

Bicycle and Pedestrian
Planning

Friends of Midcoast Maine
Midcoast Regional Planning Commission
Maine Department of Transportation

April 15, 2009 Northport Town Hall
April 23, 2009 Union Town Hall

Bike and Pedestrian Planning

- Why?
- When?
- Where?
- How?
- Who benefits?



Why? Almost everyone is a pedestrian. Whether you are able to travel on foot, or use a wheel chair, you are a pedestrian. Our citizens, our communities and our midcoast region have increasingly demanded improved pedestrian and bicycle facilities to make their travel safe, convenient and attractive.

When? The time to start is now. What better time to make and implement plans to increase walking and biking, to reduce environmental impacts, to preserve the capacity of our roads, to reduce the use of automobiles and to cut our costs of driving.

Where? Whether you are from a small rural town or a larger midcoast community, bicycle and pedestrian planning can work to increase the travel options for our citizens, to lessen congestion on our roads, to make us healthier and to reduce personal and environmental costs.

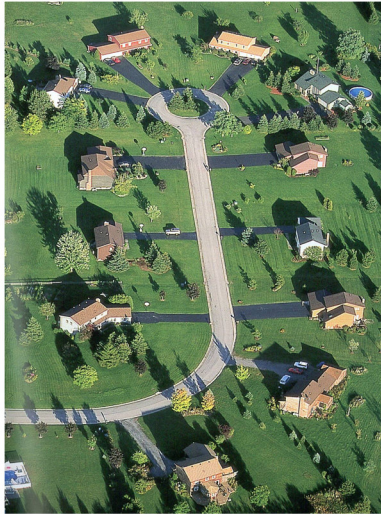
The “How” is the issue, beginning with planning and ending with implementation and financing.

We all benefit from the exercise, from improved community life, and from the economic development that surrounds well built communities.

It should always be assumed that people will walk and plans should be made to accommodate pedestrians. People will want to walk everywhere they can, and a comfortable, inviting, and safe environment should be provided for them.

There are many reasons that people walk: to run errands, to visit neighbors, to go to local stores, to take their children to the local park, for exercise, or even for the sheer enjoyment of being a pedestrian. Children should be able to walk to school or to their friends' houses. All of these activities constitute a significant number of trips. About four-fifths of all trips are non-work-related.

Typical Development Patterns



Low Density Development



Auto-dependent Development

Most new development, built in the last 50-60 years has been built for the automobile. Pedestrian and bicycle traffic is usually inconvenient, impractical and unsafe.

Creating a walkable community starts with the very nature of the built environment: having destinations close to each other; siting schools, parks, and public spaces appropriately; allowing mixed-use developments; having sufficient densities to support transit; creating commercial districts that people can access by foot and wheelchair; and so on.

Most walking trips are less than 0.8 km (0.5 mi).

Single-use, low-density residential land-use patterns discourage walking. When residents are segregated from sites such as parks, offices, and stores, there will be fewer pedestrian trips because destinations are not close enough for walking.

On the other hand, mixed use developments with sufficient density to support transit and neighborhood commercial businesses can make walking a viable option for residents.

The connection between land-use planning and transportation planning is critical, but all too often ignored.

How do we begin to plan for and accommodate all users?



LONG RANGE STRATEGIES...

- Interconnect our street systems; don't allow dead ends and cul de sacs.
- Locate residences and uses needed by the neighborhood close to each other.
- Extend and connect pedestrian networks of sidewalks and crosswalks.
- Increase density of development to expand economic and transportation opportunities.

Source: Sensible Transportation, MeDOT June 2008.

How do we improve the pedestrian environment, improve the quality of place, improve safety, and processes involved in making transportation improvements?

Strategies for Safe Walking and Bicycling

- Interconnect the local street system
- Plan and improve bicycle lanes.
- Design or retrofit streets for human scale
- Locate residences and uses needed by residences close to each other



Strategies to expand or enhance Modes of Transportation

Provide for bicycle lanes.

- Bike lanes are segments of a roadway designated by signing and pavement markings for exclusive bicycle use.
- Local streets and state highways need to provide safe travel and access for bicyclists.
- Only on neighborhood streets where speeds are lower than 25 mph should bikes and cars share the same travel lane.



Source: Sensible Transportation, MeDOT, June 2008

Strategies for Walkable Neighborhoods

- Connect neighborhoods with paths, sidewalks, trails
- Connect streets to each other
- Connect sidewalks to each other and use sidewalks to connect residences to destinations



Where do you begin? Conduct a Bicycle and Pedestrian Inventory

- Identify generators
- Collect public comment, suggestions by survey
- Hold a public workshop to identify needs, deficiencies
- Map areas of need
- Set priorities and type of project
- Build community support
- Take pictures!
- Secure funding



Inventory includes data about existing conditions and deficiencies for pedestrians and bicyclists.

For bike facilities located off the street pavement, it includes location (one or both sides of street), widths, materials, conditions, presence of street trees, lighting and other amenities.

For on-road bike facilities, it includes the width of shoulder, lighting, pavement striping, or bike lane signage, and location.

For pedestrians, it should include location and condition of existing sidewalks.

What are the generators?

- Schools
- Stores
- Businesses
- Post office
- Town hall
- Banks
- Library
- Neighborhoods



Who and what to survey

- Who?
 - Families, school kids, elderly, teenagers, workers, others
- What? Two types of surveys are helpful
 - “How walkable is your community?” survey
 - “Walkability Survey”

“How walkable is your community” survey asks people to evaluate a specific area that they currently walk or would like to walk.

Walkability survey asks about personal reasons for not walking, purposes of walking trips, quality of travel surface, recommendations from walkers to the town.

See handouts

- Identify deficiencies that affect the safety of children walking or biking to school and develop walk to school plans.



Crumbling sidewalks?

Lack of safe shoulders?

Wide roads with heavy traffic volumes?

Intersections that have pedestrian signals but not enough time to get across?

Schools and other destinations built without pedestrian access?

Identify pedestrian and bicycling deficiencies and develop strategies to address those deficiencies.



In a 1995 survey done by the Maine Department of Transportation, 80% of bicyclists rated paved shoulders the #1 desired facility. Paved shoulders (which include signed "Bike Routes" and posted and stenciled "Bike Lanes") are safer, less expensive, and easier to maintain than separate or segregated facilities like "Bike Paths."

Shoulder paving in Maine has been and will continue to be dramatically increased, raising the amount of paved shoulders over each two year paving program from 35 miles to 170 miles.

The city of Portland hired summer interns to study, map and photograph the entire peninsula and every intersection...did it have a crosswalk? was it ADA accessible? and what were the most urgent priorities? This could be done on a smaller scale in your town.

Promote walking and/or biking to school programs, including individual events, and year-long activities.



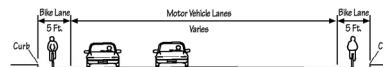
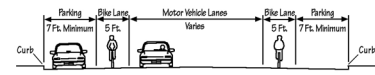
And the “walking bus” effort to get the entire group of kids on the bus to walk the last $\frac{1}{4}$ mile....



Examples of Bicycle promotions, rallies and rides.

Elements of a bike lane within a right-of-way include

- 5-6 foot wide shoulder for one way movement
- 8 foot or more for two way movements separated by curb or islands
- Proper signage
- Distinct pavement markings
- Should be incrementally added to streets or state highways where right-of-way permits and speed limit is 30 mph or greater.
- Best provided if the street is commonly used by bicyclists
- Should incrementally connect existing pathways to other destinations.



Source: Sensible Transportation, MeDOT 2008



Sometimes, even the best intentions for bicycle and pedestrian accommodation go awry
or
perhaps this is a good example of a multi-purpose route!

Coordinating public meetings or committees regarding walkable community development.



Damariscotta Bike and Pedestrian Goals and Priority Trails Bike and Pedestrian Workshop Great Salt Bay April 15, 2008

General Goals for Improving Walking and Biking in Damariscotta

Goal	# votes
Connect destinations - system as transportation	22
Keep sidewalks open in winter	17
Bike lanes on roads	15
Even sidewalks with a level surface	15
Adequate width for strollers and wheelchairs	9
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 notes - last year (C?)	1
Keep snow melted	1
TOTAL	104

Priority Trails and Off-Road Connections

Trail Route	# votes
Old Farm to Round Top Complex	33
Extension of Vine Street to Yellowfront	20
Behind Chapman Street to Yellowfront	18
Waterfront Walk - Damariscotta Bank and Trail to Howard's Office	17
Blacey Road behind lumberyard to OSB	11
Behind fire station/hardware to Sanitation District	4
Great Salt Bay Heritage Trail	3
Boardwalk to Yellowfront	2
Behind dentist's office	1
Trail under power lines	1
TOTAL	116

Involve the public from the very beginning.

Use existing community groups and go to them. Don't expect everyone to come to your meetings.

Ask for help from moms and dads and seniors and other special groups.

Give people maps and markers to make suggestions.

Examples of Bicycle Routes & Designs and Pedestrian Amenities

- Sidewalk improvements, signage, crosswalks
- On-road improvements through road reconstruction
- Off road improvements



Infrastructure Options and Benefits

Sidewalks: Provide a separate, safe place for walkers

Street crossings: Improve visibility of pedestrians by drivers and increases the comfort and safety of both.

Signage: Bright, visible signage raises awareness of the pedestrian environment and provides guidance to pedestrians and drivers alike.

Signalization: Pedestrian countdown signals indicate the time remaining for pedestrians to cross the street safely.

Shoulders: Benefit pedestrians and bicyclists by providing additional space on roadways.

Street furniture: Provides a place to rest. May promote social interaction and an increased sense of community.

Off-Road Bicycle and Pedestrian Facilities:
Provides connections between neighborhoods, schools, businesses, and village centers.



Local funding options

- Capital improvements
- Maintenance
- Local tax
- Private development – as part of the approval process
- Local improvement districts
- Impact fees
- Private donations
- Design standards



Funding is often the stumbling block.

Topsham put local funds into bike and pedestrian projects and eventually received \$2 in Enhancement funding.

Check into Enhancement Funds for sidewalks and bicycle facilities and Safe Route to School funds.

Talk to Dan Stewart, Bicycle Coordinator at the Maine DOT.

And visit the Bicycle Coalition of Maine website for a wealth of information on bicycle planning.

MaineDOT QUALITY COMMUNITY PROGRAM

Safe Routes to School

To improve safety, enable and encourage children, to walk/bike to school and after school activities

- Up to 100% federal and state funding.
- Every Two Years, \$1 Million Per Year



Contact: Dan Stewart, Maine DOT

Federal Enhancement Grant Funds

- Provides funding for bicycle and pedestrian improvements or bicycle and pedestrian safety education.
- 20% local match required
- MaineDOT solicits applications for these funds every two years (usually in the summer of even numbered years).
- Successful projects must demonstrate that they will provide for improved access or improve safety conditions.
- Visit www.enhancements.org

Transportation Enhancements (TE) activities are federally funded, community-based projects that expand travel choices and enhance the transportation experience by improving the cultural, historic, aesthetic and environmental aspects of our transportation infrastructure. TE projects must be one of 12 eligible activities and must relate to surface transportation.

For example, projects can include creation of bicycle and pedestrian facilities, streetscape improvements, refurbishment of historic transportation facilities, and other investments that enhance communities and access. The federal government provides funding for TE projects through our nation's surface transportation legislation.

Projects along Designated Scenic Byways



Route 201, Moscow, Maine

For information on funding to support projects along designated Scenic Byways, contact the Maine DOT Environmental Office, [Landscape Architecture Unit](#).

Only 95 roads in the United States have been designated National Scenic Byways or All-American Roads and [Maine boasts four of them](#)

[Acadia Byway](#) travels through Acadia National Park and the historic villages of Bar Harbor and Northeast Harbor on Mount Desert Island.

[Old Canada Road National Scenic Byway](#) travels along Route 201 through Maine's vast forests from Solon to the Canadian border.

[Rangeley Lakes National Scenic Byway](#) offers many opportunities for outdoor recreation including golfing, boating, fishing, hiking, wildlife watching, skiing and snowmobiling. Crystal clear lakes and rolling mountains set the backdrop for fantastic vistas along Routes 4 and 17.

[Schoodic National Scenic Byway](#) explores a less developed and unspoiled area of the rugged Downeast Maine coast

Municipal Transportation Gateways

- *Municipal Transportation Gateways*
To apply for funds to support municipal transportation gateways, contact the MaineDOT Environmental Office, [Community Gateways Program](#).



Community Development Block Grants



- Some communities can fund pedestrian improvements, particularly in downtown areas through the *Community Development Block Grant* program (CDBG).
- For more information visit www.meocd.org/.
- Thomaston recently received CDBG funds for trails.

Thomaston has received a \$221,000 grant from the Maine Department of Economic and Community Development to help develop a park and trail system at the former state prison property.

The grant will help the town create the park and build a trail along the perimeter of the former prison property, named Thomaston Green, to the water tower on the opposite end of Route 1.

Recreational Trails Program

- The *Maine Department of Conservation* also has a Recreational Trails Program to help build trails.
- For more information visit www.maine.gov/doc/parks/programs/community/trailsfund.html



The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU), the successor to the Intermodal Surface Transportation Efficiency Act (ISTEA), transfers a percentage of gasoline taxes paid on non-highway recreational use in off-highway vehicles from the Highway Trust Fund into the Recreational Trails Program for trail development, improvement and maintenance.

The State of Maine has agreed to take part in the Recreational Trails Program (RTP) under the Federal Highway Administration (FHWA), the federal agency that administers the program at the national level.

Recreational Trails Program Financial Policies

30% of RTP funds allocated to the state shall be reserved for uses related to motorized trail recreation.
30% of RTP funds allocated to the state shall be reserved for uses related to non-motorized trail recreation.
The remaining funds shall be used for recreational projects that facilitate diverse trail use.

Project Eligibility

Eligible projects may include:

Maintenance and restoration of existing recreational trails.

Development and rehabilitation of trail side and trailhead facilities and trail linkages for recreational trails.

Construction of new recreational trails.

Acquisition of easements or fee simple title to property for recreational trails or recreational trail corridors.

Operation of educational programs to promote safety and environmental protection as those objectives relate to use of recreational trails.

Who Is Eligible for RTP Grants?

The state has determined it will provide funds received under this program as grants-in-aid to municipalities, other qualified sub-divisions of state government and to qualified non-profit organizations under guidelines established by the Bureau of Parks and Lands in conjunction with the Maine Trails Advisory Committee.

Local Funding Share

Recreational Trails Program grants are made on a matching basis. The federal share of the project costs shall not be more than 80% (maximum grant amounts may be set by the state). The local share may consist of cash or state-approved donations of labor and/or materials.

Public Use and Access

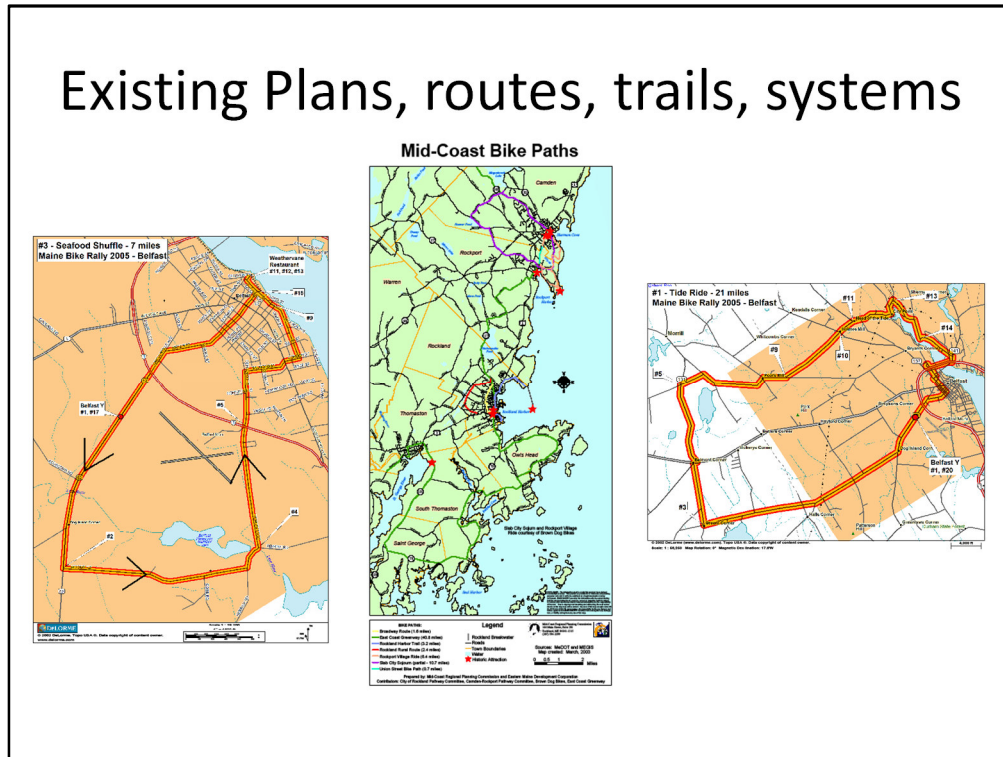
Applications for RTP funding must stipulate full support of the program and must ensure public access to the recreation improvements funded by the grant.

Rivers, Trails and Conservation Assistance Program



The *National Park Service* also has a Rivers, Trails, and Conservation Assistance Program to help communities/groups reach their goals. For more information visit www.nps.gov/rtca.

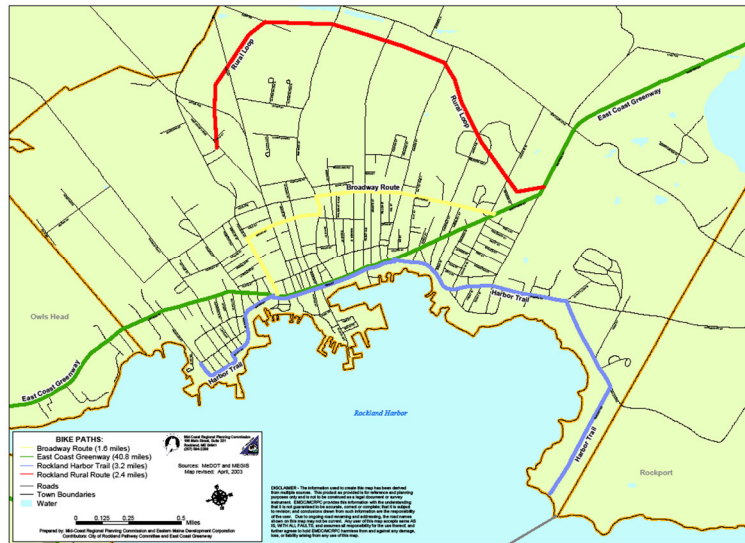
Existing Plans, routes, trails, systems



Examples of bike routes. Center map developed by the Midcoast Regional Planning Commission.

Left and right examples are in Belfast and can be found on the Bicycle Coalition of Maine website.

City of Rockland Proposed Pedestrian-Bike Pathway Routes



Proposed Mapping

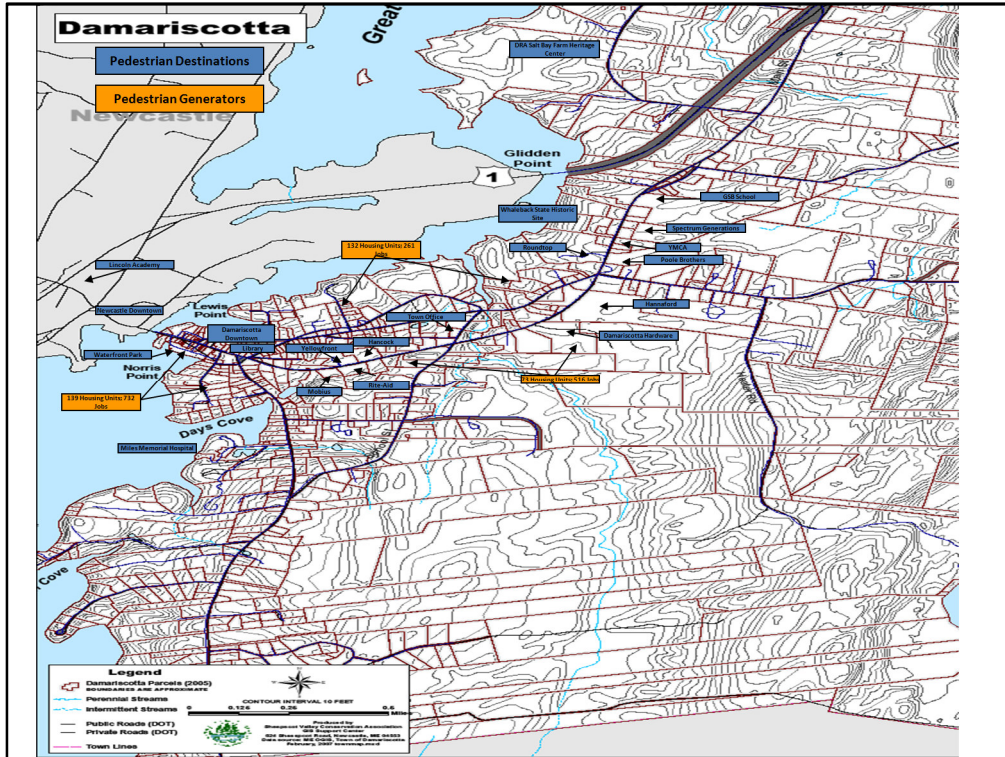


Damariscotta map
resulting from
public workshops,
surveys and on-line
comments

Improve Chances for State Funding...



- Fully evaluate existing conditions
- Involve the public and users of the system
- Prioritize improvements needed
- Document how the project will improve safety
- Show transportation and/or recreational value.



This is an example of mapping origins and destinations in Damariscotta.



Bicycle and Pedestrian Planning
For more information or assistance
please contact:



Friends of Midcoast Maine
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236-1077
E-mail: info@friendsmidcoast.org
Web-site: www.friendsmidcoast.org



Midcoast Regional Planning Commission
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594-2299
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Also, contact the Bicycle Coalition of Maine and the Maine Department of Transportation's Bicycle Coordinator Dan Stewart.