

# Guide to Conducting Walkability and Bikeability Assessments in New Hampshire Communities

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## 1.0 Introduction

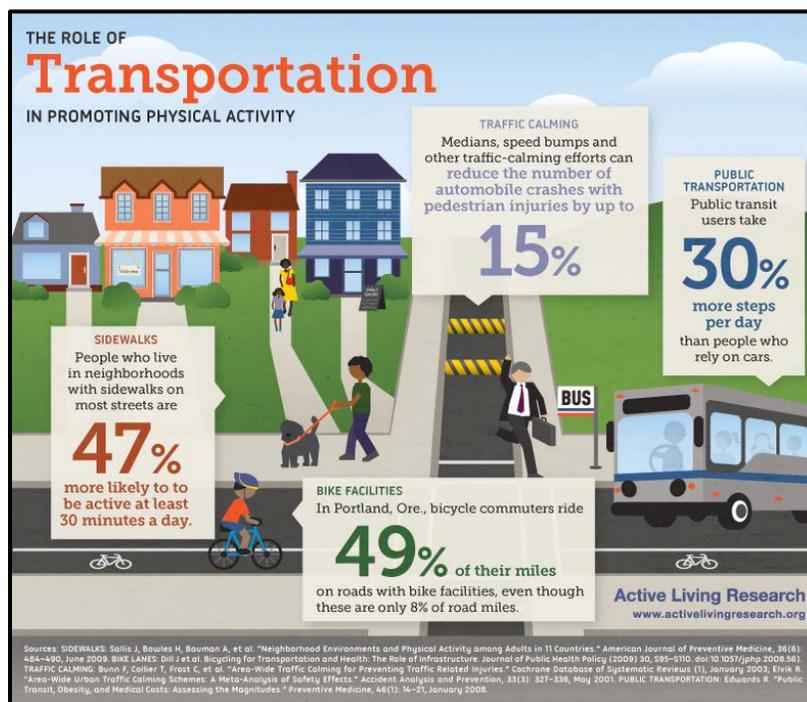
### 1.1 Purpose of this Document

This document was developed to assist municipal governments and partners in determining a town or city's *walkability and bikeability*. It is organized into five chapters. Note that words in *italics* are defined in the glossary on page 28.

- Chapter 1: Why *active transportation* is important to community vitality.
- Chapter 2: Steps for conducting walkability and bikeability assessments.
- Chapter 3: Documents to use for the assessments: pre-assessment questionnaire, walkability/bikeability checklists, post-assessment questionnaire, and optional tools.
- Chapter 4: Resources for implementing improvements to the walkability and bikeability of your community.
- Chapter 5: References and a glossary of terms.

### 1.2 Why Active Transportation

A recent Rails to Trails Conservancy report shows that active transportation is not just for urban communities.<sup>1</sup> All residents and communities can benefit economically, socially, environmentally, and health-wise by providing safe and *accessible* transportation *networks* that serve pedestrians and bicyclists. The infographic at right highlights the value active transportation plays in community vitality for residents and businesses. The New Hampshire Livable Walkable Communities Toolkit (pages 5-7) also gives examples of the benefits to communities.<sup>2</sup>



### 1.3 Goals of this Document

Documenting and understanding field conditions will lead to better community decision-making in regards to improving local and state transportation networks in communities. Developing an action plan from the analysis that is conducted as a result of the assessments will also lead to opportunities to adopt municipal policies that can lead to safer and more accessible streets in your community.

By using this document, a town or city can develop an action plan to:

<sup>1</sup> Active Transportation Beyond Urban Centers: Rails to Trails Conservancy, 2011

<sup>2</sup> New Hampshire Livable Walkable Communities Toolkit: Southern New Hampshire Planning Commission, 2012

- Identify safety and infrastructure issues in need of attention
- List the issues and potential solutions to make improvements
- Distribute action plan to appropriate entities
- Improve availability of safe places to walk and bicycle
- Improve walking and bicycling surfaces of area streets
- Improve intersections
- Improve motor vehicle activity
- Improve overall ease of walking and bicycling

### 1.4 About HEAL

Launched in 2008, HEAL is a convergence of partners dedicated to preventing obesity and ensuring that the people of New Hampshire enjoy health and quality of life through healthy eating and active living. HEAL partners and stakeholders across multiple sectors including: municipalities, schools, health, worksites, food industry, and transportation are working to inspire, promote and advance policy and environmental changes that foster healthy people in healthy places throughout the state.

Funding for HEAL is provided by the HNH Foundation, Anthem Blue Cross and Blue Shield Foundation, Endowment for Health, NH Department of Health and Human Services, Convergence Partnership Fund of Tides Foundation, and NH Charitable Foundation.

## 2.0 Walkability and Bikeability Assessments Explained

### 2.1 The Pre-Assessment Process

It is important to define walkability and bikeability in the context of your community. How do you define walkability and bikeability in your community? Think about opportunities and barriers to walking and bicycling in your neighborhood or community. Walkability and bikeability are often measured according to the environmental, health, financial, and safety benefits offered to pedestrians and bicyclists within a community. More broadly, walkability and bikeability are measures of how conducive an environment is to walking and bicycling.<sup>3</sup>

Conducting a pre-assessment questionnaire will answer the key questions related to evaluating walkability and bikeability in a community: what, where, why and how. The success of the final product relates to this early work, particularly around who will be responsible for conducting the assessment and what will be done with the results.

It is recommended that an authorized representative of a municipality complete the assessment process. Representatives will vary, depending on the size and composition of the municipality. For example, larger municipalities might appoint elected officials, paid professional staff (city planner, engineer or staff), or members of an appointed committee (e.g. bicycle/pedestrian committee, planning commission, parks and recreation department, citizen-advisory group, etc.), to complete the process. Smaller towns might consider inviting a member of an ad hoc committee or someone who is familiar with community issues to help with the assessment process, particularly if other staff or formal committees are not an option.

### 2.2 Walkability and Bikeability Checklists

After completing the Pre-Assessment Questionnaire, it will be time to do the field assessment to identify areas within your community that could be more walkable and bikeable. A successful field assessment is well thought out. The following are things to consider as you prepare.

- **Include a broad range of stakeholders:** Recruit people with strollers, people in wheelchairs or other *mobility* challenges, older adults, law enforcement, road agent/town engineer, school staff member, local bike shop, local bicycle and walking club members, parents, etc. HEAL's partner, the Health & Equity Partnership, has put together two useful documents on [community engagement](#) and [integrating equity into health strategies](#).
- **Determine your locations:** Regional planning commissions can create large sized maps and creating one for your assessment area will help you plan where to target. When the routes are determined, you can use the RPC or Google to create maps of routes you will be reviewing.
- **Keep a schedule:** Set a specific start time and end time and establish where the assessment will begin/end. Assume each block will take about 15-30 minutes to assess.
- **Time of day is important:** If you will be looking at an area with heavy traffic volume or particularly dangerous speeds/conditions, make sure to review the location during the times when the conditions are prevalent.
- **Gather people and assign tasks:** If you have multiple locations, splitting up into teams will be beneficial. Each group should have people with assigned roles such as: team leader, observers, photographer and notetaker. It will be important that everyone has a general understanding of

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<sup>3</sup> Healthy Communities: The Walkability Assessment Tool: Institute for Public Administration, University of Delaware, August 2010

## Guide to Conducting Walkability and Bikeability Assessments in NH Communities

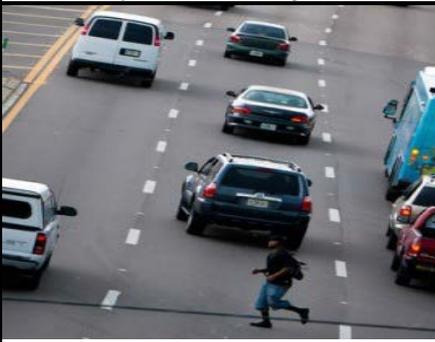
what to look for and what's important to consider when in the field. (See photos of common concerns below.)

- Materials to bring: Instructions of what you'll be doing, and materials you'll need for notes, including: pen/pencil, map for each participant, camera(s), and notebook(s).
- Document what you saw and review results: After returning from the field, meet as a whole group and discuss what you saw while it is fresh in your minds.

The following are pictures of common concerns that people find on assessments.<sup>4</sup>

		
<p>Stop sign running</p>	<p>Red light running</p>	<p>No pedestrian crossing</p>
		
<p>Not enough crossing time at traffic light</p>	<p>Not enough time to cross between cars</p>	<p>No painted crosswalks</p>

<sup>4</sup> Google Images Search, Accessed May 5, 2014

		
Cars don't yield at crosswalks	Cars don't yield when turning	Cars block crosswalks
		
No curb cuts and ramps	Speeding traffic	Too much traffic
		
Cracked sidewalks	Blocked sidewalks	Busy driveways



Sidewalks too close to traffic

Sidewalks not shoveled

Missing sidewalks



Trees missing

Abandoned lots



Abandoned buildings

Graffiti

Litter

		
Blank walls	No nearby destinations	Not enough parks or open space
	No photo	No photo
Bad driver behavior	Crime	Harassment
		
Burnt out street lights	Unleashed dogs	No one else walking

### 2.3 Post-Assessment Process

The New Hampshire communities that have been the most successful in improving safety and accessibility for pedestrians and bicyclists have been the ones that have made incremental improvements. Getting smaller early wins will encourage others to join your work, which will help you tackle larger issue items like adopting *complete streets* policies.

After documenting existing conditions, it will be time to conduct the Post-Assessment Questionnaire and develop an action plan to summarize what you have seen, prioritize opportunities that could improve pedestrian and bicycling conditions, and identify next steps for making improvements. Bringing all of the information you have collected from assessments and the Post-Assessment Questionnaire into an action plan will allow you to present the information in a meaningful way to decision-makers. Consider including the following in your action plan.

- Summarize your goals and objectives.
- Summarize responses from Pre-Assessment Questionnaire.
- Note anything surprising about the ratings and responses in the pre-assessment and field assessment.
- Compare your results to an area's [Walk Score](#) and note whether the findings make sense/do not make sense.
- Summarize the areas that have the highest and lowest ratings and identify why.
- Include pictures with any of the areas that you note.
- Identify the top priority issues to solve (how will they be addressed, who might be involved, what community partners are important to include in the process).
- Present your report and recommendations to community decision-makers and suggest that a committee or subcommittee of the decision-making body be established (if one doesn't exist) to begin implementing the improvements. If the suggestion is not received well, contact HEAL for assistance.
- Keep your document readily available at the beginning of each calendar year when the NH Department of Transportation and your local Public Works Department are preparing to resurface or restripe state and local roads in your community so that improvements to pedestrian and bicycling infrastructure can be made at the same time.
- Provide copies of the document to your select board/city council, planning board, zoning board, and conservation commission and encourage them to use it when making decisions, particularly during budget season. Also, encourage the planning board to use it when reviewing site plans, etc.

### 2.4 Optional Tools

There are additional tools to go along with the steps noted above that can supplement your work. They include the following. For more information is available in section 3.5.

- Note generation exercise
- Draw route maps
- Collect additional information
- Geocoded maps
- Surveys

### 3.0 Assessment Tools

#### 3.1 Pre-Assessment Questionnaire

The Pre-Assessment Questionnaire should be completed by an individual or representative group of a community. The individuals or groups will vary depending on the size and composition of the community. If needed, use additional sheets to complete the following questions.

After completing this questionnaire, gather a representative group of stakeholders from your community and share the results so that you can begin planning your field assessment with them. The results of this questionnaire will assist you in determining which stakeholders to involve and will help your group in determining which locations to assess.

**Completed by:** \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_  
Phone \_\_\_\_\_ Email \_\_\_\_\_

1. Why should the community initiate a walkability/bikeability assessment (e.g. help the town or city consider options for residents to become more physically active, determine whether more foot traffic would benefit local businesses, understand whether the town or city is accessible for older residents or people with disabilities, etc.)?

2. Who will lead the assessment process and be responsible for disseminating the results?

3. Will community stakeholders or citizens be asked to participate (e.g. a person who uses a wheelchair or stroller, people in underserved populations)? If so, how?

4. To what extent does the town or city currently educate or provide information to its residents on community resources (newsletters, websites, flyers, mailers, inserts, other)?

5. Where are the specific areas within the municipality that should be priorities? Why?

6. What is the Walk Score of the areas that are being considered for assessment? It will be helpful to compare the area's Walk Score to responses from the field assessment Checklists.

7. How might the town or city use the assessment results to develop a community project or initiative within a particular area?

### 3.2 Walkability and Bikeability Checklist Preparation

The following checklists are the second step in assessing walkability and bikeability and should be completed by an authorized individual or representative group of a municipality. Complete the following preliminary questions before completing the walkability and bikeability checklists.

1. Who is participating in the walkability and/or bikeability assessment and has the task of completing the following checklist? (If more, use back side of this sheet.)

Name \_\_\_\_\_ Title \_\_\_\_\_  
Phone \_\_\_\_\_ Email \_\_\_\_\_

Select locations that you wish to assess based on your responses to the Pre-Assessment Questionnaire. Once the locations have been determined, it is important to review the questions on the following pages, and determine the date and time of day when the assessment will take place. Be sure that participants are informed of the correct location, date, and time of the assessment. Participants should also review the Pre-Assessment Questionnaire, Checklists, Glossary, and photos prior to the walk. A preliminary walk may help determine the best time of day to conduct the assessment, the best route to take, and whether additional materials or people would be helpful in completing.

2. Select locations to assess: Define specific areas within the town or city to assess. Examples include:

- Defined areas around a specific destination (e.g., school) or group of destinations (e.g. commercial center, downtown areas, etc.)

Specify: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Determine the day of the week and the time that observations will take place.

- Day(s) of the week: \_\_\_\_\_

Time observations will begin/end:  
\_\_\_\_\_

4. Gather materials that are needed to answer checklist questions.

- Street maps and/or a map of the area to be assessed
- Glossary
- Clipboards
- Note paper
- Pens, pencils, highlighters

- Camera
- Measuring wheel or tape measure
- Comfortable walking shoes and clothing
- Information about regulations on sidewalk and road maintenance issues

5. Assign people in each group the following roles:

- Team Leader
- Observer(s)
- Notetaker(s)
- Photographer(s)

Plan to stop as a group when someone sees something that they think is problematic. Don't assume everyone sees it or sees the same thing.<sup>5</sup>

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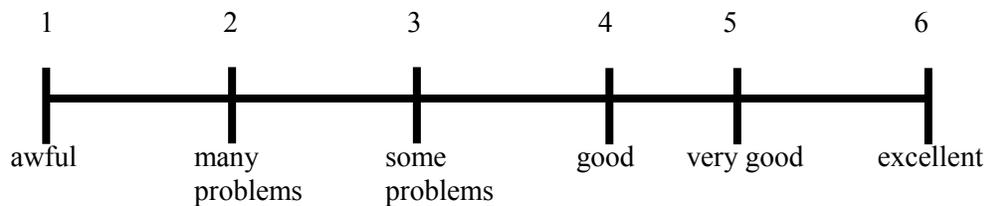
<sup>5</sup> The evaluation criteria on the following pages are inspired by the Walkability and Bikeability Checklists developed U.S. Department of Transportation, National Center for Safe Routes to School, and other partners.

### 3.3 Walkability and Bikeability Checklists

**Instructions:** When in the field, it is important to make observations first, and then make notes rather than being overly focused on taking notes on every single detail. Also remember that you are on the road, so it is important to be aware of your surroundings at all times.

As you walk and/or bike the designated areas, complete the checklist items below by giving an overall rating to each item. Use the 1-6 (low to high) rating scale below to rate the various elements of the checklist. In rating each item, consider the overall condition of the area and note problems within the area being assessed. For several questions, you will be asked to check off items that apply. A sketch or map of the area might also be helpful in noting areas for improvements or problems. Google Maps or a map from your Regional Planning Commission is recommended.

#### Rating Scale



#### Walking *Facilities* and Their Maintenance

1. Are there sidewalks, *multi-use paths*, or paved trails present?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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2. Do you feel safe using the sidewalk, multi-use path, or paved trail?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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3. Does the sidewalk, multi-use path, or the paved trail accommodate people who use strollers, wheelchairs, or other assistive mobility devices?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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4. Is the sidewalk continuous (i.e. without gaps)?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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5. Are the sidewalks a minimum of five feet wide?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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6. Is the sidewalk located on both sides of the street?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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7. Are there curb cuts present that allow pedestrians and people with strollers, wheelchairs, or senior citizens to navigate the sidewalk, paved trail, or multi-use path safely and conveniently?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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8. Is the sidewalk free from major misalignment, cracks or pavement condition issues?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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9. Is the sidewalk free from obstructions, such as poles, signs, shrubbery, dumpsters, etc.?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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**Pedestrian Amenities**

1. Are there crosswalks and/or pedestrian signals located at intersections?

Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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2. Is it easy to cross streets?

Yes

No, some problems (circle all that apply):

- a. Road was too wide
- b. Traffic signals did not provide adequate time to cross
- c. Lack of pedestrian signalization
- d. Traffic signals made us wait too long to cross
- e. Street needed striped crosswalks
- f. Blocked line of sight (e.g. parked cars, trees, or plants blocked view of traffic)
- g. Curb ramps were needed or needed repair
- h. Drivers seem to be speeding
- i. Other issues and observations

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Rating (circle one) 1 2 3 4 5 6

Locations of problems, comments:

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3. What destinations are present? Circle all that apply:

- a. Small grocery/convenience store
- b. Farmers market
- c. Food establishment
- d. Supermarket
- e. Pharmacy
- f. Entertainment
- g. Church/temple/mosque
- h. Library
- i. Post office
- j. Bank
- k. Laundry/dry cleaning
- l. Indoor fitness facility
- m. Senior center
- n. Playground/park/trailhead
- o. School (elementary, middle, high)
- p. College/technical school/university
- q. Retail stores
- r. Employment centers
- s. Smoke-free public spaces
- t. Other, specify

4. How pleasant is your walk? Circle all that apply:

- a. Needed more grass, flowers, or trees
- b. Lacked personal security
- c. Not well lit
- d. Dirty, lots of litter or trash
- e. Lack of maintenance
- f. No bench or place to rest
- g. Too much high-speed traffic
- h. Other, specify

Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

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5. Is there grass or other buffers between the roadway and sidewalk? Circle all that apply:

- a. Trees
- b. Landscaping
- c. Bike lanes
- d. Parked cars

6. Is the sidewalk part of a larger pedestrian network?

Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

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**How does your community rate?**

\_\_\_70-78 Celebrate! You live in pedestrian friendly community.

\_\_\_60-69 Your community is pretty good, but there's always room for improvement.

\_\_\_50-59 Pedestrian conditions are Okay, but not ideal. Plenty of opportunities for improvements.

\_\_\_40-49 Conditions for walking are poor and you deserve better than this! Call the mayor/selectmen and the newspaper right away.

\_\_\_40-below Oh dear. Consider wearing body armor before venturing out again.

**Bicycle Facilities and Amenities**

1. Did you have a place to bicycle safely?

a. On the road, sharing the road with motor vehicles?

Yes

No, some problems (circle all that apply):

- a. No space for bicyclists to ride
- b. Bicycle lane or paved shoulder disappeared
- c. Heavy and/or fast moving traffic
- d. Too many trucks or buses
- e. No space for bicyclists on bridges or in tunnels
- f. Poorly lighted roadways

Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

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b. On and off-road path or trail, where motor vehicles were not allowed?

Yes

No, some problems (circle all that apply):

- a. Path ended abruptly
- b. Path didn't go where I wanted to go
- c. Path intersected roads that were difficult to cross
- d. Path was crowded
- e. Path was unsafe because of sharp turns or dangerous downhill
- f. Path was uncomfortable because of too many hills
- g. Path was poorly lighted

Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

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2. How was the surface that you rode on?

Good

Some problems, the road had (circle all that apply):

- a. Potholes
- b. Cracked or broken pavement
- c. Debris (e.g. glass, sand, gravel, etc.)
- d. Dangerous drain grates, utility covers, or metal plates
- e. Uneven surface or gaps
- f. Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)
- g. Rumble strips
- h. Other problems

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Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

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3. How were the intersections you rode through?

Good

Some problems (circle all that apply):

- a. Had to wait too long to cross intersection
- b. Couldn't see crossing traffic
- c. Signal didn't give me enough time to cross the road
- d. Signal didn't change for a bicycle
- e. Unsure where or how to ride through intersection
- f. Other problems

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Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

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4. Did drivers behave well?

Good

Some problems, drivers (circle all that apply):

- a. Drove too fast
- b. Pass me too close
- c. Did not signal
- d. Harassed me
- e. Cut me off
- f. Ran red lights or stop sign
- g. Other problems

\_\_\_\_\_

\_\_\_\_\_

Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Was it easy for you to use your bike?

Good

Some problems (circle all that apply):

- a. No maps, signs, or road markings to help me find my way
- b. No safe or secure place to leave my bicycle at my destination
- c. No way to take my bicycle with me on the bus or train
- d. Scary dogs
- e. Hard to find direct route I liked
- f. Route was too hilly
- g. Other problems

\_\_\_\_\_

\_\_\_\_\_

Rating (circle one): 1 2 3 4 5 6

Location of problems (use letters from above to indicate which problems):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**How does your community rate?**

\_\_\_26-30 Celebrate! You live in pedestrian friendly community.

\_\_\_21-25 Your community is pretty good, but there's always room for improvement.

\_\_\_16-20 Pedestrian conditions are Okay, but not ideal. Plenty of opportunities for improvements.

\_\_\_11-15 Conditions for walking are poor and you deserve better than this! Call the mayor/selectmen and the newspaper right away.

\_\_\_5-10 Oh dear. Consider wearing body armor before venturing out again.

**Final Steps:**

- Return to your meeting location after you finish your assessment.
- Individually, take a moment to reflect on your session by reviewing your notes and then discuss what you saw with your team members.
- Each team should then complete the Post-Assessment Questionnaire on the following pages.
- The group facilitator should then have the teams report out on their experiences and share their answers to the Post-Assessment Questionnaire.
- Once every team has shared, the entire group will have a list of the study area's main concerns.
- The facilitator will then help the group prioritize the problems on a community-wide level.
- Once the whole list is prioritized, the facilitator should mark each priority on the map with its priority number.
- Then your group will have produced a map and lists of its priorities for making the community more walkable and bikeable.
- Finally, the group should discuss the potential solutions to solving the identified issues. On pages 23-27, there are solutions identified that you could use. Following those pages, there are other resources to tackling longer-term fixes.<sup>6 and 7</sup>

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<sup>6</sup> Neighborhood Walkability Assessment – Tools: Consortium to Lower Obesity in Chicago Children, 2010

<sup>7</sup> The Louisville Neighborhood Walkability Assessment Tool, City of Louisville, 2010

### 3.4 Post-Assessment Questionnaire<sup>8</sup>

The final step is to analyze your results and identify issues or problem areas that could be addressed through projects or initiatives. It is important to carefully organize the information that you have gathered before beginning this final step. The Post-Assessment Questionnaire is designed to help you prioritize realistic changes that could further promote walkability or bikeability in your town or city. After completing the questionnaire and identifying solutions to improve concerns your group identified, it is recommended that you compile all information into a report and share the report with other representatives from your municipality (selectmen/city council, administration, planning department or staff, parks and recreation department or staff) and ask for their input.

#### General:

Completed by: \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

#### Summarize Response:

In reviewing the responses to the Pre-Assessment Questionnaire, is there anything surprising about the ratings and responses to the items in the Checklists? For example, were there unexpected problem areas or concerns identified while filing out the Checklists that were/were not listed on the Pre-Assessment Questionnaire? Do the findings make sense given the area's Walk Score?

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What areas of the Checklists have the highest ratings? Why?

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What areas of the Checklists have the lowest ratings? Why?

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#### Identify Priority Issues:

Using the space below, list the most important issues of the area assessed. Consider what areas need most improvement and what evidence and documentation that has been gathered so far to support the need for planning and development of a project or initiative.

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<sup>8</sup> Ibid at 5.

In listing the most important issues below, consider how they will be addressed, who might be involved, and what community partners are important to include in the process (e.g. municipal departments, property owners and other residents, state government departments, anyone identified in the Pre-Assessment Questionnaire). If additional priorities have emerged, use the backside of this sheet.

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### 3.5 Optional Tools for Additional Information

There are additional tools to go along with the steps noted above that can supplement your work. Consider the following:

- Note generation exercise: Gather stakeholders in neighborhood where trouble spots were noted and ask them what keeps them or their children from walking or bicycling.
- Draw route maps: Send home maps of your study location through your schools and ask students and parents to draw how they would get to school (or other locations) by walking or bicycling. This will help in determining which roads are most likely to be used and will help prioritize your time and funding to areas of highest need.
- Collect additional information: [Regional Planning Commissions](#) gather transportation data. You can work with your Regional Planning Commission to gather additional data sets that will give you a more complete picture of the existing conditions. These data sets include Annual Average Daily Traffic (AADT, e.g. average number of cars using a road section); posted speed limits; actual speeds of vehicles; number of travel lanes per direction; widths of sidewalks, travel lanes, and *buffers*; and sight distances among others. The [National Bicycle and Pedestrian Counting Project](#) also provides tools on how to do counting projects to give you a sense of how many pedestrians and bicyclists are currently using particular roads and intersections.
- Geocoded maps: Regional Planning Commissions can develop maps that show the density of particular areas, which helps identify potential routes that can be targeted for improvements.
- Surveys: The National Center for Safe Routes to School has developed [a standardized survey](#) that schools and communities can use that ask parents their thoughts on walking and bicycling in a community. You can work with your Regional Planning Commission to complete these surveys that will yield valuable information for making decisions.

## 4.0 Improving Your Community’s Score

### 4.1 Resources for Implementation<sup>9</sup>

The following are suggestions for improving the walkability and bikeability in your town or city based on the problems that you identified.

### 4.2 Improving Walkability

Did you have room to walk?	What you can do immediately	What you and your community can do with more time
<ul style="list-style-type: none"> <li>• Sidewalks or paths started and stopped</li> <li>• Sidewalks broke or cracked</li> <li>• Sidewalks blocked</li> <li>• No sidewalks, paths or shoulders</li> <li>• Too much traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Tell town/city engineer or public works department about specific problems and provide a copy of your checklist and/or report</li> </ul>	<ul style="list-style-type: none"> <li>• Speak up at board meetings</li> <li>• Write or petition your town/city to for walkways and gather neighborhood signatures</li> <li>• Make media aware of the problem</li> <li>• Work with town/city engineer or public works department to develop plans for improvements and safe walking routes</li> </ul>

Was it easy to cross streets	What you can do immediately	What you and your community can do with more time
<ul style="list-style-type: none"> <li>• Road too wide</li> <li>• Traffic signals made us wait too long or did not give us enough time to cross</li> <li>• Crosswalk/traffic signals needed</li> <li>• View of traffic blocked by parked cars, trees, or plans</li> <li>• Needed curb ramps or ramps needed repair</li> </ul>	<ul style="list-style-type: none"> <li>• Tell town/city engineer or public works department about specific problems and provide a copy of your checklist and/or report</li> <li>• Work with neighbors to trim trees or bushes that block the street</li> <li>• Leave nice notes on problem cars asking owners not to park there</li> </ul>	<ul style="list-style-type: none"> <li>• Push for crosswalks/signals/parking changes/curb ramps at city meetings</li> <li>• Report to town/city engineer or public works department where parked cars are safety hazards</li> <li>• Report illegally parked cars to the police</li> <li>• Make media aware of problem</li> </ul>

Did drivers behave well?	What you can do immediately	What you and your community can do with more time
<ul style="list-style-type: none"> <li>• Backed out without looking</li> <li>• Did not yield</li> <li>• Turned into walkers</li> <li>• Drive to fast</li> <li>• Sped up to make traffic lights or drove through red lights</li> </ul>	<ul style="list-style-type: none"> <li>• Report unsafe driving to the police</li> <li>• Set an example: slow down and be considerate of others</li> </ul>	<ul style="list-style-type: none"> <li>• Petition for more enforcement</li> <li>• Request protected turns</li> <li>• Ask town/city planners and engineer for <i>traffic calming</i> ideas</li> </ul>

<sup>9</sup> Ibid at 14.

		<ul style="list-style-type: none"> <li>• Work with town/city engineer or public works department to develop plans for improvements and safe walking routes</li> <li>• Organize a neighborhood speed watch program</li> </ul>
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<b>Was your walk pleasant?</b>	<b>What you can do immediately</b>	<b>What you and your community can do with more time</b>
<ul style="list-style-type: none"> <li>• Needs grass, flowers, trees</li> <li>• Scary dogs</li> <li>• Scary people</li> <li>• Not well lit</li> <li>• Dirty, letter</li> <li>• Lots of traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Work with schools to develop safe routes</li> <li>• Ask neighbors to keep dogs leashed or fenced</li> <li>• Report scary dogs</li> <li>• Report scary people</li> <li>• Report lighting needs to the police or appropriate public works department</li> <li>• Plant trees, flowers, in your yard</li> <li>• Select alternative route with less traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Request increased police enforcement</li> <li>• Start a crime watch program in your neighborhood</li> <li>• Organize a community cleanup day</li> <li>• Sponsor a neighborhood beautification or tree-planting day</li> <li>• Begin an adopt-a-street program</li> <li>• Initiate support to provide routes with less traffic to schools in your community</li> </ul>

#### 4.3 Improving Bikeability

<b>Did you have a place to bicycle safely on the road?</b>	<b>What you can do immediately</b>	<b>What you and your community can do with more time</b>
<ul style="list-style-type: none"> <li>• No space for bicyclists to ride (e.g. no bike lane or shoulder, narrow lanes)</li> <li>• Bicycle lane or paved shoulder disappeared</li> <li>• Heave and/or fast-moving traffic</li> <li>• Too many trucks or buses</li> <li>• No space for bicyclists on bridges or in tunnels</li> <li>• Poorly lighted roadways</li> </ul>	<ul style="list-style-type: none"> <li>• Tell town/city engineer or public works department about specific problems and provide a copy of your checklist and/or report</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in local planning meetings</li> <li>• Encourage your community to adopt a plan to improve conditions, including a network of bike lanes on major roads</li> <li>• Ask your public works department to consider 3-Foot-Please/Share the Road signs at specific locations</li> <li>• Ask NHDOT to include paved shoulders on all their rural highways</li> <li>• Establish or join a bicycle advocacy group</li> </ul>

<b>Did you have a place to bicycle safety on an off-road path or trail?</b>	<b>What you can do immediately</b>	<b>What you and your community can do with more time</b>
<ul style="list-style-type: none"> <li>• Path ended abruptly</li> <li>• Path didn't go where I wanted to go</li> <li>• Path intersected with roads that were difficult to cross</li> <li>• Path was crowded</li> <li>• Path was unsafe because of sharp turns or dangerous downhill</li> <li>• Path was uncomfortable because of too many hills</li> <li>• Path was poorly lighted</li> </ul>	<ul style="list-style-type: none"> <li>• Tell the trail organization or NHDOT about specific problems</li> </ul>	<ul style="list-style-type: none"> <li>• Ask the trail organization of NHDOT to improve directional and warning signs</li> <li>• Petition the trail organization or NHDOT to improve path/roadway crossings</li> <li>• Ask for more trails in your community</li> <li>• Establish or join a trail organization</li> </ul>

<b>How was the surface you rode on?</b>	<b>What you can do immediately</b>	<b>What you and your community can do with more time</b>
<ul style="list-style-type: none"> <li>• Potholes</li> <li>• Cracked or broken pavement</li> <li>• Debris (e.g. broken glass, sand, gravel, etc.)</li> <li>• Dangerous drain grates, utility covers, or metal plates</li> <li>• Uneven surface or gaps</li> <li>• Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)</li> <li>• Bumpy or angled railroad tracks</li> <li>• Rumble strips</li> </ul>	<ul style="list-style-type: none"> <li>• Report problems immediately to public works department or NHDOT</li> <li>• Organize a community effort to clean up the area</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in local planning meetings</li> <li>• Encourage your community to adopt a plan to improve conditions, including a network of bike lanes on major roads</li> <li>• Ask your public works department to consider 3-Foot-Please/Share the Road signs at specific locations</li> <li>• Establish or join a bicycle advocacy group</li> </ul>

<b>How were the intersections you rode through?</b>	<b>What you can do immediately</b>	<b>What you and your community can do with more time</b>
<ul style="list-style-type: none"> <li>• Had to wait too long to cross intersection</li> <li>• Couldn't see crossing traffic</li> <li>• Signal didn't give me enough time to cross the road</li> <li>• The signal didn't change for a bicycle</li> <li>• Unsure where or how to ride through intersection</li> </ul>	<ul style="list-style-type: none"> <li>• Tell town/city engineer or public works department about specific problems and provide a copy of your checklist and/or report</li> </ul>	<ul style="list-style-type: none"> <li>• Ask the public works department or NHDOT to look at the time and sensitivity of traffic signals</li> <li>• Ask the public works department or NHDOT to install loop-detectors that detect bicyclists</li> <li>• Suggest improvements to sightlines that include cutting back vegetation; building out the path crossing; and moving parked cars that obstruct your view</li> </ul>

Did drivers behave well?	What you can do immediately	What you and your community can do with more time
<ul style="list-style-type: none"> <li>• Drivers:                             <ul style="list-style-type: none"> <li>○ Drove too fast</li> <li>○ Passed me too close</li> <li>○ Did not signal</li> <li>○ Harassed me</li> <li>○ Cut me off</li> <li>○ Ran red lights or stop signs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report unsafe drivers to the police</li> <li>• Set an example by riding responsibly; obey traffic laws; don't antagonize drivers</li> <li>• Always expect the unexpected</li> <li>• Work with your community to raise awareness to share the road</li> </ul>	<ul style="list-style-type: none"> <li>• Ask the police to enforce speed limits and safe driving</li> <li>• Work with the BWANH to have share the road message in driver tests and correspondence with drivers</li> <li>• Ask town/city planners, engineers and public works for traffic calming measures</li> <li>• Encourage your community to use cameras to catch speeders and red light runners</li> </ul>

Was it easy for you to use your bike?	What you can do immediately	What you and your community can do with more time
<ul style="list-style-type: none"> <li>• No maps, signs, or road markings to help me find my way</li> <li>• No safe or secure place to leave my bicycle at my destination</li> <li>• No way to take my bicycle with me on the bus or train</li> <li>• Scary dogs</li> <li>• Hard to find a direct route I liked</li> <li>• Route was too hilly</li> </ul>	<ul style="list-style-type: none"> <li>• Plan your route ahead of time</li> <li>• Find somewhere close by to lock your bike</li> <li>• Report scary dogs to the animal control department</li> <li>• Learn to use all of your gears!</li> </ul>	<ul style="list-style-type: none"> <li>• Ask your community to publish a local bike map</li> <li>• Ask your public works department to install bike parking racks at key destinations; work with them to identify locations</li> <li>• Petition your transit agency to install bike racks on all their buses</li> <li>• Establish or join a bicycle group at your workplace</li> </ul>

#### 4.4 Longer-term improvements

There is currently no New Hampshire specific guide that offers design and maintenance solutions and standards on how to improve poor pedestrian and bicycling conditions. However, the NH Department of Transportation Bicycle Pedestrian Transportation Advisory Committee is developing a “cookbook” for communities to use when looking to make fixes on state highways and local roads. The document will be completed by June of 2015. While the document is in development, communities can access other reference guides that offer design solutions to common safety and accessibility concerns. These documents include:

- [City of Boston Complete Streets](#)
- [Vermont Complete Streets policy](#)
- [The Pedestrian Safety Guide and Countermeasure Selection System and the Bicycling Countermeasure Selection System](#) (includes several applicable case studies)
- [Guide for Reviewing Public Road Design and Bicycling Accommodations for Virginia Bicycling Advocates](#)
- [A Resident's Guide for Creating Safe and Walkable Communities](#)
- [Costs for Pedestrian and Bicyclist Infrastructure Improvements](#)

#### 4.5 Additional Resources

This document was developed in concert with the launch of the HEAL Active Transportation Program. The primary purpose of the program is to provide participants with essential skills in planning and implementing bicycle and walking transportation efforts in their communities. The secondary purpose of the program is to provide participants opportunities to connect with HEAL staff and New Hampshire experts to help them with specific active transportation issues in their communities. Another important purpose is to connect participants with each other to help build a support network for communities currently working on or interested in working on active transportation projects.

HEAL and its partners will be providing communities assistance through HEAL Active Transportation Training Series sessions, monthly conference calls, and individualized assistance. Additionally, the Bike-Walk Alliance of NH will be providing training in the Fall of 2014 on how to advocate for pedestrian and bicycling improvements at the community and state-level. The following people can be contacted for further assistance in your community.

Nicholas J. Coates (Nik), Active Living Coordinator, HEAL NH  
125 Airport Road  
Concord, NH 03301  
603.415.4263  
[ncoates@healthynh.com](mailto:ncoates@healthynh.com)  
[www.healnh.org](http://www.healnh.org)

Tim Blagden, Executive Director, Bike-Walk Alliance of NH  
57 Regional Drive, Suite # 6  
Concord, NH 03301  
[tim@bwanh.org](mailto:tim@bwanh.org)  
[www.bwanh.org](http://www.bwanh.org)

Larry Keniston, Bicycle and Pedestrian Coordinator, NH Department of Transportation  
7 Hazen Drive  
Concord, NH 03301  
603.271.1668  
[LKeniston@dot.state.nh.us](mailto:LKeniston@dot.state.nh.us)  
[www.nh.gov/dot/programs/bikeped](http://www.nh.gov/dot/programs/bikeped)

NH Association of Regional Planning Commissions (to find your RPC)  
[www.nharpc.org](http://www.nharpc.org)

## 5.0 References and Glossary

### 5.1 References

- Institute for Public Administration at the University of Delaware, Healthy Communities: The Walkability Assessment Tool, Toolkit for a Healthy Delaware, 2010.
- Consortium to Lower Obesity in Chicago Children, Neighborhood Walkability Assessment – Tools, 2010
- City of Louisville, The Louisville Neighborhood Walkability Assessment Tool, 2010.
- United States Department of Transportation, et al, Walkability Checklist and Bikeability Checklist, 2008.

### 5.2 Glossary of Terms<sup>10</sup>

**Accessible:** Accessible facilities are those that can be reached, used, and traversed by people of all ages and abilities without difficulty.

**Active Transportation:** Includes walking, bicycling, small-wheeled transportation (skates, skateboards, push scooters, and hand carts), and wheelchair travel.

**Bicycle Facilities:** Facilities designed to accommodate bicycle travel for transportation or recreational purposes.

**Buffer:** The area between the outside edge of the roadway and the roadside edge of the sidewalk or pedestrian facility that provides a space between pedestrian traffic and motorized traffic. The buffer can contain paved areas, grassy areas, or trees.

**Complete Streets:** Complete Streets are streets designed and maintained to enable safe access for all users.

**Curb Cut:** Also known as a curb ramp, a curb cut is a short ramp installed where a sidewalk meets a road to create a smooth transition between the two surfaces rather than a steep drop of several inches.

**Mobility:** The ability to move or be moved from place to place.

**Multi-use Path:** An off-road path, paved or unpaved, intended for use by pedestrians, bicyclists, skaters, and others for transportation or recreational purposes.

**Pedestrian Facilities:** Includes roadside sidewalks, trails, and paved or unpaved off-road trails.

**Pedestrian/Bicycling Network:** A continuous pedestrian- or bicycling-facility system that allows pedestrians or bicyclists to make uninterrupted trips and accommodates multiple users.

**Traffic Calming:** A way to design streets using engineering principles to encourage people to drive more slowly. Traffic calming includes physical and visual cues that induce drivers to travel at appropriate speeds.

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<sup>10</sup> Ibid at 5.

**Walk Score:** Walk Score is a number between 0 and 100 that measures the walkability of any address (with 0 being least walkable and 100 being most walkable). It is based on an algorithm that ranks communities nationwide based on an area's number of common destinations (business, restaurants, parks, schools) within walking distance of any given starting point.

**Walkability/Bikeability:** Walkability and bikeability are often measured according to the environmental, health, and safety benefits offered to pedestrians and bicyclists within a community. More broadly, walkability and bikeability are measures of how conducive an environment is to walking or bicycling.