

TRANSFORT



2022 ONBOARD SURVEY FINDINGS

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EXECUTIVE SUMMARY

About this Survey

CORONAINSIGHTS

A system-wide survey of bus passengers was conducted in September 2022 to measure riders' behaviors, opinions, and demographic characteristics. Key survey details are highlighted below. A complete description of the methodology is found in the <u>Appendix</u>.

Questionnaire: Two-page bilingual questionnaire (English and

Spanish).

Sample size: 1,383 survey responses were collected.

Cooperation rate: Most passengers (70%) who were asked to

complete a questionnaire did so.

Sampling: Bus routes were sampled proportional to

expected ridership. Every rider who boarded a

sampled bus was eligible to participate.

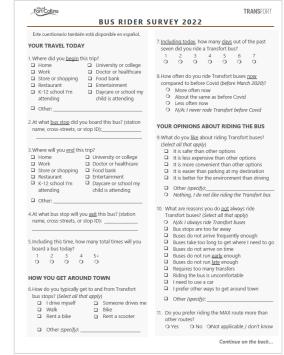
Weighting: Data were weighed to reflect route patterns

and ridership frequency.

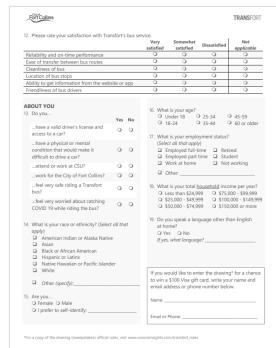
Margin of error: The estimated margin of sampling error for

systemwide results was ±3.4% within a 95%

confidence interval.



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



Passenger Information

CORONAINSIGHTS

Rider Profile

Age: Bus passengers tended to be young; half were 18 to 24

years old. However, the percentage of riders age 35 or

older increased by 30% compared to 2021.

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 passengers were either students (46%), worked

part-time (35%), or worked full-time (23%). Workers were more common and students less common in

2022 than 2021.

Income: Nearly half of passengers had annual household

incomes below \$25,000.

Riding Behavior

Access: Most (73%) passengers walked to get to or from the bus

stop, although for MAX riders, driving to/from the bus

stop was just as common as walking.

Boardings: Half of passengers boarded the bus 2-times a day. Those

who rode more days per week also boarded more times

per day.

Frequency: The average passenger rode 3.5 days per week. Those

who rode more days per week also boarded more times

per day.

Length: The average passenger's trip length was 2.7 miles. Non-

students rode more miles, on average, than students.

Purpose: Besides "home," the most common origin/destination was

a college/university.



Similar to previous research findings, the primary motivations for riding Transfort were personal convenience and saving money. Environmental benefit and safety were less common reasons for riding.



The percentage of passengers who rode Transfort because it was easier than parking increased from 40% in 2021 to 51% in 2022. This increase was stronger among students than non-students and strongest on CSU dominant routes like the 03.



Frequency (days riding Transfort in the last week) was related to many other variables. The average number of bussing days was higher for students than for non-students, higher for those age 18-24 than age 35+, higher for people with a household income below \$25,000 than above, and higher for those who speak a language other than English.

Barriers and Pain Points



Akin to 2021, in 2022 the most common barriers to riding more often were infrequency of buses and buses not running late enough. The barrier of infrequency of buses ticked up from 28% in 2021 to 31% in 2022.



Few passengers (11%) felt very concerned about catching Covid while riding the bus. Additionally, few (12%) worried about being bothered by other passengers on the bus. These beliefs appear to be commonly held across demographic groups.



The most common pain-point (8% of riders) was getting information from the Transfort website or app. This pain-point was most common among passengers age 18 to 25.



Location of bus stops was a more common pain-point for passengers on the 06 and 07 routes (whereas passengers on the 03 were very satisfied with the location of bus stops).

Additional Findings

CORONAINSIGHTS

81% **§** 3 pts



of riders were very satisfied with the friendliness of bus operators

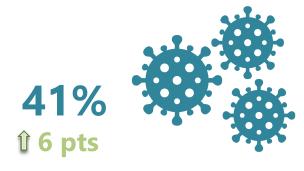


of passengers did **not** have a drivers license and car

44% û17 pts



of MAX riders typically drove to/from the bus stop



of passengers were riding the bus more often now than before Covid

73%

1 pts



Most passengers walked to or from bus stops

24%

1 pts



of passengers **spoke a** language other than English

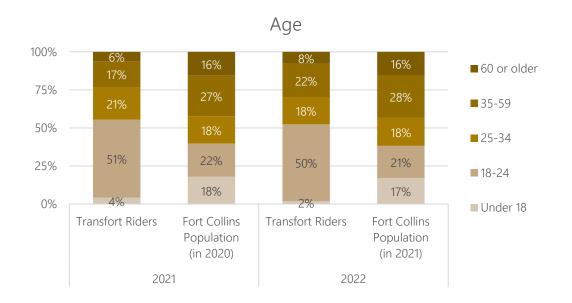
DETAILED FINDINGS

PASSENGER DEMOGRAPHICS

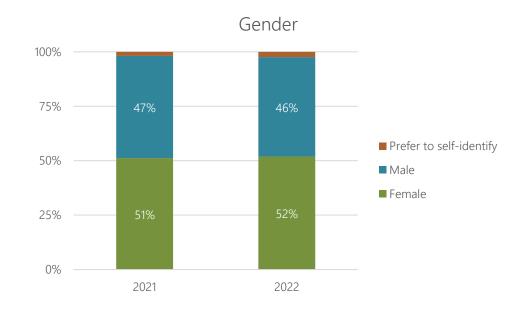
CORONAINSIGHTS

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

- Compared to the general population of Fort Collins, Transfort riders continued to trend much younger.
 - While the 18-24 age group represents half of riders, it represents only two-fifths of the total Fort Collins population, according to U.S. Census data.



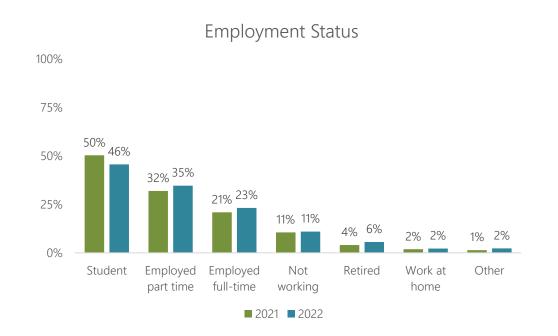
- Gender breakdown was close to the general population split, with a slight prevalence of women riding Transfort.
- > There were no notable year-to-year differences.

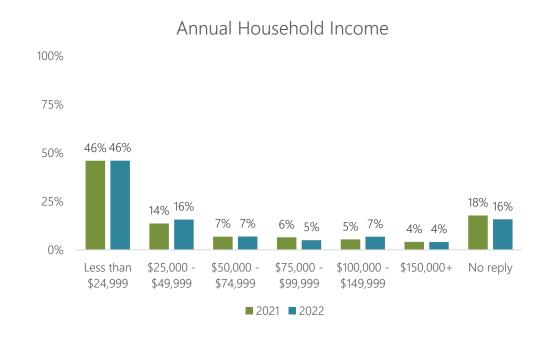


Almost half of riders were students.

CORONAINSIGHTS

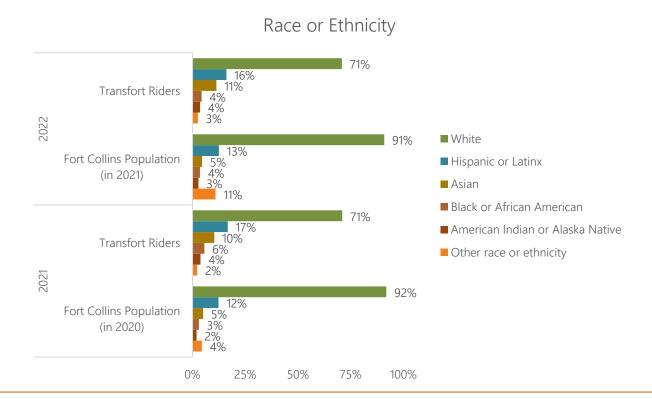
> Being a student was the most common employment status for Transfort riders, but students were a slightly smaller percentage than in 2021. > Of Transfort riders, it was most common to have a household income of less than \$25,000.



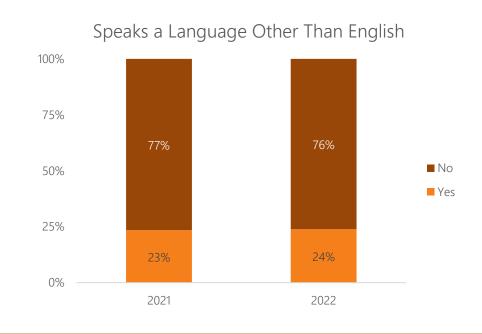


Most riders identified their race or ethnicity as White.

- > The racial makeup of riders was more diverse than the population of Fort Collins.
- There were no notable year-to-year differences.



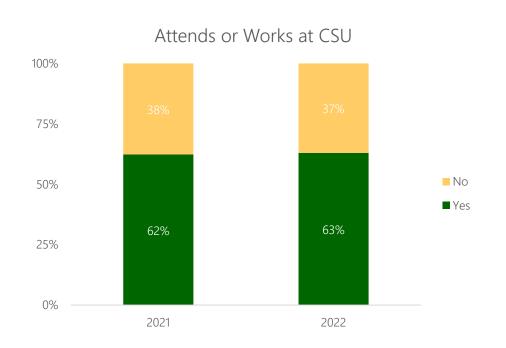
- Nearly one quarter of bus riders speak a language other than English, most often Spanish.
- > Speaking a language besides English was more common among bus riders (24%) than the population of Fort Collins (12%).



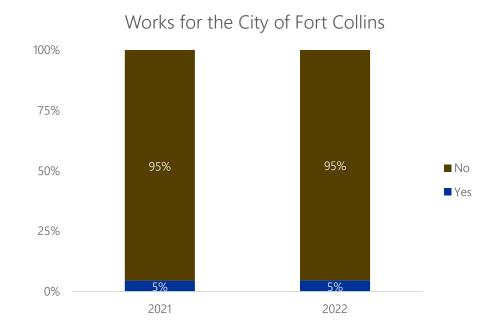
CORONAINSIGHTS

There was no change in the percentage of riders associated with CSU or working for the City of Fort Collins.

> Similar to 2021, females and Asian passengers were more likely than others to attend or work at CSU.

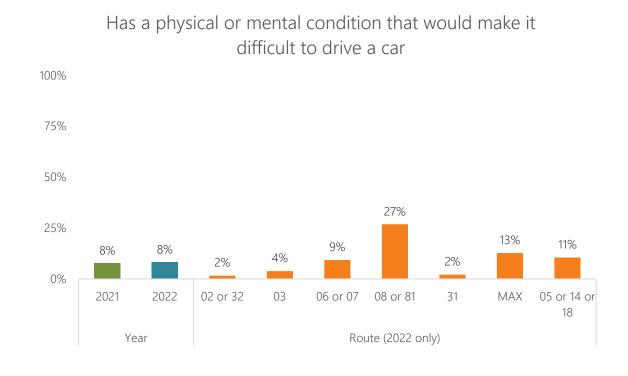


About one in every twenty passengers worked for the City of Fort Collins, which was the same ratio as 2021.



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

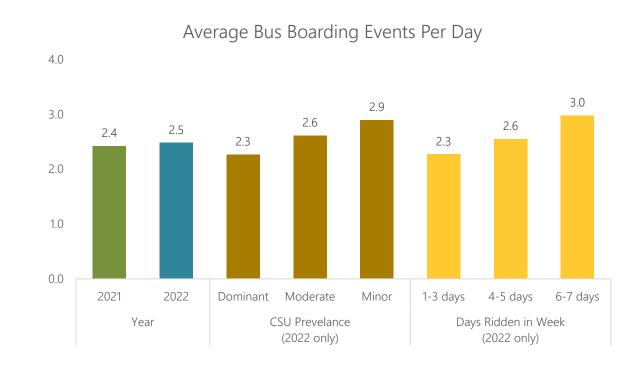
- > About 9.1% of Fort Collins residents have a disability, according to U.S. Census Bureau data.
- > Riders on the 08 or 81 routes were more than three times as likely as riders overall to report having a disability.



TRIP FREQUENCY & DISTANCE

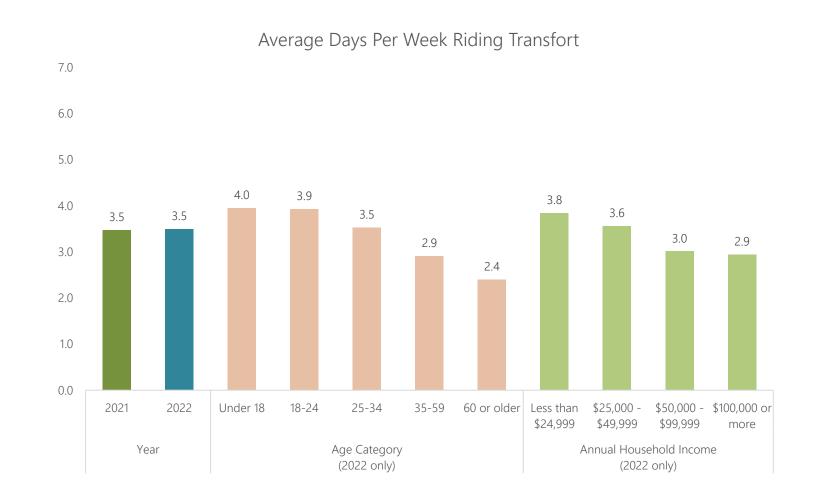
On average, passengers boarded a bus 2.5 times on days they rode. CORONAINSIGHTS

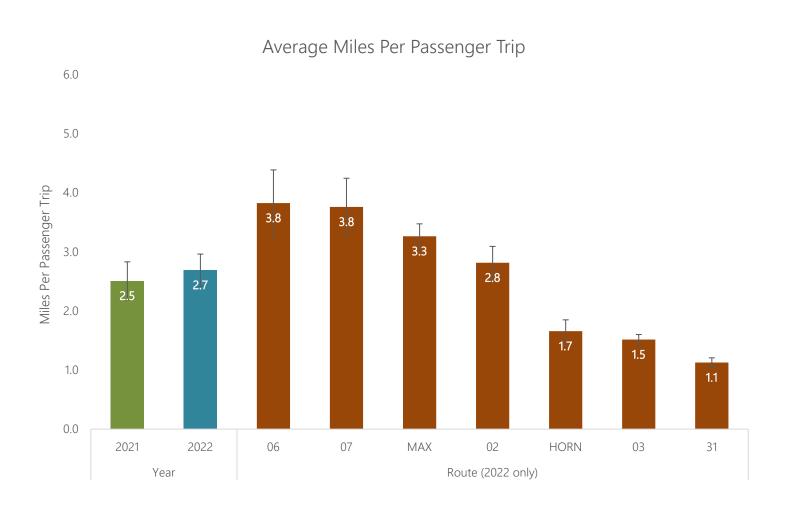
- Boarding a bus two times a day (likely one round trip) appears to be more strongly associated with CSU dominant routes like the 02 and 31.
- Passengers on routes with little connection to CSU boarded a bus almost three times on days they rode, on average.
- Number of boardings per day was positively related to number of days ridden per week. Passengers who rode more days per week tended to board more buses per day.



The average Transfort passenger rode 3.5 days per week.

- > Riding frequency was related to age and income.
 - Younger passengers tended to ride more often than older passengers.
 - Passengers in households with less income tended to ride more often than passengers in households with higher income.





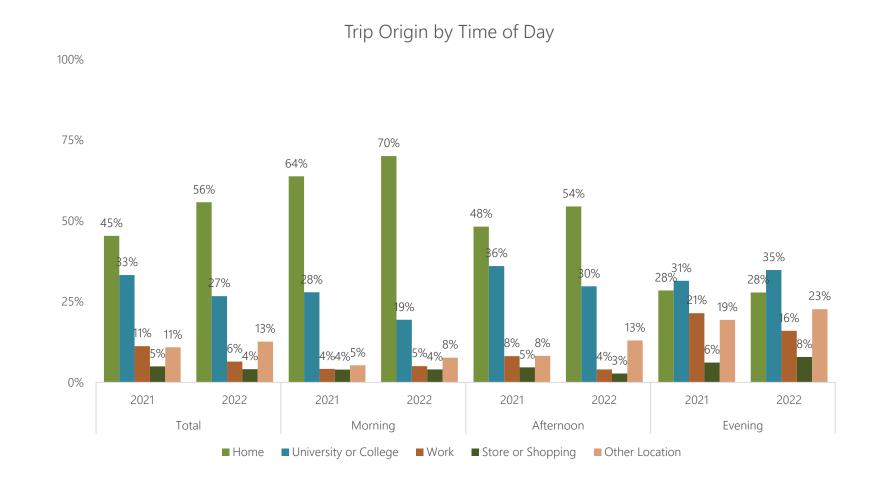
- The average trip distance in 2022 was 2.7 miles, up slightly from 2021, although this difference was not statistically significant.
- > Routes 06, 07, and the MAX all had average trip distances greater than three miles.
- > Additionally, non-students rode more miles, on average, than students (*not shown here*).

Note, grey bars represent upper and lower confidence intervals.

TRIP PURPOSE

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

- Although riding the bus for shopping was not common, it was more common in the evening than the morning or mid-day.
- > The "Other Reason" category included restaurants, K-12 schools the rider is attending, doctor's offices, food bank, entertainment, or a daycare or school the rider's child is attending.
 - Additionally, some passengers wrote in human service-related reasons (e.g., homeless shelter); others wrote in corrections-related reasons (e.g., work release).



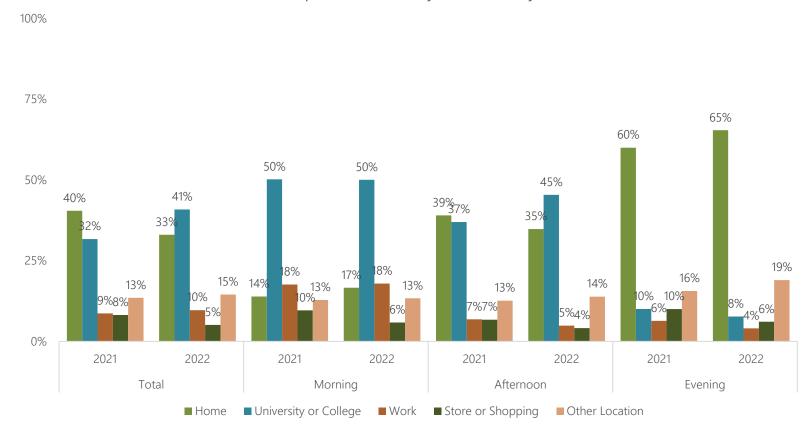
Q1: Where did you begin this trip?

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Most morning passengers were heading to university/college; most evening passengers were heading home.

Trip Destination by Time of Day

- In 2022, 41% of passengers were heading to a university or college, which was an increase from last year.
 - This change from 2021 may be in part due to collecting more surveys from morning shifts on CSU dominant routes in 2022 than in 2021



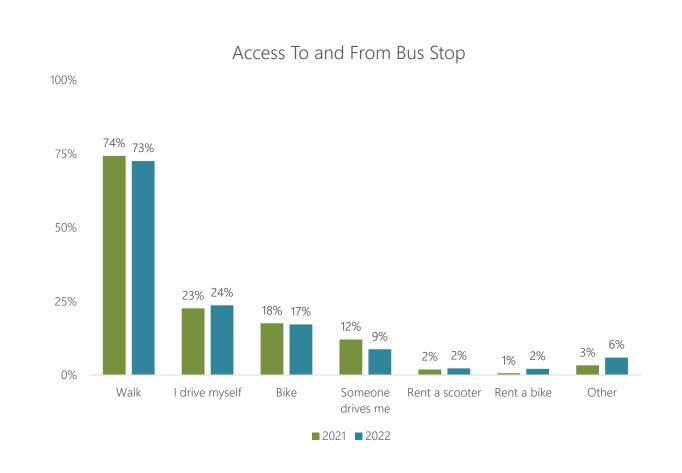
Q3: Where will you end this trip?

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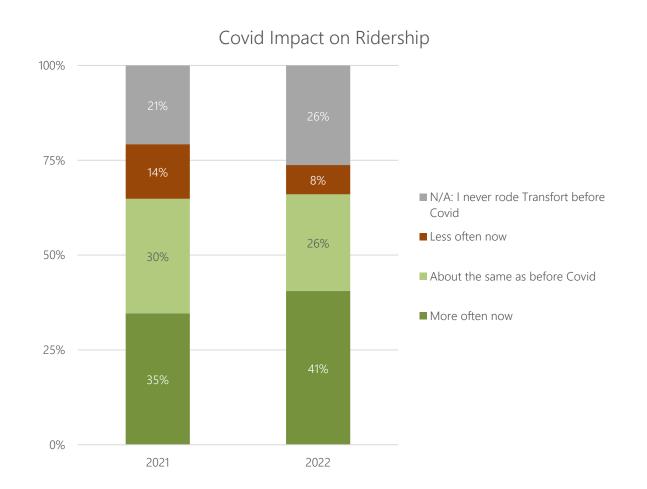
SECTION 4 BEHAVIOR

Most passengers walked to or from the bus stop.

- > Three-quarters of passengers typically walk to and from the bus stop, while about one-quarter drives and one-fifth bikes to and from the bus stop.
 - Females were more likely to walk and males were more likely to bike (not shown here).
- Renting a scooter or renting a bike is still an uncommon way to get to a bus stop. However, some respondents wrote in that they use their personal scooter to get to the bus stop. Others will skateboard to and from the stop.
- > Access to stops differed by route (not shown here).
 - Almost half (44%) of MAX passengers drove themselves to the bus stop; this was almost twice as high as the overall percentage.
 - A relatively high percentage of riders (39%) on the 05/14/18 routes biked to and from the bus stop.



More passengers are riding Transfort "more often now" compared to pre-Covid.



- > Just over two-fifths of passengers rode Transfort more in Fall 2022 than they did before Covid (i.e., before March 2020).
- Less than 10% of current passengers say they are riding less often now than before Covid.
 - What this does not represent, however, is the proportion of former riders who have not restarted riding Transfort since Covid.
- Also, a greater proportion of passengers were not riding Transfort before Covid. This difference between years is partly due to the number of current college/university student passengers who were not attending higher education before Covid.

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

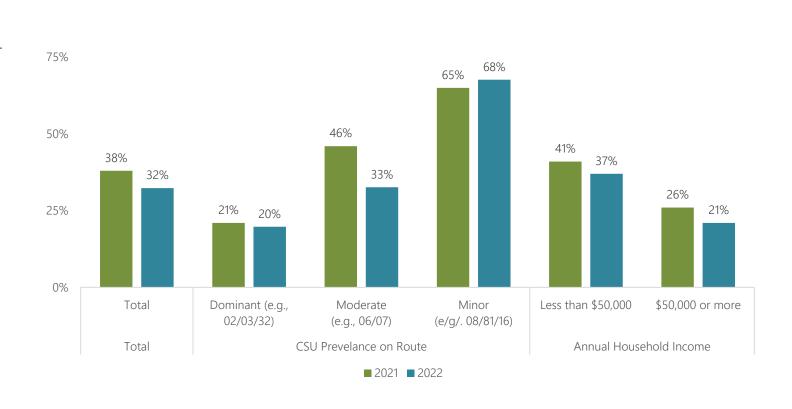
100%

CORONAINSIGHTS

Passengers without a license and access to a car may be more likely to rely mostly on Transfort for their transportation.

- Akin to 2021, passengers on routes that were not CSU prevalent (e.g., routes 08/81/16, etc.) were again less likely to have a license and car.
- > Riders living in lower-income households were less likely to have a license or a car.

Does Not have a Drivers License or Access to a Car

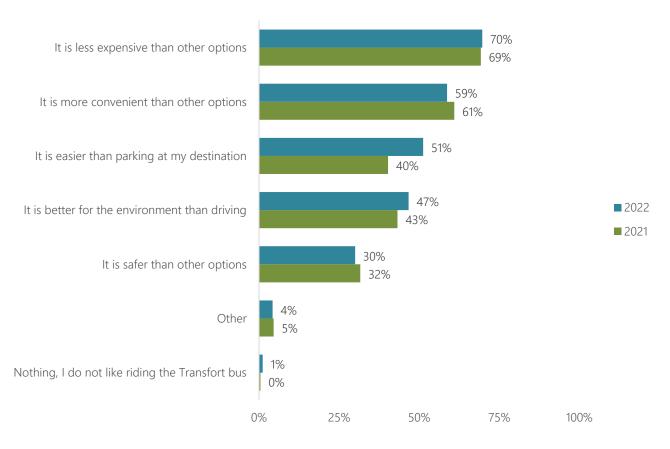


SECTION 5 OPINIONS

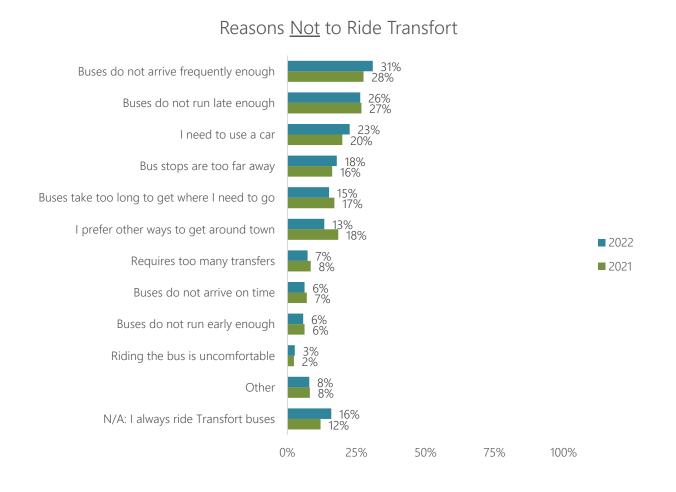
Convenience and price remained the most common attributes passengers liked about Transfort.

- > Almost 70% of passengers liked Transfort because riding was less expensive than other options.
 - Although we did not explore the cost of other options, other option costs could include gas, insurance, parking, etc.
- Compared to 2021, passengers in 2022 were more likely to say riding Transfort is easier than parking at their destination.
- Again, females were more likely than males and students were more likely than nonstudents to like the bus for environmental reasons.

Reasons to Ride Transfort



Schedule, frequency, and needing a car were again the most common barriers to riding Transfort.



- > Fewer passengers in 2022 said they didn't ride Transfort because they prefer other ways to get around (13%) compared to 2021 (18%).
- A greater proportion of passengers said they always ride Transfort (16%) compared to 2021 (12%).
 - In 2022, males, people living with household incomes below \$25,000, and non-students were most likely to always ride Transfort. Relatedly, passengers on the 06/07 routes and the 08/81 routes were most likely to always ride Transfort.

Additionally (not shown in this graph)

> Students were more likely than non-students to not ride because buses are too infrequent. Likewise, passengers on the 06/07 routes were more likely to not ride due to infrequent buses.

More than three-quarters of all passengers were very satisfied with friendliness of bus operators and cleanliness of buses.

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

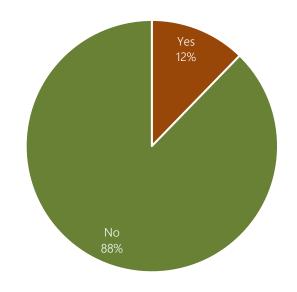


Relatively few passengers worried about being bothered by other Transfort passengers.

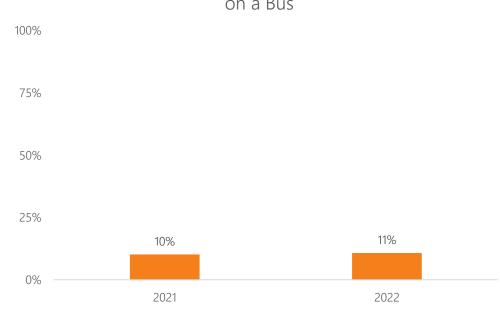
CORONAINSIGHTS

> Also, relatively few passengers were very worried about catching Covid while riding the bus, which was similar to 2021.





Is Not Very Worried About Catching Covid on a Bus





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, and to compare these measurements between years. 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.

- > The 2022 questionnaire was nearly identical to the questionnaire used in 2021, with the exception of changing Q13e from "Do you feel very safe riding a Transfort bus?" to "Do you worry about other bus passengers bothering you?" The original questionnaire design was a collaboration between Corona Insights and Transfort staff.
- > 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 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 2021 ridership data were analyzed to understand and predict the distribution of bus rides by route, day of week, and time of day. In 2021, 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, 19, and Gold were excluded because they did not operate during the study period, and routes 92 and FHS were excluded due to low number of passengers. Additionally, all Sunday routes had been suspended during the study collection period and were therefore excluded from the sampling plan.
- Sixty 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 and to compare with results from prior years. The secondary objective was to collect enough data to provide results segmented by as many routes as possible.

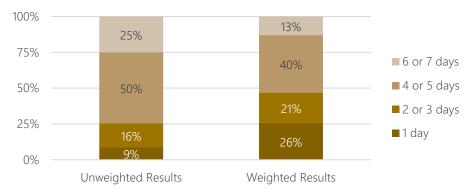
- > Once data collection shifts were assigned to each route, specific surveyor schedules were developed, including bus board and exit times and locations.
- Six data collectors were initially hired and trained on how to execute the onboard survey, although one tested positive for Covid between training and data collection and was unable to complete any shifts.
- > 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 initially declined to complete the questionnaire, surveyors described that all 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 9 through Thursday, September 22, and responses were collected between 4:00am to 7:30pm. Due to staffing shortages, only 55 of the 60 scheduled shifts were staffed, and some of the completed shifts were reduced in hours. However, at least two four-hour shifts were completed on every route.
- > Surveys collected on interline routes (i.e., 05/14/18 and 09/10) 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.

- > In total, 1,390 surveys were collected from bus passengers. Of these, 7 surveys were mostly incomplete (i.e., were not answered past Q7) and were excluded from analysis. The final sample included 1,383 usable responses. Fourteen passengers completed the Spanish language version.
- > Most bus riders (70%) who were asked to complete a survey cooperated. Morning riders were slightly more likely to cooperate (74%) than afternoon (67%) or evening (71%) riders. However, cooperation rate did differ by data collector, ranging from 40% and 80%.
- 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.





> 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	10%	6%	6%
03	15%	14%	14%
06	4%	2%	2%
07	4%	3%	3%
08	4%	4%	4%
09/10	1%	2%	2%
16	2%	2%	2%
31	8%	18%	18%
32	3%	5%	5%
05/14/18	6%	7%	7%
81	1%	2%	2%
FLEX	6%	5%	5%
HORN	5%	8%	8%
MAX	30%	22%	22%
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 ±3.4% 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.

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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