

RapidRide B Line One Year Post-Implementation Survey Results

Prepared for King County Metro by Gilmore Research Group

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EXECUTIVE SUMMARY

Background and Objectives

King County Metro Transit (Metro) introduced its second RapidRide line - the B Line - in Fall 2011, offering Bus Rapid Transit service between the Bellevue Transit Center and the Redmond Transit Center via Crossroads and Overlake. The RapidRide B Line replaced service formerly provided by two routes: Route 253 and Route 230 East.

The RapidRide B Line provides the best features Metro has to offer, including:

- Service every 10 minutes during the weekday peak periods, every 15 minutes during most other times of the day and week until 10 pm, and scheduled late night/early morning service.
- Distinctive red buses with three doors for easy boarding, security cameras, stop announcements and passenger WiFi.
- Branded passenger facilities that include redesigned shelters, enhanced lighting, electronic real time information signs, off-board ORCA card readers, and other convenient features.
- Use of transit signal priority to improve reliability and speed up travel times.

Metro contracted with the Gilmore Research Group to conduct a one-year post implementation survey of RapidRide B Line riders during October 2012. This report compares results of the RapidRide B Line post implementation survey (obtained October 2012) with initial survey results for the RapidRide B Line obtained in November and December 2011, and with survey results for the 2 routes that were replaced by the RapidRide B Line (Route 253 and Route 230 East) obtained in August and September 2011.

Specific areas of investigation were:

- Trip time
- Personal safety
- Waiting areas
- Physical characteristics of the buses
- Transfers
- Frequency and reliability of the buses
- Rides taken during the past 30 days, usual time and reason for riding and length of time as a rider
- Payment of fares and inspections by fare enforcement officers
- Overall satisfaction with each route

Key findings from the October 2012 survey are provided in this Executive Summary. They are presented as a comparison with 2011 survey results for the RapidRide B Line and for the routes it replaced.

Method

The survey of all riders onboard selected trips took place on October 24th and 25th 2012, between the hours of 6:00 am and 7:30 pm. During these hours riders were invited to complete a questionnaire regarding their satisfaction with various service quality elements. Riders were also offered the option of completing the survey by mail and online.¹ Trips to be surveyed were selected to provide a variety of peak and non-peak riders.

A total of 20 surveys were completed in one of the four languages offered in addition to English: Sixteen (16) respondents completed surveys in Spanish, 3 in Russian and 1 in Chinese. A Korean language survey was also available.

Reporting Conventions

This report compares results of rider satisfaction ratings obtained at three points of time: during August/September 2011 (for Routes 230 East and 253), during November/December 2011 (for newly implemented RapidRide B Line) and in October 2012 (for the one-year post-implementation survey of RapidRide B Line riders).

Statistical tests were used to compare differences in mean scores as well as differences in the percentage of respondents who were "satisfied" (combined ratings of 4 and 5) or "dissatisfied" (combined ratings of 1 and 2). Response proportions presented in text and displayed in graphs and in tables exclude the number of respondents who did not answer the questions and also, the number of respondents who indicated *not applicable*.

Text summaries of respondent ratings are presented as the combined proportions of satisfied/very satisfied ratings. Combined proportions that are reported in Detailed Findings of the text reflect the proportions that are shown in the graphs. These numbers may vary slightly (no more than 1 percentage point) from numbers obtained from data tables due to rounding. A complete set of data tables is available under separate cover.

Response Rates

Table 1 summarizes survey response for the RapidRide B Line in the current survey and for the RapidRide B Line and Routes 230 East and 253 in 2011.

¹ Gilmore Research created a postcard for each route. Each postcard featured a unique PIN number to access the online survey. Each route had a set of PIN numbers assigned to it so that the online survey would recognize the route number, allowing the correct wording recall for each route. The postcard included the phone number for Gilmore Research for anyone who might have difficulty accessing the survey.

The overall response rate, this year calculated as the percentage of surveys completed from all surveys distributed, *plus online survey invitation postcards*, was much lower (58%) than in any of the three survey periods of 2011.

Of the 712 surveys handed out on board the bus this year, 489 were either completed on board or mailed back, yielding a response rate of 69%. Of the 170 postcards directing riders to complete surveys online, just 24 resulted in web-based completes, a response rate of just 14%.

It may be that offering the option of completing an online survey at a later date may have had the unexpected effect of allowing potential respondents to postpone the survey completely, thereby depressing the overall response rate.

Table 1A Completed Questionnaires					
	B Line 2012	B Line 2011	Route 230E	Route 253	
	October 2012	Nov/Dec 2011	September 2011	August 2011	
Completed Questionnaires	513	504	497	519	
% of Questionnaires Handed Out	58%	94%	92%	96%	
% of All Riders on Sampled Trips*	47%	66%	45%	57%	
% Refused	17%	14%	10%	15%	
*All riders on sampled trips: this includes riders who declined to take a survey because they had already completed one.					

Dates of Survey

Survey dates for the 2011 and 2012 surveys are displayed in Table 1B.

- October 2012 on-board surveys for the RapidRide B Line were conducted during two days of rider intercepts, October 24th and October 25th. Most of the surveys (71%) were collected on the 24th.
- RapidRide B Line 2011 surveys were also collected over two days: November 29th (55% of the total number) and December 7th, 2011 (45%).
- The survey collection period for Route 230 East occurred over a four day stretch during September 2011, with a majority collected on the first day out September 9th (59%).
- Intercept interviews of Route 253 riders occurred the last two days of August 2011, with 55% of the total of 519 collected on the 30th and 46% on the 31st. were

Table 1B Survey Dates								_
	B Line	2012	B Line	2011	Route 2	230 East	Route	e 253
	# of Surveys	% of Total						
August 30, 2011							288	55%
August 31, 2011							231	46%
September 8, 2011					250	59%		
September 13, 2011					95	19%		
September 20, 2011					80	16%		
September 26, 2011					72	15%		
November 29, 2011			275	55%				
December 7, 2011			229	45%				
October 24, 2012	362	71%						
October 25, 2012	151	29%						
Total	513	100%	504	100%	497	100%	519	100%

KEY FINDINGS

Rider satisfaction ratings obtained in the current survey are very similar to ratings obtained just after the implementation of RapidRide B Line service. Nearly all remain well above ratings given for discontinued Routes 230 East and 253, and many remain significantly higher. One new aspect of service rated by riders in the current survey gathered large majorities of respondents who indicated they are satisfied: *room to stand if no seats are available* (91% satisfied/very satisfied).

The following information summarizes the significant differences between ratings given this year, ratings obtained just after implementation and ratings given for routes that were replaced by RapidRide B Line service. ²

RapidRide B Line Ratings This Year Compared to Last Year:

Four aspects of service gathered significantly larger proportions of *satisfied/very satisfied* ratings this year than last year:

- Overall satisfaction with the route (93% in 2012 v. 86% in 2011)
- Behavior of other passengers on the bus (91% v. 85%)
- Convenience of the bus stop (82% v. 69%)
- Being able to sit down while waiting (64% v. 57%)

RapidRide B Line riders gave helpfulness of drivers in making connections significantly fewer satisfied/very satisfied ratings this year than last year (75% v. 82%).

RapidRideB Line Ratings This Year Compared to Route 230 East:

A comparison of service ratings this year with service ratings for Route 230 East prior to implementation found significantly higher proportions of *satisfied/very satisfied* ratings this year for 20 out of 33 service elements evaluated in both surveys. There were no significant decreases in satisfaction ratings in the current survey.

Satisfaction ratings for the following aspects of service were significantly higher for RapidRide B Line this year than for Route 230 East:

- Wide enough doors and aisles for loading and unloading (96% in 2012 v. 85% in 2011)
- Personal safety on the bus (96% v. 92%)
- Enough bars and straps to hang onto while standing (95% v. 84%)
- Having the bus free of graffiti (94% v. 84%)
- Cleanliness of the bus interior (94% v. 85%)

² Please see the Appendix for a complete listing of all combined satisfaction ratings by route.

- *Being able to get a seat* (93% v. 85%)
- Overall satisfaction with the route (93% v. 86%)
- Behavior of other passengers on the bus (91% v. 79%)
- Smoothness of the ride (87% v. 77%)
- How often the bus runs during peak hours (85% v. 67%)
- How early the bus runs during the morning (84% v. 70%)
- Behavior of other people at the waiting area (83% v. 77%)
- The bus getting me where I'm going on time (82% v. 74%)
- Cleanliness of the waiting area (82% v. 74%)
- How long the bus trip takes (82% v. 76%)
- How often the bus runs during midday hours (80% v. 69%)
- Amount of lighting in the waiting area (77% v. 68%)
- How often the bus runs on weekends (72% v. 48%)
- Transfers: How often the bus runs in the evening/at night (72% v. 56%)
- How often the bus runs in the evening/at night (69% v. 52%)

RapidRide B Line Ratings This Year Compared to Route 253:

Of the 33 service elements evaluated in both surveys 25 had significantly more *satisfied/very satisfied* ratings this year than Route 253. None of service ratings had significantly fewer *satisfied/very satisfied* ratings this year than Route 253.

Satisfaction ratings for the following aspects of service were significantly higher for RapidRide B Line this year than for Route 253:

- Wide enough doors and aisles for loading and unloading (96% in 2012 v. 88% in 2011)
- Personal safety on the bus (96% v. 90%)
- Enough bars and straps to hang onto while standing (95% v. 88%)
- Having the bus free of graffiti (94% v. 85%)
- Cleanliness of the bus interior (94% v. 88%)
- Being able to get a seat (93% v. 82%)
- Overall satisfaction with the route (93% v. 82%)
- Behavior of other passengers on the bus (91% v. 79%)
- Personal safety waiting for the bus during the daytime (91% v. 87%)
- Smoothness of the ride (87% v. 77%)
- How often the bus runs during peak hours (85% v. 65%)
- How early the bus runs during the morning (84% v. 69%)
- Behavior of other people at the waiting area (83% v. 76%)
- The bus getting me where I'm going on time (82% v. 75%)

- Cleanliness of the waiting area (82% v. 75%)
- How long the bus trip takes (82% v. 75%)
- How often the bus runs during midday hours (80% v. 68%)
- Personal safety waiting for the bus at night (77% v. 66%)
- Amount of lighting in the waiting area (77% v. 68%)
- The number of stops the bus makes (75% v. 67%)
- How often the bus runs on weekends (72% v. 44%)
- Transfers: How often the bus runs in the evening/at night (72% v. 58%)
- The bus coming on time when transferring (71% v. 62%)
- The way buses are scheduled to make transfer connections (71% v. 63%)
- How often the bus runs in the evening/at night (69% v. 50%)

CONCLUSIONS

Results of this survey find continued high levels of satisfaction with nearly all aspects of service provided by the RapidRide B Line. Overall satisfaction with the route tracked significantly above the measure taken just after implementation, thus indicating increased rider approval of the switch to Bus Rapid Transit service.

Several aspects of waiting areas are perceived to be better than before. Satisfaction ratings for *convenience of the stop* and *being able to sit down while waiting* increased significantly over ratings that fell one year ago when the RapidRide B Line began service. And rider satisfaction with *cleanliness of the RapidRide B Line waiting areas* and *amount of lighting* remains well above satisfaction with these elements of waiting areas offered by the discontinued routes.

A one year look back shows sustained high levels of satisfaction with physical characteristics of the RapidRide buses, including the easy loading and unloading, the adequacy of sitting and standing space, smoothness of the ride, the cleanliness of the bus interiors and the lack of graffiti.

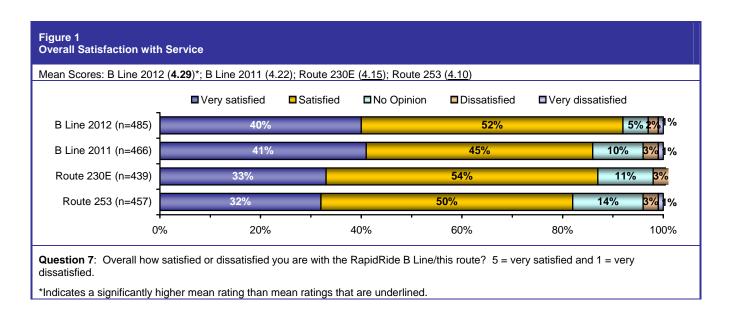
Although satisfaction with service frequency has leveled off compared to one year before, *all* aspects of service frequency gathered significantly higher ratings in the current survey than they did in the surveys of discontinued Routes 230 East and 253. This demonstrates an overall preference among riders for the frequency of service that is provided by the RapidRide B Line.

DETAILED FINDINGS

Overall Satisfaction with Service

There was a significant increase this year over last year in the percentage of RapidRide B Line riders who gave ratings of *very satisfied/satisfied* for overall service (92% v. 86%). Despite this increase, the mean satisfaction rating showed no significant change from the 2011 RapidRide B Line mean in 2012 (4.29 v. 4.22).

Overall satisfaction with RapidRide B Line service remains significantly higher than overall satisfaction with service provided by Routes 230 East and 253 prior to implementation, measured as both mean ratings and as net ratings of *satisfied/very satisfied*.



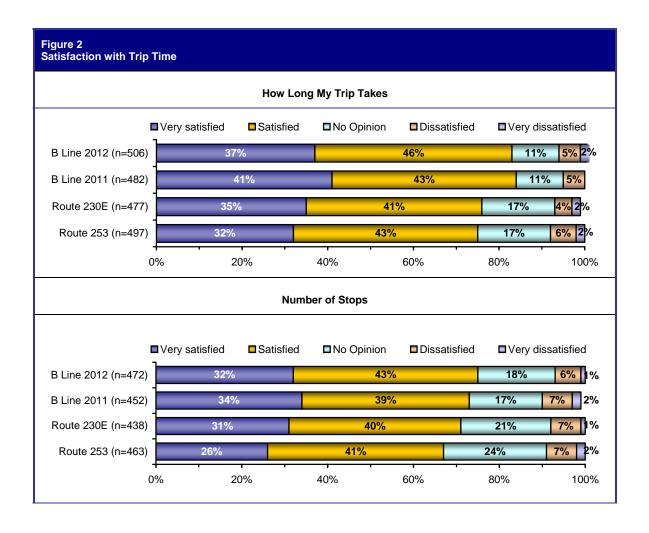
Satisfaction with Trip Time

Respondent satisfaction ratings for the RapidRide B Line were similar year to year for both elements of trip time (Figure 2):

- Length of trip (83%, 2012 v. 84%, 2011
- *Number of stops* (75%, 2012 v. 73%, 2011)

Satisfaction ratings for *length of trip* remained significantly higher this year for RapidRide B Line than for Routes 230 East (76%) and 253 (75%).

Satisfaction ratings for *number of stops* remained significantly higher this year for RapidRide B Line than for Route 253 (75% v. 67%), but not significantly higher than Route 230 East (71%).



Mean ratings for RapidRide B Line trip time this year were not significantly changed from RapidRide B Line mean ratings in 2011 for either element of service (Table 3):

- Length of trip (4.11, 2012 v. 4.19, 2011)
- *Number of stops* (3.99, 2012 v. 3.96, 2011)

Although mean ratings for both elements of RapidRide B Line service remained significantly higher this year than mean ratings for Route 253, they were not significantly different from ratings for either element of service provided by Route 230 East in 2011.

Table 3 Mean Satisfaction Scores: Trip Time				
	B Line 2012	B Line 2011	Route 230E	Route 253
How long my trip takes	4.11	4.19	4.04	<u>3.95</u>
Number of stops	3.99	3.96	3.93	3.82

Questions 1A & 1B: Please circle a number for each item to show how satisfied or dissatisfied you are with that item for this route you are riding. 5 = very satisfied and 1 = very dissatisfied.

Mean ratings that are shown in boldface type are significantly higher than mean ratings that are underlined.

Satisfaction with Personal Safety

Behavior of other passengers on the bus gathered a significantly higher share of satisfaction ratings for RapidRide B Line in this survey than in the 3 comparison surveys (Figure 3):

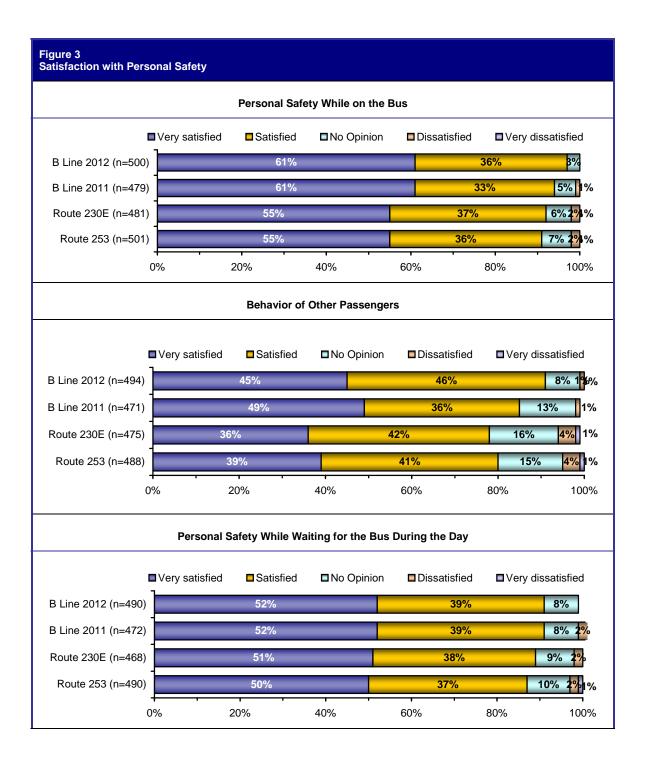
• Behavior of other passengers on the bus – B Line 2012 (91%), compared to B Line 2011 (85%), Route 230E (78%) and Route 253 (80%)

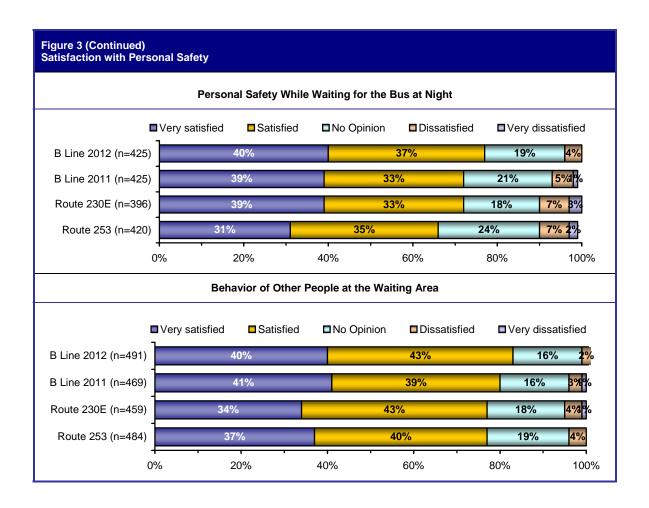
Satisfaction ratings for these for two elements of personal safety on the RapidRide B Line showed significant increases over pre-implementation ratings given for both Routes 230 East and Route 253:

- Personal safety while on bus B Line 2012 (97%) v. Route 230E (92%) and Route 253 (91%)
- Behavior of other people at the waiting area B Line 2012 (83%) v. Route 230E (77%) and Route 253 (77%)

Satisfaction ratings for personal safety at waiting areas also showed a significant increase for RapidRide B Line this year over Route 253:

- Personal safety while waiting for the bus during the day B Line 2012 (91%) v. Route 253 (87%)
- Personal safety while waiting for the bus at night B Line 2012 (77%) v. Route 253 (66%)





Mean scores for three elements of personal safety were significantly higher for RapidRide B Line 2012 than for Routes 230 East and 253 (Table 3):

- Personal safety while on the bus B Line 2012 (4.56) v. Route 230E (4.42) and Route 253 (4.42)
- Behavior of other passengers on the bus B Line 2012 (4.33) v. Route 230E (4.09) Route 253 (4.11)
- Behavior of other people at the waiting area B Line 2012 (4.20) v. Route 230E (4.04) Route 253 (4.07)

Mean scores for RapidRide B Line were higher than mean ratings for Route 253 for these aspects of bus waiting areas:

- Waiting for the bus during the day B Line 2012 (4.42) v. Route 253 (4.32)
- *Waiting for the bus at night* B Line 2012 (4.12) v. Route 253 (3.86)

Table 3 Mean Satisfaction Scores: Personal Safety				-
	B Line 2012	B Line 2011	Route 230E	Route 253
Personal safety while on bus	4.56	4.53	4.42	<u>4.42</u>
Personal safety while waiting for the bus during the day	4.42	4.39	4.37	<u>4.32</u>
Behavior of other passengers	4.33	4.32	4.09	<u>4.11</u>
Behavior of other people at the waiting area	4.20	4.18	<u>4.04</u>	<u>4.07</u>
Personal safety while waiting for the bus at night	4.12	4.04	3.99	<u>3.86</u>

Questions 2A-E: Please circle a number for each item to show how satisfied or dissatisfied you are with that item for this route you are riding. 5 = very satisfied and 1 = very dissatisfied.

Mean ratings that are shown in boldface type are significantly higher than mean ratings that are underlined.

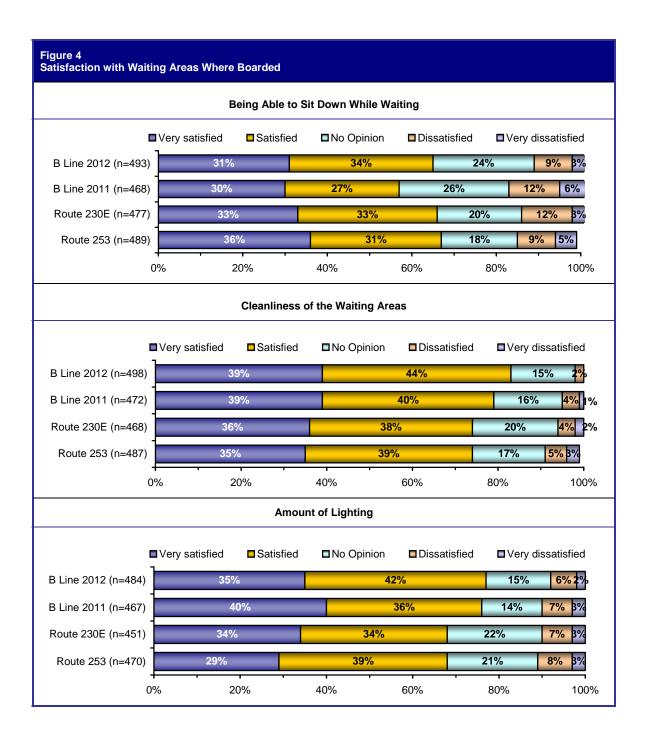
Satisfaction with the Waiting Area Where Boarded

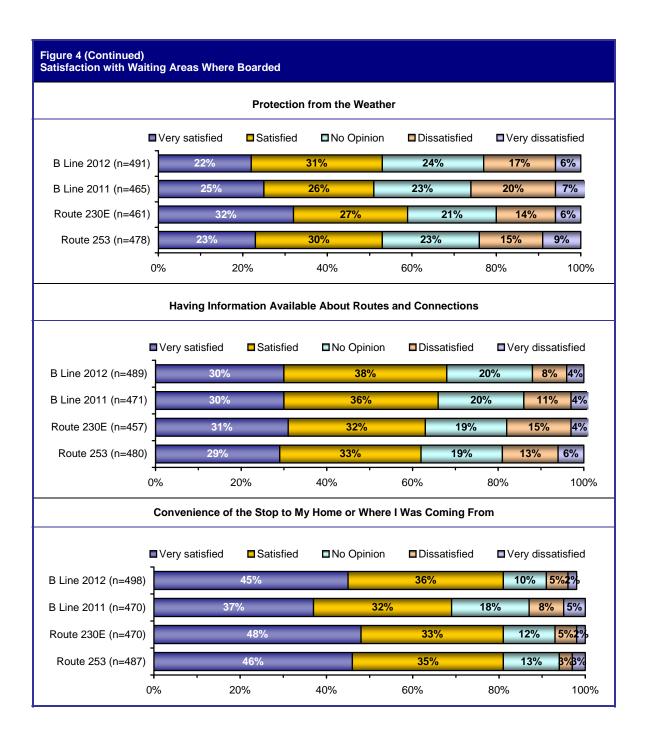
Two aspects of RapidRide B Line waiting areas showed significant improvement in satisfaction this year over 2011 RapidRide B Line results:

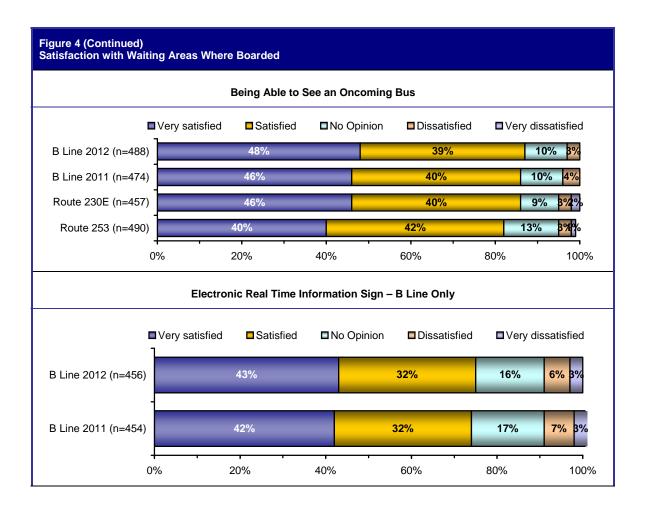
- 65% of B Line riders gave very satisfied/satisfied ratings to being able to sit down while waiting compared to 57% in 2011.
- 81% indicated they were satisfied with *convenience of the stop to my home or where I was coming from* versus 69% in 2011.

Satisfaction with *cleanliness of waiting areas* and *amount of lighting* remained significantly higher than satisfaction with these aspects waiting areas for Routes 230 East and 253:

- Cleanliness of waiting areas B Line 2012 (83%) v. Route 230E (74%) and Route 253 (74%)
- *Amount of lighting* B Line 2012 (77%) v. Route 230E (68%) Route 253 (68%)







Mean satisfaction ratings for RapidRide B Line 2012 are displayed in Table 3. Results show several significant positive increases and one significant decrease:

- Mean ratings for these three aspects of waiting areas were higher for the B Line this year than for Route 253:
 - o Being able to see an oncoming bus (4.31 v. 4.18)
 - o Amount of lighting (4.02 v. 3.83)
 - o Having information available about routes and connections (3.82 v. 3.67)
- The mean rating for *convenience of the bus stop* was higher this year than the B Line rating last year (4.17 v. 3.89), and the rating for *being able to sit down while waiting* was also significantly higher than the B Line in 2011 (3.80 v. 3.64).
- Cleanliness of B Line waiting areas had a mean rating of 4.17, a significantly higher rating than cleanliness of Route 230 E and Route 253 waiting areas (4.03 and 3.99).
- The mean rating for *protection from the weather* (3.45) was significantly lower than the mean rating for Route 230E *weather protection* (3.64).

Table 3 Mean Satisfaction Scores: Waiting Areas for Boarding this Trip					
	B Line 2012	B Line 2011	Route 230E	Route 253	
Being able to see an oncoming bus	4.31	4.27	4.26	<u>4.18</u>	
Convenience of the stop to my home or where I was coming from	4.17	<u>3.89</u>	4.19	4.18	
Cleanliness of waiting area	4.17	4.10	<u>4.03</u>	<u>3.99</u>	
Electronic real time information sign*	4.06	4.03	-	-	
Amount of lighting	4.02	4.04	3.90	<u>3.83</u>	
Having information available about routes and connections	3.82	3.77	3.69	<u>3.67</u>	
Being able to sit down while waiting	3.80	<u>3.64</u>	3.82	3.85	
Protection from weather	<u>3.45</u>	3.41	3.64	3.43	

Questions 3A-H: Please circle a number for each item to show how satisfied or dissatisfied you are with that item for this route you are riding. 5 = very satisfied and 1 = very dissatisfied.

Mean ratings that are shown in boldface type are significantly higher than mean ratings that are underlined.

*This item was not rated by Route 230 East and Route 253 respondents.

Physical Characteristics of the Buses

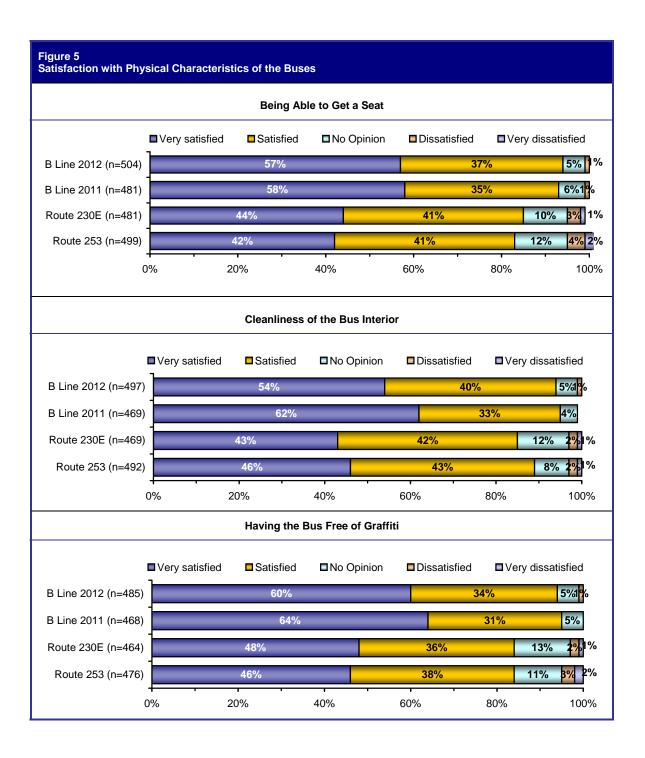
Satisfaction ratings for physical characteristics of the RapidRide B Line buses were not significantly changed from 2011 RapidRide B Line ratings.

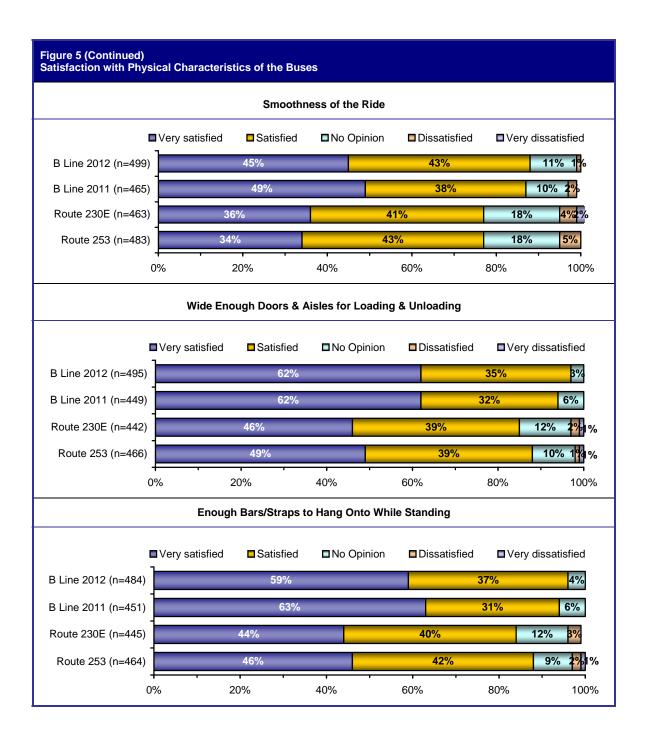
Satisfaction ratings for these six aspects of the RapidRide B Line buses remained significantly higher than ratings for Route 230 East and Route 253 buses:

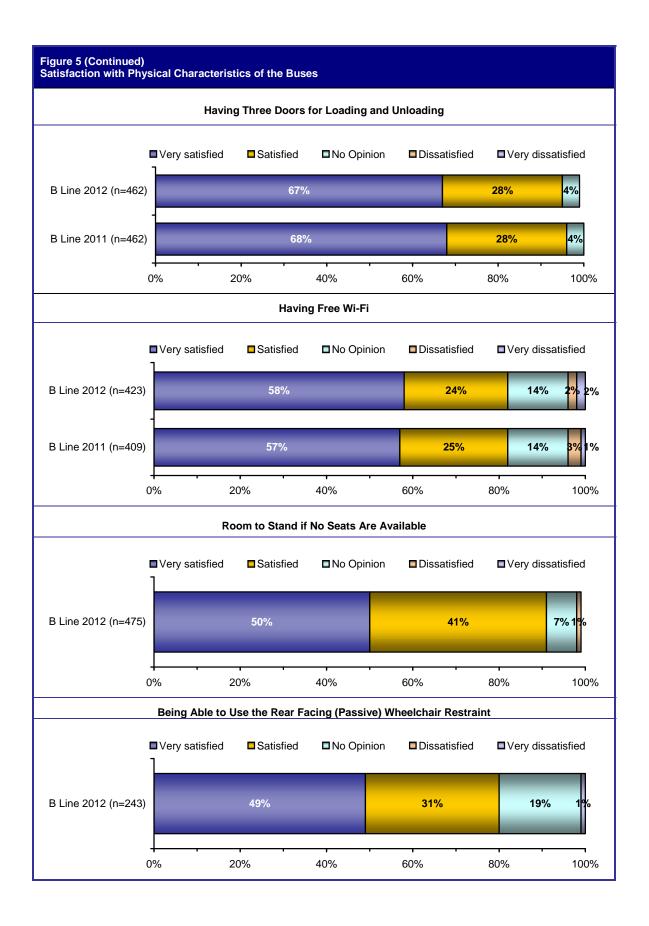
- Being able to get a seat B Line 2012 (94%) v. Route 230E (85%) and Route 253 (83%)
- Cleanliness of the bus interior B Line 2012 (94%) v. Route 230E (85%) Route 253 (89%)
- Having the bus free of graffiti B Line 2012 (94%) v. Route 230E (84%) and Route 253 (84%)
- Smoothness of the ride B Line 2012 (88%) v. Route 230E (77%) and Route 253 (77%)
- Wide enough doors and aisles for loading and unloading B Line 2012 (97%) v. Route 230E (85%) and Route 253 (88%)
- Enough bars and straps to hang onto while standing B Line 2012 (96%) v. Route 230E (84%) and Route 253 (88%)

Satisfaction ratings for two new aspects of RapidRide B Line buses asked about in this year's survey were very high:

- 91% of respondents indicated very satisfied/satisfied for room to stand if no seats are available.
- 80% gave ratings of very satisfied/satisfied for being able to use the rear-facing (passive) wheelchair restraint.







A comparison of mean satisfaction scores for the six items rated in all four surveys showed significantly higher ratings for the RapidRide B Line than for Route 230 East and Route 253, but no significant differences between RapidRide B Line ratings this year and RapidRide B Line ratings last year.

The six items rated higher for the RapidRide B Line this year than for Routes 230E and 253 are:

- Wide enough doors and aisles for loading and unloading B Line 2012 (4.57) v. Route 230E (4.27) and Route 253 (4.33)
- Enough bars and straps to hang onto while standing B Line 2012 (4.53) v. Route 230E (4.24) and Route 253 (4.29)
- Having the bus free of graffiti B Line 2012 (4.53) v. Route 230E (4.28) and Route 253 (4.25)
- Being able to get a seat B Line 2012 (4.47) v. Route 230E (4.24) and Route 253 (4.17)
- *Cleanliness of the bus interior* B Line 2012 (4.47) v. Route 230E (4.24) Route 253 (4.29)
- Smoothness of the ride B Line 2012 (4.28) v. Route 230E (4.05) and Route 253 (4.05)

Table 5 Mean Satisfaction Scores: Physical Characteristics of the Buse	es			
	B Line 2012	B Line 2011	Route 230E	Route 253
Having 3 doors for loading and unloading*	4.62	4.61	-	-
Wide enough doors and aisles	4.57	4.57	4.27	4.33
Enough bars to hold onto while standing	4.53	4.56	<u>4.24</u>	<u>4.29</u>
Having the bus free of graffiti	4.53	4.58	<u>4.28</u>	<u>4.25</u>
Being able to get a seat	4.47	4.49	4.24	<u>4.17</u>
Cleanliness of the bus interior	4.47	4.57	4.24	<u>4.29</u>
Room to stand if no seats are available**	4.40	-	-	-
Free Wi-Fi*	4.35	4.34	-	-
Smoothness of the ride	4.28	4.33	<u>4.05</u>	<u>4.05</u>
Being able to use the rear facing wheelchair restraint**	4.27	-	-	-

Questions 4A-J: Please circle a number for each item to show how satisfied or dissatisfied you are with that item for this route you are riding. 5 = very satisfied and 1 = very dissatisfied.

Mean ratings that are shown in boldface type are significantly higher than mean ratings that are underlined.

^{*}These items were not rated by Route 230 East and Route 253 respondents.

^{**}This item was new in the 2012 survey

Satisfaction with Transfers

An average of about two-thirds of RapidRide B Line respondents (64%) answered questions about transfers in the current survey, more than in the 2011 survey of RapidRide B Line respondents (55%).³

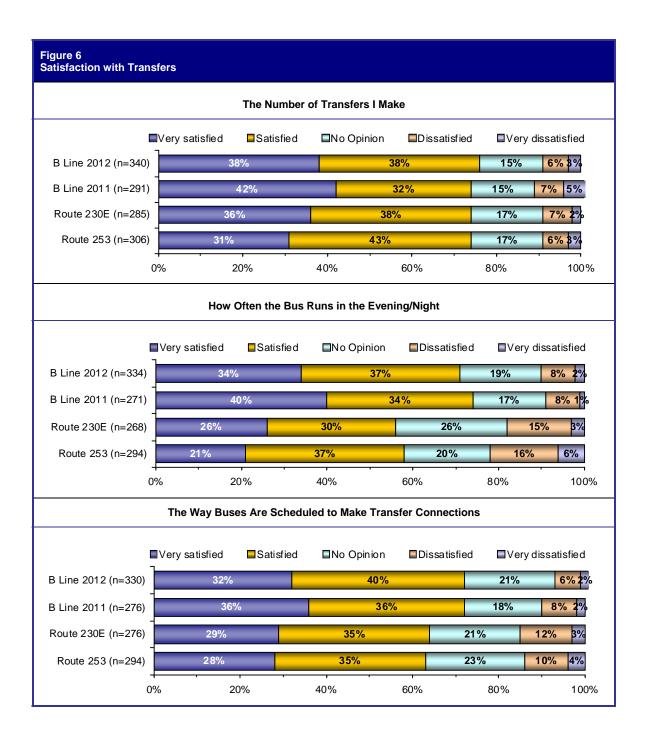
Although satisfaction ratings for three aspects of transfers remained significantly higher than 2011 pre-implementation ratings, the percentage of *very satisfied/satisfied* ratings given for *helpfulness of drivers in ensuring connections* fell significantly below the 2011 result (75% currently v. 83% in 2011).

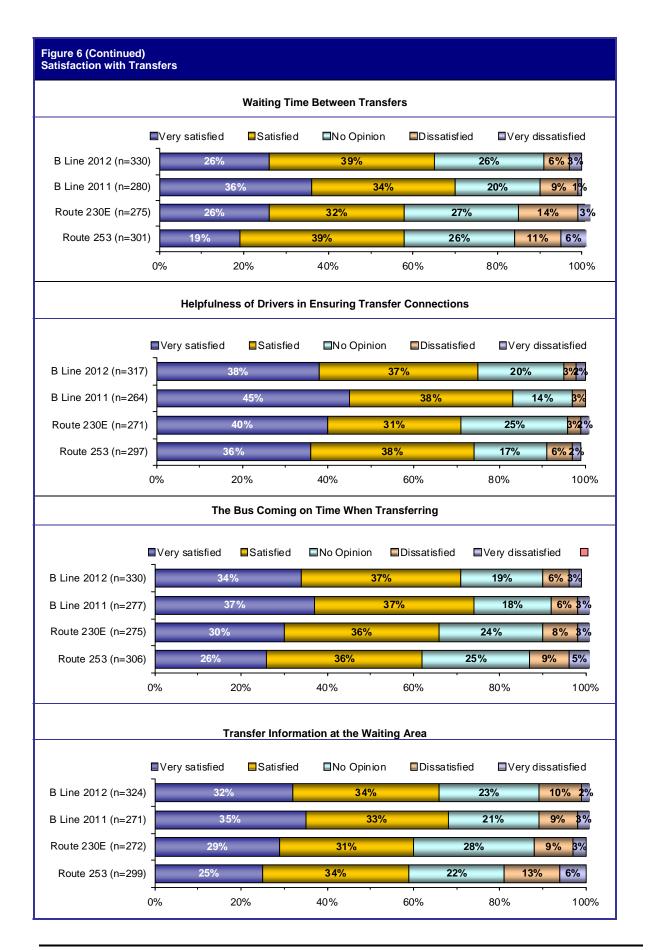
Elements of transfers that gathered significantly more *very satisfied/satisfied* ratings in the current survey than in surveys conducted prior to the RapidRide B Line implementation include:

- How often the bus runs in the evening/at night B Line 2012 (71%) v. Route 230E (56%) and Route 253 (58%)
- The way the buses are scheduled to make transfer connections B Line 2012 (72%) v. Route 253 (63%)
- The bus coming on time when transferring B Line 2012 (71%) v. Route 253 (62%)

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³ Between 317 and 340 riders answered questions about transfers in this 2012 survey, an average of 329 riders for the question series, or 64% of n=513. In 2011 between 264 and 291 answered the same series, an average of 278 riders, or 55% of n=504.





Mean satisfaction ratings for 5 elements of transfers remained significantly higher this year than mean ratings obtained prior to implementation of the RapidRide B Line:

- How often the bus runs in the evening/at night B Line 2012 (3.95) v. Route 230E (3.60) and Route 253 (3.61)
- The bus coming on time when transferring B Line 2012 (3.93) v. Route 253 (3.70)
- The way the buses are scheduled to make transfer connections B Line 2012 (3.92) v. Route 253 (3.73)
- Transfer information at the waiting area B Line 2012 (3.83) v. Route 253 (3.61)
- Waiting time between transfers B Line 2012 (3.78) v. Route 253 (3.54)

The mean rating for *helpfulness of drivers in ensuring transfer connections* fell significantly below the 2011 rating (4.06 v. 4.23).

Table 6 Mean Satisfaction Scores: Ease of Transfers				
	B Line 2012	B Line 2011	Route 230E	Route 253
Helpfulness of drivers in ensuring transfer connections	<u>4.06</u>	4.23	<u>4.04</u>	<u>3.99</u>
The number of transfers I make	4.01	4.00	3.98	3.93
How often the bus runs in the evening / at night	3.95	4.03	<u>3.60</u>	<u>3.51</u>
The bus coming on time when transferring	3.93	3.98	3.82	<u>3.70</u>
The way buses are scheduled to make transfer connections	3.92	3.95	3.76	<u>3.73</u>
Transfer information at the waiting area	3.83	3.90	3.74	<u>3.61</u>
Waiting time between transfers	3.78	3.93	3.63	<u>3.54</u>

Questions 5A-G: Please circle a number for each item to show how satisfied or dissatisfied you are with that item for this route you are riding. 5 = very satisfied and 1 = very dissatisfied.

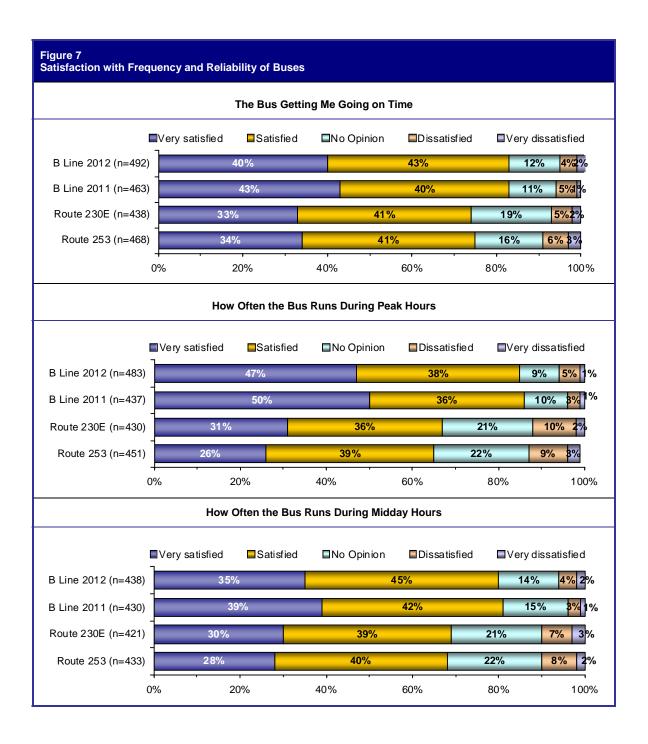
Mean ratings that are shown in boldface type are significantly higher than mean ratings that are underlined.

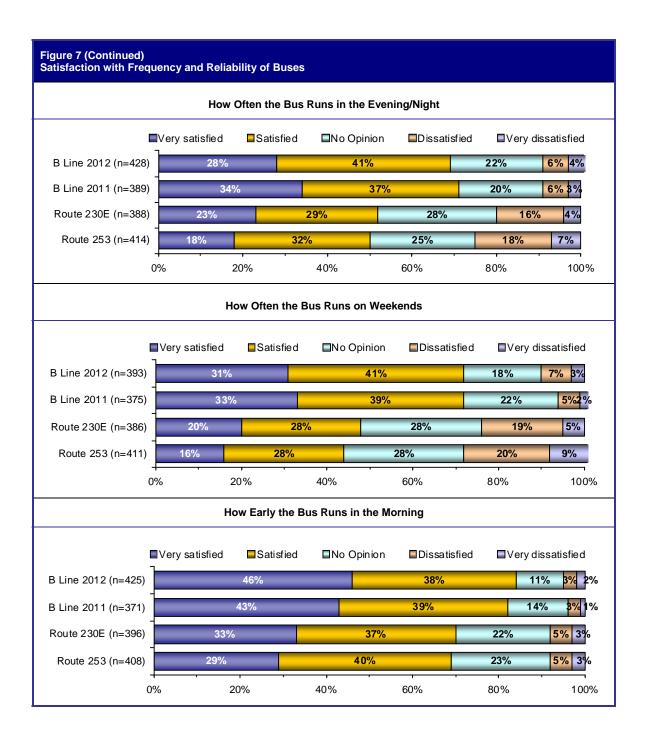
Satisfaction with Frequency and Reliability of Buses

Satisfaction ratings obtained in the current survey are not significantly different from satisfaction ratings obtained in the RapidRide B Line 2011 survey.

Satisfaction with all aspects of RapidRide B Line frequency and reliability remain significantly higher than satisfaction with service prior to B Line implementation.

- How often the bus runs during peak hours B Line 2012 (85%) v. Route 230E (67%) and Route 253 (65%)
- How early the bus runs in the morning B Line 2012 (84%) v. Route 230E (70%) and Route 253 (69%)
- The bus getting me where I'm going on time B Line 2012 (83%) v. Route 230E (74%) and Route 253 (75%)
- How often the bus runs during midday hours B Line 2012 (80%) v. Route 230E (69%) and Route 253 (68%)
- How often the bus runs on weekends B Line 2012 (72%) v. Route 230E (48%) and Route 253 (44%)
- How often the bus runs in the evening/at night B Line 2012 (69%) v. Route 230E (52%) and Route 253 (50%)





Mean satisfaction ratings for frequency and reliability of RapidRide B Line this year this year are not significantly different from mean satisfaction ratings for RapidRide B Line service last year.

Mean satisfaction ratings for all aspects of RapidRide B Line remain significantly higher than mean ratings for service provided by Routes 230 East and 253 prior to B Line implementation.

- How often the bus runs during peak hours B Line 2012 (4.25) v. Route 230E (3.83) and Route 253 (3.75)
- How early the bus runs in the morning B Line 2012 (4.24) v. Route 230E (3.92) and Route 253 (3.87)
- The bus getting me where I'm going on time B Line 2012 (4.14) v. Route 230E (3.98) and Route 253 (3.99)
- How often the bus runs during midday hours B Line 2012 (4.07) v. Route 230E (3.86) and Route 253 (3.83)
- How often the bus runs on weekends B Line 2012 (3.89) v. Route 230E (3.39) and Route 253 (3.23)
- How often the bus runs in the evening/at night B Line 2012 (3.83) v. Route 230E (3.52) and Route 253 (3.36)

Table 7 Mean Satisfaction Scores: Frequency and Reliability of Buses						
	B Line 2012	B Line 2011	Route 230E	Route 253		
How often the bus runs during peak hours	4.25	4.30	<u>3.83</u>	<u>3.75</u>		
How early the bus runs in the morning	4.24	4.19	<u>3.92</u>	<u>3.87</u>		
The bus getting me where I'm going on time	4.14	4.19	<u>3.98</u>	<u>3.99</u>		
How often the bus runs during midday hours	4.07	4.14	<u>3.86</u>	<u>3.83</u>		
How often the bus runs on weekends	3.89	3.95	<u>3.39</u>	<u>3.23</u>		
How often the bus runs in the evening / at night	3.83	3.94	<u>3.52</u>	<u>3.36</u>		

Questions 6A - I: Please circle a number for each item to show how satisfied or dissatisfied you are with that item for this route you are riding. 5 = very satisfied and 1 = very dissatisfied.

Mean ratings that are shown in boldface type are significantly higher than mean ratings that are underlined.

Number of Rides, Purpose and Times of Usual Trips, Transfers and Buses Taken Prior to the Implementation of the RapidRide B Line

Transit Trips Taken

2012 RapidRide B Line riders took an average of about 35 rides during the 30 days preceding the survey, significantly more than in any of the comparison surveys.

Table 8 Rides Taken in the Pre	evious 30 Da	ys		
	B Line 2012	B Line 2011	Route 230E	Route 253
	(458)	(444)	(422)	(454)
0 to 15	<u>23%</u>	35%	48%	39%
16 to 30	27	23	28	28
31 to 50	30	29	<u>14</u>	<u>19</u>
More than 50	21	<u>14</u>	<u>10</u>	<u>14</u>
Mean	34.7	<u>29.1</u>	<u>22.4</u>	<u>26.6</u>

Question 8: How many rides have you taken on RapidRide B Line/this route in the last 30 days?

Mean ratings that are shown in boldface type are significantly higher than mean ratings that are underlined.

May not add to 100% due to rounding

Reason for Riding

There were significantly more respondents who indicated they most often ride the

RapidRide B Line to or from *work* (82%) than in any of the comparison surveys.

Table 9 Reasons for Riding				
	B Line 2012	B Line 2011	Route 230E	Route 253
	(496)	(473)	(469)	(486)
To / from work	82%	<u>69%</u>	<u>54%</u>	<u>64%</u>
Shopping / errands	<u>24</u>	24	26	32
Fun / recreation / social	<u>17</u>	16	22	24
Appointments	<u>15</u>	13	19	23
To / from school	<u>13</u>	22	28	14
Other	<u>8</u>	10	14	11

Question 8A: What is the purpose of the trip you take most often on the RapidRide B Line/this route?

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

Multiple response question; proportions may not sum to 100%.

Days and Times of Riding

In the current survey more than two-thirds of respondents (68%) indicated they ride the bus during morning peak hours (6:00 to 9:00), significantly more than indicated morning peak hours in any of the comparison surveys.

Table 10 Times of the Day and Week Using the Bus				
	B Line 2012	B Line 2011	Route 230E	Route 253
	(495)	(470)	(461)	(483)
Weekdays before 6 AM	<u>10%</u>	9%	15%	11%
Weekdays – AM peak (6-9 AM)	68	<u>46</u>	<u>43</u>	<u>50</u>
Weekdays – PM peak (3-6 PM)	49	45	54	48
Weekdays – 9 AM to 3 PM	<u>30</u>	43	40	39
Weekdays – 6 -9 PM	42	38	<u>31</u>	<u>35</u>
Weekdays – later than 9 PM	<u>14</u>	20	18	17
Weekends	<u>31</u>	26	32	38

Question 9: When do you usually ride the RapidRide B Line/this route?

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

Multiple response question; proportions may not sum to 100%.

Transfers

The percentages of RapidRide B Line riders who said they would be transferring to or from the route was not significantly different from any results obtained in the comparison surveys.

Table 11 Transfers – Percent Answering Yes				
	B Line 2012	B Line 2011	Route 230E	Route 253
Transfer to this route from another	36%	39%	35%	30%
Transfer from this route to another	33%	31%	28%	26%

Use of Free Wi-Fi

Current use of RapidRide B Line free Wi-Fi is not significantly different from use last year. Nearly one-quarter of riders (24%) use the connection every time they ride

Table 12 Use of Free Wi-Fi Service		
	B Line 2012	B Line 2011
	(476)	(436)
Every time I ride	24%	22%
About 1 to 2 times a week	17	18
About 1 to 2 times a month	12	9
Never	<u>45</u>	52
Other	3	-

Question 13: How often do you use the free Wi-Fi provided on this RapidRide bus?

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

May not add to 100% due to rounding.

Fares

The ORCA card continues to gain in popularity displacing cash as the most frequently used method for paying

fares. In the current survey 56% of respondents said they pay their fares using an ORCA card compared to 46% in the 2011 RapidRide B Line survey, and nearly 40% in both surveys of the discontinued routes. Just 13% of respondents currently pay with cash.

Table 13 Fares				
	B Line 2012	B Line 2011	Route 230E	Route 253
	(495)	(468)	(455)	(482)
ORCA (Total)	91%	73%	66%	68%
Card (Pass)	56	<u>46</u>	<u>38</u>	<u>38</u>
Unspecified ORCA	14	16	19	16
E-Purse	17	11	9	14
Pass/E-Purse comb.	4			
Cash	<u>13</u>	22	30	32
Tickets	3	7	9	5
Other	1	3	4	1

Question 14: How do you currently pay your fare?

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

May not add to 100% due to rounding.

Use of the Off-Board ORCA Card Reader

Results of the current survey found a significant increase in use of the ORCA card reader located off-board the bus (76% v. 65%).

Table 14 Use of the Off-Board ORCA Card Reader						
	B Line 2012	B Line 2011				
	(477)	(395)				
Yes	76%	<u>65%</u>				
No	24	35				

Question 15: Have you used the ORCA reader that is located off the bus at the RapidRide stations?

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

May not add to 100% due to rounding.

Proof of Payment

There was a significant increase in the percentage of respondents asked to show proof of payment (75% v. 63%).

Of those asked for proof of payment, 73% said they thought the number of inspections was *appropriate*, fewer than in the 2011 survey (77%).

Table 15 Proof of Payment		
	B Line 2012	B Line 2011
Asked to provide proof of payment:	(476)	(456)
Yes	75%	<u>63%</u>
No	23	32
Don't know	2	5
Perceptions of payment inspections:	(349)	(279)
Appropriate	73%	77%
Should be more frequent	19	15
Should be less frequent	8	8

Questions 16 and 17: On the RapidRide B Line, have you ever been requested to show your proof of payment by a Fare Enforcement Officer? (IF YES) Are the number of inspections by the officers ...?

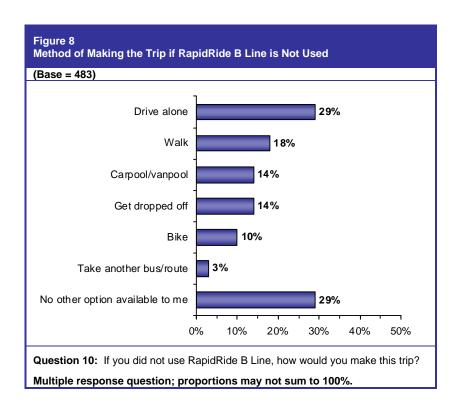
Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

May not add to 100% due to rounding.

Transportation if RapidRide B Line Is Not Used

In a new question riders were asked how they would make the trip if RapidRide B Line was not available. (Figure 8)

Although *drive alone* was selected more often than other options (29%), there were as many respondents who indicated they have *no other option available* (29%) as those who indicated *drive alone*.



Recommendations for RapidRide B Line Improvements

The final question of each survey asked respondents to give one recommendation for improving the route. Recommendations for *bus scheduling* and *frequency* again surfaced more often than other remarks, with this year's survey providing a new classification for these types of comments. As Table 16 shows, the category has been broadened to *expand bus schedule* from *increase bus frequency*.

	B Line	B Line	Route	Route
	2012	2011	230E	253
	(268)	(289)	(319)	(330)
Bus scheduling / frequency	34%	16%	47%	63%
Buses arrive / leave according to schedule	9	6	11	7
Increase bus frequency (general)	<u>8</u>	5	22	29
Expand bus schedule evenings	5	-		
Expand bus schedule weekends	5	-	-	-
Expand bus schedule mornings	4	-	-	-
Expand bus schedule general	2	-	-	-
Expand bus schedule midday	1	-	-	-
Increase bus frequency mornings	-	-	2	5
Increase bus frequency evenings	-	2	5	10
Increase bus frequency midday	-	1	1	1
Increase bus frequency weekends	=	2	6	11
Less stops / more direct routes / shorten the ride time	9	8	5	6
More information about route/schedule	9	-	6	7
Increase bus stops/ new stop locations	<u>6</u>	16	2	1
More shelters	5	5	<u>1</u>	<u>1</u>
Bus drivers: better/nicer/ safer	5	<u>1</u>	5	3
Bigger buses/more comfortable buses/improve bus quality	5	2	3	6
Easier transfers/ wait for transferring passengers	4	3	3	2
Bus stops: more seating / safer / cleaner stops	3	2	1	1
Better bus amenities	2	1	4	2
Keep the old route/don't change the route	<u>2</u>	-	14	4
More buses	2	1	2	2
Better bus maintenance/cleaner buses	1	-	2	2
Comment about security/behavior of other passengers	1	-	1	1
Foreign language	2	-	3	8
Service is fine/okay as is	21	22	<u>14</u>	16
Other	12	6	8	4

Question 21: Finally, what one thing would you recommend to improve this route?

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

Multiple response question; proportions may not sum to 100%.

Respondent Profiles

The current survey had significantly more male respondents (65%) than the baseline surveys of Route 230 East (52%) and Route 253 (54%).

Although RapidRide B Line 2012 respondent age segments differed considerably from comparison surveys, the average age this time (32.3) was not significantly different from others.

There were significantly more respondents to the current survey who indicated they were short time riders (less than 6 months -24%) than respondents to the survey of Route 230 East (18%).

Table 17 Profile of Survey Respondents				
	B Line 2012	B Line 2011	Route 230E	Route 253
Gender	(488)	(452)	(457)	(485)
Male	65%	62%	<u>52%</u>	<u>54%</u>
Female	36	38	48	46
Age	(464)	(439)	(442)	(474)
Under 18	<u>7%</u>	7%	17%	5%
18 to 24	19	24	21	16
25 to 34	42	40	<u>31</u>	44
35 to 44	19	<u>12</u>	<u>10</u>	<u>13</u>
45 to 54	<u>6</u>	8	11	9
55 to 64	7	5	5	6
65 and older	<u>1</u>	3	5	6
Mean	32.3	31.5	31.8	34.3
Length of time as a Metro rider	(484)	(453)	(459)	(481)
Less than 6 months	24%	25%	<u>18%</u>	21%
6 to 12 months	16	13	14	17
More than 1 year, less than 5 years	33	34	36	31
5 years or longer	27	29	32	31

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

May not add to 100% due to rounding.

Appendix

	B Line 2012	B Line 2011	% Point Difference
Service Item Rated			
Convenience of the stop	82%	69%	13
Overall satisfaction with Route	93	<u>86</u>	7
Being able to sit down while waiting	64	<u>57</u>	7
Behavior of other passengers on the bus	91	<u>85</u>	6
Personal safety waiting for the bus at night	77	72	5
Cleanliness of the waiting areas	82	78	4
How early the bus runs in the morning	84	81	3
Information available about connections	68	65	3
Protection from the weather while waiting	53	50	3
Wide enough doors and aisles for loading and unloading	96	94	2
Personal safety on the bus	96	94	2
Behavior of other people at the waiting area	83	81	2
Number of transfers I have to make	76	74	2
Information provided on the electronic real time sign	75	73	2
Having 3 doors for loading and unloading	96	95	1
Enough bars to hang onto while standing	95	94	1
Personal safety waiting for the bus during daytime	91	90	1
Being able to see an oncoming bus	87	86	1
Having free Wi-Fi	83	82	1
Amount of lighting in the waiting area	77	76	1
The number of stops the bus makes	75	74	1
Being able to get a seat	93	93	0
Smoothness of the ride	87	87	0
How often the bus runs on weekends	72	72	0
Cleanliness of the bus interior	94	95	-1
Having the bus free of graffiti	94	95	-1
How often the bus runs during peak hours	85	86	-1
The bus getting me where I'm going on time	82	83	-1
How often the bus runs during midday hours	80	81	-1
The way buses are scheduled to make transfer connections	71	72	-1
How long the bus trip takes	82	84	-2
TRANSFERS: How often the bus runs in the evening/night	72	74	-2
Bus coming on time when transferring	71	73	-2
FREQ: How often the bus runs in the evening/at night	69	71	-2
Transfer information at the waiting area	65	68	-3
Waiting time between transfers	65	69	-4
Helpfulness of drivers in making connections	<u>75</u>	82	-7

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

Proportions that are shown in this table were obtained directly from data summary tables. They may vary from response proportions displayed in graphs and reported in text by no more than 1 percentage point. The difference is due to rounding.

Appendix Table 2 Differences in Top 2 Box Satisfaction Ratings for RapidRide B Line 2012 and Route 230 East Route % Point **B** Line 230 East Difference Service Item Rated How often the bus runs on weekends How often the bus runs during peak hours <u>67</u> FREQ: How often the bus runs in the evening/at night TRANSFERS: How often the bus runs in the evening/night How early the bus runs in the morning Behavior of other passengers on the bus Wide enough doors and aisles for loading and unloading Enough bars to hang onto while standing How often the bus runs during midday hours Having the bus free of graffiti Smoothness of the ride Cleanliness of the bus interior Amount of lighting in the waiting area Being able to get a seat The bus getting me where I'm going on time Cleanliness of the waiting areas Waiting time between transfers Overall satisfaction with Route The way buses are scheduled to make transfer connections Behavior of other people at the waiting area How long the bus trip takes Information available about connections Personal safety waiting for the bus at night Bus coming on time when transferring Transfer information at the waiting area Personal safety on the bus

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

-2

-6

Proportions that are shown in this table were obtained directly from data summary tables. They may vary from response proportions displayed in graphs and reported in text by no more than 1 percentage point. The difference is due to rounding.

The number of stops the bus makes

Number of transfers I have to make

Being able to see an oncoming bus

Being able to sit down while waiting

Protection from the weather while waiting

Convenience of the stop

Helpfulness of drivers in making connections

Personal safety waiting for the bus during daytime

Appendix Table 3
Differences in Top 2 Box Satisfaction Ratings for RapidRide B Line 2012 and Route 253

	B Line 2012	Route 253	% Point Difference
Service Item Rated			
How often the bus runs on weekends	72	44	28
How often the bus runs during peak hours	85	<u>65</u>	20
FREQ: How often the bus runs in the evening/at night	69	50	19
How early the bus runs in the morning	84	69	15
TRANSFERS: How often the bus runs in the evening/night	72	<u>58</u>	14
Behavior of other passengers on the bus	91	79	12
How often the bus runs during midday hours	80	<u>68</u>	12
Being able to get a seat	93	82	11
Overall satisfaction with Route	93	82	11
Personal safety waiting for the bus at night	77	66	11
Smoothness of the ride	87	77	10
Having the bus free of graffiti	94	<u>85</u>	9
Amount of lighting in the waiting area	77	68	9
Bus coming on time when transferring	71	<u>62</u>	9
Wide enough doors and aisles for loading and unloading	96	88	8
The way buses are scheduled to make transfer connections	71	<u>63</u>	8
The number of stops the bus makes	75	<u>67</u>	8
Enough bars to hang onto while standing	95	88	7
The bus getting me where I'm going on time	82	<u>75</u>	7
Cleanliness of the waiting areas	82	<u>75</u>	7
Waiting time between transfers	65	58	7
Behavior of other people at the waiting area	83	<u>76</u>	7
How long the bus trip takes	82	<u>75</u>	7
Cleanliness of the bus interior	94	<u>88</u>	6
Information available about connections	68	62	6
Personal safety on the bus	96	<u>90</u>	6
Transfer information at the waiting area	65	60	5
Personal safety waiting for the bus during daytime	91	<u>87</u>	4
Being able to see an oncoming bus	87	83	4
Number of transfers I have to make	76	74	2
Helpfulness of drivers in making connections	75	74	1
Convenience of the stop	82	81	1
Protection from the weather while waiting	53	53	0
Being able to sit down while waiting	64	68	-4

Response proportions that are shown in boldface type are significantly higher than proportions that are underlined.

Proportions that are shown in this table were obtained directly from data summary tables. They may vary from response proportions displayed in graphs and reported in text by no more than 1 percentage point. The difference is due to rounding.

Appendix Table 4
Differences in Top 2 Box Satisfaction Ratings for RapidRide B Line 2012 and All Comparison Surveys

	B Line 2012	B Line 2011	B Line Pt. Gap	Route 230E	R230E Pt. Gap	Route 253	R253 Pt. Gap
Service Item Rated							
Wide enough doors and aisles for loading and							
unloading	96%	94%	2	85	11	88	8
Personal safety on the bus	96	94	2	92	4	90	6
Having 3 doors for loading and unloading	96	95	1				
Enough bars to hang onto while standing	95	94	1	84	11	88	7
Cleanliness of the bus interior	94	95	-1	85	9	88	6
Having the bus free of graffiti	94	95	-1	84	10	85	9
Overall satisfaction with Route	93	86	7	86	7	82	11
Being able to get a seat	93	93	0	85	8	82	11
Behavior of other passengers on the bus	91	85	6	79	12	79	12
Personal safety waiting for the bus during daytime	91	90	1	89	2	87	4
Room to stand if no seats are available	91						
Smoothness of the ride	87	87	0	77	10	77	10
Being able to see an oncoming bus	87	86	1	86	1	83	4
How often the bus runs during peak hours	85	86	-1	67	18	65	20
How early the bus runs in the morning	84	81	3	70	14	69	15
Behavior of other people at the waiting area	83	81	2	77	6	76	7
Having free Wi-Fi	83	82	1			,,,	•
The bus getting me where I'm going on time	82	83	-1	74	8	75	7
How long the bus trip takes	82	84	-2	76	6	75	7
Cleanliness of the waiting areas	82	78	4	74	8	75	7
Convenience of the stop	82	69	13	81	1	81	1
How often the bus runs during midday hours	80	81	-1	69	11	68	12
Being able to use the rear-facing wheelchair restraint	80	01	-1	03	11	00	12
Amount of lighting in the waiting area	77	76	1	68	9	68	9
Personal safety waiting for the bus at night	77	70	5	72	5	66	11
Number of transfers I have to make	76	74	2	73	3	74	2
The number of stops the bus makes	75	74	1	71	4	67	8
Helpfulness of drivers in making connections	75	82	-7	71	4	74	1
Information provided on the electronic real time sign	75	73	2	/1	4	74	1
How often the bus runs on weekends	72	72	0	48	24	44	28
TRANSFERS: How often the bus runs in the	12	12	U	40	24	44	20
evening/night	72	74	-2	56	16	58	14
	71	73	-2	66		62	9
Bus coming on time when transferring The way buses are scheduled to make transfer	/ 1	/3	-2	00	5	UZ	9
connections	71	72	-1	64	7	63	8
	69	72	-1 -2	52	17	50	19
FREQ: How often the bus runs in the evening/at night Information available about connections	68	65	3	62		62	6
	65		-4		6 8	58	
Waiting time between transfers		69 68		57 60			7
Transfer information at the waiting area	65 64	68	-3	60	5	60	5
Being able to sit down while waiting	64 53	57	7	66	-2	68	-4
Protection from the weather while waiting 53 50 3 59 -6 53 0							

Proportions that are shown in this table were obtained directly from data summary tables. They may vary from response proportions displayed in graphs and reported in text by no more than 1 percentage point. The difference is due to rounding.