An Onboard Survey of GoDurham Customers

2017

A study conducted by:

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Summary of Key Findings

In October 2017, CJI Research, LLC conducted an onboard survey of GoDurham customers. This was the third in a series (2011, 2015, and 2017). The survey includes 3,015 respondents and has a margin of error of +/-1.8%.

Improved customer satisfaction

- The satisfaction score for service overall increased, with 55% rating it as excellent or very good, up from 47% in 2015 and from 43% in 2011. This is an unusually large increase.
- Satisfaction with daytime frequency of service on weekdays and Saturday rose from 43% to 51%.
- Comfort while waiting for the bus rose by ten percentage points from 34% to 44%.
- When asked to rank areas for improvement, 51% GoDurham customers said “Buses running on time" was their priority. Second most important in this sense was frequency of service nights and on Sundays (31%).
- GoDurham provides great economic impact: In the past thirty days, 68% of riders took GoDurham to work, 28% to school, presumably to prepare for work, and 50% used for shopping.

Key demographics

- Like most U.S. bus systems, GoDurham customers are young, with 52% under thirty-five.
- Similar to the ridership of many bus systems, 55% of GoDurham customer households report household incomes of less than $15,000 and only 11% report incomes of $50,000 or more.
- Customers continue to be highly transit dependent, with 63% reporting that they have no vehicle available. This statistic is unchanged from 2015 and 2011 when it stood at 62%.
- Sixty-eight percent (68%) of GoDurham customers identify themselves as African-American, statistically unchanged from 67% in 2015 but a substantial change from the 2011 study when the percentage was 78%. Other ethnic groups: 13% identify themselves as Caucasian, 7% Hispanic, 4% Asian, 2% Native American and 5% “Other.”
- Of all customers 8% are either active military or veterans.

Travel characteristics

- 78% of customers say they must change buses during their trip at least once.
- Most GoDurham customers (54%) use only GoDurham
- Intersystem transfers are more often (30%) with GoTriangle than with other systems.
- Like most transit systems, many customers are new to the system: 31% said that they had been using GoDurham for less than a year.
- Most of GoDurham's customers (51%) take only 5 minutes or less to get to their bus stop.

Ridesharing

- Uber and Lyft have been used one or more times in the previous thirty days by 37% of GoDurham customers.
- Of the 37% who have used Uber or Lyft in the previous thirty days, 73% (or 27% of the ridership) say they used them to replace a bus trip.

Executive Summary

Introduction

In October 2017, CJI Research conducted an onboard survey of GoDurham customers. This was the third in a series that has now included surveys in 2011, 2015, and 2017. The GoDurham survey includes 3,015 responses and has a margin of error of +/-1.8% at the 95% level of confidence.

The 2017 survey is intended to provide updated information for comparison to findings of the previous surveys and to provide new information on customer satisfaction, customer priorities for service improvements, communications, and other matters.

Key Findings

The results of the 2017 survey are encouraging in that customer satisfaction has improved substantially across most aspects of service.

Many of the findings in this report have to do with changes between the previous passenger surveys of 2011, and 2015, and current 2017 survey. The reader should be aware that important improvements have been made to the GoDurham system between the 2011 and the 2017 surveys. The improvements show up in improved service ratings.

Perception of Major Service Improvements

- There has been a major improvement in satisfaction scores for GoDurham. The satisfaction score for service overall increased, with 55% rating it as excellent or very good (7 or 6 on a seven-point scale), up from 47% in 2015 and from 43% in 2011. This is an unusually large increase.
- Bolstering this high rating were small but continued improvement in scores for:
  - Courtesy of bus operators (57%)
  - Ease of transfers among systems (54%)
  - Ease of transfers within the GoDurham system (53%)
  - With the exception of on-time performance, all other aspects of service also experienced a rating improvement.
- Significant improvements in 2017 compared to the survey of 2015 among low-scoring items also related to the improvement in the overall score were in:
  - Daytime frequency of service on weekdays and Saturday, which rose by eight percentage points from 43% to 51%
  - Comfort while waiting for the bus, which rose by ten percentage points from 34% to 44%.
- When asked to rank areas for improvement…
  - "Buses running on time" was by far the most frequently cited aspect of service to improve. It was cited by 51% of customers as first, second, or third most important to improve among the fourteen specific aspects of service examined.
  - Second most important in this sense was frequency of service nights and on Sundays (31%)

        - Third, in spite of an overall high service quality score rating by 57% of customers, courtesy of the bus drivers was the third in the ranked list of service elements important to improve (27%).
        - Fourth most important to improve was frequency of service Monday- Saturday until 7:00 PM
    - The Net Promoter Score increased to a surprisingly great degree from a very low score in 2015 of 4.5% to 17% in 2017, an unusual and extremely rapid increase.

- Another way to consider service improvement priorities is to examine the correlation of each aspect of service with the overall service rating. That technique identified two priorities that would have a significant impact on the overall GoDurham service rating: Improved on-time performance and cleanliness of the bus interiors. Both of these have shown substantial improvement since 2011. However, the customers apparently feel there is always room for improvement.
    - In 2012 there was a major overhaul of the GoDurham system and improvement in on-time performance. Between the surveys of 2011 and 2015, there was a corresponding major increase in the satisfaction rating of on-time performance (from 33% in 2011 to 42% in 2015. The perception of on-time performance did not continue to improve between 2015 and 2017, but it the increased level of 2015 was maintained.
    - Cleanliness of the bus interiors, however, which has slipped by 3% between 2011 and 2015 improved from 36% in in the top category in 2015 to 45% in 2017.

- Trip purpose is primarily oriented to employment and school, but many customers also use GoDurham for shopping, recreation, or medical visits
    - GoDurham is providing local labor force mobility. In the past month, 68% have taken GoDurham to get to and/or from work, approximately the same as the 70% in 2015.
    - Many other customers in the past month have used GoDurham to get to and/or from middle or high school (10%) or college (18%). Thus, GoDurham is serving the large educational institutions in the community as well as the needs of the students themselves.
    - Many customers in the past month have used GoDurham to go shopping (50%), get to medical visits (35%), or for recreation and social visits (20%). A few (4%) say they have used it to get to the airport, but given that GoDurham does not serve the airport, this must refer to a connection via GoTriangle.
    - There was a major increase in the use of GoDurham to get to social services which went from 9% in 2011 to 14% in 2015 to 21% in 2017.

- Demographics
    - GoDurham provides a key support for employment and education. Of all GoDurham customers, 49% are employed outside the home and another 10% are students who are also employed, for a total of 59% of customers being employed. In addition, another 15% are students who are not also employed.
    - Of all customers 8% are either active military or veterans. Active military are evenly split between men and women while veterans are primarily men.

- There was very little change in ethnic makeup of the ridership.
- Sixty-eight percent (68%) of GoDurham customers identify themselves as African-American, statistically unchanged from 2015 (67%) but a substantial decrease from the 2011 study when the percentage was 78%. Of others, 13% identify themselves as Caucasian, 7% Hispanic, 4% Asian, 2% Native American and 5% "Other."
- Like most bus systems in the United States, the ridership of GoDurham is young, with 52% under the age of thirty-five.
- Unlike the customer base of most transit systems in the United States, more men than women use GoDurham. In most places the reverse is true.
- Similar to the ridership of many bus systems, 55% of GoDurham customer households report that they have household incomes of less than $15,000 and only 11% report household incomes of $50,000 or more.
- Customers continue to be highly transit dependent in 2017, with 63% reporting that they have no vehicle available. This figure is statistically unchanged from 2015 and 2011 when it stood at 62%.

- Travel characteristics
  - The percent of customers saying they must change buses during their trip stands at 78% making at least one transfer.
  - Most GoDurham customers (54%) use only GoDurham. When GoDurham customers transfer between systems in the region, they transfer more often to or from GoTriangle (30%) than other systems.
  - Like ridership of most transit systems, GoDurham's ridership has many customers who are relatively new to the system. In 2017, 28% said that they had been using GoDurham for less than a year, including 3% who said that the day they were surveyed was their first time using GoDurham. This large number of relatively new customers does not represent growth since ridership did not grow by 28% in that period, and actually declined slightly. Rather, it represents a combination of people beginning to use GoDurham and others ceasing to use it.

- Ridesharing
  - Ridesharing was not a significant factor in 2015 when the previous survey was conducted. In the brief period during which they have been active in Durham, Uber and Lyft have been used one or more times in the previous thirty days by 37% of GoDurham customers.
  - Of the 37% who have used Uber or Lyft in the previous thirty days, 27% (or 10% of all customers) say they have used them as part of a bus trip.
  - Of the 37% who have used Uber or Lyft in the previous thirty days, 73% (or 27% of the ridership) say they used them to replace a bus trip.

- Access to GoDurham is easy.
  - More than half of GoDurham's customers (51%) take only 5 minutes or less to get to their bus stop. And another 24% take between five and ten minutes, for a total of 75% taking ten minutes or less.

- The percentage of customers walking to their stop declined from 85% to 74% as the percent driving to their stop increased from 1% to 4%, the use of other systems' buses to get to GoDurham increased from 7% to 12%, and Uber/Lyft became a reality, accounting for 2% of the modes of access.

- Fare media
  - Of all GoDurham customers in 2017, 67% pay full fares, using either cash or a pass.
  - The use of the GoPass has increased from 13% in 2015 to 16% in 2017.
  - The use of special fares for seniors, persons with a disability, and students has remained constant, 19% in 2015 and 18% in 2017.

- Communication
  - Transit systems nationally continue to find more and more customers relying on mobile electronic modes of information-seeking, although printed materials continue to be essential.
  - More than two-thirds (68%) of GoDurham customers now use not just a cellphone, but a smartphone on which they send and receive text messages or access the internet.
  - The TransLōc app has been downloaded by 27% of GoDurham customers.
  - As is widely known, the level of reliance on these kinds of mobile communications devices and services is inversely related to age. However, substantial numbers of customers over the age of sixty use mobile electronics.
  - While use of mobile texting and internet access is directly and inversely related to age throughout the life-cycle, downloading the TransLōc is not strongly age-related until the customers reach the age of 65. But from age 18 to 54, approximately 30% of each ten- year age-cohort has downloaded it.

Introduction and Methodology

Background

In 2017, CJI Research, LLC conducted a survey of customers onboard GoDurham buses from October 25 through November 5, 2017. Similar surveys were conducted in 2011 and 2015, but in the spring rather than in the fall. Another difference is that in 2011 and 2015, separate questionnaires and samples were used for the Bull City Connector (BCC) route and the basic GoDurham routes. In 2017 the BCC was treated as just another GoDurham route. Both the 2015 and the 2017 surveys were managed by GoTriangle staff for GoDurham.

The questionnaire was initially developed by Hugh Clark of CJI Research and refined and focused by Jon Dodson and others at GoTriangle acting on behalf of GoDurham.

The 2017 study is intended to provide updated information on some aspects of the earlier survey, and to provide new information on customer satisfaction, customer priorities for service improvements, communications, and other matters.

Methods: How the Survey Was Conducted

Sample

A random sample of runs was drawn from a list of all GoDurham runs. This initial sample was examined to determine whether the randomization process in the relatively small universe of all runs had omitted any significant portion of the GoDurham system's overall route structure. The sample was adjusted slightly to take any such omissions into account.

Survey data collection occurred onboard the buses. On the bus, the survey staff approached all riders rather than a sample of riders. The only exception was that riders who appeared younger than sixteen were not approached, both for reasons of propriety and because children are typically unable to provide meaningful answers to several of the questions.

Because all riders were asked to participate rather than a sample of riders on the bus, there was little or no opportunity for a survey staff member to introduce bias in selection of persons to survey. In effect, a bus operating within a specified window of time became a sample cluster point in a sample of such clusters throughout the total system.

The GoDurham survey includes 3,064 responses and has a margin of error of +/-1.8% at the 95% level of confidence. If a sub-sample is used, sample error increases somewhat. However, with such a large overall sample this would affect the findings only in very rare circumstances in which only very small sub-segments of the ridership were being examined separately. When the distribution of responses is other than 50:50 on a specific question, the sample error for a given sample size decreases somewhat.

Data Collection

Temporary workers from the Greer Group Inc. of Durham, NC were trained and used to administer the surveys under the supervision of CJI Research staff. Surveyors wore smocks identifying them in large print as "Transit Survey" workers. This uniform helps riders visually understand the purpose of why an interviewer would be approaching them, thus increasing cooperation rate.

In most cases, the survey personnel accompanied drivers at the beginning of their shifts and rode the buses throughout each driver's paddle assignment, or they took a shuttle to Durham Station to catch their assignments. In some instances, in order to assure broader coverage of certain routes, surveyors rode partial runs and then transferred to another route or run.

The questionnaire was self-administered. Survey personnel handed surveys and a pen to riders and asked them to complete the survey. The survey forms were printed on one side in English and on the other in Spanish.

At the end of each sampled trip on a given run, the survey personnel placed the completed surveys in an envelope marked with the route, the run, the time, and the day and reported to the survey supervisors who completed a log form detailing the assignment.

PARTICIPATION RATES

A total of	9,666	adults were riding during the surveyed trips and had a chance to participate		
Of this total…	2,416	said they had already completed the survey		25%
and	2,563	refused outright		27%
and	180	customers spoke a language other than English or Spanish		2%
thus	3,522	accepted the survey form with the apparent intention of finishing it		36%
Thus, these	3,522	customers represent, the total "effective distribution, " i.e., the raw sample		
Of these…	504	accepted the survey form but did not complete it.		14%
and	3,018	completed the survey on the GoDurham bus		86%
	46	completed the survey and returned it to an operator on another bus		1%
Finally:	3,064	returned useable survey questionnaires and they comprise the final sample		
		Of all adults riding on a surveyed vehicle, this represents:		32%
		Of all the customers on sampled trips who accepted a questionnaire, this represents:		87%

Of the 3064 GoDurham respondents:

- 49 riders, or 2%, failed to complete three or more responses[1], leaving 3,015 valid cases.
- 2,129, or 69% completed the entire survey (100% of the survey, including the final question)
- 578, or 19% completed all but the final question (household income) (98% of the survey)
- 308, or 10% completed from 3 to 39 of the 41 items in the survey.

Thus, the effective N of the survey is approximately 3,015, but it will vary slightly with the actual numbers responding to a given question. With such a large sample, however, the impact on the statistical distributions will be very small.
In analysis of both surveys, those who did not respond to a question are eliminated from the computation of percentages and means unless there was a way to infer the response. For example, if

- [1] If they completed at least through question #3, they were retained in the data set since they presumably represented people making very short trips or who had some type of limitation in being able to complete the survey. A total of 49 riders completed only one or two questions and have been dropped from the analysis. For those responding through question 3, we at least obtained frequency of use, duration of ridership, and recent trip purposes, as well as knowing the route from the serial numbered questionnaire.

a rider gave as a trip purpose *getting to or from school,* it was apparent that this was a student, and that Q32 (employment) could be coded as "student," even if the respondent had not completed the survey to that point.

Questionnaire

The questionnaire was self-administered. It is reproduced in Appendix A.

The questionnaires were serial numbered so that records could be kept for the route and day of the week on which the questionnaire was completed. This is a vastly more accurate method than asking riders which route they are riding when completing the survey.

The survey is printed in English on one side and in Spanish on the other. In the survey of GoDurham riders, 208 riders, or approximately 7% of the unweighted sample identified themselves as Hispanic, but only 110, or 4% of the completed questionnaires were completed in Spanish. That is, 53% of the Hispanic riders completed the survey in Spanish.

Analysis

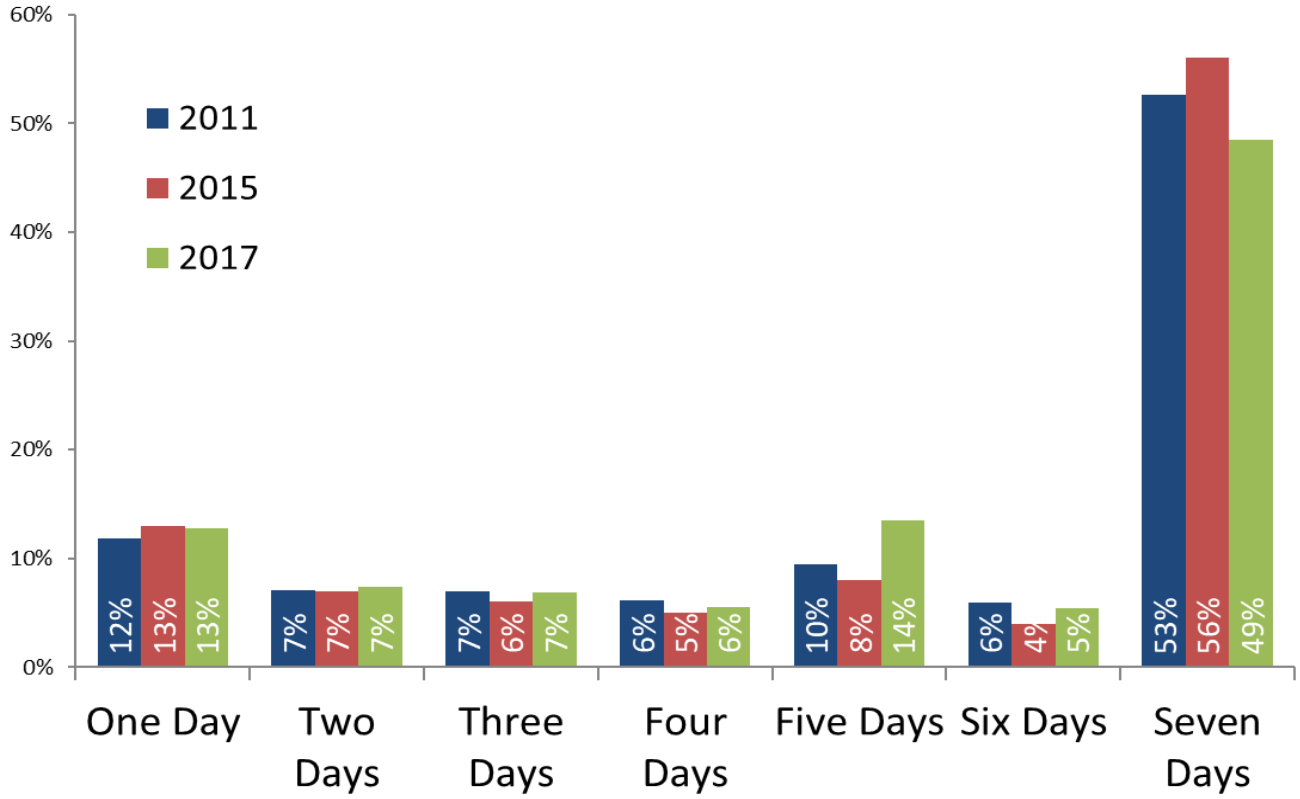
Analysis consists primarily of crosstabulations and frequency distributions. Tables were prepared in SPSS, version 24 and charts in Excel 2016. The GoDurham survey will be archived by CJI Research so that it will be available for further analysis as needed.

With a few exceptions, all percentages are rounded to the nearest whole number. In a few cases, when this could have caused important categories to round to zero, or when comparisons between charts would appear inconstant if tenths were not included, percentages are carried to tenths. Rounding causes some percentage columns to total 99% or 101%. This is not an error and should be ignored.

Rider Profile

Figure 1 Frequency of Using GoDurham

(Source: GoDurham onboard surveys 2011, 2015, 2017)



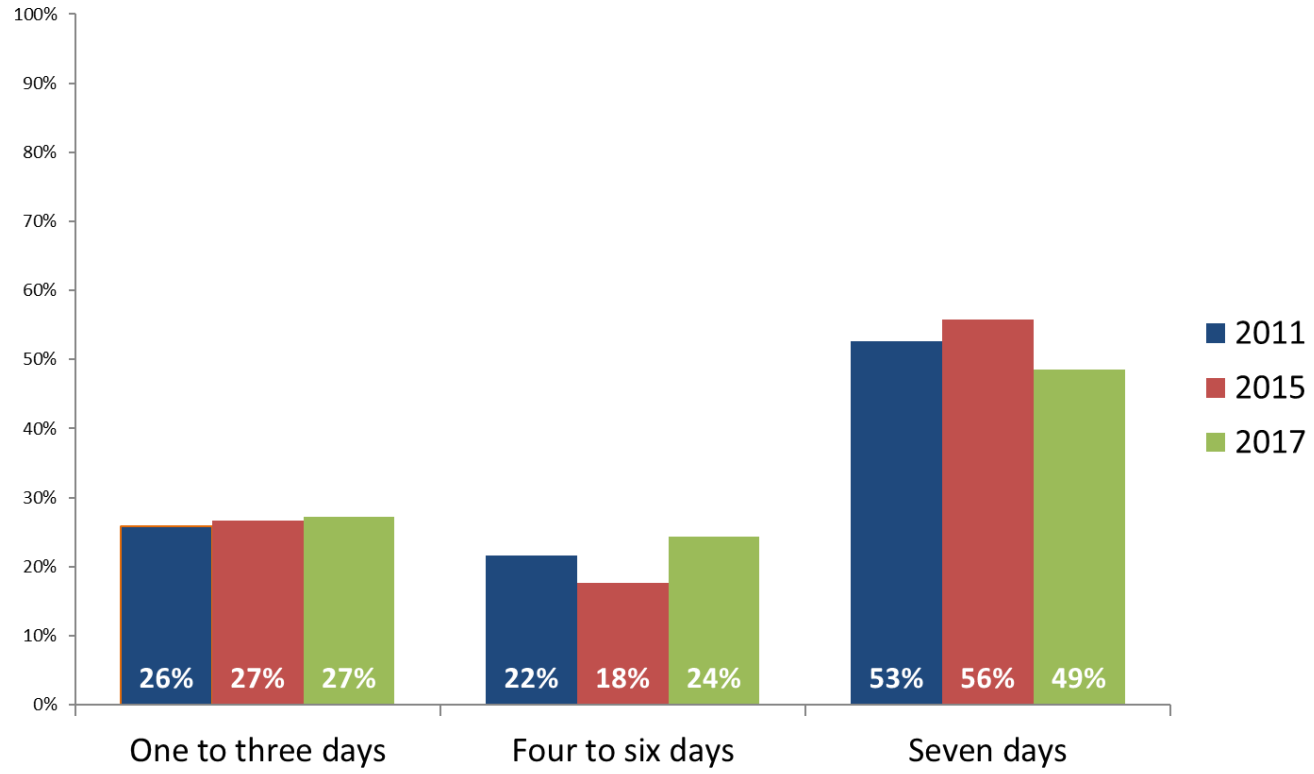
Frequency of Using GoDurham

As in 2011 and 2015, more GoDurham riders in 2017 travel seven-days a week (49% in 2017, 56% in 2015 and 53% in 2011) than follow any other pattern. However, seven-day travelers are no longer a majority. Some of the change from 56% in 2015 to 49% in 2017 is accounted for by the increase in five-day riders. Presumably this represents an increase in weekday, work-oriented commuters.

Fewer riders travel only one, two, or three days a week (27% in 2017). The balance (25%) travel four to six days a week.

Figure 2 Compressed Measure of Frequency of Using GoDurham

(Source: GoDurham onboard surveys 2011, 2015, 2017)



Rider Segments

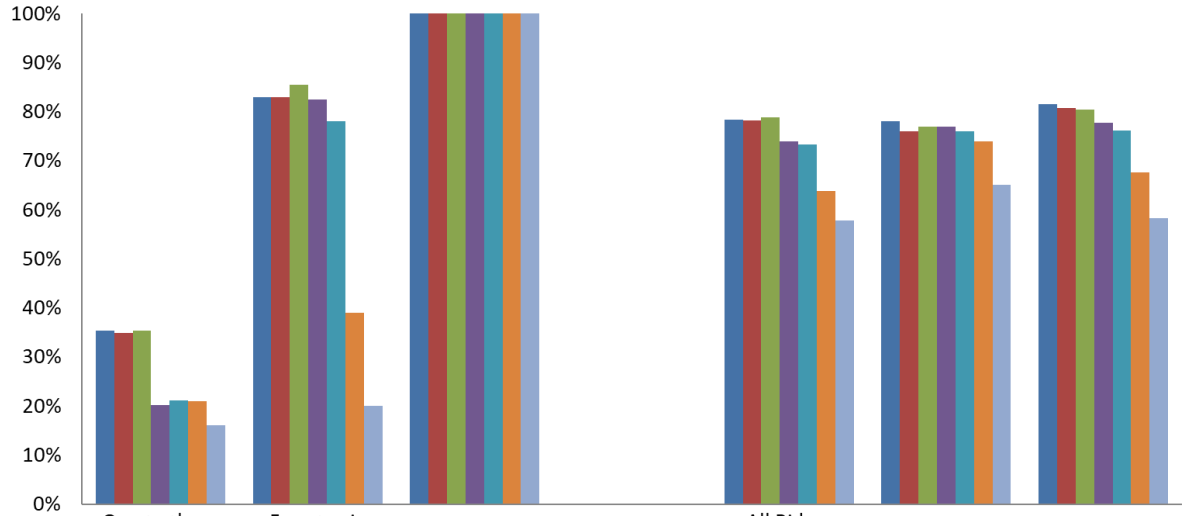
For purposes of further analysis, the riders are grouped into three sets, or "segments," depending upon how frequently the riders use GoDurham. We refer to them as:

- Those who use GoDurham one, two, or three days a week (27%)
- Those who use GoDurham four to six days a week (24%)
- Those who use GoDurham seven-days a week (49%)

Figure 3 Days of the Week GoDurham Was Used in the Past Week

Q1 Including today, during the past seven-days, which days have you ridden GoDurham?

(Source: GoDurham onboard surveys 2011, 2015, 2017)



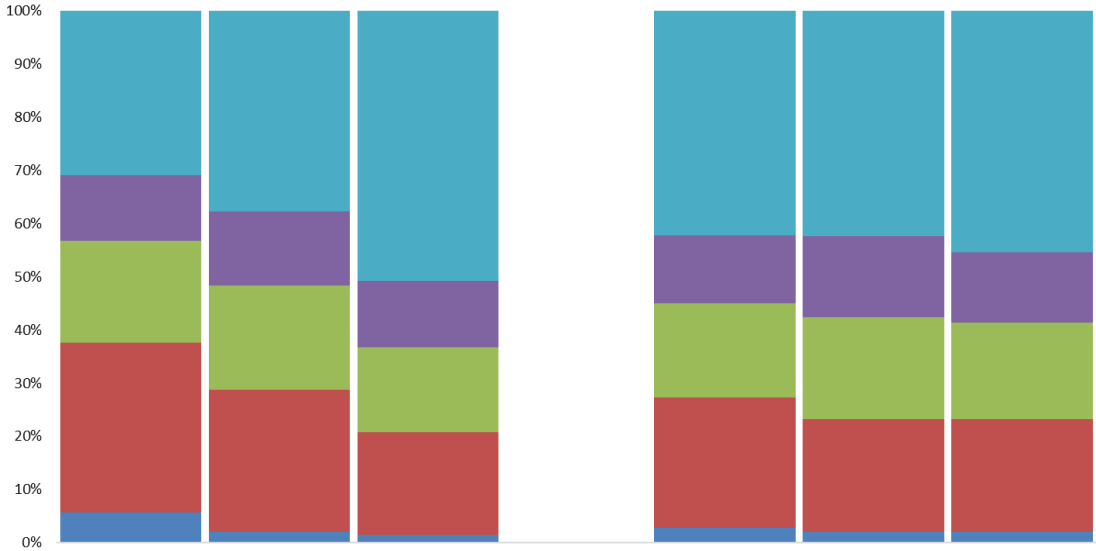
Days of the week segments	One to three days	Four to six days	Seven days	All Riders 2017	2015	2011
Rode on Monday	35%	83%	100%	78%	78%	82%
Rode on Tuesday	35%	83%	100%	78%	76%	81%
Rode on Wednesday	35%	86%	100%	79%	77%	80%
Rode on Thursday	20%	83%	100%	74%	77%	78%
Rode on Friday	21%	78%	100%	73%	76%	76%
Rode on Saturday	21%	39%	100%	64%	74%	68%
Rode on Sunday	16%	20%	100%	58%	65%	58%

Days of the Week GoDurham Was Used in the past week

Riders were asked on which of the previous seven-days they had ridden GoDurham buses. By definition, the seven-day riders use GoDurham each day. In 2017 the occasional, one to three-day, and frequent riders were most likely to use it on Monday, Tuesday, and Wednesday, and less likely to use it on subsequent weekdays and on the weekend.

Figure 4 Length of Time Using GoDurham

Q2 How long have you been riding GoDurham?
(Source: GoDurham onboard surveys 2011, 2015, 2017)



	One to three days	Four to six days	Seven days	2017	2015	2011
More than 4 years	31%	38%	51%	42%	42%	45%
3-4 years	12%	14%	12%	13%	15%	13%
1-2 years	19%	20%	16%	18%	19%	18%
Less than 1 year	32%	27%	19%	25%	21%	21%
This is the first time	6%	2%	1%	3%	2%	2%

Duration of Ridership

In 2017, one-fourth (25%) of riders said they had been using GoDurham for “less than a year,” while another 3% said that the trip on which they were surveyed was their first time using it, for a total of 28% beginning to use it only very recently. This represents an increase from both 2015 and 2011 when the analogous total was 23%.

One challenge the rapid turnover of riders presents is that the collective memory of riders is limited. Almost half (46%) of the current GoDurham riders have begun riding GoDurham since the previous survey. Thus, when we compare 2017 results to earlier surveys, the reader should understand that many (or in the case of comparisons to 2011, most) of the riders have no memory of conditions at the earlier time. They are rating their satisfaction with service with reference only to the current service levels and are not implicitly comparing current to previous service quality.

Ridership Over Time

Year	Unlinked trips	% Change
2011	5,600,000	
2012	6,300,000	12.5%
2013	6,200,000	-1.6%
2014	6,200,000	0.0%
2015	6,200,000	0.0%
2016*	7,007,230	13.0%
2017*	6,984,319	-0.3%

*An unknown proportion of this change was apparently to to a change in method for the counts from farebox counts to APC's. The farebox count for 2016 was 5,900,000

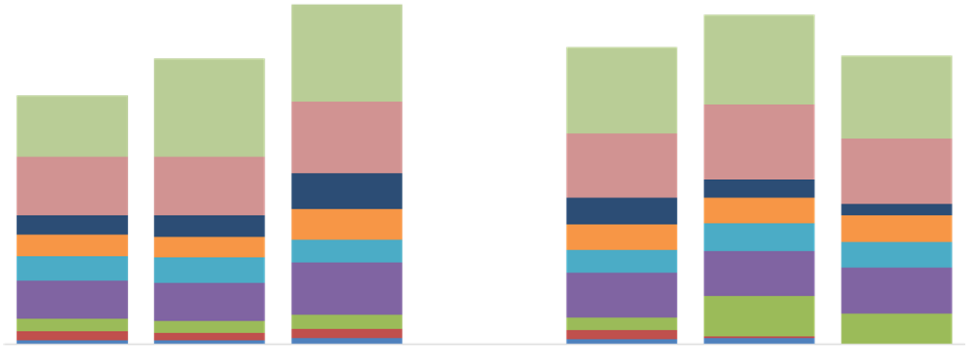
This percentage of new riders is fairly typical of bus systems in the United States. On the other hand, GoDurham has many longer-term riders also. Forty-two percent (42%) said they have used GoDurham for four or more years, and another 13% have used it for three or four years for a total of 55%, very similar to the number who had used GoDurham for that long in 2011 (58%).

Ridership since the first survey in this series in 2011 grew rapidly from 2011 to 2012. However, like most all-bus systems, ridership on GoDurham declined slightly between 2016 and 2017 according to information provided by GoTriangle. Because the total rider base is somewhat smaller, it may be that new riders make up a greater proportion of the overall ridership without really increasing in numbers of individuals.

As was true in 2015, the one to three-day occasional riders in 2017 are more likely than others to indicate that they were making their first trip on GoDurham (6%) since (obviously) the first trip, being a single trip, places them in the one to three-day segment. Occasional riders are also more likely than the other segments to have been riding for less than a year (32%). The four to six-day riders (52%) and intensive (63%) riders are more likely than occasional riders (43%) to have been riding for three or more years.

Figure 5 Use of GoDurham in the Past Month for Various Purposes, by Segment

Q3 Multiple trip purposes during the past month
(Source: GoDurham Onboard Surveys 2017, 2011, and 2015)



In past month, used GoDurham to get to or from:	One to three days	Four to six days	Seven days	2017	2015	2011
Work	48%	77%	76%	68%	70%	65%
Shopping	46%	46%	56%	50%	59%	51%
Social services	15%	17%	28%	21%	14%	9%
Social or recreational visit	17%	16%	24%	20%	20%	21%
College/Vocational school	19%	20%	18%	18%	22%	20%
Doctor/medical visit	30%	30%	41%	35%	35%	36%
Middle/HSchool	10%	9%	11%	10%	32%	24%
Other*	7%	6%	7%	7%	1%	
Airport*	3%	3%	5%	4%	5%	

* Not an optional response in 2011

Use of GoDurham in the Past Month for Various Purposes, by Segment

Riders were asked to name all of the purposes for which they had used GoDurham in the past month[2]. Getting to or from work continues to be the primary trip-purpose, with 68% of riders saying they had used GoDurham to get to or from work in the past month.

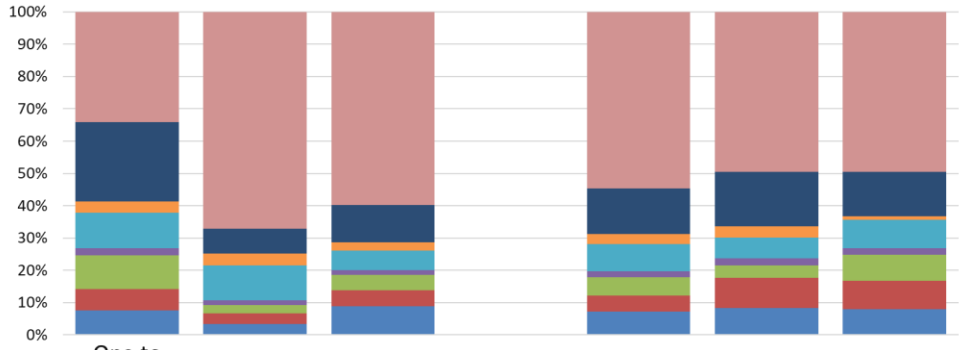
Most GoDurham riders in 2017 (68%), 2015 (70%), and 2011 (65%) said they had taken the bus to or from work during the past month. College and middle/high school trips made up another 28% of trips compared to 54% of trips in 2015. Thus, GoDurham is carrying a large proportion of its riders either for work trips or for school trips. We can think of this as an engine of labor mobility -- getting people to work or to preparation for work. Another 50% of the riders indicate that they have made shopping trips, another set of trips with immediate economic impact.

More than three-fourths of the four to six-day riders (77%) and the seven-day riders (76%) had made work-trips. The seven-day a week, most intensive riders are more likely than the other segments to have used GoDurham for each of the non-work purposes. It is interesting that even among the least frequent riders work trips are common (48%). They must either be working part-time or using different modes on different days.

[2] Because of the multiple purposes for which riders use the buses, the sums of the percentages in the chart exceed 100%.

Figure 6 Primary Purpose of Specific Trip on Which the Survey Was Completed

Q4 Primary purpose of this trip
(Source: GoDurham Onboard Surveys, 2017, 2015, and 2011



Main purpose for this trip. Using GoDurham to get to or from:	One to three days	Four to six days	Seven days	2017	2015	2011
Work	34%	67%	60%	55%	49%	50%
Shopping	25%	8%	12%	14%	17%	14%
Middle or high school	3%	4%	3%	3%	4%	1%
College or vocational	11%	11%	6%	9%	6%	9%
Social services	2%	2%	1%	2%	2%	2%
Medical	10%	3%	5%	6%	4%	8%
Social or recreation	7%	3%	5%	5%	9%	9%
Other	8%	3%	9%	7%	8%	8%

Primary Purpose of The Specific Trip on Which the Survey Was Completed

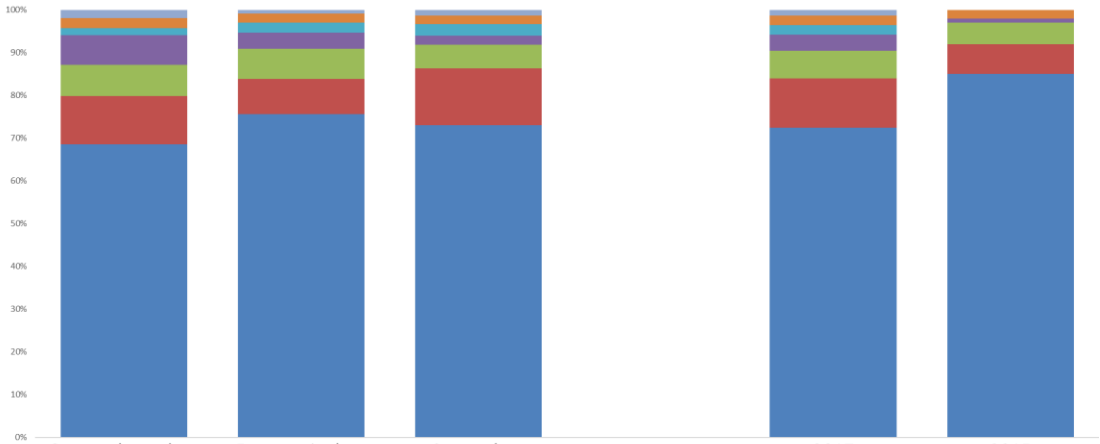
Respondents were asked their main purpose for the trip was on which they were surveyed. During the trip on which they were surveyed, 55% of the riders said were going to or from work. This represents an increase over 2015, when it stood at 49%.

As one would expect, the four, five, and six-day rider segment (67%) and the seven-day rider segment (60%) were more likely than occasional one to three-day riders (34%) to indicate they were going to or from work.

Occasional riders, as expected, were more likely to be making trips that are inherently occasional such as shopping, medical visits, social visits, and the like.

Figure 7 Mode to the GoDurham Bus Stop

How do you most often get from home to the nearest GoDurham bus stop?
(Source: GoDurham Onboard Survey, 2017 &2015)



	One to three days	Four to six days	Seven days	2017	2015
Other	2%	1%	1%	1%	0%
Bike	2%	2%	2%	2%	2%
Uber/Lyft*	2%	2%	3%	2%	
Drive	7%	4%	2%	4%	1%
Dropped off	7%	7%	6%	7%	5%
Bus other than GoDurham	11%	9%	13%	12%	7%
Walk	69%	78%	74%	74%	85%

* Not an optional response in 2015

Mode to the Bus Stop

Most people, 74%, most often simply walk to the nearest bus stop. This is more often true for those who are the four to six-day riders (78%) as opposed to those who are seven-day riders (74%) or one to three-day (69%) but walking is the dominant mode for all three segments.

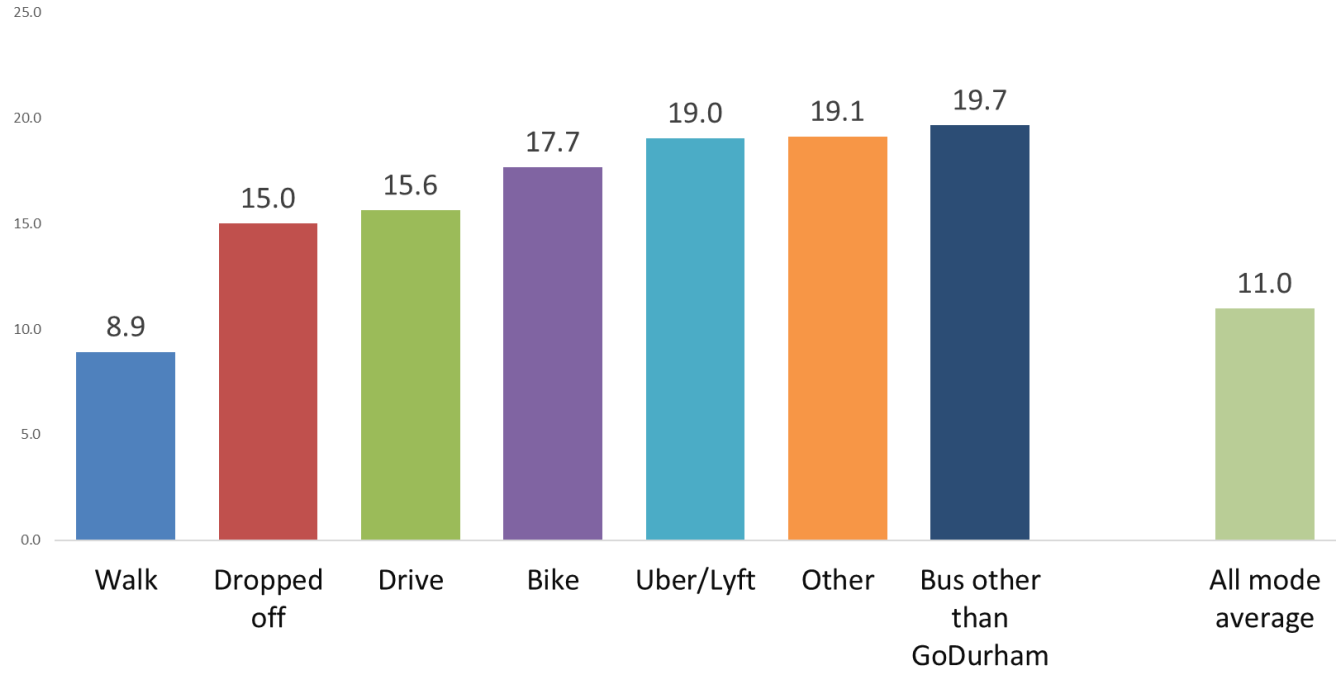
The tendency to walk to the nearest GoDurham bus stop appears to have changed dramatically between 2015 and 2017. Those who said they walk declined from 85% to 74%. Why?

- Use of buses other than GoDurham rose from 7% to 12%.
- In addition, those saying they had driven to the stop rose from 1% to 4%.
- Uber and Lyft, which did not exist in 2015, accounted for 2% in 2017.

This question was not asked in the 2011 survey.

Figure 8 Minutes to Get to the Nearest Bus Stop Using Usual Mode to the Stop

Q9 How many minutes does it take you to get from home to the nearest GoDurham stop in that way?
(Source: GoDurham Onboard Survey, 2017)



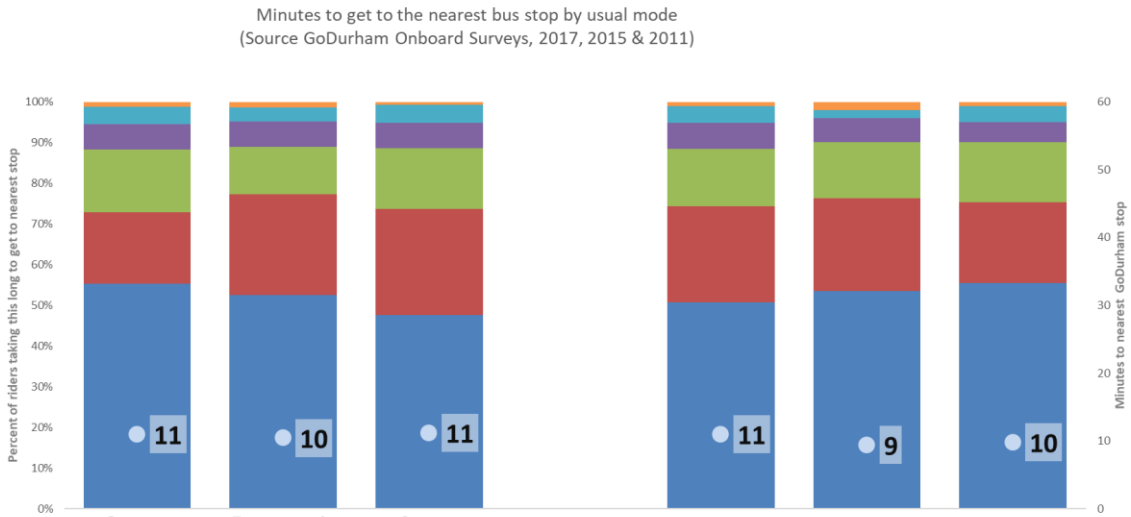
Minutes to Get to the Nearest Bus Stop Using Usual Mode to the Stop

The mean time to the bus stop by all modes is 11 minutes. The tendency is for those using a vehicular mode to require more time. For example, walking averages 8.9 minutes, but being dropped off averages 15 minutes.

The data are not displayed in the chart above, but there is very little difference among the less frequent and more frequent riders in the average minutes to the bus stop. The one to three-day riders and the seven-day riders average 11 minutes while the four to six-day riders average only slightly less, 10 minutes.

The reader should keep in mind that while riders are likely to be fairly accurate in this response, it is a perception, and not an independent measurement of elapsed time.

Figure 9 Minutes to the GoDurham Bus Stop



	One to three days	Four to six days	Seven days	2017	2015	2011
More than 60	1%	1%	1%	1%	2%	1%
Between 31 and 60	4%	4%	4%	4%	2%	4%
Between 21 and 30	6%	6%	6%	6%	6%	5%
Between 11 and 20	15%	12%	15%	14%	14%	15%
Between 5 and 10	18%	25%	26%	24%	23%	20%
5 or less	55%	52%	48%	51%	54%	56%
Avg minutes to stop	11.0	10.4	11.2	11.0	9.4	9.8

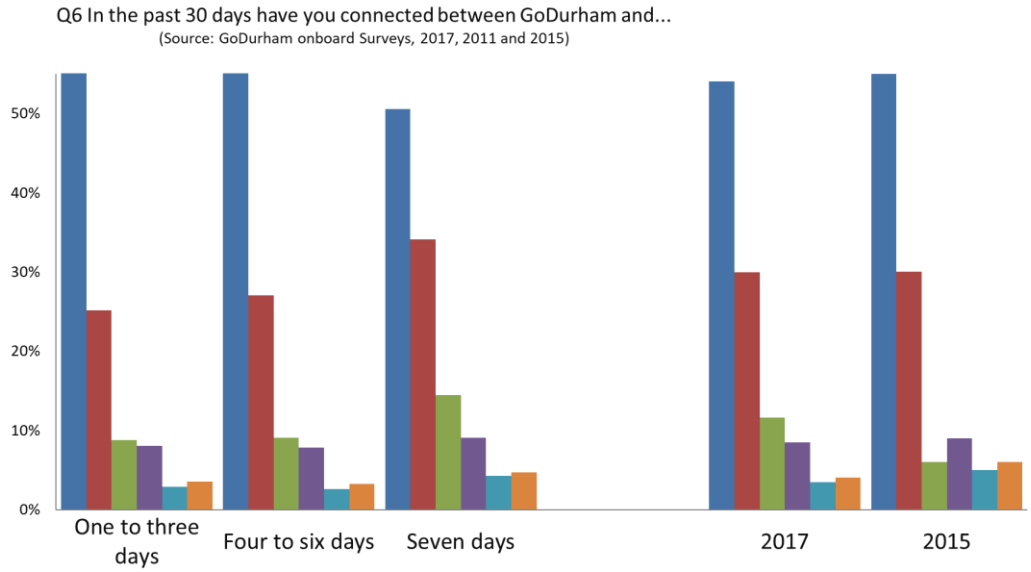
Minutes to the GoDurham Bus Stop

Using the mode-to-bus-stop they most often use, approximately half (51%) of the riders take five minutes or less to get to their bus stop. This is slightly fewer than in 2015 (54%) or 2011 (56%)[3]. Another 24% said it takes from six to ten minutes. Thus, three fourths (75%) of riders said they are ten or fewer minutes from a bus stop.

The mean time to the stop for all riders is 11 minutes, up somewhat from 9 minutes in 2015, and 10 minutes in 2011.

[3] The number of minutes in the unprocessed responses contain a few responses that are unreasonable in the normal course of activity, responses such as 395 minutes or 120 minutes. While these are possible, they have to be out of the ordinary and probably represent people who use GoDurham only at the end of a long trip by air, rail, or bus. All responses greater than 60 minutes have been recoded as 60 minutes for purposes of the charts in this section.

Figure 10 Bus Systems Used in Past Thirty Days



	One to three days	Four to six days	Seven days	2017	2015
None-GoDurham only	56%	59%	51%	54%	55%
GoTriangle	25%	27%	34%	30%	30%
GoRaleigh	9%	9%	14%	12%	6%
Duke Transit	8%	8%	9%	9%	9%
Amtrak	3%	3%	4%	4%	5%
Greyhound/Trailways/Megabus	4%	3%	5%	4%	6%

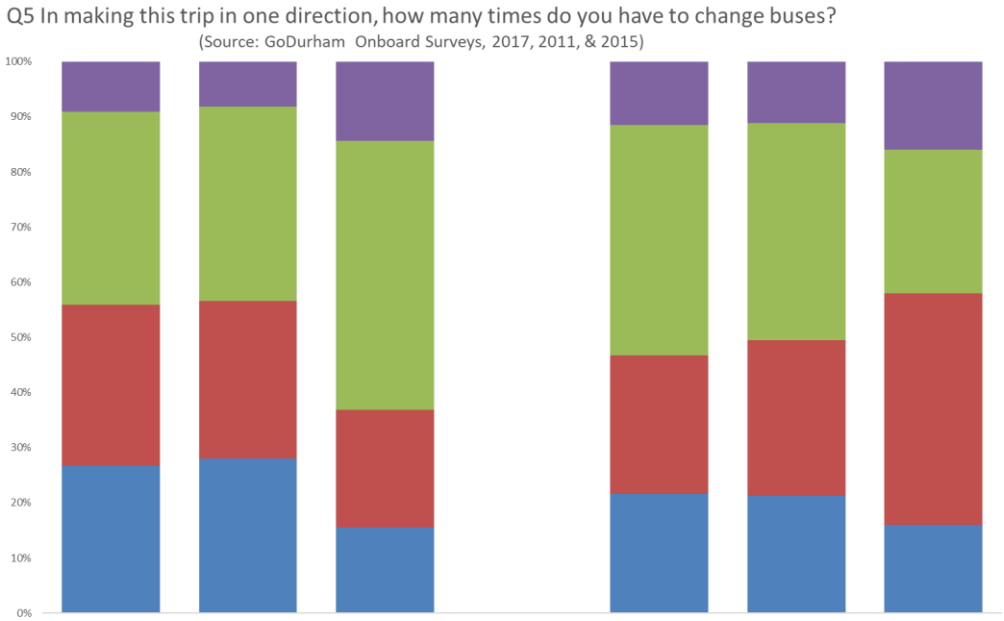
Use of Other Area Bus Systems

More than half of all GoDurham riders (54%) indicate that they have used only GoDurham and have not connected between GoDurham and other local systems in the previous thirty days. This is statistically the same as in 2015 (55%). However, many riders (30%, same as in 2015) said they have used GoDurham in conjunction with GoTriangle, and another 12% GoRaleigh, 9% Duke Transit, 4% Greyhound, Trailways or Megabus, and 4% AMTRAK. Except for GoRaleigh, which increased from 6% to 12%, these figures are essentially identical to those of 2015[4].

For all segments in 2017, GoTriangle is the system accessed by more GoDurham riders than any other local system. Seven-day riders were somewhat more likely than others to say they have used GoTriangle (34%) or GoRaleigh (14%) to access GoDurham.

[4] Figures from the 2011 study excluded here because they are not strictly comparable because the question in that survey was whether people had "ever used" these services in conjunction with GoDurham, while in both 2015 and 2017 the question involved the prior thirty days.

Figure 11 Number of Changes of Bus in Current Trip



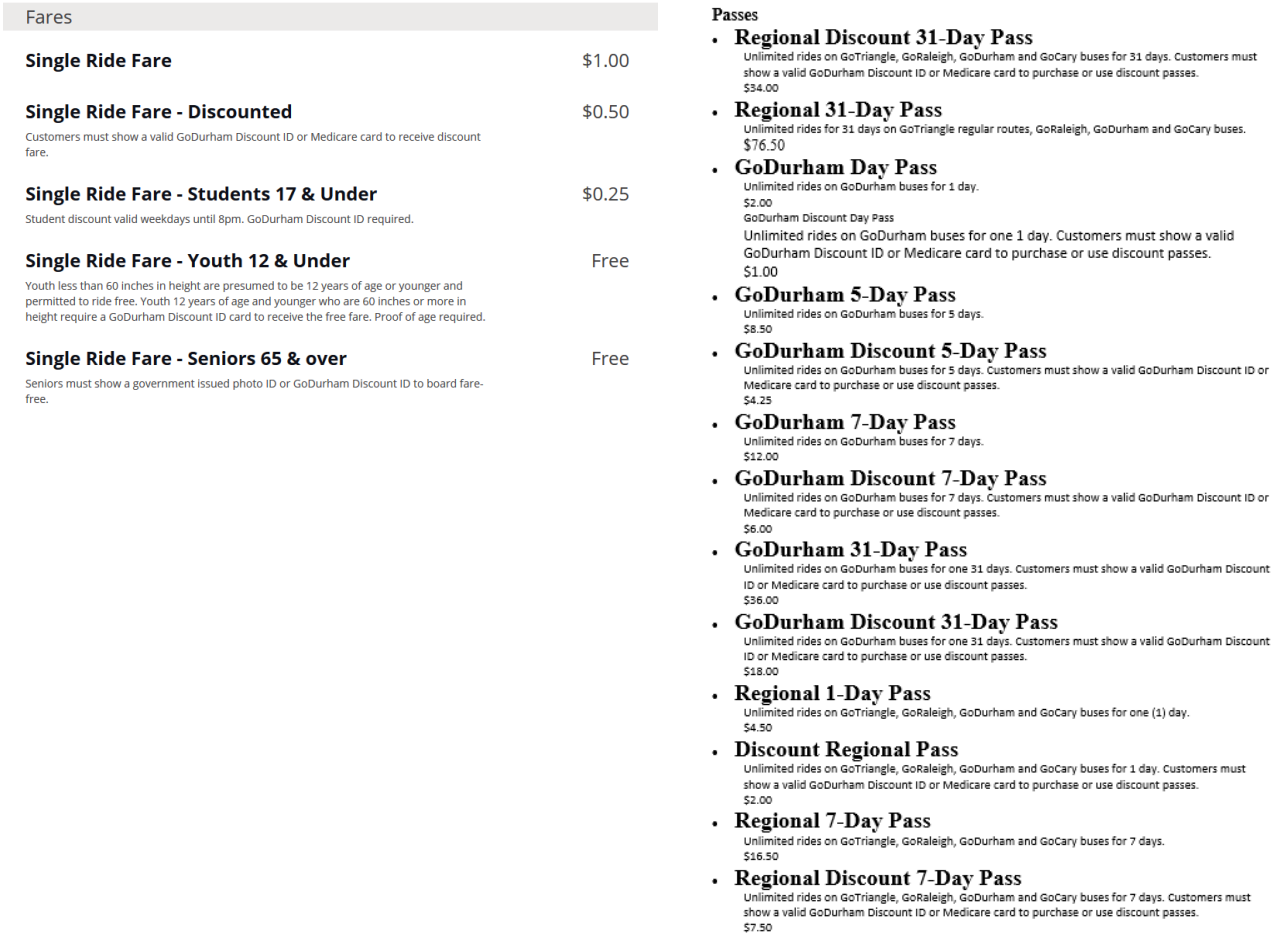
	One to three days	Four to six days	Seven days	2017	2015	2011
Three of more changes of bus	9%	8%	14%	11%	11%	16%
Two changes of bus	35%	35%	49%	42%	39%	26%
One change of bus	29%	29%	21%	25%	28%	42%
No changes of bus	27%	28%	16%	22%	21%	16%

Changing Buses During the Trip

Riders were asked how often they change buses during their current trip. Figure 11 shows that rate has been fairly consistent between 2015 and 2017. However, between 2011 and 2015, the rate of changing buses during a trip decreased from 84% to 79%%. In 2017, 22% take trips that do not require a change while 78% do change, essentially the same percentages as in 2015. A fairly high rate is consistent with the fact that the route structure is designed to rely on transferring through the central transfer facility at Durham Station, and because so many nearby systems connect with GoDurham.

As one would expect, the seven-day intensive users are more likely than other segments to need to change buses during a trip: 84% compared to 72% of four to six-day riders and 73% of occasional riders. They also tend to be more transit dependent than the other segments and must use GoDurham for all types of trips to many locations more often than other riders, thus often requiring more complex routings for a single tirp.

Figure 12 GoDurham Fares at the Time of the Survey



Fares

Single Ride Fare	$1.00
Single Ride Fare - Discounted Customers must show a valid GoDurham Discount ID or Medicare card to receive discount fare.	$0.50
Single Ride Fare - Students 17 & Under Student discount valid weekdays until 8pm. GoDurham Discount ID required.	$0.25
Single Ride Fare - Youth 12 & Under Youth less than 60 inches in height are presumed to be 12 years of age or younger and permitted to ride free. Youth 12 years of age and younger who are 60 inches or more in height require a GoDurham Discount ID card to receive the free fare. Proof of age required.	Free
Single Ride Fare - Seniors 65 & over Seniors must show a government issued photo ID or GoDurham Discount ID to board fare-free.	Free

Passes

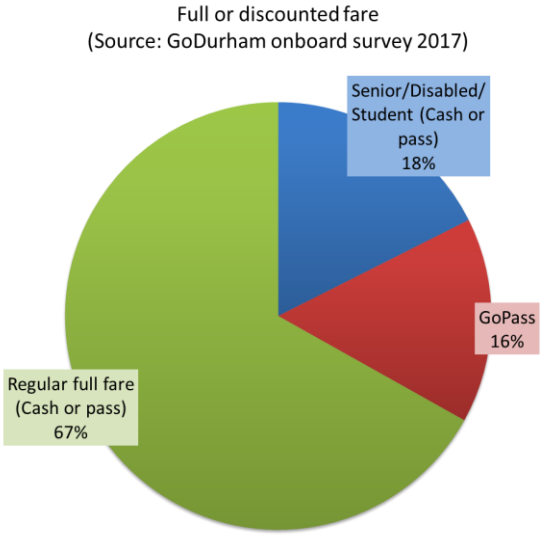
- **Regional Discount 31-Day Pass**
  Unlimited rides on GoTriangle, GoRaleigh, GoDurham and GoCary buses for 31 days. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $34.00
- **Regional 31-Day Pass**
  Unlimited rides for 31 days on GoTriangle regular routes, GoRaleigh, GoDurham and GoCary buses.
  $76.50
- **GoDurham Day Pass**
  Unlimited rides on GoDurham buses for 1 day.
  $2.00
  GoDurham Discount Day Pass
  Unlimited rides on GoDurham buses for one 1 day. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $1.00
- **GoDurham 5-Day Pass**
  Unlimited rides on GoDurham buses for 5 days.
  $8.50
- **GoDurham Discount 5-Day Pass**
  Unlimited rides on GoDurham buses for 5 days. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $4.25
- **GoDurham 7-Day Pass**
  Unlimited rides on GoDurham buses for 7 days.
  $12.00
- **GoDurham Discount 7-Day Pass**
  Unlimited rides on GoDurham buses for 7 days. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $6.00
- **GoDurham 31-Day Pass**
  Unlimited rides on GoDurham buses for one 31 days. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $36.00
- **GoDurham Discount 31-Day Pass**
  Unlimited rides on GoDurham buses for one 31 days. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $18.00
- **Regional 1-Day Pass**
  Unlimited rides on GoTriangle, GoRaleigh, GoDurham and GoCary buses for one (1) day.
  $4.50
- **Discount Regional Pass**
  Unlimited rides on GoTriangle, GoRaleigh, GoDurham and GoCary buses for 1 day. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $2.00
- **Regional 7-Day Pass**
  Unlimited rides on GoTriangle, GoRaleigh, GoDurham and GoCary buses for 7 days.
  $16.50
- **Regional Discount 7-Day Pass**
  Unlimited rides on GoTriangle, GoRaleigh, GoDurham and GoCary buses for 7 days. Customers must show a valid GoDurham Discount ID or Medicare card to purchase or use discount passes.
  $7.50

GoDurham Fares at the Time of the Survey

The table above, copied from the GoDurham website[5], displays the several types of pass media and special fares available at the time of the survey and 2017. In addition to the fares listed, the GoPass is accepted from riders affiliated with certain institutions.

[5] Source of fare information: http://data.durhamnc.gov/fares.cfm

Figure 13 Full or Discounted Fare?



Type of Fare Used

GoDurham fares can be broken down into three broad categories as shown in Figure 13, a full or regular fare, a discounted fare, and the GoPass. Rather than breaking the fares down between cash payment and the use of passes, this categorization focuses on the level of the fare. There are two reasons to break the fares down in this manner. First, the distinction between discounted and full fares is inherently important. But in addition, as a practical matter, transit customers have a difficult time when responding to a survey question about how they paid their fare, in distinguishing between paying cash for a day-pass on the bus or paying a cash fare. In practice, in the survey results, this means that the cash-fare response tends to be inflated and the day-pass response to be deflated. It is thus more meaningful to focus on other aspects of the fare structure than a cash versus pass distinction.

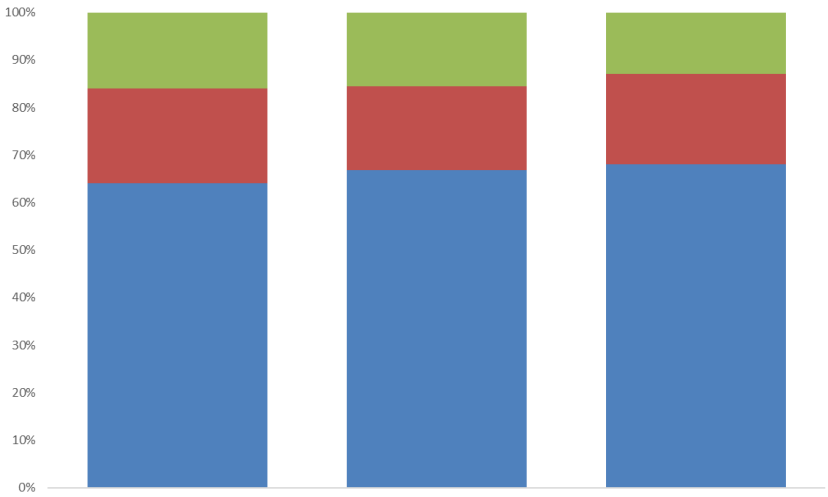
The largest percentage of GoDurham riders (67%) paid a regular full fare in the form of cash or a pass. Another 18% paid a discounted fare either in cash or with a pass. This includes a senior free fare (11%) and a student fare (7%). Finally, 16% use a GoPass, a percentage which has grown from 3% in 2011 and 13% in 2015.

The GoPass is a uniquely subsidized regional transit pass offered to employees and tenants by an employer, property manager, or developer. Characteristics of the GoPass are:

- Ride fare-FREE for a year on all transit routes in the Triangle with any agency, for commuting to and from work.
- Employer or other pass provider (property manager or developer) pays only for actual boardings – from 50-55% of published fare.
    - 50% of cost year 1
    - 52.5% of cost year 2
    - 55% of cost year 3 and beyond
    - Employer may charge an annual administrative fee,
    - but cannot pass other costs along to employee

Figure 14 Full or Discounted Fare, 2015 and 2017

Full or discounted fare
(Sources: GFI Record from GoDurham, GoDurham onboard surveys, 2015 and 2017)

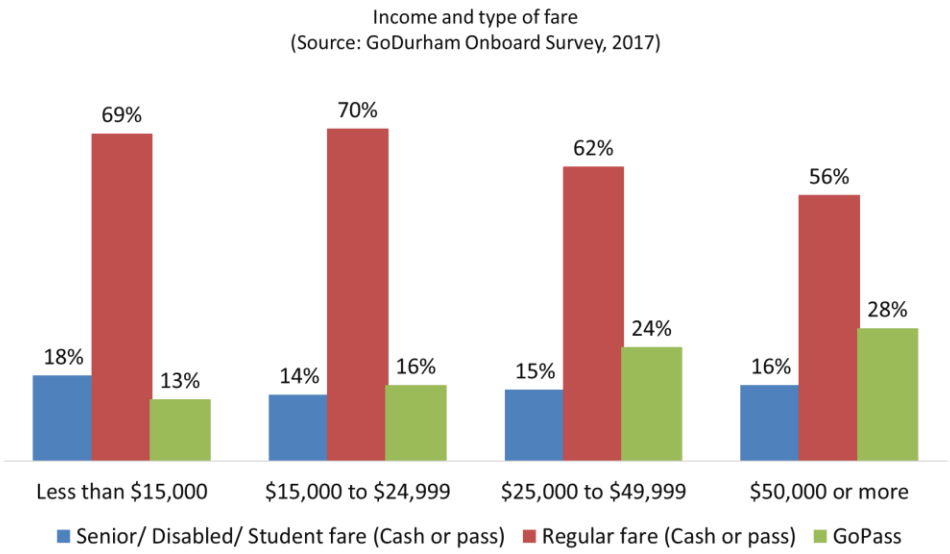


	GFI 2017	2017	2015
GoPass	16%	16%	13%
Senior/Disabled/Student (Cash or pass)	20%	18%	19%
Regular full fare (Cash or pass)	64%	67%	68%

Full or Discounted Fare, 2015 and 2017

The only significant change in the three fare types between 2015 and 2017 is that the use of the GoPass has increased from 13% to 16%. Comparison to the GFI record for 2017 confirms that the survey data are reasonable in this respect.

Figure 15 Income and Type of Fare



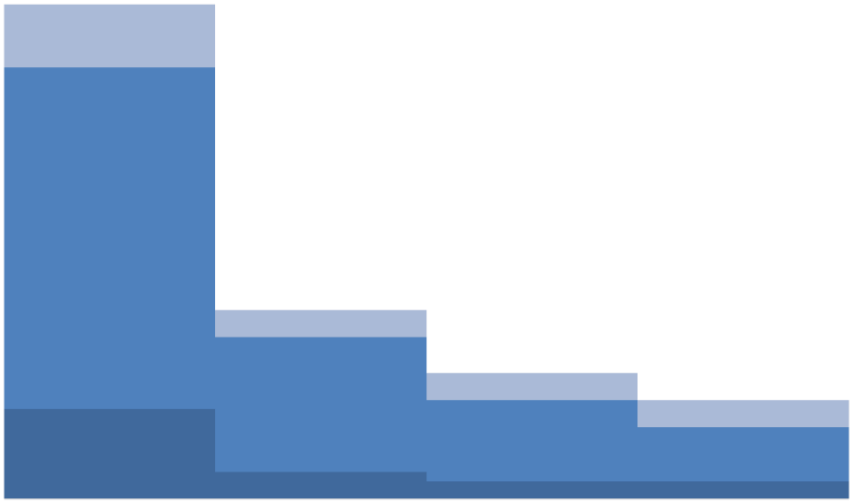
Income and Type of Fare

Although discounted fares are aimed at seniors, the disabled, and students, and not exclusively aimed at low income populations, it may be helpful to understand the relationship between household income and the use of discounted fares.

Essentially Figure 15 shows that the use of discounted fares for seniors, the disabled, and students show little difference across income categories, varying only between 14% and 18%. However, the use of full fares declines and the use of the GoPass increases with income level when income has reached at least $25,000.

Figure 16 Distribution of Type of Fare by Income Level among Total Ridership

Q7 Q41 Percent of riders in all income groups paying full or discounted fares
(Source: GoDurham onboard survey 2017)



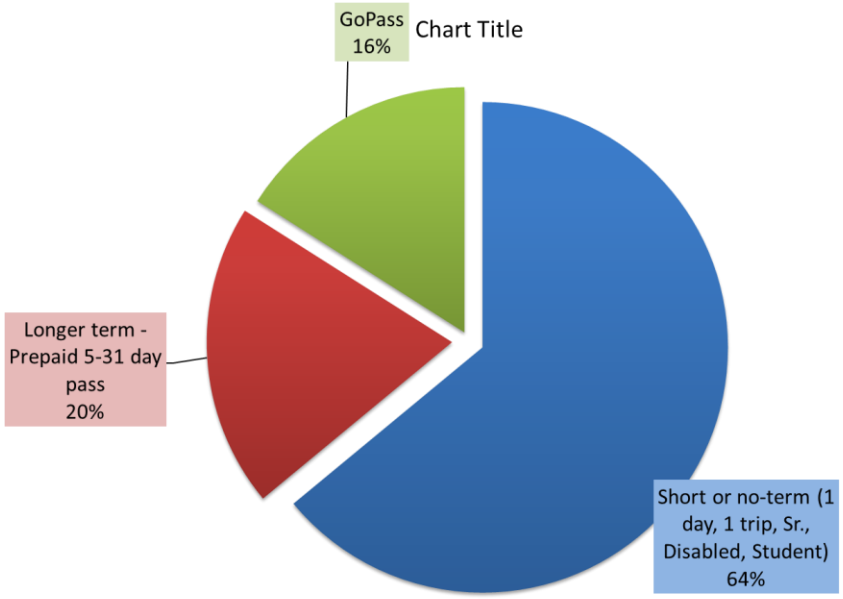
	Less than $15,000	$15,000 to $24,999	$25,000 to $49,999	$50,000 or more
GoPass	7%	3%	3%	3%
Regular full fare (Cash or pass)	38%	15%	9%	6%
Senior/Disabled/Student (Cash or pass)	10%	3%	2%	2%

Distribution of Type of Fare by Income Level among Total Ridership

The percentages in Figure 16 apply to the entire customer base. For example, 7% of all GoDurham customers have household incomes of less than $15,000 and use a GoPass, while 3% have incomes of $50,000 or more and use a GoPass.

The largest single income group among the customers has incomes under $15,000 and pays full fare. Of the 18% of customers who use some type of discounted fare, 10% are concentrated in the lowest income level, but from 2% to 3% of all GoDurham customers fall into the income categories above that level since they are directed to categories of age, student status and disability, and not to income level.

Figure 17 Fare Structure in Time Perspective



Fare Structure in Time Perspective

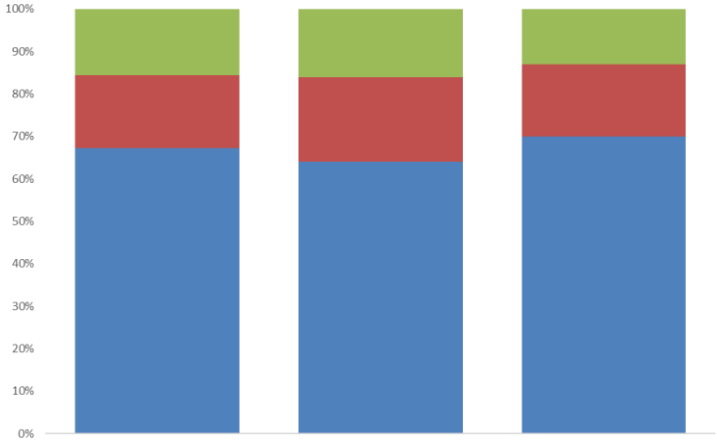
Another way to conceptualize the fare structure is to ignore discounting and to think of fare payment in terms of time. Is the fare prepaid, not just for or trip or one day, but for several days or a month? Or is it purchased for only a day or a trip, or is it a free fare, and thus independent of time constraints?

The former category is referred to here as "Longer term, prepaid," while the latter category is referred to as "Short or no-term." The "Longer term, prepaid" category includes all passes except the day pass. This includes the not only the 5 to 31 day passes, but also the Value Card (stored value) and the Regional Pass. The GoPass is a separate category, inherently a longer-term pass, but of a special type given the manner in which it is funded.

Breaking the GoDurham fares down in this way finds that 64% of fares are of the "Short or no-term" type, while 20% are of the "Longer-term, prepaid type." The balance, 16% are GoPass.

Figure 18 Fare Structure in Time Perspective, 2015 and 2017

Short-term, long-term, and GoPass fares
(Sources: GFI Record from GoDurham, GoDurham Onboard Surveys, 2015 and 2017)

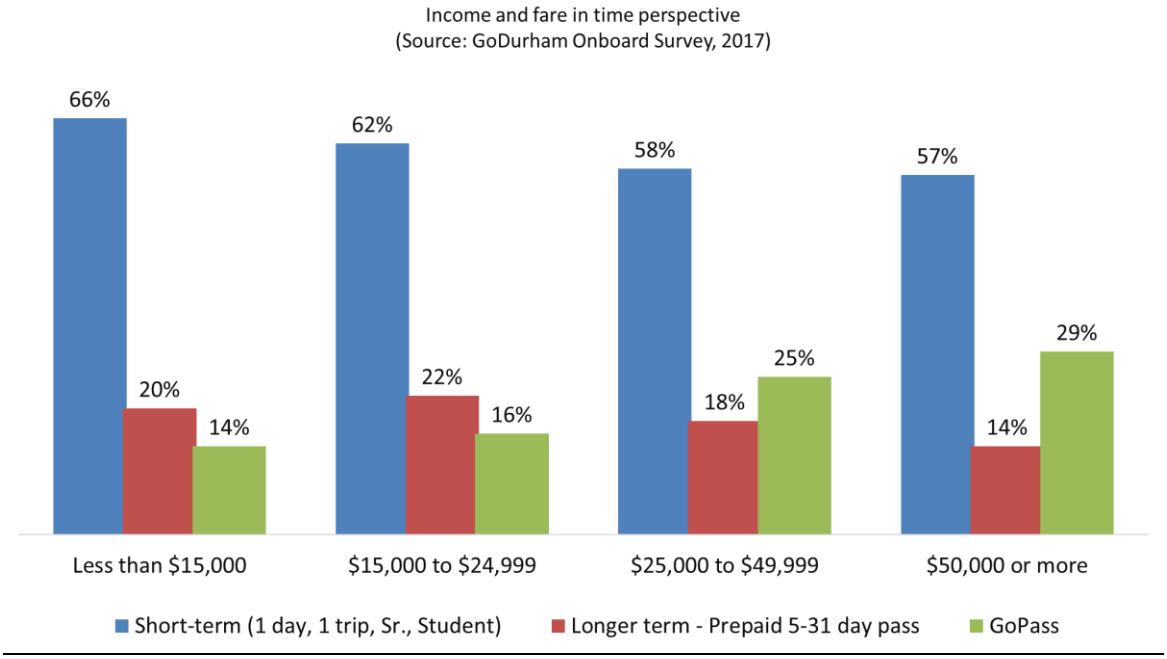


	GFI 2017	2017 Survey	2015 Survey
GoPass	16%	16%	13%
Longer term - Prepaid 5-31 day pass	17%	20%	17%
Short or no-term (1 day, 1 trip, Sr., Disabled, Student)	67%	64%	70%

Fare Structure in Time Perspective, 2015 and 2017

The distribution of short-term and longer-term fare media (and GoPass) has changed very little between 2015 and 2017, although as noted previously, the GoPass has increased from 13% to 16%. The similarity of the percentages to the GFI reports lends credence to the breakdown.

Figure 19 Fare in Time Perspective and Household Income



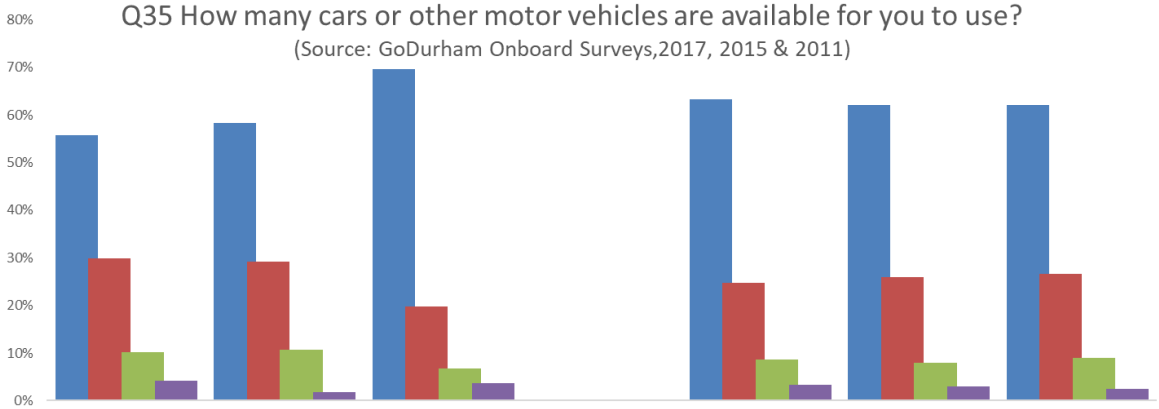
Fare in Time Perspective and Household Income

Lower income households are often risk-averse when it comes to making contingent purchases – in this case fare passes longer than a day. There is a rational and entirely reasonable reluctance to commit scarce funds in advance even for the benefit of obtaining a discount in the longer term. For this reason, one might expect that the lower the household income, the greater the tendency to use short-term fare payments.

While this tendency is visible in Figure 19, it is slight. While 66% of those customers with household incomes of less than $15,000 use short term means of fare payment, 11% fewer (57%) of those with incomes of $50,000 or more use the short or no-term fare payment methods. There is a relationship, but it is not very strong.

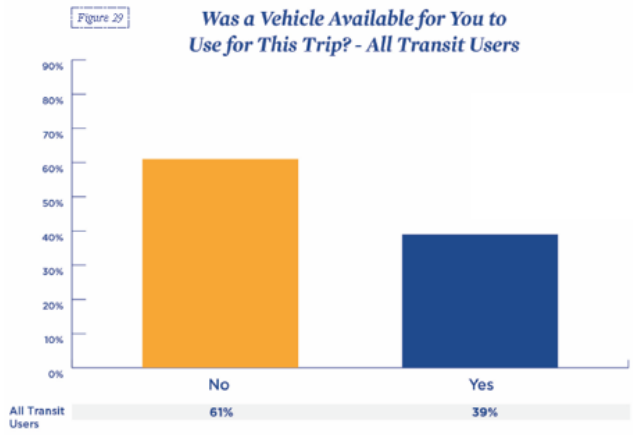
The primary difference among income levels in this regard is similar to what was observed in Figure 15. It involves the GoPass. The use of the GoPass increases with income level, while the use of both short-term fares and longer-term passes decline. While 20% of the lowest income group use one of the longer-term passes, only 14% of the highest income group uses them. And while 14% of the lowest income group use a GoPass, 29% of the highest income group do so.

Figure 20 Mode Choice



	One to three days	Four to six days	Seven days	2017	2015	2011
None	56%	58%	70%	63%	62%	62%
One	30%	29%	20%	25%	26%	27%
Two	10%	11%	7%	9%	8%	9%
Three or more	4%	2%	4%	3%	3%	2%

Figure 21 Vehicle Availability (APTA "Who Rides Public Transportation," 2016, a CJI Research Report)



Mode Choice

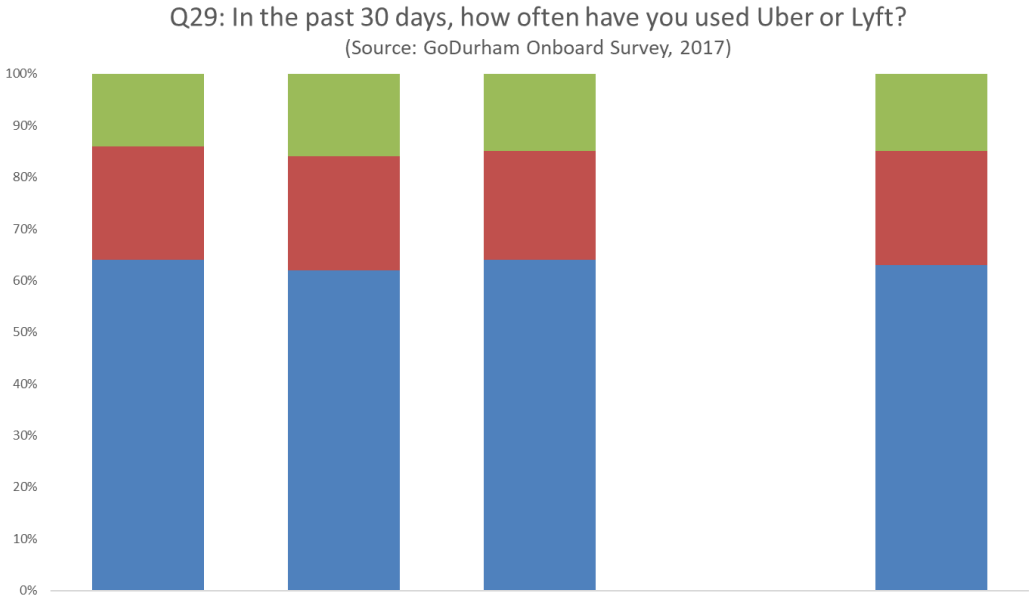
For most riders, a primary reason to use public transportation is a lack of an alternative because of low income, or in some cases, by choice. The percentage of riders lacking any vehicle has been consistent across surveys. In 2017, 63%, and in 2011 and 2015, 62% of the riders indicated that they have no vehicle available for their use. The distribution of one or more vehicles has remained very stable also.

Nationally, an analysis conducted by CJI Research for APTA of more than 200 onboard survey reports indicated that among bus riders, 61% lacked a vehicle for the trip they were making when surveyed[6].

The rider segment most likely to have mode choice is the one to three-day occasional riders, among whom 44% have at least one vehicle available to them. As in most studies of riders in all-bus systems, it is the most intensive users of transit who are the most transit-dependent (70% lack an available vehicle).

[6] http://www.apta.com/resources/reportsandpublications/Documents/APTA-Who-Rides-Public-Transportation-2017.pdf

Figure 22 Use of Uber or Lyft in Past Thirty Days



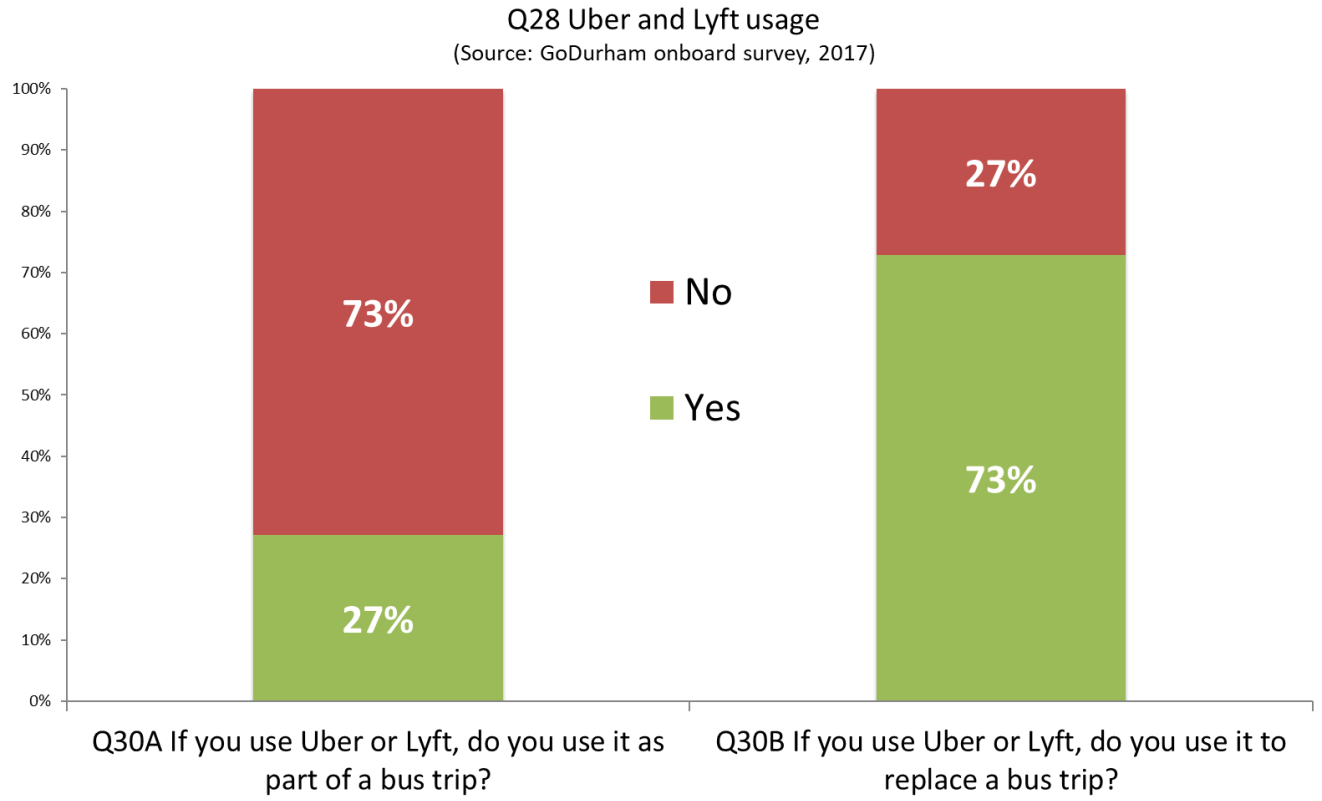
	One to three days	Four to six days	Seven days	2017
Four or more times	14%	16%	15%	15%
One to three times	22%	22%	21%	22%
Not at all	64%	62%	64%	63%

Use of Uber or Lyft in past thirty days

Mode choice is no longer simply about owning or leasing a personal vehicle. Since 2015, car sharing has become mainstream. Of all GoDurham riders, 37% say they have used a car sharing service in the past thirty days, including 22% who have used one of them from one to three times and 15% who have used them four of more times. The use of Uber and Lyft is similar across the three segments, although one might have supposed that the four to six-day riders, who have slightly higher incomes, might be more willing and able to absorb the cost[7].

[7] In future surveys it may be useful to determine if riders using shared rides are doing so with dependents because that may be no more costly than multiple bus fares.

Figure 23 Use of Uber and/or Lyft to Supplement or Replace a Trip on GoDurham



Use of Uber and/or Lyft to Supplement or Replace a Trip on GoDurham

Figure 22 indicated that 37% of GoDurham riders had used Uber or Lyft in the past thirty days. How have those trips interacted with GoDurham? Figure 23 provides some answers.

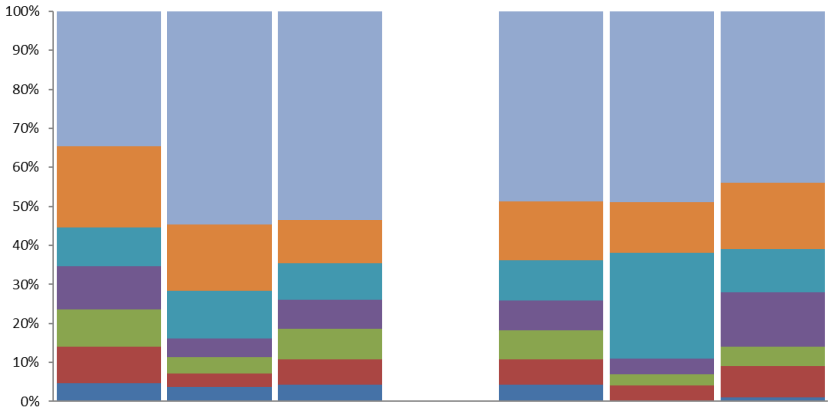
First, 27% of the 37% (i.e., 10% of the ridership) who have used a ride-sharing service, say that they have used it as part of a bus trip. Have they been using it to get to the bus stop? Analysis shows that of all riders, 2% say they have used Uber/Lyft to get to the bus stop, while 35% have used Uber/Lyft but not to get to the bus stop. The balance, 63% have not used Uber/Lyft in the past thirty days. Of course, others may have used ridesharing not to solve the first-mile problem, but instead, the challenge of the last mile from the stop to the destination. In future surveys it may be worthwhile to examine the first/last mile matter more closely.

Of greater importance is that of those who have used Uber/Lyft in the past thirty days, 73% say they have used ridesharing to replace a bus trip. This amounts to 27% of the total ridership, enough to have a meaningful impact on ridership numbers, depending on the number of shared ride trips they make.

Demographics

Figure 24 Employment of Riders

Q32 Employment
(Source: GoDurham Onboard Surveys, 2017, 2015 & 2011)



	One to three days	Four to six days	Seven days	2017	2015	2011
Employed outside home	35%	55%	53%	49%	49%	44%
Student	21%	17%	11%	15%	13%	17%
Student and employed	10%	12%	9%	10%	27%	11%
Unemployed	11%	5%	7%	8%	4%	14%
Homemaker	10%	4%	8%	7%	3%	5%
Retired	9%	3%	7%	7%	4%	8%
Employed at home	5%	4%	4%	4%	0%	1%

Employment of Riders

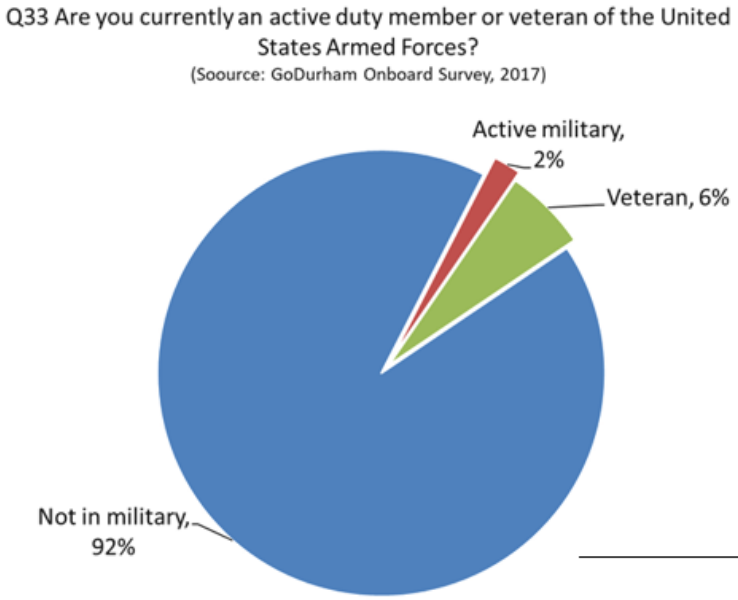
Respondents were asked about their employment. In 2017, a total of 59% of GoDurham riders reported being employed outside the home or being students and employed. This represents a decrease from the same combined figure of 76% in 2015. However, it appears now that the 2015 figure was exceptional because the 2017 figures are quite similar to those of 2011. The difference between 2015 and 2017 was due entirely to the percent of students also employed. That percentage rose from 11% in 2011 to 27% in 2015 then fell to 10% in 2017 for unknown reasons. This fluctuation suggests that there was probably some kind of temporary fluctuation possibly related to the calendars of the many universities in the area, or for other reasons[8].

Meanwhile, the percentage saying they were employed outside the home (but not also students remained constant at 49% between 2015 and 2017.

One notable change from 2015 in the 2017 results is a statistically significant increase in the percentage of riders employed at home from 1% in 2011 to 4% in 2017. The odd thing about this is that one would expect that the percent of less frequent riders in this category would be greater than the other segments. This is, however, not the case. The finding does suggest that the at-home worker is not necessarily less likely to use public transit.

[8] Month survey was conducted: 2011, April; 2015, March; 2017, October

Figure 25 Armed Forces Within the Ridership



	Q33 Active duty/Veteran status			
		Active military	Veteran	Not in military
Q31 Age	18 thru 24	20%	5%	29%
	25 thru 34	16%	10%	26%
	35 thru 44	39%	11%	15%
	45 thru 54	10%	28%	15%
	55 or older	14%	47%	15%
Q37 Gender	Male	53%	86%	50%
	Female	47%	14%	50%

Armed Forces Within the Ridership

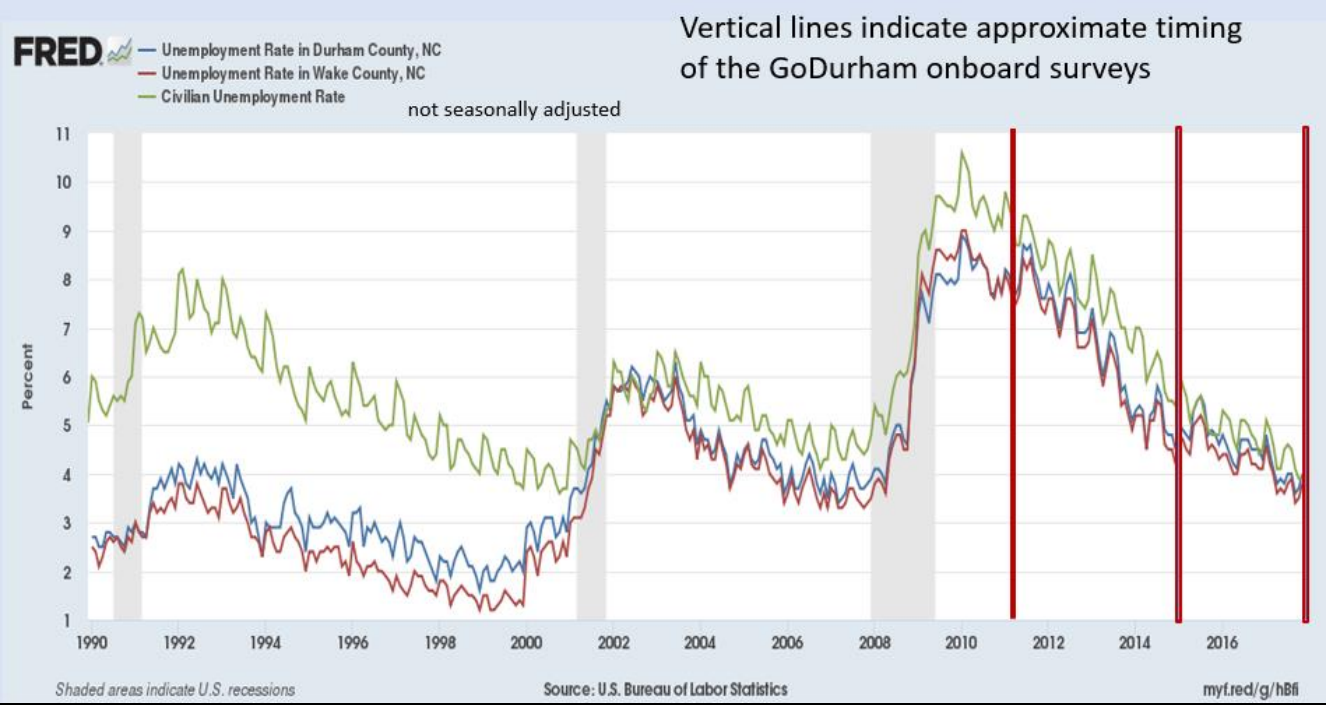
A total of 8% of the ridership is either active duty military (2%) or veterans (6%), not an insignificant share of the ridership.

Although the sub-samples of active duty and veterans are small (unweighted, 67 and 153 respondents, respectively), we can learn some things about them from their responses. As one would expect, the veterans are older than the active duty respondents. While a total of 75% of the veterans are 45 or older, only 24% of the active duty personnel are in that age range. Conversely, 75% of the active duty respondents are younger than 45.

However, both the active duty personnel and veterans tend to be older than the rest of the ridership. While 55% of the non-military-affiliated ridership is younger than 35, only 15% of veterans and 36% of the active duty personnel are in that young age group.

The changing face of the military appears clearly in the gender breakdown of the active duty and veteran personnel. While the men and women are almost evenly split within the ranks of the active duty respondents (53% male, 47% female), the veterans of service in an earlier period are predominantly men (86% male, 14% female).

Figure 26 Unemployment Rate in US and Durham and Wake Counties

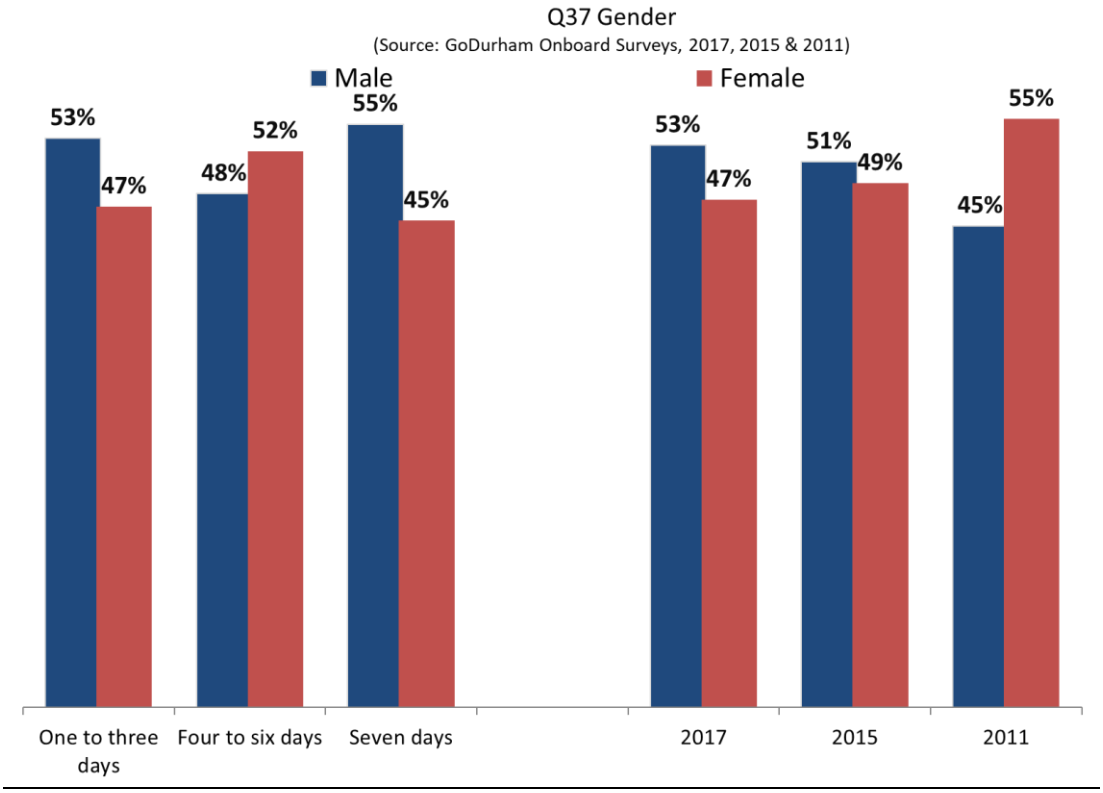


Unemployment Rate in US and Durham and Wake Counties

The substantial increase in employment of GoDurham riders outside the home between 2011 and 2015 (from 55% in 2011 to 76% in 2015) including employed students in both years, probably was reflective of the declining unemployment rate at the time shown above. However, though the unemployment rate continued to decline, the total employment of the ridership returned to 2011 levels.

The chart is from the US Bureau of Labor Statistics and was obtained through the Federal Reserve Board of St Louis.

Figure 27 Rider Segment by Gender



Gender of the Riders

The gender balance of the riders has fluctuated from survey to survey. Of all riders in 2011, 55% were women and 45% were men. The disproportion then changed and in 2015 was virtually equal, with 49% female and a slight majority, 51%, male. In 2017, the gender balance is approximately similar to 2015, with 53% male and 47% female.

However, the gender balance differs among the rider segments, with the most and least frequent riders identifying more often as male than female (55% and 53%, respectively) , but with more (52%) of the four to six-day riders identifying as female than male.

Figure 28 Gender of the Ridership, 2017

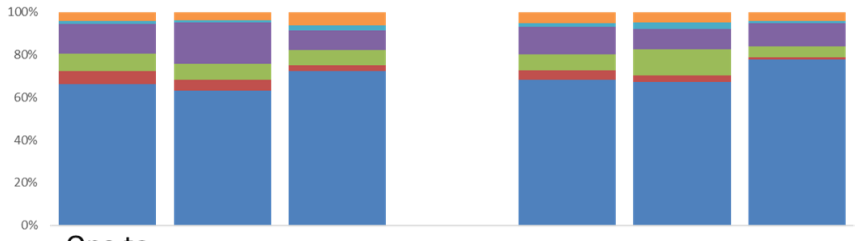
Q37 Do you identify as…	One to three days	Four to six days	Seven days	All respondents
Male	52.5%	47.1%	53.7%	51.7%
Female	46.2%	51.0%	44.8%	46.7%
Prefer not to answer	1.3%	1.9%	1.6%	1.6%

It is unusual in bus transit systems for men to outnumber women. Nationally, according to the APTA report cited earlier, among bus riders, 56% are women.

In 2015 and 2017, the gender question was changed from “Are you male or female?” to “Do you identify as…”. The responses included the option that the respondent preferred not to answer. Given that we cannot infer gender characteristics from that response, and to keep percentages consistent with the 2011 data, the latter response was excluded and gender was computed from only the responses “male” and “female.”

Figure 29 Ethnicity of Riders

Q38 Ethnicity
(Source: GoDurham Onboard Surveys, 2011, 2015 & 2017)



	One to three days	Four to six days	Seven days	2017	2015	2011
Other/multiracial	4%	4%	6%	5%	5%	4%
Native American	1%	1%	2%	2%	3%	1%
Caucasian	14%	19%	9%	13%	10%	11%
Hispanic	8%	8%	7%	7%	13%	5%
Asian	6%	5%	3%	4%	3%	1%
African American	66%	63%	72%	68%	67%	78%

Ethnicity of Riders

In measuring ethnicity, it is important to focus on self-identification by asking "Which do you consider yourself…?" and asking that respondents to note all descriptions that apply to them. In this way we tend to capture more of the overlap among groups. To present the data with consistency, however, it is important to note that the percentages of respondents offering more than one ethnic identity vary, making comparisons difficult. To simplify, we have recomputed the percentages such that they all sum to 100% of all categories mentioned.

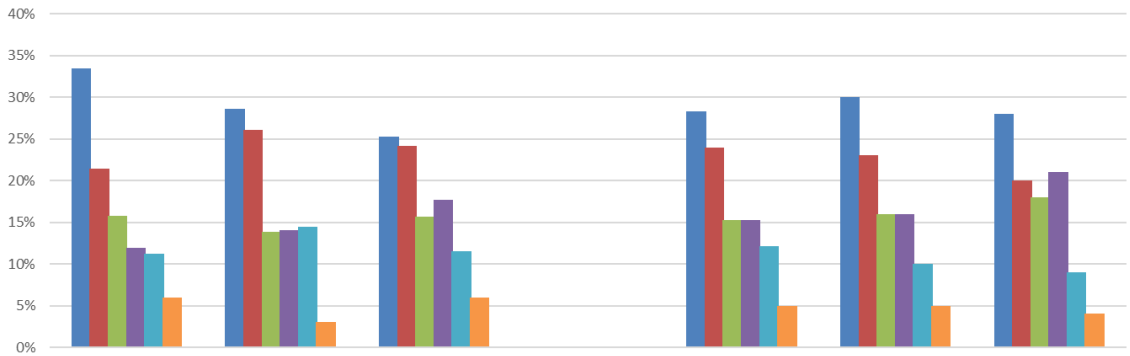
In 2017, just over two-thirds of the respondents (68%) identified themselves as African American. In 2015, the analogous figure was 67%, a substantial decrease from 2011 when it stood at 78%. Since ridership had grown during that period, this did not necessarily mean that fewer persons who identify as African American were using GoDurham, but only that the percentage had changed as other groups, especially Hispanics, increased.

The distribution of ethnicity differs somewhat among the rider segments, with seven-day riders considerably more likely than less frequent riders to identify as African American. Conversely, the one to three and four to six-day riders are considerably more likely than the seven-day riders to identify as Caucasian.

Figure 30 Age of Riders

Q31 Age

(Source: GoDurham Onboard Surveys, 2017, 2015 & 2011)



	One to three days	Four to six days	Seven days	2017	2015	2011
16 to 24	33%	29%	25%	28%	30%	28%
25 to 34	21%	26%	24%	24%	23%	20%
35 to 44	16%	14%	16%	15%	16%	18%
45 to 54	12%	14%	18%	15%	16%	21%
55 to 64	11%	14%	12%	12%	10%	9%
65 or older	6%	3%	6%	5%	5%	4%

Age of Riders

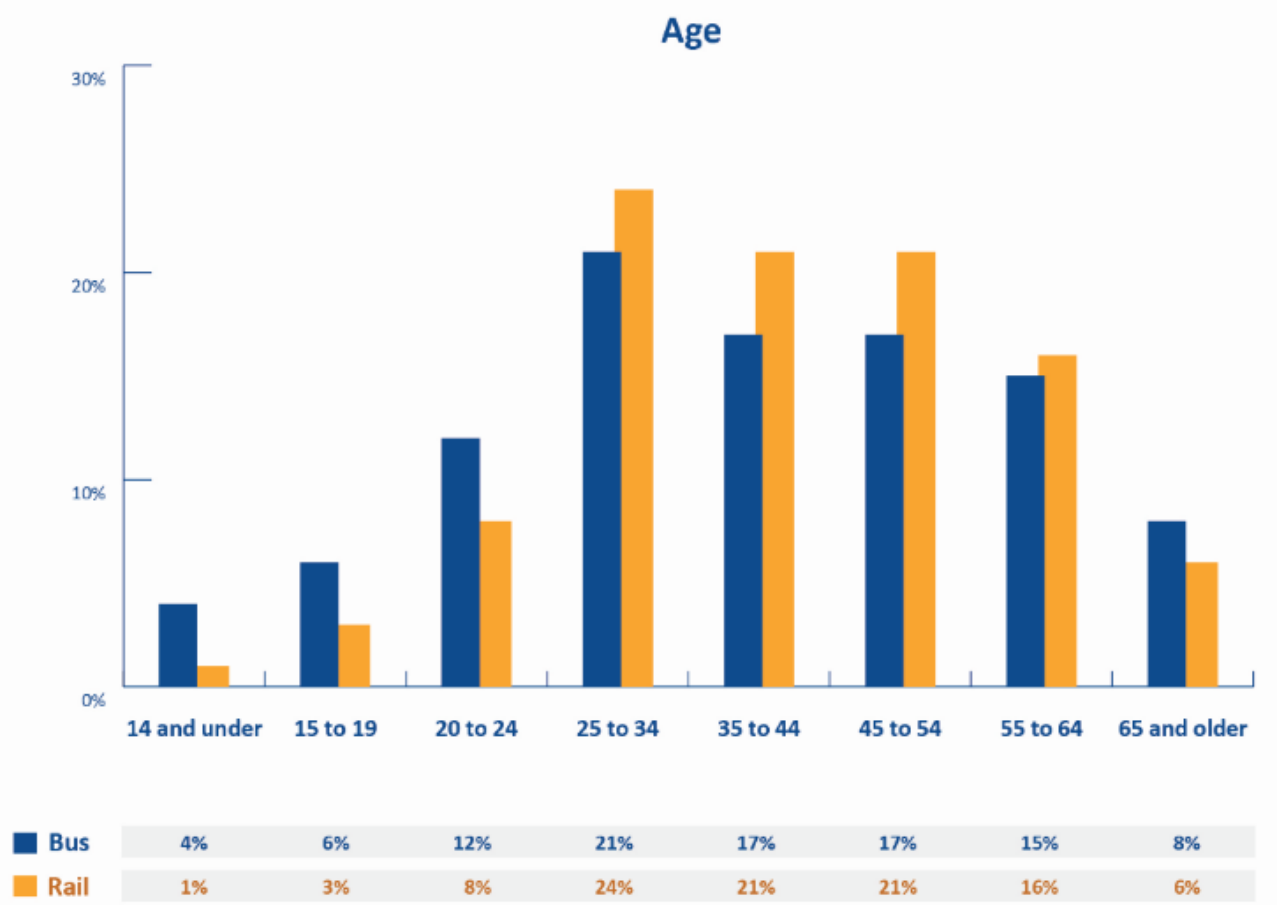
The age profile of GoDurham ridership has changed only minimally since 2015. The largest proportion of riders (52%) continues to be under 35 years of age, with 28% being 24 years old or younger, and 24% from 25 to 34. Only 5% in both 2015 and 2017 were in the 65 or older age group. Regarding the youngest age group shown in the chart (16 to 24), survey staff were instructed not to approach children who appeared to be under the age of sixteen[9]. Thus, it is likely that the total youthful ridership is somewhat larger than shown here.

The age distributions vary somewhat among the three rider segments. The most notable variation is that somewhat more of the one to three-day and four to six-day riders are in the youngest age group (33% and 29% respectively) compared to the seven-day riders (25%). This youthful age characteristic reflects the greater proportion of students in the one to three-day rider category that we saw earlier in Figure 24.

Figure 31 on the following page demonstrates that nationally, the age distribution among GoDurham riders is similar to that of bus riders in general.

[9] The reasons are both a matter of the propriety of an adult stranger, albeit a legitimate interviewer, approaching a child, but also because 16 is a reasonable estimate of the age at which a respondent can give meaningful responses to s a survey such as this. The log forms recorded the fact that there were 199 customers on the sampled trips who appeared too young to approach.

Figure 31 Age Profile of Transit Riders Nationally (APTA, 2016)



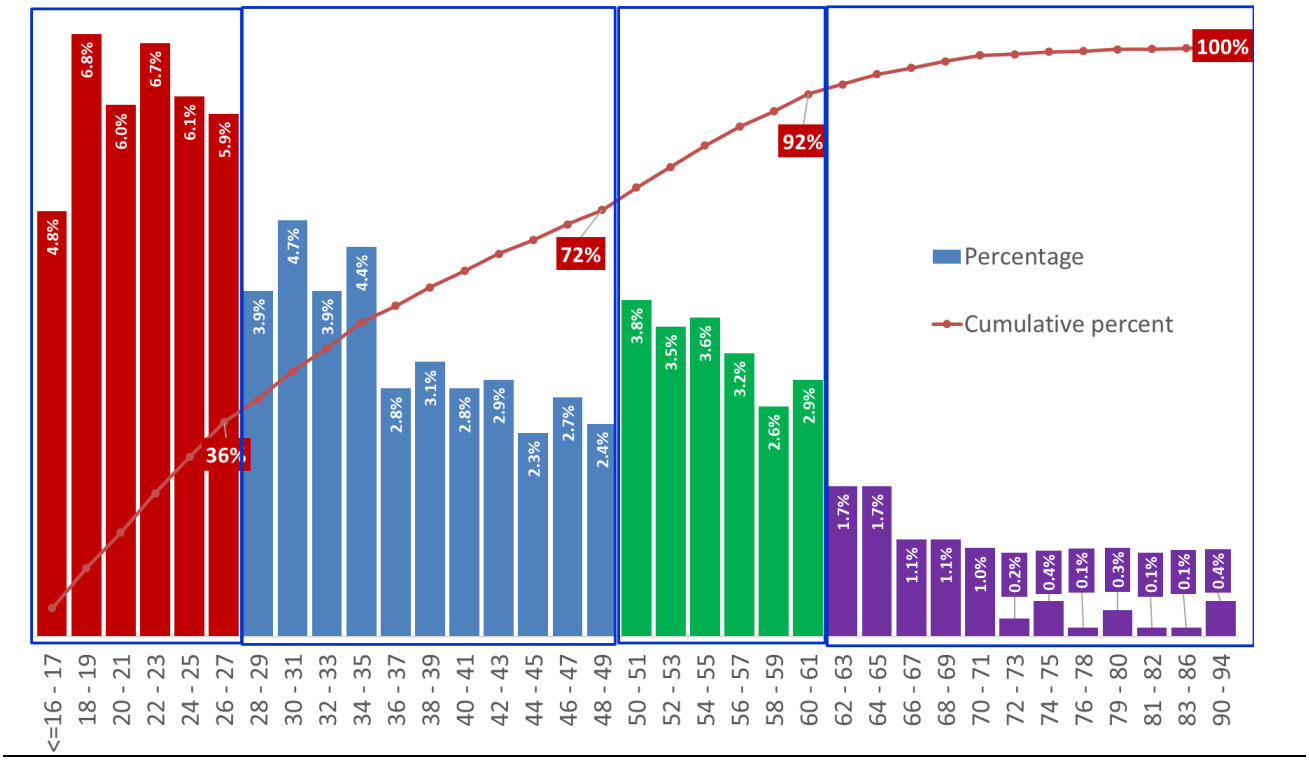
Age Profile of Transit Riders Nationally (APTA, 2016)

The age profile of GoDurham riders is closely aligned with national norms for bus riders. Nationally:

- 22% of bus riders are under the age of 25, a percentage similar to the 28% of GoDurham riders.
- Another 21% are between 25 and 34, compared to GoDurham's 24%.
- Another 17% are between 35 and 44, compared to GoDurham's 15%
- Similarly, nationally, 17% are between 45 and 54 compared to 15% for GoDurham riders.
- The balance, 23% nationally and 17% for GoDurham, are 55 or older.

Figure 32 Age Profile of GoDurham Riders

Q31 Age Profile of GoDurham Riders
(Source: GoDurham Onboard Survey, 2017)



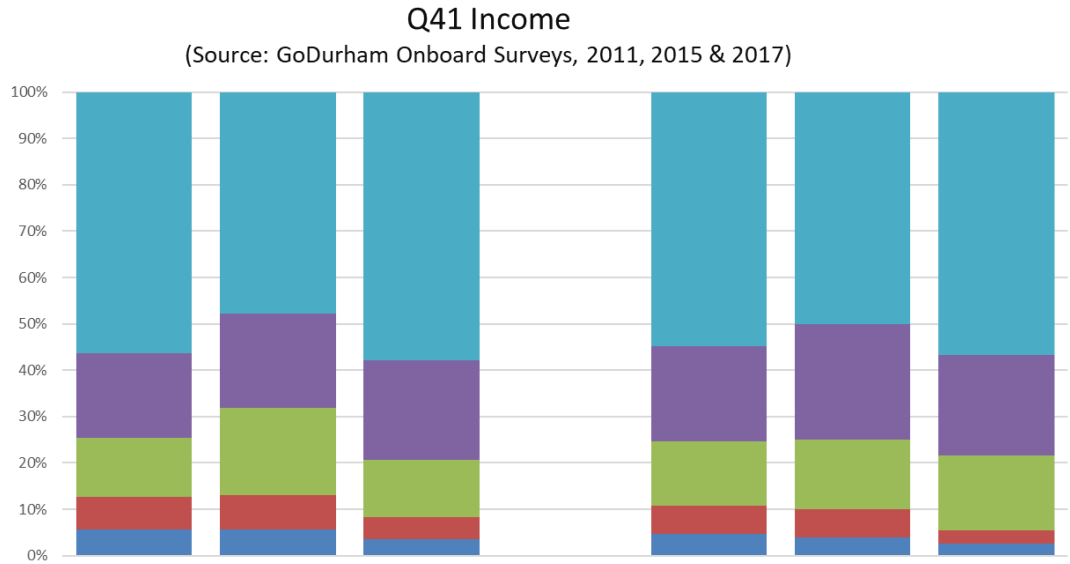
An Age Profile of GoDurham Riders

In several studies of transit riders, CJI has found that bus riders follow an age progression similar to that shown above in Figure 32. Generally, about one-third of ridership falls into a youthful cohort, young, often in school, preparing for work-life. The percentage of riders in each age group then suddenly drops off somewhere in the age range of 25 to 30. It then enters a slowly declining slope, not quite a plateau, which, for most transit systems we have studied, represents a life cycle period when most riders are in a career phase of life. The age-curve then flattens out as the riders, no longer so young, earn enough money to purchase a vehicle and move to the suburbs. At that point, the percent of ridership within each two-year age group remains quite stable throughout "middle-age." In most cases we have examined except GoDurham, this stable phase is uninterrupted and lasts until about the age of 55 or 60 after which the age profile again flattens as the ridership includes more and more retirees.

Uniquely in the case of GoDurham, however, there is a slightly larger cohort among the riders between that ages of 50 and 60 that creates a bump in the otherwise flat middle-age plateau. It is as if there had been some type of event that these riders had in common perhaps twenty years before in the late 1990's, that caused this age cohort to stay with the use of transit more often than their peers. Above the age of 60 or 61, as is true elsewhere, there is a sudden change as riders reach the age of 62.

It is not in the scope of this report, but it would be interesting, at a later time, to examine other characteristics of these age cohorts to determine whether they truly form differing markets that may have differing gender, income, ethnic, and employment characteristics, and whether they value the same or differing things in terms of transit system performance.

Figure 33 Income of Rider Households



	One to three days	Four to six days	Seven days	2017	2015	2011
Less than $15,000	56%	48%	58%	55%	50%	57%
$15,000 to $24,999	18%	20%	22%	20%	25%	22%
$25,000 $49,999	13%	19%	12%	14%	15%	16%
$50,000 to $74,999	7%	7%	5%	6%	6%	3%
$75,000 or more	6%	6%	4%	5%	4%	3%

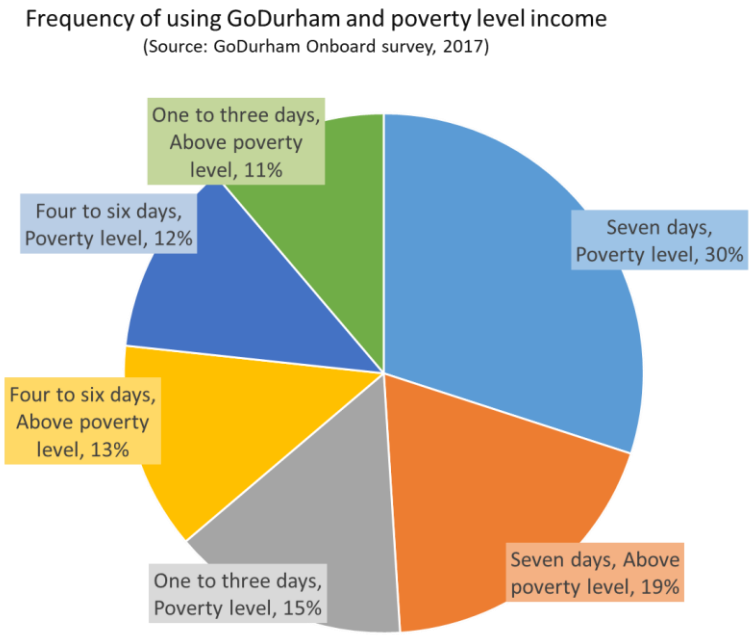
Income of Rider Households

In 2017, as in previous GoDurham surveys, most rider households have very low incomes. In 2017, 55% report household incomes of less than $15,000. Another 20% report their incomes as ranging from $15,000 to just under $25,000. Only 11% report incomes of $50,000 or more. These figures are essentially unchanged since 2015.

The percentage of riders with somewhat higher incomes, above $50,000, appears to have increased somewhat since 2011, however, with most of the increase coming between 2011 and 2015. While the cause is not entirely clear, GoTriangle staff pointed out in 2015 that the GoPass had, since 2011, been provided to people employed by Duke and other major employers. That fact is likely to have resulted in an increase in the number of salaried employees using GoDurham. For example, while in 2011, 57% reported incomes of less than $15,000, and 6% incomes of $50,000 or more, in 2015 the analogous figures were 50% and 10%. This percentage remained stable in 2017, with 11% reporting incomes of $50,000 or more.

The income distribution with the three levels of riding frequency does not vary greatly. However, as one would expect of those who hold jobs and use GoDurham to commute on a four to six-day basis (See Figure 6), the percent reporting incomes above $25,000 is somewhat greater among this segment.

Figure 34 Frequency of Riding and Poverty levels of Income as a Percentage of all GoDurham Riders



Frequency of Riding and Poverty Levels of Income

Many state and federal government programs condition benefits on poverty level household income. It is also a useful concept for purposes of understanding the real income levels of riders.

Poverty level is computed as a ratio of income to number of persons in the household. Riders were asked the number of persons living in their households (see Figure 35). That number was then related to household income. Because it is impractical to ask absolute income in a rider survey, midpoints of the several income ranges were used to approximate the dollar income needed to determine the ratio.

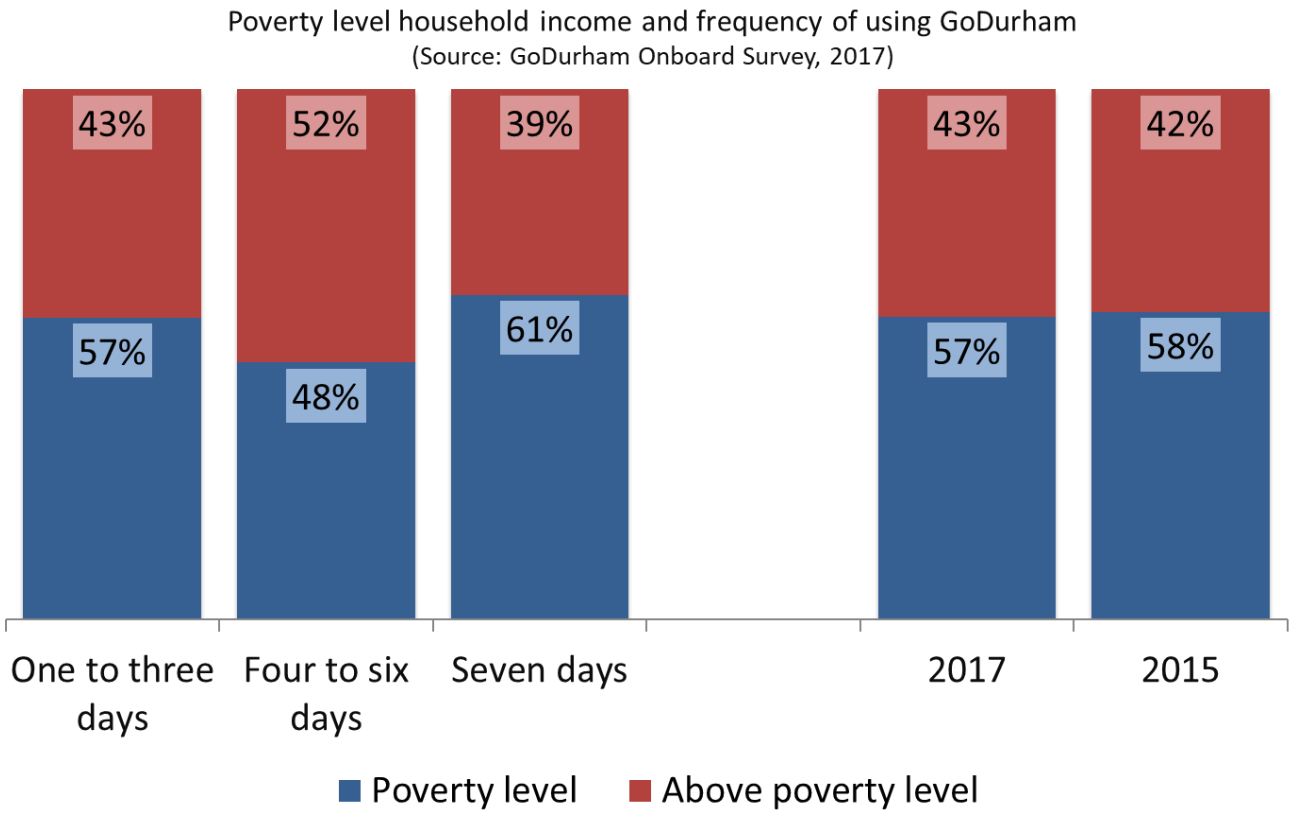
Figure 35 Rider Household Size and U.S. HHS Poverty Income Guidelines

How many people live in your household, including yourself? (GoDurham Onboard survey, 2017)		2017 poverty income guidelines for the 48 contigious states and District of Columbia (U.S.
One	25%	$12,060
Two	26%	$16,240
Three	18%	$20,420
Four	14%	$24,600
Five	8%	$28,780
Six	5%	$32,960
Seven	2%	$37,140
Eight or mor	2%	$41,320

Among all GoDurham rider households, a total of 57% of riders have incomes that are at are poverty level. Figure 34 breaks down the ridership into poverty-level and above-poverty level for all GoDurham riders broken down by frequency with which they use GoDurham.

The seven-day riders with poverty level incomes constitute almost one-third (30%) of GoDurham riders, while seven-day riders above poverty level constitute another 19% of riders.

Figure 36 Frequency of Riding and Poverty Levels of Income



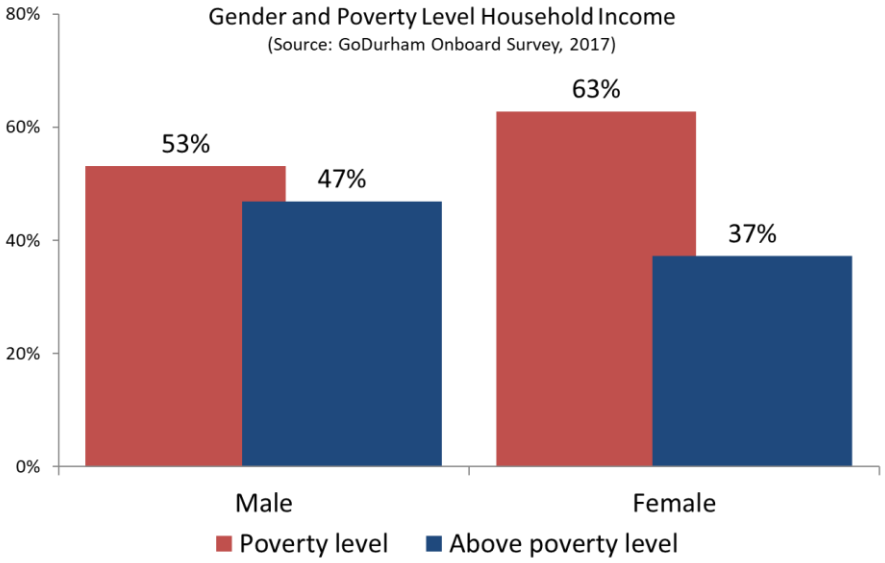
Frequency of Riding and Poverty Levels of Income

Using the poverty income approximation, we estimate that of all GoDurham riders in 2017, 57% have household incomes above poverty level. This is statistically unchanged since 2015 when it stood at 58%.

There is a relationship between poverty level income and frequency of using GoDurham. For example, while 61% of the seven-day, most frequent riders have poverty level incomes, 48% of the four to six-day riders have incomes at that level. This would be expected based on the fact that more of the four to six-day riders are employed.

Whenever the matter of poverty level household incomes is raised in a community with many college students, there is a question of validity. Are students simply short-term-poor with positive longer-term prospects? If so, they would simply falsely inflate the appearance of poverty level income among the ridership. However, when we remove students from the computation of poverty level income, we find that if there is a relationship it is within the margin of error. While 60% of riders who are students and are not also employed report household income of poverty level, 57% of non-students report that level as well. Students who are also employed have a 52% poverty rate, lower than student-only riders and lower than the rest of the ridership. Thus, student status does not account for the high poverty level.

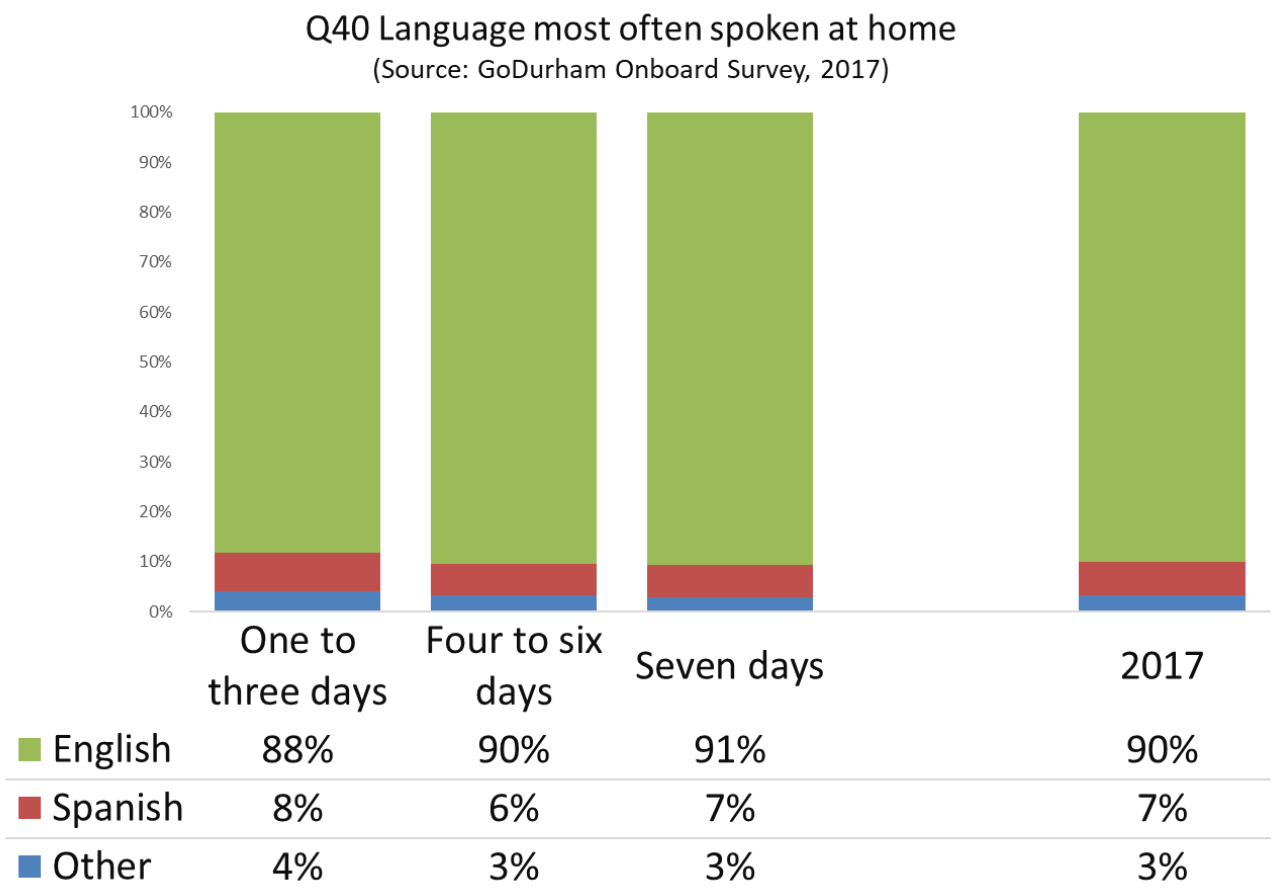
Figure 37 Poverty Level Income and Gender



Poverty Level Income and Gender

Poverty level income is related to gender. Fifty-five percent (53%) of male riders, but 63% of female riders report having poverty level incomes.

Figure 38 Language Most Often Spoken at Home



Language Most Often Spoken at Home

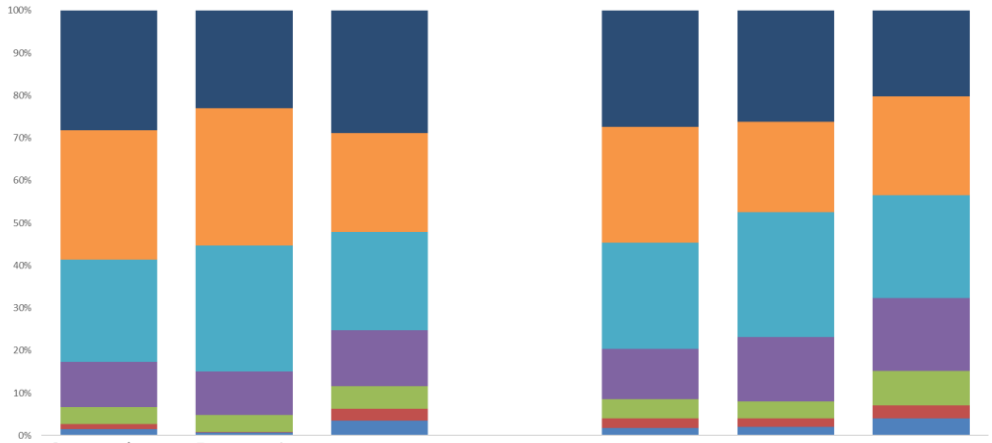
The overwhelming majority (90%) of GoDurham riders speak English at home. The next largest language group is Spanish, with 7%. The rider frequency segments do not vary significantly in this respect.

In the GoDurham Onboard Survey, 208 respondents (unweighted) identified themselves as Hispanic, but only 74, or 36% of the Hispanic respondents, completed the survey in Spanish. On the other hand, of all Hispanic riders, 40% said they speak English at home, while 60% said they speak Spanish.

Customer Satisfaction

Figure 39 Overall Satisfaction Ratings by Rider Segment

Q25 Overall, how do you rate GoDurham service?
(Source: GoDurham Onboard Surveys, 2011, 2015, & 2017)



	One to three days	Four to six days	Seven days	2017	2015	2011
Excellent	28%	23%	29%	27%	26%	20%
Quite good	30%	32%	23%	27%	21%	23%
Good	24%	30%	23%	25%	29%	24%
Neutral	11%	10%	13%	12%	15%	17%
Poor	4%	4%	5%	5%	4%	8%
Quite poor	1%	0%	3%	2%	2%	3%
Very poor	1%	1%	3%	2%	2%	4%

Overall System Satisfaction by Rider Segment

Riders were asked a series of questions concerning the quality of specific elements of GoDurham service. They were then asked to rate the service overall. We begin this section of the report with the overall rating of service.

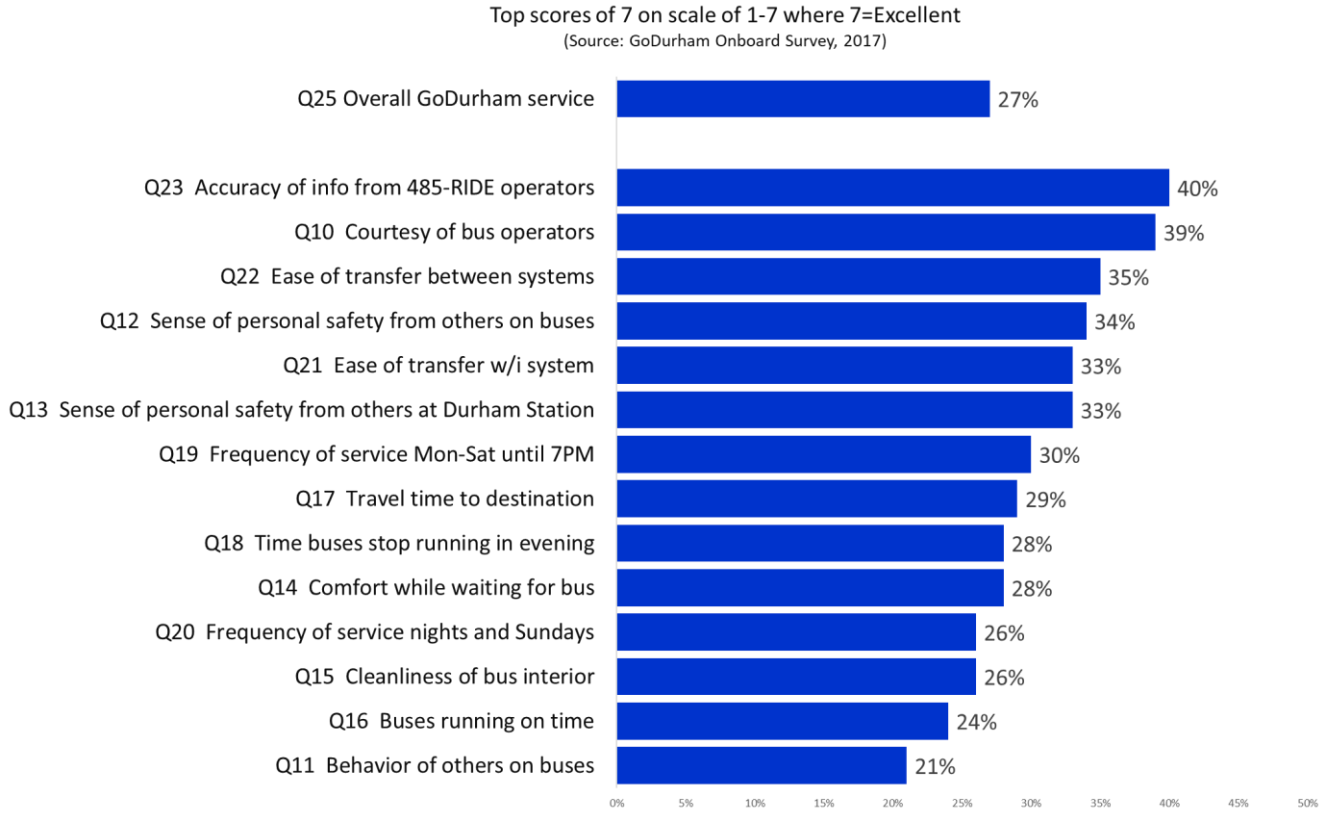
The satisfaction score for GoDurham service overall is quite positive when compared to some other transit systems. Fifty-four percent (54%) score it as a 6 or 7 on the seven-point scale. The score has risen from survey to survey since 2011. In 2011, a total of 43% rated service in the top two categories. In 2015, that had risen to 47%. In addition, the overall negative ratings (scores of 1-3) declined from a total of 15% in 2011 to 8% in 2015 and 9% in 2017. How does this compare to other systems?

- A comparison can be made to COTA (Columbus, Ohio) a system with a rider income and racial diversity profile closer to that of GoDurham. There, in 2017, 34% of riders scored service overall as 6 or 7 on the scale.
- Another fairly dense urban area is Sacramento, California. The system serving Sacramento, "Regional Transit, or "RT," was rated as 6 or 7 by only 38% in 2012.

Rider demographics clearly have an impact on the scoring. Where the system is serving a relatively upscale customer base or is located in a college town, scores tend to be higher. For example:

- GoTriangle serves a demographically different regional clientele compared to GoDurham but operates nearby and shares customers to some extent. In 2016, it was rated as 6 or 7 by 71%.
- "TheRide," serving Ann Arbor, Michigan provides a comparison, although the two urban areas, Ann Arbor and Durham, are quite different demographically, with Ann Arbor much less racially diverse than Durham. TheRide was rated as 6 or 7 for overall service quality by 72% in 2017.

Figure 40 Scores of "Excellent" in 2017 on Individual Components of GoDurham Service



Satisfaction Scores: Scores of "Excellent" in 2015 on Individual Components of GoDurham Service

Figure 41 Top Satisfaction Scores in 2015

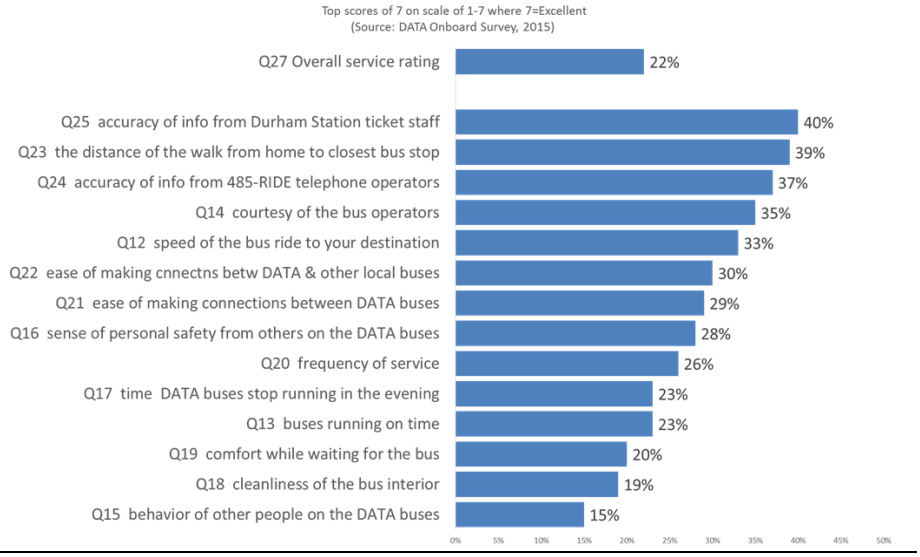


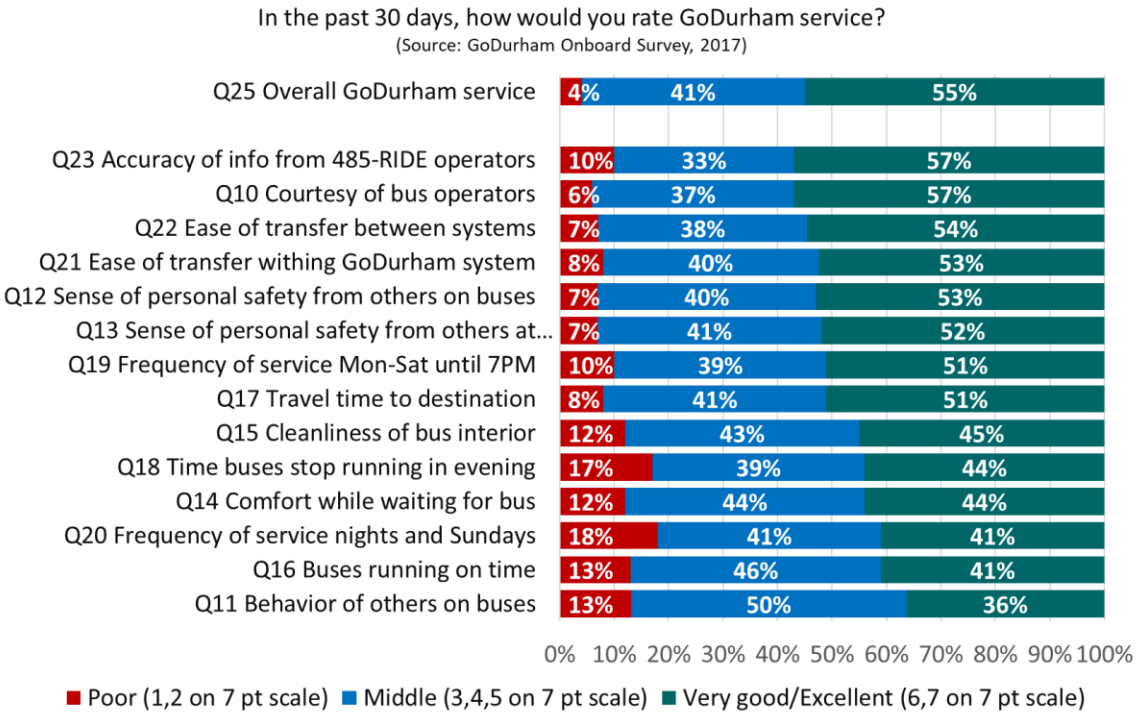
Figure 40 above presents a first look at customer satisfaction scores for individual elements of service. This first chart includes only the top score of 7 on the seven-point scale.

Figure 41 provides the score from the 2015 report for reference. (Note that some service elements were rated in one year but not the other.)

The most important aspect of the 2017 chart is the rank order of the various elements. As is fairly typical of such studies, the two items with the highest percentage of riders rating them as being excellent involve performance of staff, including accuracy of information from 485-RIDE operators, the courtesy of bus operators.

The lowest item on the list – behavior of other people on the bus – was also lowest in 2015, but it has improved, in that 21% now rate it excellent compared to 15% in 2011 and 2015. The next lowest score is one that is typically also low in most transit systems' ratings – buses running on time. Its score is now 24%, not improved since 2015 when it was at 23%. The third lowest position is a tie between the cleanliness of bus interiors and frequency of service nights and Sundays (both 26%). On cleanliness, the current score of 26%, although low, represents an improvement over the score of 19% in 2015. (Frequency of night and Sunday service was not included in the 2015 survey.)

Figure 42 Distribution of Satisfaction Ratings



Satisfaction Ratings in Perspective

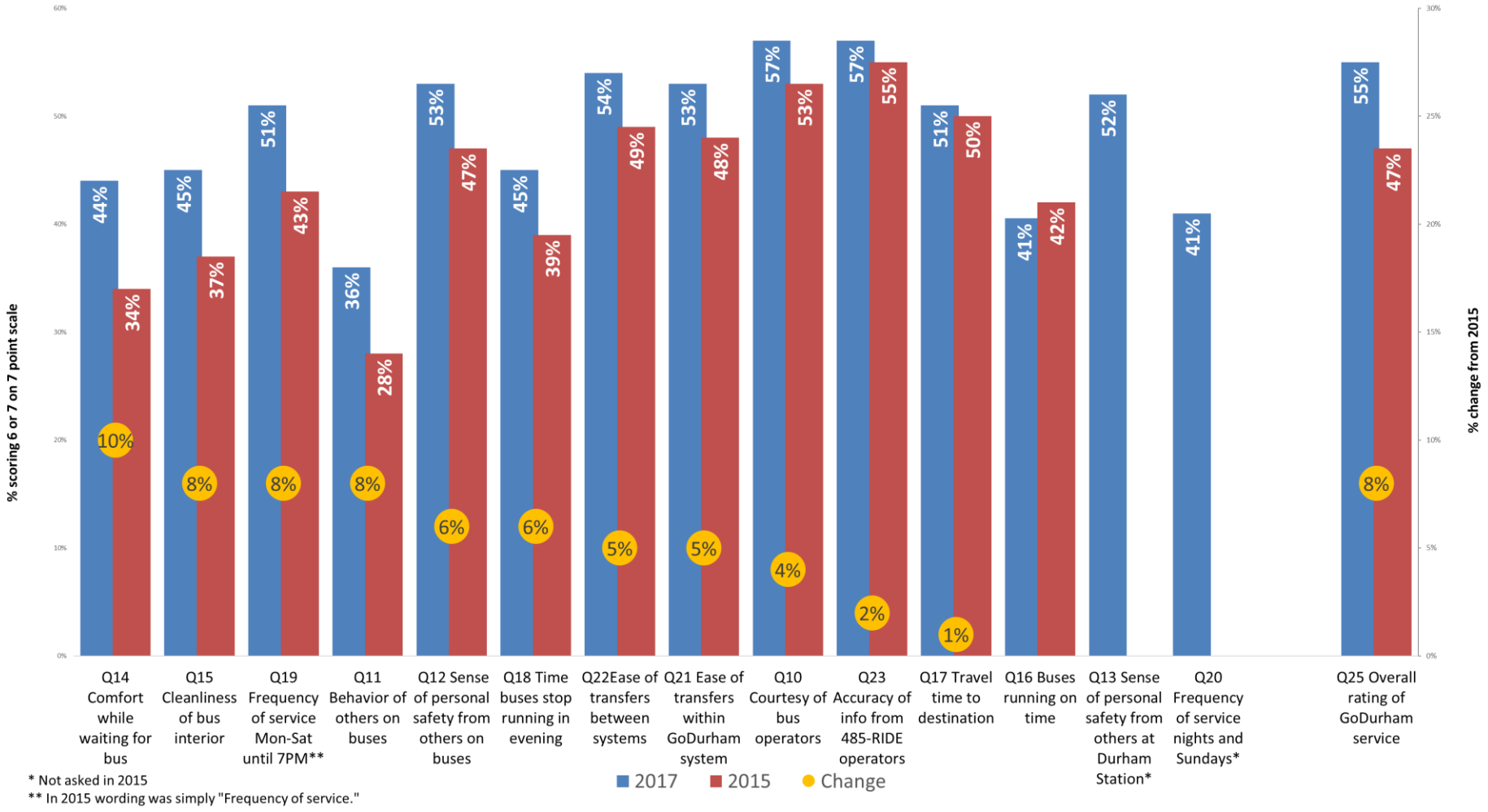
Figure 40 showed the top percentages on the seven-point scale. However, it is important to also consider the distribution of scores. To simplify the chart showing the distribution, the seven scores have been combined into three sets as shown in Figure 42. The top two scores (6 and 7) are combined and the bottom two scores (1 and 2) are combined. The middle scores (from 3 to 5) can be considered neither extremely positive nor extremely negative. The scores of six or seven represent either excellent or nearly excellent scores. This is simply a way to summarize the results that allows us to visualize the distribution of the scores.

For the most part, the items that scored lower than others in satisfaction were *not* lower because large proportions of the ridership scored them very negatively. On most items, relatively few riders gave scores of "Poor" or "very poor." In other words, riders were not giving failing grades to the aspects of GoDurham service low on the rating list in the figure above, but instead were indicating moderate satisfaction by -- to use academic grading terms -- rating them in the range of C to B- rather than B+ to A.

Two service elements had negative scores approaching 20% in the lowest score categories. These are the time the buses stop running in the evening (17% negative), and the frequency of service at night and on Sundays (18%) negative. When negative ratings reach a level nearing 20% it means that there are strong feelings among a significant minority of the ridership, almost one in five riders. Studies in other systems have taught us that this level of dissatisfaction is usually associated with those riders who have to work at night or on weekends when service is either discontinued on a route or is very infrequent. Since most jobs do not require employees to work at those times, the impact of low service levels is focused on only a relatively small number of riders so that the overall satisfaction score is moderate, but the impact on the affected riders is profound.

Figure 43 Change in Top Satisfaction Scores for GoDurham, 2015 - 2017

Change in service ratings as shown by change in top two scores (6 and 7 on 7 point scale)
(Source: GoDurham Onboard Surveys 2017 & 2015)



Comparisons of Satisfaction Ratings for GoDurham in 2015 and 2017

Figure 43 presents the satisfaction results in descending order of change in the sum of the percentages giving the top two positive scores (6 and 7 on the seven- point scale) for aspects of service that were included in both the 2015 and 2017 surveys. Ignoring the one statistically insignificant

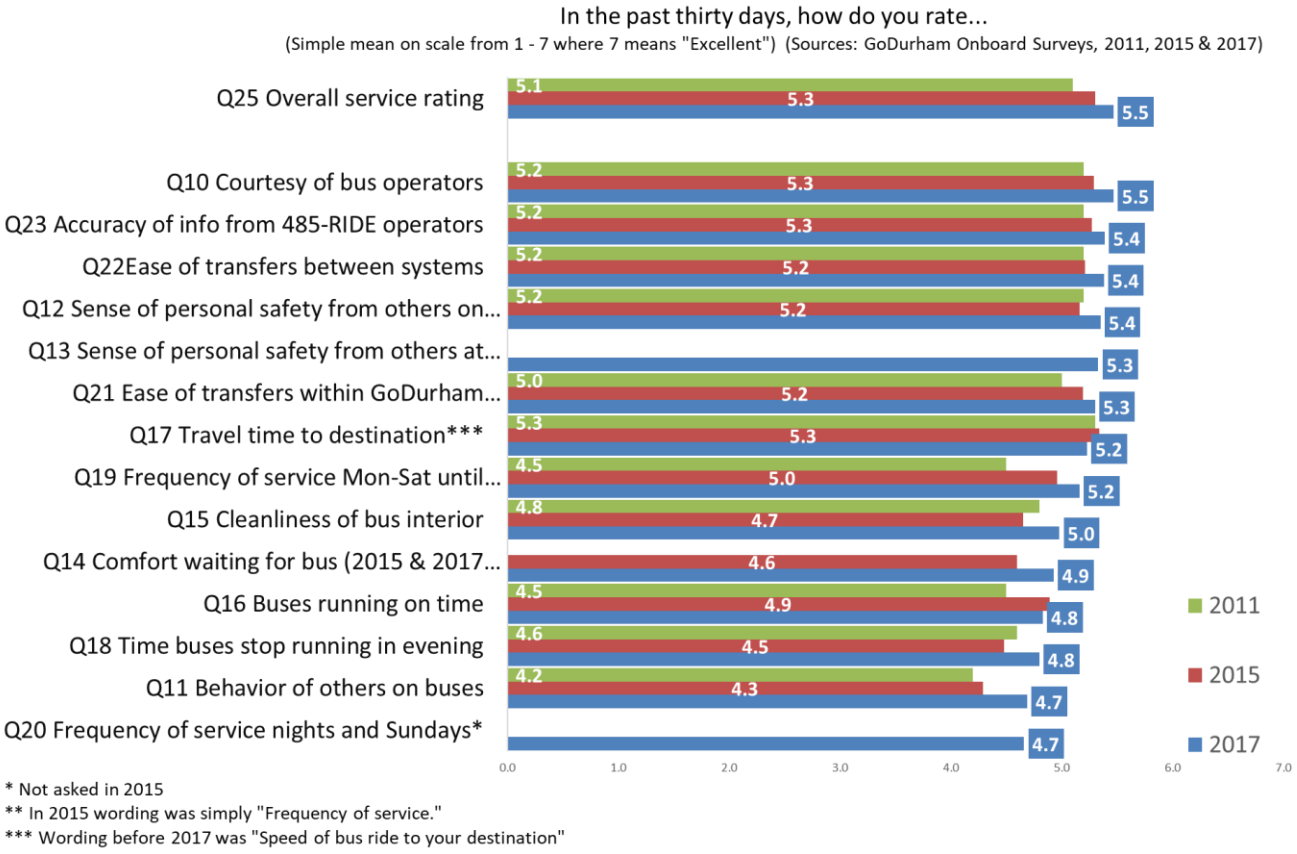
exception, the changes in ratings are positive. The overall rating went from 47% to 55% in the 6-7 range. Moreover, most service elements improved their scores. The score for buses running on time decreased by 1%, and travel time to the destination increased by 1%, but a change of +/-1% is not statistically significant, so both scores are actually unchanged.

The largest change was for comfort while waiting for the bus which increased by ten points. Three other aspects of service increased by eight points. One of these involved a change of wording, and, although we report the change, we cannot be sure the change is real. This is "Frequency of service Monday – Saturday until 7:00 PM," which, in the chart above, we have compared to the 2015 version which was simply "Frequency of service."

The other two changes of eight points involved identical wording and can be considered reliable. In spite of their low rankings in the percent-excellent scores reported in Figure 40, both of these showed real improvement over 2015 scores.

Four operational items are highest in change. They are: (1) Frequency of service, (2) connections between GoDurham and other local systems, and (3) connections among GoDurham buses, and, most important, (4) buses running on time. The latter is so important because in 2011 it was by far considered to be the most important element of service to improve (38% chose it as most important compared to 8% for the runner up). Moreover, it is the key to making connections work well. In addition, on-time performance can help create a perception of frequency because when connections are made properly, not only are wait times for a next bus reduced, but also frustration is diminished.

Figure 44 Mean Satisfaction Ratings in Three Surveys



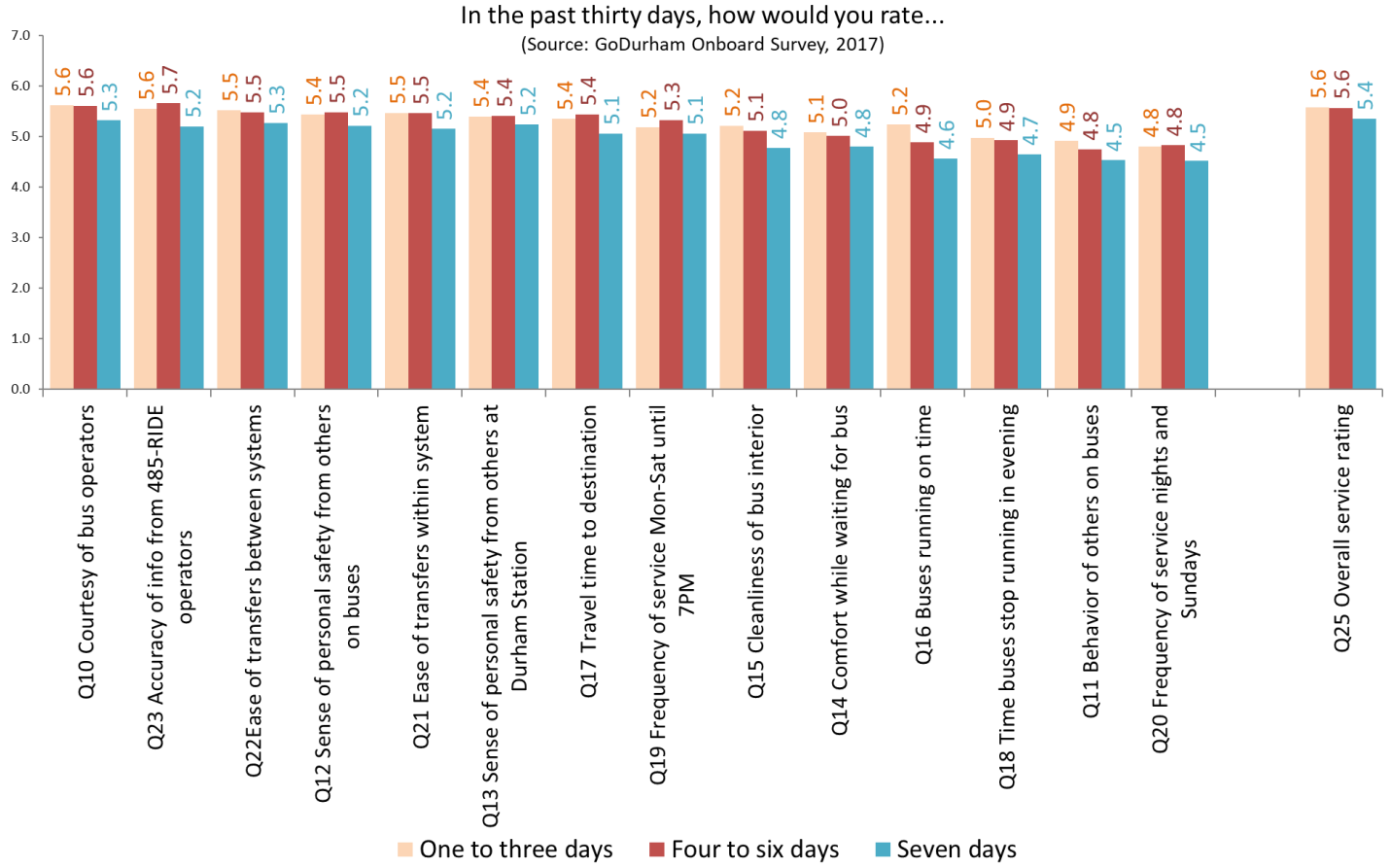
* Not asked in 2015
** In 2015 wording was simply "Frequency of service."
*** Wording before 2017 was "Speed of bus ride to your destination"

Satisfaction Scores Expressed as Means

Another way to express satisfaction scores is to use the simple mean rather than percentages. The mean has the advantage of taking into account the entire distribution of scores. Several things to note:

- Figure 44 compares scores from the three surveys from 2011 to 2017. Several questions differed slightly between the surveys and others were not asked in all three years. They are so noted.
- The range of scores from low to high in 2017 as in 2015 is small, varying by less than one point, from 4.7 to 5.5 on the seven-point scale.
- Mean scores for perceived quality of service improved on most elements of service. Only travel time to the destination slipped, but that may have been a matter of the change in wording noted in the chart, and in any event, the change was trivial and should be ignored.
- Change in the mean scores since 2015 echo the findings shown in Figure 43. That is, some of the largest changes in mean scores were for elements of service that rank very low in absolute score: Behavior of others on the buses, and buses running on time.

Figure 45 Ridership Segments and Their Ratings of Specific Aspects of Service



Comparing Mean Scores among the Segments

The three segments tend to be in agreement in terms of service satisfaction. The maximum difference among the segments is 0.7 (for buses running on time) on the seven-point scale. This suggests that regardless of how often one uses GoDurham services, the experience will tend to be perceived in generally similar ways. However, the most frequent, seven-day riders are, across all service elements, less satisfied than the other segments. Given that they produce the largest portion of all trips, this is important. The largest single difference among the segment scores is between the least and most frequent riders. It is the perception that buses run on time, a perception not shared between the least (5.2) and most frequent (4.6) riders.

The Relative Importance of Service Elements to the Overall Satisfaction Score

Prioritizing areas for service improvement is a major operational challenge for a transit system. Manipulating survey data from customers to try to divine their priorities is similarly a tricky proposition. Figure 46 on the following page presents one approach to that task.

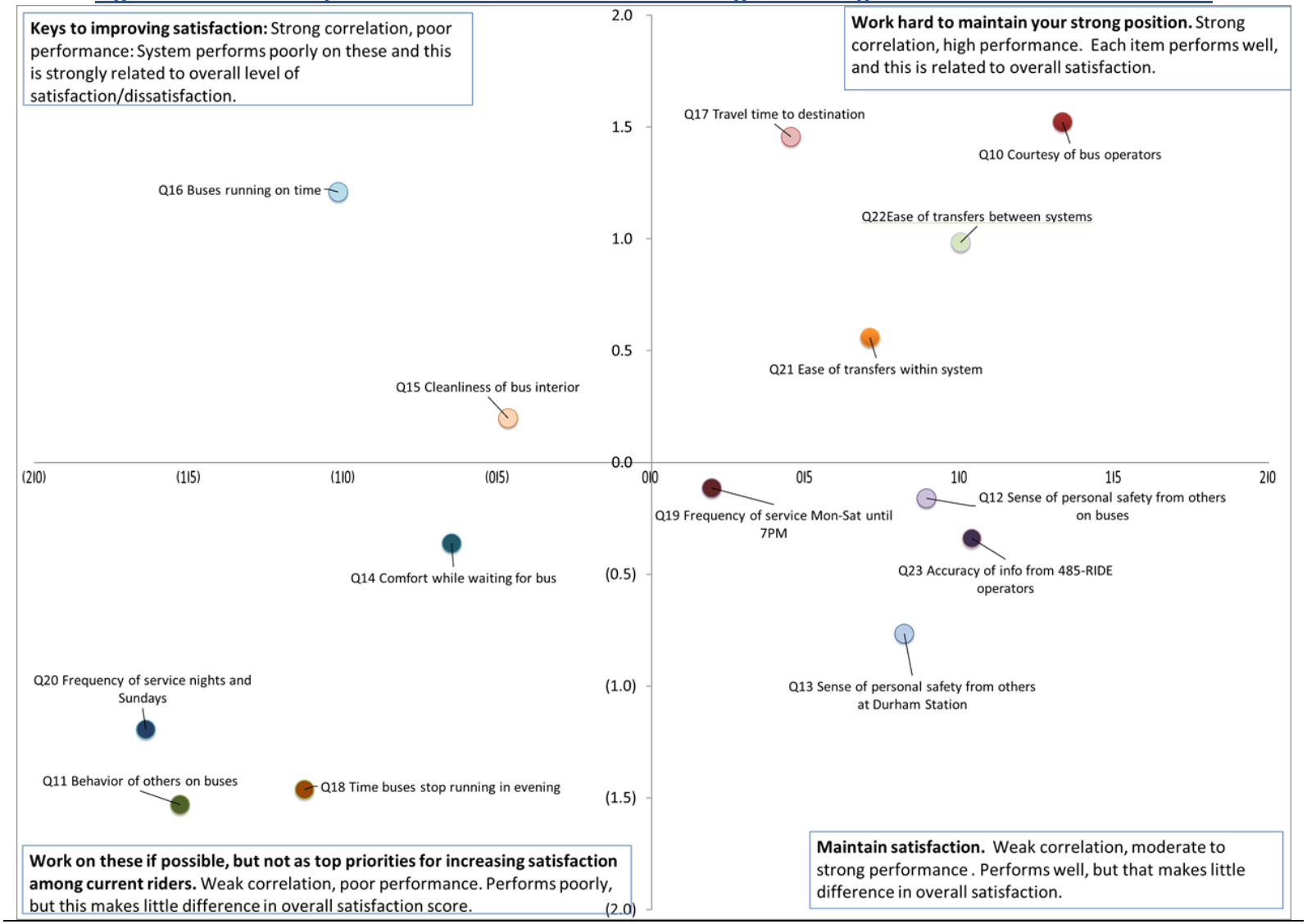
The concept of the chart is as follows: The satisfaction questions include one rating of GoDurham service "overall" and a series of many ratings of individual elements of service. The key objective of the chart is to combine the individual rating of each element of service and the relationship of each element to the overall rating. The intent is to answer the question: "How important is each element, like driver courtesy or frequency of service (etc.), to the customers' ratings of GoDurham service overall?" and thus "What actions should the GoDurham's administration take with respect to each element of service?"

A coefficient of correlation can vary from -1 to +1. The rating scores vary from 1 to 7. Because these are such different numbers in absolute terms, the most realistic way to compare them is to *standardize* them. This simply means to relativize them with respect to each other so that they can be compared. Thus, the resulting chart is not a chart of absolute scores on each service but a combination of how well a service was rated relative to the average score and how strongly that rating is associated with the overall rating of GoDurham's service.

The resulting chart contains four quadrants:

Correlation of each service rating with the rating of overall service	Low	High
High	**Keys to improving satisfaction:** *Relatively* poor performance on these services compared to others and this is related to overall level of satisfaction. Performance here hurts overall rating.	**Maintain your strong position.** Each item performs *relatively* well compared to other items and is related to overall satisfaction.
Low	**Work on this if possible, but not as top priority for increasing satisfaction among current riders.** *Relatively* poor performance but that makes little difference in overall satisfaction score. Riders would be happier with improvement.	**Maintain satisfaction.** Performance of this service is well rated *relative* to other services, but that makes little difference in overall satisfaction.
	Service performance rating	
	Low	**High**

Figure 46 Relationship between Overall Performance Rating and Ratings of Individual Service Elements



Relationship between Overall Performance Rating and Ratings of Individual Service Elements

In Figure 46 we examine the correlations between the overall rating of GoDurham service and the separate elements that make up GoDurham's service. When there is a high correlation, the implication is that the service element is influencing the overall satisfaction score. Using this logic, it appears that certain elements (upper right of chart) are helping to boost the overall satisfaction score, while others (top left) tend to detract from it. It is elements in the latter group that require attention in order to help move overall satisfaction scores. Elements in the lower left of the chart receive poor performance scores, but apparently have relatively little influence on the overall score. Similarly, elements in the lower right quadrant have high performance scores, but they have little relationship to the overall score, and can be assumed to have little influence on it.

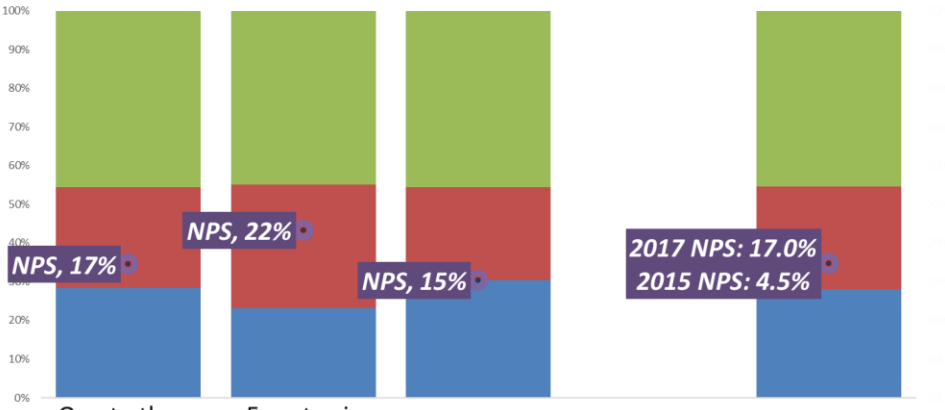
To put it another way, the system's *relative perceived strengths* are at the right and above the line. The *relative perceived weaknesses* that need attention are at the left and above the line.

At the upper left are two elements that are most likely to have an impact on overall satisfaction, buses running on time and the cleanliness of bus interiors. Interestingly, although both score low in the seven-point satisfaction scale (see Figure 40), we have also seen in Figure 43 that score for each of these elements improved since 2015 along with the improvement in the overall score. That relationship is one reason they appear in the upper left. The perception of improvement clearly had an impact, and yet there is more to be done that would have further impact.

Two elements shown at the lower left warrant special comment. This is the quadrant in which the satisfaction score is low but is theoretically not closely related to the overall level of customer satisfaction. The two scores of particular interest are for frequency of service nights and Sundays and the time buses stop running in the evening. Recall from Figure 42 that it is these two service elements that had the highest percentage of negative ratings, 18% and 17%, respectively. The problem here is that there is a large minority, almost one in five riders, who perceive these service elements very negatively. Since more than 80% of riders do not share this perception, their negativism appears to have little impact on the overall score among all riders. Yet for them this may well be a truly critical issue. Given low ridership in these off-peak periods, it is difficult to justify levels of service that would satisfy these riders. Moreover, providing such service would be unlikely to "move the needle" on overall satisfaction. However, in conducting focus groups and surveys in other systems, we have seen a relationship between low ratings on the issue of off-peak service levels and the desire to cease using transit. In other words, the effect of this aspect of service on the overall satisfaction score needs to be put in the perspective of potential rider attrition.

Figure 47 Net Promoter Score - GoDurham

Q27 Net Promoter Score*
(Source: GoDurham Onboard Survey, 2017)



	One to three days	Four to six days	Seven days	2017
Promoters	46%	45%	46%	45%
Passives	26%	32%	24%	27%
Detractors	28%	23%	30%	28%
NPS	17%	22%	15%	17%

* Net Promoter® and NPS® are registered trademarks and Net Promoter Score and Net Promoter System are trademarks of Bain & Company, Satmetrix Systems and Fred Reichheld.

Net Promoter Score

The NPS, or Net Promoter Score is a commercially marketed analysis tool that is widely used among corporations to compare performance on a common customer satisfaction standard. It is computed based on the response to the question: *How likely are you to recommend GoDurham service to a friend or colleague?* Responses are recorded on an eleven-point scale from 0 to 10.

In the NPS concept:

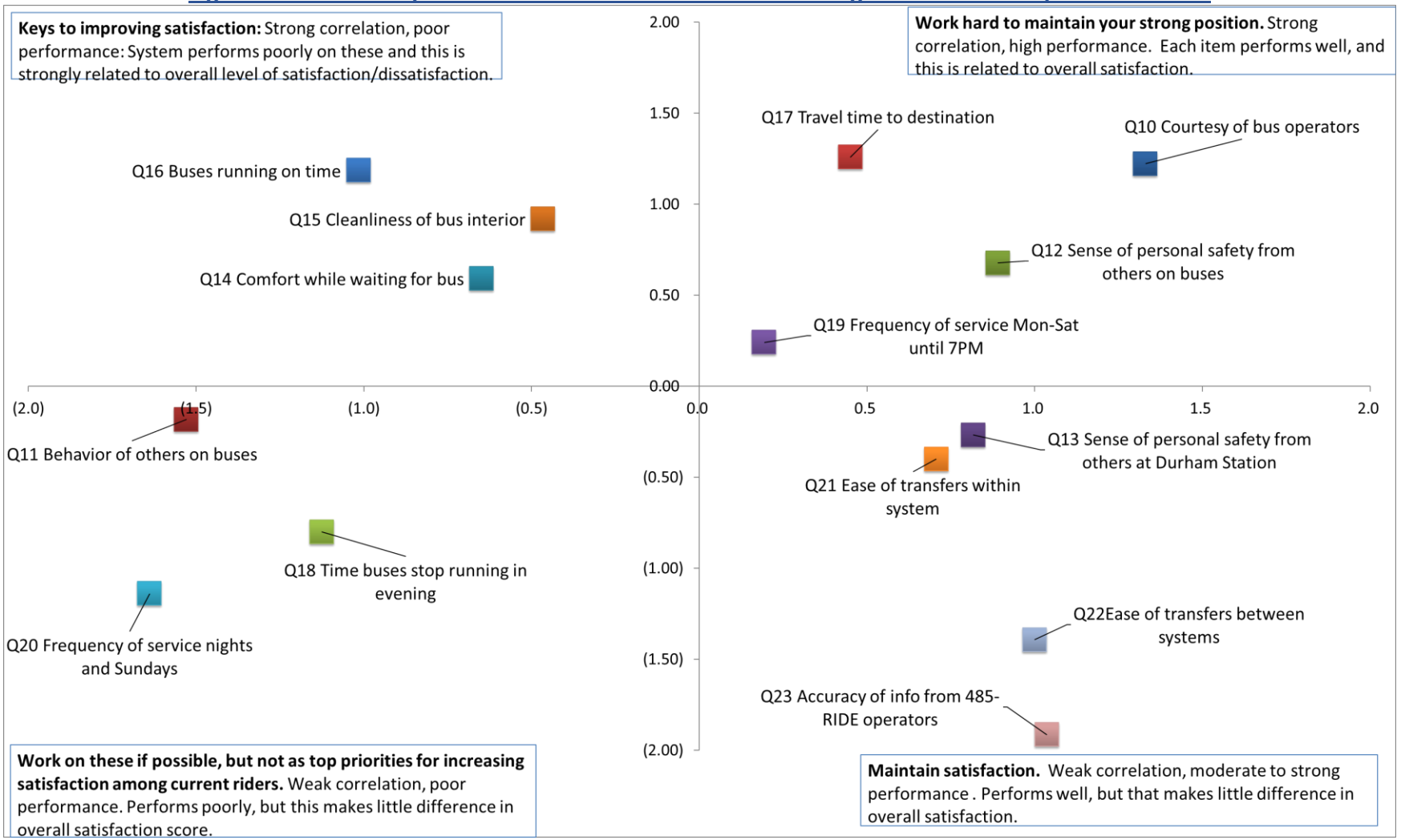
- Promoters (score 9-10) are loyal enthusiasts who will continue to be customers and refer others, fueling growth.
- Passives (score 7-8) are satisfied but unenthusiastic customers who are vulnerable to competitive offerings.
- Detractors (score 0-6) are unhappy customers who can damage your brand and impede growth through negative word-of-mouth.

To calculate the Net Promoter Score (NPS®), take the percentage of customers who are Promoters and subtract the percentage who are Detractors[10].

For all GoDurham riders in 2015, the NPS score was only 4.5%. in spite of the improvement in satisfaction since 2011. By 2017, however, rider opinions have apparently caught up with the service improvement since 2012 because in 2017 we see a truly dramatic improvement, with the NPS score rising to 17%.

[10] Quoted from the Net Promoter Community website, of Satmetrix, at http://www.netpromoter.com/why-net-promoter/calculate-your-score

Figure 48 Relationship between Net Promoter Score and Ratings of Individual Aspects of Service



Relationship between Net Promoter Score and Ratings of Individual Aspects of Service

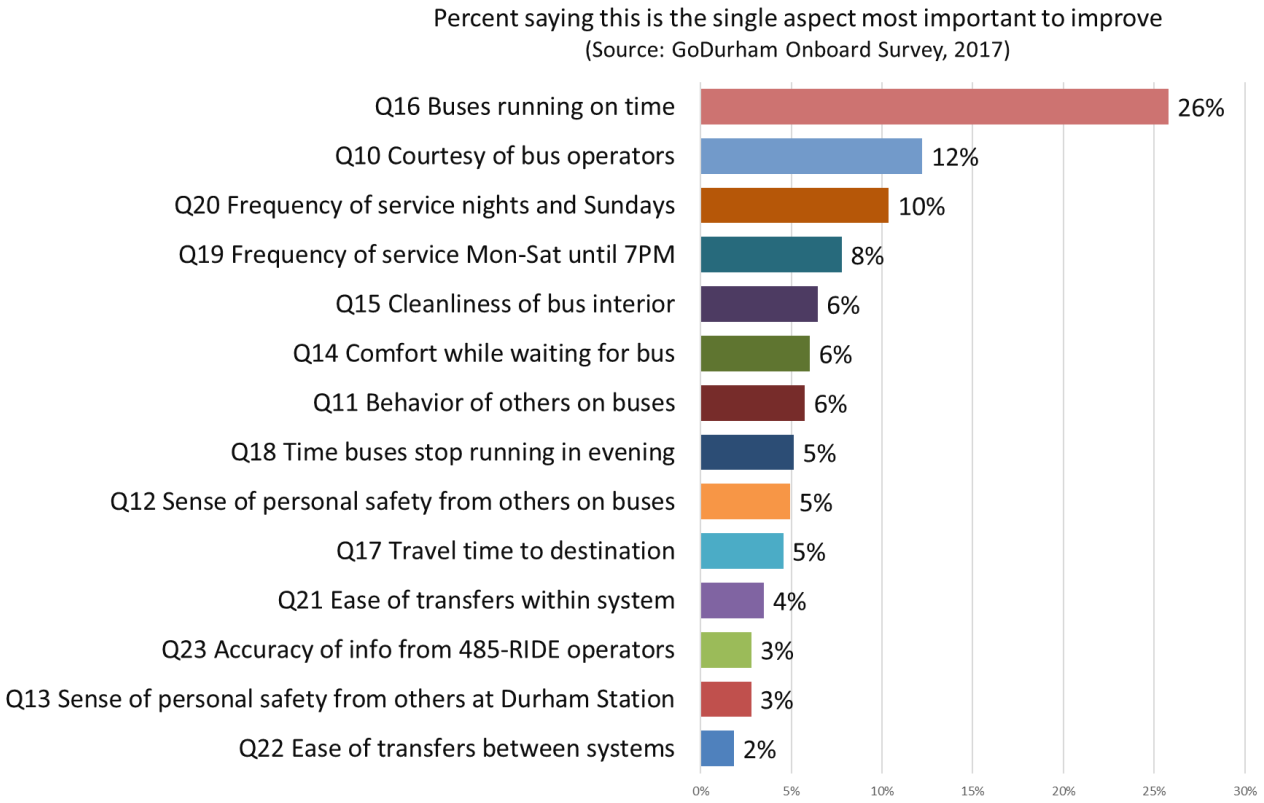
Figure 48 displays the relationship of the question ("would you recommend"), which forms the basis of the net promoter score, with each of the performance measures. With a few differences, it shows relationships similar to those shown in Figure 46 that displayed the

relationship of each performance score to the overall rating of GoDurham service. In comparing this chart to Figure 46, understand that the satisfaction score (x, left right horizontal axis) remains constant between the two charts. The only dimension that changes is the vertical (Y axis) dimension that measures the strength of the satisfaction with the individual service element to the NPS score.

The NPS replaces the overall rating with the 0 to 10 scale based on the response to the question "Would you recommend GoDurham service to a friend or colleague?" This adds a dimension because it involves projecting one's own perception of what is satisfactory onto other people. This has the effect in this case of moving the creature comforts of interior cleanliness and comfort while waiting for the bus higher up on the vertical scale of importance based on the correlation of each element with the response to "Would you recommend…? It is as if GoDurham riders are saying, for example, that comfort while waiting for the bus is less important to them than they think would be to others who are non-riders and who might ask about using GoDurham.

There are other differences as well, but no others involve movement into the critical upper left quadrant.

Figure 49 Single Most Important Element to Improve



What Do Riders Say Is the Most Important Aspect of Service to Improve?

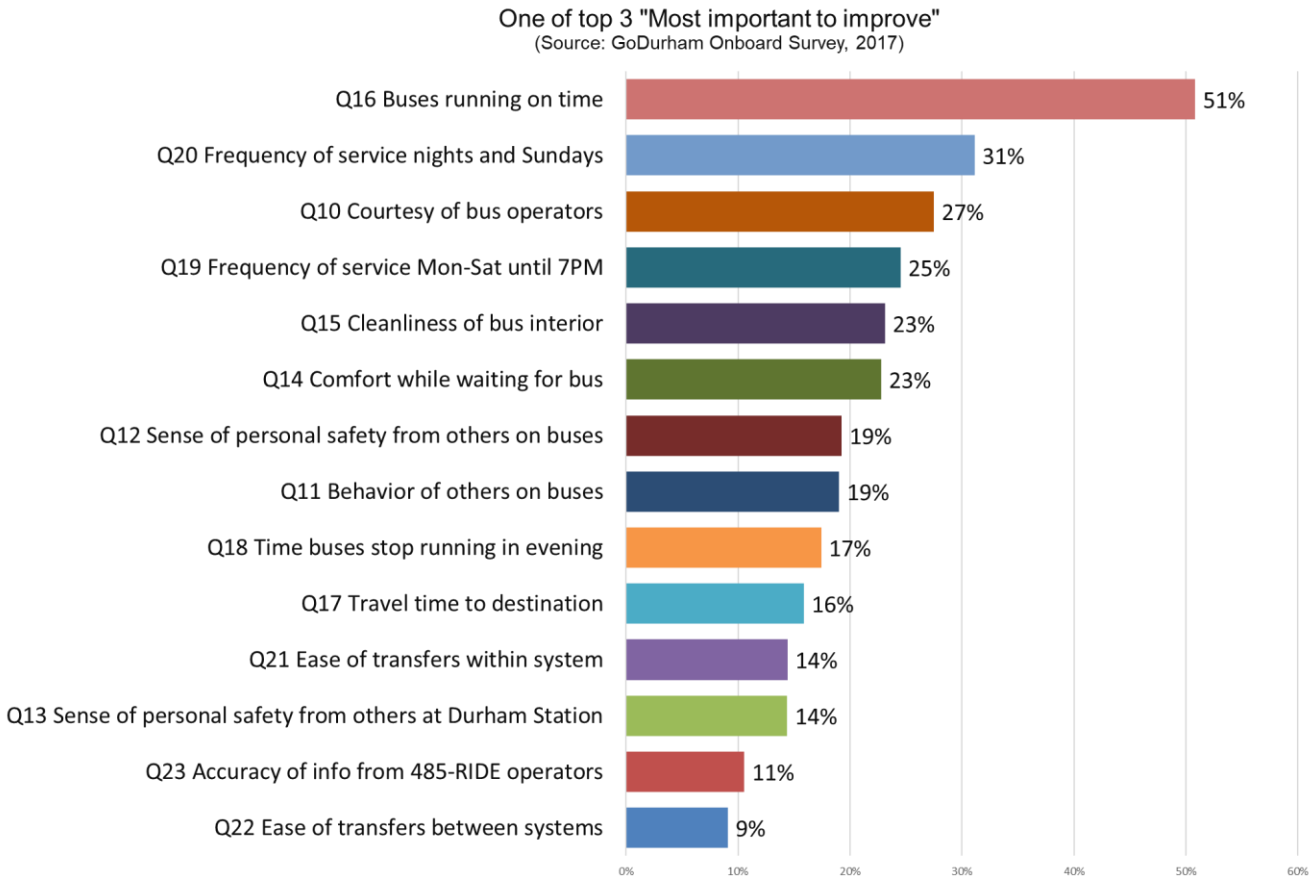
Twenty-six percent (26%) of riders indicate that having the buses run on-time is their single most important improvement priority. This may appear paradoxical because we saw in a previous chart that the rating of on-time performance improved since 2015. However, maintaining a schedule in traffic with a significant number of construction zones is inherently difficult, and this will always be an improvement priority regardless of marginal improvements. It is a receding goal.

It is important to keep in mind that this rating is a *perception* and not an absolute metric. Riders will themselves often arrive early or only marginally on time, or even a bit late for their bus and perceive that it is the bus that is off schedule. They may also not know the relationship of their stop to a time point. Thus, their perception and the reality can be quite different. Experiments have shown that what makes the greatest difference in the perceived wait time is knowing when the bus is actually coming. To the extent that people begin to use apps such as TransLōc for real time information, or get real-time information at Durham station, that will help reduce the perception of a lack of on time performance. In addition, greater frequency has a similar effect because in the absence of real time information, infrequent service creates uncertainty about whether the bus is coming or has left, and the implications for lost time are significant.

The next closest priority, improved courtesy of bus operators is rated first by 12%. Its place in the rank order seems paradoxical because we have already seen in several charts that operator courtesy is highly rated. There must be a number of riders who have had an unfortunate experience with an operator that, although they rate operators in general quite well, has caused them to feel that courtesy is among the most important elements to

improve. We should, however, keep in mind that in 2015 this aspect of service was rated most important to improve by 7% of the riders. Although the 12% differed by only 5% and was not fundamentally different, it did result in a higher placement in the rank order of elements important to improve.

Figure 50 Selected as One of Top *Three* to Improve



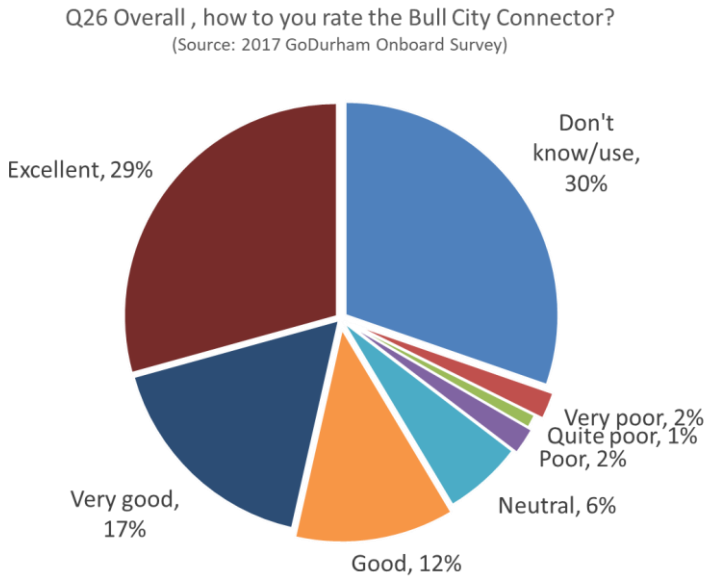
Selected as One of Top T*hree* to Improve

Riders were asked which of the several elements of service would be the top three most important to improve. Their responses are summarized in the chart above. The percentages indicate the total percent of all respondents who named the aspect of service either first, second, or third most important to improve.

Of the fourteen aspects of service examined, buses running on time received the most mentions as first, second, or third most important to improve, with a total of 51%, down somewhat from the 57% who named it one of the top three in 2015 and down substantially from the 62% placing it in the top three in 2011.

Frequency of service nights and on Sundays is the next most frequently mentioned service element, with almost one-third of riders placing it in the top three. Courtesy of bus operators is noted by 27% of riders. While, again, this does seem paradoxical given the otherwise consistently positive scores for bus operators shown in previous charts, in 2015 the analogous percentage was 24%, not very different from the 27% in 2017.

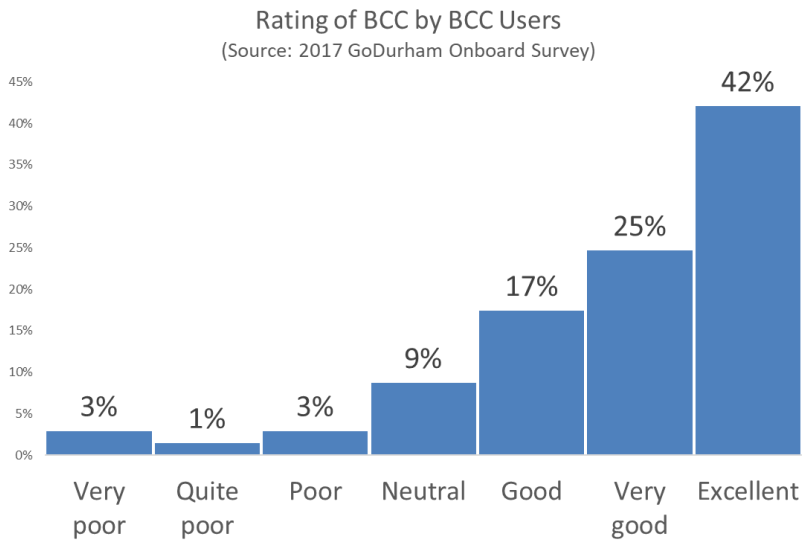
Figure 51 Using and Rating the Bull City Connector



Using and Rating the Bull City Connector

The Bull City Connector (BCC), is used by 70% of the GoDurham riders.

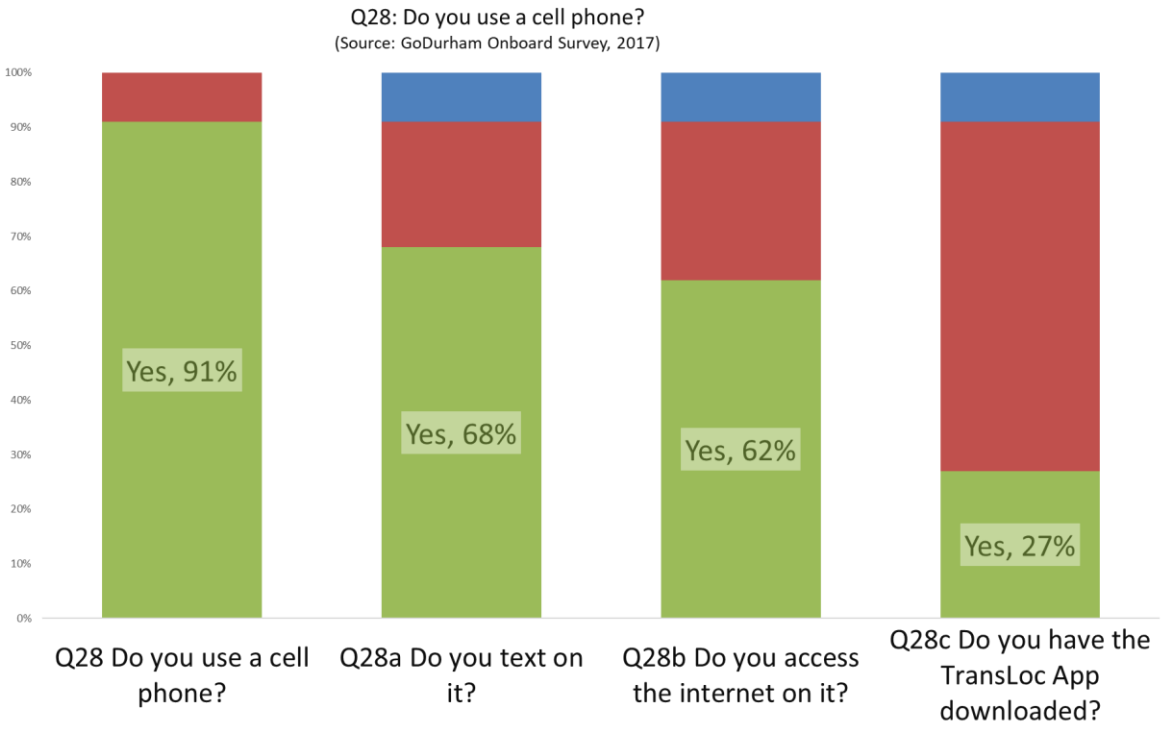
Figure 52 Rating the BCC - Users of BCC only



Among those who use the BCC, 67% rate its service as a 6 or 7 on the seven-point satisfaction scale, essentially meaning very good (25%) or excellent (42%).

Communication

Figure 53 Use of Cell and Smart Phones



No cell phone		9%	9%	9%
No	9%	23%	29%	64%
Yes	91%	68%	62%	27%

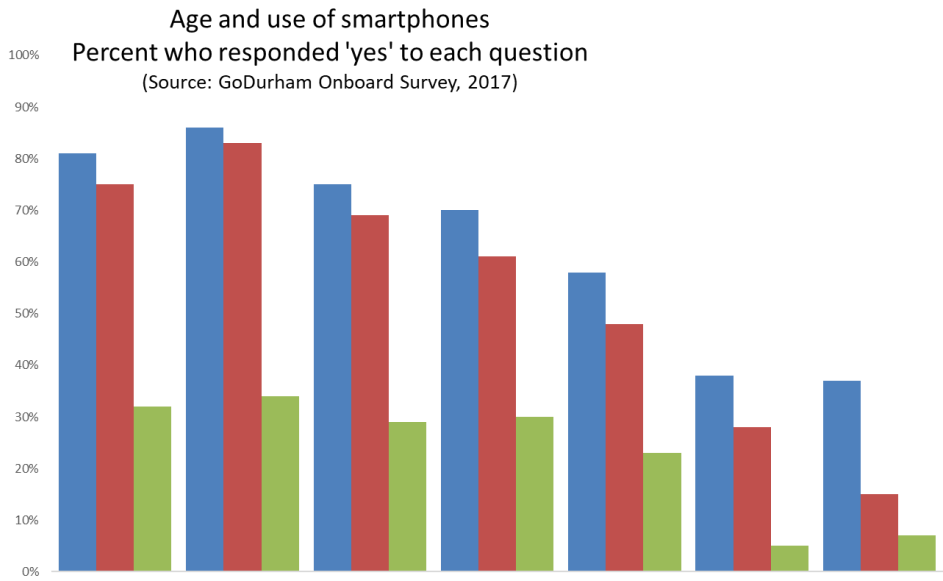
Use of Cell and Smart Phones

Among GoDurham riders, cell phone ownership is high, but not quite universal, with 91% of riders indicating they have a cell phone.

- Of all riders, slightly more than two-thirds text on their cell phones.
- 62% of all riders access the internet on their phones, thus indicating that the phone is a smartphone.
- 27% of riders have downloaded the TransLōc app.

These numbers indicate that while most riders are now using their smartphones as general information devices, that practice is not yet universal and other communication modes continue to be necessary. The numbers also indicate that more than one-fourth have downloaded the TransLōc app. While that is a substantial proportion of the ridership, it cannot yet be relied on to provide a primary communications channel to the GoDurham ridership.

Figure 54 Age and the Use of Smart Phones



If you have a cell phone...	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 or older
Q28a ...do you text on it?	81%	86%	75%	70%	58%	38%	37%
Q28b ... do you access the internet on it?	75%	83%	69%	61%	48%	28%	15%
Q28c ...do you have the TransLoc App downloaded?	32%	34%	29%	30%	23%	5%	7%

Age and the Use of Smart Phones

It is certainly not news that the use of mobile communications is related to age. Figure 54 demonstrates that relationship in the case of the GoDurham ridership. There are several notable findings in this chart:

- First, use of smartphones declines with age. However, even at age 75+, 37% of the riders say they text on their devices. This share will increase both as the technology continues to diffuse through all generations and as the younger cohorts age.
- Second, texting and accessing the internet from the smartphone go together. If you text, you probably also access the internet. The only exception is the oldest population cohort.
- Third, use of the TransLōc app has almost no relationship to age from age 18 through age 64, then it falls off. But in that long age range 18-64 it apparently must be an attitude of openness to innovation rather than the usual age-driven early adoption tendencies that fuels the use of the app.

Appendix A: Questionnaire

Figure 55 GoDurham Survey Questionnaire - English

Please tell us about how you use GoDurham

El cuestionario en español se encuentra en la parte posterior

GO Durham

To improve service, GoDurham would like to know how you use the bus! Please check, circle, or write in your answers.

1. Including today, during the past seven days, which days have you ridden GoDurham?
Mon Tue Wed Thur Fri Sat Sun Every day

2. How long have you been riding GoDurham *(including when it was called DATA)* **?**
1 ☐ This is the first time 2 ☐ Less than 1 year 3 ☐ 1–2 years
4 ☐ 3-4 years 5 ☐ More than 4 years

3. In the past month, have you used GoDurham buses to get to or from… *(All that apply)*
1 ☐ work 2 ☐ shopping
3 ☐ middle or high school 4 ☐ college or vocational school
5 ☐ social services 6 ☐ doctor or medical visit
7 ☐ social or recreational visit 8 ☐ airport
9 ☐ Other _____

4. Today on this particular bus trip what is the ONE MAIN thing you are doing. *(Please choose ONLY ONE).* **Going to or from:**
1 ☐ work 2 ☐ shopping
3 ☐ middle, or high school 4 ☐ college or vocational school
5 ☐ social services 6 ☐ doctor or medical visit
7 ☐ social or recreational visit 8 ☐ airport
9 ☐ Other _____

5. In making this trip in one direction, how many times do you have to change buses?
0-No change of bus 1 2 3 or more changes of bus

6. In the past 30 days have you connected between GoDurham and these other systems? *(All that apply)*
1 ☐ GoTriangle 2 ☐ GoRaleigh 3 ☐ Duke Transit 4 ☐ Amtrak
5 ☐ Greyhound/Trailways/Megabus 6 ☐ None - You used GoDurham only

7. How did you pay fare on first GoDurham bus you got on today?
1 ☐ Single trip $1.00 cash fare 2 ☐ Senior or disabled fare with ID
3 ☐ Student/youth fare with ID 4 ☐ GoDurham 1-day pass
5 ☐ GoDurham 5-day pass 6 ☐ GoDurham 7-day pass
7 ☐ GoDurham 31-day pass 8 ☐ Regional pass 9 ☐ GoPass

8. How do you most often get from home to your GoDurham bus?
1 ☐ Walk 2 ☐ Bike 3 ☐ Drive 4 ☐ Dropped off
5 ☐ Bus other than GoDurham 6 ☐ Uber/Lyft 7 ☐ Other _____

9. Minutes it takes you to get from home to your bus stop in that way?
_____ Minutes

In the past 30 days, how would you rate GoDurham services…	Excellent						Very Poor	Don't Know or don't use
10. Courtesy of bus operators	7	6	5	4	3	2	1	☐
11. Behavior of others on the GoDurham buses	7	6	5	4	3	2	1	☐
12. Sense of personal safety from others on the GoDurham buses	7	6	5	4	3	2	1	☐
13. Sense of personal safety from others at Durham Station	7	6	5	4	3	2	1	☐
14. Comfort while waiting for the bus	7	6	5	4	3	2	1	☐
15. Cleanliness of the bus interior	7	6	5	4	3	2	1	☐
16. Buses running on-time	7	6	5	4	3	2	1	☐
17. Travel time of the bus ride to your destination	7	6	5	4	3	2	1	☐
18. Time GoDurham buses stop running in the evening	7	6	5	4	3	2	1	☐
19. Frequency of service, Mon-Sat until 7 PM	7	6	5	4	3	2	1	☐
20. Frequency of service, nights and Sundays	7	6	5	4	3	2	1	☐
21. Ease of making connections between GoDurham buses	7	6	5	4	3	2	1	☐
22. Ease of making connections between GoDurham and other area bus systems *(GoTriangle, GoRaleigh, Duke Transit)*	7	6	5	4	3	2	1	☐
23. Accuracy of information from 485-RIDE telephone operators	7	6	5	4	3	2	1	☐

24. Of the services listed in questions 10-23, which would be the three most important to improve? *(Please write in the question numbers)***:**
_____ Most important _____ 2nd most important _____ 3rd most important

25. OVERALL, how do you rate GoDurham service?
Excellent 7 6 5 4 3 2 1 Very Poor

26. OVERALL, how do you rate service on the Bull City Connector (BCC)?
Excellent 7 6 5 4 3 2 1 Very Poor ☐ Do not use

27. How likely are you to recommend GoDurham service to a friend or colleague?
Extremely likely 10 9 8 7 6 5 4 3 2 1 Not at all likely

28. Do you use a cell-phone? 1 ☐ Yes 2 ☐ No
a. If so, do you text on it? 1 ☐ Yes 2 ☐ No
b. If so, do you access the Internet on it? 1 ☐ Yes 2 ☐ No
c. Do you have the TransLöc App on your phone? 1 ☐ Yes 2 ☐ No

29. In the past 30 days, how often have you used Uber or Lyft?
0 times 1 time 2 times 3 times 4 or more times

30. If you used Uber or Lyft…
a. Did you use it as part of a bus trip? 1 ☐ Yes 2 ☐ No
b. Did you use it to replace a bus trip 1 ☐ Yes 2 ☐ No

31. How old are you? _____ Years old

32. Please mark all of the following that apply to you. Are you:
1 ☐ Employed for pay outside your home 2 ☐ Employed for pay in your home
3 ☐ Homemaker 4 ☐ Student 5 ☐ Unemployed 6 ☐ Retired

33. Are you currently an active duty member or veteran of the United States Armed Forces? 1 ☐ No 2 ☐ Active 3 ☐ Veteran

34. Do you have a valid driver's license? 1 ☐ Yes 2 ☐ No

35. How many cars or other vehicles are available for your use?
0 1 2 3 or more

36. How many people live in your household?
1 2 3 4 5 6 7 8 or more

37. Do you identify as… 1 ☐ Male 2 ☐ Female 3 ☐ Prefer not to answer

38. Do you consider yourself to be… *(Please circle all that apply to you)*
1 ☐ African American/Black 2 ☐ Asian 3 ☐ Caucasian/White
4 ☐ Native American Indian 5 ☐ Hispanic 6 ☐ Other: _____

39. Do you speak English 1 ☐ Very well 2 ☐ Well 3 ☐ Not well

40. What language do you most often speak at home?
1 ☐ English 2 ☐ Spanish 3 ☐ Other: _____

41. What is your total annual household income?
1 ☐ Less than $10,000 2 ☐ $10,000 to $14,999 3 ☐ $15,000 to $19,999
4 ☐ $20,000 to $24,999 5 ☐ $25,000 to $34,999 6 ☐ $35,000 to $49,999
7 ☐ $50,000 to $74,999 8 ☐ $75,000 to $100,000 9 ☐ More than $100,000

Comments: _____

Thank you! Please return this form to the surveyor on your bus.

Figure 56 GoDurham Survey Questionnaire - Spanish

Por favor díganos cómo usa GoDurham

GO Durham

A GoDurham le gustaría saber cómo usted utiliza el autobús. Por favor, encierre con círculo, marque la casilla, o escriba las respuestas.

1. Incluyendo hoy, durante los últimos siete días, ¿qué días ha viajado en GoDurham?
Lun Mar Mier Jue Vier Sab Dom Todos los días

2. ¿Cuánto tiempo llevas viajando en GoDurham *(incluyendo cuando se llamó DATA)* **?**
1 ☐ Esta es la primera vez 2 ☐ Menos de 1 año 3 ☐ 1–2 años
4 ☐ 3-4 años 5 ☐ Más de 4 años

3. En el último mes, ¿ha utilizado los autobuses GoDurham para llegar o ir a...
(Marque todo lo que corresponda)
1 ☐ trabajo 2 ☐ compras
3 ☐ escuela media o secundaria 4 ☐ colegio o escuela de formación profesiona
5 ☐ servicios sociales 6 ☐ médico o una visita médica
7 ☐ visita social o recreativa 8 ☐ aeropuerto
9 ☐ Otro _____

4. Hoy en este viaje en autobús en particular, ¿cuál es la COSA PRINCIPAL que está haciendo? Yendo hacia o desde: *(Marque solo una)*
1 ☐ trabajo 2 ☐ compras
3 ☐ escuela media o secundaria 4 ☐ colegio o escuela de formación profesiona
5 ☐ servicios sociales 6 ☐ médico o una visita médica
7 ☐ visita social o recreativa 8 ☐ aeropuerto
9 ☐ Otro _____

5. Al hacer este viaje en una dirección, ¿cuántas veces tiene que cambiar de autobús?
0 - Ningún cambio de autobús 1 2 3 o más cambios de autobús

6. ¿En los últimos 30 días ha conectado entre GoDurham y estos otros sistemas?
(Marque todo lo que corresponda)
1 ☐ GoTriangle 2 ☐ GoRaleigh 3 ☐ Duke Transit 4 ☐ Amtrak
5 ☐ Greyhound/Trailways/Megabus 6 ☐ Ninguno - Uso sólo GoDurham

7. ¿Cómo pagaste la tarifa en el primer autobús de GoDurham que recibiste hoy?
1 ☐ Viaje sencillo $1.00 tarifa en efectivo 2 ☐ Tarifa de personas mayores/discapacitados con identificación
3 ☐ Cuota de estudiantes/jóvenes con identificación 4 ☐ GoDurham pase de 1-día
5 ☐ GoDurham pase de 5-días 6 ☐ GoDurham pase de 7-días
7 ☐ GoDurham pase de 31-días 8 ☐ Pase regional 9 ☐ GoPass

8. ¿Cómo, más a menudo, viaja de su hogar a su autobús de GoDurham?
1 ☐ Caminó 2 ☐ En bicicleta 3 ☐ Manejo 4 ☐ Alguien lo dejo
5 ☐ Otro autobús aparte de GoDurham 6 ☐ Uber/Lyft 7 ☐ Otro: _____

9. ¿Cuantos minutos te lleva llegar de casa a tu parada de autobús de esa manera?
_____ Minutos

En los últimos 30 días, ¿cómo calificaría los servicios de GoDurham...

	Excelente						Muy malo	No sé o no lo utilice
10. Cortesía de los operadores de autobuses	7	6	5	4	3	2	1	☐
11. Comportamiento de otros en los autobuses de GoDurham	7	6	5	4	3	2	1	☐
12. Sentido de seguridad personal de otros en los autobuses de GoDurham	7	6	5	4	3	2	1	☐
13. Sentido de seguridad personal de otros en la estación de Durham	7	6	5	4	3	2	1	☐
14. Comodidad mientras espera el autobús	7	6	5	4	3	2	1	☐
15. Limpieza del interior del autobús	7	6	5	4	3	2	1	☐
16. Los autobuses funcionan a tiempo	7	6	5	4	3	2	1	☐
17. Tiempo de viaje en autobús hasta su destino	7	6	5	4	3	2	1	☐
18. Tiempo que los autobuses de GoDurham de dejan viajar de noche	7	6	5	4	3	2	1	☐
19. Frecuencia de servicio, de lunes a sábado hasta las 7 pm	7	6	5	4	3	2	1	☐
20. Frecuencia de servicio, noches y domingos	7	6	5	4	3	2	1	☐
21. Facilidad de hacer conexiones entre Autobuses de GoDurham	7	6	5	4	3	2	1	☐
22. Facilidad de hacer conexiones entre GoDurham y otros sistemas de bus del área *(GoTriangle, GoRaleigh, Duke Transit)*	7	6	5	4	3	2	1	☐
23. Exactitud de información de 485-RIDE, operadores de telefonía	7	6	5	4	3	2	1	☐

24. De los servicios enumerados en las preguntas 10-23, ¿que serían los tres más importante para mejorar? *(Por favor escriba los números de las preguntas):*
_____ más importante _____ 2da más importante _____ 3ra más importante

25. EN GENERAL, ¿cómo califica usted el servicio de GoDurham?
Excelente 7 6 5 4 3 2 1 Muy malo

26. EN GENERAL, ¿cómo califica el servicio en el Bull City Connector (BCC)?
Excelente 7 6 5 4 3 2 1 Muy malo ☐ No lo utilizo

27. ¿Qué tan probable es que recomiende el servicio GoDurham a un amigo o colega?
Muy probable = 10 9 8 7 6 5 4 3 2 1 0 = Nada probable

28. ¿Utilizas un teléfono celular? 1 ☐ Sí 2 ☐ No
a. Si es así, ¿usa el texto en él? 1 ☐ Sí 2 ☐ No
b. Si es así, ¿tiene acceso a Internet en él? 1 ☐ Sí 2 ☐ No
c. ¿Tienes la aplicación TransLoc en tu teléfono? 1 ☐ Sí 2 ☐ No

29. En los últimos 30 días, ¿con qué frecuencia ha utilizado Uber o Lyft?
0 veces 1 vez 2 veces 3 veces 4 o más veces

30. Si utilizó Uber o Lyft...
a. ¿Lo utilizó como parte de un viaje en autobús? 1 ☐ Sí 2 ☐ No
b. ¿Lo utilizó para reemplazar un viaje en autobús? 1 ☐ Sí 2 ☐ No

31. ¿Cuantos años tiene? _____ Años

32. Por favor marque todo lo que se aplica a usted. Eres tú:
1 ☐ Empleado con paga fuera de su casa 2 ☐ Empleado con paga en su casa
3 ☐ Amo/a de casa 4 ☐ Estudiante 5 ☐ Desempleado 6 ☐ Jubilado

33. ¿Es usted actualmente un miembro de servicio activo o veterano de las Fuerzas Armadas de los Estados Unidos? 1 ☐ No 2 ☐ Activo 3 ☐ Veterano

34. ¿Tiene una licencia de conducir válida? 1 ☐ Sí 2 ☐ No

35. ¿Cuántos autos u otros vehículos están disponibles para que usted pueda usar?
0 1 2 3 o más

36. ¿Cuántas personas viven en su hogar?
1 2 3 4 5 6 7 8 o más

37. ¿Usted se identifica como... 1 ☐ Hombre 2 ☐ Mujer 3 ☐ Prefiero no responder

38. ¿Usted se considera como? *(Marque todo lo que aplica en su caso)*
1 ☐ Afro Americano/Negro 2 ☐ Asiática 3 ☐ Caucásico/Blanco
4 ☐ Indio Nativo Americano 5 ☐ Hispano 5 ☐ Otro: _____

39. ¿Habla usted Inglés? 1 ☐ Muy bien 2 ☐ Bien 3 ☐ No muy bien 4 ☐ Nada

40. ¿Qué idioma o idiomas habla usted en el hogar?
1 ☐ Inglés 2 ☐ Español 3 ☐ Otro _____

41. ¿Cuál es el ingreso total anual de su hogar?
1 ☐ Menos de $10,000 2 ☐ $10,000 a $14,999 3 ☐ $15,000 a $19,999
4 ☐ $20,000 a $24,999 5 ☐ $25,000 a $34,999 6 ☐ $35,000 a $49,999
7 ☐ $50,000 a $74,999 8 ☐ $75,000 a $100,000 9 ☐ Mas de $100,000

Comentarios: _____

¡Gracias! Por favor, devuelva este formulario al encuestador en su autobús.

Appendix B: Detailed Customer Satisfaction Tables

Figure 57 Detailed Crosstabulations of Customer Satisfaction Ratings

Frequency of using GoDurham in past 7 days:		One to three days	Four to six days	Seven days	All respondents
Q10 Satisfaction: Courtesy of bus operators	Very poor	3%	2%	7%	4%
	2	1%	1%	3%	2%
	3	5%	6%	7%	6%
	4	12%	11%	13%	12%
	5	19%	21%	17%	19%
	6	18%	23%	15%	18%
	Excellent	41%	36%	39%	39%
Q11 Satisfaction: Behavior of others on buses	Very poor	5%	6%	9%	7%
	2	4%	4%	8%	6%
	3	11%	11%	12%	11%
	4	19%	20%	18%	19%
	5	21%	25%	18%	21%
	6	15%	19%	12%	15%
	Excellent	26%	16%	22%	21%
Q12 Satisfaction: Sense of personal safety from others on buses	Very poor	3%	1%	5%	4%
	2	3%	3%	4%	3%
	3	6%	5%	9%	7%
	4	14%	13%	13%	13%
	5	19%	24%	18%	19%
	6	20%	25%	16%	19%
	Excellent	35%	30%	35%	34%
Q13 Satisfaction: Sense of personal safety from others at Durham Station	Very poor	3%	2%	5%	4%
	2	3%	3%	3%	3%
	3	6%	6%	8%	7%
	4	16%	14%	15%	15%
	5	19%	20%	19%	19%
	6	19%	26%	17%	19%
	Excellent	35%	29%	34%	33%
Q14 Satisfaction: Comfort while waiting for bus	Very poor	4%	4%	10%	7%
	2	6%	5%	5%	5%
	3	9%	10%	12%	10%
	4	15%	16%	13%	15%
	5	19%	23%	17%	19%
	6	17%	17%	15%	16%
	Excellent	29%	25%	28%	28%

Frequency of using GoDurham in past 7 days:		One to three days	Four to six days	Seven days	All respondents
Q15 Satisfaction: Cleanliness of bus interior	Very poor	4%	2%	9%	6%
	2	6%	5%	7%	6%
	3	7%	7%	10%	8%
	4	15%	17%	16%	16%
	5	18%	25%	18%	20%
	6	20%	22%	16%	18%
	Excellent	31%	22%	26%	27%
Q16 Satisfaction: Buses running on time	Very poor	3%	5%	12%	8%
	2	3%	6%	6%	5%
	3	10%	9%	11%	10%
	4	13%	15%	16%	15%
	5	22%	23%	19%	21%
	6	21%	22%	13%	17%
	Excellent	28%	20%	23%	24%
Q17 Satisfaction: Travel time to destination	Very poor	3%	1%	7%	4%
	2	4%	2%	4%	4%
	3	5%	7%	7%	7%
	4	14%	13%	15%	15%
	5	19%	20%	19%	20%
	6	22%	27%	18%	22%
	Excellent	31%	28%	29%	29%
Q18 Satisfaction: Time buses stop running in evening	Very poor	7%	6%	14%	11%
	2	5%	6%	6%	6%
	3	10%	8%	9%	9%
	4	13%	15%	14%	14%
	5	18%	19%	14%	16%
	6	17%	20%	15%	17%
	Excellent	29%	24%	28%	27%
Q19 Satisfaction: Frequency of service Mon-Sat until 7PM	Very poor	5%	2%	9%	6%
	2	5%	3%	4%	4%
	3	6%	7%	7%	7%
	4	15%	14%	15%	15%
	5	18%	20%	15%	17%
	6	22%	25%	18%	21%
	Excellent	29%	28%	32%	30%

Frequency of using GoDurham in past 7 days:		One to three days	Four to six days	Seven days	All respondents
Q20 Satisfaction: Frequency of service nights and Sundays	Very poor	9%	8%	15%	12%
	2	5%	5%	6%	6%
	3	9%	11%	9%	10%
	4	17%	14%	15%	15%
	5	16%	17%	15%	16%
	6	15%	20%	14%	16%
	Excellent	27%	24%	26%	26%
Q21 Satisfaction: Ease of transfer w/i system	Very poor	3%	2%	6%	4%
	2	2%	2%	4%	3%
	3	6%	7%	9%	8%
	4	13%	14%	13%	13%
	5	20%	21%	18%	19%
	6	21%	24%	17%	20%
	Excellent	35%	31%	32%	33%
Q22 Satisfaction: Ease of transfer between systems	Very poor	4%	3%	6%	5%
	2	1%	2%	3%	3%
	3	6%	5%	6%	6%
	4	12%	13%	14%	13%
	5	21%	19%	18%	19%
	6	17%	26%	17%	19%
	Excellent	39%	32%	35%	35%
Q23 Satisfaction: Accuracy of info from 485-RIDE operators	Very poor	4%	2%	7%	5%
	2	3%	3%	5%	4%
	3	5%	5%	8%	6%
	4	11%	10%	11%	11%
	5	17%	15%	15%	16%
	6	18%	24%	15%	18%
	Excellent	43%	40%	38%	40%
Q25 Overall GoDurham service	Very poor	1%	1%	3%	2%
	2	1%	0%	3%	2%
	3	4%	4%	5%	5%
	4	11%	10%	13%	12%
	5	24%	30%	23%	25%
	6	30%	32%	23%	27%
	Excellent	28%	23%	29%	27%

Frequency of using GoDurham in past 7 days:		One to three days	Four to six days	Seven days	All respondents
Q26 Overall Bull City Connector service	Don't know/use	33%	36%	25%	30%
	Very poor	2%	1%	3%	2%
	2	1%	0%	2%	1%
	3	2%	2%	3%	2%
	4	7%	4%	7%	6%
	5	11%	12%	13%	12%
	6	16%	20%	16%	17%
	Excellent	27%	25%	32%	29%
Q27 Likelihood of recommending GoDurham services	Not at all likely	3%	1%	4%	3%
	2	1%	0%	2%	1%
	3	3%	2%	3%	3%
	4	6%	4%	5%	5%
	5	7%	7%	8%	8%
	6	8%	9%	8%	8%
	7	10%	14%	12%	12%
	8	16%	17%	12%	15%
	9	12%	16%	11%	13%
	Extremely likely	34%	29%	34%	33%

Appendix C: Rider Comments Shown in Table (Full Comments under Separate Cover)

Comment	Percent of mentions
Negative on driver attitude	14%
Positive remark on GoDurham	13%
Negative on bus timeliness	13%
Need more service hours	12%
Bus safety & cleanliness/fellow passenger concern	10%
More stops/more buses needed	9%
Miscellaneous	8%
Comment on the survey, not on service	5%
Stop amenities wanted	5%
Negative remarkk on service	4%
Comment on APP/WIFI	3%
Route changes wanted	3%
Negative remark on fares	1%