



THE
I-81
CHALLENGE

Syracuse Transit System Analysis

Public Survey Results

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CHAPTER 1 – Introduction

The I-81 Challenge presents an opportunity to evaluate and improve the future of the transportation system in the Syracuse metropolitan area for all modes and users. Therefore, as part of *The I-81 Challenge* project, Stantec was tasked with conducting a transit system analysis for the Syracuse metropolitan area. The purpose of the transit system analysis component of *The I-81 Challenge* Study is to identify key corridors for potential improvements and establish a project justification for the improvements that would allow CENTRO to pursue FTA Small Starts or Very Small Starts funding. The transit system analysis will evaluate improvements that address a wide variety of transportation system, land-use, and parking needs that were identified through various studies including *Tech Memorandum #1: Physical Conditions Analysis*, completed by Stantec as part of *The I-81 Challenge* project, and SMTC's *University Hill Transportation Study*, among others. These needs include:

- Reducing congestion within the City, particularly along corridors adjacent to I-81 and I-690;
- Facilitating sustainable economic development within the City, including the planned development in University Hill;
- Reducing parking demand in Downtown and on University Hill;
- Examining the feasibility of increasing the frequency and number of hours per day that buses run to Downtown and University Hill;
- Improving connectivity and integration of Downtown with University Hill;
- Increasing transportation options for young, elderly, disabled, and low-income populations;
- Decreasing noise and air pollution generated from traffic; and,
- Improving transit travel times for commuters to be more competitive with vehicle travel time.

Multiple sources of data and information will be utilized to develop a list of needs and functional requirements for the transit system, identify potential corridors for improvements, and evaluate various improvement options in the transit systems analysis. Boarding and alighting data was collected on various routes in 2010, and previous studies have been reviewed to develop the list of needs shown above. Public feedback is another critical source of information that will be used throughout the transit analysis process.

Public outreach is a critical building block for any transit planning project, and is especially crucial when seeking Federal Transit Administration (FTA) funding, such as New Starts, Small Starts, and Very Small Starts. Public feedback must be received at multiple points throughout the planning process to identify transit system needs, identify factors that would enhance or encourage future transit use, and provide feedback on proposed improvements. Public involvement for the transit systems analysis was initiated during the second *I-81 Challenge* public meeting, held on Wednesday, May 9, 2012. A section of the meeting was devoted to

presenting data regarding the existing transit system and displaying case studies that provided an overview of various potential improvements. Meeting attendees could comment on the items that were presented by using sticky notes, or by completing a survey that was distributed to all meeting attendees as they left the transit section.

The results of the surveys and comments received during this initial round of public participation will serve as one of the building blocks to the transit systems analysis, and will be utilized throughout the analysis process. The results will be used to assist in identifying needs, determining areas for transit enhancements, and evaluating enhancement options. In addition, it is anticipated that the results of the transit systems analysis will be used to support a future alternatives analysis, which will then be used to apply for FTA funding. Documentation of public outreach is required for most FTA grants. Therefore, the results of the public comment and survey, along with future public outreach, will also be utilized to fulfill this requirement.

This document details the methodology and results of the comments and surveys associated with the transit component of the public information session. Conclusions obtained from both sources will also be highlighted.

1.1 Public Comment Methodology

As discussed above, meeting attendees could provide feedback regarding the existing transit system and potential future improvements through two main methods: sticky notes on comment boards, and a survey. Comments and surveys were collected during the public information session on Wednesday, May 9, 2012, as well as online through the *I-81 Challenge* website, which was available for a one-month period after the May 9th session.

1.1.1 Comment Boards Methodology

There were a total of four comment boards spread throughout the transit section of the public information session. The first comment board was located after the displays containing information regarding the existing transit system from Tech Memo 1. The comment board prompted meeting attendees to list needs or issues they had for the existing transit system. The second comment board was located after the displays containing information regarding potential transit enhancements. This comment board prompted meeting attendees to comment on the information from the displays and/or to list what amenities or improvements they would like to see within the metropolitan area. The third comment board was located following the Bus Rapid Transit (BRT) displays, and asked attendees to list what they liked or did not like about BRT. Similarly, the fourth comment board was located after the Light Rail Transit (LRT) displays, and asked attendees to list their likes and dislikes regarding LRT.

Sticky notes and pens were provided at each board location. After the completion of the information session, the notes were removed and collected by SMTC. Comments were also

collected during the online component of the public meeting. All comments were summarized by SMTC and provided to Stantec.

1.1.2 Survey Methodology

Paper surveys were distributed to meeting attendees as they exited the transit section of the May 9th public information session. This was done to ensure that meeting attendees observed the displays containing existing condition information and potential improvements, and be better prepared to answer specific survey questions. Online surveys were also collected for a one-month period following the public information session.

Two separate surveys were provided: one for non-riders/former riders, and one for current riders. A “current rider” was considered to be anyone that had used the CENTRO system within the last three months (as of May 9, 2012). A “non-rider” was considered to be anyone that had never used the CENTRO system, and a “former rider” was considered to be anyone that had utilized the CENTRO system on a regular basis in the past, but had not done so within the last three months. SMTC personnel were present to assist meeting attendees in determining which survey would apply to them. Descriptions of each survey were also provided on the project website during the duration of the online version of the public information session.

The non-rider/former rider survey consisted of seventeen (17) questions, of which, thirteen were multiple-choice style, where respondents could choose one or more answers to each question. Seven of the seventeen questions, including some of the multiple-choice questions, contained open-ended response areas. In particular, Question 17 provided a space for respondents to comment or elaborate on transit needs, improvements, or other items that they felt were important. Questions 1 through 8 were designed to obtain basic demographic information including, age, race, income, car ownership, and occupation. Questions 9 through 13 obtained information regarding past transit use (for former riders), as well as reasons why the respondent does not utilize the transit system today. Finally, Questions 14 through 16 were utilized to determine what improvements or other factors would increase the likelihood that the respondent would consider using the transit system.

The rider survey was slightly longer than the non-rider/former rider survey, with a total of 23 questions. Sixteen of the 23 questions were multiple-choice style, in a similar format to the non-rider/former rider survey. There were twelve open-ended questions. Similar to the non-rider/former rider survey, Questions 1 through 9 were designed to obtain basic demographic information including, age, race, income, car ownership, occupation, and length of time using transit. Questions 10 through 16 asked respondents how they utilize the transit system, including types of trips, common destinations, transfers, frequency of transit use, and how they get to/from the transit stops. Finally, Questions 17 through 23 obtained information from respondents regarding their satisfaction with the existing transit

service, what features are most important to them, and what improvements would enhance their transit use.

After the completion of the online component of the public information session, Stantec personnel compiled the results of the survey utilizing an Excel file. Each survey was assigned a number, and the answers for each individual survey were entered into the file. This was important, as it would allow for the review of individual surveys if the need arose in the future. The results of each survey question were then plotted for visualization and reporting. Responses to open-ended questions were summarized and categorized into themes before being displayed on charts or graphs. It should be noted that the graphs and charts prepared for the non-rider/former rider survey show the distribution of answers for each question for non-rider and former rider respondents separately.

1.1.3 Revised Rider Survey

A total of 55 rider surveys were completed, of which, 40 were completed during the public information session, and 15 were completed online. Upon review of the survey results it was determined that the rider survey appeared to provide a very unbalanced representation of the existing transit ridership. Even though the public information session was advertised on CENTRO buses and through various news media, and transit riders were provided with free vouchers to use the system to get to and from the public meeting, transit rider turnout was low.

The unbalanced nature of the survey results was evident in the demographic results as well as in the response to some questions. For example, when asked for reasons why they use transit (Question 10), the respondents most commonly responded that it is “better for the environment”, “more convenient than driving”, and “less stressful than driving”. In addition, over 40% of rider respondents stated that they use the transit system once per month or less, on average. These factors demonstrate that the original rider survey did not reach the average transit rider in the Syracuse metropolitan area.

Following the release of the survey results, it was determined that it would be necessary to conduct additional rider surveys in order to meet the public outreach objective of obtaining useable feedback from current riders that can be applied to the systems analysis. A secondary public survey/outreach effort was planned at the new Downtown Syracuse transit hub. The surveys were revised to consolidate similar questions, correct issues identified with the original survey, and to eliminate unnecessary questions, in order to shorten the survey and make it manageable for people to complete while waiting at the hub. The revised surveys were distributed at the transit hub on Thursday, October 11, 2012 between 7:30 AM and 6:00 PM. Respondents were asked to complete the survey onsite prior to boarding their bus. A mail-in or online options were not provided.

CHAPTER 2 – Comment Board Results

As discussed in the previous section, public information session attendees were provided with sticky notes that could be used to provide feedback at four comment board locations within the transit section. In addition, participants viewing the online version of the public information session could also submit comments directly through the website. SMTC provided Stantec with the comment responses, and an analysis of the responses was conducted. This section will summarize the results of the comment board analysis.

2.1 Transit Needs and Enhancements

2.1.1 Needs

A wide variety of transit system needs were identified by meeting attendees. The most commonly-identified needs include:

- Increased suburban transit options – this includes providing suburb-to-suburb connections, as well as increasing the frequency and operating hours of the entire system;
- Reduced transit travel time through bus stop consolidation and more express bus options;
- Alternative fuels for buses;
- Improved safety at bus stops and on-board;
- Reduced bus fares and free fares for City of Syracuse residents;
- Better connections to other modes of transportation (park-and-rides, airport, and train station), and key destinations (shopping, University Hill, etc.); and,
- Improved on-call transit services.

2.1.2 Concerns

In addition to transit system needs, several meeting attendees expressed concern for transit as a whole in the City of Syracuse. In particular, concern was expressed over the practicality of large-scale transit enhancements due to several factors, including:

- Travel time and convenience advantages of a car;
- Low population density;
- Low ridership on many of the existing routes;
- Local climate; and,
- Current land use.

Other attendees stated that there is a negative perception/stigma associated with the bus system that will be difficult to overcome. In order to increase transit ridership, CENTRO

would have to improve the public image of the system, including improving safety. In addition, concern was expressed over the cost and maintenance requirements for the transit system. It was suggested that CENTRO update the bus system by utilizing smaller buses for routes with a lower ridership.

2.1.3 Desired Transit Service Enhancements

Many of the comments collected during the public information session and online listed a variety of desired transit service enhancements that may help to increase transit use and improve user experience. These enhancements include:

- Rail/light rail service (potential revival and expansion of the OnTrack service);
- Direct connections between key regional destinations;
- Reduced travel time through transit signal priority and consolidated bus stops;
- Bus pull-offs at key stops;
- A monorail system;
- Smaller buses for low-ridership routes;
- Increased frequency and extended service hours; and,
- Improved service to/from Eastwood, along the James and Geddes Street Corridor, to/from Lemoyne and Onondaga Community College, and to/from Downtown Syracuse.

2.2 Transit Amenities

Several comments were collected that dealt specifically with transit amenities that would enhance or increase transit use. These amenities include:

- Better information regarding bus schedules and arrivals (real-time bus tracking, arrival information at major stops, better education, real-time information online or by phone, and better notification of schedule changes and delays);
- Route maps at bus stops;
- Improving and increasing the number and locations of bus shelters;
- On-board wireless internet;
- Better payment options (swipe cards or online payment);
- Improved lighting at bus stops;
- Public restrooms at key stops;
- Bicycle racks at stops and on buses and bus stops at major trail heads;
- Enhanced ADA accessibility; and,
- On-board entertainment.

2.3 Bus Rapid Transit (BRT)

Attendees were also asked to provide their comments regarding BRT. The table below compares common likes and dislikes expressed on the comment boards.

BRT Likes and Dislikes

Likes	Dislikes
More affordable than LRT	More expensive than a typical bus route
Flexible and easier/faster to implement	Not feasible in most areas within current right-of-way (ROW)
Reduces congestion	High maintenance costs
Faster travel time	Maintains dependency on fossil fuels
Environmentally friendly	Cannot be supported with existing population densities
Routes are easy to understand	Less-attractive than light rail/not aesthetically pleasing
More feasible than light rail, and if successful could be upgraded to light rail in the future	Buses would be too slow
Promotes economic development along routes	

In addition to likes and dislikes, some comments dealt directly with potential routes for a BRT system. Recommended routes include:

- Erie Boulevard;
- Salina Street; and,
- Suburban connections.

2.4 Light Rail Transit (LRT)

Attendees were also asked to provide their comments regarding LRT. The table below compares common likes and dislikes expressed on the comment boards.

LRT Likes and Dislikes

Likes	Dislikes
More attractive than buses	Expensive
Promotes economic development along routes	Transit demand could not support LRT/unrealistic solution
Historic/aesthetic value	Inflexible routes
Faster travel time	Not appropriate for weather conditions in Syracuse
Environmentally friendly – reduces fossil fuel consumption	Possible negative impacts on local traffic safety and congestion
Routes are easy to understand	
Can utilize existing rail infrastructure	
Has a proven track record of economic benefits	

Similar to the BRT comment boards, meeting attendees recommended routes and destinations for LRT implementation. These routes and destinations include:

LRT Destinations

- Downtown
- Syracuse University
- Hospitals
- Carousel Mall
- Carrier Dome
- Transportation Center
- Airport
- Ball Park
- Regional Market
- Jamesville Beach
- Eastern Suburb

LRT Routes

- I-81
- I-690
- Salina Street
- Erie Boulevard
- Euclid Avenue
- Genesee Street
- Crouse Avenue
- James Street
- West Onondaga
- South Avenue
- Grant/Butternut Street

2.5 Comment Board Conclusions

The comment boards provided public information session attendees and online participants with the opportunity to provide feedback regarding the existing transit system, as well as future improvements/enhancements. Meeting attendees provided valuable feedback regarding enhancements and amenities that they would like to see. Overall, providing more user information, including real-time arrivals, wireless internet, improving connections between key destinations, improving travel time, increasing operational hours and frequency, and improving safety were among the most common comments received. In general, there is favor for both BRT and LRT options; however, LRT is seen as more attractive.

The majority of comments were positive toward transit improvements; however, there were a number of comments that expressed concern over the practicality and viability of transit in the Syracuse metropolitan area, particularly large-scale improvements such as BRT or LRT.

CHAPTER 3 – Survey Results

A total of 500 rider and non-rider surveys were collected, of which 46 were completed online, 183 were completed at the public meeting, and 271 were completed in the secondary collection effort at the Downtown transit hub. This represents a response rate of 43% for surveys distributed at the public information session on May 9th, and a response rate of 18% for those who viewed the online version of the information session. This section will present the results of each survey.

3.1 Non-Rider/Former Rider Survey Results

A total of 174 non-rider and former rider surveys were completed. Of the 174 surveys, 31 were completed online. 124 respondents indicated that they were ‘non-riders’ and had never used the CENTRO transit bus system. 50 respondents indicated that they were ‘former riders’, meaning they do not currently use transit, but had in the past. The results were divided into two categories: non-rider and former rider.

3.1.1 Assessment of Results

Prior to analyzing the results of any survey, it is necessary to assess the results and determine if there are any limitations. Therefore, Stantec reviewed the results of the survey, particularly the demographics of the respondents, to assess how the results of the survey should be used. In general, the demographic results show a strong correlation to the demographics of the public information session attendees. The majority of the respondents were older (45 to 65), made at least \$50,000 per year, and had white-collar occupations, which represents the anticipated “average” non-transit user in the Syracuse metropolitan area. However, several limitations were noted.

The distribution of age of respondents was skewed heavily to an older demographic. This was to be expected, based on the typical public information session attendee; however, it is possible that non-riders in a younger demographic may prioritize transit system needs and improvements differently. In addition, over 90% of the respondents were white, and minority representation in this survey was very limited. Reaching out to potential respondents of varying ages and races may help to balance the results of the survey. However, despite the limitations, it is our opinion that the results of this survey would provide a valuable insight into reasons why respondents are not using transit, and potential measures that may increase transit use.

3.1.2 Summary of Results

Question 1: Home Address

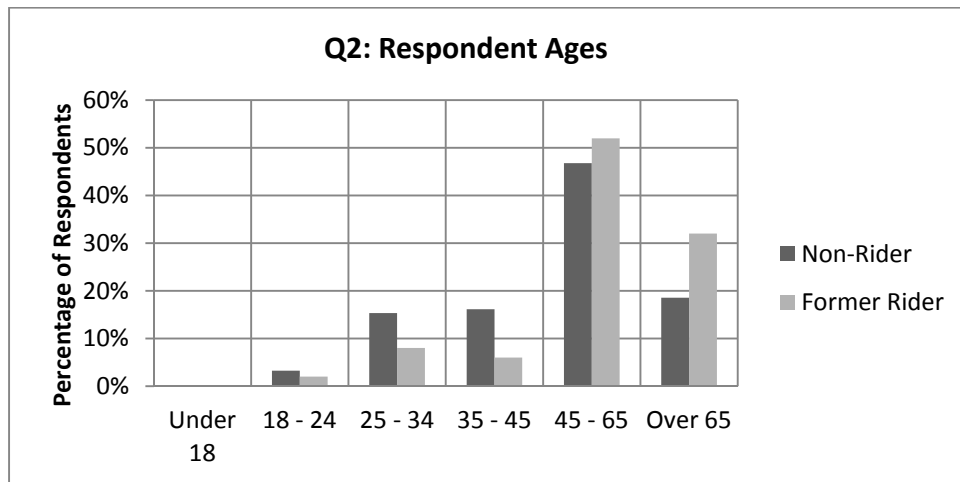
Most non-rider and former rider respondents live in the City of Syracuse, but a substantial portion of respondents are spread among other areas in the region. A total of 67 respondents live in Syracuse, with the remaining persons originating in the cities shown below.

Q1: Location of Residence

City	No. of Respondents	Percentage
Syracuse	67	54%
Other	16	13%
Dewitt	7	6%
Liverpool	5	4%
N. Syracuse	4	3%
Manlius	4	3%
E. Syracuse	2	2%
Cazenovia	3	2%
Camillus	2	2%
Fayetteville	2	2%
Lafayette	2	2%
Baldwinsville	3	2%
Tully	2	2%
Marcellus	2	2%
Jamesville	1	1%
Clay	1	1%

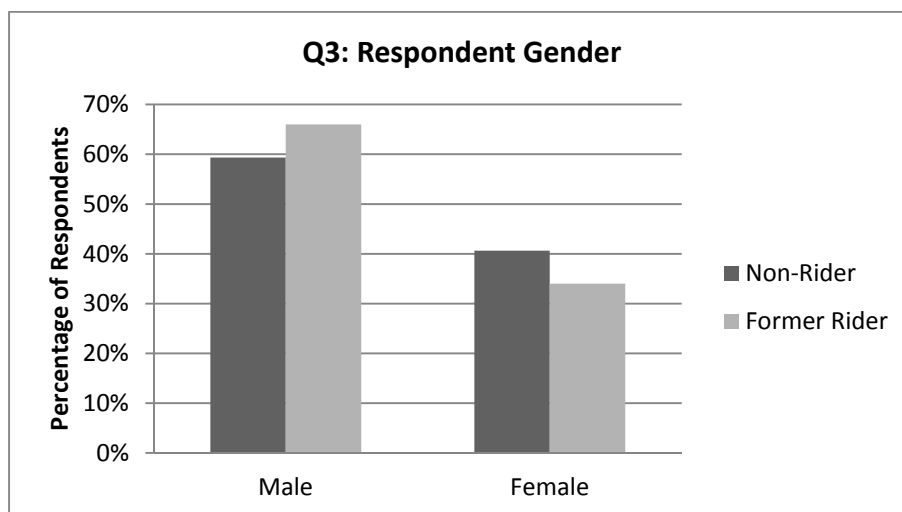
Question 2: What is your age?

The majority of non-rider (47%) and former rider (52%) respondents were between the ages of 45 and 65. This corresponds to the median age of those who attended the public meeting. The remaining non-rider respondents' ages were split almost evenly between the ages of 25 and 45, and over 65. Only four of the non-rider respondents were between the ages of 18 and 24, and none were under 18 years old. The majority (32%) of the remaining former rider respondents were over the age of 65.



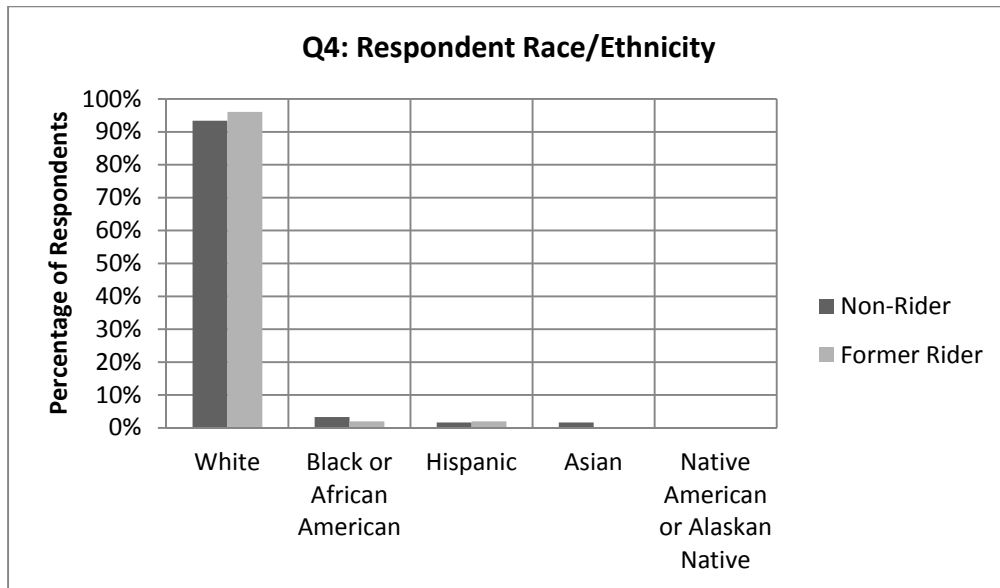
Question 3: Gender

There were more male non-rider and former rider respondents than there were female. Approximately 59% and 66% of non-rider and former rider respondents were male, respectively.



Question 4: Race/Ethnicity

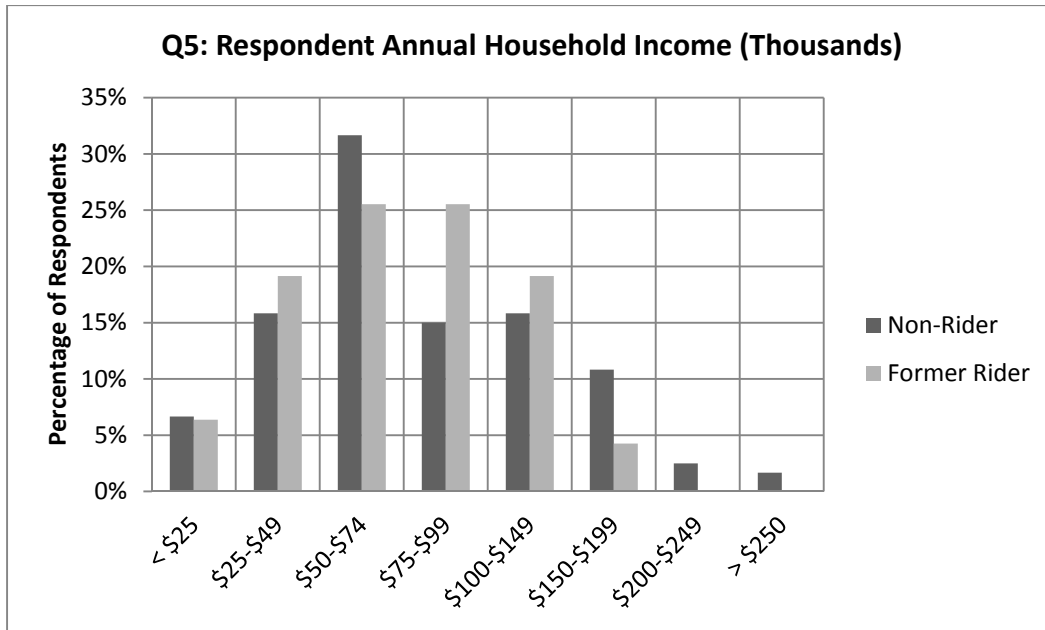
The majority (an average of 95%) of respondents in both categories were Caucasian. Five respondents were Black, three were Hispanic, and two were Asian.



Question 5: What is your annual household income?

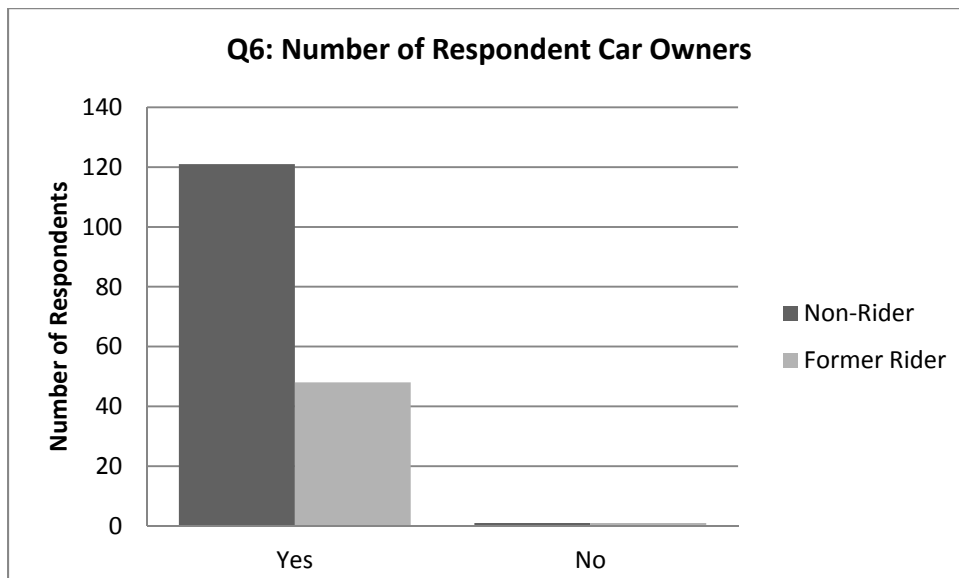
The largest portion (32%) of non-rider respondents make between \$50 and \$74 thousand per year. This amount is about 15% higher than the rest of the income responses, with approximately 15% of respondents making between \$25 and \$49 thousand, \$75 and \$99 thousand, and \$100 and \$149 thousand. Less than 5% of non-rider respondents make greater than \$200 thousand.

The former rider respondent income has a more even distribution, with 52% of respondents making \$50 to \$74 thousand or \$75 to \$99 thousand (split evenly, 26% each). 32% of former rider respondents make either \$25 to \$49 thousand or \$100 to \$149 thousand (again, split evenly at 16% each). Less than 10% of former riders make less than \$25 thousand or \$150 to \$199 thousand. In general, non-rider respondent household income is greater.



Question 6: Do you own a car?

Almost all non-rider and former rider respondents reported having access to a vehicle. Only one respondent from each category reported not having access.



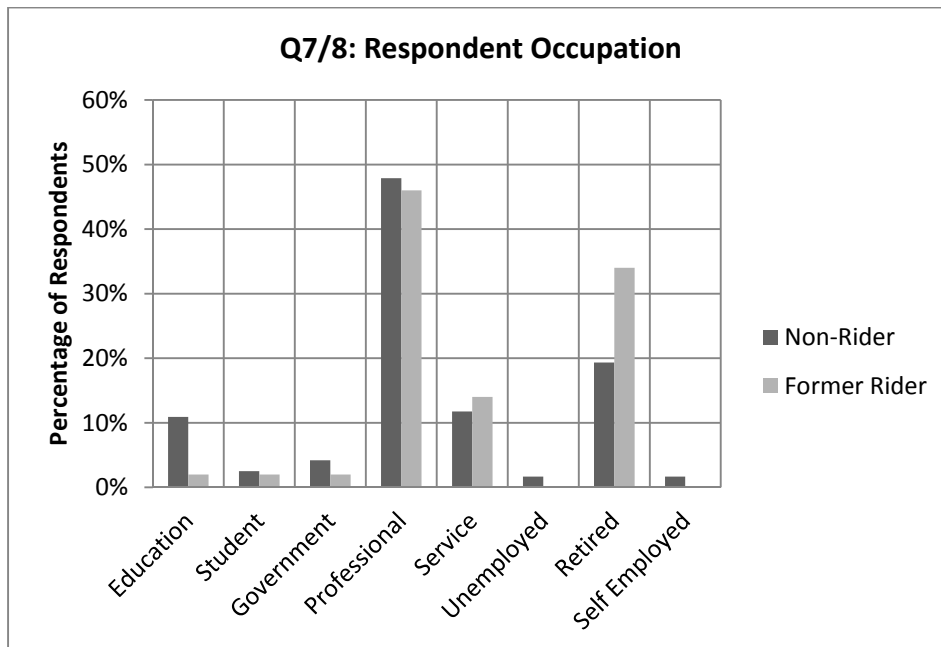
Question 7/8: What is your occupation?

This question was open-ended and allowed respondents to list their exact occupation. The respondents were then divided into eight categories for comparison purposes. The descriptions of these categories are as follows:

1. *Education*: respondent who works at a school or university
2. *Student*: respondent who attends school or a university
3. *Government*: respondent who works for the federal, state, local government, or any other public agency
4. *Professional*: ‘white-collar’ worker (lawyer, doctor, accountant, etc.)
5. *Service*: ‘blue-collar’ worker (retail, restaurant, hotel service; etc.)
6. *Unemployed*: respondents who are currently out of work
7. *Retired*: respondents who have retired from working
8. *Self-Employed*: respondents who own their own business

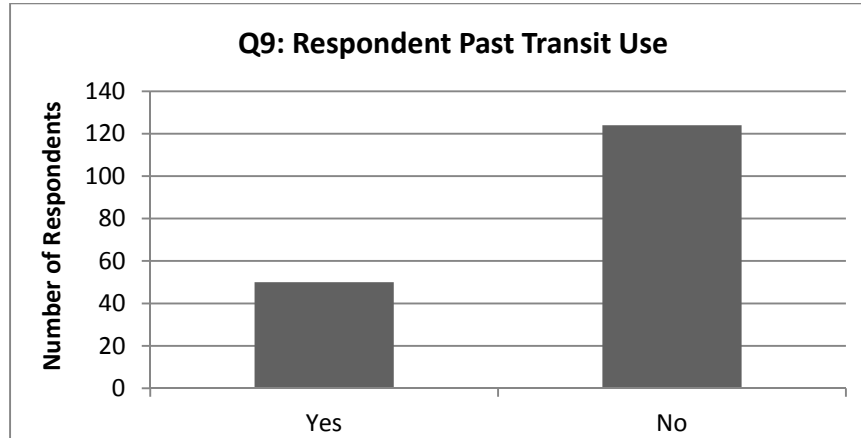
Most former rider respondents were Professionals (46%), Service workers (14%) or Retired (34%), with small percentages being in the Education, Student, or Government field. No former riders were unemployed or self-employed.

About half (48%) of the non-rider respondents were Professionals. There was a very large gap between the number of those who are Professionals and those who are not. 11% of non-rider respondents worked in Education, 12% worked in Service, and 19% were retired. Less than 5% of non-rider respondents fell into the Student, Government, Unemployed or Self-employed category. The occupational distribution chart is shown below.



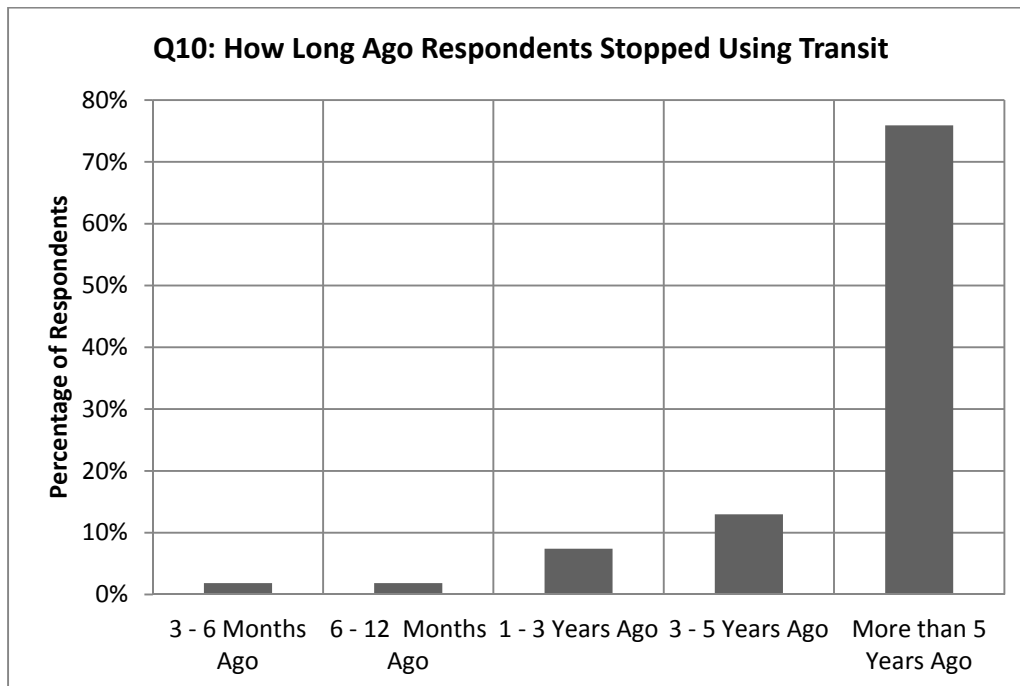
Question 9: Have you ever used the CENTRO transit system in the Syracuse metropolitan area on a regular basis?

Former riders, or those who had once used transit on a regular basis, accounted for about 30% of respondents. The remaining 70% had never used the CENTRO transit system.



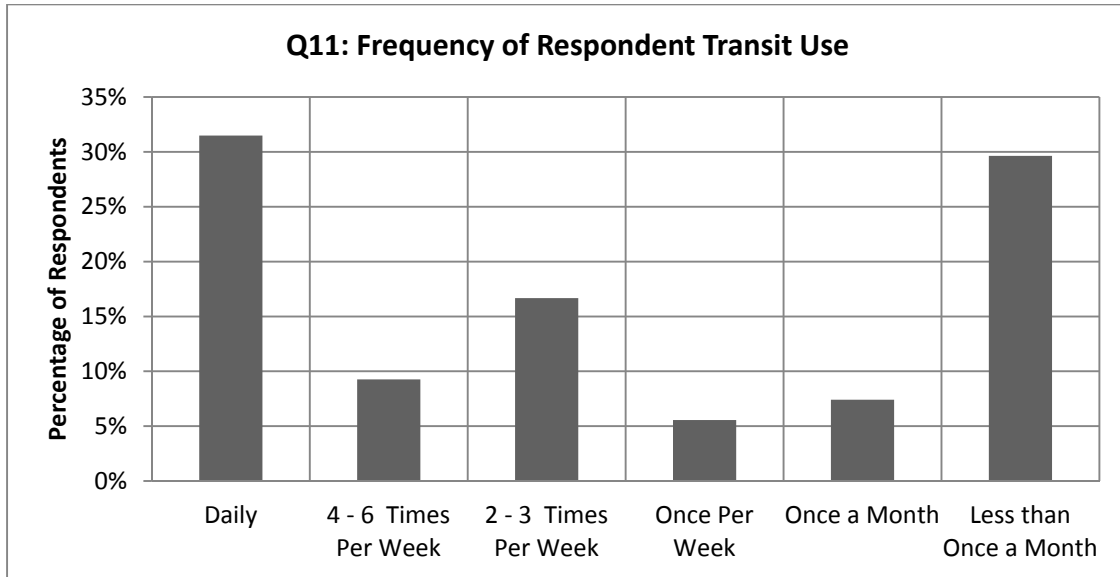
Question 10: How long ago did you stop using transit?

The majority (76%) of former riders stopped using transit more than five years ago. The remaining respondents stopped using transit more recently. The results are shown below.



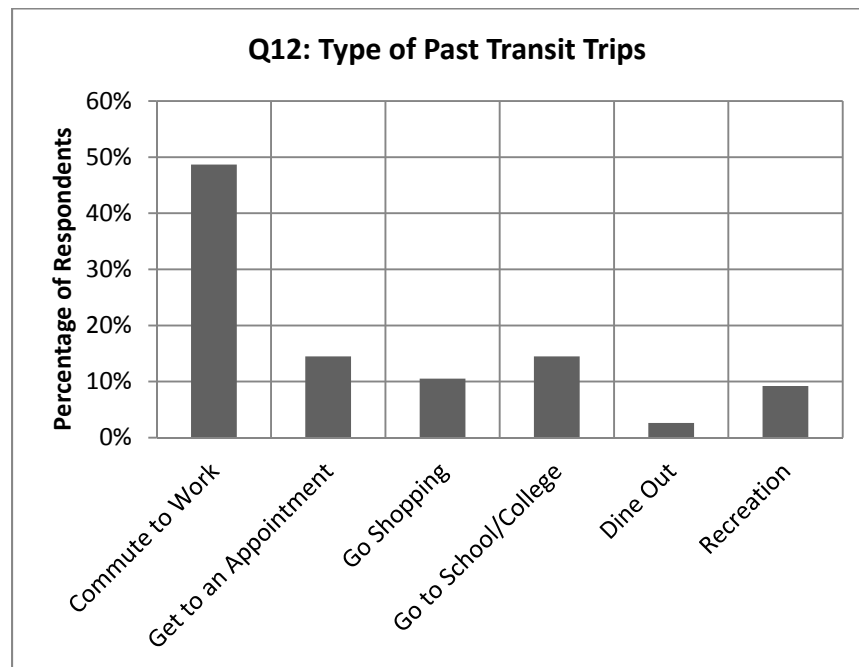
Question 11: How often did you use transit?

Of the 54 former riders that responded to Question 11, the majority were frequent riders, with 31% riding daily, 9% riding 4 to 6 times per week, and 17% riding 2 to 3 times per week. 30% of former rider respondents rode the bus less than once a month. The remaining percentages of respondent answers are shown below.



Question 12: What types of trips did you take while using transit?

The former riders were asked what types of trips they took using transit. About half of the respondents took the CENTRO bus system to work, with the remaining spread almost evenly between going to an appointment (14%), shopping (11%), to school (14%), and recreation (9%). Only two respondents reported using transit to dine out. The distribution of types of transit trips is shown below.



Question 13: What are some reasons why you do not use transit in Syracuse?

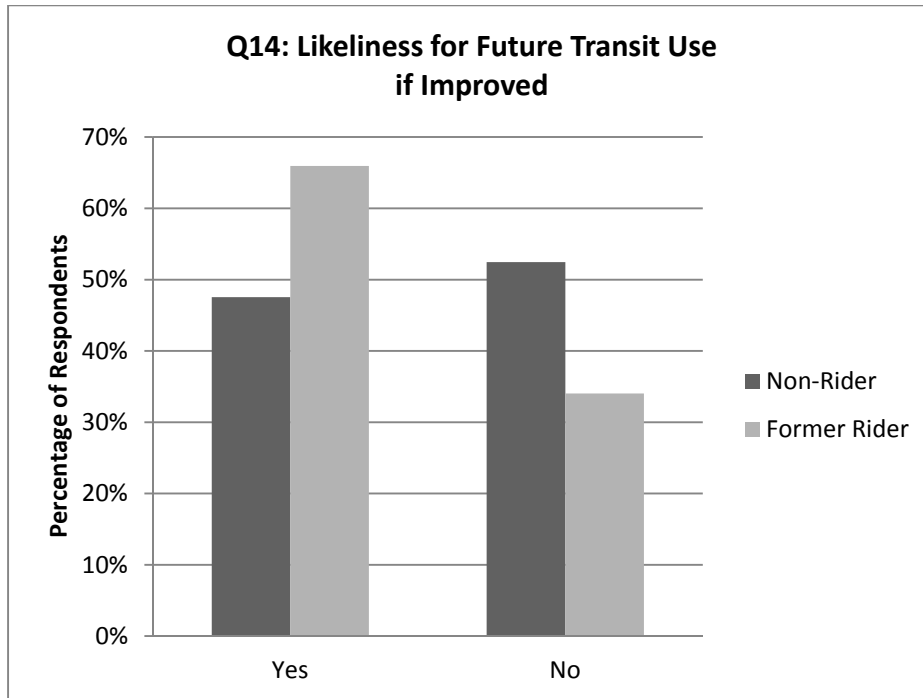
Respondents were asked to explain why they do not, or no longer, use transit. Results varied, but the highest percentage, 23% of non-riders and 20% of former riders, do not use transit because they have access to a vehicle and/or prefer driving. Other common reasons include free parking at their destination, the bus is not frequent enough and takes too long, the bus stop is too far away, and the need to have access to a vehicle during the day. The complete list of reasons for not using transit is listed below.

Q13: Respondent Reasons for Not Using Transit

Reason for Not Riding	Non-Rider	Former Rider
Have access to vehicle/prefer driving	23%	20%
Parking is free	11%	11%
Not frequent enough	11%	16%
Need access to vehicle during the day	11%	7%
Takes too long	10%	8%
Bus stop too far away	7%	10%
Hours too limited	7%	7%
Must transfer buses	7%	5%
Route changed or discontinued	1%	2%
Bus not reliable	3%	3%
Unsafe at bus stop/on bus	3%	3%
Bus fare is too expensive	2%	0%
Prefer walking	1%	2%
Use bicycle instead	1%	1%
Confusing	1%	1%
Destination not in bus route	2%	2%
Easier to use car	1%	1%
Not comfortable	0%	2%

Question 14: Are you likely to consider using transit if improvements were made?

Former riders were more likely than non-riders to consider using transit in the future. 66% of former riders would consider riding the bus again if improvements were made, and only 48% of non-riders would consider using transit.



Question 15: What three measures would make you most likely to consider using transit?

The largest factor that would influence transit use was an increase in bus frequency and/or expanding service hours, with 15% of non-riders and 19% of former-riders responding that they would consider using CENTRO if this improvement was made. The remaining top five measures that could increase transit use in non-riders and former riders (respectively) are: providing additional route options (12% and 12%), providing light rail transit (11% and 11%), improving connections from the suburbs to the City of Syracuse (12% and 9%), and decreasing travel times (12% and 7%). Other factors that could play a role in increased transit use are shown below.

Q15: Improvements that may Increase Transit Use

Improvement	Non-Rider	Former Rider
Increase frequency/expand hours	15%	19%
Make additional route options	12%	12%
Provide Light Rail Transit	11%	11%
Improve connections to the City	12%	9%
Decrease travel times	12%	7%
Provide Bus Rapid Transit	7%	8%
Improve rider information	5%	6%
Improve security	6%	4%
Improve on-time performance	4%	6%
Decrease price of transit fare	4%	6%
Improve rider amenities	4%	6%
Provide access to carshare	2%	7%
Connection from suburbs to University Hill	5%	1%

Question 16: Would any of the following factors increase the likelihood that you would consider using transit?

The main factor that would attract respondents to using transit was an increase in gas prices to an average of \$6/gallon. 25% of non-riders and 30% of former riders would be more likely use transit if this increase occurred. Increased parking fees are of a greater concern to former riders than to non-riders, with 22% of former riders being more likely to use transit if parking fees increased, and only 10% of non-riders. Non-riders were more likely to consider transit if employers provided incentives than former riders. The distribution of the remaining factors is shown below.

Q16: Factors that May Increase Transit Use

Factors	Non-Rider	Former Rider
Gas prices increase to \$6	25%	30%
Employers provide incentives	24%	16%
Parking fees increase	10%	22%
Congestion increases	14%	12%
No transfers	6%	0%
More frequent	5%	4%
Light Rail	5%	0%
Less travel time	2%	4%
Expand Service	2%	4%
Improved rider amenities	2%	4%
Improved bicyclist amenities	2%	2%
Nicer Drivers	1%	2%
Shorter wait times	2%	0%
Improved safety	1%	0%

Question 17: Please use the space below to tell us any additional needs or improvements you feel we should consider during the transit systems analysis that would make you more likely to consider transit in the future.

This question provided an area for respondents to discuss the transit system in an open-ended format. Because this question specifically asked for needs or improvements, the results were summarized into various categories and combined with the other questions that dealt specifically with needs and enhancements, such as Questions 13, 15, and 16.

3.2 Current Rider Survey Results

As discussed in Section 1.1.3, 55 rider surveys were completed during the original public outreach conducted at *the I-81 Challenge* public information session. A rider was categorized as someone who had used the CENTRO system within the last three months. A revised survey was distributed on October 11, 2012 to riders at the Downtown Syracuse transit hub in order to obtain more feedback from regular users of the system. This effort resulted in an additional 271 surveys completed.

3.2.1 Assessment of Results

Similar to the methodology of the non-rider/former rider survey, a general assessment of the demographic results of the current rider survey was conducted prior to summarizing the results. Overall, the results of the rider survey appear to be more representative of regular transit users in the Syracuse metropolitan area than the original survey, collected during the public information session. The percentage of White and Black/African American respondents were evenly split at approximately 40% each. The majority of respondents were under the age of 45, had no access to a vehicle, and made less than \$25,000 per year. Further discussion of the results of the questions will be provided in the sections below.

Respondents were asked to complete the survey while waiting at the transit hub. However, some respondents were unable to complete the survey before their bus arrived, or did not answer all questions for other reasons. As a result, only 164 of the 271 surveys had all questions completed. The incomplete surveys were processed, and responses to the completed questions were incorporated into the survey results summary. Therefore, some questions may have more total responses than others.

In addition, two issues were identified during the distribution of the surveys. First, men were more reluctant to complete the survey than women. This is reflected in the demographic results that show that more than 70% of the respondents were women. It is unclear why there was a lower response rate from men than women, but the survey collectors noted that the majority of potential male respondents declined the survey. Finally, there was confusion regarding the address fields on the survey. Respondents were asked to input their home zip code on Question 1 and their work address in Question 9. Due to the format of the survey these two questions appeared next to each other (in separate columns). This led to some respondents inputting their home street address in Question 9, rather than their work address. However, despite the limitations, it is our opinion that the results of this survey provide valuable feedback from regular users of the transit system.

3.2.2 Summary of Results

Question 1: What is your home zipcode?

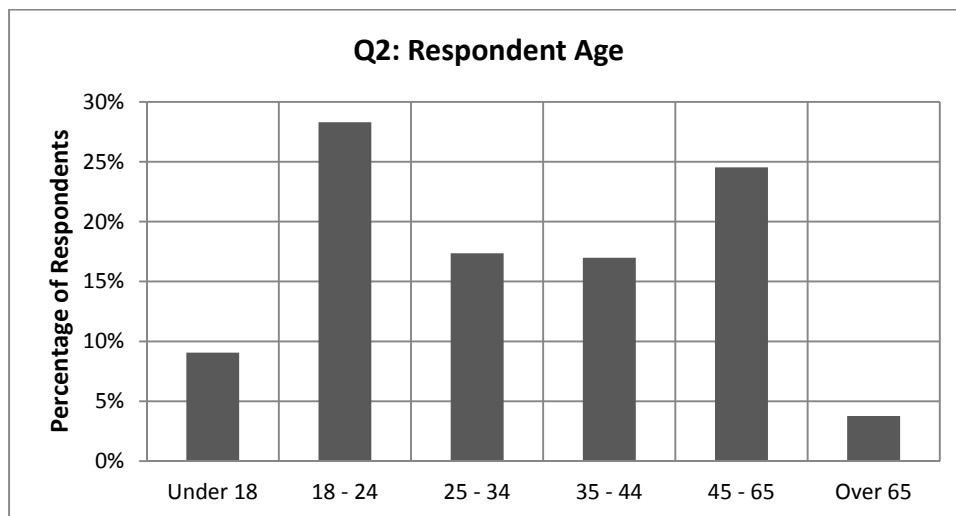
The majority of the rider respondents live in the City of Syracuse, with a small portion of commuters spread among the suburban towns in the region. A total of 210 respondents live in Syracuse, with the remaining persons originating in the cities shown below.

Q1: Locations of Residence

City	No. of Respondents	Percentage
Syracuse	210	82%
Solvay	12	5%
East Syracuse	7	3%
Liverpool	6	2%
North Syracuse	5	2%
Camillus	3	1%
DeWitt	3	1%
Manlius	3	1%
Oswego	2	1%
Other	6	2%

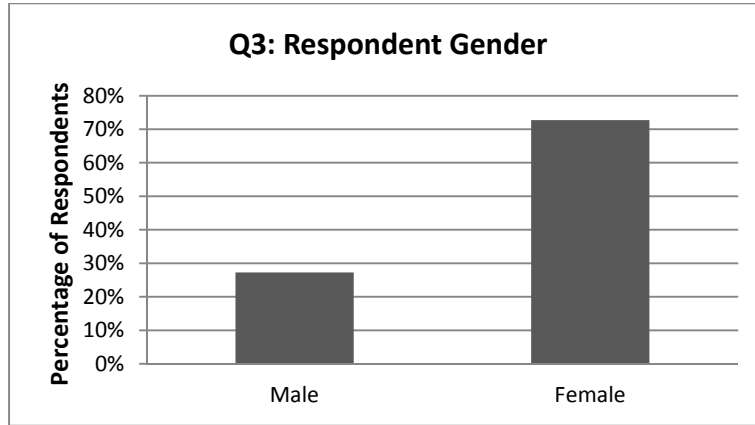
Question 2: What is your age?

The two highest age groups of rider respondents were 18-24 (28%) and 45-65 (25%). The two age groups between these ranges, 25-34 and 35-44, both comprised 17% of those who were surveyed.



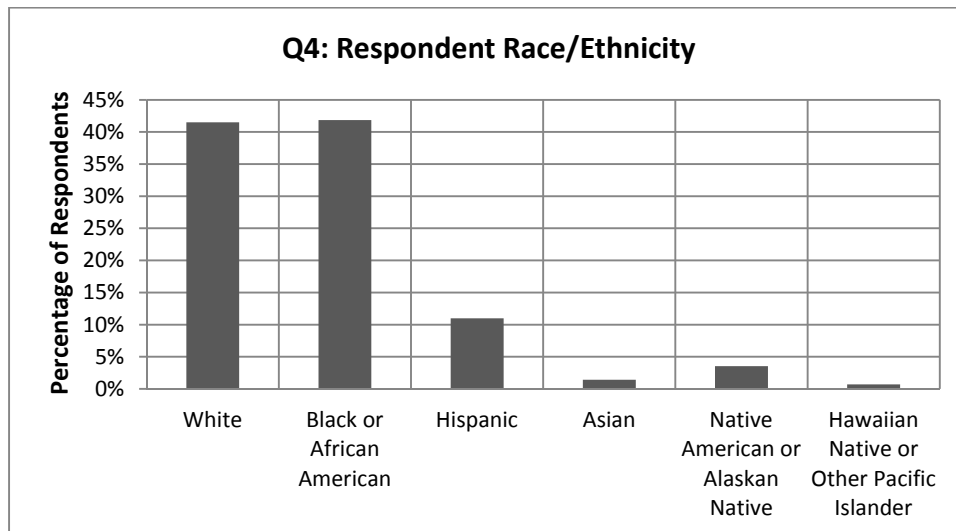
Question 3: Gender

There were more female rider respondents than there were male. Approximately 73% rider respondents were female. It was noted by the survey collection team that men were more likely to decline the survey than women.



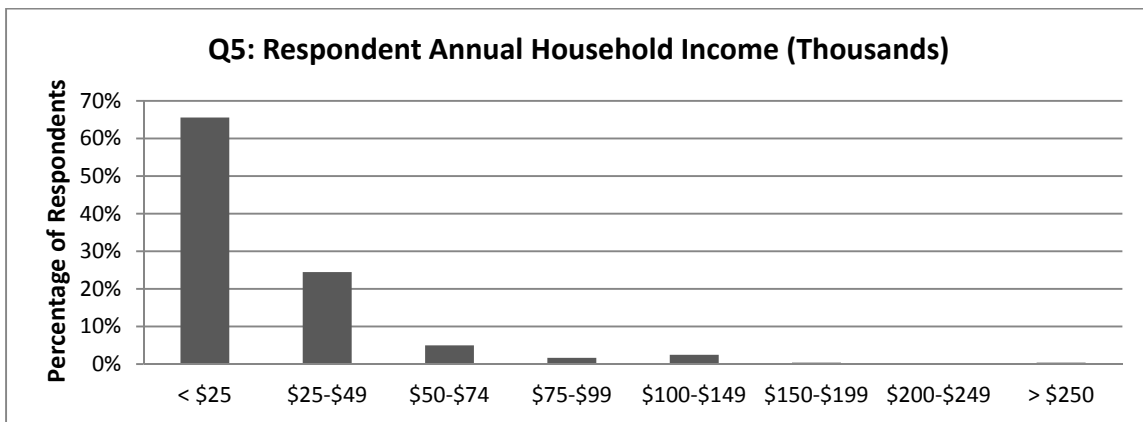
Question 4: Race/Ethnicity

The two most common respondents were Black or African American (42%) and Caucasian (41%).



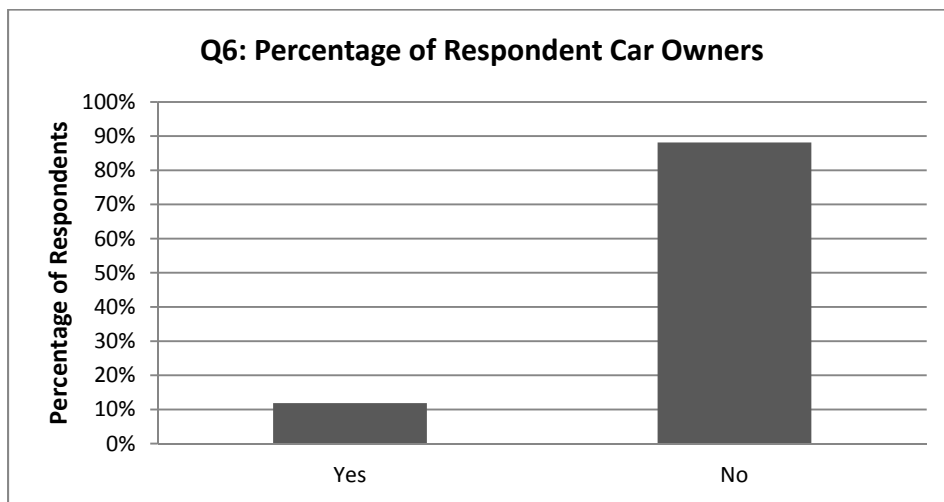
Question 5: What is your annual household income?

Approximately one-third (66%) of the respondents were near or below the US poverty threshold, with a household income of less than \$25,000 per year. 24% of the respondents landed in the \$25,000 to \$49,999 per year household income range. 5% of the respondents were from a household that earned \$50,000 to \$74,999 per year. Higher earners comprised another 5% percent of the respondents.



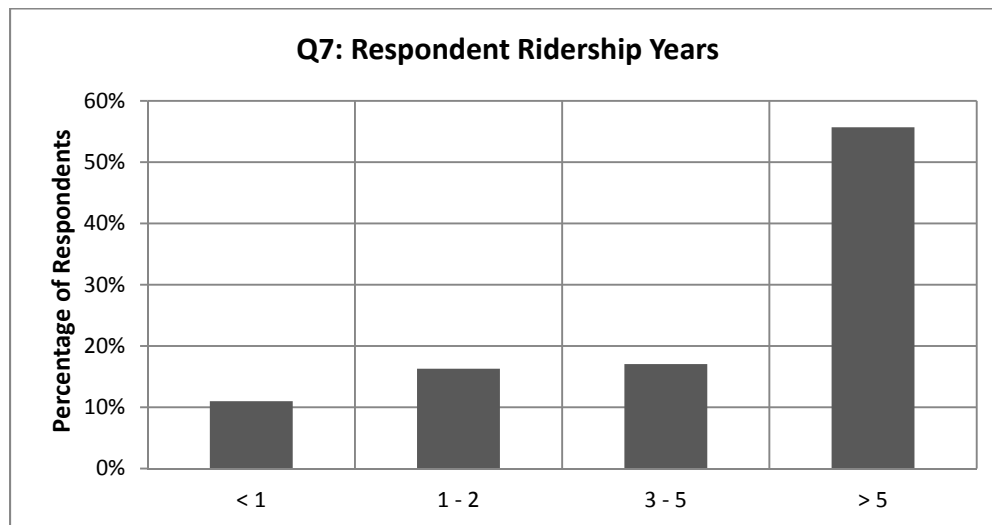
Question 6: Do you own a car?

Only 12% of rider respondents reported having access to a vehicle. The vast majority reported not having access.



Question 7: How long have you been riding transit in Syracuse?

Over half of the current rider respondents have been using the CENTRO bus system for more than five years. About one-third of users have been riding between one and two years. The remaining respondents have either been riding for 3-5 years (11%), or less than one year (4%).

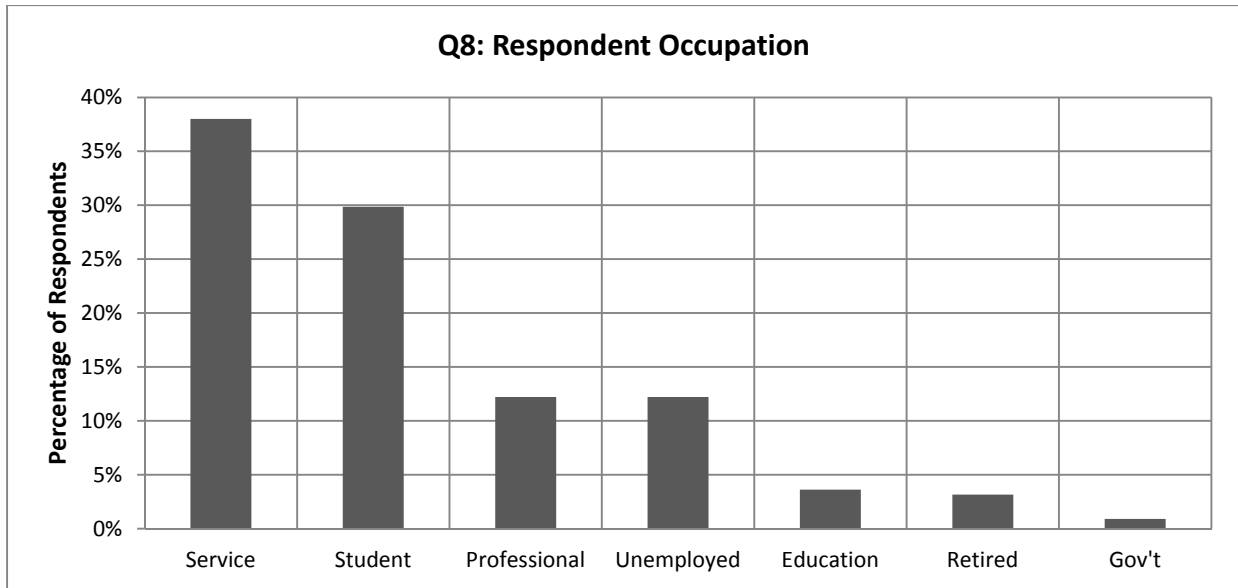


Question 8: What is your occupation?

This question was open-ended and allowed respondents to list their exact occupation. The respondents were then divided into eight categories for comparison purposes. The descriptions of these categories are as follows:

1. *Education*: respondent who works at a school or university
2. *Student*: respondent who attends school or a university
3. *Government*: respondent who works for the federal, state, local government, or any other public agency
4. *Professional*: 'white-collar' worker (lawyer, doctor, accountant, etc.)
5. *Service*: 'blue-collar' worker (retail, restaurant, hotel service; etc.)
6. *Unemployed*: respondents who are currently out of work
7. *Retired*: respondents who have retired from working
8. *Self-Employed*: respondents who own their own business

Most rider respondents were Service (38%), Student (30%), Professional (12%), or Unemployed (12%), with small percentages being in the Education, Retired, or Government field. The occupational distribution chart is shown below.



Question 9: Work Address

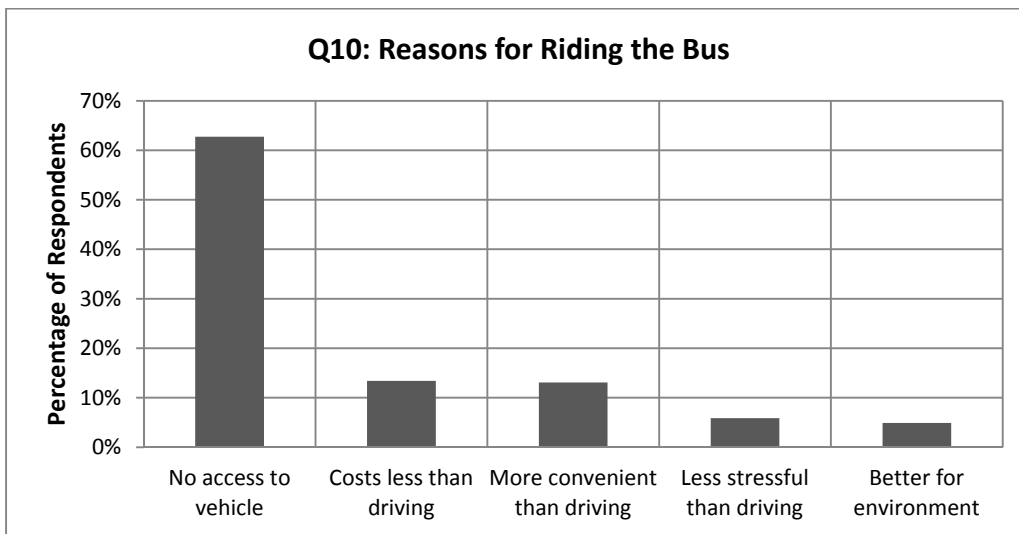
Riders were also asked where their place of employment was located. A total of 125 respondents (84%) identified their city of employment as Syracuse. The suburban communities of Camillus, Liverpool, and East Syracuse each comprised 3% of the respondent’s places of employment.

Q9: Locations of Employment

City	No. of Respondents	Percentage
Syracuse	125	84%
Camillus	5	3%
Liverpool	5	3%
East Syracuse	4	3%
Manlius	2	1%
Auburn	1	1%
Brewerton	1	1%
Cicero	1	1%
DeWitt	1	1%
Fulton	1	1%
Jamesville	1	1%
North Syracuse	1	1%

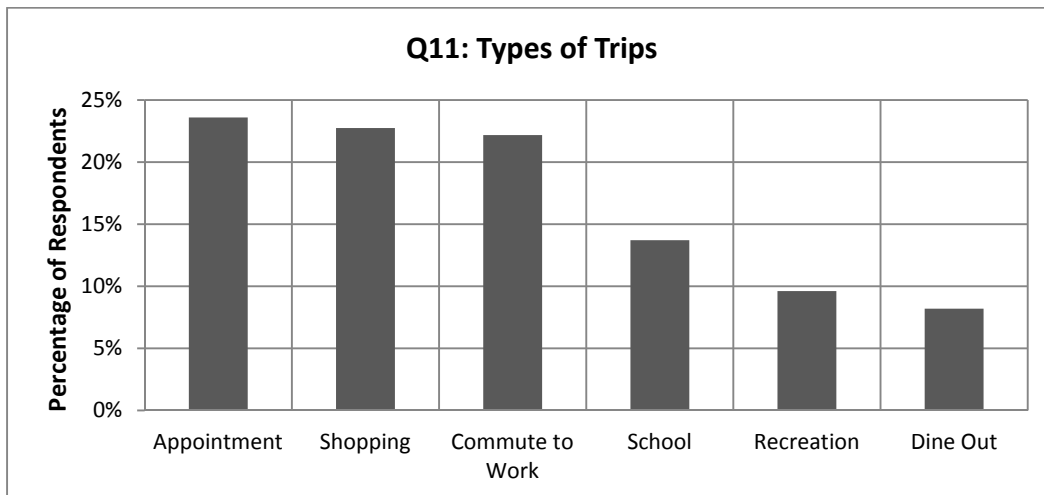
Question 10: What is the primary reason you use transit?

Respondents were asked for the primary reason that they use transit. Since 88% of respondents do not own a car, it is no surprise that the biggest reason for transit is the lack of access to a vehicle (63%). Other reasons included “costs less than driving” (13%), “more convenient than driving” (13%), and “less stressful than driving” (6%). “Better for the environment” received 5%.



Question 11: What types of trips do you take using transit?

Most respondents use transit to travel to an appointment (24%), a place to shop (23%), or their workplace (22%). 14% of respondents use transit to go school, and less than 10% use the bus to go to recreational activities or to dine out.



Question 12: Please list the three destinations you travel to most using transit.

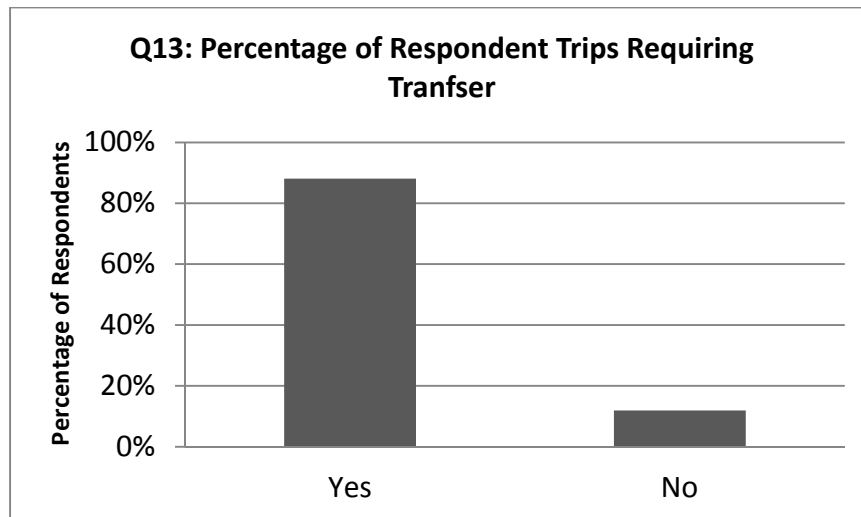
The number one destination for transit users were shopping locations (24%). Destiny USA, formerly known as Carousel Mall, was cited as the most popular of these shopping locations. “Work” and “School” were the second (19%) and third (11%) most popular destinations for transit users, as these mostly represent daily trips. Trips to hospitals, clinics, and disability workshops comprised 7% of the destinations. Since responses were extremely varied, 28% fell under the designation “Other.” Destinations, both by type and geographical location, are shown below.

Q12: Transit User Destination

Destination	Percentage
Shopping	24%
Work	19%
School	11%
Medical Care	7%
Downtown	7%
Appointment	2%
Friends	1%
Family	1%
Other	28%

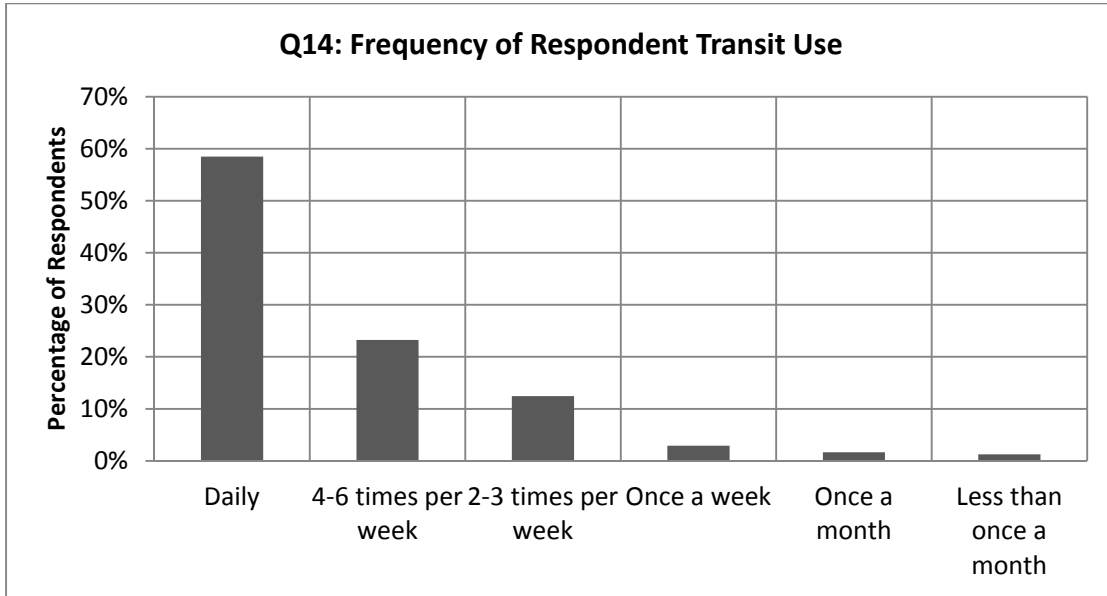
Question 13: Do the trips you listed above typically require you to transfer to another bus to get to your final destination?

Most riders reported having to transfer buses to get to their final destination. 88% of riders transfer, and the remaining 12% do not transfer.



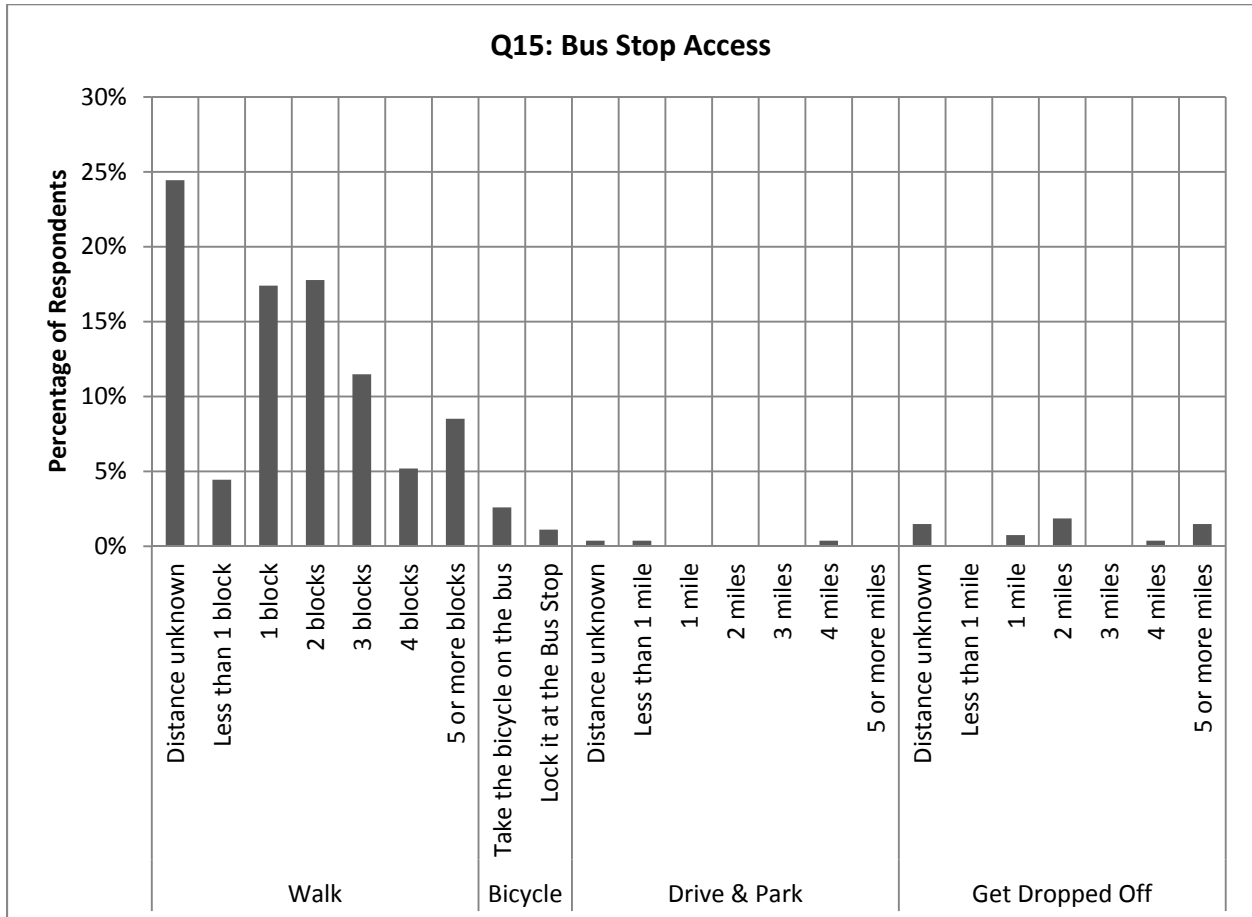
Question 14: How often do you use transit?

The majority of current rider respondents use the CENTRO bus system daily (59%). 23% of riders use the bus 4-6 times per week, 12% use the bus 2-3 times per week, and 6% use the bus once per week or occasionally. The distribution of rider frequency is shown below.



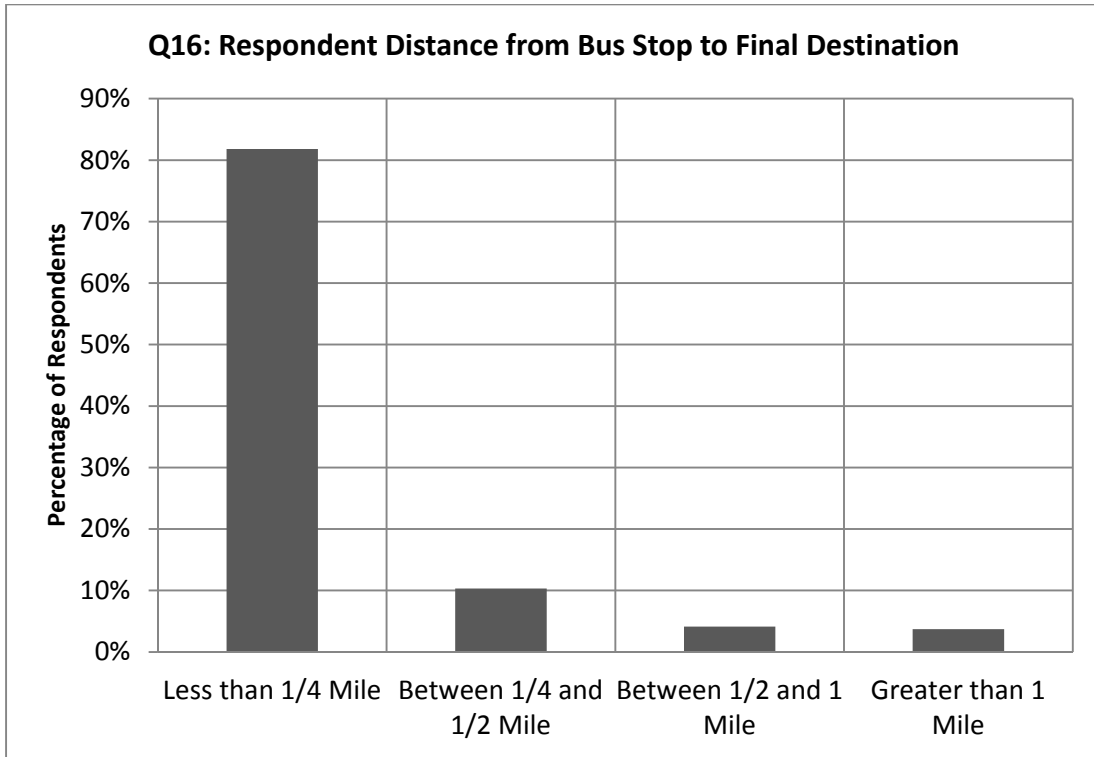
Question 15: How do you typically get to the bus stop?

Almost all of the respondents (89%) walk to the bus stop. The rest of the respondents either bike to the bus stop (4%), drive and park at bus stop (1%), or get dropped off at the bus stop (6%). Respondents that noted walking distance to bus stops often indicated that their walk was either one block (17%) or two blocks (18%).



Question 16: How far do you usually have to walk from the bus stop to your final destination?

Most of the rider respondents (82%) walk less than ¼ mile after getting off the bus to get to their final destination. 10% of respondents walk between ¼ and ½ mile. Less than 10% have to travel farther to reach their final destination. The results are shown below.



Question 17: Check the three service features that are most important to you.

Rider respondents reported that the two most important service features are on-time buses (26%) and frequent service (14%). Affordable bus fare and short travel time are also important service features (11% each) to respondents. The distribution is shown below.

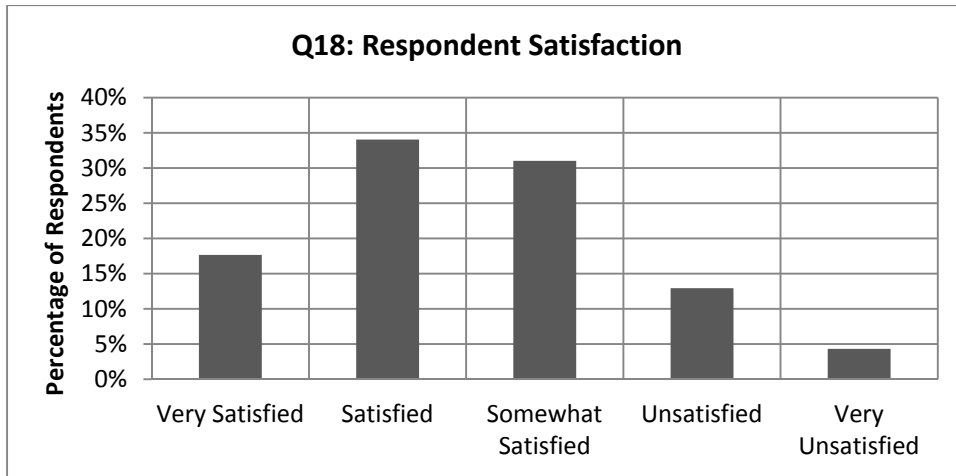
Q17: Important Service Features

Important Service Features	Percentage
Buses are on-time	26%
Frequent service	14%
Affordable bus fare	11%
Short travel time	11%
Cleanliness	10%
Convenient connections and transfers	8%
Passenger safety and security	7%
Courteous and helpful operators	7%
Easy access to bus stops	6%
Adequate seating	5%
ADA features	1%

Question 18: How satisfied are you with the current transit system?

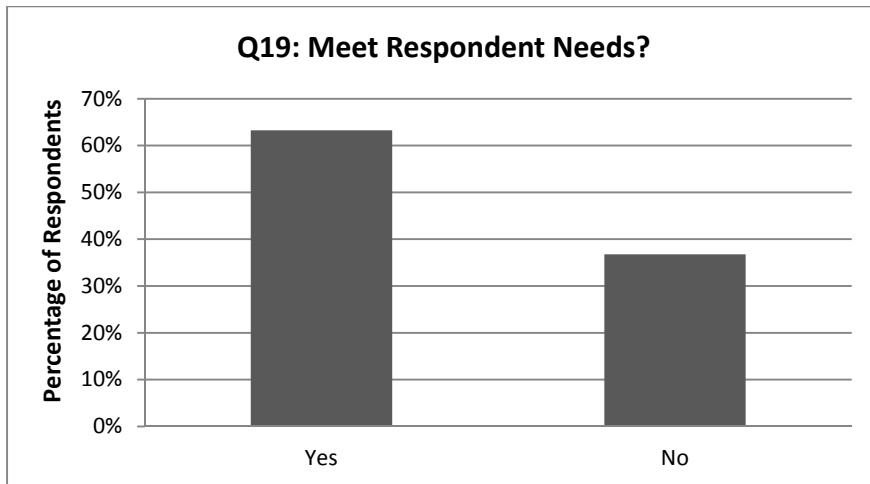
Approximately 1/3 of riders responded that they were satisfied with the current CENTRO transit system, and another 1/3 of riders were somewhat satisfied. The remaining respondents were very satisfied (18%), unsatisfied (13%), or very unsatisfied (4%). Some of the reasons respondents stated that they were unsatisfied or very unsatisfied include:

- The buses are not frequent enough;
- Buses are often late;
- Downtown transfers were difficult to make and often unpredictable;
- Not enough buses were running during evenings and weekends;
- Buses were crowded; and,
- Bus drivers were rude.



Question 19: Do you feel that the current routes and schedule meet your mobility needs?

Almost two-thirds (63%) of riders reported that the CENTRO transit system met their mobility needs, and 37% reported that the bus routes and schedules were not frequent or flexible enough to meet their needs.



Question 20: Select the three (3) improvements that you feel would most enhance your transit use.

About one-third (33%) of respondents felt that an increase in bus frequency and/or hours of operation would enhance their transit experience. Spot improvements to existing bus routes (21%), shortening travel time (13%) and improving connectivity within city (11%) were all factors that would enhance, and possibly increase, transit use.

Q20: Improvements to Enhance Transit Use

Improvement Options to Enhance Transit Use	Percentage
Increase frequency and/or operation hours of existing bus routes	33%
Spot improvements (amenities) to existing bus routes	21%
Shorten travel time between downtown Syracuse and the suburbs	13%
Improve connectivity within city	11%
Reduce number of transfers that I need to make	10%
Implement Bus Rapid Transit (BRT)	7%
Implement Light Rail (LRT)	4%
Implement circulatory streetcars	3%

Question 21: If unsatisfied with the current transit system or if you feel that the current transit system does not meet your current mobility needs, tell us how we could improve the current transit system.

The above was an open-ended question that was asked to all respondents. Although all responses were different, they all fell under the following categories of suggested improvements:

Q21: Open-Ended Response Comments/Suggestions

Comment/Suggestion	Percentage
On-time bus service	15%
Easier bus transfers	14%
Increase bus service frequency	13%
Revise bus schedules	9%
More seating for buses and bus stops	8%
Provide shelters with heating	8%
Clean buses and bus stops (alt. fuels and no smoking)	7%
PR training for bus drivers and staff	7%
Increase evening bus service	5%
Lower bus fare	5%
Increase weekend and holiday service	3%
Bus service for the disabled	2%
Add bus routes	1%
Increase police presence	1%
Maintain current bus schedule	1%
Provide wifi and bus schedule app	1%

The three most often recommended improvements from respondents were on-time operation of the buses (15%), which included buses both leaving too early and arriving too late; scheduling easier bus transfers (14%), since numerous respondents stated that they waited too long or missed their connecting bus at the downtown hub; and increasing bus frequency (13%).

3.3 Survey Conclusions

3.3.1 Non-Riders and Former Riders

The primary reason why non-riders and former rider respondents do not currently use the CENTRO transit system is that they have access to a vehicle and prefer driving. In addition, many respondents listed free parking and the long transit travel times as reasons why they do not use transit. These responses point directly to several factors within the Syracuse metropolitan area that point to a “car-centric” culture that consists of relatively low-cost parking in the downtown core, suburbanization of many businesses, and very short peak periods of congestion (compared to other cities where transit ridership is higher). These three factors play a significant role in mode choice. In cities where transit ridership is much higher, parking is typically much more expensive than in the City of Syracuse, and congestion is such that transit travel times are comparable, or sometimes even faster than, vehicle travel time. Furthermore, a higher ridership typically allows the transit agency to operate more frequently and for longer hours.

It is unlikely that these factors will improve to support transit use without significant land use changes in the Syracuse metropolitan area that increases density for both commercial and residential uses. An increase in density would also likely result in an increase in congestion, and an increase in parking fees as competition for parking increases, making transit a more comparable option.

Another significant factor for non-riders/former riders is that they need access to a vehicle while at work. This is a common concern for commuters in many cities who have jobs that require them to travel to meetings or other locations throughout the day. Some cities have implemented services such as carsharing (Zipcar, Philly Carshare, etc.), or guaranteed ride programs to provide commuters with an option of a vehicle during the day if needed. An analysis of the feasibility of a carshare program should be incorporated into any transit improvement evaluation that is designed to increase suburban ridership.

In terms of increasing transit use among non-riders and former riders, approximately 48% of the non-rider respondents and 66% of former rider respondents stated that they would likely consider using transit if improvements were made to the current system. The largest factors that may increase transit use in this group include: increased frequency and expanded service hours, adding route options and decreased travel times. Implementing Light Rail Transit and Bus Rapid Transit were also popular among respondents.

Outside factors may also increase the likelihood that non-riders and former riders would consider using transit. The most noted factor was an increase in gas price to an average of \$6 per gallon. Non-riders were more likely (24%) than former riders (16%) to use transit if employers provided incentives, while former riders were more likely (22%) than non-riders (10%) to use the bus if parking fees increase. Both groups agreed (13% average) that they may use transit if congestion on the roadway increases.

3.2.2 Current Riders

As previously noted, the original survey did not capture the useable results to most rider questions because the average rider was not represented at the public information session, or the online workshop. Therefore, the survey was revised and redistributed at the Downtown Syracuse transit hub on October 11, 2012, between 7:30 am and 6:00 PM. The revised survey results were more representative of the average transit rider in the City of Syracuse. In particular, the majority of the revised survey respondents stated that they use transit because they do not have access to a car, rather than the “better for the environment” response that was given in the original rider survey. Furthermore, the revised survey distributed at the transit hub also has a wider age and race distribution, and had more daily users than the original survey.

Similar to the responses that were given on the non-rider/former rider survey, the revised rider survey responses speak to the car-centric culture of the region which results in a system that primarily serves the increasingly transit-dependent communities within the city. Only 12% of the respondents had access to a vehicle, and many respondents noted, anecdotally, that they are only using transit because they have no other option. If they were to gain access to a vehicle, they would be unlikely to continue to use the transit system. These factors continue to fuel a negative perception of the transit system, even amongst people that have to use it on a daily basis.

The results of the rider survey also speak to the demand on the system itself. Approximately 38% of the respondents are employed in the service industry and 30% were students. These two groups make up a significant percentage of the transit users and have unique needs when compared to typical suburb to downtown commuters. People employed in the service industry typically have varying schedules, including evenings and weekends, that require access to transportation services throughout the day. Students also typically have a more varied schedule that requires them to access the transit system during off-peak times, such as mid-day and late evening. Furthermore, service sector employees, particularly in retail and food service require reverse commutes, meaning that they travel from the City outwards to locations in the suburbs.

Based on the free response sections of the surveys, the needs of some of service sector employees and student riders are not being met in an efficient manner. Over 25% of respondents listed “buses are on time” as their primary service need. The current pulse system means that all buses are scheduled to arrive and depart at transit hub at the same time. This provides for convenient transfers as long as the buses are on schedule. However, one of the most common complaints given is that buses are often late, resulting in riders who miss their transfers and have to wait between 30 minutes and one hour for another bus. Another common issue noted in the surveys is that in order to ensure that they arrive on time to work, some riders must take buses that drop them off at work or school one to three hours ahead of their scheduled shift or class.

When asked what improvements they would like to see, one-third of the respondents said increased frequency and operating hours on existing bus routes. This is consistent with the overall responses from the rider survey which points to the need to accommodate varying work schedules and needs of the typical transit rider. Other top responses included spot improvements to existing routes (21%), easier and more reliable transfers (14%), improved on-bus and bus stop amenities (16%), and shorter travel times between downtown and the suburbs (13%). Interestingly, less than 15% of the respondents listed BRT, LRT, or streetcars as improvements that would enhance their transit use. Overall, it appears that the majority of riders are looking for enhancements to their existing services to better meet their needs, rather than larger-scale improvements.

CHAPTER 4 – Conclusions and Recommendations

The results of the comment boards and surveys provided valuable insight into how the public perceives the transit system and what enhancements/improvements may increase transit use. The results of the survey will be utilized in the Syracuse Transit Systems Analysis report to provide a measure in which to develop conceptual improvement alternatives for the transit system. The results will also support future alternatives analyses of improvements identified in the Systems Analysis document required to obtain FTA New Starts, Small Starts, or Very Small Starts funding.

Based on the results of the comment boards and survey, the following prioritized list of needs/enhancements that will be carried into the Transit Systems Analysis was developed:

Need/Enhancement	Priority
Increase frequency and hours of operation.	1
Reduce transit travel time to be more comparable with vehicles.	2
Improve on-time performance.	3
Provide direct connections between major regional destinations.	4
Provide more real-time system information (online, by phone, at bus stops).	5
Improve safety and public perception of the transit system.	6
Provide more suburban commuter options.	7
Maintain an affordable fare.	8

The results of the comment board responses also provided crucial feedback that can be applied to the Transit System Analysis. The majority of both rider and non-rider/former rider respondents were in favor of transit enhancements, such as increased frequency, reduced travel time, and real-time information. Respondents favored both BRT (for its flexibility and ease of implementation), and LRT (for its aesthetic and economic benefits); however, both were seen as expensive. Some respondents also expressed concern regarding the feasibility and practicality of large-scale enhancements in the Syracuse metropolitan area. In particular, current land use patterns, suburbanization, convenience of a car, and public perception of the transit system may make it difficult to justify larger-scale improvements. Overall, respondents appear to be looking for a balanced and practical approach to enhancing the transit system.