Statewide Pedestrian and Bicycle Transportation Plan and Economic Impact Study

alta PLANNING + DESIGN

RSG

EDR GROUP Member of EBPO

Kick-off Meeting
November 28, 2018

New Hampshire DOT Department of Transportation

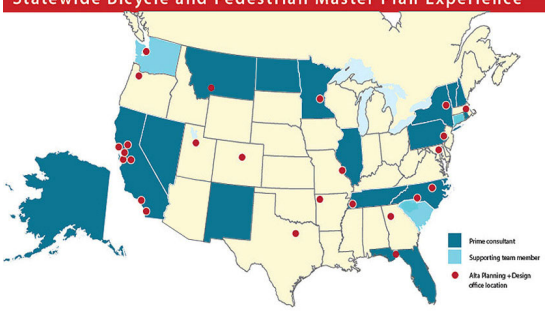
alta PLANNING + DESIGN

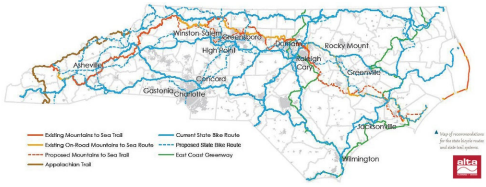
Your Planning Team

Alta Planning + Design

- Statewide planning efforts in 18 states
- Bike/ped network planning in dozens of cities, regions & counties
- Managed by staff from Cambridge MA and Troy NY offices

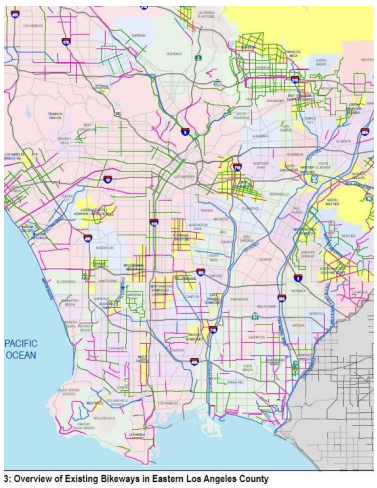
Statewide Bicycle and Pedestrian Master Plan Experience





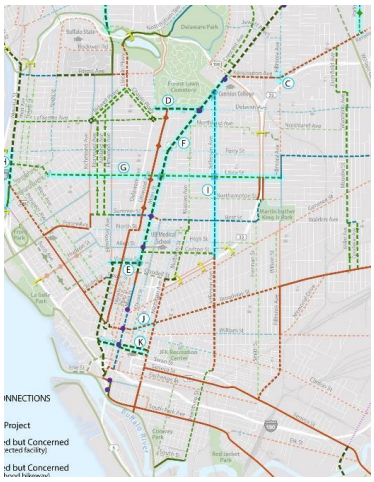
Alta's North Carolina Bike Network Plan

City/Regional Network Plans



3: Overview of Existing Bikeways in Eastern Los Angeles County

Alta's Los Angles Bike Network Plan



Alta's Buffalo Bike Network Plan

Planning for all Contexts

Alta Experience

- Lead authors of the NACTO and FHWA "Star" guides, along w/ various local/regional
- Focus on urban, suburban, or rural context for recommendation

Your Planning Team

RSG

- Vermont-based RSG has served NHDOT and northern New England for 30 years
- Authored *Your Guide to Walking and Bicycling Accommodations in NH* for NHDOT and BPTAC
- Led the Phase 1 On-Road Bicycle Plan for Vtrans (with Alta)

Economic Development Research Group

- Will take lead on the most Economic Impact Study tasks

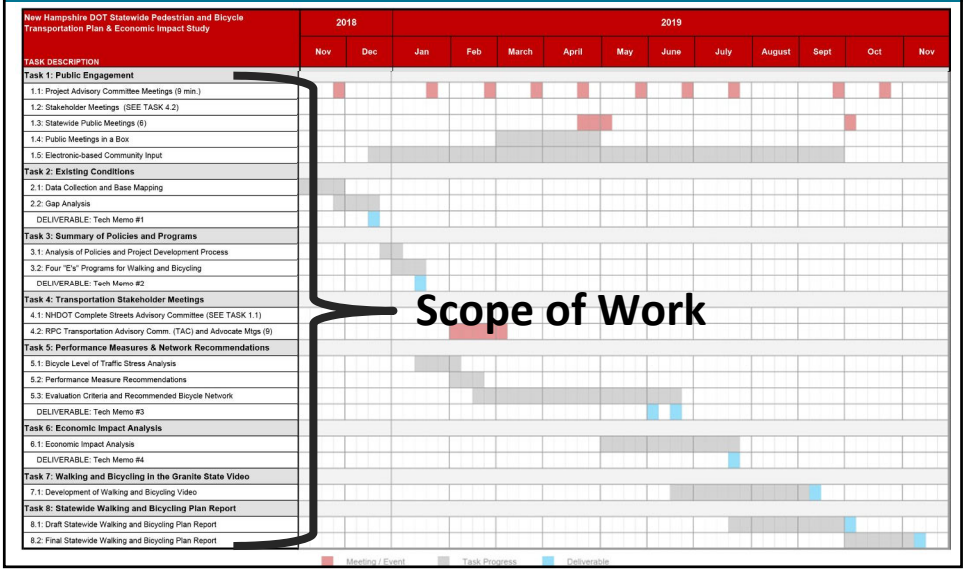
EDR GROUP
Member of EBPO

Project Schedule

New Hampshire DOT Statewide Pedestrian and Bicycle Transportation Plan & Economic Impact Study	2018		2019										
TASK DESCRIPTION	Nov	Dec	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov
Task 1: Public Engagement													
1.1: Project Advisory Committee Meetings (9 min.)													
1.2: Stakeholder Meetings (SEE TASK 4.2)													
1.3: Statewide Public Meetings (6)													
1.4: Public Meetings in a Box													
1.5: Electronic-based Community Input													
Task 2: Existing Conditions													
2.1: Data Collection and Base Mapping													
2.2: Gap Analysis													
DELIVERABLE: Tech Memo #1													
Task 3: Summary of Policies and Programs													
3.1: Analysis of Policies and Project Development Process													
3.2: Four "E's" Programs for Walking and Bicycling													
DELIVERABLE: Tech Memo #2													
Task 4: Transportation Stakeholder Meetings													
4.1: NHDOT Complete Streets Advisory Committee (SEE TASK 1.1)													
4.2: RPC Transportation Advisory Comm. (TAC) and Advocate Mtgs (9)													
Task 5: Performance Measures & Network Recommendations													
5.1: Bicycle Level of Traffic Stress Analysis													
5.2: Performance Measure Recommendations													
5.3: Evaluation Criteria and Recommended Bicycle Network													
DELIVERABLE: Tech Memo #3													
Task 6: Economic Impact Analysis													
6.1: Economic Impact Analysis													
DELIVERABLE: Tech Memo #4													
Task 7: Walking and Bicycling in the Granite State Video													
7.1: Development of Walking and Bicycling Video													
Task 8: Statewide Walking and Bicycling Plan Report													
8.1: Draft Statewide Walking and Bicycling Plan Report													
8.2: Final Statewide Walking and Bicycling Plan Report													

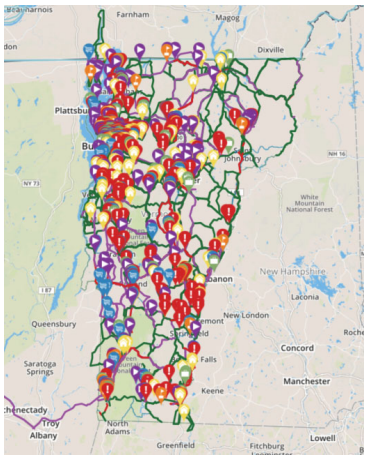
Meeting / Event Task Progress Deliverable

Project Schedule



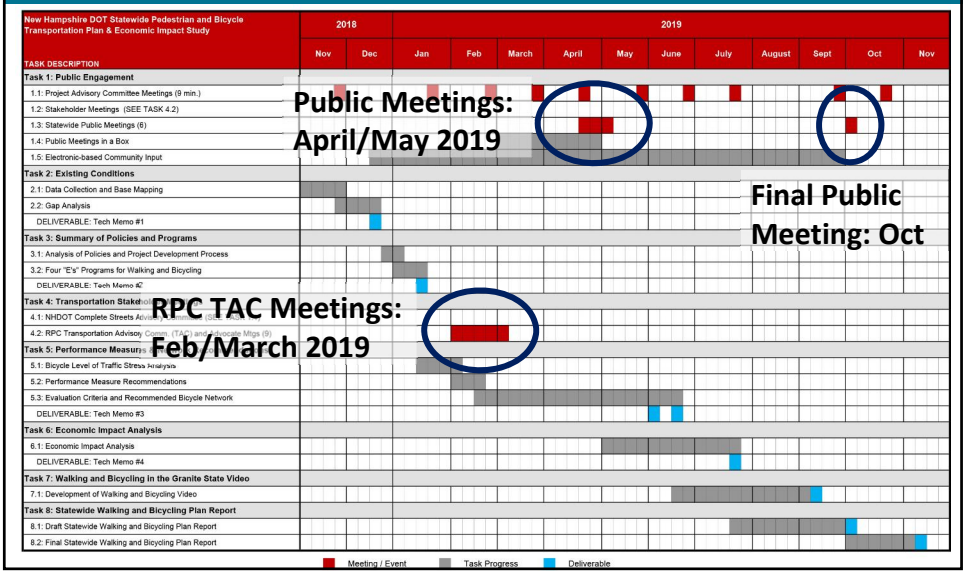
Task 1: Public Engagement

- Project website
- Online input map and survey
- Monthly CSAC/PAC meetings
- Meetings with RPC TACs
- Six community meetings
- Getting the word out:
  - Press releases
  - Flyers
  - Email blasts
  - Social media posts

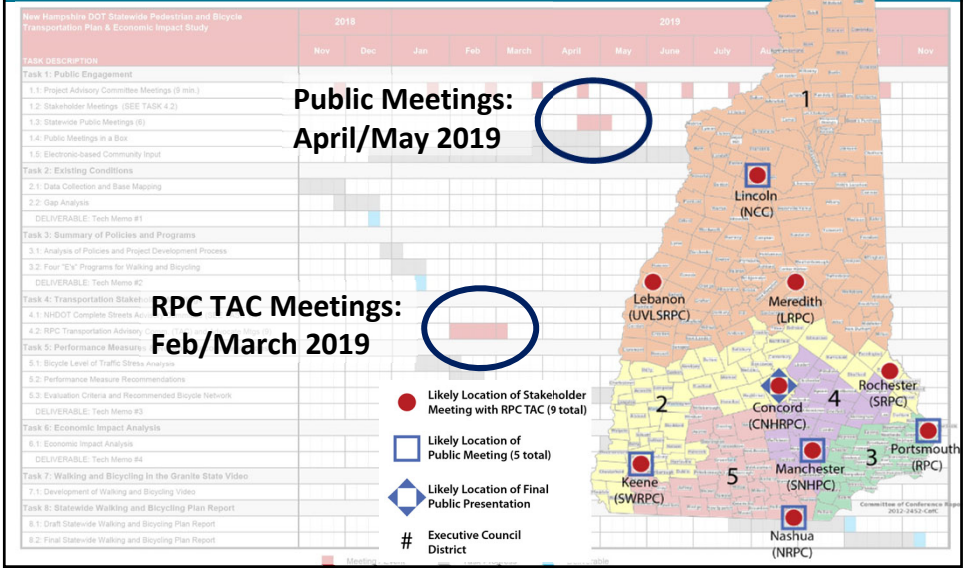


Example of Vermont online input map

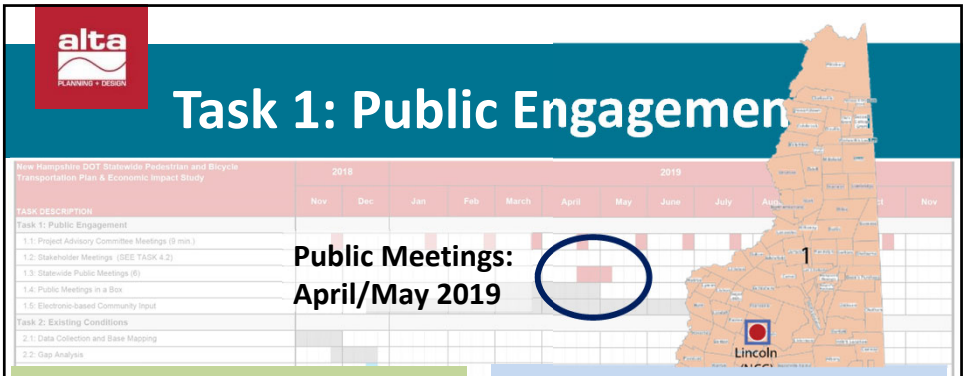
Task 1: Public Engagement



Task 1: Public Engagemen



Task 1: Public Engagement



Statewide Public Meetings

- Summary of plan approach
- Vision and goals
- Results of BLTS analysis
- Preliminary bicycle network recommendations
- Preliminary Evaluation criteria
- Next steps

Meetings in a Box

- Public meeting kit for RPCs and municipalities to use
- Copies of meeting flyers, maps, and handouts
- Draft slide presentation
- Template for summary notes/community feedback

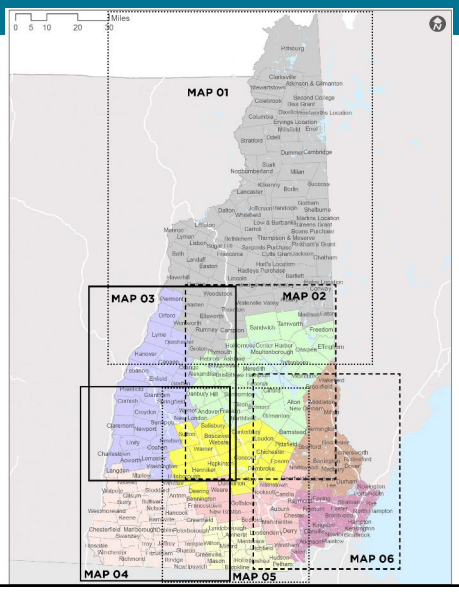
Task 2: Existing Conditions Assessment

Base Mapping

- Insets based on RPCs
- Existing walk/bike/trail facility inventory
  - Rail trails and paths
  - Bike lanes
  - sidewalks

Summary of Data & Reports

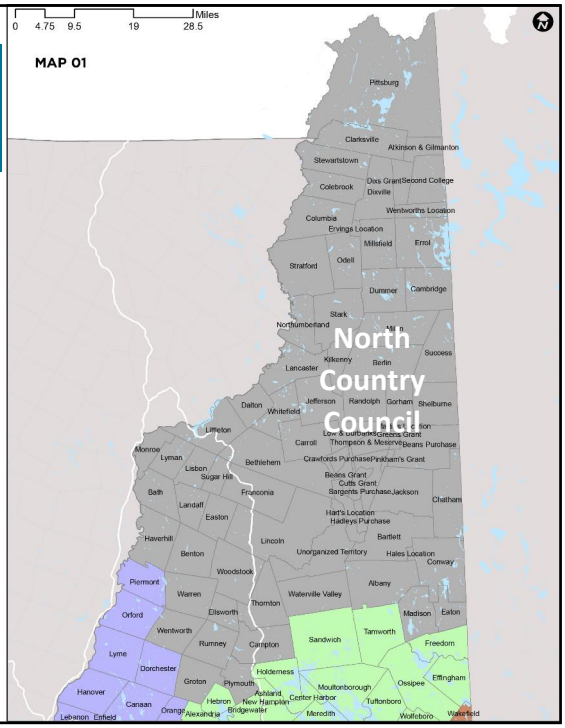
- Strava data and other counts
- RPC ped/bike plans
- Municipal ped/bike plans
- Existing programs & events



Map 1

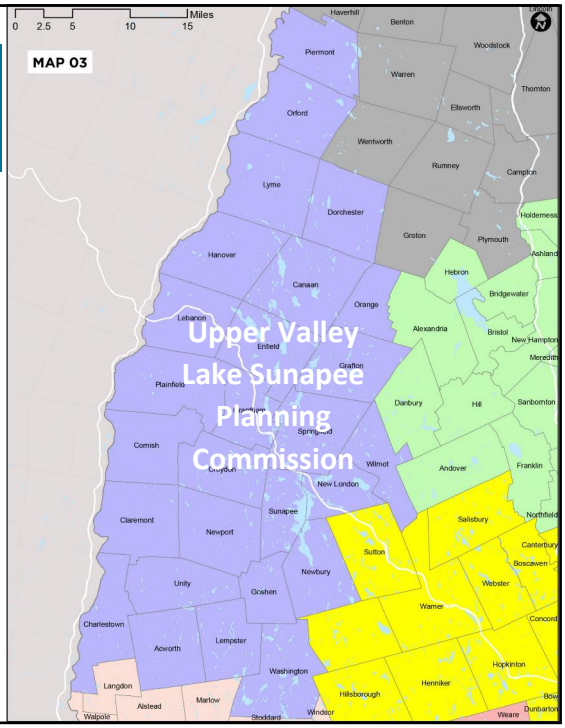
Reasoning

- Maintains similar scale for 5 of 6 maps
- All maps portrait oriented for report
- Recommended projects easily accessed by RPC staff



Map 2

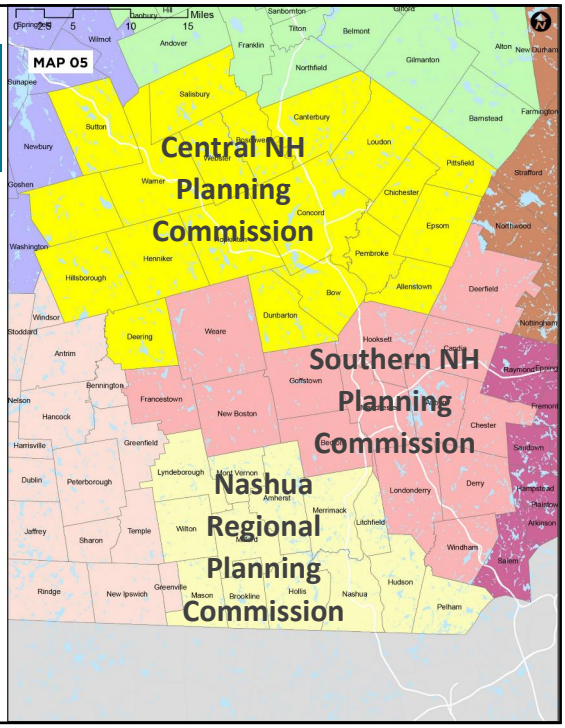
Map 3


MAP 03
Upper Valley
Lake Sunapee
Planning
Commission

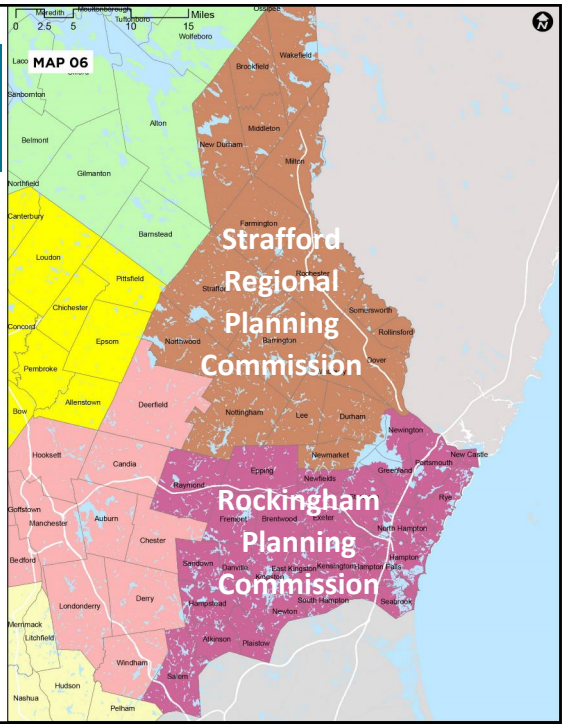
Map 4


MAP 04
Southwest
Region
Planning
Commission

Map 5


MAP 05
Central NH Planning Commission
Southern NH Planning Commission
Nashua Regional Planning Commission

Map 6


MAP 06
Strafford Regional Planning Commission
Rockingham Planning Commission

Task 3: Summary of Policies/Programs

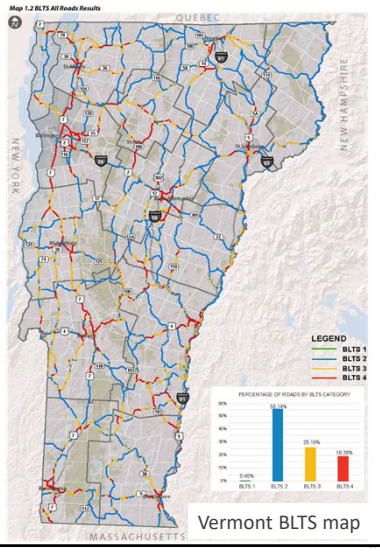
Key Sub-Tasks

- Analysis of pedestrian/ bicycle-related policies
- Analysis of NHDOT Project Development Process
- Compendium of 4 "E's" programs
- Education, encouragement, enforcement & evaluation program recommendations

Lebanon Street, Rt. 120, Hanover

Task 5: Level of Traffic Stress Analysis

- Inputs include speed, volume, shoulder width, parking and current bike facility (or NA)
- Evaluates roadways' ability to accommodate user types:
  - BLTS 1: all ages and abilities
  - BLTS 2: works well for most bicyclists
  - BLTS 3: adequate for experienced bicyclists only
  - BLTS 4: in need of significant improvement for nearly all

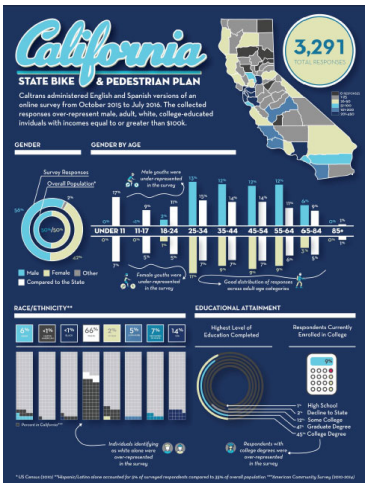


Vermont BLTS map

Task 5: Performance Measures

Purpose is to track progress over time related to:

- Ridership on key corridors
- Bicycle network miles (trails and on-street facilities)
- % of residents within ¼ or ½ mile to trails
- Bicycle mode share
- Number of LAB Bike-Friendly communities, businesses and universities
- Number of crashes and KSI's



Performance measure infographic for Alta's CA state bike/ped plan

Task 5: Network Recommendations

Network Assumptions

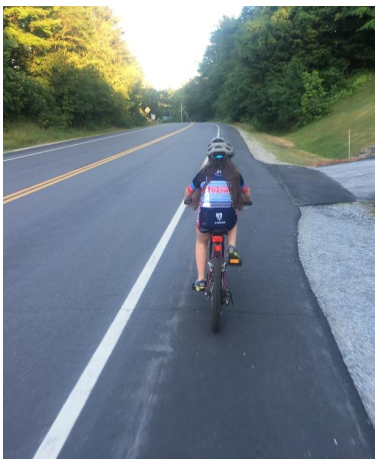
- Focus on bicycle connectivity/safety
- Primarily state roads
- Link critical destinations
- <u>Intercity routes:</u> Improved shoulders and side paths
- <u>Intracity routes:</u> lean towards "all ages and abilities" facilities

Recommended South County, RI Bike Network

Task 5: Network Recommendations

GIS-based roadway factors include:

- Right of way/shoulder width
- Number of traffic lanes
- Roadway speed and volume
- Interface with other bike facilities
- On the current TIP
- Popular state touring route
- Safety/crash history
- Land use density



Route 103, Claremont

Task 5: Project Prioritization

Critical Factors

- Develop evaluation criteria based on project goals
  - Demand
  - Safety impact
  - Connectivity
  - Equity issues
  - Cost/permitting issues
  - Others…
- Project evaluated individually and as corridors
- Criteria can be weighted based on committee needs

Criteria	Maximum Number of Points	Scoring	16-Strofolino Bridge to Calf Pasture Beach			
			Op-1	Op-2	Op-3	Op-4
User Experience/Aesthetics *Prioritizes options that offer the most scenic, recreational, and educational experience for the trail user*	2	Majority of trail option has high quality user experience: 2 Less than half of the trail option has high quality user experience: 1 Trail option has low quality user experience: 0	2	1	1	2
Economic Development *Prioritizes options that could induce new businesses due to strategic location*	2	High likelihood of attracting businesses: 2 Medium to low likelihood of attracting business: 1 Little or no likelihood of attracting businesses: 0	2	2	1	0
Property Acquisition *Prioritizes options that require fewer easements on or purchases of private property*	2	Option does not impact private landowners: 2 Option requires easements or acquisition across 1-3 private properties: 1 Option requires easements or acquisition across >3 private properties: 0	2	1	1	1
Momentum *Prioritizes options that will generate the most community and political support*	2	Option is likely to generate significant support within the community: 2 Option is likely to generate some support within the community: 1 Option is unlikely to generate support within the community: 0	1	1	1	1
Permitting Requirements *Prioritizes options that involve fewer regulatory hurdles*	2	Can be constructed with only Local Approval: 2 Requires only "General Permits" at the state or federal level: 1 Extensive individual state and federal permits required: 0	2	2	2	2
Ease of Construction *Prioritizes options with fewer engineering challenges and inconveniences to the community*	2	Can be built easily with little or no inconvenience: 2 Construction has some engineering challenges and will create minor inconvenience: 1 Construction has major engineering challenges and will entail significant inconvenience: 0	2	2	2	2
Estimated Construction Cost *Prioritizes options with a lower cost per linear foot of completed trail*	2	Per Linear Foot cost less than $150: 2 Per Linear Foot cost is between $150 and $250: 1 Per Linear Foot cost exceeds $250: 0	2	2	2	2
Total Score	20		18	16	14	14

Task 6: Economic Impact Analysis

Sub-tasks

- Economic impacts of capital investments and O&M
- Expenditures on bicycle and ped-oriented businesses
- Tourism impacts (will include surveys to event participants)
- Benefits of non-motorized travel (travel cost savings, health, enviro and safety)
- Impact to property values

Kancamagus Highway

Task 7: Walking & Bicycling Video

- Contingent on funding availability at end of project
- Video is anticipated to include:
  - Interviews with public officials and advocates
  - Footage from public meetings
  - Commentary from experts in walking and bicycling
  - Animations and infographics re: benefits of walking/biking
  - Footage of peer communities for inspiration

Task 8: Draft/Final Report

Expected Contents

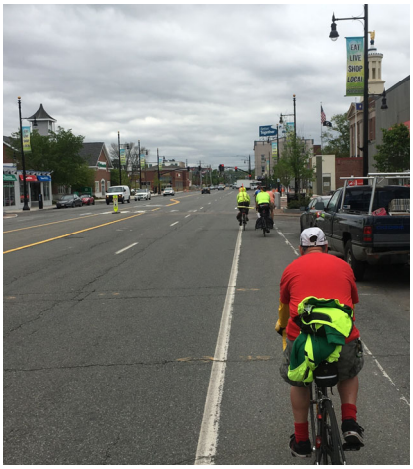
- Vision, Goals and Objectives
- Existing Conditions Inventory
- Assessment of Current Policies and Programs
- BLTS, Gap & Equity Analysis
- Network Recommendations
- Prioritization and Phasing
- Summary of Economic Impact and Benefits Analysis
- Implementation Plan
- Design Guidelines

Main Street/Rt. 3, Concord

Summary of Next Steps

December-January work

- Ongoing data collection and base mapping
- Initiation of public input map and online survey
- Gap analysis
- Equity analysis
- Summary of existing plans and reports
- Draft Vision and Goals for discussion at January 2019 PAC meeting



Main Street, Nashua

Vision Exercise

What are your top 2 or 3 goals for walking and bicycling in New Hampshire?

Ocean Blvd/Rt. 1A, Hampton Beach

Statewide Pedestrian and Bicycle Transportation Plan and Economic Impact Study

Kick-off Meeting
November 28, 2018