

Damariscotta Sidewalk-Bicycle Plan

June 2008



Prepared by

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Section 1

Introduction

Damariscotta is an unusually compact mid-coast service center community. Based on census tract data collected for the Gateway 1 project, 500 dwelling units and almost 2,500 jobs are within potential walking or biking distance of the downtown/village area. This same area also contains most of the community's civic, shopping and service uses.

Retirees have long been drawn to Damariscotta. Over thirty percent of Damariscotta residents are over 65 years of age, which is 2.5 times the state average and two-thirds greater than the Lincoln County average. This latter statistic is surprising considering that Lincoln County has the oldest population in Maine. Of Damariscotta's over 65 population, 40 percent is disabled. There are still many young people in the community, however, with 430 residents under the age of 20. (Housing and population statistics are from the 2000 Census).

Like many small towns, Damariscotta's efforts at citizen participation have been limited to public hearings and the required steps to pass an ordinance or approve a plan. In 2005, after an extensive debate within the community, a cap on the size of commercial buildings was passed by the town meeting. This experience spurred the Board of Selectmen to form DPAC (Damariscotta Planning Advisory Committee) in May 2007, which was charged with considering emerging trends and issues confronting Damariscotta and to formulate forward-looking planning strategies to improve our important regional service center functions. After immersing itself in the Town's and region's trends and issues, DPAC developed a mission statement to guide its efforts:

"To lead a community-driven process to make the Damariscotta region a better place to live, work, play, do business and visit for all people by advancing policies and practices that foster sustainable land use and prosperity"

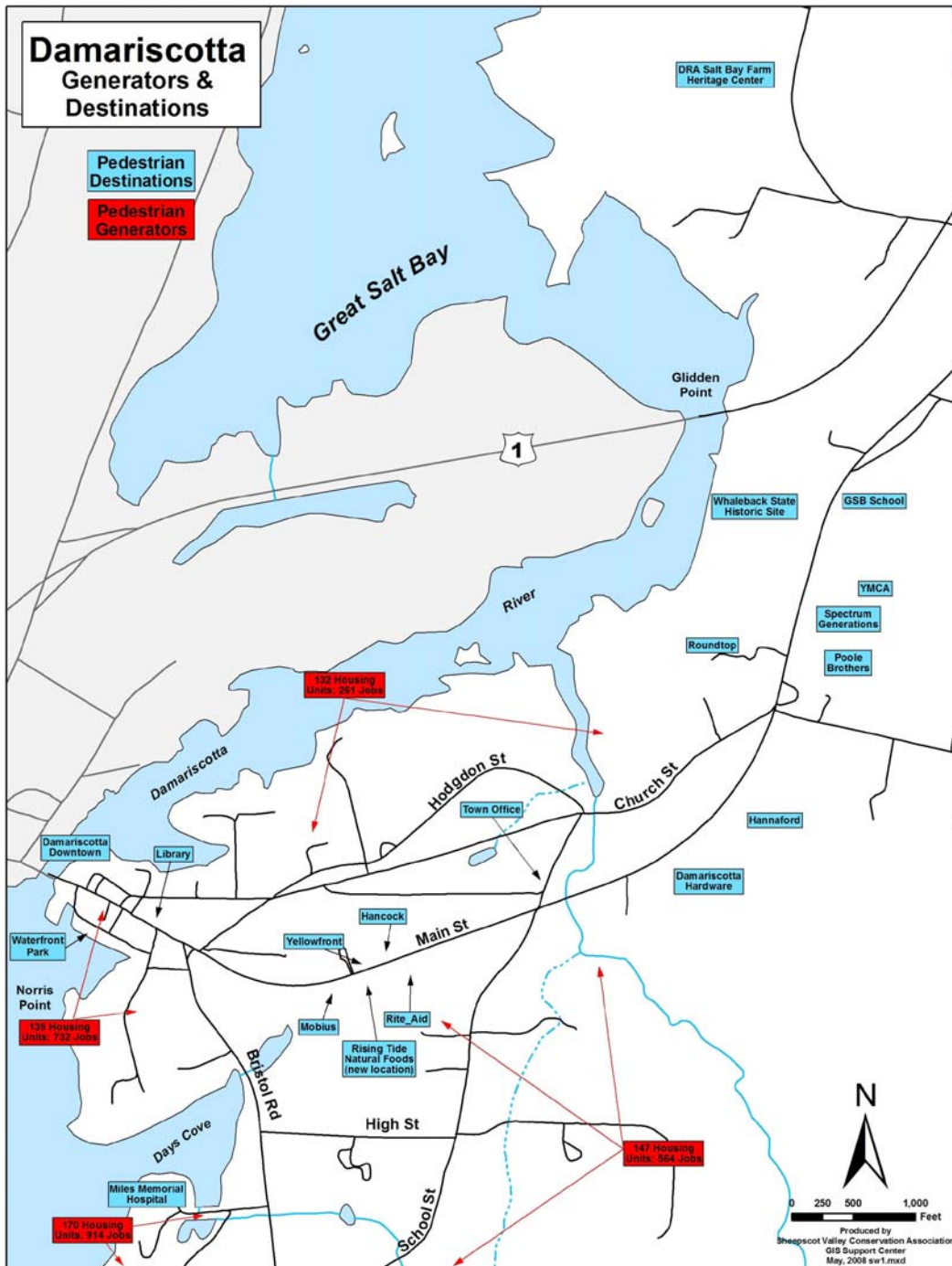
As a sounding board for community sentiment, especially for those who do not normally participate in civic affairs, many felt DPAC would hold great potential for helping ensure the creation of a successful pedestrian-bicycle plan for Damariscotta. In April 2008, DPAC, in collaboration with the Damariscotta River Association (DRA), held the Walkability/Bikability

Workshop upon which this plan relies for assessing the priority for the various sidewalk projects in the community.

Participants at the workshop identified a number of desired pedestrian destinations, which are illustrated in Figure 1. Many of these destinations are not now accessible by sidewalks. Participants also provided much information on gaps, deficiencies and substandard conditions in the existing sidewalk system. Using an interactive website, DPAC continued to collect data on citizen preferences well after the workshop, so it is reasonable to conclude that the information presented in this plan is representative of the needs and desires of the community.

Also within this same area are significant pedestrian generators. They are represented by the large number of jobs and residences and are also identified on Figure 1. Sidewalks and other pedestrian-friendly facilities are the transportation corridors that allow residents and employees to travel from homes to jobs to shopping to services and back again without the need to get into a car so the extent and condition of the sidewalk system is important for the health and welfare of the community and its residents.

Figure 1 Generators and Destinations



Section 2

The Planning Process

The Damariscotta Planning Advisory Committee (DPAC) was formed in May 2007 and was charged by the Damariscotta Board of Selectmen with pursuing forward-looking planning strategies to improve this important regional service center. DPAC's mission is:

“To lead a community-driven process to make the Damariscotta region a better place to live, work, play, do business and visit for all people by advancing policies and practices that foster sustainable land use and prosperity.”

Improving walkability and bikeability in town were the committee's top initial concerns and informal discussions with other citizens confirmed that this interest was broadly shared. The committee then set about to determine in a formal way:

- The level of citizen interest in improving biking and walking opportunities in town
- Specific areas of public concern vis-à-vis biking and walking safety and infrastructure
- Key community destinations as agreed upon by members of the public
- Priority routes for connecting these important destinations

The committee gathered public input in three ways:

- 1) An evening public bike-walk workshop
- 2) Paper “bikeability” and “walkability” surveys
- 3) An on-line Google Maps-based public input tool

Public Bike-Walk Workshop

DPAC invited citizens to a walking and biking workshop on April 15, 2008 at the Great Salt Bay School. Eighty-nine individuals took part in the evening's events. Participants were assigned to one of five workgroups tasked with:

- Identifying key community destinations
- Locating existing sidewalks and noting areas in need of repair on an aerial map of town

- Suggesting locations in need of sidewalks, bike paths/improved shoulders, crosswalks and signals
- Prioritizing routes in need of repair, new sidewalks, and improved bike passage

All groups then reconvened and reported out.

Destinations

The destinations identified by the groups were collated to determine areas of agreement. The number of groups identifying each destination is given below. If only one group identified a given destination, it was not included in the table.

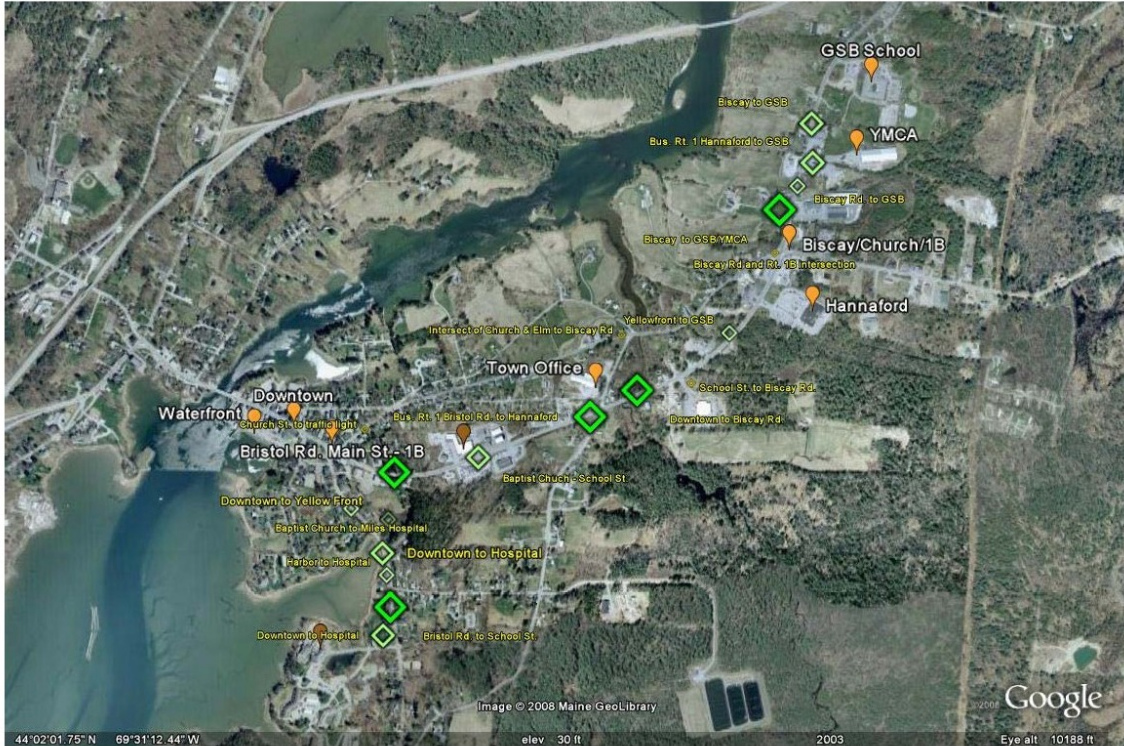
Table 1 Destinations

<u>Number Groups</u>	<u>Destination</u>
5	Downtown (esp. Bookstore, Lincoln Theater, Reny's) Yellowfront/Rising Tide Complex Round Top YMCA Great Salt Bay School
4	Damariscotta River Association Hospital Town Office Hannaford's Poole Brothers
3	Lincoln Academy Spectrum Generations Complex Whaleback State Historic Site
2	Mobius Damariscotta Hardware Round Top Ice Cream

Priority Segments by Group (“Electoral College”)

Each of the five workgroups’ top four priority route segments for improvement or extension were georeferenced and combined during the course of the meeting into a single layer in Google Earth. Segments are represented below by diamonds, and larger diamonds are higher priority than smaller ones.

Figure 2 Workshop Priority Route Segments



Interpreting the map, the group reports collectively appeared to put route segments in the following priority order:

- 1) Downtown to Biscay Road along Route 1B (inc. Yellowfront complex)
- 2) Biscay Road to Great Salt Bay School along Route 1B
- 3) Downtown to Hospital along Bristol Road
- 4) Downtown to Biscay along Church Street

Map data, with corresponding descriptive information, are available as a KMZ file for use with Google Earth.

Goals

As a large group, participants then identified goals for biking and walking in town, and began a discussion of a vision. Goals were written on a flip chart and each participant had the opportunity to vote on particular goals with sticky dots. The following goals emerged in order of importance:

Table 2 Biking and Walking Goals

Goal	# votes
Connect destinations - system as transportation	22
Keep sidewalks open in winter	17
Bike lanes on roads	16
Even sidewalks with a level surface	15
Adequate width for strollers and wheelchairs	8
Connect homes to businesses for shopping	6
Pedestrian crossings and signals at traffic lights with adequate time to cross	6
Safe crossing school to Y to Round Top	6
Enforcement - no parking on sidewalks	3
Fix timing of light at McDonalds to allow safe crossing	2
Well-lit and safe sidewalks - properly designed	1
New surface color - less heat	1
Keep snow melted	1
TOTAL	104

Priority Segments by Dot Voting (“Popular Vote”)

The final step in the evening’s exercise was for each individual to vote with dots on the sections of sidewalk and roadway they viewed as most important to repair to improve biking and walking, as well as new segments they would like to see constructed. Voting was directly on maps with colored dots and represented desired improvements to the existing sidewalks and construction of sidewalk extensions.

Table 3 Priority Improvements to Existing Sidewalks

Segments	# votes
Bristol Road to High Street	35
Shoulder of 1B to Biscay from downtown	23
Biscay/1B Intersection	17
Elm Street	15
Shoulder of 1B Biscay back to Route 1	11
Church St. from Elm St. to Cottage Garden	11
Intersection of School St and 1B	5
Church St. from Main St to Elm	4
All around Yellowfront	4
Riverside Park/Parking Lot	2
Biscay Shoulder	2
Chapman Street	2
Intersection of Bristol Road and 1B	2
Lewis Point Rd.	1
Biscay Road	1

Table 4 Priority Sidewalk Extensions

Segments	# votes
1B from Yellowfront to Biscay Road	34
1B from Biscay to school	30
1B from downtown to Yellowfront	27
Church St. from Cottage Garden to Biscay	16
Bristol Road from High Street to Hospital	15
High Street	3
Bristol Road south of Hospital	2
School Street	2
Chapman Street	2
Hospital driveway	1
All the way to the DRA	1
Biscay Road to Bremen	1

Surveys

Two specific surveys were distributed, of which 31 were returned that focused on either bicyclists or pedestrians. The surveys included questions about how bikeable and walkable Damariscotta is with a series of specific questions. See Appendix 1 for accompanying details associate with those results.

The walking survey results show that the predominant reason for not walking is that there is no safe place to walk. Other comments included “early darkness/lack of lighting” and “no safe places to walk that connect”. The purpose of most walking trips is for exercise, health and wellbeing; personal errands, commuting and visiting friends and family, and walking the dog, also weighed in. Most residents walk on the shoulders of paved roads while others walk on sidewalks “such as they are”, nature trails and walking paths.

When asked, “What should our community do to aid walking safety?” in equal measure, the responses were:

- to make areas for walking safer
- provide existing pedestrian facilities
- improve existing pedestrian facilities
- ensure year-round maintenance of pedestrian facilities.

Other suggestions include changing laws “on motorists near pedestrians”, longer traffic light timing and creating walking and biking paths. Significantly, 37% of those surveyed are parents of elementary or middle school children and none allow their children to walk to school because there is no safe route.

When asked “What is your vision for a walkable Damariscotta?” the responses were:

- safe places for their children to “walk, run and skip on”
- walk a safe 3-mile loop with Damariscotta at the hub
- create satellite parking at Lincoln Academy and Great Salt Bay School in the summer to allow for pedestrian use.

The vision descriptions also included several specific connections:

- Vine Street to Coastal Marketplace
- downtown to Hannaford
- Business Rt.1 to Great Salt Bay School
- downtown to Great Salt Bay School
- downtown to hospital
- create a walk/bike path connecting Round Top Farm, Damariscotta River Association Farm, along the river to other trails
- improve sidewalks on Elm St. and Church St.

The survey for determining Damariscotta’s ‘bikeability’ asked similar questions. Half of those asked found that their reason for not bicycling was that there is no safe place to ride and one commented that there is “no safe place to bike at 68 years old”. Many determined that bad weather or season affected their choice and a smaller percentage prefers to walk or run instead of bike.

The majority of bicyclists, like walkers, enjoy it as a form of exercise and for general wellbeing, others use biking to run errands and lastly, to commute to work or school or to visit family and friends. They travel on the shoulders of paved roads mostly and one commented that they “compete with cars”. Others use bicycle paths/trails and lanes on roads, bike on unpaved roads or travel on sidewalks.

When asked what the community should do to aid bicycling safety, the common denominator with each survey was to provide bicycle facilities such as:

- trails
- paths
- lanes
- racks
- traffic signals
- lighting
- crosswalks

Making areas safer for biking was also suggested, followed by improvement of existing bicycle facilities, and finally the encouragement of bicycle safety education. Forty-two percent of those who completed the survey were the parent of an elementary or middle school child and did not allow their child to bike to school, their reasons included “Biscay Road is not safe” and “not safe on Business Rt. 1”.

A vision for a bikeable Damariscotta had these declarations:

- “Bristol Road and Business Rt.1, Belvedere, etc. made safe for bicycling”
- “More shoulders on roads, beautiful to ride however dangerous. This area should be promoted as a bike destination if roads were more biker/bicycle friendly, therefore bring income to the area.”
- “Bike a safe 10-mile loop, with Damariscotta at the hub.”
- “Safe areas to bike on with children.”
- “Paths and trails everywhere.”

Web-Based Public Input Tool

Finally, with the assistance of a Google Earth/Maps expert, DPAC created a web-based map tool embedded in a web page that allows visitors to the page to “vote” for the segments of sidewalk they believe are most in need of repair or areas where new sidewalk are needed and to make comments on priorities and goals.

<http://damariscotta.walks.googlepages.com/home>

Seven segments were identified in the web-based tool drawing from workshop priorities. Descriptions of each segment gave visitors additional information on which to draw their conclusions. The web-based tool was advertised in the local newspaper, the Lincoln County News, and links were circulated by email to groups that had expressed interest in biking

and walking. From mid-April when it was launched through June 1, the deadline for submission, more than two dozen individuals cast their votes and made comments. (The technology automatically submits all data from the site to a single spreadsheet, attached as an appendix with names removed.)

Section 3

Existing Plans

Existing plans in Damariscotta provide a general policy framework for the rationale, justification and location of an overall sidewalk system but do not provide specifics. Identification of logical discrete segments, their inter-connections, designs, materials, priorities for implementation or costs are not given. Hence, there is need for this current Sidewalk Plan to move a step beyond existing policies in order to lay out segments, interconnections, priorities and costs for rehabilitation of existing sidewalk segments and construction of new ones.

Comprehensive Plan

The Damariscotta Comprehensive Plan 2000 provides the basic policy framework for the planning for pedestrian and biking facilities in town. This Plan first inventories the general pattern of sidewalks in the village downtown and as they radiate out to the neighboring Church Street village-scale residential neighborhood and to the Miles Hospital campus. Other primary destinations outside the village, such as a day care center and the Great Salt Bay (GSB) School, are identified as well as the primary users of pedestrian and bicycle facilities in town: schoolchildren and the elderly. (See Appendix)

Issues concerning sidewalks center on the need for more pedestrian safety, especially on Route 1B, for schoolchildren around GSB School, extending the Church Street sidewalks and connecting to the Yellowfront shopping complex on Rt. 1B. Bicycle paths are cited as needed along busy roads such as Bristol Road. Policies recommend the Town take direct responsibility for securing funding to rebuild and build anew sidewalks with an emphasis to connect downtown with the businesses on Rt. 1B.

The 2002 Comprehensive Plan Update provides more detailed implementation measures for safe and efficient pedestrian and bike movements (see Appendix):

- Four intersections along Rt. 1B, two along Bristol Road and the Belvedere Rd./Route One are identified as needing redesign and/or

- updated traffic management facilities or measures to secure more safety and efficiency for pedestrians and bicyclists.
- Six road segments are identified for turning lane, striping or other facilities to secure greater safety and efficiency.
 - One policy explicitly advocates year-round safe pedestrian and bicycle access between the town center, businesses and GSB School.
 - Implementation measures direct the Selectmen to appoint a committee to study the feasibility and costs of building and maintaining a year-round system of sidewalks and bike paths to meet the Plan's goals and policies.

Downtown Master Plan – 2003

The 'Master Plan for the Village of Damariscotta' was a major follow-up study recommended by the 2002 Comprehensive Plan (see Appendix). The Downtown Plan's purpose is to recommend ways to preserve and enhance the downtown by providing design policies and guidelines for a number of objectives. Among them:

- Improve sidewalks and connections to and from Downtown
- Improve the availability of parking in the Downtown
- Provide for pedestrian safety, balancing Main Street needs with cars
- Maintain the village scale and character of Main Street
- Reduce traffic and congestion, providing for alternatives
- Provide for open green space, street trees and landscaping
- Reinforce the connection between Downtown and the Riverfront

Guiding design principles includes specific reference to maintaining the human scale of streets by balancing automobile use and parking with other community needs. Sidewalks and pedestrian-scale lighting are cited as essential to a pedestrian friendly village and pedestrian and traffic safety. Open green spaces are cited as important for community enhancement.

A charrette workshop was held which identified, among other objectives, the need to balance pedestrian needs with pass-through traffic; the need for more downtown parking but including making landscaping improvements to the municipal harbor shore parking lot and consideration of transit, park & ride options and satellite parking arrangements. Provision of pedestrian friendly sidewalks, crosswalks and handicap ramps are recommended as well as raised crosswalks or special paving material.

Improvement to the pedestrian friendliness of alleys (between Main St. and the harborside parking lot) and better gateway signage is urged. Specifically, it is recommended that the Town acquire the Dentist's Lot for an additional riverside park; integrate the East Coast Greenway into the Town's trail system and connect to the downtown and to a loop around Great Salt Bay. Implementation measures prioritize the objectives into three phases and specify the actions and the responsible parties to carry them out.

Damariscotta River Association Plan for the Wabnaki River Trail

The Damariscotta River Association Conservation Land Trust (DRA) is developing an interpretive off-road hike, bike and ski trail along the Upper Damariscotta River connecting Round Top Farm (across from the YMCA and Great Salt Bay School) with their popular headquarters preserve and education facility, which also hosts the bi-weekly Damariscotta Farmers' Market and numerous public events that draw large crowds. The DRA seeks to connect the off-road trail with the municipal sidewalk system to allow an individual to travel safely and enjoyably from downtown to the DRA Great Salt Bay Farm Heritage Center on foot or bike through some of the area's most scenic and culturally significant areas.

Trail Benefits

- Connects with planned town sidewalk system
- Creates new opportunities for public non-motorized recreation and transportation
- Joins Round Top Farm and Great Salt Bay Farm
- Provides educational experience with interpretive signage
- Highlights rich history and ecology of the Upper Damariscotta River

The Best of the Upper Damariscotta River

- Oyster shell middens
 - Whaleback Shell Midden State Historic Site, former location of shell processing facility, (inc. excellent interpretive panels, existing trail system, parking area, and other facilities)
 - Glidden Midden (one of the largest oyster middens on the east coast north of Georgia)
 - Numerous smaller middens
- Historic shipyards (including Hitchcock)
- Productive salt marshes
- Active aquaculture sites
- Rich agricultural history, including farm buildings and restored historic orchards from Round Top Dairy operation

East Coast Greenway

The Maine Department of Transportation (MDOT) has designated interim on-road route for the East Coast Greenway through Damariscotta with the cooperation of Salt Bay Cycling Club. See Section 5 for a description of the route through Damariscotta.

Section 4

Demonstrated Sidewalk Needs

The April 15, 2008 workshop and the follow-up surveys, as presented in Section 2, documented a variety of pedestrian needs in the community. In summary, workshop participants and survey respondents placed highest priority on improving existing sidewalks on Bristol Road, Elm Street and Church Street and improving the Route 1B shoulder between the downtown and Biscay Road. This latter recommendation is telling in that despite the shoulder's existing poor condition and obvious safety issues, it is used frequently by residents who need to shop at the Yellowfront/Rising Tide grocery store complex.

Priorities for extending the existing system included new sidewalks on Route 1B from the downtown to the Great Salt Bay School, Church Street to the Biscay Road/Route 1B intersection and Bristol Road from the downtown to the hospital complex. Interestingly, many attendees and respondents were probably not aware of the presence of an existing sidewalk on Bristol Road because much of it is indistinguishable from the travelway, thus the request to install a new sidewalk.

These needs, as identified in the workshop and surveys and as illustrated in Figure 1, reflect the very high concentration of pedestrian generators and destinations in Damariscotta village. As noted in section 1, there are 500 dwelling units and 2,500 jobs within walking distance of the downtown, both of which are unusually high for a community of just over 2,000 residents.

As previously noted, Damariscotta is a compact community and distances between desired destinations are not significant, as documented in Table 5.

Table 5 Distances from Great Salt Bay School to Desired Destinations

	By Road (miles)		Direct (miles)
	Segment	Cumulative	
McDonalds (Biscay Intersection)	0.35	0.35	
School Street Intersection	0.50	0.85	
Bristol Road Intersection	0.55	1.40	
Dam-Newc Bridge	0.25	1.65	1.4
Lincoln Academy	0.70	2.35	
Hospital Entrance	0.50	1.90	
Hospital from entrance	0.17	2.07	1.5
Nobleboro-Damariscotta Line		1.90	
Salt Bay Farm		1.10	

While providing convenient connections between pedestrian and bicycle trip origins and destinations is very important, the potential for also improving pedestrian and bicycle safety cannot be overestimated. The Damariscotta Police Department reported the following speeding and accident statistics for the period May 22, 2007 through May 22, 2008. Improving the existing sidewalk system and creating additional sidewalks and paved shoulders on these roads will have the added benefit of improving safety.

Table 6 - Accident and Speed Data

Damariscotta Police Department		
May 22, 2007 - May 22, 2008		
Location	Speeding Violations	Number of Accidents
Bristol Road	32	12
Rte 1B	22	70
Church Street	0	3
High Street	0	2
Water Street	0	1

Section 5

Existing Sidewalks and Bicycle Facilities

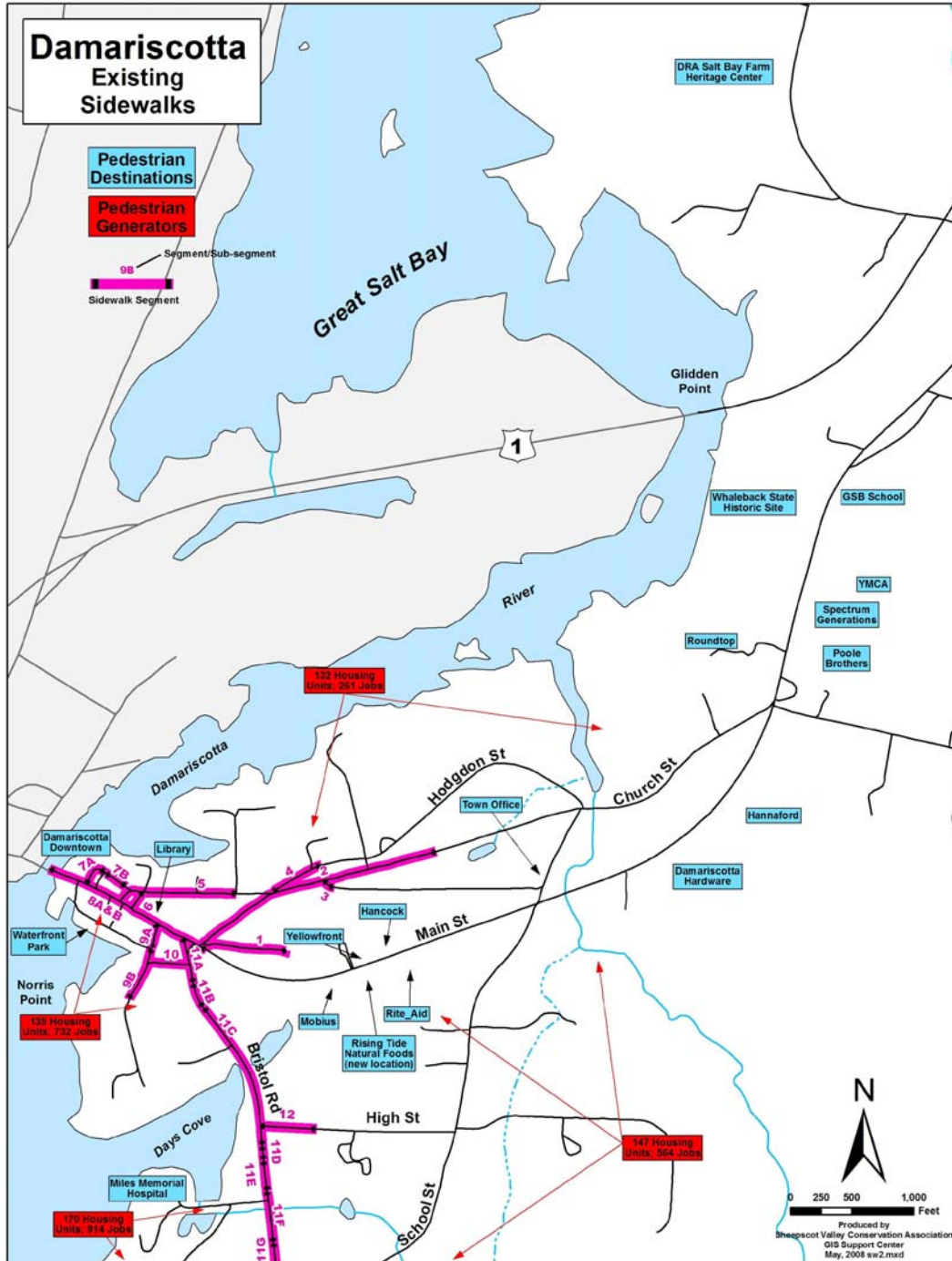
In May 2008, David Atwater of DPAC conducted a survey of the existing sidewalk system. The results of the survey are presented in Table 7. Less than 40% (4,900 feet) of the 12,877-foot sidewalk system is rated as in fair or better condition, with most of this component consisting of the new Main Street sidewalks constructed in 2007 by the Maine Department of Transportation (MDOT). Figure 2 presents the existing sidewalk system in relation to the pedestrian trip origins and destinations previously identified in Figure 1 and includes segment identifiers from Table 7.

Table 7 Existing Sidewalk System

Street	Segment	Sub Segment	Length (feet)	Location	Curbing	Width	Condition	Comments	
Vine Street	1		644	N side		2-3'	poor		
Church Street	2		2,100	NE side	limited asphalt	2-3'	poor	water pipe and parked car hazard within sidewalk*	
Chapman Street	3		110	SW side		2'	fair		
Hodgdon Street	4		457	W side	occasional asphalt	2-3'	fair	Especially problematic for handicap persons	
Elm Street	5		995	N side		3' upper; 2-3' lower	upper good; lower fair	hydrant, parked car hazard within sidewalk	
Theater Street	6		124	E side	asphalt	6'	good		
Day Block	7	A	235		asphalt	1-6'		difficult to walk	
		B	200					difficult to walk	
Main Street	8	A	1,444	N side	granite	6'	new	12 curb cuts each side, ADA ramps	
		B	1,444	S side	granite	6'	new		
Water Street	9	A	200	E side	asphalt		new		
		B	445	E side		2-3'	poor	no sidewalk river side*	
Cross Street	10		310	S side		2'	poor	*	
Bristol Road	11	A	410	W side				1st 135' new construction	
		B	212	E side	new asphalt			new	
		C	1,250	E side			2'	poor	*
		D	0						100' gap in sidewalk*
		E	227	E side				poor	*
		F	411	W side				poor	no crosswalk*
High Street	12		435	S side				does not extend to apartments	
						narrow path		combination sidewalk/swale*	

* sidewalk flush with or below adjacent street

Figure 3 Existing Sidewalks



As noted above, individual sidewalk segments and sub-segments in Table 7 are referenced in Figure 2 to illustrate the potential impact of some of the system's deficiencies on desired trip origins and destinations. Figures 4 and 5 are photos of typical segments documenting existing substandard conditions.

Figure 4 Segment 2 - Church Street Sidewalk



Figure 5 Segment 5 - Elm Street Sidewalk



Signed bicycle facilities are limited to two “East Coast Greenway” routes. Both routes are designated as “interim” routes by the Maine Department of Transportation (MDOT) until a permanent route through Damariscotta is selected. The routes were developed with the cooperation of the Salt Bay Cycling Club. The East Coast Greenway enters Damariscotta from downtown Newcastle via Main Street and travels to the Bristol Road intersection. Alternative 1 turns south on Route 129/130 to South Bristol and Bristol. From Pemaquid, it travels north, eventually connecting with Lessner Road, then to Biscay and Turner Roads. Alternative 2 continues on Main Street/Route 1B to Biscay Road then east to Turner Road. Signage is limited to “Bike Route” signs at the intersections of Egypt and Biscay Roads, Standpipe and Back Meadow Roads, Egypt and Back Meadow Roads and Egypt Road near Cohen Lane.

Section 6

Goals, Objectives, Strategies

Pedestrian/Bicycle Vision for Damariscotta

Damariscotta is a traditional, small mid-coast community that, while it has grown into an important service center, still retains its compact village architecture and compatible mix of residential, civic, service and shopping activities. Improved pedestrian and bicycle facilities are the thread that binds these uses and permits all individuals to participate in daily life without the necessity of automobile travel.

Goals, Objectives and Strategies

Goal 1: Safety: Provide safe routes for pedestrians.

Objectives

1A: Create and maintain pedestrian crosswalks on key routes in the urban core area.

Strategies

- Work with DPAC, citizens and the business community to identify areas of critical needs
- Improve existing pedestrian crossings on Bristol Road and High Street
- Create new pedestrian crossings on Bristol Road and where appropriate where new sidewalks are developed.

1B: Ensure safe routes between neighborhoods and schools in the urban core area.

Strategies

- Identify neighborhoods and primary travel corridors.
- Prioritize municipal expenditures to complete sidewalks, paths and shoulders to serve area schools, the Route 1B

shopping area, the Miles Memorial medical complex, other employment areas, the downtown, residential neighborhoods and other local pedestrian/bicycle destinations.

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

Strategies

- Identify unsafe locations (e.g. high crash nodes and segments).
- Implement traffic calming strategies in such locations as Route 1B between Bristol Road and the Yellowfront/Rising Tide complex, Church Street, the Church Street/Elm Street intersection and Bristol Road northbound at Miles Street.

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 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 Bicycle Coalition of Maine to conduct regular bike events at area 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 modern bike racks in visible areas.
- Partner with the recreation department, YMCA, DRA and other organizations to hold bicycle and pedestrian friendly events.

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

Objectives

3A: Create routes to key destinations.

Strategies (new sidewalks, crosswalks, shoulders suitable for bikes)

- Route 1B
 - Downtown to Yellowfront/Rising Tide complex
 - Yellowfront/Rising Tide complex to Biscay Road
 - Biscay Road to Great Salt Bay School
- Bristol Road
- Church Street extension to Biscay Road
- High Street extension
- Water Street (river side)

3B: Reduce traffic congestion through bicycle/pedestrian solutions.

Strategies

- Separate pedestrians from high-speed traffic.

3C: Create and enhance bicycle/pedestrian destinations.

Strategies

- Create a pedestrian/bike trail from the Shell Middens site to the Salt Bay Farm.
- Acquire right-of-way and improve surfacing to formalize and make permanent the existing pedestrian link between Chapman Street and the Coastal Marketplace
- Create a pedestrian facility from the riverfront park through the municipal parking lot to the sidewalk network.

Section 7

Proposed Facilities and Upgrades to Existing Facilities

The following is a *prioritized* list of recommended new facilities and improvements to existing facilities. They are also shown on Figure 6. The prioritization reflects the results of the Walkability/Bikability Workshop, surveys, safety statistics as well as input from the Town of Damariscotta. Please note that the Elm Street sidewalk is currently in the engineering design phase for replacement and, therefore, is not included in the following list.

1. Route 1B sub-segment A (downtown to Yellowfront/Rising Tide complex)

Business Route 1/Main Street: Business Route 1 is the core route connecting Damariscotta's downtown and outlying businesses as well as the town office and the Great Salt Bay Community School, a K-8 institution. At present, safe routes to the school do not exist, making biking and walking nearly impossible for students despite the large number that live within a reasonable distance to do so.

Figure 6 Route 1B Sub-segment



2. Route 1B sub-segment 2 (Biscay Road/Church Street/Route 1B intersection to Great salt Bay School)

Little or no paved shoulder and poor definition plague this important stretch of roadway, making safe passage for students

and others nearly impossible. The need for both safe walking via a sidewalk, and safe biking, with an adequate but relatively narrow shoulder, was viewed by all groups as a high priority

Figure 7 Route 1B Sub-segment 2



3. Route 1B sub-segment 3 (Yellowfront/Rising Tide complex to Biscay Road/Church Street/Route 1B intersection)

Heavy use by pedestrians is evidenced by cut lines along the shoulder.

Figure 8 Route 1B sub-segment 3



4. Bristol Road

Bristol Road is the main artery south from town to the Pemaquid Peninsula. It connects Miles Hospital, the largest local employer and several residential neighborhoods with

downtown. At present, a trace of sidewalk exists as far south as School Street, but it is narrow and crumbling, covered with sand and soil, and often below the grade of the roadway.

Figure 9 Bristol Road



5. Church Street

Church Street was the original Route 1 through Damariscotta and notably represents the shortest distance from downtown to the school via roadway. Church Street is a major pedestrian and bike route but its sidewalk, which is in poor condition, ends at Cottage Garden and beyond, where speeds increase, walking and biking both become more dangerous. The Church Street segment also includes the proposed trail to the Salt Bay Farm.

Figure 10 Church Street



6. High Street

High Street provides an important connection between the School Street and the residential neighborhoods in southeast

Damariscotta with Bristol Road and the Miles Memorial Hospital complex. Many of these residents are elderly and/or handicap and improved pedestrian access to the medical complex would benefit them. It's uneven surface makes it difficult to negotiate for some pedestrians and it does not extend to a large apartment complex.

Figure 11 High Street



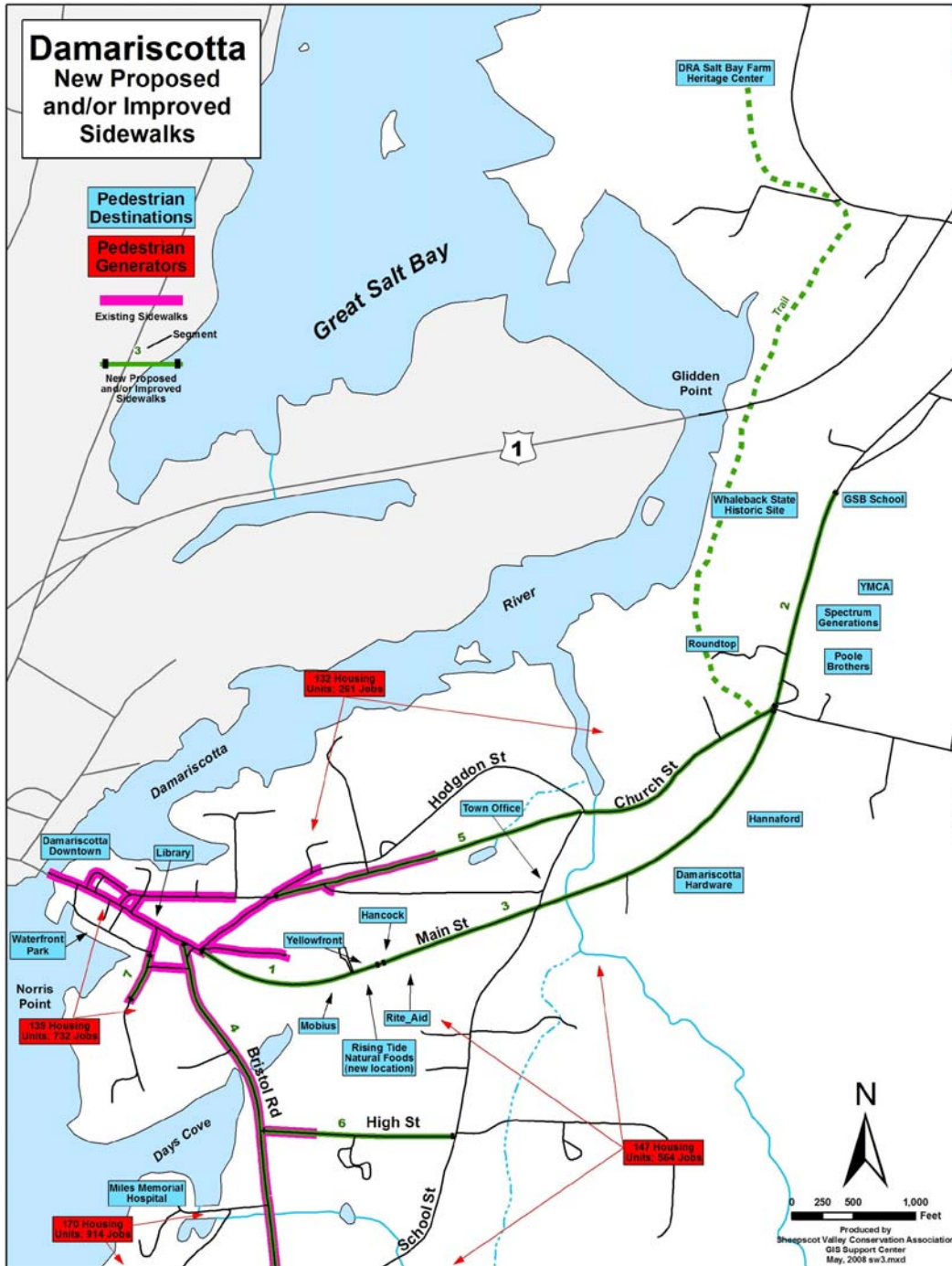
7. Water Street

Water Street connects the waterfront park, municipal parking lot and downtown shopping area with the village sidewalk network and Bristol Road. It is frequented by visitors and residents alike. About two-thirds of the existing sidewalk is in poor condition or discontinuous.

Figure 12 Water Street



Figure 13 New Proposed and/or Improved Sidewalks and Trail



Section 8

Proposed Revisions to Local Development Ordinances

The Board of Selectmen, Town Manager and Planning Board are committed to improving the quality and maintenance of pedestrian and bicycle facilities in Damariscotta and to ensuring such facilities are considered when new developments are proposed in the community.

Development ordinances administered by the Planning Board include Site Plan Review, Land Use and Subdivision Ordinances. As currently constructed, they pay varying attention to issues related to pedestrian and bicycle mobility.

The Subdivision and Land Use Ordinances are generally silent on the issue of pedestrian and sidewalk facilities. In the Site Plan Review Ordinance, the “parking and circulation” performance standard requires that:

“The layout and design of all means of vehicular and pedestrian circulation, including walkways, interior drives, and parking areas shall provide for safe general interior circulation, separation of pedestrian and vehicular traffic, service traffic, loading areas, and arrangement of parking areas.”

This performance standard is limited to on-site pedestrian circulation and does not address connection with off-site pedestrian facilities.

The “pedestrian circulation” performance standard requires that:

“The site plan must provide for a system of pedestrian ways within the development appropriate to the type and scale of development. This system must connect the major building entrances/exits with parking areas and with existing sidewalks, *if they exist or are planned in the vicinity of the project*. The pedestrian network may be located either in the street right-of-way or outside of the right-of-way in open space or recreation areas. The system must be designed to link the project with residential, recreational, and commercial facilities, schools, bus stops, and existing sidewalks in the neighborhood or, when appropriate, to connect with amenities such as parks or open space on or adjacent to the site.”

This latter performance standard addresses off-site sidewalks but only if they presently exist or are planned. Therefore, the following actions should be taken to memorialize the recommendations presented in this plan:

- The plan should be approved by the Board of Selectmen
- The plan should be incorporated as an amendment to the comprehensive plan
- The Site Plan Review Ordinance and Subdivision Ordinances should be amended to refer specifically to *planned* sidewalk facilities as presented in the plan.
- The Subdivision Ordinance should be amended to require the construction of new pedestrian facilities and their interconnection with existing or planned facilities for all subdivisions.

Damariscotta does not have an official sidewalk maintenance policy or a program for extensions to and capital improvements to the existing sidewalk system. Such activities are currently undertaken on an as-needed basis by the town administrator as funds are available. The town recently approved an engineering study of drainage deficiencies associated with sidewalks in the downtown village area. As existing sidewalks are repaired or reconstructed and new facilities are added to the system, 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 sidewalks and extensions of the system
- Establish annual sidewalk maintenance budget, including striping of crosswalks, winter maintenance and spring sweeping
- Purchase suitable sidewalk maintenance equipment or subcontract sidewalk maintenance to a private party with suitable equipment

It is further recommended that when any public road is reconstructed, the shoulder and travel lanes be sufficiently dimensioned to accommodate bicycles.

Appendices

Appendix 1

DPAC Bicycle and Pedestrian Survey Results for: “How Walkable is Damariscotta?”

19 Forms completed, tallied with percentage and total votes per answer.

What are your reasons for not walking?

0%	Disability/Other health impairment
31% or 6 votes	Bad weather/Wrong season
5% or 1 vote	Too busy/No opportunity
10% or 2 votes	Other transportation is faster
0%	Don't want to/Don't enjoy it
63% or 12 votes	No safe place to walk
5% or 1 vote	Prefer to drive/Have a vehicle
Other:	Early darkness, No safe place to walk that connect, unsafe for biking, too.

What are the purposes of your walking trips?

16% or 3 votes	To go home
53% or 10 votes	Personal errands
26% or 5 votes	Visit a friend or relative
26% or 5 votes	Commuting to school or work
95% or 18 votes	Exercise/Health/General Wellbeing
11% or 2 votes	Walk the dog
Other:	Pleasure

What do you travel on for walking trips?

63% or 12 votes	Shoulders of paved roads
26% or 5 votes	Unpaved roads
26% or 5 votes	Bicycle paths/Walking paths/Trails
16% or 3 votes	Grass or fields
Other:	Sidewalks such as they are, nature trails, sidewalks

What should our community do to aid walking safety?

68% or 13 votes	Provide existing pedestrian facilities, e.g., sidewalks, traffic signals, lighting, or crosswalks
63% or 12 votes	Improve existing pedestrian facilities, e.g., sidewalks, traffic signals, lighting, or crosswalks
63% or 12 votes	Ensure year-round maintenance of pedestrian facilities, e.g. snow removal, crosswalk paint or curb maintenance
16% or 3 votes	Enforce laws governing pedestrians
68% or 13 votes	Make areas for walking safer
0%	Change existing laws governing pedestrians

Other suggestions: Connect Vine St. to Coastal Market Place, downtown to Hannaford; walking and biking path; change laws on motorists near pedestrians; traffic light at Biscay needs to be longer.

If you are the parent of an elementary or middle school child, do you allow them to walk to school? Yes – 0% No – 37% or 7 If not, why not? One response: No safe route.

What is your vision for a walkable Damariscotta? Sidewalks on length of Business Rt.1 to Great Salt Bay School; sidewalks from downtown to Great Salt Bay School (2x); walk/bike path: Round Top to Damariscotta River Association Farm, along river to other trails; nothing specific just safe; downtown to hospital; connections to other trails; places for my children to walk, run and skip on; even sidewalks on Elm Street and Church Street; walk a safe 3-mile loop with Damariscotta at the hub; safe walk from Lincoln Academy to Great Salt Bay School; hospital to Down Street; would love to see satellite parking at Lincoln Academy and Great Salt Bay School during summer to allow for pedestrian use of back parking lot, etc.

DPAC Bicycle and Pedestrian Survey Results for:
 “How Bikeable is Damariscotta?”

12 Forms completed, tallied with percentage and total votes per answer.

What are your reasons for not bicycling?

0%	Disability/Other health impairment
25% or 3 votes	Bad weather/Wrong season
0%	Don't want to/Don't enjoy it
0%	Age
50% or 6 votes	No safe place to ride
0%	Don't know how to ride
8% or 1 vote	Prefer to walk/run
Other :	No safe place to bike at 68 years and older

What are the purposes of your bicycling trips?

8% or 1 vote	To go home
42% or 5 votes	Personal errands
25% or 3 votes	To visit a friend or relative
25% or 3 votes	Commuting to school/work
92% or 11 votes	Exercise/Health/General Wellbeing
58% or 7 votes	Bicycle ride

What do you travel on for bicycling trips?

8% or 1 vote	Sidewalks
25% or 3 votes	Bicycle paths/Walking paths/Trails
83% or 10 votes	Shoulders of paved roads
25% or 3 votes	Bicycle lanes on roads
17% or 2 votes	Unpaved roads
Other :	Roadway, competing with cars

What should our community do to aid bicycling safety?

100% or 12 votes	Provide bicycle facilities, e.g., bicycle trails, paths, lanes, racks, traffic signals, lighting, or crosswalks
42% or 5 votes	Improve existing bicycle facilities, , e.g., bicycle trails, paths, lanes, racks, traffic signals, lighting, or crosswalks
0%	Change existing laws governing bicycles
17% or 2 votes	Encourage bicycle safety education
75% or 9 votes	Make areas for bicycling safer
0%	Enforce laws governing bicycling

If you are the parent of an elementary or middle school child, do you allow them to bike to school? Yes – 0% No – 42% or 5 If not, why not? Biscay Road is not safe; not safe on Business Rt. 1.

What is your vision for a bikeable Damariscotta? Bristol Rd. and Business Rt.1 made safe for bicycling; Belvedere, etc. connect to other side of Rt.1; more shoulders on roads, beautiful ride however dangerous, this area should be promoted as a bike destination if roads were more biker/bicycle friendly, therefore bring income to area; bike a safe 10-mile loop, with Damariscotta at the hub; safe areas to bike on with children; paths and trails everywhere!