

DENVER METRO RESIDENT USAGE & PERCEPTIONS ON TRANSIT

A REPORT TO CDOT



FEBRUARY 2022

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SECTION 1
EXECUTIVE SUMMARY



Welcome

In 2022, CDOT retained Corona Insights to conduct research to develop a deeper understanding of Denver metro area residents' attitudes and behaviors related to public transit.

This research was intended to represent not just those who regularly use or rely on public transit, but rather, adult residents of the Denver metro area more broadly.

Residents of the seven-county metro area were recruited to take the survey through an online panel. Residents could take the survey in English or Spanish.

The resulting data were weighted to better represent the Metro area on key demographic characteristics.

The terms *transit* and *transportation* are used interchangeably throughout this report.

More details about the methodology can be found in the [Appendix](#).

Research goals



Understand the transportation **habits** and needs of Denver metro area residents.



Understand the **motivations** for why metro area residents use public transit.



Understand the **barriers** to public transit use and what improvements might facilitate additional future ridership.



Understand perceived and experienced issues around **safety** during public transit use in the metro area.



Assess key **demographic** differences in the Denver area's public transit experience and explore potential inequities.

Executive Summary: Summary of Respondents

Below we summarize key demographics of the population represented by these results. This summary provides overall context for interpreting results herein. These figures (and all others in this report) have been weighted by age, gender, and race/ethnicity to more effectively represent the population of the Denver Metro area.

Age

Under 35	32%
35-64	51%
65+	17%

Gender

Female	50%
Male	48%

Non-binary	1%
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Prefer to self-describe	1%
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Disability Status

Has a Disability	14%
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Does Not	86%
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County

Adams	15%
Arapahoe	19%
Boulder	10%
Broomfield	3%
Denver	25%
Douglas	13%
Jefferson	15%

Sexual Identity

LGBTQIA+	17%
Straight (heterosexual)	78%

Children in Household

No Children in Household	63%
Children in Household	37%

Annual Household Income

Under \$24,999	14%
\$25,000-\$49,999	17%
\$50,000-\$99,999	32%
\$100,000-\$149,999	22%
\$150,000 or more	15%

Race/Ethnicity

American Indian, Alaskan Native, or Native American	4%
Hispanic, Latinx, or Spanish origin	14%
Asian or Asian American	6%
Native Hawaiian or Other Pacific Islander	1%
Black or African American	6%
White or European American	75%
Some other race	3%

01

About half of residents in the Metro area rode public transit in the last six months. Nearly one out of five residents said they rode either public buses and/or public light rail or train at least a few days a week over the last half year. A bit more than one out of five residents said they rode public transit before the pandemic but did not do so in the last six months. Finally, about one quarter of residents said they did not use public transit recently or before COVID-19.



Habits

02

Regular public transit riders in the Metro area were more likely to be younger than 35, male, have lower household incomes, and identify as Black or African American. Metro area residents younger than 35 years of age were more than twice as likely to ride public transit at least a few days a week than older residents. Nearly half of Black residents said they rode public transit at least a few days a week compared to around one in ten White residents.



Demographics

03

Residents who lacked access to personal vehicles were much more likely to be regular public transit riders. Metro area residents who said no one in their household had access to a car, truck, or van were three times as likely to use public transit regularly as those who did. Additionally, regular public transit riders were much more likely to say they lacked daily access to a vehicle if one was present in their household. Nearly one out of five regular riders said a lack of a driver's license was a significant motivation for using public transit.



Demographics

04

Residents have different experiences using public transit depending on their gender, race, sexual identity, disability status, and household income. This report highlights significant differences across demographics throughout. The most striking differences are related to experiences of sexual harassment, where LGBTQIA+, female, and residents with disabilities were all more likely to have experienced harassment. Residents with lower household incomes and People of Color were more likely to say it was necessary to take precautions against crime when using public transit and less likely to say public transit operators were generally courteous and helpful.



Demographics



Safety

05

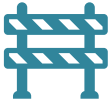
While infrequent and past public transit riders most frequently said they used public transit to avoid traffic and/or parking, regular riders had a wide range of reasons. Regular public transit riders were about half as likely to select the above reason as a motivation than other riders. Alternatively, regular riders were more likely than others to say that public transit was the fastest, most convenient travel option. Regular riders were also more likely to say public transit allowed them to save money and offered time to rest, work, and read.



Motivations

06

The most common barriers to public transit use were that service did not go where residents needed to go, was too slow, and was not frequent enough. About one out of three Metro area residents selected the above barriers as factors that prevented them from using public transportation more often. Residents said additional routes and improved safety measures would make them more likely to use public transportation in the future.



Barriers



Safety

07

Most Denver Metro residents did not think violence and crime were significant problems on public transportation or at transit stops. However, about one out of five residents said that violent crime was a significant problem on public transportation, including a quarter of regular riders. About one out of four residents perceived theft or robbery as a significant problem at public transit stops. The most frequently identified significant problem on transit and at stops was uncleanliness, selected by one third of residents.



08

Most residents said they felt it necessary to take personal precautions against crime when using public transit. Fewer than a third of residents said they did not feel it necessary. The most common precautions were traveling exclusively in the daytime and waiting for public transportation only at well-lit places. Residents were much more likely to agree that they felt safe waiting for, traveling to, and riding on public transit during the day than at night. Only one out of three said they felt safe riding public transit after dark and about a quarter agreed they felt safe waiting at or walking to public transportation stops at night.



09

More lighting/better visibility and more cameras at public transit stops were the most frequently desired safety improvements. In addition to the top two improvements, more than a third of regular riders said adding digital timetables at stops would be one of their top three most desired safety improvements.



10

Half of regular riders had experienced sexual harassment while using public transit in the last three years. Half of regular transit riders said they had experienced sexual comments, unwanted sexual staring/requests, catcalling, stalking, or groping while riding public transit or waiting at/traveling to stops. Regular riders were more than twice as likely to have experienced the above instances of sexual harassment than infrequent riders. LGBTQIA+ residents and residents with disabilities were much more likely to have experienced sexual harassment while using public transit than others.

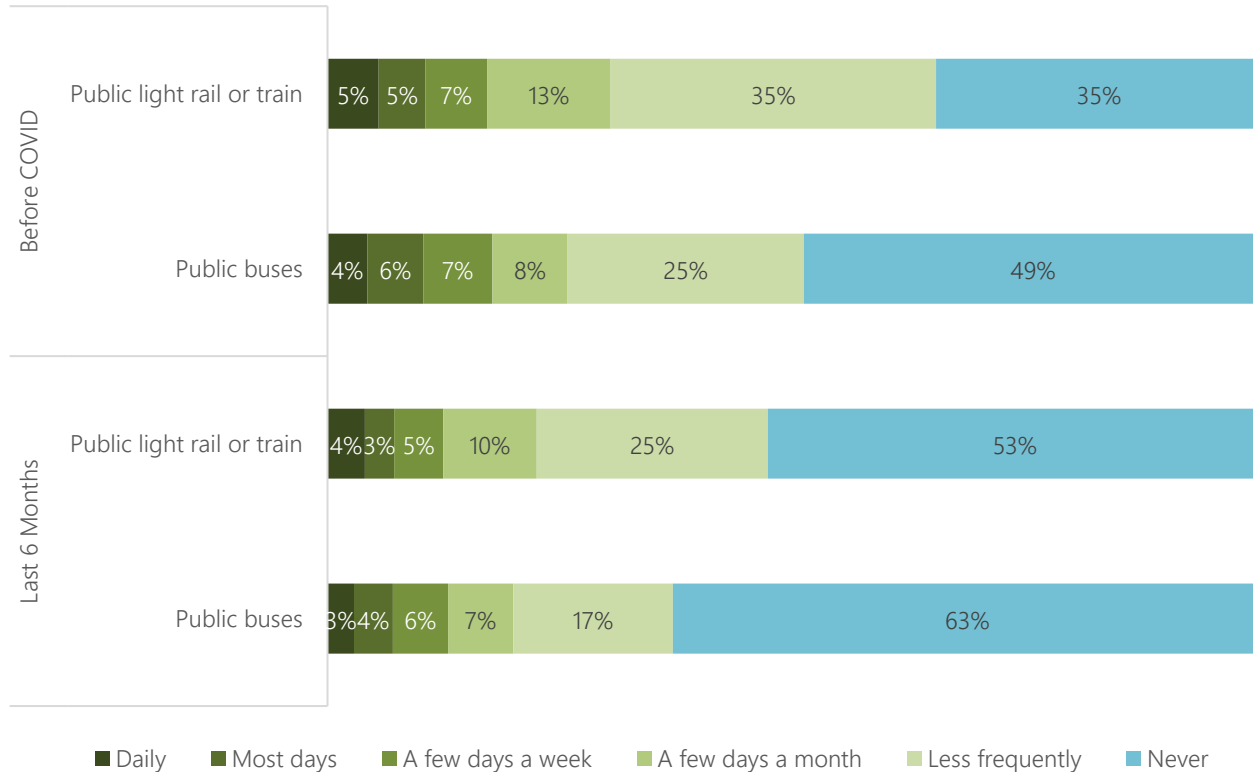


SECTION 2
PUBLIC TRANSIT USE



Fewer residents were riding public transit in the past 6 months than before the pandemic

Frequency of Transportation Modes (All Residents)



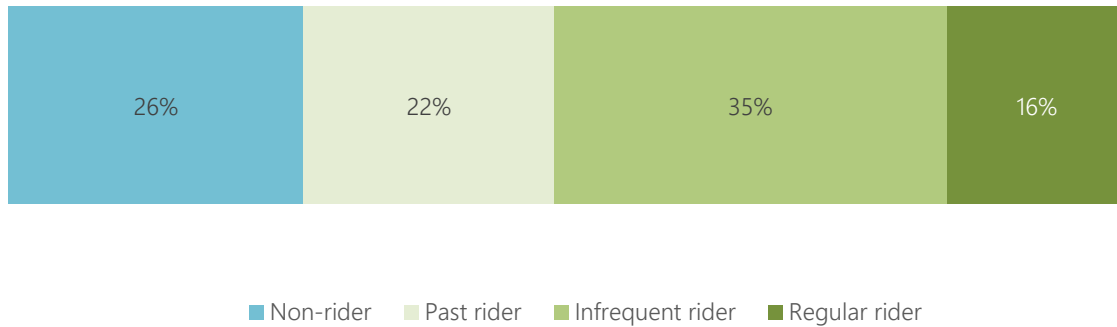
- > Residents were asked to report how frequently they used public transit both within the past six months and before the COVID-19 pandemic. In both time periods, residents were more likely to report riding public light rail or train than public buses.
- > While most residents said they rode public light rail or train (65%) or public buses (51%) at least sometimes before the pandemic, these percentages dropped when recounting use over the past six months (47% and 37%).
- > Compared to older residents, those under 35 years of age were more likely to report using the public buses and light rail daily or most days both before the pandemic and over the last six months.
- > Residents with household incomes below \$50,000 were more likely to use both modes of public transportation daily or most days before the pandemic and over the past six months when compared to their peers.

Q7. Thinking about how you traveled before the COVID-19 pandemic (before March of 2020), which best describes your previous use of these transportation modes?

Q8. Which best describes your use of these transportation modes over the past 6 months?

About one out of five residents reported riding public transit before the pandemic, but not over the past six months

Rider Status



With data about recent and pre-pandemic transit use frequency, we categorized residents into the four groups presented in the graph on the left.

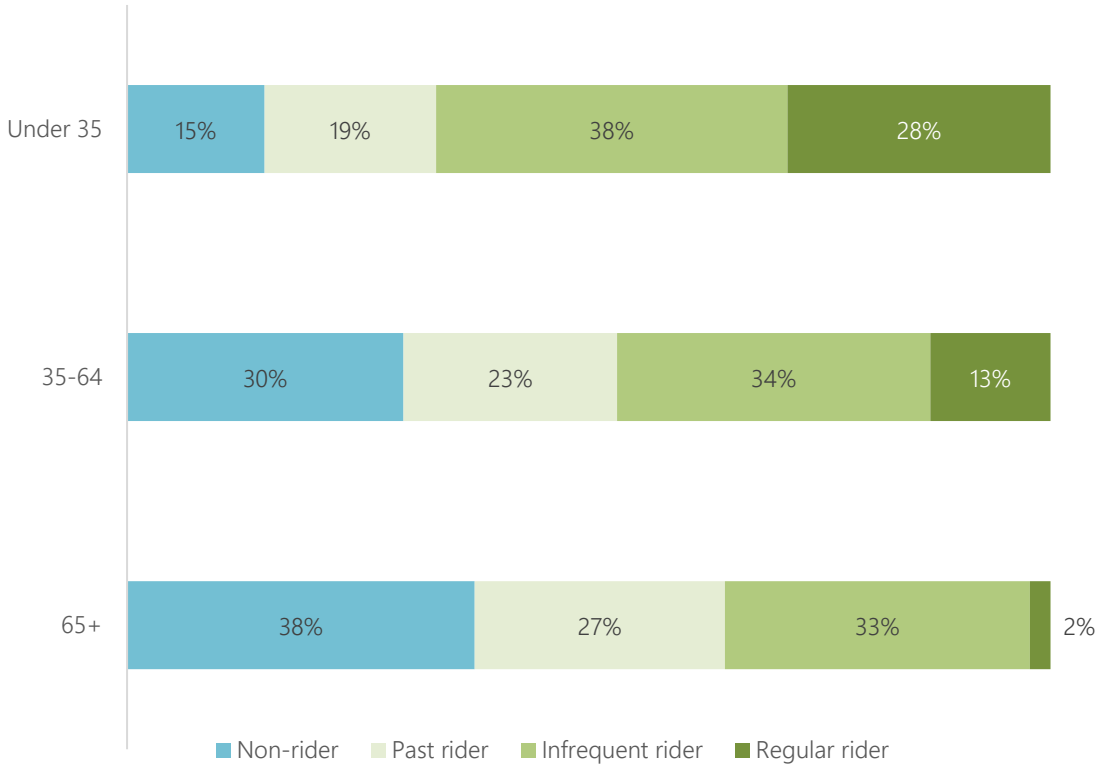
- > We determined the Rider Status segments as the following definitions:
 - **Regular rider:** someone who rides buses or the light rail/train at least a few days a week over the past six months.
 - **Infrequent rider:** someone who rides buses or the light rail/train a few days a month or less frequently (but not either more frequently) in the past six months.
 - **Past rider:** someone who previously rode the bus or light rail/train at least sometimes before the pandemic, but no longer does (in the past six months).
 - **Non-rider:** someone who says they never rode either mode in the past six months nor before the pandemic.
- > Regular riders were more likely to identify as male, be younger than 35, have household incomes below \$50,000 a year, and identify as Black.

Q7. Thinking about how you traveled before the COVID-19 pandemic (before March of 2020), which best describes your previous use of these transportation modes?

Q8. Which best describes your use of these transportation modes over the past 6 months?

Residents under 35 years old were more likely to be regular riders of public transit

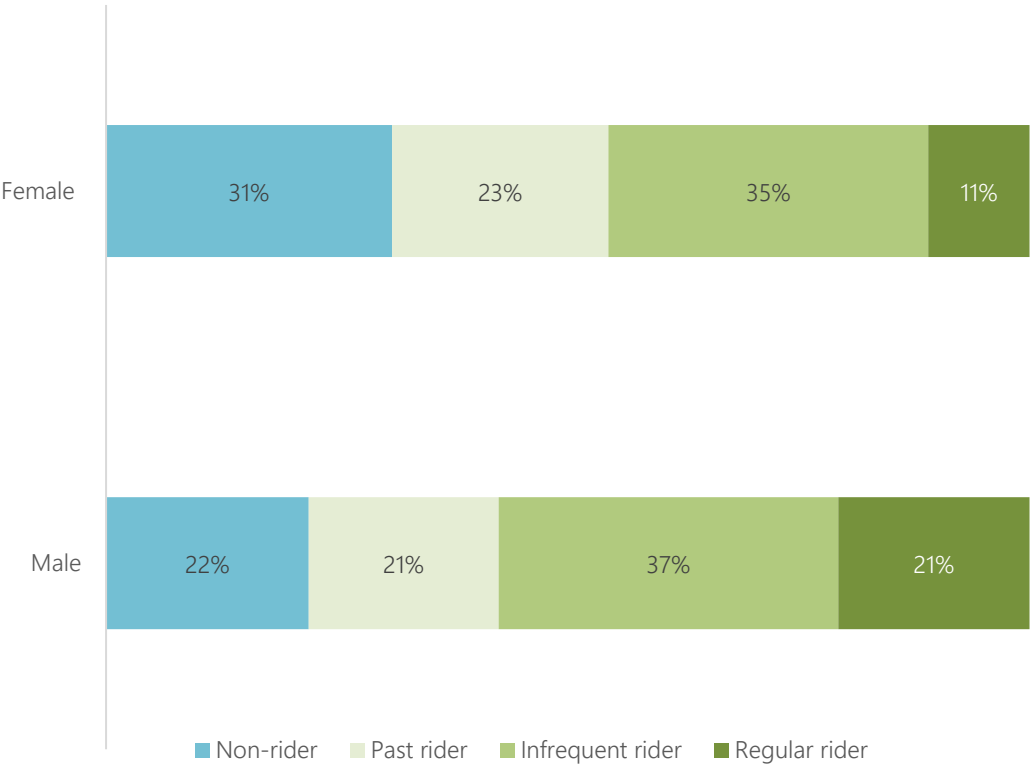
Age



- > More than one out of four (28%) of residents under 35 were regular riders of public transportation.
- > Only 15% of those under 35 were non-riders.
- > While one out of three residents 65 and older were infrequent riders, only 2% were regular riders.

Male residents were more likely to be regular riders than female residents

Gender

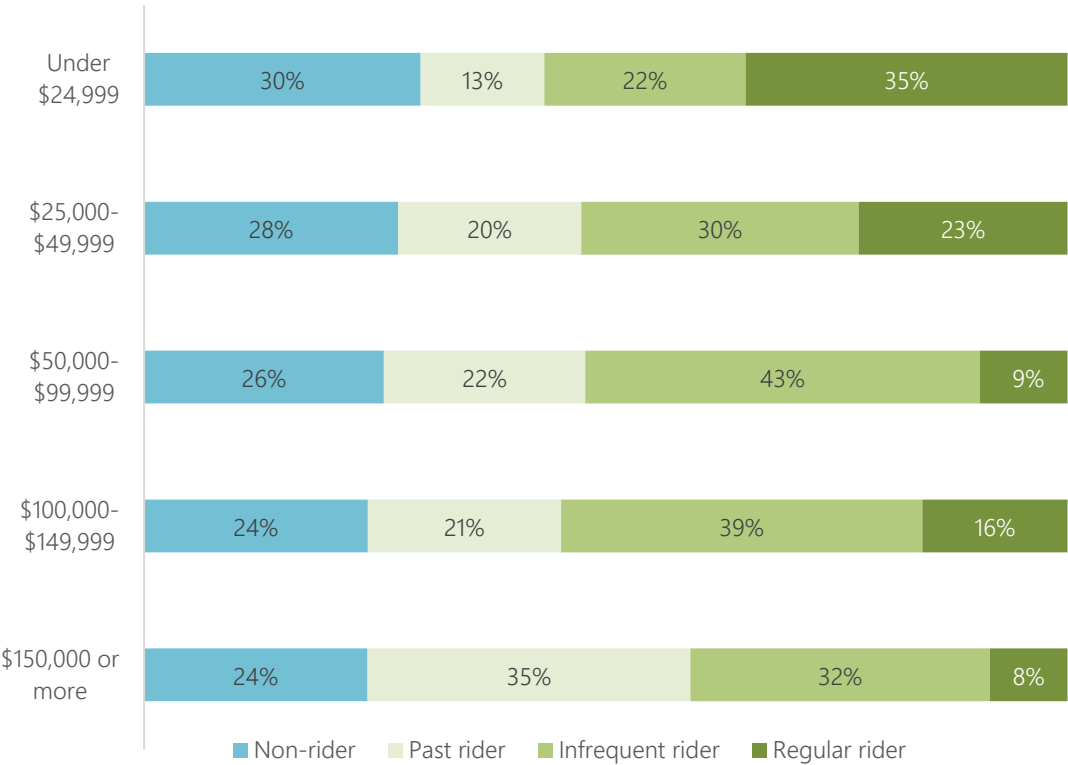


The graph on the left presents the rider status of male and female residents.

- > Male residents were nearly twice as likely (21%) to be regular riders than female residents (11%).
- > Nearly one out of three female residents (31%) did not ride public transit compared to a bit more than one out of five male residents.

Residents with lower household incomes were more likely to be regular public transit riders

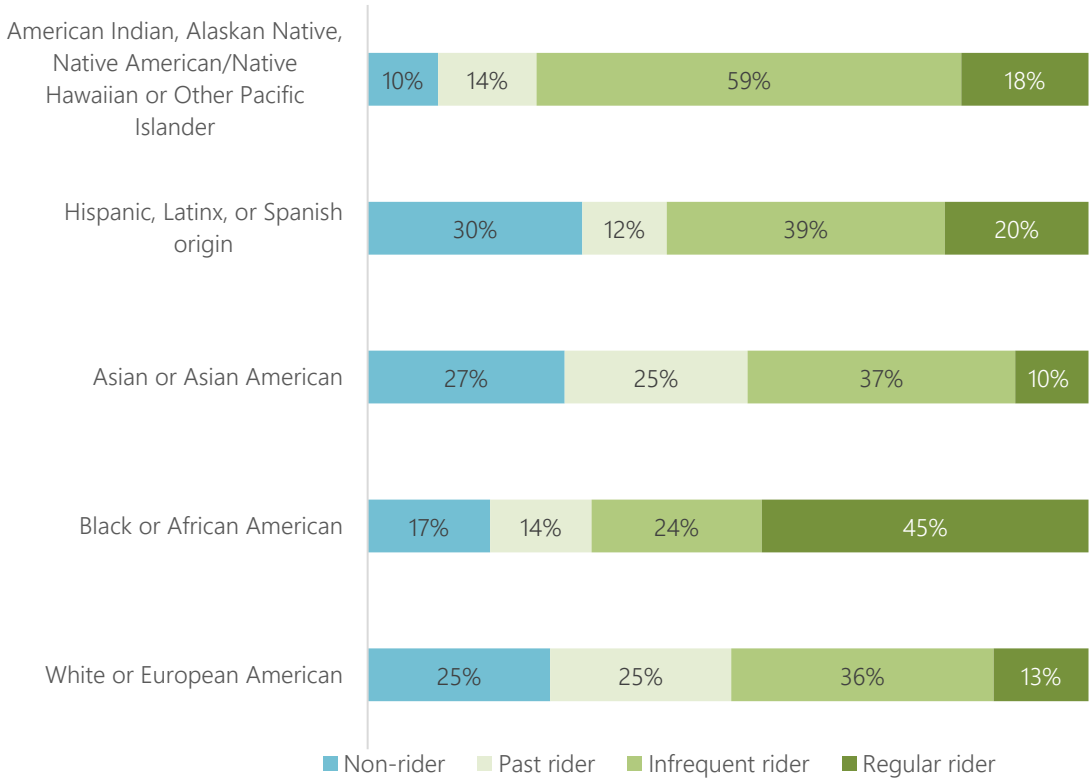
Household Income



- > More than one out of three (35%) making less than \$25,000 a year in household income were regular riders.
- > Residents with the highest household incomes, \$150,000 or more, were more likely to be past riders of public transit than others. While more than one out of three of the highest income residents (35%) were past riders, only 13% of those making less than \$25,000 rode public transportation before the pandemic but had not over the past six months. This is potentially the result of lower income residents holding employment in essential positions while higher income residents were able to work from home and/or have access to personal transportation modes over the past half year.

Black residents were more likely than others to be regular public transit riders

Race/Ethnicity



- > Nearly half of Black residents (45%) were regular public transit riders.
- > One out of four (25%) White or Asian residents were past transit riders. These residents were more likely to report high household incomes and have access to personal transportation.

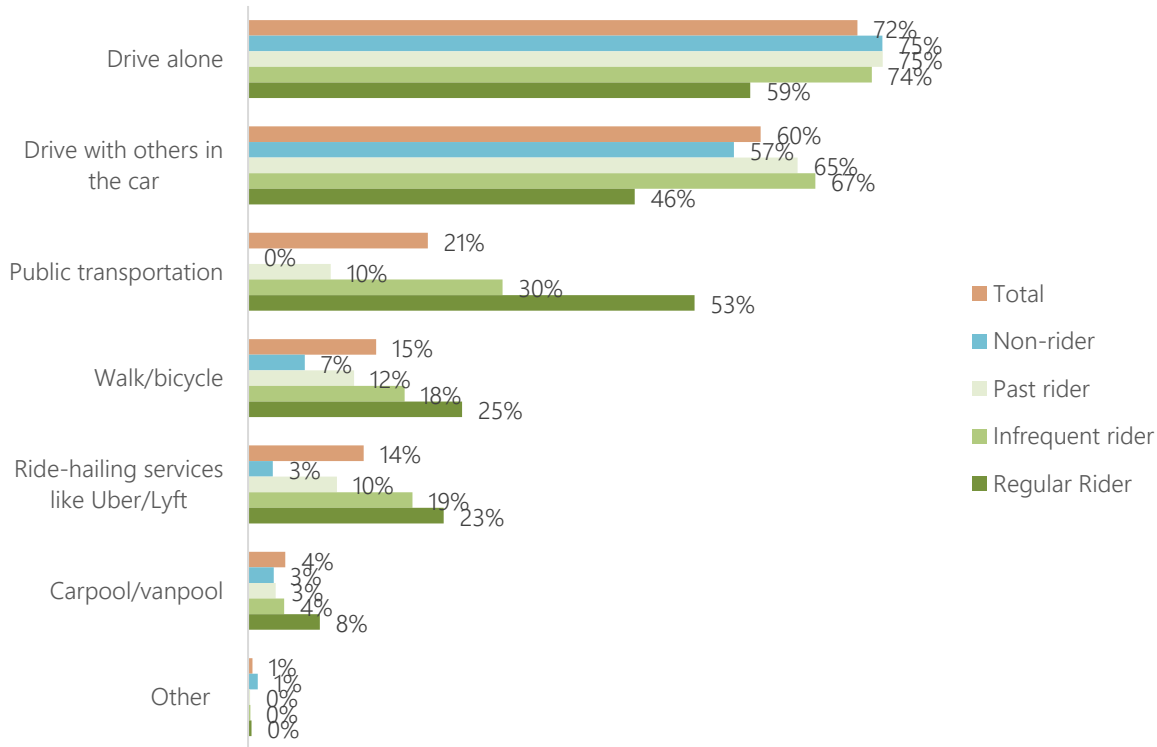
Q42. Which racial or ethnic group best describes you? Please check all that apply

SECTION 3
TRANSPORTATION BEHAVIOR



Most residents said they normally drive alone for trips in the Denver Metro area

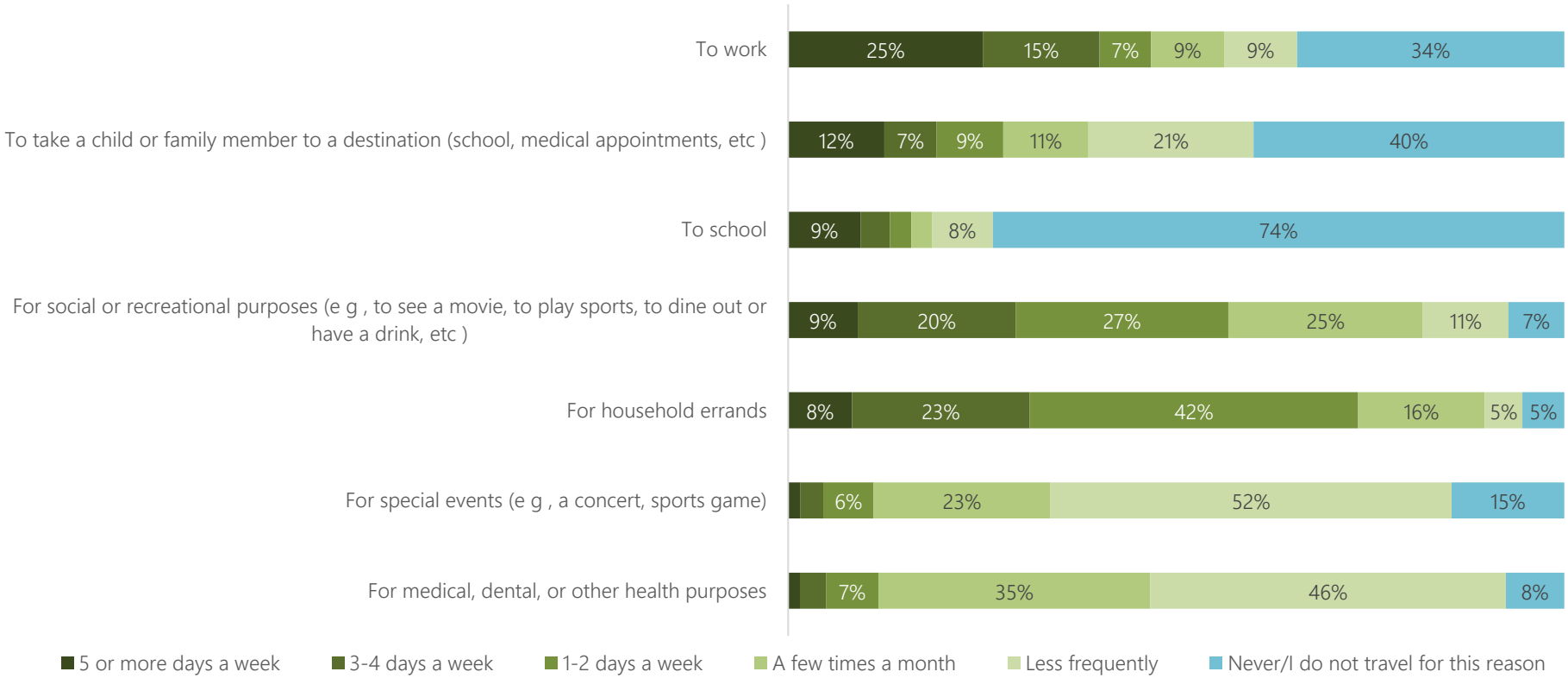
Normal Transportation Use For Trips in the Denver Metro Area



- > Nearly three out of four residents (72%) said that they normally drive alone to make trips around the Denver Metro area.
- > Regular riders were much less likely to say they drove alone (59%) or with others (54%) than other residents.
- > While about half (53%) of regular riders said they normally use public transportation to make trips in the Denver Metro area, these residents nonetheless said they were riding the public light rail or bus at least a few days a week. This highlights the importance of asking specifics of past behavior in ridership when collecting data rather than relying on residents to categorize themselves based on pre-defined terminology.

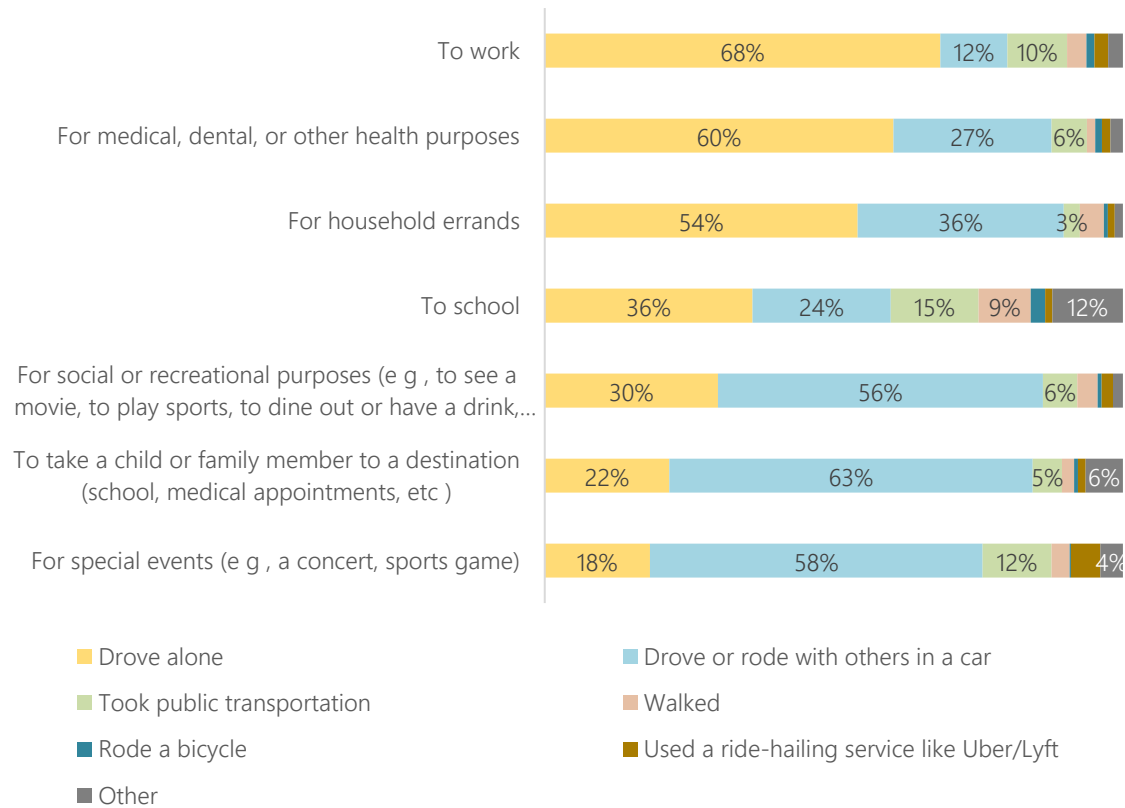
Most residents said they traveled for household errands at least weekly

Frequency of Travel (All Residents)



When asked what mode of transportation they used the last time they traveled for particular reasons, most residents reported driving alone or with others

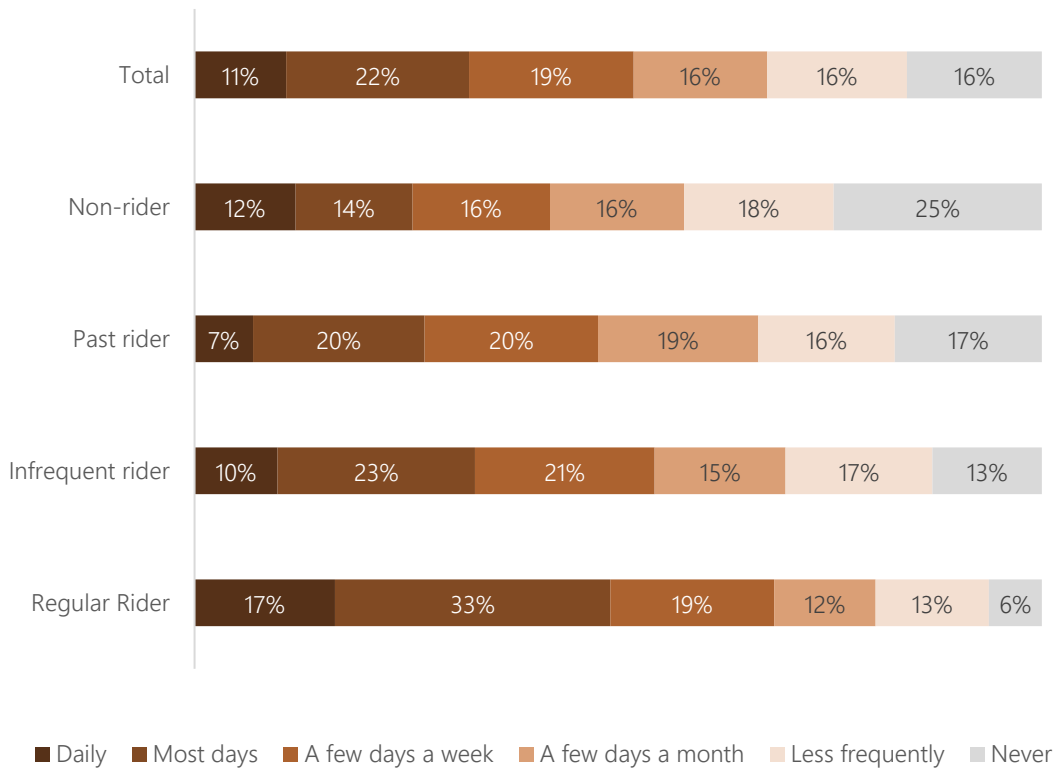
Last Time Travel Mode of Transportation (All Residents)



- > Residents who said they traveled for the purposes presented in the graph at least sometimes were asked how they did so for their last trip.
- > One out of ten residents (10%) said they used public transportation the last time they traveled to work.
- > Of residents who were traveling to school, 15% said they used public transit their last trip.
- > Very few residents (3%) reported using public transit the last time they traveled for household errands.

About half of residents in the Denver Metro area said they carry packages, bags, and/or travel with a stroller at least a few days a week.

Frequency of Carrying Packages, Bags, Carts, and/or Travel With a Stroller (All Residents)

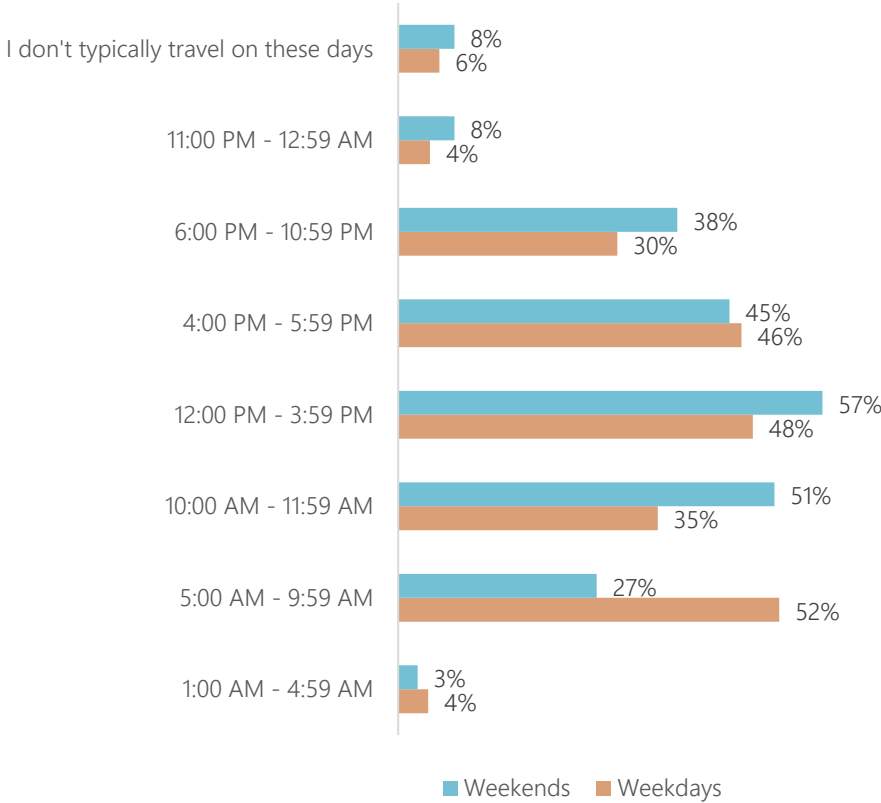


- > Respondents were asked, regardless of transportation mode, how often they carry packages, bags, carts, and/or travel with a stroller. About one in ten residents (11%) said they did so on a daily basis.
- > Regular riders said they carried something daily at a higher rate (17%) than others (10%).
- > Female respondents with children in their household said they carried something daily at a higher rate (21%) than others (9%).
- > Those aged under 35 reported carrying something daily at a higher rate (18%) than older residents (7%).

Q11. Whatever mode of transportation you are using, how often do you carry packages, bags, carts, and/or travel with a stroller day-to-day?

Residents were more likely to report traveling in the morning on weekdays than weekends

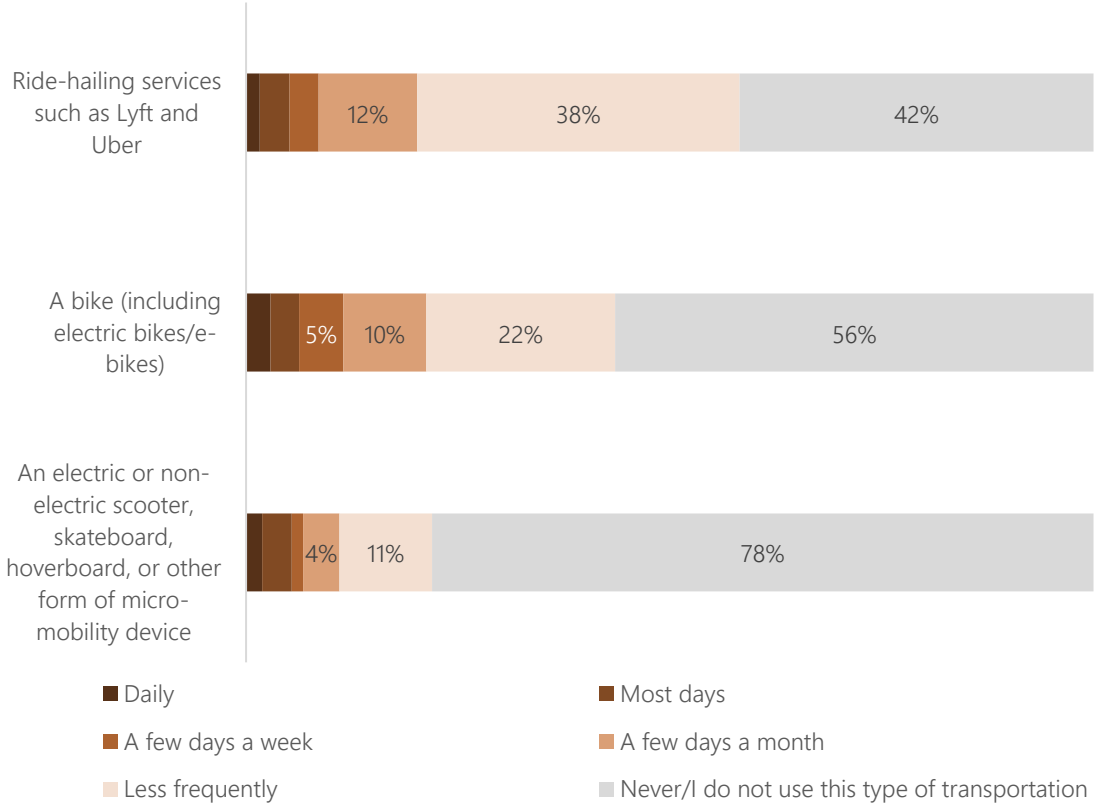
Typical Travel Times (All Residents)



- > Residents in the Metro area reported traveling midday (between 10:00 AM and 3:59 PM) at higher levels on the weekends than during weekdays.
- > Regular riders were more likely to say they traveled in the morning on weekdays, 5:00 AM – 9:59 AM (65%) than other residents (49%).
- > Residents aged 65 and older were generally less likely to travel on the weekends.

About one in five residents said they used ride-hailing services and bikes at least a few days a month

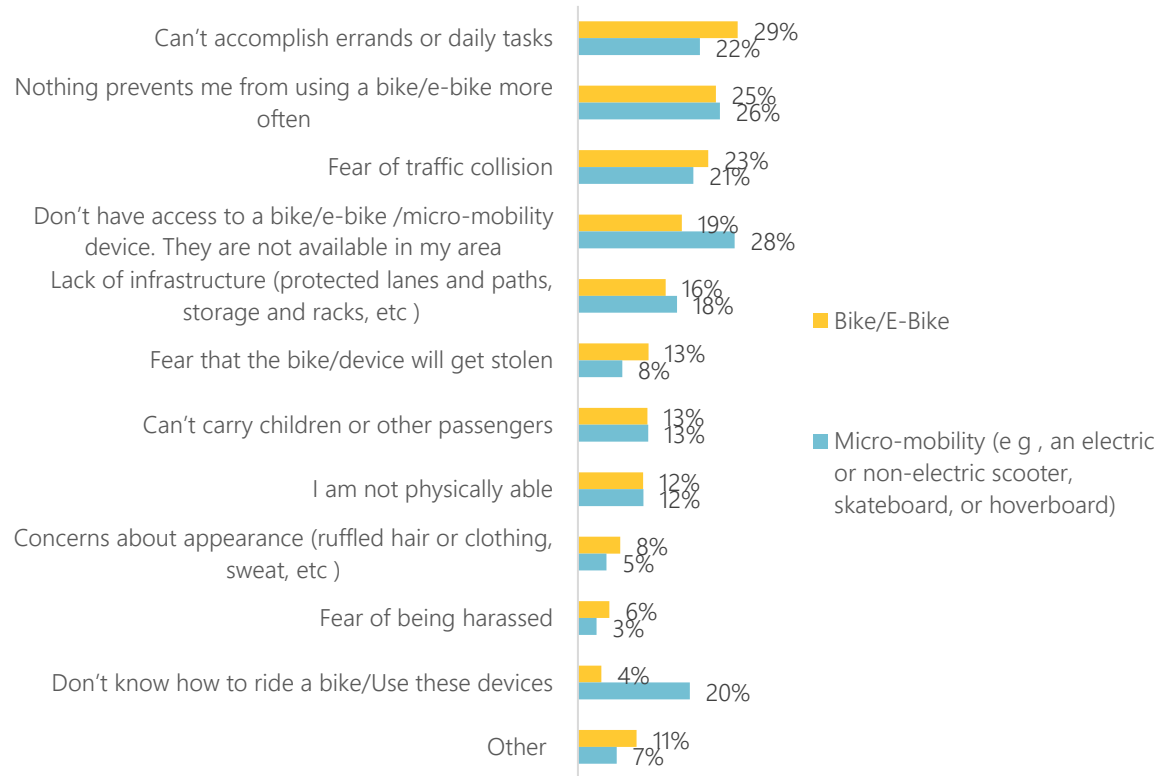
Transportation Use (All Residents)



- > About one in five residents said they used ride-hailing (20%) services and bikes (21%) at least a few days a month.
- > A lower percentage of residents (11%) reported using micro-mobility devices at least a few days a month.
- > Regular public transportation riders were much more likely to report using ride-hailing services at least monthly (53%) than others (14%).
- > Similarly, residents under 35 were more likely to report using ride-hailing services at least monthly (34%) than others (14%).
- > Male residents were more likely to say they rode a bike for transportation at least most days (11%) than female residents (2%).

Residents had a wide range of reasons for not using bikes or micro-mobility devices for transportation

Barriers to Bike and Micro-Mobility Use (All Residents)



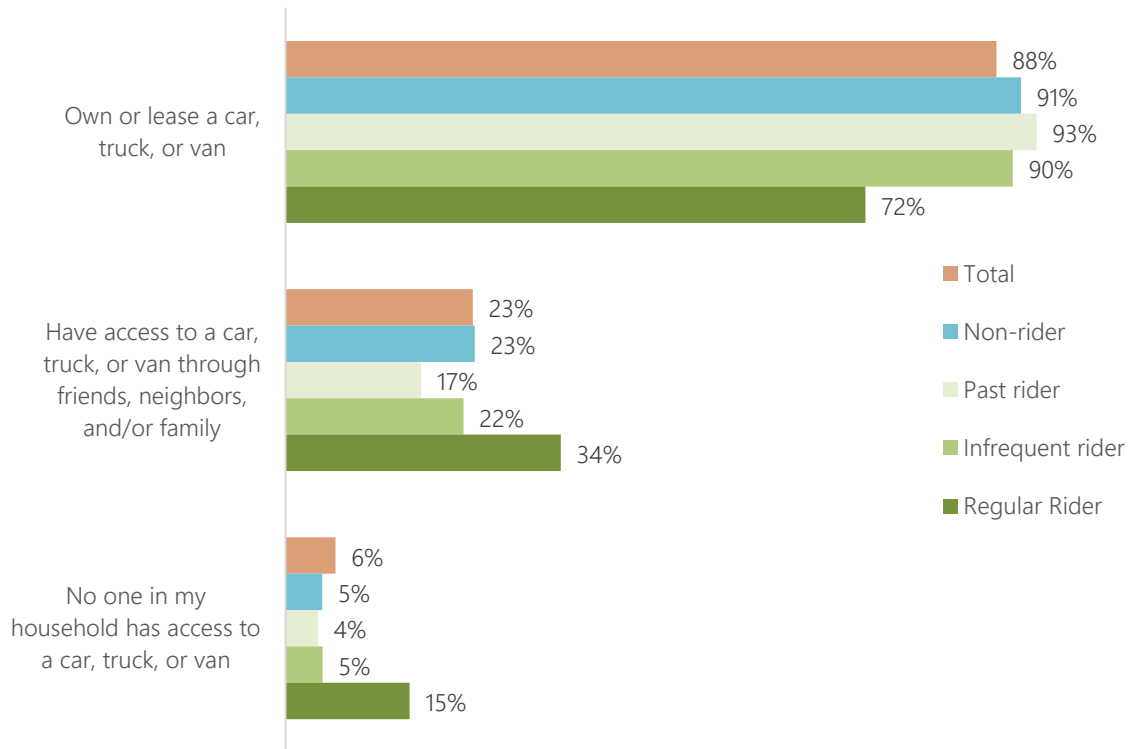
- > Residents were asked what prevents them from using bikes or micro-mobility devices more often. About one out of four residents said that nothing prevents them, suggesting a simple lack of preference for this transportation mode.
- > The most common response for why residents do not use bikes more often was that respondents couldn't accomplish errands or tasks (29%).
- > Alternatively, the most frequent barrier to micro-mobility use was that residents did not have access to these devices, or they were not in their area.
- > Almost one out of three residents aged 65 or older said they were physically unable to use a bike (29%) or micro-mobility device (32%).

Q14. Which of the following prevents you from using a bike/e-bike more often? Please select all that apply

Q15. Which of the following prevents you from using micro-mobility (e.g., an electric or non-electric scooter, skateboard, or hoverboard) devices more often? Please select all that apply

Regular public transit riders were more likely to reside in households without access to vehicles

Vehicle Access

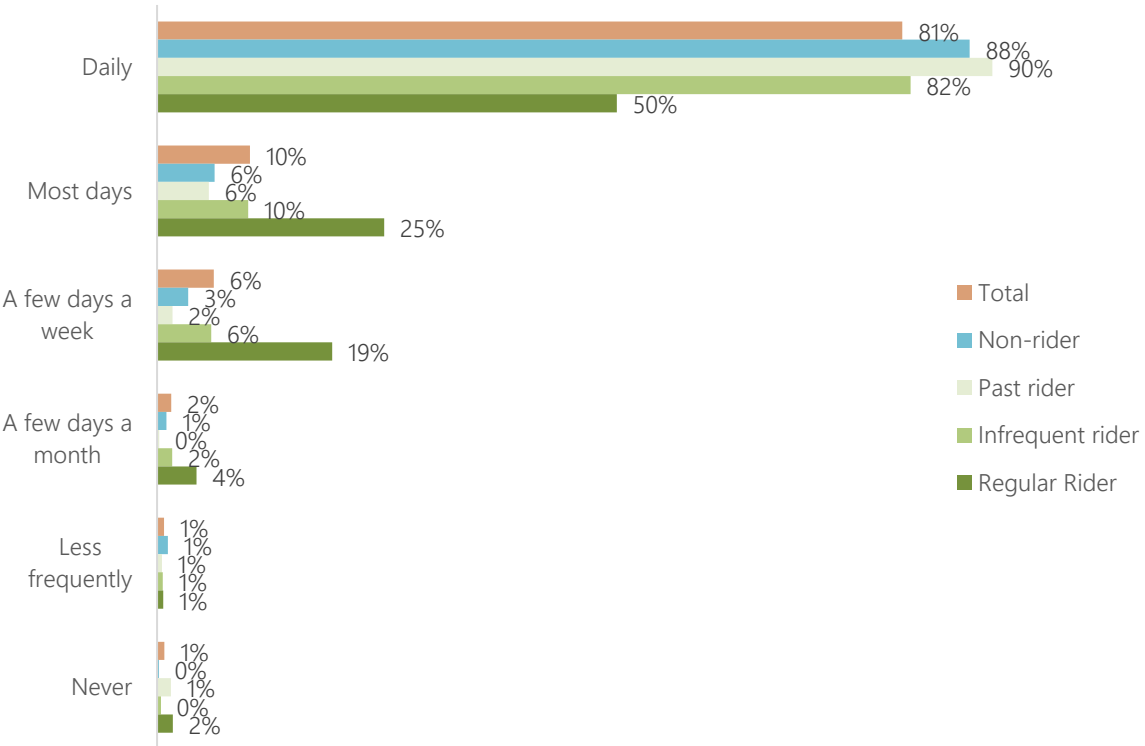


Residents were asked if they, or anyone in their household, owned or had access to a personal vehicle.

- > Regular transit riders were less likely to own or lease a car, truck, or van (72%) than other Metro area residents (91%).
- > Regular transit riders were more than three times as likely (15%) to not have access to a car, truck or van in their household than other residents (4%).
- > Vehicle access was strongly correlated with household income. Nearly one out of three residents (27%) with household incomes under \$25,000 did not have access to a vehicle compared to just 3% of those with higher household incomes.
- > Residents with disabilities were much more likely to reside in households without access to vehicles (18%) than others (4%).

Regular public transit riders were less likely to have daily access to vehicles when they were present in their households

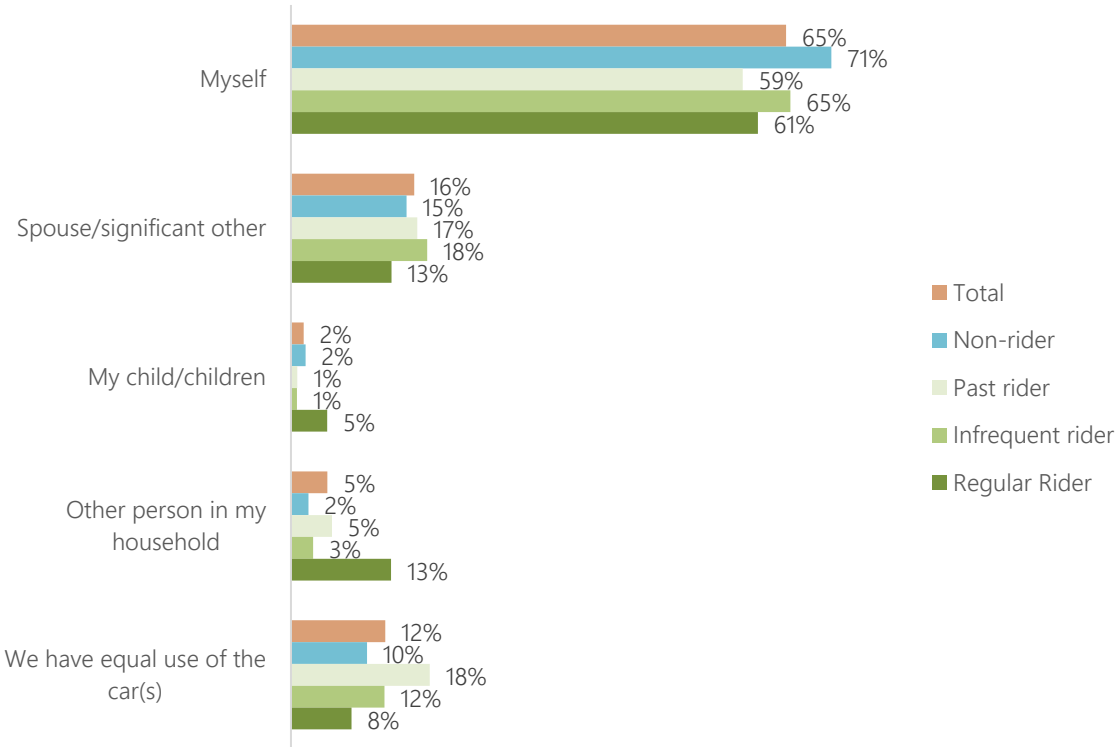
Frequency of Vehicle Access (Among Residents With a Vehicle Available in Their Household)



- > Residents who lived in households where someone had access to a vehicle were asked how often that vehicle is available for their transportation needs.
- > Only half of regular public transit riders (50%) said this vehicle was available to them on a daily basis, compared to 86% of other residents.
- > Residents under 35 years of age were less likely (72%) than older residents to have daily access to a vehicle (85%).

Most residents who had access to a vehicle in their household said they used it themselves most often

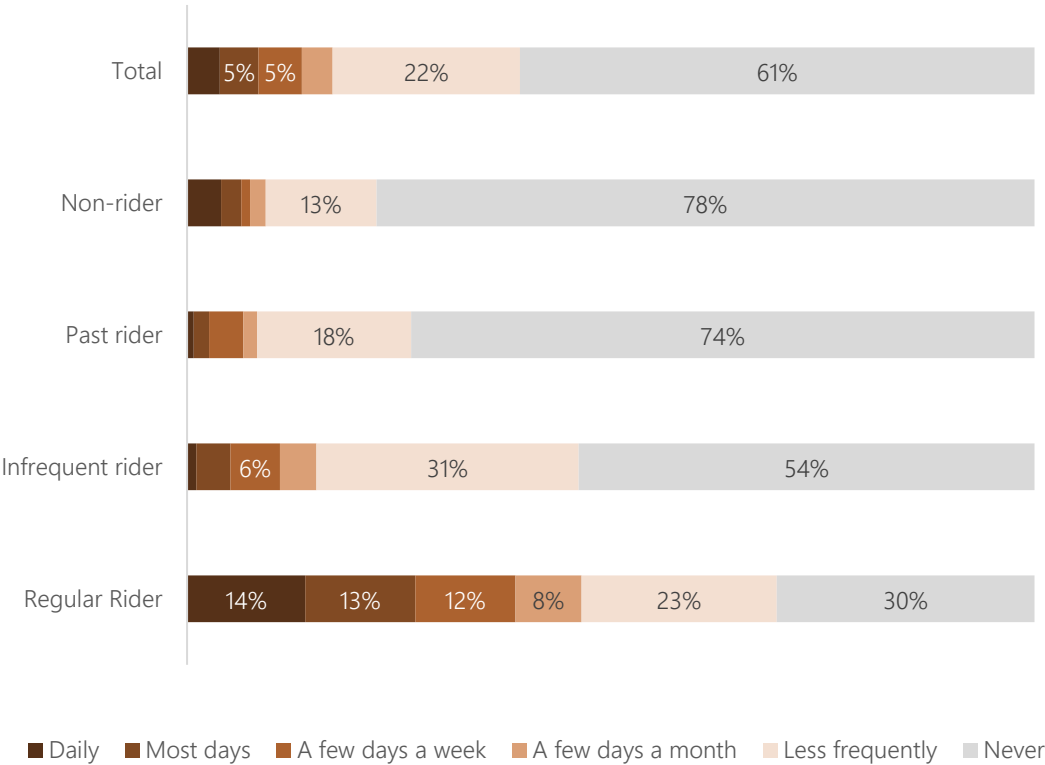
Who Most Often Uses the Vehicle (Among Residents With a Vehicle Available in Their Household)



- > Residents who lived in households where someone had access to a vehicle were asked who in the household most often used that vehicle.
- > Regular public transportation riders were more likely to say someone else in the household most often used the vehicle (13%) than other residents (3%).
- > Similarly, residents under 35 years of age were more likely to say someone else most often used the vehicle (11%) than older residents (2%).

Regular public transit riders were more likely to borrow vehicles or get rides to meet their transportation needs than other residents

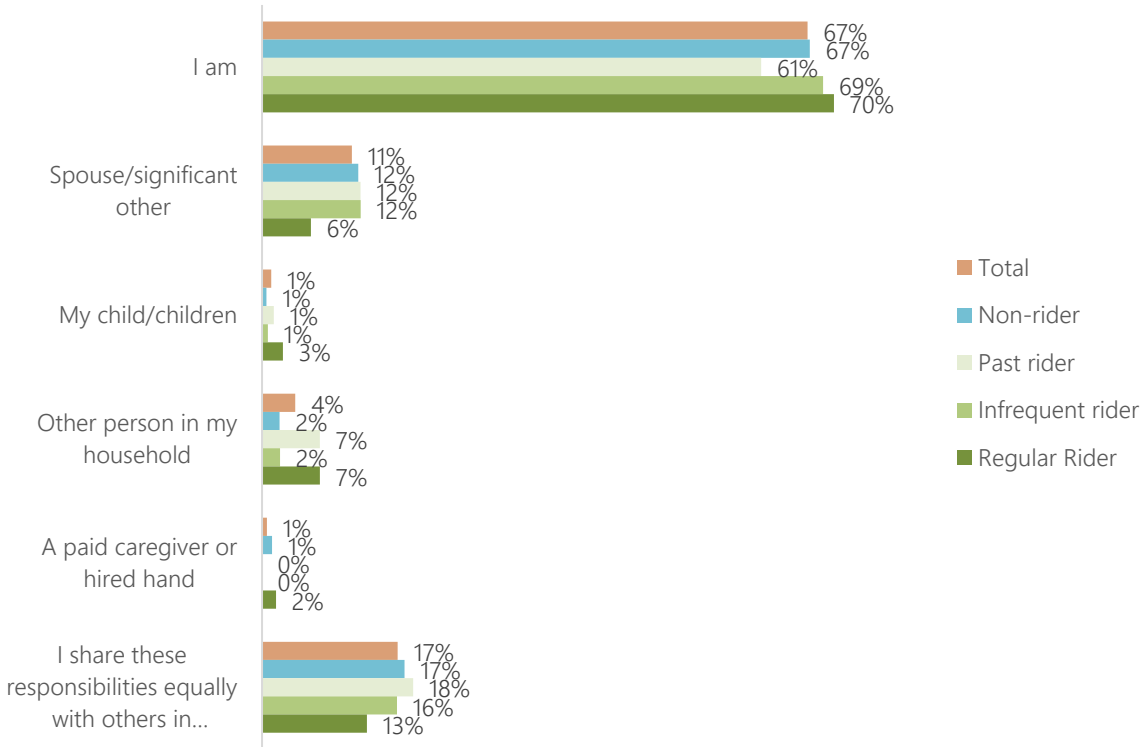
Frequency of Borrowing a Vehicle (All Residents)



- > About four out of ten (39%) regular public transit riders said they borrow a vehicle or get a ride at least a few days a week to meet their transportation needs compared to 9% of other residents.
- > People of Color in the metro area were about twice as likely to say they borrowed a vehicle or got a ride at least a few days a week (20%) than White alone residents (11%).
- > Residents with children in their households were twice as likely to do so (22%) at least a few days a week than those without (10%).

Responsibility for household errands was similar across public transit rider status

Who in Household is Responsible for Errands



- > Most residents said that they were most often responsible for household errands. Responses were similar across public transit rider status.
- > Female respondents were more likely (73%) than male respondents (61%) to say that they were most often responsible for household errands.

Q20. Who in your household is most often responsible for household errands (e.g., grocery shopping, going to the post office, dropping off dry cleaning, etc.)?

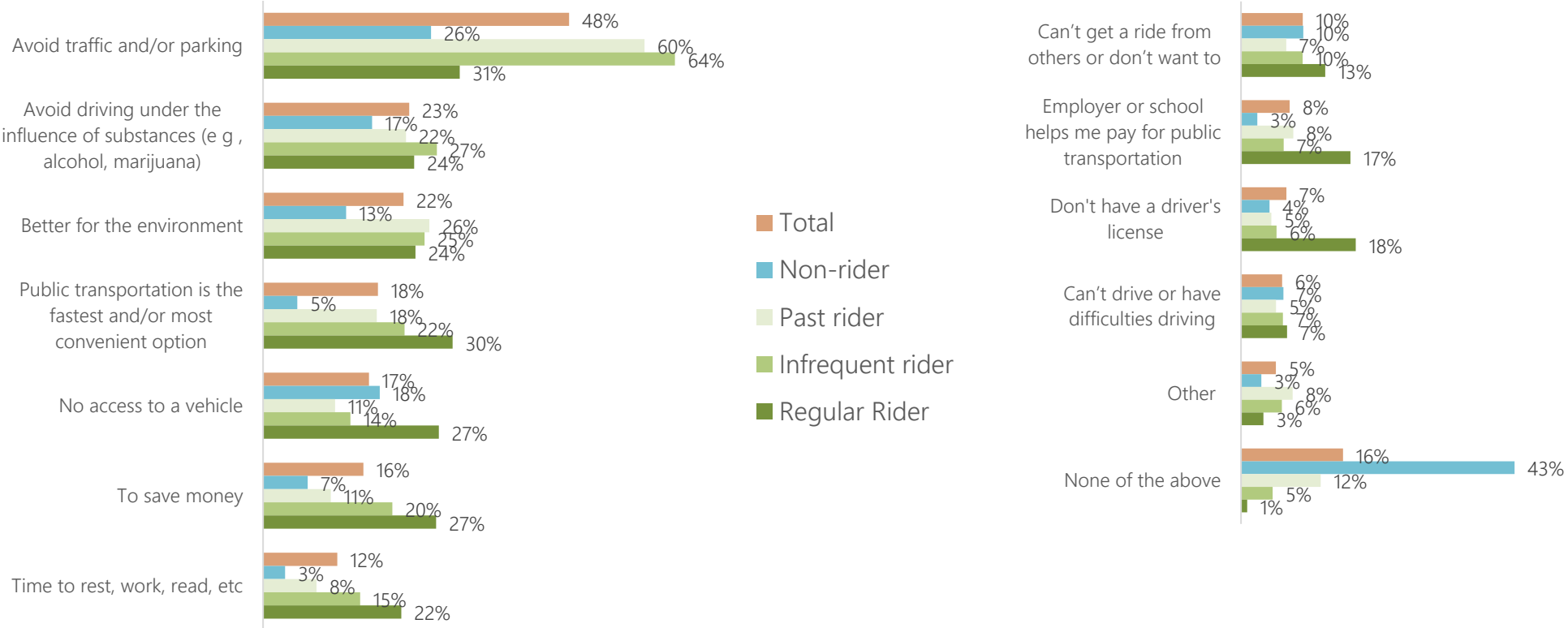
SECTION 4

MOTIVATIONS AND BARRIERS FOR PUBLIC TRANSIT USE



The most common reason metro area residents use public transportation is to avoid traffic and/or parking

Main Reason For Public Transportation Use or Potential Use



The graph, split for clarity, presents the top three reasons residents might use public transportation. The next slide describes differences across demographic segments.

Q21. What are the main reasons you might use public transportation? Please select up to 3.

Regular transit riders had distinct reasons for using public transportation

- > Regular transit riders had a wide range of reasons for using public transportation and were more likely than others to say the main reasons they used public were:
 - That public transportation was the fastest/most convenient option
 - That they lacked access to a vehicle
 - To save money
 - Public transportation allowed time to rest, work, read, etc.
 - That employers helped pay for public transit
 - That they did not have a driver's license
- > While avoiding traffic and/or parking was chosen at a similar rate of many other options for regular riders (31%), it was by far the most selected reason for all other residents (51%).
- > White alone respondents were more likely to say they use public transportation to avoid traffic and/or parking (52%) than People of Color (39%). Alternatively, People of Color were more likely to say the main reasons they use public transit was that they had no access to a vehicle (24%) than White alone respondents (13%).

"I don't currently have a car."

—Regular Rider

"I'm able to go to downtown Denver without having to worry about parking the car."

—Infrequent Rider

"Only if we're going downtown and don't want to deal with parking issues and costs."

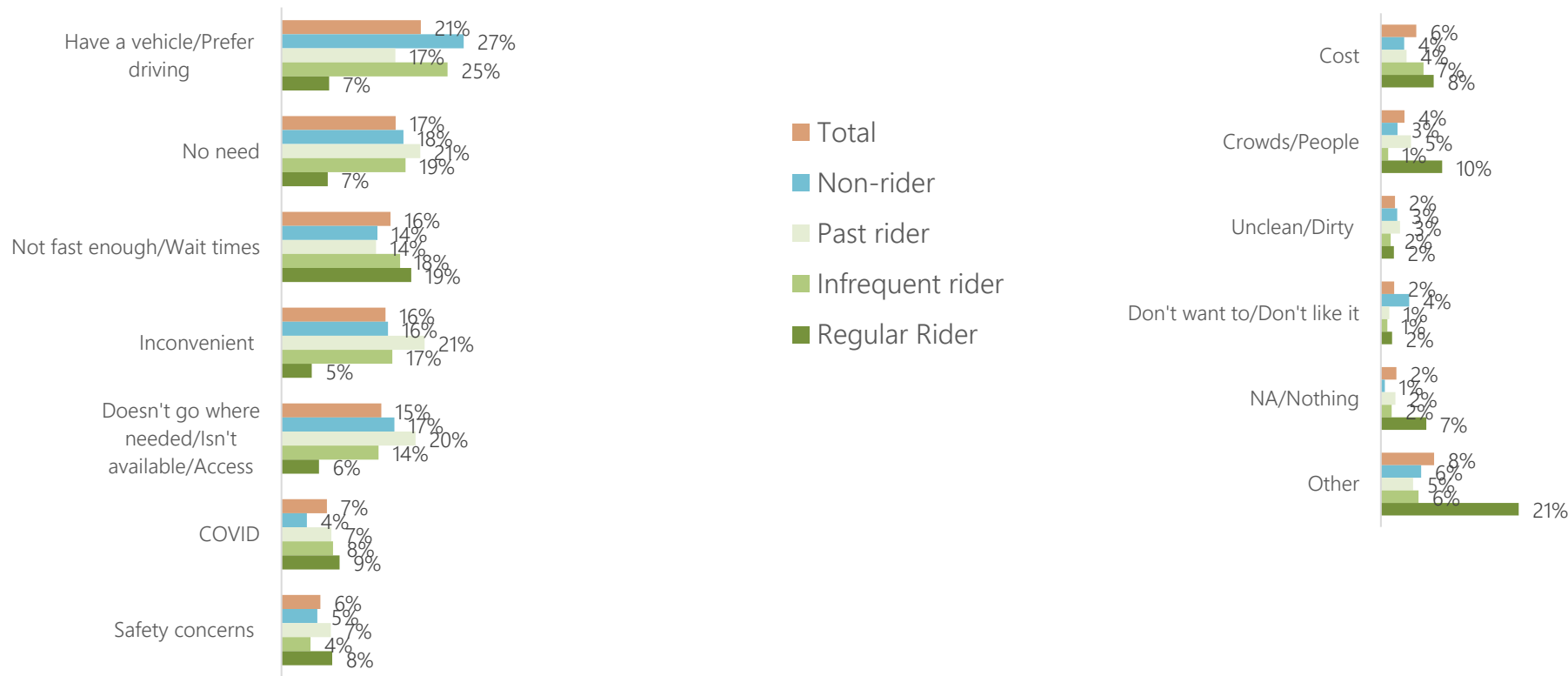
—Past Rider

"When my vehicle is being repaired."

—Non-Rider

While non-regular riders said having a vehicle was the most significant reason for not using public transit more often, regular rider most frequently mentioned wait/travel times

Most Significant Reason For Not Using Public Transportation (Coded)



The graph, split for clarity, presents coded responses from an open-ended question asking residents the most significant reason they don't use public transportation more often. The next slide describes differences across demographic segments.

Regular transit riders had distinct reasons for using public transportation

- > Regular transit riders were less likely than others to mention the following reasons for not using public transportation:
 - Having a vehicle/Prefer driving (7% and 23%)
 - Inconvenience (5% and 18%)
 - Doesn't go where needed/Isn't available/Access (6% and 17%)
- > Alternatively, regular transit riders were more likely than others to mention Crowd/People (10%) as a main reason than others (3%).
- > Regular riders were also more likely to have idiosyncratic reasons categorized as "Other" (21%) than other residents (6%).
- > Residents 65 years of age and older were more likely to say public transit didn't go where needed, wasn't available, or wasn't accessible (23%) than younger residents (13%).
- > Residents with higher household incomes (\$50,000 or more) were more likely (21%) than others (10%) to say they had no need for public transit.
- > Residents with disabilities were less likely (6%) to say public transit was inconvenient (6%) than others (17%).

"The time that it takes is three times the time that it takes to drive myself. It would keep me from home an additional 4 hours a day on top of 8 hours at work, so it's just too time consuming."

—Regular Rider

"Doesn't go where and when I want to."

—Infrequent Rider

"Just isn't as convenient as driving. But have a station right around the corner from my house."

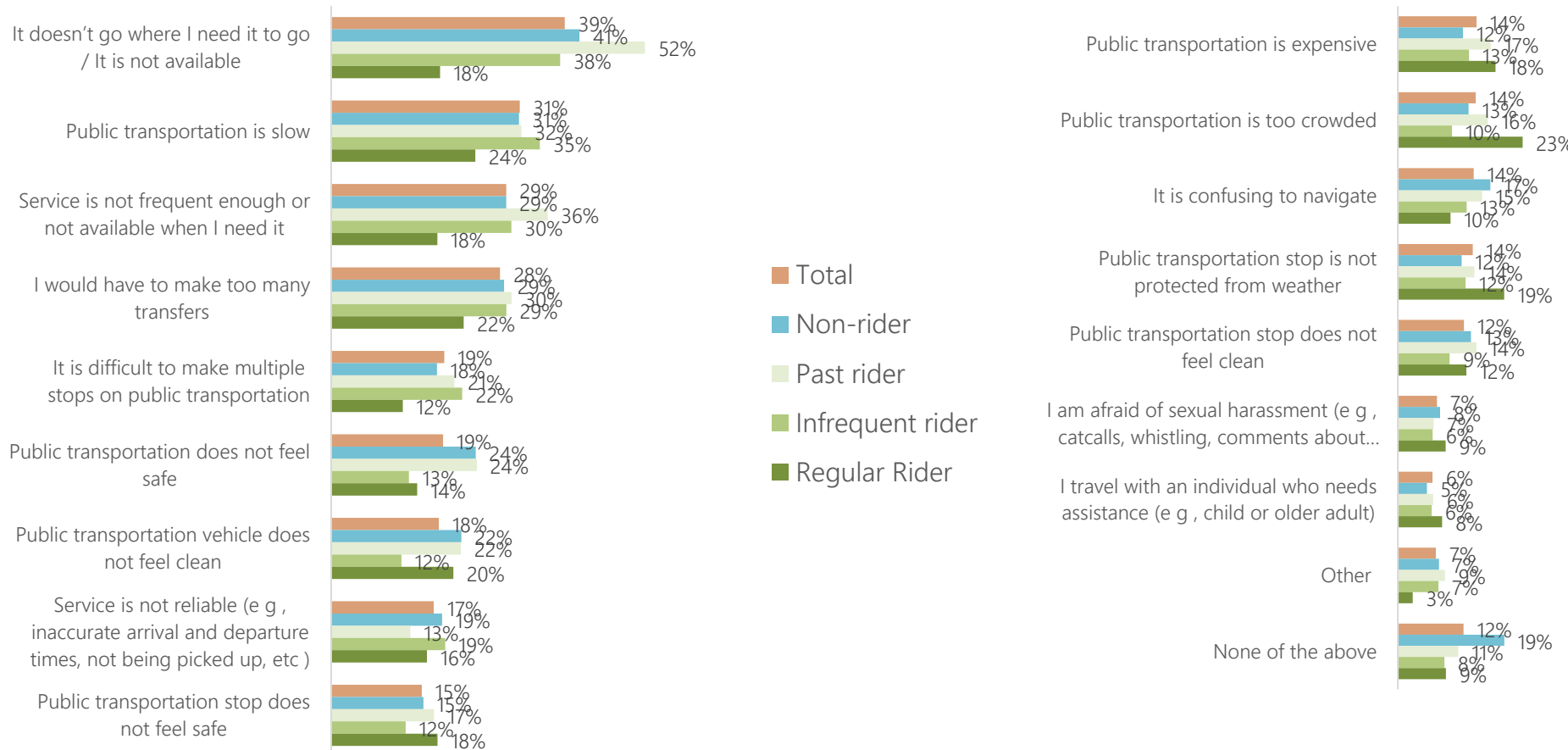
—Past Rider

"I don't need to. Am still able and capable of driving, and I own my own car."

—Non-Rider

When provided a list of barriers, residents were most likely to say lack of availability and slow transit times made public transportation difficult to use

Barriers to Public Transportation Use



The graph, split for clarity, presents reasons residents might be prevented from using public transportation. The next slide describes differences across demographic segments.

Q23. What makes it difficult for you to use public transportation and/or prevents you from using public transportation more often? Please select all that apply.

Non-regular riders were twice as likely to say public transportation doesn't go where they need it to go

- > Regular transit riders were less likely than others to say that public transit not going where they need it to go/not being available (18%) was something that made it difficult to use than other residents (43%).
- > Most residents aged 65 and older selected this top response (54%) compared to just 28% of those under 35.
- > One out of four residents with household incomes lower than \$25,000 said public transportation is not protected from weather (25%) compared to just 11% of other residents. Alternatively, those with the highest household incomes of \$150,000 or more were more likely (44%) than others (29%) to be concerned with speed of travel.
- > Female residents with children in their household were more likely to mention that they travel with an individual who needs assistance (21%) than males with children in their household (6%) or others (3%).

"Time can not be properly arranged, there is a lot of time wasted in waiting in line."

—Regular Rider

"It's expensive and I would have to be traveling with children."

—Infrequent Rider

"I have to drive to get to the light rail, may as well use my car to complete the trip."

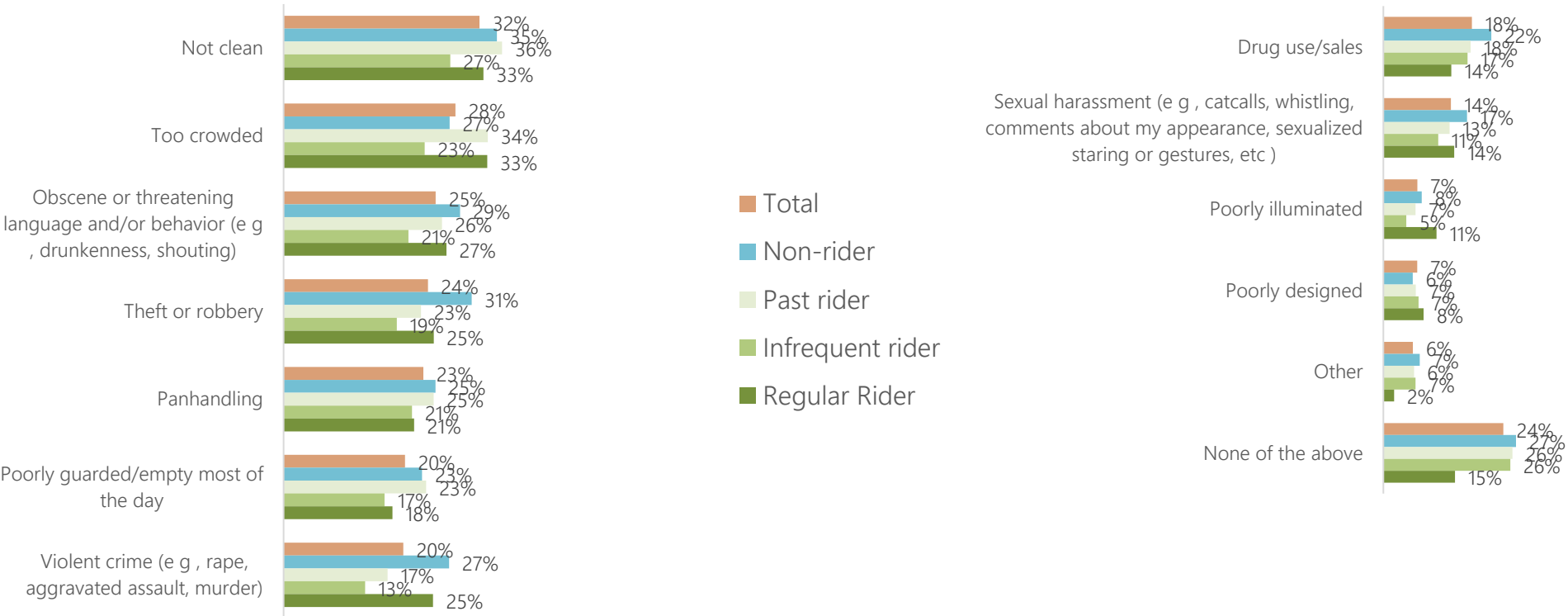
—Past Rider

"I deliver food as a living. Too much time and walking to get to destination."

—Non-Rider

About one out of three residents said uncleanliness was a significant problem on public transportation when provided a list of issues

Perceived Significant Problems on Public Transportation



The graph, split for clarity, presents the significant problems residents perceive to be present on public transportation. The next slide describes detailed results.

Q24. Which of the following do you perceive as a significant problem on public transportation (buses, light rail, and/or trains)? Please select all that apply.

One out of four residents selected obscene or threatening language and/or behavior as a significant problem on public transportation

- > Most residents in the Denver Metro area did not think violence or safety issues were significant problems on public transit, however, when provided a list of potential issues and asked to check all that apply:
 - 25% selected obscene or threatening language and /or behavior
 - 24% selected theft or robbery
 - 20% selected violent crime
 - 14% selected sexual harassment
- > Female respondents were more likely to say uncleanliness was a significant problem (38%) than male respondents (26%).
- > LGBTQIA+ residents were more likely to say that sexual harassment was a significant problem (25%) than straight residents (10%).
- > Residents under the age of 35 were more likely to say sexual harassment was a significant problem (22%) than older residents (10%).
- > About one out of four residents (24%) selected none of the above, indicating they did not think there were any significant problems.

"I have issues being around a lot of people as well as health and safety concerns."

—Regular Rider

"Public transportation is always dirty and stinky. And doesn't accept cards. I rarely carry cash."

—Infrequent Rider

"I'm too scared to get on with strangers. I know it's safe and I'll be fine, but I just can't do it unless I MUST do it."

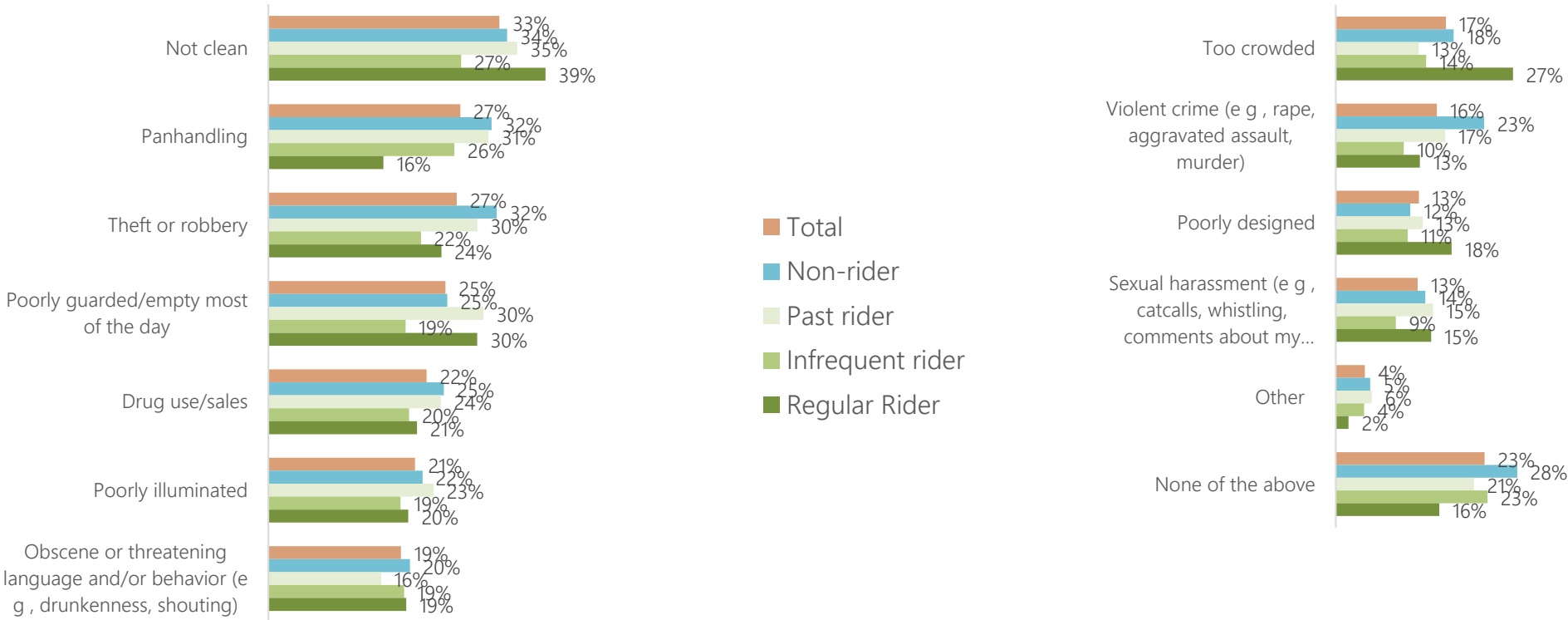
—Past Rider

"I feel vulnerable when I do not have my own car. Public transportation is not that safe."

—Non-Rider

Residents most frequently said uncleanliness, panhandling, and theft/robbery were significant problems at public transportation stops when provided a list of issues

Perceived Significant Problems at Public Transportation Stops



The graph, split for clarity, presents the significant problems residents perceive to be present at public transportation stops. The next slide describes detailed results.

Q25. Which of the following do you perceive as a significant problem at public transportation stops? Please select all that apply.

One out of four residents selected stops being poorly guarded as a significant problem

- > Most residents in the Denver Metro area did not think violence or safety issues were significant problems at public transit stops, however, when provided a list of potential issues and asked to check all that apply:
 - 27% selected theft or robbery
 - 25% selected poorly guarded/empty most the day
 - 21% selected poorly illuminated
 - 19% selected obscene or threatening language and/or behavior
 - 13% selected sexual harassment
- > Female residents were more likely to say sexual harassment was a significant problem at stops (18%) than male residents (7%).
- > LGBTQIA+ residents were more likely to say that sexual harassment was a significant problem (27%) than straight residents (10%).
- > Non-riders were more likely to select violent crime (23%) than regular riders (13%).
- > About one out of four residents (23%) selected none of the above, indicating they did not think there were any significant problems.

*"Union Station bus terminal has become a hangout for Denver's homeless and drug dealers." **
—Regular Rider

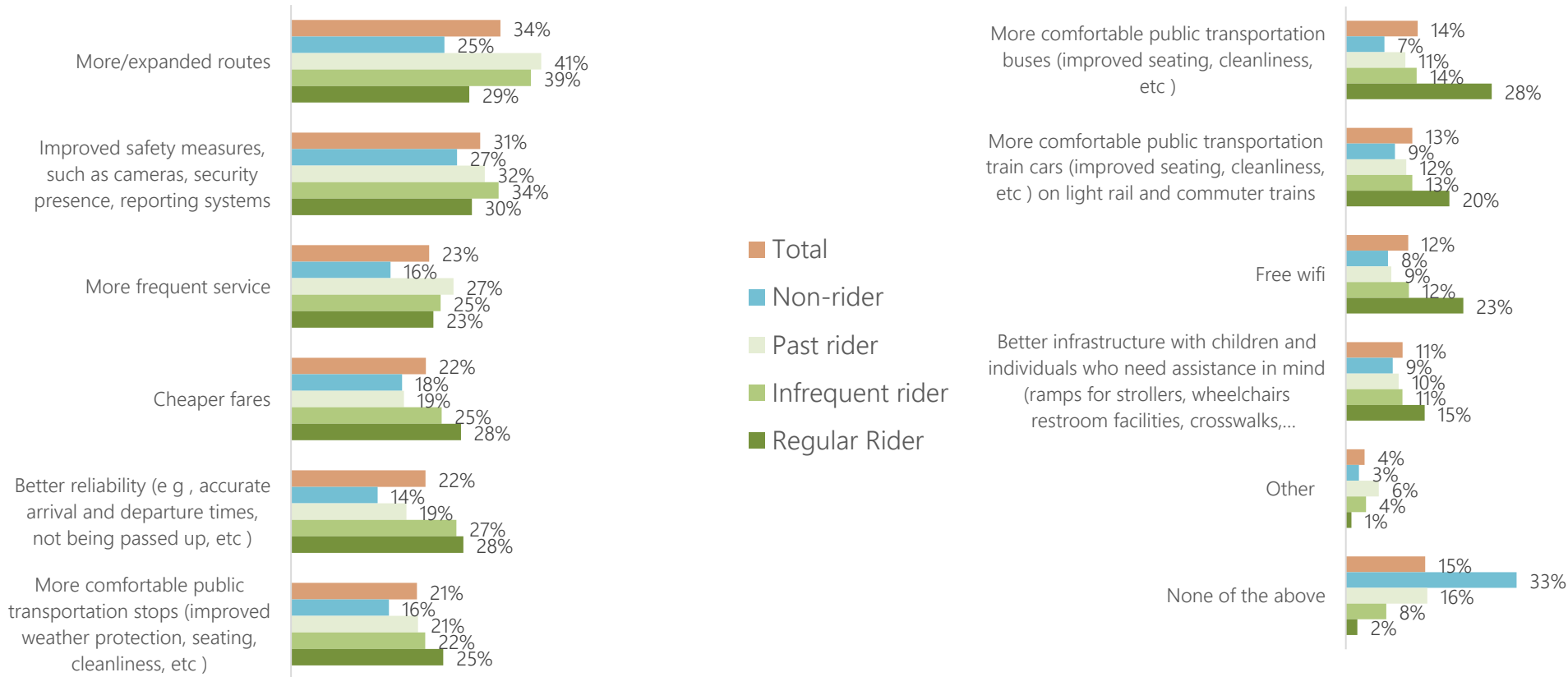
"Sometimes hard to see, either from far away or at the stop by the passenger or driver."
—Infrequent Rider

"People breaking into/stealing cars in parking structure."
—Past Rider

"Very rough people at bus stops, especially at night."
—Non-Rider

Residents said more/expanded routes and improved safety measures would make them most likely to use public transit in the future

Desired Improvements to Public Transportation



The graph, split for clarity, presents the top three desired improvements residents said would make them most likely to use public transit in the future. The next slide describes detailed results.

One third of non-riders said there as nothing that would make them more likely to ride public transportation in the future

- > One out of three non-riders (33%) selected none of the above, indicating there was nothing that would make them more likely to ride public transit in the future. In general, non-riders were less likely to select improvements than others.
- > Regular riders were more likely to say more comfortable buses (28%) and free Wi-Fi (23%) would make them more likely to use public transportation than others (11% and 10% respectively).
- > Residents with household incomes under \$25,000 a year were more likely to select cheaper fares (37%) than others (20%).
- > LGBTQIA+ residents were more likely to desire more comfortable public transportation stops (33%) than others (18%).

"Bus terminal needs to have more police and security officers."
—Regular Rider

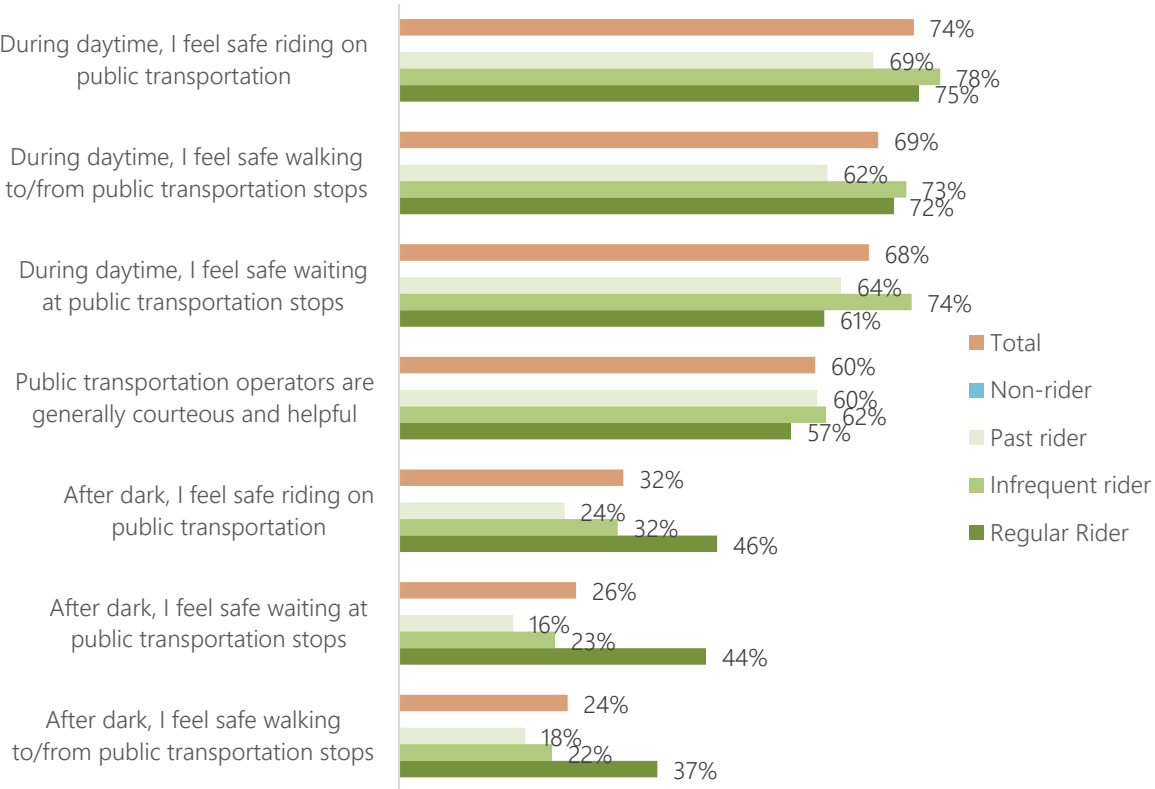
"My dogs being allowed."
—Infrequent Rider

"Free car parking at metro station parking spots."
—Past Rider

"Could never replace the convenience and safety of a private vehicle."
—Non-Rider

Residents were much more likely to agree that they felt safe using public transportation during the day than after dark

Percentage of Riders (Past and Present) Agreeing That ...

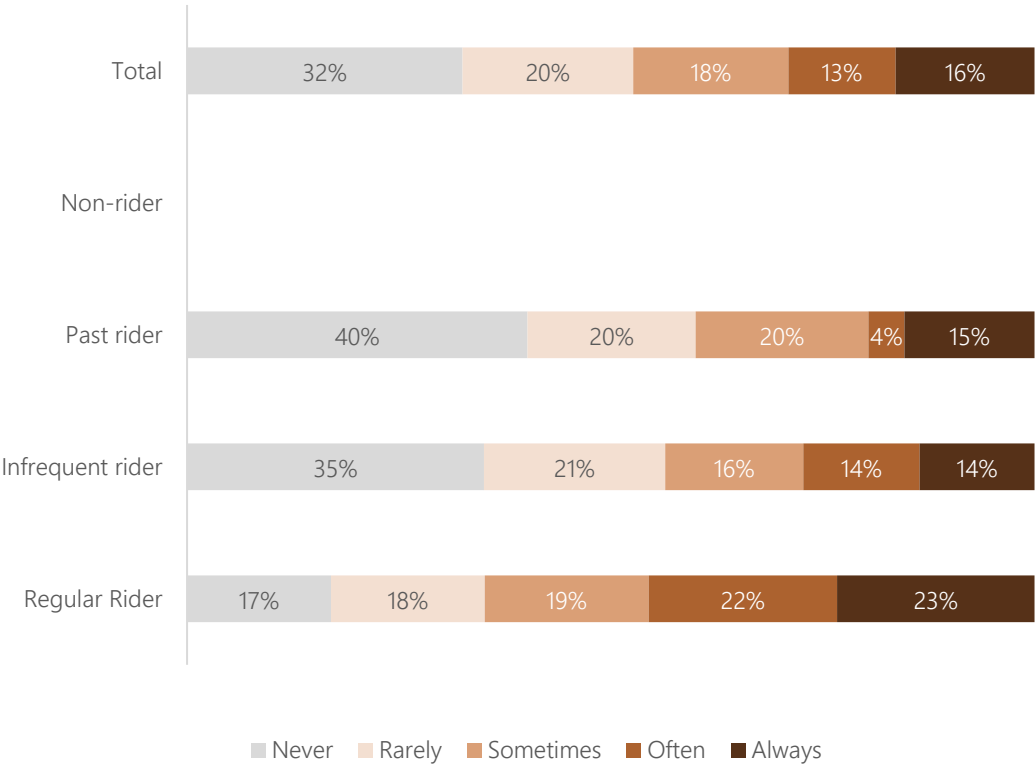


This question was not asked of non-riders.

- > Overall, riders were more than twice as likely to say they felt safe riding public transportation and waiting at/walking to public transport stops during daytime than after dark.
- > While regular riders were likely to agree that they felt safe using public transportation after dark than others, most nonetheless did not agree that they felt safe at night.
- > Male riders were twice as likely to agree that they felt safe riding, waiting at stops, and walking to/from stops after dark (41%, 35%, 37%) than female residents (22%, 14%, 14%).
- > People of Color were less likely to agree that operators are generally courteous and helpful (49%) than White alone riders (65%).
- > Riders with household incomes under \$25,000 were less likely to agree that operators are generally courteous and helpful (35%) than others (54%).

Most regular riders pay for fares/tickets with cash at least sometimes

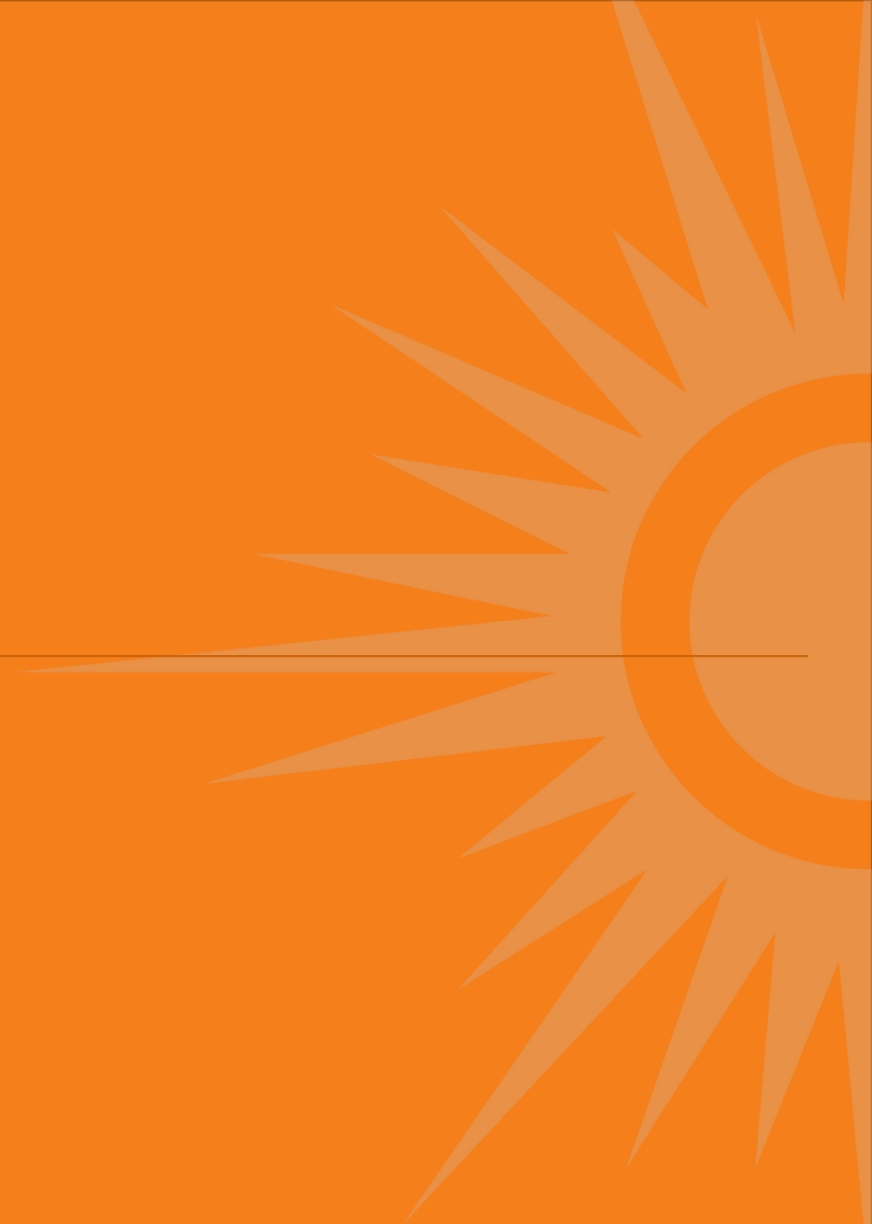
Frequency of Paying Fare/Ticket With Cash



This question was not asked of non-riders.

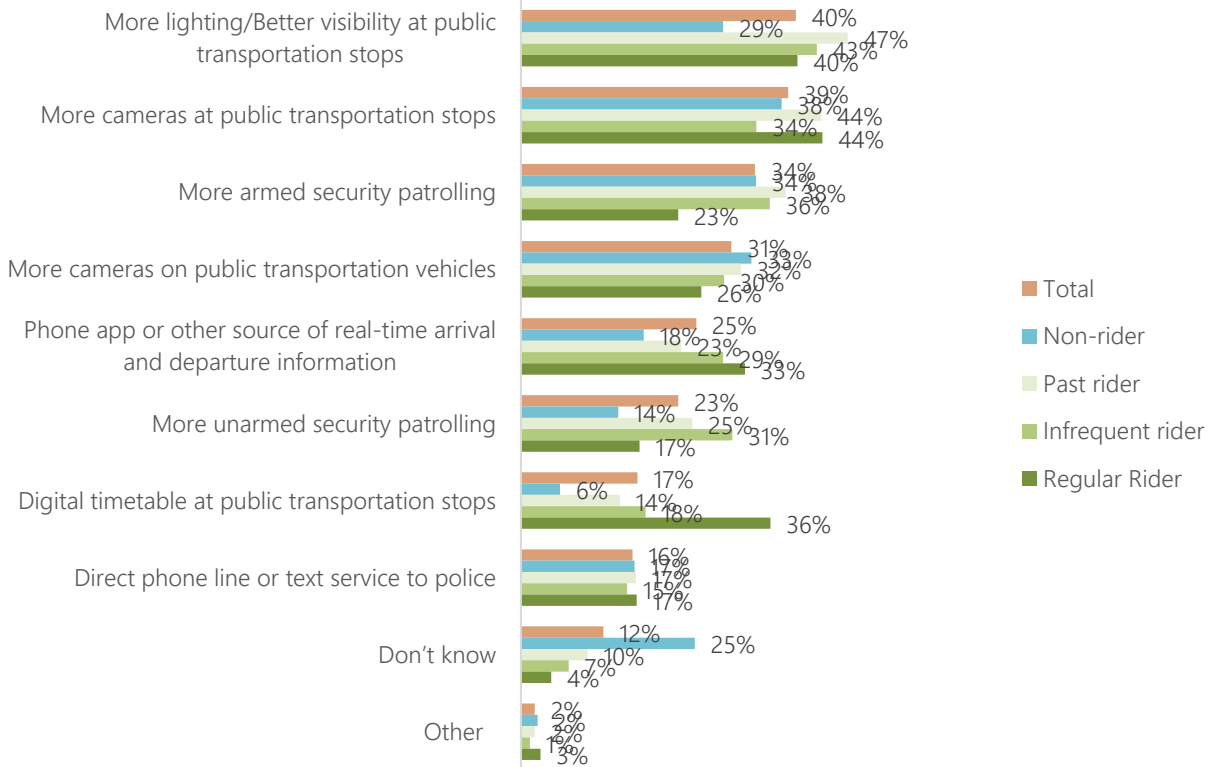
- > Regular riders were more likely (46%) than others (24%) to say they often or always paid with cash.
- > People of Color were more likely (39%) than White alone (24%) to say they often or always paid with cash.
- > Those with household incomes below \$50,000 were more likely (43%) than others (23%) to say they often or always paid with cash.

SECTION 5
PUBLIC TRANSIT SAFETY



The most desired safety improvements were more lighting and cameras at public transportation stops

Top Three Desired Safety Improvements to Public Transportation



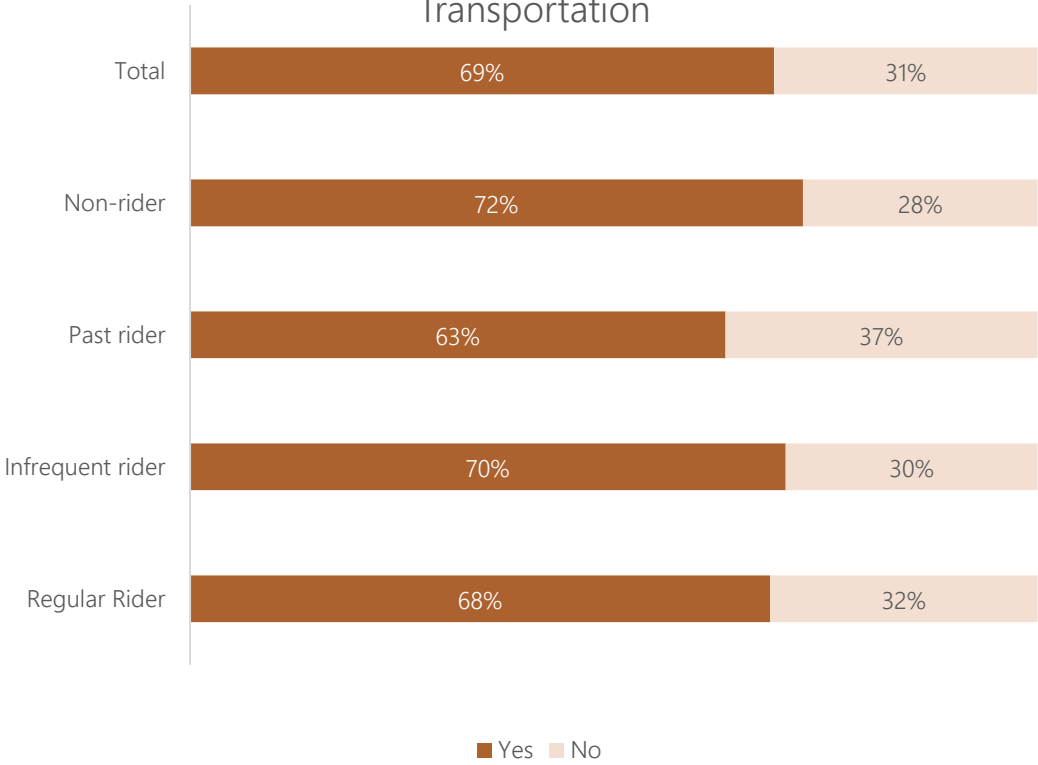
Residents were asked to select the three most important interventions that could make using public transportation safer.

- > More lighting/better visibility (40%) and more cameras (39%) at public transportation stops were the most frequently chosen options by all residents.
- > While additional armed security patrolling was the third most desired option, regular riders were less likely (23%) to choose this than others (36%).
- > Alternatively, regular riders were much more likely to desire digital timetables (36%) at stops than others (13%).

Q29. In your view, what can make traveling by public transportation safer? Select up to 3 of the most important options from the following list.

Most residents said they felt it necessary to take personal precautions against crime when using public transportation

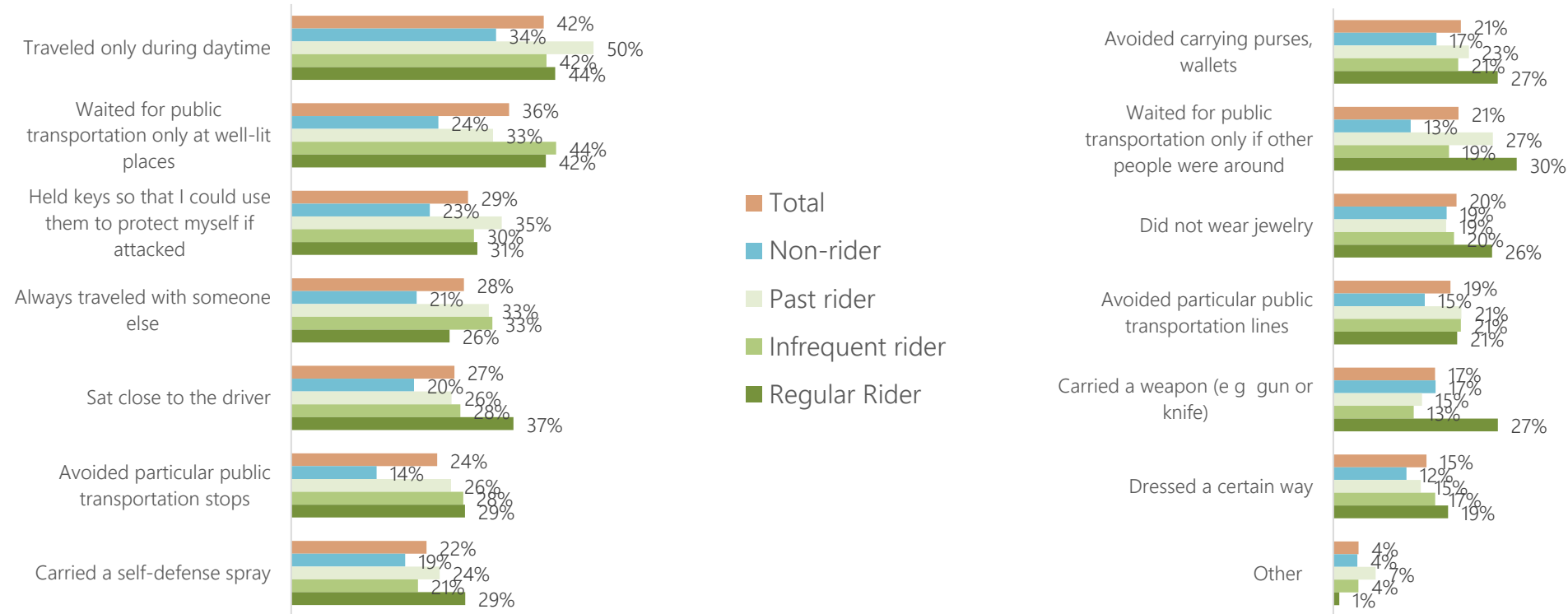
Percentage of Residents Who Felt it Necessary to Take Precautions Against Crime When Using Public Transportation



- > Rates of feeling it necessary to take personal precautions against crime when using public transportation were generally similar across rider status.
- > Female residents were more likely to say they felt it necessary (73%) than male residents (64%).
- > People of Color were more likely to say yes (76%) than those identifying as White alone (65%).
- > Residents with household incomes lower than \$50,000 were more likely to say they felt it necessary (73%), than those with household incomes over \$150,000.
- > Residents with disabilities were more likely to say yes (81%) than those without (67%).
- > LGBTQIA+ residents said they felt it necessary at a higher rate (81%) than others (66%).

Residents took a wide range of precautions against crime while using public transportation

Types of Precautions Against Crime Taken



The graph, split for clarity, presents the types of precautions residents had taken. This question was only asked of residents who said they felt it necessary to take precaution in the previous question. The next slide describes detailed results.

Q31. Which of the following precautions have you taken while using public transportation to increase your personal safety? Please select all that apply.

Using public transit in the daytime and waiting in well-lit areas were the most common precautions taken while using public transit

- > Nearly half of residents who said they felt it necessary to take precautions against crime (42%) said they traveled only during the daytime when using public transit.
- > About one out of three (36%) said they waited for public transportation only at well-lit places.
- > Female residents were more likely to say they only travel during the daytime (51%) than male residents (31%). Female residents were also more likely to say they held keys for protection (37% to 19%), traveled with someone else (36% to 21%) and carried a self defense spray (28% to 14%).
- > LGBTQIA+ residents were more likely to say they held keys for protection (47%) or dressed in a certain way (25%) than others (25% and 12% respectively).

"I pay to attention to my surroundings."
—Regular Rider

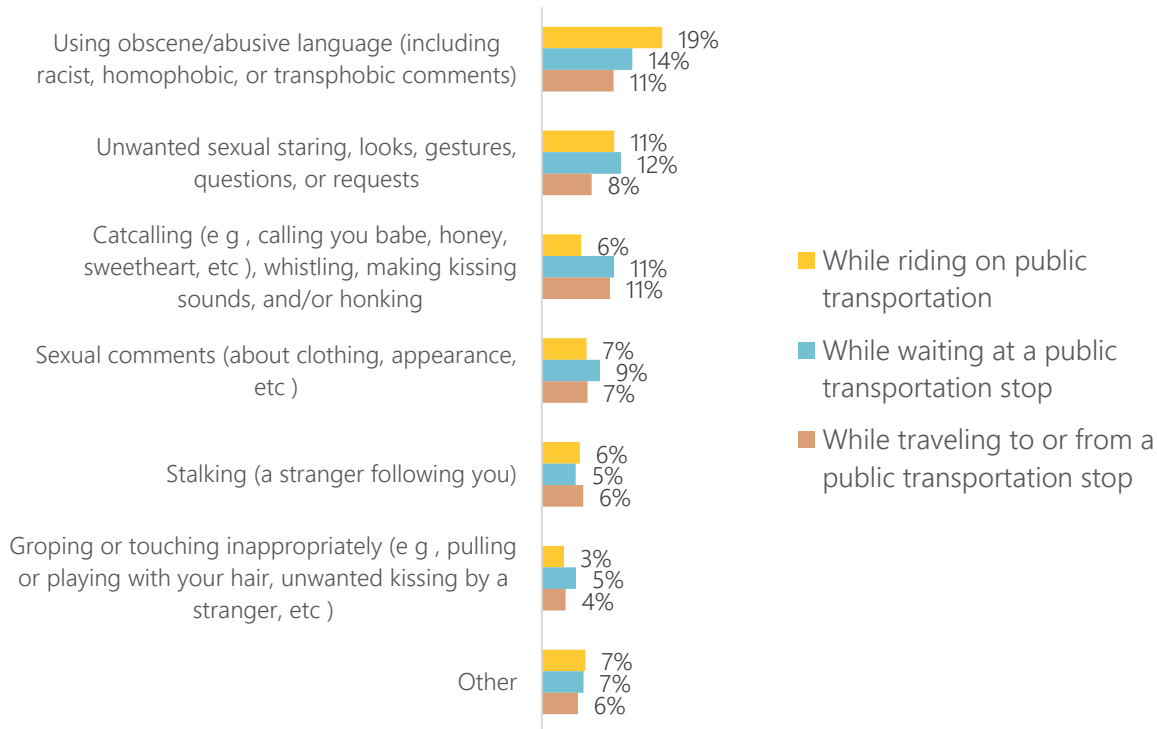
"I move away from suspicious people on the train or at stops."
—Infrequent Rider

"I was protective of my personal belongings and alert to things going on around."
—Past Rider

"I talked on phone with someone who knew what I was doing."
—Non-Rider

The most common form of harassment residents experienced was obscene/abusive language while riding on public transportation

Percentage of All Residents Who Have Experienced Harassment in The Last 3 Years



*"Guys in my face then calling me a b**** because I don't want to talk to them."*

—Regular Rider

"Unwanted catcalling and sitting close to me when there is a fully empty train."

—Infrequent Rider

"A drunk fell on me or got in my personal space."

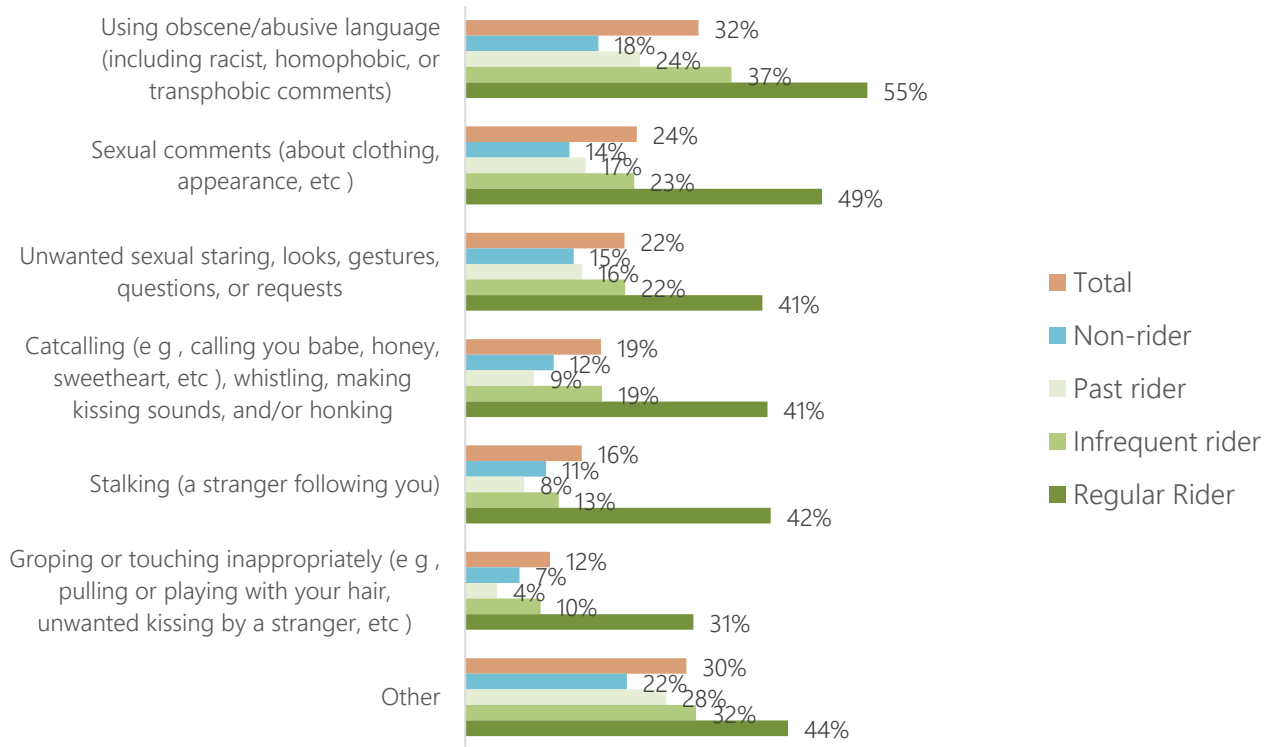
—Past Rider

"Homeless passengers with mental issues using the bus to stay warm acting unpredictably and clearly high."

—Non-Rider

Regular riders were much more likely to say they experienced harassment while using public transportation

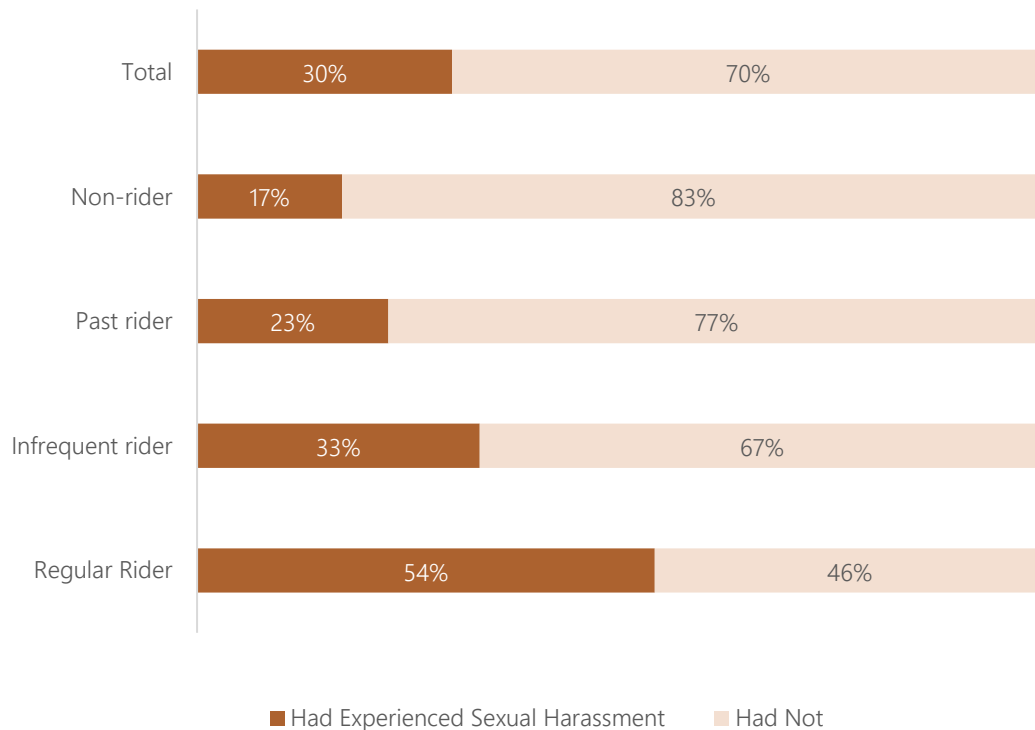
Experienced Harassment While Using Public Transportation
(On Transit or While Waiting at/Traveling to Stops)



- > Female residents were more likely to have experienced catcalling (28%) than male residents (16%) in the last three years.
- > Residents with disabilities were more much more likely to say they had experienced groping or inappropriate touching (32%) than others (8%).
- > LGBTQIA+ residents were twice as likely to have experienced groping or inappropriate touching (20%) than others (10%).
- > Residents under 35 years of age were more likely to say they experienced sexual comments (30%) than older residents (13%).
- > Residents with the lowest household incomes (under \$25,000) were more likely to have experienced stalking (27%) than those with household income above \$150,000 (6%).

About half of regular riders said they experienced sexual harassment while using public transportation over the last three years

Percentage of Residents Who Had Experienced Sexual Harassment When Using Public Transportation Over The Last 3 Years

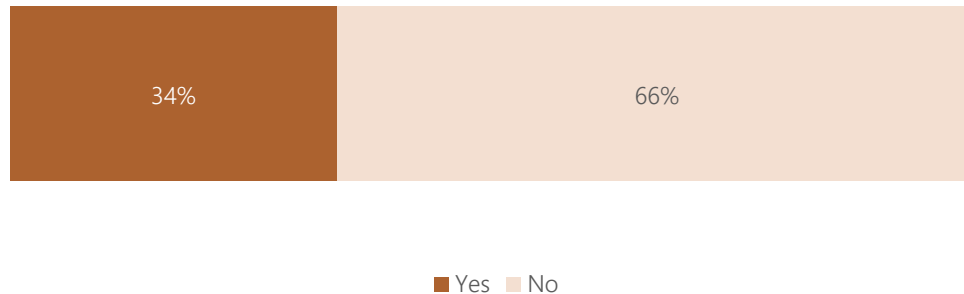


The graph on the left presents the percentage of residents who experienced at least one of the following while using public transportation over the last three years: catcalling, groping, stalking, unwanted sexual statements.

- > More than half of residents with disabilities (54%) said they had one of these experiences compared to about a quarter (26%) of other residents.
- > Nearly half of LGBTQIA+ residents said they experienced at least one of these events (48%) compared to 27% of straight residents
- > Female residents (35%) were more likely than male residents (26%) to have one of these experiences.
- > Nearly half of residents under 35 years of age (48%) reported at least one of these experiences in the last three years compared to 22% of older residents.
- > Residents with household incomes over \$150,000 were half as likely (17%) as others (34%) to have these experiences over the last three years.

About one out of three residents who experienced sexual harassment while using public transportation reported it

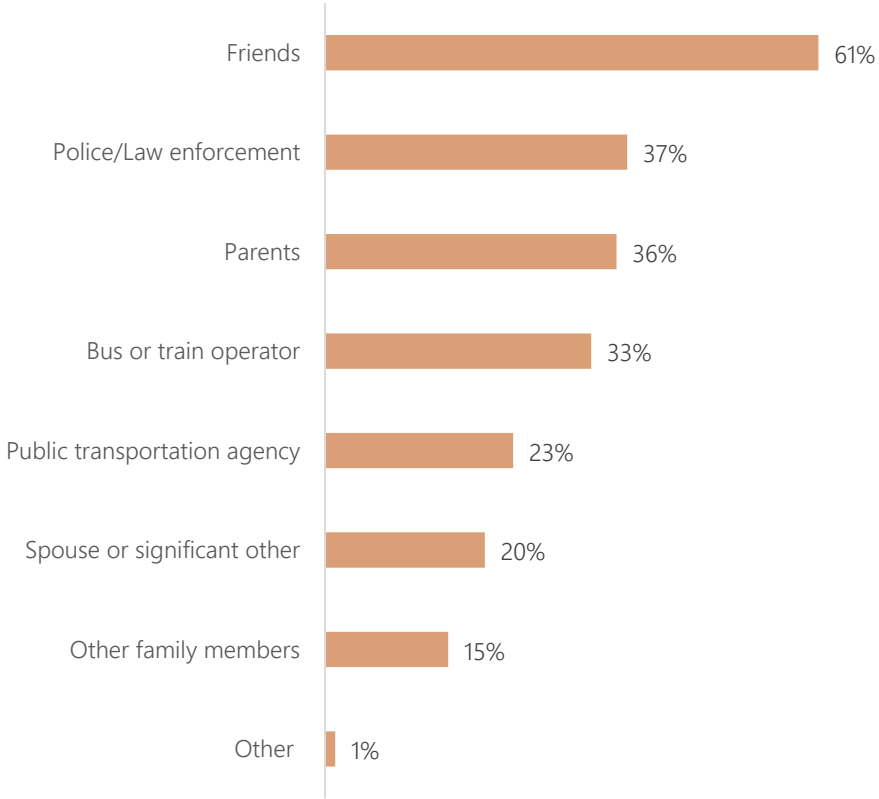
Did Resident Report Experienced Sexual Harassment on Public Transportation



- > While these sample sizes are fairly small, regular riders were much more likely to report (70%) than others (18%) who had experienced sexual harassment while using public transportation over the last three years.
- > Residents with household incomes lower than \$50,000 were more likely to report (48%) than those with higher household incomes (24%).
- > Residents with disabilities who had experienced sexual harassment were more likely (61%) than others (23%) to report the event.

Most who had experienced harassment while using public transportation reported the incident to friends

Who Was Harassment Reported To

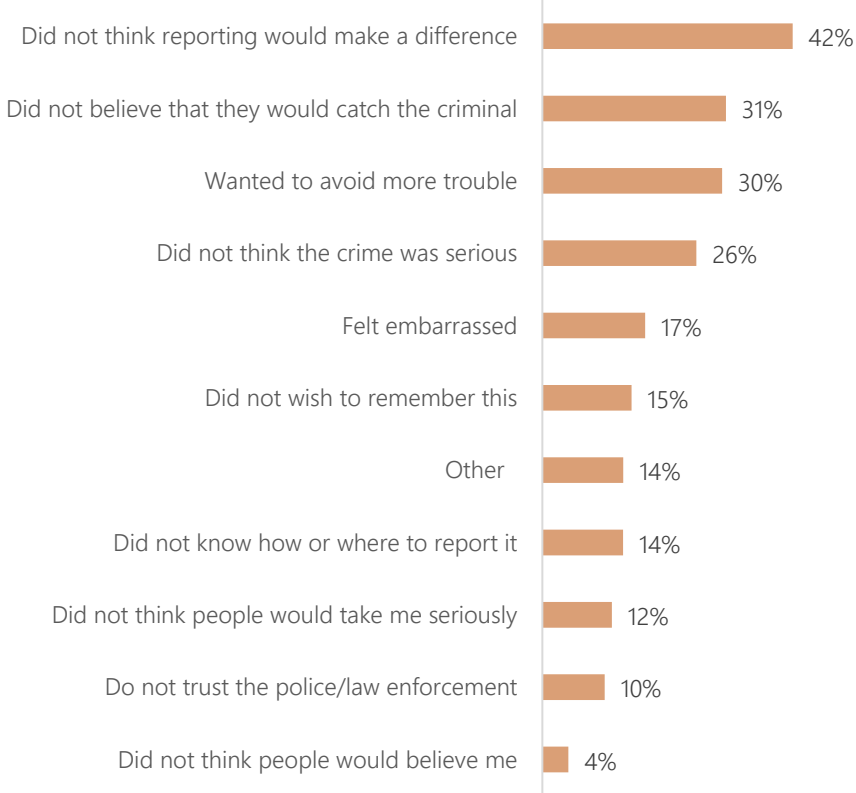


> A bit more than one out of three (37%) who had experienced sexual harassment over the last three years said they reported it to police/law enforcement.

Sample sizes are too small to make inferences across demographics.

The most common reasons for not reporting harassment was that residents did not think it would make a difference

Why Harassment Was Not Reported



Sample sizes are too small to make inferences across demographics.

SECTION 6
APPENDIX



SURVEY INSTRUMENT

- Corona Insights developed this survey instrument with CDOT's Transit Equity & Innovation Mobility Fellow. The survey instrument drew inspiration from two previous studies:
 - Agrawal, A. W., Loukaitou-Sideris, A., Tortora, C., & Hu, Y. (2020). [Crime and Harassment on Public Transportation: A Survey of SJSU Students Set in International Context](#).
 - Metro (2019). [Understanding How Women Travel](#)
- The survey was designed to require no more than 15 minutes to complete, and the actual median time was 13 minutes

RESEARCH MODE & SAMPLING

- This survey was conducted online, and respondents were drawn from an online research panel provided by Dynata. Respondents were sampled in such a way as to be reflective (though not technically representative) of the general population ages 18 or older in the seven-county Denver metro area. Respondents were screened in order to ensure that they met the survey's age and location criteria. Additional quality control checks were used to identify poor quality responses (i.e., a red herring question and review of completed surveys for speed and out of geography IP addresses, and nonsense responses.)
- In total, 1,028 surveys were collected for analysis. Margins of error technically do not apply to panel surveys given that this approach does not use a truly random sample for obtaining respondents. However, readers can generally assume that findings for the total in this report are very strong (with margins of error that would be roughly $\pm 3.7\%$ had a probability sample been used), while findings for individual segments are more moderate in their reliability. This margin of error reflects the effective sample size from the weighted data.
- Data were weighted to reflect the general population of the seven-county Denver metro area in terms of age, gender, and race/ethnicity based on the most recent data available from the US Census' American Community Survey.

EXECUTION

- Surveys were completed between February 8-22, 2022.

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