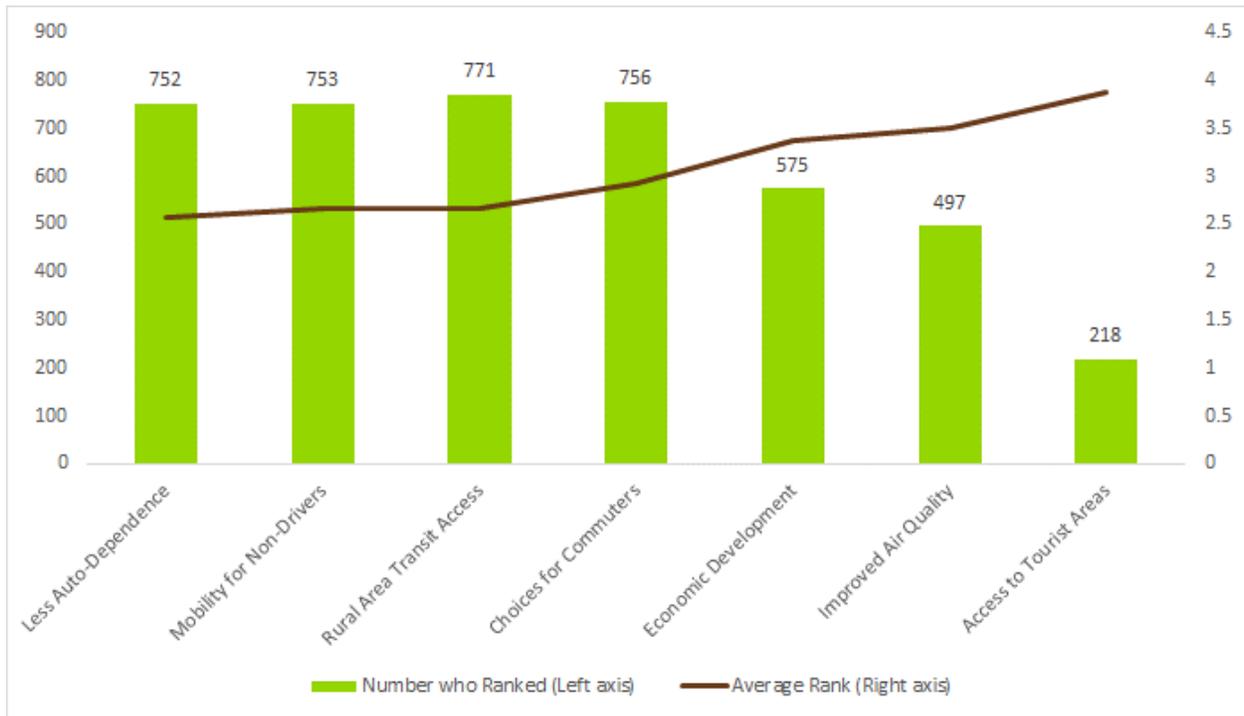


# METROQUEST RESULTS SUMMARY

## Transit Priorities

- Four of the seven listed priorities (less auto-dependence, mobility for non-drivers, rural area transit access, and choices for commuters) were roughly tied for the greatest number of people who ranked them. Each was ranked by more than 60% of survey respondents.
- Of these four, less auto-dependence had the lowest average ranking (lower is better, indicating a higher ranking), meaning it was ranked closest to the top of the most lists, with an average ranking of 2.58. The next two, mobility for non-drivers and rural area transit access, were tied with an average ranking of 2.67, followed by choices for commuters at 2.92.
- These results suggest that respondents want to be able to reduce or eliminate their auto usage, not just for commute trips, and that mobility for non-drivers and for those in rural areas are nearly equally important.
- Access to tourist areas was by far the least important priority of the seven offered, ranked by less than 20% of survey takers with an average ranking of 3.88.

Figure 1 | Transit Priority Ranking

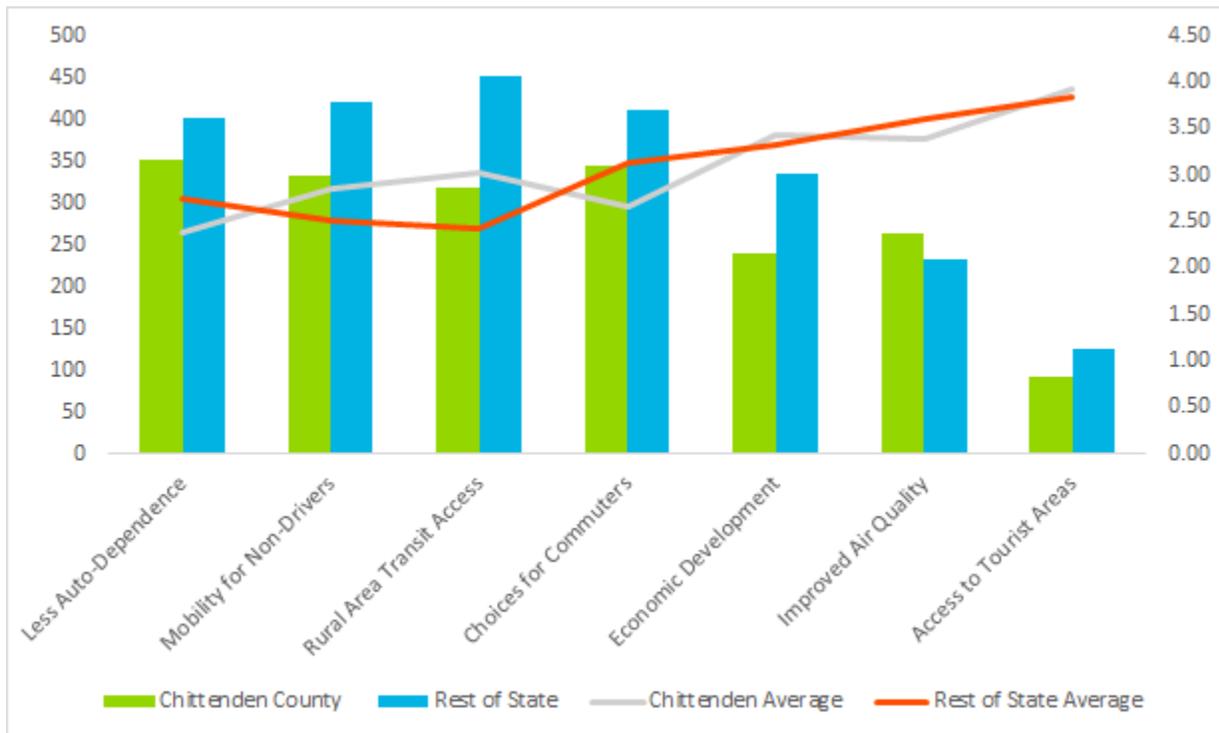


### Breakdown by Location

Of the 1202 respondents, 527 (44%) provided a home zip code in Chittenden County, which, according to 2017 American Community Survey data, is home to only 26% of Vermont residents. To better understand the needs and experiences of all Vermonters, this analysis breaks down some responses between Chittenden County residents and residents of other counties.

- Chittenden County residents included most priorities in their lists at a similar rate to residents of the rest of the state. The exceptions include Improved Air Quality, which was listed by 50% of Chittenden County residents and 35% of other Vermont residents, and Less Auto Dependence, which was listed by 67% of Chittenden County residents and 59% of other Vermont residents.
- Chittenden County residents had notably different priority rankings than other Vermont residents: They placed a higher priority on Less Auto-Dependence (average ranking 2.38, as opposed to 2.76 for other Vermont residents), Choices for Commuters (average ranking 2.67, versus 3.13 for the rest of the state, and Improved Air Quality (3.40 for Chittenden residents, 3.61 for other Vermont residents). They placed a lower priority on Mobility for Non-Drivers (2.86 for Chittenden residents, 2.52 for other Vermonters) and Rural Area Transit Access (3.02 for Chittenden residents, 2.42 for other Vermonters).
- Chittenden County residents have similar priorities to other state residents, though they are somewhat less interested in rural area access and mobility for non-drivers, and somewhat more concerned with having transit options for their commute.

Figure 2 | Transit Priority Ranking Breakdown by Location

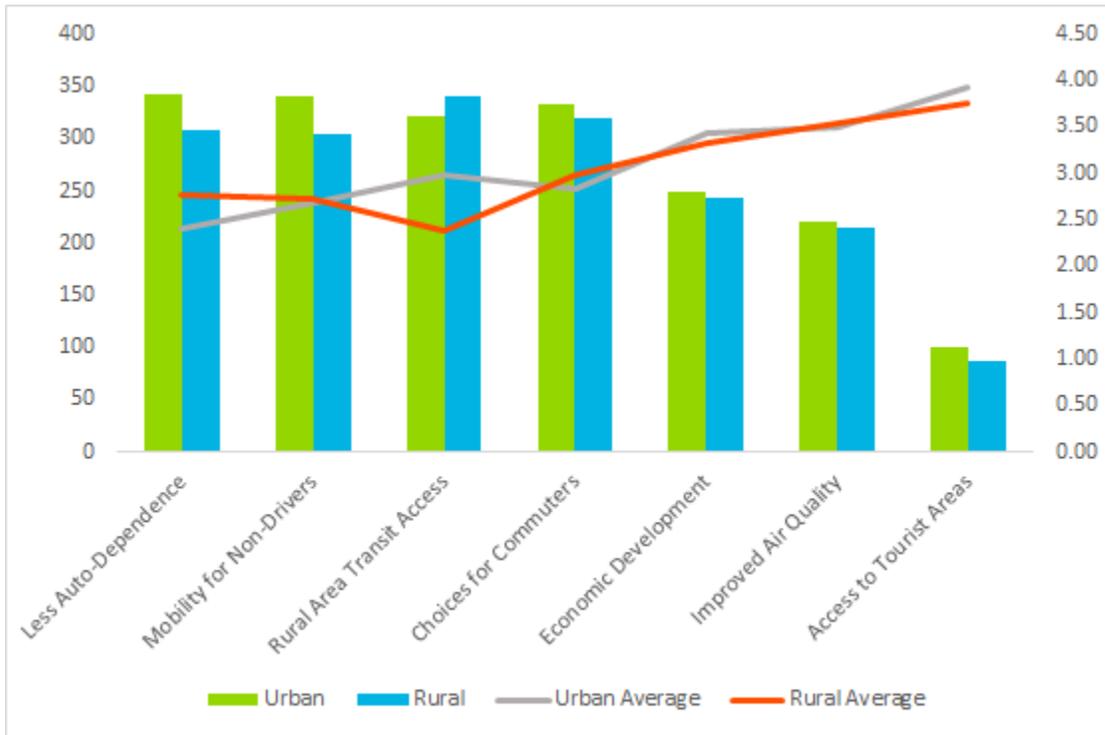


## Urban-Rural Breakdown

In addition to separating out Chittenden County residents from other residents, this analysis also breaks down survey respondents for certain questions by urban dwellers versus rural dwellers. Urban dwellers included residents who reported a home zip code in one of the following communities:

- Burlington
  - South Burlington
  - Winooski
  - Essex Junction
  - Montpelier
  - Barre City
  - Rutland City
  - White River Junction
  - Brattleboro
  - Bennington
  - Middlebury
  - St. Albans City
  - St. Johnsbury
  - Lyndonville
  - Morrisville
- 
- Out of 1202 survey respondents, 522 (43%) reported a zip code in one of these communities. 490 respondents (41%) provided a zip code located elsewhere in Vermont and were classified as rural residents. Given that the core communities of Chittenden County that generated the largest number of responses are also in the list of urban communities, there is a large degree of overlap between Chittenden County responses and urban responses. The remaining 190 respondents either did not provide a zip code, provided an invalid zip code, or provided a zip code located outside of the state of Vermont, and were not included in this analysis. Nearly identical percentages of urban and rural residents included each priority in their rankings. The sole exception to this was rural area transit access, which was ranked by 70% of rural respondents and 61% of urban respondents.
  - The average ranking was also similar for most of the listed priorities. The notable exceptions to this included Less Auto-Dependence, which was given an average rank of 2.41 by urban respondents and 2.77 for rural respondents, and Rural Area Transit Access, which had an average rank of 2.99 among urban respondents and 2.38 among rural respondents.
  - These results suggest that transit priorities are similar for urban-dwelling and rural-dwelling Vermonters: while rural Vermonters are more likely to be concerned with rural area transit access, this was also a priority for a majority of urban Vermonters as well.

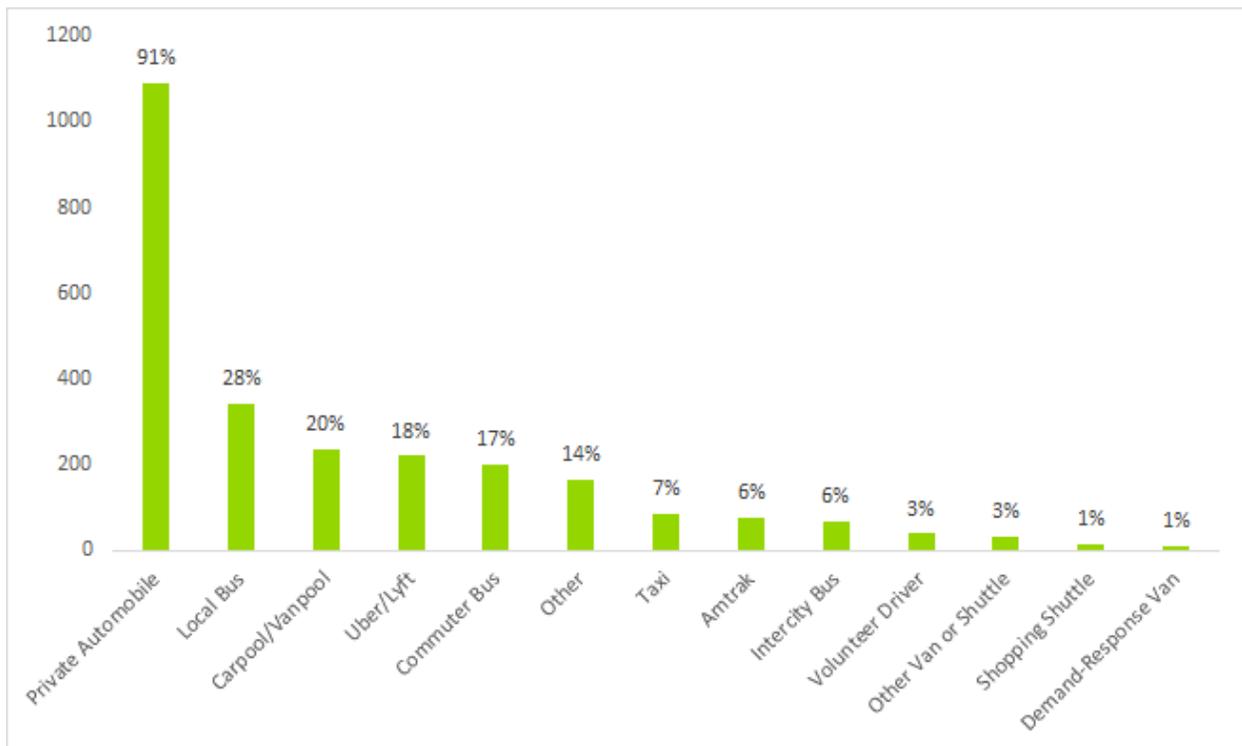
Figure 3 | Transit Priority Ranking Urban-Rural Breakdown



## Modes Used

- Most survey respondents (91%) reported using a private automobile in the past month. No other mode was used by more than 28% of respondents.
- Among survey takers, local buses were, by far, the most popular form of public transit, used by 28% of respondents in the prior month. 17% used commuter buses, while 6% reported using each of intercity buses and Amtrak. To a large extent, these figures reflect the high degree of participation by Chittenden County residents.
- Carpools and Vanpools were the most common form of shared rides, with 20% reporting having used one in the prior month, with Uber, Lyft, and similar services being used by 18%. 7% reported using traditional taxi services, while other forms of shared rides, including volunteer driver services, shopping shuttles, and all other forms of van or shuttle services, each moved 3% of survey takers or fewer.
- 14% of respondents reported using a service not listed. (The survey did not include an opportunity to specify other responses.)

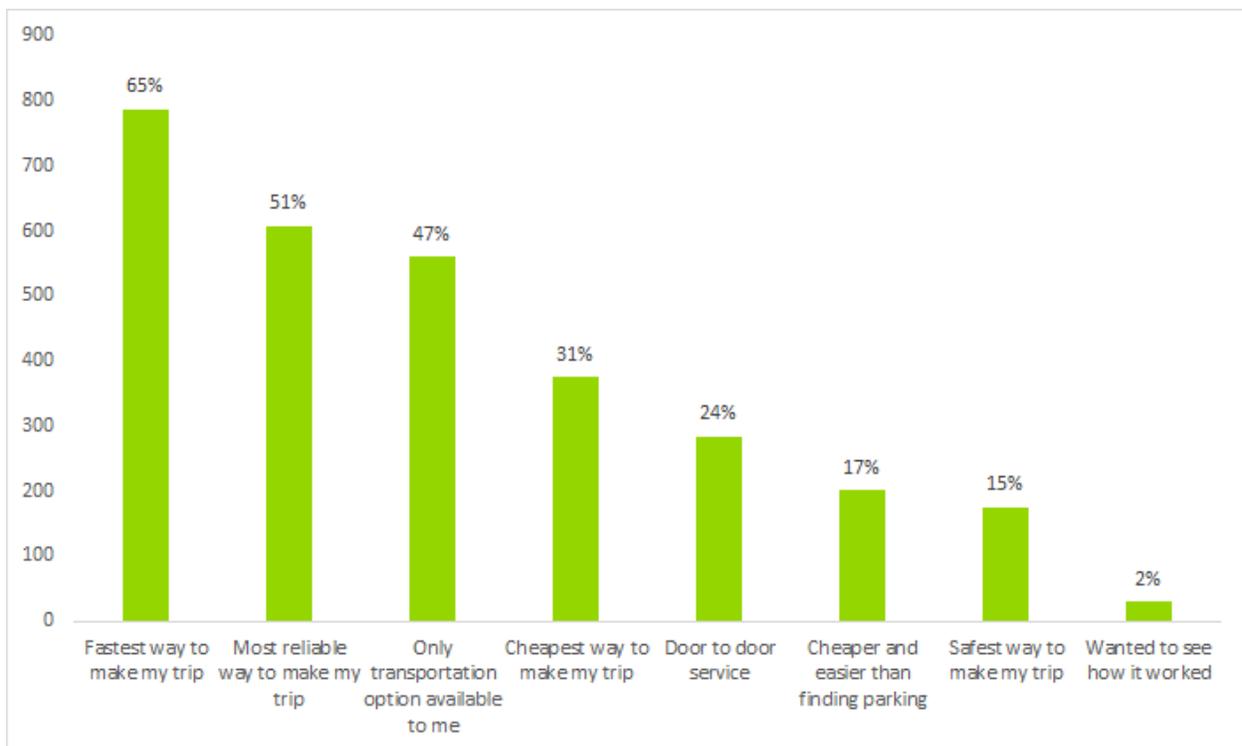
Figure 4 | Modes Used in Prior Month



## Reasons Mode Used

- 65% of survey takers reported that they chose their option because it was the fastest way to get where they wanted to go.
- Other common choices from survey respondents included taking the mode they did because it was the most reliable option (51%) and the only option available to them (47%).
- Fewer respondents suggested being motivated by cost, safety, or a desire for door to door service, suggesting that these are less important to them when making their mode choice decision.
- The results indicate that travel time and reliability are the two primary drivers for mode choice, but also that a lack of modal options is a major consideration. Cost and directness/ease of use also plays a meaningful role in mode choice.

Figure 5 | Reasons for Choosing Mode

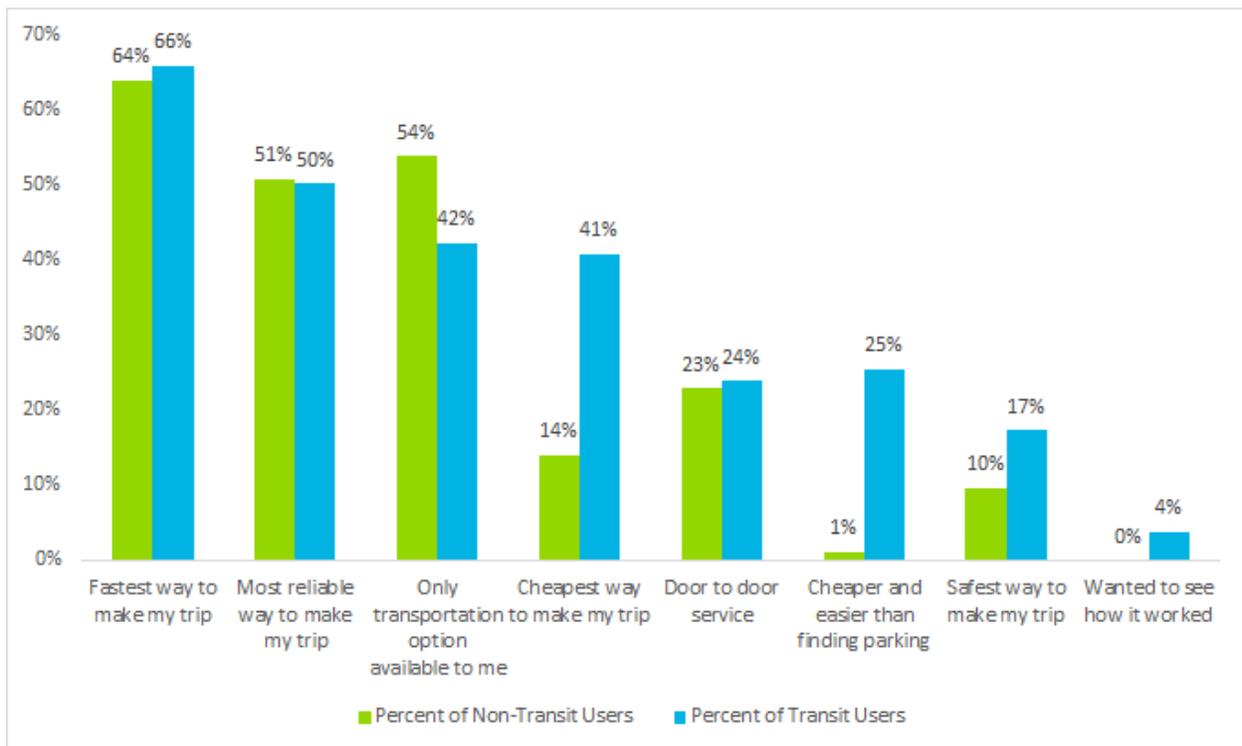


### Breakdown by Mode Used

769 of the 1202 survey respondents (64%) reported using a mode other than a private automobile in the previous month. To better understand motivations for using public transit, the responses for this question were broken down by whether or not respondents used a mode other than private auto.

- The two most common responses were chosen by nearly identical percentages of transit-users and non-transit users: 66% of transit users and 64% of all respondents reported that the mode they used was the fastest one for their trip, and 50% of transit users and 51% of non-users reported that the mode they used was the most reliable way to make their trip.
- Transit users were somewhat less likely to report that the mode they chose was the only option available to them (42% of transit users, versus 54% of non-users)
- Transit users were more likely to report that their option was the cheapest way to make their trip (41% versus 14% of non-transit users), and that their mode was cheaper and easier than finding parking (25% of transit users, versus 1% of non-users).
- These results suggest that both transit and non-transit users prioritize speed and reliability when making their mode choice decisions, and that non-transit users are more likely to see themselves as having no other options, while transit users tend to be more cost-conscious.

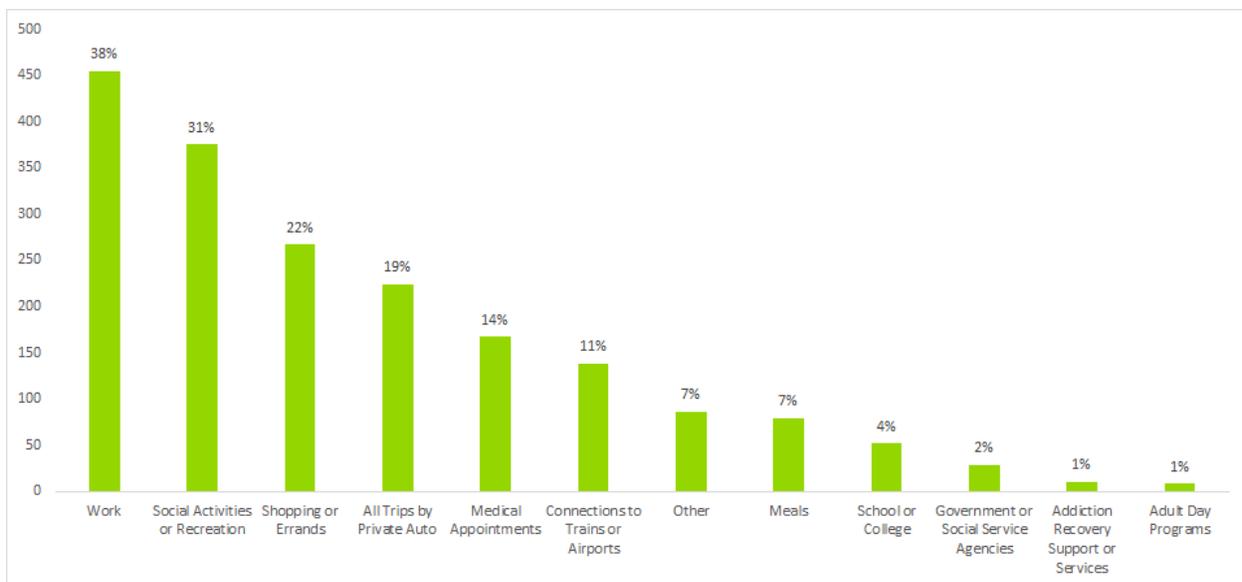
Figure 6 | Mode Choice Reasons Breakdown by Mode Choice



## Purposes of Transit Trips

- Among users of various transit modes, the most common trip purpose was to get to work (38% of respondents), followed by social activities or recreation (31%) and shopping or errands (22%).
- Nearly one in five respondents (19%) reported taking all trips by private automobile.
- 7% of respondents used modes other than private autos for trip purposes not listed here. Respondents were asked to specify if they chose other: the most common responses provided there included volunteering, getting to or from a location where their car was being serviced, going to bars, and walking or biking for recreation or exercise.
- These results indicate that Vermont transit users are most likely to be riding to get to work, but that social activities and shopping trips also make up a substantial portion of transit trips.

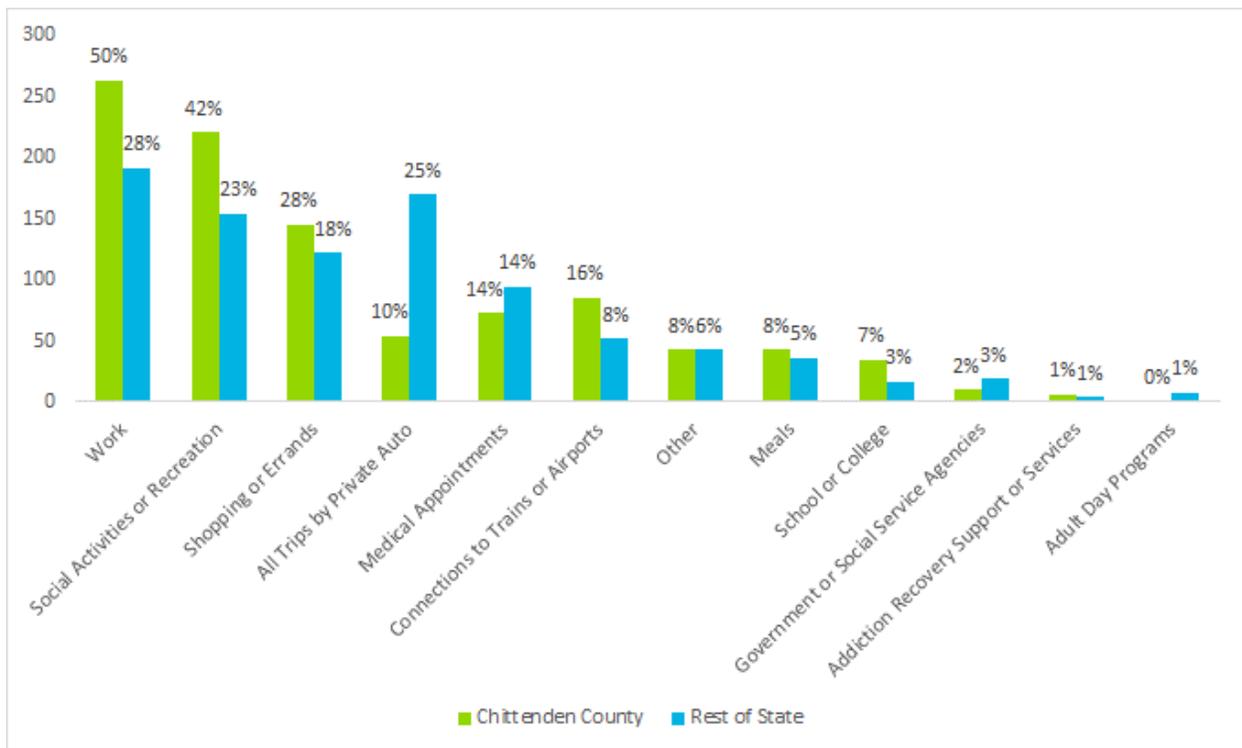
Figure 7 | Trip Purposes



### Purpose Breakdown by Location

- Chittenden County residents used transit for different purposes than Vermont residents as a whole. Half of respondents from Chittenden County used transit to get to work, as compared to 28% of other Vermont residents, and 42% of Chittenden County respondents used transit for social activities or recreation, while just 23% of other Vermonters did. Chittenden and non-Chittenden riders used transit for medical appointments at about the same rate.
- Chittenden County respondents reported making all trips by private auto at less than half the rate of other respondents: 10% of Chittenden responses reported making all trips by private auto, while 25% of other Vermonters did.
- Chittenden County respondents were equally or more likely to use transit than residents of other areas for every trip purpose listed except for trips to government or social service agencies and adult day programs, both of which were by less than 5% of all respondents.

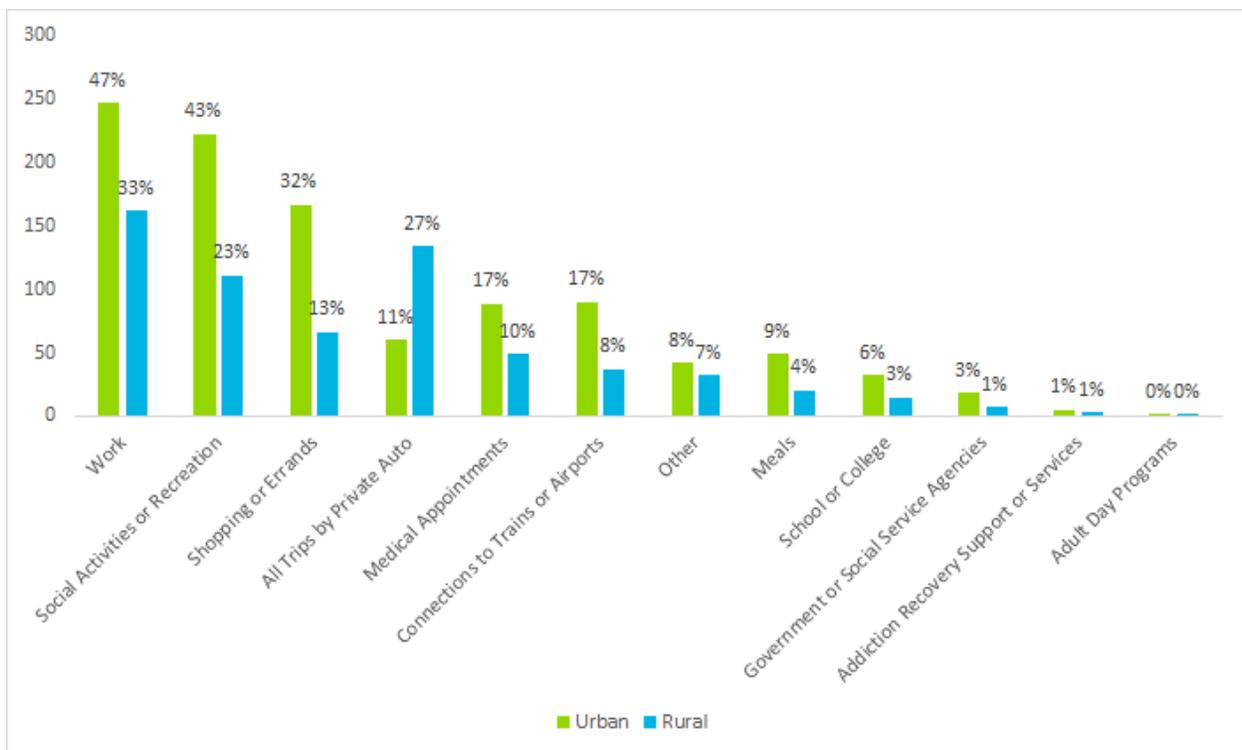
Figure 8 | Trip Purposes Breakdown by Location



### Urban-Rural Purpose Breakdown

- There were many more urban transit users than rural ones, and these users checked off more types of trip purposes. As a result, urban residents were more likely than rural residents to use transit for every purpose provided, both in absolute numbers and in percentage.
- The greatest differences between urban and rural transit users can be seen in the social activities/recreation purposes and the shopping/errands purpose. The higher level of bus service available in urban areas makes these types of trips more convenient and possible compared to rural areas. Trips to medical appointments are more evenly balanced between urban and rural transit users.
- Rural residents were more than twice as likely than urban residents to report taking all of their trips by private car (27% of rural residents, as opposed to 11% of urban residents), but a substantial majority of both rural and urban dwellers reported using transit for at least one trip.

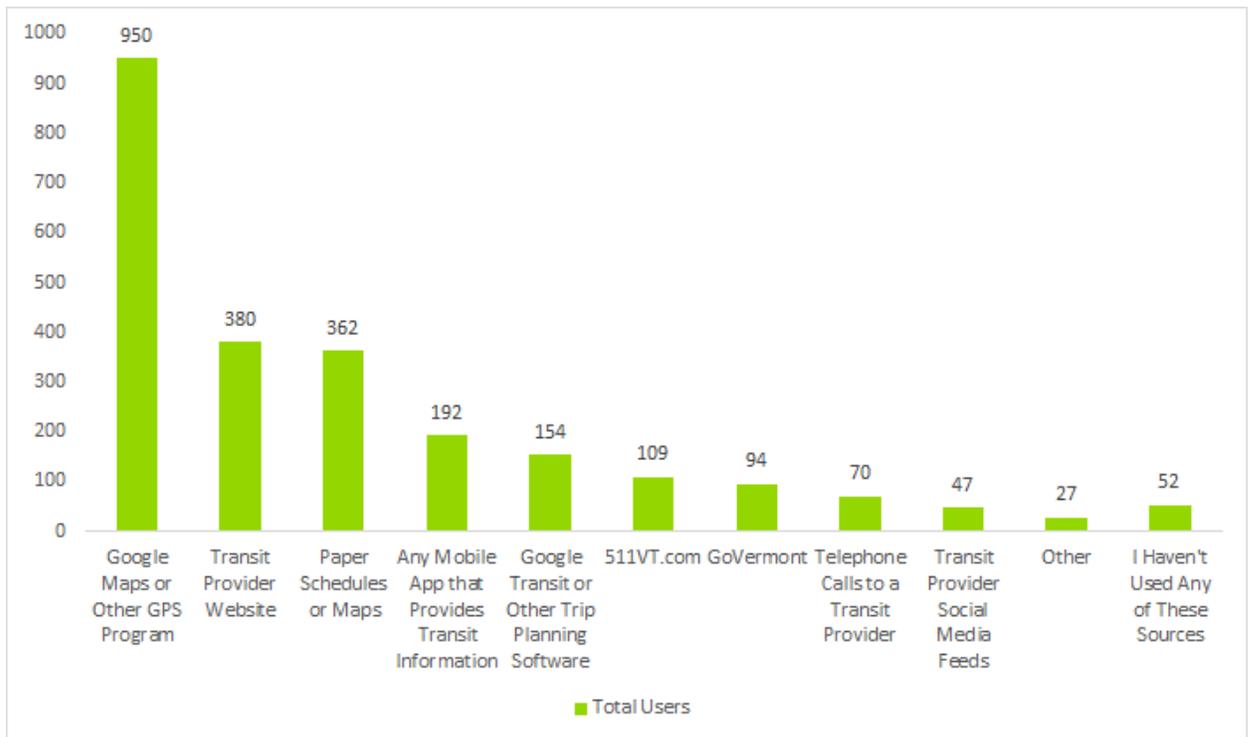
Figure 9 | Trip Purposes Urban-Rural Breakdown



## Information Sources

- Google Maps was by far the most commonly used source of information about transportation, cited by more than twice as many survey respondents as any other source of information.
- The other two most commonly used sources of information about transit included transit provider websites and paper schedules or maps.
- Respondents recorded similar levels of satisfaction with all sources of information, with users of every source ranking their helpfulness between 49% and 65%.

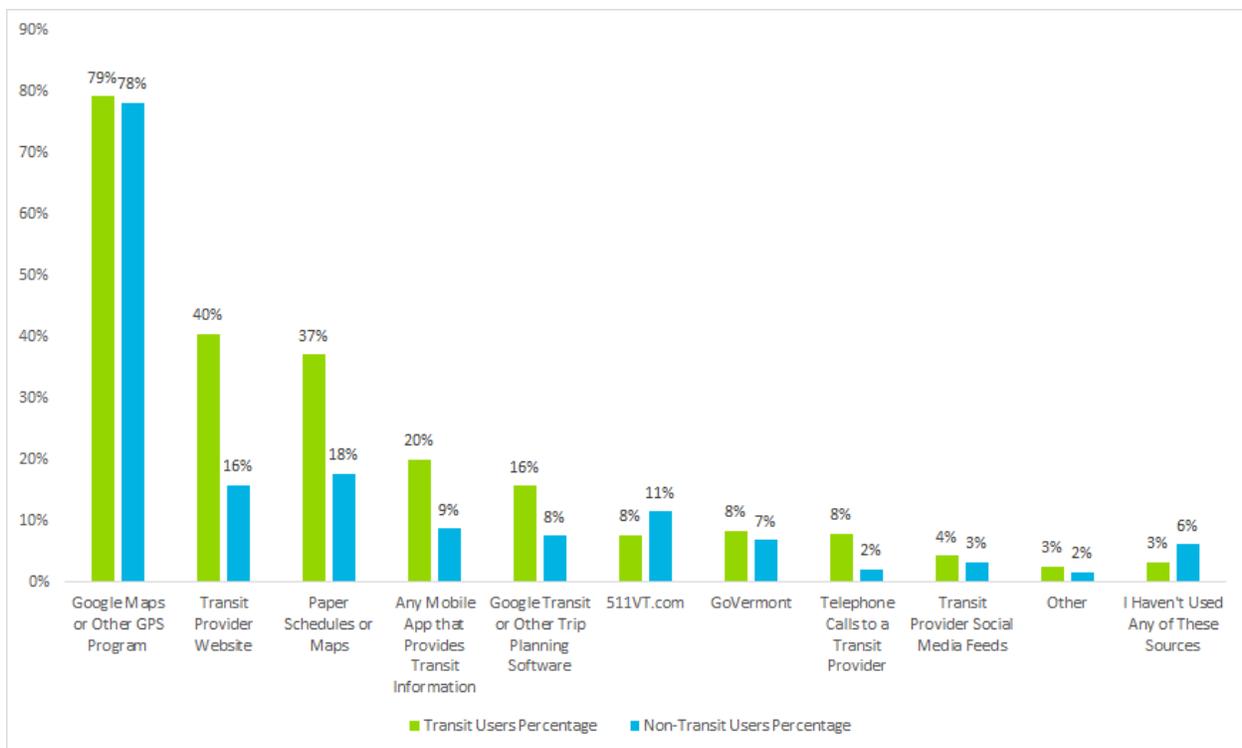
Figure 10 | Information Sources



### Breakdown by Mode Choice

- Transit users and non-transit users were equally likely to report using Google Maps or a similar GPS program to get travel information (79% of transit users and 78% of non-transit users).
- Transit users were significantly more likely to report using information sources published by transit providers, including transit provider websites (40% vs. 16%), paper schedules or maps (37% vs. 18%), and telephone calls to a transit provider (8% versus 2%). The sole exception was transit provider social media feeds, which were used by very few respondents. Transit users were also more likely to use trip planning tools such as Google Transit: these sources were used by 16% of transit users and 8% of non-transit users.
- Non-transit users were more likely to report using 511VT.com (11% of non-transit users, as opposed to 8% of transit users), and also to report having used none of the listed sources of information (6% of non-transit users, versus 3% of transit users).

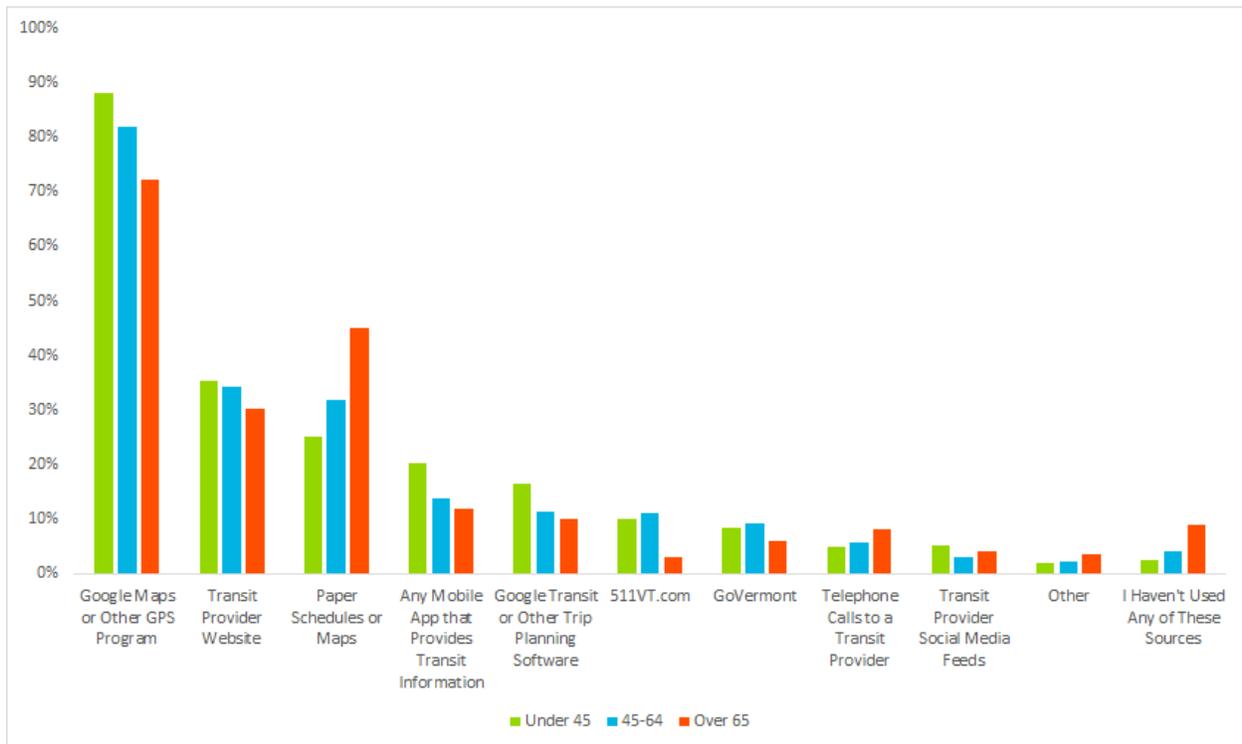
Figure 11 | Information Sources Breakdown by Mode Choice



### Breakdown by Age

- Respondents under the age of 45 (38% of all respondents<sup>1</sup>) were most likely to use Google Maps or a similar GPS program (88% reported using this source of information, as compared to 82% of respondents between 45 and 64, and 72% of respondents over the age of 65), as well as mobile apps (20% of respondents, versus 14% of respondents between the ages of 45 and 64 and 12% of respondents over the age of 65) and Google Transit or other trip planning software (17% of under 45s, compared to 11% of respondents between 45 and 65 and 10% of respondents over the age of 65).
- Respondents between the ages of 45 and 65 (35% of survey respondents) were most likely to use both 511VT.com (11% of respondents in this age range, compared to 10% of under 45s and 3% of over 65s) and GoVermont (9% of respondents in this age range, compared to 8% of under 45s and 6% of over 65s).
- Respondents over the age of 65 (14% of all respondents) were most likely to use paper schedules or maps (45% of over 65s, compared to 32% of 45-64 respondents and 25% of under 45s), as well as telephone calls to a transit provider (8% of over 65s, compared to 6% of 45-64 respondents and 5% of under 45s). They were also most likely to report having used non of the provided sources of information.

Figure 12 | Information Sources Breakdown by Age

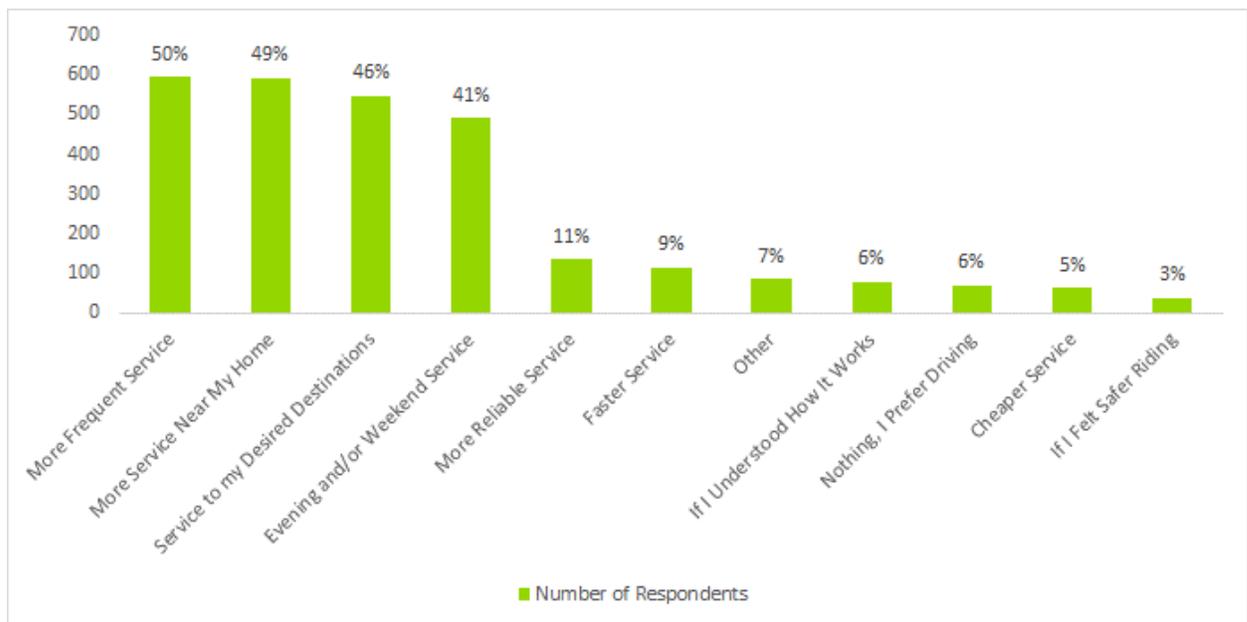


<sup>1</sup> 13% of survey respondents did not provide an age

## Improvements to Transit

- The most popular desired improvements to transit included more frequent service (50% of respondents), service closer to homes (49%) and desired destinations (46%), and evening and weekend service (41%).
  - The responses all indicate a desire for transit that is more convenient (frequency, proximity, and span of service)
- No other proposed improvement received more than 11% of respondents' votes.
- Only 6% of survey respondents responded that none of the improvements would encourage them to drive less, suggesting that providing more and higher quality transit service would draw additional users.
- Respondents who chose “other” were provided a text box to add their own suggested improvements. The most common “other” responses included early morning service, more and bigger park and rides, and an app to provide real-time bus arrival information.

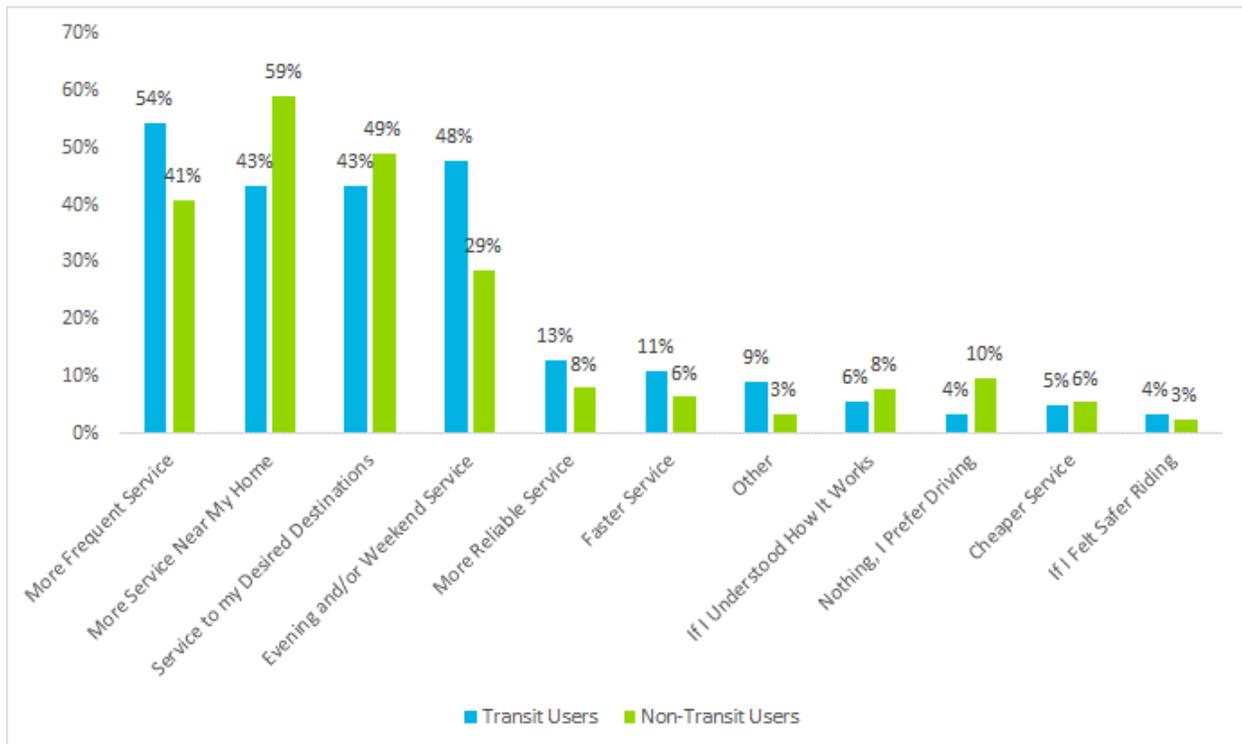
Figure 13 | Desired Improvements to Transit



### Breakdown by Transit Use

- Respondents who reported using no modes other than private automobile were most likely to express a desire for more service near their homes (59% of respondents) and service to their desired destinations (49%). This suggests that a key barrier for many respondents who only drive is a lack of service where they need it.
- Respondents who already use some type of transit were most likely to express a desire for more frequent service and more evening and/or weekend service, suggesting that many existing transit users would use transit more often if it had greater frequency or a longer span of service.
- In spite of travel time and reliability ranking first and second as the most important reasons for choosing their mode of travel (see Figures 5 and 6), these two items rank much lower than the frequency, coverage and span elements in this question. This suggests that existing transit services that the respondents use are already satisfactory in terms of travel time and reliability, and so improvements in those factors would not alter their travel choices. Rather, people are looking for more service when and where it is not already offered as the most significant inducement to use transit more often.

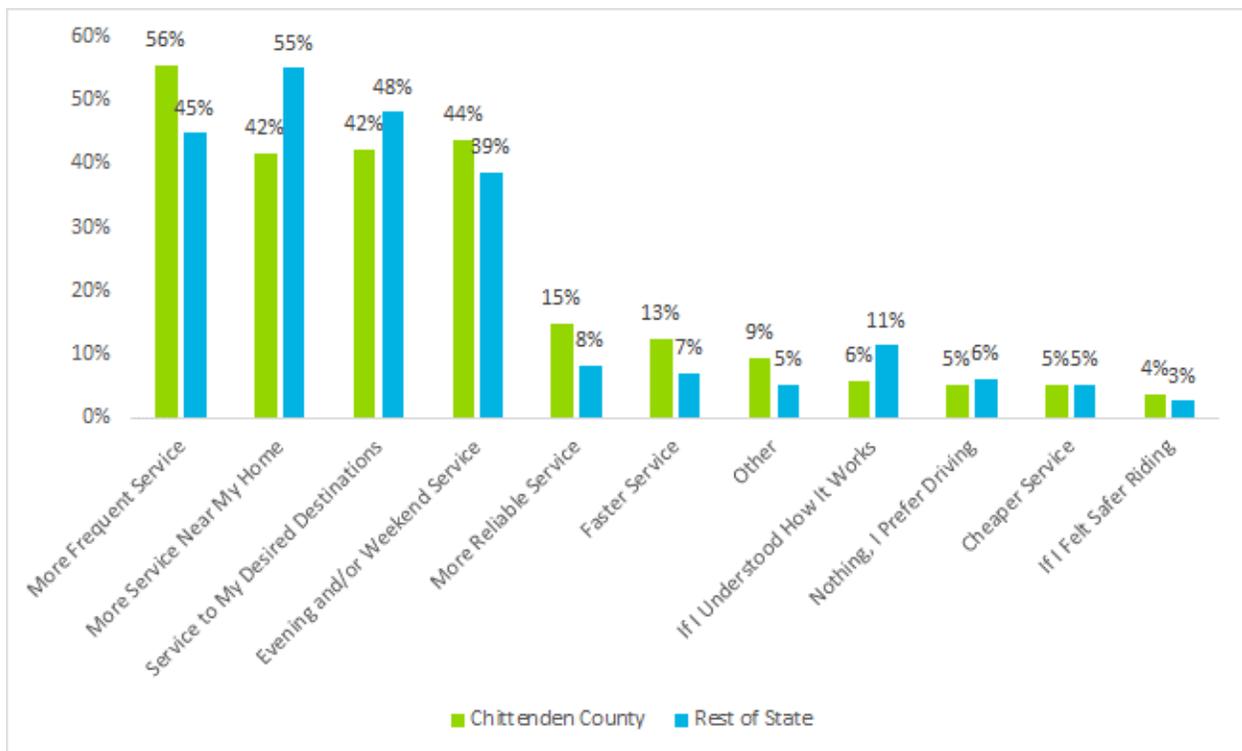
Figure 14 | Desired Improvements to Transit Breakdown by Mode Choice



### Breakdown by Location

- There are small but notable differences between the desired transit improvements preferred by Chittenden County residents versus residents of other counties in Vermont
- Chittenden County residents were somewhat more likely to want more frequent service (56% chose this, as opposed to 45% of respondents from elsewhere), and also slightly more likely to want evening or weekend service (44% of Chittenden responses versus 39% of other responses), more reliable service (15% of Chittenden responses versus 8% of responses from elsewhere), and faster service (13% of Chittenden responses versus 7% of all responses).
- Residents outside of Chittenden County were somewhat more likely to report a preference for more service near their homes (55% of non-Chittenden responses, as opposed to 42% of Chittenden responses), and service to desired destinations (48% of non-Chittenden responses, as opposed to 42% of Chittenden responses).
- Thus, the main issue outside of Chittenden County is service coverage, while within Chittenden County, coverage is less of an issue, but people would like the level of service to be higher.

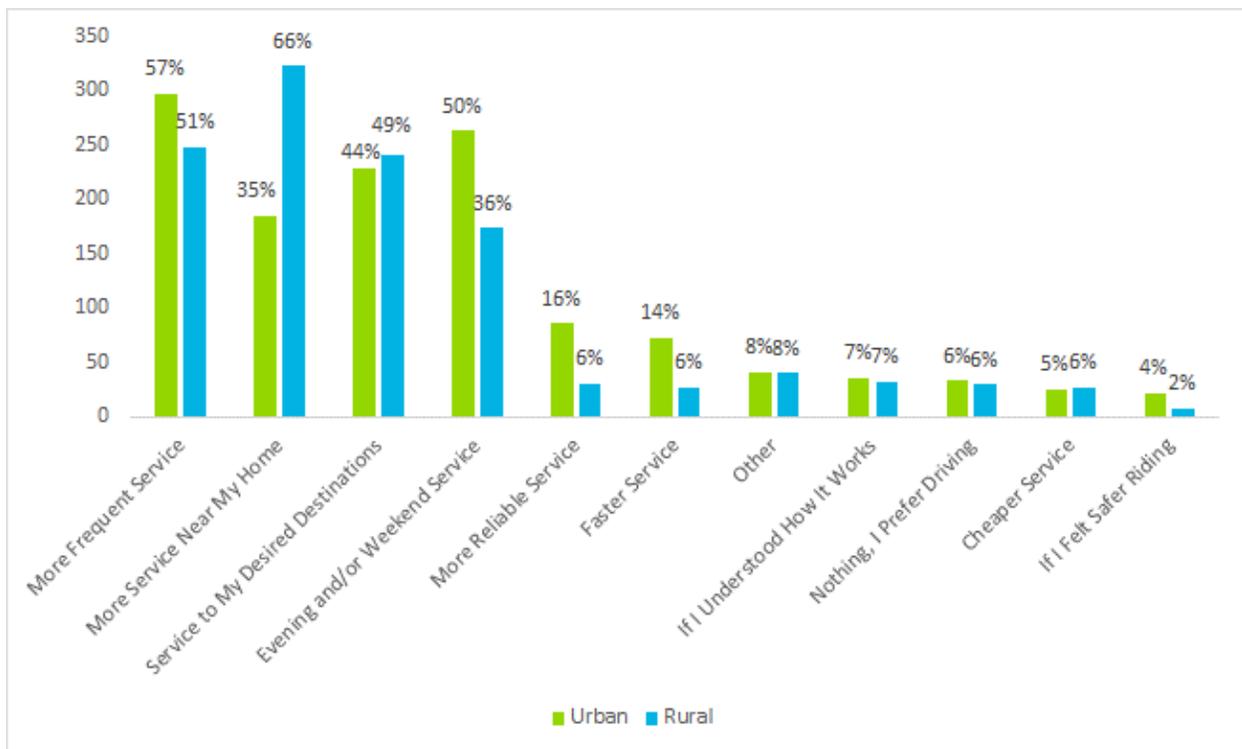
Figure 15 | Desired Transit Improvements Breakdown by Location



### Urban-Rural Breakdown

- There are small but notable differences between the desired transit improvements preferred by urban and rural Vermonters. These are similar to the Chittenden/non-Chittenden differences, but more pronounced.
- Rural Vermonters were far more likely than urban residents to want more service near their home (66% of rural residents, as opposed to 35% of urban residents) and somewhat more likely to want more service to their desired destinations (49% of rural residents versus 44% of urban residents). This suggests that rural residents see a need for greater transit coverage in their community, while urban residents recognize that they already have some service coverage.
- Urban Vermonters were more likely to want more frequent service (57% of urban Vermonters versus 51% of rural Vermonters), and significantly more likely to want more evening and/or weekend service (50% of urban residents, as opposed to 36% of rural residents) and more reliable service (16% of urban residents versus 6% of rural residents).
- Rural residents are most concerned with having any service at all, while urban residents are more concerned with upgrading the service they already have.

Figure 16 | Desired Transit Improvements Urban-Rural Breakdown

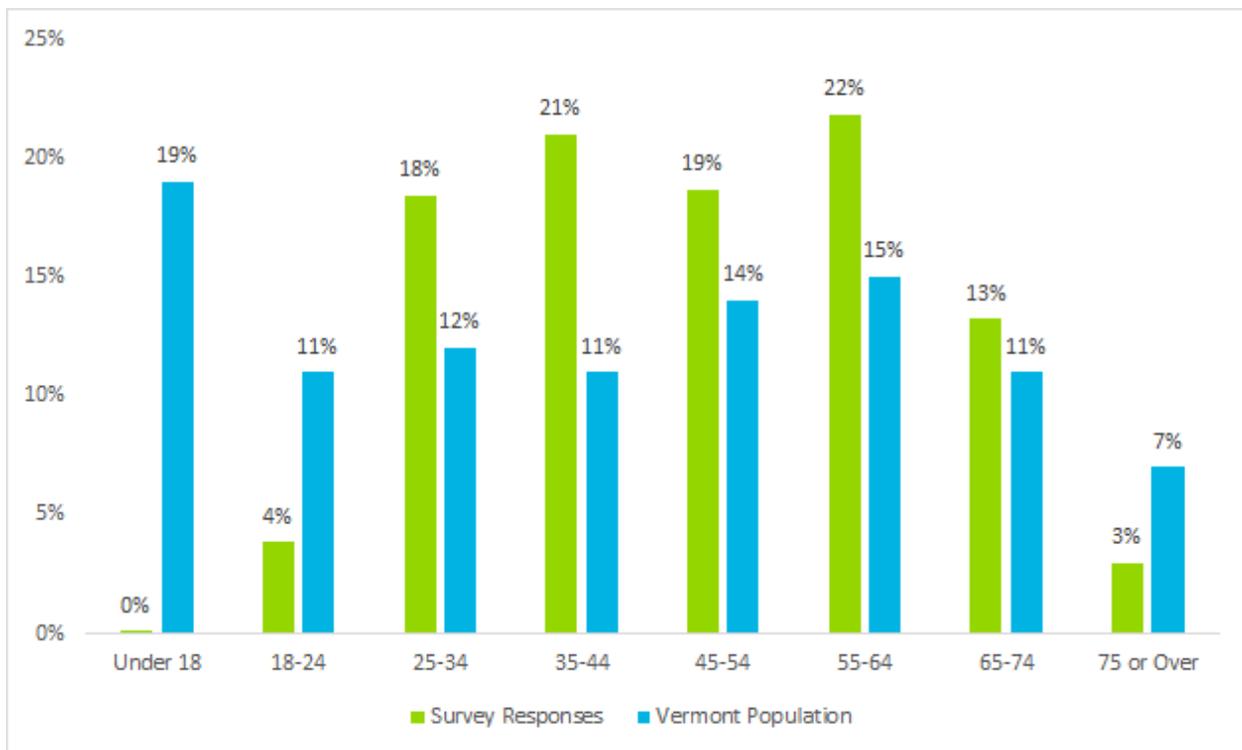


## Survey Demographics

### Age

- The survey was not very representative of the age distribution in Vermont, with the middle of the age spectrum overrepresented in the survey, and the outer ends of the spectrum underrepresented. Children under 18 were not allowed to participate in the survey, and it is understood that people over 75 would be less likely to participate in an online survey. (Paper forms were made available to some organizations, but none of these were filled out in the end.)
- Most seniors who completed the survey were under 75, as only 3% of survey takers were 75 or older, while 13% of survey takers were between the ages of 65 and 74. Per the 2017 ACS, 18% of Vermont residents are over the age of 65, while 7% are over 75.
- Very few young people participated in the survey: Only 4% of respondents were under the age of 25. Per the 2017 ACS, 19% of Vermont residents are under the age of 18, and 30% are under the age of 25. This was likely a result of the lack of awareness of the survey, rather than a reluctance to participate in an online activity.

Figure 17 | Age of Survey Respondents



## Location

- Besides the overrepresentation of Chittenden County residents (discussed earlier), Windham County was the only other county whose residents were overrepresented in the survey sample, making up 13% of respondents and 7% of the state’s population. 16% of survey respondents did not provide a location, or provided a location outside the state of Vermont. All other counties were either proportionately represented or under-represented in the survey sample. Most notably underrepresented counties included Rutland County (2% of survey takers, 10% of Vermont’s population) and Franklin County (1% of survey respondents, 8% of all Vermonters.)
- At least one resident of 136 different Vermont towns completed the survey. The top ten towns by responses are shown in Figure 19

Figure 18 | Location of Survey Respondents by County

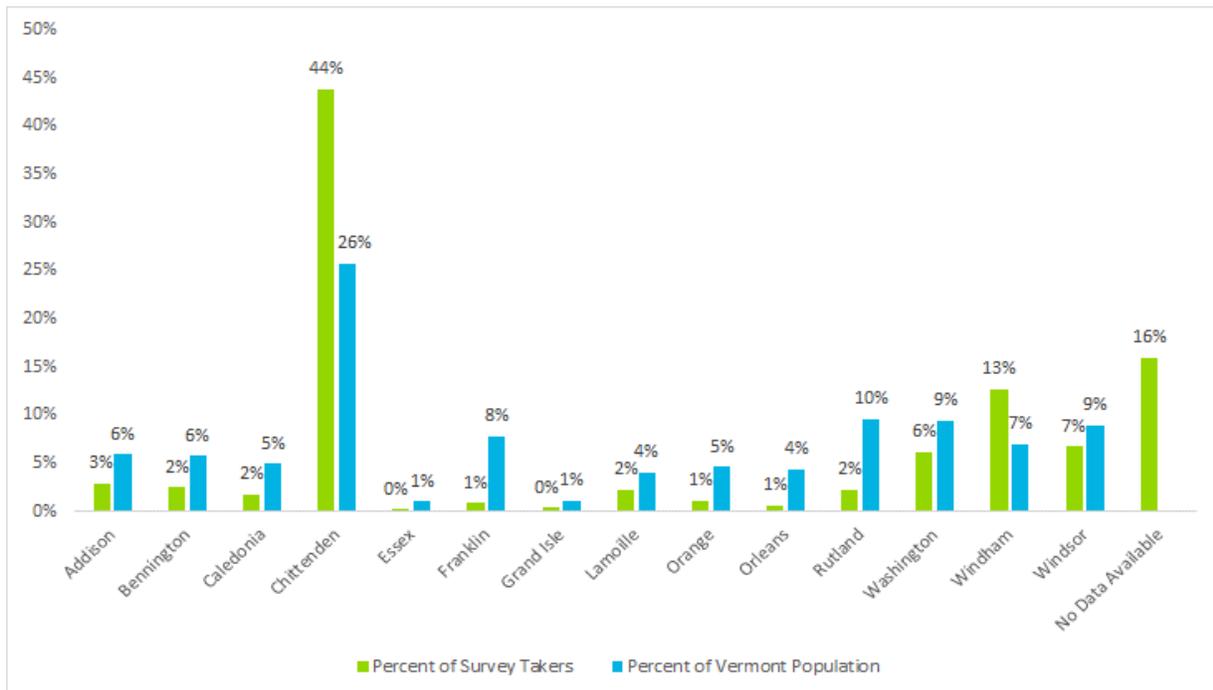
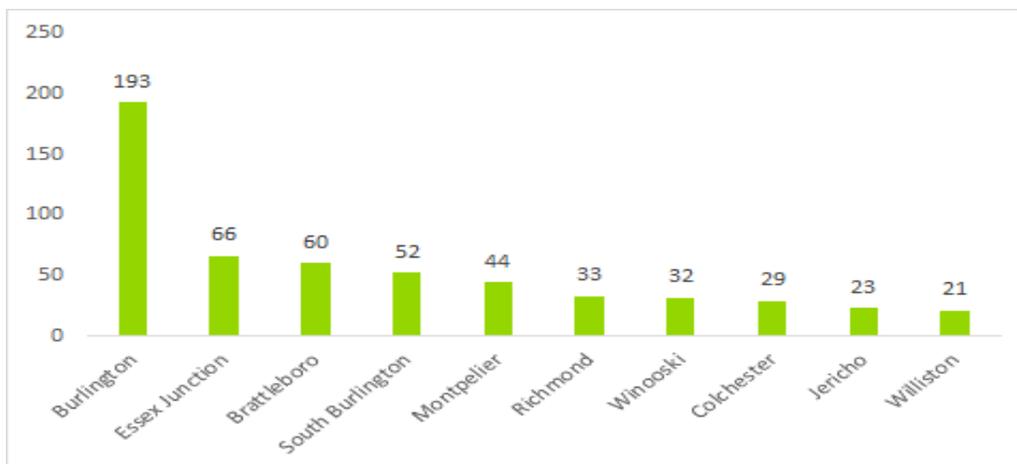


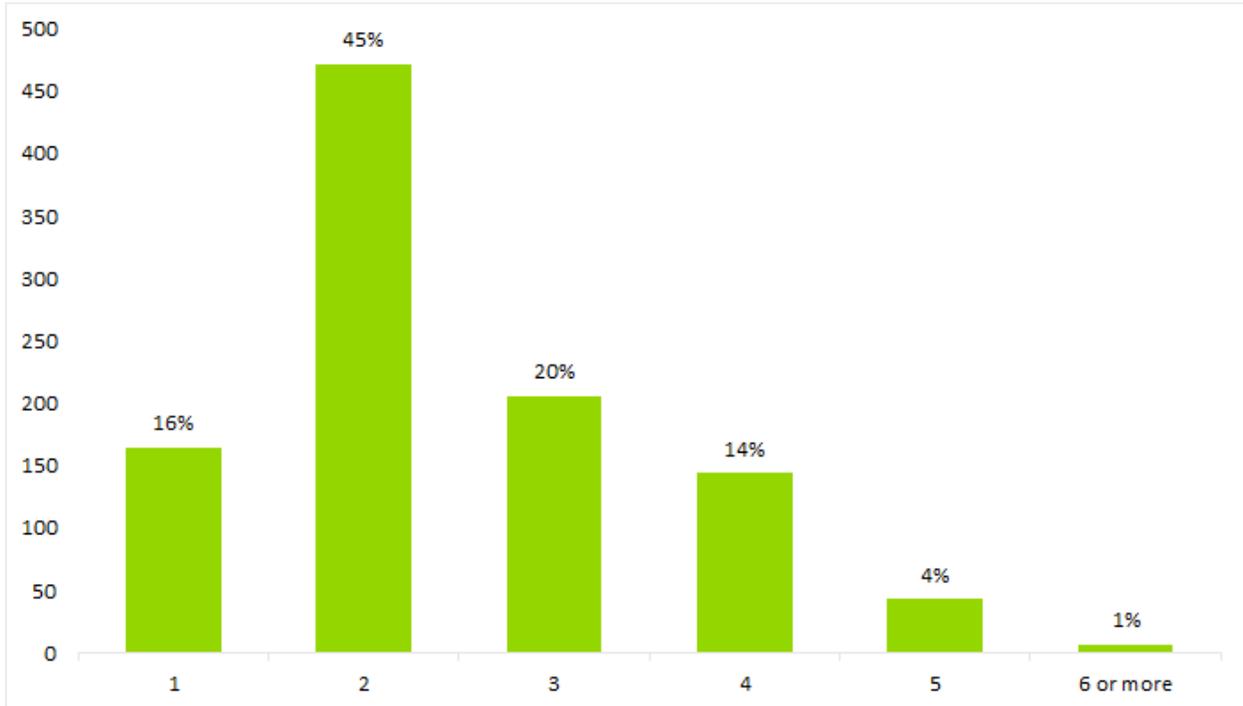
Figure 19 | Top Ten Towns for Survey Respondents



### Household Size

- A plurality of survey takers (46%) live with one other person, and another 20% live with two other people.
- Roughly one in six (16%) of respondents live alone
- Only 5% of respondents live with more than three other people.

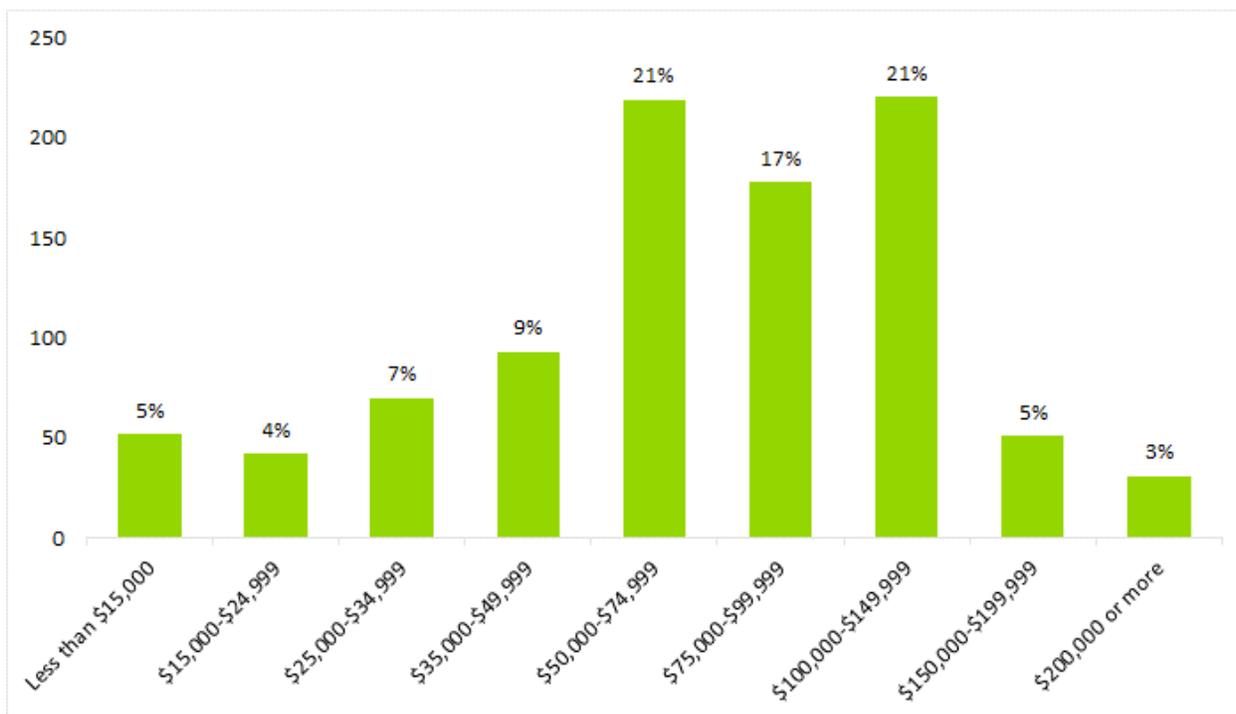
Figure 20 | Household Size of Survey Respondents



### Household Income

- 59% of survey respondents who provided an income listed an income between \$50,000 and \$150,000.
- 8% of survey respondents reported an income over \$150,000 per year, as compared to 9% reporting an income below \$25,000 per year
- The median income, among people who reported income in the survey, was about \$75,000. The median household income in Vermont for 2017 was \$76,560, so the survey is broadly representative of the population by income. However, at a finer level of detail some income groups are underrepresented while others are overrepresented.
- The lowest income categories are underrepresented in the survey (30% of the households in Vermont have incomes under \$35,000, but only 16% of survey respondents did), while the middle to upper-middle categories are overrepresented (47% of households have incomes from \$50,000 to \$150,000, but 59% of survey respondents did).

Figure 21 | Household Income of Survey Respondents



## Access to Vehicles

- A plurality of survey respondents (47%) live in two-car households.
- More respondents live in a one-car household (32%) than in a household with more than two vehicles (25%)
- Only 4% of survey respondents reported owning more than three cars.
- Zero cars was not an option in the survey, though 6% of respondents did not answer, and they may represent households with zero cars. Indeed, 7% of Vermont households had zero cars available in 2017, 35% had one car available and 40% had two cars available, so the survey is fairly representative of the Vermont population on this characteristic.

Figure 22 | Automobile Access of Survey Respondents

