Wiscasset Bicycle-Pedestrian Plan

January 2010

Prepared by

Wiscasset Bike-Pedestrian Committee

Robert Faunce, Lincoln County Planner

Wiscasset Bicycle-Pedestrian Plan

Table of Contents

1. Introduction

2. The Community

3. The Planning Process

4. Existing Plans and Ordinances; Existing Facilities

5. Goals, Objectives, Strategies

6. Survey results - Demonstrated Needs
   - General
   - Biking Survey Results
   - Walking and Running Survey Results

7. Proposed Facilities and Upgrades to Existing Facilities

8. Other Recommendations

9. MDOT Funding Sources for Bicycle and Pedestrian Improvements

Figures

1. Wiscasset History of Growth Maps
2. Wiscasset Waterfront
3. Wiscasset Village Sidewalk System
4. Route 27 Sidewalk
5. Route 144/Birch Point Road
6. Route 218/Federal Street
7. Typical Rural Wiscasset Roads
8. Storm Grates
9. Access Along the River in Wiscasset Village
10. Wiscasset Town Landing and Main Street Pier
11. Railroad Avenue Parking Area, Railroad Station and Pedestrian Improvements
12. Wiscasset Public Trails Location Map
13. Wiscasset Public Trails
14. Pedestrian Highway Crossing - Route 9 China

15. Route 27 Wiscasset High School Crosswalk
16. Sheepscot River Boardwalk
17. Typical Riverfront Boardwalk
18. Route 218
19. Birch Point Road
20. Wiscasset High School Crosswalk
21. Wiscasset Primary School Crosswalk
22. Route 144
23. Route 27 Sidewalk and Proposed Esplanade
24. Potential Off-Road Trail West of Route 27
25. Route 1 Crosswalk Location
26. Lee Street Sidewalk Extension
27. Recommended Signage

Tables

1. Traffic Volumes on Selected Wiscasset Roads
2. SAWDT vs. AADT for Selected Locations on Route 1
3. Wiscasset Sidewalk System
4. Non-Student Purposes for Biking, Walking and Running
5. Non-Student Preferred Biking Locations
6. Non-Student Preferred Walking/Running Location
7. Non-Student Recommended Crosswalk Locations
8. Student Purposes for Biking Walking and Running
9. Student Preferred Biking Locations
10. Student Preferred Walking/Running Locations
11. Students Roads That Are Hard to Cross
12. Most Frequently Cited Biking Routes by Non-Students and Students
13. Most Frequently Cited Walking/Running Routes by Non-Students and Students
14. Bike Rack Inventory
15. Potential New Bike Rack Locations

Appendices

1. Wiscasset Bike-Ped Surveys

Section 1

Introduction

Wiscasset has long been a welcoming community for families, retirees, near-retirees and visitors. The village, which includes many Historic Register and Register-eligible buildings, is a wonderful place to walk for both residents and visitors with almost five miles of brick, concrete and asphalt sidewalks. With the exception of the Wiscasset Christian Academy on Route 1, all of the community's schools are accessible by sidewalk, although traffic speed and concerns about crossing Route 27 greatly limit the number of children who walk to school.

While Wiscasset has excellent pedestrian facilities, the same cannot be said for bicyclists. With the exception of Routes 1 and 27 and a short portion of Route 218, which have paved shoulders, other Wiscasset roadways are not nearly as accommodating to bicycle users. Gravel shoulders, narrow widths, horizontal and vertical curves and, in some instances, poor travel surfaces make bicycling in Wiscasset challenging.

The Town of Wiscasset, Maine Department of Transportation and the Lincoln County Planning Office began a bicycle and pedestrian study in 2009 with the intention of determining the level of interest in bicycling, walking and jogging in Wiscasset. The study included the following work tasks:

- Proposing off-street parking improvements in the downtown to complement a future train station

- Addressing pedestrian access along the waterfront

- Evaluating pedestrian and bicycle access to the transportation system including the need, if any, for new or improved sidewalks, crosswalks or road shoulders, bike lanes or other facilities to enhance safety for pedestrians and bicyclists in Wiscasset including any off road routes that may be needed for connectivity.

- Reviewing existing bike-ped-related ordinance and site plan provisions and, if necessary, recommending amendments to address any deficiencies

- Evaluating the current sidewalk/bicycle budget and the funding mechanism for sidewalk/bicycle facility maintenance and capital improvements

- Developing a public informational process to make the public more aware of the existing and potential future role of pedestrian and bicycle facilities in Wiscasset and to solicit public input into the planning process

- Working with MDOT staff as they continue to develop interim traffic management treatment for Wiscasset village

- Identifying permits that may be required for implementation and preparing maps

Paper surveys were made available at a number of public facilities in Wiscasset and on-line surveys were advertised and linked to the town website. Due to the number of schools in the community and their relative proximity to the village, separate paper and on-line surveys designed specifically for students were created.

As part of the study, students and non-students were asked why and where they walked, jogged or biked in Wiscasset, the routes they took, the condition of existing facilities, recommendations, if any, for new or improved facilities, safety concerns and related information. A total of 160 student surveys and 40 non-student surveys were completed. The results of these surveys, as well as research conducted on existing facilities and meetings with the Wiscasset Bike-Pedestrian Committee, the Wiscasset Transportation Committee and survey respondents who provided contact information, served as the basis for the findings and the recommendations in this plan.

Section 2

The Community

The following includes a summary of data from the 2007 Comprehensive Plan prepared by the Town of Wiscasset Planning Department.

The Maine Historic Preservation Commission has identified Wiscasset as one of three architecturally significant villages in the state, along with the towns of Paris Hill and Castine. Samuel Chamberlain, in his book Towns of New England, noted that millions were spent restoring Williamsburg, Virginia, while Wiscasset remains essentially intact. Its abundance of classical architecture is evidenced by the inclusion of 10 structures in the Historic American Buildings Survey (H.A.B.S.) of 1936 and the subsequent inclusion of five buildings listed on the National Register of Historic Buildings. In 1973, a large part of the Village District became a part of the National Register.

Between 1970 and the year 2000, Wiscasset's population increased from 2,244 people to 3,603 people. This is a 61% increase, which is very similar to the population increase for Lincoln County during that same period (64%), but much larger than Maine's growth rate (20%). The Maine State Planning Office estimates that Wiscasset will grow by another 300 people over the next 10 years but development may push this number a lot higher.

In the year 2000, there were 1,612 housing units in the community. 67% of the dwellings were detached, single-family dwellings. As evidenced from the Wiscasset History of Growth Maps presented in Figure 1, development historically was located within or in proximity to the village. Since the 1970's, however, new development has spread throughout the community in a typical sprawl pattern.

Wiscasset's most notable natural resource is the Sheepscot River. The community shares many miles of waterfront along this waterway and in years past it was the site of important shipping and boat-building industries. Indeed, the Wiscasset Custom House still stands within the village. Unfortunately, the construction of two 19th railroad tracks isolated the village from the waterfront, a condition that persists today (see Figure 2).

Figure 1 Wiscasset History of Growth Maps

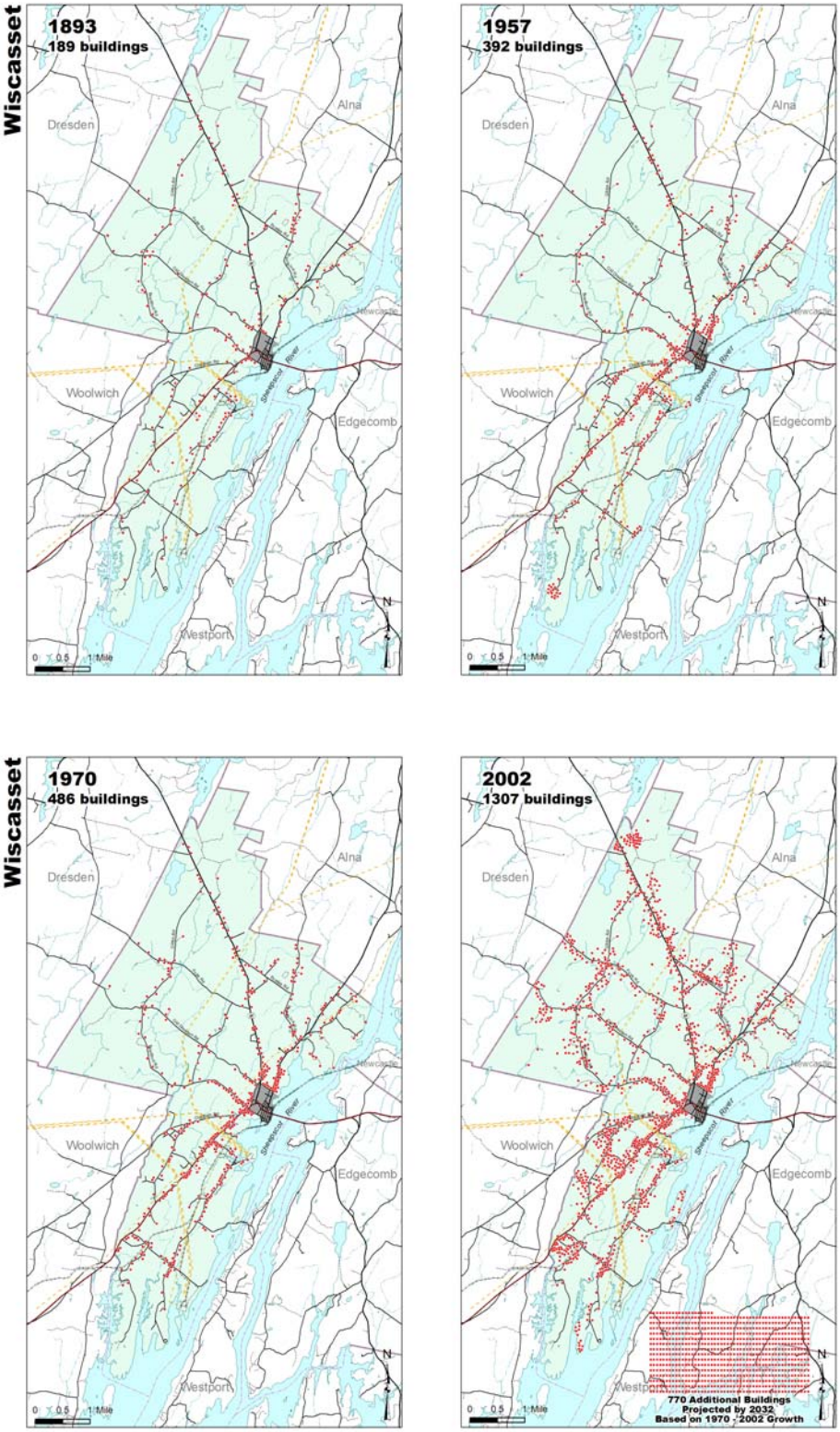


Figure 2 Wiscasset Waterfront

While Wiscasset can indeed legitimately claim title to the "prettiest village in Maine", on any summer day perhaps the most significant feature of the community is the seemingly unending line of traffic on Route 1. Table 1 presents average annual daily traffic data (AADT) for selected locations in Wiscasset. The increase in Route 1 traffic during the period 1997-2007 does not appear to be significant but it is limited to changes in *annualized* daily traffic volume. Based on data presented in the Gateway 1 Corridor Action Plan, *summertime* daily traffic on Route 1 (summer average weekday daily traffic - SAWDT) is 20% greater than the AADT. This data is presented in Table 2

Surprisingly, Route 1 traffic does not affect village residents as much as one might expect. Certainly trips in automobiles, especially those requiring crossing or traveling east or west on Route 1, can be challenging but Wiscasset's extensive sidewalk system permits residents and visitors to walk to almost any destination in the village. Figure 3 and Table 3 illustrate Wiscasset's sidewalk system.

Table 1 Traffic Volumes[1] on Selected Wiscasset Roads[2]			
Road	1997	2007	Change
Route 1 E/O Federal Street	16,770	17,770	6%
Route 1 SW/O Route 27	19,410	19,930	3%
Route 1 NE/O Route 144	16,450	17,240	5%
Route 27 N/O Route 1	6,100	7,280[3]	19%
Route 144 @ Old Ferry Road	1,430	1,340	-6%
Route 218 @ Hooper Street	2,440	2,740	12%
Willow Lane NW of Churchill Street	540	640	19%
Hooper Street @ Federal Street	1,550	1,630	5%

[1] Average annual daily traffic
[2] Source - Maine Department of Transportation
[3] 2005 data

Table 2 SAWDT vs. AADT for Selected Locations on Route 1			
Road	2005 AADT[1]	2005 SAWDT[2]	Seasonal Increase
Route 1 SW/O Route 27	19,250	23,190	20%
Route 1 NE/O Route 144	17,300	20,840	20%

[1] Average annual daily traffic - Source: Maine Department of Transportation
[2] Seasonal Average Weekday Daily Traffic - Source: Gateway 1 Corridor Action Plan

Of the entire 4.8 mile sidewalk system, 3.5 miles are located within the 0.2 square mile village area, a remarkably high sidewalk density in a small coastal community. Table 3 is based on the results of a sidewalk survey completed by Lincoln County Planner Robert Faunce in 2008. As noted in Table 3, sidewalk surfaces vary from brick to concrete to asphalt. Some sidewalks, such as those on Summer and Pleasant Streets, consist of asphalt and brick portions side by side, making them difficult to negotiate. A few others, such as the Federal Street sidewalk from the Ancient Cemetery to the Old Jail, have a heaved brick surface in some locations. Overall, however, only about 10% of Wiscasset's sidewalks were rated in the survey as being in poor or poor to fair condition.

There are some gaps in the sidewalk system, notably from Lee-High Street intersection to Water Street and along most of Bath Road in the village. As noted earlier, the existing system provides walking connections to many destinations in Wiscasset. An important exception to this is the Town Office on the northwest side of the Routes 1/27 intersection. There is no crosswalk across Route 1 in this location, due to the absence of existing sidewalks, even though the Town Office and Lincoln County complex are almost across Route 1 from each other.

Figure 3 Wiscasset Village Sidewalk System

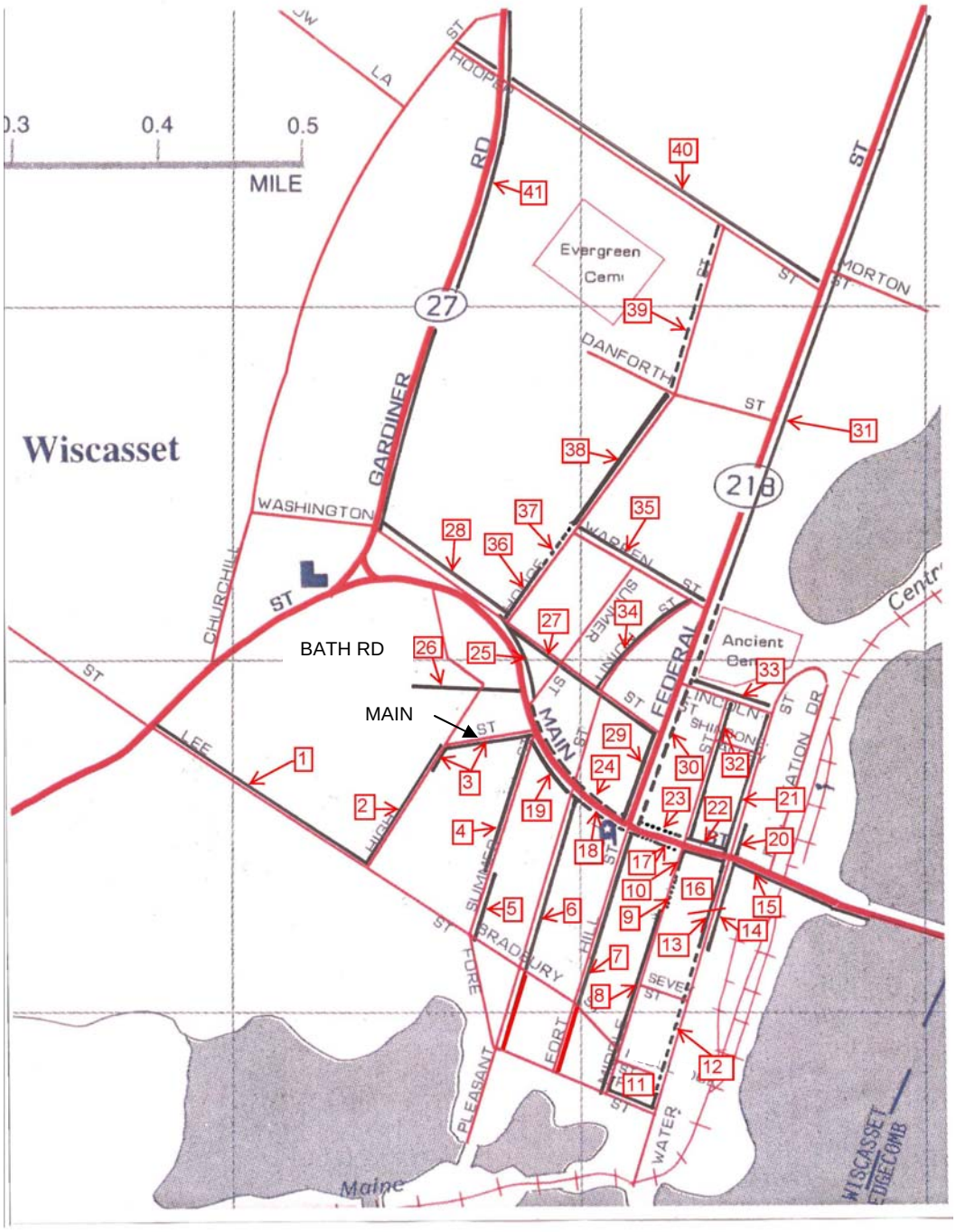


Table 3 Wiscasset Sidewalk System

Wiscasset Sidewalks								
#	Street	Segment from	to	Side	Length feet	Type	Condition	Comments
1	Lee	Main	High	N	900	4' brick	VG	needs some maintenance to remove vegetation
2a	High	Lee	Main	W	500	4' brick	G	some unevenness
2b	High	Library	Main	E	30	5' brick		
3	Main	Library	Summer	S	400	4' brick		
4	Summer	Bradbury	1/3 to Main	E	250	2' asphalt/1' brick	P-F	asphalt fair; brick poor
5	Summer	1/3 to Main	Main	W	525	2' asphalt/1' brick	P-F	asphalt fair; brick poor
6	Pleasant	Bradbury	Main	E	650	2.5' asphalt/1' brick	P-F	asphalt fair; brick poor
7	Fort Hill	Bradbury	Main	E	650	4' paved	VG	
8a	Middle	Fore	Custom House	E	25	6' brick		
8b	Middle	Custom House	Bradbury	W	25	no sidewalk	N/A	
8c	Middle	Bradbury	Garage	W	650	5' brick-stamped asphalt	VG	
9	Middle	Carriage Garage	commercial block	E	150	3' concrete/2' brick	F-G	concrete spawling; poles within brick portion
10	Middle	commercial block	Main	E	75	5' brick	VG	
11	Custom House				200	8-9' brick	VG	Middle/Fore/Water Street sides of building
12	Water	Customs House	CEI	W	500	4' brick	VG	
13	Water	CEI	Main	W	300	5-7' brick	G-VG	
14	Water	CEI	Main	E	300	3-5' brick	VG	
15	Main	Water	Davey Bridge	S	400	4' concrete		
16	Main	Water	Middle	S	150	to 9' brick	VG	stairs affect handicap access
17	Main	Middle	Fort Hill	S	175	4' brick	G	expands to 11' at Middle
18	Main	Fort Hill	Pleasant	S	225	5' brick	VG	new
19	Main	Pleasant	Summer	S	250	4' brick	G	
20	Water	Main	commercial block	E	100	4.5' brick	G	
21	Water	Main	Lincoln	W	500	4' brick	G	4.5' at commercial block
22	Main	Water	Middle	N	150	5-10' brick	VG	stairs impact handicap access
23	Main	Middle	Federal	N	175	5' brick	G-VG	
24	Main	Federal	Summer	N	500	5' brick	G-VG	
25	Bath	Summer	Hodge	N	300	4' asphalt	P	
26	Courthouse Sq	Main	Courthouse access		350	5' brick	VG	
27	Washington	Federal	Hodge	S	700	4' stamped asphalt	VG	
28	Washington	Hodge	Gardiner	N	550	5' stamped asphalt	F	
29	Federal	Main	Washington	W	325	4' asphalt/4.5' brick	G	
30	Federal	Main	Ancient Cemetery	E	850	4' concrete	G	
31	Federal	Ancient Cemetery	Old Jail	E	1500	4.5' brick	P-F	
32	Middle	Main	Lincoln	E	650	6' brick	VG	
33	Lincoln	Federal	Water	N	350	4' brick	G	
34	Union	Washington	Warren	W	450	4' asphalt	VG	
35	Warren	Hodge	Federal	N	475	4' stamped asphalt	G	
36	Hodge	Washington	St. Philips	W	225	3.5' brick	G	
37	Hodge	St. Philips	Warren	W	150	5' asphalt	F-G	irregular width
38	Hodge	Warren	Danforth	W	600	2' asphalt	F	very narrow
39	Hodge	Danforth	Hooper	W	600	3' asphalt	F-G	
40	Hooper	Federal	Churchill	N	1600	4.5' concrete	VG	
41	Gardiner	Main	High School	E	7000	3.5' asphalt	P-G	very little separation from high speed traffic
					25430			

The Wiscasset Middle School is on Federal Street north of Hooper Street and is accessible by sidewalk. The Wiscasset High School, Primary School, Community Center and Playground are north of the village on Gardiner Road (Route 27). While the Route 27 sidewalk extends from the village to the high school, it is located immediately adjacent to the highway, which is a relatively high speed traffic corridor with a substantial traffic volume. School children must cross Route 27 to reach the high school, primary school and community center. While there are crosswalks at each

location, safety concerns due to traffic and the location of the sidewalk close to speeding traffic may discourage use among some students. See Figure 4.

Figure 4 Route 27 Sidewalk

While pedestrians have access to a comprehensive sidewalk system, bicyclists are faced with more constraints. Routes 1 and 27 have wide travel lanes and paved shoulders, making them suitable for most bicyclists. Two of the major bicycle routes in Wiscasset, however, have significant limitations.

Route 144/Birch Point Road provides an alternative to the heavier traffic volume and higher speeds of Route 1. It also provides access to Westport Island, the Eaton Farm area and Chewonki Neck. As shown in Figure 5, road shoulders are gravel or vegetated and the travel surface is deteriorated in many locations, making it difficult for bikers to safely negotiate. Route 144/Birch Point Road is classified as a minor collector with a 2007 AADT of only 1,340 vehicles. This relatively low volume of traffic, together with limited truck use, compensate to some extent for surface and shoulder conditions.

Route 218/Federal Street, above Hooper Street, is part of the East Coast Greenway. It is classified as a major collector with a 2007 AADT of 2,740 vehicles. Truck traffic is significantly greater than on Route 144 because it is a principal transportation connection to the north and is used by heavy trucks hauling gravel out of pits in Alna and Whitefield. Figure 6 illustrates a transition section of Route 218 near Clark Cove. A paved shoulder begins just above the terminus of the Federal Street sidewalk. At Clark Cove, however, the shoulder becomes gravel with a substantial drop-off over the edge of the travelway. Given the combination of curvilinear roadway, poor gravel shoulders, higher traffic volumes and

Figure 5 Route 144/Birch Point Road

Figure 6 Route 218/Federal Street

heavy truck traffic, Route 218 north of Clark Cove does not safely accommodate bicyclists in its current condition.

Most other roads in Wiscasset have very good travel surfaces but share the similar characteristics of gravel shoulders and narrow width. Figure 7 presents four typical town roads. Lowelltown Road and Willow Lane are part of the East Coast Greenway. There are a number of locations in Wiscasset where storm grates have been set such that the openings are parallel to the travelway, creating a safety issue for bicyclists. See Figure 8.

As discussed above, Wiscasset village has long been physically separated from the Sheepscot River by an active railroad right-of-way. State law prohibits pedestrians from walking on railroad tracks so those wishing to walk along the shore must use an uneven and overgrown path between the tracks and the river's highwater line, as illustrated in Figure 9.

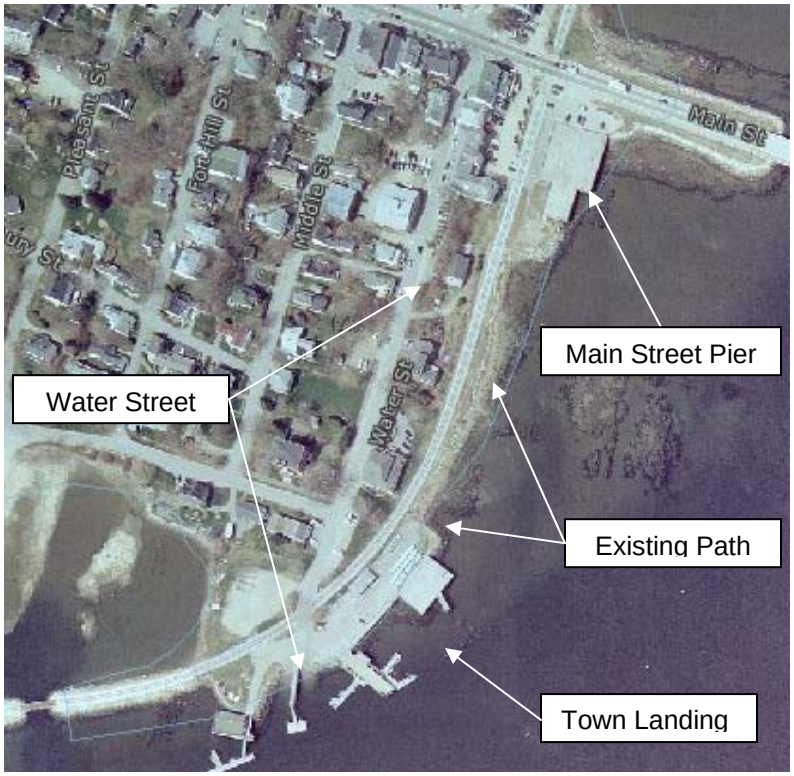
In addition to the lack of access to the riverfront, the current situation prevents any meaningful connection between two major waterfront facilities in Wiscasset, the Town Landing and the Main Street Pier, shown in Figure 10. The Town Landing is used by commercial fisherman and recreational boaters, many of whom tie up at the Town Landing with the intention of shopping and dining in the village. Currently, these visitors, many of whom are senior citizens, must either walk the path shown in Figure 9 or use a circuitous and longer route up Water Street.

Figure 7 Typical Rural Wiscasset Roads

Figure 8 Storm Grates

Figure 9 Access Along the River in Wiscasset Village

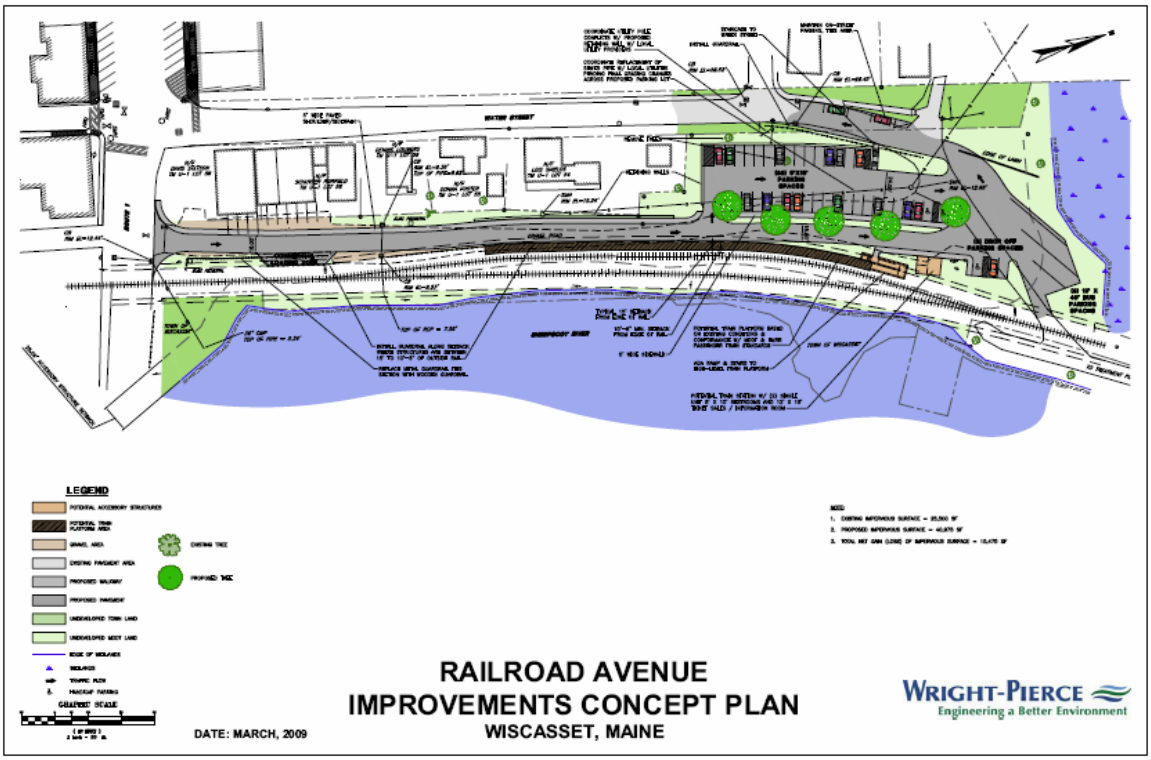
Figure 10 Wiscasset Town Landing and Main Street Pier



A long-standing desire of the Town of Wiscasset has been to redevelop property leased by the Maine Eastern Railroad from the state north of Main Street along Railroad Avenue. Wright-Pierce Engineers was

retained to prepare a development plan with additional parking, pedestrian improvements along Railroad Avenue and a new railroad station. The plan, which is presented as Figure 11, includes 39 vehicle parking spaces, three tour bus parking spaces, a small train station, a pedestrian walking area on the west side of Railroad Avenue and an interstate bus passenger loading area, creating the first true intermodal passenger facility in Lincoln County. The parking area, train station and intermodal facility were all included as recommendations in the 2006 Comprehensive Plan and the project is a high priority for Wiscasset. The town is currently seeking potential funding sources to implement the development plan.

Figure 11 Railroad Avenue Parking Area, Railroad Station and Pedestrian Improvements



Concurrent with the preparation of this bicycle-pedestrian study and plan, the community has been working to expand and encourage better utilization of an extensive system of public trails. As presented in Figure 12, all of the trails, including the Water Trail, are accessible from public roads. Figure 13 presents details on the locations of these trails.

Figure 12 Wiscasset Public Trails Location Map

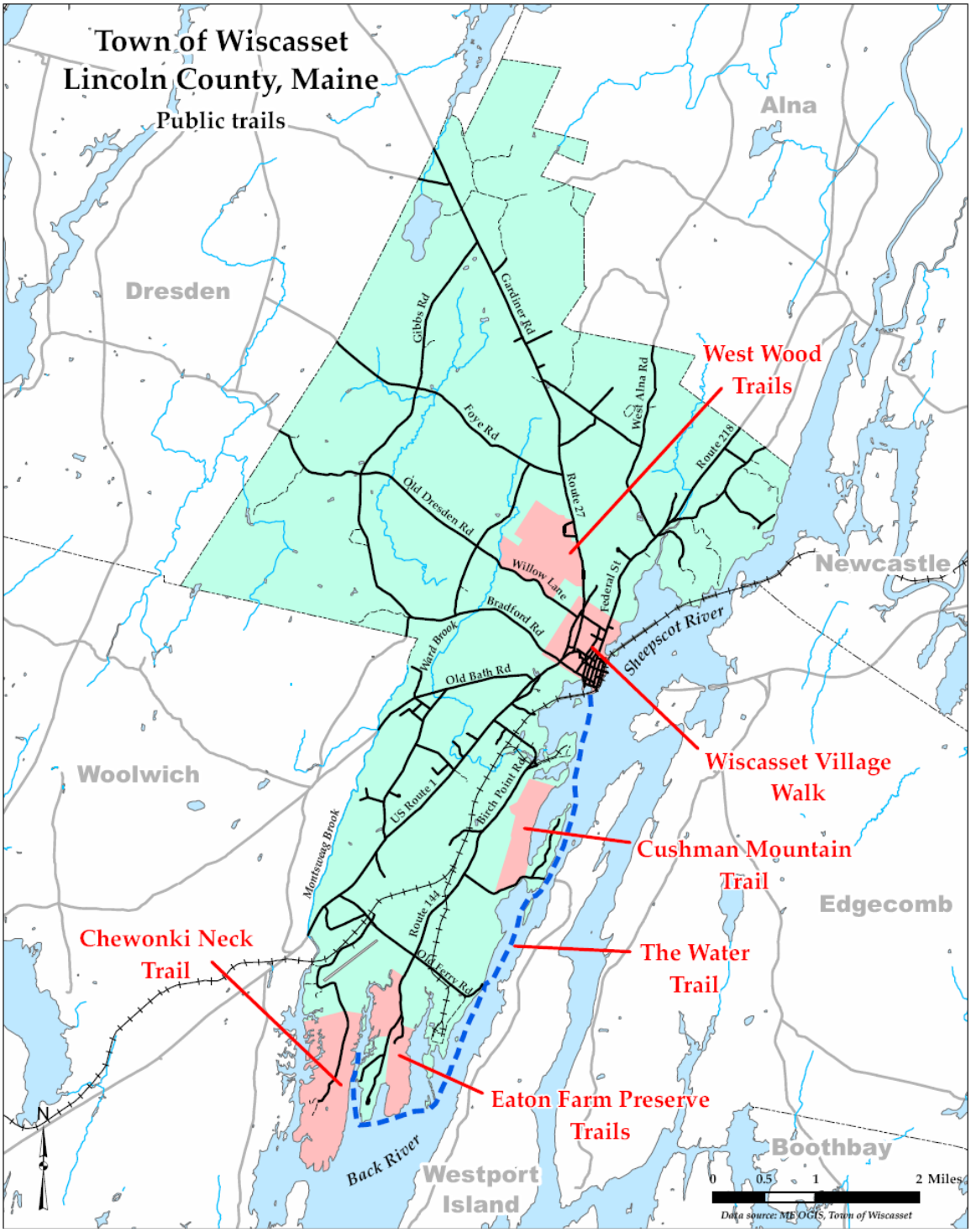
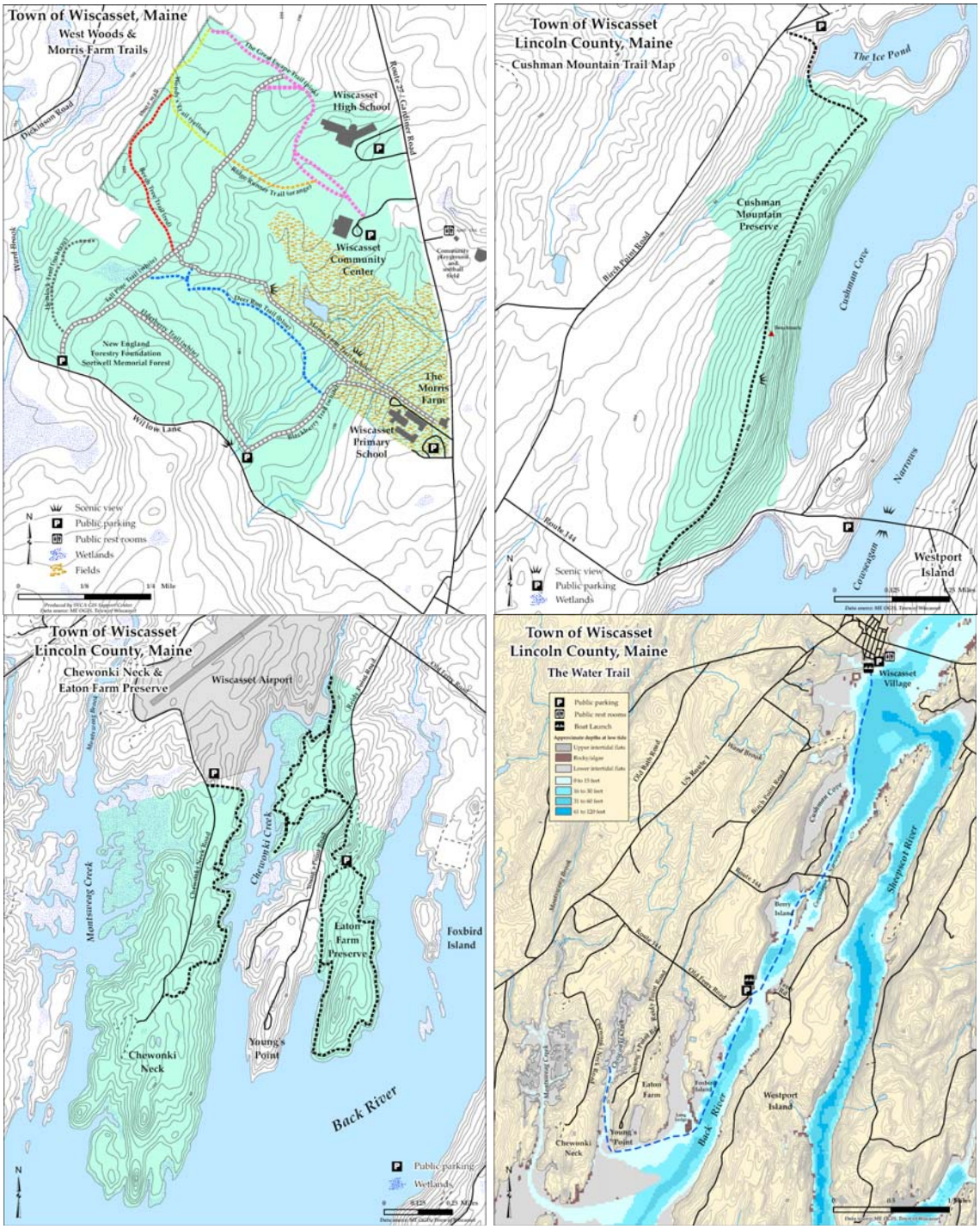


Figure 13 Wiscasset Public Trails



Section 3

The Planning Process

The Wiscasset Board of Selectmen appointed a Bike-Pedestrian Committee to oversee the project. Members included:

Don Jones	Patty Bridgham
Todd Souza	Jeffrey Hinderliter
Cary Huggins	Anne Leslie
Mark Wheeler	Bill Cumming
Cindy Fischer	Bob Bruce

At its first meeting, the committee decided to solicit input from the community by conducting a survey of both pedestrians and bicyclists. Both paper and electronic surveys were used Because there are three public schools and one private school in Wiscasset, the committee decided to specifically solicit student input by preparing a separate survey for them. The electronic surveys were linked to the Town of Wiscasset's website and adult paper surveys were made available at the town office, Wiscasset Community Center and Wiscasset Library. Paper student surveys were distributed to the Wiscasset Primary and Middle Schools and the Wiscasset Christian Academy. At the suggestion of the Wiscasset High School principal, surveys for high school students were limited to the electronic format.

Several news articles advertising the availability of the surveys were placed in the Wiscasset Newspaper. In order to ensure that the public and students had sufficient opportunity to provide input, the survey period ran for three months from September to November, 2009.

At the end of the survey period, survey responses were tallied. One hundred sixty completed student surveys were received, which represented about 20% of the entire student population. Forty non-student surveys were received. Although fewer than the committee anticipated, this should not be viewed as a negative. As illustrated in Figure 3 and Table 3, Wiscasset has a comprehensive village sidewalk system in overall good condition. It has relatively few gaps and residents can walk to most places in the village on a sidewalk. The committee felt that the survey response by non-students likely reflected the public's view that Wiscasset's sidewalk system served them well at this time.

The committee held a joint meeting with the Wiscasset Transportation Committee on December 7, 2009 to review the results of the survey and prioritize recommended improvements to bicycle and pedestrian facilities in Wiscasset. Also invited to attend the meeting were four survey respondents who provided contact information and expressed interest in participating in the project. The committee also discussed other recommendations, all of which served as the basis for the final Wiscasset Bicycle-Pedestrian Plan as presented in this document.

Section 4

Existing Plans and Ordinances and Budgeting

Wiscasset does not currently have a bicycle and/or pedestrian plan. The 2006 Comprehensive Plan recommended applying for state and/or federal funds to construct a bike recreational trail but did not identify a location. The plan made the following recommendations for sidewalks:

- Create a capital improvement plan that includes maintenance of sidewalks, curbs and crosswalks
- Provide human crossing assistance for pedestrians on Main Street
- Negotiate with landowners to a build a pedestrian/bicycle bridge to White's Island and Birch Point
- Build a sidewalk on the south side of Tucker's Hill and Fore Street to connect Lee Street and High Street sidewalks, the new Birch Point bridge, the Middle Street sidewalk and the Water Street sidewalk.
- Create a new Bath Road crosswalk to connect the municipal building with the county courthouse, bank and Subway shop
- Build a sidewalk on the west side of Bath Road connecting the Lee Street sidewalk, the Municipal Building, the Gardiner Street sidewalk and the Washington Street sidewalk
- Restore the washed-out cribwork on the waterfront outboard of the railroad tracks in order to create a waterfront esplanade from the Main Street Pier to Memorial Pier (Town Landing)

Neither the Subdivision Ordinance nor the Site Plan Review ordinance require a developer to consider bicycle or pedestrian needs when planning projects. If a developer does propose a sidewalk, however, it must be a minimum four feet in width with a three foot esplanade separating it from the adjacent street.

The town does not have a separate sidewalk capital improvement or maintenance budget. Such work is included in the "Road and Sidewalks Construction and Repair" budget, which was allocated $150,000 for FY09. According to the Road Commissioner, very little of the budget is expended on sidewalk construction or repair.

Section 5

Goals, Objectives, Strategies

Pedestrian/Bicycle Vision for Wiscasset

Wiscasset has an extensive sidewalk system but major transportation corridors such as Routes 1 and 27 affect the ability of residents and visitors to move freely throughout the village. Bicycle facilities are much less developed and present their own safety concerns, yet they are still attractive to a growing number of bicyclists in the community and those visiting Wiscasset. For these reasons as well as the desire expressed by many students to be able to walk and bike to their schools and within their neighborhoods and around the community, improved pedestrian and bicycle facilities are important for Wiscasset's future.

Goals, Objectives and Strategies

Goal 1: Safety: Provide safe routes for pedestrians.

Objectives

1A: Create and maintain pedestrian crosswalks in key locations in the community.

Strategies

- Work with Selectmen, Planning Board, citizens and the business community to identify areas of critical needs
- Improve existing pedestrian crossing locations in the village and on Route 27 near schools and public facilities
- Create new pedestrian crossings wherever new sidewalks are developed.

1B: Ensure safe routes between neighborhoods and along routes with significant bicycle and pedestrian usage.

Strategies

- Install paved shoulders on local roads where feasible when they are slated for reconstruction or major improvements.

- Request that MDOT install paved shoulders wherever feasible when it schedules state and state-aid roads for reconstruction or significant improvements
- Sweep paved road shoulders at least annually

1C: Use signage and other traffic calming measures to enhance safety on key routes.

Strategies

- Install 'bike route' signs wherever paved shoulders satisfy state standards and install 'share the roads' signs on all other roads regularly used by bicyclists as well as all segments of the East Coast Greenway.
- Consider installing traffic calming devices, such as narrowed shoulders, to allow safer pedestrian crossings on Route 27 near the schools and the Wiscasset Community Center and similar areas. (Figure 14 shows "bump-outs" on Route 9 in China that reduce the effective length of the crossing for pedestrians. In addition, by placing structures close to the edge of the travelway, they also result in lower traffic speeds.)

Goal 2: Education and Awareness: Educate the public about bicycle and pedestrian facilities and issues, the health benefits of walking and biking and facilitate easy access to information.

Objectives

2A: Build awareness of existing bicycle/pedestrian assets.

Strategies

- Create and maintain a publicly accessible website or link to the town website with local bicycle/pedestrian information and maps.
- Develop and install signage for trails and walking/biking routes.

2B: Provide educational programs about bicycle/pedestrian safety.

Strategies

- Encourage schools to promote bicycling and walking to school.
- Engage the Bicycle Coalition of Maine to conduct bike events at Wiscasset's public and private schools.
    - Bike rodeos
    - Bike safety classes
    - Bike to school week
    - “Walking Bus” program

2C: Hold public events that encourage use of bicycle and pedestrian infrastructure.

Strategies

- Locate bike racks in destination areas in the village, schools and the Wiscasset Playground.
- Partner with the Wiscasset Recreation Department, other local recreation organizations and other organizations to hold bicycle and pedestrian friendly events.

Goal 3: Connectivity & Infrastructure: Modify the transportation infrastructure to provide safe bicycle/pedestrian access to and between significant destinations and neighborhoods and enhance connections to the network of other bicycle/pedestrian facilities.

Objectives

3A: Create routes to key destinations.

Strategies (off-road routes, shoulders suitable for bikes)

- Route 27 off-road path
- Extend Lee Street sidewalk
- Connect Bradford Road and Churchill Street with sidewalk
- Install Route 1 crosswalk at Town Office
- Improve Route 27 crosswalks at primary and high schools

Figure 14 Pedestrian Highway Crossing
Route 9 China

Section 6

Survey Results - Demonstrated Needs

Non-Student Surveys

Eighty-eight percent of the non-student respondents were 36 years or older, a quarter were retired and 60% were female. Of those responding to questions about frequency of activity, 45% said they biked daily or weekly while 71% said they walked or ran daily or weekly. Safety or the lack of suitable facilities were the most frequently cited reasons for not biking, walking or running more often. As presented in Table 4, exercise and recreation were the predominant reasons cited by non-student respondents for walking, running and biking.

Table 4 Non-Student Purpose for Biking, Walking and Running

Purpose of Activity	Percentage of Respondents Citing Purpose	
	Bikers	Walkers, Runners
Exercise	74%	90%
Recreation	62%	69%
Shopping, errands	15%	28%
Visit friends, neighbors	24%	23%
Work	9%	8%
Medical	6%	15%

Table 5 presents preferred biking locations and Table 6 preferred walking and running locations. Route 144 and Birch Point Road were cited by bikers a surprisingly large number of times given the absence of paved shoulders and overall poor pavement condition but this may, in part, reflect the lack of an alternative to Route 1 in south-west Wiscasset. Not surprisingly, a third of bikers and two-thirds of pedestrians said they frequented the village. As expected, other routes used by bikers tended to be longer distance and/or higher traffic roads while walkers/runners tended to use routes on the periphery of the village.

Table 7 presents difficult intersections. Hooper Street is one of the few connections between Route 27 and Route 218 north of Route 1 and it is also a link in the East Coast Greenway. Its intersection with Route 27 was cited most often as a problem intersection. This is probably due to a combination of circumstances - limited sight distance to the north, high

traffic speeds and a wide paved area to cross. The most frequently recommended new crosswalk location was on Route 1 between the Town Office and the Lincoln County complex.

Table 5 Non-Student Preferred Biking Locations	
Location	Number of times cited
Village streets	13
Route 1	11
Route 144	9
Route 27	8
Willow Lane	6
Birch Point Road	6
Federal Street/Route 218	6
Hooper Street	4
Gibbs Road	4
Churchill	3
Other	22

Table 6 Non-Student Preferred Walking/Running Locations	
Location	Number of times cited
Village streets	28
Federal Street	5
Davey Bridge	5
Willow Lane	4
Churchill Street	4
Hooper Street	4
Route 144	3
Birch Point Road	3
Chewonki	3
Other	18

Table 7 Non-Student Recommended Crosswalk Locations	
Location	Number of times cited
Town Office/County Building	5
Churchill Street/Washington Street	3

The most often recommended improvement to biking, walking or running in Wiscasset was the construction of a walking/biking trail similar to that in Brunswick. In response to a question about improving access along the Sheepscot River, 94% of respondents indicated that the were in favor of a boardwalk along the river between the Main Street Pier and the Town Landing.

Student Surveys

Only about 12% of the student survey respondents attended Wiscasset High School. Ninety percent of all students bike, with 71% of them biking on a daily or weekly basis. When asked why they did not bike more often, 47% said they lacked sufficient time and 46% had safety concerns or said there were not suitable facilities. Eighty-four percent of student respondents said they walked or ran daily or weekly. Fifty-four percent said concern for safety or lack of adequate facilities prevented them from walking or running more often, while 42% cited lack of time as their reason.

Table 8 presents reasons cited by students for biking, walking or running. The proportion of students who indicated they walked to school appears to be high and may be due, in part, to the fact that almost half of Wiscasset Primary School student respondents said they walked to school. The survey question did not solicit information on the frequency of walking to school, so even a very occasional walk to school could lead a student to answer in the affirmative. This data may be a better indication that the schools are within walking distance for a significant percentage of students and that improving the safety and convenience of walking routes may directly impact the number of students choosing to walk to school.

Table 8 Student Purpose for Biking, Walking and Running

Purpose of Activity	Percentage of Students Citing Purpose	
	Bikers	Walkers, Runners
Exercise	51%	68%
School	3%	34%
Recreation	39%	39%
Shopping/errands	6%	10%
Visit Friends, Neighbors	35%	42%
Other	30%	14%

Tables 9 and 10 list the locations where student respondents prefer to bike, walk and run and highlight one of the more important findings of

the survey. The overwhelming choice for these activities is at or near the students' residences. When viewed in the context of concerns about safety summarized above, it may be that, rather than the home environs being the preferred location, they may be the safest location for students. A number of student respondents commented that they used their driveway or back yard because their neighborhood street lacked a sidewalk or that traffic speeds were too high. The roads shown in Figure 7

Table 9 Student Preferred Biking Locations

Location	Number of times cited
Near house or in driveway	78
Route 27	16
Village	12
Federal Street/Route 218	12
Route 1	7
Neighborhood streets	6
Brunswick Bikeway	4
Route 144/Birch Point Road	4
Old Dresden Road	3
Lowelltown Road	3
Other locations	29

Table 10 Student Preferred Walking/Running Locations

Location	Number of times cited
Home	38
Wiscasset High School track	13
Route 27	8
Wiscasset Middle School	5
Foye Road	5
Old Dresden Road	5
Wiscasset Primary School	4
Dorr Road	4
Brunswick Bikeway	4
Wiscasset Playground	4
Village	4
Wiscasset Community Center	3
Route 1	3
Other Locations	19

are typical for Wiscasset in that they have good travel surfaces but the combination of narrow width, gravel shoulders and curvilinearity contribute to the unease of younger bicyclists and pedestrians.

The second most frequently cited biking route and third most frequently cited walking/running route was Route 27. In fact, those routes and destinations highlighted in red in Table 10 are accessible by pedestrians only via Route 27. Students were asked what streets were difficult to cross. Not surprisingly, Route 1, which lacks crosswalks except in the village, was cited most often but Route 27, which has sidewalks at Route 1, Hooper Street and the primary and high schools, was second. While this may reflect the need for additional crosswalks, it is likely a result of high traffic speed and existing crosswalks that are not highly visible. Given the number of student-oriented facilities on Route 27, improved pedestrian safety should be a priority. See Table 11 and Figure 15.

Table 11 Streets That Are Hard to Cross

Street	Number of times cited
Route 1	13
Route 27	6
Route 218	3
Old Bath Road	2
West Alna Road	2
Others	6

Figure 15 Route 27 Wiscasset High School Crosswalk

Tables 12 and 13 combine the results of the student and non-student route preferences. The routes shaded in both tables are those common routes cited most frequently by both student and non-student survey respondents. The routes and destinations in bold/italics/asterisks in Table 13 are those that are accessible only by Route 27.

Table 12 Most Frequently Cited Bike Routes by Non-Students and Students

Non-Students	Student
Village Streets	Near house/driveway
Route 1	Route 27
Route 144	Village Streets
Route 27	Federal St./Route 218
Willow Lane	Route 1
Birch Point Road	Neighborhood Streets
Federal St./Route 218	Route 144/Birch Pt. Rd.
Hooper Street	Old Dresden Road
Gibbs Road	Lowelltown Road
Churchill Street	

Table 13 Most Frequently Cited Walking/Running Routes by Non-Students and Students

Non-Students	Students
Near house/driveway	Home
Route 27	***Wiscasset High School track***
Village Streets	***Route 27***
Federal St./Route 218	Wiscasset Middle School
Route 1	Foye Road
Neighborhood Streets	Old Dresden Road
Route 144/Birch Pt. Rd.	***Wiscasset Primary School***
Old Dresden Road	Dorr Road
Lowelltown Road	***Wiscasset Playground***
	Village
	Wiscasset Community Center
	Route 1

Bike-Pedestrian Committee member Mark Wheeler completed an inventory of existing bike racks in Wiscasset, which is presented in Table 14. He also developed recommendations on where new bike racks should be located in order to encourage additional bicycle use in the community. His findings and recommendations are presented in Table 15.

Table 14 Bike Rack Inventory	
Location	Comments
Wiscasset Community Center	Good location, condition
Wiscasset High School	Poor location behind school
Wiscasset Middle School	Side of building, visible

Table 15 Potential New Bike Rack Locations	
Wiscasset Community Playground	Two racks at ramp to office and ball fields
Wiscasset High School	Two racks near front door and at ball fields
Wiscasset Primary School	One rack near courtyard front door
Wiscasset Post Office	One rack along front walk
Wiscasset Town Landing	One rack near rest room building
Wiscasset Town Office	One rack near flag pole
Downtown	At least one rack where space is available

Based on the individual and combined results of the student and non-student surveys, the sidewalk inventory, Mark Wheeler's bike rack recommendations and comments provided by members of the Bike-Pedestrian Committee and Transportation Committee, the following list of potential bicycle and pedestrian improvements was discussed and prioritized at a joint committee meeting on December 7, 2009.

- ***Route 144 pavement and paved shoulders*** *(cited by many bikers and some pedestrian - current pavement condition makes it very difficult to use)*

- ***Birch Point Road pavement and shoulders*** *(pavement generally not as deteriorated as Route 144 but improvements needed)*

- ***Route 27 sidewalk enhancement*** *(Route 27, WHS, WPS, WCC and Wiscasset playground among the most popular routes and destinations cited by students - existing sidewalk's immediate proximity to the travelway a safety concern - consider installing an esplanade between sidewalk and road, installing sidewalk on both sides of road to WHS and/or an off-road path on the west side of the highway)*

- ***Route 218 paved shoulders and storm grates*** *(abrupt transition from paved to gravel shoulders significantly changes biking experience and reduces safety; storm grates should be turned 90° to improve safety of bicyclists)*

- ***Improved Route 27 crosswalks*** *(poor or absent crosswalks cited often by students - perhaps best locations for new/improved crosswalks would be at schools, playground and WCC)*

- ***Town Office – County Building crosswalk*** *(there is significant potential cross-road pedestrian traffic between two of Wiscasset's most significant institutions but pedestrians are inhibited by lack of a crosswalk; recommended in comp plan)*

- ***Sheepscot River Boardwalk*** *(94% approval by survey respondents; recommended in comp plan)*

- ***Rural roads paved shoulders*** *(potential recommendation that town consider installing paved shoulders on rural roads where feasible and cost-effective)*

- ***New bike racks (9)*** *(based on research and recommendations made by committee member Mark Wheeler)*

- ***Improvements to Summer Street sidewalk*** *(from sidewalk inventory; recommended in comp plan)*

- ***Improvements to Pleasant Street sidewalk*** *(from sidewalk inventory)*

- ***Improvements to Bath Road sidewalk (Summer Street to Hodge Street)*** *(from sidewalk inventory; recommended in comp plan)*

- ***Improvements to Federal Street sidewalk (Ancient Cemetery to Old Jail)*** *(from sidewalk inventory)*

- ***Extend Lee Street sidewalk to Water Street*** *(this segment along Fort Hill Road is a missing link in Village system; recommended in comp plan)*

Section 7

Proposed Facilities and Upgrades to Existing Facilities

The following is a *prioritized* list of recommended new facilities and improvements to existing facilities. In addition to these facilities, it is recommended that suitable signage such as that presented in Figure 27 be installed on all applicable roads.

1. Sheepscot River Boardwalk

The highest priority project is a boardwalk connector between the Main Street Pier and the Town Landing, as shown in Figure 16. It would provide to the public visual access to the Sheepscot River, something that is now limited due to the railroad right of way. At least one privately owned parcel is required to construct a boardwalk so ownership issues will need to be resolved before this project proceeds. In addition, the project will

Figure 16 Sheepscot River Boardwalk

require a local shoreland zoning permit, a Natural Resources Protection Act Permit from the Department of Environmental Protection and, potentially, a permit from the Army Corps of Engineers. Figure 17 is a photo of the type of boardwalk that might be considered along the Sheepscot River.

Figure 17 Typical Riverfront Boardwalk

2. Route 218 Paved Shoulders

Route 218 between Hooper Street and the Sheepscot River Bridge in Alna is part of the East Coast Greenway so, in addition to local bicyclists, many vacationing bicyclists use Route 218. The combination of heavy truck traffic, gravel shoulders and poor pavement in places creates an unpleasant and potentially unsafe riding experience.

Figure 18 Route 218

3. Birch Point Road Pavement and Paved Shoulders

Birch Point Road and Route 144 (see 5, below) serve as an alternative loop to Route 1, in addition to providing access to Westport Island. The narrowness of the road, poor surface pavement and gravel shoulders, as illustrated in Figure 19, limit usability for bicyclists and pedestrians. Birch Point Road has a slightly higher priority than Route 144 because it supports a higher concentration of residences.

4. Improve Route 27 Crosswalks Near Schools, Community Center, Playground

The presence of two schools, a playground and a community center make Route 27 an important route for students. Crosswalks connect the sidewalk on the east side of Route 27 with the primary school and the high school on the west side of the highway. As illustrated in Figures 20 and 21, these crosswalks do not have the high visibility necessary given the volume and speed of traffic on Route 27.

Figure 19 Birch Point Road

Figure 20 Wiscasset High School Crosswalk

Figure 21 Wiscasset Primary School Crosswalk

5. Route 144 Pavement and Shoulders *(see discussion in 3, above)*

Figure 22 Route 144

6. Extend Bath Road Sidewalk Between Churchill Street and Bradford Road

There is a Route 1 crosswalk at Lee Street and Bradford Road. This permits pedestrians using the Lee Street sidewalk to cross Route 1 but there is no corresponding sidewalk on Bradford Road or on the northerly side of Route 1. This proposed sidewalk would allow pedestrians from Lee Street to access Churchill Street and the Town Office.

7. Sidewalk Improvements to Summer and Pleasant Streets and Improve Federal Street Sidewalk from the Ancient Cemetery to the Old Jail

The sidewalk inventory presented in Table 3 identified portions of he existing sidewalk system that are in poor or poor to fair condition. These would be improved as part of priority #7. In addition, the Bath Road sidewalk would be extended from Summer to Hodge Streets.

8. Install Esplanade Between Route 27 Sidewalk and Travelway

As shown in the first photo in Figure 23, the Route 27 sidewalk is immediately adjacent to the travelway. While this may not be a problem for adult pedestrians, it can be intimidating for school children using the sidewalk, which is in close proximity to fast moving traffic. In addition, over the course of the winter, use of the sidewalk can be affected by ice and snow plowed from the travelway. Priority 8 would involve setting the sidewalk back from the curbline by installing an esplanade similar to that shown in the second photo.

Figure 23 Route 27 Sidewalk and Proposed Esplanade

9. Construct Off-Road Path Adjacent to West Side of Route 27

Either in addition to or as an alternative to the sidewalk esplanade described in #8, above, priority #9 would involve construction of an off-road path adjacent to, but set back from, the westerly side of Route 27 from Wiscasset High School to Hooper Street. The path would be suitable for bicyclist and pedestrian use and could be connected with existing and planned trails in the area. The path could provide a safe and effective way for school children to walk or bike to the public facilities on Route 27. An example of such a path is the gravel surface trail in South Nyack, New York shown in Figure 24.

Figure 24 Potential Off-Road Path West of Route 27

10. Install Route 1 Crosswalk at Town Office; Extend Lee Street Sidewalk to Water Street (tied)

A Route 1 crosswalk at the town office would allow increased pedestrian safety for those accessing the town office or Lincoln County complex. The Lee Street sidewalk extension would permit pedestrians to safely walk from the end of the sidewalk at High Street all the way to Water Street. It would also provide a second connection with Summer, Pleasant, Fort Hill and Middle Streets. One property owner suggested that the proposed sidewalk on Fore Street between Summer Street and Bradbury Street should be on the easterly side of Fore Street.

Figure 25 Route 1 Crosswalk Location

Figure 26 Lee Street Sidewalk Extension

Figure 27 Recommended Signage

Section 8

Other Recommendations

Sidewalk Maintenance

During the course of reviewing survey responses and preparing this plan, it became quite apparent how important Wiscasset's sidewalk system is to the community. The 3.5-mile village sidewalk network is used daily by many residents and visitors for exercise, shopping and dining, allowing them to leave their cars at home and enjoy "the prettiest village in Maine" on the way to their destinations. Likewise, the 1.3-mile Route 27 sidewalk connects the village with many of Wiscasset's major public facilities and is the only means for children to walk to school, the community center or the playground.

For this infrastructure, which many might argue is just as vital to the community's overall transportation system as its roads, to adequately meet the community's needs, it must do so on a year round basis. This means that sidewalks must be plowed and sanded in winter at the same time the village's streets are sanded and plowed. This has not necessarily always been the case in the village where pedestrians oftentimes must walk within the streets because sidewalks have not been plowed on a timely basis. In addition, vegetation must be cleared during the growing season and brick and asphalt surfaces repaired when needed. This requires both an on-going inspection and maintenance program and a budget adequate to implement it. The committee, therefore, recommends a budget line item devoted to summer and winter sidewalk maintenance and repair.

In a related matter, property owners should be prohibited from maintaining their properties in a manner that adversely affects adjacent sidewalks, such as plowing snow onto sidewalks and failing to trim back vegetation overhanging sidewalks.

Ordinances and Policies

The plan should be incorporated as an amendment to the comprehensive plan. The Subdivision and Site Plan Review Ordinances should be amended to refer specifically to *planned* bicycle and sidewalk facilities as presented in the plan and both ordinances should be amended to require the construction of new bicycle and/or pedestrian facilities and their connection with existing or planned facilities for developments that

are in proximity to planned facilities or that are anticipated to create demand for pedestrian and/or bicycle facilities.

Wiscasset does not have an official policy for construction or maintenance of paved road shoulders. Such activities are currently undertaken on an as-needed basis by the town as funds are available. As new pedestrian and bicycle facilities are constructed in the community, a formal maintenance policy will be an important step in ensuring that the spending of scarce local financial resources on the system will be optimized. This will be accomplished by:

- Establish an annual budget for improvements to existing bicycle and pedestrian facilities and construction of new facilities on Town owned roads
- Establish an annual maintenance budget, including striping of crosswalks, winter maintenance and spring sweeping of Town owned roads

It is further recommended that when any public road is reconstructed, the shoulder and travel lanes be sufficiently dimensioned to accommodate bicycles. In addition, new bike racks should be installed in locations listed in Table 15.

Section 9

MDOT Funding Sources for Bicycle and Pedestrian Improvements

The following MDOT can provide funding for bike and pedestrian improvements.

Quality Communities Program

Transportation Enhancement Program

- 80/20 funding
- safety and education programs
- bike and ped facilities
  - paved sidewalks and shoulders on minor collectors or local roads
  - new sidewalks on arterials and major collectors with closed drainage
  - bike lane stripping
  - bike parking facilities and bike racks

Safe Routes to School

- up to 100% funding
- infrastructure within 2 miles of schools to substantially improve safety of students to walk or bike to school
  - sidewalks
  - traffic calming
  - crossings
  - on-street bike facilities
  - off-street bike and pedestrian facilities
  - traffic diversion near K-8 schools

Go Maine

- 80/20
- bike racks with capacities of 2, 6 or 8 bikes