A SURVEY
OF USERS of *TheRide,*
A SERVICE OF THE
ANN ARBOR AREA TRANSPORTATION AUTHORITY
October, 2013

A study conducted by:

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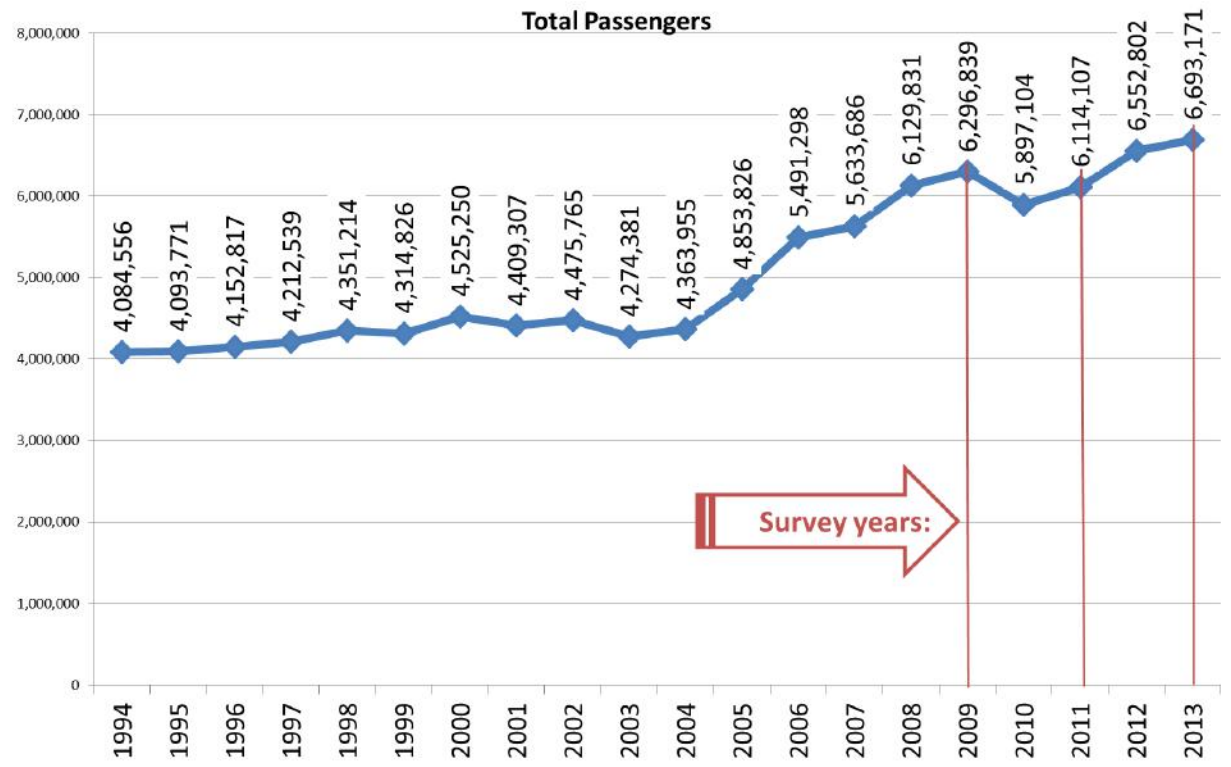


Ridership

Ridership on *TheRide* remained relatively flat from 1994 through 2004, varying in a limited range from about 4 million trips in 1994 to 4.3 million in 20014, but then began a long climb to 2009 when it reached a total of almost 6.3 million trips. With the Great Recession, it fell back to below 6 million, but as the economy slowly recovered much of its strength, it began a rapid increase again, reaching almost 6.7 million in 2013.

Survey Data Collection

A survey was conducted onboard AAATA buses from October 4 through 10, 2011. Survey data collection occurred onboard the buses. Temporary workers were used for this purpose under the supervision of CJI Research Corporation staff. Surveyors wore both ID badges and smocks identifying them in large print as "Transit Survey" workers. This uniform helps riders visually understand the purpose of the interviewers approaching them.

Survey personnel accompanied drivers at the beginning of the shifts and rode the buses for an entire run. They approached all riders rather than a sample of riders. Thus, the bus was in effect a sample cluster point within which all were surveyed. Survey personnel handed surveys to riders and asked them to complete the survey. They also provided pencils to the potential respondents.

At the end of the run, the survey personnel placed the completed surveys in an envelope marked with the route and the run and reported to the survey supervisors who completed a log form detailing the run.

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 more accurate method than asking riders which route they are riding when completing the survey.

Sample

A random sample of runs was drawn from a list of all AAATA 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 AAATA System's overall route structure. The sample was adjusted slightly to take any such omissions into account.

The resulting total sample size is 3,522 useable responses. When all respondents were included, this sample had a sample error level of $\pm$1.6%. If a sub-sample were used, sample error would increase somewhat, though 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. This does not occur in the report presented here.

Participation Rates

A total of 6,596 AAATA riders were approached and asked to participate in the survey. Of these, 1,261 (19%) said they had already completed a survey. Another 987 (15%) were unwilling to participate, and 231 presented a language barrier (4%). Thus, the total "effective distribution," defined as a rider accepting the survey materials and agreeing to complete a survey form, was 4,118 persons. Of these, 596 (14%) accepted the questionnaire but failed to return it, 93 took the questionnaire and either gave it to another driver or mailed it back in a post-paid envelope, and 3,429 returned a useable survey form to the surveyor on the bus. Thus, the effective participation rate among everyone who was approached was 53%, and was 86% among those who initially agreed to participate.

Figure 1 Response rates

Response rates

A total of…	6,596	adults were riding the surveyed trips and thus had a chance to participate		Percent
	Of these…	1261	said they had already completed the survey	19%
		987	refused outright	15%
		231	encountered a language barrier	4%
	…and…	4,118	accepted the survey with apparent intention to complete it	62%
Thus,	4,118	represents the "effective distribution."		
		93	Completed the survey and returned it to an AATA operator on another trip	2%
		3,429	Completed it on the AATA vehicle	83%
		596	accepted but did not complete the survey	14%
		3,522	returned useable survey questionnaires	
			Of all adults riding a surveyed vehicle, this represents:	53%
			Of effective distribution, this represents:	86%

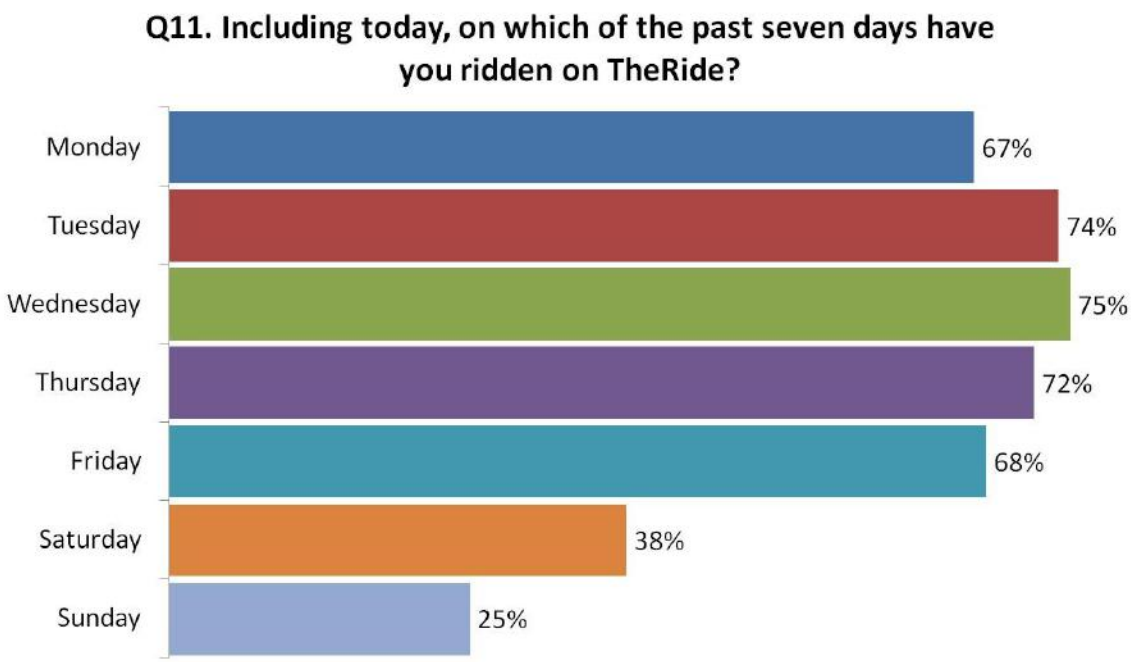
Analysis

Analysis consists primarily of cross tabulations and frequency distributions. Tables were prepared in SPSS (version 20) and charts in Excel 2010.

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, percentages are carried to tenths. Rounding causes some percentage columns to total 99% or 101%. Such totals do not represent errors and the deviation from 100% should be ignored.

Rider profile

Figure 2 Days TheRide was used in 2013

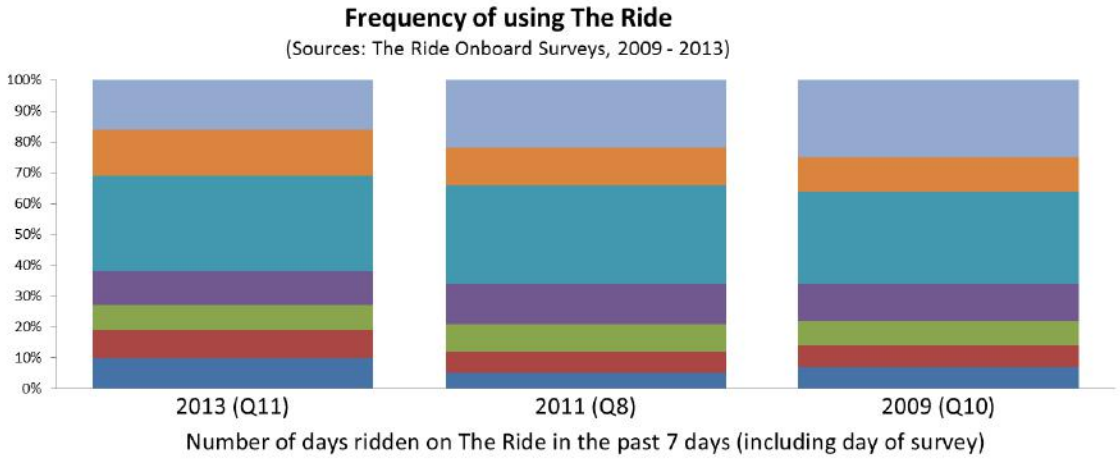


Days TheRide was used in 2013

TheRide was used by at least two-thirds of the riders on every weekday, with 67% using it on Monday, and 68% on Tuesday and by three fourths or almost three fourths on Tuesdays (74%), Wednesdays (75%) and Thursdays (72%).

Weekends attract fewer riders, with 38% saying they used *TheRide* on Saturday, and 25% on Sunday.

Figure 3 Frequency of using TheRide



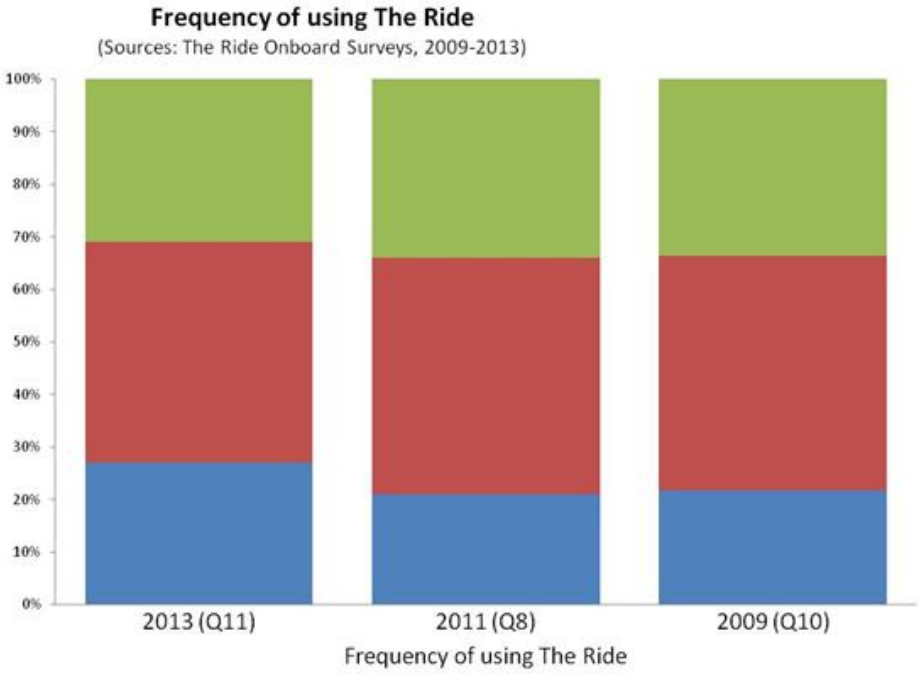
	2013 (Q11)	2011 (Q8)	2009 (Q10)
Seven days	16%	22%	25%
Six days	15%	12%	11%
Five days	31%	32%	30%
Four days	11%	13%	12%
Three days	8%	9%	8%
Two days	9%	7%	7%
One day	10%	5%	7%

Frequency of using TheRide

Most riders (a total of 62%) use AAATA five or more days a week. Sixteen percent use it every day, while another 15% use it six days a week. The 2013 results represent a continuation of trends among six and seven day riders begun in 2009. In 2009, 25% of riders said they used *TheRide* seven days a week. That figure slipped to 22% in 2011 and to 16% in 2013. Although it did not entirely offset the declining percent of seven day riders, six day riders increased from 11% in 2009 to 12% in 2011 and 15% in 2013.

The reasons for this change are not clear from the data.

Figure 4 Compressed measure of frequency of using TheRide



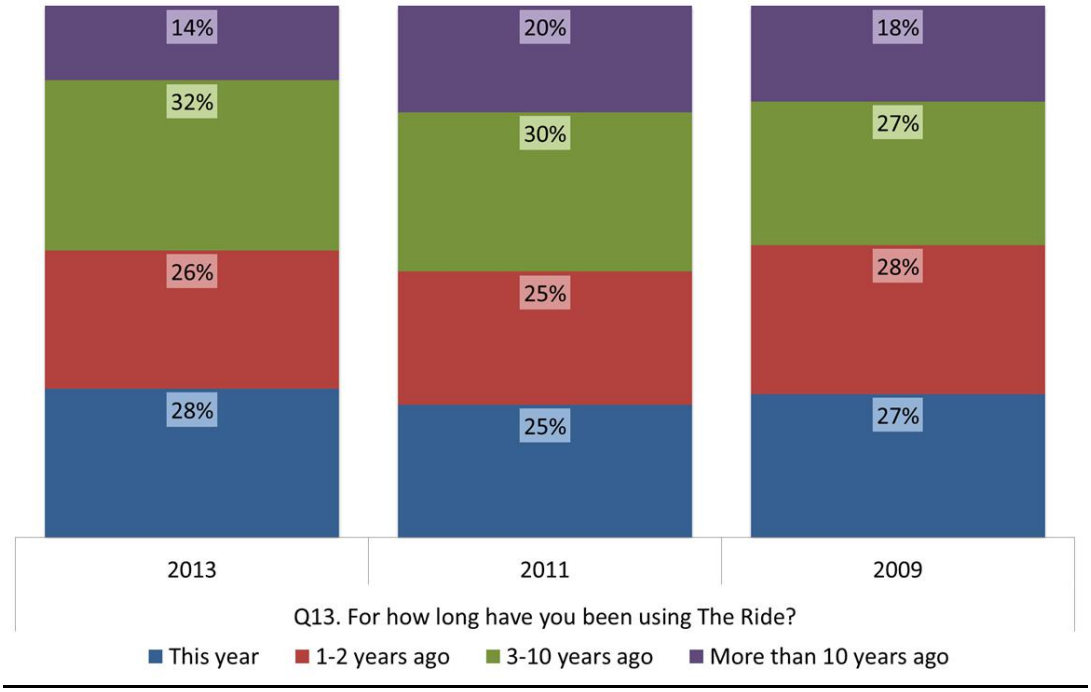
	2013 (Q11)	2011 (Q8)	2009 (Q10)
Intensive - Six or seven days	31%	34%	34%
Frequent - Four or five days	42%	45%	45%
Occasional - One to three days	27%	21%	22%

Rider segments

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

- "Occasional riders," who use *TheRide* one to three days a week (27%)
- "Frequent riders," who use *TheRide* four or five days a week (42%)
- "Intensive riders," who use *TheRide* six or seven days a week (31%)

Figure 5 Duration of Using TheRide

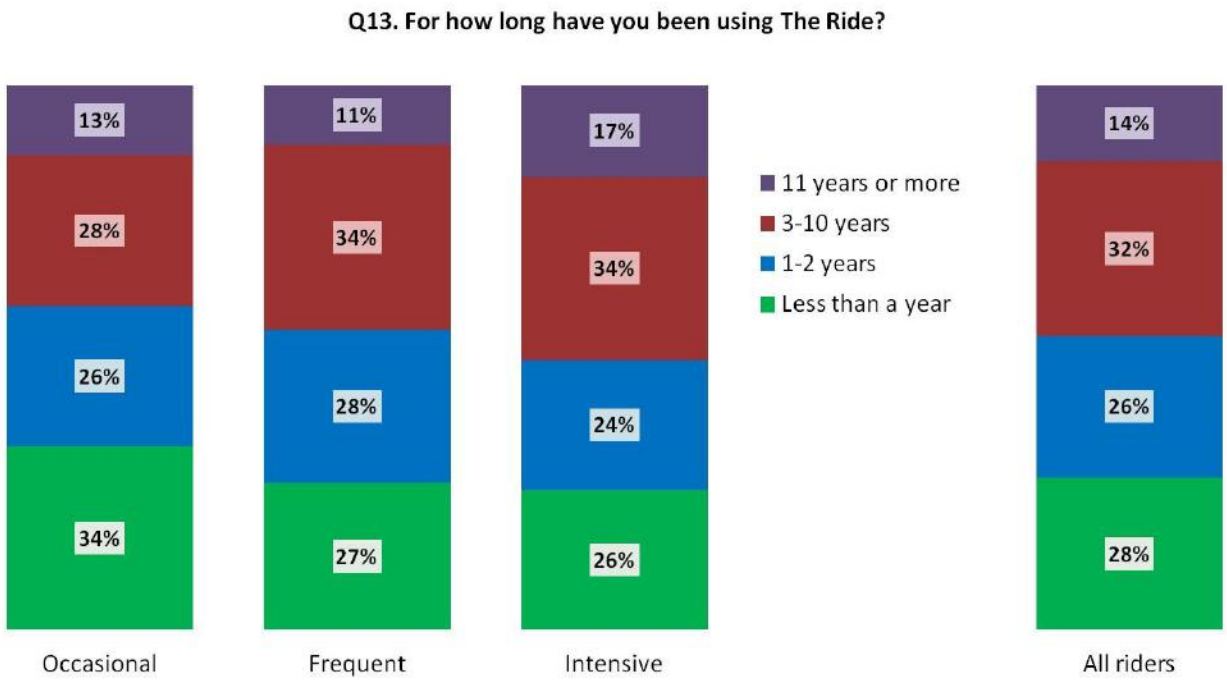


Duration of Using TheRide

Twenty-eight percent (28%) began using AAATA only in the year of the survey (2013). This result is similar to the results of prior surveys. The range of differences in this respect is only 3%, ranging from 25% in 2011 to 28% in 2013. The surveys were conducted in October, meaning that these people had begun using AAATA only during the previous nine or ten months. These are fairly typical rates of clientele turnover for all bus transit systems. Approximately another fourth (26%) had begun using AAATA between 2011 and 2012 and the balance, 46%, prior to that time.

The primary difference among the three surveys is that the percentage of long term riders has diminished from 18% in 2009 and 20% in 2011 to only 14% in 2013. Since ridership has increased, this does not necessarily mean that the absolute number of long term riders has declined. Rather the increased numbers of more recent riders have caused the relative proportions of longer term riders to decline as the more recent riders' proportions increased.

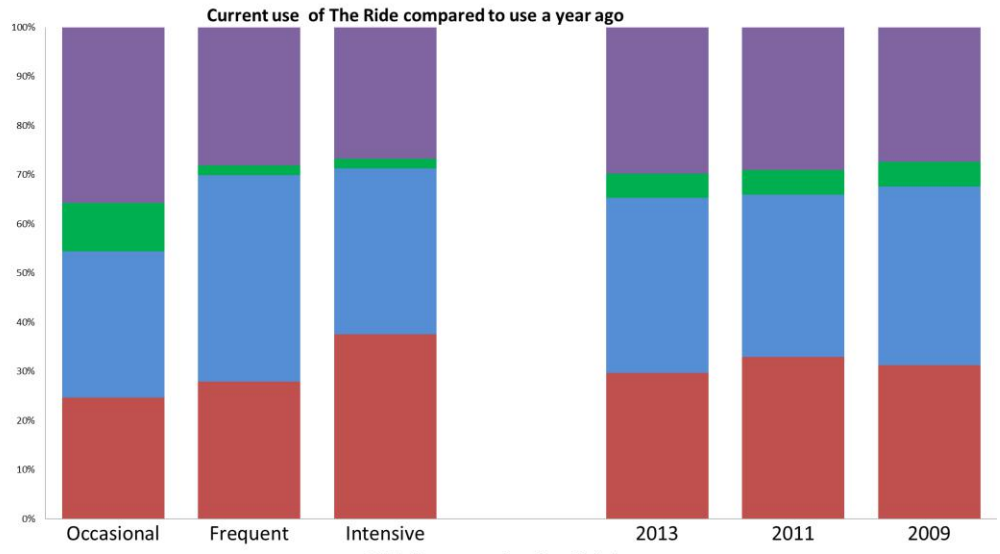
Figure 6 When riders began using TheRide



When riders began using TheRide

The largest influx of recent riders is among the occasional riders among whom 34% began riding only in 2013, compared with 26% of those using *TheRide* six or seven days a week. Clearly, part of the marketing effort should involve retention of these riders and making it easy for them to use *TheRide* more frequently.

Figure 7 Current use of TheRide and use one year ago



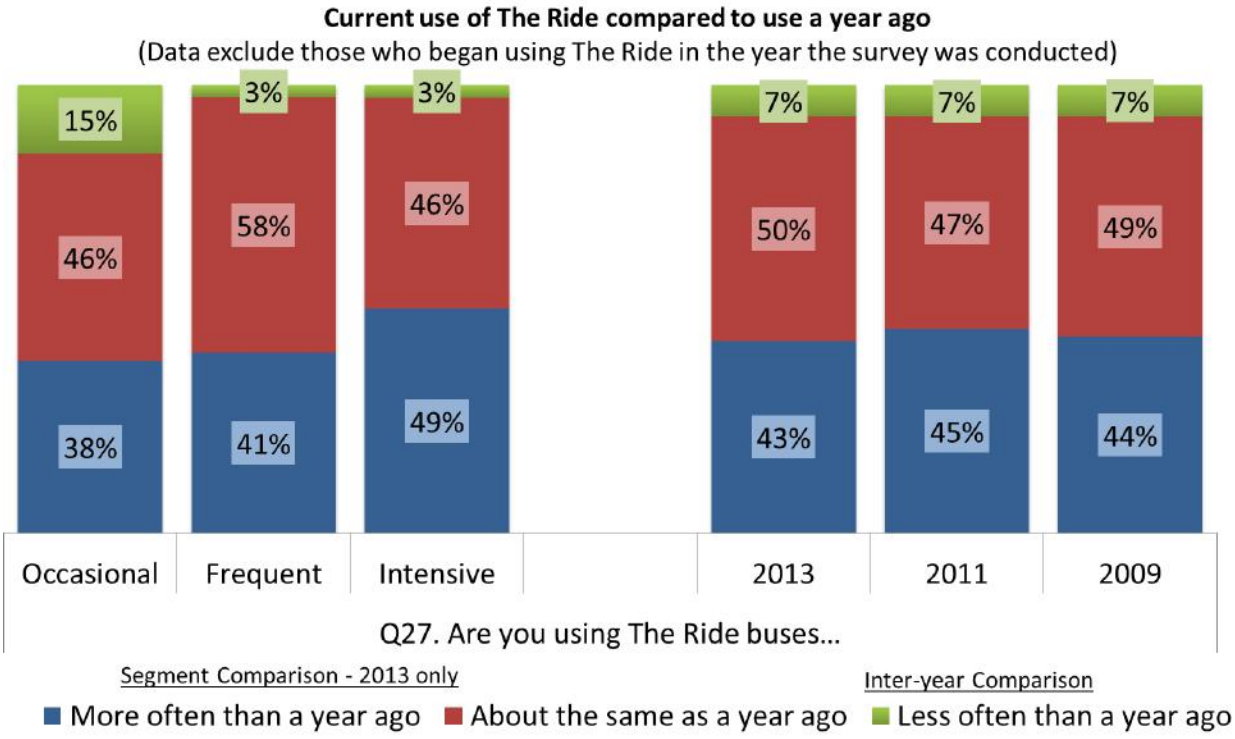
Q27. Are you using The Ride buses...

	Segment Comparison - 2013 only			Inter-year Comparison		
Began only this year	36%	28%	27%	30%	29%	27%
Less often than a year ago	10%	2%	2%	5%	5%	5%
About the same as a year ago	30%	42%	34%	36%	33%	36%
More often than a year ago	25%	28%	38%	30%	33%	31%

Current use of TheRide and use one year ago

Change in use of transit occurs in several ways. New riders may begin riding from population growth or from a combination of successful service and marketing efforts or both. Or existing riders may ride more often, or they may continue riding for a longer period. We saw in Figure 5 that the percent of new riders has increased and that the percent of riders who have been riding from three to ten years has also increased. Since the ridership itself has also increased, this suggests that there are more individual people in each of these categories because of better retention.

Figure 8 Change in frequency of using TheRide among pre-existing riders

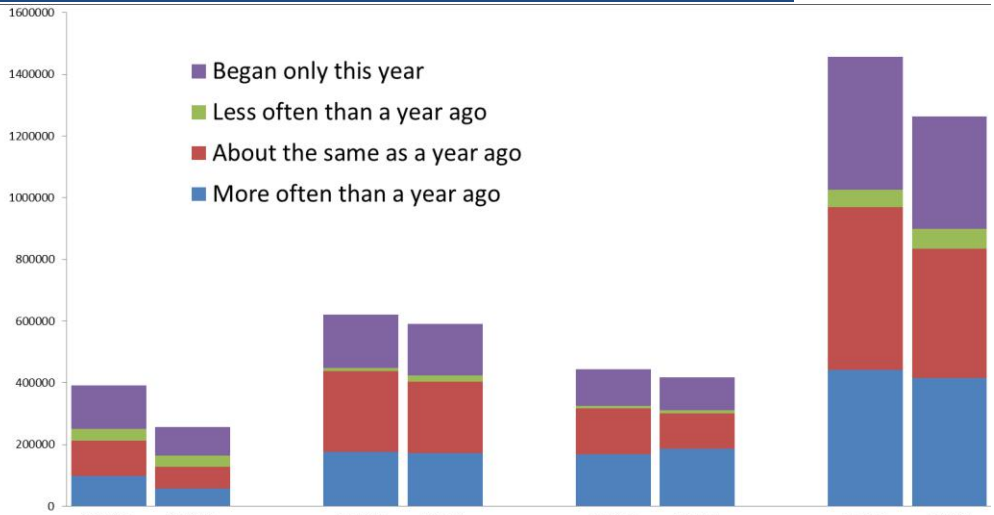


Change in frequency of using TheRide among pre-existing riders

Among those riders who had a history of riding prior to 2013 when the survey was conducted, 43% said they rode more often in 2013 than in 2012. The percentages of riding more often, less often, or with the same frequency did not change appreciably since 2009.

The intensive users are more likely than others to say they ride more often currently than a year ago.

Figure 9 Change in ridership, among rider frequency groups



	2013	2011	2013	2011	2013	2011	2013	2011
	Occasional		Frequent		Intensive		TOTAL	
Began only this year	140175	92527	173602	166736	117953	105221	431729	364485
Less often than a year ago	38114	35627	11003	19504	7242	10198	56359	65329
About the same as a year ago	116319	69291	260452	232321	149975	115520	526746	417131
More often than a year ago	97125	58799	176892	171815	168411	186381	442427	416994

Change in ridership, among rider frequency groups

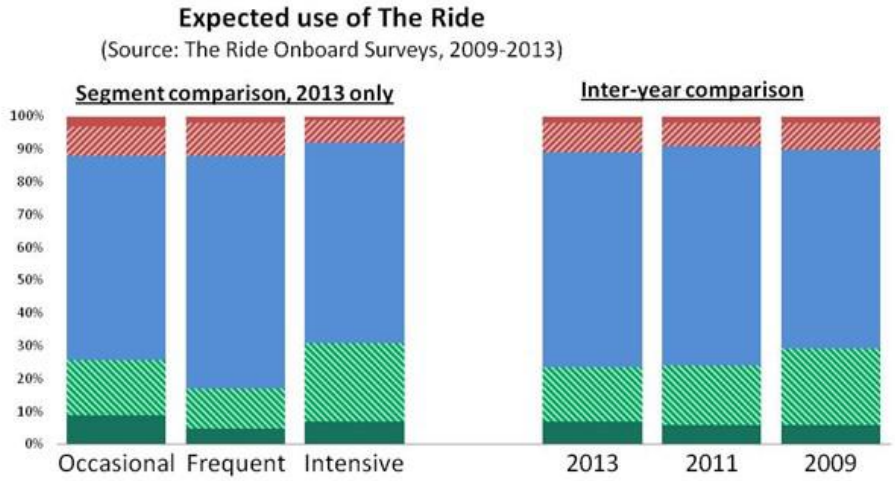
For sampling and weighting, ridership figures for the fourth quarter of the year prior to the survey were provided by AAATA[1].

Visual examination of the change in riding habits on the basis of estimated ridership shows that:

- Ridership grew substantially.
- Intensive and frequent ridership increased somewhat but that proportionately the largest increase was among occasional riders.
- Between 2011 and 2013, there was a major increase in the numbers of those who said they ride with about the same frequency as in the previous year (+26% change) and in those who said they began riding in the year of the survey (+18%).

[1] In each year, the weighting to these figures will correct the proportions among the routes, and will provide projections to the total sample within 1% of the actual ridership. However, in any given table, there will be missing data because some riders will have failed to respond to a given question. Thus, while for the total sample, the projected ridership is accurate within .07%, the totals for each year on any given crosstabulation (especially on questions occurring later in the survey because of survey abandonment on short trips) the projections will underestimate the ridership by some percentage, in this case 13% or 14% for 2013 and 2011 respectively. Nevertheless, the estimates provide an approximation of the proportions that percentage distributions do not provide.

Figure 10 Intention of using transit one year from now



	Occasional	Frequent	Intensive	2013	2011	2009
stop using AATA for other reason	3%	2%	1%	2%	2%	2%
move away from this area	9%	10%	7%	9%	7%	8%
keep using AATA	63%	71%	61%	66%	66%	60%
get a car but also use AATA	17%	12%	24%	17%	18%	23%
get a car and stop using AATA	9%	5%	7%	7%	6%	6%

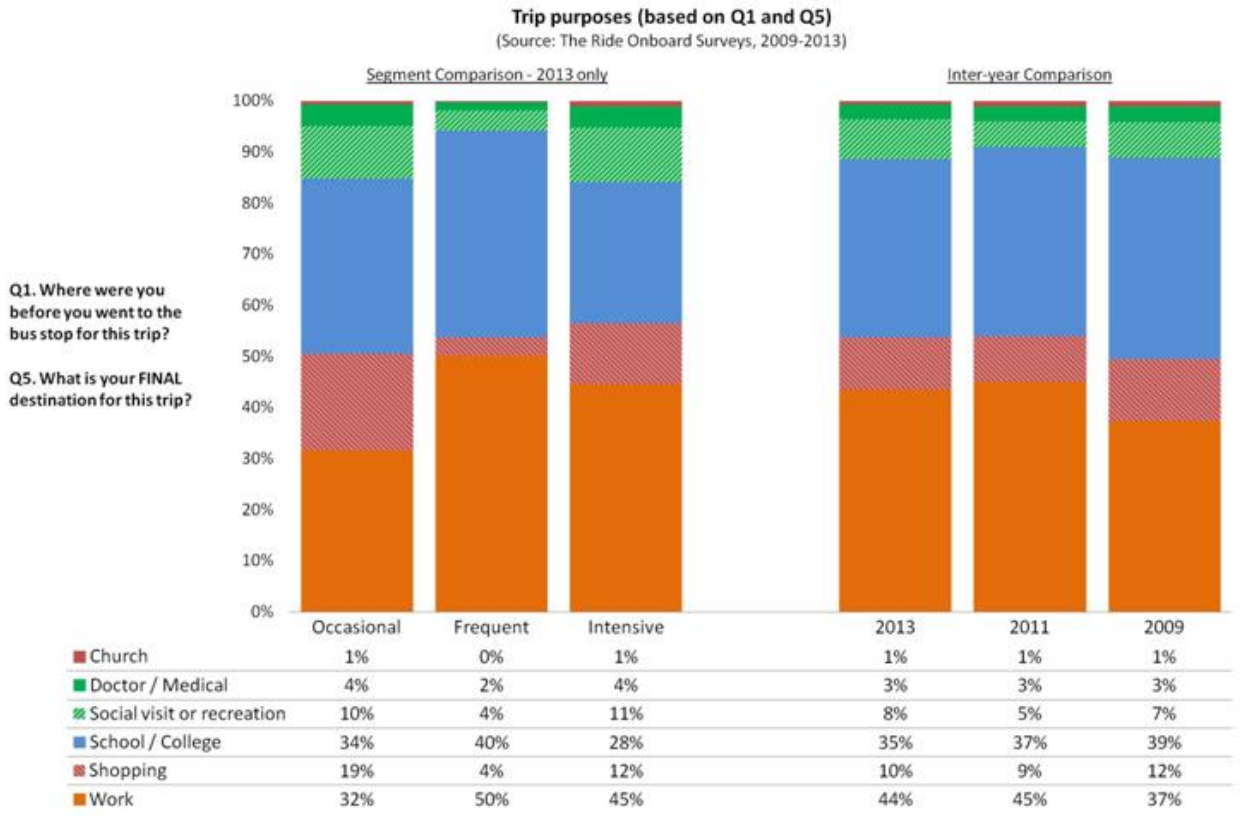
Intention of using transit one year from now

As it is with any business, customer retention is important in the marketing of public transit. AAATA riders were asked whether in one-year they expected to continue to be using AAATA buses, or whether for various reasons they would reduce their use or discontinue use of the bus service.

In 2009, 60% indicated that they would keep using AAATA, while 23% indicated that they planned to obtain a car, but also planned to continue using AAATA. The balance, 16%, indicated that for several different reasons they planned to cease using AAATA. In 2011, the percent intending to continue using AAATA had risen to 66% a change accounted for almost entirely by a decrease in the percent saying that they planned to get a car but also to continue using AAATA. The 2013 results are virtually the same as those of 2011, with 66% again saying they expect to continue using AAATA, and 17% saying they plan to get a car but continue using *TheRide*.

The frequent riders, who tend to be commuters going to or from work or school (or both), comprise the segment most likely to say (70%) that they would keep using AAATA. As in 2009 and 2011, the intensive users are the ones most likely (24%) to say they intend to "get a car but keep using AAATA."

Figure 11 Trip purposes



	Occasional	Frequent	Intensive	2013	2011	2009
Church	1%	0%	1%	1%	1%	1%
Doctor / Medical	4%	2%	4%	3%	3%	3%
Social visit or recreation	10%	4%	11%	8%	5%	7%
School / College	34%	40%	28%	35%	37%	39%
Shopping	19%	4%	12%	10%	9%	12%
Work	32%	50%	45%	44%	45%	37%

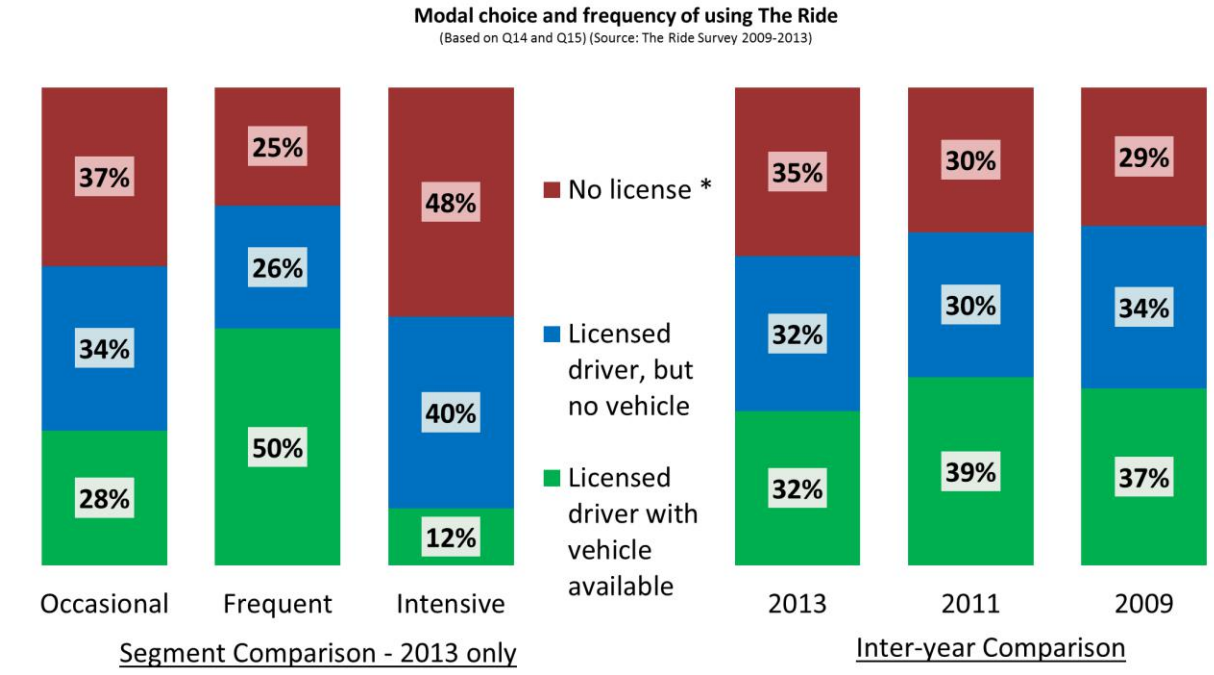
Trip purposes

Trip purpose changed considerably between 2009 and 2011, and remained at 2011 levels in 2013. The primary change was that, as the economy improved from 2009 to 2011, the percent of riders making work trips rose by 8% from 37% to 45% and it remained at approximately that level (44%) in 2013. There have been minor fluctuations in school and shopping trips, but it is the change in work-trips that was most pronounced in the period 2009 – 2013.

Getting to or from school or college (35%) remains a major trip purpose, although it is down somewhat from 39% in 2009 and 37% in 2011. We shall see in a later chart (Figure 24) that 47% of AAATA riders are students (up from 40% in 2011), and another 6% are both students and employed for a total of 53%.

Notice that frequent riders tend to make trips for school (40%) and trips for work (50%), but few trips for other purposes. Like the frequent riders, the intensive riders divide primarily between trips for school (28%) and trips for work (45%). However, they made more trips for shopping (12%) than the frequent riders (4%). For occasional riders, work trips were less frequent (32%), but school/college trips (34%) were roughly comparable to the other segments, and trips for shopping (19%) or socializing (10%) were more frequent.

Figure 12 Modal choice



* This category includes those without a valid license. Most of this category have neither a license nor a vehicle, but a small number have a vehicle but a suspended license.

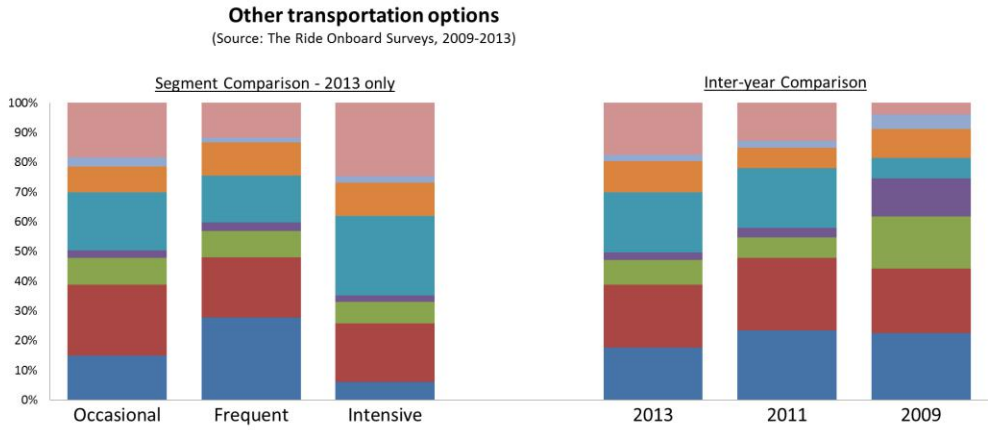
Modal choice

Among all riders, roughly one third (32%) have modal choice in that they are licensed drivers and had a vehicle available for their trip on the day they were surveyed on the bus. Another approximate third (also 32%) are licensed drivers but had no vehicle available. The balance, 35%, had neither license nor vehicle available for the trip on which they were surveyed. This represents a substantial increase over 2011, when 30% had no license.

Modal choice varies considerably among the three rider segments. Frequent riders are more likely than the other rider segments to be licensed to drive and have a vehicle available (50%), and thus have the greatest level of choice. Of course, they are also more likely to be traveling for work, and thus are clearly income-earners with the options income brings. Among intensive riders, only 12% fall in this category, while 40% are licensed but had no vehicle available for the trip, and another 48% either have no license and/or lacked an available vehicle.

The primary reasons for the differences in modal choice are economic. While 64% of intensive riders have household incomes of $25,000 or less, slightly less than half of the other rider segments have such low incomes (see Figure 31).

Figure 13 Alternative if AAATA service had not been available



Q12. If AATA bus service were not available for this trip, what would you have done instead?

	Occasional	Frequent	Intensive	2013	2011	2009
Not made this trip at all	18%	12%	25%	18%	13%	4%
Gone somewhere else	3%	2%	2%	2%	2%	5%
Bicycled	9%	11%	11%	10%	7%	10%
Walked	20%	16%	27%	20%	20%	7%
Taken a carpool or vanpool	3%	3%	2%	3%	3%	13%
Taken a U of M bus	9%	9%	7%	8%	7%	18%
Gotten a ride	24%	20%	20%	21%	24%	22%
Driven alone	15%	28%	6%	18%	23%	23%

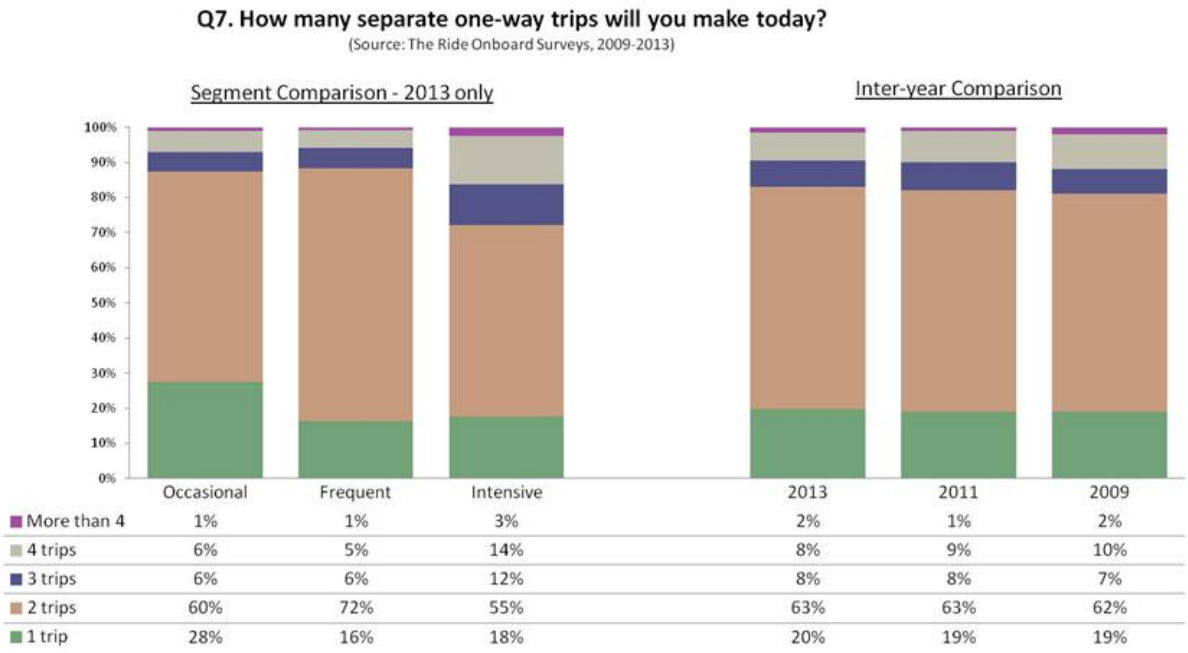
Alternative if AAATA service had not been available

Riders were asked what they would have done if *TheRide* were not available for this trip. In the absence of AAATA service, approximately one-fifth (21%) of riders said that they would have gotten a ride, while another 18% said they would have driven alone. In both 2009 and 2011, 13% said they would not have made the trip at all.

In both 2011 and 2013, 20% indicated they would have walked, a fact that suggests that a significant proportion of the trips being made via AAATA are within walking distance. For reasons that cannot be explained by the survey data, the percent who said they would have walked tripled from 7% in 2009 to 2011, but then remained stable at 20%.

Being more likely to have modal choice, the frequent (33%) and the occasional riders (24%) are more likely than the intensive riders (10%) to say that they would have driven alone had AAATA not been available.

Figure 14 Number of transit trips today



Number of transit trips today

Riders were asked how many separate one-way trips they would make on the day they were surveyed. Almost two thirds, 63%, indicated they would make two trips, while 19% indicated they would make only one, and the balance, 18%, indicated they would be making three or more trips. These results are almost identical to the 2011 results and are so similar to results of 2009, that the small differences can be ignored.

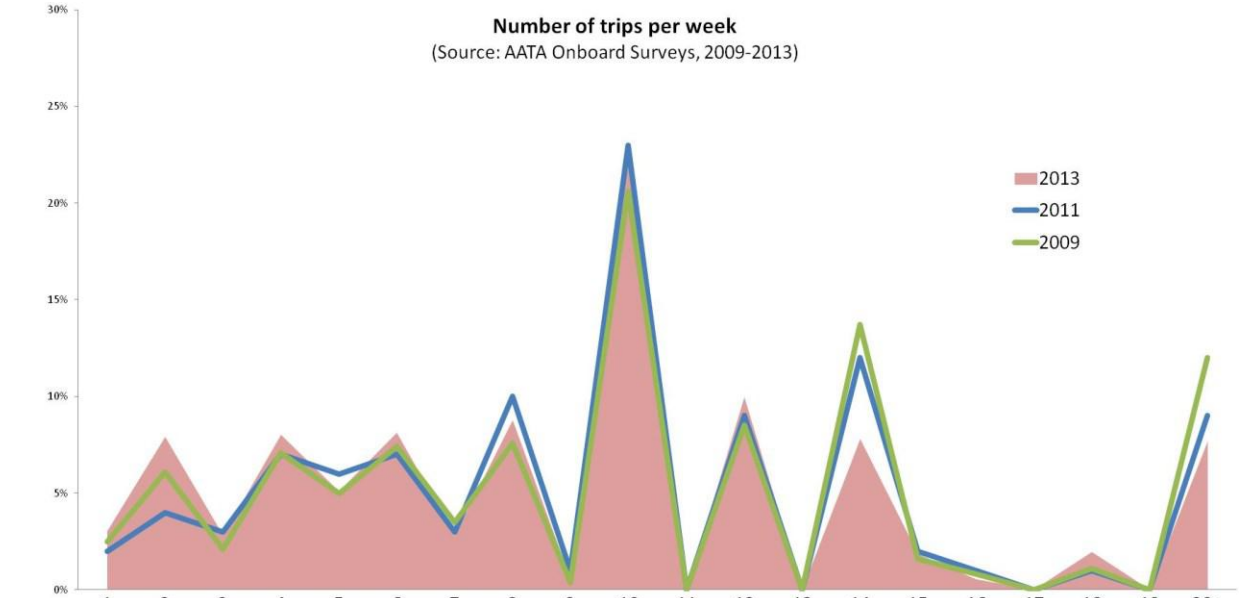
Figure 15 Trips per day

	2013	2011	2009
		Mean	
Occasional rider	2.0	1.9	1.9
Frequent rider	2.0	2.1	2.1
Intensive rider	2.3	2.3	2.4
All riders	2.1	2.1	2.1

Among the intensive riders, a total of 29% make three or more trips a day, while only 12% of frequent riders and 13% of occasional riders make so many trips. In other words, the intensity of using transit as measured in the charts in this report based on the number of days per week transit is used, is magnified by the tendency of those who use AAATA on more days to use it for more trips on those days.

The mean number of trips for all riders in 2013 and in both 2009 and 2011 was 2.1. The mean number of trips varies among the rider segments, with the occasional and frequent riders making two trips and intensive riders averaging more than two trips (2.3 trips).

Figure 16 Percent of all riders making certain numbers of trips per week



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
2013	3%	8%	3%	8%	5%	8%	3%	9%	1%	23%	0%	10%	0%	8%	2%	1%	0%	2%	0%	8%
2011	2%	4%	3%	7%	6%	7%	3%	10%	1%	23%	0%	9%	0%	12%	2%	1%	0%	1%	0%	9%
2009	3%	6%	2%	7%	5%	7%	4%	8%	0%	21%	0%	9%	0%	14%	2%	1%	0%	1%	0%	12%

Trips per week

By simply multiplying the number of days per week riders use AAATA by the number of trips per day we can estimate the number of trips per week.

Of all riders in 2013, 21% make ten trips per week. The next most common pattern is to make from twelve (10%) to fourteen (8%) trips per week. The fact that the even numbers represent peaks and odd numbers valleys simply means that most riders make round trips.

Figure 17 Trips made each week by rider segments

Trips per week 2011

	Mean	Std. Deviation	Median
Occasional rider	4.2	2.5	4
Frequent rider	9.6	3.8	10
Intensive rider	15.6	7.3	14
All riders	10.5	6.6	10

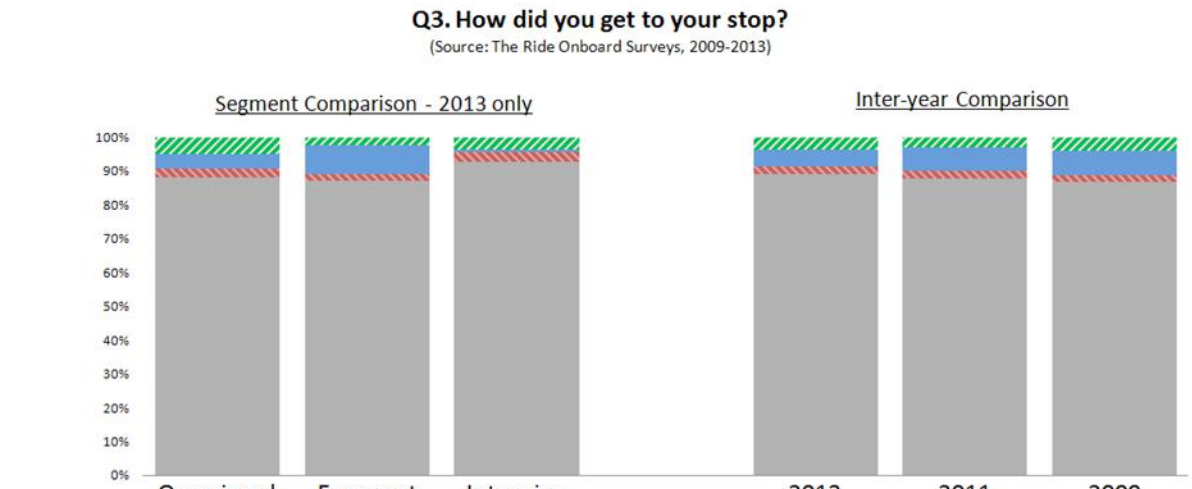
Trips per week 2013

	Mean	Std. Deviation	Median
Occasional rider	3.8	2.6	3
Frequent rider	9.6	3.6	10
Intensive rider	15.1	7.4	14
All riders	9.7	6.5	10

The inset table (Figure 17) shows trip tendencies statistically. The average (mean) number of trips per week in 2013 is 9.7, while the median is 10 trips. The standard deviation is 6.5 trips.

Because it is part of the computation of the trips per week, it is self-evident that the number of weekly trips will vary positively with the number of days on which AAATA is used. However, it is instructive to see the differences among the segments. Notice, for example, that in 2013, as in 2011, the intensive riders make several times the mean numbers of trips (15.1) than are made by occasional riders (3.8). Thus, to take just one example, retaining one intensive rider is the same, in terms of ridership, as attracting almost four (3.98) new occasional riders.

Figure 18 Mode to bus stop

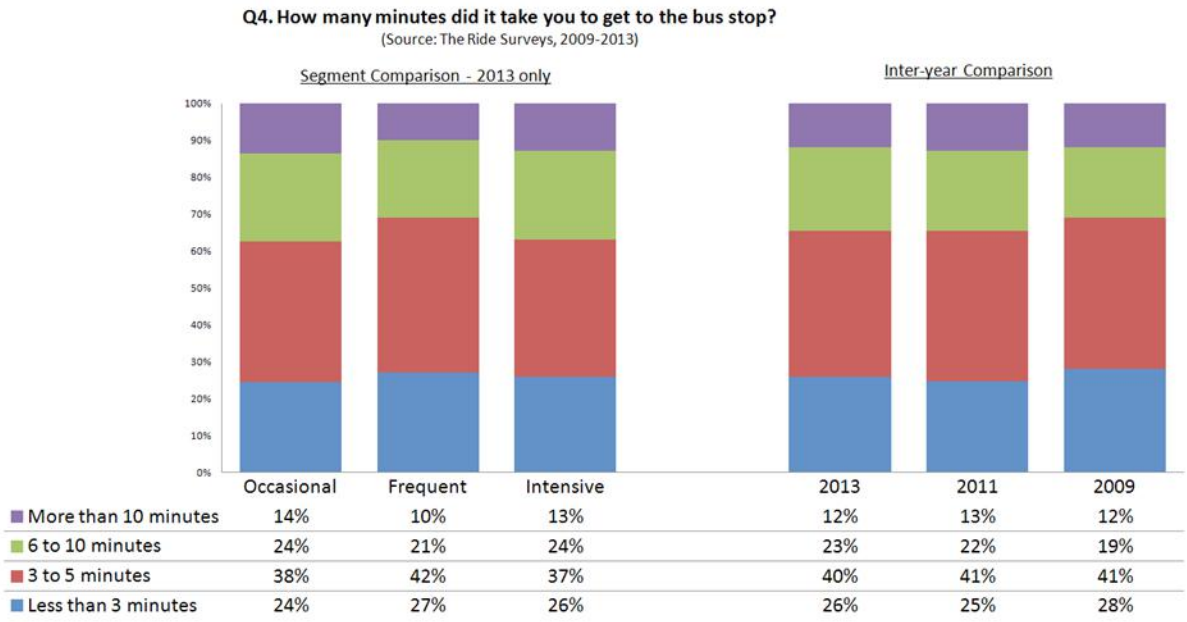


Mode to bus stop

As is typical in almost all transit systems, most people (89% in the case of AAATA) walk to the bus stop. This has not changed substantially since 2009.

This tendency varies somewhat among the rider segments, with 9% of frequent riders indicating that they had driven to the bus stop, apparently utilizing a park and ride opportunity. Only 1% of intensive users drove to the stop.

Figure 19 Minutes to and from the bus stop



Minutes to and from the bus stop

Riders were asked how long it takes to get to their bus stop. In general, they say it takes five minutes or less in both directions. For example, of all riders, 26% said it takes them less than three minutes to get to the bus stop, and 40% said it takes 3 to 5 minutes to get to the bus stop. These percentages remain essentially unchanged since 2009.

These tendencies vary only slightly among the rider segments.

Figure 20 Time to the bus stop

Minutes to the bus stop

	2013	2011	2009
Mean	6.5	6.8	6.6
Median	5	5	5
Std. Dev.	6.8	7.7	7.8

The inset table provides summary statistics in terms of the number of minutes it takes to get to the bus stop.

For all AAATA riders, the average time to the bus stop is 6.5 minutes, essentially the same as in 2009 when the mean was 6.6 minutes, but a bit less than the 6.8 minutes in 2011.

The median time indicates that one-half of AAATA riders spend five minutes or less getting to the bus stop and half spend more time than that. This remains unchanged since 2009.

The standard deviation of 6.8 minutes to the bus stop indicates that roughly two-thirds (actually 68%) of AAATA riders spend within 0 to 13.3 minutes to get to the stop. This range is somewhat tighter than in 2011 (14.5) or 2009 (14.4).

Figure 21 Time to the bus stop, by mode to the stop

How many minutes did it take you to get to the bus stop?
By: How did you get to your stop?

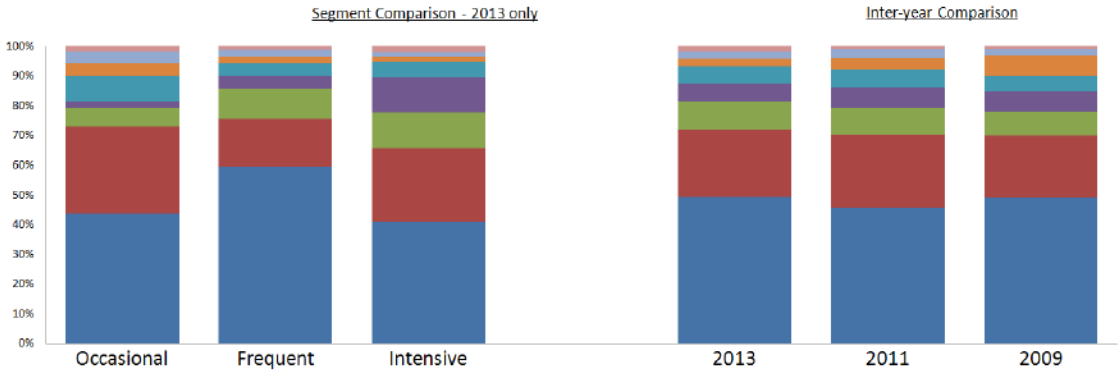
	Mean	Median	Std. Deviation	# of Respon-dents
Drove	16	15	13	143
Got a ride	14	10	33	129
Wheelchair / scooter	9	5	8	10
Bike	8	5	8	77
Walked	6	5	6	2975

The time to get to the bus stop varies with the mode. Those who walk have the shortest average trip to the bus stop (6 minutes), while those who drive to the stop have the longest (16 minutes).

The table also shows the unweighted number of respondents. The reason for providing this information is that, while the number of respondents overall is large, the number in any category except walking is small. This is especially true of those using a wheelchair or scooter (n=10) and because that number is so small, it should not be considered suggestive, but definitive for that population.

Figure 22 How riders pay their fares

Q8. How did you pay for this trip?
(Source: The Ride Onboard Surveys, 2009-2013)



8. How did you pay for this trip?

	Occasional	Frequent	Intensive	2013	2011	2009
Transfer	2%	1%	2%	2%	1%	1%
Token	4%	2%	2%	3%	3%	2%
EMU	4%	2%	2%	3%	4%	7%
Other	9%	5%	6%	6%	6%	5%
30-Day pass	2%	4%	12%	6%	7%	7%
go!Pass	6%	10%	12%	10%	9%	8%
Cash	30%	17%	25%	23%	25%	21%
MCard	44%	60%	42%	50%	46%	49%

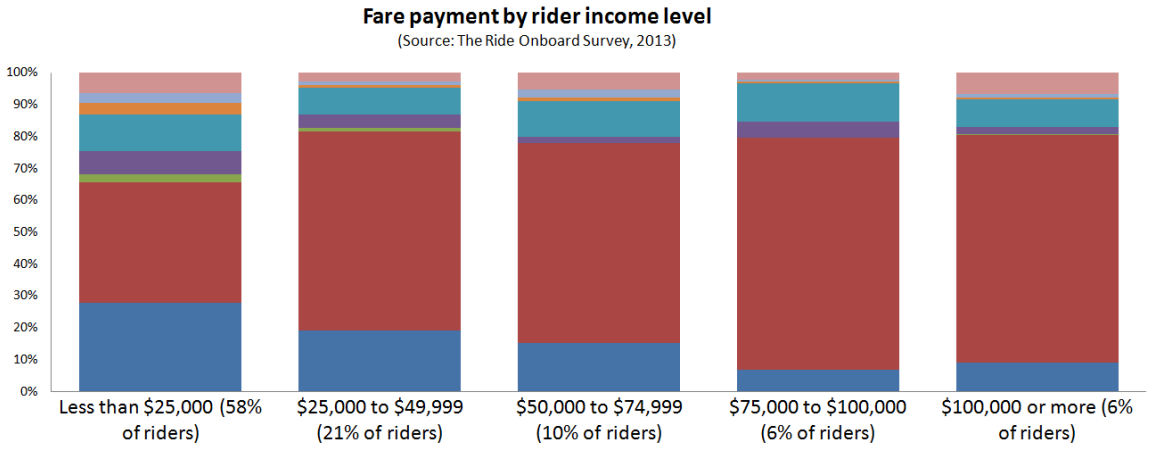
How riders pay their fares

Among all AAATA riders, half (50%) pay their fare with an MCard, while another 21% use another type of pass. This includes the go!pass, 10%, the 30-Day pass, 6%, the EMU pass, 3%, and tokens, 3%). A small number use a transfer (2%). Another 23% pay their fare with cash, a decrease of 2% since 2011. That change is associated with an increase in use of the MCard.

It is of special interest that 10% of *TheRide* users ride with a go!pass, a pass provided as a benefit by employers for commuting by full time employees.

As one would expect, the use of cash is greatest among the occasional transit users, among whom 30% pay the fare in cash. However, of that rider segment, 44% use an MCard and another 18% use another type of pass.

Figure 23 Fare medium and income



Other	7%	3%	5%	2%	7%
EMU Pass	3%	1%	3%	1%	1%
Token	4%	1%	1%	1%	0%
go!Pass	12%	9%	11%	12%	9%
30-day pass	8%	4%	2%	5%	2%
Transfer	3%	1%	0%	0%	0%
MCard	39%	63%	63%	73%	71%
Cash	28%	19%	15%	7%	9%

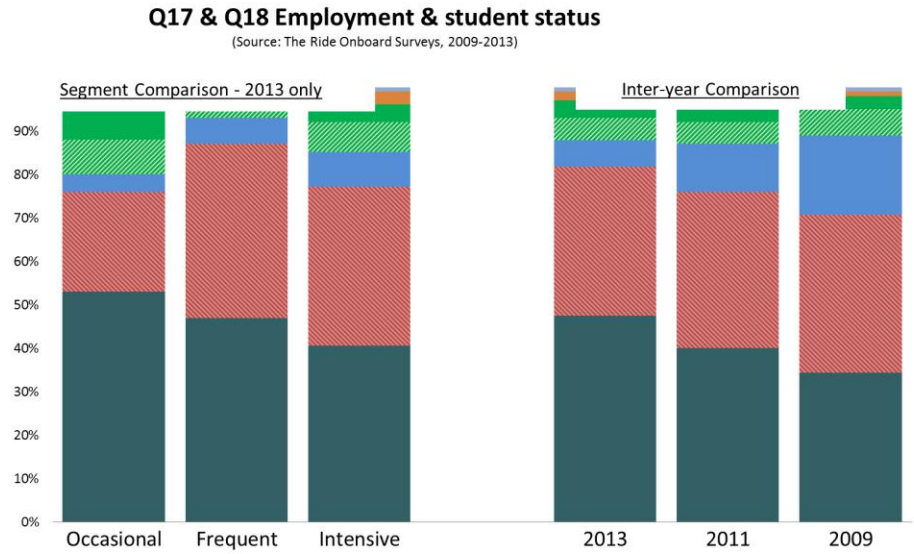
Fare medium and income

Use of the MCard, which accounts for 50% of the fares paid, is closely related to income. The higher the income, the more likely a rider is to use the MCard. For example, while more than 70% of those earning $75,000 or more use an MCard, only 39% of those with incomes of less than $25,000 use an MCard.

It is generally the case in public transit markets that people from lower income households are more likely than those from households with higher incomes to use cash rather than to hold discounted passes. That is the case in using *TheRide*. However, unlike riders on most transit systems, the reason is not that they are less likely to purchase a thirty day pass for income-related reasons, but rather that they are much less likely to have a pass subsidized by the University. Although the percentage is small overall, at AAATA riders from the lowest income group are *more* likely than others to use the thirty day pass (8% compared to 2% for the highest income riders). They are simply less likely than those with higher incomes to have an MCard.

Demographic Profile

Figure 24 Employment of riders



	Occasional	Frequent	Intensive	2013	2011	2009
Homemaker	2%	1%	1%	1%	1%	1%
Employed for pay at home	3%	2%	3%	2%	3%	1%
Retired	7%	2%	4%	4%	4%	3%
Unemployed	8%	2%	7%	5%	5%	6%
Student and employed	4%	6%	8%	6%	11%	18%
Employed outside of home	23%	40%	37%	34%	36%	36%
Student only (not also employed)	53%	47%	41%	47%	40%	34%

Employment of riders

A majority of riders are students, either students-only or students who are also employed. While 47% of riders indicated they are students-only (up from 40% in 2009 and 34% in 2009, another 6% indicated they are both students and employed (down from 11% in 2011 and 18% in 2009). Thus a total of 53% of *TheRide*'s users are students.

Notice that there is a consistent pattern over the course of the three surveys in which the percentage of riders who are only students and not also employed has risen by 13%, while the percentage of riders who are employed students has declined from 18% to 6%. Why this change is occurring is unclear, but it is a clear and strong trend.

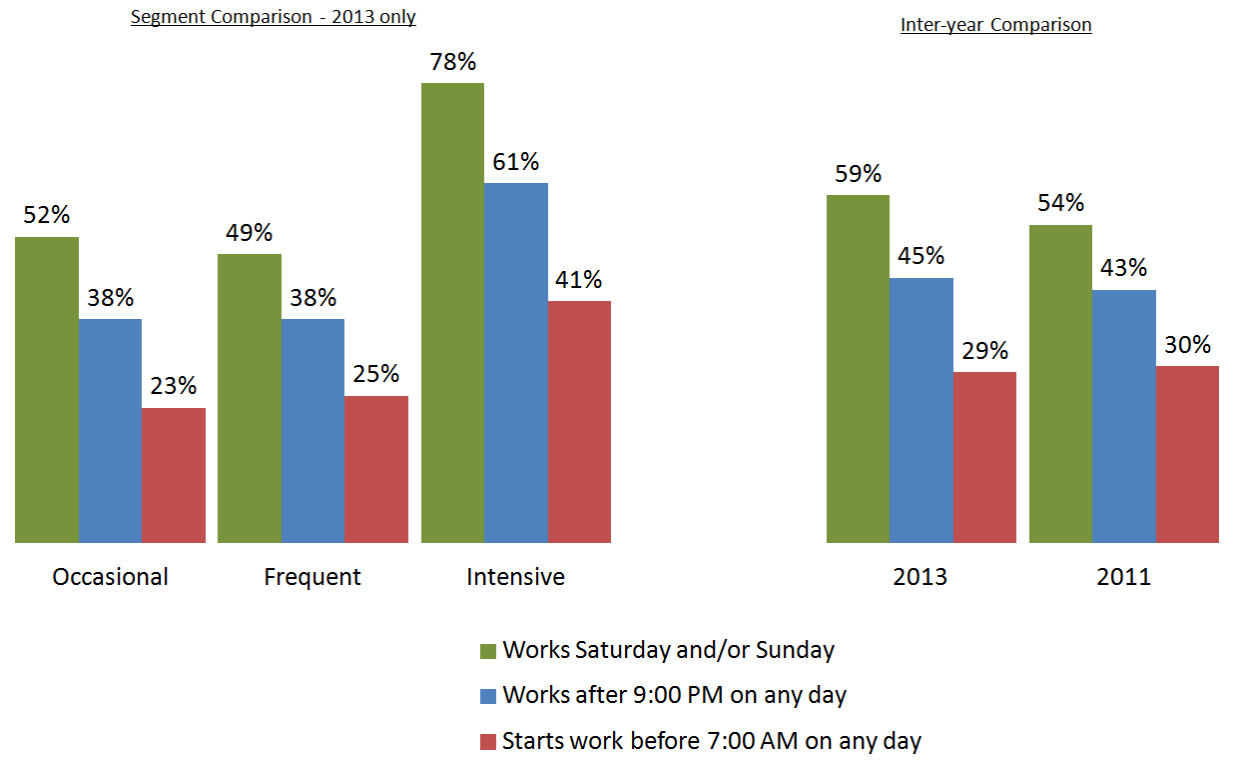
The next largest group consists of persons who are employed for pay outside their home (34%). This percentage is basically unchanged from 2011 and 2009 when (both years) it stood at 36%.

More of the occasional riders than of the other rider segments are students-only, not also employed. While 53% of occasional riders are students-only (up from 47% in 2011), 47% of frequent riders and 41% of the intensive riders (up from 43% and 33% respectively) are students-only. The largest percentage increase was among the intensive users (up by 8%). Given the reduction of the percentage of students who are also employed and the increase in students-only, it is somewhat surprising that the percentage of trips being made to get to or from school did not increase (See Figure 11 Trip purposes).

Figure 25 Working on non-peak days and hours

Q19. If employed, usually...

(Sources: The Ride Onboard surveys, 2011 & 2013)



Working on non-peak days and hours

Those riders who are employed were asked whether they work during off-peak times, specifically weekend days, and/or after 9 PM on any day of the week. Included among the employed riders are both those who are only employed and those who are both students and employed. Of employed riders, 59% indicated that they must work on Saturday and/or Sunday (up from 54% in 2011), 45% indicated they must work on one or more days a week after 9 PM, and 29% that they must begin work before 7:00 AM on at least some work days.

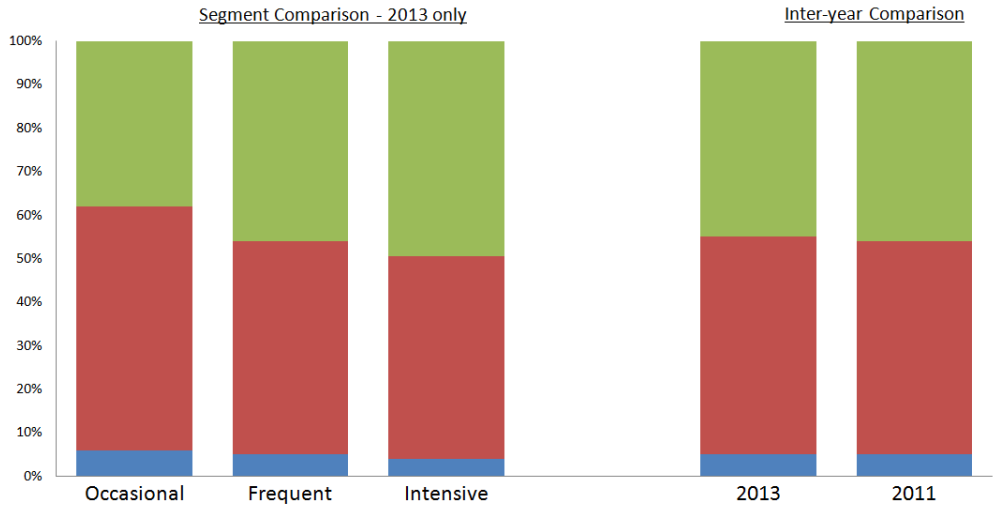
It is the weekend work rather than late night or early morning work that has seen the primary increase since 2011. Having to work evenings is the second most common, and working before 7:00 am is third. As one would anticipate, all three tendencies hold especially true for the intensive riders. They are lower in income than the other segments and would probably be more likely to have service jobs that require weekend and evening work.

Serving weekend riders is always a challenge for transit systems since farebox recovery is so low. Yet the reduced services generally available on weekends cause loss of effective transit coverage and is often a source of dissatisfaction as we will show in a later section (See Figure 44 Having to work on weekends and customer satisfaction, page 56.)

Figure 26 Student riders

Q18. Student status

(Source: The Ride Onboard Surveys, 2009-2013)

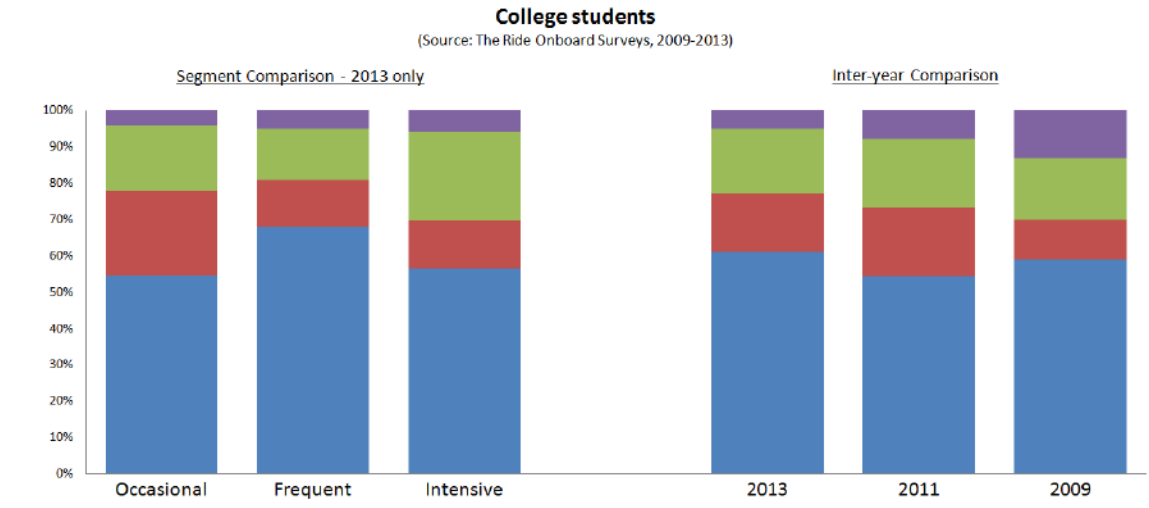


	Occasional	Frequent	Intensive	2013	2011
Not a student	38%	46%	50%	45%	46%
College student	56%	49%	47%	50%	49%
High school student	6%	5%	4%	5%	5%

Student riders

Half (50%) of adult riders are college students and another 5% are high school students. These percentages remained constant from 2011 to 2013. As there was in 2011, in 2013 there is a slight inverse relationship between being a college student and frequency of using *TheRide*. While of occasional riders 56% are college students, fewer intensive users, 47%, are college students. In other words, occasional riders are more likely than other rider segments to be college students. Nevertheless, in all three rider groups there are a great many college students.

Figure 27 School/college attended



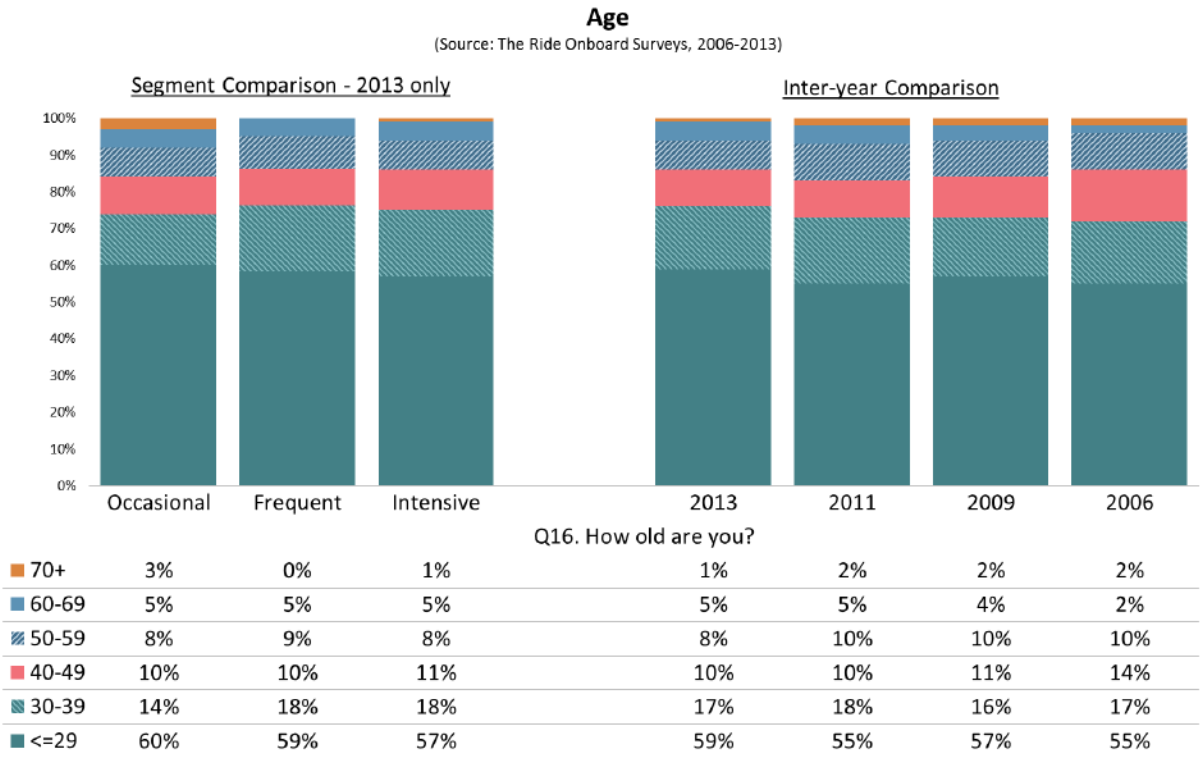
	Occasional	Frequent	Intensive	2013	2011	2009
Other	4%	5%	6%	5%	8%	13%
WCC	18%	14%	24%	18%	19%	17%
EMU	23%	13%	13%	16%	19%	11%
U of M	54%	68%	56%	61%	55%	59%

School/college attended

Those riders who indicated that they are students were asked which school they attend. Of all student riders (a category which includes both employed students and students-only) 61% said they attend the University of Michigan, while 18% attend Washtenaw Community College, 16% Eastern Michigan University, and 5% other schools. These proportions are generally similar to those of the 2011 survey.

Among the frequent riders, more than two-thirds (68%) attend the University of Michigan, 13% EMU, and 14% WCC. But among occasional riders 14% fewer (54%) attend University of Michigan, while 23% attend EMU.

Figure 28 Age



	Occasional	Frequent	Intensive	2013	2011	2009	2006
70+	3%	0%	1%	1%	2%	2%	2%
60-69	5%	5%	5%	5%	5%	4%	2%
50-59	8%	9%	8%	8%	10%	10%	10%
40-49	10%	10%	11%	10%	10%	11%	14%
30-39	14%	18%	18%	17%	18%	16%	17%
<=29	60%	59%	57%	59%	55%	57%	55%

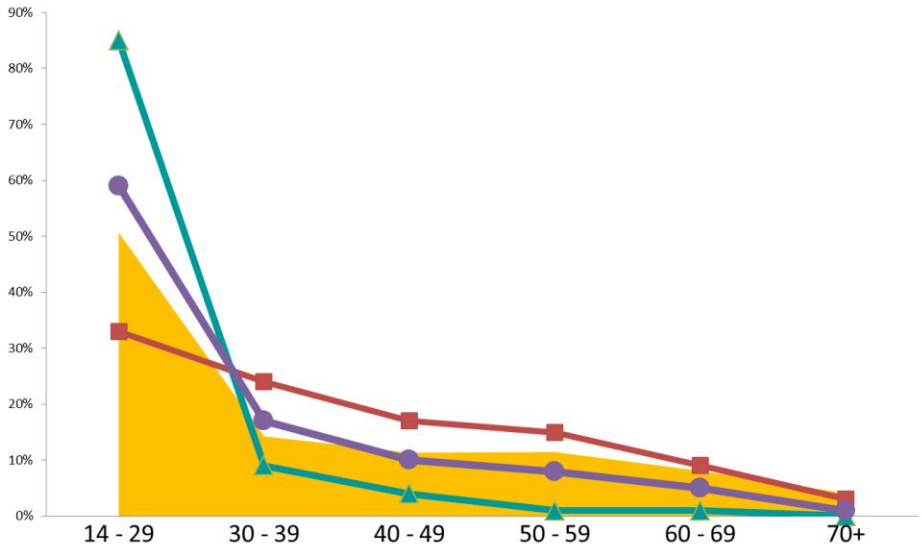
Age of riders

In the United States, transit riders tend to be young, even in towns without major universities. This is especially true on university towns such as Ann Arbor. Of all AAATA riders, 59% are under the age of thirty. Given that students make up a very substantial portion of the total ridership, this is not surprising. Since 2006, the age distribution of the ridership has changed only marginally.

The rider segments do not differ greatly in terms of age. In 2013 as in 2011, the three rider segments are more alike in age than they are different.

Figure 29 Contrast - general public age (Census 2010) and AAATA riders

Comparing age of the general public with age of riders
(Sources: Census, 2010 & The Ride Onboard Survey, 2013)



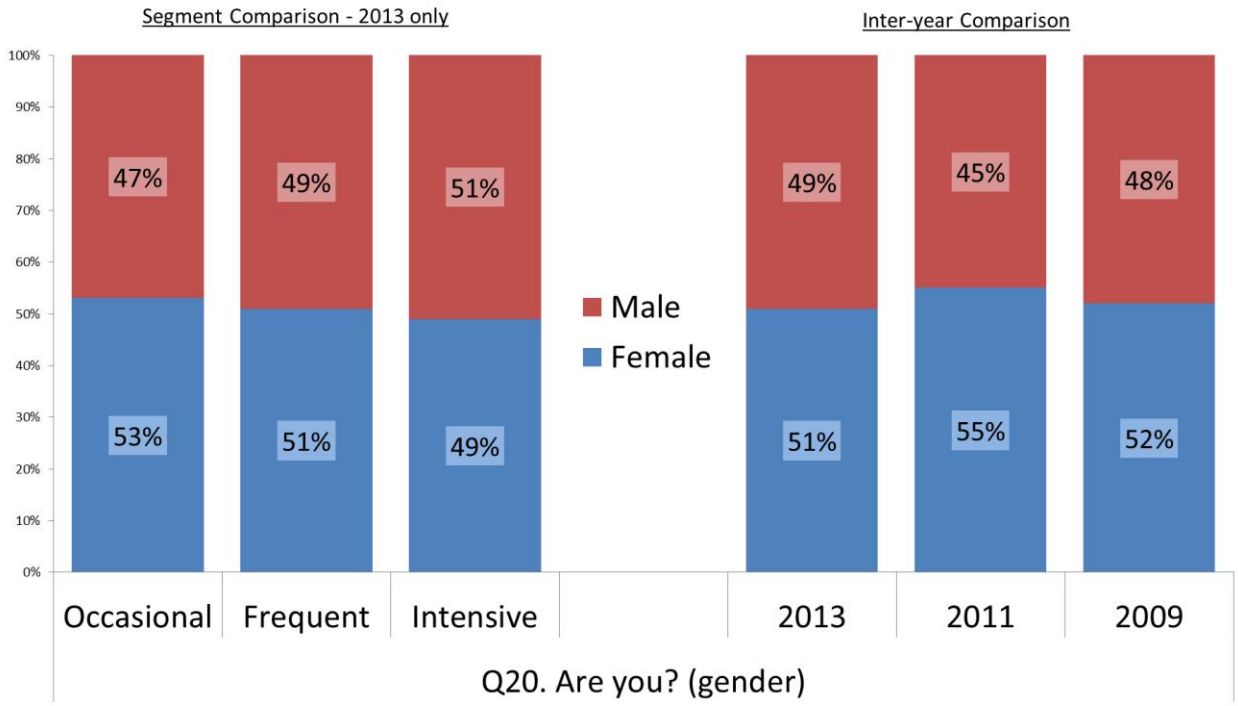
	14 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70+
Ann Arbor & Ypsi Census (2010)	51%	14%	11%	11%	8%	4%
Non-student riders	33%	24%	17%	15%	9%	3%
Student riders	85%	9%	4%	1%	1%	0%
All riders (student and non-student)	59%	17%	10%	8%	5%	1%

Age of the general public and age of AAATA riders

Probably because of the colleges and universities in the area, the combined population of the Ann Arbor and Ypsilanti areas is unusually youthful compared to most American cities. In most transit systems we observe an immense gap between the ages of the population and the ridership, with the ridership being far younger than the general public. In this case, the differences do exist in the usual direction, but they are much smaller than we usually observe. As a result, the age profile of all riders (purple line in Figure 29), including both students and non-students matches fairly closely the profile of Ann Arbor and Ypsilanti (yellow area).

The age distributions of student ridership (green line) and the non-student ridership are quite different from each other. Non-student riders are older than the ridership as a whole, with fewer in the under-30 range and more in the age range of 30 through 59. Nevertheless, even the non-students are relatively young.

Figure 30 Gender



Gender of riders

According to the Census of 2010, the total population of Ann Arbor and Ypsilanti is 51% female, 49% male. In 2011, the gender distribution of riders was significantly different from that distribution with a ratio of 55% women to 45% men, but in 2013 the ratio is the same as the total population.

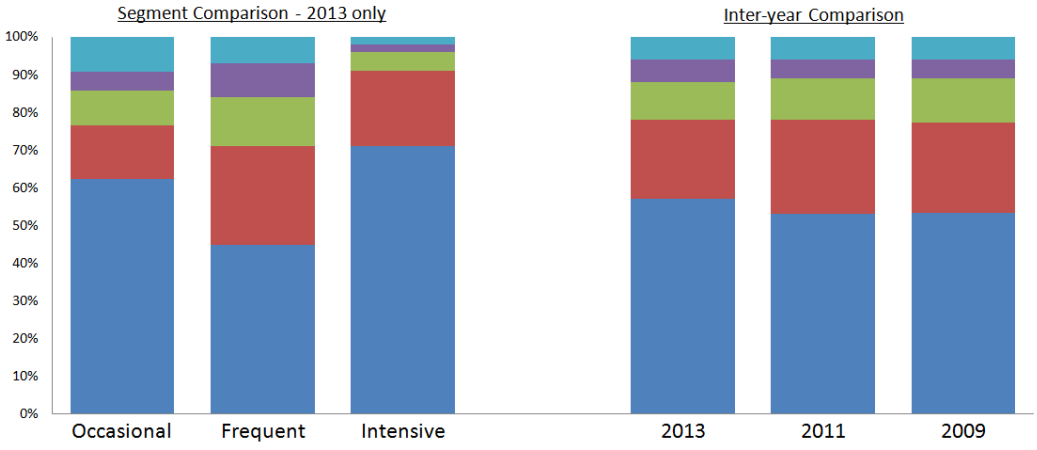
In 2011, a search in the data for something to explain the shift from a difference of 4% between the percentages of men and of women to a difference of 10% was fruitless. For example, age as a possible reason was examined. If there had been a surge in riders over the age of 60 from 2009 to 2011 and a corresponding reversal and decline in that age from between 2011 and 2013, that might have explained the change because, the population over 60 is more female than male. But that did not occur, and other changes in variables, such as employment and student status, also did not explain it.

Occasional (53%) and frequent (51%) riders are more often female than are the intensive riders (49%).

Figure 31 Income

Household income

(Source: The Ride Onboard Surveys, 2009-2013)



Q21. What is your total combined annual household income?

	Occasional	Frequent	Intensive	2013	2011	2009
$100,000 or more	9%	7%	2%	6%	6%	6%
$75,000 to $99,999	5%	9%	2%	6%	5%	5%
$50,000 to $74,999	9%	13%	5%	10%	11%	12%
$25,000 to $49,999	14%	26%	20%	21%	25%	24%
Less than $25,000	61%	45%	71%	57%	53%	54%

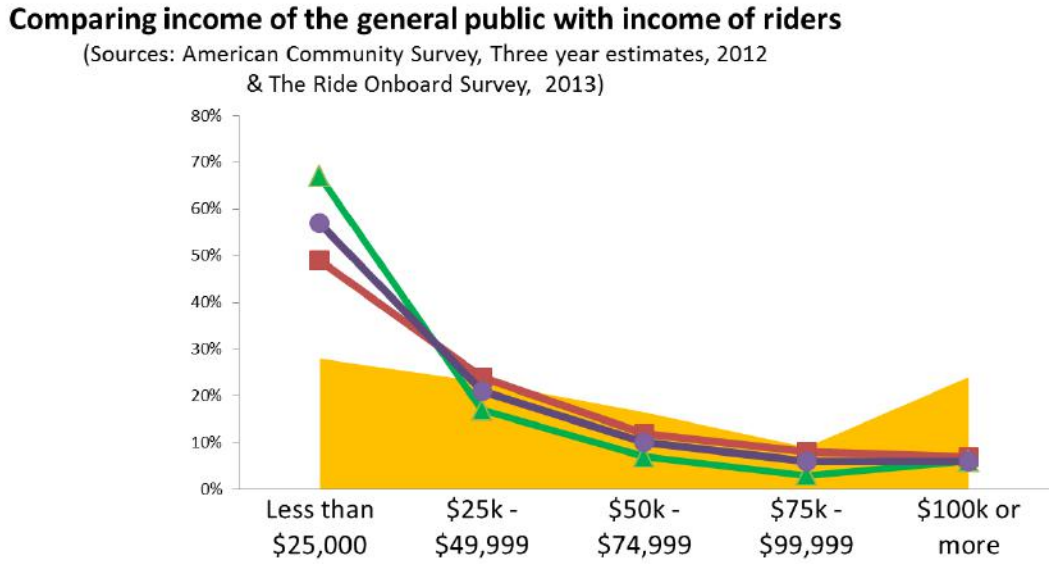
Income of rider households

As in previous survey years, in 2013 more than half of all AAATA riders (57%) report household incomes of less than $25,000 annually. There was a significant increase in the percentage of riders in this lowest income category from 2011 to 2013 which went from 53% to 57% in that period.

As is true of virtually all transit systems in the United States, the incomes of most frequent users of *TheRide* ("Intensive") are lower than those of the less frequent riders. For example, 71% (up from 64% in 2011) of the households in the intensive rider category report income of less than $25,000 annually, but "only" 45% of the frequent riders report incomes this low. Frequent riders are more often gainfully employed, and this accounts for their households' higher incomes.

Of the intensive riders, a total of only 9% report household incomes in the categories $50,000 or more. Of frequent riders, 29%, and of the occasional riders, 23% report incomes of $50,000 or more.

Figure 32 Contrast - general public income (ACS results) and AAATA riders



	Less than $25,000	$25k - $49,999	$50k - $74,999	$75k - $99,999	$100k or more
Ann Arbor & Ypsi Census 2010	28%	23%	17%	9%	24%
Non-student riders, 2013 Onboard Survey	49%	24%	12%	8%	7%
Students	67%	17%	7%	3%	6%
All riders (student and non-student), 2013 Onboard Survey	57%	21%	10%	6%	6%

Comparing the incomes of households in Ann Arbor and Ypsilanti with those of AAATA riders

Figure 32 displays a comparison of household income for the whole service area with the household income of the ridership. For general public household income we have used the *American Community Survey* (ACS), which is a household random sample survey the Census Bureau conducts on an ongoing basis between the decennial census periods. Household income data from that survey are compared in the chart above to the income distribution among AAATA rider households taken from the AAATA Onboard Survey of 2013.

The contrasting income levels of rider households and all households in the cities of Ann Arbor and Ypsilanti and AAATA riders is shown in the chart. Because students are likely to have low incomes, but to be preparing for careers in which they are likely to have much higher future incomes, students and non-students are shown separately in the chart. Compared to all households in the two cities, all AAATA riders are two times more likely (57% to 28%) to fall into the lowest income category (Less than $25,000). Compared to the populations of Ann Arbor and Ypsilanti, riders are also one-fourth as likely (6% to 24%) to fall into the highest income category.

Many students may be expected to have incomes lower than others, and indeed while approximately half (49%) of non-student riders have incomes in the lowest income level, two thirds of the students (67%) fall into that very low income group.

Customer Satisfaction with AAATA Communication Methods

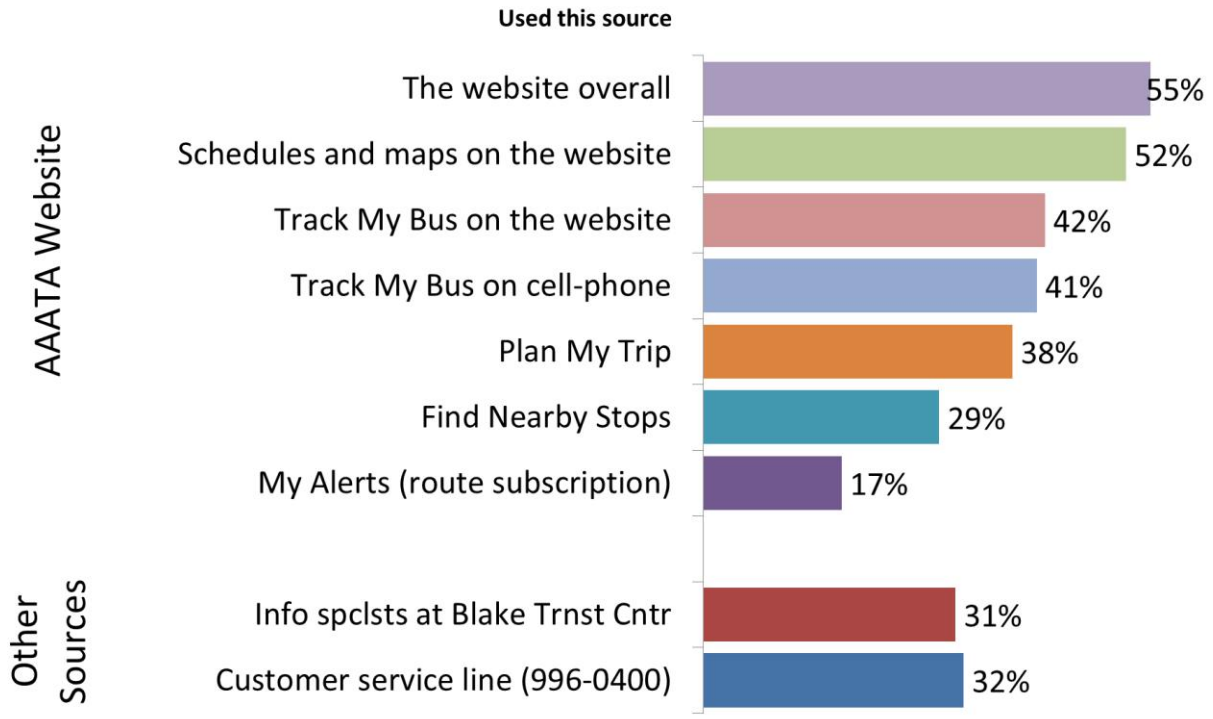
Figure 33 How information source-satisfaction questions were asked

32. If you have used the *website* TheRide.org since August 21, how satisfied or dissatisfied are you with each *website* feature?	Did not use	Dissatisfied ☹			Neutral ☺			Satisfied ☺
a. Plan My Trip	☐	1	2	3	4	5	6	7
b. Track My Bus on the website	☐	1	2	3	4	5	6	7
c. Track My Bus on cell-phone	☐	1	2	3	4	5	6	7
d. My Alerts (route subscription)	☐	1	2	3	4	5	6	7
e. Find Nearby Stops	☐	1	2	3	4	5	6	7
f. Schedules and maps on the website	☐	1	2	3	4	5	6	7
g. The Website overall	☐	1	2	3	4	5	6	7
33. And how satisfied are you with information sources besides the website:								
h. Customer service line (996-0400)	☐	1	2	3	4	5	6	7
i. Information specialists at the Blake Transit Center	☐	1	2	3	4	5	6	7

Satisfaction items concerning information sources in the onboard questionnaire

Before we describe the results of the customer satisfaction measurements in the survey, it is important to discuss the elements involved. The rating scale in the survey questionnaire in the figure above was used to measure satisfaction with the AAATA website as a source of information on various aspects of local travel via *TheRide*.

Figure 34 Use of website and other information sources



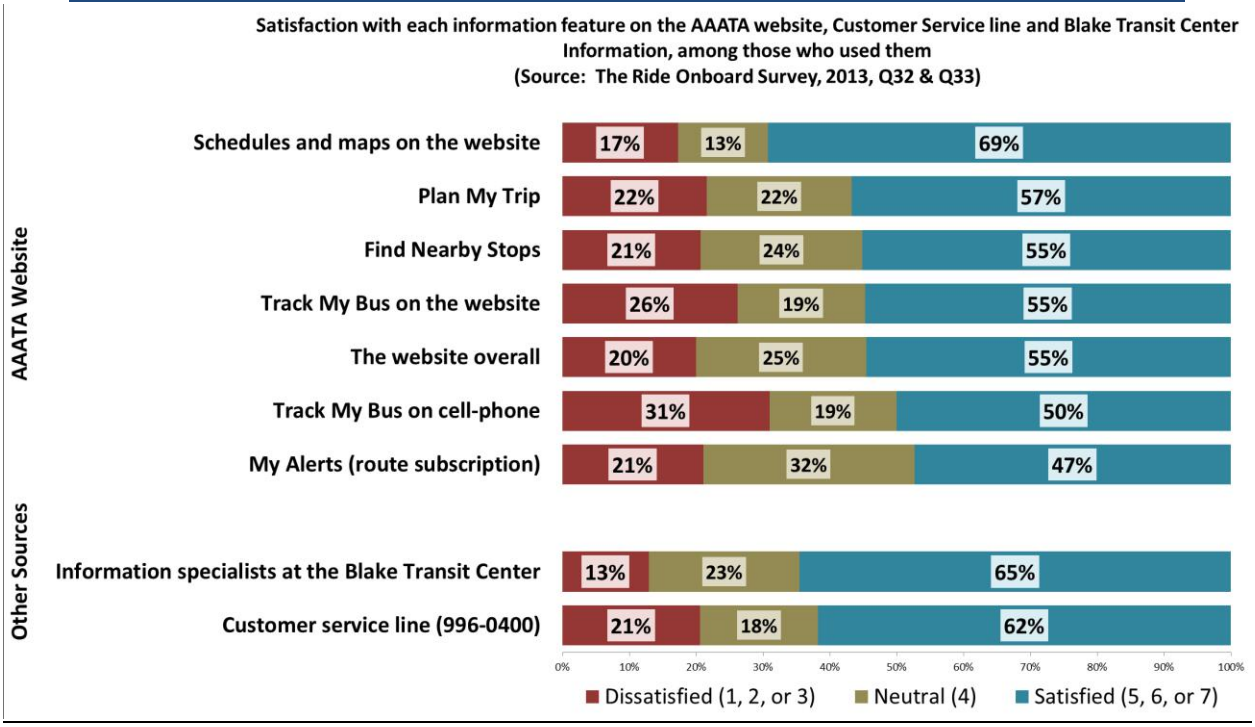
Use of website and other information sources

While all riders, by definition, use the buses, not all riders use the various sources of information about bus service. In the chart above, the percent who have used each source is shown. For the website, the question was whether they had used it since August 21st, but for the information specialists and customer service line, no time period was specified.

More than half of the riders (55%) said they had used the website since August 21, and most riders had used the website for schedules and maps (52%). These are the more traditional behaviors, analogous to using a printed schedule.

Features with more contemporary technology, including bus tracking whether by website or cell-phone, and having route subscriptions (alerts) have been used by fewer riders (42%, 41% and 17% respectively). It is interesting that tracking the bus on the website and on the cell phone are so nearly identical in use-level. It may be that the smart phone is now so commonly used to access the website, that the distinction between tracking a bus on the website and tracking on a cell phone is now a distinction without a difference.

Figure 35 Satisfaction with the AAATA website and other information services



Satisfaction with the AAATA website and other information services

Each rider was asked to rate his or her level of satisfaction with the AAATA website as a source of information about services of *TheRide*. Ratings were based on a numeric scale ranging from 1 through 7. Optionally, in lieu of a rating, the rider could also indicate that he or she had not used the specific source of information.

This information is displayed in two ways: In Figure 35 on this page as a chart with high and low scores condensed (1, 2, 3 are negative, 4 is neutral, and 5, 6, 7 are positive)and, in Figure 36 on the following page, as a table with full scalar detail.

Among those using the features, the best scores for the website features are for the schedules and maps (69% positive). Most features scored in the mid-50% range. Tracking the bus on one's cell phone and receiving alerts received 50% and 47% positive scores respectively. Of concern are the relatively high percentages of negative scores on the tracking mechanisms, whether by the website (26%) or the cell phone (31%). But these are relatively new items and there may be an adjustment period while riders become used to the levels of precision that are realistically feasible. They are also used by fewer than half of riders.

Figure 36 Detailed satisfaction with information services among those who have used them

Detail of satisfaction ratings for information sources ("Didn't Use" option excluded when calculating %)								
	Dissatisfied			Neutral			Satisfied	Didn't Use
	1	2	3	4	5	6	7	
AAATA Website								
Schedules and maps on the website	11%	5%	5%	21%	13%	13%	29%	48%
Plan My Trip	11%	5%	5%	22%	13%	14%	30%	62%
Find Nearby Stops	15%	7%	10%	20%	15%	12%	24%	71%
Track My Bus on the website	12%	6%	6%	35%	12%	12%	29%	58%
The website overall	10%	3%	7%	24%	14%	14%	28%	45%
Track My Bus on cell-phone	14%	4%	8%	19%	13%	19%	37%	59%
My Alerts (route subscription)	11%	5%	5%	32%	10%	11%	26%	83%
Other Information sources								
Customer service line (996-0400)	6%	6%	9%	18%	12%	12%	38%	68%
Information specialists at the Blake Transit Center	3%	3%	6%	23%	10%	13%	42%	69%

Satisfaction with information source among those who have used each source

(Note, because of slight differences in rounding when combining scores for Figure 35, percentages when totaled in positive, negative, and neutral categories may differ slightly. This is unimportant and should be ignored.)

In the table above we see the scores mapped out across all levels of the seven point scale, and percentage of non-users is shown separately to provide perspective. The conclusions one would reach based on this table do not differ materially from the observations based on the chart in 36.

Figure 37 Detailed satisfaction with information services among all riders.

Detail of satisfaction ratings for information sources								
	Dissatisfied			Neutral			Satisfied	Didn't Use
	1	2	3	4	5	6	7	
AAATA Website								
Plan My Trip	4%	2%	2%	8%	5%	5%	11%	62%
Track My Bus on the website	5%	2%	4%	8%	6%	6%	11%	58%
Track My Bus on cell-phone	6%	3%	4%	8%	6%	5%	10%	59%
My Alerts (route subscription)	2%	1%	1%	6%	2%	2%	5%	83%
Find Nearby Stops	3%	1%	2%	7%	4%	4%	8%	71%
Schedules and maps on the website	3%	2%	4%	7%	7%	10%	19%	48%
The website overall	3%	3%	5%	14%	10%	8%	12%	45%
Other Information sources								
Customer service line (996-0400)	2%	2%	3%	6%	4%	4%	13%	68%
Information specialists at the Blake Transit Center	1%	1%	2%	7%	3%	4%	13%	69%

Detailed satisfaction with information services among all riders

One additional table provides another perspective on the same data. The percentages include all riders who, including those who do not use the feature. For example, it shows that of all riders, 11% rate the "Track my bus on the website" feature as "7," and another 12% as "5," or "6," while 58% have not used it since August 21. In other words, use of this feature is currently satisfying a relatively small proportion of the ridership (23%), though presumably its use will grow in the future.

In addition, in terms of the tracking features that showed a relatively high negative response, we can see from the table that because of the low utilization rates, the comparatively negative response involves only relatively few riders (11% to 13%) at this point in the feature's development.

Customer Satisfaction with Service

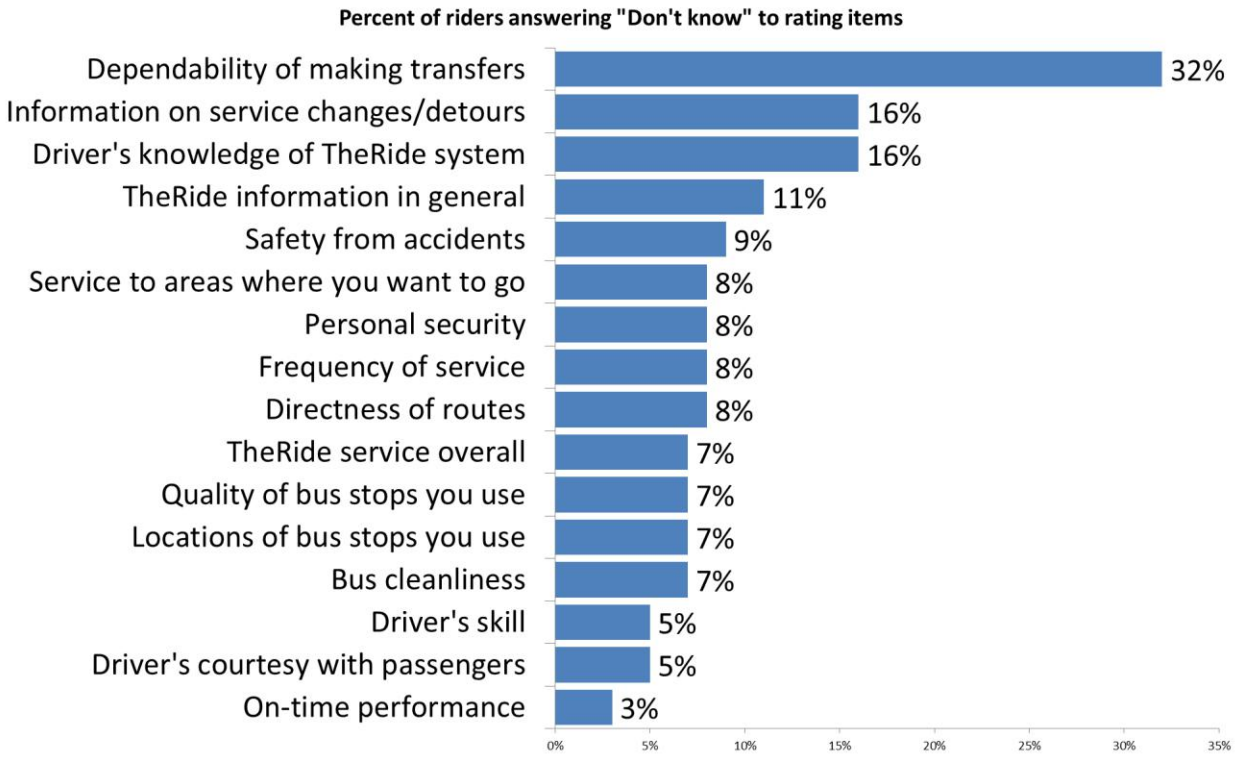
Figure 38 Customer satisfaction questions

34. How satisfied or dissatisfied are you with TheRide service in each of the following areas?	Don't know/	Dissatisfied ☹			Neutral 😐			Satisfied ☺
a. Drivers' skill	☐	1	2	3	4	5	6	7
b. Drivers' courtesy with passengers	☐	1	2	3	4	5	6	7
c. Drivers' knowledge of the TheRide system	☐	1	2	3	4	5	6	7
d. TheRide information in general	☐	1	2	3	4	5	6	7
e. Information on service changes/detours	☐	1	2	3	4	5	6	7
f. Frequency of service	☐	1	2	3	4	5	6	7
g. On-time performance	☐	1	2	3	4	5	6	7
h. Dependability of making transfers	☐	1	2	3	4	5	6	7
i. Locations of bus stops you use	☐	1	2	3	4	5	6	7
j. Quality of bus stops you use	☐	1	2	3	4	5	6	7
k Directness of routes	☐	1	2	3	4	5	6	7
l. Service to areas where you want to go	☐	1	2	3	4	5	6	7
m. Bus cleanliness	☐	1	2	3	4	5	6	7
n. Safety from accidents	☐	1	2	3	4	5	6	7
o. Personal security	☐	1	2	3	4	5	6	7
p. TheRide Service overall	☐	1	2	3	4	5	6	7

Customer satisfaction questions

For the sake of better understanding the tables that follow, the original wording of the satisfaction questions is shown here.

Figure 39 Percent unable to answer rating items



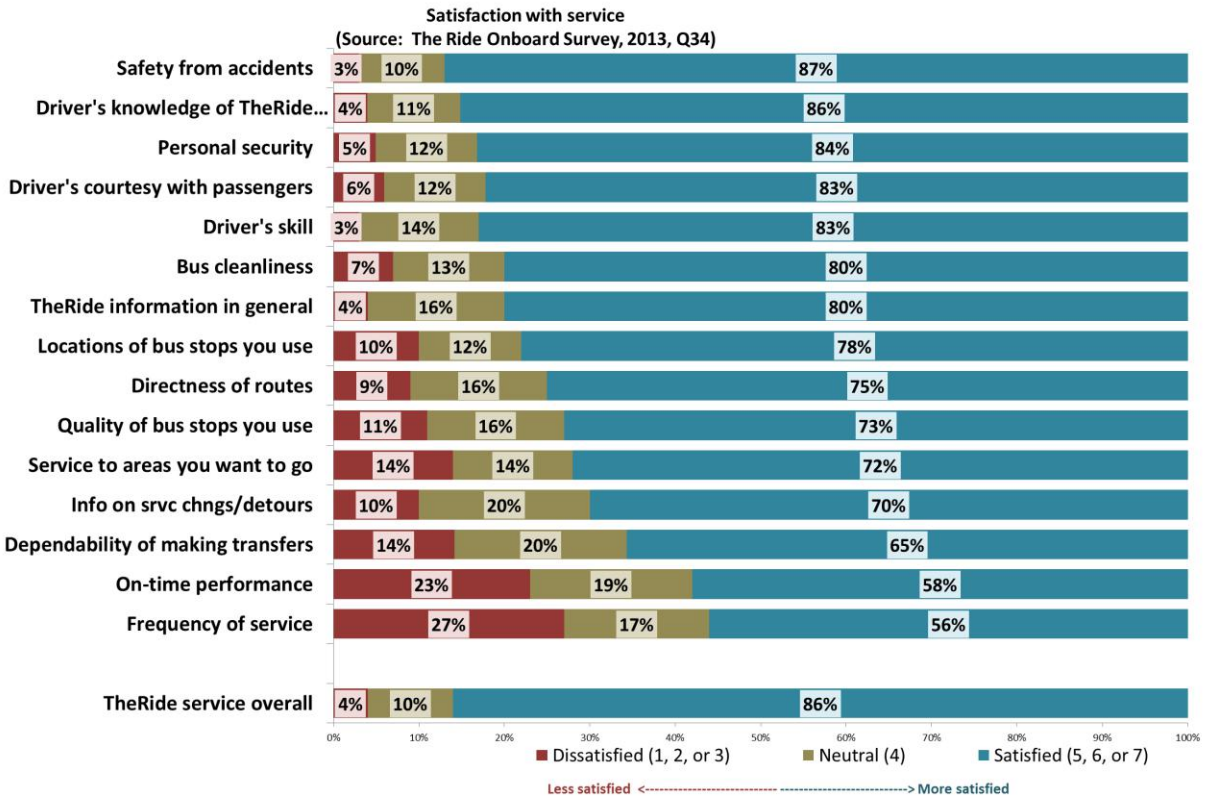
Percent unable to answer rating items

Personal experience obviously bears strongly on the ability to rate an aspect of service. The largest percentage of riders unable to rate an aspect of service was for the dependability of making transfers (32%), a fact that obviously suggests something about the frequency with which riders do or do not use transfers.

Other elements with substantial *don't know* responses include aspects of information many riders would be unlikely to know how to rate, specifically driver's knowledge of the *TheRide* system (16%) and information on route changes and detours (also 16%).

The average present of *don't know* responses was 10%.

Figure 40 Service satisfaction - overview



Service satisfaction – overview

Figure 40 above combines all satisfied responses (scores 5, 6, 7) and dissatisfied responses (scores 1, 2, 3). Neutral scores (4 on the scale from 1 – 7) are also shown. The percent who were not sure how to respond, presumably because they lacked sufficient experience, are excluded from the analysis. Unlike the data on information sources, the percentages unable to rate the services were small, averaging only 10%.

First, all of the scores are very positive, including the rating of service overall, which has a positive rating by 86% of riders.

The rank order of the service satisfaction ratings is fairly typical of customer service ratings in other all-bus transit systems CJI has studied. Such things as safety, vehicle cleanliness, driver courtesy and the like are generally the highest rated. In some systems the sense of personal security is ranked low, while for *TheRide* is it near the top of the rankings. But the communities where it is rated poorly and thus ranked low, generally are different from Ann Arbor demographically, and face more of what some have called the frictions of cultural and economic differences while in some others systems there have been well-publicized incidents of violence.

For *TheRide*, as for most other systems, the lower rated items are operational and very difficult to alter in a manner that would produce consistently high scores. These include frequency of service and on time performance. The fact that majorities of 56% and 58%, respectively rate those aspects positively represents better performance than in most systems we have studied.

Figure 41 Service satisfaction in detail among those able to rate

Detail of satisfaction ratings for services (Don't know responses excluded when calculating %)								
	Dissatisfied			Neutral			Satisfied	Don't Know
	1	2	3	4	5	6	7	
Driver's knowledge of TheRide system	1%	1%	2%	11%	12%	22%	52%	16%
Safety from accidents	1%	1%	2%	10%	11%	24%	52%	9%
Driver's skill	1%	1%	2%	13%	15%	21%	48%	5%
Personal security	1%	1%	2%	12%	13%	24%	47%	8%
Driver's courtesy with passengers	1%	2%	3%	12%	15%	23%	45%	5%
Locations of bus stops you use	2%	2%	5%	12%	15%	22%	41%	7%
TheRide information in general	1%	1%	3%	16%	15%	23%	41%	11%
Bus cleanliness	1%	2%	4%	13%	18%	24%	38%	7%
Information on service changes/detours	2%	2%	6%	20%	14%	19%	37%	16%
Quality of bus stops you use	2%	3%	6%	16%	15%	20%	37%	7%
Dependability of making transfers	3%	4%	8%	20%	14%	16%	36%	32%
Directness of routes	2%	2%	5%	16%	18%	22%	36%	8%
TheRide service overall	1%	1%	2%	10%	22%	29%	35%	7%
Service to areas where you want to go	3%	4%	7%	14%	17%	20%	34%	8%
Frequency of service	7%	8%	13%	17%	16%	14%	25%	8%
On-time performance	5%	7%	12%	19%	18%	17%	24%	3%

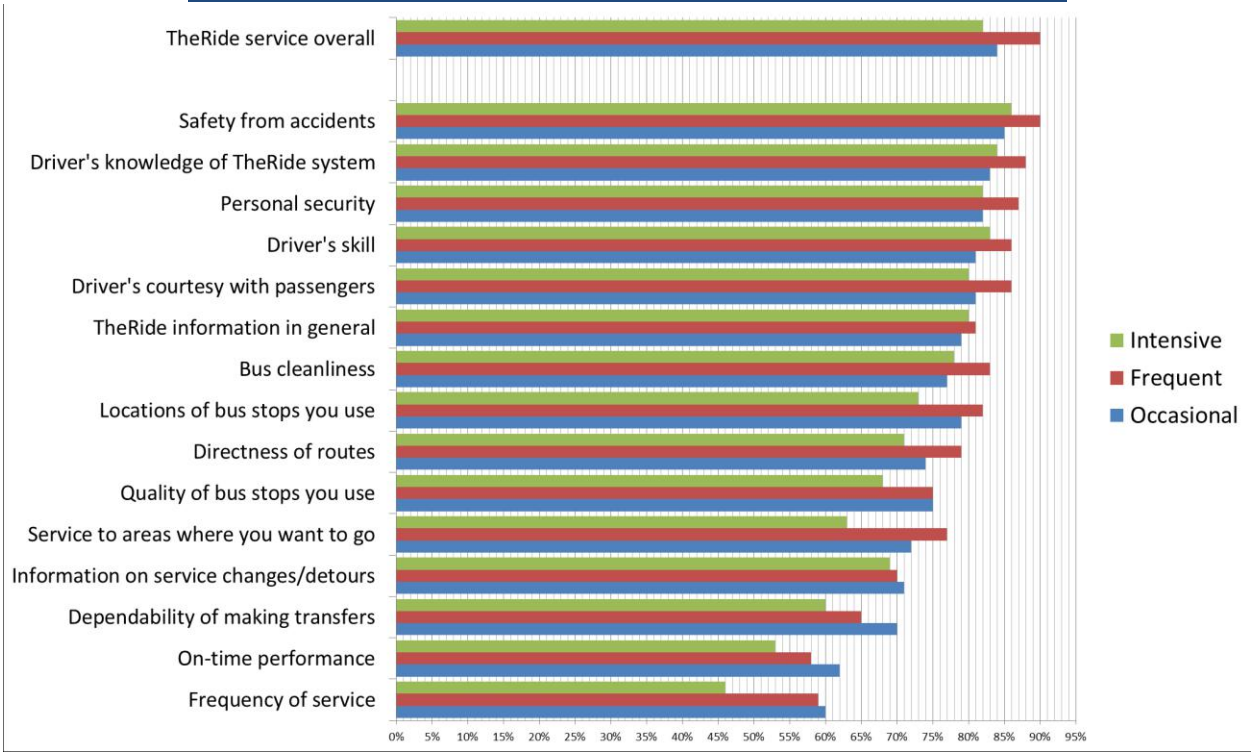
Service satisfaction in detail "Don't know" response shown but excluded from rating percent

Figure 41 presents a more detailed overview of the satisfaction scores. The ratings are displayed in descending order of the percent giving positive scores of 5, 6, or 7, but now the *levels* of satisfaction and dissatisfaction are broken out. In this table, those who indicated they were unsure how to answer are shown, but not included in the computation of the percentages giving each rating. In this way, in a single table we can see both the level of familiarity with the service and the opinions of those with enough familiarity to offer a score.

In all cases, the positive scores greatly outnumber the negatives. The tendency is for the riders who are able to provide a rating to score services between 4 and 7, with very few scoring in the negative range. As is true of most all-bus systems, however, frequency of service and on-time performance are at the low end of satisfaction. Dependability of transferring is closely related to all three of these, and is also in the bottom four.

Given the normal challenges of operating in traffic, in all weather, all manner of street configurations, and the realities of budgetary limits, the low rankings of these aspects of service are typical for all-bus systems and are never surprising.

Figure 42 Satisfaction ratings and frequency of using TheRide

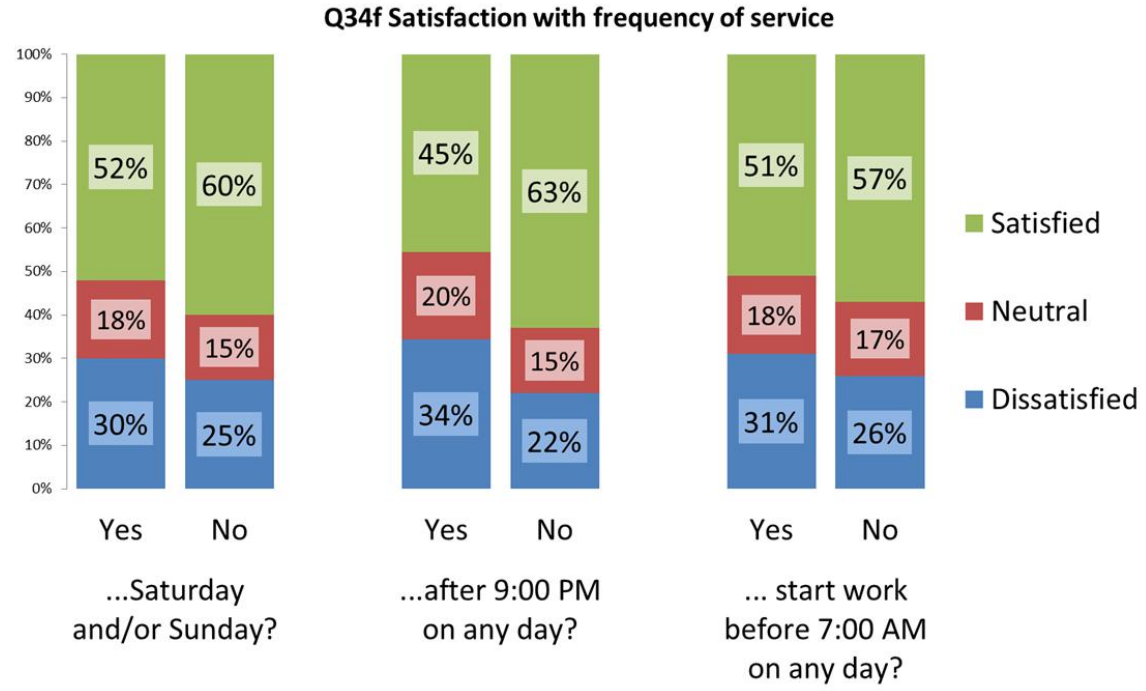


Satisfaction ratings and frequency of using TheRide

It is fairly typical for intensive riders compared to frequent riders to offer service ratings that are somewhat lower. A primary reason, as we have learned from talking with riders in focus groups in many systems other than AAATA, is that the intensive riders often lack the regular hours and simplicity of commuting routes that the frequent riders are more likely to experience. Thus they usually use the system differently from less frequent users, for example transferring more to obtain the coverage they need, making more trips per day, and using transit during hours of reduced service and on weekends. In addition, simply by making more trips per day on more days each week, they simply have more opportunities to observe whatever may go wrong in the normal course of a service day.

While most of the ratings are lower for the intensive riders, matters of on time performance and coverage (service to areas where you want to go) show the greatest contrast.

Figure 43 Satisfaction with frequency of service, by having to work weekends or late or early shifts

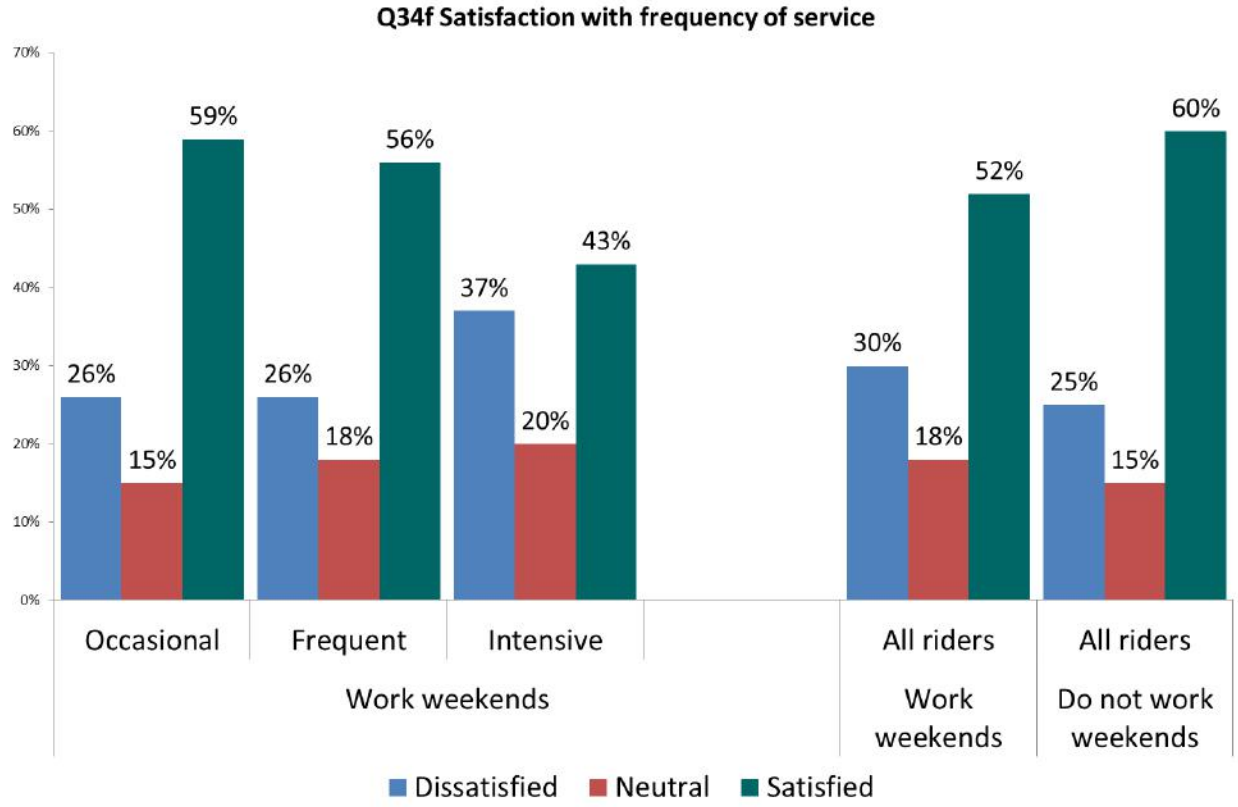


Satisfaction with frequency of service, by having to work weekends or late or early shifts

Frequency of service is a critical variable and, like other aspects of service, satisfaction level slipped somewhat from 2011 to 2013. Figure 43 demonstrates that riders who must work outside the Monday to Friday, 9 to 5 routine tend to provide lower satisfaction scores. Given that service operates at reduced levels at those times, this is not surprising.

The challenge is that such employment appears to be increasing. In Figure 25 (page 35) we saw that the percentage of *TheRide* users who work weekends or evening had increased between 2011 and 2013. Perhaps this is a product slowly growing additional employment as the halting economic recovery proceeds, or it is perhaps a manifestation of fundamental changes in practices in the workplace. In any event, the fact that more people are relying on AAATA for marginal trips would appear to be a sign of success for *TheRide*. However, if in fact the trend continues for more people to work in these time-slots, then fully serving that population will represent a significant and growing challenge for AAATA.

Figure 44 Having to work on weekends and customer satisfaction

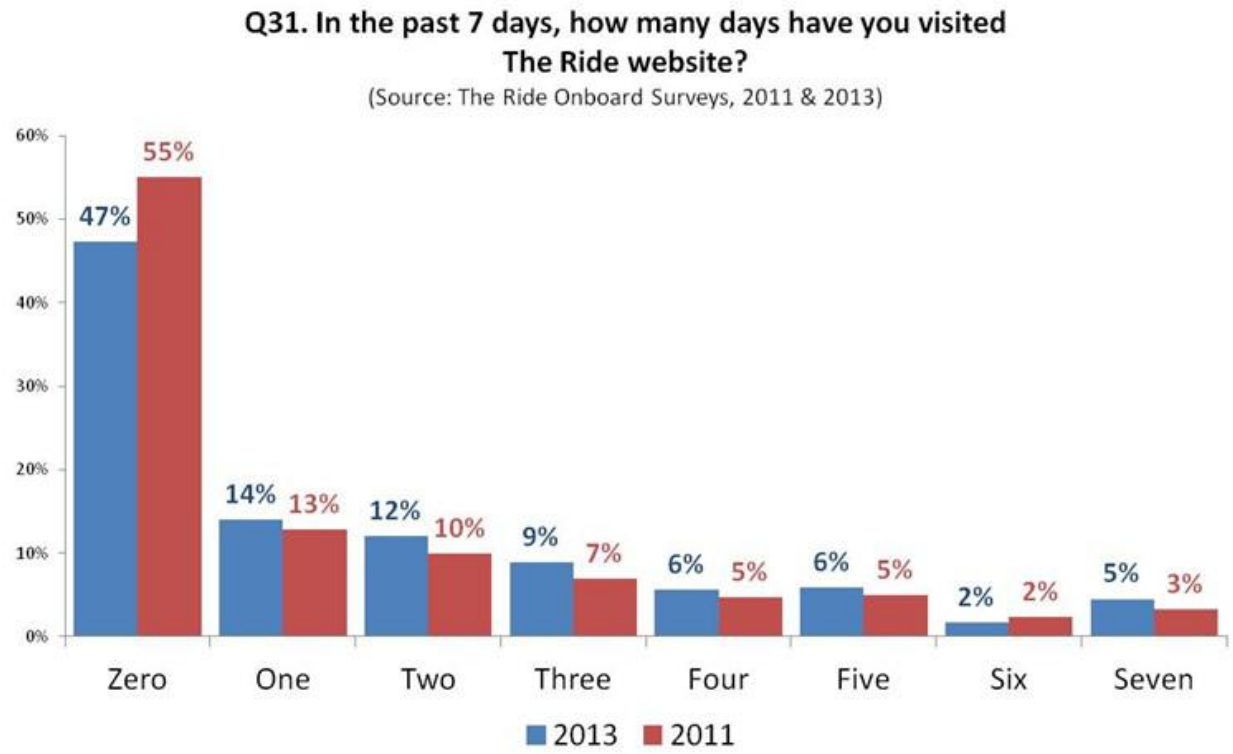


Customer satisfaction and having to work on weekends

Having to work on weekends is associated with lower satisfaction scores. Similarly, among those who must work on weekends, there is a particularly high level of dissatisfaction (37%) among intensive transit users in comparison to the frequent and occasional riders (both, 26%). Given the fact that intensive users are, by definition, using transit on the weekends, they have to deal with reduced levels of service, and can be expected to be somewhat less satisfied.

Use of AAATA electronic information services

Figure 45 Use of the AAATA website



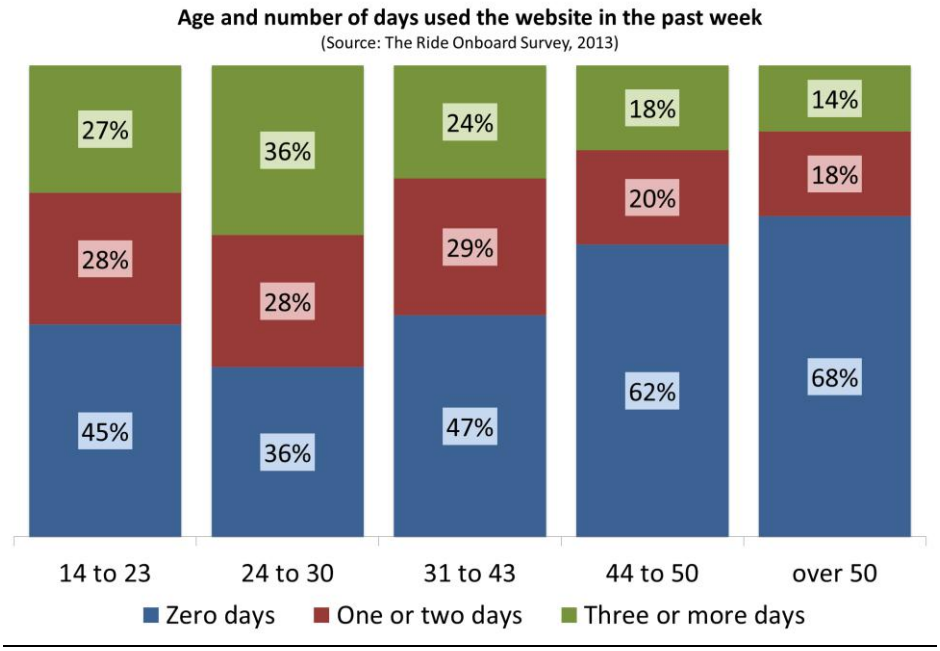
Use of the AAATA website

Since 2011, the use of the AAATA website by riders has increased somewhat. In 2013, 47% had not used the website in the past seven days, and a majority of 53% said they had used it. In 2011, 55% said they had not used it in the past seven days, and 45% had used it, a percentage that had increased from 41% 2009. Thus there has been continual growth in use of the website.

In addition, the percent saying they had used it multiple times increased from the 2011 total of 32% accessing the site two or more times in seven days to 40% in 2013.

There are probably two reasons for this gradual increase. First, the site design has kept up nicely with customer needs and usability. Secondly, the use of all electronic sources will tend to increase simply because these modes of information seeking are heaviest among the young. With each passing year more of the older riders who are less likely users of digital media grow older and leave the commuting population (or cease rising transit for other reasons), and are replaced by younger riders who voraciously consume digital media.

Figure 46 Age and use of the website



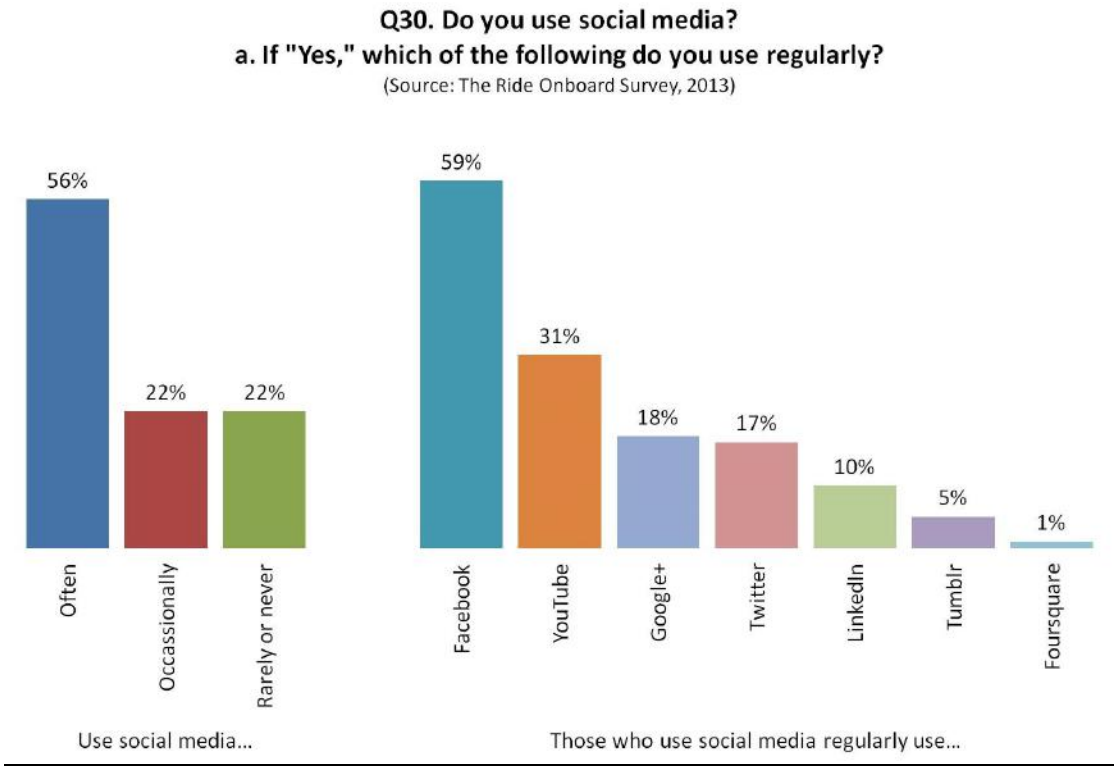
Age and use of the website

The probability of using the AAATA website is dependent upon age of the user. With one major exception, the younger the user, the more likely he or she is to rely on electronic information sources. Thus for example, while 64% of those 24 to 30 said they had used the AAATA website on one or more days in the past week, only 32% of those riders who are 60 or older said they had done so. This age relationship is extremely similar to what we have observed among riders on other systems.

The exception to this direct relationship between age and use of the website, and an intriguing aspect of this table, is that those twenty three or younger are less likely (55%) than those in the next older cohort, between the ages of twenty four and thirty (64%), to say they had visited the AAATA website one or more times in the past week. It is by now well-known that the younger generation is heavily reliant upon the use of texting and social media to obtain information and that their use of email has declined. Is it possible that they, more often than slightly older riders, are obtaining information through those means and not so often relying on visits to the website? If so, this would mean that before the under-twenty-four cohort ages and moves on from school to work it is at least as essential to build a major presence in social media as it is to build the website.

On the other hand, as we shall see in Figure 52, the increasing use of smartphones also means that the website will increasingly be accessed from mobile devices. Mobile optimization of the site is critical because, by definition, the AAATA market is mobile. It also seems likely that compared to social media, the mobile-optimized website, will be even more important for long-term rider communications. The reasons are that, first, unlike social media pages, the website functionality is fully under AAATA control and, second, because the website, unlike some social media sites (which can suffer from trendiness), has permanence.

Figure 47 Do you use social media regularly?



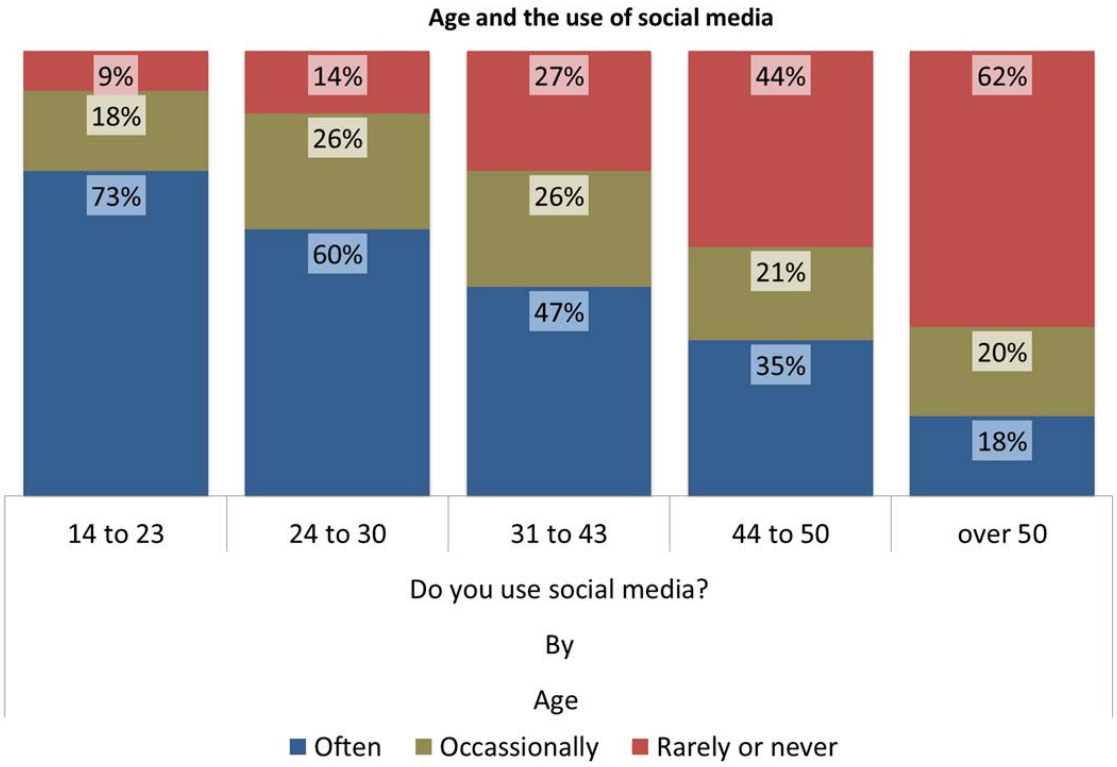
Do you use social media regularly?

Riders were asked if they use social media. Fifty six percent (56%) of riders say they do so often and another 22% that they do so occasionally. Of all riders, 59% say they use Facebook (up from 47% in 2011) which is by far the most commonly used social medium. YouTube is next with 31%, up from 22% in 2011. Google+, with 18% and Twitter with 17% are used by fewer riders.

LinkedIn is a specialized medium, and not surprisingly is used by relatively few riders (10%, though that has increased from 5% in 2011). Tumbler (5%) and FourSquare (1%) are still minor players in this developing field.

Of course the field is changing rapidly. For example, with the acquisition of *What's App,* in February, 2014, Facebook has suddenly blurred the boundaries between twitter-like text messaging, and social media portals.

Figure 48 Age and the use of social media

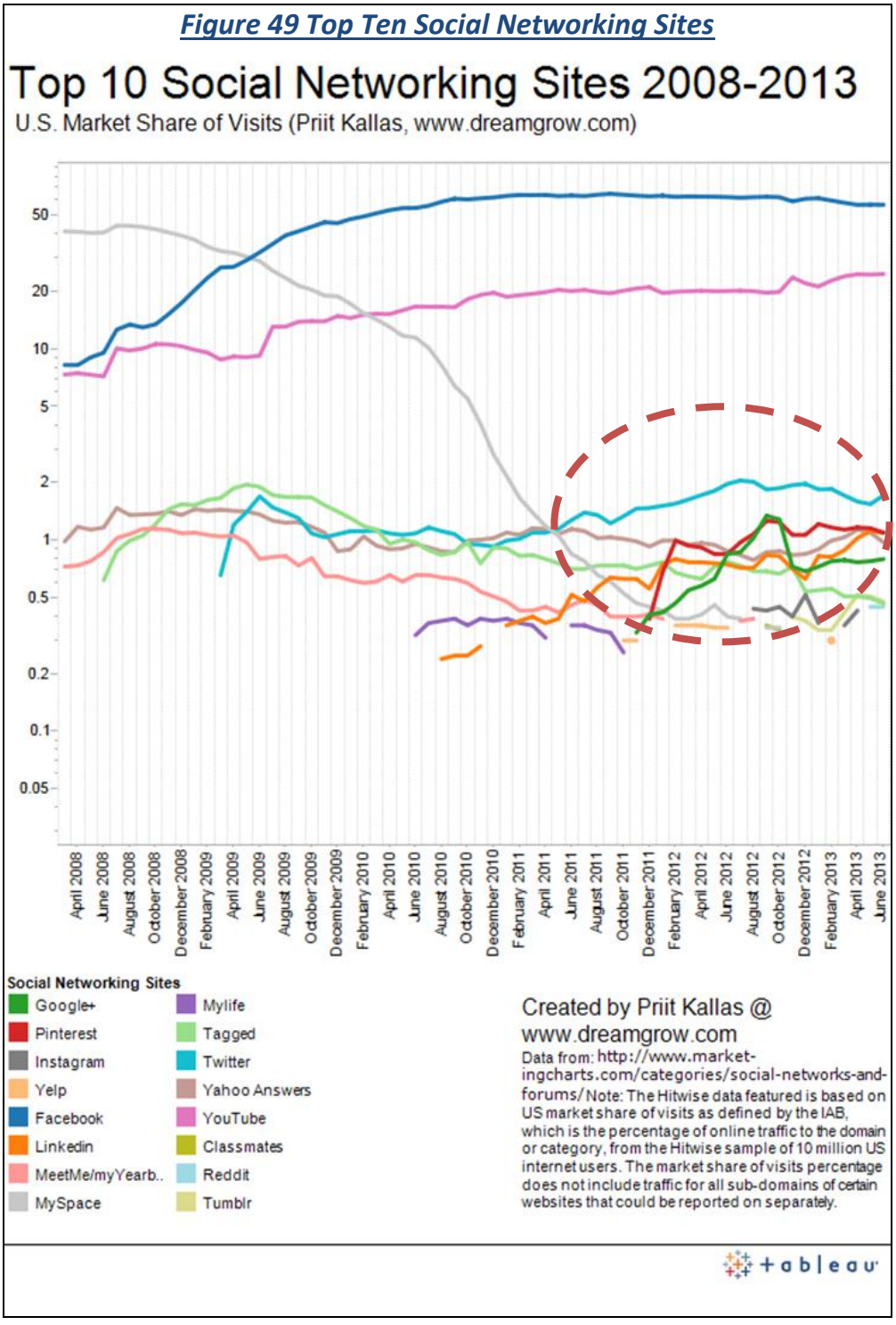


Age and the use of social media

The use of social media such as Facebook and Twitter is even more dependent upon age than is use of the website. Thus, for example, of those under twenty four, 73% indicate that they use social media often. However, of those older than fifty only 18% indicate they use social media often. In fact, the percent utilizing social media is related in a linear manner to the age of the rider: The older the rider across each cohort of increased age, the less likely he or she is to use social media.

Already, 56% of the total ridership use social media "often." In all likelihood, if this study is repeated in several years, AAATA will see an increase in the use of social media at all ages. In part this will be because of increased use among older people, but just as importantly it will be the result of the aging of those who are now under twenty. As the younger population ages, they will continue to use digital communications including social media, and communication with the ridership will require a significant presence on social media as a vehicle. However, to repeat a caveat offered earlier, a website optimized for smartphones may be just as important or more important as social media presence.

Figure 49 Top Ten Social Networking Sites



The Changing Social Media Marketplace

The very definition of "social media" is changing rapidly. To ask survey questions about social media is to follow a shape-shifting target.

For AAATA to understand how riders are obtaining information, it is has become irrelevant to ask about Internet access which at one time was the cutting edge survey question about technology.

The relevant questions now and in future surveys involve the style of information seeking and interaction that riders use via the Internet which has become nothing more than a utility – Visual social media like SnapChat, Pinterest, Instagram and Tumblr? Verbal social media like plain text, Twitter, What's App, and even e-mail? All of these? Something entirely new?

In considering the role of "social media" in the sphere of electronic communications with riders, we have to turn to sources external to the survey for some further information. The charts on this and the

following page are derived from an information source called “dreamgrow.com,” which tracks market changes in the digital communications marketplace.

Figure 50 Traffic trend for Instagram and Pinterest (2011 – 2012)

Figure 49 illustrates the point that when we ask questions of riders regarding their use of social media we are asking about a rapidly developing field. What social media means in 2013 will not be what it means in 2015 - if the study is repeated then. Note the rapid development of new social media within the red-dotted circle in the chart. The developments are so rapid that Dreamgrow.com, at the time the chart in Figure 49 was created in June of 2013, had not even tracked “WhatsApp.com” which Facebook acquired, along with its hundreds of millions of users for billions of dollars eight months later, thus overnight permanently altering the nature of Facebook from a pure posting site to a messaging/information system and Twitter competitor.

There are other trends as well within the social media sphere. Teens, for example, are currently turning more often to visual links as opposed to verbal postings such as the original Facebook or like Twitter and are increasingly using both of those vehicles to convey images. It was for that reason Facebook acquired Instagram (founded in 2010) at its early stages of development in April, 2012 (circled in red in the chart) and recently attempted to purchase another visually-oriented social media start-up called “Snap-Chat[2].”

However, another visually oriented site, Pinterest, is highly competitive with Instagram. Therefore, while Facebook remains momentarily dominant in this communication market space, especially with its acquisition of Instagram, the landscape can change quickly. The only certainties are that (a) the social media markets have become a fundamental element in communication, (b) they will continue to become more important as current young users age, (c) social media will change rapidly in the coming decade and (d) in the near future at least, one trend will be toward sharing of information visually, and (d) that short messaging systems will be thoroughly integrated into the major social media sites[3].

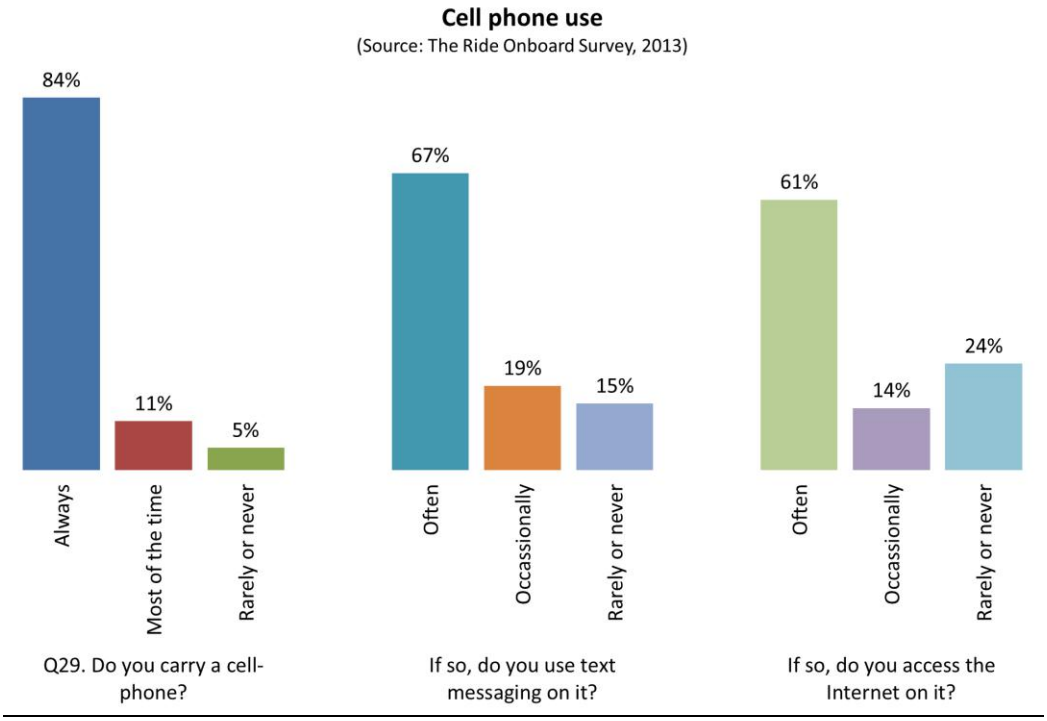
Both current marketing strategies and tactics, and future passenger surveys will have to deal with this rapidly changing environment in which access to the Internet is virtually universal, communications

[2] Jenna Wertham, "Still on Facebook, But Finding Less to Like. http://bits.logs.nytimes.com/2013/11/16/still-on-facebook-but-finding-less-to-like/?ref=technology&_r=0

[3] Charts are from: http://www.dreamgrow.com/top-10-social-networking-sites-by-market-share-of-visits-june-2013/

mobile, and social media, especially visual social media, dominant. In short, Figure 48, which represents riders' response to the question of whether they use "social media," is still useful, but it is a guide to a current communications environment that is changing so rapidly that very term "social media" may be obsolete by the time the next survey is conducted, and in the meanwhile the finding provides only limited guidance to marketing personnel.

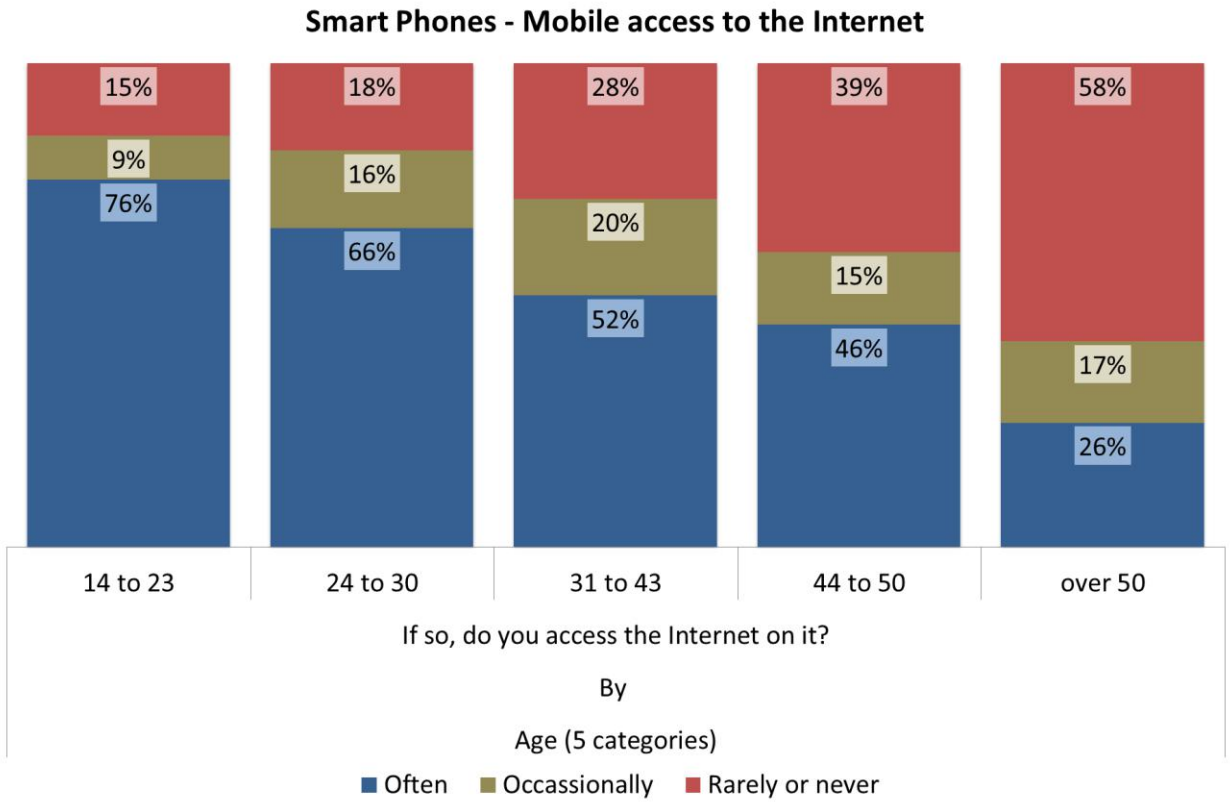
Figure 51 Use of cell and smart phones



Use of cell and smart phones

Riders were asked whether they usually carry a cell phone. Eighty-four percent (84%) indicated they do. Of all riders, 67% said that they send text messages on their phones, and 61% said they access the Internet on it. The tendencies to carry a cell phone and to send text messages with it have not changed meaningfully since 2011. However, the tendency to access the Internet via the cell phone increased from 50% to 61% since 2011 as the diffusion of smart phone technology and accounts have burgeoned.

Figure 52 Age and the Use of Smart Phones



Age and the Use of Smart Phones and Tablets

Just as with the use of social media, use of mobile devices, specifically smart phones, is directly related to age. Using the cell phone to access the Internet means that the user has a smartphone. For example while 76% of the youngest group of riders say they regularly use a smartphone for Internet access, only 26% of those who are sixty or older do so.

Because the ridership is young, in spite of the fact that relatively few of those over the age of 50 are using smart phones to access the Internet wirelessly, 61% of the ridership as a whole say they use a smartphone to access the Internet wirelessly.

Social media, including visual communication, posting and messaging are and will be critically important in the coming years. But they must all be mobile because just as the cellphone is rapidly displacing the landline phone, the smartphone and tablets are displacing the desktop and laptop as primary communications devices

Appendix A: Questionnaire

TheRide Passenger Survey

Please let TheRide know how to serve you better!

1. **Where were you before you went to the bus stop for this trip?**
   1 Home 2 Work 3 Shopping 4 School / college
   5 Social visit or recreation 6 Doctor / medical 7 Church
   8 Other_____
2. **What are the cross streets at that location?**
   Street: _____
   Cross street: _____
   What city? (Circle one): Ann Arbor Ypsilanti Other _____
3. **How did you get to your stop?**
   1 Walked 2 Wheelchair/scooter 3 Bike 4 Drove 5 Got a ride
4. **How many minutes did it take you to get to the bus stop?** _____
5. **What is your FINAL destination for this trip?**
   1 Home 2 Work 3 Shopping 4 School / college
   5 Social visit or recreation 6 Doctor / medical 7 Church
   8 Other_____
6. **What are the cross streets at your final destination?**
   Street: _____
   Cross street: _____
   What city? (Circle one): Ann Arbor Ypsilanti Other _____
7. **How many separate one-way bus trips will you make today?** (For example, even if you transfer, going to work is only one trip; going home from work is a second trip)
   1 trip 2 trips 3 trips 4 trips Other _____(how many?)
8. **How did you pay for this trip?**
   1 Cash 2 MCard 3 Transfer 4 30-Day pass
   5 go!Pass 6 Token 7 EMU Pass 8 Other _____
9. **Do you have one of the following:** 1 An ADA (green) card 2 Good as Gold (senior card)
   3 Fare Deal Card (for disability) 4 Fare Deal card (for low income) 5 Fare Deal Card (age 60-64)
10. **Which TheRide routes do you use regularly? (up to 4)**
    Routes: 1U 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
    16 17 18 20 22 33 36 609
11. **Including today, on which of the past seven days have you ridden on TheRide?**
    (All that apply) 1 Mon 2 Tue 3 Wed 4 Thurs 5 Fri 6 Sat 7 Sun
12. **If TheRide were not available for this trip, what would you have done instead?**
    1 driven alone 2 gotten a ride 3 taken a U of M bus 4 taken a carpool or vanpool
    5 walked 6 bicycled 7 gone somewhere else 8 not made this trip at all
13. **For how long have you been using TheRide?**
    a Less than a year b 1-2 years c 3-5 years 6-10 years d 11-15 years e more than 15 years

Do you have a disability that makes it difficult for you to use a standard transit bus? 1 Yes 2 No

14. **Do you have a valid driver's license?** 1 Yes 2 No
15. **Was a car (or truck or motorcycle) available to you to make this trip?** 1 Yes 2 No
16. **How old are you?** _____Years old
17. **Which one of the following best describes you? Are you (circle only one):**
    1 Employed for pay outside your home 2 Employed for pay in your home
    3 Student 4 Homemaker 5 Unemployed 6 Retired
18. **Are you a ...** 1 High school student 2 College student 3 Not a student
    a. **If you are a college student, which college?**
    1 U of M 2 EMU 3 WCC 4 Concordia 5 Cleary 6 Cooley
    6 Other: _____
19. **If employed, do you usually?**
    a. Work Saturday and/or Sunday 1 Yes 2 No
    b. Work after 9:00 PM on any day? 1 Yes 2 No
    c. Start work before 7:00 am on any day? 1 Yes 2 No
20. **Are you?** 1 Male 2 Female
21. **What is your total combined 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
22. **How many people live in your household?** 1 2 3 4 5 or more
23. **Which do you consider yourself (Circle all that apply):**
    1 African-American/Black 2 Asian 3 Caucasian/white 4 Native–American Indian
    5 Pacific Islander/Hawaiian 6 Other _____
24. **Are you Hispanic/Latino(a)?** 1 Yes 2 No
25. **How well do you speak English...** 1 Very well 2 Well 3 Not Well
26. **What language do you most often speak at home?**
    1 English 2 Spanish 3 Other: _____

Please turn the survey over and complete the questions on the back

27. **Are you using TheRide buses …**

1 More often than a year ago 2 About the same as a year ago 3 Less often than a year ago

28. **A year from now, do you expect to:**

1 Keep using TheRide 2 Get a car but keep using TheRide also 3 Get a car and stop using TheRide 4 Move away from this area 5 Stop using TheRide for other reason

29. **Do you carry a cell-phone** 1 Always 2 Most of the time 3 Rarely or never

a. If so, do you use text messaging on it? 1 Often 2 Occasionally 4 Rarely or never

b. If so, do you access the Internet on it? 1 Often 2 Occasionally 4 Rarely or never

30. **Do you use social media?** 1 Often 2 Occasionally 4 Rarely or never

a. **If "Yes," which of the following do you use regularly?**

1 Facebook 2 Twitter 3 Foursquare 4 Google+ 5 Tumblr 6 LinkedIn 7 YouTube

31. **In the past 7 days, how many days have you visited the TheRide website?**

0 1 2 3 4 5 6 7

32. If you have used the ***website*** TheRide.org since August 21, how satisfied or dissatisfied are you with each ***website*** feature?	Did not use	Dissatisfied ☹			Neutral 😐			Satisfied ☺
a. Plan My Trip	☐	1	2	3	4	5	6	7
b. Track My Bus on the website	☐	1	2	3	4	5	6	7
c. Track My Bus on cell-phone	☐	1	2	3	4	5	6	7
d. My Alerts (route subscription)	☐	1	2	3	4	5	6	7
e. Find Nearby Stops	☐	1	2	3	4	5	6	7
f. Schedules and maps on the website	☐	1	2	3	4	5	6	7
g. The Website overall	☐	1	2	3	4	5	6	7

33. **And how satisfied are you with information sources besides the website:**

h. Customer service line (996-0400)	☐	1	2	3	4	5	6	7
i. Information specialists at the Blake Transit Center	☐	1	2	3	4	5	6	7

34. How satisfied or dissatisfied are you with TheRide service in each of the following areas?	Don't know/	Dissatisfied ☹			Neutral 😐			Satisfied ☺
a. Drivers' skill	☐	1	2	3	4	5	6	7
b. Drivers' courtesy with passengers	☐	1	2	3	4	5	6	7
c. Drivers' knowledge of the TheRide system	☐	1	2	3	4	5	6	7
d. TheRide information in general	☐	1	2	3	4	5	6	7
e. Information on service changes/detours	☐	1	2	3	4	5	6	7
f. Frequency of service	☐	1	2	3	4	5	6	7
g. On-time performance	☐	1	2	3	4	5	6	7
h. Dependability of making transfers	☐	1	2	3	4	5	6	7
i. Locations of bus stops you use	☐	1	2	3	4	5	6	7
j. Quality of bus stops you use	☐	1	2	3	4	5	6	7
k Directness of routes	☐	1	2	3	4	5	6	7
l. Service to areas where you want to go	☐	1	2	3	4	5	6	7
m. Bus cleanliness	☐	1	2	3	4	5	6	7
n. Safety from accidents	☐	1	2	3	4	5	6	7
o. Personal security	☐	1	2	3	4	5	6	7
p. TheRide Service overall	☐	1	2	3	4	5	6	7

35. **Have you any comments or suggestions for TheRide?**

_____

_____

PLEASE RETURN SURVEY TO SURVEYOR ONBOARD THIS BUS, OR TO ANY TheRide BUS DRIVER. Thanks!

TheRide Encuesta para pasajeros

¡Dígale a TheRide cómo podemos servirlo mejor!

1. **¿En dónde estaba usted antes de ir a la parada de autobús para este viaje?**
   1 Casa 2 Trabajo 3 De compras 4 Escuela/universidad
   5 Visita social o diversión 6 Cita médica 7 Iglesia
   8 Otro lugar_____
2. **¿Cuáles son las calles que se cruzan en esa ubicación?**
   Calle: _____
   Calle que la cruza: _____
   ¿Qué ciudad? (Encierre una): Ann Arbor Ypsilanti Otra _____
3. **¿Cómo llegó a su parada?**
   1 Caminando 2 En silla de ruedas/*scooter* 3 En bicicleta 4 Manejó 5 Lo llevaron
4. **¿Cuántos minutos tardó para llegar a la parada de autobús?** _____
5. **¿Cuál es su destino FINAL en este viaje?**
   1 Casa 2 Trabajo 3 Compras 4 Escuela/universidad
   5 Visita social o diversión 6 Cita médica 7 Iglesia
   8 Otro lugar_____
6. **¿Cuáles son las calles que se cruzan en su destino final?**
   Calle: _____
   Calle que la cruza: _____
   ¿Qué ciudad? (Encierre una): Ann Arbor Ypsilanti Otra _____
7. **¿Cuántos viajes individuales de ida hará usted hoy?** (Por ejemplo, aunque haga trasbordo, ir a trabajar es un viaje; ir del trabajo a casa es un segundo viaje).
   1 viaje 2 viajes 3 viajes 4 viajes Otro _____(¿cuántos?)
8. **¿Cómo pagó este viaje?**
   1 Efectivo 2 MCard 3 Trasbordo 4 Pase de 30 días
   5 go!Pass 6 Ficha 7 EMU Pass 8 Otro _____
9. **¿Tiene alguna de las siguientes tarjetas?** 1 Tarjeta ADA (verde) 2 Good as Gold (tarjeta para personas mayores)
   3 Tarjeta Fare Deal (para discapacitados) 4 Tarjeta Fare Deal (para personas de bajos ingresos)
   5 Tarjeta Fare Deal (para personas de 60 a 64 años)
10. **¿Qué rutas de TheRide usa usted de forma regular? (hasta 4)**
    Rutas: 1U 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
    16 17 18 20 22 33 36 609
11. **Incluyendo hoy, ¿cuáles de los últimos siete días viajó en TheRide?** (Marque todas las opciones que apliquen) 1 Lun 2 Mar 3 Mié 4 Jue 5 Vie 6 Sáb 7 Dom
12. **Si TheRide no hubiera estado disponible para este viaje, ¿qué hubiera hecho?**
    1 Hubiera manejado su automóvil 2 Hubiera pedido que lo lleven 3 Hubiera tomado un autobús U de M
    4 Hubiera tomado un coche o una camioneta compartidos 5 Hubiera caminado 6 Hubiera ido en bicicleta 7 Hubiera ido a otro lugar 8 No hubiera hecho este viaje
13. **¿Durante cuánto tiempo ha estado usando TheRide?**
    a Menos de un año b 1-2 años c 3-5 años 6-10 años d 11-15 años e Más de 15 años

    ¿Tiene alguna discapacidad que le impida usar un autobús estándar? 1 Sí 2 No
14. **¿Tiene licencia de conducir válida?** 1 Sí 2 No
15. **¿Había un automóvil (o camión o motocicleta) disponible para usted para hacer este viaje?** 1 Sí 2 No
16. **¿Qué edad tiene?** _____años
17. **¿Cuál de las siguientes opciones lo describe mejor? Usted actualmente es... (encierre una opción):**
    1 Empleado que recibe pago fuera de su casa 2 Empleado que recibe pago en su casa
    3 Estudiante 4 Ama de casa 5 Desempleado 6 Jubilado
18. **¿Es usted...?** 1 Estudiante de escuela secundaria 2 Estudiante universitario No es estudiante
    a. **Si es estudiante universitario, ¿de qué universidad?**
    1 U of M 2 EMU 3 WCC 4 Concordia 5 Cleary 6 Cooley
    6 Otra: _____
19. **Si está empleado, ¿generalmente...?**
    a. Trabaja sábados o domingos 1 Sí 2 No
    b. Trabaja después de las 9 p.m. 1 Sí 2 No
    c. Comienza a trabajar antes de las 7 a.m. 1 Sí 2 No
20. **¿Es usted...?** 1 Hombre 2 Mujer
21. **¿Cuál es el ingreso anual total combinado 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 Más de $100,000
22. **¿Cuántas personas viven en su hogar?** 1 2 3 4 5 o más
23. **¿De qué raza se considera usted? (Encierre todas las que apliquen):**
    1 Afroamericana/Negra 2 Asiática 3 Caucásica/Blanca 4 Indígena norteamericana
    5 De las islas del Pacífico/nativo de Hawái 6 Otra _____
24. **¿Es usted hispano o latino?** 1 Sí 2 No
25. **¿Qué tan bien habla inglés?** 1 Muy bien 2 Bien 3 No bien
26. **¿Qué idioma habla usted con más frecuencia en su hogar?**
    1 Inglés 2 Español 3 Otro: _____

Voltee la encuesta y responda a las preguntas de atrás

27. ¿Utiliza los autobuses de TheRide...?

1 Con mayor frecuencia que hace un año 2 Casi con la misma frecuencia que hace un año
3 Con menos frecuencia que hace un año

28. Dentro de un año, ¿usted espera...?

1 Seguir usando TheRide 2 Comprar un auto pero seguir usando TheRide
3 Comprar un auto y dejar de usar TheRide
4 Mudarme de esta zona 5 Dejar de usar TheRide por otros motivos

29. ¿Lleva un teléfono celular con usted? 1 Siempre 2 La mayoría de las veces 3 Rara vez o nunca

a. Si la respuesta es sí, ¿usa mensajes de texto en su teléfono celular?
1 A menudo 2 Ocasionalmente 4 Rara vez o nunca

b. Si la respuesta es sí, ¿se conecta a Internet en su teléfono celular?
1 A menudo 2 Ocasionalmente 4 Rara vez o nunca

30. ¿Usa los medios sociales? 1 A menudo 2 Ocasionalmente 4 Rara vez o nunca

a. Si la respuesta es sí, ¿cuáles de los siguientes usa en forma regular?
1 Facebook 2 Twitter 3 Foursquare 4 Google+ 5 Tumblr 6 LinkedIn 7 YouTube

31. En los últimos 7 días, ¿cuántas veces visitó el sitio web de TheRide?
0 1 2 3 4 5 6 7

32. Si ha usado el *sitio web* TheRide.org desde el 21 de agosto, ¿cuán satisfecho o insatisfecho está con cada función del *sitio web*?	No lo usó	Insatisfecho ☹			Neutro 😐			Satisfecho ☺
a. Plan My Trip (para planear su viaje)	☐	1	2	3	4	5	6	7
b. Track My Bus (para seguir el recorrido de su autobús) en el sitio web	☐	1	2	3	4	5	6	7
c. Track My Bus (para seguir el recorrido de su autobús) en el teléfono celular	☐	1	2	3	4	5	6	7
d. My Alerts (suscripción a rutas)	☐	1	2	3	4	5	6	7
e. Find Nearby Stops (para buscar paradas cercanas	☐	1	2	3	4	5	6	7
f. Horarios y mapas en el sitio web	☐	1	2	3	4	5	6	7
g. El sitio web en general	☐	1	2	3	4	5	6	7

33. ¿Y cuán satisfecho está con las fuentes de información además del sitio web?

h. Línea de servicio al cliente (996-0400)	☐	1	2	3	4	5	6	7
i. Especialistas en información en Blake Transit Center	☐	1	2	3	4	5	6	7

34. ¿Cuán satisfecho o insatisfecho está con el servicio de TheRide en cada uno de los siguientes aspectos?	No sabe	Insatisfecho ☹			Neutro 😐			Satisfecho ☺
a. La habilidad del conductor	☐	1	2	3	4	5	6	7
b. La cortesía del conductor con los pasajeros	☐	1	2	3	4	5	6	7
c. El conocimiento del conductor del sistema de TheRide	☐	1	2	3	4	5	6	7
d. La información de TheRide en general	☐	1	2	3	4	5	6	7
e. Información sobre cambios de servicios/desvíos	☐	1	2	3	4	5	6	7
f. Frecuencia del servicio	☐	1	2	3	4	5	6	7
g. Puntualidad	☐	1	2	3	4	5	6	7
h. Confiabilidad de los trasbordos	☐	1	2	3	4	5	6	7
i. Ubicaciones de las paradas de autobús que utiliza	☐	1	2	3	4	5	6	7
j. Calidad de las paradas de autobús que utiliza	☐	1	2	3	4	5	6	7
k Rutas directas	☐	1	2	3	4	5	6	7
l. Servicio en áreas donde usted desea ir	☐	1	2	3	4	5	6	7
m. Limpieza del autobús	☐	1	2	3	4	5	6	7
n. Seguridad ante accidentes	☐	1	2	3	4	5	6	7
o. Seguridad personal	☐	1	2	3	4	5	6	7
p. El servicio de TheRide en general	☐	1	2	3	4	5	6	7

35. ¿Tiene algún comentario o sugerencia para TheRide?

_____

_____

ENTREGUE LA ENCUESTA AL ENCUESTADOR QUE SE ENCUENTRA A BORDO DE ESTE AUTOBÚS O A CUALQUIER CONDUCTOR DE TheRide ¡Gracias!

Appendix B – Comments by Riders - Under Separate Cover