Project Advisory Committee

To help guide the NHDOT Pedestrian and Bicycle Transportation Plan effort, a Project Advisory Committee (PAC) was organized by the Department. It includes the current members of the Complete Streets Advisory Committee (CSAC), plus a handful of additional members who were included to provide a more complete perspective on pedestrian and bicycling issues, especially how they interface with economic development. The PAC met roughly every other month and includes the following individuals:

- Sylvia von Aulock, Southern NH Planning Commission
- Greg Bakos, Bike-Walk Alliance of NH
- Alek Belensz, North Country Council
- Tim Blagden, Rail Trail Advocacy Representative
- Scott Bogle, Rockingham Planning Commission
- Simon Corson, Town of Amherst
- Tim Dunn, NHDOT Highway Design
- Karen Goddard, M&C Clothing and Gifts (Nashua Chamber)
- Sally Gunn, NHDOT Senior Highway Safety Engineer
- JoAnne Miles Holmes, NH Department of Health and Human Services
- Tom Jameson, NHDOT Planning and Community Assistance
- Larry Keniston, NHDOT Active Transportation Engineer
- Sandt Michener, NHDOT ADA Specialist
- Kathleen Mullen, NH Department of Health and Human Services
- Valerie Rochon, President, Chamber Collaborative of Greater Portsmouth
- Will Schoefmann, City of Keene
- Derek Shooster, Bike Manchester
- Will Stewart, Manchester Alderman
- Liz Strachan, NH Department of Environmental Services

- Dave Topham, Granite State Wheelers
- Craig Tufts, Central NH Planning Commission
- Stephanie Verdile, NH Office of Strategic Initiatives Division of Planning
- Tim White, NH Department of Environmental Services
- Mike Whitten, Manchester Transit Authority
- Steve Workman, Transport New Hampshire

The PAC provided input on the draft work products developed by the consultant team, including the early 2019 existing conditions analysis, network recommendations, and the development of project goals and objectives. Additionally, committee members helped to promote the public meetings and outreach events, both of which induced significant public input that helped to inform the Alta team's planning efforts.

RPC Technical Advisory Committee meetings

In February and March 2019, the consultant team met with each of the state's nine Regional Planning Commission (RPC) Technical Advisory Committees (TAC). At the meetings, the team presented a summary of the project schedule, scope of work and deliverables, and initiated discussion about pedestrian and bicycle network gaps throughout each respective region. The dates and locations for the nine meetings included:

- Southwest RPC TAC in Keene February 4
- North Country Council TAC in Lincoln February 21
- Southern NHPC TAC in Manchester February 21
- Rockingham RPC TAC in Exeter February 28
- Strafford RPC TAC in Rochester March 1
- Central NHRPC TAC in Bow March 1
- Upper Valley Lake Sunapee RPC TAC in Lebanon March 12
- Nashua RPC TAC in Merrimack March 13

Online Input

Project Website

The project website (http://nhpedbikeplan.com)

designed to explain the study and promote the plan went live in early February 2019. The website also featured solicited input via an online survey and online public input map tool that was closed to the public at midnight on October 15, 2019. Links to the survey, online input map, and other documents including PowerPoint presentations from the public meetings and notes from the PAC meetings and public flyers were made available on the website as well. The web site also provided an opportunity for visitors to request being placed on the project email



Screenshot of the Interactive Map tool on the websites landing page

list and/or to leave a comment. Through this portal, 93 people left their name and email address only and 79 people also included comments.

The project web site was supplemented by social media accounts with Facebook (54 followers), Twitter (18 followers) and Instagram (8 followers). Although the project team provided a modest stream of postings to each platform, social media activity, such as "likes" and retweets, was relatively minimal. Despite the relatively low number of followers to each of the accounts, over 50 people left their names and email address to indicate their interest in being kept in touch during the process.

Online Survey

The online survey opened in early February 2019, and included 17 questions. When the survey was closed to public comment on October 15, 1095 individual responses were received.

The survey featured a mix of questions related to barriers to walking and bicycling, the primary purposes for, and frequency of, walk and bike trips, confidence level when riding a bicycle, factors that prevent more walk and bike trips, perceived effectiveness of a variety of infrastructure and program improvements, and open-ended responses seeking info on specific roadways that need improved pedestrian and bicycle facilities. The 17-questions in the survey included:

- 1. What is the five-digit zip code of your current residence?
- 2. In what type of community do you live?
- 3. What is your age?
- 4. What is your gender?
- If you drive a car regularly for most or all of your trips, what barriers prevent you from walking or bicycling more frequently? (top 3)
- Which of the following initiatives would encourage you to walk or bike more frequently for transportation? (top 3)
- 7. What are the two primary reasons you walk?
- 8. What are the two primary reasons you ride a bike?
- 9. Have you bicycled in New Hampshire in the past year?



WAYS TO GET INVOLVED

Additional ways to get involved included signing up for emailed updates and a link to the interactive map

- 10. If you bicycled in the past year, how many times do you ride your bike in a typical spring/summer/fall week? (a trip is one-way, so a round trip counts as 2 bike rides)
- 11. If you have not bicycled in New Hampshire in the last year, which factors MOST prevented you from doing so?
- 12. How confident do you feel when riding a bicycle?
- 13. How effective do you believe each of the following improvements would be to increase the number of trips that residents of New Hampshire make by walking or bicycling?
- 14. Of the improvements in Question 13, which three would be the most effective?
- 15. What do you think would MOST improve the walking and bicycling experience for young children? (top 3)
- 16. Please enter your top 3 state roads in which pedestrian and bicycle facilities are needed to improve accessibility and safety for pedestrians and bicyclists.
- Would you like to be informed of the results of this survey and be given notice of public meetings for the New Hampshire Statewide Pedestrian and Bicycle Transportation Plan? If yes, please provide your email. (126 participants submitted their name and email address.)

A summary of the 1,095 responses received are shown below;



Figure 1. Question 1 Reponses

The largest number of respondents reported living in Zip codes, 03766 (Lebanon), 03301 (Concord), and 03246 (Laconia) respectively

Question 1: "What is the five-digit zip code of your current residence?" The survey included least one response from 209 out of the 248 Zip codes in New Hampshire. Twenty-five Zip codes had more than ten responses each, and there were 73 Zip codes with one response each.

Question 2: *"In what type of community do you live?"* Respondents indicated the following categories:

- Other: 2.4%.
- Rural: 20.3%
- Small town / village: 38.2%
- Suburban: 23.3%
- Urban: 16.0%

Question 3: *"What is your age?"* The largest age category was the 50 – 69 years of age, indicating high interest among middle-aged and folks heading into retirement, where interest in pedestrian and bicycle facilities peaks for some. The respondents indicated their age within following categories:

- <18: 0.3%
- 18-29: 8.0%
- 30-49: 33.3%
- 50-69: 47.8%
- >70: 10.6%



Figure 2. Question 5 Responses

The three most popular responses indicate that concerns about safety when riding in or around motor vehicle traffic, the distance to the final destination, and the lack of sidewalks or crossings are the primary barriers to walking or bicycling more frequently in New Hampshire. Question 4: "What is your gender?" Respondents were nearly evenly split along gender lines, with 52.1 identifying as Male, 45.5% identifying as Female. 2.4% selected "Other / Prefer Not to Answer".

Question 5: "If you drive a car regularly for most or all of your trips, what barriers prevent you from walking or bicycling more frequently?" (Choose top 3). See Figure 2 for responses.

Question 6: "Which of the following initiatives would encourage you to walk or bike more frequently for transportation?" (Choose top 3). 70% of all respondents chose "More bike lanes and wider shoulders." 60% of all respondents chose "More rail trails and multi-use paths." And 39% of all respondents chose "Better connected sidewalk network with safer crossings."

Question 7 and 8: "What are the two primary reasons you walk? What are the two primary reasons you ride a bike?" The majority of respondents indicated that they choose to walk and to bicycle because it is healthy form of exercise and because it is good for the environment. (See Figure 3.)



Figure 3. Question 7 & 8 Responses

Question 9: "Have you bicycled in New *Hampshire in the past year?"* Yes: 83% No: 17%

Question 10: "If you bicycled in the past year, how many times do you ride your bike in a typical spring/summer/fall week? (a trip is one-way, so a round trip counts as 2 bike rides)"

- Zero times per week: 4%
- 1 to 2 times per week: 24%
- to 5 times per week: 29%
- 5 to 10 times per week: 19%
- More than 10 times per week: 24%

Question 11: "If you have not bicycled in New Hampshire in the last year, which factors MOST prevented you from doing so?" Respondents were offered 11 choices to rank. As seen in Figure 4, the top three choices were:

- Bicycle lanes and trails are too few and not interconnected: 55%
- I don't feel safe riding a bicycle in traffic: 47%
- Road surfaces are poor: 31%

Question 12: "How confident do you feel when riding a bicycle?"

- I do not or cannot ride a bike and have no plans to tart riding: 0.6%
- Modestly confident: I only feel safe on separated trails/paths with few traffic crossings: 18.3%
- Quite confident: I prefer separated paths, but will ride on roads where space is available and traffic is manageable: 46.4%
- Very confident: I am comfortable riding with traffic in most situations: 34.7%





Question 13 & 14: "How effective do you believe each of the following improvements would be to increase the number of trips that residents of New Hampshire make by walking or bicycling? Of the improvements in Question 13, which three would be the most effective?"

• Respondents indicated whether they felt each of the 18 individual projects or programs was "Very Effective", "Effective", "Neutral", "Ineffective", or "Very Ineffective." (See Figure 5 below.)



Figure 5. Question 13 & 14 Responses

Question 15: "What do you think would MOST improve the walking and bicycling experience for young children?" (Choose top 3)

- New or better sidewalks near schools and parks: 60%
- Traffic calming treatments near schools such as speed humps: 30.9%
- New or better crossing treatment: 28.5%
- Walking school buses: 25.9%
- Reduced automobile congestion at school during drop off and pick up periods: 23.3%
- Additional crossing guards: 7.1%
- Better police enforcement near schools: 13.8%
- Better safety training at schools: 25.9%
- Secure bike parking at schools: 11.1%
- Route maps provided to children of their own neighborhood: 8.1%

Question 16: "Please enter your top 3 state roads in which pedestrian and bicycle facilities are needed to improve accessibility and safety for pedestrians and bicyclists." Respondents were able to fill in a blank text box with their answer. There were 185 individual responses. Any roadway mentioned only once is not included in Figure 6 below. Respondents indicated that the roads most in need of improve accessibility and safety for pedestrians and bicyclists include US 3, NH 28, NH 4, NH 101, and NH 108.



Figure 6. Question 16 Responses

Online Public Input Map

The interactive online public input map was developed at the same time as the online survey, both placed on the project web site. There were a variety of ways that users were able to add input to the map; users received prompts and could place lines or marker points on the map to identify:

- 1. Where do you currently walk or bike in New Hampshire?
- 2. What destinations would you like to access by walking or biking in New Hampshire?
- 3. Which routes work well for walking and biking vs. routes that need improvement?
- 4. What are barriers to walking or biking (such as a busy intersection)?

Map users also had the ability to add a comment to the point or marker that they placed to indicate additional issues. After being closed for public comment at midnight on October 15th 2019, the input map tool featured:

- 859 map suggestions based on prompts
 - 416 lines markers (per prompt #1 and #3 above)
 - 443 markers (per prompt #2 and #4 above)
- 916 comments/votes on the 859 suggestions stated above
 - 834 "Likes"
 - o 82 "Dislikes"
- 289 misc. comments

Many of the comments related to general corridor-wide improvements needed, while others were more focused on specific neighborhoods, streets, or intersections throughout the state. A selection of interesting comments includes:

- **Roadway Maintenance**: "Despite being a state-designated bike route, the paved shoulder to the right of the white fog line along Route 120 north and south is frequently fewer than six inches wide. Considering the high speed of vehicles, and portions where posted limits are between 40 and 50 mph, this entire corridor puts bicycle commuters at high risk, meaning only the most experienced riders are likely to take a chance at riding on this route identified (*by someone else*) as suitable for biking." (*Marker left in Plainfield, just south of Lebanon*)
- **Connectivity:** NH 120 is a tremendously important route. It connects Lebanon to Hanover via the region's two biggest employers (Dartmouth College and DHMC). Parts of it are good (Mt. Support off-road path), parts of it are lacking (route on hospital property, last 1/2 mile before downtown Hanover). It could release significant latent demand if it's improved."
- **Difficult Bike Crossing**: "It's a challenge here riding north on Route 108 to merge across high-speed traffic to continue north on Route 108" (*Market left on Route 33 at Route 108 in Stratham. Most "liked" comment in this category.*)
- **Difficult Walk Crossing**: "The Miracle Mile (Route 4) is a busy street with a three-lane cross section. It has bus stops, a large thrift store, the closest grocery store to downtown Lebanon, and is very difficult to

cross. The city applied for funding for a TAP grant but was unsuccessful. A safe crossing and sidewalks are really needed here." (*Most "liked" comment in this category*.)

- Favorite Bike Destination: "There are many Exeter students that attend Cooperative Middle School and cannot walk or bike to school due to the Guinea Road bridge over Route 101. The bridge has no sidewalk nor are there sidewalks to the school entry. Providing a sidewalk/bike lane on the existing bridge or better yet a pedestrian bridge over Route 101 would open a route to Cooperative Middle School for hundreds of Exeter students and parents."
- **Favorite Bike Route**: "Daily cycle commute to work. Section from Hanover to West Lebanon (Meadow Brook area) has a very narrow shoulder measured at 2-20 inches (varies a bit over the stretch). This is a common cycling route as any other option to get between these places is at least a mile longer. Additionally, it is heavily traveled by cars. Leads to unsafe cycling conditions, and also annoyed drivers who have a hard time passing cyclists on this stretch."
- **Favorite Walk Destination:** "Please add to the WOW trail. Having this trail go from Belmont to Weirs Beach and to potentially Meredith. What a great asset to our community." (most liked comment in this category.)
- **Favorite Walk Route**: "No sidewalk for 90% of this route. I often walk with stroller and don't feel safe from cars that drive fast." (*Bridge Street, Manchester*)
- Needs Bikeway: "The route from downtown Dover to Kittery/Eliot via NH-4 and NH-101 is the only practical route for cyclists heading East (or take NH-4 all the way to S. Berwick, adding a big climb and several miles). No shoulder, no traffic enforcement, high vehicle traffic and speeding, blind corners and hills, no bike signage despite proximity to ECG/Eastern Trail/US Bike Route 1. Needs paved shoulders (2 foot minimum, maintained) or Bikes May Use Full Lane Change Lanes to Pass signage. Cooperate with Maine DOT."
- **Needs Walkway**: "This section of Route 4 is designed like a highway and does not match with the adjacent sections. It is very intimidating for peds and bikes given the fast ramps to the highway. When it is eventually rebuilt it should be narrowed and bikes lanes and sidewalks added, and the ramp geometry changed to slow down traffic." (*Marker placed in West Lebanon*)
- **Misc.:** "The Route 4/Madbury Road intersection is dangerous. A friend of mine was badly hit at the intersection while she was proceeding straight on Madbury and a car turned into her. I frequently bike or jog across the intersection, and it is scary, because (a) Madbury Road south of the intersection is narrow and lacks a sidewalk north of Hampshire Ave, (b) there is no way for a pedestrian to change the Route 4 light, and (c) cars travel through the intersection in all directions very fast." (Marker placed in Durham)
- Walk maintenance issue: "This gap in the roadway network isolates the elementary and high schools from the downtown. I would love to see Hanover Street reconstructed as a two-lane roadway with nice sidewalks to connect the school and town without going onto NH-120. If done well, this could be an attractive connection to the schools for all users. Trimming vegetation and maintaining the existing ped bridge would also be welcomed."

The series of images on the following pages present snapshots, or "screen grabs," from the online public input map that roughly match the various RPC regions. Purple dashed lines indicate routes that work well for walking and biking and the red dashed lines are routes that need improvement. The numbered green boxes represent key destinations and the red bicycle and pedestrian boxes are barriers to access.



Public Input Map – North Country

Online public input map users added a variety of desirable pedestrian and bicycle routes to the North Country area.

Public Input Map – Lakes Region



Online public map users added a handful of barriers to walking and bicycling in the region, as well as comments about particular intersections or corridors that need improvement. The Lakes Region was the region with the fewest online public input map comments.



Public Input Map – Hanover-Sunapee Region

Online public map users added dozens of comments in the Hanover area, with fewer comments and map marker points added in the surrounding towns.

Public Input Map - Monadnock Region



Public input map users indicated many marker point locations with comments related to recreational destinations, connections between rail trails and hiking trails, and on-road improvements desired.

Public Input Map – Merrimack Valley



Public input map users added more than 100 comments in the greater Merrimack Valley Area, ranging from sidewalks on local residential and collector streets to better bicycle access to Merrimack River recreation destinations.

Public Input Map – Seacoast Region



Public input map users in the Strafford region included many miles or desirable route lines, routes that are difficult for walking or bicycling, and more specific comments like sidewalk and intersection crossing needs.

Community Meetings and Events

Throughout the month of September and the first half of October, the planning team engaged the general public in two different formats:

- Evening public meetings were held in five communities: Keene, Lebanon, Manchester, Gilford and Portsmouth. A sixth meeting was held by the UVLS RPC in Lebanon using materials created by, but without assistance from, the Alta team (aka "meeting in a box")
- Outreach events were held at five farmers markets including Dover, Nashua, Littleton, Concord and Exeter

At all events, participants were asked to answer two key questions derived from the online survey. One related to the primary challenges to walking and bicycling in New Hampshire, and the other question related to the project and/or program improvements that would encourage participants to walk and bicycle more frequently.

Participants were also asked to provide the planning team their goals for a pedestrian and bicycle plan for New Hampshire. In most cases, goals were written onto post-it notes and placed on a board for other meeting/event attendees to see. Maps of each respective New Hampshire region was also made available to collect participants' ideas and comments related to good and bad routes for walking and bicycling, and ideas for where improvements could be made. **Both project Goals and Map comments are presented in the Appendix.**

Feedback received from the public was based on similar activities and questions for all events, as described above. The primary distinction between the evening public meetings and the farmer's market events was that the former included a 25–30 minute slide presentation that summarized the planning process to-date, outlined the mapping/analysis work completed so far, and highlighted next steps in the planning process. A general Q/A period followed the slide presentation and meeting attendees then assembled into small groups of 10-15 in order to provide map comments. Before the meetings were adjourned, a brief summary of the discussion items at each break-out group was made by the facilitator from the Alta team or a member of the local RPC staff.



Large crowds at the project information table (at center) at the Nashua Farmers Market

Outreach Event Dates and Locations

The table below indicates the date of each event, the regional planning commission location served, and the event location.

DATE	RPC	LOCATION	ATTENDEES
September 8th	Strafford Region Planning Commission	Dover Farmers Market	~85
September 15 th	Nashua Region Planning Commission	Nashua Farmers Market	~285
September 17 th	Southwest Region Planning Commission	Keene Public Library	20
September 18 th	Upper Valley Lake Sunapee Regional Planning Commission	UVLS RPC Offices	20
September 22 nd	North Country Council	Littleton Farmers Market	~115
September 24 th	Southern New Hampshire Planning Commission	Manchester Public Library	35
September 25 th	Lakes Region Planning Commission	Gilford Public Library	35
September 29 th	Central New Hampshire Regional Planning Commission ("meeting in a box" event)	Concord Farmers Market	~85
October 2 nd	Rockingham Planning Commission	Portsmouth Public Library	35
October 9 th	Rockingham Planning Commission ("meeting in a box" event)	Exeter Farmers Market	~45
October 9 th	Upper Valley Lake Sunapee Regional Planning Commission, Commission meeting ("meeting in a box" event)	UVLS RPC Offices	20

Summary of Responses to Survey Questions

As mentioned above, participants at all events were asked a pair of questions from the online survey. The survey questions were printed on a large-format poster paper. Attendees were asked to place three small colored stickers ("dots") in the answer column they thought was most appropriate. The first survey question (#11 from the online survey) asked: "Which top THREE factors most prevent or discourage you from bicycling more in New Hampshire or in your local community?" From the 11 events in the table above, roughly 2,200 dots were placed. Figure 7 at right summarizes the answers. When comparing the public's responses at the engagement events to the responses from the online survey, obvious trends are apparent. While the resulting percent of answers or votes for the barriers to bicycling are different between the two data sets, the same three factors—see rows 2, 4 and 6--remain the top choices among both survey participants and public engagement event attendees. The table below indicates the differences between the results from the 11 public engagement events relative to the online survey.



Figure 7. Factors Preventing or Discouraging Bicycling More

Question 11 from online survey: top responses	Online Survey Responses	Public Engagement Event Responses
Bicycle lanes and trails are too few and not interconnected	55% (1st place)	26% (1st place)
I don't feel safe riding a bicycle in traffic	47% (2nd place)	23% (2nd place)
Road surfaces are poor	31% (3rd place)	15% (tied for 3rd place)

In addition to the 11 choices offered for survey question #11, attendees were also able to include write-in answers in the "other" column. Figure 8 below highlights the answers that event attendees included to represent additional factors that discourage them from bicycling in their community. For brevity, write-in answers that were only included once were excluded from Figure 8.



Figure 8. Other Factors which Discourage Bicycling

The second question public engagement event attendees were asked was adapted from question 13 from the online survey: **"Which of the THREE following improvements do you feel would most likely increase the number of trips that residents of New Hampshire make by walking or bicycling?"** From the 11 events described above, approximately 2,400 dots were placed. While the online survey question asked respondents to rank each individual project or program improvement based on its relative effectiveness, attendees at the 11 outreach events were asked to place their dots in the column adjacent to the three improvement they thought would most increase walk and bicycle trips in New Hampshire.



Figure 9. Improvements that would Increase Biking and Walking Trips

The top scoring answers to this question were also the top scoring answers in the online survey format. This supports the development of wider shoulders and striped bike lanes on state highways and busy streets, protected bike lanes buffered from traffic, and more rail trails and greenways to increase comfort for a wide range of bicyclists across New Hampshire.

Question 13 from online survey: top responses	Online Survey Responses	Public Engagement Event Responses
More rail trails and greenways	74% (1 st place)	18% (1 st place)
Protected bike lanes buffered from traffic	71% (2 nd place)	16% (3 rd place)
Wider shoulders and striped bike lanes on state highways and busy local streets	63% (3 rd place)	17% (2 nd place)