Bicycling and Walking:



Transportation Choices for New Hampshire's Lakes Region

March 26, 2012

Why is a Bike/Ped Plan Needed

- Safe walking and biking opportunities are missing for children, families and adults – perception
- At least 10 pedestrians killed in region in past 10 years
- Median regional age is 45.3, active transportation can allow people to age in place and participate in the local economy
- Adult and child obesity rates are climbing, about \$70 million/year in associated med costs due to Type 2 diabetes
- Motor travel is more expensive Oct 2011 gas prices were 143% higher than Jan 2012 prices (and even higher today)

Plan Development Process

Included the following:

- Caucus
- Public Meetings
- Internet Survey
- Research, Personal Communications
- Consultant for Conceptual Designs at 15 locations in 15 different communities
- Field Assessments
- Concept Designs
- TAC Editorial Review Sub-Committee
- Public Review Period

Outreach in Plan Development Process

- press releases in local and regional newspapers
- radio announcements
- website postings
- email distribution to:
 - regional organizations
 - recreational groups
 - advocacy groups
 - public health partnerships
 - bike/walk/run businesses

- municipal and state officials:
 - recreation
 - DOT staff
 - planning
 - public works
 - administrative staff



Updated Vision

"A purposefully connected network of trails, sidewalks, road shoulders, and markings promoting safe and enjoyable bicycle and pedestrian mobility. Design and maintenance of livable, complete streets that support transportation, recreation, health, and economic interests throughout the Lakes Region."

Caucus Key Concepts: Meet Diverse Needs

A plan that addresses the needs of all types of users

- Advanced on-road bikers
- Recreational users: individuals, families, children
- Mountain bikers
- Organized events
- Visitors and residents

Caucus Key Concepts: Evaluation

- Accurate assessment of biking and walking conditions
- Support for local bicycle and pedestrian plans
- Analysis of the economic impacts of bicycle/pedestrian network
- Importance of non-motorized access to transit

Caucus Key Concepts: Information

- More informative regional bicycling and walking map
- Web-based plan information
- Prioritization of routes to be addressed in upcoming projects
- Linkages between nodes along appropriate corridors

Caucus Key Concepts: Infrastructure

- Wider road shoulders along major routes and around the lakes
- Address existing gaps and poorly functioning network facilities
- Need for improved signage in communities and on best routes

Concerns Expressed at Public Meetings and Surveys

- Economic benefits of trails and walkable communities poorly understood.
- New sources of funding for projects need to be identified.
- Cycling space is needed for circum-lake routes.
- Share the Road signs are needed in key areas.
- Connectivity between existing multi-use trails is limited, people said more connections needed.

(Based on input from 70 public meeting attendees and 245 survey responses)

Public Response to Behavior Questions – a few responses

- 62% of survey respondents would walk more if there were more trails or off-road paths.
- 60% would bike or bike more if there were four foot shoulders on busy paved streets.
- 48% of respondents do not bike or bike less because road shoulders are too narrow.

(Based on 245 internet survey responses)

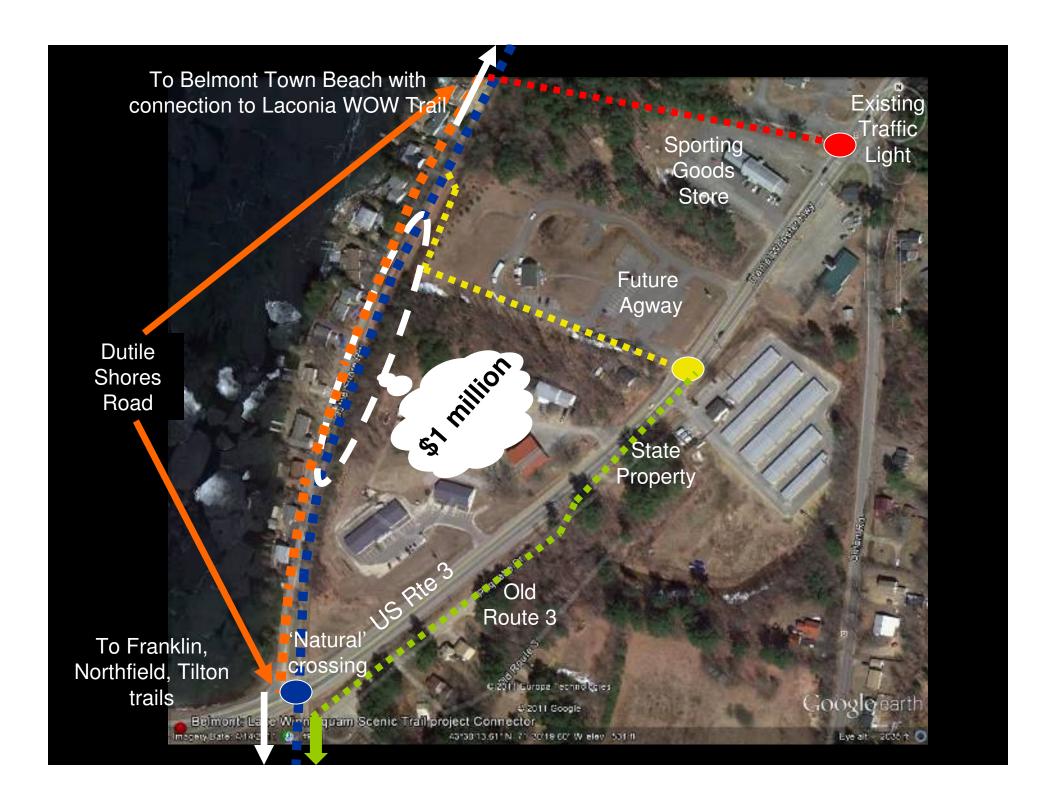
Conceptual Designs for Safety and Access Improvements

- LRPC conducted RFQ process for consultant
- 36 sites nominated by 15 communities
- 15 sites evaluated (one per community)
- \$10 million estimated costs
- Variety of issues considered
- Consideration for example treatments beneficial to other communities region-wide.

Design Consultants: Resource Systems Group and Ironwood Design Group

Example 1: Belmont Challenge -Lake Winnisquam Scenic Trail



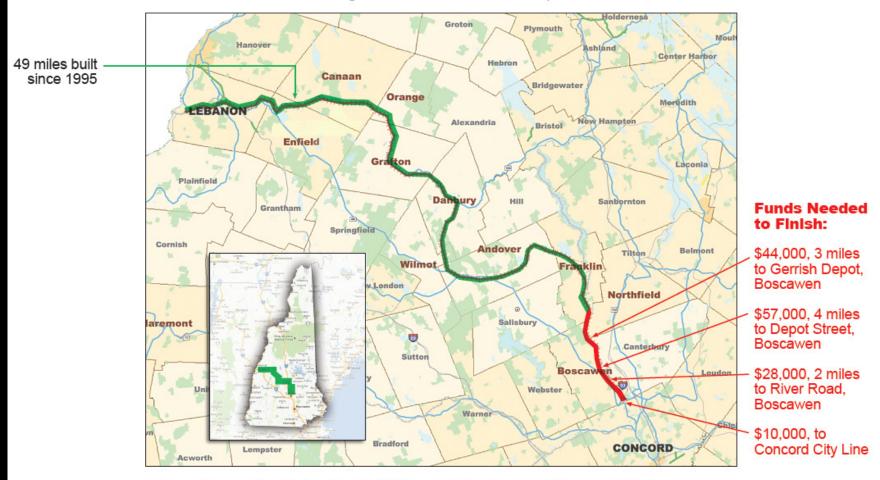






Funding the Finish of THE NORTHERN RAIL TRAIL

The Longest Rail Trail in New Hampshire



Friends of the Northern Rail Trail in Merrimack County www.fnrt.org info@fnrt.org
Friends of the Northern Rail Trail in Grafton County www.northerntrail.org info@northerntrail.org





Example 3: NH Route 25 Center Harbor





Example 4: Travel Lane Width Change





Before (11.5'-12' Lanes)

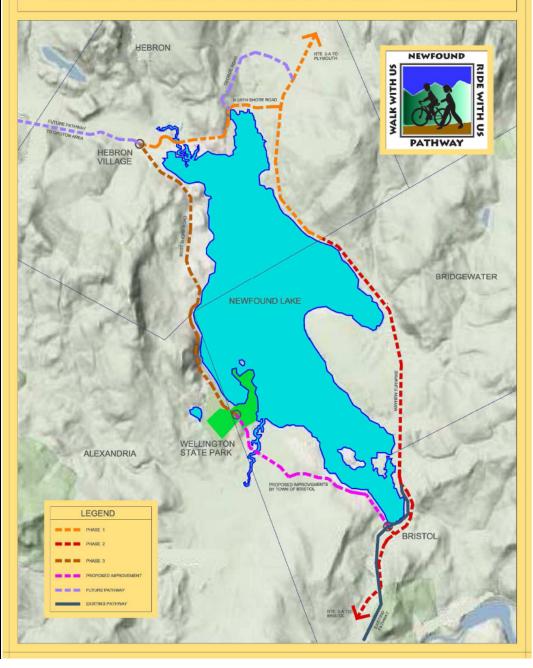
After (10.5' - 11' Lanes)

NHDOT Lane Width Change Policy - Local Action Required

"Municipal requests for lane allocation modifications of resurfaced highways will be granted. Without a community driven effort to reallocate space, the Department lays out the lane allocation similar to whatever it was prior to the resurfacing. This usually means 12-foot or wider travel lanes wherever the total pavement width can support white lines at 12 feet or more from the centerline."

Larry Keniston, NHDOT Intermodal Facilities Engineer

CONCEPTUAL PATHWAY COMPLETION



Lane Width Modification

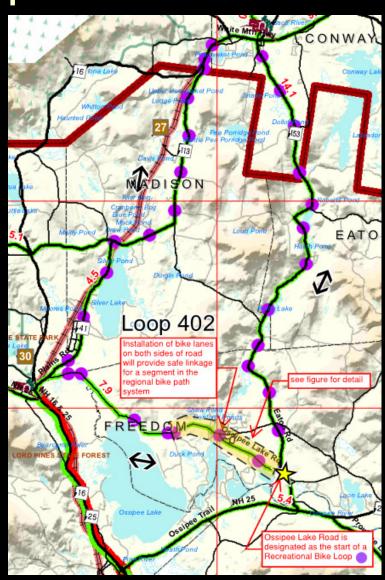
Requested changes already occurred in Concord, Pembroke, and Hopkinton, none in Lakes Region yet. A low cost strategy to calm traffic and increase infrastructure for on road cycling/walking

For additional information on Lane Width Modifications:

Bill Lambert, Administrator, NH DOT Bureau of Traffic 603-271-2291

Example 5: Ossipee Lake Trail - Freedom

- 4' marked, paved bike lanes, both sides of Ossipee Lake Road – from Babcock Road 2 miles to Pequawket Trail
- Phase 2 would continue for additional 3.5 miles past 500 homes and summer camp housing 350 to NH Route 153.
- Coordinated municipal/NHDOT replacement of Danforth Ponds bridge and Square Brook culvert to accommodate added lane widths.

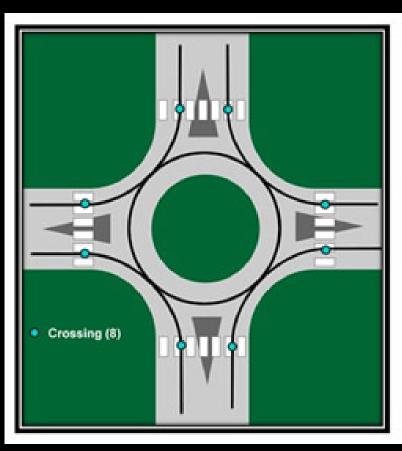


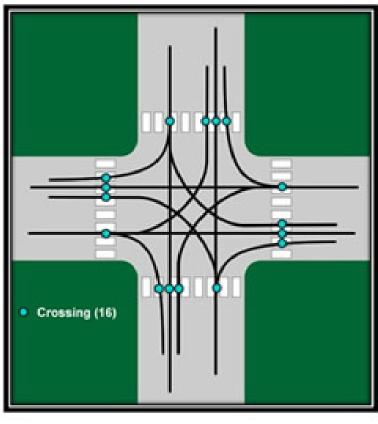
Take Away 1: Speed and Collisions

Decline in collisions as a function of speed reduction

Speed Drop	Collision Drop		
1 mph	5 percent		
3 mph	15 percent		
6 mph	42 percent		

Take Away 2: Opportunities to Reduce Conflicts





Take Away 3: Benefits of "Active" Transportation

Societal

- Healthy Active Living
- Aging in Place
- Environmentally Friendly

Economic

- Increased property values
- Increased local spending
- Reduced spending on fossil fuels
- Decreased healthcare costs

Take Away 3: (continued)

- A VTrans (Vermont's transportation agency) study showed that current walking and biking activity is associated with between \$34 and \$84 million in annual costs avoided by replacing driving with active transportation.
- BCEDC estimated that the WOW Trail, as proposed, would generate \$1.79 million annually in new visitor spending in Belknap County, which would create 31 new permanent jobs paying \$780,000 in annual earnings. (Fall 2011)
- University of Massachusetts Political Economy Research Institute 2011 Study – 58 bike/pedestrian projects 11 states and 11 cities including Concord, NH. Associated in-state job creation – road only projects created the *fewest* jobs.

Take Away 3: (continued)

Project Type	Number of projects	Direct jobs/\$ 1 MM	Indirect jobs/\$1 MM	Induced jobs/\$1 MM	Total jobs/ per \$1 MM
Total, all projects	58	4.69	2.12	2.15	8.96
Bicycle infra. only	4	6.00	2.40	3.01	11.41
Off-street multi-use trails	9	5.09	2.21	2.27	9.57
On-street bicycle and pedestrian facilities (without road construction)	2	4.20	2.20	2.02	8.42
Pedestrian infra. only	10	5.18	2.33	2.40	9.91
Road infrastructure with bicycle and pedestrian facilities	13	4.32	2.21	2.00	8.53
Road infrastructure with pedestrian facilities	9	4.58	1.82	2.01	8.42
Road infra. only (no bike or pedestrian facilities)	11	4.06	1.86	1.83	7.75

Take Away 4: Planning and Priorities Needed

 Though all Lakes Region communities lack a comprehensive pedestrian and/or bicycle plan,

Some municipal support is noticeable for active transportation:

Informational materials

TE Grants

SRTS Travel Plans

Project prioritization

Traffic calming

Pedestrian accessibility

Additional sidewalks

Maps

Take Away 4: (continued) Walk Score® May Help ID Priorities

- Walkability index based on proximity to businesses and services (scale = 1-100).
- Indication of potential for walkability.
- VTRANS study equates increase in property values.
- Based on 50-100 Walk Score \$4,400 to \$7,600 residential property value increase.

Take Away 4: (continued) Example LR Walk Scores®

Walk Score
83
54
38
85
74
62
68
69

27 Plan Recommendations

Examples:

- Bike and pedestrian data collection (new)
- Bike/Walk to Work Week
- Scenic Byway Management Plan
- SRTS State Advisory Committee
- Legislative involvement with TE funding
- Master Plans UPWP element
- HSIP and SRTS Travel Plan involvement

NHDOT Comments on Draft Plan

- 1. Prioritization of planned improvements needed.
- 2. What funding options exist?
- 3. How do identified improvements rank in comparison to other modal improvements?
- 4. Implementation schedule for goals?

NHDOT Comments on Draft Plan

- NHDOT Primary Goals
 - capacity preservation
 - improved safety
 - maintenance of existing infrastructure

Lakes Region TAC

- Plan Editorial Review Subcommittee
 - Sheldon Morgan, DPW Director, Gilford (Chairman)
 - David Ford, DPW Director, Wolfeboro
 - Bruce Woodruff, Town Planner,
 Moultonborough

February 2012 TAC vote to recommend this plan for Commission adoption on March 26.