

***Technical Memorandum:***  
**South Portland Bus Survey Results**



*Prepared by:*  
**Greater Portland Council of Governments**

*In Cooperation With:*  
**South Portland Bus Service**

*Prepared for:*  
**South Portland Bus Service**

**South Portland Bus Service Staff:**

Tom Meyers, Director  
Rick Sargent- Operations Supervisor

**GPCOG Transportation Planning Staff:**

Steve Linnell- Senior Planner  
Stephanie Carver- Land Use Planner  
Jennifer Puser-Transit and Energy Planner  
Rick Harbison - Intern

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# SOUTH PORTLAND BUS SERVICE PASSENGER SURVEY

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## **Overview**

This Technical Memorandum documents the results of a passenger survey of the South Portland Bus Service ridership performed in early 2011. The survey was a coordinated effort between South Portland Bus Service and the Greater Portland Council of Governments (GPCOG). It was distributed in person to 246 riders and filled out while they were on the bus. Since some respondents did not have time to complete the survey before disembarking, or chose to skip a question that did not apply to them, the total number of responses varies somewhat from question to question (shown as the n-value in each graph).

The survey was conducted in conjunction with similar passenger surveys on Casco Bay Lines and Greater Portland METRO. The surveys were developed by GPCOG, with input from South Portland Bus Service and the Regional Transit Operations Working Group (the project and planning implementation team of the PACTS Transit Committee, made up of managers from each of the seven public operators in the region). The results were then entered into Survey Monkey, a computer program used to collect and analyze survey responses. Appendix B is an example of the hard-copy survey instrument that was used.

The survey was intended to elicit information on ridership patterns and demographics, as well as attitudes about the South Portland Bus Service and the Greater Portland Area transit services in general.

Much appreciation is due to the South Portland Bus Service staff for their assistance with the creation of the survey instrument, and the distribution effort. Appreciation is also due to PACTS, the Transit Operations Working Group, and the Federal Transit Administration for their assistance as well.

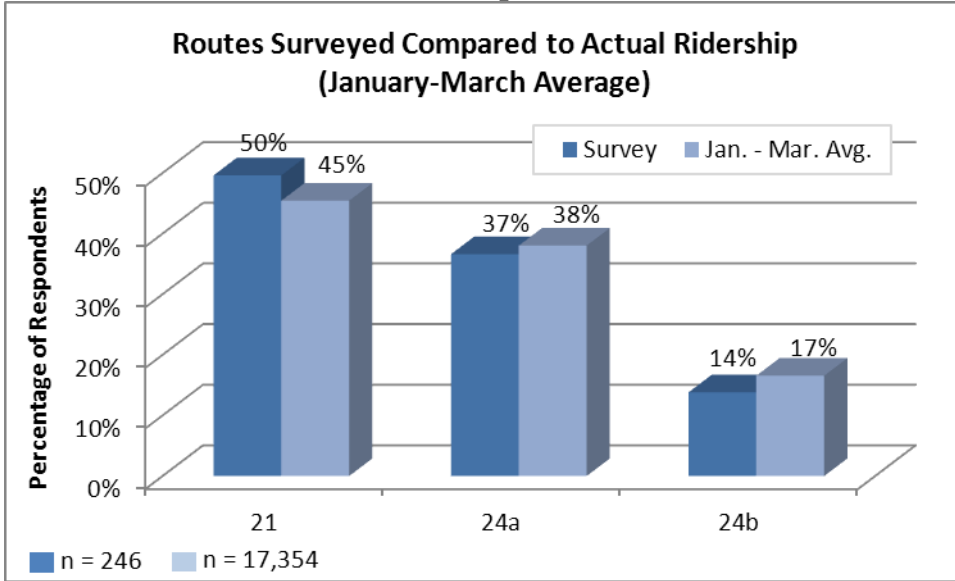
## **Key Findings**

- The vast majority of respondents either live in Portland or South Portland. The breakdown in representation between the two cities is close to a 50/50 split, with slightly more riders reporting they are from Portland.
- Most respondents do not use multiple modes. If they transfer, they do so from or to another bus, not a different mode of transportation.
- In large part, respondents are regular riders with most trips happening mid-week.
- Respondents deem ‘on time performance’ and ‘frequency of service’ to be the most important aspects of bus service. These categories received the lowest marks when respondents were asked to rate level of service.
- Slightly less than half of respondents do not have access to a registered vehicle.

**-Survey Question Data-**

**Routes Surveyed Compared to Actual Ridership (January – March Average)**

**Graph 1**



**Table 1**

Routes Surveyed Compared to Actual Ridership (January-March Average)				
	Survey		Jan. - Mar. Avg.	
	Percent	Count	Percent	Count
21	49.6%	122	45.4%	7884
24a	36.6%	90	38.0%	6598
24b	13.8%	34	16.5%	2872
Total	100%	246	100%	17354

Graph and Table 1 display two distinct data sets. The data on the left (dark blue) shows the level of representation each route received as part of the survey sample. The data on the right (light blue) shows the three-month average of actual ridership from January through March (the period in which the survey was conducted). Despite some minor variations, the results demonstrate the level of representation achieved by the survey sample closely mirrors that which actually occurred during the period when the survey was conducted.

## Transfer From Another Route or Mode

Graph 2

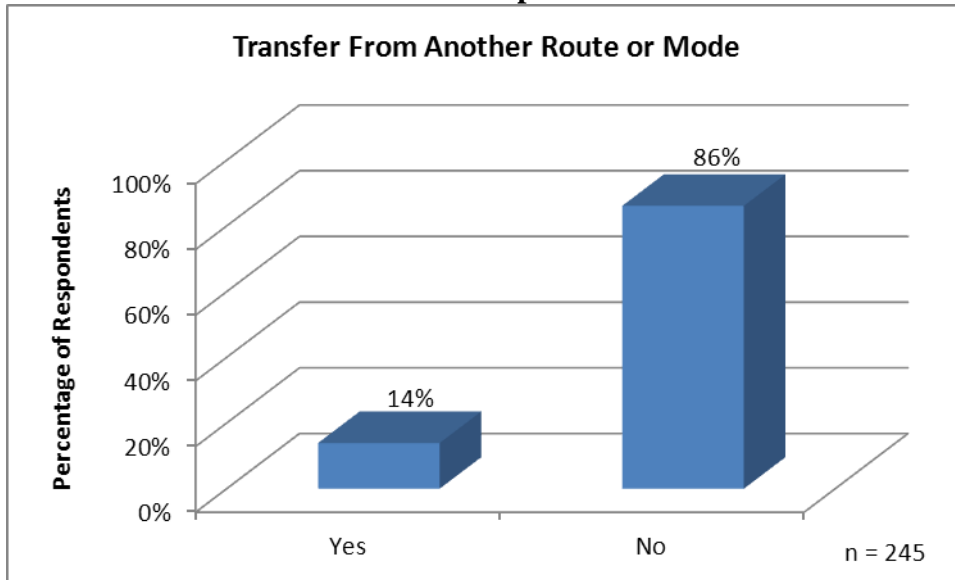


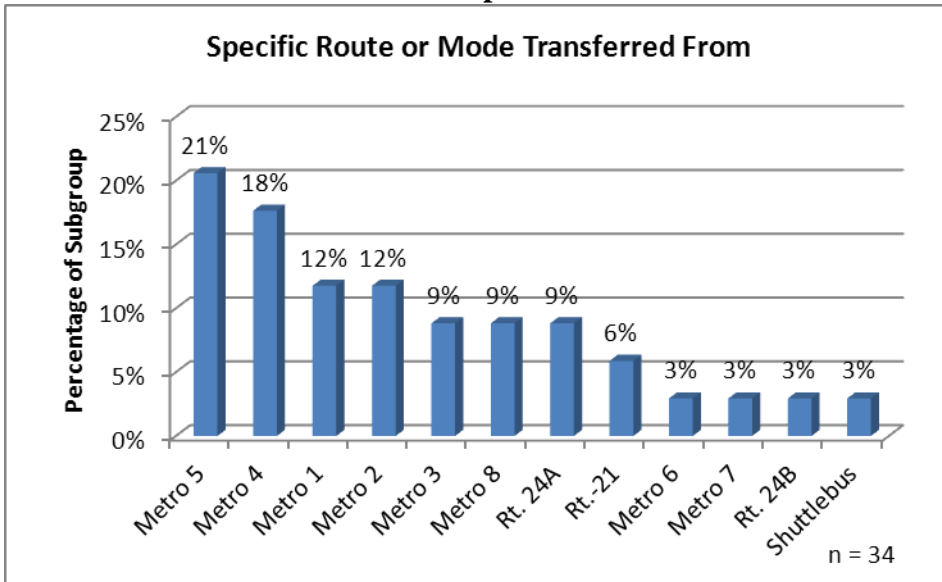
Table 2

Transfer From Another Route or Mode		
	Count	Percent
Yes	34	13.9%
No	211	86.1%
Total	245	100%

Graphs and Tables 2-5 examine the concept of transit connectivity. Here, respondents were asked to indicate whether they transferred from another bus line or transportation mode to access the bus they were currently on. The results reveal that most riders (86.1%) did not in fact transfer. As detailed in Graph and Table 3 on the next page, the small number of respondents (13.9%) who did transfer did so predominantly from another bus in the regional system.

**(SUBGROUP) Specific Route or Mode Transferred From**

**Graph 3**



**Table 3**

Specific Route or Mode Transferred From	Count	Percent
METRO 5	7	20.6%
METRO 4	6	17.6%
METRO 1	4	11.8%
METRO 2	4	11.8%
METRO 3	3	8.8%
METRO 8	3	8.8%
Rt. 24A	3	8.8%
Rt.-21	2	5.9%
METRO 6	1	2.9%
METRO 7	1	2.9%
Rt. 24B	1	2.9%
ShuttleBus	1	2.9%
Total	34	100.0%

Of the small subgroup of riders (13.9%, or 34 respondents) who did transfer from another transportation mode, Graph and Table 3 specify which one they used. The results were unanimous in that every respondent in the subgroup indicated having transferred from another bus line, with no riders indicating they transferred from a non-bus transportation mode. Since METRO does not go to South Portland (other than at the Mall), South Portland riders most likely transfer from METRO to SPBS in Portland (along Congress Street).

As you can see in Graph 3 above, riders transferred from 12 different bus routes, with METRO 4 (17.6%) and METRO 5 (20.6%) generating the most use. A number of answer choices received no responses and were therefore excluded from the graph and table; these are RTP, Casco Bay Lines, Zoom, the Wave, Concord Trailways, Vermont/Greyhound, Jetport, Bicycle, Walk, and Other.

## Transfer To Another Route or Mode

Graph 4

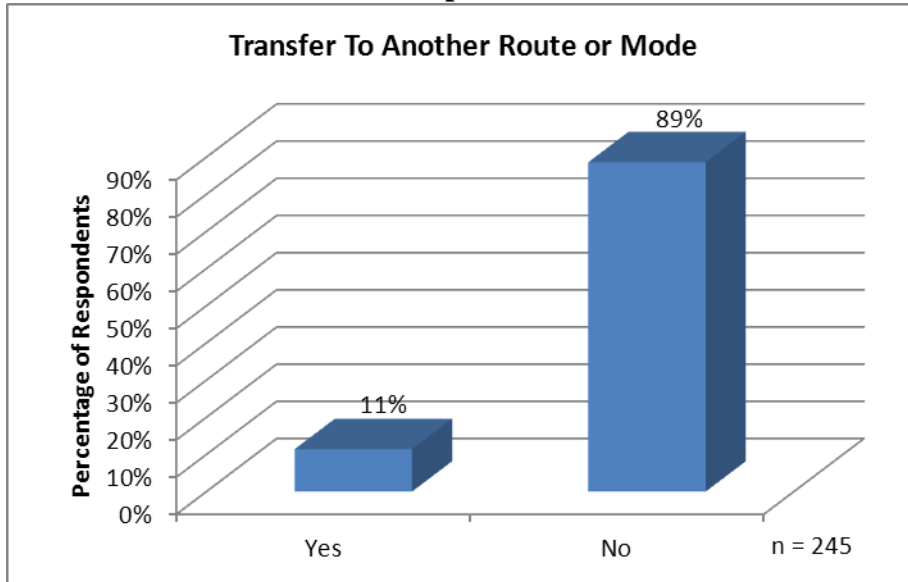


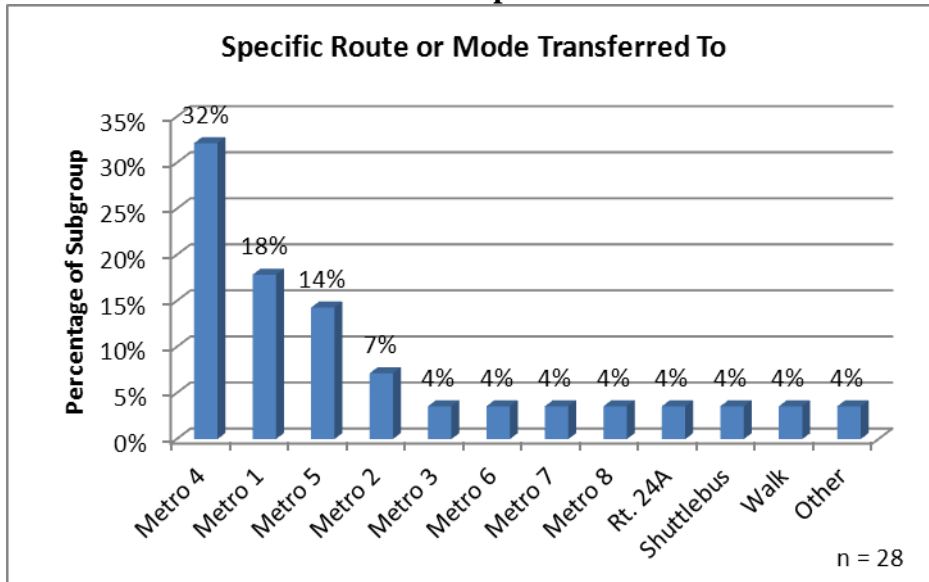
Table 4

Transfer To Another Route or Mode		
	Count	Percent
Yes	28	11.4%
No	217	88.6%
Total	245	100.0%

Graph and Table 4 refer to the question which asked respondents to indicate whether they planned to transfer to another transportation mode *after* they got off the bus. The results show that the majority of respondents (88.6%) did not intend to transfer to another transportation mode. As detailed in Graph and Table 5 on the next page, the small number of respondents (11.4%) that did intend to transfer were connecting in large part to another bus line.

**(SUBGROUP) Specific Route or Mode Transferred To**

**Graph 5**



**Table 5**

Specific Route or Mode Transferred To		
	Count	Percent
METRO 4	9	32.1%
METRO 1	5	17.9%
METRO 5	4	14.3%
METRO 2	2	7.1%
METRO 3	1	3.6%
METRO 6	1	3.6%
METRO 7	1	3.6%
METRO 8	1	3.6%
Rt. 24A	1	3.6%
ShuttleBus	1	3.6%
Walk	1	3.6%
Other	1	3.6%
Total	28	100%

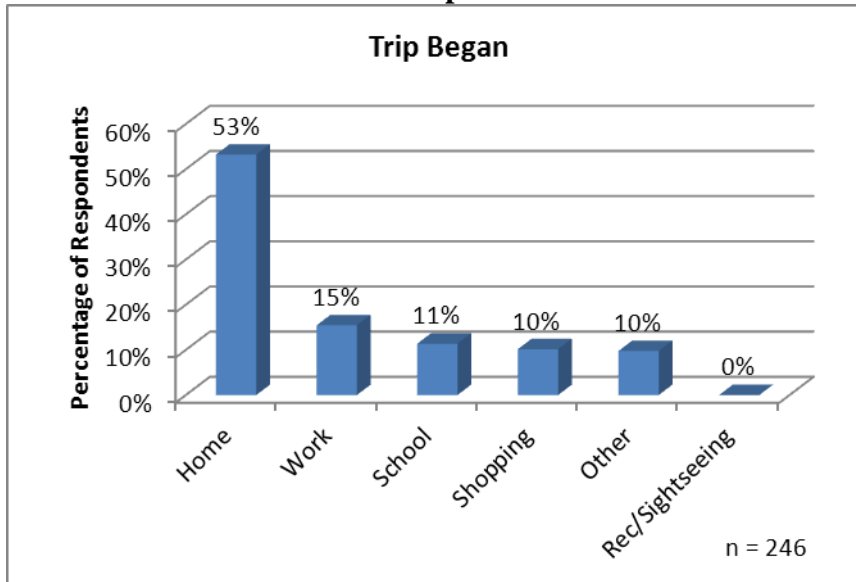
Again, the small subgroup of riders (11.4%, or 28 respondents) who did plan to transfer after disembarking were almost unanimous in indicating they would transfer to another bus line rather than another transportation mode. As you can see in Graph and Table 5 above, riders planned to transfer to 12 different bus routes, with METRO 4 (32.1%), METRO 1 (17.9%) and METRO 5 (14.3%) standing out as the most popular routes. For this question, a number of answer choices received no responses and were therefore excluded from the graph and table; these are Rt. 21, Rt. 24b, RTP, Casco Bay Lines, Zoom, the Wave, Concord Trailways, Vermont/Greyhound, Jetport, and bicycle.

Overall, the results displayed in Graphs and Tables 2-5 seem to suggest that most riders are using South Portland buses for single trip purposes, and are less likely -at this time- to connect to more than one bus route or transportation mode. If they do transfer, they are most likely leaving or going to Portland.

*For Graph and Table 3, and Graph and Table 5: Although everyone gets themselves to and from the bus stops on foot, wheelchair, bike, etc., these modes did not receive many responses. This seems to be a question of perception, as respondents may not think of walking or biking as a 'transportation mode', or perhaps they felt the distance they travelled was not long enough to warrant checking the box.*

## Trip Began

**Graph 6**



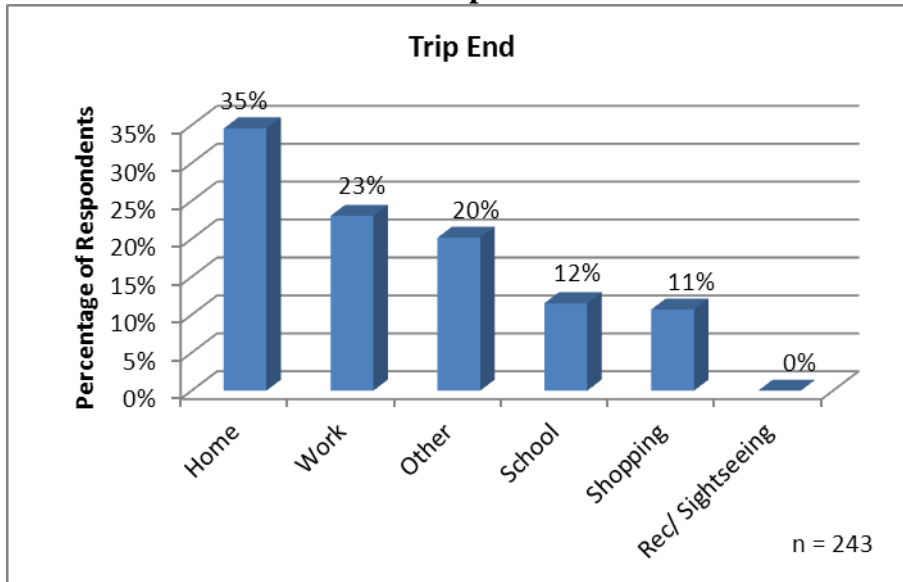
**Table 6**

Trip Began		
	Count	Percent
Home	131	53.3%
Work	38	15.4%
School	28	11.4%
Shopping	25	10.2%
Other	24	9.8%
Recreation/Sightseeing	0	0.0%
Total	246	100%

Graphs and Tables 6-7 refer to the questions in the survey that asked respondents about the purpose of their travel. More specifically, where they departed from, and where they intend to go. Graph and Table 6 indicate that the greater part of respondents (53.3%) began their trip at home. The remaining responses are fairly evenly distributed among work (15.4%), shopping (10.2%), school (11.4%) and other (9.8%). No respondents indicate using the bus for recreation or sightseeing purposes.

## Trip End

**Graph 7**



**Table 7**

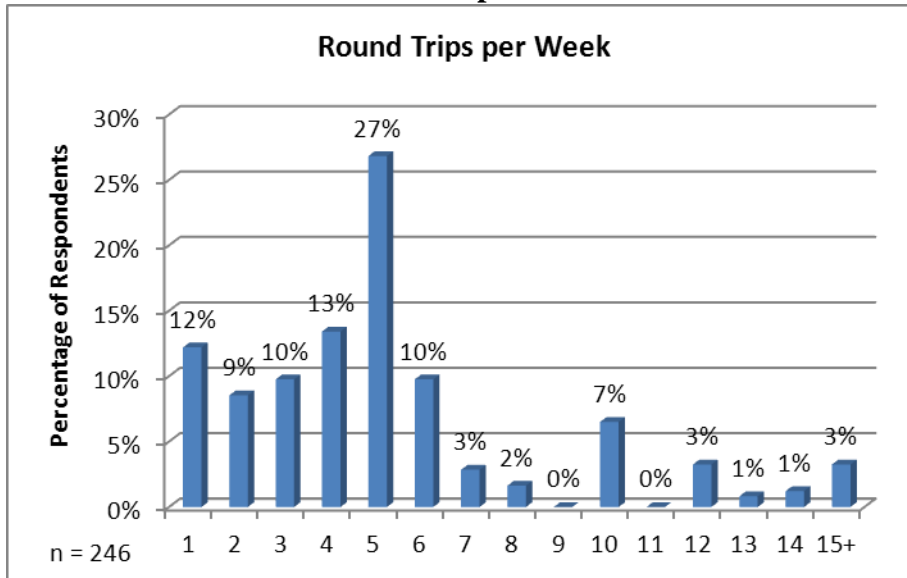
Trip End		
	Count	Percent
Home	84	34.6%
Work	56	23.0%
Other	49	20.2%
School	28	11.5%
Shopping	26	10.7%
Recreation/ Sightseeing	0	0.0%
Total	243	100%

Graph and Table 7 also show that a good number of respondents will also end their trip at home (34.6%), while work (23%) and other (20.2%) received slightly higher responses than the previous question.

There is a strong possibility that the data displayed in Graphs and Tables 6-7 is distorted somewhat by misinterpretation of the two survey questions by respondents. It seems as though some respondents may have overlooked the 'one way' aspect of the questions, which could explain why 'home' is the most popular response for both trip beginning and ending. Nevertheless, the data does reveal that 'home' is a major point of origin and destination for most respondents who use the bus.

## Round Trips per Week

**Graph 8**



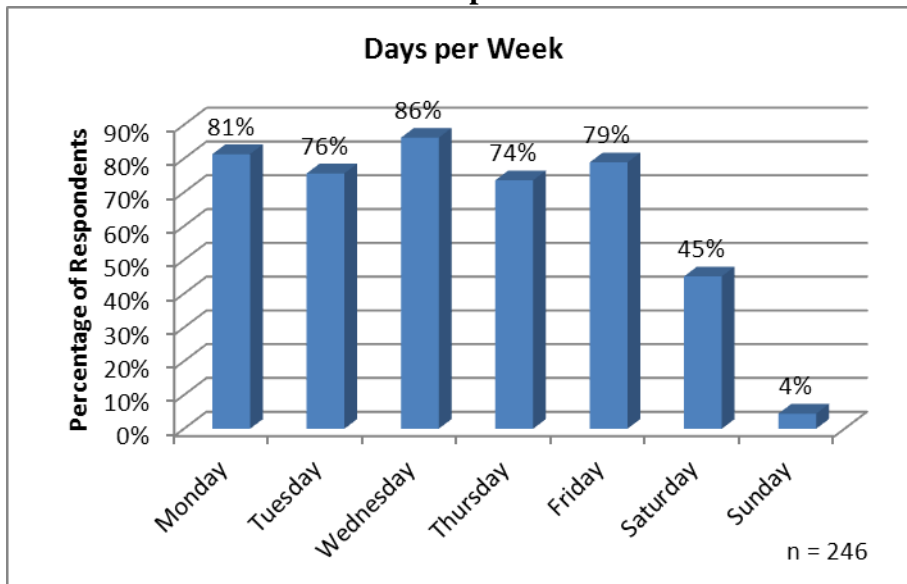
**Table 8**

Round Trips per Week		
	Count	Percent
1	30	12.2%
2	21	8.5%
3	24	9.8%
4	33	13.4%
5	66	26.8%
6	24	9.8%
7	7	2.8%
8	4	1.6%
9	0	0.0%
10	16	6.5%
11	0	0.0%
12	8	3.3%
13	2	0.8%
14	3	1.2%
15+	8	3.3%
Total	246	100%

Graph and Table 8 demonstrate that most respondents are frequently commuting by bus. Taken together, those who reported using the service more than once a week account for 87.8% of the survey group. The fact that five round trips per week received the most responses (26.8%) seems to suggest that a significant portion of riders commute to work or school via bus during the workweek. Additionally, a considerable number of respondents use the bus on a very frequent basis (15% of respondents take 10+ trips per week).

## Days per Week

**Graph 9**



**Table 9**

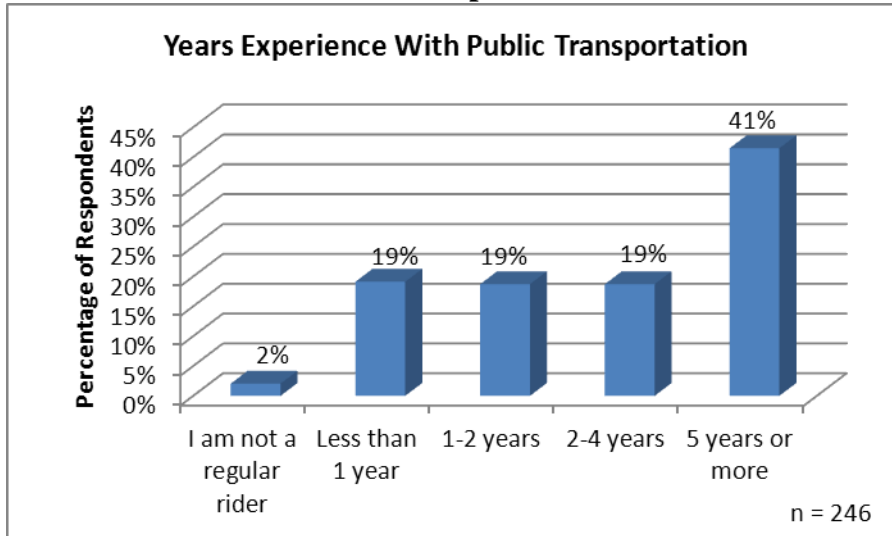
Days per Week		
	Count	Percent
Monday	200	81.3%
Tuesday	186	75.6%
Wednesday	212	86.2%
Thursday	181	73.6%
Friday	194	78.9%
Saturday	111	45.1%
Sunday	11	4.5%
Total (responses)	246	NA

Graph and Table 9 display the results from the question which asked respondents what days of the week they normally ride the bus. The format of this question was ‘check all that apply’; therefore, the percent totals for each day were arrived at by dividing the count totals for each day by the number of respondents that answered the question (246); this explains why the sum of percentages does not equal 100%.

Clearly, most riders use the bus during the workweek, with Monday (81.3%), Wednesday (86.2), and Friday (78.9%) being the most popular days to use the service. The frequency of ridership drops off steeply on Saturday (45.1%), and the few respondents who reported they use the service on Sunday (4.5%) must be referring to METRO, since South Portland buses do not operate on Sundays.

## Years Experience With Public Transportation

**Graph 10**



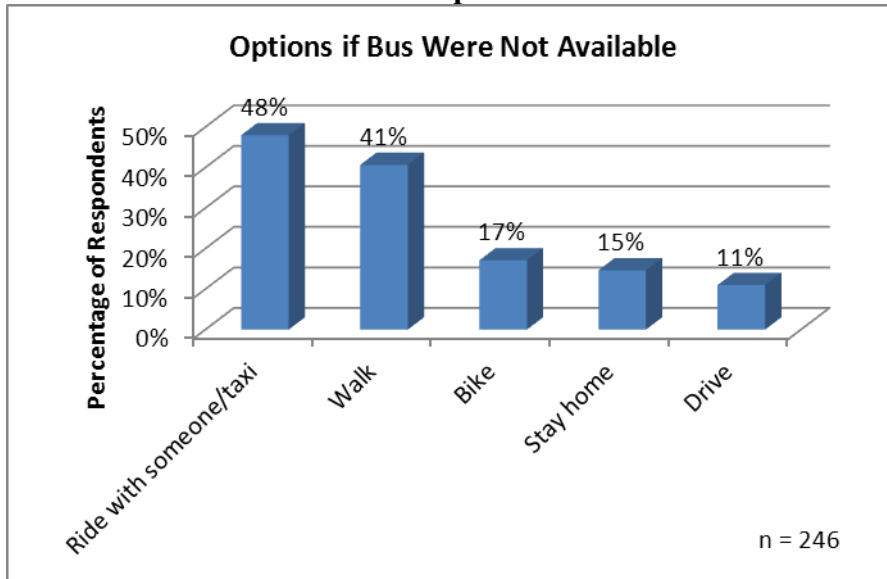
**Table 10**

	Count	Percent
I am not a regular rider	5	2.0%
Less than 1 year	47	19.1%
1-2 years	46	18.7%
2-4 years	46	18.7%
5 years or more	102	41.5%
Total	246	100%

The results from Graph and Table 10 indicate that most respondents are seasoned public transportation users. The clear majority (41.5%) have been using public transportation for five years or more, and taken together, those who have been using public transportation for over one year and up to five years or more account for 78.9% of respondents.

## Options if Bus Were Not Available

**Graph 11**



**Table 11**

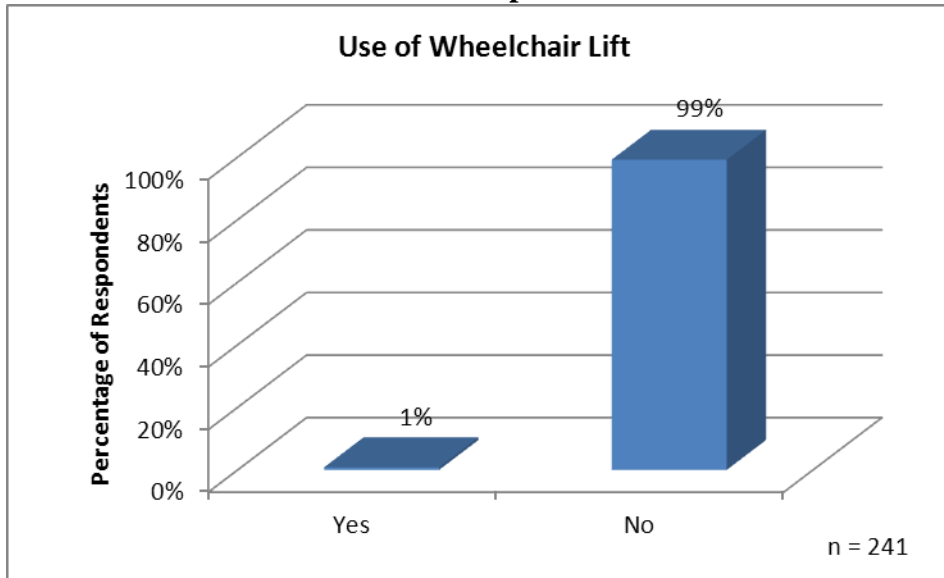
Options if Bus Were Not Available		
	Count	Percent
Ride with someone/taxi	118	48.0%
Walk	100	40.7%
Bike	42	17.1%
Stay home	36	14.6%
Drive	27	11.0%
Total (responses)	246	NA

Graph and Table 11 refer to the question in the survey which asked respondents how they would make their trip if transit service were unavailable. The format of this question was also ‘check all that apply’, meaning that the column totals do not add up to 100%.

Most respondents report that if transit service were unavailable, they would either carpool with someone, take a taxi, or walk. Presumably, these results indicate that most respondents either do not own a vehicle, or do not have immediate access to a vehicle. Moreover, the fact that 14.6% selected ‘stay home’, seems to indicate that a number of respondents are fairly dependent on the bus to get around.

## Use of Wheelchair Lift

**Graph 12**



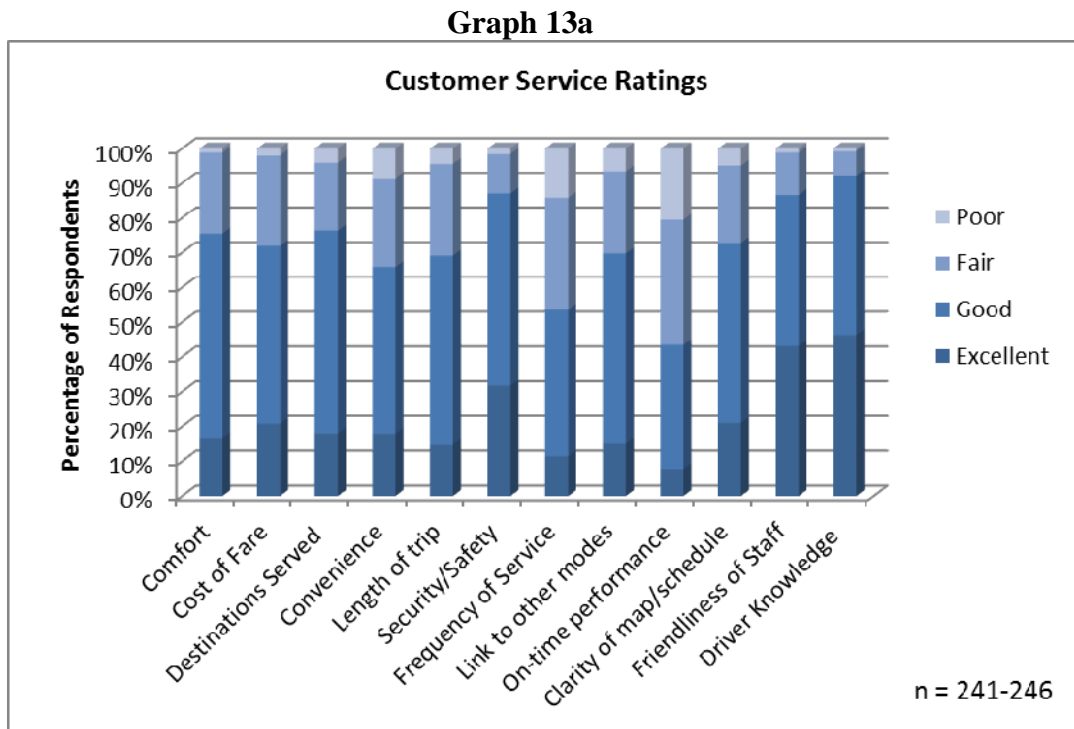
**Table 12**

Use of Wheelchair Lift		
	Count	Percent
Yes	2	0.8%
No	239	99.2%
Total	241	100%

The overwhelming majority of survey respondents did not use the wheelchair lift to board the bus.

## Customer Service Ratings

Graphs 13a, 13b and Table 13 display the results from the customer service questions in the survey, which asked respondents to rate 12 aspects of the bus service from ‘poor’ to ‘excellent’. Since some respondents did not select an answer choice for certain aspects, there are slight variations in the n-value (total responses) for each category. However, these differences are so minor (total responses for each category range from 241-246) they have little to no affect on the data.



Graph 13a (above) includes all possible answers to the question (poor, fair, good, excellent), whereas Graph 13b (next page) condenses ‘poor’ and ‘fair’ together, as well as ‘good’ and ‘excellent’, to give an easier visual depiction of general trends.

**Graph 13b**



**Table 13**

Please Rate the Following Aspects of this Service by Checking the Appropriate Box						
	Poor	Fair	Good	Excellent	Total (percent)	Total (responses)
Comfort	1.2%	23.3%	58.8%	16.7%	100%	245
Cost of Fare	2.0%	26.0%	51.2%	20.7%	100%	246
Destinations Served	4.1%	19.6%	58.4%	18.0%	100%	245
Convenience	8.5%	25.6%	48.0%	17.9%	100%	246
Length of trip	4.5%	26.4%	54.5%	14.6%	100%	246
Security/Safety	1.6%	11.4%	<b>55.3%</b>	<b>31.7%</b>	100%	246
Frequency of Service	14.2%	32.1%	42.3%	11.4%	100%	246
Link to other modes	6.6%	23.7%	54.8%	14.9%	100%	241
On-time performance	20.5%	36.1%	35.7%	7.8%	100%	244
Clarity of map/schedule	4.9%	22.2%	51.9%	21.0%	100%	243
Friendliness of Staff	1.2%	12.2%	<b>43.5%</b>	<b>43.1%</b>	100%	246
Driver Knowledge	0.8%	7.0%	<b>45.9%</b>	<b>46.3%</b>	100%	244

As is evident in the graphs and table above, respondents rated most aspects of the bus service favorably, with ‘driver knowledge’, ‘friendliness of staff’, and ‘security/safety’ receiving the highest marks. According to survey takers, the bus service could improve ‘on-time performance’, ‘frequency of service’, and ‘link to other modes’.

## Most Important Customer Service Category

Graph 14

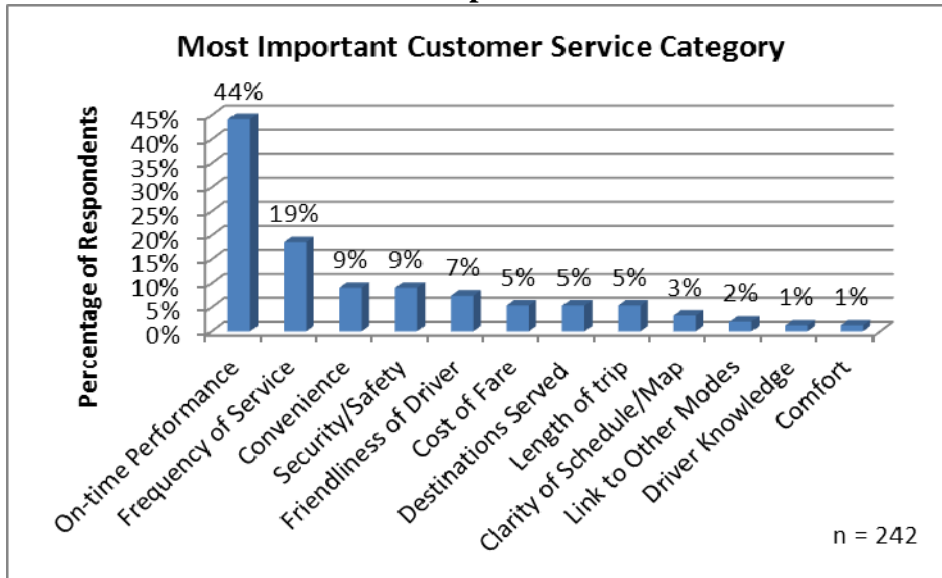


Table 14

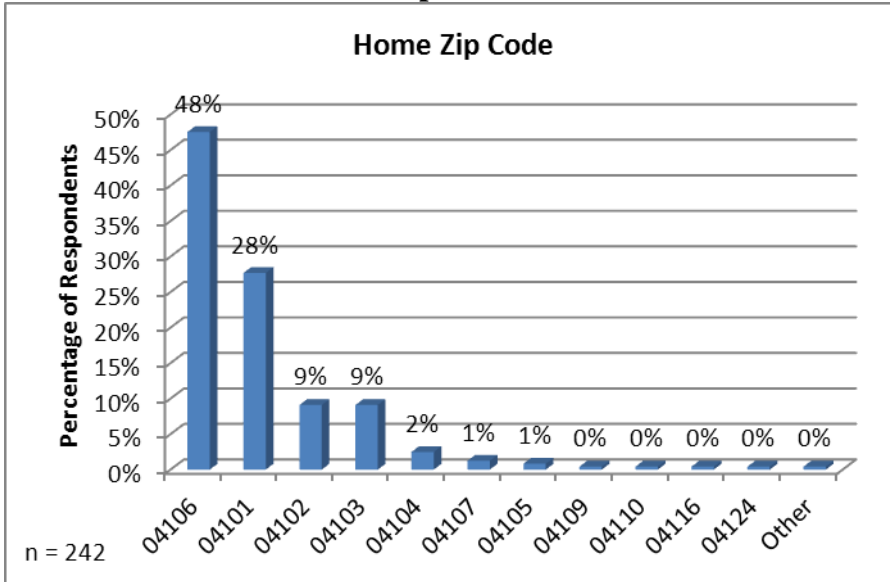
Most Important Customer Service Category		
	Count	Percent
On-time Performance	107	44.2%
Frequency of Service	45	18.6%
Convenience	22	9.1%
Security/Safety	22	9.1%
Friendliness of Driver	18	7.4%
Cost of Fare	13	5.4%
Destinations Served	13	5.4%
Length of trip	13	5.4%
Clarity of Schedule/Map	8	3.3%
Link to Other Modes	5	2.1%
Driver Knowledge	3	1.2%
Comfort	3	1.2%
Total (responses)	242	NA

Question 14 in the survey asked respondents which category from the previous question they felt was most important. Although the question asked respondents to select one answer choice, several respondents chose more than one, which makes this question a 'check all that apply'.

As is evident in Graph and Table 14, 'On-Time Performance' at 44.2%, is far and away the most important aspect of service for most survey takers. 'Frequency of Service' also rated high at 18.6%. The remaining categories are fairly evenly distributed at approximately 10% or less. It should be noted that the two categories respondents felt were most important also received the lowest ratings in the previous question.

## Home Zip Code

**Graph 15**



**Table 15**

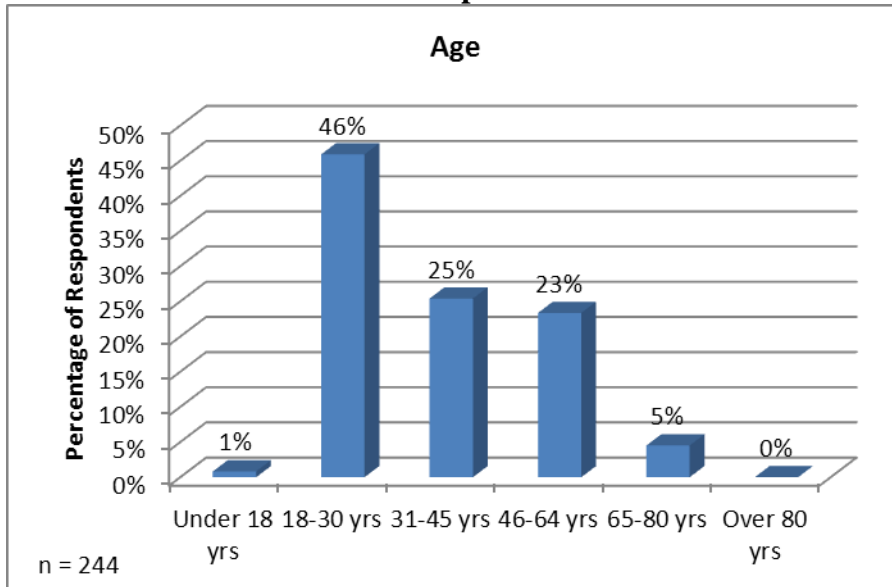
Home Zip Code		
	Count	Percent
04106 (South Portland)	115	47.5%
04101 (Portland)	67	27.7%
04102 (Portland)	22	9.1%
04103 (Portland)	22	9.1%
04104 (Portland)	6	2.5%
04107 (Cape Elizabeth)	3	1.2%
04105 (Falmouth)	2	0.8%
04109 (Portland)	1	0.4%
04110 (Cumberland)	1	0.4%
04116 (South Portland)	1	0.4%
04124 (Portland)	1	0.4%
Other	1	0.4%
Total	242	100%

Graph and Table 15 show that the lion's share of survey takers reside in one of four zip codes, 04106 (South Portland, 47.5%), 04101 (Portland, 27.7%), 04102 (Portland 9.1%), and 04103 (Portland, 9.1%).

Taken together, respondents who indicate they live in Portland formed the majority of riders at 49.2%, with South Portland close behind at 47.9%. A number of zip codes listed in the question did not receive any responses and were therefore excluded from the graph and table, these are: Portland (04112), Portland (04122), Portland (04123), Peaks Island (04108), Chebeague (04017), Cliff Island (04019), and Long Island (04050).

## Age

**Graph 16**



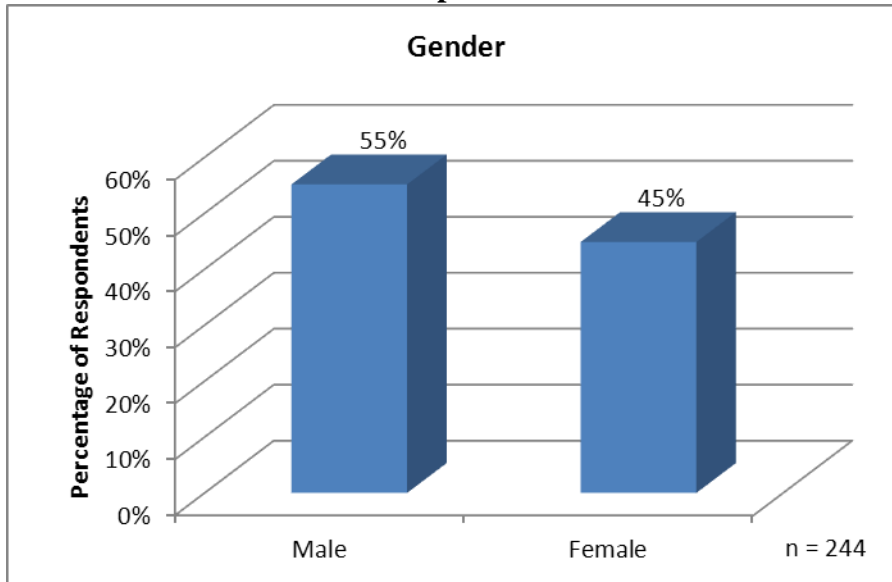
**Table 16**

Age		
	Count	Percent
Under 18 yrs	2	0.8%
18-30 yrs	112	45.9%
31-45 yrs	62	25.4%
46-64 yrs	57	23.4%
65-80 yrs	11	4.5%
Over 80 yrs	0	0.0%
Total	244	100%

Graph and Table 16 show that the bulk of respondents are between 18 and 64 years old, with almost no respondents reporting to be 18 or under, and very few reporting to be 65-80, or over 80 years old. According to survey results, the 18-30 (45.9%) category is almost as large as the 31-45 and 46-64 categories combined (48.8%).

## Gender

**Graph 17**



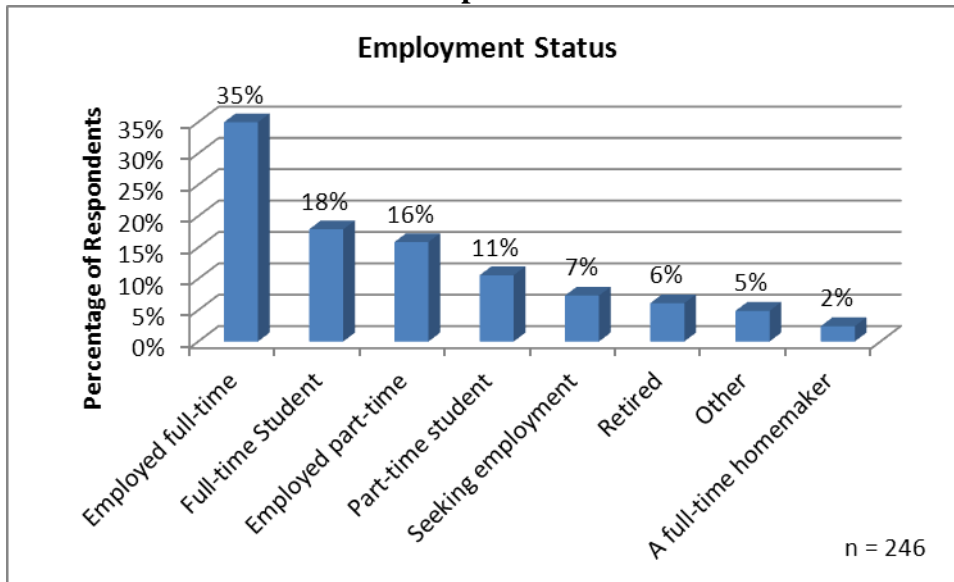
**Table 17**

Gender		
	Percent	Count
Male	55.1%	134
Female	44.9%	109
Total	100%	243

Graph and Table 17 seem to indicate that slightly more men ride the bus in South Portland than women. However, due to the relatively small sample size, the possibility of surveyor bias (the survey was not distributed in a purely random fashion), and the possibility that women may have been more reluctant to take the survey, it would be difficult to make firm conclusions based on this data.

## Employment Status

**Graph 18**



**Table 18**

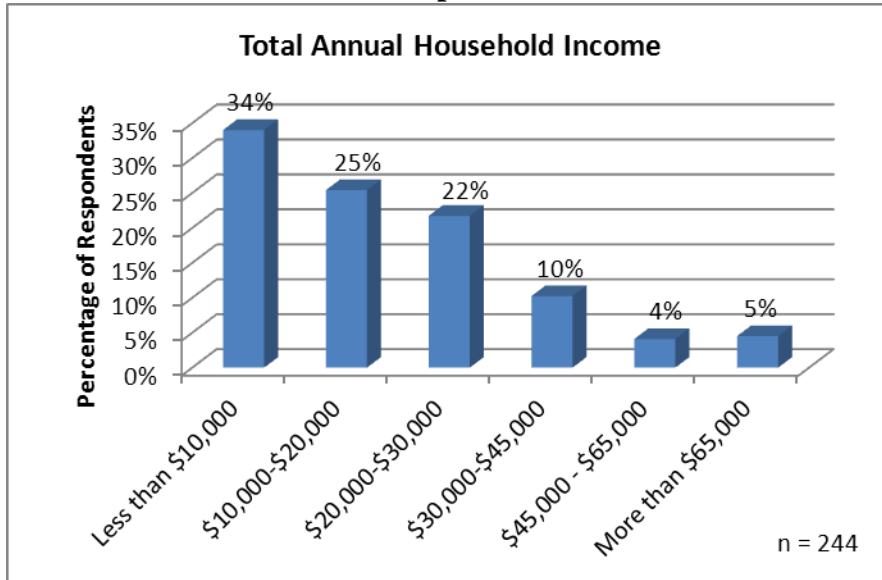
Employment Status		
	Percent	Count
Employed full-time	35.0%	86
Full-time Student	17.9%	44
Employed part-time	15.9%	39
Part-time student	10.6%	26
Seeking employment	7.3%	18
Retired	6.1%	15
Other	4.9%	12
A full-time homemaker	2.4%	6
<b>Total</b>	<b>100%</b>	<b>246</b>

The results of Graph and Table 18 indicate that full-time workers (35%) account for the largest portion of survey respondents. The gap between this group and those who reported 'full-time student' (17.9%) and 'employed part-time' (15.9%) is considerable.

If 'employed full-time' and 'employed part-time' are combined, respondents who are working in any capacity make up 50.9% of all survey respondents; whereas those who reported either 'full-time student' or 'part-time student' account for 28.5%. Taken together, it is clear that most survey respondents are either working or in school (79.4%). It should be noted, however, that there is some overlap with this data (i.e. some part-time students are also employed part-time, etc.).

## Total Annual Household Income

**Graph 19**



**Table 19**

Total Annual Household Income		
	Count	Percent
Less than \$10,000	83	34.0%
\$10,000-\$20,000	62	25.4%
\$20,000-\$30,000	53	21.7%
\$30,000-\$45,000	25	10.2%
\$45,000-\$65,000	10	4.1%
More than \$65,000	11	4.5%
Total	244	100%

The results of Graph and Table 19 indicate that most riders who were surveyed live in households with less than \$30,000 total annual income (81.1%).

## Household Size

Graph 20

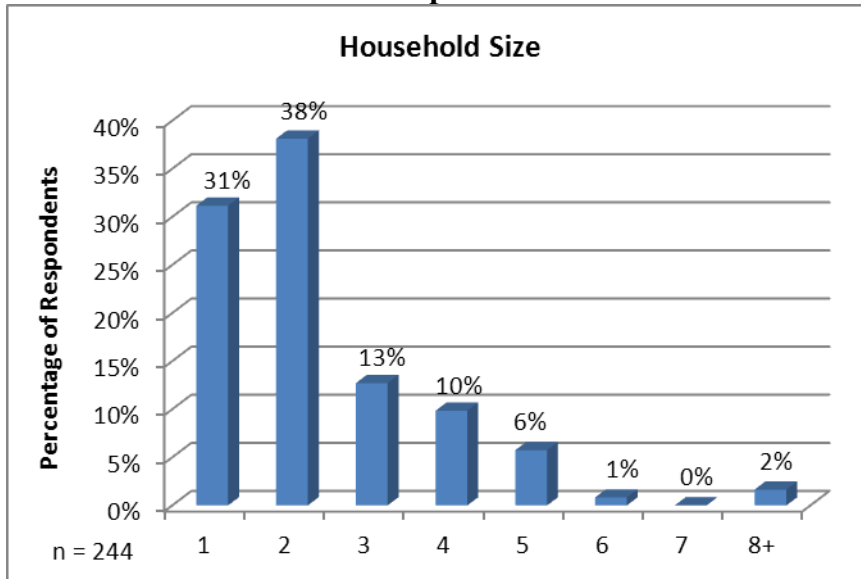


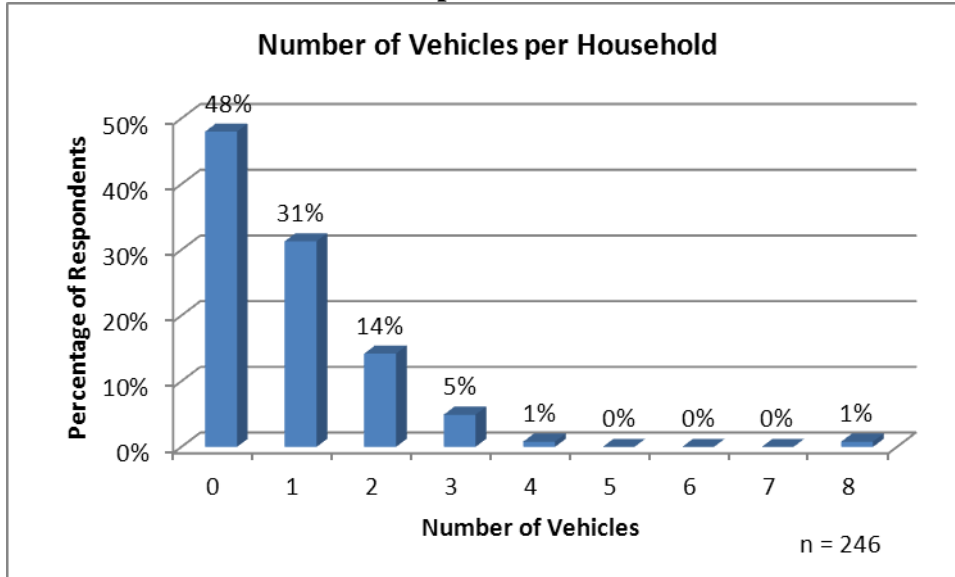
Table 20

Household Size		
	Count	Percent
1	76	31.1%
2	93	38.1%
3	31	12.7%
4	24	9.8%
5	14	5.7%
6	2	0.8%
7	0	0.0%
8+	4	1.6%
Total	244	100%

The results of Graph and Table 20 indicate that most riders who participated in the survey either live by themselves, or with only one other individual. Taken together, those who come from households of two or fewer comprise 69.3% of all survey respondents.

## Number of Vehicles per Household

**Graph 21**



**Table 21**

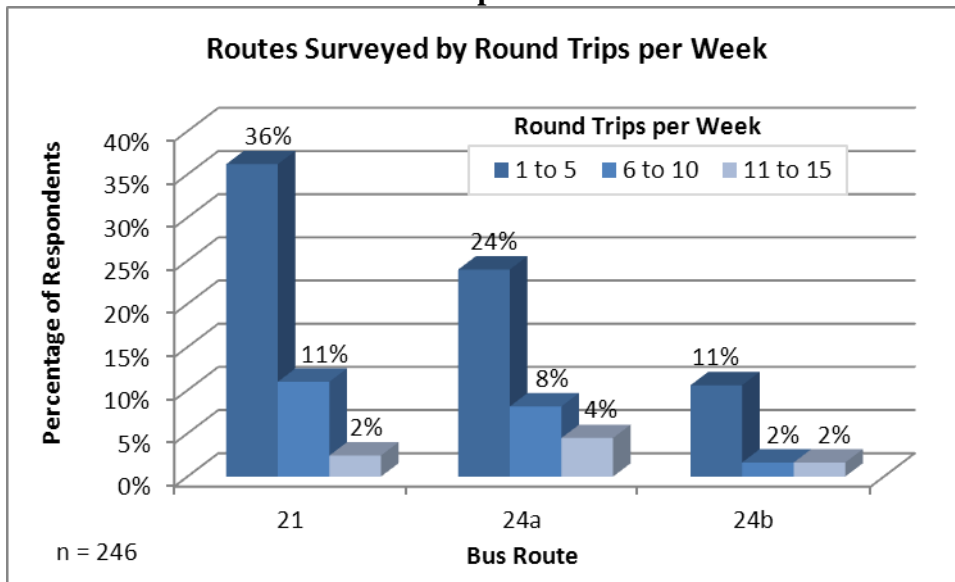
Number of Vehicles per Household		
# of vehicles	Count	Percent
0	118	48.0%
1	77	31.3%
2	35	14.2%
3	12	4.9%
4	2	0.8%
5	0	0.0%
6	0	0.0%
7	0	0.0%
8	2	0.8%
Total	246	100%

Graph and Table 21 show that nearly half of respondents do not own, or have access to a vehicle (48%). Of those that do, the majority report 1 to 2 vehicles per household (45.5%).

**-Cross Referenced Data-**

**Routes Surveyed by Round Trips per Week**

**Graph 22**



**Table 22**

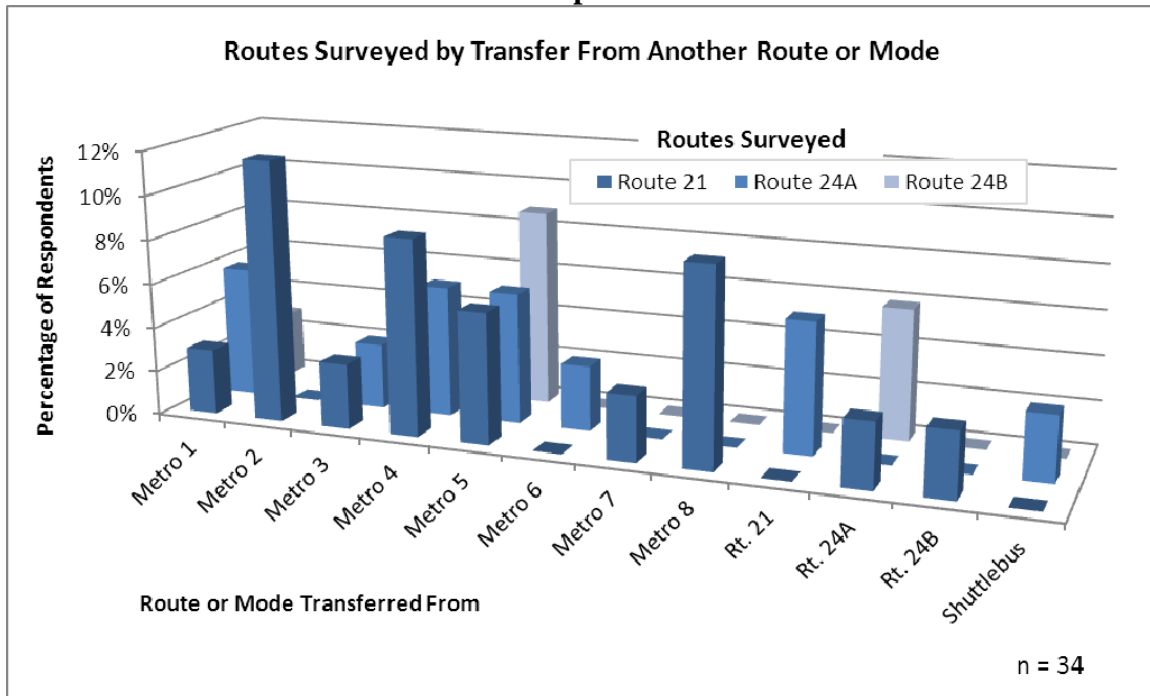
Routes Surveyed by Round Trips per Week						
	21		24a		24b	
	Percent	Count	Percent	Count	Percent	Count
1-5 Trips per wk	36.2%	89	24.0%	59	10.6%	26
6-10 Trips per wk	11.0%	27	8.1%	20	2%	4
11-15+ Trips per wk.	2%	6	4%	11	2%	4
Total	49.6%	122	36.6%	90	13.8%	34
Total (responses)						246

For Graph and Table 22, round trips were grouped together (1 to 5, etc.) to better show trends. As is evident, the majority of riders for each route take between 1 to 5 trips per week, followed by 6 to 10 trips per week. A very small percentage of riders use the service 11 to 15 or more times per week.

Route 24b does show slightly lower representation in the '6 to 10', and '11 to 15+' categories than what might be expected -- suggesting that route 24b has a slightly lower proportion of frequent bus riders. However, since the subgroups for these categories are relatively small in number (34 respondents for route 24b) it is difficult to make firm conclusions based on this data.

## Routes Surveyed by Transfer From Another Route or Mode

Graph 23



Graph 23 (above) and Table 23 (next page) illustrate transfer patterns by cross referencing the route respondents were on when they took the survey with the route or mode they transferred from (since not all respondents transferred to get to the bus they were on, this analysis represents a subgroup of riders: 34 respondents). To interpret the graph: the tallest column in the graph indicates that 11.8% of the subgroup transferred from METRO 2 to Route 21. A number of answer choices received no responses and were therefore excluded from the analysis. These are: RTP, Casco Bay Lines, Zoom, the Wave, Concord Trailways, Vermont Greyhound, Jetport, Bicycle, Walk, and Other.

**Table 23\***

Routes Surveyed by Transfer From Another Route or Mode			
Transfer From	Routes Surveyed		
	Route 21	Route 24A	Route 24B
METRO 1	2.9%	5.9%	2.9%
METRO 2	<b>11.8%</b>	0.0%	0.0%
METRO 3	2.9%	2.9%	2.9%
METRO 4	<b>8.8%</b>	5.9%	2.9%
METRO 5	5.9%	5.9%	<b>8.8%</b>
METRO 6	0.0%	2.9%	0.0%
METRO 7	2.9%	0.0%	0.0%
METRO 8	<b>8.8%</b>	0.0%	0.0%
Route 21	NA**	<b>5.9%</b>	0.0%
Route 24A	2.9%	NA	<b>5.9%</b>
Route 24B	2.9%	0.0%	NA
ShuttleBus	0.0%	2.9%	0.0%
Total	50.0%	32.4%	23.5%
Answered question	34		

\*To preserve space, the “count” columns for Table 23 were not included

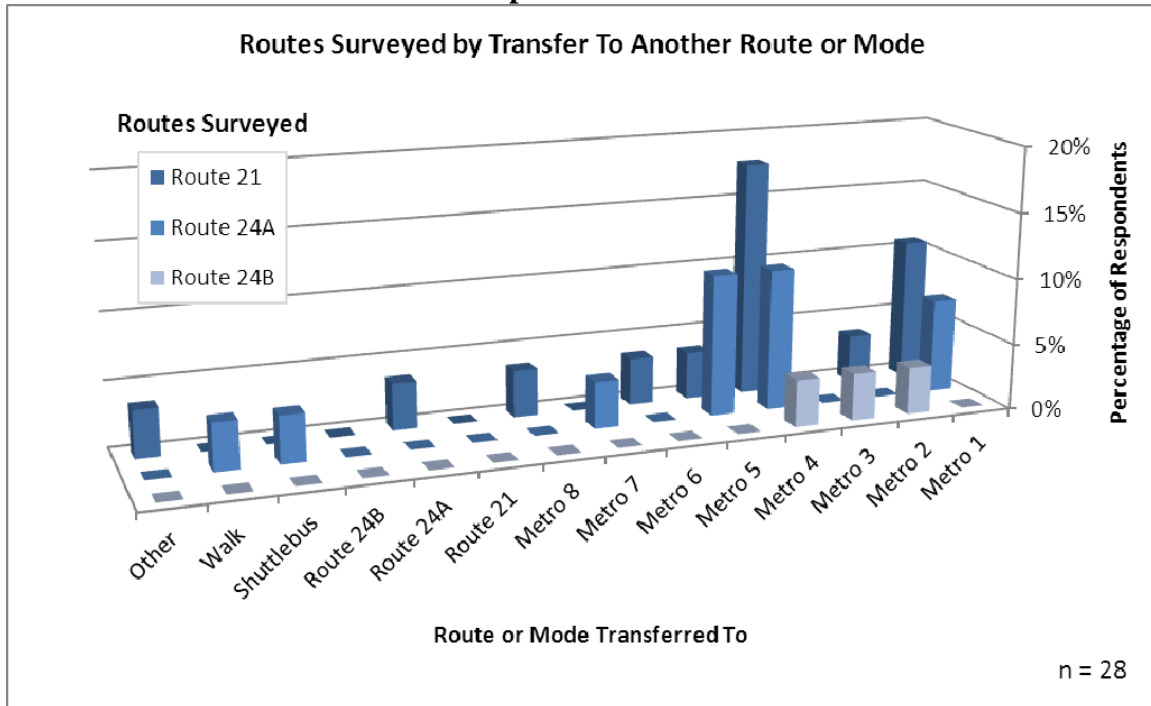
\*\*Since it is impossible to transfer from Route 21 to Route 21, and so on, instances where this occurs are labeled NA even though some responses were received in error

As mentioned previously, the largest number of transfers occurred from METRO 2 to Route 21 (11.8%), followed by METRO 4 to Route 21 (8.8%), METRO 8 to Route 21 (8.8%), and METRO 5 to Route 24B (8.8%).

Within the South Portland Bus Service, the largest number of transfers occurred from Route 21 to Route 24A (5.9%), and Route 24A to Route 24B (5.9%).

## Routes Surveyed by Transfer To Another Route or Mode

**Graph 24**



Similar to the previous analysis, Graph 24 (above) and Table 24 (next page) show transfer patterns by cross referencing the route respondents were on when they took the survey with the route or mode they will transfer *to* after disembarking (since not all respondents transferred after disembarking, this analysis represents a subgroup of riders: 28 respondents). To interpret the graph: the tallest column in the graph indicates that 17.9% of the subgroup intended to transfer from Route 21 to METRO 4. A number of answer choices received no responses and were therefore excluded from the analysis. These are: RTP, Casco Bay Lines, Zoom, the Wave, Concord Trailways, Vermont Greyhound, Jetport, and Bicycle.

**Table 24\***

Routes Surveyed by Transfer To Another Route or Mode			
Transfer To	Routes Surveyed		
	Route 21	Route 24A	Route 24B
METRO 1	<b>10.7%</b>	7.1%	0.0%
METRO 2	3.6%	0.0%	3.6%
METRO 3	0.0%	0.0%	3.6%
METRO 4	<b>17.9%</b>	<b>10.7%</b>	3.6%
METRO 5	3.6%	<b>10.7%</b>	0.0%
METRO 6	3.6%	0.0%	0.0%
METRO 7	0.0%	3.6%	0.0%
METRO 8	3.6%	0.0%	0.0%
Route 21	NA	0.0%	0.0%
Route 24A	<b>3.6%</b>	NA	0.0%
Route 24B	0.0%	0.0%	NA
ShuttleBus	0.0%	3.6%	0.0%
Walk	0.0%	3.6%	0.0%
Other	3.6%	0.0%	0.0%
Total	50.0%	39.3%	10.7%
Total (responses)			28

\*To preserve space, the “count” columns for Table 24 were not included

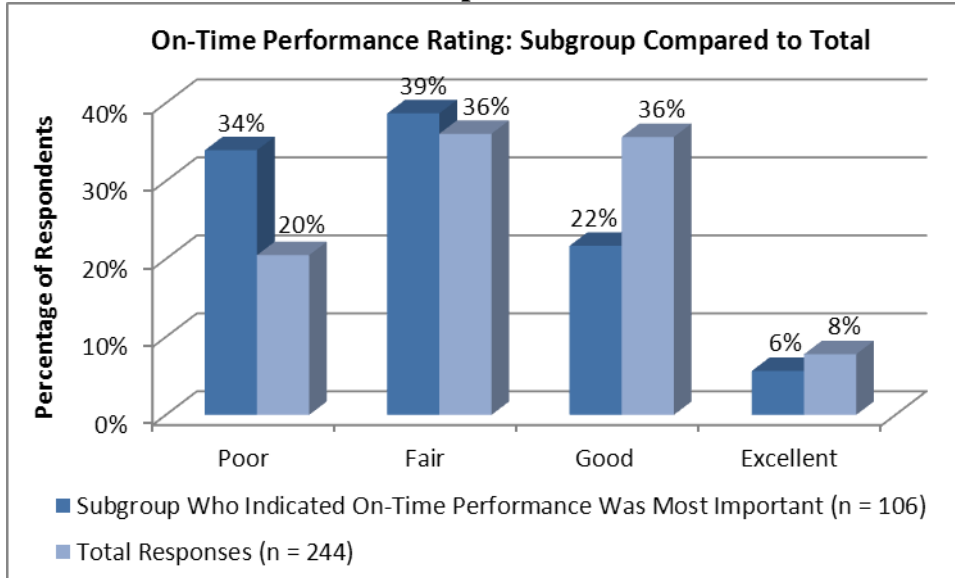
\*\*Since it is impossible to transfer to Route 21 from Route 21, and so on, instance where this occurs are labeled NA even though some responses were received in error

As is evident in Graph and Table 24, the most common transfer patterns were: Route 21 to METRO 4 (17.9%), Route 21 to METRO 1 (10.7%), Route 24A to METRO 4 (10.7%), and Route 24A to METRO 5 (10.7%).

Within the South Portland Bus Service, the most common transfer pattern was Route 21 to Route 24A (3.6%).

## On-Time Performance Rating: Subgroup Compared to Total

**Graph 25**



**Table 25**

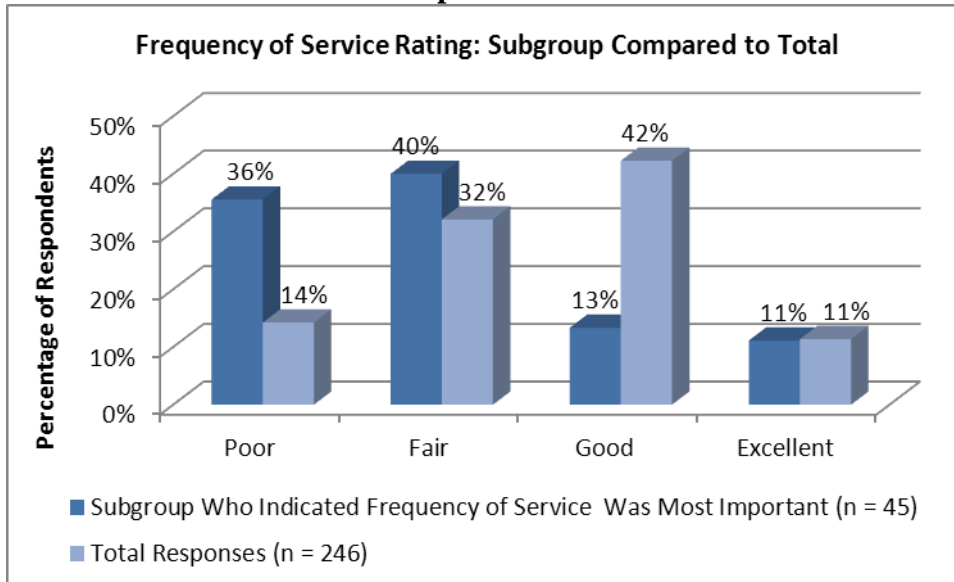
On-Time Performance Rating: Subgroup Compared to Total						
	Poor	Fair	Good	Excellent	Total	
Subgroup Who Indicated On-Time Performance Was Most Important	34.0%	38.7%	21.7%	5.7%	Count	Percent
					106	100%
Total Responses	20.5%	36.1%	35.7%	7.8%	244	100%

\*To preserve space, some of the "count" columns for Table 25 were not included.

Graph and Table 25 isolate a specific subgroup (those who felt 'On-Time Performance was the most important customer service category), to see how they rated 'On-Time Performance' in the previous question (poor, fair, good, excellent). Compared to all survey respondents, it is clear that those who felt 'On-Time Performance' was most important were more likely to be less satisfied with the service. This is most evident in the 'poor' and 'good' columns, where the disparity between the subgroup and all survey respondents is the largest.

## Frequency of Service Rating: Subgroup Compared to Total

**Graph 26**



**Table 26**

Frequency of Service Rating: Subgroup Compared to Total						
	Poor	Fair	Good	Excellent	Total	
Subgroup Who Indicated Frequency of Service Was Most Important	35.6%	40.0%	13.3%	11.1%	Count	Percent
					45	100%
Total Responses	14.2%	32.1%	42.3%	11.4%	246	100%

\* To preserve space, some of the "count" columns for Table 26 were not included

Similar to the previous analysis, Graph and Table 26 isolate respondents who felt 'Frequency of Service' was the most important customer service category to see how they rated this category in the previous question (poor, fair, good, excellent). The results are similar: compared to all survey respondents, those who felt 'Frequency of Service' was most important were more likely to give it a lesser rating. This is also evident in the 'poor' and 'good' columns, where the disparity between the subgroup and the total is most noticeable.

## Years Experience With Public Transportation by Age

Graph 27

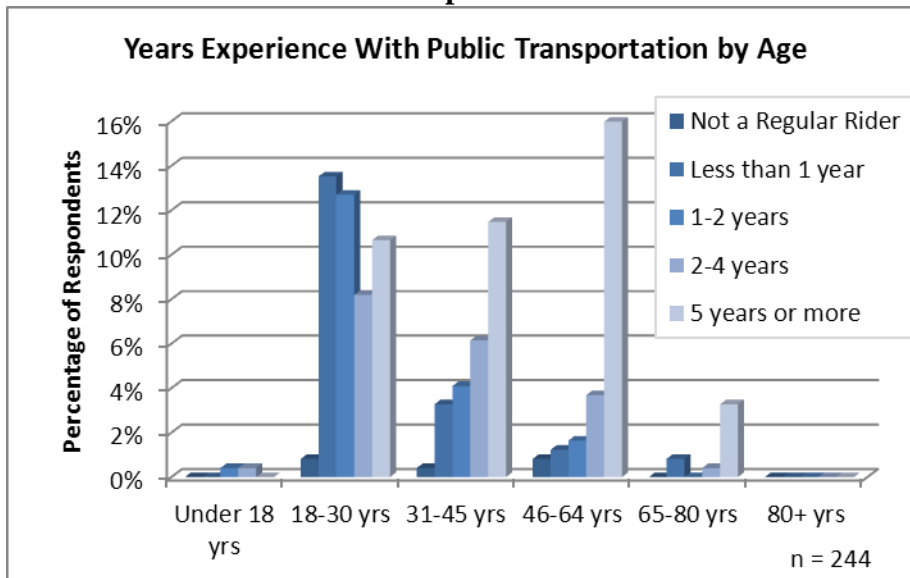


Table 27

Years Experience With Public Transportation by Age										
	Not a Regular Rider		Less than 1 year		1-2 years		2-4 years		5 years or more	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
Under 18 yrs	0.0%	0	0.0%	0	0.4%	1	0.4%	1	0.0%	0
18-30 yrs	0.8%	2	<b>13.5%</b>	33	12.7%	31	8.2%	20	10.7%	26
31-45 yrs	0.4%	1	3.3%	8	4.1%	10	6.1%	15	<b>11.5%</b>	28
46-64 yrs	0.8%	2	1.2%	3	1.6%	4	3.7%	9	<b>16.0%</b>	39
65-80 yrs	0.0%	0	0.8%	2	0.0%	0	0.4%	1	<b>3.3%</b>	8
80+ yrs	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
<b>Total</b>	<b>2.0%</b>	<b>5</b>	<b>18.9%</b>	<b>46</b>	<b>18.9%</b>	<b>46</b>	<b>18.9%</b>	<b>46</b>	<b>41.4%</b>	<b>101</b>
<b>Total (responses)</b>										<b>244</b>

Graph and Table 27 deal with the demographics of ridership among survey respondents. As common sense might predict, it shows that those who are older (46-80 yrs) are more likely to report using public transportation for 5 years or more; whereas younger respondents (18-45 yrs) are likely to report using public transportation for less than 2 years.

## Options if Bus Were Not Available by Age

Graph 28

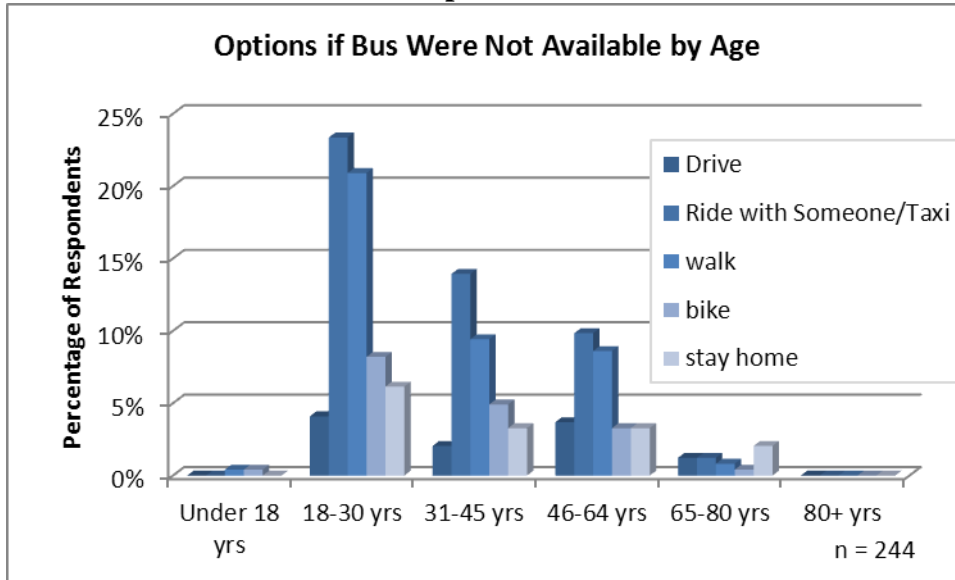


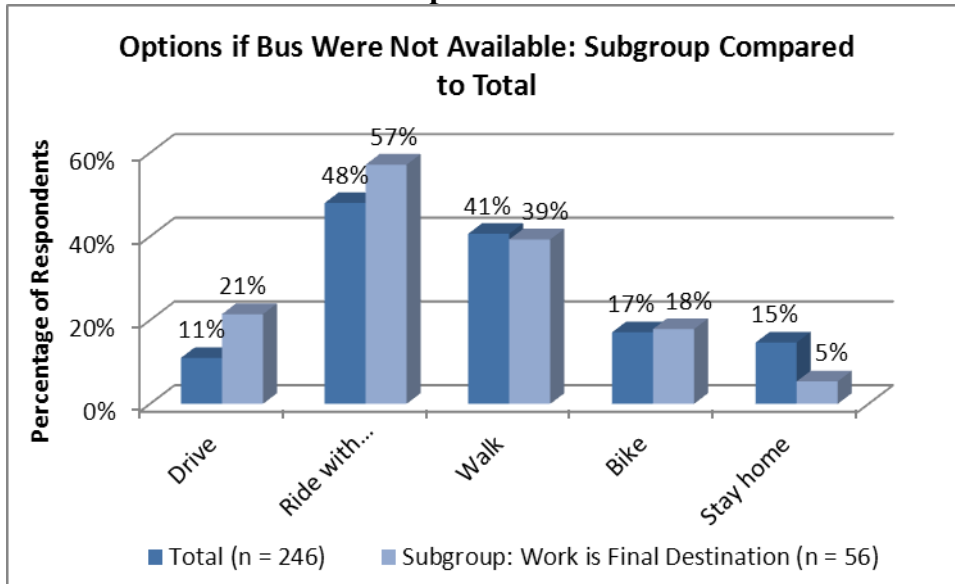
Table 28

	Drive		Ride with Someone/ Taxi		Walk		Bike		Stay Home	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
Under 18 yrs	0.0%	0	0.0%	0	0.4%	1	0.4%	1	0.0%	0
18-30 yrs	4.1%	10	<b>23.4%</b>	57	20.9%	51	8.2%	20	6.1%	15
31-45 yrs	2.0%	5	<b>13.9%</b>	34	9.4%	23	4.9%	12	3.3%	8
46-64 yrs	3.7%	9	<b>9.8%</b>	24	8.6%	21	3.3%	8	3.3%	8
65-80 yrs	1.2%	3	1.2%	3	0.8%	2	0.4%	1	<b>2.0%</b>	5
80+ yrs	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
<b>Total</b>	<b>11.1%</b>	<b>27</b>	<b>48.4%</b>	<b>118</b>	<b>40.2%</b>	<b>98</b>	<b>17.2%</b>	<b>42</b>	<b>14.8%</b>	<b>36</b>
Total (responses)										244

Graph and Table 28 show that if the bus service were not available, most respondents (regardless of age) would either: ride with someone, take a taxi, or walk. This finding seems to suggest that nearly half of the respondents do not own, or have access to a vehicle they can personally drive.

## Options if Bus Were Not Available: Subgroup Compared to Total

**Graph 29**



**Table 29**

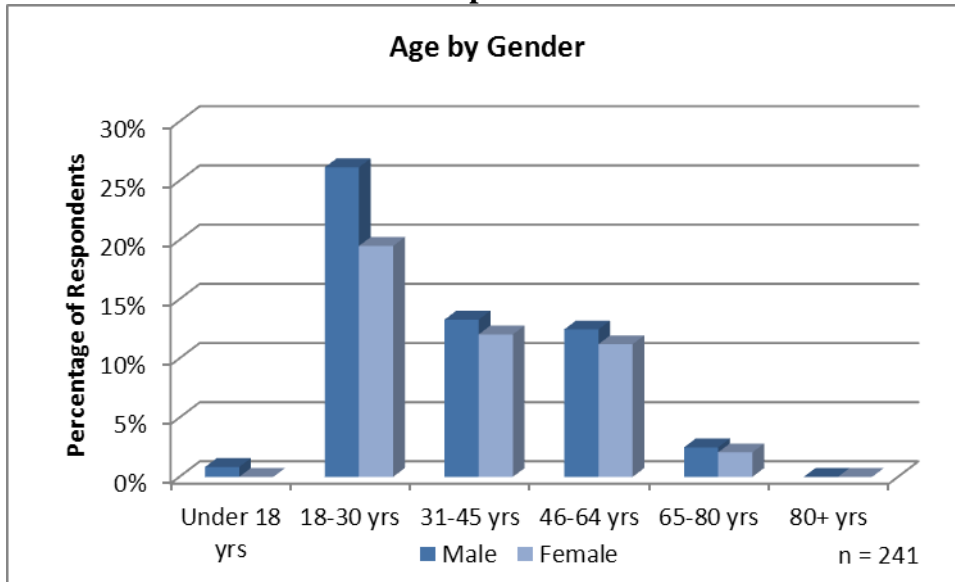
Options if Bus Were Not Available: Subgroup Compared to Total				
	Total Respondents		Subgroup: Work is Final Destination	
	Percent	Count	Percent	Count
Drive	11.0%	27	21.4%	12
Ride with someone/taxi	48.0%	118	57.1%	32
Walk	40.7%	100	39.3%	22
Bike	17.1%	42	17.9%	10
Stay home	14.6%	36	5.4%	3
Total	NA	323	NA	79
Answered Question	NA	246	NA	56

Graph and Table 29 isolate a specific subgroup (those who indicated their ‘one-way’ trip would end at work), to get a better idea of how a disruption in bus service would affect their ability to get to work. Compared to all survey respondents, members of the subgroup were less likely to stay home if the bus were not available, and more likely to drive, ride with someone, take a taxi, or bike.

The ‘Options if Bus Were Not Available’ question asked respondents to ‘check all that apply’, which explains why the count totals in the analysis are larger than the number of respondents who answered the question.

## Age by Gender

**Graph 30**



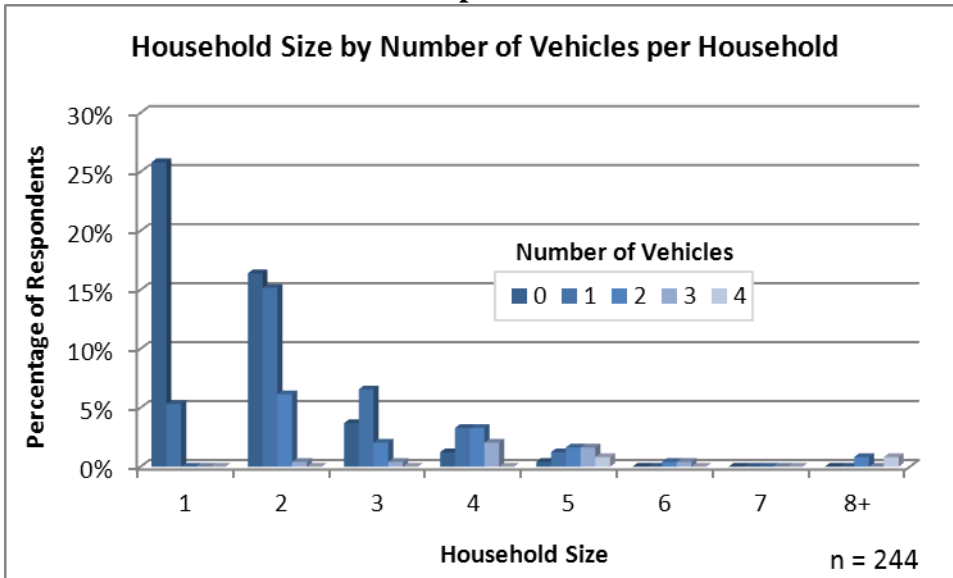
**Table 30**

Age by Gender				
	Male		Female	
	Percent	Count	Percent	Count
Under 18 yrs	0.8%	2	0.0%	0
18-30 yrs	26.1%	63	19.5%	47
31-45 yrs	13.3%	32	12.0%	29
46-64 yrs	12.4%	30	11.2%	27
65-80 yrs	2.5%	6	2.1%	5
80+ yrs	0.0%	0	0.0%	0
<b>Total</b>	<b>55.2%</b>	<b>133</b>	<b>44.8%</b>	<b>108</b>
<b>Total (responses)</b>				<b>241</b>

Graph and Table 30 show the demographic breakdown among survey respondents by both age and gender. As is evident, gender is evenly distributed between men and women among the age groups, with the exception that slightly more men in the 18-30 age bracket are likely to use the bus.

## Household Size by Number of Vehicles per Household

**Graph 31**



**Table 31**

Household Size by Number of Vehicles per Household									
	Household Size								
# Vehicles	1	2	3	4	5	6	7	8+	Total
0	25.8%	16.4%	3.7%	1.2%	0.4%	0.0%	0.0%	0.0%	47.5%
1	5.3%	15.2%	6.6%	3.3%	1.2%	0.0%	0.0%	0.0%	31.6%
2	0.0%	6.1%	2.0%	3.3%	1.6%	0.4%	0.0%	0.8%	14.3%
3	0.0%	0.4%	0.4%	2.0%	1.6%	0.4%	0.0%	0.0%	4.9%
4	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.8%	1.6%
Total	31.1%	38.1%	12.7%	9.8%	5.7%	0.8%	0.0%	1.6%	100.0%
Total (responses)									244

\*To preserve space, the “count” columns for Table 31 were not included.

The data in Graph and Table 31 cross references household size by number of vehicles per household. Respondents who live by themselves and have no access to a vehicle make up the largest subgroup (25.8%), while those who live with one other person and also have no access to a vehicle account for the second largest subgroup (16.4%). Respondents who live with one other person and report one vehicle per household comprise the third largest subgroup (15.2%). No respondents reported more than four vehicles per household.

## -Appendix-

### **A. Please Make Any Additional Comments You May Have About Public Transportation**

The survey received 59 additional comments, categorized below:

- Be on time (X22)<sup>1</sup>
- More buses and frequency of bus trips (X18)
- Service on Sundays and public holidays (X6)
- Unhappy with new schedule (X5)
- Later bus service on Saturdays to Mall and Walmart
- Having all of the large buses. It's no fun standing.
- The Bus Line is awesome and all the drivers and dispatchers are great. Merry Christmas.
- Get rid of the "paddy wagon buses." Too crowded and too dark.
- Make connections better.
- Lower the price.
- Schedules should be posted at bus stops.
- Not sure why the 21 goes into a suburban area outbound from Portland to SMCC. I have yet to see anyone get picked up here, it makes the trip long for those going to school.
- Some of the drivers should be nicer.
- Continue free rides for students. It saves money. And delivers relief to stressful days.
- Get newer buses.
- Punch passes should be sold at the METRO station in Portland.

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<sup>1</sup> X followed by a number represents similar comments repeated n amount of times

**B. Survey Instrument**

Date/ Time \_\_\_\_\_ Provider/ Route # \_\_\_\_\_ IB /OB \_\_\_\_\_ Surveyor \_\_\_\_\_  
Driver # \_\_\_\_\_

**On-Board Transit Survey**

Please help Greater Portland’s Public Transportation Providers serve you better by completing this survey conducted by the Greater Portland Council of Governments (GPCOG), and returning it to one of the staff surveyors on board. The estimated time to complete this form is less than ten minutes. If you have any questions regarding this survey please call us at 774-9891 or email us ([info@gpcog.org](mailto:info@gpcog.org)).

**\*\*\*\*\*Please feel free to complete the survey later and return it the next time you ride. \*\*\*\*\***

**1. Where did you board for this trip?**

\_\_\_\_\_  
*(Street/intersection/major landmark)*

**2. Where will you be ending this trip?**

\_\_\_\_\_  
*(Street/intersection/major landmark)*

**3. Did you transfer from another bus line or transportation mode to this bus?  
(Check one) Yes No**

**4. If yes, which one? (Check one)**

METRO Route: #1 #2 #3 #4 #5 #6 #7 #8

So. Portland Bus Route: Rt.-21 Rt. 24A Rt. 24B

Casco Bay Lines RTP Zoom ShuttleBus The WAVE Concord Trailways

Vermont/Greyhound Jetport Bicycle Walk Other\_\_\_\_\_

**5. Will you transfer to another bus or transportation mode when you get off?  
Yes No**

**6. If yes, which one? (Check one)**

METRO Routes: #1 #2 #3 #4 #5 #6 #7 #8

So. Portland Bus Routes: Rt.-21 Rt. 24A Rt. 24B

Casco Bay Lines    RTP    Zoom    ShuttleBus    The WAVE    Concord Trailways

Vermont/Greyhound    Jetport    Bicycle    Walk    Other \_\_\_\_\_

**7. This (one way) trip began at:  
end at:**

- Home
- Work
- Shopping
- School
- Other \_\_\_\_\_

**This (one way) trip will**

- Home
- Work
- Shopping
- School
- Other \_\_\_\_\_

**8. How many round trips do you take by bus each week? \_\_\_\_\_**

**9. Which days of the week do you normally ride the bus? (Check all that apply)**

Monday    Tuesday    Wednesday    Thursday    Friday    Saturday    Sunday

**10. How long have you been using public transportation?**

5 years or more    2-4 years    1-2 years    Less than 1 year

**11. If transit service were not available, how would you make this trip? (Check one)**

Drive    ride with someone, or taxi    walk    bike    stay home

**12. Did you use the wheelchair lift to board the bus (Check one)?**    Yes    No

**13. Please rate the follow aspects of this service by checking the appropriate box?**

	Poor	Fair	Good	Excellent
Comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost of Fare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Destinations Served by Bus Routes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Convenience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of Trip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security/ Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frequency of Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Link to other modes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On-time performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of schedule/map	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friendliness of Driver	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Driver Knowledge of other routes/modes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Please circle the category listed in the question above that you feel is **most important**.

15. What is your home zip code? \_\_\_\_\_

16. What is your age? (Check one)

under 18 yrs   18-30 yrs   31-45 yrs   46-64 yrs   65-80 yrs   over 80 yrs

17. Are you: Male or Female (Check one)

18. Are you: (Check all that apply)

Full-time Student   Part-time student   Employed full-time   Employed part-time  
A full-time homemaker   Retired   Seeking employment   other

19. What is your total annual household income? (Check one)

Less than \$10,000/yr.   \$10,000-\$20,000   \$20,000-\$30,000   \$30,000-\$45,000  
\$45,000 - \$65,000/yr   More than \$65,000

20. How many people (including yourself) live in your household? \_\_\_\_\_

21. How many registered motor vehicles are owned/used by residents of your household? \_\_\_\_\_

22. Please make any additional comments you may have about public transportation in the space below. (What is the single most important improvement Portland's Regional Public Transit Providers could make?)