BBC & RESEARCH CONSULTING

2019 Customer Satisfaction Survey

Regional Transportation District

FINAL REPORT

2019 Customer Satisfaction Survey

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SECTION I.
Introduction

The Regional Transportation District (RTD) is the regional public transit authority in the Denver and Boulder Metropolitan area and operates public transit services across eight counties, including approximately 120 bus routes, 11 rail lines, and various specialty services, such as Access-a-Ride, FlexRide, and numerous area shuttles.[1] RTD's mission is to provide safe, clean, reliable, courteous, accessible, and cost-effective service across all of those trips.

To assess the degree to which it is meeting its customers' needs, RTD regularly conducts a large-scale survey to assess satisfaction across various aspects of the services and amenities it provides. RTD last conducted a satisfaction survey in 2017, but since that time, the organization has gone through several changes, including new service lines, a new fare structure, and a new mobile ticketing application. In light of those changes, RTD commissioned BBC Research & Consulting (BBC) to conduct the 2019 Customer Satisfaction Survey across all revenue-generating services—including bus, SkyRide, light rail, commuter rail, and FlexRide services—to assess how those changes may have affected customer satisfaction since 2017.

In conducting the 2019 survey, BBC built on its experience conducting customer satisfaction surveys for RTD in 2011, 2014, and 2017. The questions that BBC and RTD included in the 2019 survey were very similar to questions that were included as part of those previous surveys, but the survey also included some new questions to address particular areas of interest, including the degree to which RTD is attracting new customers and customers' use of RTD's mobile ticketing application. BBC analyzed responses to all questions in the 2019 survey, and where possible, compared responses from the 2019 survey to responses from the 2017 survey to assess any substantial changes across time.

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[1] RTD's service area includes parts or all of Adams County, Arapahoe County, Boulder County, Broomfield County, Denver County, Douglas County, Jefferson County, and Weld County.

SECTION II.
Methodology

RTD commissioned BBC to conduct the 2019 RTD Customer Satisfaction Survey in the Spring of 2019 to collect information from passengers about various topics related to the services and amenities it provides.

Survey Instrument

BBC worked closely with RTD to develop the survey instrument for the study, based primarily on instruments RTD used for past satisfaction surveys and refinements related to the district's current needs. The survey instrument included questions related to:

- **Trip characteristics,** including trip purpose; time of trip; and information about transfers;

- **Fare characteristics,** including method of payment, fare level, the use of special fare discounts, and the use of RTD's mobile ticketing application;

- **RTD use,** including RTD services used, number of RTD trips, frequency of RTD use, and changes in RTD use;

- **Satisfaction with RTD**, including satisfaction with RTD performance, reliability, comfort, value, customer care, and overall satisfaction; and

- **Demographic characteristics**, including occupation, level of education, household income, marital status, race/ethnicity, age, and gender.

The full survey instrument BBC used for the study is presented in Appendix A.

Survey Administration

BBC constructed survey packets to distribute to bus, light rail, commuter rail, FlexRide (formerly Call-n-Ride), and SkyRide customers. Each survey packet comprised the following materials:

- RTD-branded outer envelope that contained all other survey packet materials;

- Hardcopy survey instrument;

- Return envelope with pre-paid postage;

- Golf pencil; and

- Two RTD one-way Free Ride coupons.

The hardcopy survey instrument included instructions for completing the survey as well as a survey due date and how to return completed surveys to RTD. The instructions also included a link to an online version for participants who preferred to complete the survey in that manner. The survey was offered in English and Spanish. Approximately 94 percent of participants completed the survey in hardcopy format.

BBC worked closely with RTD to distribute survey packets to customers throughout March 2019. RTD bus, SkyRide, and FlexRide operators were responsible for distributing survey packets

during their regular shifts according to sampling plans that RTD's Market Research team developed based on ridership volume. BBC was responsible for distributing survey packets to light rail and commuter rail customers waiting at train and transit stations according to a similar sampling plan that RTD's Market Research team developed. Figure 1 presents a breakdown of survey distribution, completes and response rate by RTD service. As shown in Figure 1, a total of 12,539 surveys were distributed with an overall response rate of 30 percent:

- 7,864 distributed to bus/SkyRide passengers with a 33 percent response rate;

- 4,000 distributed to light/commuter rail passengers with a 25 percent response rate; and

- 675 were distributed to FlexRide passengers with a 34 percent response rate.

Figure 1.
Survey distribution and response rates by RTD service

Note:
Percentages may not sum 100% due to rounding.

Source:
2019 RTD Customer Satisfaction Survey.
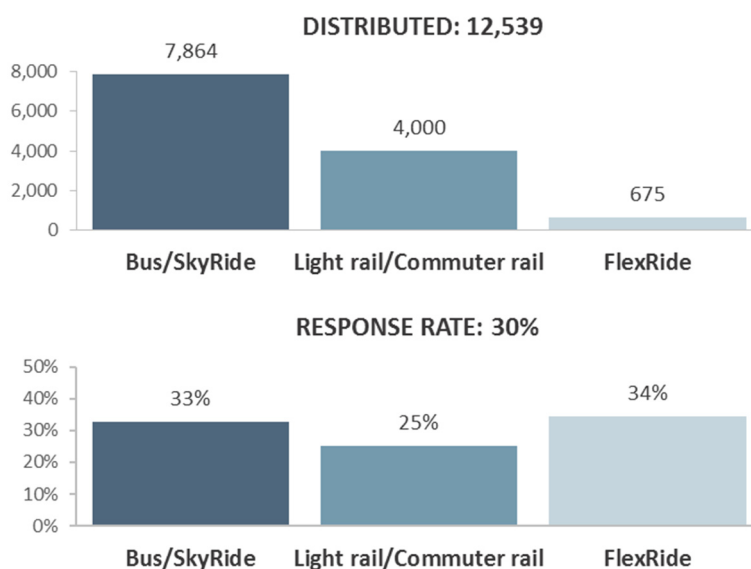
SECTION III.
Results

BBC conducted all analyses using R statistical software. As appropriate, the study team made determinations of statistical significance at the α = .05 level using two-tailed tests. BBC weighted the survey data so that participants' responses were representative of the population of people who rode different RTD services in 2018, the last complete calendar year preceding BBC's execution of the survey. RTD provided BBC with ridership data by line and service, and we used that information to develop appropriate population weights and apply them to the survey data prior to analysis. Where possible, we compared results of participants who only used train services (*train-only* participants) and participants who used both bus and train services (*bus and train* participants) to participants who only used bus services (*bus-only* participants). In addition, where possible, we compared results from the 2019 survey to the 2017 survey.

Demographic Characteristics

The survey included various questions about participant characteristics, including level of education, household income, race/ethnicity, age, and gender. As shown in Figure 2:

- Approximately 50 percent of participants were men;

- More than 60 percent of participants were non-Hispanic whites (62%);

- More than one-half of participants were 45 years old or older (53%);

- More than one-third of participants reported residing in Denver county (37%);

- Approximately 30 percent of participants were low income individuals;[2]

- More than one-half of participants reported having a college degree (54%); and

- Nearly one-third of passengers reported not having a car available to them (30%).

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[2] BBC classified participants as low income if they indicated that their total household incomes were 185 percent or less of the national poverty threshold for their household size.

Figure 2.
Demographic characteristics of passengers

Gender (n=3,720)		Household Income (n=3,354)	
Male	50%	Low Income	30%
Female	49%	Other Income	70%
Other	1%	**Occupation (n=3,671)**	
Race (n=3,649)		Professional/Managerial	47%
Caucasian/White	62%	Sales/Clerical/Service	17%
Hispanic/Latino	15%	Laborer/Craftsman/Foreman	10%
African American/Black	14%	Retired	6%
Asian/Pacific Islander	4%	Student (employed)	6%
Native American/Indian	2%	Student (only)	4%
Other	4%	Homemaker	1%
Age (n=3,728)		Disabled (unable to work)	4%
Under 18	1%	Unemployed (looking for work)	3%
18-24	8%	Other	2%
25-34	19%	**Household Size (n=3,560)**	
35-44	18%	One person	25%
45-54	19%	Two people	37%
55-64	24%	Three people	16%
65 or older	10%	Four people	13%
County of Residence (n=3,711)		Five people	6%
Denver	37%	Six people	2%
Arapahoe	18%	More than six people	2%
Jefferson	13%	**Number of Cars Available by Household (n=3,673)**	
Boulder	12%	No car	30%
Adams	9%	One car	28%
Douglas	5%	Two cars	27%
Broomfield	2%	Three cars	11%
Weld	1%	Four or more	5%
Other	3%	**Average Number of Cars Available by Household**	1 car
Education (n=3,692)			
Less than 12 years	5%		
High school graduate	16%	**Valid Driver's License (n=3,718)**	
Some college	25%	Yes	74%
College graduate	34%	**Disability or Medical Condition that Prevents Driving (n=3,731)**	
Post graduate degree	20%		
Less than 12 years	5%	Yes	8%

Note: Percentages may not sum 100% due to rounding.

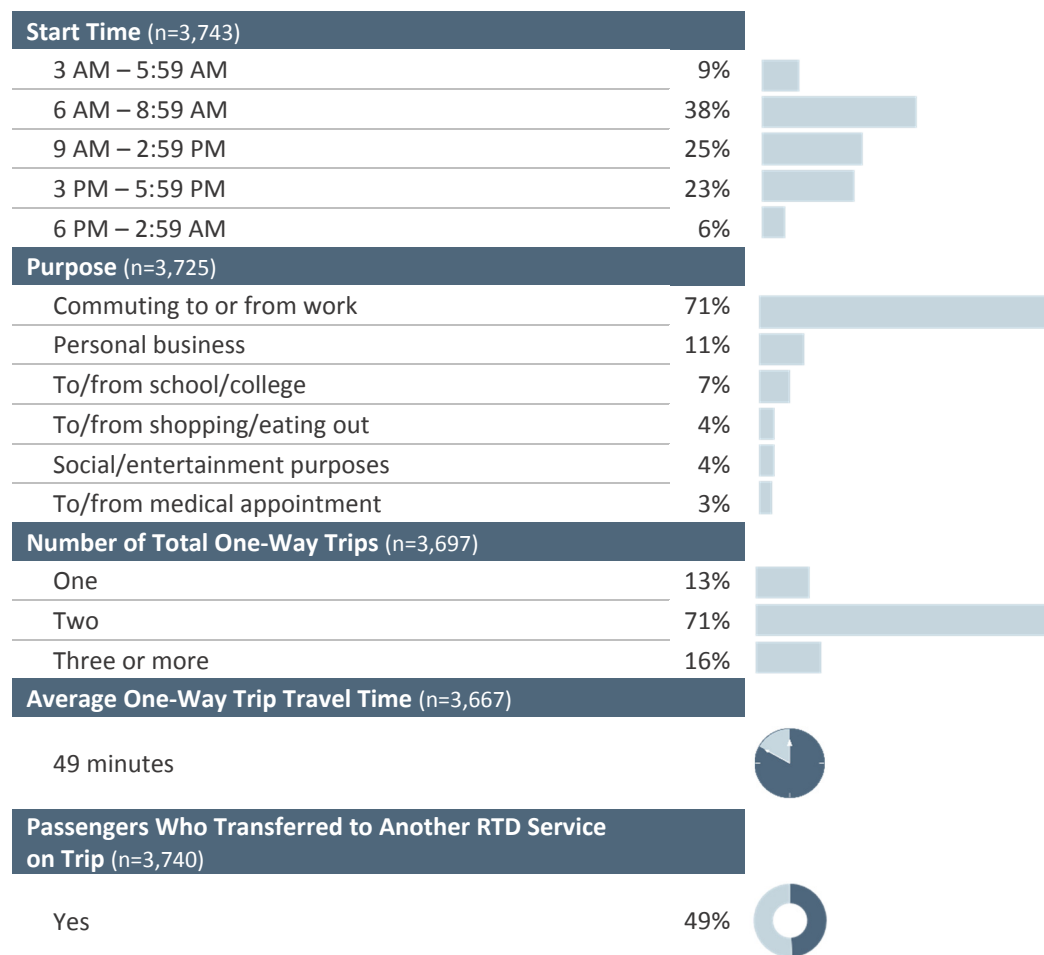Source: 2019 RTD Customer Satisfaction Survey.

Trip Characteristics

The survey also included questions about characteristics of participants' RTD trips, including trip purpose; time of day; and mode of travel to and from RTD stops. Figure 3 presents basic characteristics of the trips on which participants received the survey. As shown in Figure 3:

- More than one-third of participants began their trip between 6 AM and 9 AM (38%);

- Nearly three-fourths of participants indicated that the primary purpose of their trip was to commute to or from work (71%);

- Nearly three-fourths of participants took two one-way trips (71%); and

- Participants reported an average one-way trip time of approximately 49 minutes.

Figure 3.
Trip characteristics

Start Time (n=3,743)	
3 AM – 5:59 AM	9%
6 AM – 8:59 AM	38%
9 AM – 2:59 PM	25%
3 PM – 5:59 PM	23%
6 PM – 2:59 AM	6%
Purpose (n=3,725)	
Commuting to or from work	71%
Personal business	11%
To/from school/college	7%
To/from shopping/eating out	4%
Social/entertainment purposes	4%
To/from medical appointment	3%
Number of Total One-Way Trips (n=3,697)	
One	13%
Two	71%
Three or more	16%
Average One-Way Trip Travel Time (n=3,667)	
49 minutes	
Passengers Who Transferred to Another RTD Service on Trip (n=3,740)	
Yes	49%

Note: Percentages may not sum 100% due to rounding.

Source: 2019 RTD Customer Satisfaction Survey.
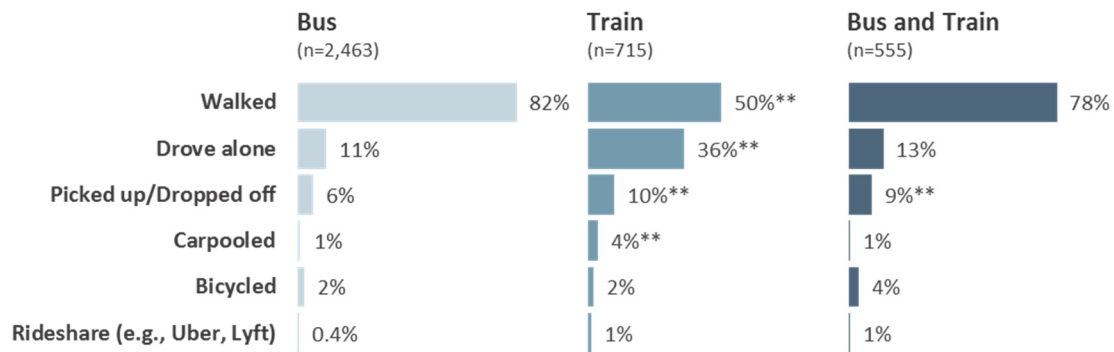
Mode of travel to originating stop. Participants were asked about all the different modes of transportation they used to get to the originating stop of the trip on which they received the survey. BBC assessed whether the mode of transportation to their originating stops differed among bus-only; train-only; and bus and train participants. The majority of passengers indicated

that they walked at least part of the way to the originating stops of their trip. However, as shown in Figure 4, there were some differences between bus-only; train-only; and bus and train passengers in how they got to their originating stops:

- Train-only participants were less likely than bus-only passengers to indicate that they walked at least part of the way to their originating stops (50% vs. 82%);

- Train-only participants were more likely than bus-only passengers to indicate that they drove alone at least part of the way to their originating stops (36% versus 11%);

- Train-only participants (10%) and bus and train participants (9%) were more likely than bus-only participants (6%) to indicate that they were picked up and dropped off at their originating stops; and

- Train-only participants were more likely than bus-only passengers to indicate that they carpooled at least part of the way to their originating stops (4% versus 1%).

Figure 4.
Mode of travel to originating stop

	Bus (n=2,463)	Train (n=715)	Bus and Train (n=555)
Walked	82%	50%**	78%
Drove alone	11%	36%**	13%
Picked up/Dropped off	6%	10%**	9%**
Carpooled	1%	4%**	1%
Bicycled	2%	2%	4%
Rideshare (e.g., Uber, Lyft)	0.4%	1%	1%

Notes: **Denotes statistical significance at the 95% confidence level.

Participants could indicate multiple modes of travel, so percentages may not sum to 100%.
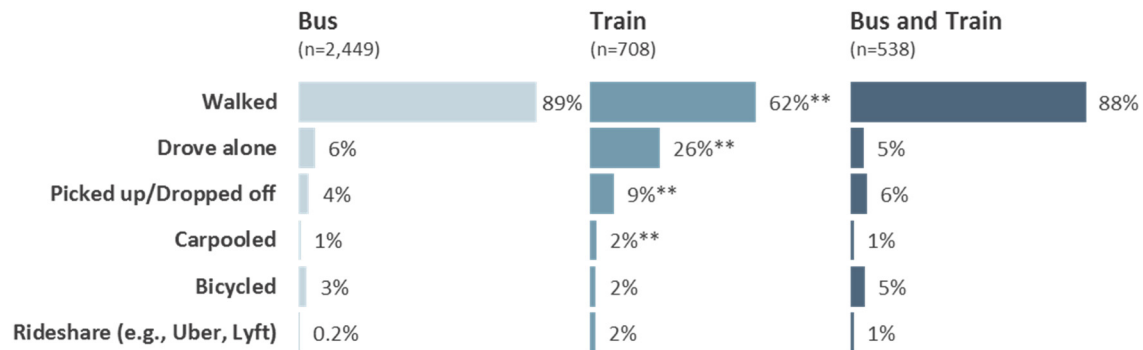
Source: 2019 RTD Customer Satisfaction Survey.

Mode of travel to final destination. Participants were also asked about all the different modes of transportation they used to get from the last stop of the trip on which they received the survey to their final destinations. Similar to their originating stops, the majority of passengers indicated that they walked at least part of the way from their final RTD stops to their final destinations. Again, BBC analyzed the differences between the modes of travel for bus-only; train-only; and bus and train participants. As shown in Figure 5, several differences emerged among passengers' mode of travel from their final stops to their final destinations:

- Train-only participants were less likely than bus-only passengers to indicate that they walked at least part of the way from their final RTD stops to their final destinations (62% vs. 89%);

- Train-only participants were more likely than bus-only passengers to indicate that they drove alone at least part of the way from their final RTD stops to their final destinations (26% versus 6%);

- Train-only participants were more likely than bus-only passengers to indicate that they were picked up from their final RTD stops and dropped off at their final destinations (9% versus 4%); and

- Train-only participants were more likely than bus-only passengers to indicate that they carpooled at least part of the way from their final RTD stops to their final destinations (2% versus 1%).

Figure 5.
Mode of travel to final destination

	Bus (n=2,449)	Train (n=708)	Bus and Train (n=538)
Walked	89%	62%**	88%
Drove alone	6%	26%**	5%
Picked up/Dropped off	4%	9%**	6%
Carpooled	1%	2%**	1%
Bicycled	3%	2%	5%
Rideshare (e.g., Uber, Lyft)	0.2%	2%	1%

Notes: **Denotes statistical significance at the 95% confidence level.

Participants could indicate multiple modes of travel, so percentages may not sum to 100%.

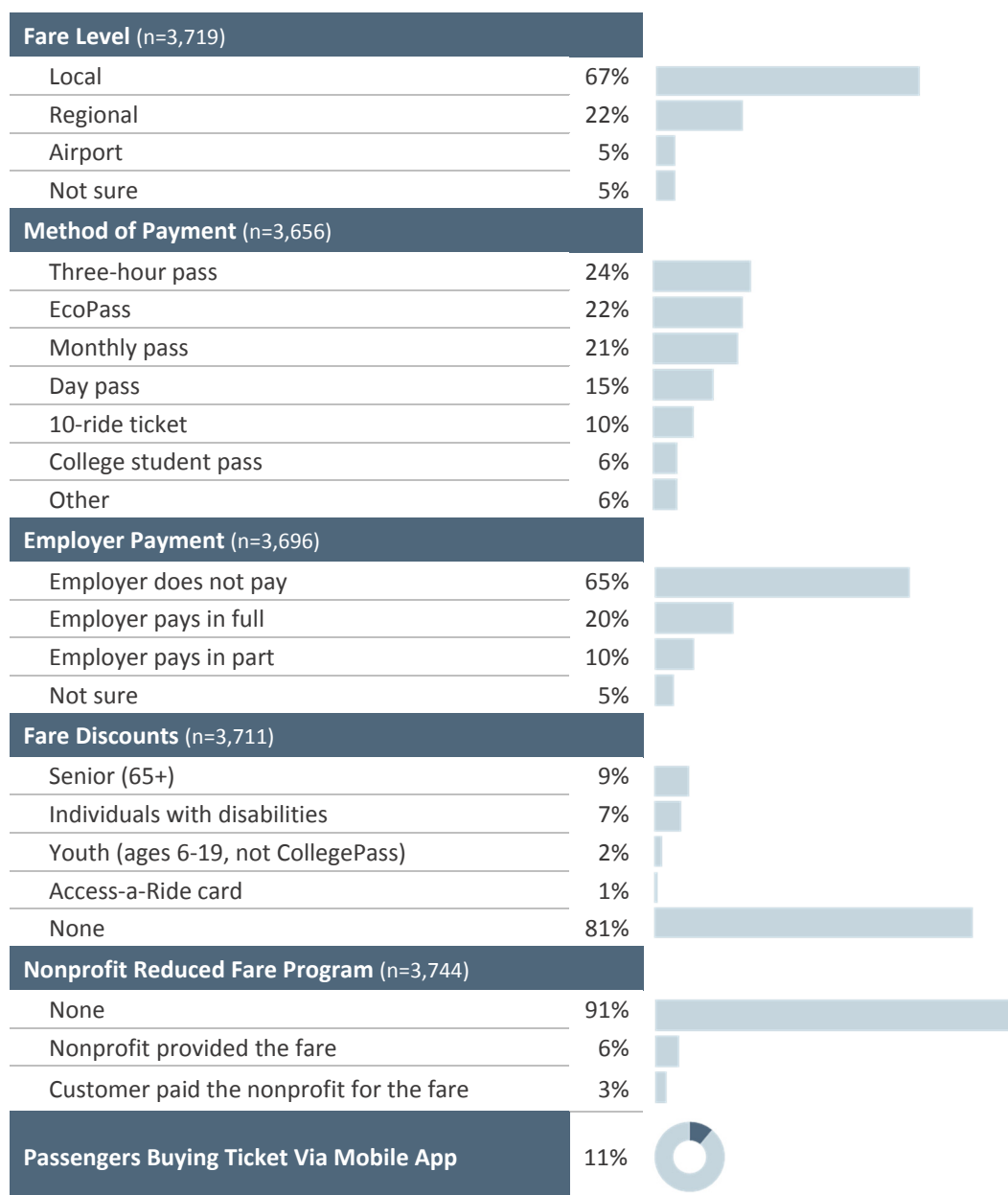Source: 2019 RTD Customer Satisfaction Survey.

Fare Characteristics

The survey included questions about the fares passengers paid for the trip on which they received the survey, including fare levels they used; how they paid their fares; and whether they used special fare discounts. Figure 6 presents key results from the project team's analyses of those characteristics.[3] As shown in Figure 6:

- Two-thirds of participants used the Local fare level (67%) and approximately one-fifth used the Regional fare level (22%);

- Approximately one-quarter of participants bought three-hour passes (24%), approximately one-fifth used EcoPasses to pay their fares (22%), and one-fifth used monthly passes to pay their fares (21%);

- Approximately one-tenth of participants indicated they bought their tickets using RTD's mobile ticketing app (11%);

- Approximately one-third of passengers indicated that their employers either paid all (20%) or part (10%) of their tickets; and

- The majority of passengers did not use any discounts (81%) or the Nonprofit Reduced Fare Program (91%) when paying their fares.

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[3] The following response options were combined into the category of "College student pass": CU-Boulder Student Pass, Auraria Student Pass, University of Denver Student Pass, and Other College Student Pass.

Figure 6.
Fare characteristics

Fare Level (n=3,719)		
Local	67%	
Regional	22%	
Airport	5%	
Not sure	5%	
Method of Payment (n=3,656)		
Three-hour pass	24%	
EcoPass	22%	
Monthly pass	21%	
Day pass	15%	
10-ride ticket	10%	
College student pass	6%	
Other	6%	
Employer Payment (n=3,696)		
Employer does not pay	65%	
Employer pays in full	20%	
Employer pays in part	10%	
Not sure	5%	
Fare Discounts (n=3,711)		
Senior (65+)	9%	
Individuals with disabilities	7%	
Youth (ages 6-19, not CollegePass)	2%	
Access-a-Ride card	1%	
None	81%	
Nonprofit Reduced Fare Program (n=3,744)		
None	91%	
Nonprofit provided the fare	6%	
Customer paid the nonprofit for the fare	3%	
Passengers Buying Ticket Via Mobile App	11%	

Notes: Percentages may not add to 100% due to rounding.

Participants could indicate multiple methods of payments, so percentages may not sum to 100%.

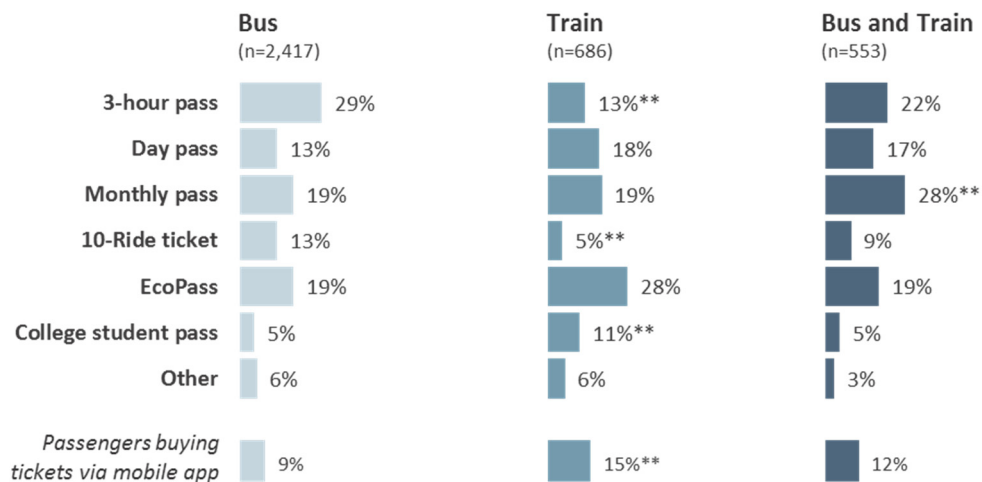Source: 2019 RTD Customer Satisfaction Survey.

BBC further examined payment methods and how they differed among bus-only; train-only; and bus and train participants. As shown in Figure 7:

- Train-only participants were less likely than bus-only participants to indicate they bought three-hour passes (13% vs. 29%);

- Bus and train participants were more likely than bus-only participants to indicate they used monthly passes to pay their fares (28% vs. 19%);

- Train-only participants were less likely than bus-only participants to indicate they used 10-ride tickets to pay their fares (5% vs. 13%); and

- Train-only participants were more likely than bus-only participants to indicate they used college student passes to pay their fares (11% vs. 5%).

Train-only participants were also more likely than bus-only participants to indicate they used RTD's mobile application to buy their tickets.

Figure 7.
Method of payment by participant type

	Bus (n=2,417)	Train (n=686)	Bus and Train (n=553)
3-hour pass	29%	13%**	22%
Day pass	13%	18%	17%
Monthly pass	19%	19%	28%**
10-Ride ticket	13%	5%**	9%
EcoPass	19%	28%	19%
College student pass	5%	11%**	5%
Other	6%	6%	3%
Passengers buying tickets via mobile app	9%	15%**	12%

Notes: **Denotes statistical significance at the 95% confidence level.

Participants could indicate multiple methods of payments, so percentages may not sum to 100%.

Source: 2019 RTD Customer Satisfaction Survey.

Park-n-Ride

The survey included questions about the use of Park-n-Ride services. Participants were asked to indicate whether they parked a car at a Park-n-Ride on the day on which they received the survey, and 24 percent of participants indicated that they had done so.

Bike Use

Participants were asked several questions about their bike use as it related to RTD services, including whether they parked a bike at a Park-n-Ride; took a bike with them on the bus or train; or did not use a bike on the day on which they received a survey. Figure 8 presents those results. The vast majority of passengers (92%) reported that they did not use a bike on the day on which they received the survey. Of the participants who did, nearly 90 percent of them reported taking their bikes with them on the bus or train.

RTD Use

The survey included questions about participants' use of RTD services, including the RTD services they used; how many total one-way trips they made on the day on which they received the survey; and how frequently they use RTD services.

Figure 8.
Bike Use on RTD Services

Source:
2019 RTD Customer Satisfaction Survey.

1%

7%

n=3,745

92%

- Did not use bike
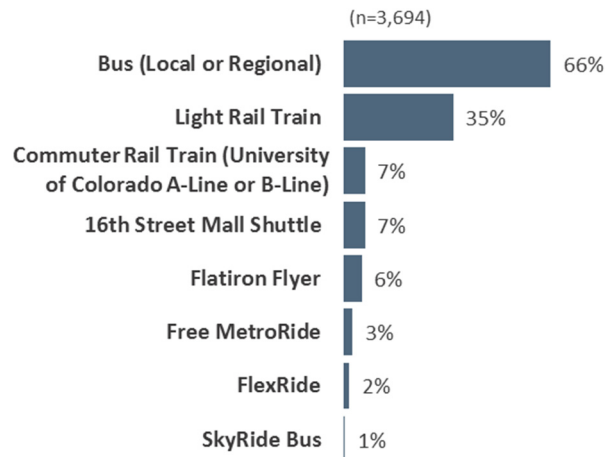- Took bike on bus/train
- Parked bike at Park-n-Ride
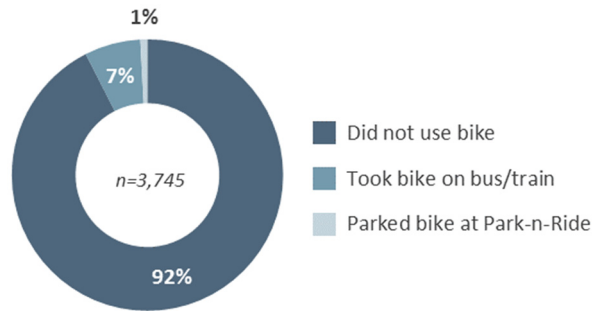
RTD services. Participants were asked to indicate all of the RTD services they used on the trip on which they received the survey. As shown in Figure 9, approximately two-thirds participants indicated that they took at least one bus trip during the trip on which they received the survey (66%). Thirty-five percent of passengers indicated that they rode on a light rail train at some point during their trip. Less than 10 percent of passengers indicated using any other RTD service during the trip on which they received the survey.

Figure 9.
RTD Services used on the survey trip

Note:
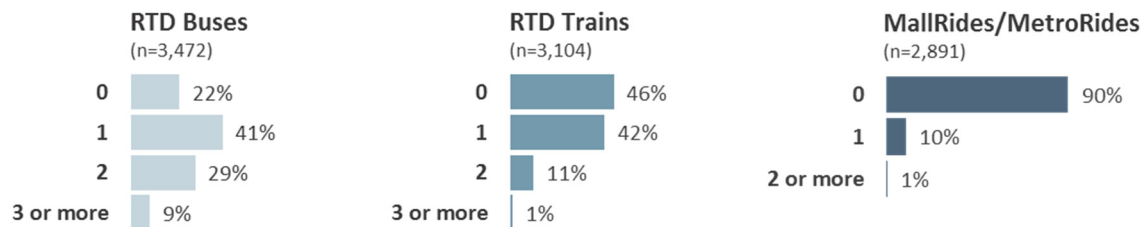Participants could indicate multiple methods of payments, so percentages may not sum to 100%

Source:
2019 RTD Customer Satisfaction Survey.

(n=3,694)

Bus (Local or Regional)	66%
Light Rail Train	35%
Commuter Rail Train (University of Colorado A-Line or B-Line)	7%
16th Street Mall Shuttle	7%
Flatiron Flyer	6%
Free MetroRide	3%
FlexRide	2%
SkyRide Bus	1%

Vehicles by trip. RTD participants were asked to indicate how many total RTD vehicles they used or would use to complete their trip by service type: buses, trains, and MallRide/MetroRide. Figure 10 presents those results. As shown in Figure 10:

- More than three-fourths of participants indicated that they used at least one bus to complete their trip (78%) and more than one-third indicated that they used at two or more busses (37%);

- More than one-half of participants indicated that they used at least one train to complete their trip (54%) and 12% indicated that they used two or more trains; and

- Only 10 percent of participants indicated that they used a MallRide or MetroRide vehicle to complete their trip.

Figure 10.
Number of trips by service

RTD Buses
(n=3,472)

0	22%
1	41%
2	29%
3 or more	9%

RTD Trains
(n=3,104)

0	46%
1	42%
2	11%
3 or more	1%

MallRides/MetroRides
(n=2,891)

0	90%
1	10%
2 or more	1%

Notes: **Denotes statistical significance at the 95% confidence level.
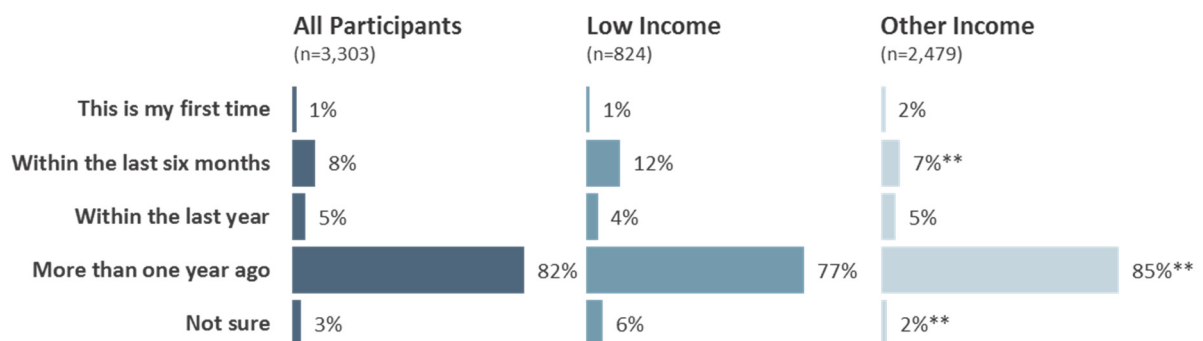
Percentages may not sum to 100% due to rounding.

Source: 2019 RTD Customer Satisfaction Survey.

Frequency of RTD use. Participants were asked several questions about how frequently they use RTD services and how that frequency has changed over the past year. BBC examined whether there were any differences between low income participants and other income participants in regard to their use of RTD services.

First time use. To assess whether recent changes in lines, fare structures, and technology has attracted new RTD users, the survey asked participants to indicate when they used RTD services for the first time. Figure 11 shows those results for all participants considered together and separately for low income and other income participants. As shown in Figure 11:

■ Overall, 15 percent of participants indicated that their first time using RTD was within the last year;

■ Low income participants were more likely than other income participants to indicate that their first time using RTD was within the last six months (12% vs. 7%); and

■ Low income participants were less likely than other income participants to indicate that their first time using RTD was more than a year ago (77% versus 85%).

Figure 11.
First time use of RTD services

All Participants
(n=3,303)

Low Income
(n=824)

Other Income
(n=2,479)

	All Participants	Low Income	Other Income
This is my first time	1%	1%	2%
Within the last six months	8%	12%	7%**
Within the last year	5%	4%	5%
More than one year ago	82%	77%	85%**
Not sure	3%	6%	2%**

Notes: **Denotes statistical significance at the 95% confidence level.
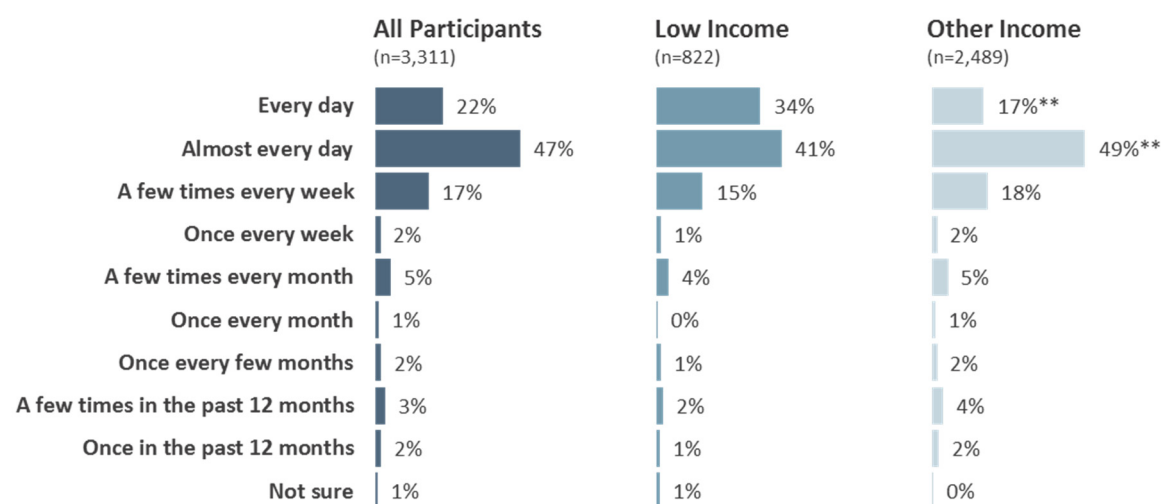
Percentages may not sum to 100% due to rounding.

Source: 2019 RTD Customer Satisfaction Survey.

Frequency of use. Participants were also asked how often they used RTD services in the past year. Figure 12 shows those results for all participants considered together and separately for low income and other income participants. As shown in Figure 12:

- Overall, more than two-thirds of participants indicated that they used RTD every day or almost every day in the past year (69%);

- Low income participants were more likely than other income participants to indicate that they used RTD every day in the past year (34% versus 17%); and

- Low income participants were less likely than other income participants to indicate that they used RTD almost every day in the past year (41% vs. 49%).

Figure 12.
Frequency of RTD use in past year

	All Participants (n=3,311)	Low Income (n=822)	Other Income (n=2,489)
Every day	22%	34%	17%**
Almost every day	47%	41%	49%**
A few times every week	17%	15%	18%
Once every week	2%	1%	2%
A few times every month	5%	4%	5%
Once every month	1%	0%	1%
Once every few months	2%	1%	2%
A few times in the past 12 months	3%	2%	4%
Once in the past 12 months	2%	1%	2%
Not sure	1%	1%	0%

Notes: **Denotes statistical significance at the 95% confidence level.

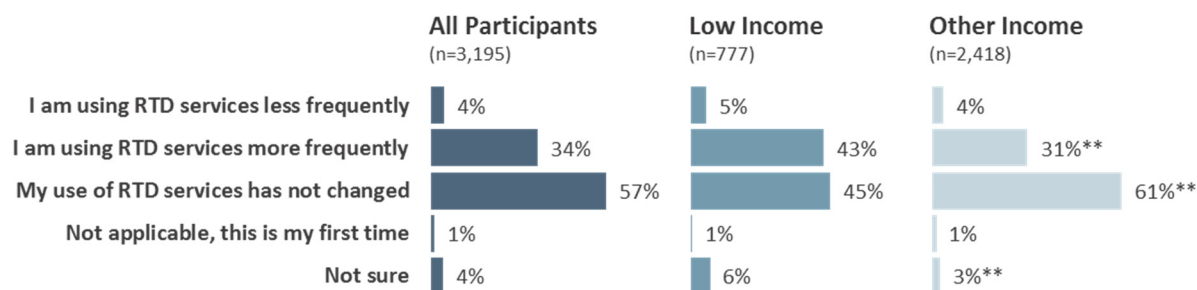Percentages may not sum to 100% due to rounding.

Source: 2019 RTD Customer Satisfaction Survey.

Changes in frequency of use. Participants were also asked to indicate if the frequency of their use of RTD services has changed over the past year. Figure 13 shows those results for all participants considered together and separately for low income and other income participants. As shown in Figure 13:

- Overall, approximately one-third of participants indicated that they use RTD services more frequently than in the past (34%);

- Low income participants were more likely than other income participants to indicate that they use RTD services more frequently than in the past (43% vs. 31%); and

- Low income participants were less likely than other income participants to indicate that their use of RTD services has not changed in the past year (45% versus 61%).

Figure 13.
Changes in frequency of RTD use in past year

	All Participants (n=3,195)	Low Income (n=777)	Other Income (n=2,418)
I am using RTD services less frequently	4%	5%	4%
I am using RTD services more frequently	34%	43%	31%**
My use of RTD services has not changed	57%	45%	61%**
Not applicable, this is my first time	1%	1%	1%
Not sure	4%	6%	3%**

Notes: **Denotes statistical significance at the 95% confidence level.

Percentages may not sum to 100% due to rounding.

Source: 2019 RTD Customer Satisfaction Survey.

Quality of RTD Services

The survey included several questions about the quality of various aspects of RTD services, including:
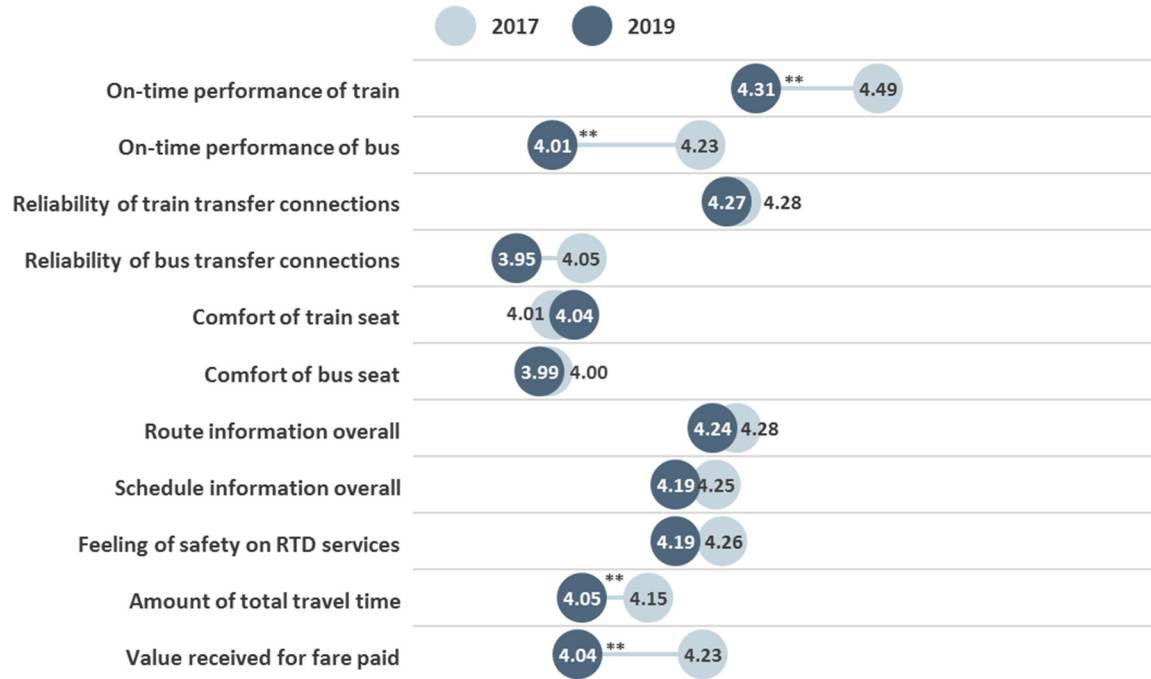
- On-time performance;
- Amount of travel time;
- Reliability of transfers;
- Safety and comfort;
- Route and schedule information;
- Value; and
- Overall quality.

Passengers were asked to rate the quality for each aspect on a scale from 1 to 5, where 1 indicated *poor* and 5 indicated *excellent*. BBC calculated average quality ratings for all RTD passengers and compared quality ratings between 2019 and 2017.

Quality of service aspects. Participants were asked several questions about the quality of various aspects of RTD services including on-time performance; amount of travel time; reliability of transfers; safety; comfort; and route and schedule information. The survey asked passengers to rate each aspect with which they had experience. Results for 2019 and 2017 are presented in Figure 14. Overall, participants in 2019 indicated that the quality of all aspects of RTD services is quite high. The average quality ratings across all aspects of RTD services ranged from 3.95 and 4.31. However, in general, quality ratings appeared to be somewhat lower in 2019 than in 2017. Specifically, quality ratings were lower in 2019 than in 2017 for:

- On-time performance of trains (4.31 vs. 4.49);
- On-time performance of buses (4.01 vs. 4.23);
- Amount of total travel time (4.05 vs. 4.15); and
- Value received for the fare that passengers paid (4.04 vs. 4.23).

Figure 14.
Average quality ratings of various service aspects

Legend: ● 2017 ● 2019

Service Aspect	2019	2017
On-time performance of train	4.31**	4.49
On-time performance of bus	4.01**	4.23
Reliability of train transfer connections	4.27	4.28
Reliability of bus transfer connections	3.95	4.05
Comfort of train seat	4.04	4.01
Comfort of bus seat	3.99	4.00
Route information overall	4.24	4.28
Schedule information overall	4.19	4.25
Feeling of safety on RTD services	4.19	4.26
Amount of total travel time	4.05**	4.15
Value received for fare paid	4.04**	4.23

Notes: **Denotes statistical significance at the 95% confidence level.

Source: 2019 RTD Customer Satisfaction Survey.

Quality of RTD customer service. The survey included several questions about RTD customer service, including whether participants contacted customer service in the past month, how they did so, whether their issues were successfully resolved, and their satisfaction with RTD customer service. Overall, 23 percent of participants indicated that they contacted RTD customer service in the past month. As shown in Figure 15, more than three-quarters of those participants spoke to a live operator (77%), and more than one-half of them had their issues successfully resolved (56%). Participants were also asked to rate their satisfaction with RTD customer service on a scale from 1 to 5, where 1 indicated *very dissatisfied* and 5 indicated *very satisfied*. The average satisfaction rating for RTD customer service was 3.84, indicating that participants were moderately satisfied.
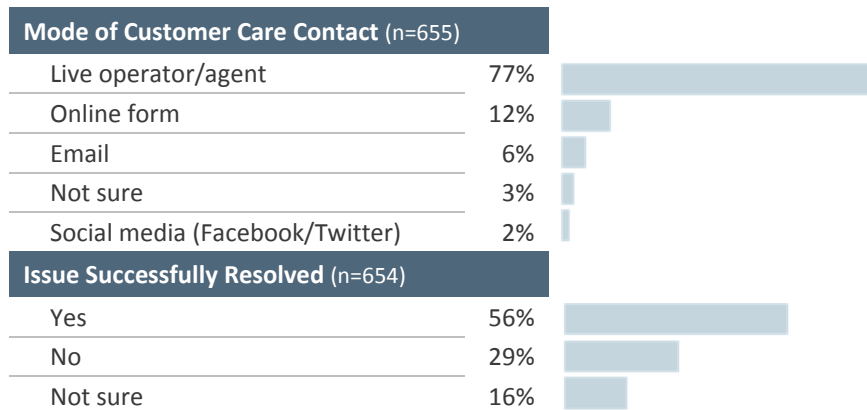
Figure 15.
Characteristics of customer service experiences

Note:
Percentages may not sum 100% due to rounding.

Source:
2019 RTD Customer Satisfaction Survey.

Mode of Customer Care Contact (n=655)	
Live operator/agent	77%
Online form	12%
Email	6%
Not sure	3%
Social media (Facebook/Twitter)	2%

Issue Successfully Resolved (n=654)	
Yes	56%
No	29%
Not sure	16%

Overall quality. Participants were also asked several questions related to the overall quality of RTD services, including their likelihood to choose to use RTD again and to recommend RTD to others. Results for 2019 and 2017 are presented in Figure 16. In general, participants in 2019 rated the overall quality of RTD services quite high, as they did in 2017. The average quality ratings for overall RTD services (average quality = 4.17), overall train service (average quality = 4.30), and overall bus service (average quality = 4.15) exceeded 4.0. In addition, participants indicated that they were very likely to choose to use RTD again (average likelihood = 4.80) and to recommend RTD to others (average likelihood = 4.44). In fact, participants in 2019 were more likely than participants in 2017 to indicate that they were likely to choose to use RTD again (average likelihood of 4.80 vs. 4.66).[4]

The survey also included a question about participants' overall satisfaction with RTD services, which conceptually, was very similar to the question asking participants to rate the overall quality of RTD services. The average rating for overall satisfaction with RTD services was 4.26, similar to the average overall rating of RTD services (4.17).

Figure 16.
Overall quality of RTD services
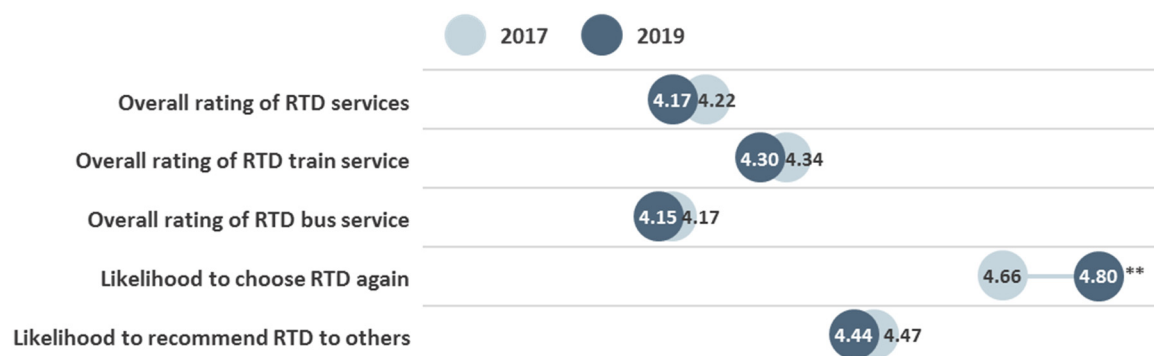
Notes: **Denotes statistical significance at the 95% confidence level.

Source: 2019 RTD Customer Satisfaction Survey.

Relationship between aspect quality and overall quality. BBC conducted regression analyses to examine whether participants' perceptions of the quality of particular aspects of RTD services predict their perceptions of the overall quality of RTD services, their likelihood to choose to use RTD in the future, and their likelihood to recommend RTD to others. BBC regressed each of those outcomes on participants' ratings of the quality of different aspects of RTD services, including on-time performance; amount of travel time; reliability of transfers; feelings of safety and comfort; route and schedule information; and the value received for the fare amount.

Overall rating of RTD services. BBC first examined the relationships between participants' ratings of the overall quality of RTD services and their ratings of the quality of individual aspects of RTD services. The corresponding regression coefficients are presented in Figure 17. As shown in Figure 17, the quality of several individual aspects that BBC included in the regression model

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[4] RTD used different scale labels for questions having to do with the likelihood to choose RTD again and the likelihood to recommend RTD to others in 2019 than in 2017. In 2019, the scale went from 1 ("very unlikely") to 5 ("very likely"), whereas in 2017, the scale went from 1 ("poor") to 5 ("excellent").

were independently, positively, and significantly related to the overall quality of RTD services. That is, higher ratings of the quality of those aspects predicted higher ratings of the overall quality of RTD services. The three aspects whose quality had the strongest relationships with overall quality were:

■ On-time bus performance (regression coefficient = 0.18).

■ Value received for the fare amount (regression coefficient = 0.17); and

■ Train seat comfort (regression coefficient = 0.08).

Figure 17.
Relationships between overall quality of RTD and quality of individual aspects of service

Aspect of RTD Service	Mean	n	Regression Coefficient	Significance
Overall rating of RTD services	**4.17**	**3,633**		
On-time performance of bus	4.01	3,324	0.18	**
On-time performance of train	4.31	2,138	0.06	**
Amount of total travel time	4.05	3,616	0.11	
Reliability of bus transfer connections	3.95	2,208	0.04	**
Reliability of train transfer connections	4.27	1,661	0.09	
Feeling of safety on RTD services	4.19	3,683	0.06	**
Comfort of bus seat	3.99	3,309	0.06	**
Comfort of train seat	4.04	2,196	0.08	**
Route information overall	4.24	3,615	0.05	
Schedule information overall	4.19	3,638	0.11	
Value received for fare paid	4.04	3,528	0.17	**

Notes: **Denotes statistical significance at the 95% confidence level.

Source: 2019 RTD Customer Satisfaction Survey.

Likelihood of choosing to use RTD again. BBC also examined the relationship between participants' likelihood of choosing to use RTD again and the quality of different aspects of RTD services. As shown in Figure 18, the quality of two aspects was independently, positively, and significantly related to the reported likelihood of choosing to use RTD again:

■ Reliability of train transfers (regression coefficient = 0.09); and

■ Feeling of safety on RTD services (regression coefficient = 0.04).

Figure 18.
Relationships between likelihood of choosing to use RTD again and quality of individual aspects of service

Aspect of RTD Service	Mean	n	Regression Coefficient	Significance
Likelihood to choose RTD again	**4.80**	**3,753**		
On-time performance of bus	4.01	3,324	0.01	
On-time performance of train	4.31	2,138	0.06	
Amount of total travel time	4.05	3,616	0.03	
Reliability of bus transfer connections	3.95	2,208	-0.01	
Reliability of train transfer connections	4.27	1,661	0.09	**
Feeling of safety on RTD services	4.19	3,683	0.04	**
Comfort of bus seat	3.99	3,309	0.03	
Comfort of train seat	4.04	2,196	0.02	
Route information overall	4.24	3,615	0.03	
Schedule information overall	4.19	3,638	-0.01	
Value received for fare paid	4.04	3,528	0.04	

Notes: **Denotes statistical significance at the 95% confidence level.

Source: 2019 RTD Customer Satisfaction Survey.

Likelihood to recommend RTD to others. In addition, BBC examined the relationships between passengers' likelihood to recommend RTD to others and the quality of various aspects of services. As shown in Figure 19, the quality of several aspects was independently, positively, and significantly related to the reported likelihood to recommend RTD to others. The three aspects whose quality had the strongest relationships with overall quality were:

■   Amount of total travel time (regression coefficient = 0.19).

■   Value received for the fare amount (regression coefficient = 0.15); and

■   On-time bus performance (regression coefficient = 0.10).

In addition, the quality ratings of the route information that RTD provides was significantly but negatively related to the reported likelihood to recommend RTD to others: route information overall (regression coefficient = -0.08). It is not clear why higher perceived quality of the route information that RTD provides would be related to lower likelihood to recommend RTD to others, but it may warrant further examination in future research.

Figure 19.
Relationships between likelihood to recommend RTD to others and quality of individual aspects of service

Aspect of RTD Service	Mean	n	Regression Coefficient	Significance
Likelihood to recommend RTD to others	**4.44**	**3,731**		
On-time performance of bus	4.01	3,324	0.10	**
On-time performance of train	4.31	2,138	0.09	**
Amount of total travel time	4.05	3,616	0.19	**
Reliability of bus transfer connections	3.95	2,208	-0.02	
Reliability of train transfer connections	4.27	1,661	0.08	
Feeling of safety on RTD services	4.19	3,683	0.09	**
Comfort of bus seat	3.99	3,309	0.06	
Comfort of train seat	4.04	2,196	-0.02	
Route information overall	4.24	3,615	-0.08	**
Schedule information overall	4.19	3,638	0.05	**
Value received for fare paid	4.04	3,528	0.15	**

Notes: **Denotes statistical significance at the 95% confidence level.

Source: 2019 RTD Customer Satisfaction Survey.

SECTION IV.
Discussion

The 2019 RTD Customer Satisfaction Survey revealed important information about customers' experiences and satisfaction with RTD services. RTD can use that information to refine its services and continue meeting its customers' needs in the future. Passengers shared their experiences with and perceptions of various aspects of RTD services such as RTD use; payment and use of discounts; travel to and from RTD stops and stations; and the quality of RTD services. Key results from the 2019 RTD Customer Satisfaction Survey include the following:

- RTD passengers perceive the overall quality of RTD services as very high. The average rating of the overall quality of RTD services was 4.17 on a 5-point scale.

- RTD passengers rate the quality of all aspects of RTD service as very high. Average quality ratings of various aspects of RTD services varied between 3.95 and 4.31 out of 5.

- RTD continues to deliver high value for the fares that they charge. The average rating of the value that passengers received from the fare that they paid was 4.04 out of 5.

- In general, passenger satisfaction for certain service aspects have decreased since 2017—including on-time performance and perceived value of RTD fares—but it nonetheless remains relatively high.

- Passengers are very likely to choose to use RTD again and recommend RTD to others. Average likelihood ratings were 4.80 and 4.44 out of 5, respectively. Moreover, the likelihood for passengers to choose to use RTD again increased substantially since 2017.

- On-time performance and fare value are important predictors of passengers' perceptions of the overall quality of RTD services and their likelihood to recommend RTD to others. Reliability of transfers and feelings of safety are important predictors of passengers' likelihood to choose to use RTD again.

- Relatively few passengers use RTD's mobile ticketing application to purchase their fares.

- Changes that RTD has implemented over the past few years may be resulting in increased usage—a substantial portion of passengers indicate that they use RTD more frequently than in the past, and RTD has attracted many first-time passengers in the past year.

RTD should consider the information above and additional information from the 2019 RTD Customer Satisfaction Survey. Several potential recommendations emerged from the analyses:

- Overall, RTD passengers had very positive perceptions of the quality and value of RTD services. However, passenger satisfaction for certain service aspects have decreased since 2017, including on-time performance and fare value. RTD should continue to monitor satisfaction with those service aspects as it considers operational refinements.

- The on-time performance of buses, comfort of bus seats, and the reliability of bus transfers continue to be among the service aspects that receive the lowest quality ratings. RTD should continue to explore ways in which they could improve those service aspects,

because they have important relationships with passengers' perceptions of the overall quality of RTD services.

- Although the uptake and usage of RTD's mobile ticketing application is quite low—only 11 percent of passengers reported using it as part of the survey—anecdotal information indicates that the passengers who do use it appreciate its convenience. RTD should consider exploring ways to increase communication about the mobile ticketing application and encouraging passengers to use it.

- The frequency of RTD usage appears to have increased over the past year, and RTD also appears to be attracting new passengers. The district might consider additional research to better understand what factors are leading Denver residents to use RTD more, and how it can continue encouraging that increase.