



DATE: June 28, 2019
TO: Plan for Ashuelot Rail Trail Project Advisory Committee
FROM: SWRPC Staff
RE: Outreach – Online Resident Survey

In order to learn about trail issues, trip types, destinations and other information about the Ashuelot Rail Trail, SWRPC, in coordination with the Project Advisory Committee, developed an online survey that was made available to the general public. The survey was open from July 2018 to March 2019. The survey was advertised via SWRPC newsletters, a trail sign posted at various locations along the trail's route, Facebook, printed flyers, and at an open house held in November 2018. This memo summarizes key survey results, including who responded, how respondents use the trail and which issues were identified as priorities, opportunities and concerns.

I. Who Responded

Over the collection period, 555 responses were received in total. Of those responses, 392, or 71 percent, were received from respondents with home zip codes within or partially within southwest New Hampshire, as defined by SWRPC Region (Figure 1). The remainder of respondents had home zip codes elsewhere in NH (12%), Massachusetts (10%), Vermont (3%), Connecticut (1%), or elsewhere in the United States (1%). In total, responses were received from 152 unique home zip codes. Figure 2 depicts respondent home zip codes in the northeastern United States. The wide geographic range of home zip codes indicates that interest in the trail extends beyond local users.

Figure 1 – The SWRPC Region

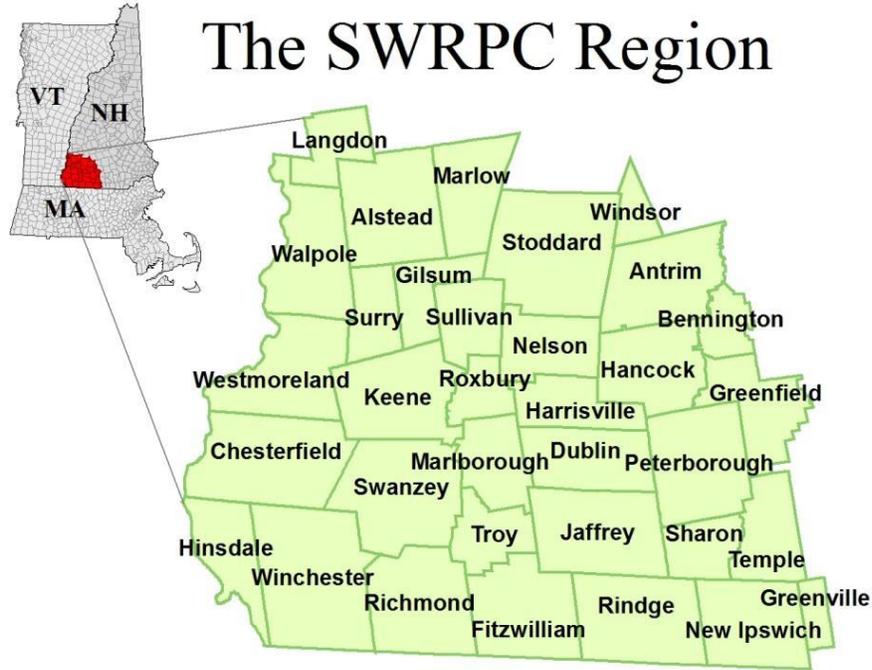
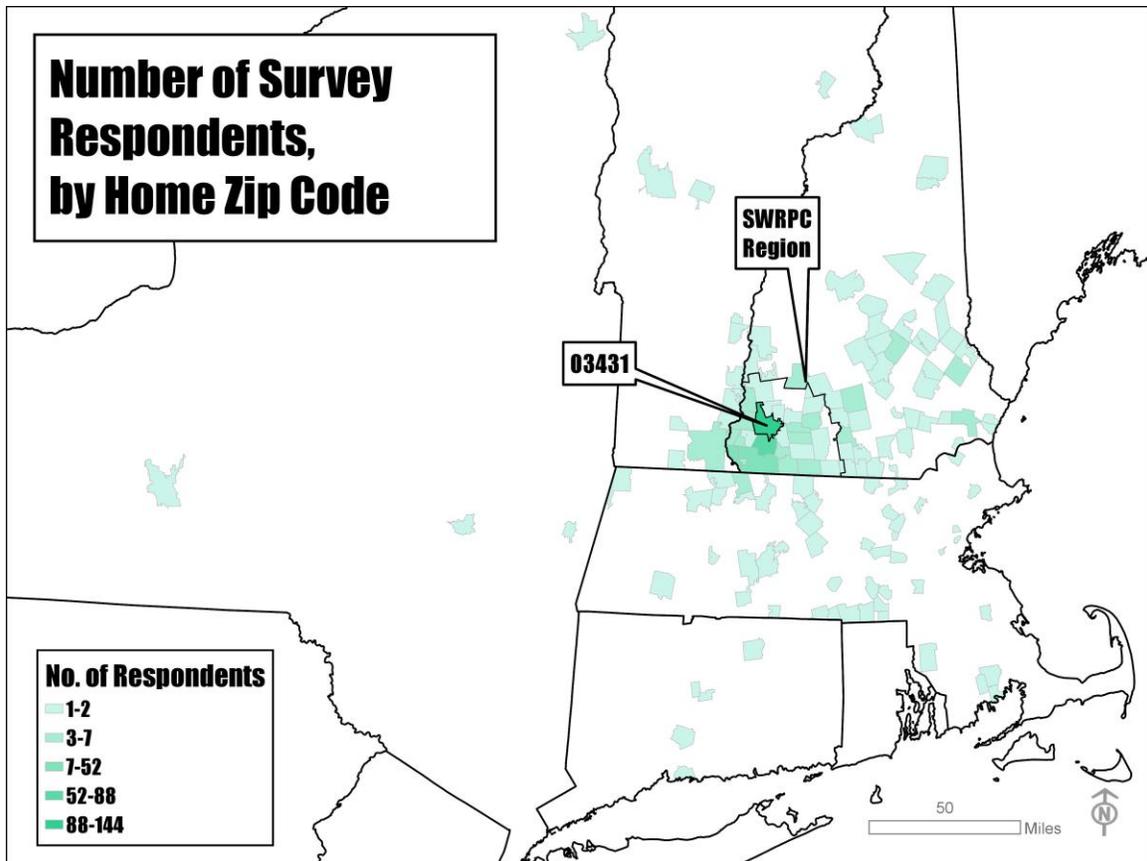


Figure 2 – Number of Survey Respondents, by Home Zip Code



Respondent home zip codes were most commonly located within municipalities along the Ashuelot Rail Trail. Zip code areas do not align perfectly with municipal boundaries, but provide the best means of identifying survey respondents who live or work in municipalities along the trail’s route (Figure 3). Zip code 03431, which includes all of Keene, as well as sections of Surry, Roxbury and Swanzey was the most common respondent home zip code, with about 30 percent of respondents indicating that they live there. Zip code 03446, which includes most of Swanzey was the second most common home zip code, accounting for about 16 percent of responses. About 11 percent of respondents had a home zip code of 03470 or 03441, which together encompass the majority of Winchester and Richmond.¹ The fourth most common home zip code was 03451, which includes most of Hinsdale.

Figure 3 – Zip Code Areas within or Partially within Keene, Swanzey, Winchester, and Hinsdale

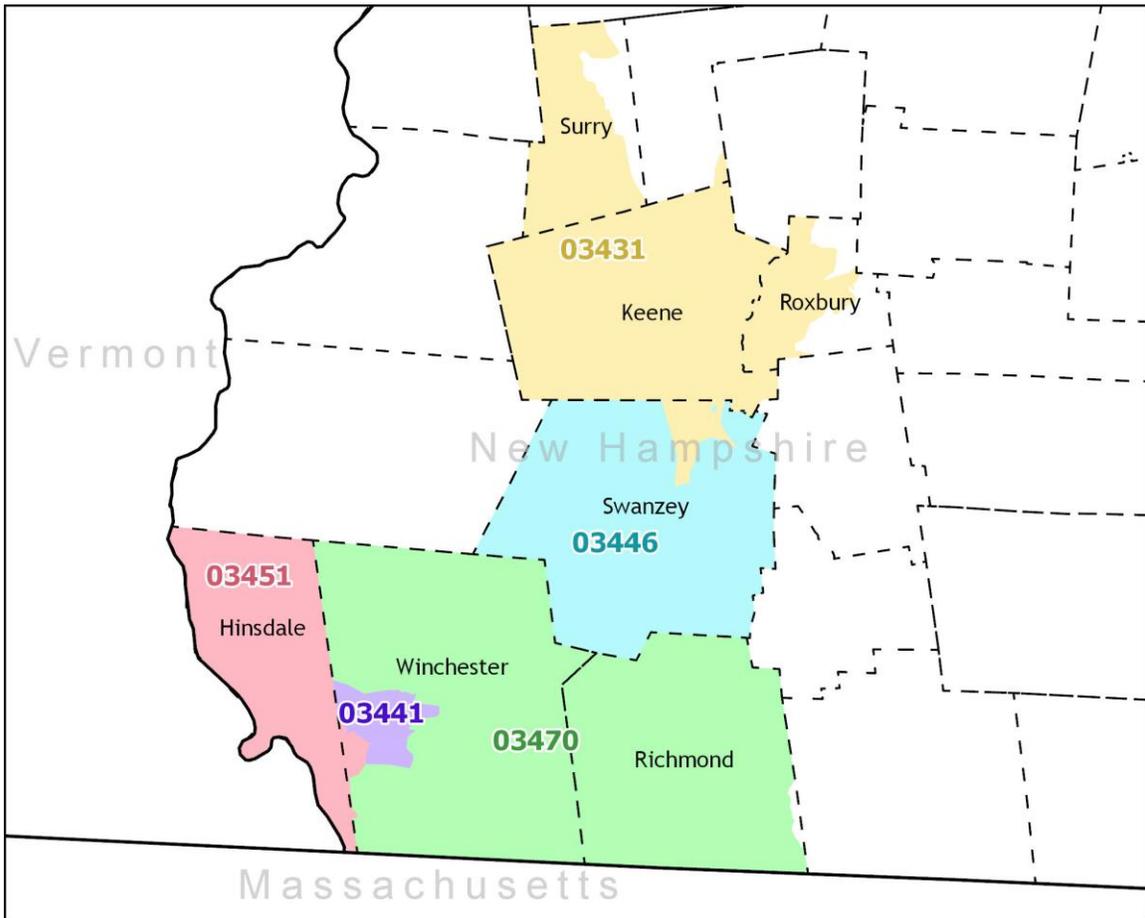


Table 1 cross-tabulates respondent home zip codes with work zip codes in order to determine the frequency of home-work zip code pairings, i.e. how many respondents *live* in Zip Code A and *work* in Zip Code B. Zip codes outside of municipalities along the trail’s route are grouped together as “other,” along with non-responses.² The “total” column shows how many respondents live in each zip code while the “total” row shows how many respondents work in each zip code.

¹ Given the small size of zip code 03441, and the fact that it and 03470 both lie within the Town of Winchester, they are grouped together in order to approximate town boundaries.

² All 555 respondents supplied a home zip code, while 522 supplied a work zip code. Respondents who did not supply a zip code may have chosen to skip the answer or may not be employed.

A plurality of respondents, just over 44 percent, live *and* work within one of the zip codes along the trail’s route. About 36 percent of respondents *neither* live *nor* work within a zip code along the trail’s route. In short, survey responses represent both individuals with intimate familiarity with the communities along the trail’s route as well as individuals who may visit those communities infrequently or perhaps have never visited them at all.

Respondents who both lived and worked in zip code 03431 constituted the most common home-work zip code pairing, accounting for nearly 20 percent of all respondents.

Table 1 – Percent of Respondents, by Home and Work Zip Code (n = 555)

Home Zip Code*	Work Zip Code*					Total
	03431	03446	03470, 03441	03451	Other	
03431	19.6%	0.0%	0.4%	0.2%	5.8%	25.9%
03446	5.6%	5.2%	0.4%	0.5%	4.1%	15.9%
03470, 03441	3.2%	0.2%	4.1%	0.2%	2.7%	10.5%
03451	0.2%	0.2%	0.2%	4.0%	2.0%	6.5%
Other	4.1%	0.9%	0.2%	0.2%	35.9%	41.3%
Total	32.8%	6.5%	5.2%	5.0%	50.5%	100.0%

* Refer to Figure 3 for a depiction of zip code geographies.

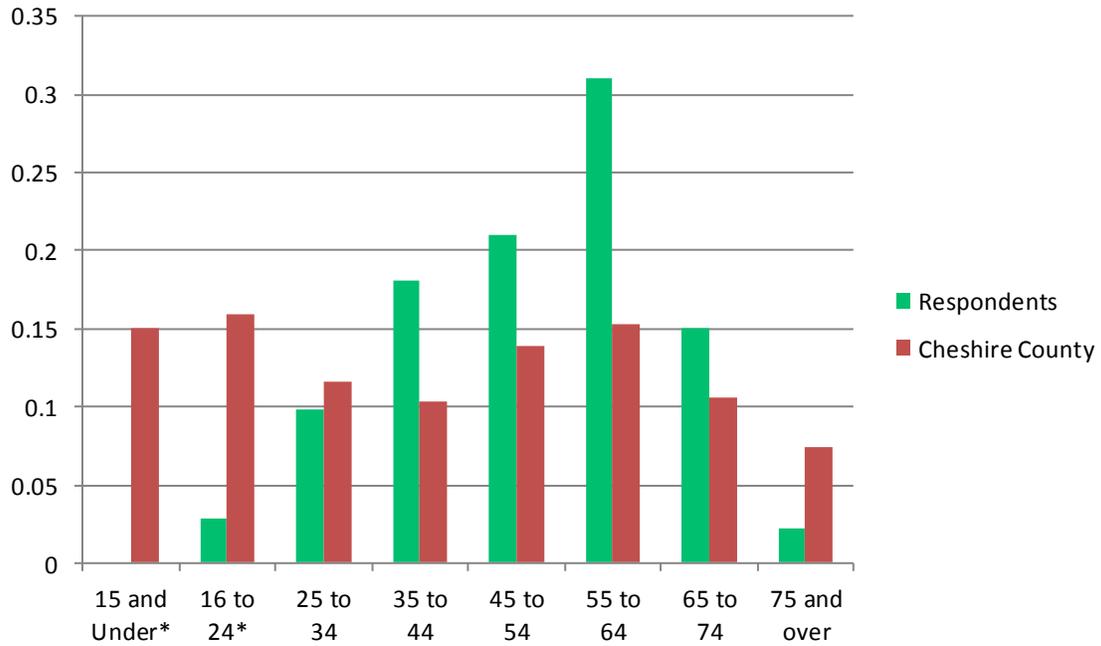
In addition to requesting respondents’ home and work zip codes, the survey also asked whether respondents lived or worked within biking or walking distance of the Ashuelot Rail Trail. Out of all survey respondents, 37 percent indicated that *both* their home location and work location were either within walking or cycling distance of the Ashuelot Rail Trail (Table 2).

Table 2 – Survey respondents, by Distance to Ashuelot Rail Trail, from Home and Work Locations (n = 555)

Home within...	Workplace within...		
	Walking Distance	Biking Distance	Neither/No Response
Walking distance	16.0%	3.4%	10.6%
Biking Distance	5.8%	11.4%	8.5%
Neither/No Response	2.5%	2.9%	38.9%

Demographic information collected by the survey was limited to data on respondent age (Figure 4). When comparing the proportion of different age cohorts that live in Cheshire County with the survey sample, the survey sample underrepresented individuals on the tail ends of the age spectrum - the County’s youngest and oldest residents. Individuals aged 16 to 24 years old were notably missing from the survey sample, representing only 2.8% of the survey sample, compared to 15.9% of the Cheshire County population in the same age bracket. No survey responses were received from individuals aged 15 years old or younger. Individuals aged 75 and over were also underrepresented: 2.2% of respondents fell within the age bracket, compared with 7.5% of County residents. Older middle aged adults (55-64 years old) were the most overrepresented age bracket, composing 31.1% of respondents but only 15.3% of the Cheshire County population.

Figure 4 - Age Cohorts for Survey Respondents (n = 499) vs. Cheshire County Population 15 and Over



Source: American Community Survey 2017 5-Year Estimates

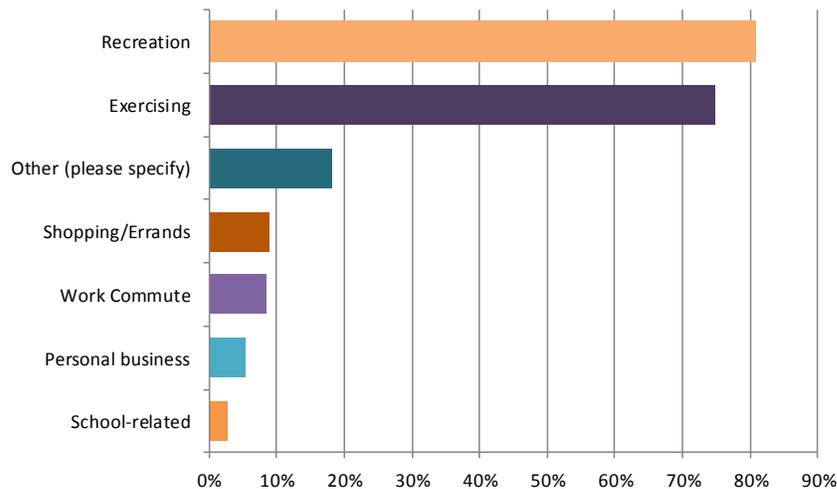
* The number of survey respondents aged 16-24 years old is compared to the 15-24 year-old Cheshire County population, the closest age bracket available from the American Community Survey. Likewise, the number of respondents aged 15 years old and under is compared to the 14 and under County population.

II. How Respondents Use the Trail

Among the survey's 555 respondents, 79 percent reported using the Ashuelot Rail Trail - 65 percent within the last 12 months and 14 percent not within the last 12 months. Respondents who indicated that they had used the trail within the last 12 months were prompted with a series of questions aimed at capturing why, how and when they used the trail, as well where they traveled when using the trail.

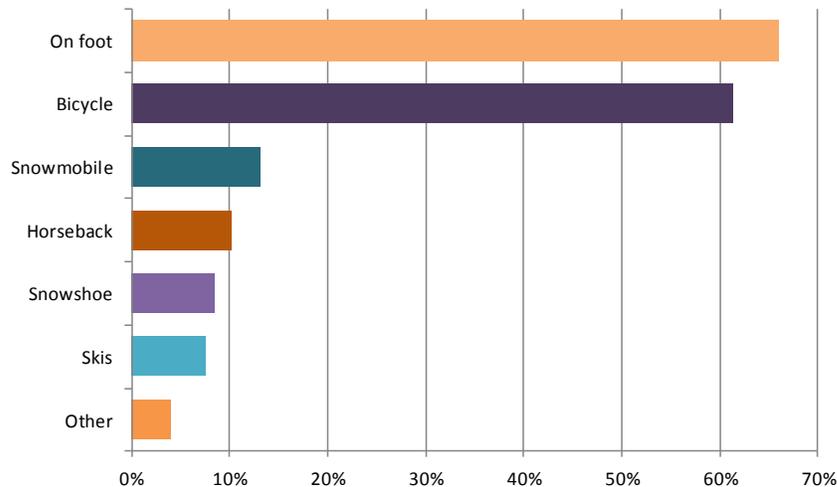
Respondents indicated that they use the trail for a variety of purposes, but by far the most common reason respondents used the trail was for recreation or exercise (Figure 5). For respondents who marked "other," dog walking was a common response.

Figure 5 – Purposes of Respondent On-trail Trips within the Last 12 months (n = 344)



For the 344 respondents who indicated one or more on-trail travel modes, walking was the most common, with 66 percent indicating that they had walked on the trail within the last 12 months (Figure 6). A slightly smaller portion of respondents (61 percent) indicated that they had biked on the trail. Smaller numbers of respondents reported traveling on the trail by snowmobile, horseback, skis, and snowshoes. Under "other," several respondents answered that they've used ATVs on the trail, which is currently not a permitted use.

Figure 6 – Respondent On-trail Travel Modes within the Last 12 months (n = 344)



A majority (52 percent) of the 344 respondents who have used the trail in the last twelve months reported that they have done so using only one travel mode. Significant overlap, however, exists between trail user groups, with many respondents reporting traveling along the trail using two or more travel modes (Figure 7). Overlap is more common among some travel modes than others, as depicted in Figure 8, where thicker lines connecting travel modes represent higher numbers of respondents who use *both* of those modes. For example, many survey respondents who use the trail on bicycle also use it on foot. Conversely, fewer respondents who use the trail by horseback also use it by bicycle. Lines that start and end at a single travel mode (and may appear like humps) represent trail users who use *only* that mode and no other mode.

Figure 7 – Percent of Question Respondents, by No. of Travel Modes Used on the Ashuelot Rail Trail (n = 344)

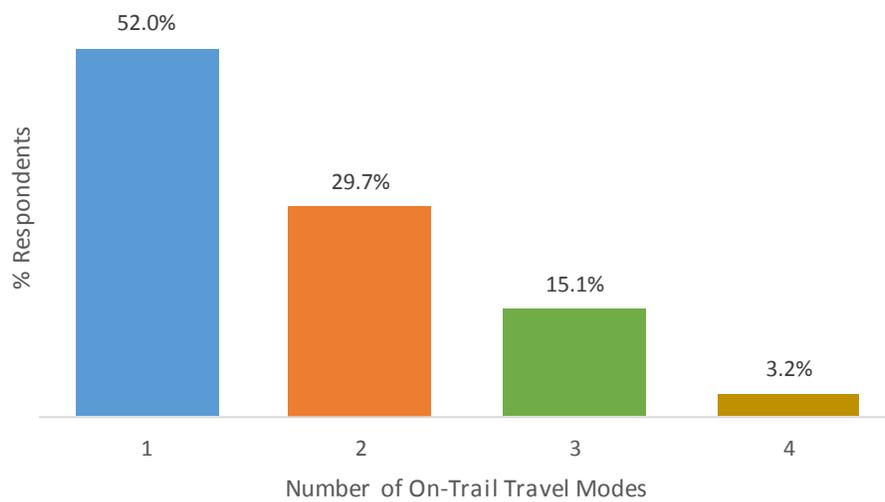
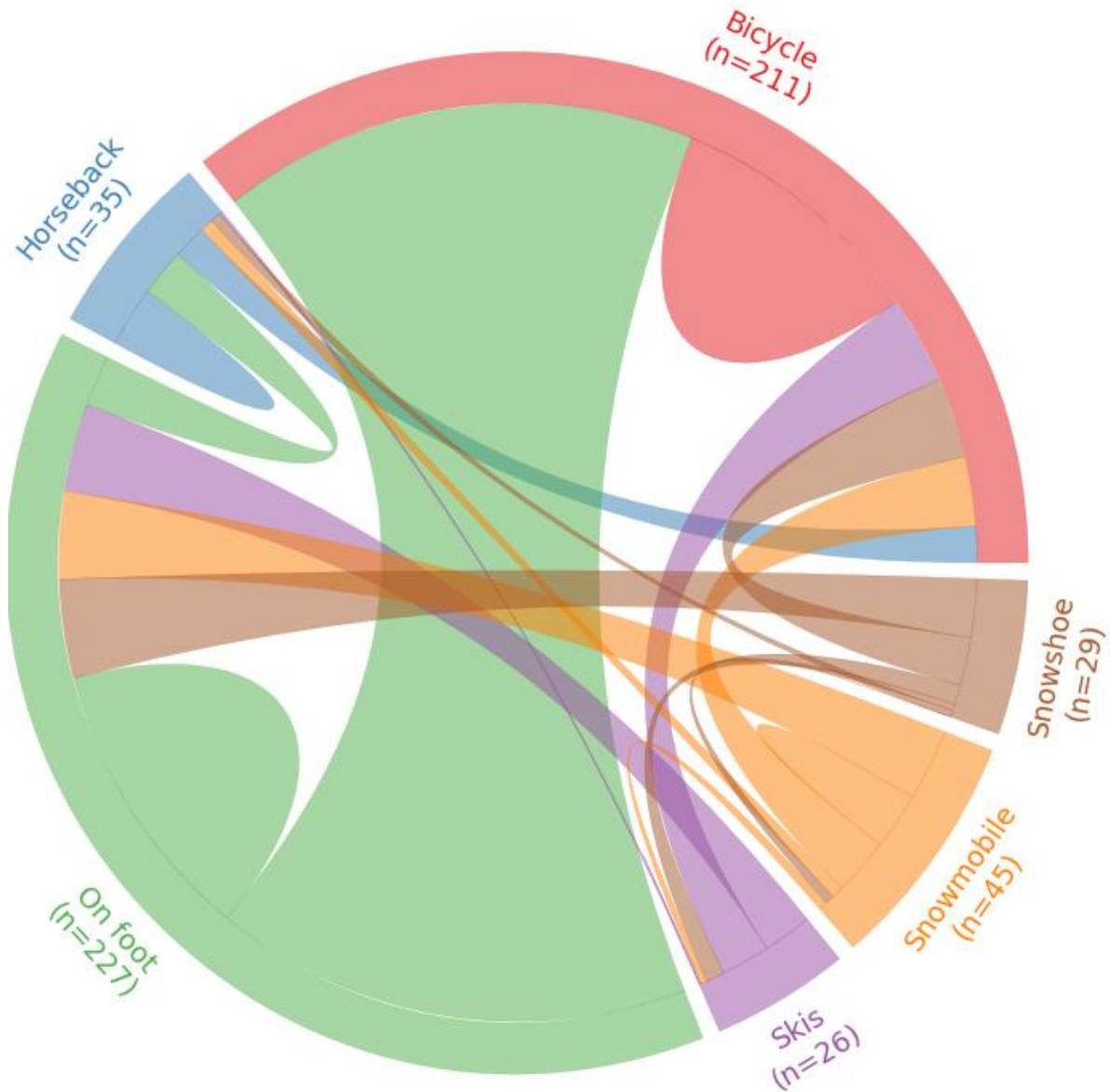
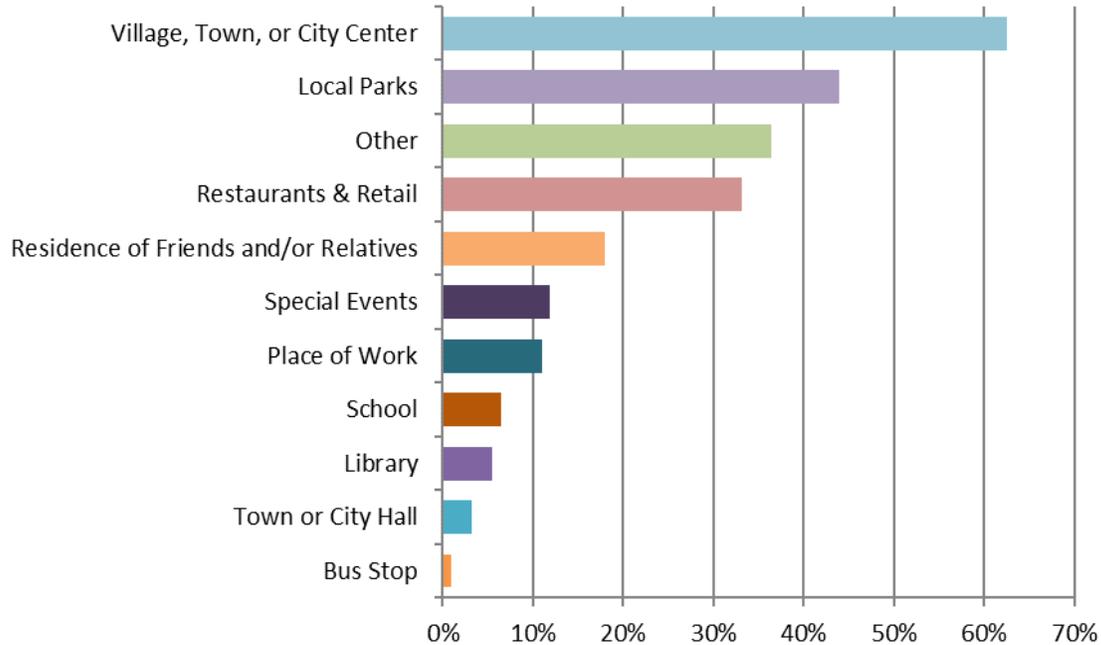


Figure 8 – Overlap among On-Trail Travel Modes Used by Survey Respondents.(n = 344)



The survey asked respondents to indicate places that they traveled to using the rail trail (Figure 9). Among the 344 question respondents, 63 percent said that they had used the rail trail to travel to a village, town, or city center, the most common answer by a substantial margin. This figure may be somewhat inflated, however, by respondents returning to downtown areas after round-trip outings. Other common destinations included local parks (44 percent) and restaurants and retail establishments (33 percent). The majority of respondents who marked “other” noted that they had no particular destination when using the trail.

Figure 9 – Destinations Reached by Respondents When Using the Ashuelot Rail Trail (n =344)



Respondents who had used the trail within the last twelve months were prompted with a question regarding seasons of trail use. Of the 344 respondents who answered the question, 88 percent indicated that they used the trail during the fall, the most commonly cited season of use. A slightly lower number of respondents indicated that they use the trail during the summer (86 percent) or the spring (81 percent). Winter was the least frequently cited season of use, with 49 percent of question respondents indicating that they use the trail during that period of the year.

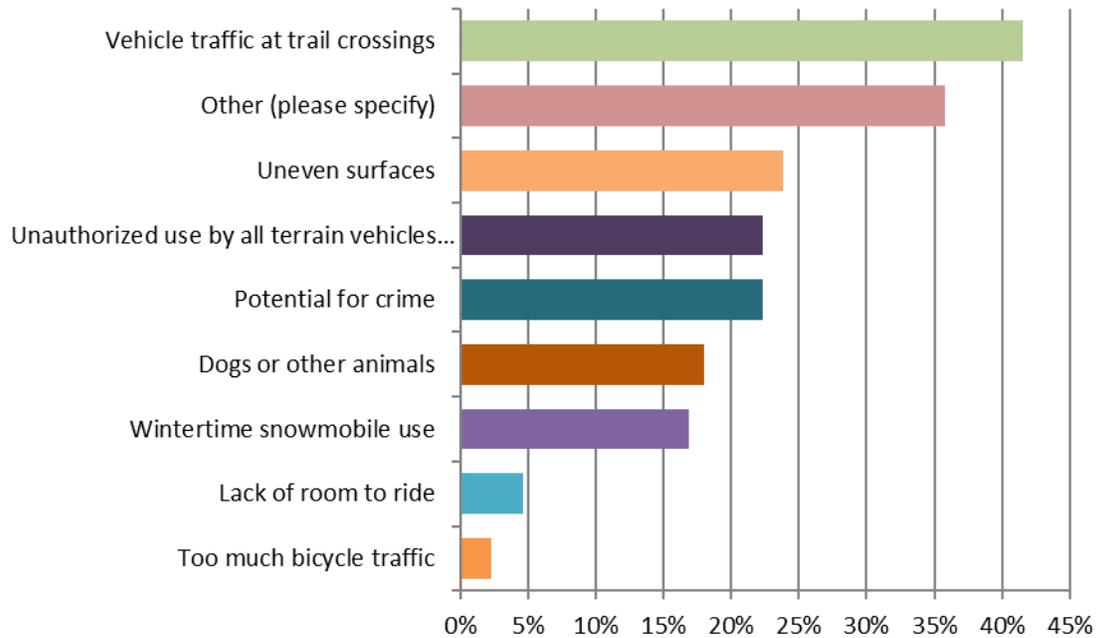
Among the 344 respondents who had used the trail in the last twelve months, 76 percent said that they used the trail on both weekdays and weekends. Thirteen percent said that they use the trail only on weekends while 11 percent said they use the trail only on weekdays.

Respondents who had used the trail in the last twelve months were asked whether they “typically” used the trail alone or with others. About 57 percent of the 344 question respondents indicated that they typically use the trail with others, while 43 percent said that they typically use the trail alone.

III. Respondent Perspectives on Trail-Related Issues

The survey included several questions aimed at capturing respondent trail-related concerns and priorities. Respondents who had used the trail in the last 12 months (n = 344) were asked to indicate their top safety concerns related to the Ashuelot Rail Trail (Figure 10). Vehicle traffic at trail crossings was the top safety concern raised, with 42 percent of question respondents indicating that it was an issue. Many respondents who selected “other” commented that they did so because they did not have safety concerns regarding the trail.

Figure 10 - Safety Concerns of Respondents who Used the Trail in Last 12 Months (n = 344)



When comparing safety concerns among different user groups, similarities and differences emerge. Table 3 lists the safety concerns most frequently cited by individuals using various on-trail transportation modes. It should be noted that these groups are not mutually exclusive, i.e. an individual who uses the trail on a bicycle, for example, may also use it via one or more other transportation modes. Similar to safety concerns of respondents overall, vehicle traffic at trail crossings was the most frequently cited safety concern for each trail user group. Unauthorized use by all-terrain vehicles (ATVs) or motorcycles appeared as a 2nd or 3rd most frequently cited safety concern among those using the trail via bicycle, horseback, skis, or snowshoes. “Potential for crime” appeared as a top-three safety concern only among those who use the trail on horseback and on foot. “Dogs and other animals” appeared as a top-three safety concern only among individuals who snowmobile on the trail.

Table 3 – Top Three Most Frequently Cited Safety Concerns, by On-Trail Travel Mode

	Bicycle	Horseback	On foot	Skis	Snowmobile	Snowshoe
1	Vehicle traffic at trail crossings	Vehicle traffic at trail crossings	Vehicle traffic at trail crossings	Vehicle traffic at trail crossings	Vehicle traffic at trail crossings	Vehicle traffic at trail crossings
2	Uneven surfaces	Unauthorized use by ATVs or motorcycles	Potential for crime	Wintertime snowmobile use	Uneven surfaces	Unauthorized use ATVs or motorcycles
3	Unauthorized use by ATVs or motorcycles	Potential for crime	Uneven surfaces	Unauthorized use by ATVs or motorcycles	Dogs or other animals	Wintertime snowmobile use

Patterns also come to light when comparing safety concerns of trail users from different home zip code areas (Table 4). Among respondents with home zip codes 03431 (Keene) and 03446 (Swanzy), vehicle traffic at trail crossing was the most frequently cited safety concern. By

comparison, respondents with home zip codes 03451 (Hinsdale) and 03470/03441 (Winchester) most frequently cited uneven surfaces as their top safety concern. Potential for crime appeared as a frequently cited safety concern for respondents with home zip codes 03431, 03446, and 03451. Wintertime snowmobile use appeared as a top-three safety concern only among respondents with a home zip code of 03431.

Table 4 – Top Three Most Frequently Cited Safety Concerns, by Home Zip Code

	03431	03446	03451	03470/03441
1	Vehicle traffic at trail crossings	Vehicle traffic at trail crossings	Uneven surfaces	Uneven surfaces
2	Potential for crime	Potential for crime	Dogs or other animals	Vehicle traffic at trail crossings
3	Wintertime snowmobile use	Uneven surfaces	Potential for crime	Dogs or other animals

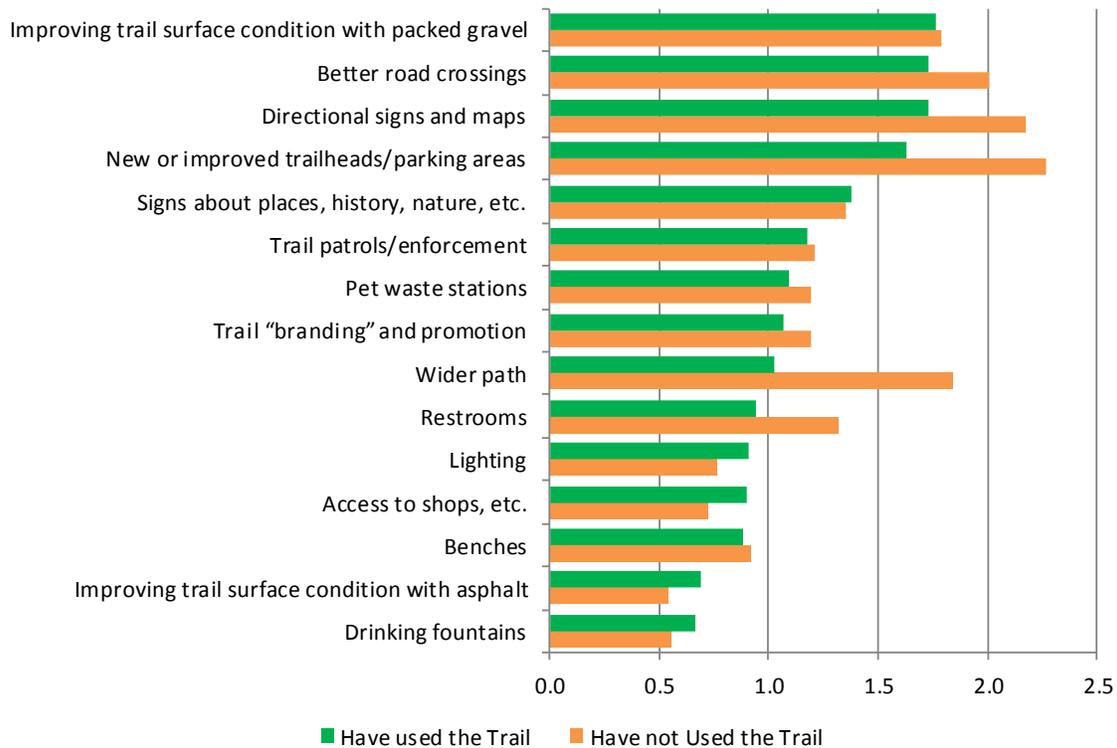
All respondents - not just those who used the trail in the last 12 months - were asked to prioritize trail-related improvements. Given a list of potential improvements, respondents were requested to prioritize each one on a four-point scale: “not a priority”, “low priority”, “medium priority”, and “high priority”, Figure 11 presents the average prioritization of each potential improvement, with zero representing “not a priority” and a three representing a “high priority”³. Results are broken out by respondents who have used the trail (whether in the last 12 months or less recently) and respondents who have not used the trail at all.

Among respondents who had used the trail, the top-three highest prioritized improvements were: improving the trail surface condition with packed gravel; better road crossings; and directional signs and maps. Respondents who had not used the trail expressed somewhat different top priorities. New or improved trailheads/parking areas received the highest average prioritization, followed by directional signs and maps and better road crossings.

Overall, respondent non-users expressed a more urgent need to address various trail improvements when compared to respondent trail users. Most notably, respondent non-users placed much greater importance on increasing trail width than respondent trail users.

³ “No response” was assigned a zero if the respondent prioritized at least one potential improvement. Respondents who skipped the question entirely were dropped from the results.

Figure 11 - Priority of Potential Trail-Related Improvements as Weighted Average of Responses, on a Scale from Zero to Three (n = 499*)



*Of the 499 question respondents, 405 had used the trail within the last 12 months and 94 had not.

Among respondent trail users, priorities for improvements were not uniform. Differences manifested themselves, for example, between respondents who used the trail via different travel modes.

The top priority for snowmobilers was directional signs and maps. The potential trail improvement appears as a top-five priority for other respondent groups, although at somewhat lower levels. Snowmobilers were the only respondent group for which "access to shops" appears as a top-five priority.

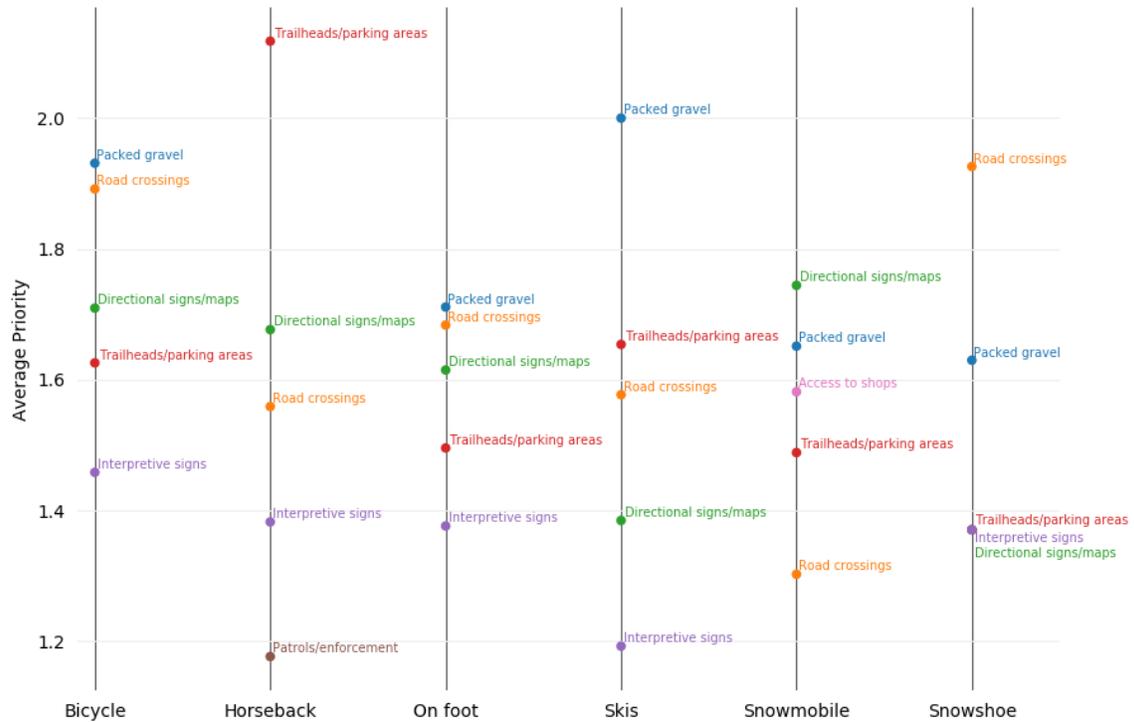
Figure 12 groups respondents by whether or not they use the trail via each listed mode of travel (groups are not mutually exclusive). The top five potential trail improvements - those with the highest *average* prioritization - are then plotted for each group, on a scale from 0 to 3 ("Not a Priority" to "High Priority"). It should be emphasized that sample sizes vary between trail user groups (Figure 6). Although exact on-trail mode share cannot be determined from available data, it is possible to observe that pedestrians and bicyclists are the most common trail users.

Overlap exists between the priorities of various respondent groups, but differences are also apparent. For example, improving the trail surface with packed gravel appears as the first or second highest priority for all groups except for respondent equestrian users. For equestrian respondents, improving the trail surface with packed gravel does not appear as a top-five priority. Unlike other respondent groups, equestrian respondents prioritized improved trailheads and parking areas as the most important potential trail improvement. In fact, this top priority among equestrian respondents received a noticeably higher prioritization score than the top priority of other respondent groups. Through other outreach methods (e.g. the open house), equestrian users have expressed strong interest in trailheads and parking areas that can accommodate trailers and

that include safe areas for loading and unloading horses. Although equestrians assign special importance to improved parking areas and trailheads, it should be noted that the issue appears as a top-five priority for all other respondent groups, albeit at lower levels.

The top priority for snowmobilers was directional signs and maps. The potential trail improvement appears as a top-five priority for other respondent groups, although at somewhat lower levels. Snowmobilers were the only respondent group for which “access to shops” appears as a top-five priority.

Figure 12 - Top Five Priorities for Trail Improvements, by Travel Mode of Respondent



Among respondents who lived in zip code areas along the trail, some top priorities were aligned while others were less so. Improving trail surface conditions with packed gravel was the first or second highest prioritized improvement across all home zip code areas. Directional signs and maps was a top-three priority improvement for respondents who lived in zip code areas 03431 (Keene), 03451 (Hinsdale), and 03470/03441 (Winchester), but not for respondents who lived in zip code area 03446 (Swanzy). “Better road crossings” was the top priority for respondents who lived in zip codes with more developed areas (03431 and 03446) while it wasn’t a top-three priority for respondents who lived in more rural zip codes (03451 and 03470/03441).

Table 5 – Top Three Highest Prioritized Trail Improvements among Respondents with Home Zip Codes along the Ashuelot Rail Trail (n = 299)

	03431	03446	03470/03441	03451
1	Better road crossings	Better road crossings	Improving trail surface condition with packed gravel	Directional signs and maps
2	Improving trail surface condition with packed gravel	Improving trail surface condition with packed gravel	Directional signs and maps	Improving trail surface condition with packed gravel
3	Directional signs and maps	New or improved trailheads/parking areas	New or improved trailheads/parking areas	Signs about places, history, nature, etc.

In addition to asking respondents to assign priorities to specific issues, the survey also invited respondents to identify specific assets and opportunities along the trail. The open form question prompted a wide variety of responses. The most frequently identified opportunity was the potential benefit of opening the trail to off-highway recreational vehicles (OHRVs), which include all-terrain vehicles (ATVs), motorized trail bikes, and utility terrain vehicles (UTVs). Even though potential OHRV use represented the most commonly identified opportunity, only a small fraction (8.1 percent) of all 555 survey respondents indicated support for permitting OHRVs. Among those respondents, 42 percent were snowmobilers and 42 percent had not used the Ashuelot Rail Trail before. Slightly less than half (49 percent) of OHRV-supporting respondents were local users, with home zip code areas that contained a segment of the trail. About half of these local users lived in zip code area 03431 (Keene) while the remainder lived in zip codes 03446 (Swanzy), 03470 (Winchester), or 03451 (Hinsdale). It should be emphasized that OHRVs are not currently permitted on the Ashuelot Rail Trail. The terms under which the railroad corridor was originally deeded to the State prohibit trail use by OHRVs.

Other respondent-identified trail assets and opportunities included (but were not limited to): improving connectivity between the rail trail and other trail networks, including those in/near Brattleboro, VT; granting access to horse carriages; installation of trail etiquette signage; and installation of distance markers. Several respondents noted that there is potential to collaborate with particular groups - e.g. New England Mountain Bike Association and the Daniel Webster Council - on trail-related projects. Respondent-identified assets and opportunities will serve as a reference as plan development continues.

Respondents were also prompted to identify particular trail-related challenges and concerns, which included: disruption, safety hazard and trail damage caused by unauthorized OHRV trail use; any threat of future authorization of on-trail OHRV use; the speed of on-trail snowmobile travel; concerns regarding how paving the trail would negatively impact equestrian users; lack of clarity on where the trail proceeds south of Swanzy; loiterers on/near the trail; and trail maintenance (mowing/brush clearing). Like with respondent-identified assets and opportunities, respondent-identified challenges and concerns will inform plan development as the project continues.

Key Findings

- **Interest in the Ashuelot Rail Trail extends beyond local users, suggesting that it and other rail trails in the Monadnock Region hold potential as tourist attractions.** Tourist interest is indicated by the large number of survey responses received from outside the Monadnock Region and individuals who have never used the trail before.

Considering that respondents most commonly used the trail in the Fall, special opportunity may exist to promote the trail for foliage-based tourism (“leaf peeping”).

- **Vehicle traffic at trail crossings was the top safety concern among survey respondents who had used the trail in the last twelve months.** When survey respondents were grouped by on-trail travel mode (e.g. bicycling, snowmobiling), vehicle traffic at trail crossings was the top safety concern for each group. In short, survey respondents, no matter how they travel on the trail, generally agreed that vehicle traffic at trail crossings is the top safety concern. Respondents who had not used the trail in the last twelve months or at all were excluded from the questions relating to safety concerns.
- **Improving the trail surface (with packed gravel) was the highest priority improvement identified by survey respondents who had used the trail.** Improved trail crossings ranked a close second.
- **Some priorities among trail user groups aligned while others diverged.** For example, improving the trail surface with packed gravel ranked highly as a priority among all trail user groups except for equestrian users, who prioritized improved trailheads and parking highest.
- **Many survey respondents travel on the trail by more than one mode,** suggesting that there may be opportunity for coordination and collaboration among different trail user groups.
- **Some survey respondents strongly supported permitting OHRV use on the rail trail while others strongly objected.** Respondents who supported using OHRVs on the trail tended to be snowmobilers or non-users of the trail.
- **Respondents who live in urban areas may have priorities that differ from respondents who live in rural areas.** For example, respondents who live in zip code areas that contained urbanized areas - 03431 (Keene) or 03446 (Swanzy) - strongly prioritized better road crossings, which was not a highly-ranked priority for respondents from more rural zip code areas - 03470/03441 (Winchester) and 03451 (Hinsdale).
- **Compared with current or past trail users, non-user respondents tended to assign a greater importance to making trail improvements.** Non-user respondents may have higher standards for trail conditions and/or a more negative/uniformed view of current trail conditions.

Recommendations

- **Form an umbrella trail group that includes representatives from multiple trail constituencies,** e.g. snowmobilers, equestrians, bicyclists. Such a trail group may help trail user groups to recognize where priorities align and opportunities exist for collaboration.
- **Considering the wide geographic distribution of respondent home zip codes, pursue a conversation regarding specific marketing strategies to boost trail-based tourism.**
- **Since traffic at trail crossings is a top safety concern among survey respondents, identify specific trail crossings where safety issues exist.** Once problematic crossings are established, inventory existing safety measures (e.g. pedestrian warning signs, traffic calming) and identify potential improvements.
- **Since improving trail surface with packed gravel is the top priority among survey respondents, identify particular trail segments where improvements are especially needed.** Municipalities who have experience improving trail surfaces could serve as a valuable resource for municipalities seeking to enhance segments within their boundaries.

- **Recognizing that towns and village centers are the most common destination indicated by survey respondents, examine how trail-to-downtown connections might be enhanced to support current trail use and encourage increased future use.**