists which directly contributes to another Plan objective C.3.
C.2.	High	Cycling events could provide benefits to all local citizens and tourists, not just cyclists. They could also benefit local businesses, and draw additional visitors to the City.
C.3	High	This is a high priority because achieving the designation would positively impact the image and marketing of Cumberland, and could benefit local businesses and city wide economic development.
C.4.	Low	This is important to insure future development considers the needs of cyclists and pedestrians and connects to a city wide system. It is listed a low priority because it does not provide a benefit to users until development occurs, and that is usually a long process.
C.5.	Medium	Those riders who do not already use bikes as alternative transportation will most likely be more favorable to the idea once some of the physical improvement recommendations are already in place to make it easier to do so. Especially important is sufficient bike parking in place, objectives B.3. and B.4.
C.6.	Medium	Although bicycle route maps are important they will probably provide the most benefit to those unfamiliar to the City, tourists and local riders. They would also benefit from being produced after some of the recommended physical route and amenity improvements are already in place.
C.7.	Low	This objective relates to including bicycle and pedestrian access in the planning, design, and construction of future transportation projects, which are generally long term type project that involve considerable lead time.
C.8.	Medium	This objective will provide the most impact when bike routes are in place, bicycle maps are available (C.6.), and events are scheduled (C.2.). Although it could be considered a high priority as it can still be useful earlier on just not as useful as it will eventually become.
D.1.	High	Safety should be a top priority. Increasing bicycle safety and education will promote and encourage new riders.
D.2.	Medium	This objective would be beneficial after the bicycle routes are in place to further enforce to motorists that a particular area is now an official bike route and they should now expect to see riders there.
D.3.	Medium	This objective is only necessary to occur after the bicycle routes are in place to provide up keep.
D.4.	Low	This objective would be beneficial if bicycle use increases in the city after some of the physical improvements are in place.
D.5.	Low	This objective would be beneficial to monitor and analysis the success of bicycle safety after a city wide bike network is in place.
D.6.	High	This objective is a high priority because is will promote new riders and provides a new activity that is open to all local citizens to improve their enjoyment of bike riding in Cumberland for recreation and / or commuting.

Kickoff Projects

As noted in the peer review section of the Plan a kickoff or initial demonstration project has been used in other cities to maintain the momentum created from the Master Plan process. This also serves as a public relations and educational outreach tool to put into action some of the Plan Objectives and show people how the improvements will impact them. The downtown area is the likely candidate for a physical installation kickoff project due to the visibility it would receive from local residents and tourists. But due to the timing of the submission of the Plan, September 2008, a portion of the '08 riding season has elapsed and it may not be feasible to initiate the installation of bike lanes or signage on a route quickly enough to make an impact in 2008. Therefore some of the non-physical improvement objectives in the encouragement and education section are recommended for the fall and winter of this year and early next year, followed by physical improvements to correspond with National Bike Month in May 2009.

Plan Objectives recommended for kickoff or demonstration projects

- Establishment of the Cumberland Bicycle Advisory Committee (CBAC)
    - Objective: C.1.
    - Priority Level: High
    - Why: This is a low to no cost objective which facilitates future public participation, helps to maintain the long term momentum of the Plan by having an advocacy group, can help take the lead in organizing some of the *Encouragement* activities, and is listed on the part one application for Bike Friendly Community (BFC) designation from the League of American Bicyclists (Objective C.3.).
    - Timeline: October thru December 2008

- Downtown bicycle parking areas, and limited bike access signage at the Baltimore St Pedestrian Mall.
    - Objectives: A.20. and B.4.
    - Priority Level: High
    - Why: This area is a hub of activity, home to numerous tourist and local destinations, and easily accessible from the regional trails and Canal Place. These are two low cost objectives that improve bicycle access to downtown and local business.
    - Timeline: April 2009

Funding

The funding section begins with a list and description of sources categorized by public, private, and resources. The description section is follow by a chart showing the Plan objectives and potential matches with the listed funding sources.

Public

City of Cumberland

Consider the establishment of a bicycle fund to establish fiscal year spending goals for bicycle facility improvements or as matching funds form potential bicycle facility grants.

Consider bicycle facility improvements which can overlap with the budgets for other public capital improvement or maintenance projects. Examples include:

- Striping of bike lanes to coincide with regular road resurfacing or re-striping maintenance projects.
- Inclusion of on-road bicycle facilities and prioritization within transportation capital improvement road projects.
- Parks and Recreation improvements for public park trails.
- Continuing rider education programs with safety programs and Parks and Recreation activity programs

City of Cumberland and Local Business Partnership

Consider a cost sharing program, between the City and private businesses, for the installation of bike racks and bike parking facilities at local businesses throughout the City. In the downtown, Baltimore St mall area, where multiple businesses could be served, investigate cost sharing with the Downtown Development Commission. An example of a successful program, which Cumberland may look at for guidance, is the City of Minneapolis, MN “Neighborhood Bike Rack 50/50 Cost Share Program”. Information on their program is at:
http://www.ci.minneapolis.mn.us/bicycles/bikeparking-rack.asp

In addition, some of the recommended bike rack styles provide the opportunity for messages or advertising that could possibly be sold for bike racks in public spaces.

Appalachian Regional Commission (ARC) - program grants

The ARC awards program grants for a variety of projects that fit within their strategic plan’s four general goals. A portion of this Plan was funded through the ARC. The grantees are expected to contribute matching funds. More information can be found at:
http://www.arc.gov/index.do?nodeId=101

Coalition for Recreational Trails, Recreation Trails Program (RTP)

The RTP is administered by Maryland State Highway Administration (SHA). The RTP matches federal funds with local funds to implement trail projects. Projects sponsors can be county or municipal government.

The RTP funding requires a minimum 20 percent matching funds. RTP funding may be used for:

- Maintenance and restoration of existing trails.
- Development and rehabilitation of trailside and trailhead facilities and trail linkages.
- Purchase and lease of trail construction and maintenance equipment.
- Construction of new trails (with restrictions for new trails on Federal lands).
- Acquisition of easements or property for trails.
- Assessment of trail conditions for accessibility and maintenance.
- Development and dissemination of publications and operation of educational programs to promote safety and environmental protection related to trails (including supporting non-law enforcement trail safety and trail use monitoring patrol programs, and providing trail-related training) (limited to 5 percent of a State's funds).
- State administrative costs related to this program (limited to 7 percent of a State's funds).

A project database is maintained at *http://www.funoutdoors.info/rtphome.html*

A search of previous funded projects in Maryland gives a brief description of the project which may provide further guidance in Cumberland's efforts to obtain funding.

Below is contact information for the Maryland RTP coordinator:

Terry Maxwell, Recreational Trails Coordinator
Office of Environmental Design
Maryland State Highway Administration

Street: 707 N Calvert St Mailstop C-303
Baltimore MD 21202-3668
Mail: Mail Stop C-303
PO Box 717
Baltimore MD 21203-0717

Phone 410-545-8637 or 800-446-5962
Fax 410-209-5003
tmaxwell@sha.state.md.us

Future Transportation Improvements

The Cumberland Area Long Range Transportation Plan; Chapter 4: Financially Constrained Long-Range Transportation Plan has recommended projects at areas where bicycle facilities would be beneficial as mentioned throughout this Plan. Continue coordination and investigation to insure funded and planned transportation improvement projects consider the inclusion of bicycle facilities. In most cases accommodating bicycle facilities in the improvements would not add significant cost to the projects.

Transportation Enhancement Program (TEP)

Administered by the Maryland State Highway Administration (SHA), this program reauthorized through the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) funds non-traditional transportation related projects including provisions for facilities for pedestrians and bicycles. SHA provides some project support services but design, management, construction, implementation, and permits are all the responsibility of the project sponsor. The TEP is a Federal Funds reimbursement program not a grant program. The TEP will not fund more than half of a project's total costs or more than 80 percent of its reimbursable costs. More details can be found in the Maryland Transportation Enhancement Program manual available through the SHA.

Trail Strategic Implementation Plan (TSIP)

The Maryland Department of Transportation (MDOT) has recently initiated the preparation of the TSIP as an analysis and assessment of existing trail systems throughout the state. The TSIP may identify potential connections throughout the state to link existing trail systems. As the TSIP preparation process will likely extend through 2009 the City of Cumberland and the newly formed Cumberland Bicycle Advocacy Committee should stay current with the process due to the presence of regional trails through the City, and potential regional connections that may be recommended as part of the TSIP that could enhance Cumberland's bicycle goals.

Rivers, Trails, and Conservation Assistance Program – National Park Service

The program does not issue grants but does provide assistance in the planning portion of conservation project through their in house staff. A few recommendations of the Plan are for potential and future greenway and regional trail connections which could benefit from additional planning that focuses on just that objective and how it specifically could be achieved, and may fit within the parameters of this program. The program can be found at http://www.nps.gov/ncrc/programs/rtca/index.htm

Private

Bikes Belong Grant

Bikes Belong awards grants of up to $10,000 for facility and / or advocacy projects. Grants are reviewed on a quarterly cycle and are accepted by e-mail.

The City of Cumberland is eligible to apply for a grant under the facility category. The program encourages municipalities "to align with a local bicycle advocacy group that will help develop and advance the project or program." The City should consider potential alignments with a local cycling clubs or advocacy group, or in association with the recommended Cumberland Bicycle Advocacy Committee. Project types eligible under the facility category include:

- Bike paths, trails, routes, and lanes
- Mountain bike facilities
- Bike parks
- BMX facilities
- Innovative and unique high-profile projects

More information, guidelines, and applications can be found at *http://www.bikesbelong.org*

Fundraising and Advertising

There are numerous creative avenues for project fund raising that can coincide with other recommendations in the Plan for encouragement and community bike related events. Some example follow below, but stakeholders throughout the community may have other creative ideas that the Cumberland Bicycle Advocacy Committee, when formed, can sponsor.

- Guided bicycle historic tours where a small donation goes to community bicycle advocacy projects.
- Cumberland Bicycle Maps could sell advertising space to cover the cost of production.
- Sponsorship of bike routes
- Entrance fee for bicycle event participants (races etc.)

Private Businesses

Coordinate and work with business owners where appropriate for funding of physical improvements in addition to the advertising recommendations listed above. The most obvious teaming opportunities are for bicycle facility amenities such as:

- Sponsorship of encouragement events or bicycle education / rules of the road classes

Resources

A number of bicycle advocacy groups provide additional resources regarding bicycle facility and trail funding which are available on their websites. Below is a list that should be beneficial throughout the implementation of bicycle facility improvements in Cumberland.

American Trail

This is a national non-profit group promoting all trail uses. Their website has numerous resources at the links listed below.

http://www.americantrails.org/resources/fedfund/index.html

http://www.americantrails.org/resources/funding/index.html

International Mountain Bike Association (IMBA)

The IMBA is a national non-profit group focusing on mountain bike trails. Their website has links to funding resources and education which may be beneficial with some of the off-road recommendations which may be multi-use trails, including mountain bike.

http://www.imba.com/resources/grants/index.html

Funding Chart

Objective	City of Cumberland	City of Cumberland and Local Business Partnership	Appalachian Regional Commission – program grants	Coalition for Recreational Trails, Recreation Trails Programs	Future Transportation Improvements	Transportation Enhancement Program (TEP)	Trail Strategic Implementation Plan (TSIP)	Rivers, Trails, and Conservation Assistance – National Park Service	Bikes Belong Grant	Fundraising and Advertising	Private Businesses
A.1.	X								X		
A.2.	X								X		
A.3					X						
A.4.					X	X					
A.5.						X					
A.6.						X					
A.7.	X					X					
A.8.	X					X					
A.9.	X										
A.10.	X										
A.11.	X										
A.12.				X					X		
A.13.			X	X				X			
A.14.				X				X			
A.15.				X							
A.16.			X	X			X				
A.17.			X	X			X				
A.18.											
A.19.											
A.20.	X	X								X	X
A.21.	X			X					X		
A.22.	X				X	X					
B.1.	X									X	X
B.2.											
B.3.	X	X								X	X
B.4.	X	X								X	X
B.5.	X	X									X
B.6.	X										
B.7.	X	X								X	X
C.2.		X								X	X
C.5.										X	X
C.6.	X	X								X	X

City of Cumberland
- Maryland -
RESOLUTION

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF CUMBERLAND, MARYLAND, TO ADOPT THE 2008 CUMBERLAND TRAILS AND BIKEWAY MASTER PLAN AS A SUPPLEMENT TO THE 2004 COMPREHENSIVE PLAN.

WHEREAS, the 2004 Comprehensive Plan contains an objective to "promote pedestrian and bicycle travel as alternatives to the automobile and as a recreational activity for visitors and residents," and includes recommended action measures to establish designated bikeways or bicycle compatible roadways in the City; and

WHEREAS, the City received a grant from the Appalachian Regional Commission and secured the services of Whitney, Bailey, Cox, and Magnani (WBCM) to prepare a Trails and Bikeway Master Plan; and

WHEREAS, the City conducted a public workshop on April 26, 2008 to solicit citizen and stakeholder input on issues, needs, and desired routes for future bicycle facility improvements; and

WHEREAS, the Mayor and City Council of Cumberland conducted a public hearing on August 16, 2008 to seek public comments on the draft plan and made copies of the plan available for public review for more than 30 days prior to said public hearing; and

WHEREAS, the City's planning consultant, WBCM, has revised the plan to address the public comments received.

NOW, THEREFORE, BE IT RESOLVED THAT, the Mayor and City Council of Cumberland hereby adopts the 2008 Cumberland Trails and Bikeways Master Plan as a supplement to the 2004 City of Cumberland Comprehensive Plan.

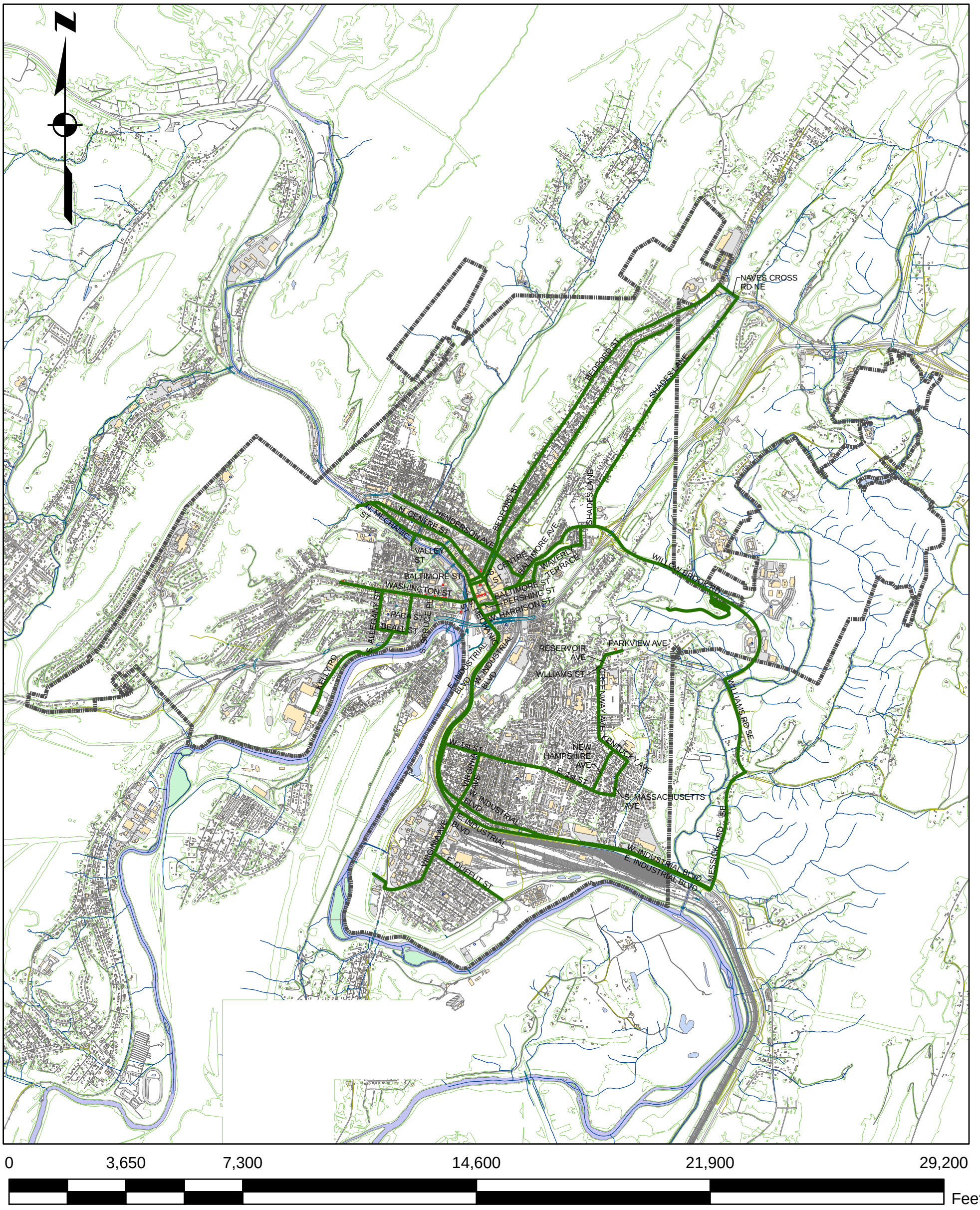
Given under our Hands and Seals this 2nd day of September, 2008, with the Corporate Seal of the City of Cumberland hereto attached, duly attested by the City Clerk.

Attest:

Marjorie A. Eirich
City Clerk

Mayor and City Council
Of Cumberland

Lee N. Fiedler
Mayor



Attachment A: MASTER PLAN

2008 Cumberland Trails & Bikeway Master Plan

City of Cumberland, Maryland

Legend

- Proposed Bike Network
- Tourist Destinations
- Local Destinations
- City_Boundary_05

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WBCM
ARCHITECTURE ENGINEERING CONSTRUCTION