



# 2022 Transit On-Board Survey

Pilot Survey Update for Transit Policy Working Group



# Outline

- What is the on-board survey?
- Pilot survey findings
  - Who is on board now?
  - What kind of trips are they making?
- Plan for main survey



# What is the On-Board Survey?

- System-wide survey of who is on transit, and where they are going
- An “intercept-interview” survey
- Conducted every five years
- Last survey 2016



Photo by David Joles, the Star Tribune 10/22/2021

# We do this survey to:

- Better understand current transit riders and markets
- Improve transit forecasts and planning
- Support before-and-after studies
- Federally required



# Routes sampled in pilot survey



## Routes

Light rail (Green and Blue), BRT (A and C line) and 8 Core Local Routes: 2, 3, 5, 6, 10, 18, 19\* *partial*, 21

Chosen by ridership

Ridership on these ten routes totaled to:

- **59%** of Metro Transit boardings in Fall 2019, and
- **64%** of Metro Transit ridership in Fall 2021

## Survey sample

Surveyed September 13 – November 15

Completed **4,000** questionnaires

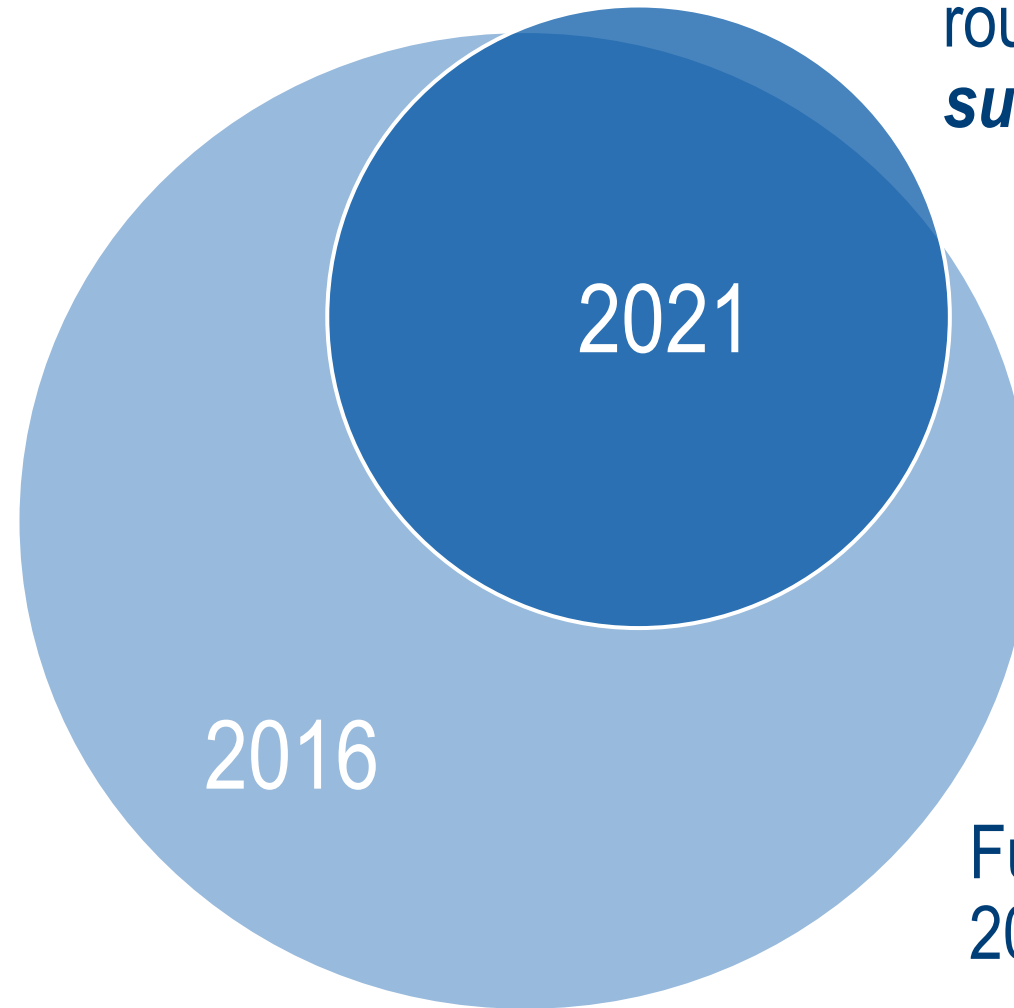
Weighted to Fall 2021 ridership (route, time of day, and direction)

In 2016, same routes: **15,580** questionnaires completed (51% of all questionnaires completed 2016)

# Who is on board?



# How we understand these data: a subset of trips and riders



Riders and trips served by these routes today are mostly a **subset** of the riders & trips served in 2016.

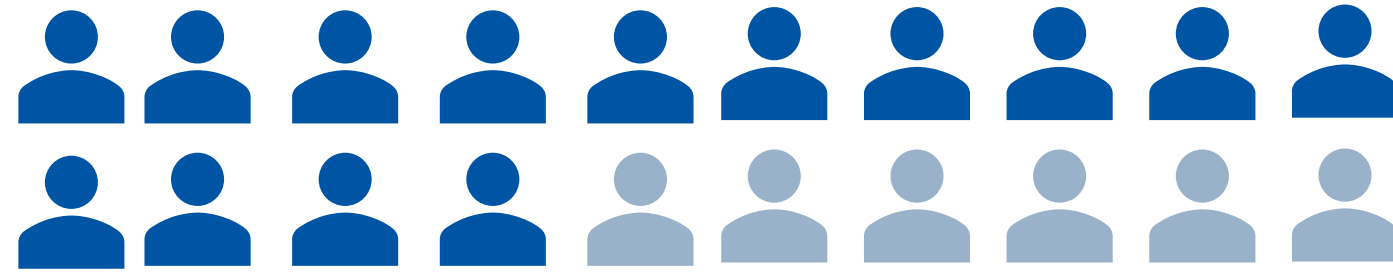
These slides compare *only* the routes sampled in 2021.

Full survey data coming 2023.

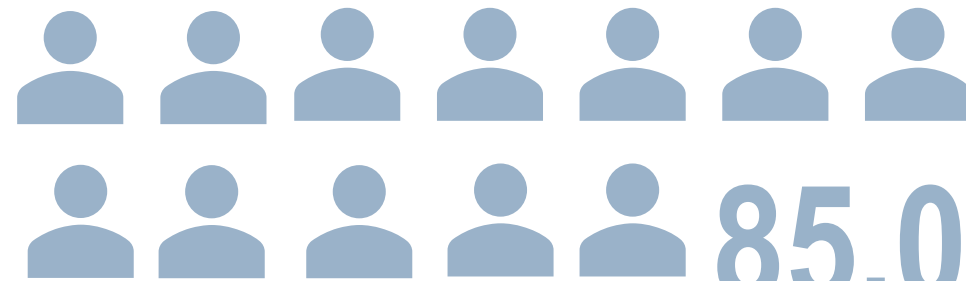
# How we understand these data: trips lost, trips retained



Of the  
**157,000**  
trips per day in 2016



**72,000**  
were retained  
(46% retention  
rate)



**85,000**  
were lost  
(54% loss rate)

 5,000 trips



# Retained a greater share of men's trips than women's trips

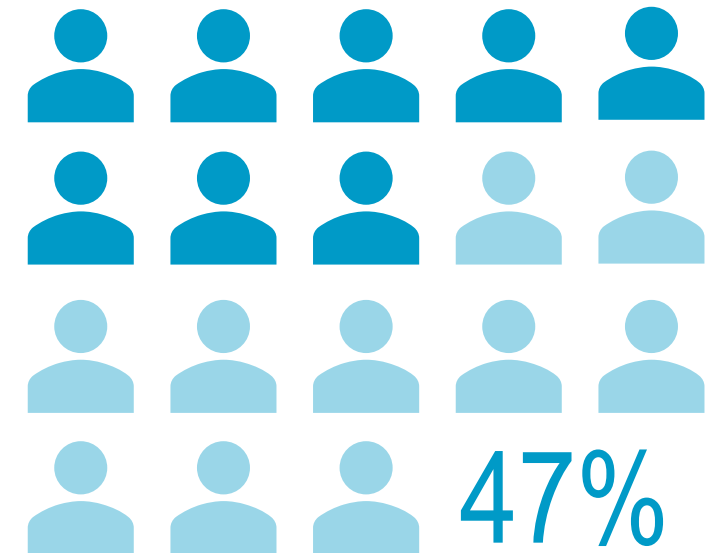


Of the  
**72,000**  
trips made by women and  
girls in 2016



**41%**  
were retained  
(30,000 trips)

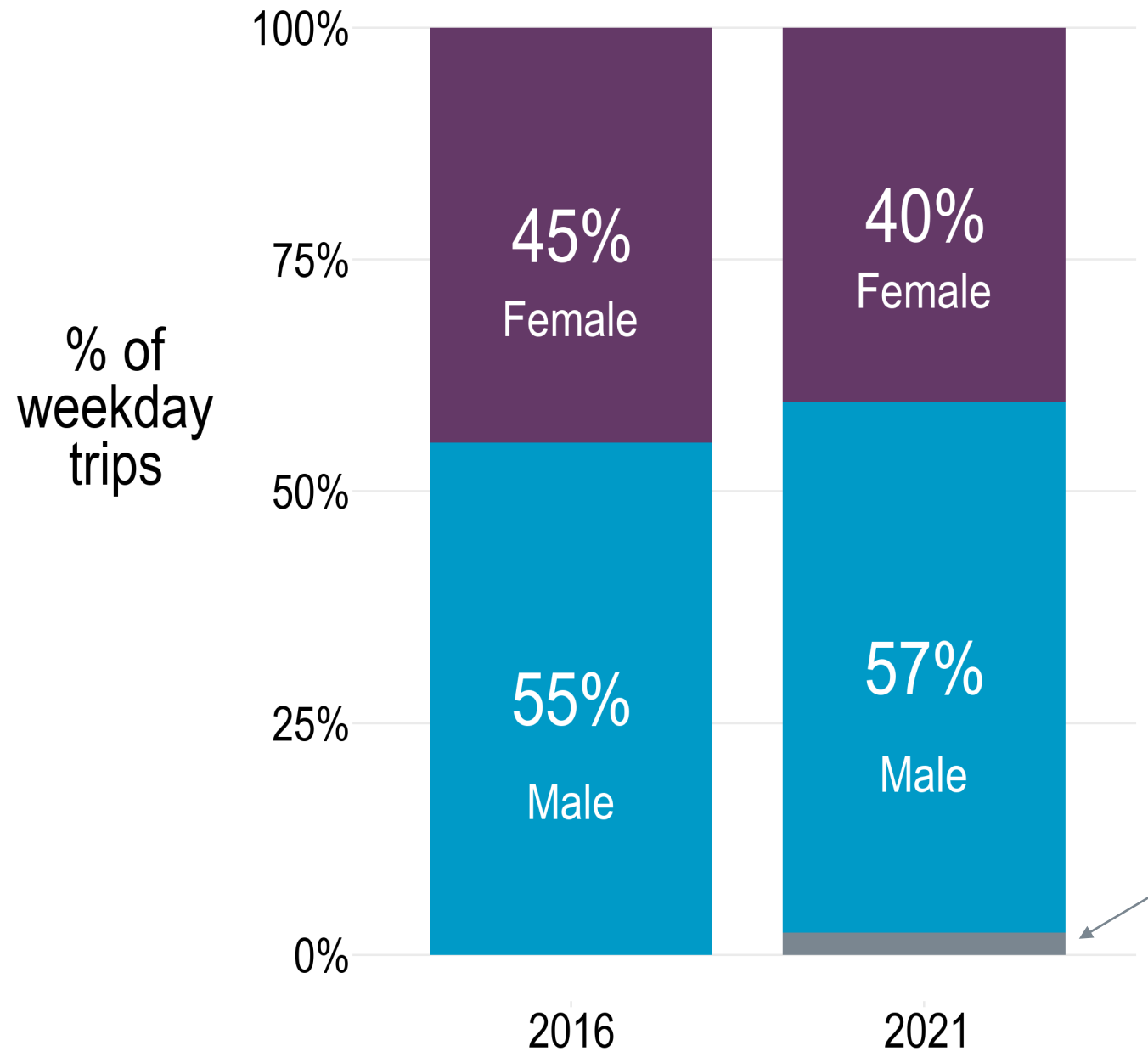
Of the  
**90,000**  
trips made by men and  
boys in 2016



**47%**  
were retained  
(42,000 trips)

 5,000 trips

# Share of men on-board has increased

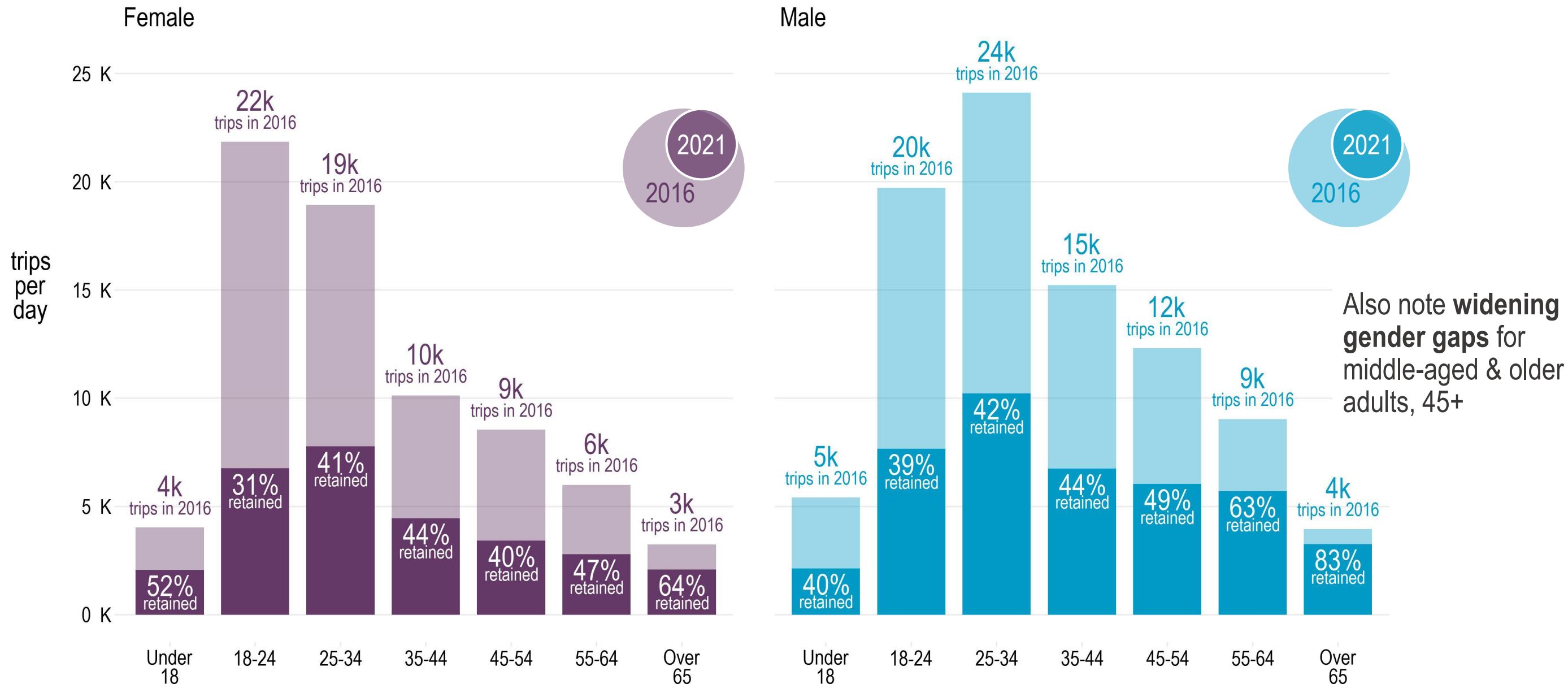


Comparison of the same routes in 2016 and 2021.

Transgender, non-binary, and other identities (2%) – see “Appendix” slides

# Retained greatest share of trips by older men, least by young women

2021 daily ridership (darker color) is overlaid on 2016 ridership (lighter color).

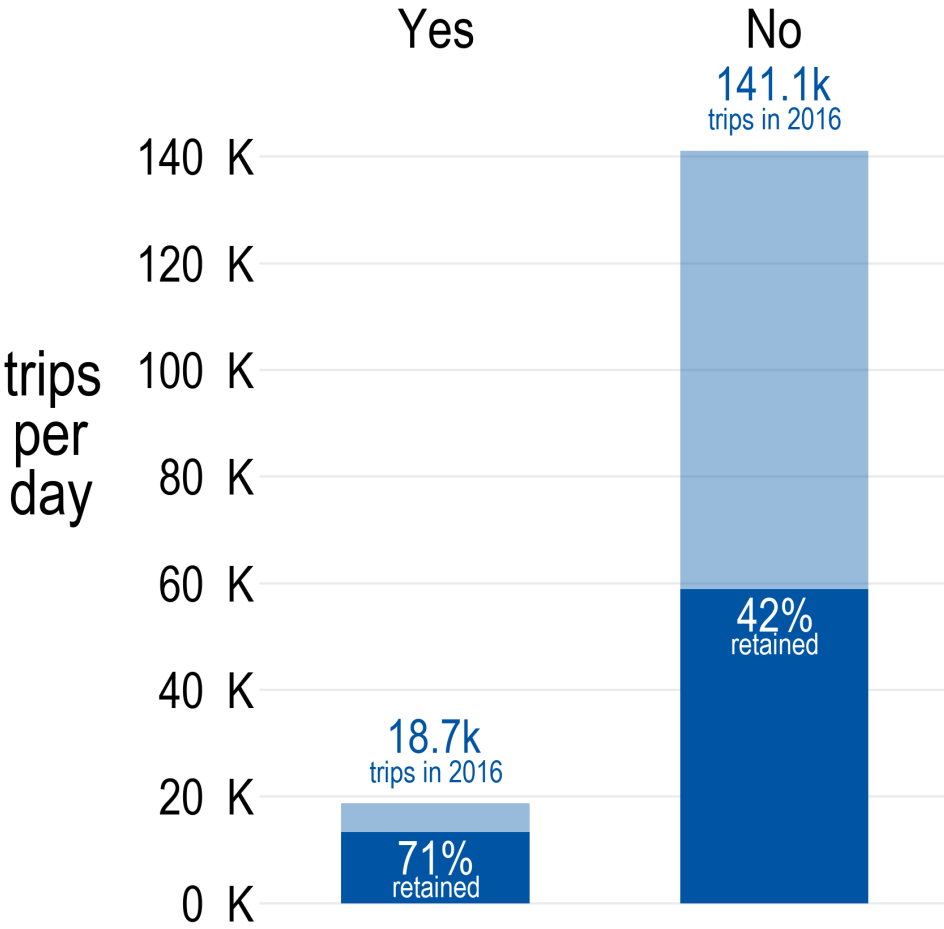


Comparison of the same routes in 2016 and 2021.

# Retained a greater share of trips by riders with a disability



Do you consider yourself to have a disability?

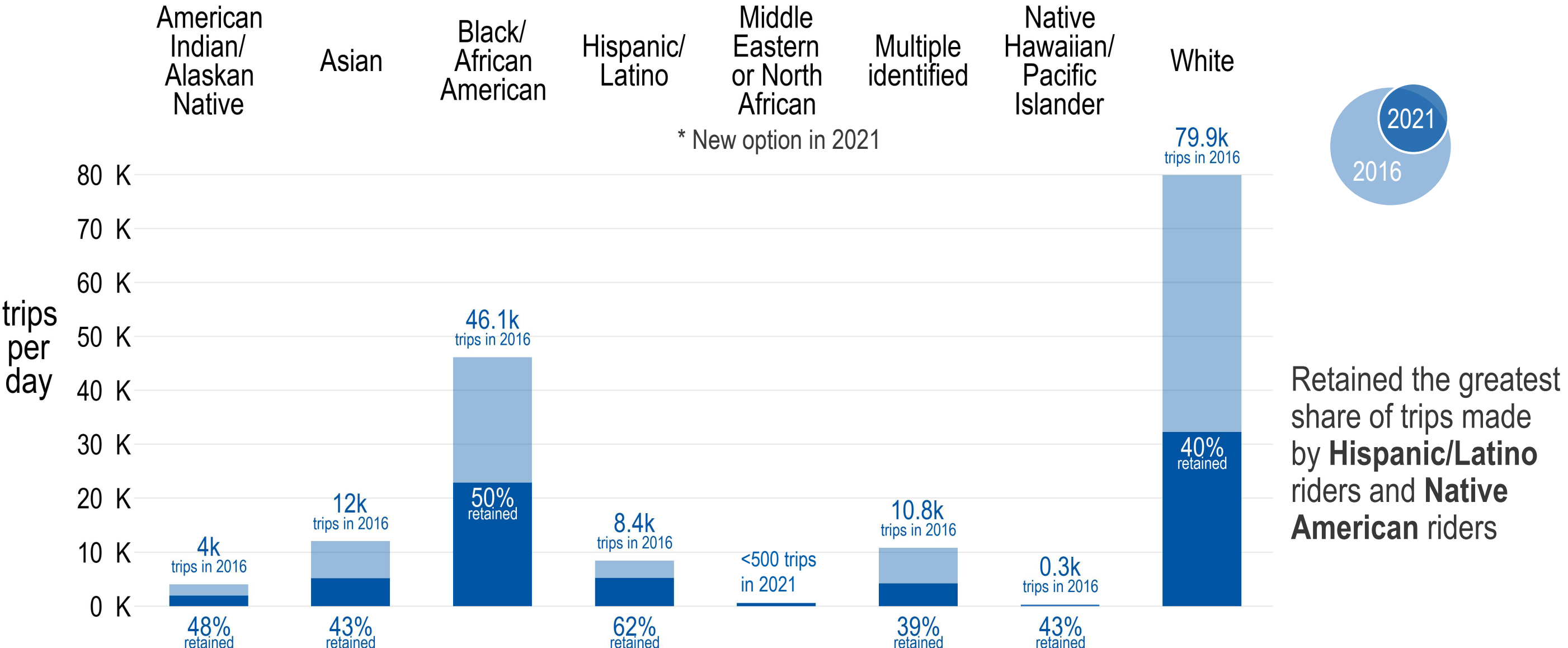


2021 daily ridership (darker color) is overlaid on 2021 ridership (lighter color). Comparison of the same routes in 2016 and 2021.

“Prefer not to answer” omitted.

Additionally, the share of trips made by those with a disability has increased from 11% to 18%.

# Retained greater share of trips made by riders of color

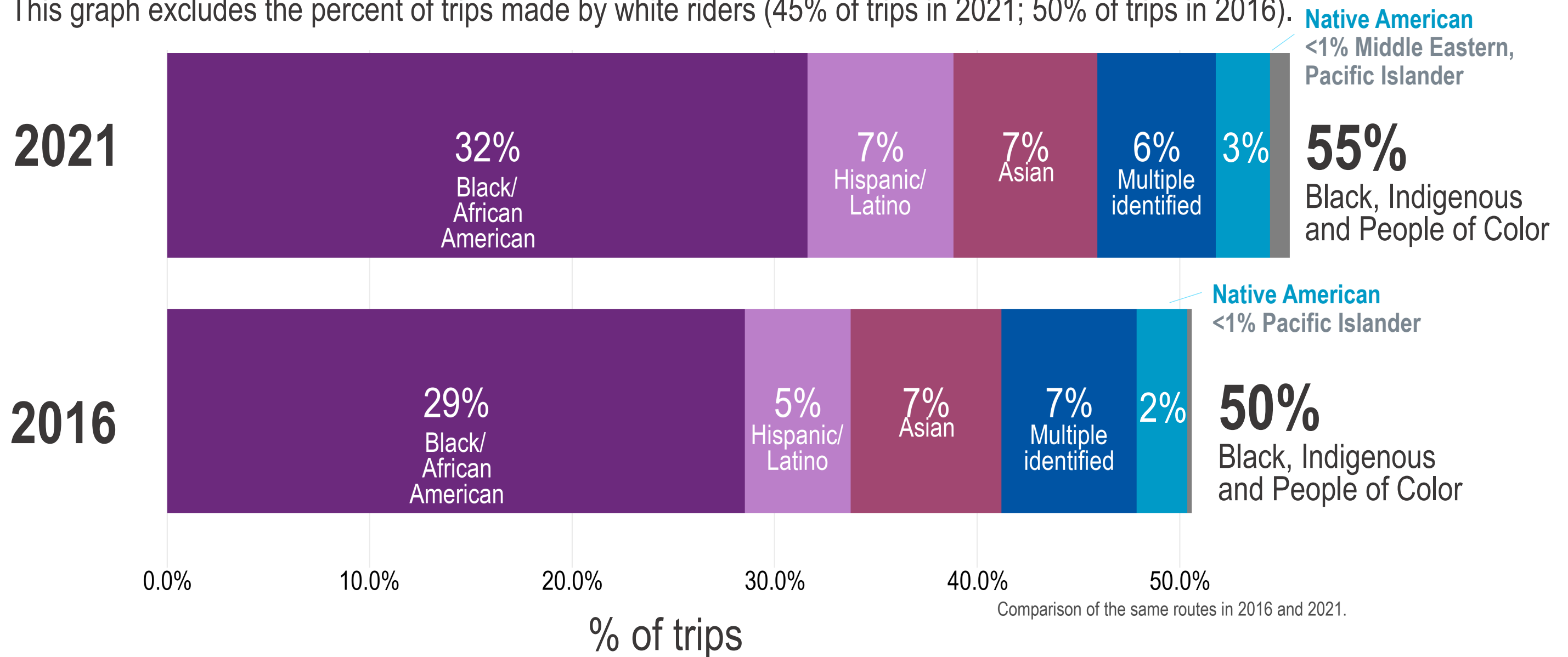


2021 daily ridership (darker color) is overlaid on 2021 ridership (lighter color). Comparison of the same routes in 2016 and 2021.

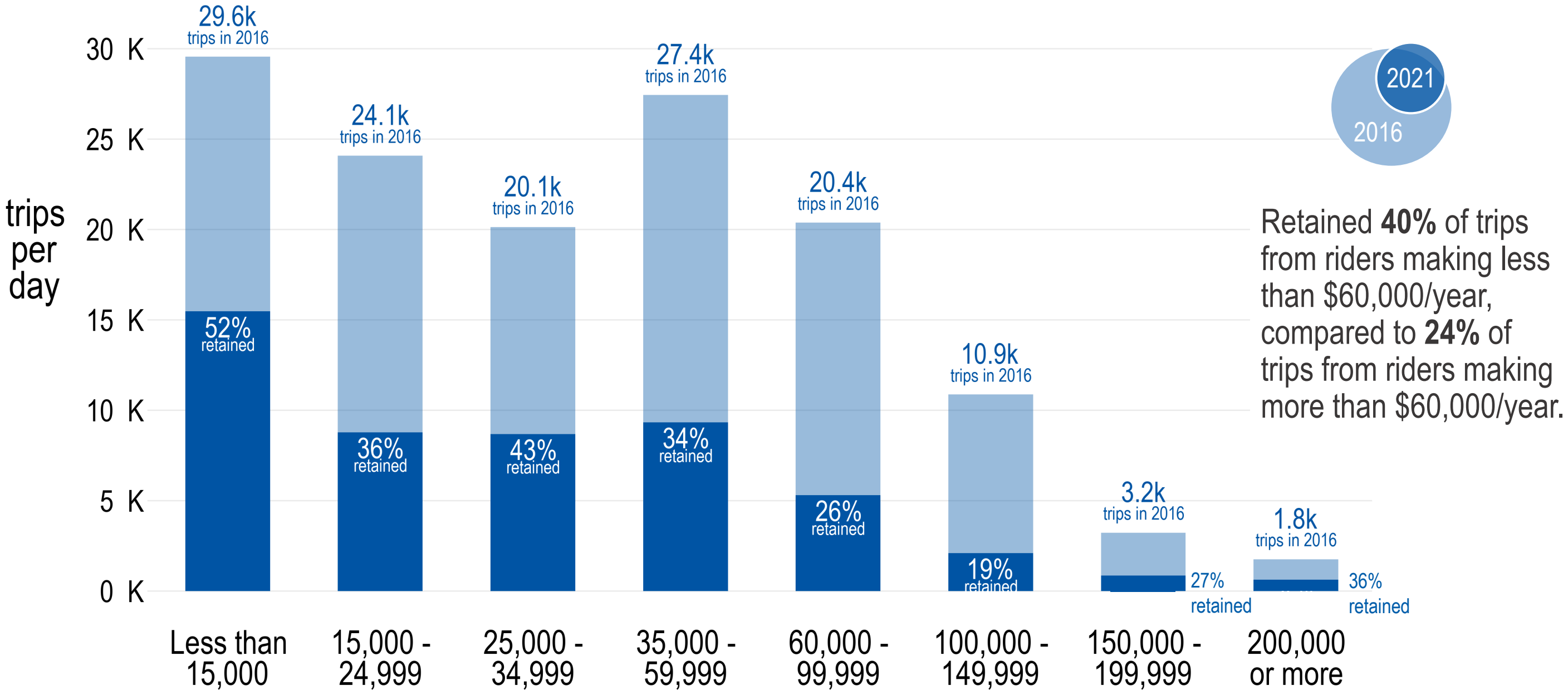
Retained the greatest share of trips made by **Hispanic/Latino** riders and **Native American** riders

# Share of riders who identify as Black or Latino has increased

This graph excludes the percent of trips made by white riders (45% of trips in 2021; 50% of trips in 2016).



# Retained greatest share of trips made by lowest-income riders

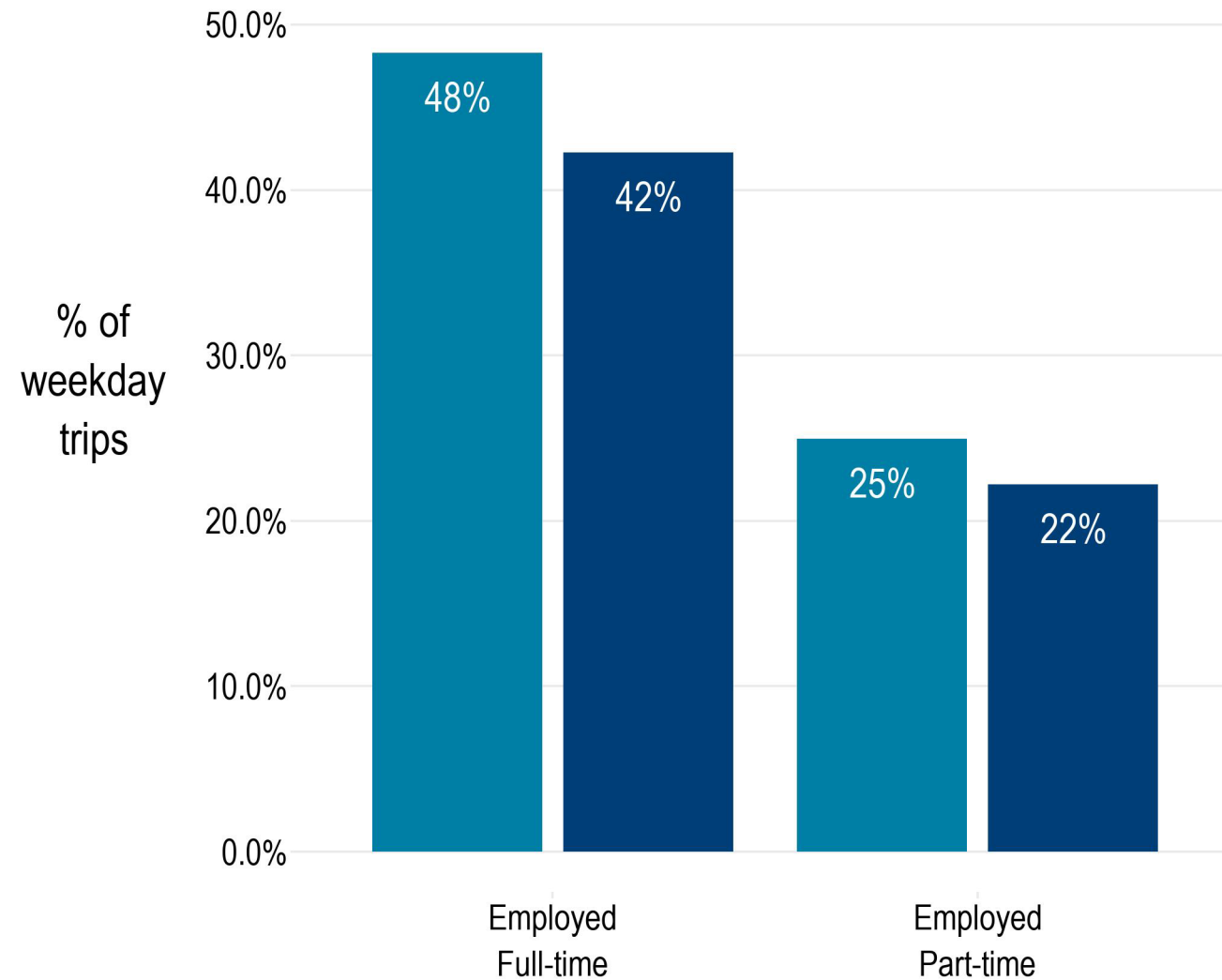


2021 daily ridership (darker color) is overlaid on 2021 ridership (lighter color). Comparison of the same routes in 2016 and 2021.

# Share of trips made by riders who are employed or students decreased

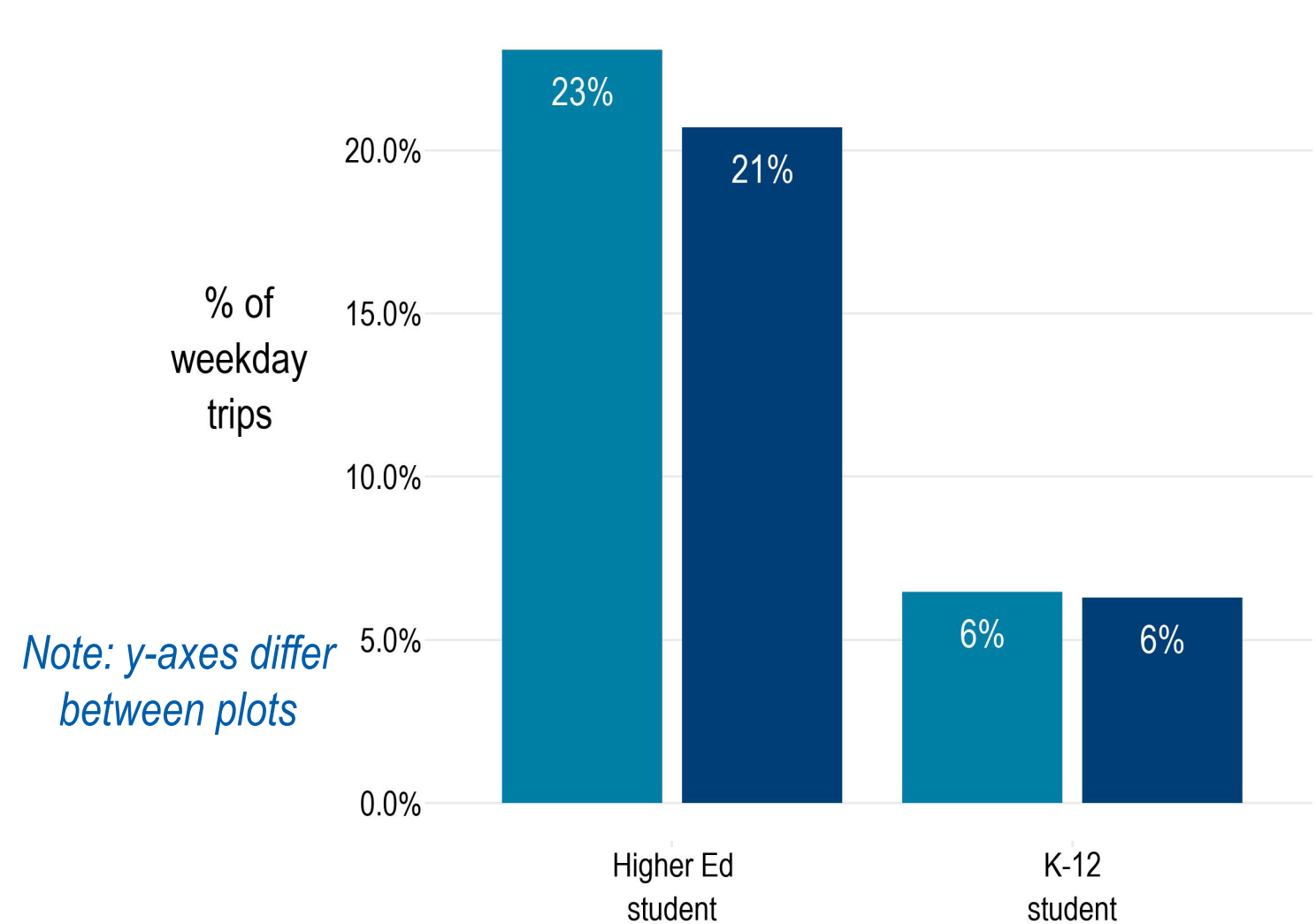
A smaller share of riders are employed

Comparison of the same routes in 2016 and 2021



A smaller share of riders are students

Comparison of the same routes in 2016 and 2021



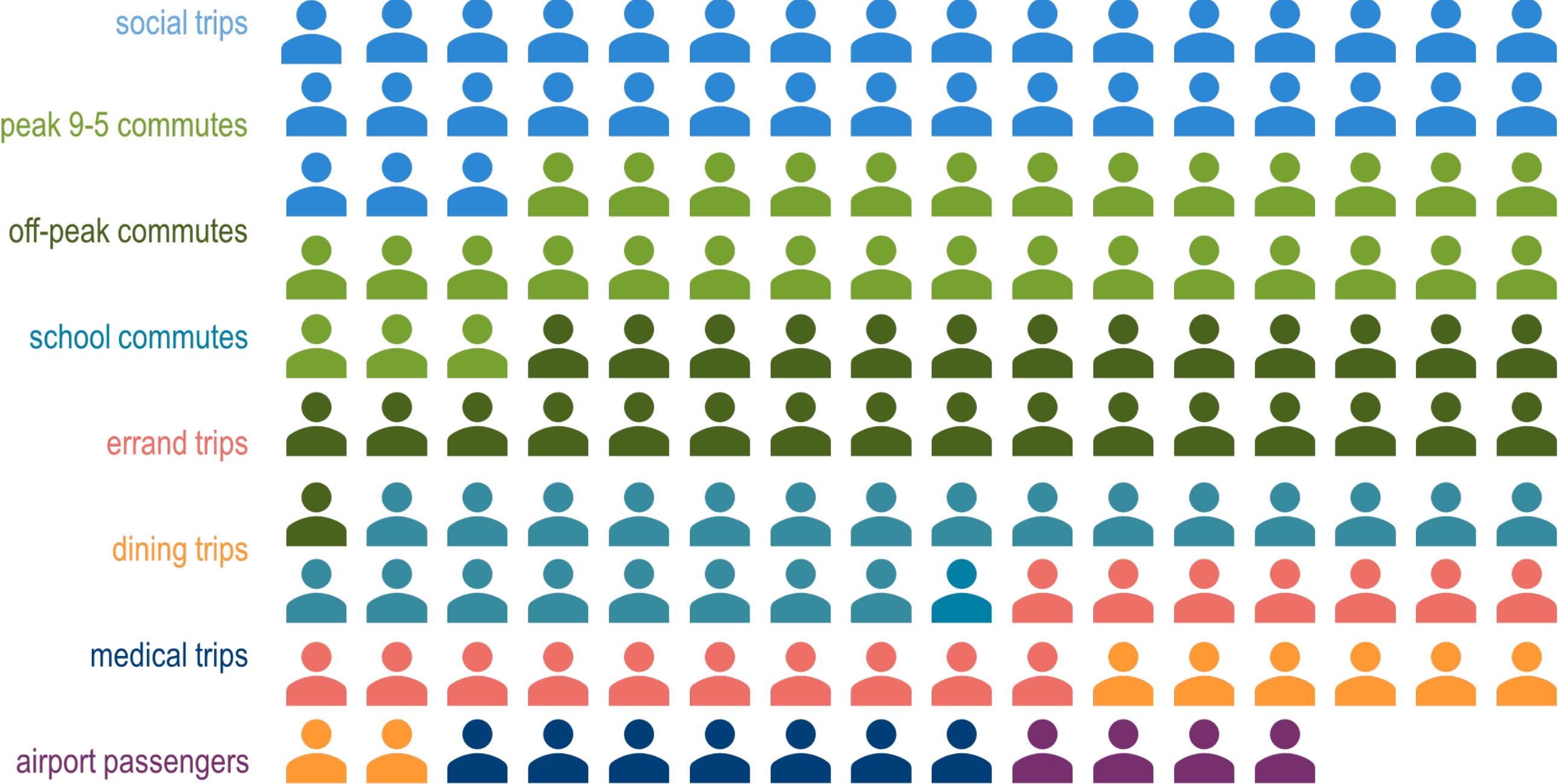
*Note: y-axes differ between plots*



# What kinds of trips are people making?

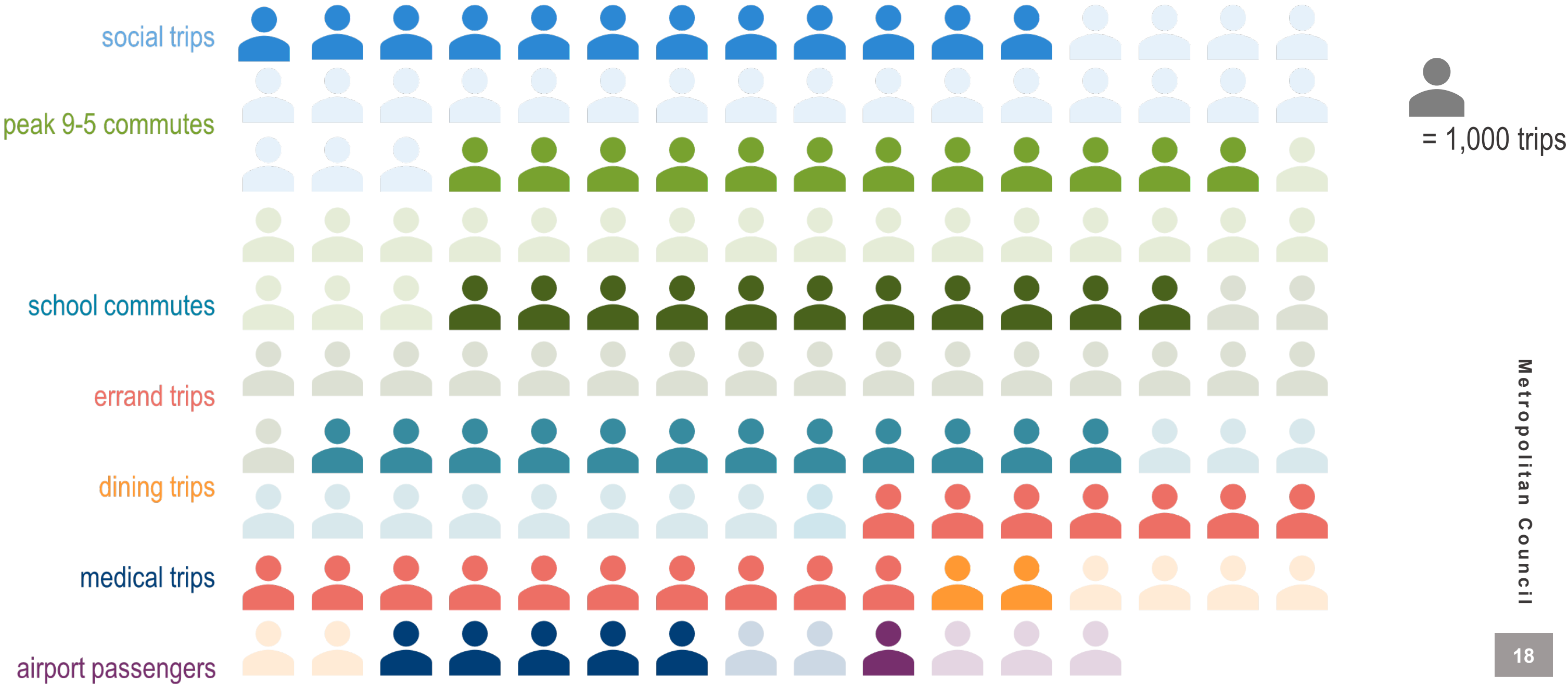


# 157,000 trips in 2016

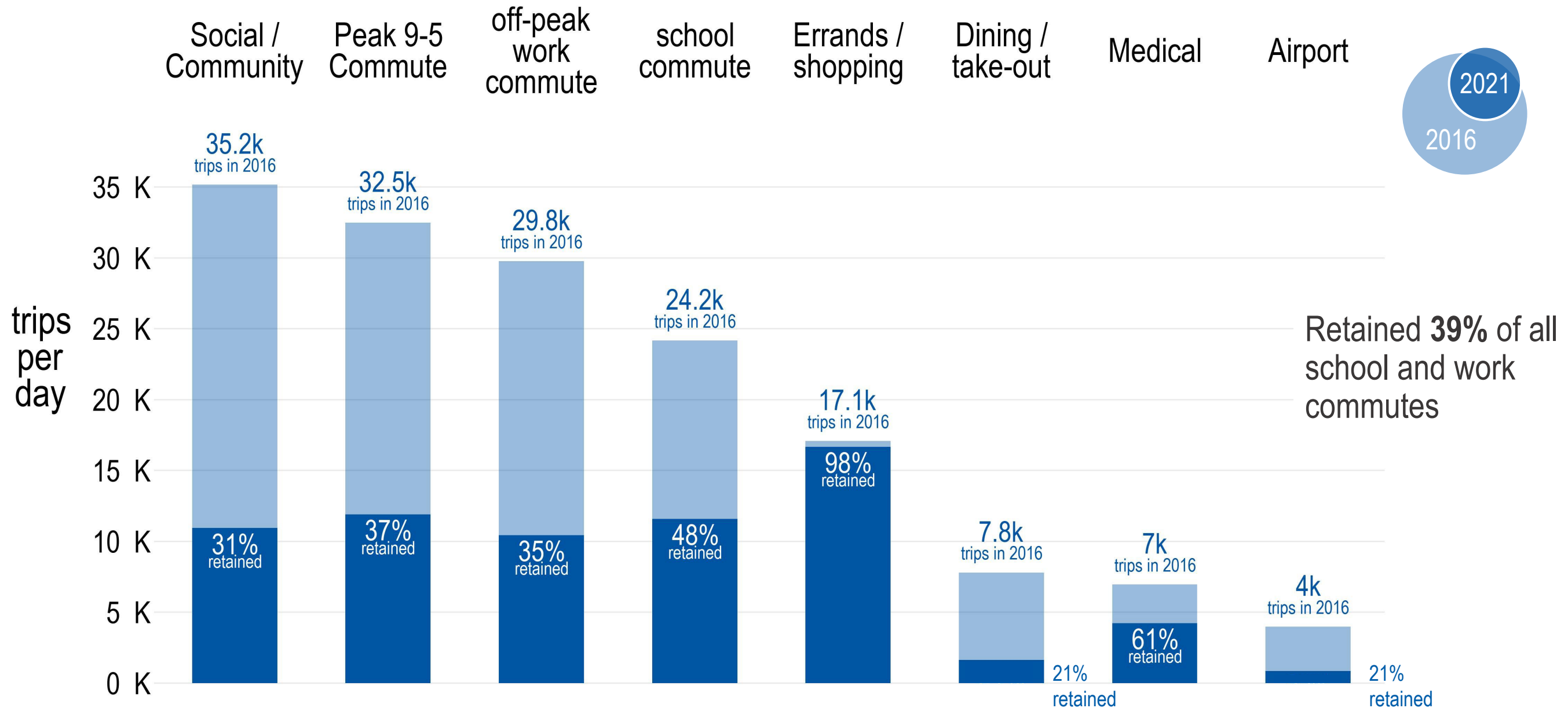


 = 1,000 trips

# 72,000 trips retained in 2021

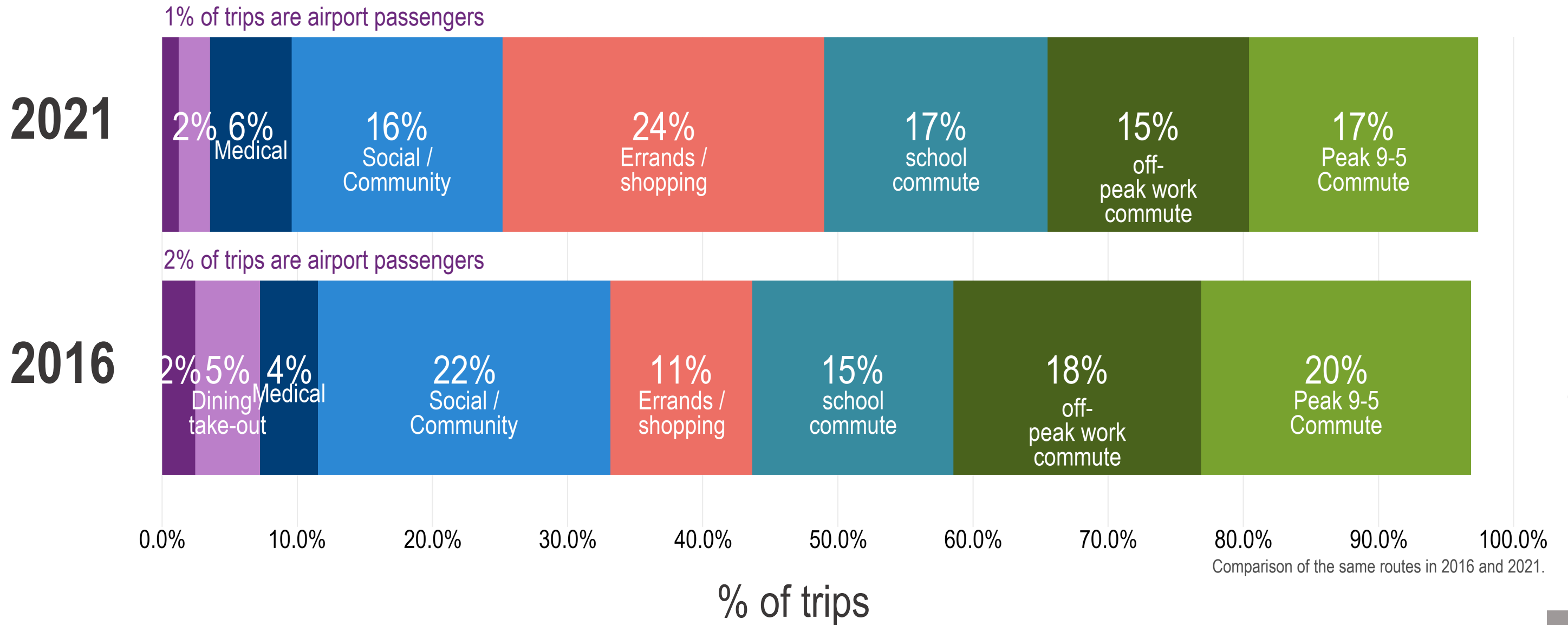


# Retained greatest share of trips made for errands, least for airport passengers



2021 daily ridership (darker color) is overlaid on 2016 ridership (lighter color). Comparison of the same routes in 2016 and 2021.

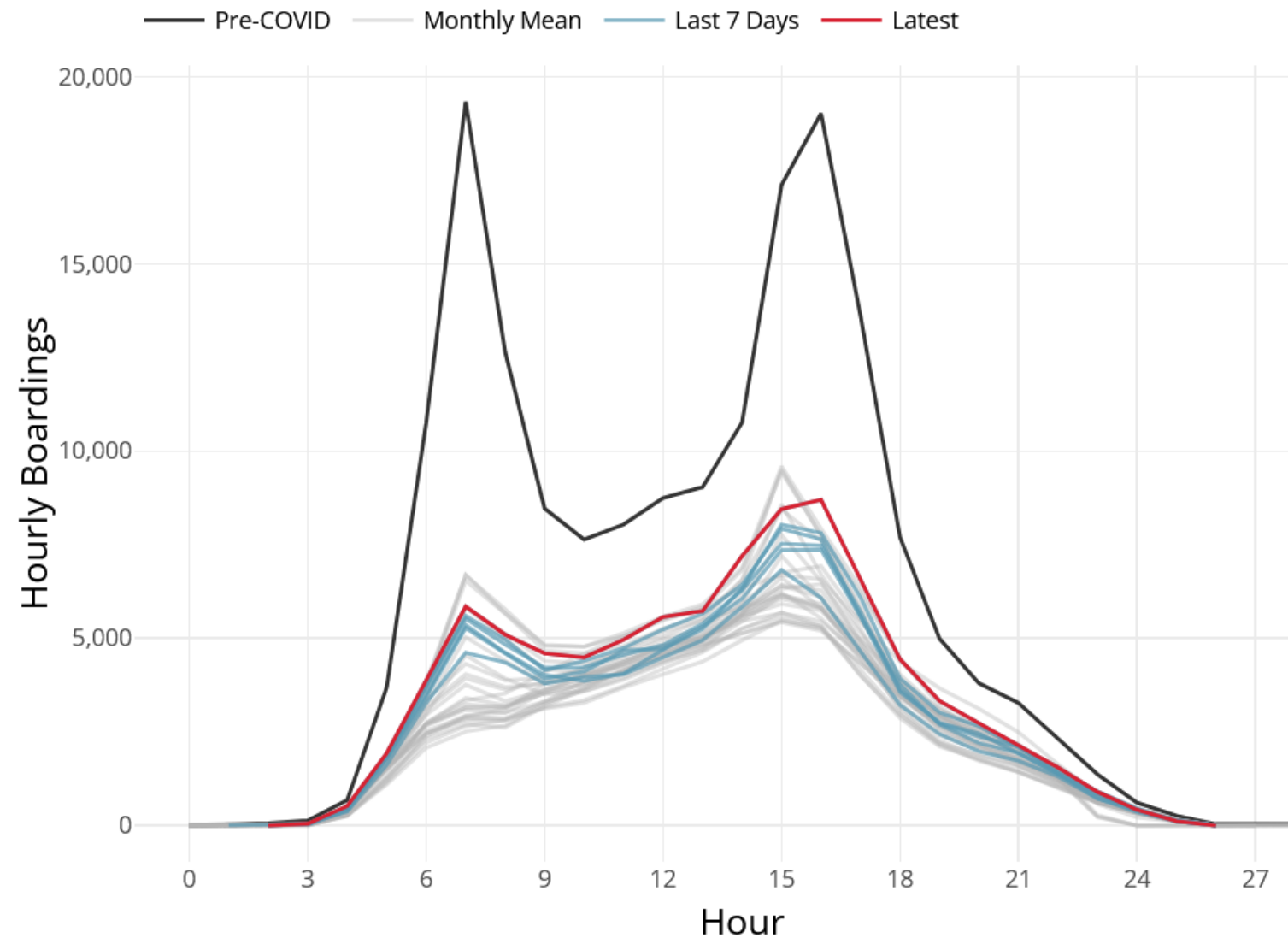
# The share of people traveling for errands has grown



# Previously observed trends: ridership by hour

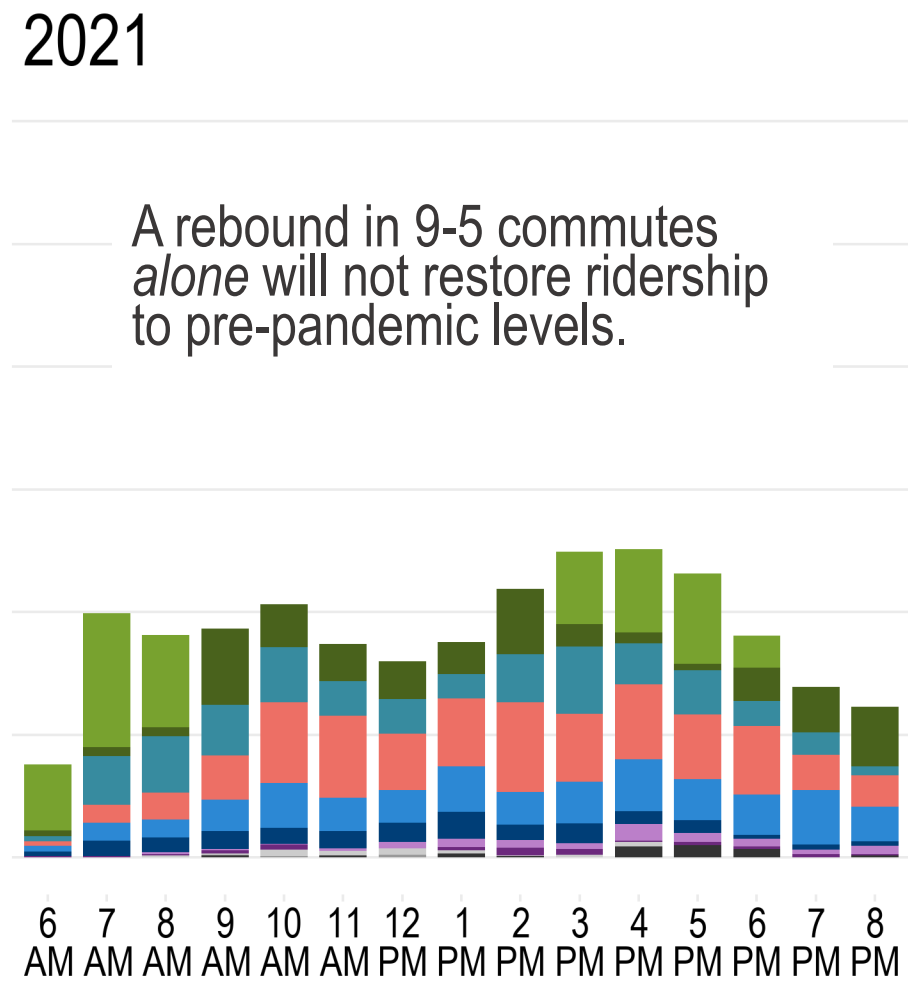
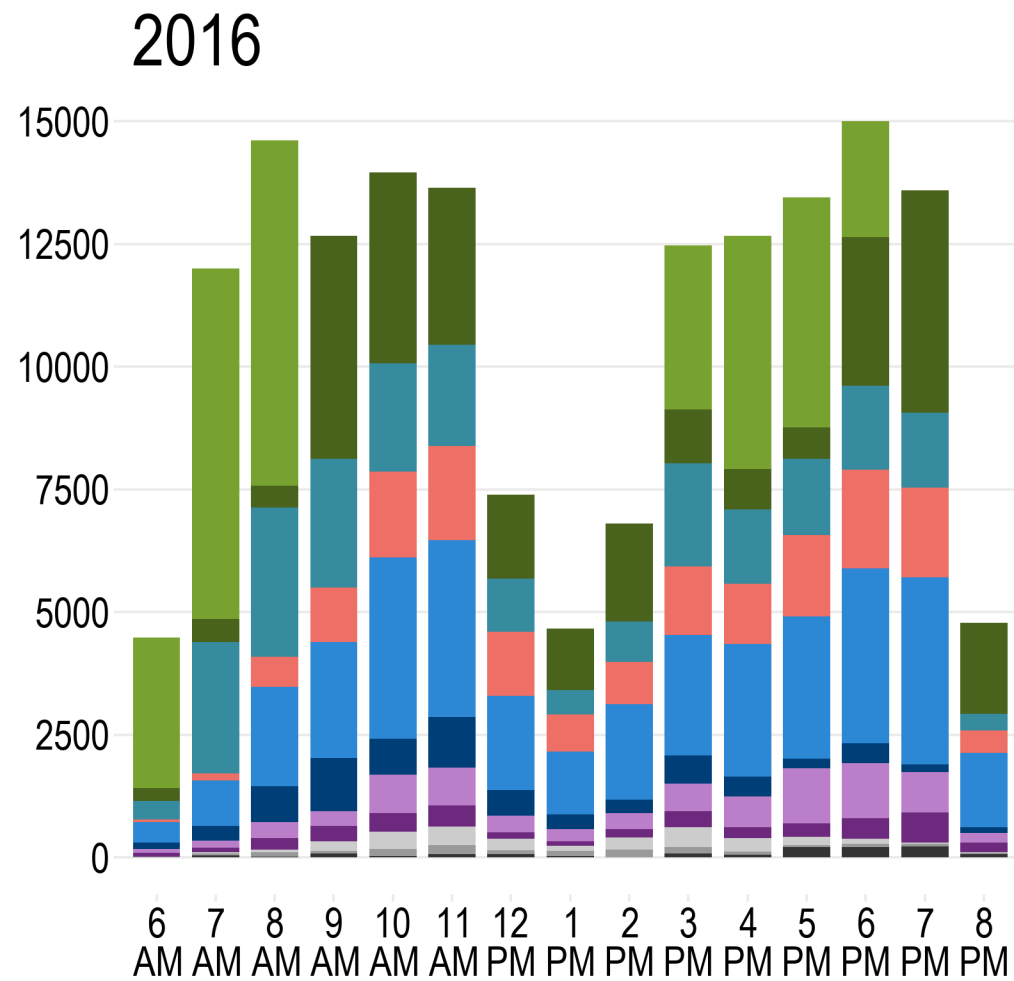


### Weekday Ridership by Hour



# Trip purpose by time of day, then and now

number of trips



Comparison of the same routes in 2016 and 2021.

- Peak 9-5 Commute
- off-peak work commute
- school commute
- Errands / shopping
- Social / Community
- Medical
- Dining / take-out
- Airport
- School to Work
- Job to job
- Special event

# Key Findings: Trips and Riders Retained



## What is the “core ridership” in the Pandemic era?

- BIPOC riders
- older riders, especially men
- lower income riders and those who are unemployed
- riders who identify as having a disability

## What are the “core trip types” transit continues to serve?

- Basic life maintenance (shopping, errands, medical appointments) retained more than other trip types
- Transit *continues* to serve a wide variety of trips: all-day, all-purpose



# Plan for main survey



# Main survey starts Summer 2022

- Currently in planning phase
- Planning for uncertainty
- All routes, directions, time of day
- Includes weekends
- Will be reaching out to providers to ensure operators are aware of our presence
  
- Final data back Q1 2023
- Will make data available to all providers, stakeholders in online dashboard

# Your questions are welcome!

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# Appendix: More complete gender identity options available in 2021

Respondents could identify as **Non-Binary**, **Other/Prefer to self-describe**, and/or **Transgender**

