## RAPIDRIDE

## Rider Satisfaction Study

February 2020


## Prepared for:

## ? King County METRO <br> Mobility Division

Research Conducted by:
PACIFIC MARKET RESEARCH


## Table of Contents

Page 4-5
Page 6-9
Page 10-11
Page 12-16
Page 13-14
Page 15-16
Page 17-23
Page 18
Page 19
Page 20
Page 21
Page 22
Page 23
Page 24-37
Page 25-26
Page 27-28
Page 29-30
Page 31-33
Page 34-35
Page 36-37
Page 38
Page 39-40
Page 41

Background and Objectives
Methodology
Reporting Conventions
Rider Profiles/Travel Behavior
Rider Profiles - Demographic
Rider Profiles - Travel Behavior
Comparison of Average Satisfaction
Satisfaction Overview
Overall Satisfaction
Onboard the Bus Satisfaction
Personal Safety Satisfaction
Waiting Area/ Bus Stop Satisfaction
Travel Time Satisfaction
Key Driver Analysis
Key Driver Analysis Overview
Key Driver Categories of Service
Onboard the Bus Quadrant Analysis
Personal Safety Quadrant Analysis
Waiting Area / Bus Stops Quadrant Analysis
Travel Time Quadrant Analysis
Appendix
Questionnaire
Intercept Schedule

## Background and Objectives

The goal of this survey effort is to refresh Metro's understanding of RapidRide customer satisfaction on a line-by-line and system-wide basis. This research allows for the ability to gather and analyze rider feedback on customer satisfaction elements via onboard surveys of riders on six RapidRide (RR) lines. These elements include understanding passenger satisfaction, how the passenger experience can be improved, how satisfaction has changed over time, and how new dynamics (e.g., Viaduct closure, reroutes, light rail, etc.) are affecting passenger satisfaction and use of RapidRide.

Specific areas of investigation include:

- Overall satisfaction
- Satisfaction with rider experience elements:
- Trip time
- Personal safety
- Cleanliness and condition of buses and shelters
- Experience while riding and waiting for the bus
- Likelihood to recommend
- Recommendations for improvement
- Impact of personal safety concerns on ridership
- Recommendations to improve feelings of personal safety
- How RapidRide compares to other Metro bus service
- Travel behavior elements:
- Trip purpose
- Day/time of travel
- Transfer
- Rides taken during the past 30 days
- Length of time as a rider
- Decline in line usage
- Payment of fares
- Frequency of fare enforcement
- Fare enforcement perceptions


19 King County
METRO

## Background and Objectives (cont.)

Since 2010 King County Metro Transit has provided RapidRide bus service, which in 2020 now includes six routes (lines A-F). RapidRide provides bus service that is faster and more frequent which results in faster service to each destination. RapidRide buses make extensive use of transit signal priority, and on some lines use semi-exclusive lanes to bypass traffic. A summary of the six lines is provided below:
$\left.\begin{array}{|c|c|l|l|}\hline \begin{array}{c}\text { RapidRide } \\ \text { Line }\end{array} & \begin{array}{c}\text { Line } \\ \text { Initiated }\end{array} & \begin{array}{l}\text { Service Summary } \\ \text { A Line }\end{array} & 2010 \\ \text { Offers Bus Rapid Transit (BRT) service between Tukwila International Boulevard Link Station and Federal Way } \\ \text { Transit Center on Pacific Highway South/ International Boulevard, via SeaTac and Des Moines. A Line } \\ \text { provides connections to Link light rail as well as buses that serve Burien, Tukwila, the city of SeaTac, the } \\ \text { Duwamish area, and downtown Seattle. Service is provided around the clock, every day of the week, with } \\ \text { trips operating every 10-15 minutes during most times of the day. }\end{array}\right]$

## Methodology

Data collection goals were set to complete approximately 500 questionnaires per line ( 400 weekday and 100 late-night) for a total of 3000 completed questionnaires. With the exception of the A Line, each of the lines exceeded the goal of 400 weekday/daytime completes. Regarding late-night targets, the schedule allowed for a total of four late-night trips per line in the 10:00 PM to midnight time frame, with survey completions ranging from 43 to 111 depending on the line. Final samples sizes by line, by interviewing day part, can be found in the table below.

|  | A Line | B Line | C Line | D Line | E Line | F Line | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Weekday/Daytime | 384 | 463 | 518 | 487 | 435 | 434 | 2,721 |
| Late-night | 67 | 43 | 47 | 97 | 111 | 64 | 429 |
| Total | 451 | 506 | 565 | 584 | 546 | 499 | 3151 |

All riders onboard selected RapidRide trips were invited to complete a questionnaire regarding their satisfaction with various service quality elements (the interviewing schedule for all lines is provided in the Appendix).

Interceptors approached each rider as they boarded the bus, asked them to participate in the survey, and provided a survey for completion. Riders were strongly encouraged to complete and return the surveys while on the bus. Return envelopes were provided in circumstances where the rider indicated they would not have time to complete the survey while on the bus, so the completed questionnaire could still be returned via mail to Metro.

## Methodology (cont.)



Interceptors were responsible for tallying the number of riders on each surveyed trip and the outcome of rider interaction, including the number of surveys distributed and returned. To accommodate riders who do not speak English, the survey was also offered in seven additional languages: Spanish, Vietnamese, Amharic, Russian, Chinese, Somali and Korean. Riders who did not speak English were presented with a postcard of information translated into each language that explained the research and what was requested of the rider. In total 136 surveys were collected in these languages. This includes:

- 59 in Spanish
- 28 in Korean
- 27 in Russian
- 11 in Chinese
- 9 in Amharic
- 2 in Vietnamese

The interviewing trip schedules were selected to provide a mix of peak and non-peak interviewing and took place between Monday, February $3^{\text {rd }}$ and Friday, March $6^{\text {th }}$ at varying intervals across lines. Hours of data collection ranged from weekdays 6:00 AM and 8:00 PM and 10:00 PM to midnight. The days of the week included varied by route.

## Methodology (cont.)

Metro routinely conducts on-board surveys to gauge the satisfaction of riders. As such, this effort built off past RapidRide surveys. Each line's previous wave of surveying is listed in the table below.

It should be noted that late-night interviewing was not included in previous waves and in order to keep the results comparable between waves late-night interviews are excluded from the analysis when comparing 2020 to previous data.


## Methodology

The response rate as a proportion of all questionnaires handed out in 2020, ranged from $47 \%$ to $57 \%$, with response rates highest on the F Line and lowest on the A Line.

Response rates as a proportion of all riders contacted reflect the proportion of RapidRide passengers completing surveys in 2020 ranged from $32 \%-51 \%$, with rates highest on the $F$ Line and lowest on the A Line.

To increase response on F Line, due to lower ridership levels, F Line riders were offered two free ride tickets as an incentive for completing the survey.

Response and refusal rates are summarized by RapidRide line in the table to the right.

| 2020 Results | Total | Daytime | Late-Night |
| :---: | :---: | :---: | :---: |
| RapidRide A Line |  |  |  |
| Completed Questionnaires | 451 | 384 | 67 |
| \% of Questionnaires Handed Out | 47\% | 51\% | 35\% |
| \% of All Riders on Sampled Trips* | 32\% | 32\% | 31\% |
| \% Refused | 31\% | 26\% | 54\% |
| RapidRide B Line |  |  |  |
| Completed Questionnaires | 506 | 463 | 43 |
| \% of Questionnaires Handed Out | 52\% | 51\% | 64\% |
| \% of All Riders on Sampled Trips* | 45\% | 44\% | 47\% |
| \% Refused | 35\% | 36\% | 20\% |
| RapidRide C Line |  |  |  |
| Completed Questionnaires | 565 | 518 | 47 |
| \% of Questionnaires Handed Out | 56\% | 56\% | 59\% |
| \% of All Riders on Sampled Trips* | 50\% | 50\% | 49\% |
| \% Refused | 33\% | 34\% | 24\% |
| RapidRide D Line |  |  |  |
| Completed Questionnaires | 584 | 487 | 97 |
| \% of Questionnaires Handed Out | 55\% | 54\% | 60\% |
| \% of All Riders on Sampled Trips* | 50\% | 48\% | 57\% |
| \% Refused | 35\% | 35\% | 34\% |
| RapidRide E Line |  |  |  |
| Completed Questionnaires | 546 | 435 | 111 |
| \% of Questionnaires Handed Out | 54\% | 58\% | 45\% |
| \% of All Riders on Sampled Trips* | 45\% | 47\% | 37\% |
| \% Refused | 34\% | 33\% | 38\% |
| RapidRide F Line |  |  |  |
| Completed Questionnaires | 499 | 434 | 65 |
| \% of Questionnaires Handed Out | 57\% | 58\% | 55\% |
| \% of All Riders on Sampled Trips* | 51\% | 52\% | 45\% |
| \% Refused | 34\% | 34\% | 31\% |
| *All riders on sampled trips: this inch already completed one. | lined | e a surv | or had |

King County

## Reportine conventions

Significance was tested at the 95 percent level where significance is presented unless otherwise noted. Data crosstabulations with comprehensive significance testing are available under separate cover.

Where data is compared to previous years, other RapidRide lines, or among rider segments, significant differences are noted with an arrow ( $\uparrow \downarrow$ ) and/or color differences (red or green). For readability, significant differences for proportions where both comparison groups are less than $6 \%$ are not noted.

Response proportions presented in text and displayed in graphs and in tables exclude the number of respondents who did not answer the question as well as respondents who indicated "not applicable". When comparing 2020 results with previous data, surveys collected late-night have been excluded to keep results comparable.

Rounding mechanisms inherent in the software can make response proportions shown in graphs and reported in text vary from cross tabulation results by up to one percentage point.

Mean scores for satisfaction ratings are based in a 5-point scale where ( $5=$ Very Satisfied, 4=Satisfied, 3=Neutral, 2=Dissatisfied, 1=Very Dissatisfied or 5=Very Positive, 4=Somewhat Positive, 3=Neutral, 2=Somewhat Negative, 1=Very Negative.

This report presents results comparing each of the RapidRide lines. Full detailed findings for each of the lines (A-F) are presented as separate reports with one report for each line.

In some instances, columns sum to more than 100 percent due to multiple responses given to a single question; these cases are noted.

## Reporting Conventions (cont.)

For each RapidRide Line, analysis was conducted on a variety of subgroups, listed and noted by the icons designated to the right.

The "Daytime" vs "Late-night" sub-groups reference the time of day in which the rider was on the RapidRide bus and invited to participate.

The low income qualified sub-group was calculated by combining respondent's reported household size and income level. This calculation matches Metro's low-income fare qualifications and is defined in the chart below.

Low Income Fare Qualification
Maximum Income to Qualify

| HH Size | Monthly |  |
| :---: | :---: | :---: |
| $\$ 2,023$ | $\underline{\text { Annual }}$ |  |
| 2 | $\$ 2,743$ | $\$ 24,276$ |
| 2 | $\$ 3,463$ | $\$ 32,916$ |
| 3 | $\$ 4,183$ | $\$ 41,556$ |
| 4 | $\$ 4,903$ | $\$ 50,196$ |
| 5 | $\$ 5,623$ | $\$ 58,836$ |
| 6 | $\$ 6,343$ | $\$ 67,476$ |
| 7 | $\$ 7,063$ | $\$ 76,116$ |
| 8 |  | $\$ 84,756$ |

If the respondent did not answer one of these questions their income qualification could not be determined, which is the case for $33 \%$ of respondents.

Combined RapidRide A-F Lines Total
Interviewing Daypart:
Daytime vs. Late-night
$\mathrm{n}=2,721 \quad \mathrm{n}=430$

Gender:
Male vs. Female
$\mathrm{n}=1,491 \quad \mathrm{n}=1,070$

Race/Ethnicity:
White vs. Minority
$\mathrm{n}=1,172 \quad \mathrm{n}=1,359$

Low Income Qualified:
Yes vs. No
$n=809 \quad n=1,294$


## Senior or Disabled: <br> Yes vs. Total <br> $n=490 \quad n=3,151$

Actual base size responding varies by question.

## King County <br> METRO

# Rider Profiles/ Travel Behavior 

## Rider Profiles

|  | Total | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender |  |  |  |  |  |  |  |
| Male | 58\% | 58\% | 62\% | 55\% | 57\% | 54\% | 61\% |
| Female | 41\% | 42\% | 36\% | 45\% | 42\% | 43\% | 39\% |
| Other | 1\% | 1\% | 2\% | 0\% | 1\% | 2\% | 0\% |
| Age |  |  |  |  |  |  |  |
| $<25$ | 19\% | 30\% | 23\% | 12\% | 14\% | 17\% | 25\% |
| 25-34 | 34\% | 19\% | 42\% | 37\% | 41\% | 36\% | 24\% |
| 35-44 | 18\% | 18\% | 18\% | 18\% | 17\% | 17\% | 18\% |
| 45-54 | 13\% | 17\% | 8\% | 15\% | 13\% | 11\% | 14\% |
| 55-64 | 10\% | 13\% | 6\% | 9\% | 10\% | 12\% | 12\% |
| 65+ | 6\% | 4\% | 3\% | 8\% | 7\% | 8\% | 7\% |
| Mean | 37 | 37 | 34 | 39 | 38 | 38 | 38 |
| Income |  |  |  |  |  |  |  |
| <\$24,999 | 24\% | 38\% | 15\% | 13\% | 15\% | 25\% | 46\% |
| \$25,000-\$32,999 | 11\% | 19\% | 10\% | 8\% | 7\% | 14\% | 12\% |
| \$33,000+ | 65\% | 43\% | 75\% | 79\% | 79\% | 61\% | 41\% |
| \% Low Income Qualified | 38\% | 71\% | 26\% | 21\% | 23\% | 40\% | 68\% |
| Race / Ethnicity |  |  |  |  |  |  |  |
| \% White | 57\% | 33\% | 48\% | 73\% | 75\% | 60\% | 39\% |
| \% Non-White | 47\% | 72\% | 56\% | 31\% | 28\% | 45\% | 66\% |
| \% Hispanic | 16\% | 23\% | 15\% | 12\% | 11\% | 15\% | 22\% |
| Language Spoken at Home |  |  |  |  |  |  |  |
| English | 86\% | 80\% | 71\% | 93\% | 92\% | 90\% | 86\% |
| Other | 14\% | 20\% | 29\% | 7\% | 8\% | 10\% | 14\% |

[^0]Text in red bold indicates significantly lower than total at 95\% confidence.

## Rider Profiles

|  | Total | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Disabled |  |  |  |  |  |  |  |
| Yes | 15\% | 21\% | 12\% | 9\% | 11\% | 19\% | 22\% |
| No | 85\% | 79\% | 88\% | 91\% | 89\% | 81\% | 78\% |
| Employment |  |  |  |  |  |  |  |
| Employed Full-time | 63\% | 46\% | 72\% | 72\% | 72\% | 59\% | 48\% |
| Employed Part-time | 15\% | 21\% | 11\% | 11\% | 12\% | 16\% | 19\% |
| Unemployed | 8\% | 13\% | 6\% | 5\% | 5\% | 9\% | 15\% |
| Retired | 7\% | 6\% | 2\% | 7\% | 7\% | 9\% | 8\% |
| Student | 10\% | 17\% | 10\% | 7\% | 6\% | 11\% | 14\% |
| Disabled | 1\% | 2\% | 0\% | 0\% | 1\% | 1\% | 1\% |
| Other | 2\% | 3\% | 1\% | 1\% | 1\% | 3\% | 1\% |
| Living Situation |  |  |  |  |  |  |  |
| Own | 22\% | 8\% | 16\% | 34\% | 25\% | 26\% | 15\% |
| Rent | 58\% | 57\% | 71\% | 56\% | 63\% | 55\% | 49\% |
| Staying with a friend / relative | 12\% | 22\% | 8\% | 8\% | 4\% | 12\% | 22\% |
| Living in a shelter/transitional | 3\% | 5\% | 2\% | 1\% | 4\% | 3\% | 6\% |
| Unhoused | 3\% | 4\% | 1\% | 0\% | 3\% | 4\% | 5\% |
| Other | 3\% | 6\% | 2\% | 1\% | 2\% | 2\% | 5\% |
| Number Living in Household |  |  |  |  |  |  |  |
| 1 | 28\% | 24\% | 27\% | 31\% | 31\% | 27\% | 25\% |
| 2+ | 72\% | 76\% | 73\% | 69\% | 69\% | 73\% | 75\% |
| Mean | 2.57 | 3.28 | 2.51 | 2.31 | 2.24 | 2.55 | 2.97 |

Text in dark green bold indicates significantly higher than total at 95\% confidence.
Text in red bold indicates significantly lower than total at 95\% confidence.

## Travel Behavior

|  | Total | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| To/from Work | 71\% | 62\% | 80\% | 79\% | 72\% | 69\% | 63\% |
| Shopping/Errands | 21\% | 24\% | 21\% | 16\% | 16\% | 17\% | 33\% |
| Appointments | 18\% | 25\% | 13\% | 14\% | 15\% | 22\% | 22\% |
| Fun/recreation/social outing | 18\% | 20\% | 13\% | 16\% | 17\% | 20\% | 21\% |
| To/from School/College | 12\% | 28\% | 9\% | 7\% | 8\% | 11\% | 15\% |
| Airport | 4\% | 8\% | 2\% | 2\% | 3\% | 4\% | 6\% |
| Other | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 2\% |
| Length of Metro Ridership |  |  |  |  |  |  |  |
| <6 Months | 18\% | 22\% | 22\% | 12\% | 18\% | 18\% | 19\% |
| 6-12 Months | 17\% | 15\% | 16\% | 15\% | 18\% | 17\% | 22\% |
| 1-5 Years | 40\% | 34\% | 42\% | 47\% | 42\% | 36\% | 39\% |
| More than 5 Years | 24\% | 30\% | 20\% | 26\% | 22\% | 29\% | 21\% |
| Fare Payment |  |  |  |  |  |  |  |
| ORCA Card | 78\% | 69\% | 89\% | 85\% | 82\% | 78\% | 62\% |
| Cash or paper transfer | 20\% | 35\% | 8\% | 14\% | 14\% | 16\% | 40\% |
| Human Services/ Shelter Ticket | 5\% | 6\% | 3\% | 2\% | 4\% | 5\% | 9\% |
| Mobile ticket (Transit GO App) | 4\% | 4\% | 3\% | 4\% | 4\% | 5\% | 4\% |
| Usually ride without paying a fare | 2\% | 4\% | 1\% | 2\% | 1\% | 2\% | 3\% |
| Other | 1\% | 1\% | 2\% | 1\% | 2\% | 2\% | 1\% |

[^1]
## Travel Behavior

|  | Total | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day/Time Riding: Weekday |  |  |  |  |  |  |  |
| Midnight to 6AM | 12\% | 22\% | 5\% | 10\% | 11\% | 14\% | 13\% |
| AM Peak 6-9AM | 52\% | 39\% | 57\% | 58\% | 58\% | 55\% | 40\% |
| Between 9AM-3PM | 44\% | 47\% | 46\% | 38\% | 38\% | 45\% | 50\% |
| PM Peak 3-6PM | 47\% | 36\% | 41\% | 57\% | 55\% | 47\% | 39\% |
| Between 6-9PM | 30\% | 29\% | 36\% | 30\% | 29\% | 29\% | 25\% |
| 9PM to Midnight | 19\% | 27\% | 13\% | 16\% | 19\% | 22\% | 17\% |
| Weekday only Riders | 43\% | 37\% | 52\% | 45\% | 41\% | 45\% | 36\% |
| Weekday \& Weekend Riders | 57\% | 63\% | 48\% | 55\% | 59\% | 55\% | 64\% |
| Transfer |  |  |  |  |  |  |  |
| No | 55\% | 44\% | 68\% | 61\% | 60\% | 62\% | 28\% |
| Yes | 45\% | 56\% | 32\% | 39\% | 40\% | 38\% | 72\% |
| Yes, Bus | 36\% | 42\% | 30\% | 29\% | 33\% | 31\% | 54\% |
| Yes, Link - Light Rail | 8\% | 16\% | 1\% | 6\% | 5\% | 6\% | 15\% |
| Yes, Sounder - Commuter Rail | 3\% | 4\% | 1\% | 2\% | 3\% | 2\% | 7\% |
| Yes, Uber or Lyft | 2\% | 4\% | 1\% | 1\% | 1\% | 2\% | 3\% |
| Yes, Ferry | 2\% | 2\% | 1\% | 3\% | 1\% | 1\% | 2\% |
| Yes, Streetcar | 1\% | 1\% | 0\% | 0\% | - | 1\% | 2\% |
| Yes, Other | 0\% | - | 0\% | 1\% | 0\% | - | 1\% |

Text in dark green bold indicates significantly higher than total at 95\% confidence.
Text in red bold indicates significantly lower than total at 95\% confidence.


## Comparison of Average Satisfaction

## Satisfaction - Overview

The RapidRide survey asked riders about their overall satisfaction with the RapidRide line they were on, as well as with sixteen aspects of service. These aspects can be grouped into four service categories:

| Service Category | Aspect of Service |
| :--- | :--- |
| Onboard the Bus | Cleanliness of bus interiors <br>  <br>  <br>  <br>  <br> Condition of buses <br> Experience while riding this bus |
| Personal Safety | Personal safety while waiting for the bus: during the day \& at night <br> Behavior of other people at the bus stop or station: during the day \& at night <br> Personal safety while on the bus: during the day \& at night <br> Behavior of other passengers on the bus: during the day \& at night |
| Waiting Area / Bus Stops | Cleanliness of bus stops <br> Condition of bus shelters <br> Experience while waiting for this bus |
| Travel Time | How long my bus trip takes <br> The bus getting me where I'm going in a reliable amount of time |

Satisfaction was asked using five-point scales, where five is very satisfied and one is very dissatisfied. The following section primarily compares average satisfaction scores. Each individual RapidRide Line's report has more details about the proportions of riders that are satisfied or dissatisfied with each aspect of service.

## Overall Satisfaction

Most RapidRide riders are satisfied with their RapidRide route. Significantly more B Line riders are satisfied with the overall experience on their RapidRide line than riders on all other lines. Those on A and E Lines are comparatively less enthusiastic, although approximately seven out of ten are still "satisfied" or "very satisfied".

## Riders' Overall Satisfaction with Their RapidRide Line



## Onboard the Bus - Satisfaction

$B$ Line riders are the most satisfied with all the aspects onboard the bus, while $A$ and $E$ Line riders are the least satisfied. A Line riders are notably less satisfied with the 'cleanliness of the bus interiors.'

Average Satisfaction with Aspects Onboard the Bus


## Personal Safety－Satisfaction

Riders on Lines B and C are the most satisfied with all the aspects of＇personal safety＇during the day and at night， while those on Lines A and E are the least satisfied overall，especially on the＇behavior of other people＇both on the bus and waiting at the bus stop．

Average Satisfaction with Aspects of Personal Safety

|  | A Line | B Line | C Line | D Line | E Line | F Line |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| During the Day |  |  |  |  |  |  |
| Daytime Personal Safety | $3.48 \downarrow$ | $4.25 \uparrow$ | $3.96 \uparrow$ | 3.77 | $3.52 \downarrow$ | 3.79 |
| Personal safety while waiting for the bus－ During the day | $3.63 \downarrow$ | 4.31 个 | $4.09 \uparrow$ | 3.92 | $3.74 \downarrow$ | 3.97 |
| Behavior of other people at the bus stop or station－During the day | $3.32 \downarrow$ | 4.14 个 | $3.75 \uparrow$ | 3.59 | $3.33 \downarrow$ | 3.56 |
| Personal safety while on the bus－During the day | $3.61 \downarrow$ | $4.38 \uparrow$ | $4.11 \uparrow$ | 3.92 | $3.68 \downarrow$ | 3.95 |
| Behavior of other passengers on the bus－ During the day | $3.35 \downarrow$ | 4.17 个 | 3.87 个 | 3.65 | $3.35 \downarrow$ | 3.67 |
| At Night |  |  |  |  |  |  |
| Night－time Personal Safety | $3.08 \downarrow$ | $3.91 \uparrow$ | $3.40 \uparrow$ | $3.20 \downarrow$ | $2.95 \downarrow$ | $3.48 \uparrow$ |
| Personal safety while waiting for the bus－ At night | $3.18 \downarrow$ | $3.94 \uparrow$ | $3.38 \uparrow$ | $3.23 \downarrow$ | $3.03 \downarrow$ | 3.54 个 |
| Behavior of other people at the bus stop or station－At night | $2.92 \downarrow$ | $3.76 \uparrow$ | $3.17 \uparrow$ | $2.99 \downarrow$ | $2.79 \downarrow$ | $3.34 \uparrow$ |
| Personal safety while on the bus－At night | $3.28 \downarrow$ | $4.08 \uparrow$ | $3.65 \uparrow$ | $3.41 \downarrow$ | $3.14 \downarrow$ | $3.65 \uparrow$ |
| Behavior of other passengers on the bus－ At night | $2.95 \downarrow$ | $3.87 \uparrow$ | $3.42 \uparrow$ | $3.17 \downarrow$ | $2.84 \downarrow$ | 3.41 个 |

181 King County
METRO
Q2．Personal Safety on RapidRide；Base varies by line \＆question：A Line $\mathrm{n}=375-444$ ；B Line $\mathrm{n}=\mathbf{4 2 8 - 5 0 2 ; ~ C ~ L i n e ~} \mathrm{n}=492-561$ ； D Line $\mathrm{n}=522-580$ ； E Line $n=479-536 ;$ F Line $n=417-489 . \uparrow \downarrow$ Sig．higher or lower than three or more lines at the 95 percent level．

## Waiting Area / Bus Stops - Satisfaction

Riders on Lines $B$ and $C$ are the most satisfied with all the aspects 'about the waiting area/ bus stops', while those on Lines A and E have the lowest levels of satisfaction. Most Lines have higher satisfaction for the overall experience of waiting for the bus, but have less satisfaction for the cleanliness of the bus stops - specifically for those on Lines $A$ and $E$.

Average Satisfaction with Aspects of Waiting Area \& Bus Stops


## Travel Time - Satisfaction

When it comes to satisfaction with the reliability and length of the trip, $B$ and $D$ Line riders are the most satisfied and riders of $A$ and $C$ Lines are the least satisfied.


# Key Driver Analysis 

## Key Driver Analysis - Overview

The RapidRide survey asked riders about their satisfaction with sixteen aspects of service grouped into four service categories (Travel Time, Personal Safety, Waiting Area/ Bus Stop, and Onboard the Bus).

Key Driver Analysis was used to derive the importance of the individual aspects of service by looking at the relationship between the individual aspect and overall satisfaction. Individual aspects that are highly correlated with overall satisfaction have more influence than aspects of service that are not as highly correlated. This "derived importance" can help provide further understanding of the underlying factors driving overall customer satisfaction that a respondent may not explicitly state.

This analysis can be used to identify priorities for improvements and services to maintain. The model produces an impact effect coefficient for each aspect of service. For the tables throughout this section the impact effect coefficients have been standardized to sum to $100 \%$ to aid in their display and have been labeled as coefficient.

Additionally, the individual service aspects' impact effect coefficients have been combined with others from the same service category to show each category's total impact on overall satisfaction.

## Key Driver Analysis - Quadrant Overview

Using the impact effect coefficient and riders' average satisfaction with each aspect of service, quadrant maps were created to display how each aspect performs and, where possible, display priorities for resources to build on strengths and address the most significant concerns.

Below is an example and description of these quadrants:

| Opportunities: <br> Above Average Impact Effect <br> to Overall Satisfaction <br> AND Below Average <br> Satisfaction of the Individual <br> Aspect/Category |
| :--- | :--- | :--- | :--- | :--- |

## Key Drivers: Categories of Service

There are four service categories: About the Bus, Personal Safety, Waiting Areas / Bus Stops, and Travel Time. Within each category the impact effect coefficients of its individual aspects have been combined to show each service category's total impact on overall satisfaction.

Personal Safety is a driver of satisfaction for all, particularly riders of the A and F Line. Experience Onboard the Bus is twice as important as the Waiting Area / Bus Stops. Though Travel Time is the least important area overall, it is much more important to $B, C$, and $D$ Line riders and less important to $A$ Line riders.

## Influence of Service Categories on Satisfaction with Line

$\square$ Onboard the Bus ■ Personal Safety ■ Waiting Area / Bus Stops ■ Travel Time

| Line A | $40 \%$ | $37 \%$ | $18 \%$ | $6 \%$ |
| :---: | :---: | :---: | :---: | :---: |
| Line B | $34 \%$ | $24 \%$ | $20 \%$ |  |
| Line C | $43 \%$ | $24 \%$ | $15 \%$ | $18 \%$ |
| Line D | $39 \%$ | $29 \%$ | $15 \%$ | $17 \%$ |
| Line E | $34 \%$ | $28 \%$ | $22 \%$ | $15 \%$ |
| Line F | $35 \%$ | $34 \%$ | $20 \%$ | $11 \%$ |

## Categories of Service - Importance/ Satisfaction Comparison

Examination of the quadrants indicates there are opportunities for improvement onboard the bus and with personal safety targeted to A Line, whereas attention to the waiting area and bus stop should be focused on E and $F$ Line. Travel time is a pain point for $C$, and to a lesser extent, E Line riders.

Onboard the Bus


Waiting Area / Bus Stop


Personal Safety


Travel Time


## Onboard the Bus - Key Drivers of Satisfaction

Cleanliness and the condition of the bus are much less important to overall satisfaction than other aspects of riding the bus; however, this is not to say that these aspects of service should be ignored. Instead, results should be interpreted as assurance that minimum standards of cleanliness and condition are being met on all RapidRide Lines.

## Onboard the Bus - Individual Aspects Influence on Overall Satisfaction

■ Experience while riding this bus
■ Cleanliness: Things that can be wiped/washed away - Of bus interiors

- Condition: Things that must be repaired, replaced, repainted) - Of the buses

*Total impact effect is the sum of the individual service aspects coefficients and describes the extent to which these service aspects drive overall satisfaction. The possible range is $0 \%$ to $100 \%$.


## Onboard the Bus - Importance/Satisfaction Comparison

Improvements to the experience of riding the bus should be targeted to A Line first, though improvements to cleanliness onboard Line E and condition onboard Line F may also be opportunities. The onboard experience of riders on $C$ and $D$ Line is a strength.

Experience While Riding This Bus


Cleanliness of Bus Interior


Condition of the Buses


## Personal Safety - Key Drivers of Satisfaction

'Personal safety' is more of a factor in overall satisfaction for riders of $A$ and $F$ Lines. Both day and nighttime safety is important, though nighttime safety is somewhat less important to riders of $B$ and $C$ Lines. Safety and behavior of other riders on the bus is slightly more important than safety and behavior concerns while waiting for the bus.

Personal Safety - Individual Aspects' Influence on Overall Route Satisfaction


## Daytime Personal Safety - Importance/ Satisfaction Comparison

RapidRide A Line offers the most opportunity for targeted improvements to safety - both on and off the bus. Addressing unsafe behavior of passengers during the day onboard Line $D$ and $E$ is also indicated.



Behavior of Other People at Bus Stop During the Day


Safety on Bus
During the Day


Behavior of Other People on the Bus During the Day


## Nighttime Personal Safety - Importance/ Satisfaction Comparison

Nighttime safety improvements should be focused on RapidRide A, E, and D Lines. Behavior of other people (both at the bus stop and on the bus) at night is a notable issue for the E Line.



Behavior of Other People at Bus Stop


Safety while on the Bus


Behavior of Other People on the Bus
At Night


## Waiting Area / Bus Stops - Key Drivers of Satisfaction

Cleanliness and condition of the bus stops is less important than other aspects of the waiting experience. This does not mean these service aspects are not important; however, and results should be interpreted as RapidRide currently meets minimum standards expected when it comes to cleanliness and condition. This is especially true for $C$ and $D$ Lines and may be more variable on the $E, F$, and to some extent, $B$ Line.

```
Waiting Area / Bus Stops - Individual Aspects' Influence on Overall Route Satisfaction
■ Experience while waiting for this bus
■ Cleanliness: Things that can be wiped/washed away - Of bus stops
- Condition: Things that must be repaired, replaced, repainted) - Of bus shelters
```

| Total Impact <br> Effect |
| :---: |
| $18 \%$ |
| $20 \%$ |
| $15 \%$ |
| $15 \%$ |
| $22 \%$ |
| $20 \%$ |

## Waiting Area / Bus Stops - Importance/Satisfaction Comparison

Opportunities to improve the waiting areas and bus shelters are the most prevalent for RapidRide E and F Line. Targeted efforts towards improving the cleanliness of E and F Line bus stops and addressing the condition of F Line bus shelters is prescribed.

Experience while Waiting for Bus

Condition of Bus Shelters


Cleanliness of Bus Stops


## Travel Time - Key Drivers of Satisfaction

Travel time and reliability are much more important drivers of overall route satisfaction to $B, C$, and $D$ Line riders than to A Line riders.

## Travel Time - Individual Aspects' Influence on Overall Route Satisfaction

■ The bus getting me where I'm going in a reliable amount of time
■ How long my bus trip takes


## Travel Time - Importance/ Satisfaction Comparison

Improving reliability in terms of the total amount of trip time is an opportunity for both C and E Lines. The length of the bus trip is less of an issue, though some opportunities exist here as well for C Line.

The Bus Getting Me Where I'm Going in a Reliable Amount of Time


How Long my Bus Trip Takes



## Appendix

## 2020 QUESTIONNAIRE

time:-
AM / PM

## RapidRide A Line

\author{

1. Ming County $^{2}$ <br> METRO
}

We'll Get You There

## Rider Report Card

Please complete the questionnaire to let King County Metro Transit know how they are doing and how they can improve service on this route.

Return your completed questionnaire to the survey worker. Or if you are unable to complete the questionnaire while riding, return directly to Metro using the postage paid return envelope provided by the survey worker

IF YOU HAVE ALREADY COMPLETED THE QUESTIONNAIRE, PLEASE RETURN THIS TO THE SURVEY WORKER.
Thank you very much for your help.

## Instructions

Please check the box to show how satisfied or dissatisfied you are with each item for this route you are riding Check "Not Applicable" if the item does not apply to you.
Remember to rate RapidRide A Line, not other routes or Metro Transit in general. THANK YOU!

| 1. Travel on RapidRide A Line | $\begin{gathered} \text { Very } \\ \text { Dissatisfied } \end{gathered}$ | Dissatisfied | Neutral | Satisfied | $\begin{aligned} & \text { Very } \\ & \text { Satisfied } \end{aligned}$ | $\begin{gathered} \text { Not } \\ \text { Applicable } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V How long my bus trip takes | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| The bus getting me where I'm going in a reliable amount of time | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 2. Personal Safety on RapidRide A Line | $\begin{gathered} \text { Very } \\ \text { Dissatisfied } \end{gathered}$ | Dissatisfied | Neutral | Satisfied | $\begin{aligned} & \text { Very } \\ & \text { Satisfied } \end{aligned}$ | $\begin{gathered} \text { Not } \\ \text { Applicable } \end{gathered}$ |
| Personal safety while waiting for the bus: <br> - During the day |  | $\square$ | $\square$ | $\square$ |  | $\square$ |
| - At night | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| Behavior of other people at the bus stop or station: <br> - During the day | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| - At night | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| Personal safety while on the bus: <br> - During the day | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| - At night | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| Behavior of other passengers on the bus: <br> - During the day | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| - At night | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |


| 3. Cleanliness and Condition of RapidRide A Line |  | Dissatisfied | Neutral | Satisfied | $\begin{aligned} & \text { Very } \\ & \text { Satisfied } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cleanliness: things that can be wiped/washed away - Of bus stops |  |  |  |  |  |  |
| - Of bus interiors | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| Condition: Things that must be repaired, replaced, repainted - Of bus shelters | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| - Of the buses | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 4. Overall Satisfaction with RapidRide A Line | $\begin{gathered} \text { Very } \\ \text { Dissatisfied } \end{gathered}$ | Dissatisfied | Neutral | Satisfied | $\begin{gathered} \text { Very } \\ \text { Satisfied } \end{gathered}$ | Not Applicable |
| V Experience while riding this bus | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| V Experience while waiting for this bus | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| V Overall how satisfied are you with RapidRide A Line | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |

5. Would you recommend RapidRide A Line to a friend, coworker, or family member? $\quad$ Yes $\quad$ No
6. What ONE THING would you recommend to improve RapidRide A Line? $\qquad$

| 7. How do you feel RapidRide A Line compares to other Metro bus service for the following items? |  |  |  |
| :---: | :---: | :---: | :---: |
|  | This Rapidaide is Retter | There is No Difference | Service is Better |
| V The quality of the overall transit experience | $\square$ | $\square$ | $\square$ |
| V Your personal safety | $\square$ | $\square$ | $\square$ |
| V The shelters and features at the bus stop | $\square$ | $\square$ | $\square$ |
| V The bus and features on the bus | $\square$ | $\square$ | $\square$ |
| V How often the bus comes to your stop | $\square$ | $\square$ | $\square$ |
| - The speed of service | $\square$ | $\square$ | $\square$ |
| V Reliability of service | $\square$ | $\square$ | $\square$ |
| V Not having to rely on a predetermined schedule when going to the bus stop | $\square$ | $\square$ | $\square$ |
| V The hours during the day that the bus operates | $\square$ | $\square$ | $\square$ |
| V Ensuring riders pay their fare | $\square$ | $\square$ | $\square$ |

8. How often do you avoid riding RapidRide $A$ Line due to concerns about your personal safety?

- Never
$\square$ Rarely
- Sometimes
- Frequently

9. What change(s) would improve your feeling of personal safety while waiting for or riding RapidRide A Line?

## 2020 QUESTIONNAIRE

## Your Travel Patterns

10. What is the purpose of the trip you take most often on RapidRide A Line? (Please check only one.) - To/from Work

- Fun/recreation/social outing
- To/from School/College (As a student)
$\square$ Appointments (business, medical, etc)
Shopping/errands
- Other (please specify):

ㅁ Airport

| When do you usually ride RapidRide A Line? (Please check all that apply.) | Midnight to 6 AM | $\begin{aligned} & \text { AM Peak } \\ & \text { 6-9 AM } \end{aligned}$ | $\begin{aligned} & \text { Between } \\ & 9 \text { AM to } 3 \\ & \text { PM } \end{aligned}$ | $\begin{gathered} \text { PM Peak } \\ \text { 3-6 PM } \end{gathered}$ | Between 6-9 PM | 9 PM to Midnight | $\begin{gathered} \text { Not } \\ \text { Applicable } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V Weekday | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| V Weekend |  | $\square$ |  | $\square$ |  |  |  |

12. On this trip today did you or will you transfer TO/FROM RapidRide A Line? (Please check all that apply.)

- No transfer
Yes, bus - Which bus route?


## ?

- Yes, Uber or Ly
Yes, Link - Light Rail
ㅁ Yes, Ferry
- Yes, Sounder - Commuter Rail
ㅁ. Yes, Streetcar
ㅁ Yes other, (please specify):
$\qquad$

13. How many rides have you taken on RapidRide A Line in the last $\mathbf{3 0}$ days? (Count a roundtrip as 2 rides.) $\qquad$
14. How long have you been using RapidRide A Line? (Please check only one.)
Less than 6 months
More than a year but less than 5 years
ㅁ 6-12 months
More than 5 years
15. Has your use of RapidRide $A$ Line declined over the last few years? ㅁ No $\quad$ ㄱes $\boldsymbol{V}$ Please answer Q15a 15a. If YES, Why has your use of RapidRide A Line declined? $\qquad$
16. How do you usually pay your fare? (Check one.) - ORCA Card

Human Services / Shelter Ticket
ㅁ Cash or paper transfer

- Mobile ticket (Transit
$\begin{array}{ll}\square & \text { Usually ride without paying a fare } \\ \text { ㅁ Other (please specify): }\end{array}$

17. On RapidRide A Line, have you ever been asked to show your proof of payment by a fare enforcement officer? ㅁ No $\square$ Yes $\boldsymbol{\nabla}$ Please answer Q17a
17a. If YES, about how many times have you been asked to show proof of payment in the last 30 days? $\qquad$

| 18. Please rate your experiences with or perceptions of the Fare Enforcement services on RapidRide A Line | $\begin{aligned} & \text { Very } \\ & \text { Negative } \end{aligned}$ | Somewhat Negative | Neutral | Somewhat Positive | $\begin{aligned} & \text { Very } \\ & \text { Positive } \end{aligned}$ | $\begin{aligned} & \text { Don't } \\ & \text { Know } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Customer Service (e.g., providing way-finding directions, assisting with ORCA or fare payment systems, etc.). | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| V Inspecting proof of fare payment | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| V Passengers' Safety | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| - Compassion or care for riders | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| V Professionalism | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |

Tell us a little about yourself (this information will be used for analytical purposes only)
19. What is your gender identity? (Check one.) $\square$ Male $\square$ Female $\square$ Other (please specify)
20. What is your age? $\qquad$ Years
21. Are you ...? (Check all that apply.)
ㅁ Employed Full-time

- Employed Part-time
- Unemployed

ㅁ Retired
$\begin{array}{ll}\text { 마 } & \text { Retired } \\ \text { ㅇ } & \text { Student } \quad \text { Full-time } \quad \text { ㅁ Part-time } \\ \text { ㅁ } & \text { Other: }\end{array}$
$\qquad$
22. Including yourself, how many persons live in your household? $\qquad$

| 23. What is your total annual household income before taxes? | (Check one.) |
| :--- | :--- | :--- |
| ㅁ Less than $\$ 24,999$ ㅁ $\$ 42,000-\$ 49,999$ ㅁ $\$ 67,000-\$ 75,999$ <br> ㅁ $\$ 25,000-\$ 32,999$ ․ $\$ 50,000-\$ 58,999$ 모 $\$ 76,000-\$ 84,999$ <br> ㅁ $\$ 33,000-\$ 41,999$ ㅁ $\$ 59,000-\$ 66,999$ ㅁ $\$ 85,000$ or more |  |

- \$25,000-\$32,999
\$50,000-\$58,999 - $\$ 59,000-\$ 66,999$
(\$76,000-\$84,999

Do you identify yourself as Hispanic or Latinx? ㅁ Yes ㅁ No
25. Do you identify yourself as . . ? (Check all that apply.)
American Indian/Alaskan Native
Native Hawaiian or Pacific Islander

- Asian
White/Caucasian
- Black/African American
- Other (please specify):
$\qquad$

26. What is the primary language spoken at home?

ㅁ English $\square$ Other (please specify the language): $\qquad$
27. Do you consider yourself to have a disability?

- Yes
- No

28. Which of the following best describes your living situation? (Check one.)
ㅁ Own my own home
ㅁ Rent my own apartment/ home

- Staying with a friend or relative
Living in a shelter or transitional housing
Unhoused/ Unsheltered
- Other, not listed:

29. What is your home zip code? $\qquad$ - Currently unsheltered/no home Zip code

Optional: King County Metro Transit may be conducting other research studies in the future. These could be surveys or focus groups. Would you be willing to be contacted if we do further research? If so, please provide your contact information below

Please note:

- Your responses will be anonymous, and all survey responses will be reported in the aggregate
- The information you provide will only be used by King County Metro Transit to recruit for transit related surveys or focus groups.

First name:
Telephone number to reach you at for future studies: $\qquad$
Email address to reach you at for future studies: $\qquad$

## Intercept Schedule

## Times and Routes

Intercept interviewing took place between February $3^{\text {rd }}$ and March $6^{\text {th }}$, 2020. Trips to be surveyed were selected to provide a variety of routes as well as both peak and non-peak riders. Data was collected on weekdays and late-nights.

| A Line | Federal Way Transit Center to Tukwila International Blvd Station |
| :---: | :---: |
| 2 shifts Mon., Feb. $3^{\text {rd }}$ | 3:30 to 8 PM |
| 2 shifts Tue., Feb. $4^{\text {th }}$ | 6 AM to 2:30 PM |
| 1 shift Fri., Mar. $6^{\text {th }}$ | 11:30 to 8 PM |
| 1 shift Tue., Feb.4 ${ }^{\text {th }}$ | 10 PM to Midnight |
| 2 shifts Wed., Feb. $5^{\text {th }}$ | 10 PM to Midnight |
| 1 shift Thu., Feb. 6 ${ }^{\text {th }}$ | 10 PM to Midnight |
| B Line | Redmond Transit Center to Bellevue Transit Center |
| 2 shifts Fri., Feb. $7^{\text {th }}$ | 11:30 to 8 PM |
| 2 shifts Wed., Feb. $12^{\text {th }}$ | 6 AM to 2:30 PM |
| 1 shift Mon., Feb. $10^{\text {th }}$ | 10 PM to Midnight |
| 2 shifts Tue., Feb. $11^{\text {th }}$ | 10 PM to Midnight |
| 1 shift Mon., Feb. 20 ${ }^{\text {th }}$ | 10 PM to Midnight |
| C Line | South Lake Union to Westwood Village |
| 2 shifts Thu., Feb 13 ${ }^{\text {th }}$ | 11:30 to 8 PM |
| 2 shifts Fri., Feb 14 ${ }^{\text {th }}$ | 6 AM to 2:30 PM |
| 2 shifts Tues., Feb 18 ${ }^{\text {th }}$ | 10 PM to Midnight |
| 2 shifts Wed., Feb. 19 ${ }^{\text {th }}$ | 10 PM to Midnight |


| D Line | Prefontaine PL S \& Yesler Way to <br> NW 100 |
| :--- | :--- |
| 2 shifts Pl \& $7^{\text {th }}$ Ave NW |  |


[^0]:    Text in dark green bold indicates significantly higher than total at 95\% confidence.

[^1]:    Text in dark green bold indicates significantly higher than total at 95\% confidence
    Text in red bold indicates significantly lower than total at 95\% confidence.

