FHWA-NJ-2018-010

Analysis of Local Bus Markets - Phase II

FINAL REPORT

December 2018

Submitted by

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In cooperation with
New Jersey
Department of Transportation
Bureau of Research
and
U. S. Department of Transportation
Federal Highway Administration

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TECHNICAL REPORT
STANDARD TITLE PAGE

1. Report No.	2.Government Accession No.	3. Recipient's Catalog No.
FHWA-NJ-2018-010		

4.Title and Subtitle	5.Report Date
Analysis of Local Bus Markets (Phase II)	December 2018
	6. Performing Organization Code

7.Author(s)	8. Performing Organization Report No.
Deka, Devajyoti	

9.Performing Organization Name and Address	10. Work Unit No.
Alan M. Voorhees Transportation Center Rutgers, The State University of New Jersey 33 Livingston Ave, 4th Floor New Brunswick, NJ 08901, USA	11. Contract or Grant No.

12.Sponsoring Agency Name and Address		13.Type of Report and Period Covered
New Jersey Department of Transportation 1035 Parkway Avenue Trenton, NJ 08625-0600	Federal Highway Administration 1200 New Jersey Avenue, SE Washington, D.C. 20590	Final Report
		14.Sponsoring Agency Code

15. Supplementary Notes

16.Abstract

This research is a follow-up of the Analysis of Local Markets study conducted by the Alan M. Voorhees Transportation Center during 2015-17. Whereas the primary objectives of the previous study were to examine both traffic (i.e., congestion) and air quality (i.e., greenhouse gas) impacts of local buses, the primary objective of the current study is to examine only air quality impacts. The analysis of air quality impacts from transportation in New Jersey is important because of the high level of air pollution in most parts of the state.

While the primary objective of this research is to estimate the greenhouse gas (GHG) impacts of local buses, its secondary objective is to examine the socioeconomic and travel characteristics of bus riders. To fulfill these objectives, a survey of bus riders was necessary. The survey was conducted between 6 AM and 4 PM onboard buses of 25 routes in four general areas or county groups of New Jersey: Hudson County, Middlesex/Monmouth County, Burlington County, and Morris County.

The analysis of survey data revealed that a large proportion of riders would use app-based services, drive their own cars, carpool with others, or use taxis to travel to their destinations in the absence of buses. Such diversions to the automobile would generate a significant amount of vehicle miles traveled, which in turn would generate a significant amount of GHG.

The analysis of rider and trip characteristics showed that the surveyed buses mostly serve riders from households without cars who have limited options to travel. Survey data analysis also showed that the buses serve a large number of low-income and minority populations. Most riders use buses to travel to and from work, but many also use them for personal business and other purposes. Based on the results, recommendations have been made.

17. Key Words	18. Distribution Statement
Local Bus; Rider Survey; Environmental Impact; Rider Characteristics	No restriction

19. Security Classif (of this report)	20. Security Classif. (of this page)	21. No of Pages	22. Price
Unclassified	Unclassified	196	

Form DOT F 1700.7 (8-69)

ACKNOWLEDGEMENTS

The author wishes to acknowledge the efforts of the New Jersey Department of Transportation (NJDOT), including the Project Manager Ms. Priscilla Ukpah and Manager Bureau of Research, Ms. Amanda Gendek. The author thanks the Research Selection and Implementation Panel members, including Susan O'Donnell, Senior Director for Business Analysis and Research at NJ TRANSIT, John D. Dean, Program Director, Research and Community Services at NJ TRANSIT, as well as Rossana Ybasco and Patrick Glasson, also from NJ TRANSIT. These individuals offered valuable comments and suggestions on the research project resulting in an improved product.

As research team members, senior research specialist Mark Walzer of the Bloustein Center for Survey Research, as well as senior research specialist Andrea Lubin and research project coordinator Stephanie Crozier of the Alan M. Voorhees Transportation Center significantly contributed to this study. Mark Walzer assisted with survey scheduling and monitoring as well as with the supervision of the survey. Andrea Lubin assisted with hiring and training of surveyors and setting up the data-entry program. Stephanie Crozier assisted with surveyor hiring, monitoring of surveyor activities, timesheets, and other project administration activities, such as travel reimbursements.

The contribution of Rutgers students from various programs to this study was immense. Edward J. Bloustein School students Sonia Szczesna and Shivang Shelat assisted with scheduling and monitoring of the survey and other important logistical work. Doctoral student Da Fei helped with survey data cleaning and weighting as well as GIS analysis. Approximately 40 graduate and undergraduate students from various programs at Rutgers University undertook the difficult task of conducting onboard surveys. Without the contributions of all of the above, the study could not have been successfully completed.

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EXECUTIVE SUMMARY

Background

Compared to other states, a larger share of people in New Jersey use public transportation. Yet, transportation-related air pollution, especially greenhouse gas (GHG) emission, is a significant concern in New Jersey because of high traffic volumes on its road network. The air quality concerns in the state could be much greater in the absence of public transit. With that background, this study examines the GHG impacts of local buses.

In order to assess the GHG impacts of local buses, it is necessary to analyze the travel patterns of riders, especially to comprehend how they would have traveled in the absence of buses. Such information cannot be obtained without a large-scale survey of bus riders. Although NJ TRANSIT periodically conducts surveys of bus riders to assess riders' personal and household characteristics, travel patterns, and satisfaction with transit, such surveys have not been conducted in more than ten years for many of its bus routes. NJ TRANSIT selected 27 of those routes for survey and analyses for this study. As four of those routes were combined into two during the study period, this report presents results from the analyses of survey data from 25 existing routes.

Research Objectives

The specific objectives of this research are the following:

(a) Assess the GHG impacts of local buses.
(b) Assess the characteristics of riders and their travel patterns.
(c) Generate a dataset of riders through a survey that can be used to answer the research questions of this study and assist NJ TRANSIT with future service planning and modeling.

Research Tasks

The key tasks involved in this research are the following:

- **Survey preparation**: Hire and train surveyors, prepare assignment sheets, print and organize surveys for distribution, and schedule surveys by week.

- **Conduct onboard survey of bus riders**: Conduct onboard survey of bus riders between 6 AM and 4 PM to collect data from 25 bus routes.

- **Enter, clean, and weight data**: Enter paper surveys collected onboard by surveyors and received by mail into an electronic format, scan surveys and assignment sheets, clean the entered data by comparing with scanned surveys, and weight the data to make the sample representative of all riders.

- **Analyze survey data**: Analyze survey data to examine route-specific riders' individual characteristics (including demographic and socioeconomic characteristics) and riders' travel characteristics (including trip origins and destinations, access and egress modes, trip frequency, ticket type, satisfaction with service, and the availability of travel alternatives).

- **Estimate air quality impacts of buses**: Use GIS to calculate trip distances of bus riders, estimate vehicle miles travelled (VMT), and estimate GHG emissions from trips that would be diverted to automobile in the absence of buses to determine the potential GHG impacts of buses.

Key Findings

The following are the key findings of this research:

- The rider survey for the 25 routes, conducted between 6 AM and 4 PM on weekdays over several weeks in the fall of 2017 and spring of 2018, generated data from 3,795 riders.
- The analysis of the emissions impact of buses showed that the diversion of riders from buses to automobile would generate a large amount of GHG, composed mostly of carbon dioxide (CO_2). The analysis showed, based on one-way trip alone, approximately 6,175 metric tons of CO_2 would be generated annually from automobiles if the riders diverted to that mode. It would take almost 1,314 automobiles to operate for a full year to generate that amount of emission.
- The bus routes predominantly serve low-income populations. For almost all routes, the share of low-income riders was significantly larger than the share of low-income persons in New Jersey. The low income of bus riders is evident from the fact that the share of riders with annual income less than $25,000 is greater than 50 percent for 11 of the 25 routes, and for all but two routes, the share of such riders is greater than 30 percent.
- The routes predominantly serve racial and ethnic minority populations. The share of non-white riders is greater than the share of white population in the state for only one route whereas the share of African American riders is smaller than the state average for only five routes. For all but four routes, the share of Hispanic riders is greater than the state average. Asian riders also constitute more than the share of Asian population in the state for almost all routes.
- The local buses serve a large number of riders with no vehicles in household. For only one route, the share of riders with no vehicles in household is smaller than the share of households with no vehicle in household in the state. Whereas only 11.6 percent of all households in New Jersey do not have a vehicle, for ten of the routes, the share of riders with no vehicles in household is greater than 50 percent.
- For a large number of riders, buses are their only means of travel. More than 50 percent of the riders in 17 routes stated that they had no other means of travel.
- A large proportion of the bus trips are made to go to work. The proportion of riders going to work by buses varied between 22 percent and 100 percent for the routes. For 15 of the routes, more than 40 percent stated that their trip destination was work.

- Most bus routes surveyed did not have direct access to a train station, but for those that connect to a train station, the share of riders accessing stations by bus was substantial.
- Buses on other routes are often used by the riders of the surveyed routes as access or egress mode, indicating that many riders depend on the network of NJ TRANSIT buses instead of depending on the single route where they were surveyed.
- Rider satisfaction scores indicated that far more riders are satisfied than dissatisfied with the bus service. On a 11-point scale between 0 and 10, the mean satisfaction score varied between 6.99 and 8.86 for the 25 routes.
- Although app-based services provided by transportation network companies did not even exist in New Jersey until November 2013, a large proportion of riders stated that they would take such services in the absence of buses. For 15 routes, the share of riders potentially taking app-based service is greater than potentially driving on their own, indicating the possibility of substituting bus trips by app-based services.

Recommendations

On the basis of the experience with the survey and data analysis, the following recommendations are made:

- Promote local buses since they can potentially help to reduce GHG emissions and facilitate travel for a large number of riders who have no other option to travel.
- Consider conducting surveys between 6 AM and 8 or 9 PM in the future instead of only between 6 AM and 4 PM to collect data from more diverse riders.
- Conduct surveys on weekends to collect data from more diverse riders and examine weekend travel patterns.
- Examine through statistical methods whether surveys on selected bus trips instead of all bus trips would generate unbiased results to reduce the cost of surveys.
- Promote future research to understand how app-based services provided by transportation network companies can be integrated with transit services.
- Promote future research to investigate the potential and actual adverse effects of app-based services on bus transit.

INTRODUCTION

As noted in the final report for Analysis of Local Bus Markets by the Alan M. Vorhees Transportation Center (1), examining the impact of public transit on air quality is very important in New Jersey because of a high level of pollution caused by cars driven by people on congested roads. As noted in that report, more than 80% of the trips in New Jersey are made by cars. As a result, the share of GHG emitted by transportation in New Jersey is significantly higher than the national average (37% versus 28%).

Due to the significant contribution of the transportation sector to overall GHG emissions, public transportation is often perceived as a potential solution. Although New Jersey roads are highly congested, transit usage in the state is also one of the highest in the nation. In addition to several commuter lines and three light rail lines, NJ TRANSIT operates over 250 bus routes throughout the state, some connecting places in neighboring states of New York and Pennsylvania. According to NJ TRANSIT's Quarterly Ridership Trend Report for the 3rd quarter of FY-2018, 484,250 trips are made by the agency's buses on average weekdays, accounting for approximately 57% of total weekday trips by all transit modes operated by the agency (2).

The first objective of this research was to conduct an onboard survey of riders traveling by buses on selected routes and use the data to examine the air quality impacts of local buses. The second objective of this research was to use the survey data to analyze the characteristics of the riders and their travel patterns. The 25 bus routes for which onboard rider surveys were conducted through this study are listed in Table 1. These routes are categorized into four County Groups: Hudson County, Middlesex/Monmouth County, Burlington County, and Morris County. Although these routes are categorized into county grouping, some routes also serve neighboring counties.

It has been more than ten years since onboard rider surveys were last conducted for the 25 bus routes listed in Table 1. As a result, no recent data are available regarding the riders or their travel patterns involving these routes.

The rider surveys onboard 25 routes were conducted in two rounds, the first in the fall of 2017 and the second in the spring of 2018. The fall 2017 survey continued for seven weeks and the spring 2018 survey continued for nine weeks. Eight routes were surveyed in the fall of 2017 and 18 routes were surveyed in the spring of 2018. Fewer routes were surveyed in the first round because of higher rider volume and number of bus trips. Following NJ TRANSIT convention, surveys were conducted only on Tuesdays, Wednesdays, and Thursdays, excluding holidays. The survey period on each day was from 6 AM to 4 PM. Riders on all buses leaving the origin stop between those two time periods were asked to complete the survey.

This report contains only summary of findings for the entire study. Results of route-by-route analysis of rider characteristics and travel patterns have been provided to the study sponsor in the form of two technical memoranda. Survey data generated by this research has been provided to the study sponsor in electronic format.

Table 1 – The Surveyed Bus Routes

Route #	Market	Location/Service Area	Average Weekday Ridership (Trips)*
Hudson County Group			
2	Contract	Essex/Hudson	3,039
10	Contract	Hudson	3,846
88	Contract	Hudson	2,734
119	NY Interstate	Hudson/New York	3,953
Burlington County Group			
406	South Jersey	Camden/Burlington/Philadelphia	1,458
414	South Jersey	Burlington/Camden/Philadelphia	55
612	South Jersey	Mercer	51
Middlesex/Monmouth County Group			
48	North Jersey Local	Union/Middlesex	2,034
805	Contract	Metropark Loop Shuttle	311
830	Contract	Veolia Transportation/Monmouth	307
831	Contract	Veolia Transportation/Monmouth	359
832	Contract	Veolia Transportation/Monmouth	745
834	Contract	Veolia Transportation/Monmouth	330
837	Contract	Veolia Transportation/Monmouth	439
838	Contract	Veolia Transportation/Monmouth	324
Morris County Group			
871	North Jersey Local	Morris	112
872	North Jersey Local	Morris	42
873	North Jersey Local	Morris	171
874	North Jersey Local	Morris	117
875	North Jersey Local	Morris	126
878	Contract	Morris	22
880	North Jersey Local	Morris	395
890	Contract	Delaware River/Warren	17
891	Contract	Delaware River/Warren	27
986	Contract	Summit/Murray Hill/Plainfield	150

* Estimates based on ridership volumes provided by NJ TRANSIT and onboard count of riders by the research team.

Note: There were 27 routes in the scope of work, but Rt. 833 and Rt. 835 were merged into one route, Rt. 838, whereas Rt. 878 and Rt. 879 were merged into another route, Rt. 878. Thus, this survey was conducted onboard 25 routes instead of 27 routes.

CONDUCT RIDER SURVEY AND ANALYZE DATA

Introduction

The rider survey on the 25 routes was completed in two rounds: Fall of 2017 and spring of 2018. The fall 2017 survey was conducted for seven weeks (from 10-03-17 to 11-16-17) and the spring 2018 survey was conducted for nine weeks (from 3-20-18 to 5-15-18). The routes in the Burlington County group and Hudson County group were surveyed in fall 2017, whereas the routes in the Middlesex/Monmouth County group and Morris County group were surveyed in spring 2018.

Survey Preparation

The survey questionnaire was the same as that used by the research team for Analysis of Local Bus Markets study, completed in July 2017. The survey questionnaire was once again approved by the Institutional Review Board (IRB) of Rutgers University.

Approximately three weeks were needed to prepare for each round of survey. The surveyor positions were advertised using various online outlets at Rutgers University's New Brunswick campus. For each round, between 25 and 30 students were hired as surveyors through a two-step interview process. Three additional students were hired to schedule and monitor the survey on a daily basis.

Mandatory training sessions were organized for the surveyors before each round of survey. The training included topics such as preparation, responsibility, role, safety, and courtesy. Staff from VTC and NJ TRANSIT provided instruction at each session. All surveyors were required to take additional training on human subject research administered online by the Rutgers University Institutional Review Board (IRB) and obtain the Collaborative Institutional Training Initiative (CITI) certificate. NJ TRANSIT notified the bus garage personnel and NJ TRANSIT police about the survey and provided an authorization letter which included the names of all surveyors that was carried by the surveyors when conducting the onboard survey. Each surveyor was also provided an apron bearing the Rutgers University logo to be worn when conducting the survey.

NJ TRANSIT determined the number of surveys to be printed (both Spanish and English). Each survey instrument (and the envelope) had a unique serial number. Before the commencement of each round of survey, NJ TRANSIT provided the driver paddles for the pertinent routes to the research team. The bus driver paddles are the schedules for each bus driver showing the daily trips, including arrival and departure times. The paddles are used by drivers to maintain their schedule. The research team used the paddles to prepare assignment sheets for each bus trip surveyed. A sample of an assignment sheet is shown in Figure 1. As shown in the figure, the assignment sheets had all bus stops for the route listed, in addition to the trip start time and end time and beginning stop and ending stop. They also had spaces for the surveyors to write down the number of boarding and alighting riders at each stop.

ROUTE Number: **871**		
BUS Number (Painted No.):		
RUN Number: **001**	**TRIP** Number: 1	Ptn. **11**
Direction: **OUTBOUND**	From: **SPEEDWELL AVE AT**	To: WILLOWBROOK MALL
Date:	**CATTANO AVE 10:30 AM**	**11:38 AM**
Agent Names:		

ENGLISH Questionnaires		**SPANISH Questionnaires**
First Serial ID:		First Serial ID:
Last Serial ID:		Last Serial ID:

	Bus Stop	Passengers		# of Refusals	Top Survey Serial ID
		ON	OFF		
1	SPEEDWELL AVE AT CATTANO AVE				
2	SPRING ST AT WATER ST				
3	MORRIS ST AT ELM ST				
4	RIDGEDALE AVE 525' N OF ABBETT AVE				
5	RIDGEDALE AVE AT JOHN ST				
6	RIDGEDALE AVE AT EVERGREEN PL				
7	RIDGEDALE AVE AT EAST HANOVER AVE				
8	RIDGEDALE AVE 1000'N OF EAST HANOVER AVE				
9	RIDGEDALE AVE AT EAST FREDERICK PL				
10	RIDGEDALE AVE AT HORSE HILL RD				
11	RIDGEDALE AVE AT CEDAR KNOLLS RD				
12	RIDGEDALE AVE AT ELM PL				
13	RIDGEDALE AVE AT GLENN DR				
14	RIDGEDALE AVE AT MALAPARDIS RD				
15	RIDGEDALE AVE AT WING DR				
16	RIDGEDALE AVE AT RT-10				
17	N JEFFERSON RD 157'S OF PAPER MILL DRIVE				
18	N JEFFERSON RD 170'S OF FANOK RD				
19	PARSIPPANY RD AT EASTMANS RD				
20	PARSIPPANY RD AT CARLSTADT RD				
	TOTAL				

Number of Surveys Returned:	**CONTACT INFO:**
Number of Spanish Surveys Distributed:	**PI Phone # | Field op. Phone #**

Comments:

Figure 1. Sample assignment sheet

The schedulers at the survey center prepared a contact list of all surveyors, indicating which surveyors had personal automobiles to drive themselves and other surveyors to the survey site. They also prepared a document indicating each surveyor's availability on Tuesdays, Wednesdays, and Thursdays. Using this document and the driver list, VTC staff prepared the survey schedule for each week. The schedule was emailed to all surveyors a week prior to the actual survey for confirmation. Once confirmation was received, survey bags, containing survey instruments, pencils, assignment sheets, etc., were prepared for each day. Drivers for each shift were instructed to collect the bags the evening before the survey date.

At the survey center, VTC staff and students prepared a "Masterfile" containing information on each scheduled trip, including the names of the surveyors and the drivers carrying surveyors to the site as well as start and end time of shifts. The Masterfile was used to monitor the progress of the survey each day. When trips were missed for any reason (e.g., late arrival of bus, buses posting a run number different from assignment sheet, surveyor failing to find bus stop, etc.), the information was recorded in the Masterfile so that surveys for the missed trips could be rescheduled on a future date.

Conducting the Onboard Survey

Designated drivers carried one to three other surveyors to the site, depending on the schedule for that day. The surveyors arrived at the beginning bus stop 15-20 minutes before the departure time of the bus. They introduced themselves to the bus operators and presented their Rutgers ID card and the NJ TRANSIT authorization letter. When bus runs included a large number of trips (e.g., eight or ten trips), the surveyors continued to stay on the same bus conducting surveys for a maximum of eight hours per shift. When runs contained only two or three trips, the surveyors often transferred to another run on the same route or to another route operating in the same area.

Two surveyors boarded each bus to conduct surveys and record the number of riders. One surveyor distributed and collected completed surveys, whereas the other surveyor filled out the assignment sheets, including the number of boarding and alighting riders at each stop. At the conclusion of each trip, the surveyors bundled the completed surveys together with the assignment sheet for the trip and prepared for the next trip. At the conclusion of the entire shift, they organized the completed and unused surveys into separate bundles and brought them back to the survey center, where completed surveys from each trip were filed separately in locked filing cabinets. Approximately 90% of the completed surveys were collected onboard by the surveyors onboard while the remaining surveys were mailed back by the respondents in postage-paid envelopes given to them.

Data Entry, Cleaning, Geocoding, and Weighting

For each survey round, three students were hired for entering data from the paper surveys into a computer. Prior to the task, English and Spanish data-entry templates

were set up in Qualtrics and the data-entry personnel were familiarized with each bus route surveyed. The electronic data were checked for anomalies such as duplicate entry and implausible serial number. Whenever possible, the erroneous data were corrected.

The trip origins and destinations of the riders were subsequently geocoded using ArcGIS. When the respondents provided detailed addresses, it was possible to geocode the origins and destinations to exact location. When respondents provided only partial addresses such as only the street name or the zip code, their origins and destinations were geocoded to an approximate location.

In the final step of the process, a weight variable was created following a methodology provided by NJ TRANSIT. The methodology uses average weekday ridership data for each route together with directional number of respondents for peak and off-peak periods. Application of the weight variable expands the survey responses to represent the full universe of weekday riders on each route.

Data Analysis

The analysis of survey data is divided into three broad sections: (a) rider characteristics, (b) trip characteristics, and (b) environmental impacts of buses. Results of the analysis are presented in the three following sections in that order. The rider characteristics pertain to demographic and socioeconomic variables. The trip characteristics include trip origins and destinations, access and egress modes, trip frequency, return trip mode, ticket type, the availability of alternative modes, et cetera. The environmental impact section presents results showing how much GHG would be generated if bus riders were to drive instead of taking buses.

The results of the analysis are presented in this report in summary form. Detailed tables containing route-by-route analysis have been provided to the study sponsor in the form of a technical memorandum.

NJ TRANSIT conventionally estimates response rates for onboard rider surveys by assuming that most riders travel in both directions during a day but take the survey only once. With that assumption, the response rate for all surveys combined is 39%. For the survey conducted in fall 2017, the response rate was 41%, whereas the response rate for the survey conducted in spring 2018 was 38%.

The margins of error (MOE) at 95% confidence level for the surveyed routes are shown in Table 2. Because of extremely small rider volumes, some routes were combined by following guidance from NJ TRANSIT. Despite that, however, MOE remains high for some combined routes. One of the reasons for the high MOE for some routes, especially those in Morris County and two in Burlington County is that the rider volumes are very low. Since number of total riders is used as a denominator when estimating MOE, a small number of riders for a route lowers the estimate even when the response rate is reasonable.

Table 2 – Margin of error for surveyed routes at the 95% confidence level

Route by County Group	Margin of Error	Average Weekday Riders
Hudson County		
2	2.5%	3,039
10	2.3%	3,846
88	2.8%	2,734
119	2.1%	3,953
Burlington County		
406	3.6%	1,458
414	12.4%	55
612	13.8%	51
Middlesex/Monmouth County		
48	2.8%	2,034
805	7.1%	311
830	6.7%	307
831	7.3%	359
832	5.3%	745
834	7.0%	330
837	6.6%	439
838	8.1%	324
Morris County		
880	7.4%	395
986	11.8%	150
871_874	9.6%	229
872_875	11.3%	168
873_878	10.4%	193
890_891	20.9%	44

RIDER CHARACTERISTICS

Introduction

This broad section presents a description of the demographic and socioeconomic characteristics of the surveyed riders. The demographic characteristics include gender and age. The socioeconomic characteristics include race, ethnicity, occupation, income, household size, number or vehicles in household, et cetera. All figures shown here represent average weekday riders.

Gender

The male-female split of riders for the surveyed routes is presented in Table 3, where the total number of riders (N) represents weighted survey respondents who responded to the question. By applying the male and female percentages to the number of riders, one can estimate the number of male and female riders for each route.

Table 3 – Male-female split of riders for the surveyed routes

	Percent			Riders
Rt. #	Male	Female	Total	(N)
Hudson County				
2	52.5	47.5	100.0	2,628
10	34.7	65.3	100.0	3,467
88	41.9	58.1	100.0	2,375
119	45.3	54.7	100.0	3,420
Burlington County				
406	45.2	54.8	100.0	1,277
414	31.8	68.2	100.0	55
612	65.2	34.8	100.0	51
Middlesex/Monmouth County				
48	48.9	51.1	100.0	1,840
805	69.9	30.1	100.0	304
830	47.8	52.2	100.0	264
831	40.6	59.4	100.0	329
832	45.8	54.2	100.0	692
834	33.5	66.5	100.0	274
837	44.1	55.9	100.0	389
838	46.2	53.8	100.0	296
Morris County				
880	59.0	41.0	100.0	352
986	38.2	61.8	100.0	134
871_874	45.9	54.1	100.0	212
872_875	58.0	42.0	100.0	162
873_878	49.2	50.8	100.0	171
890_891	28.4	71.6	100.0	44

According to the 2016 American Community Survey, the shares of male and female population of New Jersey are 48.8 percent male and 51.2 percent female, respectively. A comparison of the shares of males and females in Table 3 with these shares indicate how the bus riders differ from the state's population. When compared to the state population, the share of female riders is higher than the state's population for all but five routes. On the whole, the share of female riders is higher than the share of male riders for the surveyed buses. These results are consistent with the results of Analysis of Local Bus Markets (1), which also found a higher share of female riders for most bus routes.

Age

The age distribution of the riders for each surveyed route is shown in Table 4. The column N represents the weighted riders who responded. For reference, 22.7 percent of New Jersey's population is under age 18 and 18.6 percent is age 65 or over.

Table 4 – Age distribution of riders for the surveyed routes

Rt. #	Percent									N
	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total	
Hudson County										
2	1.5	22.8	23.9	19.5	15.8	9.9	3.4	3.2	100.0	2,752
10	8.2	34.0	16.5	12.7	13.4	6.0	2.7	6.6	100.0	3,546
88	5.6	23.9	19.9	14.9	16.3	7.9	3.7	7.7	100.0	2,546
119	4.2	15.7	26.3	19.1	16.0	9.0	2.7	6.9	100.0	3,714
Burlington County										
406	1.3	11.9	26.7	20.7	15.4	15.2	3.2	5.7	100.0	1,374
414	0.0	9.1	9.1	22.7	18.2	22.7	9.1	9.1	100.0	55
612	0.0	8.7	34.8	43.5	4.4	4.4	0.0	4.4	100.0	51
Middlesex/Monmouth County										
48	2.5	15.1	18.7	14.8	19.6	13.5	6.6	9.3	100.0	1,993
805	0.0	7.5	45.1	32.5	8.5	5.8	0.0	0.7	100.0	295
830	5.7	3.3	17.9	17.1	30.1	13.0	8.1	4.9	100.0	282
831	0.0	7.8	20.7	19.6	26.1	8.6	4.9	12.3	100.0	354
832	7.6	31.0	15.6	10.9	8.3	11.5	6.7	8.5	100.0	730
834	0.0	8.1	20.4	27.5	18.6	22.4	0.0	3.0	100.0	330
837	1.3	12.7	13.1	24.7	10.7	18.6	11.9	7.0	100.0	439
838	3.7	34.6	25.4	18.8	6.0	5.3	4.6	1.6	100.0	311
Morris County										
880	1.5	8.5	19.2	16.4	17.5	13.6	7.7	15.5	100.0	362
986	0.0	4.5	8.1	24.4	32.0	23.0	5.1	2.9	100.0	141
871_874	0.0	12.3	31.7	15.2	28.5	6.3	3.8	2.3	100.0	224
872_875	6.6	24.5	25.0	3.8	19.0	13.0	1.5	6.6	100.0	163
873_878	0.0	13.7	25.6	8.7	9.1	22.5	13.1	7.4	100.0	173
890_891	0.0	10.7	4.9	12.8	29.8	19.8	0.0	22.0	100.0	44

For all bus routes surveyed, the proportion of riders under age 18 is smaller than the state population, but that is not surprising because young children cannot travel alone, and if they travel with adults, the adults would complete the survey. The surveyors reported that the riders under age 18 are mostly school children going to or coming back from school.

The share of riders age 65 and over is low for most routes because older adults generally are less likely to take fixed-route transit than younger adults. Also, many older adults have retired from work so they are not riding buses to commute. From the distributions in Table 3, it is difficult to generalize if the share of riders under age 18 or age 65 and over is significantly different for routes in any specific county. That is because within each county, the shares vary substantially among the routes.

Race

The share of riders belonging to different races is shown in Table 5. For reference, one may note that the share of white, African American, and Asian persons in the state of New Jersey, according to the 2016 American Community survey, are 68.1 percent, 13.5 percent, and 9.2 percent, respectively.

Only for the combined routes 890_891, the share of white riders is greater than the share of white population in the state, 68.1 percent. The share of white riders on the 830 and 834 routes is only slightly smaller than the state average, but for all other routes, the share of white riders is significantly smaller. The share of white riders is especially small for the Hudson County routes, which have much higher ridership volumes than routes in the other three areas. Because of the larger share of non-white riders in routes with higher rider volumes, the routes serve a much larger share of non-white riders overall.

The share of African American riders is greater than the state average of 13.5 percent in most routes. Only Rt. 88 in Hudson County, Rt. 612 in Burlington County, Rt. 805 and Rt. 830 in Middlesex/Monmouth County, and the combined routes 890_891 in Morris County have share of African American riders that is lower than state average. The share of African American riders is the highest for Rt. 406 in Burlington County, but routes with very large share of African American riders are present in all four areas.

The share of Asian riders is greater than the share of Asian population of New Jersey for more than half of the routes. Among the four areas, the Hudson County routes have the greatest share of Asian riders and the Middlesex/Monmouth County routes have the smallest share. Because the Hudson County routes are used by significantly more riders than the routes in the other three areas, the overall share of Asian riders is far greater for the surveyed routes as a whole than the share of Asian population in New Jersey.

Table 5 – Racial composition of riders for the surveyed routes

	Percent							
Rt.#	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total	N
Hudson County								
2	20.7	38.6	20.6	2.7	8.0	9.4	100.0	2,528
10	28.9	30.9	16.7	1.4	10.7	11.5	100.0	3,183
88	33.9	13.0	21.8	1.8	11.4	18.1	100.0	2,093
119	32.2	17.4	28.2	0.8	7.6	13.8	100.0	3,265
Burlington County								
406	18.8	61.6	4.5	2.2	7.0	5.9	100.0	1,218
414	59.1	18.2	13.6	0.0	0.0	9.1	100.0	55
612	20.0	5.0	70.0	0.0	5.0	0.0	100.0	44
Middlesex/Monmouth County								
48	24.4	46.6	15.3	1.0	7.5	5.2	100.0	1,785
805	17.8	2.4	72.6	2.4	2.4	2.4	100.0	292
830	66.6	11.5	0.0	0.0	0.0	21.9	100.0	241
831	40.9	37.8	0.0	0.0	8.9	12.5	100.0	254
832	35.7	46.4	4.6	0.7	7.5	5.1	100.0	618
834	65.7	21.3	3.9	0.0	3.9	5.2	100.0	292
837	28.7	56.9	0.0	3.1	6.1	5.2	100.0	395
838	42.3	21.7	9.8	6.4	7.8	12.1	100.0	232
Morris County								
880	61.0	14.0	2.1	3.2	3.2	16.5	100.0	260
986	33.4	36.1	13.7	0.0	2.7	14.0	100.0	113
871_874	36.7	16.0	18.4	0.0	13.3	15.7	100.0	185
872_875	53.4	23.0	1.7	2.1	3.7	16.2	100.0	149
873_878	27.1	35.1	11.0	0.0	22.6	4.1	100.0	155
890_891	87.9	12.1	0.0	0.0	0.0	0.0	100.0	41

Ethnicity

Responses to a survey question inquiring about the ethnicity of the riders are summarized in Table 6. It shows the percent of riders for each route that were Hispanic, Latino, or Spanish. For reference, one may note that the proportion of Hispanic or Latino persons in the entire New Jersey state in 2016 was 19.3 percent. Only Rt. 414 and Rt. 612 in Burlington County, Rt. 805 in Middlesex/Monmouth County, and the combined routes 890_891 in Morris County have a share of Hispanic or Latino riders that is smaller than the share of Hispanic or Latino population in the state. Compared to other routes these routes have a far smaller number of total riders. As a result, the share of Hispanic or Latino riders for all routes combined is substantially larger than the state's share of Hispanic or Latino population.

Table 6 – Ethnicity of riders for the surveyed routes

Rt. #	Percent: Hispanic, Latino, or Spanish	Percent: Not Hispanic, Latino, or Spanish	Total	N
Hudson County				
2	34.6	65.4	100.0	2,290
10	34.6	65.5	100.0	3,229
88	59.1	41.0	100.0	2,351
119	31.3	68.8	100.0	3,370
Burlington County				
406	22.1	78.0	100.0	1,118
414	9.5	90.5	100.0	52
612	0.0	100.0	100.0	47
Middlesex/Monmouth County				
48	29.6	70.4	100.0	1,727
805	7.9	92.1	100.0	279
830	48.7	51.4	100.0	259
831	44.6	55.4	100.0	307
832	33.6	66.4	100.0	665
834	20.9	79.1	100.0	301
837	34.1	65.9	100.0	394
838	39.9	60.1	100.0	269
Morris County				
880	62.3	37.7	100.0	334
986	35.2	64.8	100.0	128
871_874	48.6	51.4	100.0	199
872_875	42.4	57.7	100.0	152
873_878	24.2	75.8	100.0	151
890_891	6.4	93.6	100.0	44

To a certain extent, the share of Hispanic riders reflects the share of Hispanic population in the counties where the bus routes operate. For example, at 43 percent, the share of Hispanic population lives in Hudson County which is the highest among all New Jersey counties. Accordingly, the Hudson County routes have a large share of Hispanic riders. Similarly, the share of Hispanic population in Cumberland County is only 7.5 percent and two routes operating in the county have a very low share of Hispanic riders. However, Hispanic riders in Middlesex, Monmouth, and Morris Counties constitute a much larger share than one would expect from the share of Hispanic population in those counties because the shares of Hispanic population in those counties, respectively, are 20.0 percent, 10.4 percent, and 12.7 percent.

Household Income

The distribution of annual household income of riders on the surveyed routes is shown in Table 7. When comparing the income of riders with the state's population, one may note that only 11.0 percent of the state's population has a household income below $15,000 and 15.5 percent has an income below $25,000. At the other end of the

spectrum, six percent of the state's population has household income greater than $200,000 and 27.6 percent has an income exceeding $100,000.

For only two routes (Rt. 414 and Rt. 612) the share of riders with income less than $15,000 (and also $25,000) is lower that the share of New Jersey population with that level of income. These routes are Rt. 414 and Rt. 612, both from Burlington County. For both of these routes, the ridership volumes are extremely small. For the other routes, the share of riders with such low levels of income was greater than the share of persons with similar income in the state, indicating that most bus routes serve a large share of low-income riders. By comparing the income of riders with New Jersey population's income at the high end of the income spectrum, one would come to the same conclusion. Only for three routes, Rt. 612 in Burlington County, Rt. 838 in Middlesex/ Monmouth County, and Rt. 986 in Morris County, the share of riders earning more than $200K is larger than the share of New Jersey population with similar income.

Table 7 – Annual household income of riders for the surveyed routes

Rt. #	Under $15K	$15K-$24K	$25K-$49K	$50K-$74K	$75K-$99K	$100K-$199K	$200K+	Total	N
Hudson County									
2	27.5	17.1	29.9	10.8	5.9	7.4	1.5	100.0	2,529
10	28.1	17.7	27.0	12.4	5.2	8.7	1.0	100.0	3,021
88	36.2	18.0	28.6	8.9	4.1	3.0	1.2	100.0	2,179
119	20.8	10.5	23.4	15.6	13.1	14.6	2.0	100.0	3,165
Burlington County									
406	32.5	24.0	27.9	8.0	2.4	4.0	1.1	100.0	1,185
414	5.0	5.0	20.0	45.0	10.0	15.0	0.0	100.0	50
612	5.6	0.0	11.1	27.8	27.8	11.1	16.7	100.0	40
Middlesex/Monmouth County									
48	30.9	21.9	25.9	8.9	5.1	6.2	1.1	100.0	1,849
805	0.0	0.0	9.5	22.4	22.4	43.0	2.7	100.0	263
830	27.7	16.8	38.7	9.9	6.9	0.0	0.0	100.0	232
831	39.0	13.0	34.1	10.0	0.0	3.9	0.0	100.0	308
832	38.3	20.1	26.9	9.4	3.4	0.7	1.3	100.0	661
834	16.1	28.0	28.4	24.1	3.5	0.0	0.0	100.0	288
837	41.7	17.6	27.4	8.7	4.6	0.0	0.0	100.0	388
838	34.9	18.2	19.4	7.5	6.1	5.5	8.5	100.0	250
Morris County									
880	35.2	28.8	26.8	5.3	1.7	2.2	0.0	100.0	321
986	15.6	14.9	45.7	6.4	3.7	6.4	7.4	100.0	113
871_874	30.1	26.1	18.9	16.7	7.4	0.9	0.0	100.0	195
872_875	47.6	12.7	14.0	9.7	6.4	5.4	4.3	100.0	114
873_878	27.2	27.8	8.2	16.0	4.0	16.7	0.0	100.0	153
890_891	30.4	16.7	33.6	12.1	7.2	0.0	0.0	100.0	39

According to the 2016 American Community Survey, the median household income for New Jersey as a whole is $73,702. In contrast, the share of riders with annual income less than $25,000 is greater than 50 percent for 11 of the 25 routes, and for all but two routes, the share of such riders is greater than 30 percent.

Vehicles in Household

The availability of household vehicles for riders of the surveyed bus routes is shown in Table 8. It shows the share of riders with no vehicle, one vehicle, two vehicles, and three or more vehicles in household. Among these groups, those with no vehicles in household are of greater significance since they are likely to be more reliant on public transit than persons from households with one or more vehicles. For reference, one may note that the proportion of households with no vehicles in household in the state of New Jersey in 2016 was 11.6 percent, whereas proportion of households with one vehicle was 34.4 percent, the proportion with two vehicles was 36.2 percent, and the proportion with three or more vehicles was 17.8 percent.

Table 8 – Distribution of riders by number of vehicles in household

	Percent					
Rt. #	No car	One car	Two cars	Three or more cars	Total	Riders (N)
Hudson County						
2	52.1	28.7	16.0	3.2	100.0	2,723
10	40.1	32.2	20.4	7.4	100.0	3,504
88	49.9	34.4	11.6	4.1	100.0	2,489
119	43.2	37.3	15.9	3.6	100.0	3,650
Burlington County						
406	50.8	30.0	15.5	3.7	100.0	1,347
414	18.2	40.9	31.8	9.1	100.0	55
612	22.7	63.6	13.6	0.0	100.0	49
Middlesex/Monmouth County						
48	37.1	38.3	16.7	7.9	100.0	1,947
805	7.4	77.4	10.1	5.1	100.0	297
830	53.7	35.8	10.6	0.0	100.0	282
831	63.2	29.4	5.2	2.2	100.0	349
832	49.4	28.5	15.2	6.9	100.0	714
834	51.5	41.5	7.0	0.0	100.0	330
837	52.7	35.6	8.8	2.9	100.0	432
838	36.7	24.0	34.4	4.9	100.0	287
Morris County						
880	51.4	27.8	13.8	7.1	100.0	359
986	42.6	38.6	18.9	0.0	100.0	132
871_874	67.9	22.0	3.6	6.5	100.0	196
872_875	45.8	30.7	15.6	7.9	100.0	149
873_878	70.4	13.7	10.8	5.1	100.0	176
890_891	60.9	32.7	6.4	0.0	100.0	44

Table 8 shows that the share of riders with no vehicles in their household is higher than the state as a whole for all surveyed routes except Rt. 805 in Middlesex/Monmouth County. Two other routes with a relatively low share of riders with no vehicle in their household are Rt. 414 and Rt. 612, both from the Burlington County area. Table 7 showed that the riders of these three routes also have relatively higher income than other surveyed routes.

Although the population of Hudson County has a lower vehicle ownership rate than the other counties, the riders of the surveyed routes in Hudson County do not necessarily have lower vehicle ownership rate than the riders of the other counties. Some routes in Middlesex/Monmouth County and Morris County in fact have a greater share of riders without vehicles than the Hudson County routes. Somewhat surprisingly, the two routes with the greatest share of riders without vehicles in their household are from Morris County.

Occupation

Selected occupation of riders from the survey data analysis is shown in Table 9. In addition to the occupations shown in the table, a few other occupations, including "not currently employed," "home maker," "non-office worker" and "other" were included in the survey questionnaire as response categories. Those categories have been combined into the "Other" category in Table 8 because of space limitation.

Table 9 – Occupation of riders

	Percent								
Rt.#	Management/ Professional	Technical/ Skilled	Clerical/ Secretarial	Sales/ Retail	Retired	Student	Other	Total	Riders (N)
Hudson County									
2	12.1	16.1	6.0	9.2	1.0	9.2	46.5	100.0	2,660
10	11.3	5.7	6.8	7.3	4.9	29.1	34.9	100.0	3,448
88	11.4	5.5	5.1	8.2	6.3	24.6	38.8	100.0	2,548
119	22.3	12.0	5.4	7.2	5.2	15.3	32.7	100.0	3,654
Burlington County									
406	10.8	10.6	6.0	13.2	4.5	7.1	47.9	100.0	1,323
414	27.3	31.8	22.7	0.0	0.0	0.0	18.2	100.0	55
612	38.1	33.3	4.8	9.5	0.0	0.0	14.3	100.0	47
Middlesex/Monmouth County									
48	7.8	10.5	6.3	13.2	9.3	11.5	41.5	100.0	1,914
805	32.8	43.7	0.0	2.4	0.0	0.0	21.2	100.0	293
830	0.0	10.8	5.8	14.2	0.0	5.8	63.4	100.0	275
831	5.7	6.3	2.9	24.3	4.6	0.0	56.1	100.0	329
832	4.6	8.8	1.2	24.7	9.6	24.5	26.7	100.0	762
834	11.9	13.1	3.1	20.5	4.5	4.5	42.3	100.0	335
837	6.0	11.7	9.9	17.1	6.9	1.3	47.2	100.0	438
838	6.9	6.6	3.6	9.5	4.5	26.9	42.1	100.0	306
Morris County									
880	3.1	8.3	3.2	14.1	19.1	4.3	48.1	100.0	359
986	21.9	14.6	14.6	5.1	0.0	0.0	43.9	100.0	142
871_874	3.4	21.8	7.7	17.6	3.6	1.1	44.8	100.0	197
872_875	7.6	7.1	7.6	12.1	6.7	31.7	27.3	100.0	161
873_878	14.6	8.9	4.4	13.4	10.8	9.7	38.3	100.0	175
890_891	19.1	0.0	0.0	15.6	21.2	0.0	44.0	100.0	44

The share of Management/Professional and Technical/Skilled workers is the highest for Rt. 612 and Rt. 414 from Burlington County. As workers in these occupations usually

earn more than other occupations, these results are consistent with the relatively high income of the riders of the two routes. However, some routes in the other counties also show a high proportion of workers in these occupations, such as Rt. 119 in Burlington County and Rt. 986 in Morris County. The share of riders in sales/retail occupations appears to be higher in Middlesex/Monmouth and Morris County routes than the routes in the other two counties. The share of students is high for the Hudson County routes as a whole than the routes in the other three counties. The Hudson County routes surveyed as a part of Analysis of Local Bus Markets (2017) was also high. A reason for the high share of students for the Hudson County routes is that many high school students take transit buses in that general area. Although the Hudson County routes as a whole show a large share of students, selected routes in the other counties also show a large share of students including Rt. 832 and Rt. 838 in Middlesex/Monmouth County and Rt. 872_875 in Morris County.

Household Size

The distribution of riders by household size (i.e., number of persons in household), is shown in Table 10. Of particular interest are the proportions of riders in single-person and 4+ person households since existing literature generally shows that persons from single-person households typically use more transit and persons from large households typically use less transit. One reason is that single persons often live in apartments in urban areas where transit is readily available, whereas larger households often locate in suburban areas where transit is less readily available. Larger households often have children and the presence of children often induces households to acquire cars.

Data from the 2016 American Community Survey show that 25.7 percent of persons in New Jersey as a whole live in single-person households and 26.0 percent live in households with four or more persons. For all routes in Hudson County and Burlington County, the share of riders from single-person households is substantially lower than the state average. However, for a few routes in Middlesex/Monmouth County and Morris County, the share of riders from single-person households is larger than the share of persons from single-person households in New Jersey.

The share of riders with four or more persons in household is greater for most routes than the state average of 26 percent. Only three routes, namely, Rt. 831 in Middlesex/Monmouth County and Rt. 871_874 and Rt. 873_878 in Morris County have a smaller share of riders from households with four or more persons. On the whole, the theory that people from smaller households are more likely to take transit and people from larger households are less likely to take transit does not hold for the surveyed routes. A reason for many riders from large households taking buses may be that economic constraints prohibit them from acquiring and using cars. That seems to be the case particularly in Hudson County where the share of riders from single-person households is low and the share of riders from four or more persons in a household is high.

Table 10 – Distribution of riders by household size

Rt. #	Percent					Riders (N)
	One person	Two person	Three person	Four or more person	Total	
Hudson County						
2	13.3	25.9	23.4	37.3	100.0	2,701
10	11.0	21.7	21.9	45.4	100.0	3,512
88	13.1	22.0	23.9	42.0	100.0	2,474
119	16.0	25.0	23.2	35.9	100.0	3,573
Burlington County						
406	16.4	24.1	21.5	38.1	100.0	1,333
414	13.6	36.4	22.7	27.3	100.0	55
612	9.1	40.9	18.2	31.8	100.0	49
Middlesex/Monmouth County						
48	12.1	21.2	26.1	40.6	100.0	1,952
805	10.4	27.3	36.0	26.3	100.0	289
830	19.9	19.0	21.5	39.7	100.0	266
831	31.9	24.2	19.5	24.4	100.0	354
832	21.1	27.3	17.6	34.0	100.0	730
834	27.5	38.3	9.7	24.6	100.0	330
837	28.2	18.6	16.5	36.8	100.0	418
838	16.5	15.7	11.1	56.7	100.0	288
Morris County						
880	18.5	15.2	20.4	46.0	100.0	351
986	9.2	20.8	34.4	35.6	100.0	135
871_874	32.2	25.3	21.3	21.2	100.0	208
872_875	15.4	24.9	14.2	45.5	100.0	152
873_878	31.7	36.9	8.9	22.5	100.0	168
890_891	25.5	28.4	0.0	46.1	100.0	44

Disability

The proportion of riders with disability for the surveyed bus routes is shown in Table 11. For reference, according to the 2016 American Community Survey, the proportion of civilian noninstitutionalized population with disabilities in the entire state of New Jersey is 10.4 percent. Table 11 shows that the proportion of riders with disability is significantly smaller than the state average for all but two combined routes: Rt. 872_875 and Rt. 890_891, both in Morris County. A potential reason for the low share of riders with disability for most of the surveyed routes is the small share of elderly riders, for the share of persons with disability is usually significantly higher among elderly persons than non-elderly persons. Another reason for the low share of bus riders with disability is that many persons with disability use NJ TRANSIT's ADA-complementary Access Link paratransit service because of its greater convenience and comfort.

Table 11 – Proportion of riders with disability

Rt. #	Percent: Has Disability	Percent: Does not have	Percent: Total	Riders (N)
Hudson County				
2	2.3	97.7	100.0	2,717
10	3.9	96.1	100.0	3,493
88	5.7	94.3	100.0	2,458
119	1.5	98.5	100.0	3,670
Burlington County				
406	5.5	94.5	100.0	1,333
414	4.6	95.5	100.0	55
612	0.0	100.0	100.0	47
Middlesex/Monmouth County				
48	5.0	95.0	100.0	1,917
805	0.0	100.0	100.0	296
830	0.0	100.0	100.0	282
831	6.7	93.3	100.0	336
832	3.1	96.9	100.0	714
834	9.5	90.5	100.0	320
837	7.5	92.5	100.0	439
838	6.0	94.0	100.0	285
Morris County				
880	5.7	94.3	100.0	346
986	0.0	100.0	100.0	130
871_874	6.1	93.9	100.0	218
872_875	13.3	86.7	100.0	149
873_878	0.0	100.0	100.0	173
890_891	19.8	80.2	100.0	44

TRAVEL CHARACTERISTICS

This broad section describes how the riders use buses on the surveyed routes. It includes discussions on origin and destination places, access and egress modes, trip frequency, travel mode for return trips, and type of tickets purchased.

Origin and Destination Places

The origin and destination places for this analysis do not pertain to any specific geographic locations such as cities, city blocks, or neighborhoods. Instead they pertain to places such as home, work, and schools. As such, the analyses show trip purposes rather than actual locations where trips started or ended.

The origins of the bus trips (i.e., the trips where the riders were intercepted by the surveyors) are presented in Table 12. The destination places for the routes are shown in Table 13.

Table 12 – Origin places of riders for bus trips

	Percent										
Rt. #	Home	Work	Shop	Personal business	Medical/ dental	Social/ recreation	School (K-12)	Tech., college or university	Other	Total	Riders (N)
Hudson County											
2	60.7	25.3	1.6	2.0	1.5	0.4	1.9	0.5	6.2	100.0	2,912
10	65.1	11.7	1.4	3.6	2.0	0.3	3.8	8.8	3.3	100.0	3,613
88	58.2	14.4	1.9	3.8	2.6	1.4	2.6	8.1	7.0	100.0	2,647
119	64.7	16.6	2.5	2.6	2.3	0.3	2.7	4.3	4.1	100.0	3,818
Burlington County											
406	53.3	24.1	3.9	6.4	5.3	0.2	0.9	2.1	3.9	100.0	1,434
414	90.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	4.6	100.0	55
612	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	51
Middlesex/Monmouth County											
48	60.1	16.1	1.7	5.2	4.8	0.9	1.1	3.1	7.1	100.0	1,984
805	97.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	311
830	57.5	20.5	3.2	0.0	0.0	0.0	5.5	0.0	13.4	100.0	291
831	62.2	19.0	3.8	3.8	4.5	0.0	0.0	0.0	6.7	100.0	337
832	61.4	11.3	3.4	4.3	0.6	0.6	4.9	9.7	3.9	100.0	732
834	69.5	4.6	1.5	15.3	1.5	0.0	0.0	0.0	7.6	100.0	330
837	60.2	19.8	3.2	3.0	4.8	1.5	0.0	0.0	7.6	100.0	418
838	49.5	9.2	1.2	3.1	4.4	2.1	1.2	18.1	11.1	100.0	313
Morris County											
880	70.9	5.2	2.3	2.9	5.8	0.0	0.0	0.0	13.0	100.0	379
986	73.3	21.6	0.0	2.3	2.9	0.0	0.0	0.0	0.0	100.0	143
871_874	68.9	14.5	1.0	3.6	0.0	2.3	0.0	1.0	8.8	100.0	228
872_875	70.5	0.0	0.0	6.6	0.0	0.0	0.0	9.8	13.2	100.0	165
873_878	57.9	13.2	1.8	4.4	2.7	0.0	0.0	4.5	15.5	100.0	179
890_891	50.4	17.1	19.8	6.4	0.0	0.0	0.0	0.0	6.4	100.0	44

Table 12 shows that more than 50 percent of trips for each route originated at the riders' homes. A reason for such a high proportion of trips originating at home for all routes is that the survey was conducted between 6 AM and 4 PM. If the survey continued beyond 4 PM, the proportion of trips from home would have been lower since many more workers' return trips from work would have been accounted for. Another reason for the large share of home origins is that most riders returning home in the afternoon did not respond to the survey because they completed the survey in the morning, when they were leaving from home.

Although less substantial than trips originating at home, the share of trips originating at work is also large for almost all routes. The share of trips originating at work would have been potentially larger if the survey continued beyond 4 PM. On the whole, the large share of work origins suggests that the surveyed buses play a significant role in connecting work places to homes for the riders.

Table 13 – Destination places of riders for bus trips

	Percent										
Rt. #	Home	Work	Shop	Personal business	Medical/ dental	Social/ recreation	School (K-12)	Tech., college or university	Other	Total	Riders (N)
Hudson County											
2	22.0	63.9	1.6	2.0	1.8	0.8	1.2	4.3	2.5	100.0	2,627
10	26.4	30.8	2.3	5.5	2.4	1.3	7.5	18.7	5.2	100.0	3,438
88	24.5	38.3	4.7	5.2	4.2	0.7	4.3	10.8	7.2	100.0	2,381
119	26.4	48.4	3.2	4.0	2.5	0.5	4.8	4.7	5.6	100.0	3,466
Burlington County											
406	34.1	44.2	3.3	6.7	2.5	1.0	1.3	1.3	5.6	100.0	1,315
414	9.1	90.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	55
612	0.0	95.7	0.0	4.4	0.0	0.0	0.0	0.0	0.0	100.0	51
Middlesex/Monmouth County											
48	29.5	43.1	2.7	6.4	5.8	1.2	2.0	3.7	5.6	100.0	1,849
805	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	304
830	36.0	45.1	16.2	2.7	0.0	0.0	0.0	0.0	0.0	100.0	255
831	31.2	45.0	5.1	5.1	3.9	0.0	0.0	2.5	7.3	100.0	310
832	20.8	34.0	9.5	5.8	4.7	0.7	5.0	18.2	1.3	100.0	659
834	16.4	53.1	9.1	6.1	5.5	2.4	0.0	0.0	7.3	100.0	274
837	33.3	41.9	6.7	4.6	6.1	2.9	0.0	3.0	1.5	100.0	400
838	30.3	36.8	6.7	2.3	0.0	5.1	0.0	17.4	1.4	100.0	279
Morris County											
880	23.1	44.9	9.4	3.7	11.3	0.0	0.0	0.0	7.7	100.0	350
986	14.1	77.0	0.0	0.0	0.0	6.6	2.4	0.0	0.0	100.0	131
871_874	18.4	50.3	3.1	9.9	0.0	7.3	0.0	0.0	11.1	100.0	220
872_875	23.3	38.3	3.0	2.9	0.0	0.0	0.0	26.7	5.8	100.0	165
873_878	20.3	54.5	10.6	4.9	2.0	0.0	2.0	2.0	3.8	100.0	162
890_891	49.6	22.0	15.6	0.0	0.0	0.0	0.0	0.0	12.8	100.0	44

Table 13, where the destinations of the bus riders are shown, provides a better indication of riders' trip purposes than Table 12, where trip origins were shown. That is

because a large share of the trip origins was home. As expected, the largest share of trip destination for most routes was work, indicating that the buses play an important role in providing access to work locations. However, Table 13 also shows that the buses provide access to other types of activities as well to many riders, as the share of trips for personal business, shopping, medical/dental visits, and schools are also not insignificant for most routes. Somewhat surprisingly, the share of trips to institutions of higher education is high for several routes. Compared to the Analysis of Local Bus Markets (1), the share of trips to K-12 schools is lower for these surveyed routes, potentially because several routes in Hudson County in that study were used by many students going to school.

Access and Egress Mode

The travel modes used by the riders to access boarding bus stops for the 23 routes are shown in Table 14. Their egress modes from alighting stop are shown in Table 15.

Table 14 – Access mode to boarding bus stop

	Percent												
Rt. #	Walked only	Drove and parked	Carpool/ Drop-off	Another bus	Light Rail	NJT Train	PATH	Bike	Taxi	App-based service	Other	Total	Riders (N)
Hudson County													
2	49.3	0.9	1.6	32.3	1.5	11.1	3.1	0.3	0.0	0.0	0.0	100.0	2,790
10	83.8	0.5	0.6	5.9	0.4	1.0	7.0	0.1	0.1	0.3	0.5	100.0	3,551
88	77.8	0.6	1.2	14.4	0.7	1.1	3.0	0.2	0.0	0.6	0.5	100.0	2,659
119	85.7	1.3	0.8	4.4	0.2	0.3	3.2	0.3	0.0	0.6	3.3	100.0	3,840
Burlington County													
406	62.7	2.0	2.1	19.4	4.6	1.1	0.0	1.8	0.7	0.2	5.3	100.0	1,413
414	77.3	4.6	13.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	55
612	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	51
Middlesex/Monmouth County													
48	77.1	0.9	0.9	13.2	0.3	5.7	0.0	0.4	0.0	0.4	1.1	100.0	2,014
805	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	311
830	77.6	0.0	14.9	3.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	100.0	307
831	84.9	0.0	4.3	5.1	0.0	4.4	0.0	0.0	0.0	1.2	0.0	100.0	354
832	73.4	0.9	3.4	7.3	0.0	9.1	0.0	2.4	2.9	0.0	0.6	100.0	730
834	77.2	0.0	1.5	19.3	0.0	0.0	0.0	2.0	0.0	0.0	0.0	100.0	330
837	89.8	0.0	3.1	1.5	0.0	1.3	0.0	2.9	0.0	0.0	1.3	100.0	439
838	63.3	4.6	6.6	16.3	0.0	5.3	0.0	3.9	0.0	0.0	0.0	100.0	314
Morris County													
880	89.4	0.8	4.0	1.9	0.0	0.0	0.8	0.8	1.4	1.1	0.0	100.0	387
986	41.0	0.0	2.2	26.5	0.0	30.4	0.0	0.0	0.0	0.0	0.0	100.0	141
871_874	79.3	0.8	0.0	15.6	0.0	4.3	0.0	0.0	0.0	0.0	0.0	100.0	230
872_875	82.3	0.0	6.3	1.9	0.0	7.7	0.0	0.0	0.0	0.0	1.9	100.0	166
873_878	67.2	1.6	1.6	16.9	0.0	12.7	0.0	0.0	0.0	0.0	0.0	100.0	177
890_891	64.6	0.0	9.9	19.1	0.0	6.4	0.0	0.0	0.0	0.0	0.0	100.0	44

Table 14 shows that walking to boarding bus stops is the most common practice for bus riders. For more than half of the routes, 75 percent or more riders accessed their boarding stops by walking. For only two routes, the share of riders walking to boarding stop was less than half (Rt. 2 and Rt. 986). After walking, accessing bus stop by another bus is the most common. For routes, such as Rt. 2, Rt. 88, Rt. 406, Rt. 48, Rt. 834, Rt. 838, Rt. 986, Rt. 871-874, Rt. 873_878_, Rt. 890_891, the share of riders accessing boarding bus stops by another bus is substantial. The large share of riders boarding buses for these routes is an indication that these routes are well-connected with other bus routes. The share of riders accessing boarding stations by carpool/drop-off is small for most routes. Only for two routes the shares are noticeable. The share of NJ TRANSIT train is also small for most stations as the share of this mode is greater than 10 percent for only three routes. The share of PATH trips to boarding stations is even smaller, and as expected, only the riders for the Hudson County routes mentioned this mode. It is not surprising that the share of taxi trips to boarding stations is also very small. The very small share of trips by app-based modes indicates that Uber, Lyft, etc., are not commonly used by bus riders to access boarding stations.

Table 15 – Egress mode from alighting bus stop

	Percent												
Rt. #	Walked only	Drove and parked	Carpool/ Drop-off	Another bus	Light Rail	NJT Train	PATH	Bike	Taxi	App-based service	Other	Total	Riders (N)
Hudson County													
2	66.3	1.2	0.9	17.9	1.4	4.7	6.2	0.9	0.0	0.2	0.4	100.0	2,497
10	78.8	0.5	0.6	5.6	0.1	0.4	12.9	0.0	0.0	0.3	0.7	100.0	3,361
88	66.3	1.0	0.5	21.9	2.7	0.3	4.5	0.2	0.2	0.7	1.8	100.0	2,381
119	77.4	1.1	0.0	3.9	0.9	0.6	5.5	0.0	0.6	0.5	9.7	100.0	3,478
Burlington County													
406	75.2	0.8	0.3	16.7	3.4	0.8	0.0	0.9	0.0	0.3	1.7	100.0	1,275
414	81.8	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0	4.6	100.0	55
612	26.1	0.0	0.0	0.0	0.0	69.6	0.0	0.0	0.0	4.4	0.0	100.0	51
Middlesex/Monmouth County													
48	75.1	0.4	0.5	11.2	0.0	11.8	0.5	0.0	0.0	0.0	0.5	100.0	1,897
805	4.8	0.0	0.0	0.0	2.3	90.7	2.3	0.0	0.0	0.0	0.0	100.0	310
830	76.6	6.3	3.6	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	255
831	81.0	0.0	3.6	10.4	0.0	0.0	0.0	3.4	0.0	0.0	1.6	100.0	331
832	87.7	0.0	0.7	7.0	0.0	2.7	0.0	1.3	0.0	0.0	0.7	100.0	668
834	83.0	0.0	2.5	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	264
837	74.9	0.0	1.7	13.9	0.0	1.6	0.0	4.7	3.2	0.0	0.0	100.0	400
838	68.2	6.2	2.9	9.2	0.0	8.1	0.0	2.4	1.4	1.7	0.0	100.0	286
Morris County													
880	84.8	1.2	1.6	5.6	0.0	0.8	0.0	0.0	5.2	0.8	0.0	100.0	352
986	68.9	0.0	6.5	10.5	2.4	11.7	0.0	0.0	0.0	0.0	0.0	100.0	128
871_874	82.6	1.0	0.0	14.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	100.0	225
872_875	87.3	4.6	0.0	2.2	0.0	4.6	0.0	1.5	0.0	0.0	0.0	100.0	143
873_878	78.1	0.0	0.0	16.8	0.0	0.0	1.6	1.8	0.0	1.6	0.0	100.0	174
890_891	79.5	0.0	12.4	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	35

Table 15 shows that similar to access modes, walking is the most common egress mode for most routes, followed by the use of another bus. Once again, 75 percent or more riders from more than half of the routes walked from their alighting station to their destinations. Similar to boarding station access mode, using another bus from egress station is the second most common way for bus riders. For 12 routes, the share of riders using another bus as egress mode was greater than 10 percent. PATH is once again mentioned primarily by riders in the Hudson County routes. The share of riders using NJ TRANSIT rail as egress mode is not common for most routes. However, the share is very high for Rt. 805, which provides access to the Metropark Station along the Northeast Corridor line, followed by Rt. 612, which provides access to the Princeton Junction Station along the same line. Another route with a noticeable share of riders using NJ TRANSIT trains is Rt. 48, which provides service to Broad St. at Jersey St., a location only one block away from the Elizabeth Station along the Northeast Corridor and North Jersey Coast line. Yet another route with a high volume of NJ TRANSIT train users is Rt. 986, which serves the Summit Station on the Morristown line and Plainfield Station along the Raritan Valley line. Similar to access mode, the share of ridehailing app modes is almost insignificant for all routes.

Trip Frequency

Riders were asked how frequently they take the bus. The results for all routes are shown in Table 16. Riders who made trips six or seven times a week may be considered *dependent users* since many of them are likely to use the bus for commuting to work as well as other activities such as shopping and errands. Some of them may also work more than five days a week. Riders who made trips five times a week can be considered *commuters*, who are highly likely to take the bus to work or school/college. Riders who made trips more than one time but less than five times a week can be considered regular but *infrequent users*. Riders who made 1-3 trips a month can be considered *occasional users*, while riders who made less than one trip a month can be considered *sporadic* users.

When one follows the above categorization of riders, three routes in Hudson County (Rts. 2, 10, and 88), one route in Burlington County (Rt. 406), five routes in Middlesex/Monmouth County (Rts. 48, 830, 831, 834, 837), and three routes in Morris County (Rts. 880, 871_874, and 873_878) have a large share (more than 20 percent) of *dependent riders*. The share of *commuters*—riders who take the bus five days a week—is larger than the share of dependent riders for all routes. For five routes (Rts. 2, 414, 612, 805, and 986), the share of commuters is more than 50 percent.

With a few exceptions, the shares of *infrequent* and *occasional riders* appear to be larger for the routes in Middlesex/Monmouth and Morris County than the routes in Hudson County and Burlington County. On the whole, far more riders use the buses five days a week or more than less than five days for all routes. Only for six routes (Rt. 832, Rt. 834, and Rt. 838 in Middlesex/Monmouth County, and Rt. 872_875, Rt. 873_878, and Rt. 890_891 in Morris County) the share of riders using buses five days or more is lower than the share of riders using buses less frequently. More importantly, the share

of riders using buses five or more days a week is larger for the routes that have high rider volumes than routes with low rider volumes.

Table 16 – Frequency of trips made by buses on the surveyed routes

	Percent										
Rt. #	7 days/ week	6 days/ week	5 days/ week	3-4 days/ week	1-2 days/ week	1-3 days/ month	<one day/ month	<one day/ year	First time user	Total	Riders (N)
Hudson County											
2	16.0	15.3	50.7	9.2	4.6	1.9	1.8	0.0	0.6	100.0	2,670
10	19.9	9.7	35.2	20.7	7.0	4.2	2.6	0.3	0.4	100.0	3,450
88	19.9	10.9	34.9	17.4	7.0	4.1	4.4	0.7	0.7	100.0	2,403
119	10.6	9.4	47.1	16.0	7.9	5.0	2.1	0.2	1.6	100.0	3,496
Burlington County											
406	18.3	11.8	32.9	14.7	8.7	8.1	3.2	0.3	2.0	100.0	1,318
414	9.5	4.8	66.7	9.5	4.8	4.8	0.0	0.0	0.0	100.0	52
612	0.0	0.0	60.9	21.7	13.0	0.0	4.4	0.0	0.0	100.0	51
Middlesex/Monmouth County											
48	15.0	11.4	35.7	18.2	9.5	6.5	2.7	0.5	0.5	100.0	1,856
805	2.3	0.0	89.4	8.3	0.0	0.0	0.0	0.0	0.0	100.0	303
830	8.7	13.9	33.1	28.7	8.7	3.5	0.0	0.0	3.5	100.0	264
831	14.6	15.3	29.5	16.7	12.7	6.1	2.9	0.0	2.3	100.0	334
832	9.1	9.5	29.0	26.3	15.0	4.9	4.2	0.0	2.0	100.0	679
834	7.3	18.0	15.8	28.1	27.2	1.8	1.8	0.0	0.0	100.0	279
837	5.9	23.7	28.4	21.7	7.7	9.4	3.3	0.0	0.0	100.0	406
838	7.5	7.0	29.2	23.9	23.1	3.4	3.7	0.0	2.2	100.0	299
Morris County											
880	6.1	19.1	31.1	23.7	10.9	6.0	1.6	0.0	1.6	100.0	347
986	0.0	3.1	71.1	10.9	9.3	0.0	5.5	0.0	0.0	100.0	134
871_874	5.4	22.4	42.3	22.7	1.8	1.8	0.0	0.0	3.6	100.0	228
872_875	2.9	5.0	30.8	32.6	20.3	8.3	0.0	0.0	0.0	100.0	165
873_878	7.4	13.6	24.6	29.8	15.4	1.7	2.8	0.0	4.7	100.0	171
890_891	7.1	0.0	30.8	12.6	11.9	12.6	14.2	11.0	0.0	100.0	40

Return Trip

The bus riders were asked in the survey how they would travel when making the return trip. Their responses are summarized in Table 17.

It is evident from Table 17 that more than half of the riders for all routes would take the same bus for their return trip. The lowest share was observed for Rt. 871_874 and the highest share was observed for Rt. 872_875, both in Morris County.

The large share of riders who would take the same bus in the opposite direction for their return trip indicates that many riders are dependent on the bus routes for their daily travel. The large share may also be the result of a large share of commuting trips because commuters are more likely to commute both ways by the same mode. Table 17 indicates that when riders do not return by buses on the same route, they are more

likely to return by buses on other routes than returning by some other mode. The share of riders who mentioned that they would return by NJ TRANSIT train is high for routes that provide access to train stations, but many riders who specified train as the return mode potentially did so because they considered train to be a more dominant mode than bus when they utilized both modes as a part of their journey. It is likely that they used buses on the same route or some other route for their mixed-mode journey involving train, but specified train because they considered it more dominant than buses. Somewhat surprisingly, the share of riders who mentioned that they would make the return trip by car was substantial for some routes. However, as expected, the share of such riders is small for all Hudson Country routes.

Table 17 – Stated mode for return trip by bus riders

	Percent						
Rt. #	Same bus route	Another bus	Train	Car	Other	Total	Riders (N)
Hudson County							
2	62.4	18.2	7.8	5.3	6.2	100.0	2,591
10	68.3	14.4	6.8	4.7	5.8	100.0	3,286
88	63.1	23.5	1.1	5.7	6.6	100.0	2,286
119	63.3	16.0	9.1	4.5	7.1	100.0	3,375
Burlington County							
406	68.2	15.2	6.1	5.6	5.0	100.0	1,261
414	81.8	18.2	0.0	0.0	0.0	100.0	55
612	60.9	8.7	21.7	8.7	0.0	100.0	51
Middlesex/Monmouth County							
48	62.0	15.1	8.0	10.3	4.6	100.0	1,799
805	66.7	2.3	24.4	3.3	3.3	100.0	303
830	73.9	2.6	6.1	6.1	11.3	100.0	264
831	63.9	8.5	16.8	4.0	6.8	100.0	301
832	76.9	8.6	4.1	6.6	3.8	100.0	643
834	71.3	7.5	2.4	17.0	1.8	100.0	269
837	72.5	8.0	5.0	3.2	11.4	100.0	393
838	72.9	5.6	2.7	10.5	8.3	100.0	289
Morris County							
880	77.0	3.7	9.9	5.4	4.1	100.0	340
986	81.4	4.8	5.0	5.6	3.2	100.0	130
871_874	52.7	29.4	3.2	6.8	7.8	100.0	217
872_875	79.8	4.3	1.5	7.1	7.3	100.0	165
873_878	65.8	6.1	11.8	8.8	7.5	100.0	171
890_891	60.9	12.8	0.0	21.4	4.9	100.0	44

Ticket Type

The survey respondents were asked about the type of tickets they used for the rides where they were intercepted by surveyors. The results are summarized in Table 18. The figures in the table show that one-way tickets/cash and monthly passes are the two most common types of tickets used by the riders. However, in contrast to the Analysis of Local Bus Markets study (1), which found more frequent use of monthly passes than

one-way tickets, this study found greater use of one-way tickets. For 15 routes, one-way tickets were more common, whereas monthly passes were more common for the remaining routes.

With a few exceptions, monthly-pass use is more frequent for the routes in Hudson County and Burlington County than for the routes in Middlesex/Monmouth and Morris County. The results in Table 18 are consistent with the frequency of using buses in Table 16, which showed that the share of infrequent and occasional riders was larger for the routes in Middlesex/Monmouth and Morris County than the routes in Hudson County and Burlington County. That is because riders who use buses more frequently are more likely to purchase monthly passes whereas riders who travel less frequently are more likely to purchase one-way tickets.

Table 18 – Type of tickets used by riders

	Percent											
Rt.#	One-way Ticket/ Cash	Monthly Pass	Senior/ Person with disability/ Children	Round Trip	10-Trip/ Multi-trip	Weekly Pass	Student Monthly Pass	Student One-way	Student 10-Trip	Other	Total	Riders (N)
Hudson County												
2	26.5	53.5	3.3	6.0	0.5	3.2	1.3	1.6	0.3	3.8	100.0	2,681
10	44.0	36.5	4.2	3.8	0.0	0.3	3.3	2.4	1.6	3.9	100.0	3,433
88	33.8	49.0	5.6	3.0	0.4	0.0	2.2	2.6	0.2	3.3	100.0	2,363
119	38.4	37.7	6.2	3.9	7.3	0.2	1.1	2.1	0.5	2.6	100.0	3,489
Burlington County												
406	50.8	31.6	10.8	3.3	2.6	0.0	0.0	0.2	0.0	0.8	100.0	1,302
414	19.1	38.1	23.8	0.0	19.1	0.0	0.0	0.0	0.0	0.0	100.0	52
612	18.2	72.7	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	49
Middlesex/Monmouth County												
48	43.2	39.3	8.8	3.4	0.0	1.2	2.8	1.3	0.0	0.0	100.0	1,875
805	10.6	89.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	303
830	68.7	14.8	10.4	0.0	0.0	6.1	0.0	0.0	0.0	0.0	100.0	264
831	62.4	15.4	15.6	1.4	1.6	0.0	0.0	0.0	0.0	3.7	100.0	325
832	57.4	14.2	13.9	7.2	0.0	0.0	3.3	0.6	0.0	3.3	100.0	672
834	55.0	8.3	10.9	18.1	0.0	0.0	0.0	0.0	0.0	7.8	100.0	279
837	59.2	6.4	20.4	6.1	1.7	3.1	0.0	0.0	0.0	3.1	100.0	406
838	58.5	26.2	2.6	8.9	0.0	0.0	0.0	0.0	0.0	3.8	100.0	303
Morris County												
880	67.7	10.8	17.6	1.6	0.8	1.6	0.0	0.0	0.0	0.0	100.0	350
986	36.3	52.9	2.3	8.5	0.0	0.0	0.0	0.0	0.0	0.0	100.0	134
871_874	50.6	34.4	11.8	1.6	0.0	0.8	0.0	0.0	0.0	0.8	100.0	228
872_875	65.9	16.6	5.9	2.1	4.3	3.2	2.1	0.0	0.0	0.0	100.0	151
873_878	54.5	14.4	24.5	2.9	0.0	0.0	3.8	0.0	0.0	0.0	100.0	168
890_891	52.7	0.0	35.4	0.0	0.0	0.0	0.0	0.0	0.0	11.9	100.0	40

The share of riders using discounted tickets for seniors, persons with disability, and children is significant for most routes but the share varies widely between routes. It appears from Table 18 that such reduced fare tickets are used least in the Hudson

County routes. For several routes in Burlington, Middlesex/Monmouth, and Morris Counties, the share of discounted trips is more than 10 percent. The use of all other types of tickets is far less common than monthly passes, one-way tickets, and discounted tickets.

Satisfaction

A question was included in the survey that pertains to the riders' satisfaction of the bus service they were using. Riders were instructed to give a satisfaction score for the service. The score ranged from 0 to 10, 0 being unacceptable and 10 being excellent. Thus, the higher score reflected greater satisfaction and the lower score reflected lower satisfaction. Table 19 shows the share of riders giving specific score to each route. Although riders could select each specific integer score between 0 and 10, some scores have been combined in the table for space limitations. The two columns in the extreme right hand side of the table show the mean and median scores for each route.

Table 19 – Satisfaction scores for the routes

	Percent								Riders		
Rt. #	0	1-2	3-4	5	6-7	8-9	10	Total	(N)	Mean	Median
Hudson County											
2	1.8	2.2	5.9	21.5	17.9	25.8	25.0	100.0	2,569	7.15	8
10	2.7	3.6	11.0	21.7	22.4	23.3	15.3	100.0	3,316	6.50	7
88	0.9	2.4	6.7	17.5	18.0	32.3	22.3	100.0	2,276	7.29	8
119	1.1	2.0	7.3	19.8	25.8	27.3	16.9	100.0	3,293	6.99	7
Burlington County											
406	0.3	0.8	4.0	20.4	20.8	24.5	29.3	100.0	1,266	7.55	8
414	0.0	0.0	0.0	14.3	14.3	33.3	38.1	100.0	52	8.14	8
612	0.0	0.0	4.4	8.7	43.5	30.4	13.0	100.0	51	7.22	7
Middlesex/Monmouth County											
48	2.5	0.7	7.7	15.3	21.6	29.2	23.1	100.0	1,788	7.26	8
805	0.0	2.4	2.4	17.6	23.7	46.6	7.4	100.0	296	7.23	8
830	0.0	0.0	5.7	2.9	12.3	49.1	30.2	100.0	243	8.40	9
831	0.0	0.0	5.5	25.6	11.2	27.1	30.7	100.0	329	7.53	8
832	1.7	3.8	10.1	20.0	22.7	23.7	18.1	100.0	654	6.77	7
834	0.0	0.0	1.9	19.4	24.1	29.1	25.4	100.0	254	7.61	8
837	3.5	0.0	9.7	9.9	16.6	25.3	35.0	100.0	379	7.51	8
838	0.0	3.4	9.2	20.3	16.1	28.1	22.9	100.0	292	7.17	8
Morris County											
880	0.0	0.0	1.6	8.4	11.2	46.2	32.7	100.0	352	8.32	8
986	0.0	12.0	3.1	19.8	10.8	29.4	25.0	100.0	134	7.04	8
871_874	0.0	0.0	4.6	7.5	5.4	38.4	44.1	100.0	205	8.43	9
872_875	0.0	2.9	1.5	3.8	25.3	29.4	37.1	100.0	165	8.25	9
873_878	3.8	0.0	4.8	19.3	28.1	25.0	19.1	100.0	168	7.08	7
890_891	0.0	0.0	0.0	17.1	6.4	9.9	66.7	100.0	44	8.86	10

It is evident from Table 19 that the satisfaction scores for all routes are skewed, showing that more riders chose scores closer to excellent than unacceptable. This is

also evident from the fact that the median score for all routes is greater than 5, the middle point of the continuous series between 0 and 10. However, a comparison of the mean and median scores shows that some routes are more satisfactory to the riders than other routes. The route with the highest satisfaction is Rt. 890_891 in Morris County, which has a median score of 10—the highest possible. Two other routes in Morris County have a median score of 9, whereas only one other route has a median score of 9 (Rt. 830 in Middlesex/Monmouth County). On the whole, the satisfaction scores are somewhat lower in Hudson and Burlington County than in Middlesex/Monmouth and Morris County.

Responses to another survey question provide additional insights about the satisfaction of riders with the bus routes they used. Through this question, the riders were asked whether they would recommend the service they used to a friend or relative. The responses to that question are summarized in Table 20.

Table 20 – Likelihood of recommending service to friend or relative

Rt. #	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total	Riders (N)
Hudson County							
2	48.2	32.1	7.3	5.4	7.0	100.0	2,651
10	34.6	40.3	11.2	6.7	7.2	100.0	3,447
88	46.2	33.0	9.3	5.5	5.9	100.0	2,396
119	40.2	38.1	7.8	5.7	8.2	100.0	3,473
Burlington County							
406	45.8	30.9	8.0	5.5	9.7	100.0	1,319
414	72.7	13.6	4.6	4.6	4.6	100.0	55
612	56.5	34.8	4.4	0.0	4.4	100.0	51
Middlesex/Monmouth County							
48	46.8	36.4	5.4	4.8	6.7	100.0	1,855
805	41.6	34.3	2.3	14.5	7.3	100.0	303
830	80.5	19.5	0.0	0.0	0.0	100.0	248
831	45.8	23.8	14.3	8.1	8.0	100.0	325
832	38.9	35.2	10.9	7.7	7.4	100.0	692
834	39.9	37.9	3.7	6.0	12.6	100.0	279
837	53.5	27.8	4.7	9.5	4.5	100.0	406
838	41.7	27.6	18.9	7.0	4.9	100.0	302
Morris County							
880	56.5	24.3	3.1	5.9	10.2	100.0	357
986	61.5	15.6	5.4	12.0	5.5	100.0	134
871_874	61.7	28.8	0.0	1.1	8.5	100.0	212
872_875	44.5	35.6	8.2	0.0	11.7	100.0	165
873_878	66.9	15.7	5.5	4.6	7.3	100.0	174
890_891	76.5	0.0	6.4	0.0	17.1	100.0	44

Consistent with the responses to the question on satisfaction score that showed a far larger proportion of riders giving high scores than low scores, Table 20 shows that more riders would recommend the service rather than not recommend. When those who are very likely and somewhat likely to recommend are combined, even for the least

satisfactory route (Rt. 831), almost 70 percent said they would recommend the service. When one examines only the share of those who are “very likely” to recommend, riders in the Hudson County routes appear significantly less satisfied and the riders on the Morris County routes appear somewhat more satisfied than the routes in the other two counties. However, when those who are “very likely” and “somewhat likely” are combined, the differences between the routes in different counties become less obvious. On the whole, consistent with Table 19, the responses show a high level of satisfaction of riders in all routes.

Reason for Using Bus

The survey respondents were asked about the reasons for using the bus where they were intercepted by surveyors. They were given three responses to choose form: (a) I have no other way to travel, so I use the bus; (b) I use the bus because it is the best choice for me, even though there are other ways I could travel; and (c) I usually use another type of transportation, but I occasionally take the bus. The responses are summarized in Table 21.

Table 21 – Reasons for using buses by riders

	Percent				
Rt. #	No other way	Best choice	Atypical rider	Total	Riders (N)
Hudson County					
2	58.9	33.4	7.7	100.0	2,618
10	54.1	38.7	7.2	100.0	3,436
88	54.3	37.4	8.3	100.0	2,345
119	36.8	55.5	7.7	100.0	3,456
Burlington County					
406	60.8	28.4	10.8	100.0	1,313
414	27.3	72.7	0.0	100.0	55
612	52.2	43.5	4.4	100.0	51
Middlesex/Monmouth County					
48	57.0	32.3	10.8	100.0	1,875
805	39.9	57.8	2.3	100.0	303
830	51.3	42.6	6.1	100.0	264
831	60.8	29.7	9.4	100.0	310
832	61.1	27.2	11.6	100.0	667
834	57.4	36.5	6.1	100.0	274
837	50.4	38.5	11.1	100.0	393
838	49.4	41.3	9.3	100.0	283
Morris County					
880	61.7	28.3	9.9	100.0	357
986	55.1	39.2	5.7	100.0	131
871_874	68.1	23.9	8.0	100.0	224
872_875	60.4	31.9	7.7	100.0	165
873_878	68.9	22.7	8.5	100.0	165
890_891	55.0	37.9	7.1	100.0	40

Table 21 shows that except for four routes (Rt. 119 in Hudson County, Rt. 414 in Burlington County, and Rt. 805 and Rt. 838 in Middlesex/Monmouth County) more than half of the riders for all routes have no option to travel other than buses. Table 7 showed that household income of the riders for the two routes with the lowest share of riders mentioning that they have no other way to travel is higher than most other routes. Table 8 showed that the share of riders with no cars in household was the lowest for Rt. 414. Most riders of the Morris County routes are more likely to not have any other option to travel than the riders of the routes in other counties. The share of riders who mentioned that the buses were their best choice varies widely between the routes.

Travel Alternatives

The bus riders were asked how they would have traveled if the bus service was not available. In addition to various travel modes they could use, they were also given an option to state that they would not make the trip. The responses to the question are summarized in Table 22.

Table 22 – How riders would have traveled if the bus was not available

	Percent										
Rt. #	Would not make this trip	Drive a car	Car-pool	Taxi	App-based service	Jitney	Walk	Bike	Other	Total	Riders (N)
Hudson County											
2	22.6	8.1	6.3	9.9	34.5	1.9	7.4	1.6	7.7	100.0	2,666
10	11.7	11.3	3.9	8.5	26.3	13.8	10.3	2.4	11.8	100.0	3,665
88	12.0	9.4	3.1	7.3	28.2	10.9	11.0	1.8	16.4	100.0	2,587
119	6.9	9.7	2.6	4.1	23.2	8.3	6.3	1.1	37.7	100.0	3,752
Burlington County											
406	20.0	13.1	7.2	14.1	26.0	0.2	9.5	2.2	7.7	100.0	1,461
414	16.0	28.0	8.0	0.0	8.0	0.0	4.0	4.0	32.0	100.0	62
612	4.2	37.5	0.0	0.0	45.8	0.0	4.2	0.0	8.3	100.0	53
Middlesex/Monmouth County											
48	18.4	8.4	3.8	12.3	29.8	0.0	13.2	1.6	12.6	100.0	2,043
805	6.5	35.5	0.0	4.4	34.6	0.0	7.3	4.4	7.3	100.0	341
830	17.7	12.3	5.4	29.2	4.6	0.0	3.1	7.7	20.0	100.0	298
831	11.1	8.8	4.2	36.6	13.0	0.0	9.3	9.7	7.4	100.0	363
832	16.3	8.3	2.8	35.9	14.1	0.0	9.4	4.7	8.6	100.0	803
834	13.8	8.3	3.0	38.8	18.4	0.0	5.6	1.7	10.5	100.0	386
837	19.8	7.3	0.0	34.8	11.7	0.0	5.6	5.4	15.5	100.0	452
838	15.3	17.2	1.2	29.1	23.1	0.0	5.4	6.6	2.3	100.0	337
Morris County											
880	17.4	2.5	6.2	35.3	14.0	1.4	9.1	1.4	12.7	100.0	400
986	20.2	22.8	2.3	8.5	33.5	0.0	0.0	0.0	12.7	100.0	134
871_874	27.0	3.3	5.9	17.0	35.2	0.0	5.2	6.4	0.0	100.0	223
872_875	19.9	6.5	6.3	17.2	29.9	0.0	14.9	1.2	4.2	100.0	175
873_878	9.9	4.1	1.7	9.5	44.7	0.0	10.0	7.5	12.6	100.0	187
890_891	34.6	0.0	0.0	25.3	16.1	0.0	24.0	0.0	0.0	100.0	47

The first column of Table 22 shows the share of riders in each route that would not make the trip if the bus service did not exist. It is evident that the share of riders who would not have made the trip is substantial for most routes. For all routes except four (Rt. 119, Rt. 612, Rt. 805, and Rt. 873_878) at least 10 percent riders mentioned that would not have made the trip in the absence of buses on the route they were using. For four routes (Rt. 2, Rt. 986, Rt. 871_874, and Rt. 890_891), the share was larger than 20 percent. The share of riders who stated that they would drive a car was smaller than the share of riders who mentioned that they would not make the trip for most routes. For two Burlington County routes, however, the share of riders stating that they would drive was significantly higher. While the share of riders who stated that they would carpool was small for almost all routes, the share of riders who stated that they would take a taxi was much larger. For most Middlesex/Monmouth County routes, the share is larger than those who stated that they would drive.

The share of riders who said they would use an app-based service such as Uber and Lyft is the largest alternate mode for riders on many routes. That appears to be the case in all counties other than Middlesex/Monmouth County, where a large share of riders mentioned that they would use a taxi. The fact that the largest share of riders for most routes stated that the riders would use an app-based service indicates that buses and app-based services like Uber and Lyft are perceived to be substitutes by a large number of bus riders. This seems to repudiate the thinking of many researchers who think that app-based services would be used predominantly in suburban areas where transit service is not readily available.

The share of riders who stated that they would use jitneys is noticeable only for the Hudson County routes. That is not surprising because jitneys are not as available in other parts of New Jersey as they are in Hudson County. A small but significant share of riders also mentioned that they would walk or bike in the absence of buses. However, walking is possible only when a rider’s trips are short and biking can be a substitute for bus trips with moderate distance only. A reason for a significant share of riders for some routes in Morris County mentioning that they would walk may be that the routes are generally short.

ENVIRONMENTAL IMPACT

Introduction

The most important objective of this research is to estimate the environmental impacts of buses. Toward this end, analyses were undertaken to estimate CO_2 emissions that would have been generated if the bus riders were to use alternative transportation modes such as cars, taxis, or app-based services. The CO_2 estimates were obtained for 25 bus routes surveyed.

The air quality impact of transit is often estimated by examining how the transit riders would have traveled between their trip origins and destinations if the transit service did not exist. Adopting that approach, this study uses responses from a survey question that inquired what alternative travel mode the respondents would have used in the absence of the bus service they were using. Although many riders selected other modes such as walk, bike, train, another bus, etc., the relevant trips for the analysis here are only those that would have been made by an automobile, including driving alone, carpool, taxi, or app-based service such as Uber and Lyft. The riders who said they would not make the trips they were making in the absence of buses were also excluded from analysis because they would not generate any VMT by giving up their trips.

The following sequential steps were involved in estimating the CO_2 emissions that would have been generated from the diversion of bus riders to the automobile.

(a) Geocode the trip origins and destinations of the survey respondents.
(b) Using GIS, estimate network distances (miles) between the origins and destinations of each trip in the survey data.
(c) Select the trips for which the rider stated that he or she would have traveled by an automobile mode in the absence of the bus.
(d) Apply appropriate vehicle occupancy rate for those who said they would carpool in the absence of buses.
(e) Estimate vehicle miles traveled (VMT) for each potential automobile user by applying respective vehicle occupancy rates.
(f) Make a realistic assumption about miles per gallon (MPG) for automobile and CO_2 emission per gallon of gasoline.
(g) Use MPG, emissions per gallon, and VMT to estimate CO_2 emissions that would have been generated if riders diverted to automobile as stated in the survey.

Impact Estimation

The distances between bus trip origins and destinations were estimated by the ArcGIS Network Analyst. Vehicle occupancy rate for those who said they would carpool was obtained from responses to a specific survey question. For those who said they would carpool but did not mention the number of people they would carpool with, the average occupancy rate for all carpool riders was used. This average was 2.24 persons per car

for those who stated the number of carpool riders. For those who said they would drive alone, take a taxi, or take an app-based service, the vehicle occupancy rate was assumed to be one since potential taxi users and app-based service users were not asked about sharing vehicles with others.

Table 23 shows the estimated route-specific vehicle miles traveled (VMT) for the riders who stated that they would use an automobile mode in the absence of buses. The VMT estimates are based on one-way trip only. They would be twice as much if all riders returned by the same bus. The estimates are shown separately for those who would drive or carpool and those who would use app-based service or taxi, in addition to the total VMT obtained by aggregating the two. In addition to the estimates of VMT, the table shows the number of riders in each route that would use the specific modes.

Table 23 – Estimated vehicle miles to be traveled in the absence of buses

	Driver and Carpool		App-based and Taxi		Total	
Rt. #	Riders (N)	Miles	Riders (N)	Miles	Riders (N)	Miles
Hudson County						
2	293	1,647	906	5,987	1,199	7,634
10	393	1,979	971	5,251	1,364	7,231
88	232	1,236	674	3,490	906	4,726
119	242	1,533	701	4,029	943	5,563
Burlington County						
406	152	940	386	2,871	538	3,811
414	12	74	5	42	17	116
612	20	952	22	884	42	1,835
Middlesex/Monmouth County						
48	179	1,690	719	5,731	898	7,421
805	99	2,612	118	2,693	217	5,306
830	20	117	69	306	89	423
831	31	204	146	1,048	177	1,252
832	78	556	321	2,800	399	3,356
834	30	246	141	924	171	1,170
837	33	149	147	975	180	1,124
838	52	580	122	1,060	174	1,640
Morris County						
880	27	80	156	953	183	1,033
986	19	204	49	615	68	819
871_874	18	92	92	866	110	958
872_875	11	104	69	592	80	696
873_878	4	62	92	1,296	96	1,358
890_891	0	0	17	250	17	250
Total	1,945	15,059	5,923	42,662	7,868	57,721

The United States Environmental Protection Agency (EPA) uses a formula to estimate CO_2 emissions from gasoline consumption by automobiles (3). The formula can be stated as:

$$Total\ CO_2 emissions = \frac{CO_2 emissions\ per\ gallon}{MPG} X\ VMT$$

By assuming 8,887 grams of emissions per gallon of gasoline, 21.6 MPG, and 11,400 annual VMT, it estimated that the average annual emission per car is approximately 4.7 metric tons. The same assumptions have been made here to estimate CO_2 reduction for each bus route. Instead of annual VMT for a car, the VMT estimates from Table 23 were used for each route. The average weekday and annual estimates of CO_2 for the routes are shown in Table 24. The figures in the table show how much CO_2 would have been emitted if the bus riders who said they would travel by automobile in the absence of buses made their trips by automobile. Thus the figures indicate how much additional CO_2 would have been generated by additional automobile trips due to diversion from buses. While the weekday emissions were obtained by the EPA formula, to obtain the annual estimates, it was assumed that there are 260 working days in a year. Hence the annual estimates are 260 times larger than the weekday estimates.

Table 24 – Average weekday and annual CO_2 emissions from diversion to automobile

	Average weekday emissions (Metric tons)			Annual emissions (Metric tons)		
Rt.#	Driver and carpool	Taxi and app-based	Total	Driver and carpool	Taxi and app-based	Total
Hudson County						
2	0.68	2.46	3.14	176.2	640.4	816.6
10	0.81	2.16	2.97	211.7	561.7	773.5
88	0.51	1.44	1.94	132.2	373.3	505.6
119	0.63	1.66	2.29	164.0	431.0	595.1
Burlington County						
406	0.39	1.18	1.57	100.5	307.1	407.7
414	0.03	0.02	0.05	7.9	4.5	12.4
612	0.39	0.36	0.76	101.8	94.5	196.3
Middlesex/Monmouth County						
48	0.70	2.36	3.05	180.8	613.1	793.9
805	1.07	1.11	2.18	279.5	288.1	567.5
830	0.05	0.13	0.17	12.5	32.8	45.3
831	0.08	0.43	0.52	21.8	112.1	134.0
832	0.23	1.15	1.38	59.5	299.5	359.0
834	0.10	0.38	0.48	26.3	98.8	125.1
837	0.06	0.40	0.46	16.0	104.3	120.2
838	0.24	0.44	0.67	62.0	113.4	175.4
Morris County						
880	0.03	0.39	0.43	8.6	101.9	110.5
986	0.08	0.25	0.34	21.8	65.8	87.6
871_874	0.04	0.36	0.39	9.8	92.6	102.4
872_875	0.04	0.24	0.29	11.2	63.3	74.5
873_878	0.03	0.53	0.56	6.6	138.7	145.3
890_891	0.00	0.10	0.10	0.0	26.7	26.7
Total	6.20	17.55	23.75	1,610.9	4,563.7	6,174.6

Table 24 shows that emissions from driver and carpool are generally lower than emissions from app-based service and taxi. This is because a larger number of riders stated that they would use app-based service or taxi than driving or carpooling. The factors that affected the estimated emissions for each route were (a) distance between trip origins and destinations, and the (b) number of riders who stated that they would use an automobile mode.

Using the EPA's estimate of CO_2 generated per car per year, from the annual emissions figures in Table 24, one can estimate the number of cars that would have to be removed in order to achieve the estimated reduction in emissions. The estimated number of reduced cars from roads for each bus route is shown in Table 25.

The number of cars reduced in Table 25 is not for one weekday but for the whole year. The figures in the table indicate, based on one-way trips alone, the total emissions reduced by the 25 routes by allowing people to take buses instead of automobiles is equivalent to taking away 1,314 cars from roads for one full year.

Table 25 – Number of cars that would be removed from roads to achieve the estimated reduction in CO_2

Rt.#	Driver and carpool	Taxi and app-based	Total
Hudson County			
2	37	136	174
10	45	120	165
88	28	79	108
119	35	92	127
Burlington County			
406	21	65	87
414	2	1	3
612	22	20	42
Middlesex/Monmouth County			
48	38	130	169
805	59	61	121
830	3	7	10
831	5	24	29
832	13	64	76
834	6	21	27
837	3	22	26
838	13	24	37
Morris County			
880	2	22	24
986	5	14	19
871_874	2	20	22
872_875	2	13	16
873_878	1	30	31
890_891	0	6	6
Total	343	971	1,314

Note: The figures are based on one-way trip. They would be double if riders returned by the same bus.

One may note that buses also contribute to CO_2 emissions. To accurately estimate emissions generated from buses, information is needed about type of fuel used by buses. Additionally, assumptions have to be made about vehicle speed, traffic conditions, et cetera. Due to the unavailability of related information, efforts were not made to estimate emissions generated from the buses. Thus the CO_2 emissions shown here should not be interpreted as net savings. They only represent emissions that would be generated from cars if the riders who said they would use a car in the absence of buses used cars instead of buses for their trips.

The GHG savings from the routes surveyed in this study are significantly lower than the savings from the routes surveyed in Analysis of Local Bus Markets (1). The emissions estimated from the 25 routes in the current study are approximately 60% of the emissions estimated from the 23 routes in the previous study. Two factors contributed to this result. First, total ridership for the routes surveyed in the previous study was significantly larger. As a result, far more riders mentioned that they would use an automobile mode. Second, the routes surveyed through the previous survey were much longer. Despite this discrepancy, both studies show that most of the GHG savings occur from riders who would use an app-based service instead of driving alone.

CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

This research was based on a survey of riders on 25 NJ TRANSIT bus routes operating in Hudson County, Middlesex/Monmouth County, Burlington County and Morris County Groups. The analysis included analyses of (a) riders' demographic and socioeconomic characteristics, (b) riders' travel characteristics, and (c) CO_2 emissions from cars for riders who said they would use cars, taxis, or app-based services in the absence of buses.

The analysis on riders' demographic characteristics showed that the proportion of riders below age 18 and riders age 65+ is lower than state average, but these results are not surprising. The share of riders below age 18 is lower because a large proportion of them are too young to be using buses. The lower share of riders age 65+ is also consistent with other transit surveys as many older adults do not have the physical ability to use buses. Furthermore, older adults travel far less than younger persons.

A large proportion of riders on most routes are from low-income households. The only exceptions appear to be RT. 414 and Rt. 612 in Burlington County and Rt. 805 in Middlesex/Monmouth County. For many routes, riders with less than $25,000 annual household income constitute half or more of all riders. Although many surveyed routes serve areas with fairly high income, the riders generally have low incomes. Many are also from households without vehicles. Thus the buses help to provide mobility to a large number of low-income riders.

The survey results showed that a large proportion of riders have no vehicles in their household. Although only about 12% of households in New Jersey do not have any vehicle, for all but one route, the share of riders without vehicles was higher than the state average. For many routes, the share of vehicle-less riders was four or five times greater than the New Jersey average. For all but two routes, more than half of the riders stated that they had no other means to travel. Furthermore, between 10 and 20 percent of the riders for most routes mentioned that they would not even make the trip if the bus route did not exist. The data collected through the survey shows that the local buses provide an important safety net to less-privileged riders.

Analysis of the socioeconomic data also showed that a large proportion of riders in all four regions within New Jersey are racial or ethnic minorities. For almost all routes, the shares of African American, Hispanic and Asian riders are substantially larger than their respective shares in New Jersey as a whole. Although for some routes, the share of a specific minority group may be lower, the share of all three population groups combined is greater than the state average for all routes even though some routes serve non-minority areas.

A number of key observations can be made from the analysis of riders' travel patterns. First, because of the duration of the survey (6 AM to 4 PM), a large proportion of the

trips were made from home for all routes. This result is similar in Analysis of Bus Markets (1), the previous phase of the study, which also involved surveys between 6 AM and 4 PM. The largest proportion of riders for most routes stated that they were going to work. For many routes, the share of riders going to colleges or technical institutions for education was high. The high proportion of work and school trips by the buses shows their importance in facilitating important non-discretionary trips. Although the most common destination of the bus riders is work places, many riders also use the buses for personal business and shopping trips.

Second, the analysis of access and egress modes showed that most riders walk to and from the bus stops. However, the analysis of access and egress modes showed that a substantial number of bus riders also use buses on other routes. Riders use NJ TRANSIT train as access/egress mode only for selected bus routes, such as Rt. 612 and Rt. 805—routes that directly connect to commuter train stations. Third, although taking buses five days a week is most common, the analysis of trip frequency showed that the proportion of riders using buses for more than five days a week is also significant for most routes. The high proportion of riders using buses for more than five days a week indicates the importance of buses in facilitating weekend travel.

Fourth, the analysis of ticket types showed that cash/daily tickets and monthly passes are the most common for all routes. Fifth, most riders are highly satisfied with the bus services they use. For every route, the mean and median satisfaction scores are higher than the mid-point of the scale. Yet, the scores vary considerably across the routes. Sixth, a large proportion of riders for almost all routes stated that they use the bus because they have no other way to travel. This indicates that the bus service is highly important for most bus riders to meet their travel needs. Finally, a large share of riders indicated that in the absence of buses they would use an automobile mode, including driving their own cars, carpooling, taking a taxi, or using an app-based service. Similar to Analysis of Local Bus Markets (1), this study shows that a large share of riders would use app-based services in the absence of buses. This may indicate that the emerging app-based services may be highly competitive with buses. Although it is often believed by transportation professionals that the app-based services would help conventional fixed-route transit by providing first- and last-mile service, the survey responses seem to indicate that the app-based services are more likely to be a substitute than a complement to buses.

The analysis of the emissions impact of buses showed that the diversion of riders from buses to automobile would generate a large amount of CO_2. The analysis showed, based on one-way trips alone, 6,175 metric tons of CO_2 would be generated annually from automobiles if the riders decided to use that mode. It would take almost 1,314 automobiles to operate for a full year to generate that much emission. Considering that 52 to 81 percent of the riders for the surveyed routes mentioned that they take the bus in both directions per day, the total CO^2 emissions saved by the buses would be much higher than the estimate provided above.

Recommendations

The primarily objective of this research was to examine the emissions impact of local bus riders potentially deviating to cars, taxis, or app-based services in the absence of buses. Its secondary objective was to examine the socioeconomic characteristics of the riders and their travel patterns. Based on the results showing significant positive environmental impacts, the promotion of the local bus services can be highly recommended. The promotion of local buses can also be recommended for several other reasons. First, they serve a large proportion of riders who have no other means of travel. Second, local buses serve a large proportion of low-income and minority populations. In that sense, it is beneficial for achieving transportation equity. Third, the surveyed local buses are predominantly used for trips to work – trips that are important and non-discretionary. Fourth, buses on some of the surveyed routes also serve as useful feeder service to NJ TRANSIT trains, thereby helping to increase overall transit ridership.

Since the most significant task of this research was to conduct a large survey of bus riders, a few recommendations can be made for future surveys. First, extending the survey period from 6 AM to 4 PM to 6 AM to 8 or 9 PM could generate data from a more diverse set of riders. Second, since services are provided on many of the surveyed routes during weekends and many riders mentioned using buses six or seven days a week, conducting the survey on Saturdays and Sundays would generate additional important information that can be used for service planning. Third, because of the high cost of conducting surveys onboard every bus trip, NJ TRANSIT can consider conducting surveys on selected trips instead of all trips. However, in order to get appropriate representation of riders, further research would be needed to determine the number of trips to be surveyed for each bus route.

Considering that a very high proportion of riders on almost all routes stated that they would use an app-based service in the absence of buses, attention is needed in future research about the possibility of current transit riders choosing to take app-based services instead of transit. Coordination between app-based service providers and transit service providers to integrate the two types of services could ensure that they continue to be complementary to each other instead of being substitute. Studies have also indicated that one of the reasons for the loss of transit ridership nationwide since 2014 could be the expansion of app-based services in transit-rich areas (4). Thus there is a need to examine the overall effect of app-based services on local buses and other transit modes.

REFERENCES

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APPENDIX A

RIDER CHARACTERISTICS

This appendix, APPENDIX A, contains detailed tables relating to *rider characteristics*, whereas APPENDIX B contains detailed tables pertaining to riders' *travel characteristics*. The results presented in both appendices pertain to all riders surveyed through this study in two time periods, Fall 2017 and Spring 2018. Usable data was collected by the two rounds of surveys from a total of 3,795 bus riders traveling by any of 25 routes. The results presented in both memoranda are weighted results. The weights were generated by following a methodology used by NJ TRANSIT that uses direction of trip, time of day, and ridership volume. In addition to correcting for time of day and direction, the weights inflate the survey respondents to total riders. Thus the data tables show results for weekday daily riders instead of the sample of surveyed riders.

In addition to providing route-specific results, this appendix provides results for some of the routes that were combined because of small volumes of riders and survey respondents. The tables for individual routes are presented first, followed by combined routes. For each individual and combined route, nine tables are presented. Including combined routes, this Memorandum contains a total of 261 tables.

The tables in this appendix are organized by bus market. The routes for each market are shown below. The detailed tables are presented in the same sequence as shown.

Hudson County Group: Rt. 2, Rt. 10, Rt. 88, Rt. 119.

Burlington County Group: Rt. 406. Rt. 414, Rt. 612

Middlesex Monmouth County Group: Rt. 48, Rt. 805, Rt. 830, Rt. 831, Rt. 832, Rt. 834, Rt. 837, and Rt. 838.

Morris County Group: Rt. 871, Rt. 872, Rt. 873, Rt. 874, Rt. 875, Rt. 878, Rt. 880, Rt. 890, Rt. 891, and Rt. 986. In addition, separate tables are provided for these route combinations: Rt. 871_874, Rt. 872_875, Rt. 873_878, Rt. 890_891.

DATA TABLES

ROUTE 2

Table 1 – Gender

	Male	Female	Total
Riders	1379	1249	2628
%	52.47	47.53	100.00

Table 2 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	42	628	657	536	434	273	94	88	2752
%	1.52	22.82	23.87	19.48	15.77	9.93	3.42	3.18	100.00

Table 3 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	524	975	521	67	203	237	2528
%	20.72	38.59	20.61	2.65	8.04	9.39	100.00

Table 4 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	793	1497	2290
%	34.62	65.38	100.00

Table 5 – Household Income

Income	Riders	%
Under $15,000	695	27.49
$15,000-$24,999	431	17.06
$25,000-$34,999	298	11.77
$35,000-$49,999	458	18.12
$50,000-$74,999	274	10.84
$75,000-$99,999	148	5.86
$100,000-$149,999	137	5.41
$150,000-$199,999	50	1.96
$200,000 or over	38	1.49
Total	2529	100.00

Table 6 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	1419	782	435	88	2723
%	52.10	28.70	15.97	3.24	100.00

Table 7 – Occupation

	Riders	%
Management/ Professional	322	12.12
Technical/ Skilled	427	16.07
Clerical/ Secretarial	160	6.02
Not currently employed	79	2.95
Non-Office Worker	369	13.86
Sales/Retail	244	9.17
Retired	26	0.96
Student	244	9.17
Homemaker	57	2.16
Other	732	27.52
Total	2660	100.00

Table 8 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	360	700	633	486	324	198	2701
%	13.34	25.90	23.43	18.00	11.98	7.34	100.00

Table 9 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	62	2655	2717
%	2.28	97.72	100.00

ROUTE 10

Table 10 – Gender

	Male	Female	Total
Riders	1203	2263	3467
%	34.71	65.29	100.00

Table 11 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	291	1206	585	449	474	212	95	235	3546
%	8.20	34.00	16.50	12.67	13.36	5.97	2.68	6.62	100.00

Table 12 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	918	985	530	43	342	365	3183
%	28.86	30.94	16.65	1.35	10.74	11.46	100.00

Table 13 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	1116	2113	3229
%	34.55	65.45	100.00

Table 14 – Household Income

Income	Riders	%
Under $15,000	848	28.08
$15,000-$24,999	535	17.72
$25,000-$34,999	328	10.87
$35,000-$49,999	487	16.11
$50,000-$74,999	374	12.36
$75,000-$99,999	158	5.22
$100,000-$149,999	185	6.13
$150,000-$199,999	77	2.55
$200,000 or over	29	0.96
Total	3021	100.00

Table 15 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	1404	1128	713	259	3504
%	40.07	32.18	20.36	7.38	100.00

Table 16 – Occupation

	Riders	%
Management/ Professional	389	11.27
Technical/ Skilled	197	5.72
Clerical/ Secretarial	234	6.79
Not currently employed	301	8.74
Non-Office Worker	276	7.99
Sales/Retail	253	7.34
Retired	168	4.88
Student	1004	29.12
Homemaker	126	3.65
Other	500	14.51
Total	3448	100.00

Table 17 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	387	761	770	700	501	393	3512
%	11.03	21.66	21.93	19.94	14.26	11.18	100.00

Table 18 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	136	3357	3493
%	3.89	96.11	100.00

ROUTE 88

Table 19 – Gender

	Male	Female	Total
Riders	995	1379	2375
%	41.91	58.09	100.00

Table 20 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	143	608	506	380	415	202	95	197	2546
%	5.61	23.90	19.87	14.93	16.31	7.92	3.74	7.73	100.00

Table 21 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	709	271	455	38	238	380	2093
%	33.90	12.97	21.76	1.83	11.39	18.14	100.00

Table 22 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	1388	963	2351
%	59.05	40.95	100.00

Table 23 – Household Income

Income	Riders	%
Under $15,000	790	36.24
$15,000-$24,999	392	18.01
$25,000-$34,999	279	12.82
$35,000-$49,999	343	15.75
$50,000-$74,999	194	8.91
$75,000-$99,999	89	4.10
$100,000-$149,999	53	2.41
$150,000-$199,999	13	0.62
$200,000 or over	25	1.15
Total	2179	100.00

Table 24 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	1241	857	289	102	2489
%	49.87	34.44	11.59	4.10	100.00

Table 25 – Occupation

	Riders	%
Management/ Professional	291	11.42
Technical/ Skilled	141	5.54
Clerical/ Secretarial	130	5.10
Not currently employed	212	8.32
Non-Office Worker	213	8.35
Sales/Retail	209	8.22
Retired	160	6.29
Student	628	24.64
Homemaker	113	4.45
Other	450	17.67
Total	2548	100.00

Table 26 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	324	544	592	468	335	210	2474
%	13.10	22.01	23.94	18.92	13.55	8.49	100.00

Table 27 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	141	2317	2458
%	5.74	94.26	100.00

ROUTE 119

Table 28 – Gender

	Male	Female	Total
Riders	1549	1871	3420
%	45.29	54.71	100.00

Table 29 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	157	583	978	710	595	333	102	256	3714
%	4.21	15.71	26.34	19.12	16.02	8.95	2.74	6.90	100.00

Table 30 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	1052	567	919	27	248	452	3265
%	32.22	17.36	28.16	0.81	7.61	13.84	100.00

Table 31 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	1053	2317	3370
%	31.25	68.75	100.00

Table 32 – Household Income

Income	Riders	%
Under $15,000	659	20.82
$15,000-$24,999	331	10.46
$25,000-$34,999	201	6.34
$35,000-$49,999	540	17.05
$50,000-$74,999	494	15.61
$75,000-$99,999	416	13.14
$100,000-$149,999	345	10.89
$150,000-$199,999	116	3.67
$200,000 or over	64	2.01
Total	3165	100.00

Table 33 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	1578	1363	578	131	3650
%	43.23	37.34	15.85	3.58	100.00

Table 34 – Occupation

	Riders	%
Management/ Professional	814	22.28
Technical/ Skilled	438	11.97
Clerical/ Secretarial	197	5.39
Not currently employed	189	5.18
Non-Office Worker	158	4.34
Sales/Retail	261	7.15
Retired	190	5.19
Student	560	15.34
Homemaker	117	3.20
Other	729	19.95
Total	3654	100.00

Table 35 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	570	892	829	739	376	166	3573
%	15.96	24.97	23.21	20.68	10.52	4.66	100.00

Table 36 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	54	3616	3670
%	1.48	98.52	100.00

ROUTE 406

Table 37 – Gender

	Male	Female	Total
Riders	577	700	1277
%	45.19	54.81	100.00

Table 38 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	17	164	367	284	212	209	43	78	1374
%	1.27	11.92	26.71	20.68	15.40	15.20	3.16	5.65	100.00

Table 39 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	229	750	55	26	85	71	1218
%	18.82	61.60	4.54	2.17	7.02	5.85	100.00

Table 40 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	247	871	1118
%	22.05	77.95	100.00

Table 41 – Household Income

Income	Riders	%
Under $15,000	385	32.54
$15,000-$24,999	285	24.01
$25,000-$34,999	165	13.91
$35,000-$49,999	166	13.99
$50,000-$74,999	95	8.04
$75,000-$99,999	29	2.44
$100,000-$149,999	34	2.88
$150,000-$199,999	13	1.13
$200,000 or over	13	1.06
Total	1185	100.00

Table 42 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	685	404	209	49	1347
%	50.82	30.01	15.52	3.65	100.00

Table 43 – Occupation

	Riders	%
Management/ Professional	143	10.82
Technical/ Skilled	140	10.56
Clerical/ Secretarial	79	6.00
Not currently employed	92	6.94
Non-Office Worker	116	8.80
Sales/Retail	174	13.17
Retired	60	4.50
Student	94	7.08
Homemaker	13	0.99
Other	412	31.16
Total	1323	100.00

Table 44 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	219	321	286	292	113	102	1333
%	16.43	24.05	21.44	21.92	8.51	7.64	100.00

Table 45 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	74	1259	1333
%	5.54	94.46	100.00

ROUTE 414

Table 46 – Gender

	Male	Female	Total
Riders	17	37	55
%	31.82	68.18	100.00

Table 47 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	5	5	12	10	12	5	5	55
%	0.00	9.09	9.09	22.73	18.18	22.73	9.09	9.09	100.00

Table 48 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	32	10	7	0	0	5	55
%	59.09	18.18	13.64	0.00	0.00	9.09	100.00

Table 49 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	5	47	52
%	9.52	90.48	100.00

Table 50 – Household Income

Income	Riders	%
Under $15,000	2	5.00
$15,000-$24,999	2	5.00
$25,000-$34,999	5	10.00
$35,000-$49,999	5	10.00
$50,000-$74,999	22	45.00
$75,000-$99,999	5	10.00
$100,000-$149,999	5	10.00
$150,000-$199,999	2	5.00
$200,000 or over	0	0.00
Total	50	100.00

Table 51 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	10	22	17	5	55
%	18.18	40.91	31.82	9.09	100.00

Table 52 – Occupation

	Riders	%
Management/ Professional	15	27.27
Technical/ Skilled	17	31.82
Clerical/ Secretarial	12	22.73
Not currently employed	0	0.00
Non-Office Worker	0	0.00
Sales/Retail	0	0.00
Retired	0	0.00
Student	0	0.00
Homemaker	0	0.00
Other	10	18.18
Total	55	100.00

Table 53 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	7	20	12	0	7	7	55
%	13.64	36.36	22.73	0.00	13.64	13.64	100.00

Table 54 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	2	52	55
%	4.55	95.45	100.00

ROUTE 612

Table 55 – Gender

	Male	Female	Total
Riders	33	18	51
%	65.22	34.78	100.00

Table 56 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	4	18	22	2	2	0	2	51
%	0.00	8.70	34.78	43.48	4.35	4.35	0.00	4.35	100.00

Table 57 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	9	2	31	0	2	0	44
%	20.00	5.00	70.00	0.00	5.00	0.00	100.00

Table 58 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	0	47	47
%	0.00	100.00	100.00

Table 59 – Household Income

Income	Riders	%
Under $15,000	2	5.56
$15,000-$24,999	0	0.00
$25,000-$34,999	2	5.56
$35,000-$49,999	2	5.56
$50,000-$74,999	11	27.78
$75,000-$99,999	11	27.78
$100,000-$149,999	4	11.11
$150,000-$199,999	0	0.00
$200,000 or over	7	16.67
Total	40	100.00

Table 60 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	11	31	7	0	49
%	22.73	63.64	13.64	0.00	100.00

Table 61 – Occupation

	Riders	%
Management/ Professional	18	38.10
Technical/ Skilled	16	33.33
Clerical/ Secretarial	2	4.76
Not currently employed	2	4.76
Non-Office Worker	2	4.76
Sales/Retail	4	9.52
Retired	0	0.00
Student	0	0.00
Homemaker	0	0.00
Other	2	4.76
Total	47	100.00

Table 62 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	4	20	9	13	0	2	49
%	9.09	40.91	18.18	27.27	0.00	4.55	100.00

Table 63 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	47	47
%	0.00	100.00	100.00

ROUTE 48

Table 64 – Gender

	Male	Female	Total
Riders	900	940	1840
%	48.89	51.11	100.00

Table 65 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	49	301	374	294	391	269	131	185	1993
%	2.47	15.10	18.74	14.77	19.60	13.48	6.55	9.28	100.00

Table 66 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	435	831	272	18	135	94	1785
%	24.39	46.56	15.26	1.02	7.54	5.24	100.00

Table 67 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	511	1216	1727
%	29.61	70.39	100.00

Table 68 – Household Income

Income	Riders	%
Under $15,000	572	30.92
$15,000-$24,999	406	21.94
$25,000-$34,999	169	9.14
$35,000-$49,999	309	16.73
$50,000-$74,999	165	8.93
$75,000-$99,999	94	5.08
$100,000-$149,999	91	4.92
$150,000-$199,999	23	1.25
$200,000 or over	20	1.08
Total	1849	100.00

Table 69 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	723	745	326	154	1947
%	37.10	38.26	16.74	7.90	100.00

Table 70 – Occupation

	Riders	%
Management/ Professional	149	7.77
Technical/ Skilled	201	10.52
Clerical/ Secretarial	120	6.27
Not currently employed	201	10.48
Non-Office Worker	184	9.59
Sales/Retail	252	13.19
Retired	178	9.31
Student	219	11.45
Homemaker	42	2.20
Other	368	19.22
Total	1914	100.00

Table 71 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	235	414	509	325	301	167	1952
%	12.06	21.22	26.09	16.65	15.43	8.55	100.00

Table 72 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	96	1821	1917
%	4.99	95.01	100.00

ROUTE 805

Table 73 – Gender

	Male	Female	Total
Riders	212	91	304
%	69.92	30.08	100.00

Table 74 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	22	133	96	25	17	0	2	295
%	0.00	7.46	45.08	32.54	8.47	5.76	0.00	0.68	100.00

Table 75 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	52	7	212	7	7	7	292
%	17.81	2.40	72.60	2.40	2.40	2.40	100.00

Table 76 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	22	257	279
%	7.89	92.11	100.00

Table 77 – Household Income

Income	Riders	%
Under $15,000	0	0.00
$15,000-$24,999	0	0.00
$25,000-$34,999	15	5.70
$35,000-$49,999	10	3.80
$50,000-$74,999	59	22.43
$75,000-$99,999	59	22.43
$100,000-$149,999	106	40.30
$150,000-$199,999	7	2.66
$200,000 or over	7	2.66
Total	263	100.00

Table 78 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	22	230	30	15	297
%	7.41	77.44	10.10	5.05	100.00

Table 79 – Occupation

	Riders	%
Management/ Professional	96	32.76
Technical/ Skilled	128	43.69
Clerical/ Secretarial	0	0.00
Not currently employed	0	0.00
Non-Office Worker	15	5.12
Sales/Retail	7	2.39
Retired	0	0.00
Student	0	0.00
Homemaker	0	0.00
Other	47	16.04
Total	293	100.00

Table 80 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	30	79	104	62	7	7	289
%	10.38	27.34	35.99	21.45	2.42	2.42	100.00

Table 81 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	296	296
%	0.00	100.00	100.00

ROUTE 830

Table 82 – Gender

	Male	Female	Total
Riders	126	138	264
%	47.82	52.18	100.00

Table 83 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	16	9	50	48	85	37	23	14	282
%	5.68	3.25	17.89	17.09	30.07	13.02	8.13	4.88	100.00

Table 84 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	160	28	0	0	0	53	241
%	66.64	11.47	0.00	0.00	0.00	21.88	100.00

Table 85 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	126	133	259
%	48.65	51.35	100.00

Table 86 – Household Income

Income	Riders	%
Under $15,000	64	27.71
$15,000-$24,999	39	16.82
$25,000-$34,999	64	27.78
$35,000-$49,999	25	10.88
$50,000-$74,999	23	9.90
$75,000-$99,999	16	6.92
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	232	100.00

Table 87 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	151	101	30	0	282
%	53.67	35.77	10.56	0.00	100.00

Table 88 – Occupation

	Riders	%
Management/ Professional	0	0.00
Technical/ Skilled	30	10.82
Clerical/ Secretarial	16	5.82
Not currently employed	0	0.00
Non-Office Worker	89	32.52
Sales/Retail	39	14.15
Retired	0	0.00
Student	16	5.82
Homemaker	18	6.66
Other	67	24.19
Total	275	100.00

Table 89 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	53	50	57	71	18	16	266
%	19.85	18.97	21.53	26.73	6.89	6.02	100.00

Table 90 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	282	282
%	0.00	100.00	100.00

ROUTE 831

Table 91 – Gender

	Male	Female	Total
Riders	133	195	329
%	40.58	59.42	100.00

Table 92 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	28	73	70	93	31	17	43	354
%	0.00	7.84	20.66	19.64	26.13	8.62	4.87	12.25	100.00

Table 93 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	104	96	0	0	23	32	254
%	40.87	37.77	0.00	0.00	8.86	12.50	100.00

Table 94 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	137	170	307
%	44.60	55.40	100.00

Table 95 – Household Income

Income	Riders	%
Under $15,000	120	39.04
$15,000-$24,999	40	12.96
$25,000-$34,999	43	14.10
$35,000-$49,999	62	19.98
$50,000-$74,999	31	10.03
$75,000-$99,999	0	0.00
$100,000-$149,999	8	2.48
$150,000-$199,999	4	1.42
$200,000 or over	0	0.00
Total	308	100.00

Table 96 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	220	103	18	8	349
%	63.19	29.42	5.20	2.18	100.00

Table 97 – Occupation

	Riders	%
Management/ Professional	19	5.73
Technical/ Skilled	21	6.34
Clerical/ Secretarial	10	2.93
Not currently employed	15	4.52
Non-Office Worker	53	15.98
Sales/Retail	80	24.32
Retired	15	4.63
Student	0	0.00
Homemaker	28	8.54
Other	89	27.00
Total	329	100.00

Table 98 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	113	86	69	52	22	13	354
%	31.88	24.19	19.49	14.65	6.14	3.64	100.00

Table 99 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	23	313	336
%	6.70	93.30	100.00

ROUTE 832

Table 100 – Gender

	Male	Female	Total
Riders	317	375	692
%	45.80	54.20	100.00

Table 101 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	56	226	113	80	60	84	49	62	730
%	7.63	30.97	15.55	10.92	8.26	11.48	6.66	8.52	100.00

Table 102 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	220	286	29	4	46	31	618
%	35.67	46.39	4.64	0.72	7.51	5.07	100.00

Table 103 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	223	441	665
%	33.61	66.39	100.00

Table 104 – Household Income

Income	Riders	%
Under $15,000	253	38.31
$15,000-$24,999	133	20.08
$25,000-$34,999	86	13.08
$35,000-$49,999	91	13.78
$50,000-$74,999	62	9.37
$75,000-$99,999	22	3.38
$100,000-$149,999	0	0.00
$150,000-$199,999	4	0.67
$200,000 or over	9	1.32
Total	661	100.00

Table 105 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	353	204	109	49	714
%	49.37	28.49	15.24	6.91	100.00

Table 106 – Occupation

	Riders	%
Management/ Professional	35	4.63
Technical/ Skilled	67	8.76
Clerical/ Secretarial	9	1.16
Not currently employed	42	5.52
Non-Office Worker	35	4.64
Sales/Retail	188	24.68
Retired	73	9.62
Student	187	24.47
Homemaker	9	1.15
Other	117	15.38
Total	762	100.00

Table 107 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	154	199	129	109	115	25	730
%	21.09	27.27	17.61	14.87	15.78	3.37	100.00

Table 108 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	22	692	714
%	3.09	96.91	100.00

ROUTE 834

Table 109 – Gender

	Male	Female	Total
Riders	92	182	274
%	33.54	66.46	100.00

Table 110 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	27	67	91	61	74	0	10	330
%	0.00	8.07	20.40	27.52	18.63	22.38	0.00	2.99	100.00

Table 111 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	192	62	11	0	11	15	292
%	65.70	21.25	3.93	0.00	3.93	5.19	100.00

Table 112 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	63	238	301
%	20.91	79.09	100.00

Table 113 – Household Income

Income	Riders	%
Under $15,000	46	16.05
$15,000-$24,999	81	27.96
$25,000-$34,999	30	10.33
$35,000-$49,999	52	18.07
$50,000-$74,999	69	24.05
$75,000-$99,999	10	3.54
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	288	100.00

Table 114 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	170	137	23	0	330
%	51.52	41.53	6.95	0.00	100.00

Table 115 – Occupation

	Riders	%
Management/ Professional	40	11.93
Technical/ Skilled	44	13.12
Clerical/ Secretarial	10	3.05
Not currently employed	27	7.93
Non-Office Worker	42	12.45
Sales/Retail	69	20.54
Retired	15	4.52
Student	15	4.52
Homemaker	15	4.52
Other	58	17.44
Total	335	100.00

Table 116 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	91	126	32	41	35	5	330
%	27.50	38.26	9.67	12.40	10.68	1.49	100.00

Table 117 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	30	289	320
%	9.47	90.53	100.00

ROUTE 837

Table 118 – Gender

	Male	Female	Total
Riders	171	217	389
%	44.08	55.92	100.00

Table 119 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	6	56	57	108	47	82	52	31	439
%	1.33	12.70	13.06	24.69	10.67	18.61	11.94	6.99	100.00

Table 120 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	113	224	0	12	24	20	395
%	28.71	56.88	0.00	3.14	6.13	5.15	100.00

Table 121 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	134	259	394
%	34.13	65.87	100.00

Table 122 – Household Income

Income	Riders	%
Under $15,000	162	41.67
$15,000-$24,999	68	17.64
$25,000-$34,999	63	16.13
$35,000-$49,999	44	11.27
$50,000-$74,999	34	8.68
$75,000-$99,999	18	4.61
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	388	100.00

Table 123 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	228	154	38	13	432
%	52.73	35.62	8.75	2.90	100.00

Table 124 – Occupation

	Riders	%
Management/ Professional	26	5.98
Technical/ Skilled	51	11.65
Clerical/ Secretarial	43	9.87
Not currently employed	38	8.62
Non-Office Worker	32	7.38
Sales/Retail	75	17.06
Retired	30	6.93
Student	6	1.33
Homemaker	19	4.41
Other	117	26.76
Total	438	100.00

Table 125 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	118	78	69	75	46	33	418
%	28.18	18.56	16.47	17.94	10.99	7.86	100.00

Table 126 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	33	406	439
%	7.49	92.51	100.00

ROUTE 838

Table 127 – Gender

	Male	Female	Total
Riders	137	159	296
%	46.19	53.81	100.00

Table 128 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	12	107	79	58	19	17	14	5	311
%	3.74	34.61	25.41	18.75	6.00	5.33	4.56	1.59	100.00

Table 129 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	98	50	23	15	18	28	232
%	42.27	21.68	9.78	6.37	7.77	12.13	100.00

Table 130 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	107	162	269
%	39.92	60.08	100.00

Table 131 – Household Income

Income	Riders	%
Under $15,000	87	34.87
$15,000-$24,999	46	18.18
$25,000-$34,999	14	5.66
$35,000-$49,999	34	13.71
$50,000-$74,999	19	7.54
$75,000-$99,999	15	6.10
$100,000-$149,999	7	2.90
$150,000-$199,999	6	2.57
$200,000 or over	21	8.48
Total	250	100.00

Table 132 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	105	69	99	14	287
%	36.67	23.99	34.40	4.94	100.00

Table 133 – Occupation

	Riders	%
Management/ Professional	21	6.85
Technical/ Skilled	20	6.58
Clerical/ Secretarial	11	3.63
Not currently employed	18	5.90
Non-Office Worker	32	10.45
Sales/Retail	29	9.46
Retired	14	4.47
Student	82	26.92
Homemaker	14	4.50
Other	65	21.25
Total	306	100.00

Table 134 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	48	45	32	55	60	48	288
%	16.54	15.68	11.10	18.95	20.94	16.79	100.00

Table 135 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	17	268	285
%	6.00	94.00	100.00

ROUTE 871

Table 136 – Gender

	Male	Female	Total
Riders	50	56	106
%	47.31	52.69	100.00

Table 137 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	4	32	20	29	10	6	5	106
%	0.00	3.47	29.99	19.23	27.63	8.98	5.83	4.88	100.00

Table 138 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	53	8	20	0	5	4	90
%	58.69	8.88	21.89	0.00	5.73	4.81	100.00

Table 139 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	50	42	92
%	54.62	45.38	100.00

Table 140 – Household Income

Income	Riders	%
Under $15,000	16	16.51
$15,000-$24,999	35	36.15
$25,000-$34,999	15	15.30
$35,000-$49,999	7	7.22
$50,000-$74,999	16	16.56
$75,000-$99,999	6	6.36
$100,000-$149,999	2	1.89
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	97	100.00

Table 141 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	64	30	7	0	101
%	63.66	29.39	6.95	0.00	100.00

Table 142 – Occupation

	Riders	%
Management/ Professional	0	0.00
Technical/ Skilled	20	21.18
Clerical/ Secretarial	7	7.27
Not currently employed	5	5.36
Non-Office Worker	24	24.99
Sales/Retail	14	14.03
Retired	7	7.27
Student	0	0.00
Homemaker	0	0.00
Other	19	19.91
Total	97	100.00

Table 143 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	18	39	29	9	6	0	101
%	18.21	38.82	28.22	8.61	6.13	0.00	100.00

Table 144 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	5	96	101
%	5.13	94.87	100.00

ROUTE 872

Table 145 – Gender

	Male	Female	Total
Riders	14	28	42
%	33.00	67.00	100.00

Table 146 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	0	17	0	14	10	0	0	40
%	0.00	0.00	41.58	0.00	34.21	24.21	0.00	0.00	100.00

Table 147 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	7	10	0	0	0	19	35
%	19.76	27.54	0.00	0.00	0.00	52.69	100.00

Table 148 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	15	12	26
%	55.20	44.80	100.00

Table 149 – Household Income

Income	Riders	%
Under $15,000	2	8.00
$15,000-$24,999	5	18.40
$25,000-$34,999	5	18.40
$35,000-$49,999	0	0.00
$50,000-$74,999	5	18.40
$75,000-$99,999	5	18.40
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	5	18.40
Total	26	100.00

Table 150 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	24	2	0	0	26
%	92.00	8.00	0.00	0.00	100.00

Table 151 – Occupation

	Riders	%
Management/ Professional	10	36.80
Technical/ Skilled	5	18.40
Clerical/ Secretarial	10	36.80
Not currently employed	0	0.00
Non-Office Worker	0	0.00
Sales/Retail	2	8.00
Retired	0	0.00
Student	0	0.00
Homemaker	0	0.00
Other	0	0.00
Total	26	100.00

Table 152 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	5	12	5	5	0	0	26
%	18.40	44.80	18.40	18.40	0.00	0.00	100.00

Table 153 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	26	26
%	0.00	100.00	100.00

ROUTE 873

Table 154 – Gender

	Male	Female	Total
Riders	62	87	149
%	41.58	58.42	100.00

Table 155 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	24	44	15	16	16	23	13	150
%	0.00	15.78	29.39	9.98	10.43	10.93	14.99	8.49	100.00

Table 156 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	42	54	17	0	13	6	132
%	31.70	41.04	12.90	0.00	9.51	4.84	100.00

Table 157 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	37	92	128
%	28.46	71.54	100.00

Table 158 – Household Income

Income	Riders	%
Under $15,000	42	31.92
$15,000-$24,999	43	32.60
$25,000-$34,999	6	4.66
$35,000-$49,999	7	4.99
$50,000-$74,999	24	18.75
$75,000-$99,999	6	4.66
$100,000-$149,999	3	2.42
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	130	100.00

Table 159 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	101	24	19	9	153
%	66.12	15.73	12.34	5.81	100.00

Table 160 – Occupation

	Riders	%
Management/ Professional	3	2.07
Technical/ Skilled	16	10.20
Clerical/ Secretarial	8	4.99
Not currently employed	6	3.92
Non-Office Worker	20	13.34
Sales/Retail	23	15.39
Retired	19	12.35
Student	17	11.12
Homemaker	3	2.14
Other	37	24.47
Total	152	100.00

Table 161 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	53	40	15	6	15	17	146
%	36.58	27.18	10.28	4.17	10.45	11.34	100.00

Table 162 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	150	150
%	0.00	100.00	100.00

ROUTE 874

Table 163 – Gender

	Male	Female	Total
Riders	47	59	106
%	44.42	55.58	100.00

Table 164 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	24	39	13	34	4	2	0	117
%	0.00	20.35	33.22	11.48	29.22	3.83	1.91	0.00	100.00

Table 165 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	15	22	14	0	19	25	95
%	15.70	22.80	15.05	0.00	20.43	26.02	100.00

Table 166 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	46	61	107
%	43.32	56.68	100.00

Table 167 – Household Income

Income	Riders	%
Under $15,000	43	43.54
$15,000-$24,999	16	16.04
$25,000-$34,999	10	10.63
$35,000-$49,999	4	4.58
$50,000-$74,999	17	16.88
$75,000-$99,999	8	8.33
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	98	100.00

Table 168 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	69	13	0	13	95
%	72.47	14.19	0.00	13.33	100.00

Table 169 – Occupation

	Riders	%
Management/ Professional	7	6.72
Technical/ Skilled	22	22.40
Clerical/ Secretarial	8	8.15
Not currently employed	10	10.39
Non-Office Worker	4	4.48
Sales/Retail	21	20.98
Retired	0	0.00
Student	2	2.24
Homemaker	0	0.00
Other	25	24.64
Total	100	100.00

Table 170 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	49	13	16	19	10	0	107
%	45.42	12.60	14.69	17.56	9.73	0.00	100.00

Table 171 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	8	109	117
%	6.96	93.04	100.00

ROUTE 875

Table 172 – Gender

	Male	Female	Total
Riders	80	40	120
%	66.86	33.14	100.00

Table 173 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	11	40	24	6	17	11	2	11	123
%	8.80	32.42	19.59	5.03	14.08	9.28	2.00	8.80	100.00

Table 174 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	73	24	2	3	6	6	114
%	63.78	21.53	2.17	2.73	4.90	4.90	100.00

Table 175 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	50	76	126
%	39.65	60.35	100.00

Table 176 – Household Income

Income	Riders	%
Under $15,000	52	59.51
$15,000-$24,999	10	10.93
$25,000-$34,999	2	2.80
$35,000-$49,999	9	9.85
$50,000-$74,999	6	7.05
$75,000-$99,999	2	2.80
$100,000-$149,999	6	7.05
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	88	100.00

Table 177 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	44	44	23	12	123
%	35.85	35.60	18.95	9.59	100.00

Table 178 – Occupation

	Riders	%
Management/ Professional	2	1.83
Technical/ Skilled	7	4.83
Clerical/ Secretarial	2	1.83
Not currently employed	15	11.49
Non-Office Worker	3	2.30
Sales/Retail	17	12.86
Retired	11	8.05
Student	51	37.95
Homemaker	0	0.00
Other	25	18.85
Total	135	100.00

Table 179 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	19	26	17	23	9	33	126
%	14.78	20.69	13.28	17.98	7.39	25.87	100.00

Table 180 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	20	103	123
%	16.16	83.84	100.00

ROUTE 878

Table 181 – Gender

	Male	Female	Total
Riders	22	0	22
%	100.00	0.00	100.00

Table 182 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	0	0	0	0	22	0	0	22
%	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00

Table 183 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	0	0	0	0	22	0	22
%	0.00	0.00	0.00	0.00	100.00	0.00	100.00

Table 184 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	0	22	22
%	0.00	100.00	100.00

Table 185 – Household Income

Income	Riders	%
Under $15,000	0	0.00
$15,000-$24,999	0	0.00
$25,000-$34,999	0	0.00
$35,000-$49,999	0	0.00
$50,000-$74,999	0	0.00
$75,000-$99,999	0	0.00
$100,000-$149,999	0	0.00
$150,000-$199,999	22	100.00
$200,000 or over	0	0.00
Total	22	100.00

Table 186 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	22	0	0	0	22
%	100.00	0.00	0.00	0.00	100.00

Table 187 – Occupation

	Riders	%
Management/ Professional	22	100.00
Technical/ Skilled	0	0.00
Clerical/ Secretarial	0	0.00
Not currently employed	0	0.00
Non-Office Worker	0	0.00
Sales/Retail	0	0.00
Retired	0	0.00
Student	0	0.00
Homemaker	0	0.00
Other	0	0.00
Total	22	100.00

Table 188 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	0	22	0	0	0	0	22
%	0.00	100.00	0.00	0.00	0.00	0.00	100.00

Table 189 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	22	22
%	0.00	100.00	100.00

ROUTE 880

Table 190 – Gender

	Male	Female	Total
Riders	207	144	352
%	58.98	41.02	100.00

Table 191 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	6	31	70	59	63	49	28	56	362
%	1.53	8.54	19.23	16.42	17.50	13.55	7.71	15.51	100.00

Table 192 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	159	36	6	8	8	43	260
%	60.97	13.97	2.11	3.23	3.24	16.48	100.00

Table 193 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	208	126	334
%	62.28	37.72	100.00

Table 194 – Household Income

Income	Riders	%
Under $15,000	113	35.15
$15,000-$24,999	92	28.81
$25,000-$34,999	46	14.38
$35,000-$49,999	40	12.43
$50,000-$74,999	17	5.29
$75,000-$99,999	6	1.72
$100,000-$149,999	7	2.23
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	321	100.00

Table 195 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	184	100	49	25	359
%	51.38	27.79	13.75	7.08	100.00

Table 196 – Occupation

	Riders	%
Management/ Professional	11	3.08
Technical/ Skilled	30	8.25
Clerical/ Secretarial	11	3.15
Not currently employed	43	12.04
Non-Office Worker	55	15.28
Sales/Retail	51	14.09
Retired	68	19.07
Student	15	4.27
Homemaker	15	4.28
Other	59	16.50
Total	359	100.00

Table 197 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	65	53	72	82	63	17	351
%	18.45	15.17	20.41	23.26	17.97	4.73	100.00

Table 198 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	20	326	346
%	5.72	94.28	100.00

ROUTE 890

Table 199 – Gender

	Male	Female	Total
Riders	6	11	17
%	33.33	66.67	100.00

Table 200 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	0	0	6	8	0	0	3	17
%	0.00	0.00	0.00	33.33	50.00	0.00	0.00	16.67	100.00

Table 201 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	11	3	0	0	0	0	14
%	80.00	20.00	0.00	0.00	0.00	0.00	100.00

Table 202 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	3	14	17
%	16.67	83.33	100.00

Table 203 – Household Income

Income	Riders	%
Under $15,000	3	20.00
$15,000-$24,999	0	0.00
$25,000-$34,999	8	60.00
$35,000-$49,999	0	0.00
$50,000-$74,999	0	0.00
$75,000-$99,999	3	20.00
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	14	100.00

Table 204 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	11	3	3	0	17
%	66.67	16.67	16.67	0.00	100.00

Table 205 – Occupation

	Riders	%
Management/ Professional	8	50.00
Technical/ Skilled	0	0.00
Clerical/ Secretarial	0	0.00
Not currently employed	6	33.33
Non-Office Worker	0	0.00
Sales/Retail	0	0.00
Retired	3	16.67
Student	0	0.00
Homemaker	0	0.00
Other	0	0.00
Total	17	100.00

Table 206 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	0	6	0	3	6	3	17
%	0.00	33.33	0.00	16.67	33.33	16.67	100.00

Table 207 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	17	17
%	0.00	100.00	100.00

ROUTE 891

Table 208 – Gender

	Male	Female	Total
Riders	7	20	27
%	25.33	74.67	100.00

Table 209 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	5	2	0	5	9	0	7	27
%	0.00	17.33	8.00	0.00	17.33	32.00	0.00	25.33	100.00

Table 210 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	25	2	0	0	0	0	27
%	92.00	8.00	0.00	0.00	0.00	0.00	100.00

Table 211 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	0	27	27
%	0.00	100.00	100.00

Table 212 – Household Income

Income	Riders	%
Under $15,000	9	36.23
$15,000-$24,999	7	26.09
$25,000-$34,999	5	18.84
$35,000-$49,999	0	0.00
$50,000-$74,999	5	18.84
$75,000-$99,999	0	0.00
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	25	100.00

Table 213 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	16	12	0	0	27
%	57.33	42.67	0.00	0.00	100.00

Table 214 – Occupation

	Riders	%
Management/ Professional	0	0.00
Technical/ Skilled	0	0.00
Clerical/ Secretarial	0	0.00
Not currently employed	4	16.00
Non-Office Worker	0	0.00
Sales/Retail	7	25.33
Retired	7	24.00
Student	0	0.00
Homemaker	0	0.00
Other	9	34.67
Total	27	100.00

Table 215 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	11	7	0	0	5	4	27
%	41.33	25.33	0.00	0.00	17.33	16.00	100.00

Table 216 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	9	19	27
%	32.00	68.00	100.00

ROUTE 986

Table 217 – Gender

	Male	Female	Total
Riders	51	83	134
%	38.23	61.77	100.00

Table 218 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	6	11	35	45	32	7	4	141
%	0.00	4.50	8.07	24.43	31.98	22.95	5.13	2.94	100.00

Table 219 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	38	41	16	0	3	16	113
%	33.38	36.13	13.74	0.00	2.74	14.01	100.00

Table 220 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	45	83	128
%	35.22	64.78	100.00

Table 221 – Household Income

Income	Riders	%
Under $15,000	18	15.57
$15,000-$24,999	17	14.93
$25,000-$34,999	13	11.29
$35,000-$49,999	39	34.36
$50,000-$74,999	7	6.41
$75,000-$99,999	4	3.67
$100,000-$149,999	7	6.41
$150,000-$199,999	0	0.00
$200,000 or over	8	7.35
Total	113	100.00

Table 222 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	56	51	25	0	132
%	42.57	38.59	18.85	0.00	100.00

Table 223 – Occupation

	Riders	%
Management/ Professional	31	21.88
Technical/ Skilled	21	14.60
Clerical/ Secretarial	21	14.55
Not currently employed	0	0.00
Non-Office Worker	35	24.39
Sales/Retail	7	5.10
Retired	0	0.00
Student	0	0.00
Homemaker	3	2.18
Other	25	17.30
Total	142	100.00

Table 224 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	12	28	46	39	6	3	135
%	9.23	20.83	34.38	28.55	4.71	2.30	100.00

Table 225 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	130	130
%	0.00	100.00	100.00

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Table 226 – Gender

	Male	Female	Total
Riders	97	115	212
%	45.87	54.13	100.00

Table 227 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	28	71	34	64	14	8	5	224
%	0.00	12.33	31.68	15.16	28.46	6.27	3.77	2.32	100.00

Table 228 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	68	30	34	0	25	29	185
%	36.68	16.01	18.39	0.00	13.26	15.67	100.00

Table 229 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	97	103	199
%	48.56	51.44	100.00

Table 230 – Household Income

Income	Riders	%
Under $15,000	59	30.07
$15,000-$24,999	51	26.06
$25,000-$34,999	25	12.96
$35,000-$49,999	12	5.90
$50,000-$74,999	33	16.72
$75,000-$99,999	14	7.35
$100,000-$149,999	2	0.94
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	195	100.00

Table 231 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	133	43	7	13	196
%	67.93	22.03	3.59	6.46	100.00

Table 232 – Occupation

	Riders	%
Management/ Professional	7	3.42
Technical/ Skilled	43	21.80
Clerical/ Secretarial	15	7.71
Not currently employed	16	7.92
Non-Office Worker	29	14.55
Sales/Retail	35	17.57
Retired	7	3.57
Student	2	1.14
Homemaker	0	0.00
Other	44	22.32
Total	197	100.00

Table 233 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	67	53	44	27	17	0	208
%	32.21	25.33	21.26	13.21	7.98	0.00	100.00

Table 234 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	13	205	218
%	6.11	93.89	100.00

ROUTE 872_875

Table 235 – Gender

	Male	Female	Total
Riders	94	68	162
%	58.02	41.98	100.00

Table 236 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	11	40	41	6	31	21	2	11	163
%	6.64	24.46	24.99	3.79	19.02	12.95	1.51	6.64	100.00

Table 237 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	79	34	2	3	6	24	149
%	53.36	22.95	1.66	2.08	3.74	16.21	100.00

Table 238 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	64	88	152
%	42.35	57.65	100.00

Table 239 – Household Income

Income	Riders	%
Under $15,000	54	47.62
$15,000-$24,999	14	12.65
$25,000-$34,999	7	6.40
$35,000-$49,999	9	7.58
$50,000-$74,999	11	9.67
$75,000-$99,999	7	6.40
$100,000-$149,999	6	5.42
$150,000-$199,999	0	0.00
$200,000 or over	5	4.25
Total	114	100.00

Table 240 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	68	46	23	12	149
%	45.79	30.71	15.60	7.89	100.00

Table 241 – Occupation

	Riders	%
Management/ Professional	12	7.56
Technical/ Skilled	11	7.05
Clerical/ Secretarial	12	7.56
Not currently employed	15	9.61
Non-Office Worker	3	1.92
Sales/Retail	19	12.07
Retired	11	6.73
Student	51	31.74
Homemaker	0	0.00
Other	25	15.76
Total	161	100.00

Table 242 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	23	38	22	27	9	33	152
%	15.41	24.88	14.17	18.06	6.11	21.38	100.00

Table 243 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	20	129	149
%	13.30	86.70	100.00

ROUTE 873_878

Table 244 – Gender

	Male	Female	Total
Riders	84	87	171
%	49.24	50.76	100.00

Table 245 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	24	44	15	16	39	23	13	173
%	0.00	13.74	25.58	8.68	9.08	22.49	13.05	7.38	100.00

Table 246 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	42	54	17	0	35	6	155
%	27.12	35.11	11.04	0.00	22.59	4.14	100.00

Table 247 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	37	114	151
%	24.23	75.77	100.00

Table 248 – Household Income

Income	Riders	%
Under $15,000	42	27.24
$15,000-$24,999	43	27.82
$25,000-$34,999	6	3.98
$35,000-$49,999	7	4.26
$50,000-$74,999	24	16.01
$75,000-$99,999	6	3.98
$100,000-$149,999	3	2.07
$150,000-$199,999	22	14.65
$200,000 or over	0	0.00
Total	153	100.00

Table 249 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	124	24	19	9	176
%	70.43	13.73	10.77	5.07	100.00

Table 250 – Occupation

	Riders	%
Management/ Professional	26	14.61
Technical/ Skilled	16	8.90
Clerical/ Secretarial	8	4.36
Not currently employed	6	3.42
Non-Office Worker	20	11.64
Sales/Retail	23	13.42
Retired	19	10.76
Student	17	9.70
Homemaker	3	1.86
Other	37	21.34
Total	175	100.00

Table 251 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	53	62	15	6	15	17	168
%	31.71	36.88	8.91	3.62	9.05	9.83	100.00

Table 252 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	0	173	173
%	0.00	100.00	100.00

ROUTE 890_891

Table 253 – Gender

	Male	Female	Total
Riders	13	32	44
%	28.39	71.61	100.00

Table 254 – Age

	Under 18	18-24	25-34	35-44	45-54	55-61	62-64	65+	Total
Riders	0	5	2	6	13	9	0	10	44
%	0.00	10.70	4.94	12.75	29.83	19.76	0.00	22.02	100.00

Table 255 – Race

	White	Black or African American	Asian	American Indian or Alaska Native	Multi-racial	Other	Total
Riders	36	5	0	0	0	0	41
%	87.91	12.09	0.00	0.00	0.00	0.00	100.00

Table 256 – Ethnicity

	Spanish/Hispanic/Latino	Not Spanish/Hispanic/Latino	Total
Riders	3	41	44
%	6.38	93.62	100.00

Table 257 – Household Income

Income	Riders	%
Under $15,000	12	30.40
$15,000-$24,999	7	16.71
$25,000-$34,999	13	33.64
$35,000-$49,999	0	0.00
$50,000-$74,999	5	12.07
$75,000-$99,999	3	7.19
$100,000-$149,999	0	0.00
$150,000-$199,999	0	0.00
$200,000 or over	0	0.00
Total	39	100.00

Table 258 – Number of Household Vehicles

	None	One	Two	Three or more	Total
Riders	27	14	3	0	44
%	60.90	32.72	6.38	0.00	100.00

Table 259 – Occupation

	Riders	%
Management/ Professional	8	19.13
Technical/ Skilled	0	0.00
Clerical/ Secretarial	0	0.00
Not currently employed	10	22.63
Non-Office Worker	0	0.00
Sales/Retail	7	15.64
Retired	9	21.19
Student	0	0.00
Homemaker	0	0.00
Other	9	21.40
Total	44	100.00

Table 260 – Household Size

	One	Two	Three	Four	Five	Six or more	Total
Riders	11	13	0	3	10	7	44
%	25.52	28.39	0.00	6.38	23.46	16.26	100.00

Table 261 – Disability

	Has disability preventing bus use	Does not have disability preventing bus use	Total
Riders	9	36	44
%	19.76	80.24	100.00

APPENDIX B

TRAVEL CHARACTERISTICS

This appendix, APPENDIX B, contains detailed tables relating to riders' *travel characteristics*, whereas APPENDIX A contained detailed tables pertaining to *rider characteristics*. The results presented in both appendices pertain to all riders surveyed through this study in two time periods, Fall 2017 and Spring 2018. Usable data was collected by the two rounds of surveys from a total of 3,795 bus riders traveling by any of 25 routes. The results presented in both memoranda are weighted results. The weights were generated by following a methodology used by NJ TRANSIT that uses direction of trip, time of day, and ridership volume. In addition to correcting for time of day and direction, the weights inflate the survey respondents to total riders. Thus the data tables show results for weekday daily riders instead of the sample of surveyed riders.

In addition to providing route-specific results, this appendix provides results for some of the routes that were combined because of small volumes of riders and survey respondents. The tables for individual routes are presented first, followed by combined routes. For each individual and combined route, 11 tables are presented. Including combined routes, this appendix contains a total of 319 tables.

The tables in this appendix are organized by bus market. The routes for each market are shown below. The detailed tables are presented in the same sequence as shown.

Hudson County Group: Rt. 2, Rt. 10, Rt. 88, Rt. 119.

Burlington County Group: Rt. 406. Rt. 414, Rt. 612

Middlesex Monmouth County Group: Rt. 48, Rt. 805, Rt. 830, Rt. 831, Rt. 832, Rt. 834, Rt. 837, and Rt. 838.

Morris County Group: Rt. 871, Rt. 872, Rt. 873, Rt. 874, Rt. 875, Rt. 878, Rt. 880, Rt. 890, Rt. 891, and Rt. 986. In addition, separate tables are provided for these route combinations: Rt. 871_874, Rt. 872_875, Rt. 873_878, Rt. 890_891.

DATA TABLES

ROUTE 2

Table 1 – Origin Place

	Riders	%
Home	1767	60.70
Work	735	25.25
Shopping	45	1.55
Personal business	58	1.99
Medical/dental	45	1.55
Social/recreational	12	0.41
School(K-12)	56	1.92
Technical, college or university	13	0.45
Other	180	6.18
Total	2911	100.00

Table 2 – Destination Place

	Riders	%
Home	577	21.96
Work	1680	63.95
Shopping	41	1.56
Personal business	53	2.02
Medical/dental	47	1.79
Social/recreational	20	0.76
School(K-12)	31	1.18
Technical, college or university	114	4.34
Other	64	2.44
Total	2627	100.00

Table 3 – Access Mode

	Riders	%
Walked only	1376	49.32
Drove a Car and Parked	26	0.93
Carpooled/Dropped Off	44	1.58
Another bus	901	32.29
Light Rail	42	1.51
NJT Train	308	11.04
PATH	85	3.05
Bike	8	0.29
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	2790	100.00

Table 4 – Egress Mode

	Riders	%
Walk only	1655	66.28
Drive Only	29	1.16
Carpool/Drop Off	23	0.92
Another bus	446	17.86
Light Rail	34	1.36
NJT Train	117	4.69
PATH	155	6.21
Bike	22	0.88
Taxi	0	0.00
Uber or other app-based service	5	0.20
Other	11	0.44
Total	2497	100.00

Table 5 – Frequency of Using the Bus Route

	Riders	%
7 days/week	427	15.99
6 days/week	408	15.28
5 days/week	1353	50.67
3-4 days/week	246	9.21
1-2 days/week	122	4.57
1-3 days/month	50	1.87
Less than one day/month	48	1.80
Less than one day/year	0	0.00
First time customer	16	0.60
Total	2670	100.00

Table 6 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	1617	471	202	138	162	2590
%	62.43	18.19	7.80	5.33	6.25	100.00

Table 7 – Ticket Type

	Riders	%
One-way Ticket/Cash	709	26.47
Monthly Pass	1435	53.56
Sr. Citizen/Customer with disability/Children	89	3.32
Round Trip(2 One-way)	160	5.97
10-Trip/Multi-trip	13	0.49
Weekly Pass	85	3.17
Student Monthly Pass	35	1.31
Student One-way	43	1.61
Student 10-Trip	8	0.30
Other	102	3.81
Total	2679	100.00

Table 8 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	45	1.75
1	27	1.05
2	29	1.13
3	51	1.99
4	100	3.89
5	552	21.49
6	146	5.68
7	314	12.22
8	501	19.50
9	161	6.27
10 (Excellent)	643	25.03
Total	2569	100.00

Mean Satisfaction Score= 7.15
Median Satisfaction Score= 8

Table 9 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	1277	852	193	144	186	2652
%	48.15	32.13	7.28	5.43	7.01	100.00

Table 10 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	1543	873	201	2617
%	58.96	33.36	7.68	100.00

Table 11 – Trip Alternatives

	Riders	%
Would not make the trip	602	22.59
Drive a car	216	8.11
Carpool	167	6.27
Taxi	264	9.91
Uber or other app-based service	919	34.48
Jitney	51	1.91
Walk	198	7.43
Bike	43	1.61
Other	205	7.69
Total	2665	100.00

ROUTE 10

Table 12 – Origin Place

	Riders	%
Home	2352	65.06
Work	424	11.73
Shopping	50	1.38
Personal business	130	3.60
Medical/dental	73	2.02
Social/recreational	11	0.30
School(K-12)	137	3.79
Technical, college or university	319	8.82
Other	119	3.29
Total	3615	100.00

Table 13 – Destination Place

	Riders	%
Home	907	26.38
Work	1059	30.80
Shopping	78	2.27
Personal business	189	5.50
Medical/dental	81	2.36
Social/recreational	43	1.25
School(K-12)	258	7.50
Technical, college or university	643	18.70
Other	180	5.24
Total	3438	100.00

Table 14 – Access Mode

	Riders	%
Walked only	2974	83.70
Drove a Car and Parked	17	0.48
Carpooled/Dropped Off	20	0.56
Another bus	209	5.88
Light Rail	14	0.39
NJT Train	34	0.96
PATH	247	6.95
Bike	5	0.14
Taxi	5	0.14
Uber or other app-based service	11	0.31
Other	17	0.48
Total	3553	100.00

Table 15 – Egress Mode

	Riders	%
Walk only	2649	78.79
Drive Only	15	0.45
Carpool/Drop Off	20	0.59
Another bus	188	5.59
Light Rail	5	0.15
NJT Train	14	0.42
PATH	435	12.94
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	11	0.33
Other	25	0.74
Total	3362	100.00

Table 16 – Frequency of Using the Bus Route

	Riders	%
7 days/week	686	19.88
6 days/week	334	9.68
5 days/week	1214	35.18
3-4 days/week	716	20.75
1-2 days/week	240	6.95
1-3 days/month	146	4.23
Less than one day/month	89	2.58
Less than one day/year	11	0.32
First time customer	15	0.43
Total	3451	100.00

Table 17 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	2246	472	222	155	191	3286
%	68.35	14.36	6.76	4.72	5.81	100.00

Table 18 – Ticket Type

	Riders	%
One-way Ticket/Cash	1512	44.04
Monthly Pass	1253	36.50
Sr. Citizen/Customer with disability/Children	145	4.22
Round Trip(2 One-way)	132	3.85
10-Trip/Multi-trip	0	0.00
Weekly Pass	9	0.26
Student Monthly Pass	113	3.29
Student One-way	83	2.42
Student 10-Trip	53	1.54
Other	133	3.87
Total	3433	100.00

Table 19 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	89	2.68
1	51	1.54
2	69	2.08
3	160	4.82
4	206	6.21
5	719	21.67
6	249	7.50
7	495	14.92
8	515	15.52
9	257	7.75
10 (Excellent)	508	15.31
Total	3318	100.00

Mean Satisfaction Score= 6.50
Median Satisfaction Score= 7

Table 20 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	1194	1388	386	232	247	3447
%	34.64	40.27	11.20	6.73	7.17	100.00

Table 21 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	1860	1331	246	3437
%	54.12	38.73	7.16	100.00

Table 22 – Trip Alternatives

	Riders	%
Would not make the trip	430	11.73
Drive a car	413	11.27
Carpool	145	3.96
Taxi	311	8.49
Uber or other app-based service	962	26.25
Jitney	507	13.83
Walk	376	10.26
Bike	88	2.40
Other	433	11.81
Total	3665	100.00

ROUTE 88

Table 23 – Origin Place

	Riders	%
Home	1541	58.24
Work	380	14.36
Shopping	51	1.93
Personal business	101	3.82
Medical/dental	69	2.61
Social/recreational	36	1.36
School(K-12)	70	2.65
Technical, college or university	214	8.09
Other	184	6.95
Total	2646	100.00

Table 24 – Destination Place

	Riders	%
Home	583	24.49
Work	912	38.30
Shopping	112	4.70
Personal business	125	5.25
Medical/dental	100	4.20
Social/recreational	16	0.67
School(K-12)	103	4.33
Technical, college or university	258	10.84
Other	172	7.22
Total	2381	100.00

Table 25 – Access Mode

	Riders	%
Walked only	2069	77.81
Drove a Car and Parked	16	0.60
Carpooled/Dropped Off	31	1.17
Another bus	383	14.40
Light Rail	19	0.71
NJT Train	29	1.09
PATH	79	2.97
Bike	6	0.23
Taxi	0	0.00
Uber or other app-based service	15	0.56
Other	12	0.45
Total	2659	100.00

Table 26 – Egress Mode

	Riders	%
Walk only	1578	66.27
Drive Only	23	0.97
Carpool/Drop Off	12	0.50
Another bus	522	21.92
Light Rail	64	2.69
NJT Train	7	0.29
PATH	106	4.45
Bike	6	0.25
Taxi	5	0.21
Uber or other app-based service	16	0.67
Other	42	1.76
Total	2381	100.00

Table 27 – Frequency of Using the Bus Route

	Riders	%
7 days/week	479	19.93
6 days/week	262	10.90
5 days/week	838	34.86
3-4 days/week	419	17.43
1-2 days/week	168	6.99
1-3 days/month	98	4.08
Less than one day/month	106	4.41
Less than one day/year	17	0.71
First time customer	17	0.71
Total	2404	100.00

Table 28 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	1443	537	24	130	152	2286
%	63.12	23.49	1.05	5.69	6.65	100.00

Table 29 – Ticket Type

	Riders	%
One-way Ticket/Cash	799	33.81
Monthly Pass	1157	48.96
Sr. Citizen/Customer with disability/Children	133	5.63
Round Trip(2 One-way)	72	3.05
10-Trip/Multi-trip	9	0.38
Weekly Pass	0	0.00
Student Monthly Pass	52	2.20
Student One-way	61	2.58
Student 10-Trip	3	0.13
Other	77	3.26
Total	2363	100.00

Table 30 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	19	0.84
1	21	0.92
2	33	1.45
3	95	4.18
4	56	2.46
5	398	17.50
6	138	6.07
7	271	11.92
8	431	18.95
9	304	13.37
10 (Excellent)	508	22.34
Total	2274	100.00

Mean Satisfaction Score= 7.29
Median Satisfaction Score= 8

Table 31 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	1108	791	223	132	142	2396
%	46.24	33.01	9.31	5.51	5.93	100.00

Table 32 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	1273	877	194	2344
%	54.31	37.41	8.28	100.00

Table 33 – Trip Alternatives

	Riders	%
Would not make the trip	310	11.98
Drive a car	242	9.35
Carpool	79	3.05
Taxi	188	7.27
Uber or other app-based service	730	28.22
Jitney	282	10.90
Walk	285	11.02
Bike	47	1.82
Other	424	16.39
Total	2587	100.00

ROUTE 119

Table 34 – Origin Place

	Riders	%
Home	2470	64.68
Work	634	16.60
Shopping	97	2.54
Personal business	100	2.62
Medical/dental	86	2.25
Social/recreational	11	0.29
School(K-12)	101	2.64
Technical, college or university	164	4.29
Other	156	4.08
Total	3819	100.00

Table 35 – Destination Place

	Riders	%
Home	915	26.40
Work	1676	48.36
Shopping	111	3.20
Personal business	138	3.98
Medical/dental	86	2.48
Social/recreational	18	0.52
School(K-12)	165	4.76
Technical, college or university	164	4.73
Other	193	5.57
Total	3466	100.00

Table 36 – Access Mode

	Riders	%
Walked only	3291	85.70
Drove a Car and Parked	49	1.28
Carpooled/Dropped Off	30	0.78
Another bus	170	4.43
Light Rail	6	0.16
NJT Train	11	0.29
PATH	122	3.18
Bike	11	0.29
Taxi	0	0.00
Uber or other app-based service	23	0.60
Other	127	3.31
Total	3840	100.00

Table 37 – Egress Mode

	Riders	%
Walk only	2691	77.35
Drive Only	37	1.06
Carpool/Drop Off	0	0.00
Another bus	135	3.88
Light Rail	30	0.86
NJT Train	20	0.57
PATH	191	5.49
Bike	0	0.00
Taxi	22	0.63
Uber or other app-based service	16	0.46
Other	337	9.69
Total	3479	100.00

Table 38 – Frequency of Using the Bus Route

	Riders	%
7 days/week	372	10.63
6 days/week	330	9.43
5 days/week	1647	47.08
3-4 days/week	561	16.04
1-2 days/week	277	7.92
1-3 days/month	176	5.03
Less than one day/month	72	2.06
Less than one day/year	8	0.23
First time customer	55	1.57
Total	3498	100.00

Table 39 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	2136	539	308	153	239	3375
%	63.29	15.97	9.13	4.53	7.08	100.00

Table 40 – Ticket Type

	Riders	%
One-way Ticket/Cash	1338	38.35
Monthly Pass	1317	37.75
Sr. Citizen/Customer with disability/Children	217	6.22
Round Trip(2 One-way)	135	3.87
10-Trip/Multi-trip	253	7.25
Weekly Pass	7	0.20
Student Monthly Pass	40	1.15
Student One-way	74	2.12
Student 10-Trip	17	0.49
Other	91	2.61
Total	3489	100.00

Table 41 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	35	1.06
1	19	0.58
2	46	1.40
3	92	2.79
4	147	4.46
5	651	19.77
6	246	7.47
7	603	18.31
8	539	16.37
9	358	10.87
10 (Excellent)	557	16.91
Total	3293	100.00

Mean Satisfaction Score= 6.99
Median Satisfaction Score= 7

Table 42 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	1395	1323	271	199	285	3473
%	40.17	38.09	7.80	5.73	8.21	100.00

Table 43 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	1273	1916	266	3455
%	36.85	55.46	7.70	100.00

Table 44 – Trip Alternatives

	Riders	%
Would not make the trip	257	6.85
Drive a car	364	9.70
Carpool	99	2.64
Taxi	156	4.16
Uber or other app-based service	871	23.22
Jitney	310	8.26
Walk	237	6.32
Bike	42	1.12
Other	1415	37.72
Total	3751	100.00

ROUTE 406

Table 45 – Origin Place

	Riders	%
Home	764	53.28
Work	345	24.06
Shopping	56	3.91
Personal business	91	6.35
Medical/dental	76	5.30
Social/recreational	3	0.21
School(K-12)	13	0.91
Technical, college or university	30	2.09
Other	56	3.91
Total	1434	100.00

Table 46 – Destination Place

	Riders	%
Home	449	34.14
Work	581	44.18
Shopping	43	3.27
Personal business	89	6.77
Medical/dental	32	2.43
Social/recreational	14	1.06
School(K-12)	17	1.29
Technical, college or university	17	1.29
Other	73	5.55
Total	1315	100.00

Table 47 – Access Mode

	Riders	%
Walked only	886	62.75
Drove a Car and Parked	28	1.98
Carpooled/Dropped Off	30	2.12
Another bus	274	19.41
Light Rail	65	4.60
NJT Train	16	1.13
PATH	0	0.00
Bike	25	1.77
Taxi	10	0.71
Uber or other app-based service	3	0.21
Other	75	5.31
Total	1412	100.00

Table 48 – Egress Mode

	Riders	%
Walk only	959	75.22
Drive Only	10	0.78
Carpool/Drop Off	3	0.24
Another bus	213	16.71
Light Rail	43	3.37
NJT Train	10	0.78
PATH	0	0.00
Bike	12	0.94
Taxi	0	0.00
Uber or other app-based service	4	0.31
Other	21	1.65
Total	1275	100.00

Table 49 – Frequency of Using the Bus Route

	Riders	%
7 days/week	241	18.29
6 days/week	156	11.84
5 days/week	434	32.93
3-4 days/week	193	14.64
1-2 days/week	115	8.73
1-3 days/month	107	8.12
Less than one day/month	42	3.19
Less than one day/year	3	0.23
First time customer	27	2.05
Total	1318	100.00

Table 50 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	860	191	77	70	63	1261
%	68.20	15.15	6.11	5.55	5.00	100.00

Table 51 – Ticket Type

	Riders	%
One-way Ticket/Cash	661	50.81
Monthly Pass	411	31.59
Sr. Citizen/Customer with disability/Children	140	10.76
Round Trip(2 One-way)	42	3.23
10-Trip/Multi-trip	34	2.61
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	3	0.23
Student 10-Trip	0	0.00
Other	10	0.77
Total	1301	100.00

Table 52 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	3	0.24
1	3	0.24
2	7	0.55
3	20	1.58
4	30	2.37
5	258	20.38
6	95	7.50
7	169	13.35
8	181	14.30
9	129	10.19
10 (Excellent)	371	29.30
Total	1266	100.00

Mean Satisfaction Score= 7.55
Median Satisfaction Score= 8

Table 53 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	604	408	106	73	128	1319
%	45.79	30.93	8.04	5.53	9.70	100.00

Table 54 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	799	372	142	1313
%	60.85	28.33	10.81	100.00

Table 55 – Trip Alternatives

	Riders	%
Would not make the trip	292	20.01
Drive a car	192	13.16
Carpool	104	7.13
Taxi	206	14.12
Uber or other app-based service	380	26.05
Jitney	3	0.21
Walk	138	9.46
Bike	32	2.19
Other	112	7.68
Total	1459	100.00

ROUTE 414

Table 56 – Origin Place

	Riders	%
Home	50	92.59
Work	2	3.70
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	2	3.70
Total	54	100.00

Table 57 – Destination Place

	Riders	%
Home	5	9.09
Work	50	90.91
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	55	100.00

Table 58 – Access Mode

	Riders	%
Walked only	42	79.25
Drove a Car and Parked	2	3.77
Carpooled/Dropped Off	7	13.21
Another bus	2	3.77
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	53	100.00

Table 59 – Egress Mode

	Riders	%
Walk only	45	83.33
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	7	12.96
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	2	3.70
Total	54	100.00

Table 60 – Frequency of Using the Bus Route

	Riders	%
7 days/week	5	9.80
6 days/week	2	3.92
5 days/week	35	68.63
3-4 days/week	5	9.80
1-2 days/week	2	3.92
1-3 days/month	2	3.92
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	0	0.00
Total	51	100.00

Table 61 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	45	10	0	0	0	55
%	81.82	18.18	0.00	0.00	0.00	100.00

Table 62 – Ticket Type

	Riders	%
One-way Ticket/Cash	10	19.23
Monthly Pass	20	38.46
Sr. Citizen/Customer with disability/Children	12	23.08
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	10	19.23
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	52	100.00

Table 63 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	0	0.00
4	0	0.00
5	7	13.73
6	2	3.92
7	5	9.80
8	17	33.33
9	0	0.00
10 (Excellent)	20	39.22
Total	51	100.00

Mean Satisfaction Score= 8.14
Median Satisfaction Score= 8

Table 64 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	40	7	2	2	2	53
%	75.47	13.21	3.77	3.77	3.77	100.00

Table 65 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	15	40	0	55
%	27.27	72.73	0.00	100.00

Table 66 – Trip Alternatives

	Riders	%
Would not make the trip	10	16.39
Drive a car	17	27.87
Carpool	5	8.20
Taxi	0	0.00
Uber or other app-based service	5	8.20
Jitney	0	0.00
Walk	2	3.28
Bike	2	3.28
Other	20	32.79
Total	61	100.00

ROUTE 612

Table 67 – Origin Place

	Riders	%
Home	51	100.00
Work	0	0.00
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	51	100.00

Table 68 – Destination Place

	Riders	%
Home	0	0.00
Work	49	96.08
Shopping	0	0.00
Personal business	2	3.92
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	51	100.00

Table 69 – Access Mode

	Riders	%
Walked only	51	100.00
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	0	0.00
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	51	100.00

Table 70 – Egress Mode

	Riders	%
Walk only	13	25.49
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	36	70.59
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	2	3.92
Other	0	0.00
Total	51	100.00

Table 71 – Frequency of Using the Bus Route

	Riders	%
7 days/week	0	0.00
6 days/week	0	0.00
5 days/week	31	60.78
3-4 days/week	11	21.57
1-2 days/week	7	13.73
1-3 days/month	0	0.00
Less than one day/month	2	3.92
Less than one day/year	0	0.00
First time customer	0	0.00
Total	51	100.00

Table 72 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	31	4	11	4	0	50
%	62.00	8.00	22.00	8.00	0.00	100.00

Table 73 – Ticket Type

	Riders	%
One-way Ticket/Cash	9	18.37
Monthly Pass	36	73.47
Sr. Citizen/Customer with disability/Children	4	8.16
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	49	100.00

Table 74 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	2	3.85
4	0	0.00
5	4	7.69
6	7	13.46
7	16	30.77
8	16	30.77
9	0	0.00
10 (Excellent)	7	13.46
Total	52	100.00

Mean Satisfaction Score= 7.22
Median Satisfaction Score= 7

Table 75 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	29	18	2	0	2	51
%	56.86	35.29	3.92	0.00	3.92	100.00

Table 76 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	27	22	2	51
%	52.94	43.14	3.92	100.00

Table 77 – Trip Alternatives

	Riders	%
Would not make the trip	2	3.85
Drive a car	20	38.46
Carpool	0	0.00
Taxi	0	0.00
Uber or other app-based service	24	46.15
Jitney	0	0.00
Walk	2	3.85
Bike	0	0.00
Other	4	7.69
Total	52	100.00

ROUTE 48

Table 78 – Origin Place

	Riders	%
Home	1193	60.07
Work	319	16.06
Shopping	33	1.66
Personal business	103	5.19
Medical/dental	95	4.78
Social/recreational	18	0.91
School(K-12)	22	1.11
Technical, college or university	62	3.12
Other	141	7.10
Total	1986	100.00

Table 79 – Destination Place

	Riders	%
Home	546	29.53
Work	797	43.10
Shopping	50	2.70
Personal business	118	6.38
Medical/dental	107	5.79
Social/recreational	22	1.19
School(K-12)	37	2.00
Technical, college or university	68	3.68
Other	104	5.62
Total	1849	100.00

Table 80 – Access Mode

	Riders	%
Walked only	1552	77.14
Drove a Car and Parked	17	0.84
Carpooled/Dropped Off	18	0.89
Another bus	265	13.17
Light Rail	7	0.35
NJT Train	115	5.72
PATH	0	0.00
Bike	8	0.40
Taxi	0	0.00
Uber or other app-based service	8	0.40
Other	22	1.09
Total	2012	100.00

Table 81 – Egress Mode

	Riders	%
Walk only	1425	75.12
Drive Only	8	0.42
Carpool/Drop Off	9	0.47
Another bus	213	11.23
Light Rail	0	0.00
NJT Train	224	11.81
PATH	9	0.47
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	9	0.47
Total	1897	100.00

Table 82 – Frequency of Using the Bus Route

	Riders	%
7 days/week	278	14.98
6 days/week	212	11.42
5 days/week	663	35.72
3-4 days/week	339	18.27
1-2 days/week	177	9.54
1-3 days/month	120	6.47
Less than one day/month	49	2.64
Less than one day/year	9	0.48
First time customer	9	0.48
Total	1856	100.00

Table 83 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	1116	271	144	186	83	1800
%	62.00	15.06	8.00	10.33	4.61	100.00

Table 84 – Ticket Type

	Riders	%
One-way Ticket/Cash	810	43.20
Monthly Pass	737	39.31
Sr. Citizen/Customer with disability/Children	165	8.80
Round Trip(2 One-way)	64	3.41
10-Trip/Multi-trip	0	0.00
Weekly Pass	22	1.17
Student Monthly Pass	52	2.77
Student One-way	25	1.33
Student 10-Trip	0	0.00
Other	0	0.00
Total	1875	100.00

Table 85 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	45	2.52
1	12	0.67
2	0	0.00
3	54	3.02
4	83	4.64
5	273	15.27
6	108	6.04
7	278	15.55
8	310	17.34
9	212	11.86
10 (Excellent)	413	23.10
Total	1788	100.00

Mean Satisfaction Score= 7.26
Median Satisfaction Score= 8

Table 86 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	868	675	100	88	124	1855
%	46.79	36.39	5.39	4.74	6.68	100.00

Table 87 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	1068	605	202	1875
%	56.96	32.27	10.77	100.00

Table 88 – Trip Alternatives

	Riders	%
Would not make the trip	376	18.40
Drive a car	172	8.42
Carpool	77	3.77
Taxi	251	12.29
Uber or other app-based service	609	29.81
Jitney	0	0.00
Walk	269	13.17
Bike	32	1.57
Other	257	12.58
Total	2043	100.00

ROUTE 805

Table 89 – Origin Place

	Riders	%
Home	304	97.75
Work	7	2.25
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	311	100.00

Table 90 – Destination Place

	Riders	%
Home	0	0.00
Work	304	100.00
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	304	100.00

Table 91 – Access Mode

	Riders	%
Walked only	311	100.00
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	0	0.00
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	311	100.00

Table 92 – Egress Mode

	Riders	%
Walk only	15	4.84
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	0	0.00
Light Rail	7	2.26
NJT Train	281	90.65
PATH	7	2.26
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	310	100.00

Table 93 – Frequency of Using the Bus Route

	Riders	%
7 days/week	7	2.31
6 days/week	0	0.00
5 days/week	271	89.44
3-4 days/week	25	8.25
1-2 days/week	0	0.00
1-3 days/month	0	0.00
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	0	0.00
Total	303	100.00

Table 94 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	202	7	74	10	10	303
%	66.67	2.31	24.42	3.30	3.30	100.00

Table 95 – Ticket Type

	Riders	%
One-way Ticket/Cash	32	10.56
Monthly Pass	271	89.44
Sr. Citizen/Customer with disability/Children	0	0.00
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	303	100.00

Table 96 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	7	2.36
3	0	0.00
4	7	2.36
5	52	17.57
6	30	10.14
7	40	13.51
8	84	28.38
9	54	18.24
10 (Excellent)	22	7.43
Total	296	100.00

Mean Satisfaction Score= 7.23
Median Satisfaction Score= 8

Table 97 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	126	104	7	44	22	303
%	41.58	34.32	2.31	14.52	7.26	100.00

Table 98 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	121	175	7	303
%	39.93	57.76	2.31	100.00

Table 99 – Trip Alternatives

	Riders	%
Would not make the trip	22	6.45
Drive a car	121	35.48
Carpool	0	0.00
Taxi	15	4.40
Uber or other app-based service	118	34.60
Jitney	0	0.00
Walk	25	7.33
Bike	15	4.40
Other	25	7.33
Total	341	100.00

ROUTE 830

Table 100 – Origin Place

	Riders	%
Home	167	57.39
Work	60	20.62
Shopping	9	3.09
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	16	5.50
Technical, college or university	0	0.00
Other	39	13.40
Total	291	100.00

Table 101 – Destination Place

	Riders	%
Home	92	36.08
Work	115	45.10
Shopping	41	16.08
Personal business	7	2.75
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	255	100.00

Table 102 – Access Mode

	Riders	%
Walked only	239	77.60
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	46	14.94
Another bus	9	2.92
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	14	4.55
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	308	100.00

Table 103 – Egress Mode

	Riders	%
Walk only	195	76.77
Drive Only	16	6.30
Carpool/Drop Off	9	3.54
Another bus	34	13.39
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	254	100.00

Table 104 – Frequency of Using the Bus Route

	Riders	%
7 days/week	23	8.71
6 days/week	37	14.02
5 days/week	87	32.95
3-4 days/week	76	28.79
1-2 days/week	23	8.71
1-3 days/month	9	3.41
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	9	3.41
Total	264	100.00

Table 105 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	195	7	16	16	30	264
%	73.86	2.65	6.06	6.06	11.36	100.00

Table 106 – Ticket Type

	Riders	%
One-way Ticket/Cash	181	68.82
Monthly Pass	39	14.83
Sr. Citizen/Customer with disability/Children	27	10.27
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	16	6.08
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	263	100.00

Table 107 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	0	0.00
4	14	5.76
5	7	2.88
6	0	0.00
7	30	12.35
8	64	26.34
9	55	22.63
10 (Excellent)	73	30.04
Total	243	100.00

Mean Satisfaction Score= 8.40
Median Satisfaction Score= 9

Table 108 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	199	48	0	0	0	247
%	80.57	19.43	0.00	0.00	0.00	100.00

Table 109 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	135	112	16	263
%	51.33	42.59	6.08	100.00

Table 110 – Trip Alternatives

	Riders	%
Would not make the trip	53	17.73
Drive a car	37	12.37
Carpool	16	5.35
Taxi	87	29.10
Uber or other app-based service	14	4.68
Jitney	0	0.00
Walk	9	3.01
Bike	23	7.69
Other	60	20.07
Total	299	100.00

ROUTE 831

Table 111 – Origin Place

	Riders	%
Home	209	62.02
Work	64	18.99
Shopping	13	3.86
Personal business	13	3.86
Medical/dental	15	4.45
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	23	6.82
Total	337	100.00

Table 112 – Destination Place

	Riders	%
Home	97	31.19
Work	139	44.69
Shopping	16	5.14
Personal business	16	5.14
Medical/dental	12	3.86
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	8	2.57
Other	23	7.40
Total	311	100.00

Table 113 – Access Mode

	Riders	%
Walked only	301	85.03
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	15	4.24
Another bus	18	5.08
Light Rail	0	0.00
NJT Train	16	4.52
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	4	1.13
Other	0	0.00
Total	354	100.00

Table 114 – Egress Mode

	Riders	%
Walk only	268	81.21
Drive Only	0	0.00
Carpool/Drop Off	12	3.64
Another bus	34	10.30
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	11	3.33
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	5	1.52
Total	330	100.00

Table 115 – Frequency of Using the Bus Route

	Riders	%
7 days/week	49	14.67
6 days/week	51	15.27
5 days/week	98	29.34
3-4 days/week	56	16.77
1-2 days/week	42	12.57
1-3 days/month	20	5.99
Less than one day/month	10	2.99
Less than one day/year	0	0.00
First time customer	8	2.40
Total	334	100.00

Table 116 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	192	25	51	12	20	300
%	64.00	8.33	17.00	4.00	6.67	100.00

Table 117 – Ticket Type

	Riders	%
One-way Ticket/Cash	203	62.46
Monthly Pass	50	15.38
Sr. Citizen/Customer with disability/Children	51	15.69
Round Trip(2 One-way)	4	1.23
10-Trip/Multi-trip	5	1.54
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	12	3.69
Total	325	100.00

Table 118 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	13	3.96
4	5	1.52
5	84	25.61
6	5	1.52
7	31	9.45
8	65	19.82
9	24	7.32
10 (Excellent)	101	30.79
Total	328	100.00

Mean Satisfaction Score= 7.53
Median Satisfaction Score= 8

Table 119 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	149	77	46	26	26	324
%	45.99	23.77	14.20	8.02	8.02	100.00

Table 120 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	188	92	29	309
%	60.84	29.77	9.39	100.00

Table 121 – Trip Alternatives

	Riders	%
Would not make the trip	40	11.02
Drive a car	32	8.82
Carpool	15	4.13
Taxi	133	36.64
Uber or other app-based service	47	12.95
Jitney	0	0.00
Walk	34	9.37
Bike	35	9.64
Other	27	7.44
Total	363	100.00

ROUTE 832

Table 122 – Origin Place

	Riders	%
Home	449	61.34
Work	83	11.34
Shopping	25	3.42
Personal business	31	4.23
Medical/dental	4	0.55
Social/recreational	4	0.55
School(K-12)	36	4.92
Technical, college or university	71	9.70
Other	29	3.96
Total	732	100.00

Table 123 – Destination Place

	Riders	%
Home	137	20.79
Work	224	33.99
Shopping	63	9.56
Personal business	38	5.77
Medical/dental	31	4.70
Social/recreational	4	0.61
School(K-12)	33	5.01
Technical, college or university	120	18.21
Other	9	1.37
Total	659	100.00

Table 124 – Access Mode

	Riders	%
Walked only	536	73.32
Drove a Car and Parked	7	0.96
Carpooled/Dropped Off	25	3.42
Another bus	54	7.39
Light Rail	0	0.00
NJT Train	66	9.03
PATH	0	0.00
Bike	18	2.46
Taxi	21	2.87
Uber or other app-based service	0	0.00
Other	4	0.55
Total	731	100.00

Table 125 – Egress Mode

	Riders	%
Walk only	586	87.72
Drive Only	0	0.00
Carpool/Drop Off	4	0.60
Another bus	47	7.04
Light Rail	0	0.00
NJT Train	18	2.69
PATH	0	0.00
Bike	9	1.35
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	4	0.60
Total	668	100.00

Table 126 – Frequency of Using the Bus Route

	Riders	%
7 days/week	62	9.13
6 days/week	64	9.43
5 days/week	197	29.01
3-4 days/week	179	26.36
1-2 days/week	102	15.02
1-3 days/month	33	4.86
Less than one day/month	29	4.27
Less than one day/year	0	0.00
First time customer	13	1.91
Total	679	100.00

Table 127 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	495	55	27	42	24	643
%	76.98	8.55	4.20	6.53	3.73	100.00

Table 128 – Ticket Type

	Riders	%
One-way Ticket/Cash	385	57.46
Monthly Pass	95	14.18
Sr. Citizen/Customer with disability/Children	93	13.88
Round Trip(2 One-way)	49	7.31
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	22	3.28
Student One-way	4	0.60
Student 10-Trip	0	0.00
Other	22	3.28
Total	670	100.00

Table 129 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	11	1.68
1	7	1.07
2	18	2.75
3	18	2.75
4	49	7.48
5	131	20.00
6	38	5.80
7	110	16.79
8	93	14.20
9	62	9.47
10 (Excellent)	118	18.02
Total	655	100.00

Mean Satisfaction Score= 6.77
Median Satisfaction Score= 7

Table 130 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	269	244	75	53	51	692
%	38.87	35.26	10.84	7.66	7.37	100.00

Table 131 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	408	182	78	668
%	61.08	27.25	11.68	100.00

Table 132 – Trip Alternatives

	Riders	%
Would not make the trip	131	16.27
Drive a car	67	8.32
Carpool	22	2.73
Taxi	289	35.90
Uber or other app-based service	113	14.04
Jitney	0	0.00
Walk	76	9.44
Bike	38	4.72
Other	69	8.57
Total	805	100.00

ROUTE 834

Table 133 – Origin Place

	Riders	%
Home	229	69.39
Work	15	4.55
Shopping	5	1.52
Personal business	51	15.45
Medical/dental	5	1.52
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	25	7.58
Total	330	100.00

Table 134 – Destination Place

	Riders	%
Home	45	16.36
Work	146	53.09
Shopping	25	9.09
Personal business	17	6.18
Medical/dental	15	5.45
Social/recreational	7	2.55
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	20	7.27
Total	275	100.00

Table 135 – Access Mode

	Riders	%
Walked only	254	76.97
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	5	1.52
Another bus	64	19.39
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	7	2.12
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	330	100.00

Table 136 – Egress Mode

	Riders	%
Walk only	219	82.95
Drive Only	0	0.00
Carpool/Drop Off	7	2.65
Another bus	38	14.39
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	264	100.00

Table 137 – Frequency of Using the Bus Route

	Riders	%
7 days/week	20	7.17
6 days/week	50	17.92
5 days/week	44	15.77
3-4 days/week	79	28.32
1-2 days/week	76	27.24
1-3 days/month	5	1.79
Less than one day/month	5	1.79
Less than one day/year	0	0.00
First time customer	0	0.00
Total	279	100.00

Table 138 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	192	20	7	46	5	270
%	71.11	7.41	2.59	17.04	1.85	100.00

Table 139 – Ticket Type

	Riders	%
One-way Ticket/Cash	153	54.84
Monthly Pass	23	8.24
Sr. Citizen/Customer with disability/Children	30	10.75
Round Trip(2 One-way)	51	18.28
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	22	7.89
Total	279	100.00

Table 140 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	5	1.96
4	0	0.00
5	49	19.22
6	7	2.75
7	55	21.57
8	63	24.71
9	11	4.31
10 (Excellent)	65	25.49
Total	255	100.00

Mean Satisfaction Score= 7.61
Median Satisfaction Score= 8

Table 141 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	111	106	10	17	35	279
%	39.78	37.99	3.58	6.09	12.54	100.00

Table 142 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	157	100	17	274
%	57.30	36.50	6.20	100.00

Table 143 – Trip Alternatives

	Riders	%
Would not make the trip	53	13.77
Drive a car	32	8.31
Carpool	11	2.86
Taxi	149	38.70
Uber or other app-based service	71	18.44
Jitney	0	0.00
Walk	22	5.71
Bike	7	1.82
Other	40	10.39
Total	385	100.00

ROUTE 837

Table 144 – Origin Place

	Riders	%
Home	252	60.14
Work	83	19.81
Shopping	13	3.10
Personal business	13	3.10
Medical/dental	20	4.77
Social/recreational	6	1.43
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	32	7.64
Total	419	100.00

Table 145 – Destination Place

	Riders	%
Home	133	33.17
Work	168	41.90
Shopping	27	6.73
Personal business	18	4.49
Medical/dental	25	6.23
Social/recreational	12	2.99
School(K-12)	0	0.00
Technical, college or university	12	2.99
Other	6	1.50
Total	401	100.00

Table 146 – Access Mode

	Riders	%
Walked only	394	89.55
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	14	3.18
Another bus	7	1.59
Light Rail	0	0.00
NJT Train	6	1.36
PATH	0	0.00
Bike	13	2.95
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	6	1.36
Total	440	100.00

Table 147 – Egress Mode

	Riders	%
Walk only	300	74.81
Drive Only	0	0.00
Carpool/Drop Off	7	1.75
Another bus	56	13.97
Light Rail	0	0.00
NJT Train	6	1.50
PATH	0	0.00
Bike	19	4.74
Taxi	13	3.24
Uber or other app-based service	0	0.00
Other	0	0.00
Total	401	100.00

Table 148 – Frequency of Using the Bus Route

	Riders	%
7 days/week	24	5.93
6 days/week	96	23.70
5 days/week	115	28.40
3-4 days/week	88	21.73
1-2 days/week	31	7.65
1-3 days/month	38	9.38
Less than one day/month	13	3.21
Less than one day/year	0	0.00
First time customer	0	0.00
Total	405	100.00

Table 149 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	284	31	20	13	45	393
%	72.26	7.89	5.09	3.31	11.45	100.00

Table 150 – Ticket Type

	Riders	%
One-way Ticket/Cash	240	59.11
Monthly Pass	26	6.40
Sr. Citizen/Customer with disability/Children	83	20.44
Round Trip(2 One-way)	25	6.16
10-Trip/Multi-trip	7	1.72
Weekly Pass	13	3.20
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	12	2.96
Total	406	100.00

Table 151 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	13	3.43
1	0	0.00
2	0	0.00
3	18	4.75
4	19	5.01
5	37	9.76
6	14	3.69
7	49	12.93
8	89	23.48
9	7	1.85
10 (Excellent)	133	35.09
Total	379	100.00

Mean Satisfaction Score= 7.51
Median Satisfaction Score= 8

Table 152 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	217	113	19	39	18	406
%	53.45	27.83	4.68	9.61	4.43	100.00

Table 153 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	198	152	44	394
%	50.25	38.58	11.17	100.00

Table 154 – Trip Alternatives

	Riders	%
Would not make the trip	89	19.69
Drive a car	33	7.30
Carpool	0	0.00
Taxi	157	34.73
Uber or other app-based service	53	11.73
Jitney	0	0.00
Walk	25	5.53
Bike	25	5.53
Other	70	15.49
Total	452	100.00

ROUTE 838

Table 155 – Origin Place

	Riders	%
Home	155	49.36
Work	29	9.24
Shopping	4	1.27
Personal business	10	3.18
Medical/dental	14	4.46
Social/recreational	6	1.91
School(K-12)	4	1.27
Technical, college or university	57	18.15
Other	35	11.15
Total	314	100.00

Table 156 – Destination Place

	Riders	%
Home	85	30.36
Work	103	36.79
Shopping	19	6.79
Personal business	6	2.14
Medical/dental	0	0.00
Social/recreational	14	5.00
School(K-12)	0	0.00
Technical, college or university	49	17.50
Other	4	1.43
Total	280	100.00

Table 157 – Access Mode

	Riders	%
Walked only	199	63.17
Drove a Car and Parked	15	4.76
Carpooled/Dropped Off	21	6.67
Another bus	51	16.19
Light Rail	0	0.00
NJT Train	17	5.40
PATH	0	0.00
Bike	12	3.81
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	315	100.00

Table 158 – Egress Mode

	Riders	%
Walk only	195	68.18
Drive Only	18	6.29
Carpool/Drop Off	8	2.80
Another bus	26	9.09
Light Rail	0	0.00
NJT Train	23	8.04
PATH	0	0.00
Bike	7	2.45
Taxi	4	1.40
Uber or other app-based service	5	1.75
Other	0	0.00
Total	286	100.00

Table 159 – Frequency of Using the Bus Route

	Riders	%
7 days/week	23	7.72
6 days/week	21	7.05
5 days/week	87	29.19
3-4 days/week	71	23.83
1-2 days/week	69	23.15
1-3 days/month	10	3.36
Less than one day/month	11	3.69
Less than one day/year	0	0.00
First time customer	6	2.01
Total	298	100.00

Table 160 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	211	16	8	30	24	289
%	73.01	5.54	2.77	10.38	8.30	100.00

Table 161 – Ticket Type

	Riders	%
One-way Ticket/Cash	177	58.42
Monthly Pass	79	26.07
Sr. Citizen/Customer with disability/Children	8	2.64
Round Trip(2 One-way)	27	8.91
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	12	3.96
Total	303	100.00

Table 162 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	10	3.42
3	6	2.05
4	21	7.19
5	59	20.21
6	20	6.85
7	27	9.25
8	39	13.36
9	43	14.73
10 (Excellent)	67	22.95
Total	292	100.00

Mean Satisfaction Score= 7.17
Median Satisfaction Score= 8

Table 163 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	126	83	57	21	15	302
%	41.72	27.48	18.87	6.95	4.97	100.00

Table 164 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	140	117	26	283
%	49.47	41.34	9.19	100.00

Table 165 – Trip Alternatives

	Riders	%
Would not make the trip	52	15.38
Drive a car	58	17.16
Carpool	4	1.18
Taxi	98	28.99
Uber or other app-based service	78	23.08
Jitney	0	0.00
Walk	18	5.33
Bike	22	6.51
Other	8	2.37
Total	338	100.00

ROUTE 871

Table 166 – Origin Place

	Riders	%
Home	90	81.82
Work	11	10.00
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	5	4.55
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	4	3.64
Total	110	100.00

Table 167 – Destination Place

	Riders	%
Home	25	22.73
Work	57	51.82
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	16	14.55
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	12	10.91
Total	110	100.00

Table 168 – Access Mode

	Riders	%
Walked only	101	89.38
Drove a Car and Parked	2	1.77
Carpooled/Dropped Off	0	0.00
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	10	8.85
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	113	100.00

Table 169 – Egress Mode

	Riders	%
Walk only	95	88.79
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	8	7.48
Light Rail	0	0.00
NJT Train	4	3.74
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	107	100.00

Table 170 – Frequency of Using the Bus Route

	Riders	%
7 days/week	12	10.81
6 days/week	17	15.32
5 days/week	67	60.36
3-4 days/week	11	9.91
1-2 days/week	2	1.80
1-3 days/month	2	1.80
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	0	0.00
Total	111	100.00

Table 171 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	57	20	7	13	4	102
%	55.88	19.61	6.86	12.75	3.92	100.00

Table 172 – Ticket Type

	Riders	%
One-way Ticket/Cash	59	53.15
Monthly Pass	39	35.14
Sr. Citizen/Customer with disability/Children	5	4.50
Round Trip(2 One-way)	4	3.60
10-Trip/Multi-trip	0	0.00
Weekly Pass	2	1.80
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	2	1.80
Total	111	100.00

Table 173 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	10	10.00
4	0	0.00
5	13	13.00
6	0	0.00
7	4	4.00
8	27	27.00
9	4	4.00
10 (Excellent)	42	42.00
Total	100	100.00

Mean Satisfaction Score= 7.96
Median Satisfaction Score= 8

Table 174 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	64	27	0	0	16	107
%	59.81	25.23	0.00	0.00	14.95	100.00

Table 175 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	67	35	4	106
%	63.21	33.02	3.77	100.00

Table 176 – Trip Alternatives

	Riders	%
Would not make the trip	36	33.33
Drive a car	5	4.63
Carpool	2	1.85
Taxi	17	15.74
Uber or other app-based service	41	37.96
Jitney	0	0.00
Walk	7	6.48
Bike	0	0.00
Other	0	0.00
Total	108	100.00

ROUTE 872

Table 177 – Origin Place

	Riders	%
Home	24	55.81
Work	0	0.00
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	19	44.19
Total	43	100.00

Table 178 – Destination Place

	Riders	%
Home	0	0.00
Work	35	83.33
Shopping	0	0.00
Personal business	5	11.90
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	2	4.76
Other	0	0.00
Total	42	100.00

Table 179 – Access Mode

	Riders	%
Walked only	26	63.41
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	5	12.20
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	10	24.39
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	41	100.00

Table 180 – Egress Mode

	Riders	%
Walk only	22	91.67
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	2	8.33
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	24	100.00

Table 181 – Frequency of Using the Bus Route

	Riders	%
7 days/week	5	11.63
6 days/week	2	4.65
5 days/week	17	39.53
3-4 days/week	5	11.63
1-2 days/week	0	0.00
1-3 days/month	14	32.56
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	0	0.00
Total	43	100.00

Table 182 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	38	2	0	2	0	42
%	90.48	4.76	0.00	4.76	0.00	100.00

Table 183 – Ticket Type

	Riders	%
One-way Ticket/Cash	10	34.48
Monthly Pass	14	48.28
Sr. Citizen/Customer with disability/Children	0	0.00
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	5	17.24
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	29	100.00

Table 184 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	5	11.63
2	0	0.00
3	0	0.00
4	0	0.00
5	0	0.00
6	5	11.63
7	0	0.00
8	7	16.28
9	0	0.00
10 (Excellent)	26	60.47
Total	43	100.00

Mean Satisfaction Score= 8.18
Median Satisfaction Score= 10

Table 185 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	14	10	5	0	14	43
%	32.56	23.26	11.63	0.00	32.56	100.00

Table 186 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	28	15	0	43
%	65.12	34.88	0.00	100.00

Table 187 – Trip Alternatives

	Riders	%
Would not make the trip	19	39.58
Drive a car	2	4.17
Carpool	5	10.42
Taxi	0	0.00
Uber or other app-based service	15	31.25
Jitney	0	0.00
Walk	0	0.00
Bike	2	4.17
Other	5	10.42
Total	48	100.00

ROUTE 873

Table 188 – Origin Place

	Riders	%
Home	81	51.92
Work	24	15.38
Shopping	3	1.92
Personal business	8	5.13
Medical/dental	5	3.21
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	8	5.13
Other	27	17.31
Total	156	100.00

Table 189 – Destination Place

	Riders	%
Home	33	23.74
Work	66	47.48
Shopping	17	12.23
Personal business	8	5.76
Medical/dental	3	2.16
Social/recreational	0	0.00
School(K-12)	3	2.16
Technical, college or university	3	2.16
Other	6	4.32
Total	139	100.00

Table 190 – Access Mode

	Riders	%
Walked only	119	76.77
Drove a Car and Parked	3	1.94
Carpooled/Dropped Off	3	1.94
Another bus	30	19.35
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	155	100.00

Table 191 – Egress Mode

	Riders	%
Walk only	114	75.00
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	29	19.08
Light Rail	0	0.00
NJT Train	0	0.00
PATH	3	1.97
Bike	3	1.97
Taxi	0	0.00
Uber or other app-based service	3	1.97
Other	0	0.00
Total	152	100.00

Table 192 – Frequency of Using the Bus Route

	Riders	%
7 days/week	13	8.72
6 days/week	23	15.44
5 days/week	42	28.19
3-4 days/week	29	19.46
1-2 days/week	26	17.45
1-3 days/month	3	2.01
Less than one day/month	5	3.36
Less than one day/year	0	0.00
First time customer	8	5.37
Total	149	100.00

Table 193 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	90	10	20	15	13	148
%	60.81	6.76	13.51	10.14	8.78	100.00

Table 194 – Ticket Type

	Riders	%
One-way Ticket/Cash	69	47.59
Monthly Pass	24	16.55
Sr. Citizen/Customer with disability/Children	41	28.28
Round Trip(2 One-way)	5	3.45
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	6	4.14
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	145	100.00

Table 195 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	6	4.14
1	0	0.00
2	0	0.00
3	0	0.00
4	8	5.52
5	32	22.07
6	6	4.14
7	19	13.10
8	27	18.62
9	15	10.34
10 (Excellent)	32	22.07
Total	145	100.00

Mean Satisfaction Score= 7.1
Median Satisfaction Score= 8

Table 196 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	94	27	10	8	13	152
%	61.84	17.76	6.58	5.26	8.55	100.00

Table 197 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	91	37	14	142
%	64.08	26.06	9.86	100.00

Table 198 – Trip Alternatives

	Riders	%
Would not make the trip	18	10.91
Drive a car	8	4.85
Carpool	3	1.82
Taxi	18	10.91
Uber or other app-based service	61	36.97
Jitney	0	0.00
Walk	19	11.52
Bike	14	8.48
Other	24	14.55
Total	165	100.00

ROUTE 874

Table 199 – Origin Place

	Riders	%
Home	67	57.26
Work	22	18.80
Shopping	2	1.71
Personal business	8	6.84
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	2	1.71
Other	16	13.68
Total	117	100.00

Table 200 – Destination Place

	Riders	%
Home	15	13.64
Work	53	48.18
Shopping	7	6.36
Personal business	22	20.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	13	11.82
Total	110	100.00

Table 201 – Access Mode

	Riders	%
Walked only	81	69.23
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	0	0.00
Another bus	36	30.77
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	117	100.00

Table 202 – Egress Mode

	Riders	%
Walk only	91	77.78
Drive Only	2	1.71
Carpool/Drop Off	0	0.00
Another bus	24	20.51
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	117	100.00

Table 203 – Frequency of Using the Bus Route

	Riders	%
7 days/week	0	0.00
6 days/week	35	29.91
5 days/week	29	24.79
3-4 days/week	41	35.04
1-2 days/week	2	1.71
1-3 days/month	2	1.71
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	8	6.84
Total	117	100.00

Table 204 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	57	43	0	2	13	115
%	49.57	37.39	0.00	1.74	11.30	100.00

Table 205 – Ticket Type

	Riders	%
One-way Ticket/Cash	56	47.46
Monthly Pass	40	33.90
Sr. Citizen/Customer with disability/Children	22	18.64
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	118	100.00

Table 206 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	0	0.00
4	0	0.00
5	2	1.90
6	2	1.90
7	4	3.81
8	37	35.24
9	11	10.48
10 (Excellent)	49	46.67
Total	105	100.00

Mean Satisfaction Score= 8.87
Median Satisfaction Score= 9

Table 207 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	67	34	0	2	2	105
%	63.81	32.38	0.00	1.90	1.90	100.00

Table 208 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	85	19	13	117
%	72.65	16.24	11.11	100.00

Table 209 – Trip Alternatives

	Riders	%
Would not make the trip	24	21.24
Drive a car	2	1.77
Carpool	11	9.73
Taxi	21	18.58
Uber or other app-based service	37	32.74
Jitney	0	0.00
Walk	4	3.54
Bike	14	12.39
Other	0	0.00
Total	113	100.00

ROUTE 875

Table 210 – Origin Place

	Riders	%
Home	93	75.61
Work	0	0.00
Shopping	0	0.00
Personal business	11	8.94
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	16	13.01
Other	3	2.44
Total	123	100.00

Table 211 – Destination Place

	Riders	%
Home	38	30.89
Work	28	22.76
Shopping	5	4.07
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	42	34.15
Other	10	8.13
Total	123	100.00

Table 212 – Access Mode

	Riders	%
Walked only	111	88.10
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	6	4.76
Another bus	3	2.38
Light Rail	0	0.00
NJT Train	3	2.38
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	3	2.38
Total	126	100.00

Table 213 – Egress Mode

	Riders	%
Walk only	103	85.83
Drive Only	7	5.83
Carpool/Drop Off	0	0.00
Another bus	3	2.50
Light Rail	0	0.00
NJT Train	7	5.83
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	120	100.00

Table 214 – Frequency of Using the Bus Route

	Riders	%
7 days/week	0	0.00
6 days/week	6	4.92
5 days/week	34	27.87
3-4 days/week	49	40.16
1-2 days/week	33	27.05
1-3 days/month	0	0.00
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	0	0.00
Total	122	100.00

Table 215 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	94	5	2	10	12	123
%	76.42	4.07	1.63	8.13	9.76	100.00

Table 216 – Ticket Type

	Riders	%
One-way Ticket/Cash	90	73.17
Monthly Pass	11	8.94
Sr. Citizen/Customer with disability/Children	9	7.32
Round Trip(2 One-way)	3	2.44
10-Trip/Multi-trip	7	5.69
Weekly Pass	0	0.00
Student Monthly Pass	3	2.44
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	123	100.00

Table 217 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	2	1.64
4	0	0.00
5	6	4.92
6	3	2.46
7	34	27.87
8	8	6.56
9	33	27.05
10 (Excellent)	36	29.51
Total	122	100.00

Mean Satisfaction Score= 8.28
Median Satisfaction Score= 9

Table 218 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	59	49	9	0	6	123
%	47.97	39.84	7.32	0.00	4.88	100.00

Table 219 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	72	38	13	123
%	58.54	30.89	10.57	100.00

Table 220 – Trip Alternatives

	Riders	%
Would not make the trip	16	12.60
Drive a car	9	7.09
Carpool	6	4.72
Taxi	30	23.62
Uber or other app-based service	38	29.92
Jitney	0	0.00
Walk	26	20.47
Bike	0	0.00
Other	2	1.57
Total	127	100.00

ROUTE 878

Table 221 – Origin Place

	Riders	%
Home	22	100.00
Work	0	0.00
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	22	100.00

Table 222 – Destination Place

	Riders	%
Home	0	0.00
Work	22	100.00
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	22	100.00

Table 223 – Access Mode

	Riders	%
Walked only	0	0.00
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	0	0.00
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	22	100.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	22	100.00

Table 224 – Egress Mode

	Riders	%
Walk only	22	100.00
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	22	100.00

Table 225 – Frequency of Using the Bus Route

	Riders	%
7 days/week	0	0.00
6 days/week	0	0.00
5 days/week	0	0.00
3-4 days/week	22	100.00
1-2 days/week	0	0.00
1-3 days/month	0	0.00
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	0	0.00
Total	22	100.00

Table 226 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	22	0	0	0	0	22
%	100.00	0.00	0.00	0.00	0.00	100.00

Table 227 – Ticket Type

	Riders	%
One-way Ticket/Cash	22	100.00
Monthly Pass	0	0.00
Sr. Citizen/Customer with disability/Children	0	0.00
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	22	100.00

Table 228 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	0	0.00
4	0	0.00
5	0	0.00
6	0	0.00
7	22	100.00
8	0	0.00
9	0	0.00
10 (Excellent)	0	0.00
Total	22	100.00

Mean Satisfaction Score= 7
Median Satisfaction Score= 7

Table 229 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	22	0	0	0	0	22
%	100.00	0.00	0.00	0.00	0.00	100.00

Table 230 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	22	0	0	22
%	100.00	0.00	0.00	100.00

Table 231 – Trip Alternatives

	Riders	%
Would not make the trip	0	0.00
Drive a car	0	0.00
Carpool	0	0.00
Taxi	0	0.00
Uber or other app-based service	22	100.00
Jitney	0	0.00
Walk	0	0.00
Bike	0	0.00
Other	0	0.00
Total	22	100.00

ROUTE 880

Table 232 – Origin Place

	Riders	%
Home	268	70.53
Work	20	5.26
Shopping	9	2.37
Personal business	11	2.89
Medical/dental	22	5.79
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	50	13.16
Total	380	100.00

Table 233 – Destination Place

	Riders	%
Home	81	23.14
Work	157	44.86
Shopping	33	9.43
Personal business	13	3.71
Medical/dental	39	11.14
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	27	7.71
Total	350	100.00

Table 234 – Access Mode

	Riders	%
Walked only	346	89.18
Drove a Car and Parked	3	0.77
Carpooled/Dropped Off	16	4.12
Another bus	7	1.80
Light Rail	0	0.00
NJT Train	0	0.00
PATH	3	0.77
Bike	3	0.77
Taxi	6	1.55
Uber or other app-based service	4	1.03
Other	0	0.00
Total	388	100.00

Table 235 – Egress Mode

	Riders	%
Walk only	298	84.66
Drive Only	4	1.14
Carpool/Drop Off	6	1.70
Another bus	20	5.68
Light Rail	0	0.00
NJT Train	3	0.85
PATH	0	0.00
Bike	0	0.00
Taxi	18	5.11
Uber or other app-based service	3	0.85
Other	0	0.00
Total	352	100.00

Table 236 – Frequency of Using the Bus Route

	Riders	%
7 days/week	21	6.03
6 days/week	66	18.97
5 days/week	108	31.03
3-4 days/week	82	23.56
1-2 days/week	38	10.92
1-3 days/month	21	6.03
Less than one day/month	6	1.72
Less than one day/year	0	0.00
First time customer	6	1.72
Total	348	100.00

Table 237 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	262	13	34	18	14	341
%	76.83	3.81	9.97	5.28	4.11	100.00

Table 238 – Ticket Type

	Riders	%
One-way Ticket/Cash	237	67.33
Monthly Pass	38	10.80
Sr. Citizen/Customer with disability/Children	62	17.61
Round Trip(2 One-way)	6	1.70
10-Trip/Multi-trip	3	0.85
Weekly Pass	6	1.70
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	352	100.00

Table 239 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	6	1.71
4	0	0.00
5	29	8.26
6	14	3.99
7	25	7.12
8	110	31.34
9	52	14.81
10 (Excellent)	115	32.76
Total	351	100.00

Mean Satisfaction Score= 8.32
Median Satisfaction Score= 8

Table 240 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	202	87	11	21	36	357
%	56.58	24.37	3.08	5.88	10.08	100.00

Table 241 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	220	101	36	357
%	61.62	28.29	10.08	100.00

Table 242 – Trip Alternatives

	Riders	%
Would not make the trip	70	17.46
Drive a car	10	2.49
Carpool	25	6.23
Taxi	141	35.16
Uber or other app-based service	56	13.97
Jitney	6	1.50
Walk	36	8.98
Bike	6	1.50
Other	51	12.72
Total	401	100.00

ROUTE 890

Table 243 – Origin Place

	Riders	%
Home	8	47.06
Work	3	17.65
Shopping	0	0.00
Personal business	3	17.65
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	3	17.65
Total	17	100.00

Table 244 – Destination Place

	Riders	%
Home	8	47.06
Work	3	17.65
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	6	35.29
Total	17	100.00

Table 245 – Access Mode

	Riders	%
Walked only	6	35.29
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	0	0.00
Another bus	8	47.06
Light Rail	0	0.00
NJT Train	3	17.65
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	17	100.00

Table 246 – Egress Mode

	Riders	%
Walk only	14	82.35
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	3	17.65
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	17	100.00

Table 247 – Frequency of Using the Bus Route

	Riders	%
7 days/week	3	16.67
6 days/week	0	0.00
5 days/week	3	16.67
3-4 days/week	3	16.67
1-2 days/week	0	0.00
1-3 days/month	3	16.67
Less than one day/month	6	33.33
Less than one day/year	0	0.00
First time customer	0	0.00
Total	18	100.00

Table 248 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	11	6	0	0	0	17
%	64.71	35.29	0.00	0.00	0.00	100.00

Table 249 – Ticket Type

	Riders	%
One-way Ticket/Cash	14	82.35
Monthly Pass	0	0.00
Sr. Citizen/Customer with disability/Children	3	17.65
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	17	100.00

Table 250 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	0	0.00
4	0	0.00
5	3	17.65
6	0	0.00
7	3	17.65
8	0	0.00
9	0	0.00
10 (Excellent)	11	64.71
Total	17	100.00

Mean Satisfaction Score= 8.67
Median Satisfaction Score= 10

Table 251 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	11	0	3	0	3	17
%	64.71	0.00	17.65	0.00	17.65	100.00

Table 252 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	8	6	3	17
%	47.06	35.29	17.65	100.00

Table 253 – Trip Alternatives

	Riders	%
Would not make the trip	3	15.00
Drive a car	0	0.00
Carpool	0	0.00
Taxi	3	15.00
Uber or other app-based service	3	15.00
Jitney	0	0.00
Walk	11	55.00
Bike	0	0.00
Other	0	0.00
Total	20	100.00

ROUTE 891

Table 254 – Origin Place

	Riders	%
Home	14	50.00
Work	5	17.86
Shopping	9	32.14
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	28	100.00

Table 255 – Destination Place

	Riders	%
Home	13	48.15
Work	7	25.93
Shopping	7	25.93
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	27	100.00

Table 256 – Access Mode

	Riders	%
Walked only	23	85.19
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	4	14.81
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	27	100.00

Table 257 – Egress Mode

	Riders	%
Walk only	14	77.78
Drive Only	0	0.00
Carpool/Drop Off	4	22.22
Another bus	0	0.00
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	18	100.00

Table 258 – Frequency of Using the Bus Route

	Riders	%
7 days/week	0	0.00
6 days/week	0	0.00
5 days/week	9	40.91
3-4 days/week	2	9.09
1-2 days/week	5	22.73
1-3 days/month	2	9.09
Less than one day/month	0	0.00
Less than one day/year	4	18.18
First time customer	0	0.00
Total	22	100.00

Table 259 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	16	0	0	9	2	27
%	59.26	0.00	0.00	33.33	7.41	100.00

Table 260 – Ticket Type

	Riders	%
One-way Ticket/Cash	7	30.43
Monthly Pass	0	0.00
Sr. Citizen/Customer with disability/Children	11	47.83
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	5	21.74
Total	23	100.00

Table 261 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	0	0.00
4	0	0.00
5	5	18.52
6	0	0.00
7	0	0.00
8	0	0.00
9	4	14.81
10 (Excellent)	18	66.67
Total	27	100.00

Mean Satisfaction Score= 8.97
Median Satisfaction Score= 10

Table 262 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	23	0	0	0	5	28
%	82.14	0.00	0.00	0.00	17.86	100.00

Table 263 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	13	9	0	22
%	59.09	40.91	0.00	100.00

Table 264 – Trip Alternatives

	Riders	%
Would not make the trip	13	48.15
Drive a car	0	0.00
Carpool	0	0.00
Taxi	9	33.33
Uber or other app-based service	5	18.52
Jitney	0	0.00
Walk	0	0.00
Bike	0	0.00
Other	0	0.00
Total	27	100.00

ROUTE 986

Table 265 – Origin Place

	Riders	%
Home	105	73.43
Work	31	21.68
Shopping	0	0.00
Personal business	3	2.10
Medical/dental	4	2.80
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	0	0.00
Total	143	100.00

Table 266 – Destination Place

	Riders	%
Home	18	13.74
Work	101	77.10
Shopping	0	0.00
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	9	6.87
School(K-12)	3	2.29
Technical, college or university	0	0.00
Other	0	0.00
Total	131	100.00

Table 267 – Access Mode

	Riders	%
Walked only	58	41.13
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	3	2.13
Another bus	37	26.24
Light Rail	0	0.00
NJT Train	43	30.50
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	141	100.00

Table 268 – Egress Mode

	Riders	%
Walk only	88	69.29
Drive Only	0	0.00
Carpool/Drop Off	8	6.30
Another bus	13	10.24
Light Rail	3	2.36
NJT Train	15	11.81
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	127	100.00

Table 269 – Frequency of Using the Bus Route

	Riders	%
7 days/week	0	0.00
6 days/week	4	3.01
5 days/week	95	71.43
3-4 days/week	15	11.28
1-2 days/week	12	9.02
1-3 days/month	0	0.00
Less than one day/month	7	5.26
Less than one day/year	0	0.00
First time customer	0	0.00
Total	133	100.00

Table 270 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	106	6	7	7	4	130
%	81.54	4.62	5.38	5.38	3.08	100.00

Table 271 – Ticket Type

	Riders	%
One-way Ticket/Cash	49	36.57
Monthly Pass	71	52.99
Sr. Citizen/Customer with disability/Children	3	2.24
Round Trip(2 One-way)	11	8.21
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	134	100.00

Table 272 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	3	2.22
2	13	9.63
3	4	2.96
4	0	0.00
5	27	20.00
6	0	0.00
7	15	11.11
8	21	15.56
9	19	14.07
10 (Excellent)	33	24.44
Total	135	100.00

Mean Satisfaction Score= 7.04
Median Satisfaction Score= 8

Table 273 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	83	21	7	16	7	134
%	61.94	15.67	5.22	11.94	5.22	100.00

Table 274 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	72	51	7	130
%	55.38	39.23	5.38	100.00

Table 275 – Trip Alternatives

	Riders	%
Would not make the trip	27	20.15
Drive a car	31	23.13
Carpool	3	2.24
Taxi	11	8.21
Uber or other app-based service	45	33.58
Jitney	0	0.00
Walk	0	0.00
Bike	0	0.00
Other	17	12.69
Total	134	100.00

ROUTE 871_874

Table 276 – Origin Place

	Riders	%
Home	157	68.91
Work	33	14.48
Shopping	2	0.99
Personal business	8	3.58
Medical/dental	0	0.00
Social/recreational	5	2.27
School(K-12)	0	0.00
Technical, college or university	2	0.99
Other	20	8.78
Total	228	100.00

Table 277 – Destination Place

	Riders	%
Home	40	18.35
Work	111	50.31
Shopping	7	3.07
Personal business	22	9.85
Medical/dental	0	0.00
Social/recreational	16	7.34
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	24	11.09
Total	220	100.00

Table 278 – Access Mode

	Riders	%
Walked only	182	79.26
Drove a Car and Parked	2	0.80
Carpooled/Dropped Off	0	0.00
Another bus	36	15.64
Light Rail	0	0.00
NJT Train	10	4.30
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	230	100.00

Table 279 – Egress Mode

	Riders	%
Walk only	185	82.58
Drive Only	2	1.00
Carpool/Drop Off	0	0.00
Another bus	33	14.48
Light Rail	0	0.00
NJT Train	4	1.94
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	225	100.00

Table 280 – Frequency of Using the Bus Route

	Riders	%
7 days/week	12	5.43
6 days/week	51	22.40
5 days/week	96	42.30
3-4 days/week	52	22.70
1-2 days/week	4	1.79
1-3 days/month	4	1.79
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	8	3.58
Total	228	100.00

Table 281 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	114	64	7	15	17	217
%	52.73	29.38	3.24	6.82	7.84	100.00

Table 282 – Ticket Type

	Riders	%
One-way Ticket/Cash	115	50.57
Monthly Pass	78	34.43
Sr. Citizen/Customer with disability/Children	27	11.77
Round Trip(2 One-way)	4	1.62
10-Trip/Multi-trip	0	0.00
Weekly Pass	2	0.81
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	2	0.81
Total	228	100.00

Table 283 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	10	4.64
4	0	0.00
5	15	7.45
6	2	1.09
7	9	4.31
8	64	31.18
9	15	7.26
10 (Excellent)	90	44.06
Total	205	100.00

Mean Satisfaction Score= 8.43
Median Satisfaction Score= 9

Table 284 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	131	61	0	2	18	212
%	61.69	28.79	0.00	1.06	8.46	100.00

Table 285 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	152	53	18	224
%	68.12	23.90	7.97	100.00

Table 286 – Trip Alternatives

	Riders	%
Would not make the trip	60	27.00
Drive a car	7	3.34
Carpool	13	5.87
Taxi	38	16.97
Uber or other app-based service	78	35.23
Jitney	0	0.00
Walk	12	5.17
Bike	14	6.42
Other	0	0.00
Total	223	100.00

ROUTE 872_875

Table 287 – Origin Place

	Riders	%
Home	116	70.50
Work	0	0.00
Shopping	0	0.00
Personal business	11	6.58
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	16	9.78
Other	22	13.15
Total	165	100.00

Table 288 – Destination Place

	Riders	%
Home	38	23.30
Work	63	38.28
Shopping	5	2.99
Personal business	5	2.94
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	44	26.66
Other	10	5.83
Total	165	100.00

Table 289 – Access Mode

	Riders	%
Walked only	136	82.26
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	10	6.28
Another bus	3	1.87
Light Rail	0	0.00
NJT Train	13	7.72
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	3	1.87
Total	166	100.00

Table 290 – Egress Mode

	Riders	%
Walk only	125	87.27
Drive Only	7	4.55
Carpool/Drop Off	0	0.00
Another bus	3	2.16
Light Rail	0	0.00
NJT Train	7	4.55
PATH	0	0.00
Bike	2	1.47
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	143	100.00

Table 291 – Frequency of Using the Bus Route

	Riders	%
7 days/week	5	2.94
6 days/week	8	5.04
5 days/week	51	30.77
3-4 days/week	54	32.62
1-2 days/week	33	20.31
1-3 days/month	14	8.32
Less than one day/month	0	0.00
Less than one day/year	0	0.00
First time customer	0	0.00
Total	165	100.00

Table 292 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	132	7	2	12	12	165
%	79.80	4.27	1.50	7.11	7.32	100.00

Table 293 – Ticket Type

	Riders	%
One-way Ticket/Cash	100	65.86
Monthly Pass	25	16.58
Sr. Citizen/Customer with disability/Children	9	5.94
Round Trip(2 One-way)	3	2.05
10-Trip/Multi-trip	7	4.31
Weekly Pass	5	3.21
Student Monthly Pass	3	2.05
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	151	100.00

Table 294 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	5	2.94
2	0	0.00
3	2	1.50
4	0	0.00
5	6	3.76
6	8	4.83
7	34	20.48
8	15	9.10
9	33	20.29
10 (Excellent)	61	37.11
Total	165	100.00

Mean Satisfaction Score= 8.25
Median Satisfaction Score= 9

Table 295 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	73	59	14	0	19	165
%	44.52	35.58	8.20	0.00	11.70	100.00

Table 296 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	100	53	13	165
%	60.35	31.94	7.71	100.00

Table 297 – Trip Alternatives

	Riders	%
Would not make the trip	35	19.94
Drive a car	11	6.51
Carpool	11	6.31
Taxi	30	17.15
Uber or other app-based service	52	29.87
Jitney	0	0.00
Walk	26	14.85
Bike	2	1.20
Other	7	4.18
Total	175	100.00

ROUTE 873_878

Table 298 – Origin Place

	Riders	%
Home	103	57.85
Work	24	13.20
Shopping	3	1.82
Personal business	8	4.44
Medical/dental	5	2.68
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	8	4.50
Other	28	15.50
Total	179	100.00

Table 299 – Destination Place

	Riders	%
Home	33	20.28
Work	88	54.53
Shopping	17	10.62
Personal business	8	4.91
Medical/dental	3	1.95
Social/recreational	0	0.00
School(K-12)	3	1.95
Technical, college or university	3	2.01
Other	6	3.75
Total	162	100.00

Table 300 – Access Mode

	Riders	%
Walked only	119	67.21
Drove a Car and Parked	3	1.60
Carpooled/Dropped Off	3	1.60
Another bus	30	16.94
Light Rail	0	0.00
NJT Train	22	12.66
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	177	100.00

Table 301 – Egress Mode

	Riders	%
Walk only	136	78.13
Drive Only	0	0.00
Carpool/Drop Off	0	0.00
Another bus	29	16.81
Light Rail	0	0.00
NJT Train	0	0.00
PATH	3	1.62
Bike	3	1.81
Taxi	0	0.00
Uber or other app-based service	3	1.62
Other	0	0.00
Total	174	100.00

Table 302 – Frequency of Using the Bus Route

	Riders	%
7 days/week	13	7.37
6 days/week	23	13.64
5 days/week	42	24.64
3-4 days/week	51	29.76
1-2 days/week	26	15.44
1-3 days/month	3	1.65
Less than one day/month	5	2.80
Less than one day/year	0	0.00
First time customer	8	4.70
Total	171	100.00

Table 303 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	112	10	20	15	13	171
%	65.83	6.11	11.83	8.77	7.46	100.00

Table 304 – Ticket Type

	Riders	%
One-way Ticket/Cash	92	54.51
Monthly Pass	24	14.35
Sr. Citizen/Customer with disability/Children	41	24.54
Round Trip(2 One-way)	5	2.85
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	6	3.76
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	0	0.00
Total	168	100.00

Table 305 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	6	3.81
1	0	0.00
2	0	0.00
3	0	0.00
4	8	4.78
5	32	19.25
6	6	3.35
7	42	24.72
8	27	16.15
9	15	8.84
10 (Excellent)	32	19.10
Total	168	100.00

Mean Satisfaction Score= 7.08
Median Satisfaction Score= 7

Table 306 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	117	27	10	8	13	174
%	66.94	15.68	5.51	4.57	7.31	100.00

Table 307 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	114	37	14	165
%	68.86	22.65	8.49	100.00

Table 308 – Trip Alternatives

	Riders	%
Would not make the trip	18	9.87
Drive a car	8	4.07
Carpool	3	1.74
Taxi	18	9.47
Uber or other app-based service	84	44.73
Jitney	0	0.00
Walk	19	10.00
Bike	14	7.50
Other	24	12.62
Total	187	100.00

ROUTE 890_891

Table 309 – Origin Place

	Riders	%
Home	22	50.41
Work	8	17.08
Shopping	9	19.76
Personal business	3	6.38
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	3	6.38
Total	44	100.00

Table 310 – Destination Place

	Riders	%
Home	22	49.59
Work	10	22.02
Shopping	7	15.64
Personal business	0	0.00
Medical/dental	0	0.00
Social/recreational	0	0.00
School(K-12)	0	0.00
Technical, college or university	0	0.00
Other	6	12.75
Total	44	100.00

Table 311 – Access Mode

	Riders	%
Walked only	29	64.61
Drove a Car and Parked	0	0.00
Carpooled/Dropped Off	4	9.88
Another bus	8	19.13
Light Rail	0	0.00
NJT Train	3	6.38
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	44	100.00

Table 312 – Egress Mode

	Riders	%
Walk only	28	79.53
Drive Only	0	0.00
Carpool/Drop Off	4	12.44
Another bus	3	8.03
Light Rail	0	0.00
NJT Train	0	0.00
PATH	0	0.00
Bike	0	0.00
Taxi	0	0.00
Uber or other app-based service	0	0.00
Other	0	0.00
Total	35	100.00

Table 313 – Frequency of Using the Bus Route

	Riders	%
7 days/week	3	7.08
6 days/week	0	0.00
5 days/week	12	30.82
3-4 days/week	5	12.56
1-2 days/week	5	11.87
1-3 days/month	5	12.56
Less than one day/month	6	14.15
Less than one day/year	4	10.96
First time customer	0	0.00
Total	40	100.00

Table 314 – Return Trip Mode

	Same Bus	Another Bus	Train	Car	Others	Total
Riders	27	6	0	9	2	44
%	60.90	12.75	0.00	21.40	4.94	100.00

Table 315 – Ticket Type

	Riders	%
One-way Ticket/Cash	21	52.74
Monthly Pass	0	0.00
Sr. Citizen/Customer with disability/Children	14	35.39
Round Trip(2 One-way)	0	0.00
10-Trip/Multi-trip	0	0.00
Weekly Pass	0	0.00
Student Monthly Pass	0	0.00
Student One-way	0	0.00
Student 10-Trip	0	0.00
Other	5	11.87
Total	40	100.00

Table 316 – Satisfaction Score

Score	Riders	%
0 (Not acceptable)	0	0.00
1	0	0.00
2	0	0.00
3	0	0.00
4	0	0.00
5	8	17.08
6	0	0.00
7	3	6.38
8	0	0.00
9	4	9.88
10 (Excellent)	30	66.67
Total	44	100.00

Mean Satisfaction Score= 8.86
Median Satisfaction Score= 10

Table 317 – Likelihood of Recommending the Service to Friend or Family

	Very Likely	Somewhat Likely	Do Not Know	Somewhat Unlikely	Very Unlikely	Total
Riders	34	0	3	0	8	44
%	76.54	0.00	6.38	0.00	17.08	100.00

Table 318 – Reason for Using Bus

	No other option	Best choice	Occasional use	Total
Riders	22	15	3	40
%	55.02	37.90	7.08	100.00

Table 319 – Trip Alternatives

	Riders	%
Would not make the trip	16	34.63
Drive a car	0	0.00
Carpool	0	0.00
Taxi	12	25.34
Uber or other app-based service	8	16.05
Jitney	0	0.00
Walk	11	23.98
Bike	0	0.00
Other	0	0.00
Total	47	100.00