

Report of the Bicycle Pedestrian Subcommittee for the

Region Two Transportation Advisory Committee

12/29/00

Prepared by:

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Executive Summary

The Regional Transportation Advisory Committee (RTAC) and the Hancock County Planning Commission (HCPC) have reviewed all state-numbered roads in Hancock and Washington Counties to identify priorities for shoulder paving or other improvements.

This report is the outcome of a series of subcommittee analyses, communications and meetings. Included with the report are a brief narrative describing the process, a list of participants, a summary table of routes and mileage recommended and a map illustrating the recommended locations for shoulder paving.



Purpose of the Study

The Maine Department of Transportation is in the process of writing a new Regional Bicycle Plan for infrastructure improvements and other transportation programming. The rise in popularity in walking and bicycling throughout the State and the importance that these forms of recreation play in our economy have motivated MDOT to look for effective and efficient means for improving access for walkers and cyclists. The relatively high construction and maintenance costs of stand-alone trails and the difficulty in many cases of obtaining right-of-way impel us to think primarily in terms of using our existing assets and improving them to provide interconnected bikeways and pedestrian ways within a constrained budget. Paving gravel shoulders along State roads is a particularly cost-effective approach with multiple (some say 17) benefits, one of which is safer bicycling.

This study provides guidance for future shoulder paving in the RTAC-2 region that includes all of Hancock and Washington Counties. The study provides readers with a brief summary of the issues, a map indicating important future bikeways and a summary table of the mileage of first and second priority shoulder paving projects.

Participation

A subcommittee of the RTAC was formed and held a series of six meetings, with several persons working additional time outside of the meetings. Participants in the subcommittee are listed below.

<u>Name</u>	<u>Affiliation</u>	<u>Place of Work/Residence</u>
Will Burden	Resident, Cyclist	Mount Desert (Hancock County)
Bill Ceckler	Resident, Cyclist	Hancock (Hancock County)
Barbara Drisko	Selectman, Walker	Columbia Falls (Washington County)
Leslie Harlow	Business Owner, Cyclist	Sullivan (Hancock County)
Lois Hubbard	Business Owner, Walker	Jonesport (Washington County)
Sally Jacobs	Camp owner, Cyclist	Trescott (Washington County)
Eric Larsson	Planner/Lawyer, Cyclist	Castine (Hancock County)
Jean Marshall	Planner, Walker	Southwest Harbor (Hancock County)
Jeffrey Miller	Resident, Cyclist	Bar Harbor (Hancock County)
Doug Monteith	Resident, Cyclist	Winter Harbor (Hancock County)
Stan Moses	RTAC, Walker	Bucksport (Hancock County)
Renee Speth	Resident, Cyclist	Lamoine (Hancock County)
Frank Tracy	RTAC, Walker	Lubec (Washington County)
Hanna Weber	Resident, Cyclist	Surry (Hancock County)

In addition to the committee members, the Bicycle Coalition of Maine, MDOT and HCPC provided technical support. The following persons attended one or more of the subcommittee meetings.

<u>Name</u>	<u>Affiliation</u>
John Balicki	Maine Department of Transportation
Mike Hoover	Maine Department of Transportation
Jim Fisher	Hancock County Planning Commission

Public Participation

Every effort was made to select a panel of residents that were regionally representative and also represented different public and private interests. The panel included residents living in the two counties, public servants, business owners, transportation specialists, walkers and cyclists.

In order to broaden input, several opportunities were provided for public comment. HCPC staff presented the bicycle planning process to a variety of meetings, including the Mount Desert Island League of Towns, the Route 1 Corridor Committee, the Acadia Byway Corridor Committee, the Schoodic Byway Corridor Committee, and several town meetings. An information booth was presented at the Destiny 2000 Sustainable Tourism Conference in Calais and was later presented at a meeting of the RTAC. A web site was maintained throughout the process where information was posted on this process and including draft maps of the proposed routes. Press releases were provided to local newspapers announcing several of the meetings and highlighting the significance of bicycle and pedestrian planning for the region. Some of these meetings coincided with public discussions of the proposed downeast trail. Finally, two articles were published in the HCPC quarterly newsletter that described the effort and invited public input.

Data

The Maine Department of Transportation (MDOT) provided information on current shoulder surface, width and the amount of automobile traffic roads typically experience. From these data a calculated level of service / comfort for cyclists was also provided. For instance, a road with no shoulders and heavy, high speed traffic would be considered very uncomfortable and in fact very dangerous. MDOT also provided bicycle accident data for RTAC - 2 that included approximate locations of accidents over the past two years.

Information was also provided on MDOT policies for shoulder paving. These policies set guidelines for shoulder paving based primarily on the Summer Average Daily Traffic counts (SADT) and road classification, such as minor collector, major collector, and arterial. Due to the fact that SADT data are as yet not available for all relevant road segments, Annual Average Daily Traffic has been used in these analyses.

MDOT and HCPC staff provided maps of the region, with road classification and geographic features. These maps were perhaps the most important tools used in the planning process. Draft maps were annotated by the committee, and these changes were digitized for subsequent meetings.

Criteria For Shoulder Paving

In addition to MDOT shoulder paving policy, the subcommittee developed a local list of criteria by which prioritization would be systematized. The criteria listed below were considered throughout the process, but subcommittee chose to use these qualitatively, rather than quantitatively. Other considerations came up about specific road segments, such as the difficulty of finding parking, the perceived attitudes of local leaders and the current condition of the roads. Given the totality of the cycling experience, the focus of the subcommittee was on the overall desirability of routes from an integrated perspective rather ranking each on many specific considerations.

The criteria presented below merely indicate whether a factor was considered to add or detract from an overall ranking. They are listed in alphabetical order.

Summary of Criteria and Their Impact on Selection of Shoulders to be Paved		
1	+	Anticipated number of bikers and pedestrians
2	+	Benefits to community residents
3	+	Distance and likely cost of segments
4	-	Existence of alternative routes that are bike-able
5	+	Improving system continuity - connecting existing bike-able areas such as Bar Harbor, Public Lands, Schoodic and the proposed Downeast Trail
6	+	Potential impact on economic development
7	+	Potential to support walk-able communities
8	+	Proximity to Ellsworth and other population centers
9	+	Potential to reduce risk of accidents
10	+	Scenic beauty of the location

- Improvements to Minor Collectors -

Minor collector improvements are undertaken at the request of the municipality in which they are located and require a 1/3 match from that municipality. Shoulder improvements on these roads must be agreed upon by the local municipality and should be included as part of their Urban-Rural Initiative Program (URIP) requests to MDOT for minor collector improvements. Recommendations included below must proceed through local government channels.

Findings

- Downeast Trail and Arterials Form the Backbone -

Subcommittee members agreed that in the long run, the proposed Downeast Trail would provide and unparalleled multi-use facility for RTAC 2 that would draw many thousands of tourists all four seasons and would provide an alternative transportation backbone for residents. The cost of the Downeast Trail is significant, and interim solutions for cyclists and pedestrians are necessary. MDOT has an existing commitment to pave shoulders along the arterials in Hancock and Washington Counties, those being parts of Route 1, Route 3 and Route 1A between Brewer and Ellsworth. Because of this standing commitment, the subcommittee has not placed these roads in the list of local priorities. **However, the committee believes that shoulder paving should be given a very high priority along these arterials.**

- Setting Priorities for Shoulder Paving -

Given the backdrop of the proposed Downeast Trail and existing State plans to pave all shoulders along Route 1, Route 3 and Route 1A (Bangor Road), the group chose to emphasize the peninsula connections, popular recreational loops and safety. Eleven bikeways were identified, though any of these might be cut into smaller pieces or merged into larger ones. These bikeways correspond to existing popular bike rides, some of which are currently considered very dangerous, as well as some that are thought to have great future potential. The map, included below indicates these routes.

First Priority:

Along many of these routes the subcommittee identified sections that they considered to be higher priority, because of heavier automobile traffic or because they are getting significant numbers of individual cyclists or bike tours that are leading to friction with automobile and truck traffic. This friction can result in stress for cyclists and drivers as well as life-threatening accidents. First priority segments should receive paved shoulders as soon as possible, generally at the time that the road receives significant maintenance, such as rebuilding.

Second Priority:

Second priority segments are those that are bike-able without shoulders, but are still not considered safe given the speed of traffic, use by trucks and topographical features. Second priority routes should receive paved shoulders as first priority sections are completed or in concert with other MDOT road improvement programs..

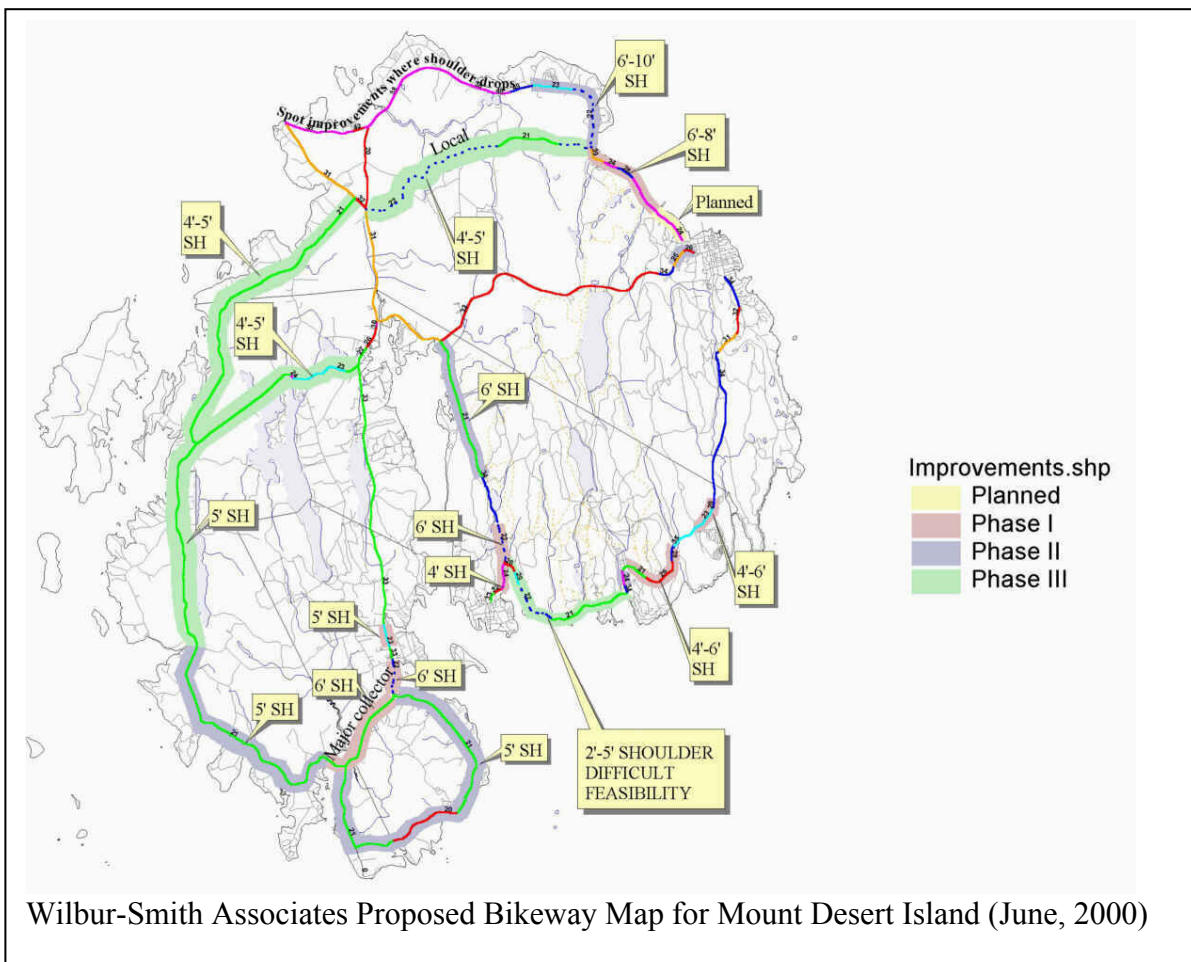
Leveraging the Private Sector:

Most of the prioritized segments in RTAC 2 pass through undeveloped land, farmland, timberland and low density residential communities. The committee encourages MDOT the State Planning Office and town governments to require all future development along these routes to be designed in bicycle and pedestrian-friendly ways. To accomplish this goal, developers

should provide adequate right-of-way, sidewalks, paths or bikeways along with other infrastructure improvements where their development has frontage on priority bikeways. Commercial development should be held to the highest standard in this regard.

Mount Desert Island Bicycle Plan:

During the research and writing of this plan the Maine Department of Transportation contracted Wilbur Smith Associates to produce a more detailed bicycle and pedestrian plan for Mount Desert Island. At the time of this writing that plan is in draft stage and sets forth several levels of priority eventually leading to paving all of the shoulders of State Roads on Mount Desert Island. In light of this ongoing process, this committee makes only limited recommendations for shoulder paving on Mount Desert Island. Preliminary indications are that Mount Desert Island priorities in this plan are consistent with first or second tier priorities in the Wilbur-Smith Associates Plan. Readers interested in knowing more about the Wilbur-Smith Associates Plan are encouraged to contact MDOT.



Summary Tables

The table below summarizes mileage of each proposed bikeway for RTAC 2. The totals for each of the two counties are approximately equal and in each case approximately three-fourths of the proposed bikeways are rated as first priority and one-fourth second priority. While this represents a significant investment by the people of Maine, there are many, many more miles of roads that are being used by cyclists that would benefit from shoulder paving.

The subcommittee also reiterates that some very dangerous roads were not included because we believe that these sections will receive shoulder paving to meet the very heavy demands by motorized traffic. Most significantly, Route 1A between Bangor and Ellsworth has one of the highest volumes of traffic in the region, yet is a very narrow, two lane road with deteriorated sand and gravel shoulders. It is not bike-able now, yet may play an important role in the future Downeast Trail.

The table indicates bikeways, state road numbers, characteristics found along the way, and mileage classified according to subcommittee prioritization as well as already paved sections.

Priority Routes

Bike and Pedestrian way	Route Numbers	Class	Begin Mile	End Mile	Length	Characteristics	Priority Miles			Total Miles
							First	Second	Paved	
Bangor - Bucksport - Castine	Route 15	Min Art	40.72	50.11	9.4	AADT	21.4	7.2	1.7	30.3
	Route 175	Min Coll	38.11	46.15	8.0	AADT 1,000 - 2,220				
	Route 166	Maj Coll	0.00	7.34	7.3	AADT 1,600				
	Route 166A	Min Coll	0.00	3.77	3.8	AADT 1,000 Scenic Route, popular for cyclists and cycle tours				
Penobscot-Blue Hill	Route 199	Min Coll	0.00	3.56	3.6	AADT 1,000 - 1,800	9.9	3.6	0.0	13.4
	Route 177	Min Coll	0.00	6.98	7.0	AADT 1,000 - 1,800				
	Route 175	Maj Coll	33.15	36.08	2.9	AADT 1,000 - 2,220 Scenic Route, popular for cyclists and cycle tours. Some sections already paved.				
Deer Isle - Ellsworth	Route 15	Maj Coll	5.91	23.90	17.9	AADT 2,000 - 7,000	7.6	13.3	1.4	22.2
	Route 172	Maj Coll	9.26	11.21	2.0	AADT 2,000 - 8,000				
	Route 172		21.28	22.33	1.1					
	Route 175	Maj Coll	19.86	23.63	0.9	AADT 1,000 - 2,220				
	Route 1	Prin Art	192.93	193.05	0.1	AADT > 6,000 Popular for cyclists and cycle tours. Some parts on East Coast Greenway				
Lamoine - Franklin	Route 204	Maj Min	0.00	1.71	1.7	AADT 1,500 - 4,200	9.7	1.4	0.0	11.1
	Route 1	Min Art	197.43	199.26	1.8	AADT > 10,000				
	Route 182	Maj Coll	0.05	7.61	7.6	AADT > 4,000 Bicycle connection between MDI and down-east region. Passes near Lamoine State Park. Part of this is in the East Coast Greenway.				

Bike and Pedestrian way	Route Numbers	Class	Begin Mile	End Mile	Length	Characteristics	Priority Miles			Total Miles
							First	Second	Paved	
Mount Desert Island	Route 3	Min Art	90.31	117.63	27.6	AADT 6,000 - 12,000	17.3	0.0	16.8	34.1
	Route 102	Maj Coll	0.04	3.95	3.9	AADT > 5,000				
	Route 102	Maj Coll	11.35	13.41	2.6	In-fill shoulder between existing paved-shoulder segments and park facilities. High level of bicycle use.				
	Route 198	Maj Coll	10.01	10.44	0.4					
Schoodic Loop	Route 1	Min Art	Not Inc.	Not Inc.	Not Inc.	AADT > 6,000	13.5	5.2	0.7	19.4
	Route 186	Maj Coll	0.00	16.13	16.1	AADT 1,500 - 2,000				
	ANP Connectors	Local			3.3	Maine Bike Tour, National Scenic Byway, Connection to Acadia National Park. Some sections are popular for cycling and walking.				
Milbridge-Cherryfield-Harrington	Route 1	Maj Coll	225.29	230.31	5.0	AADT 2,000 - 5,000	8.6	0.0	4.1	12.7
	Route 1A	Min Art	63.36	71.07	7.7	AADT 3,000 - 5,000 Some sections already paved, important connector for Washington County and Downeast Trail. Scenic views.				
Jonesport Loop	Route 1	Min Art	241.36	251.41	10.0	AADT 3,500 - 5,000	22.9	10.9	0.2	33.4
	Route 187	Maj Coll	0.05	22.85	22.8	AADT 1,000 - 4,000				
	Beals Connectors C425J Div2				0.8	Scenic views, Route 1 connector for Washington County. Currently considered unsafe for cyclists.				
Machias - Whitneyville Loop	Route 1	Min Art	251.08	257.68	6.4	AADT 4,000 - 10,000	0.0	12.1	2.4	14.4
	Route 1A	Maj Coll	71.07	79.09	8.0	AADT 1,000 - 3,000 Scenic loop, part of East Coast Greenway, some sections already paved.				

Bike and Pedestrian way	Route Numbers	Class	Begin Mile	End Mile	Length	Characteristics	Priority Miles			Total Miles
							First	Second	Paved	
Lubec - Eastport	Route 1	Min Art	257.68	294.62	36.9	AADT 1,500	29.6	20.6	5.0	55.2
	Route 189	Maj Coll	0.00	11.19	11.2	AADT 2,000 - 4,000				
	Route 190	Maj Coll	0.00	7.09	7.1	Scenic Route, connects Lubec to Route 1, some parts already paved.				
Eastport - Calais	Route 1	Min Art	294.62	314.25	19.6	AADT 2,000 - 3,000 AADT 3,000 - 4,000 Scenic Route, connects two Canadian boarder crossings, some parts already paved.	6.0	0.0	13.7	19.6
Hancock County							79.4	30.6	20.6	130.5
Washington County							66.5	43.5	25.3	135.4
Grand Total							146.7	71.5	45.7	265.9

Of course, there are many potential bike routes that are not included in the preceding list. The list below includes many of the State Roads that were considered, but were not given first or second priority for shoulder paving at this time.

Non-Priority Routes

Route	Roads Identified	Class	Characteristics
Bangor - Dedham - Ellsworth	Route 1A	Arterial	AADT > 10,000. Very dangerous in current condition. Assumed to be receiving paved shoulders.
Bucksport - Ellsworth	Route 1	Arterial	Most of shoulders already paved. Assumed to be receiving paved shoulders.
Bangor - Calais	Route 9	Arterial	Assumed to be receiving paved shoulders.
Orland - Holden	Route 46	Maj Coll	AADT between 1,55 and 2,500. Alternative route using local roads has been designated for East Coast Greenway.
Orland - Surry	Route 176	Min Coll	AADT 600 - 800 Some scenic views or farmland and Toddy Pond. Local road alternative is North Bend Road which has less traffic.
Blue Hill - Brooklin - Sedgwick - Brookesville Loop	Route 175 Route 172 Route 176	Min Coll Maj Min Min Coll	AADT 600 - 5,000 AADT 750 - 1,200 AADT 850 - 3,500 Scenic area with hills, curves and some difficult cycling areas. Traffic levels generally low. Route 15 corridor proposed as primary bikeway.
Clifton - Ellsworth	Route 180	Min Coll	AADT between 600 and 900.
Amherst - Ellsworth	Route 181	Min Coll	AADT between 300 and 600.
Aurora - Ellsworth	Route 179	Maj Coll	AADT between 600 and 900.
Waltham - Eastbrook - Franklin - Sullivan	Route 200	Min & Maj Coll	AADT between 550 and 850. Some local road alternatives.
Ellsworth - Trenton	Route 230	Min & Maj Coll	Trenton AADT 500 to 2,000. Ellsworth AADT 3,000 to 11,000. Alternate route on Route 3 exists. This route is more scenic, but acts as an informal auto and truck bypass around Ellsworth's High Street commercial district and is quite dangerous for cyclists.
Ellsworth - Lamoine Beach	Route 184	Maj Coll	AADT between 1,000 and 2,250. Serves Lamoine, East Lamoine, Lamoine State Park and Lamoine Beach.

Route	Roads Identified	Class	Characteristics
Tunk Lake - Sullivan	Route 183	State Aid Road	No AADT data available. Not heavily used and considered safe in current condition. Connects to Schoodic Mountain, Tunk Lake and Donnell Pond Public Reserve Lands. Also included in East Coast Greenway.
Sullivan - Sorrento	Route 185	Min Coll	AAADT 500 to 1,000. Considered relatively safe in current condition.
Beddington - Cherryfield	Route 193	Maj Coll	AAADT between 300 and 900.
Township 9 - Cherryfield	Route 182	Maj Coll	AAADT approximately 2,000. State Scenic Byway, but very difficult to widen due to topography.
Cherryfield - Harrington	Route 1	Maj Coll	AAADT between 3,000 and 4,000. Alternative local roads available and used for East Coast Greenway.
Wesley - Machias	Route 192	Maj Coll	AAADT between 350 and 850 except for close proximity to Machias.
Baring-Meddybemps-Cooper - East Machias - Cutler - Lubec	Route 191	Maj Coll	AAADT between 400 and 1,500 except for close proximity to East Machias and Baring. Considered fairly safe for cycling. Coastal Route 1, Charlotte Road and Moosehorn Refuge provide alternative routes.
Meddybemps - Pembroke	Route 214	Maj Coll	AAADT approximately 800.

The Committee notes that many of the routes not prioritized for shoulder paving are narrow and have significant levels of bicycle and pedestrian use. Many of these roads would benefit from shoulder paving, but were not considered to be as high on the priority list as others.

Conclusion and Map

Finally, the priorities identified by the subcommittee are presented in map form on the following page. Bike and pedestrian ways are indicated by solid color lines. A thick, yellow band around the line indicates a first priority section. A thick black band around the line indicates that this section already has paved shoulders on both sides. Readers should note that since the inception of this research some roads have received additional shoulder paving. Updated GIS information is not yet available to indicate these changes on the map.

The picture that emerges from this map is a series of primarily north-south or interior to coastal rides that depart from a central corridor along route 1 and the Calais Branch railroad line. Each of the trips will enable cyclists and walkers to visit scenic areas, passing through woods, fields and along the shorefront. Many of these trips are already used by individual cyclists, walkers and bicycle tours. Shoulder paving will help to increase safety for these travelers and will ease difficulties experienced by motorists.

RTAC 2 Bicycle and Pedestrian Subcommittee Shoulder Paving Recommendations

December 29, 2000

