CORONA INSIGHTS

TRANSFORT

2021 ONBOARD SURVEY FINDINGS

Contents

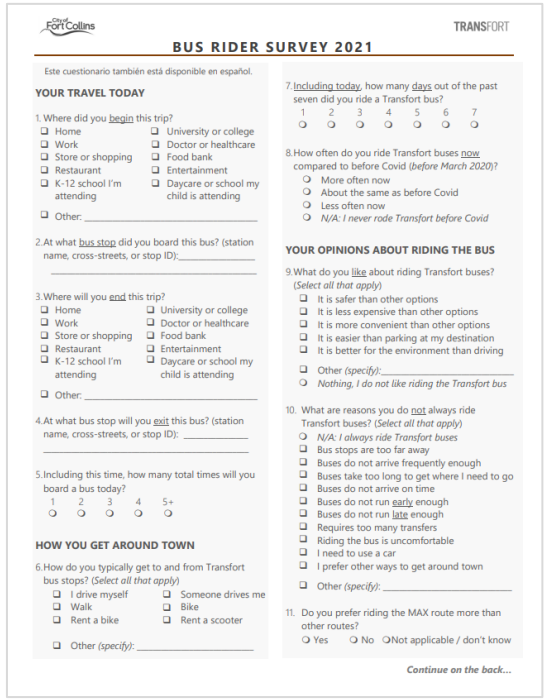
CORONAINSIGHTS

EXECUTIVE SUMMARY

About this Survey

A system-wide survey of bus passengers was conducted in fall 2021 to measure riders' behaviors, opinions, and demographic characteristics. Key survey details are highlighted below. A complete description of the methodology is found in the Appendix.

Sample size:	1,729 survey responses were collected.
Questionnaire:	Two-page bilingual questionnaire (English and Spanish.
Cooperation rate:	Most passengers (75.4%) who were asked to complete a questionnaire did so.
Sampling:	All bus routes that operated during the study period were included.
Weighting:	Data were weighed to reflect route patterns and ridership frequency.
Margin of error:	The estimated margin of sampling error for systemwide results was ±3.0% within a 95% confidence interval.



BUS RIDER SURVEY 2021

Este cuestionario también está disponible en español.

YOUR TRAVEL TODAY

1. Where did you begin this trip?
   - ❑ Home
   - ❑ Work
   - ❑ Store or shopping
   - ❑ Restaurant
   - ❑ K-12 school I'm attending
   - ❑ University or college
   - ❑ Doctor or healthcare
   - ❑ Food bank
   - ❑ Entertainment
   - ❑ Daycare or school my child is attending
   - ❑ Other: _____

2. At what bus stop did you board this bus? (station name, cross-streets, or stop ID): _____

3. Where will you end this trip?
   - ❑ Home
   - ❑ Work
   - ❑ Store or shopping
   - ❑ Restaurant
   - ❑ K-12 school I'm attending
   - ❑ University or college
   - ❑ Doctor or healthcare
   - ❑ Food bank
   - ❑ Entertainment
   - ❑ Daycare or school my child is attending
   - ❑ Other: _____

4. At what bus stop will you exit this bus? (station name, cross-streets, or stop ID): _____

5. Including this time, how many total times will you board a bus today? 1 ○ 2 ○ 3 ○ 4 ○ 5+ ○

HOW YOU GET AROUND TOWN

6. How do you typically get to and from Transfort bus stops? *(Select all that apply)*
   - ❑ I drive myself
   - ❑ Walk
   - ❑ Rent a bike
   - ❑ Someone drives me
   - ❑ Bike
   - ❑ Rent a scooter
   - ❑ Other *(specify)*: _____

7. Including today, how many days out of the past seven did you ride a Transfort bus? 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○

8. How often do you ride Transfort buses now compared to before Covid *(before March 2020)*?
   - ○ More often now
   - ○ About the same as before Covid
   - ○ Less often now
   - ○ *N/A: I never rode Transfort before Covid*

YOUR OPINIONS ABOUT RIDING THE BUS

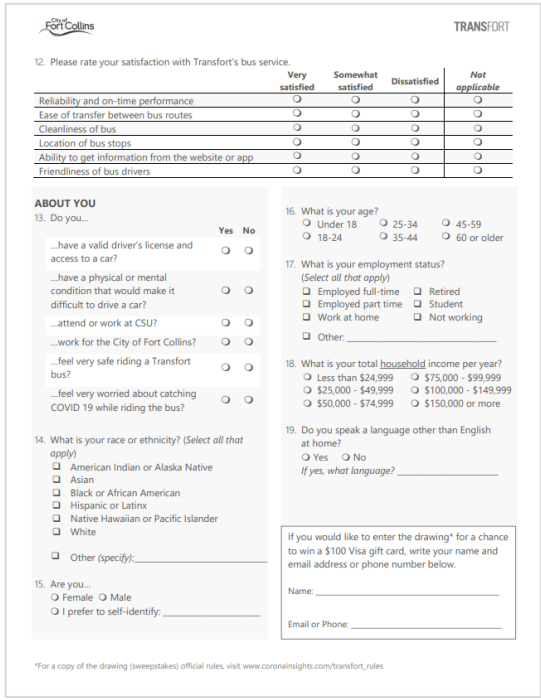
9. What do you like about riding Transfort buses? *(Select all that apply)*
   - ❑ It is safer than other options
   - ❑ It is less expensive than other options
   - ❑ It is more convenient than other options
   - ❑ It is easier than parking at my destination
   - ❑ It is better for the environment than driving
   - ❑ Other *(specify)*: _____
   - ○ *Nothing, I do not like riding the Transfort bus*

10. What are reasons you do not always ride Transfort buses? *(Select all that apply)*
    - ○ *N/A: I always ride Transfort buses*
    - ❑ Bus stops are too far away
    - ❑ Buses do not arrive frequently enough
    - ❑ Buses take too long to get where I need to go
    - ❑ Buses do not arrive on time
    - ❑ Buses do not run early enough
    - ❑ Buses do not run late enough
    - ❑ Requires too many transfers
    - ❑ Riding the bus is uncomfortable
    - ❑ I need to use a car
    - ❑ I prefer other ways to get around town
    - ❑ Other *(specify)*: _____

11. Do you prefer riding the MAX route more than other routes? ○ Yes ○ No ○ Not applicable / don't know

Continue on the back...

A full copy of the questionnaire is provided as an attachment to this report.



12. Please rate your satisfaction with Transfort's bus service.

	Very satisfied	Somewhat satisfied	Dissatisfied	*Not applicable*
Reliability and on-time performance	○	○	○	○
Ease of transfer between bus routes	○	○	○	○
Cleanliness of bus	○	○	○	○
Location of bus stops	○	○	○	○
Ability to get information from the website or app	○	○	○	○
Friendliness of bus drivers	○	○	○	○

ABOUT YOU

13. Do you...

	Yes	No
...have a valid driver's license and access to a car?	○	○
...have a physical or mental condition that would make it difficult to drive a car?	○	○
...attend or work at CSU?	○	○
...work for the City of Fort Collins?	○	○
...feel very safe riding a Transfort bus?	○	○
...feel very worried about catching COVID 19 while riding the bus?	○	○

14. What is your race or ethnicity? *(Select all that apply)*
   - ❑ American Indian or Alaska Native
   - ❑ Asian
   - ❑ Black or African American
   - ❑ Hispanic or Latinx
   - ❑ Native Hawaiian or Pacific Islander
   - ❑ White
   - ❑ Other *(specify)*: _____

15. Are you... ○ Female ○ Male ○ I prefer to self-identify: _____

16. What is your age? ○ Under 18 ○ 18-24 ○ 25-34 ○ 35-44 ○ 45-59 ○ 60 or older

17. What is your employment status? *(Select all that apply)*
   - ❑ Employed full-time
   - ❑ Employed part time
   - ❑ Work at home
   - ❑ Retired
   - ❑ Student
   - ❑ Not working
   - ❑ Other: _____

18. What is your total household income per year?
   - ○ Less than $24,999
   - ○ $25,000 - $49,999
   - ○ $50,000 - $74,999
   - ○ $75,000 - $99,999
   - ○ $100,000 - $149,999
   - ○ $150,000 or more

19. Do you speak a language other than English at home? ○ Yes ○ No
If yes, what language? _____

If you would like to enter the drawing* for a chance to win a $100 Visa gift card, write your name and email address or phone number below.

Name: _____

Email or Phone: _____

*For a copy of the drawing (sweepstakes) official rules, visit www.coronainsights.com/transfort_rules

Passenger Information

Rider Profile

Age: Bus passengers tended to be young, typically 18 to 24 years old.

Gender: There was a slight prevalence of females riding Transfort.

Race/ethnicity: Compared to the city's population, bus passengers were more racially diverse and more likely to speak languages other than English.

Work Status: Most (62%) passengers attended or worked at CSU; 5% worked for the City of Fort Collins.

Income: Nearly half of passengers had annual household incomes below $25,000.

Riding Behavior

Access: Most passengers walked to get to or from the bus stop, especially those on CSU- dominant routes.

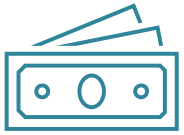
Boardings: Half of passengers boarded the bus 2-times a day. Lower-income riders tended to board more often per day, on average.

Frequency: The average passenger rode 3.5 days per week, this was higher for 18- to 24-year-olds, students, and passengers who live in low-income households.

Length: The average passenger's trip length was 2.5 miles, and 61% of passengers traveled less than two miles.

Purpose: Many passengers were traveling to or from a college/university.

Uses and Benefits



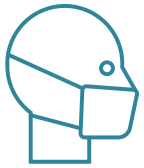
Motivations to riding Transfort were primarily the personal benefits of convenience and saving money. Riding the bus for environmental benefit or safety were less common.

Transfort is often used to get to and from a university/college, both by students and employees. Some of this behavior is likely attributable to limited parking on or near campuses. This pattern skews the population of riders to be much younger than the population of Fort Collins residents.

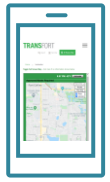
Still, many passengers ride Transfort for reasons other than to get to or from school, and they have different motivations and barriers for riding. For example, people traveling to work or shopping were far less likely than others to say riding the bus is easier than parking at their destination. Therefore, bus service provides benefits to passengers besides less parking hassle.

Barriers and Pain Points

The most common barriers to riding more often are the infrequency of buses and buses not running late enough. Labor shortages have recently forced Transfort to reduce the frequency of buses on some routes, most notably the Max. These reductions may amplify barriers to not riding the bus more often.



Few passengers (10%) felt very concerned about catching COVID-19 while riding the bus. Additionally, few (4%) did not feel very safe riding a Transfort bus. However, these potential barriers may be more salient for those who did not ride the bus at all, a population that was not part of this onboard survey.



The most common pain-point, for about 10% of riders, was getting information from the Transfort website or app.

Older riders were more likely to be satisfied with reliability and on-time performance, but less likely to be satisfied with the cleanliness of buses.

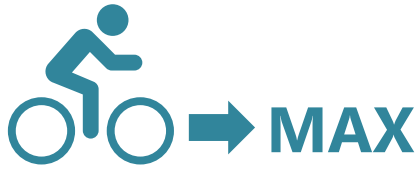
Additional Findings

78% 

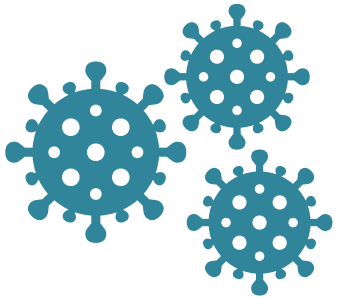
of riders were very satisfied with the friendliness of bus operators

38% 

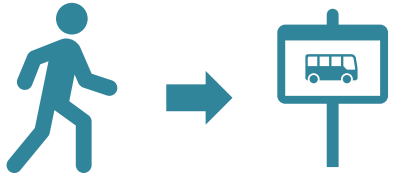
of passengers did not have a drivers license and car



Max riders were more likely than others to bike to the bus stop

65% 

of passengers were riding the bus as much or more than before COVID-19



Regardless of age, most passengers walked to or from bus stops

Spanish & Arabic

were the most common languages spoken by passengers, besides English

Recommendations

Bus Frequency

Because bus infrequency was a common barrier to riding more often, explore ways to increase or at least maintain frequency, especially for CSU-dominant routes.

Late-evening Service

"Buses not running late enough" was a common barrier across all demographics (except for 60+ year old riders). Extending service into the evening would meet the needs of frequent users.

Transfer

Transferring buses appears to be related to household income, with lower-income riders transferring more often. Also, non-students were more likely to board three or more buses a day, suggesting they were transferring routes more often. Consider strategies to decrease the need to transfer for lower income residents.

Early-morning Service

Although "buses not running early enough" was a barrier for only 6% of riders, it is a more common barrier for non-students. Consider earlier service for some non-CSU dominant routes.

DETAILED FINDINGS

SECTION 1

PASSENGER DEMOGRAPHICS

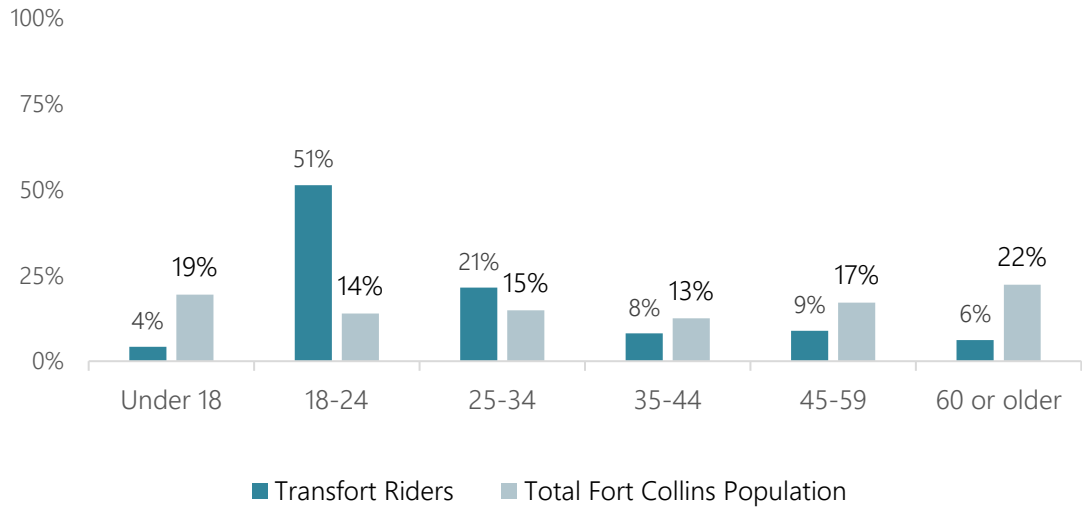
Half of riders were between the ages of 18 and 24 years old.

CORONAINSIGHTS

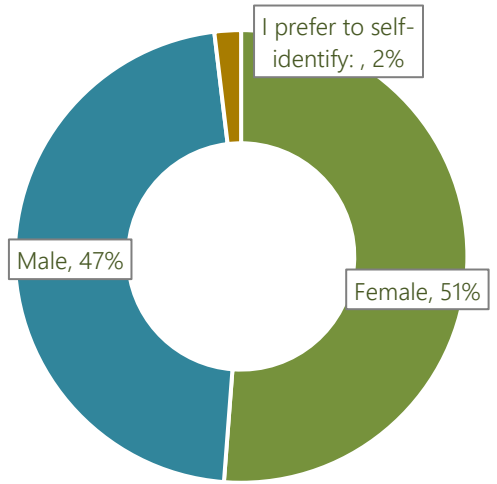
- Compared to the general population of Forth Collins, Transfort riders tended to be younger.
  - While the 18-25 age group represents 51% of riders, it represents only 14% of the total Fort Collins population, according to U.S. Census data.

- Gender breakdown was close to the general population split, with a slightly prevalence of women riding Transfort.

Age



Gender



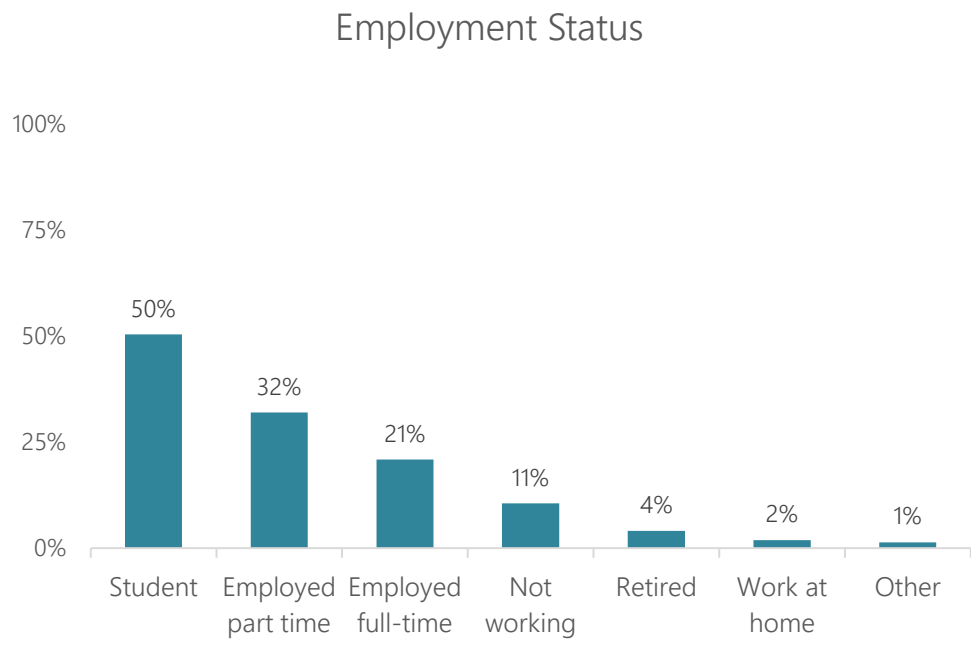
Q16: What is your age?
Q15: Are you...female, male, or do you prefer to self-identify?

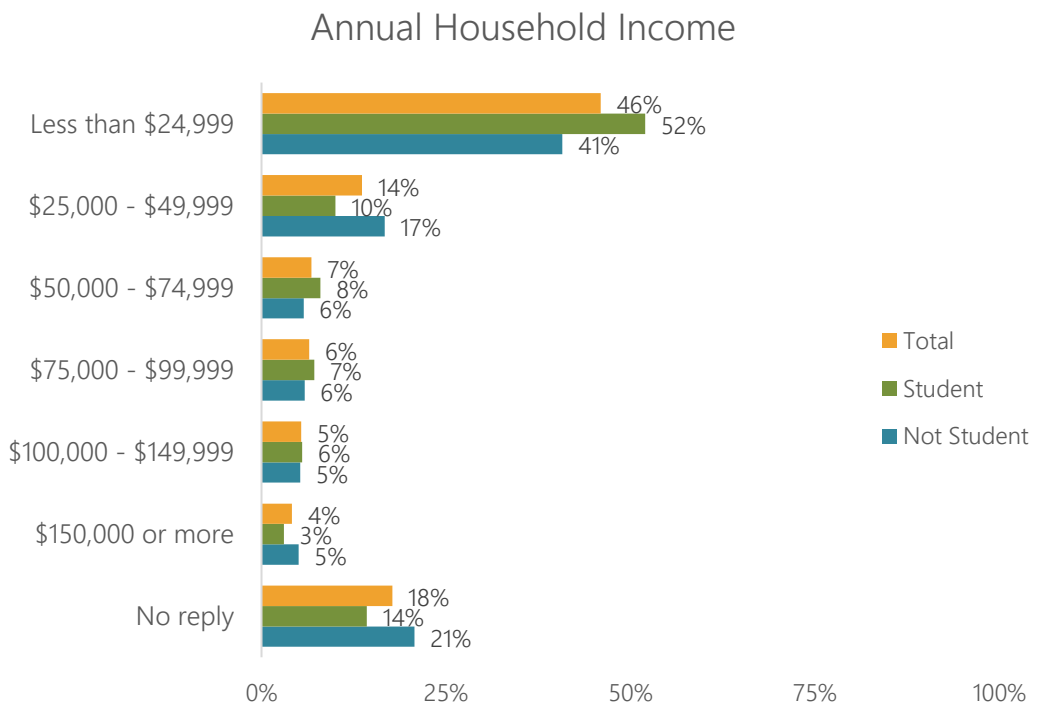
Nearly half of riders were students.

CORONAINSIGHTS

> Being a student was the most common employment status for Transfort riders.

> Of Transfort riders, it was most common to have a household income of less than $25,000.



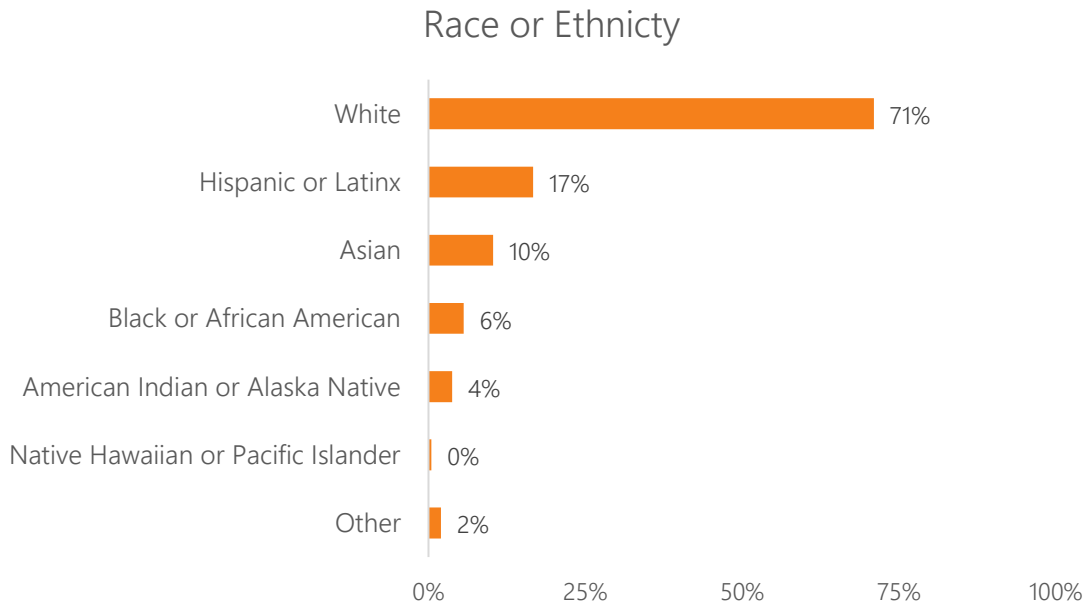


Q17 :What is your employment status? (Select all that apply)
Q18: What is your total household income per year?

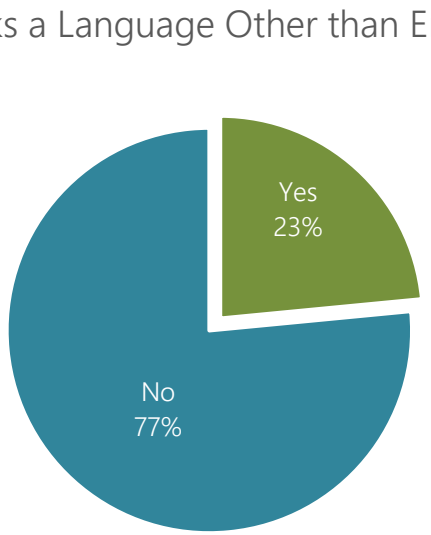
Most riders identified their race or ethnicity as White.

CORONAINSIGHTS

- The next largest racial or ethnic group in riders was Hispanic or Latinx followed by Asian.
- The racial makeup of riders was more diverse than the population of Fort Collins.



- Most riders do not speak a language other than English. The most common second language is Spanish followed by Arabic.
- Speaking a language besides English is more common among bus riders than the population of Fort Collins.



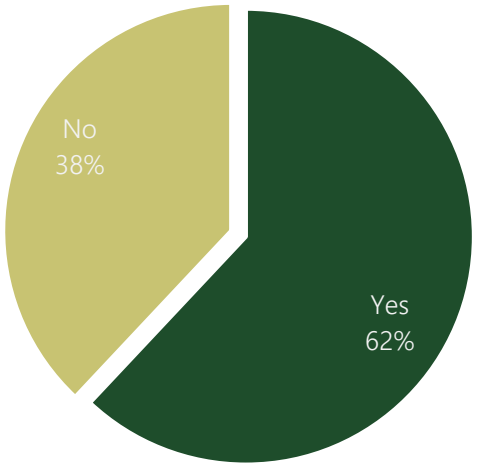
Q14:What is your race or ethnicity? (Select all that apply)
Q19: Do you speak a language other than English?

Nearly two-thirds of passengers were associated with CSU.

CORONAINSIGHTS

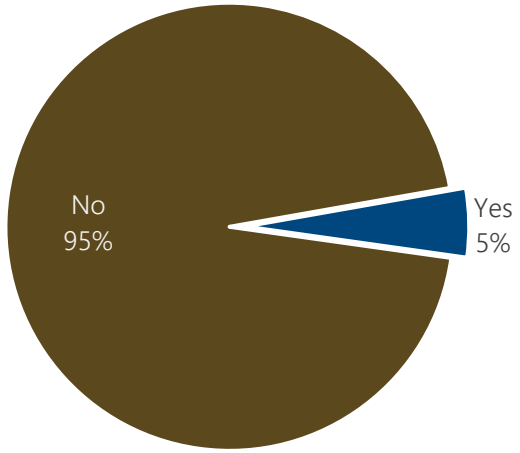
- Riders of Asian race and females were more likely than others to attend or work at CSU.

Attend or Work at CSU



- About one in every twenty passengers worked for the City of Fort Collins

Work for the City of Fort Collins

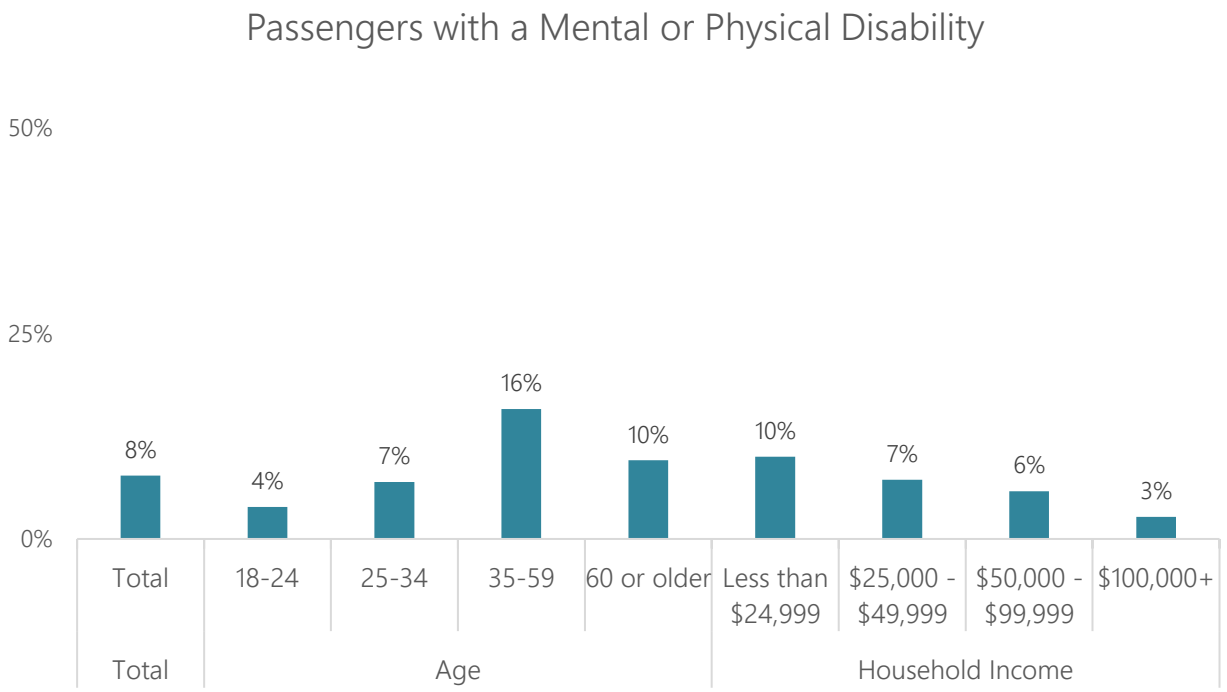


Q13.c: Do you attend or work at CSU?
Q13d: Do you work for the City of Fort Collins?

8% of riders indicated that they have a mental or physical disability, which closely mirrors the citywide population.

CORONAINSIGHTS

- About 7% of Fort Collins residents have a disability, according to U.S. Census Bureau data.
- Riders indicating that they have a mental of physical disability was highest in the 35–59-year-old age category.
- Passengers with lower household incomes were more likely to self-identify that they have a mental or physical disability.



Q13: Do you have a mental or physical disability?

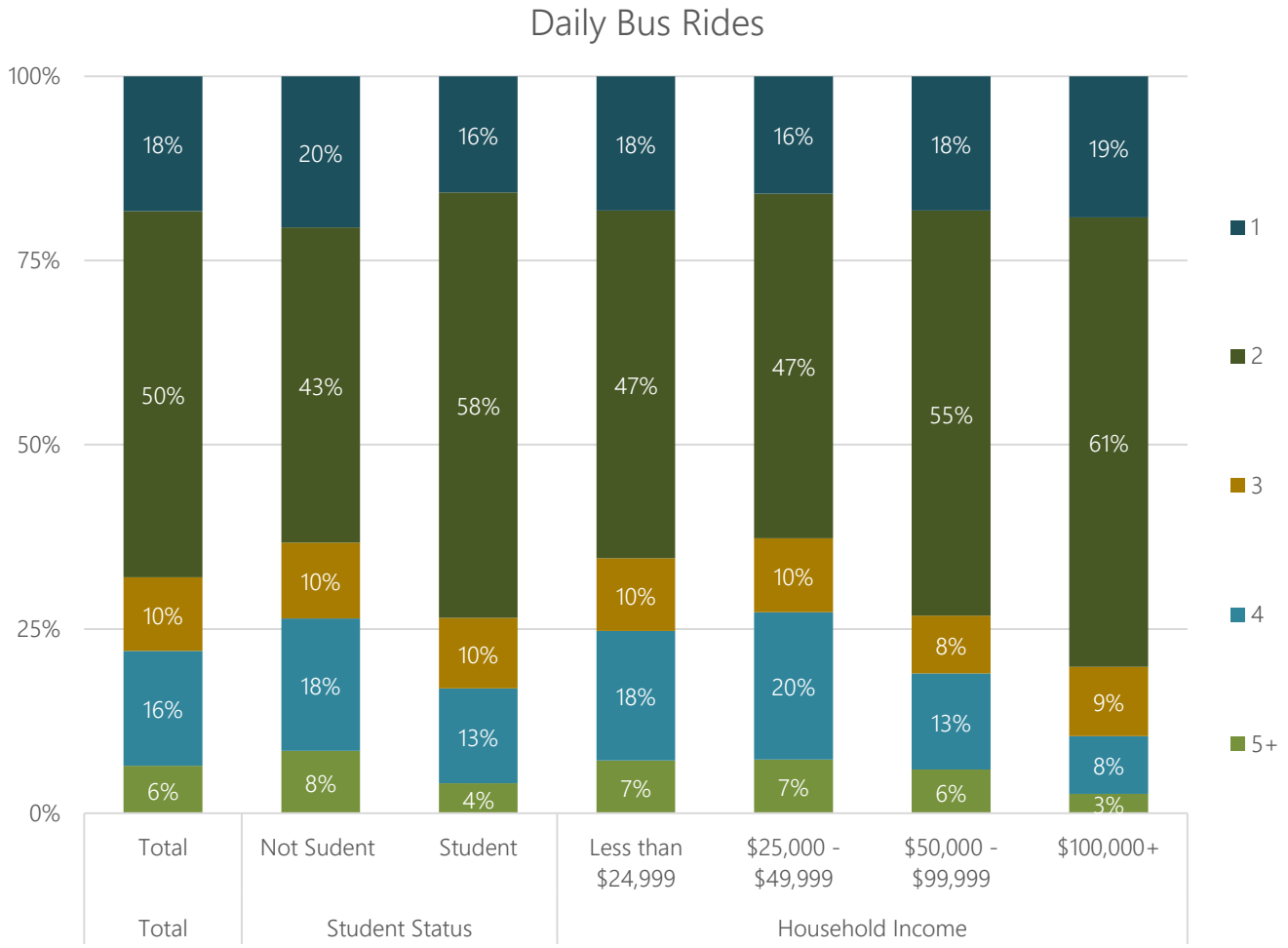
SECTION 2

TRIP FREQUENCY & DISTANCE

50% of passengers boarded the bus twice on days they ride.

CORONAINSIGHTS

- Riders with a household income below $50,000 took more bus trips in the same day compared to riders with incomes above $50,000.
- 25% of non-student passengers rode the bus more than 3 times a day, compared to 17% of students.
- With 50% of passengers boarding the bus only twice in a day, it is likely that most are taking round trips. This is also true of the "4 rides per day" category.
- Nearly 20% of riders were taking one-way trips by only boarding the bus once.

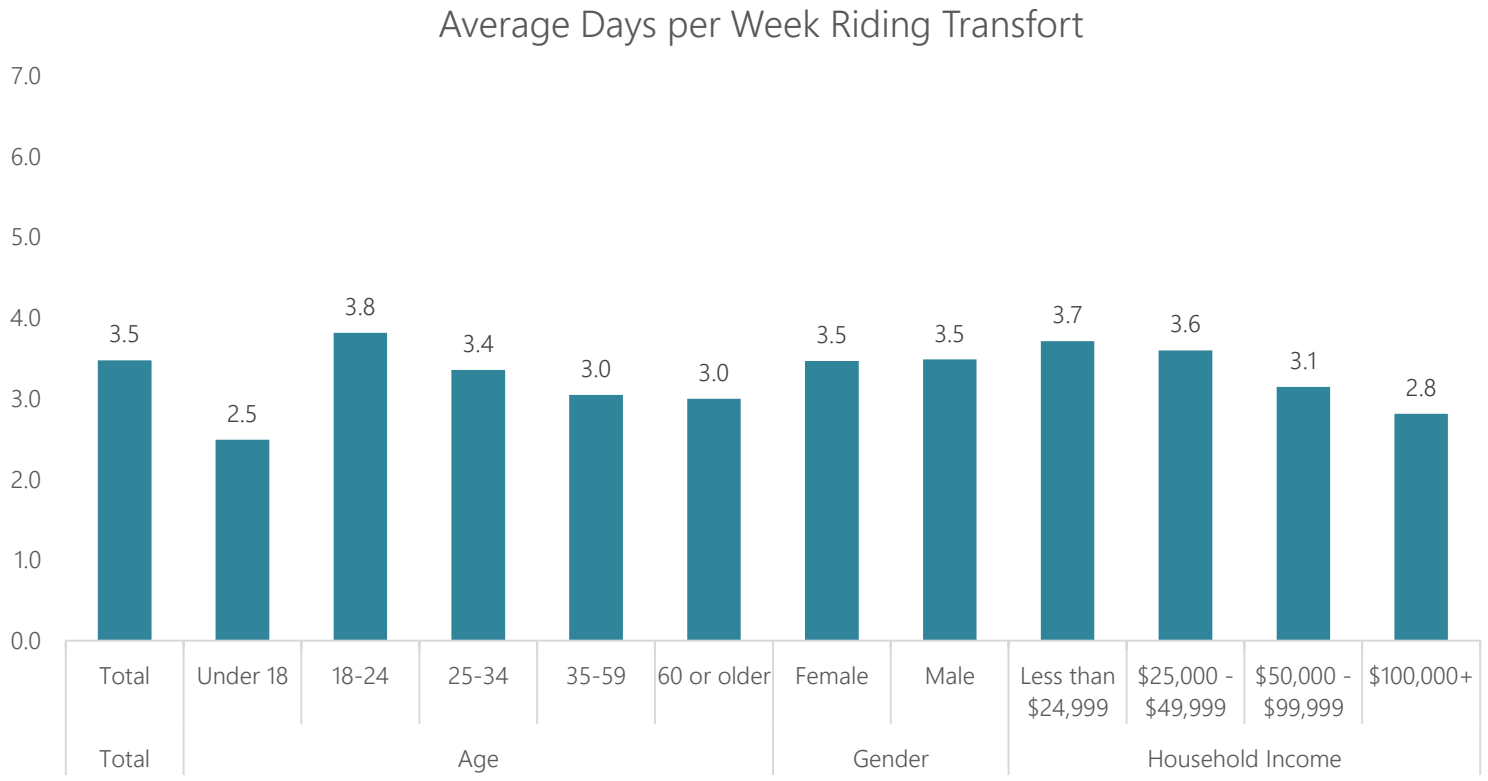


Q5: Including this time, how many total times will you board a bus today?

The average passenger rides Transfort 3.5 days per week.

CORONAINSIGHTS

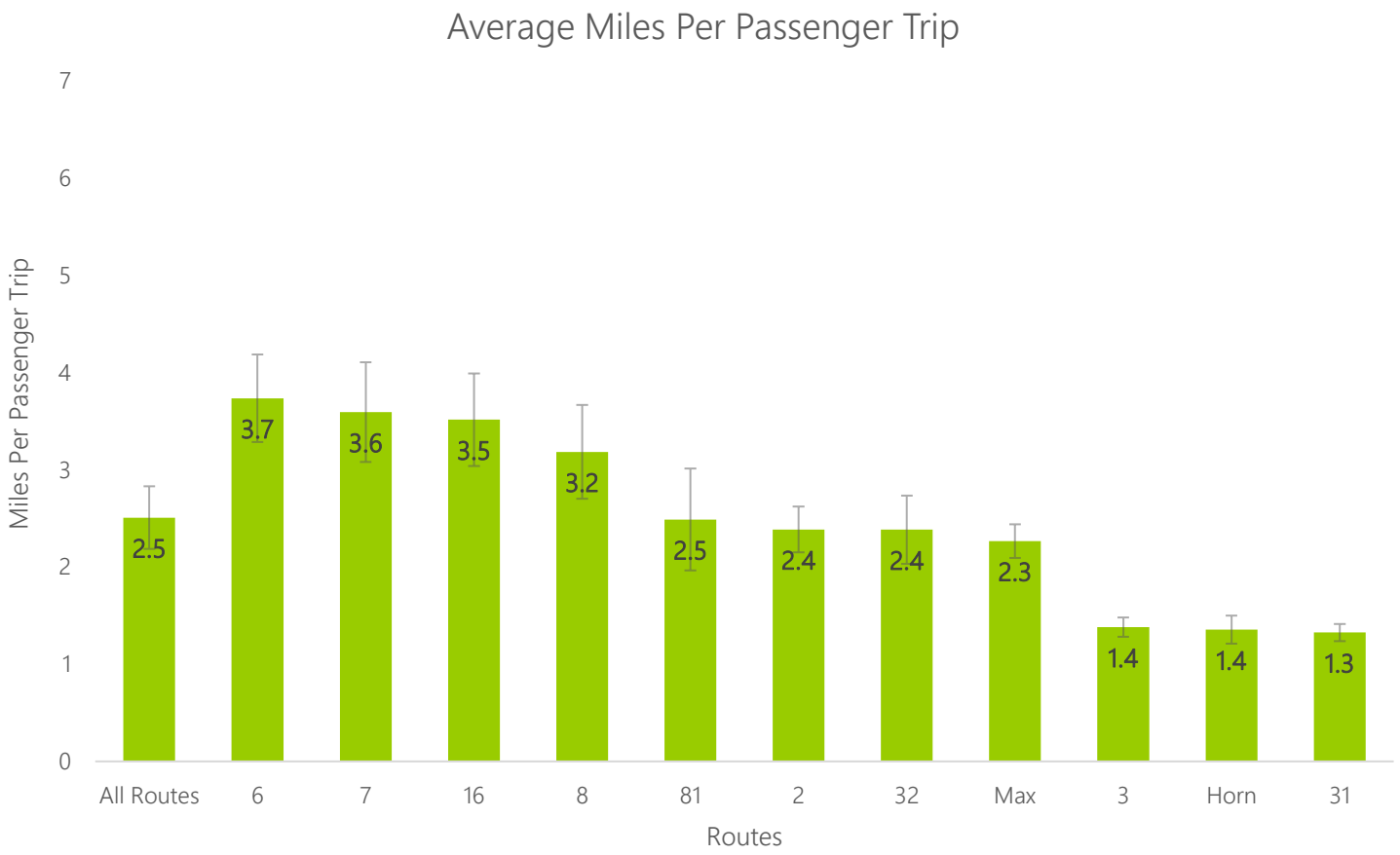
- Riding frequency was higher for 18- to 24-year-olds, passengers who live in low-income households, and students.
- Male and female riders rode the bus with similar frequencies.



Q7: Including today, how many days out of the past seven did you ride a Transfort bus?

The average passenger's trip distance was 2.5 miles.

CORONAINSIGHTS



- Routes 6, 7, 16, and 8 all had average trip distances greater than three miles.
- Additionally, passengers not associated with CSU rode more miles, on average (*not shown here*).

Note, grey bars represent upper and lower confidence intervals.

Q2: At what bus stop did you board this bus? (station name, cross-streets, or stop ID)

Q4: At what bus stop did you exit this bus? (station name, cross-streets, or stop ID)

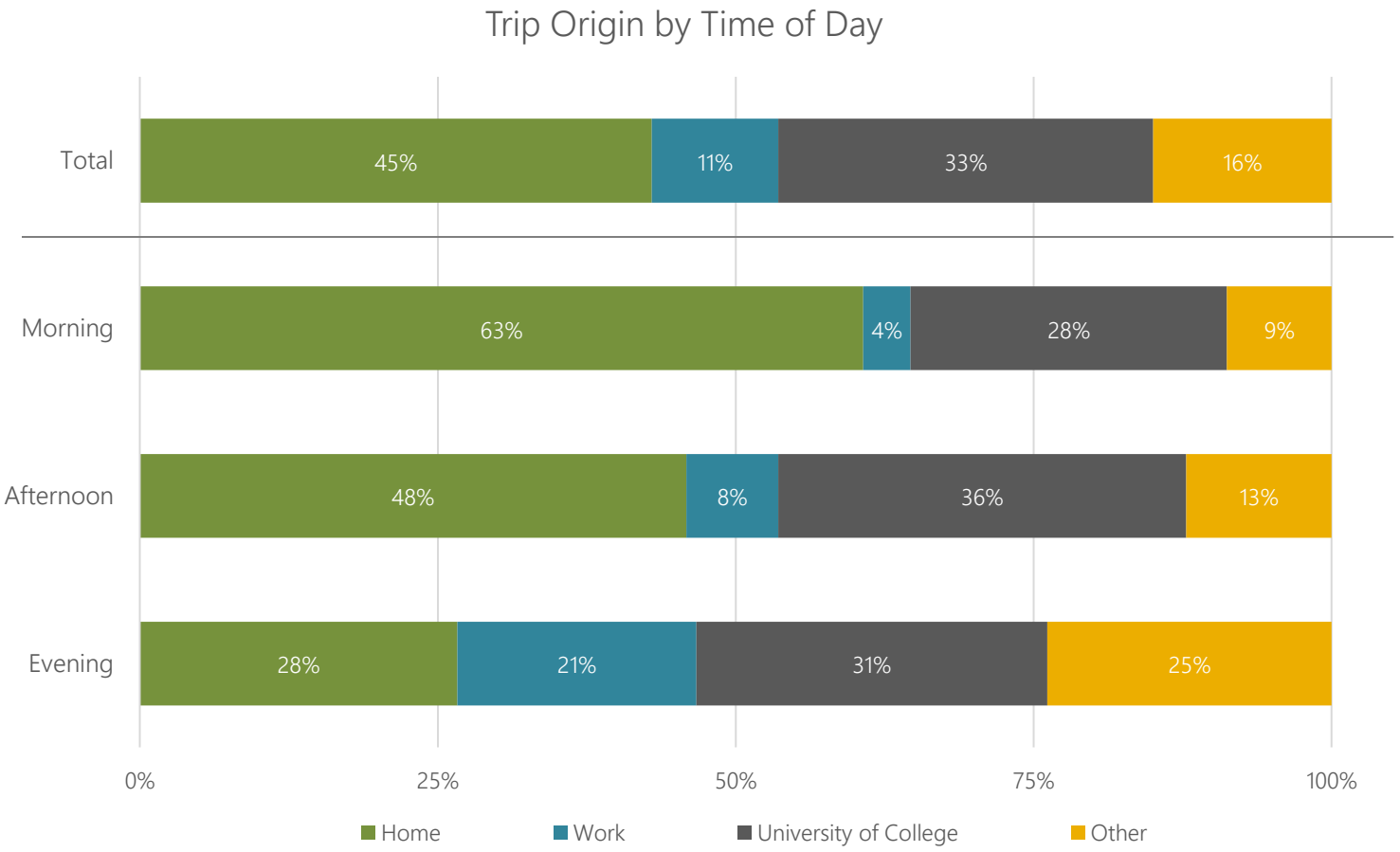
SECTION 3

TRIP PURPOSE

Throughout the day, trip origin changed from primarily beginning at home to beginning at work or school.

CORONAINSIGHTS

- The option of "Other" included stores, restaurants, K-12 schools the rider is attending, doctor's offices, food bank, entertainment, or a daycare or school the riders' child is attending.
- Passengers with a household income above $100,000 were the least likely group to originate their trip at home (*not shown here*).
- Males were more likely to be going to work than females (*not shown here*).

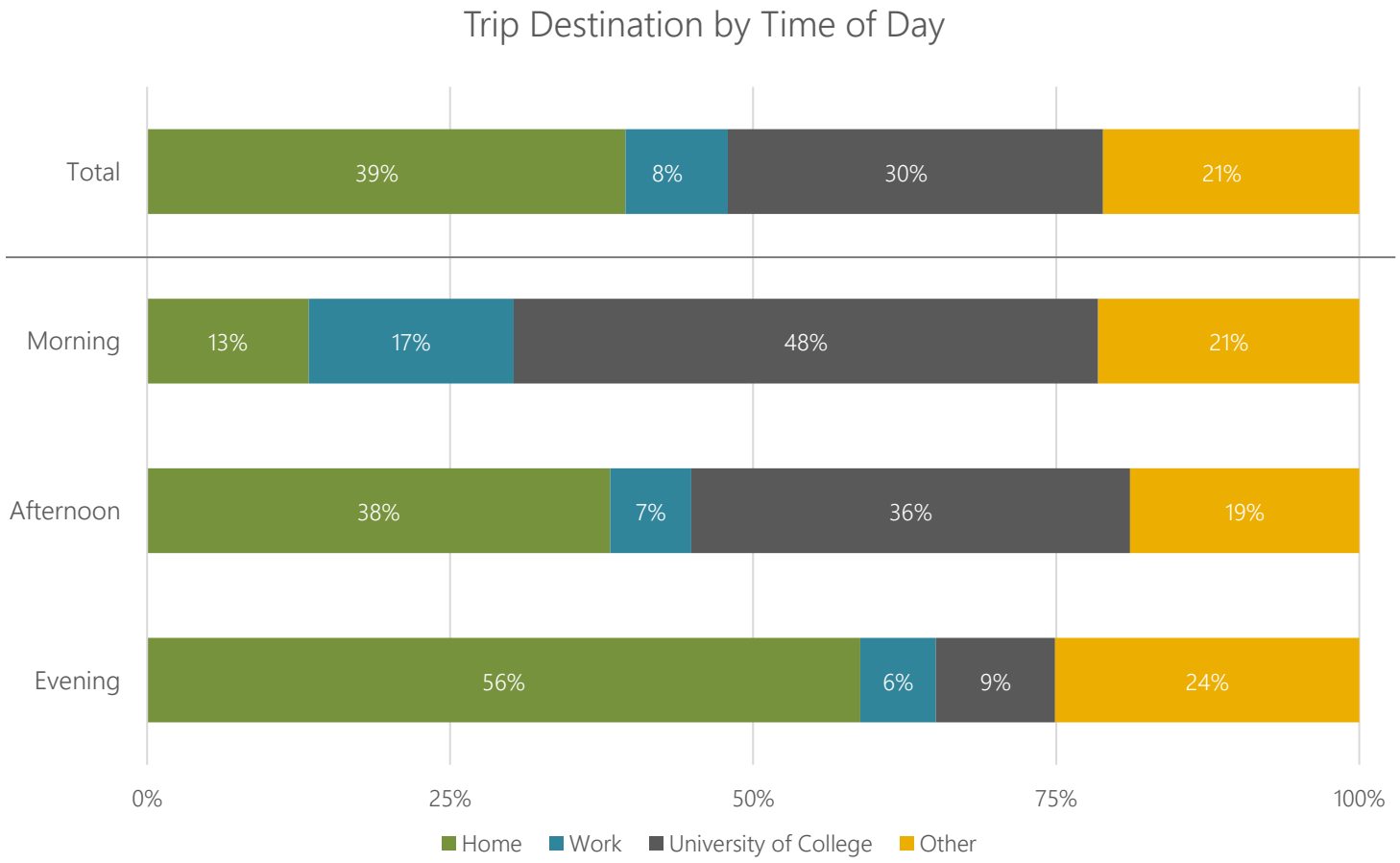


Q1: Where did you begin this trip?

Most evening passengers were heading home.

CORONAINSIGHTS

- 30% of all passengers were heading to a university or college.
- Riders under 18 were most likely to be going to the store or shopping (*not shown here*).
- The MAX Route was more evenly distributed across destination options compared to other routes in the system (*not shown here*).



Q3: Where will you end this trip?

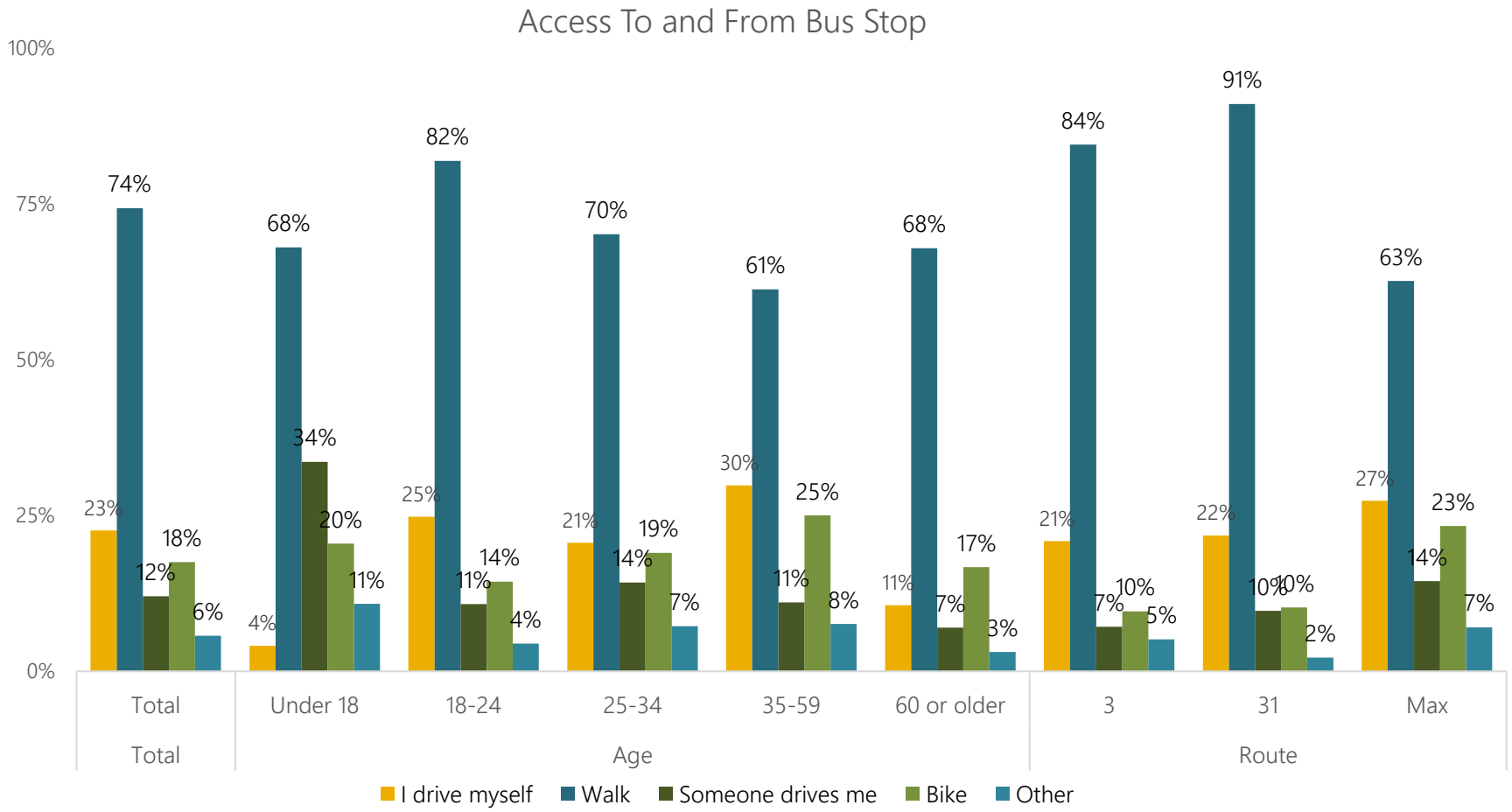
SECTION 4

BEHAVIOR

Regardless of age, most passengers walked to or from the bus stop.

CORONAINSIGHTS

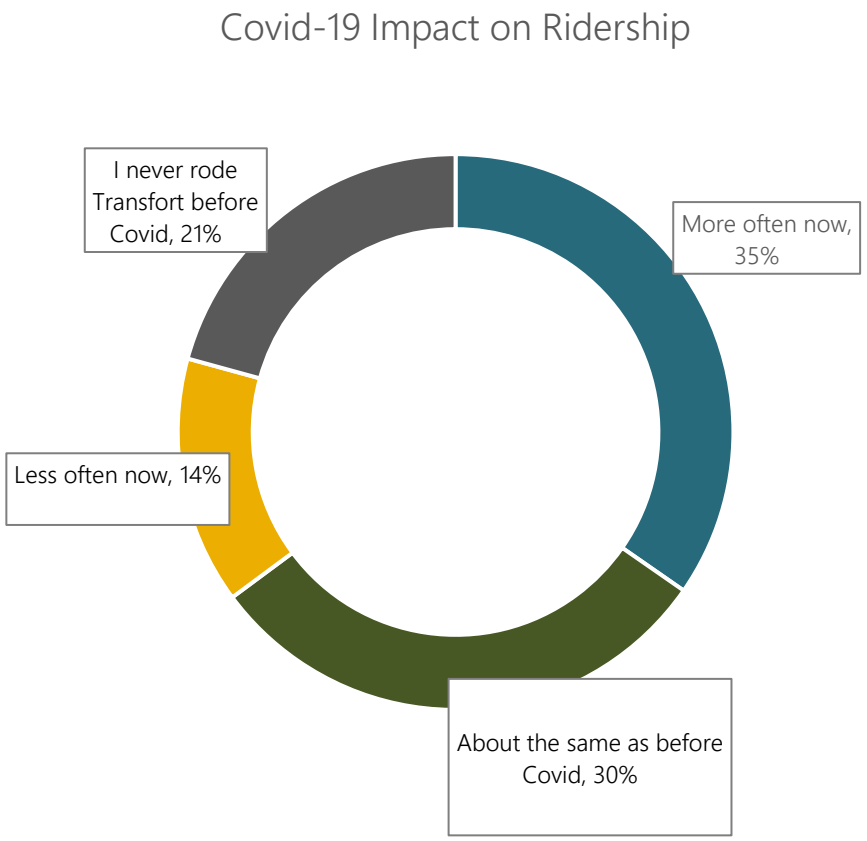
- Rider under 18 years-old were most likely to be driven to the bus by someone else, while other age groups were more likely to drive themselves.
- Males were more likely than females to bike to a bus stop (22% compared to 14%")
- Passengers from high income households ($100k+) were more likely than others to drive themselves to the bus stop.



Q6: How do you typically get to and from Transfort bus stops? (Select all that apply)

Covid-19 did not negatively impact passenger trip frequency.

CORONAINSIGHTS



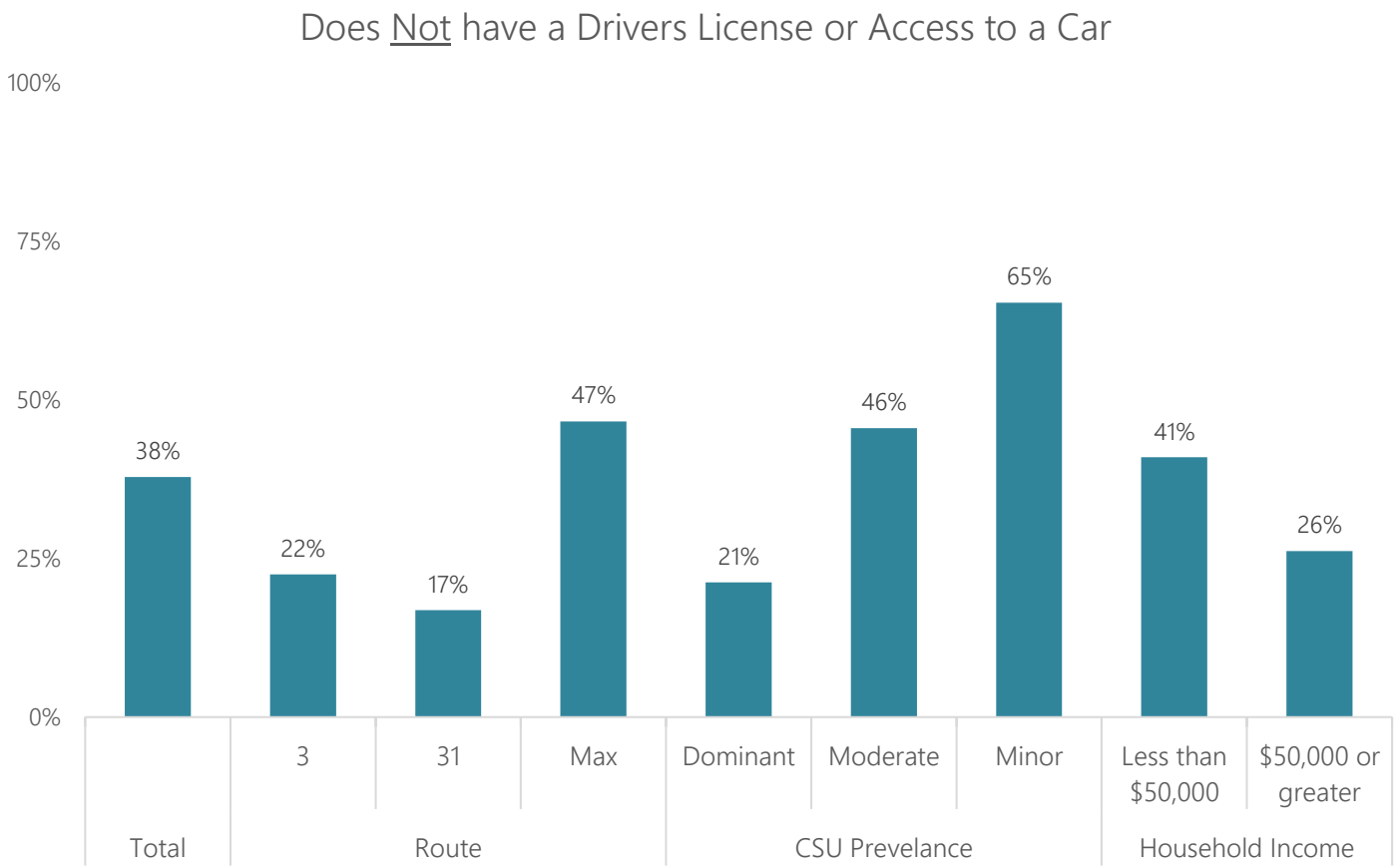
- 65% of passengers indicated that they were riding the bus an equal amount or more than they were before the Covid-19 pandemic.
- 21% of riders began utilizing Transfort buses after the Covid-19 pandemic.

Q8: How often do you ride Transfort buses now compared to before Covid (before March 2020)?

More than one third of passengers do not have a license and car.

CORONAINSIGHTS

- Nearly half of passengers on the Max did not have a drivers license nor a car.
- Passengers on routes that were not CSU prevalent were unlikely to have a license and car.
- Riders living in lower-income households were less likely to have a license nor a car.



Q13a: Do you have a valid driver's license and access to a car?

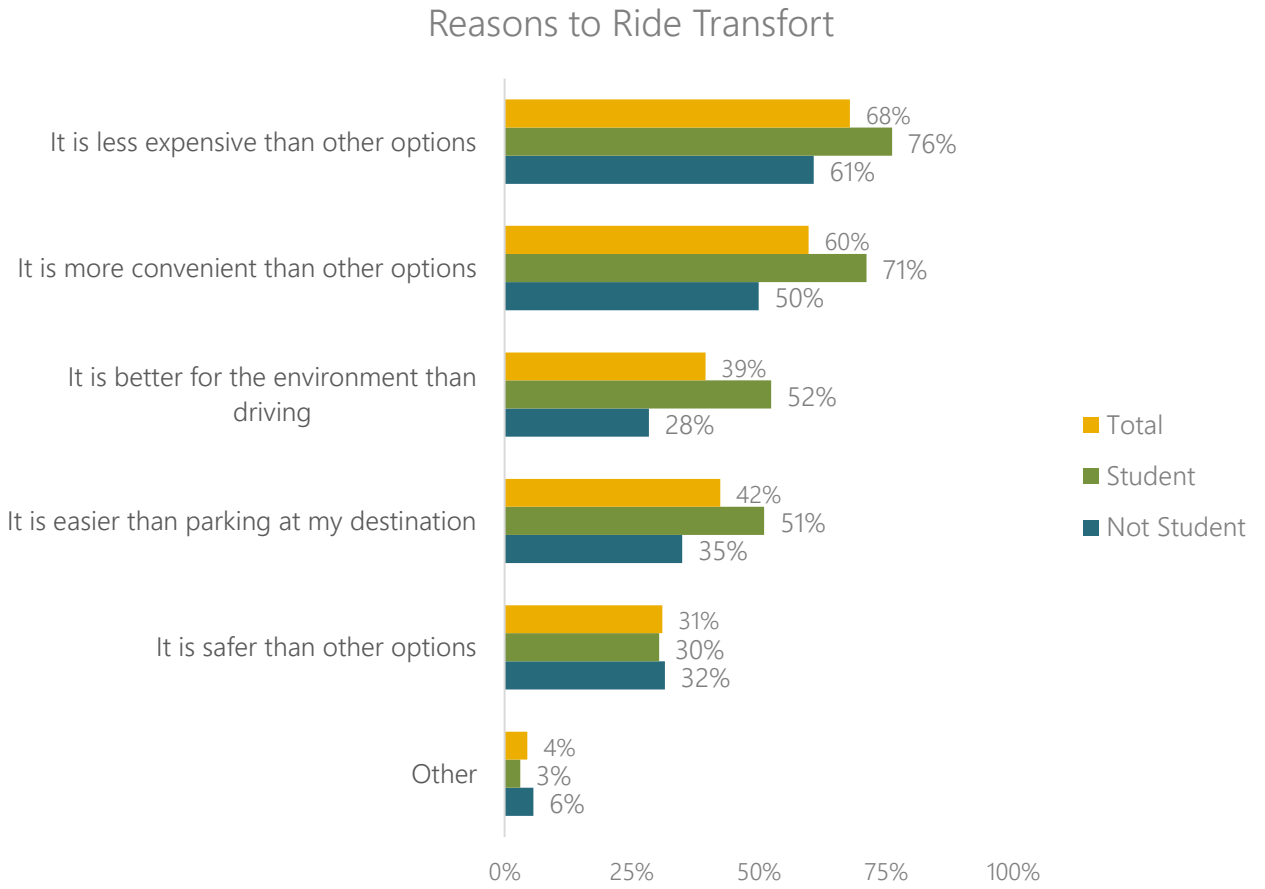
SECTION 5

OPINIONS

Convenience and price were the most common attributes passengers like about Transfort.

CORONAINSIGHTS

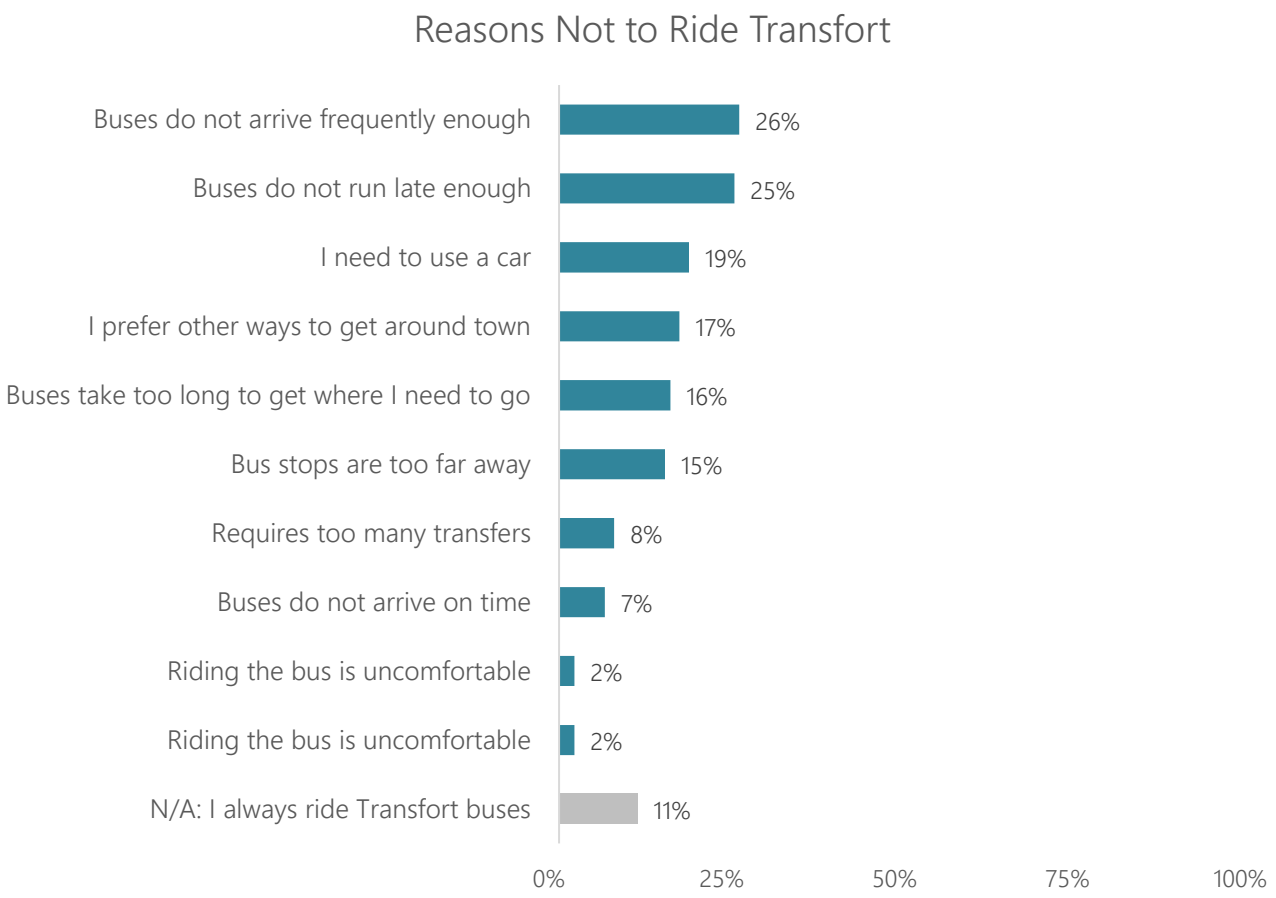
- Students were much more likely than non-students to say riding the bus was more convenient and easier than parking at their destination.
- Students were also more likely to say riding the bus was better for the environment.
- Additionally, 50% of females like that the bus is better for the environment than other transportation options, compared to 36% of males (*not shown here*).



Q9:What do you like about riding Transfort buses?

Schedule, frequency, and needing a car were the biggest barriers to using Transfort.

CORONAINSIGHTS



Additionally (*not shown in this graph*)

- Passengers ages 25-34 were more likely to say buses do not run late enough.
- Passengers with a household income above $100,000 were more likely to feel buses take too long to arrive at their destination.
- MAX riders were more likely to think stops are too far apart.

Q10:What are reasons you do not always ride Transfort?

Almost all passengers were satisfied with friendliness of bus operators, cleanliness of buses, bus reliability, and location of stops.

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- Among passengers who transfer between buses, most were either very satisfied or somewhat satisfied with the ease of transfers.
- Getting information from the Transfort website or app was the most common reason for dissatisfaction.

Q12: Please rate your satisfaction with Transfort's bus service.

A vast majority of passengers felt very safe riding a Transfort Bus.

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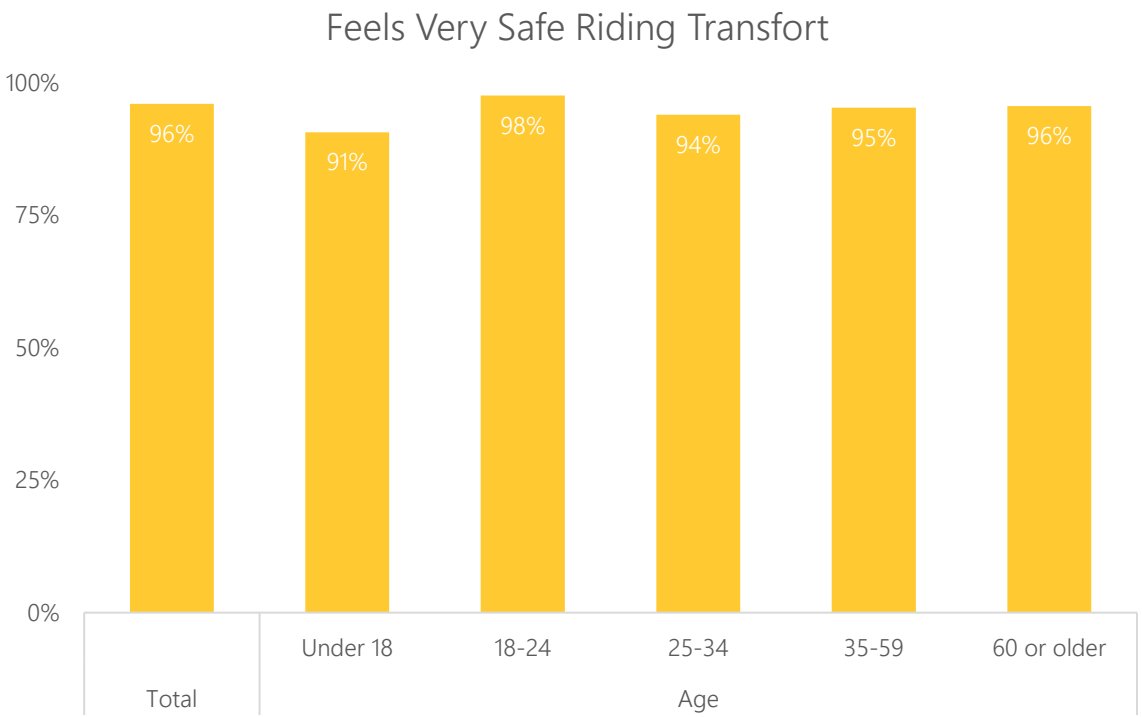
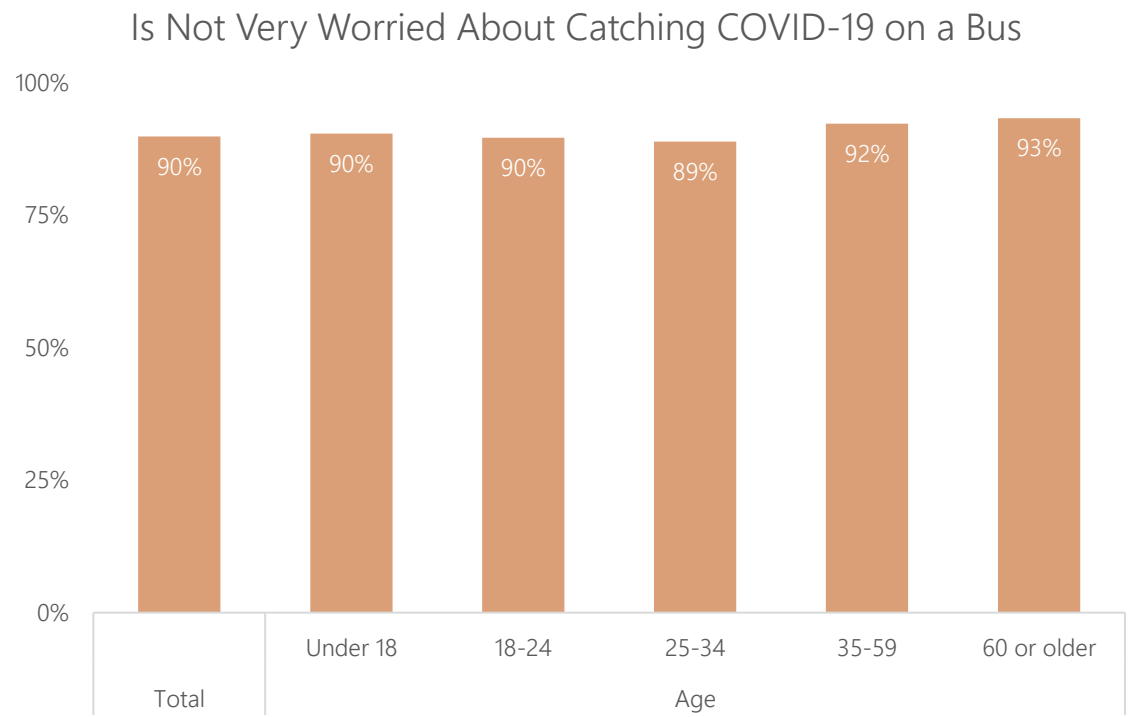
> Regardless of various demographic characteristics, almost all passengers felt very safe riding Transfort, and few were very worried about catching COVID-19 while riding the bus.





> However, feeling unsafe may be a barrier for people who do not ride Transfort, a population not studied in this survey.

Q13e. Do you feel very safe riding a Transfort bus?
Q13f: Do you feel very worried about catching COVID 19 while riding the bus?

MAX Riders preferred riding the MAX over other routes.

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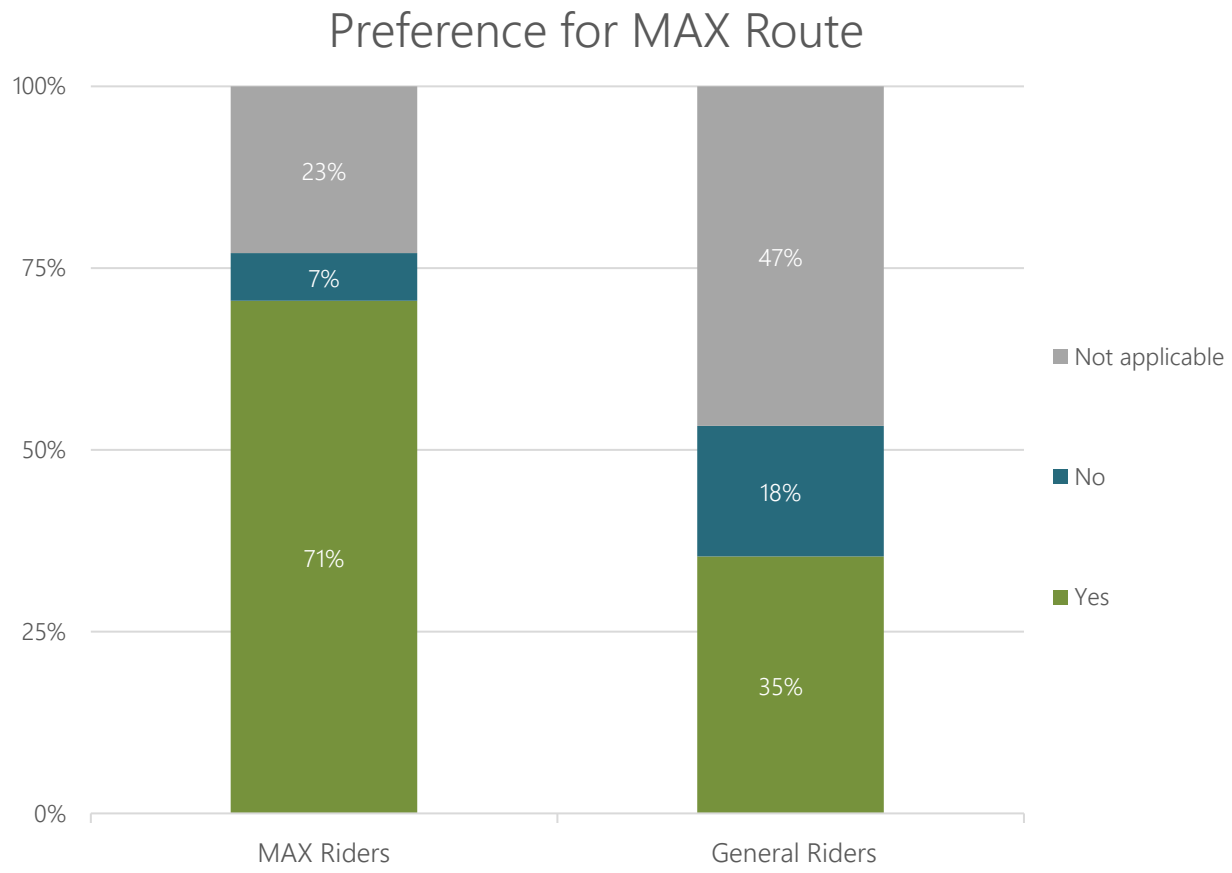


- 60% of riders 60 years or older preferred riding the MAX over other routes.
- 44% of men preferred the MAX while only 28% of women did.

Q11: Do you prefer riding the MAX route more than other routes?

APPENDIX A

METHODOLOGY

Survey Goals and Questionnaire Design

- The objective of the onboard passenger survey was to measure transit passengers' riding frequency, trip purpose, trip length, riding behavior, and demographics. It also sought to understand opinions about using fixed-route transit, such as satisfaction with service, areas for improvement, barriers to riding more often, and safety concerns.
- The project outcome is to guide and support Transfort planners and staff to make the smart decisions necessary to sustainably provide exceptional fixed-route transit service that will meet the community's transportation needs.
- Questionnaire design was a collaboration between Corona Insights and Transfort staff. Transfort provided an initial list of required topics and the questionnaire used in prior surveys. Corona Insights leveraged these resources to build a new questionnaire to meet project needs. Transfort provided input and feedback for several rounds of questionnaire revisions before a final questionnaire draft was agreed upon.
- The questionnaire was one sheet (8.5"x11"), double-sided, and available in English and Spanish. Questionnaires were printed on thick 100# cover cardstock paper to avoid the need to use clipboards.

Sampling Plan

Sampling is the process of deciding whom to invite to participate in the survey. Creating a good process that provides all riders with an opportunity to be invited to answer the survey questionnaire is foundational to producing results that reliably reflect the population of bus riders.

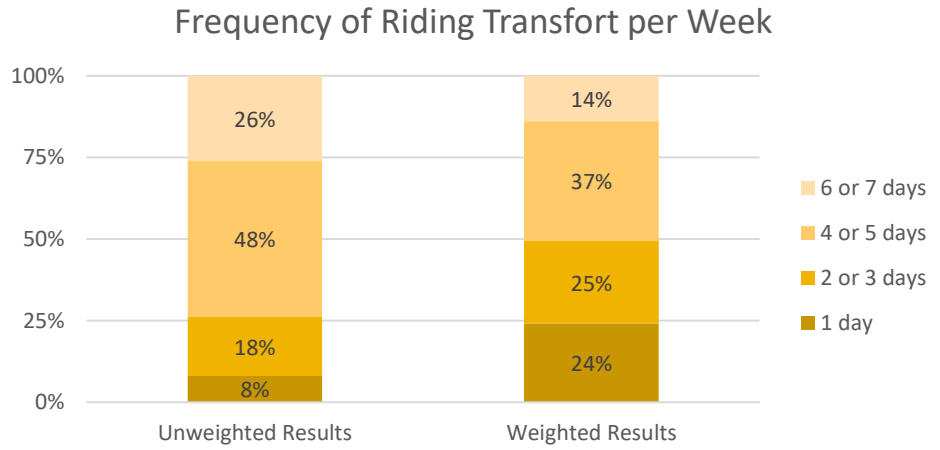
- It was expected that ridership patterns differed dramatically by route. Therefore, fall of 2019 ridership data were analyzed to understand and predict the distribution of bus rides by route, day of week, and time of day. In 2019, rides were much more frequent on weekdays than weekends, but they were distributed nearly equally by time of day (i.e., morning, afternoon, evening).
- The results of this initial planning analysis were used to determine the proportion of total surveying hours that would be devoted to each route by day of week.
- A random number generator was used to assign data collection shifts. Routes 11, 12, and Gold were excluded because they did not operate during the study period. Additionally, all Sunday routes had been suspended during the study collection period and were therefore excluded from the sampling plan.
- 100 data collection shifts were initially assigned in total, with more shifts devoted to busier routes, such as the Max.
- The primary objective of this sampling approach was to collect passenger data that represented all riders. The secondary objective was to collect enough data to provide results segmented by as many routes as possible.

Scheduling and Data Collection

- Once data collection shifts were assigned to each route, specific surveyor schedules were developed, including bus board and exit times and locations.
- Four data collectors were initially hired and trained on how to execute the onboard survey, and one additional data collector was hired and trained after the first week of data collection. The total number of data collectors hired was less than half the expected number due to a shortage of temporary staffing. Therefore, data collection was extended from one week to two weeks.
- Surveyors were taught how to invite bus passengers to participate in the survey and how to track the number of responses and refusals they received on each shift. To help reduce refusals, if passengers declined to complete the survey, surveyors described that survey participants were eligible for a chance to win a $100 gift card. No more than two attempts were made to collect a survey response from any rider.
- The survey period ran from Friday, September 24 through Thursday, October 7, and responses were collected between 6:30am to 7:30pm. Due to staffing shortages, only 53 of the 100 scheduled shifts were staffed. However, at least two four-hour shifts were completed on every route except for the 19 and the 92, on which one shift was completed for each.
- Surveys collected on interline routes (i.e., 05/14/18, 09/10, and 31/32) were bundled together in their interline group.
- At the completion of each shift, surveyors recorded shift details: date, surveyor name, route, board and exit time, number of surveys collected, number of refusals, and other comments. Completed questionnaires and a cover sheet were sealed in envelopes for each shift.
- All completed survey data and associated metadata were entered into a survey analysis software program.

Sample Size, Response Rate, and Data Weighting

- In total, 1,746 surveys were collected from bus passengers. Of these, 17 surveys were mostly incomplete (i.e., were not answered past Q7) and were excluded from further analysis. The final sample included 1,729 usable responses. Seven passengers completed the Spanish language version.
- Most bus riders (75.4%) who were asked to complete a survey cooperated. There was little difference in cooperation rate among morning, afternoon, and evening shifts. However, cooperation rate did differ by data collector, ranging between 55% and 85%.
- The accuracy of survey results of an intercept survey relies upon the likelihood that each bus rider will be equally likely to be invited to participate in the survey. Randomly assigning data collection shifts to buses by time of day helped ensure equal opportunity. However, because frequent bus riders were on the bus more often, they were more likely to be surveyed than infrequent riders.
- We corrected for this potential sampling bias by statistically balancing (i.e., weighting) the selection probability of passengers based on the number of days each respondent rode the bus in the prior week. That is, since infrequent riders were less likely to be surveyed, their responses were given more influence in the results.
- The table below shows the difference in distribution of rider frequency between unweighted and weighted data. The weighted data better represents all riders.



Data Weighting (continued) and Margin of Sampling Error

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- Besides correcting for sampling probability, data were also weighted to balance the percentage of responses by route to the percentage of total system ridership on each route.

Route	Total responses collected	Ridership during study period	Representation in the results
02	8%	5%	5%
03	12%	12%	12%
5/14/18	5%	7%	7%
06	3%	2%	2%
07	4%	2%	2%
08	4%	4%	4%
09/10	2%	2%	2%
16	3%	2%	2%
19	1%	2%	2%
31	12%	15%	15%
32	5%	4%	4%
81	3%	2%	2%
92	<1%	<1%	<1%
FHS	<1%	<1%	<1%
Flex	3%	5%	5%
Horn	6%	9%	9%
Max	28%	27%	27%
All Routes	100%	100%	100%

- The margin of sampling error is an estimate of the precision of the survey results. For top-level results, the margin of sampling error was ±3.0% within a 95% confidence interval. This means that if the survey was conducted 100 times, we would expect 95 of the new estimates to be within three percentage points of the parallel estimates in this repot.
- Margin of sampling error estimates for segments are larger than the top-line estimates relative to the number of responses per segment.
- All margin of sampling error estimates account for weighting effects; margin of error estimates increase in relation to the size of the statistical weights.

Additional Files

Two separate files that provide additional detail and context supplement this report.

Analysis Tables

Tabulation and crosstabulation analysis tables for each question and verbatim responses to open-ended questions (Excel format)

Questionnaire Documents

Questionnaire in English and Spanish (PDF format)

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