

Puget Sound Regional Household Travel Survey Program

Transit Operators Committee
23 October 2024



Puget Sound Regional Council



We are leaders in the region to realize equity for all. Diversity, racial equity and inclusion are integrated into how we carry out all our work.

psrc.org/equity

Overview



- Intro to the Household Travel Survey (HTS) Program
- Transit Trends*
- Work Location Trends*
- 2023 presentation schedule & 2025 survey

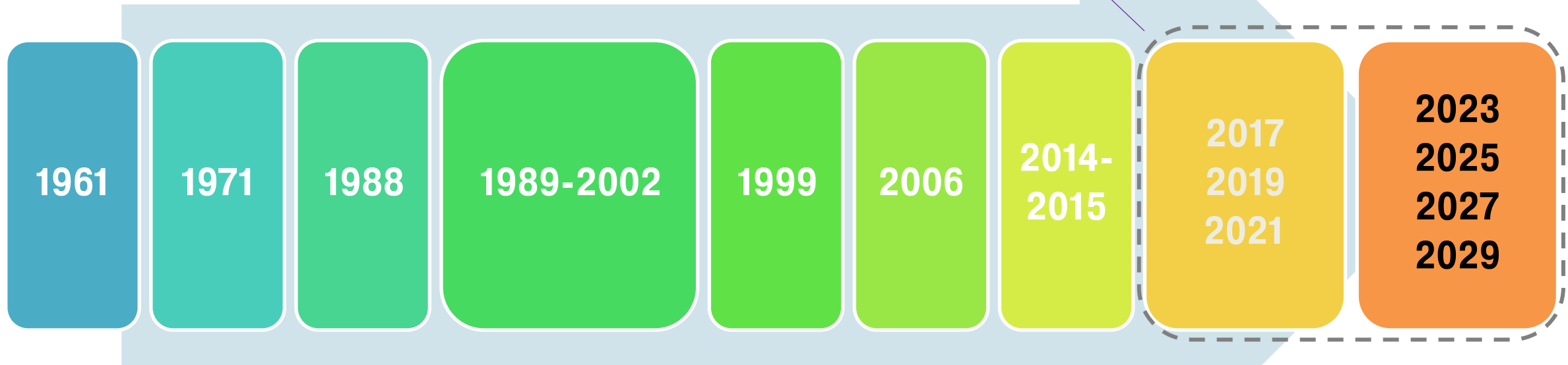
* Unless otherwise noted, all data reported are from Puget Sound Regional Household Travel Surveys



Puget Sound Regional Travel Studies

More frequent snapshots

allows for more timely analysis & monitoring of trends. Data can be combined across years.



Webpage: <https://www.psrc.org/household-travel-survey-program>



Multi-year HTS Program

Program goal: The surveys seek to capture quality, regionally representative data for activity and travel behaviors of residents on a typical weekday.

Motivations

- Frequent snapshots, ability to combine multiple years of data
- “Smoother” budgets & labor roles
- More flexibility & opportunities for add-ons



Uses of HTS data



Analysis

- Most recent regional travel behaviors & patterns
- Trends: comparisons with previous surveys

Model development

- SoundCast
 - Activity-based travel model system
 - Estimate activity/travel choice models
- UrbanSim
 - Parcel-based land use model system
 - Estimate residential location choice model



Information in the HTS data

Who is traveling?

Where are they going?

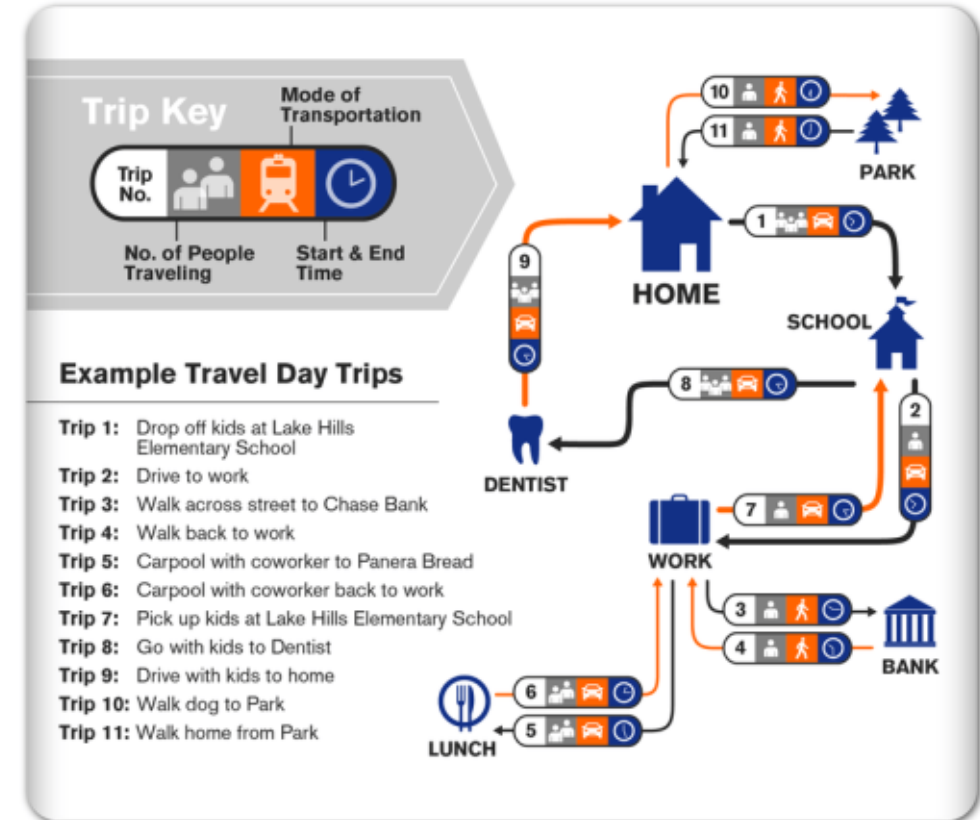
When do they travel?

Why are they going?

How do they get there?

Planning/policy questions

- How much do people walk?
- How does transit use vary by race?
- What kinds of households get home deliveries?
- How often do workers typically telecommute?
- What households are displaced from their homes?



2017, 2019, & 2023 samples

Representative samples

2017 sample

- 3,275 households
- Redmond & Seattle add-ons

2019 sample

- 3,044 households
- Seattle add-on

2023 sample

- 3,661 households
- Bellevue & Seattle add-ons

Sampling & stratifications

- Random address sample from USPS
- Targeted areas for oversampling
 - People of color, low income, no vehicles, renters, young adults, Regional Growth Centers
- Lower expected response rates including rural areas



2023 PUGET SOUND REGIONAL
Travel Study

TELL US HOW YOU GET AROUND

RECEIVE A GIFT CARD
AS THANKS FOR YOUR TIME

Puget Sound Regional Council
Seattle Department of Transportation

The banner features a grid of images: a ferry, a lighthouse, a cyclist, a person walking on a rainbow crosswalk, a scenic view of a bridge over water, and a bus stop. It includes icons for various modes of transport (walking, bicycle, car, bus, train) and logos for the Puget Sound Regional Council and Seattle Department of Transportation.



The 2023 HTS data – The connections are the magic

Directly observed demographics:

- Age
- Disability (new)
- Education
- Gender
- Income
- Race & ethnicity
- Sexuality (new)

Examples of planning topics for analysis:

- Active travel
- Electric vehicle charging (new)
- Home deliveries
- Public transit use
- Residential displacement
- Shopping & travel purposes
- Working at home
- Vehicle miles travel & greenhouse gas emissions



General travel & transit trends



Overall trends

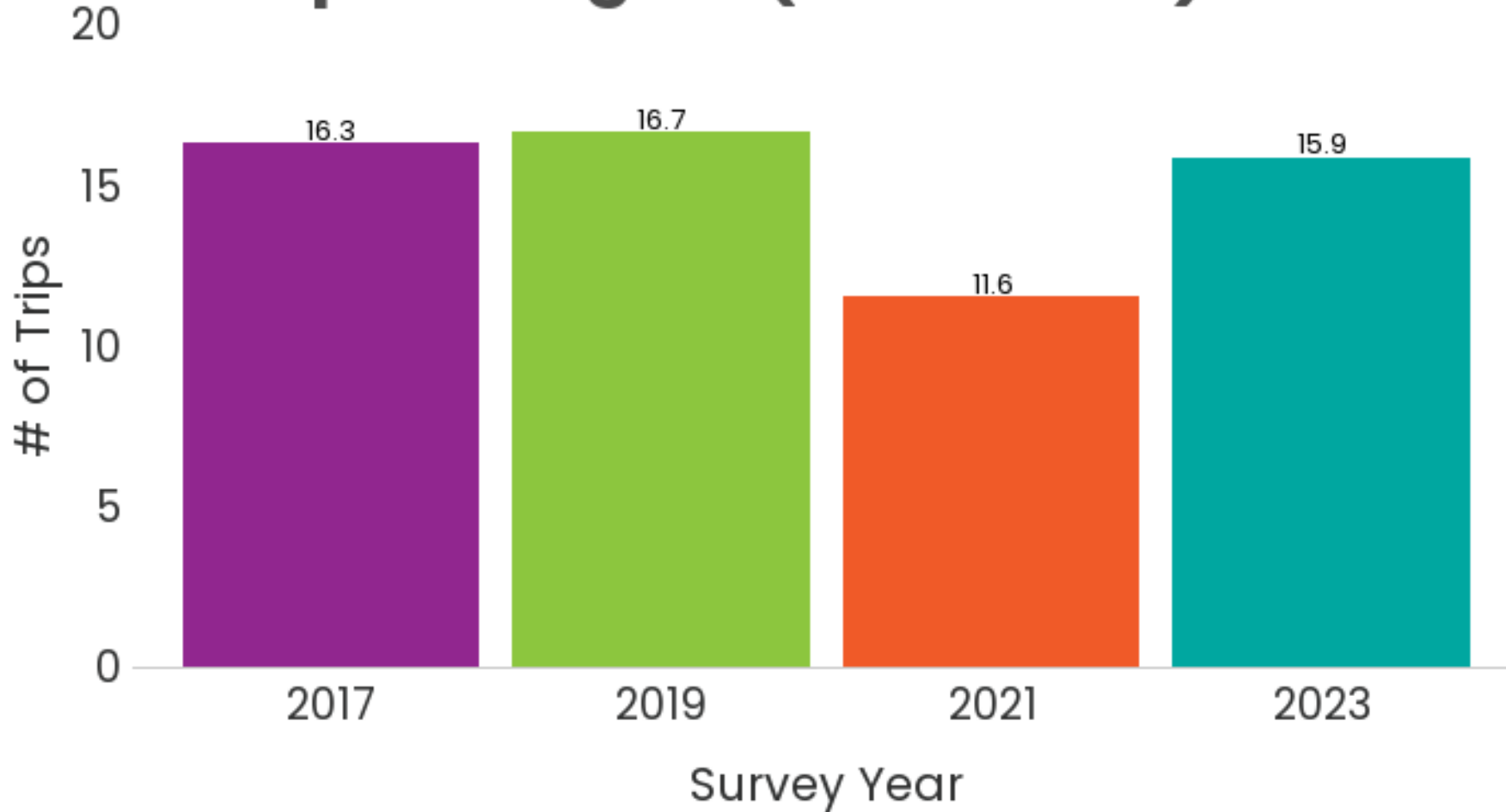
Trip Mode Share By County (2023)

Trip Mode Share	Home County				
Trip Mode	King	Kitsap	Pierce	Snohomish	Region
Drive Alone	45%	46%	39%	45%	44%
Carpool	37%	38%	48%	46%	41%
Transit	5%	6%	4%	3%	5%
Walking	11%	10%	9%	5%	10%
Bike/Micromobility	1.7%	0.3%	0.5%	0.5%	1.1%



Overall trends

Total Trips in Region (in millions)

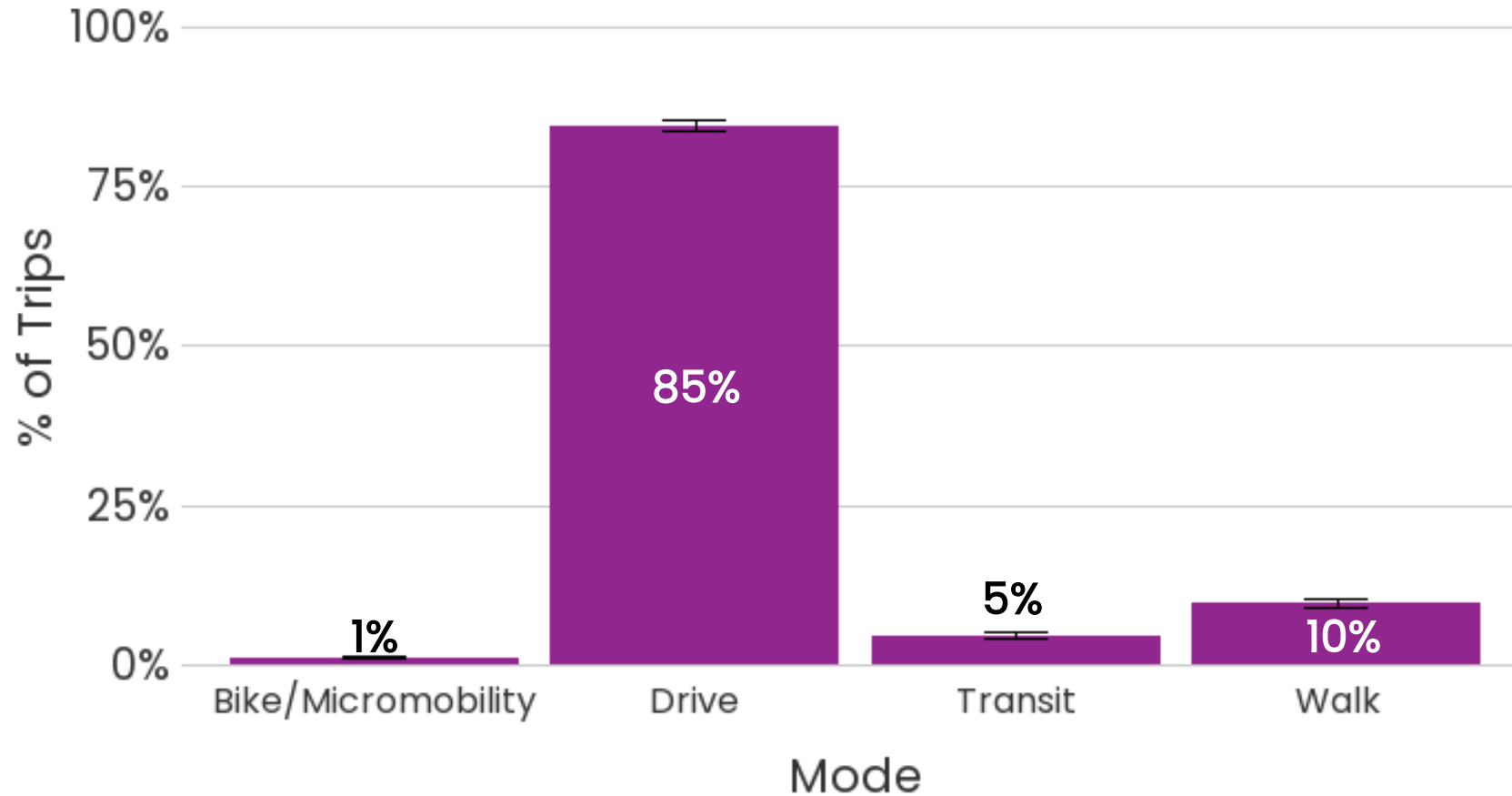


Number of trips made by residents on an average weekday in 2023 is nearly back to pre-pandemic level.



Overall trends

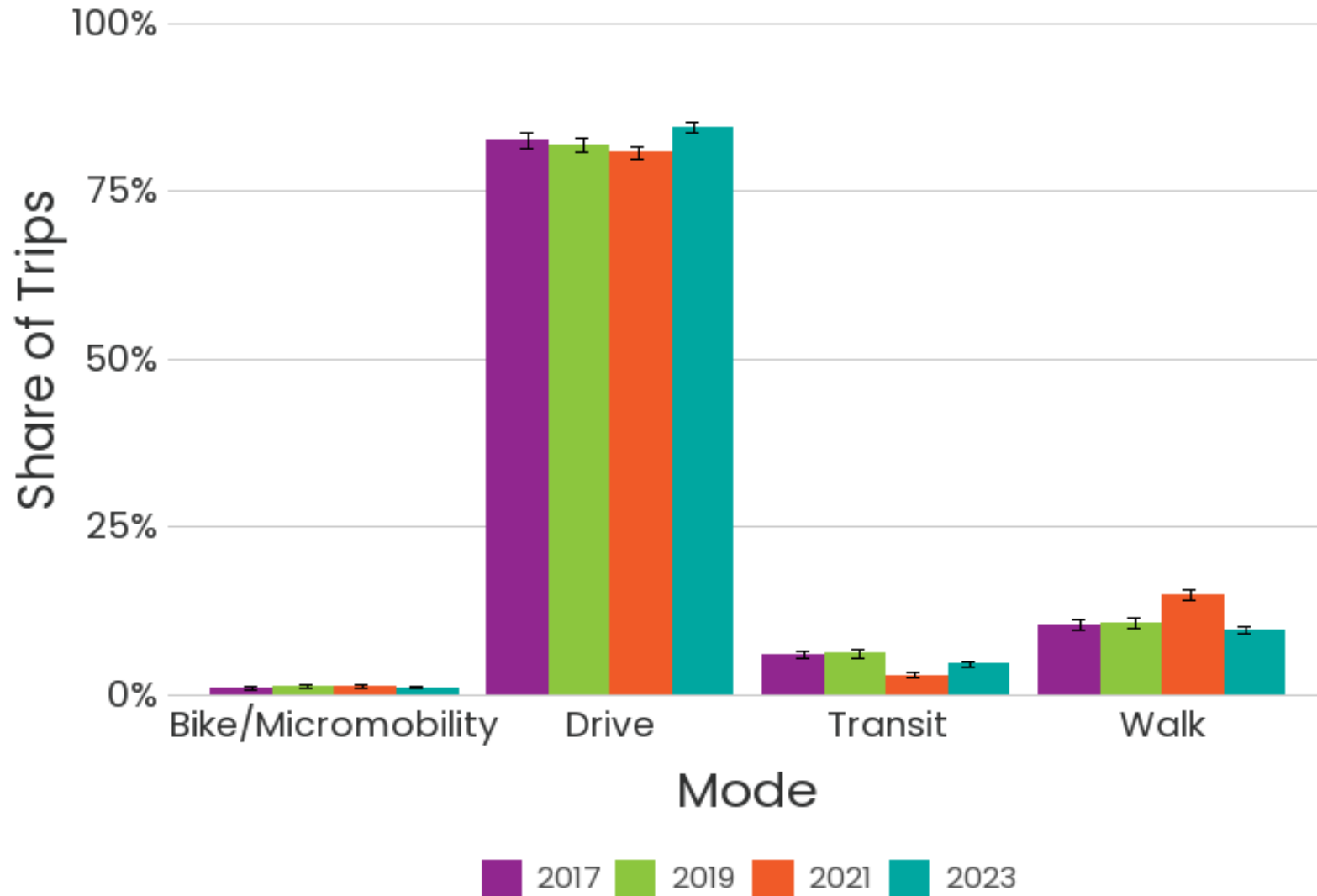
Trips by Mode - Share (2023)



On an average weekday, 5% of trips are made by transit.



Overall Trends



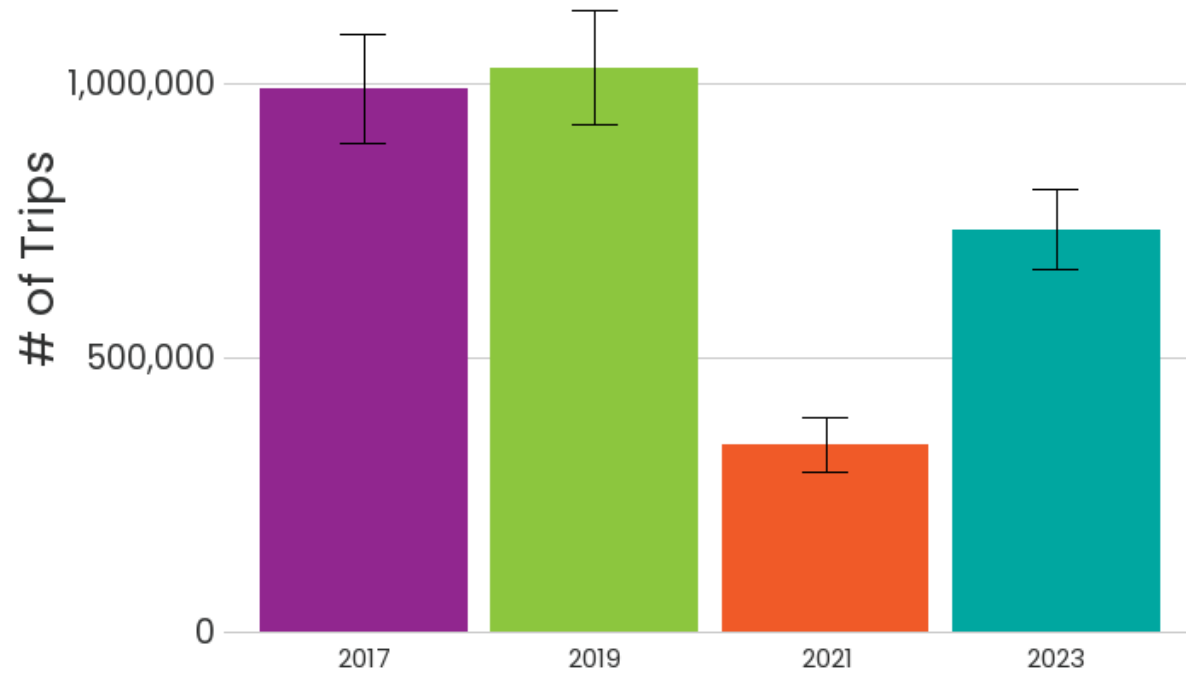
In 2023, walking decreased to pre-pandemic level and transit saw increase.



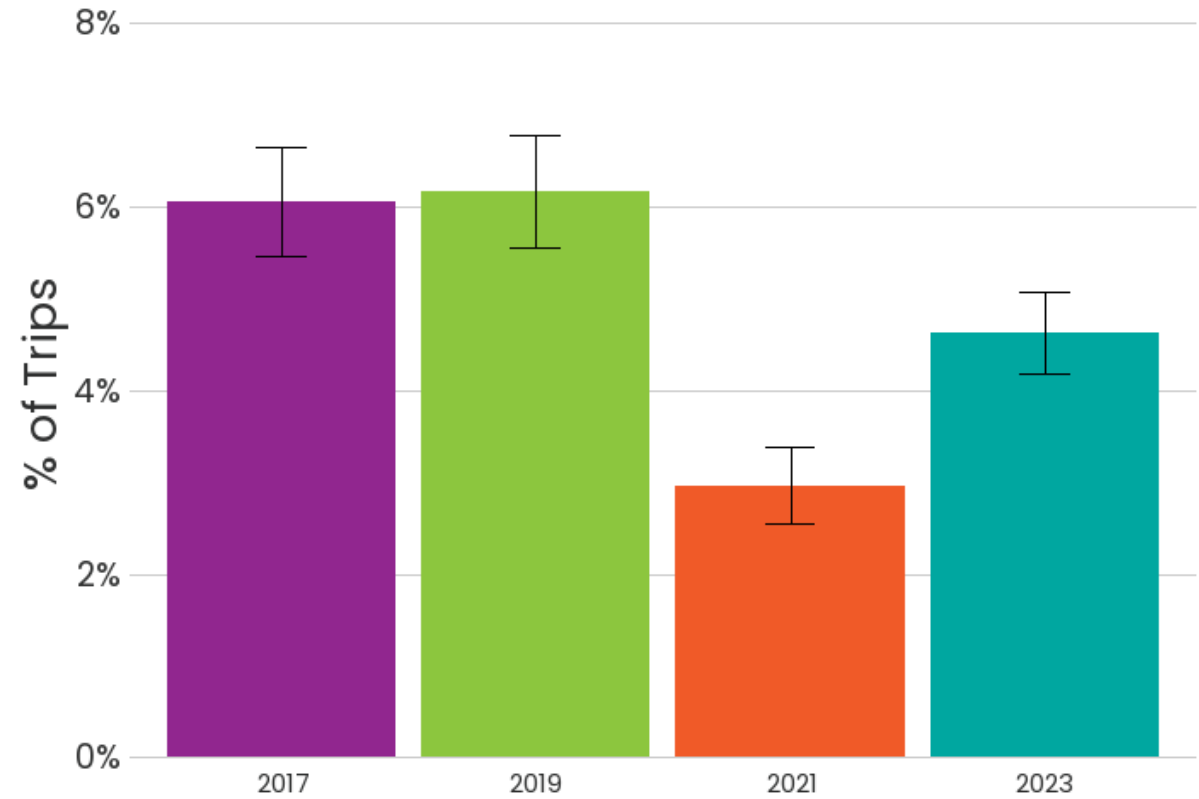
Transit Trips

Transit trips started to rebound in 2023

Transit Trips - Count



Transit Trips - Share

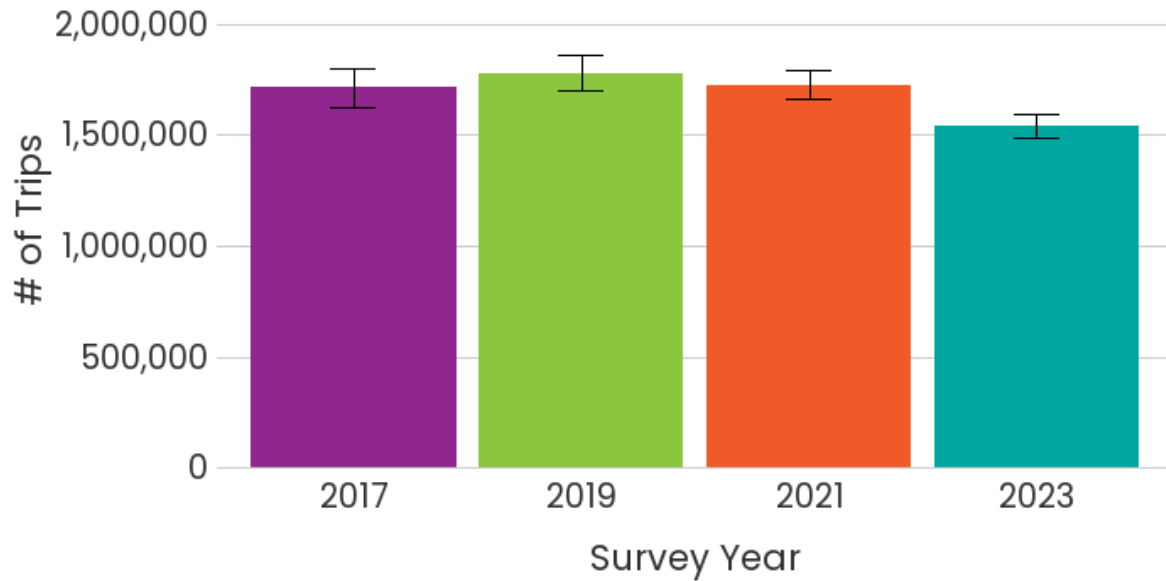


Walk Trips

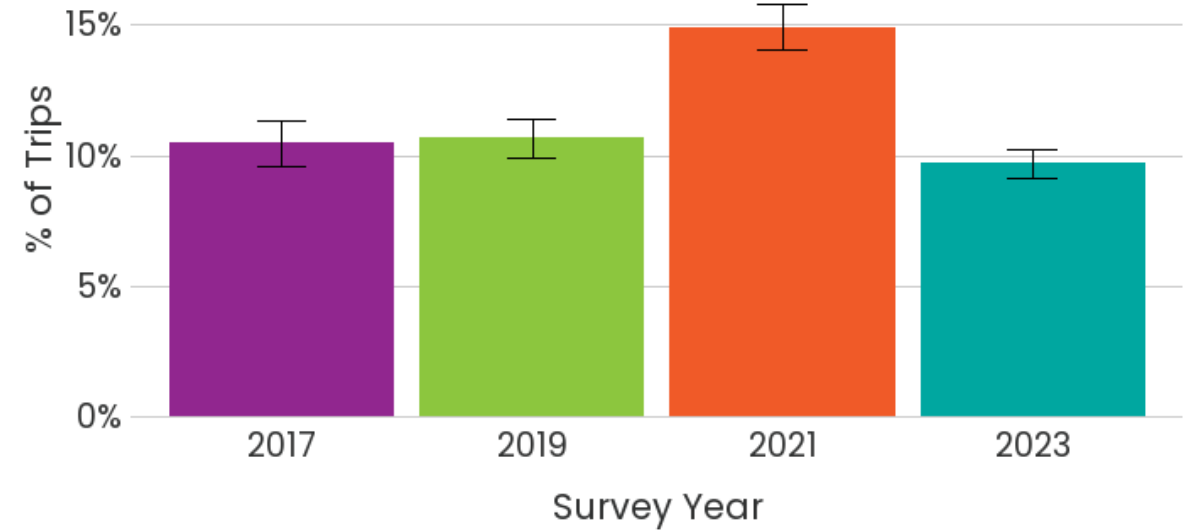
- Count of walking trips on an average weekday decreased from 2021

- Share of trips made by walking in 2023 is similar to pre-pandemic years

Walk Trips - Count



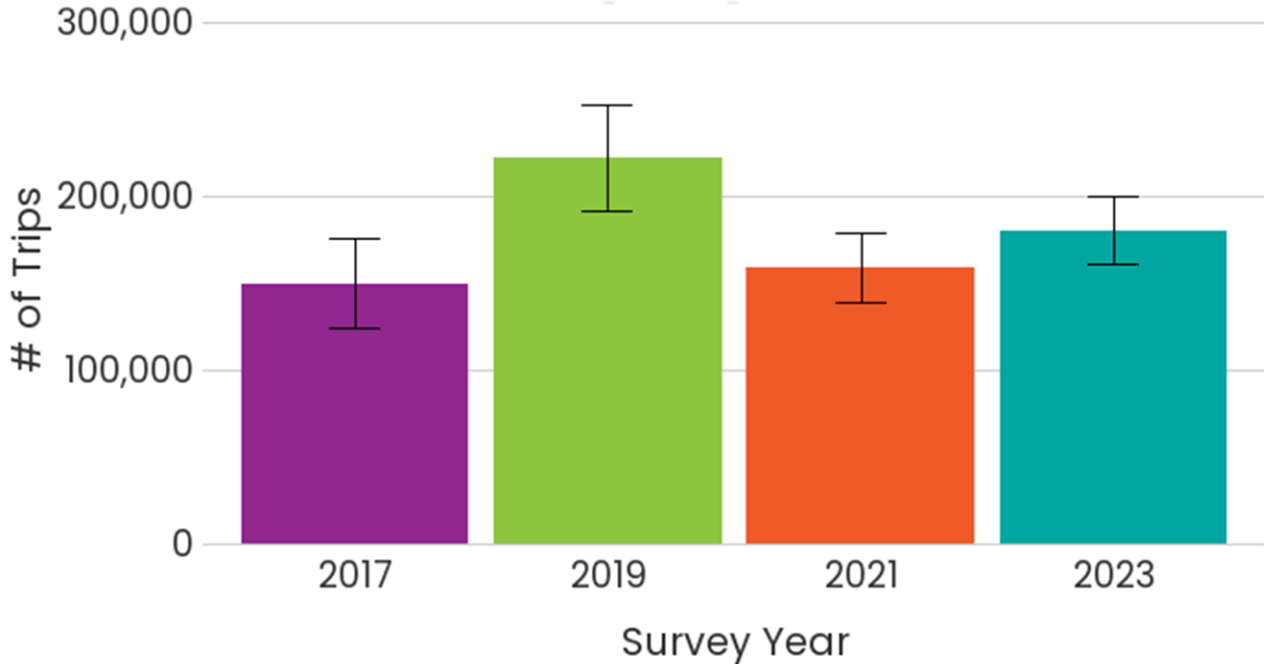
Walk Trips - Share



Bike & Micromobility Trips

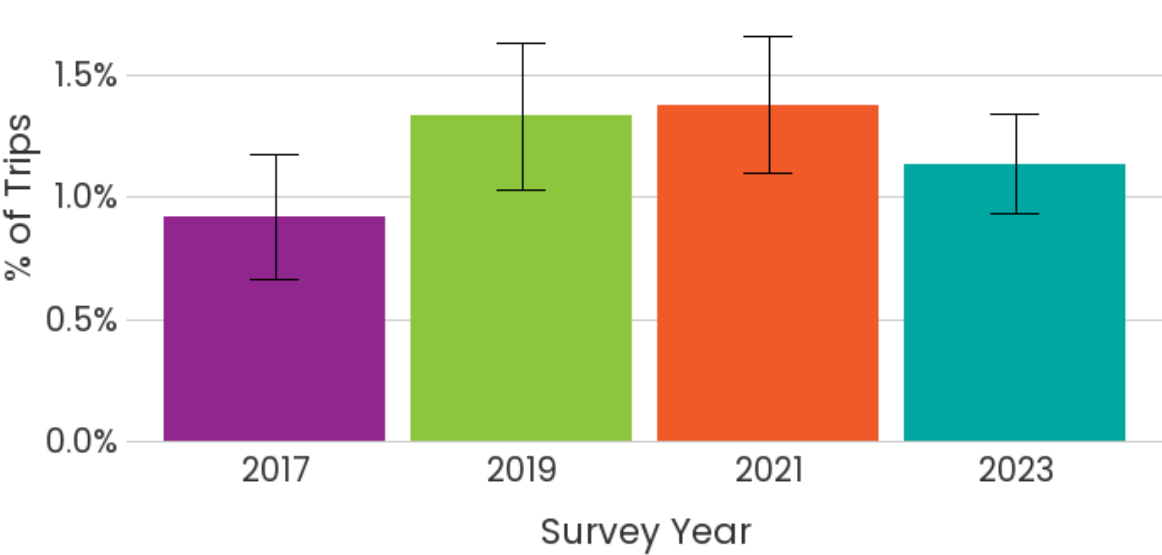
- Count of trips made by bicycle or micromobility fell in 2021 and began to recover in 2023

Bike & Micromobility Trips – Count

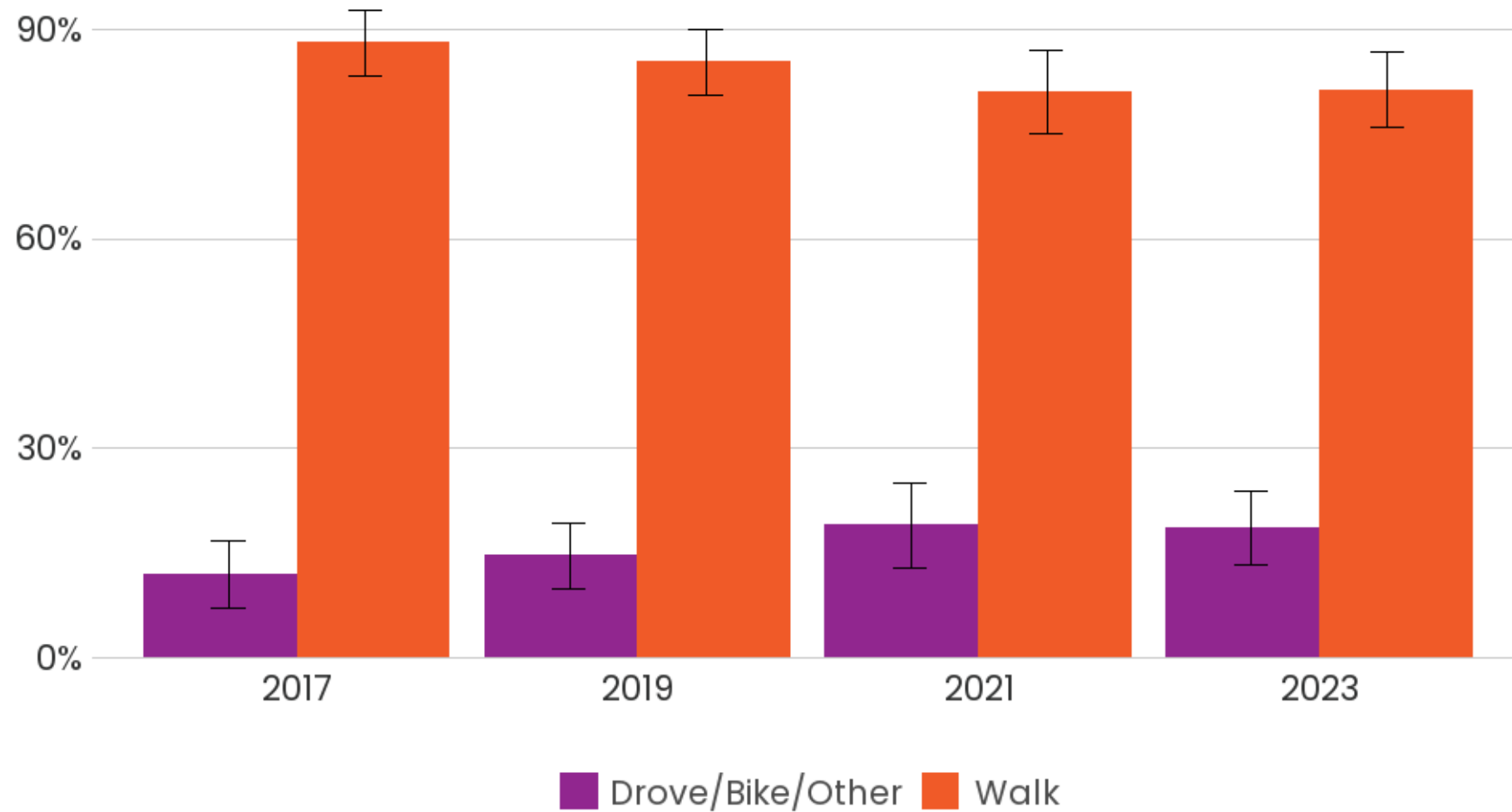


- Share of trips made by bicycle or micromobility has remained around 1% in all four survey years
- In 2023, 9% of people said they biked within the last 30 days

Bike & Micromobility Trips – Share



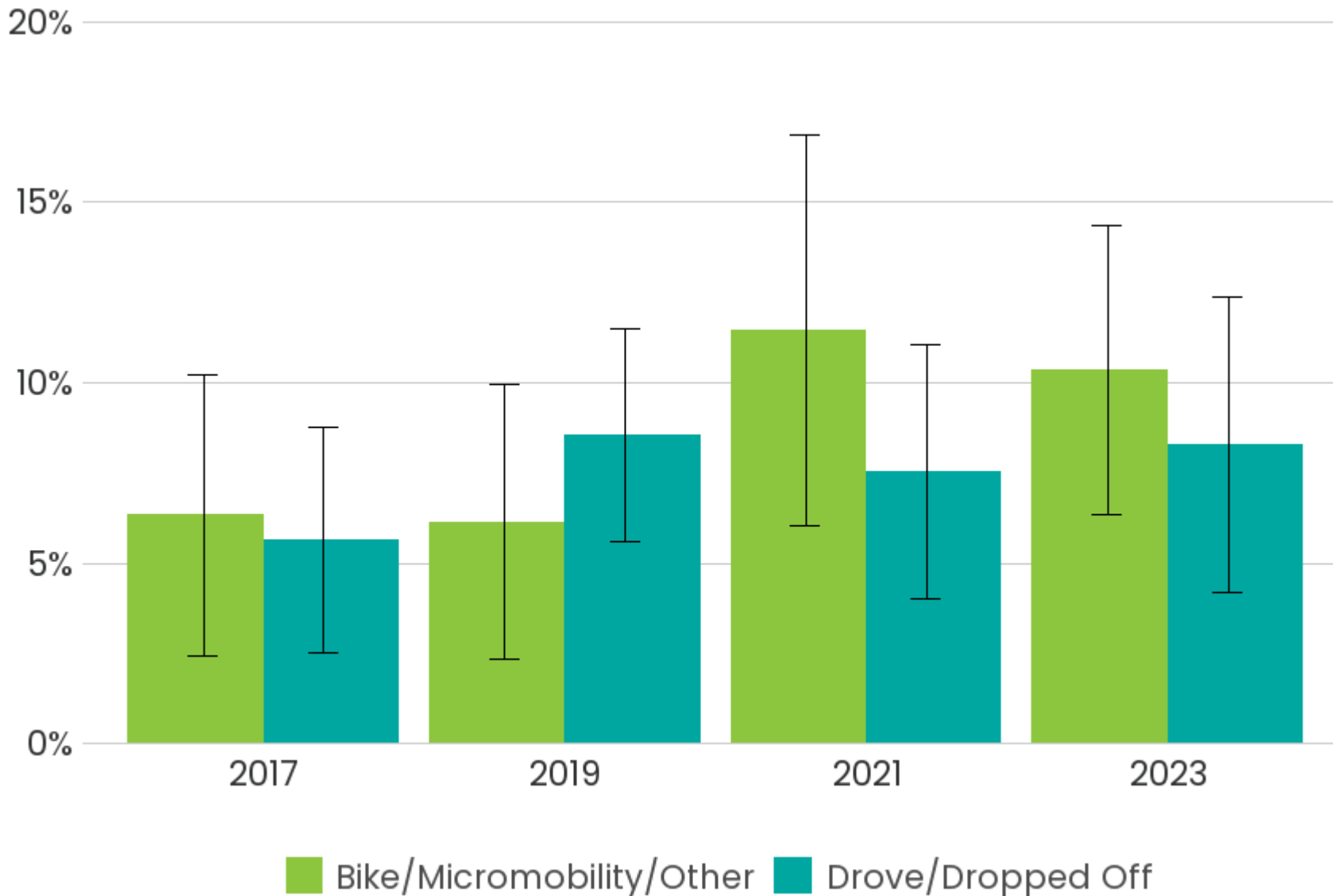
Mode to Access Transit



The most common way to access transit is walk. It has been decreasing over time, but the changes are within the margin of error.



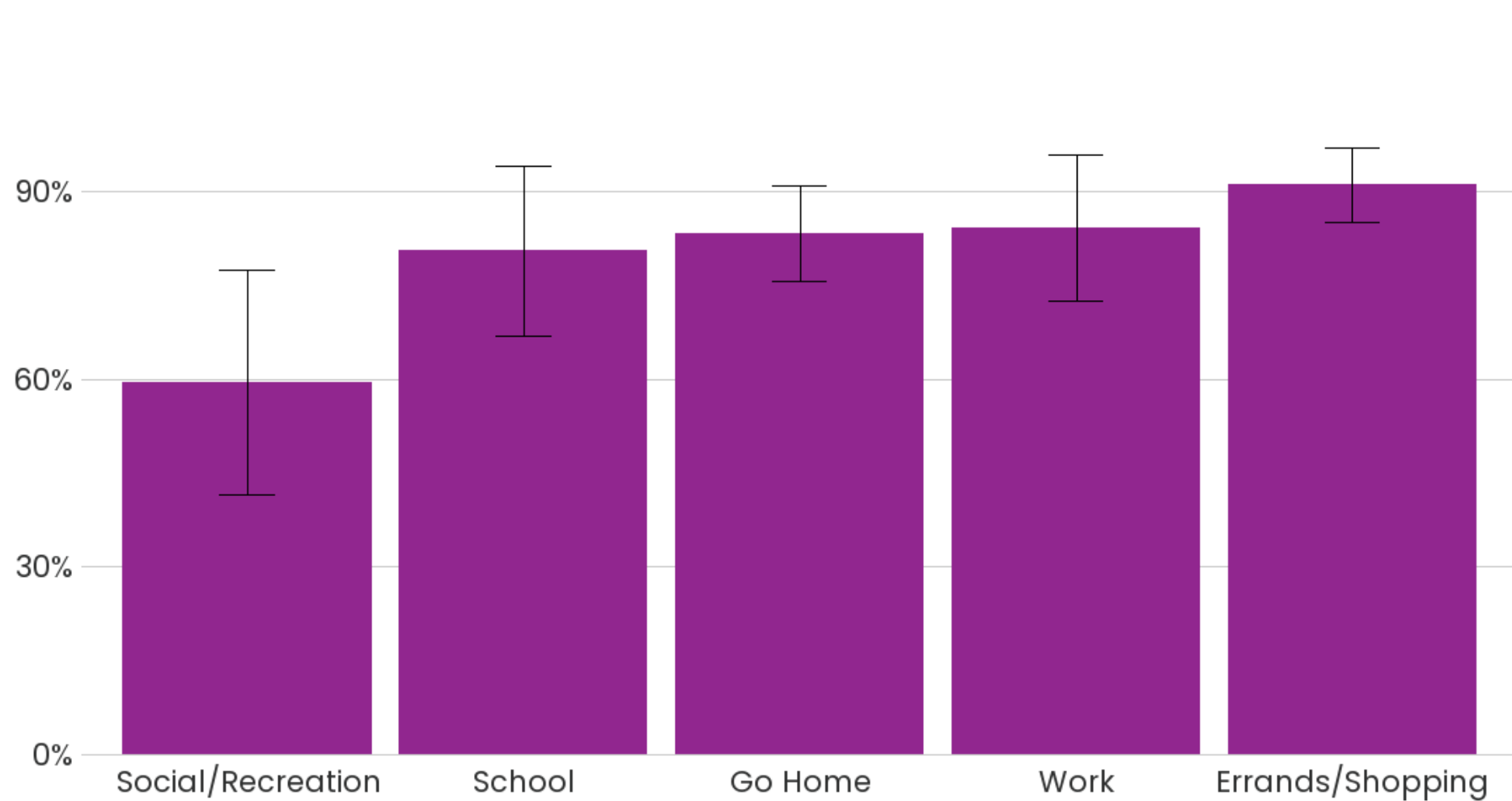
Mode to Access Transit (Non-Walk Modes)



Due to the large margins of error, we cannot infer any trends for non-walk access modes to transit.



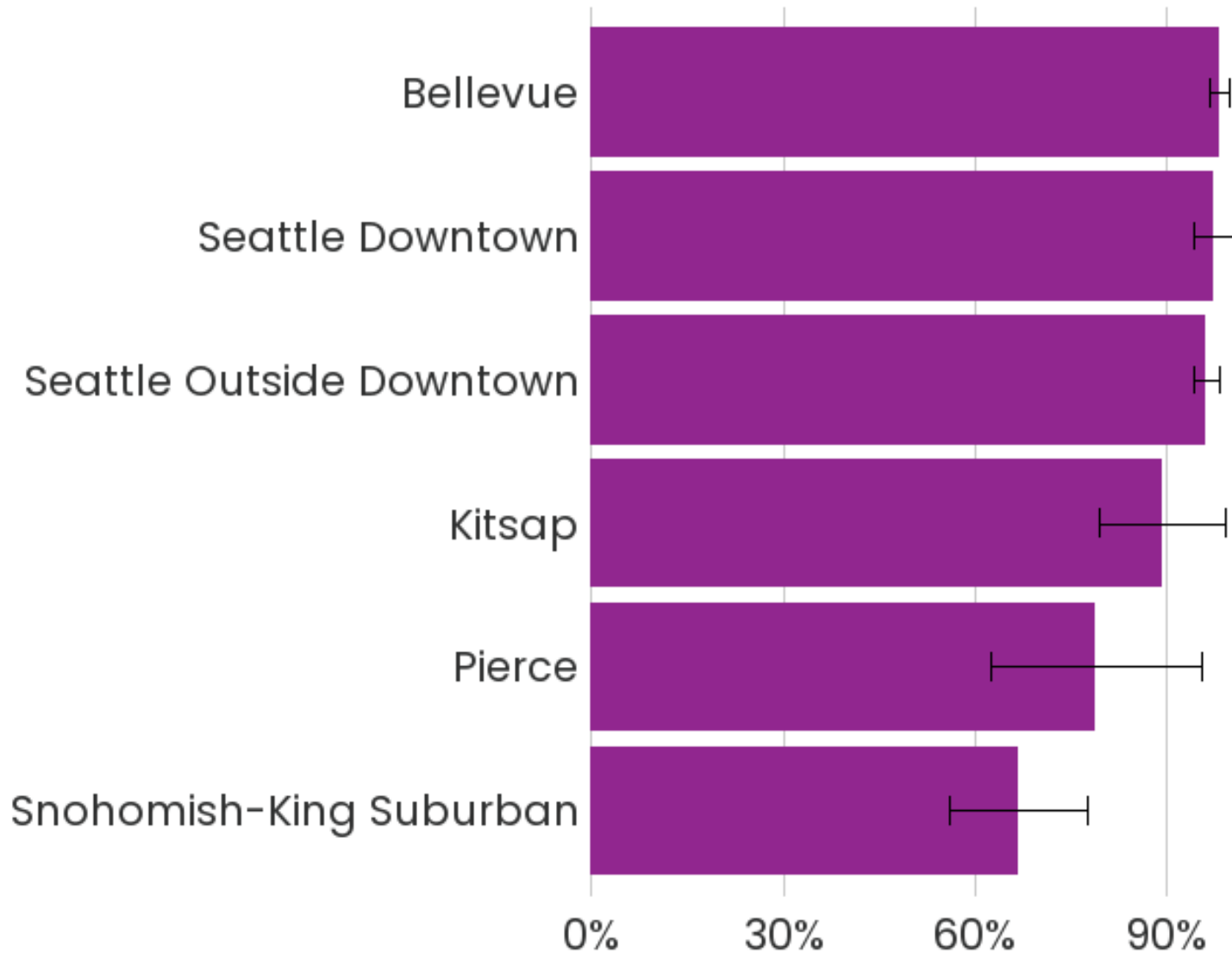
Walk to Access Transit by Destination Purpose (2023)



Social/Recreation has lowest share of walking to transit. Due to large margin of error, it is still comparable to some other destination purposes.



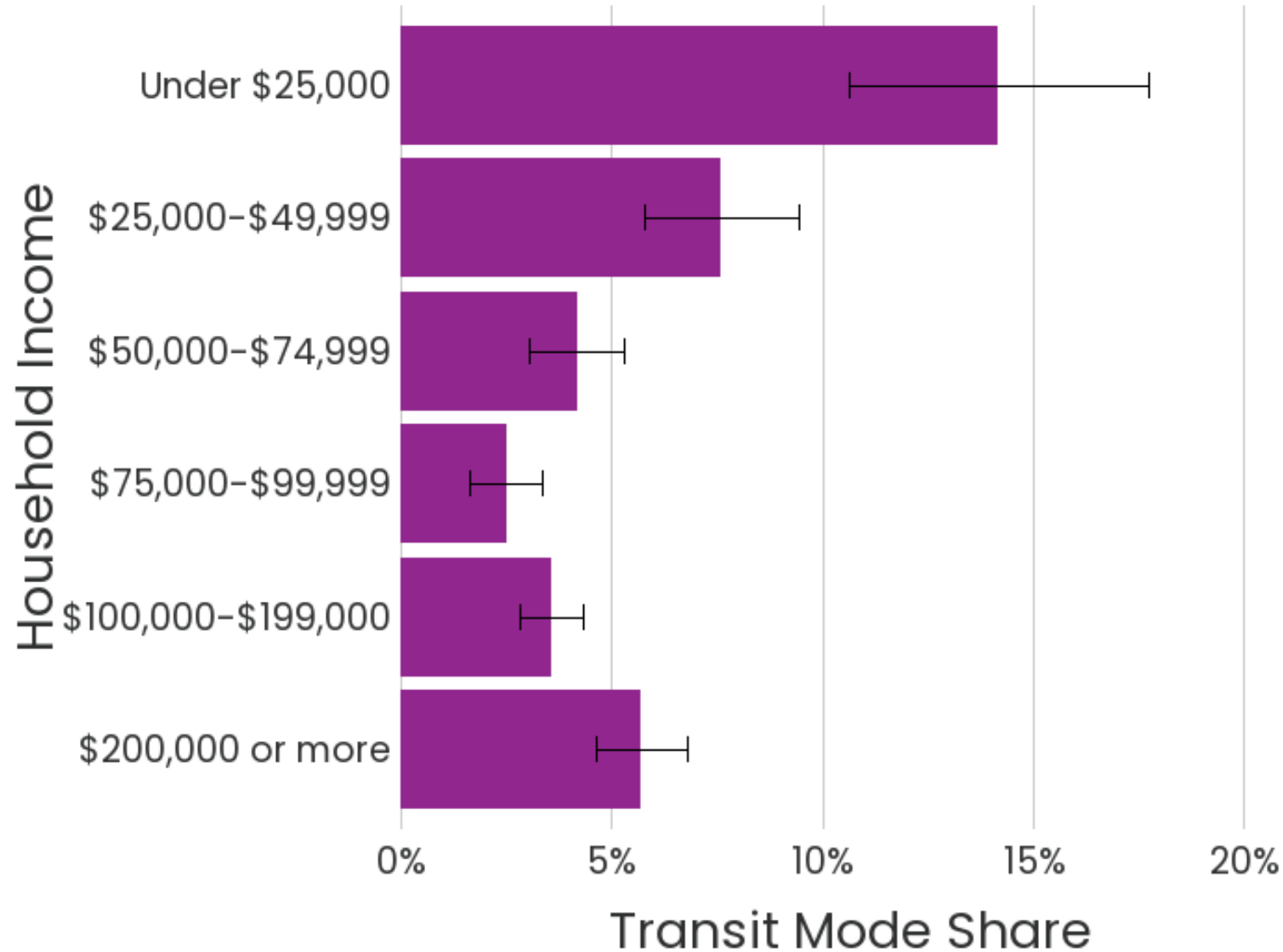
Walk to Access Transit by Home Subregion (2023)



In 2023, Bellevue and Seattle had the highest rates of walking to access transit.



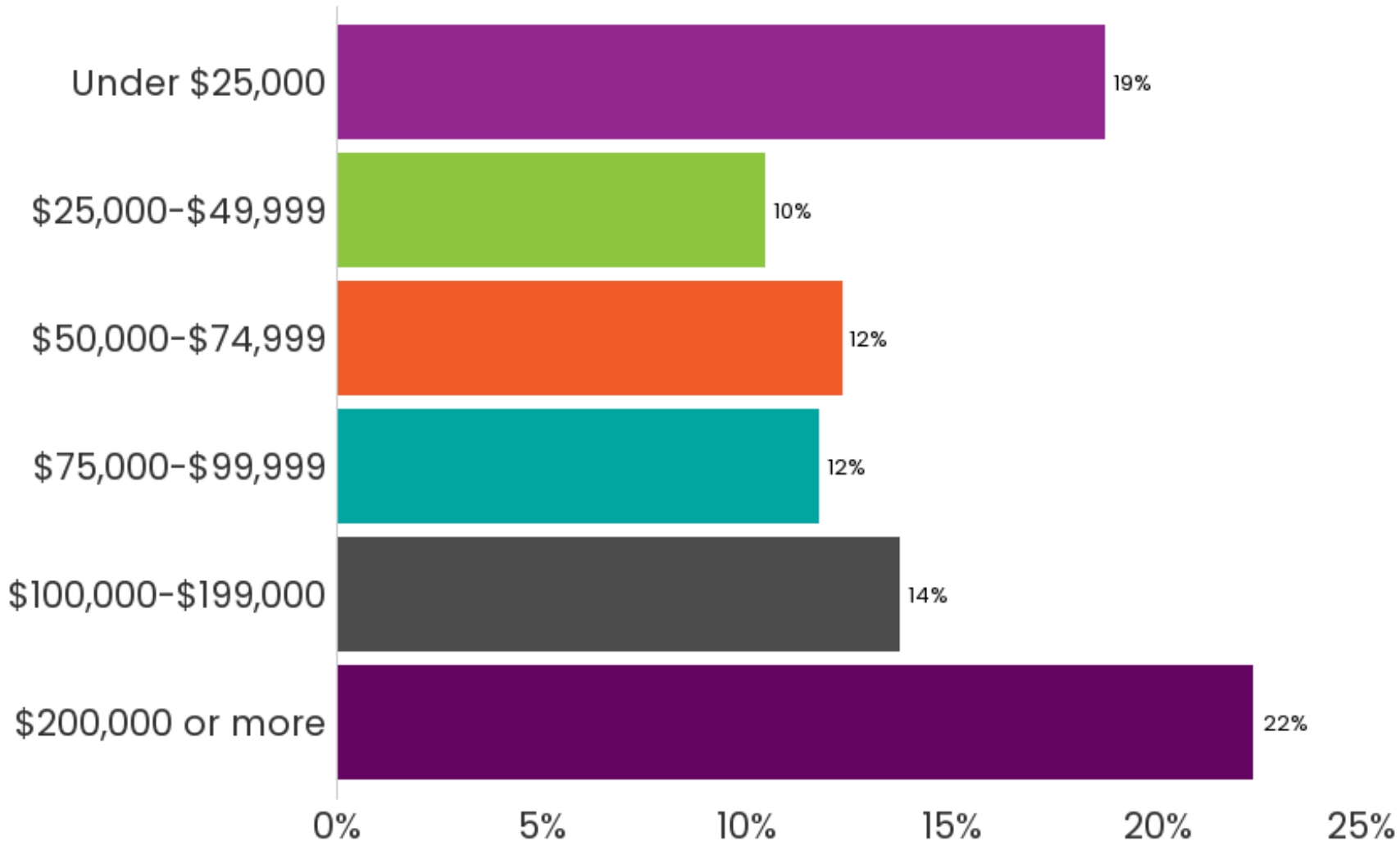
Transit Mode Share by Income (2023)



Lower income households use transit more than any other income bracket.



Worker Share with Fully Subsidized Transit by Household Income (2023)

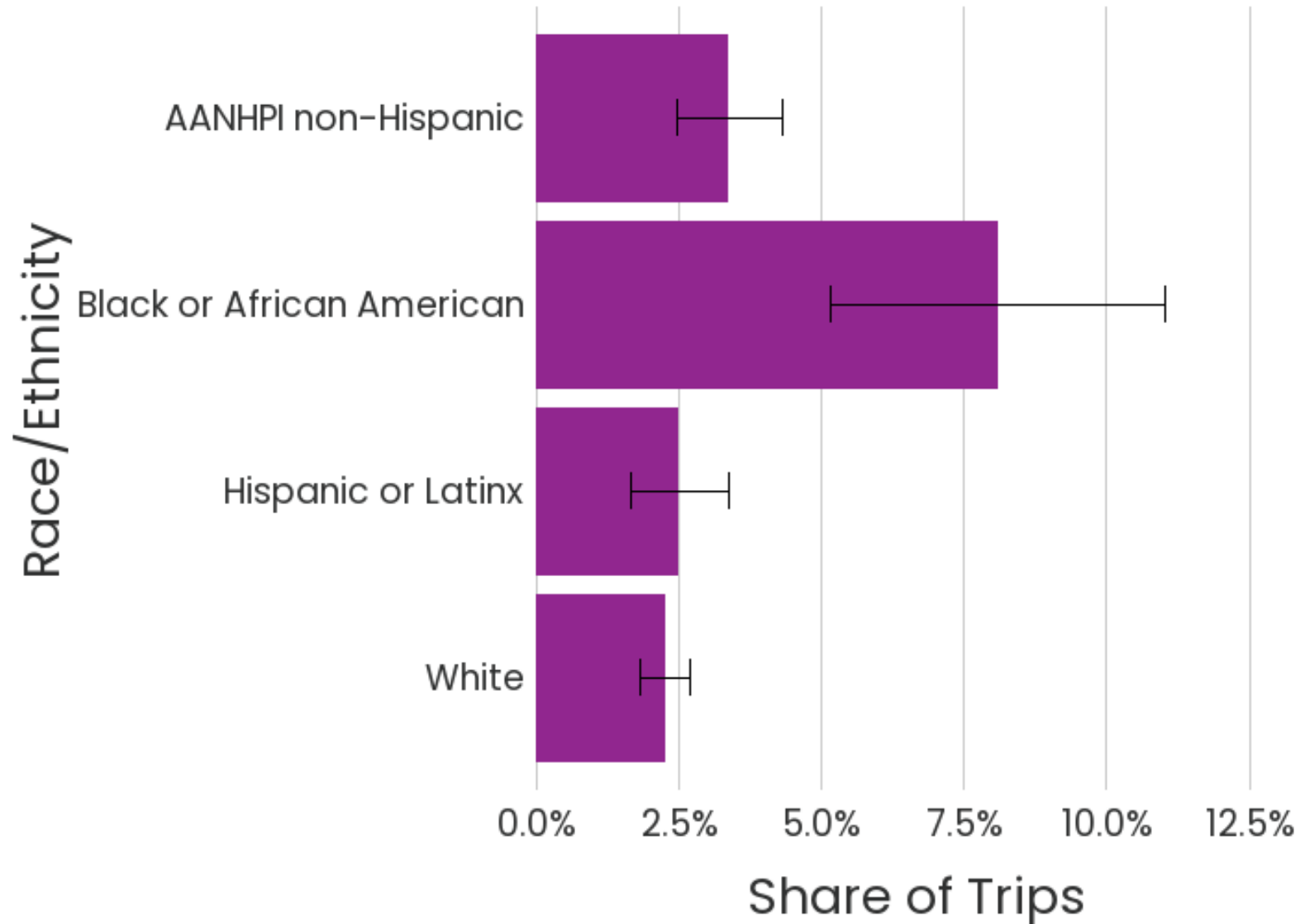


This question focused on workers who received free transit passes.

Transit subsidy is C-shaped with respect to income, with those in the lowest and highest income groups being more likely to have pass or fare subsidies from their employers.



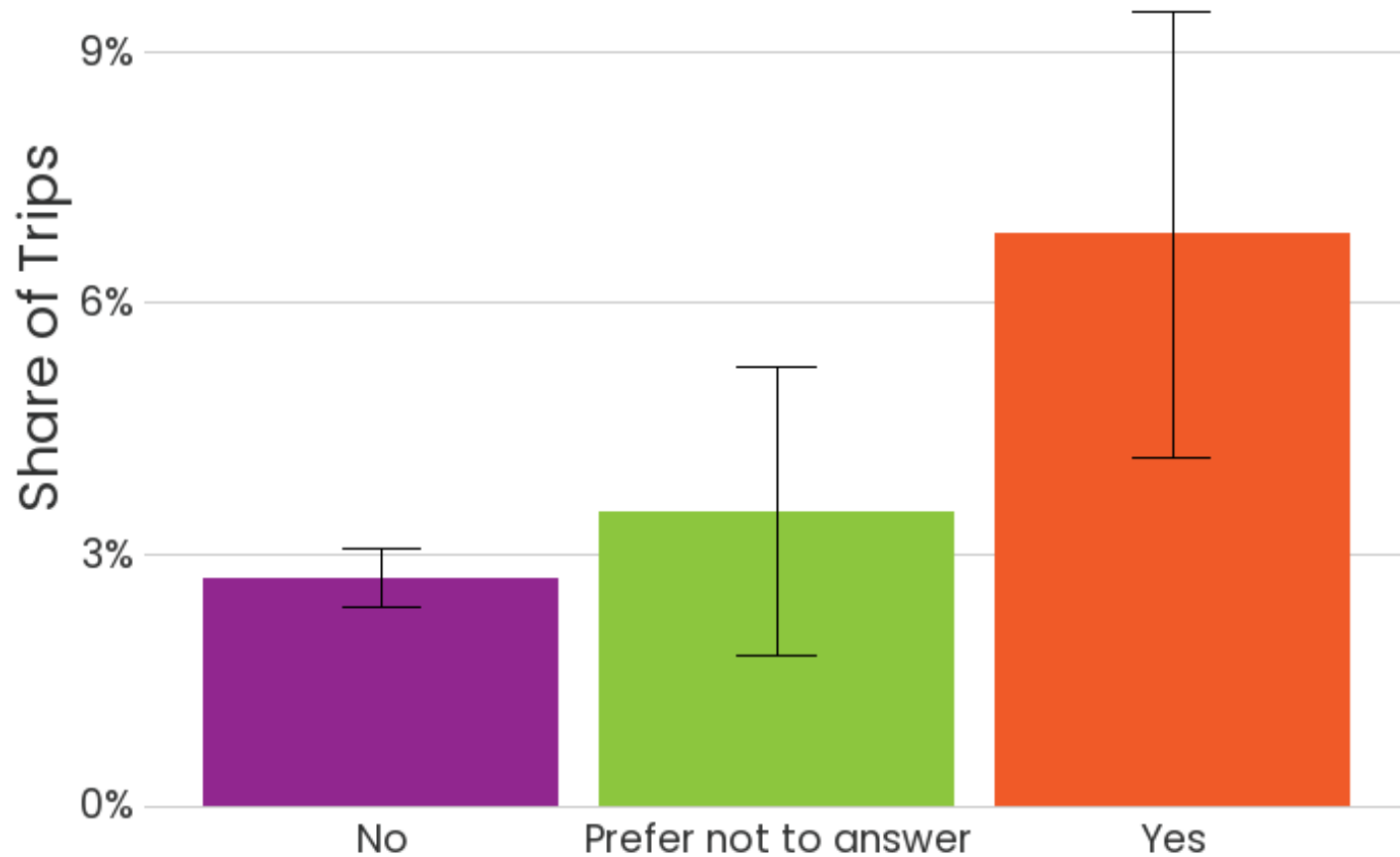
Transit Mode Share by Race (2023)



Black or African American residents use transit more than other communities.



Share of Transit Trips by Disability Status (2023)



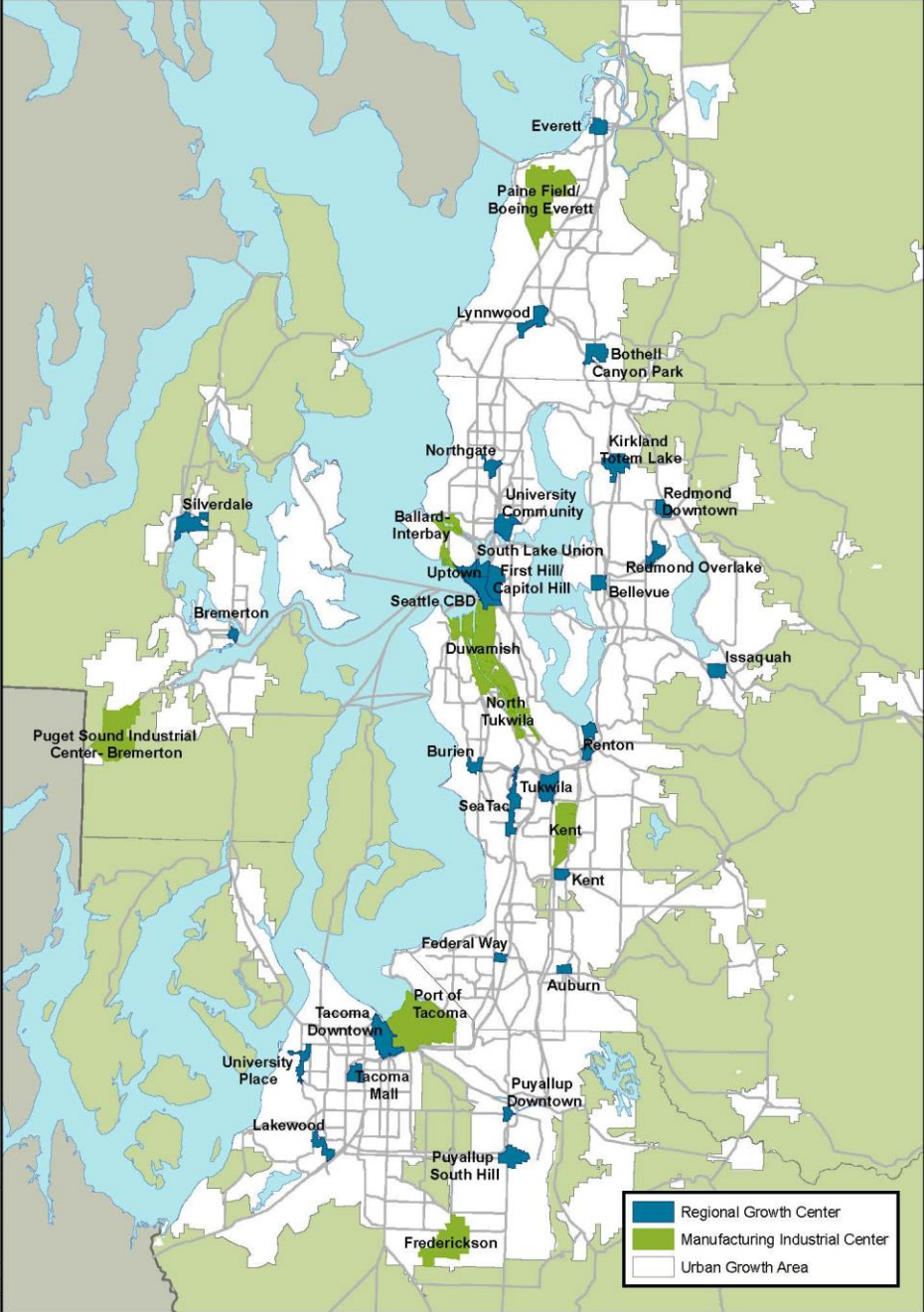
People who identified as having a disability use transit more than those who do not.



Centers Trends



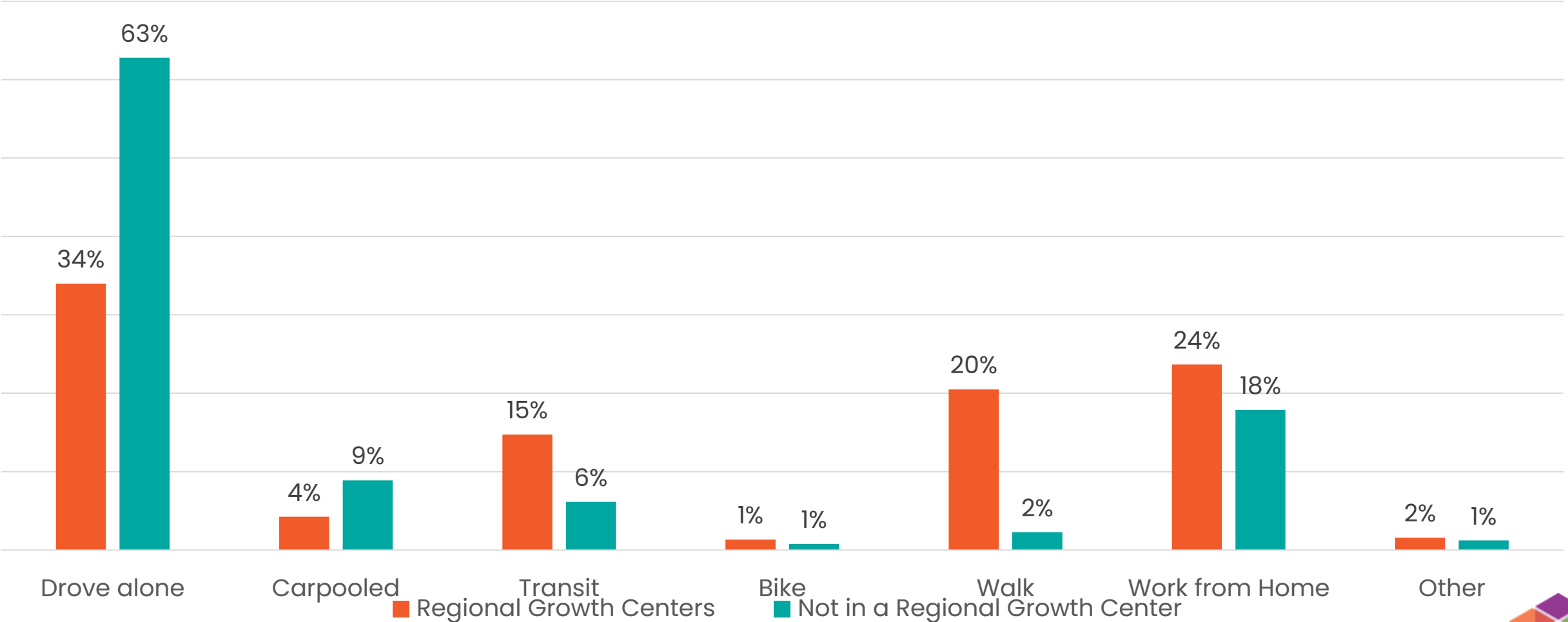
Regional Growth Centers and Manufacturing/Industrial Centers



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Mode to Work for Residents (2010, 2022 Census Data)

Residents of centers drive alone to work at almost half the rate of residents of the rest of the region and walk to work at a rate 10 times higher.

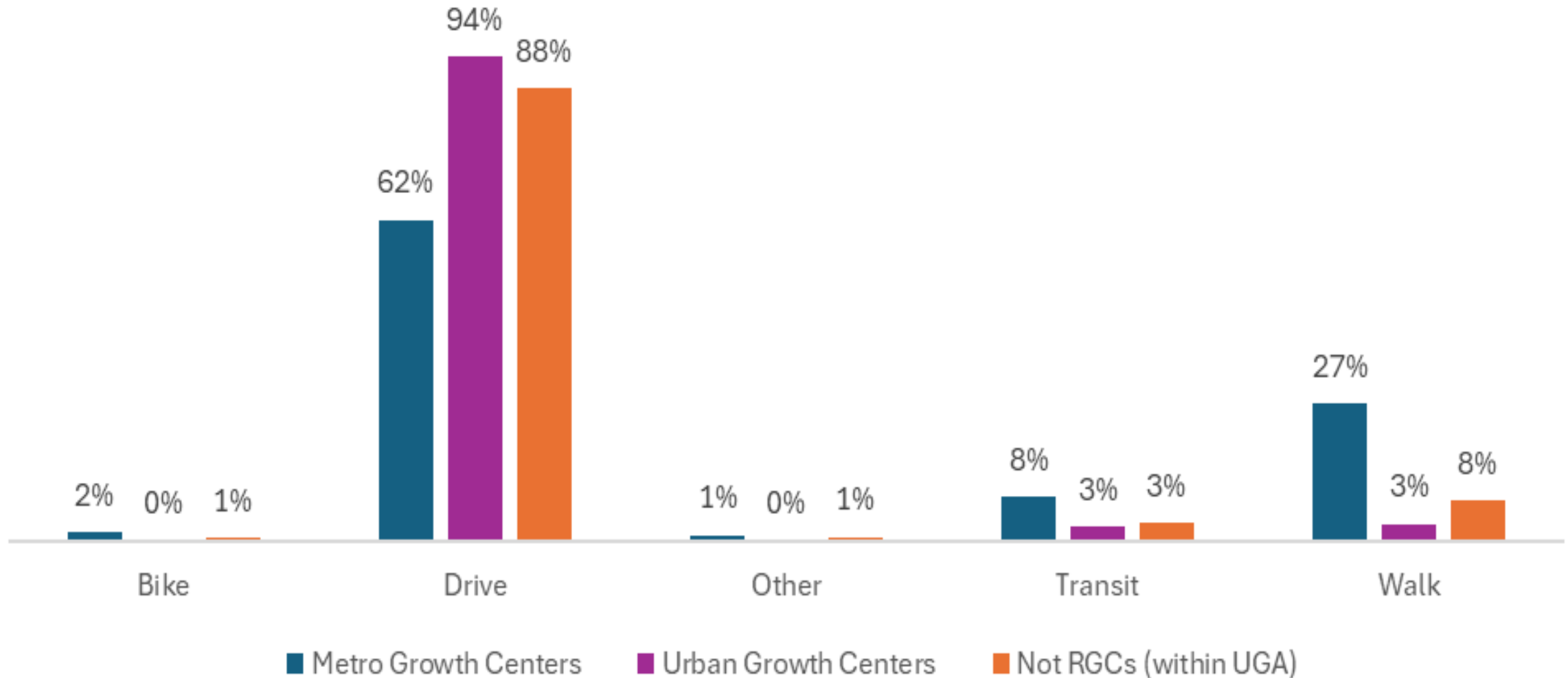


Source: 2010, 2022 5-year ACS, B08301



Mode of All Trips Based on Destination (2023)

As a destination, metro growth centers have the highest share of trips via walking, transit, and biking.



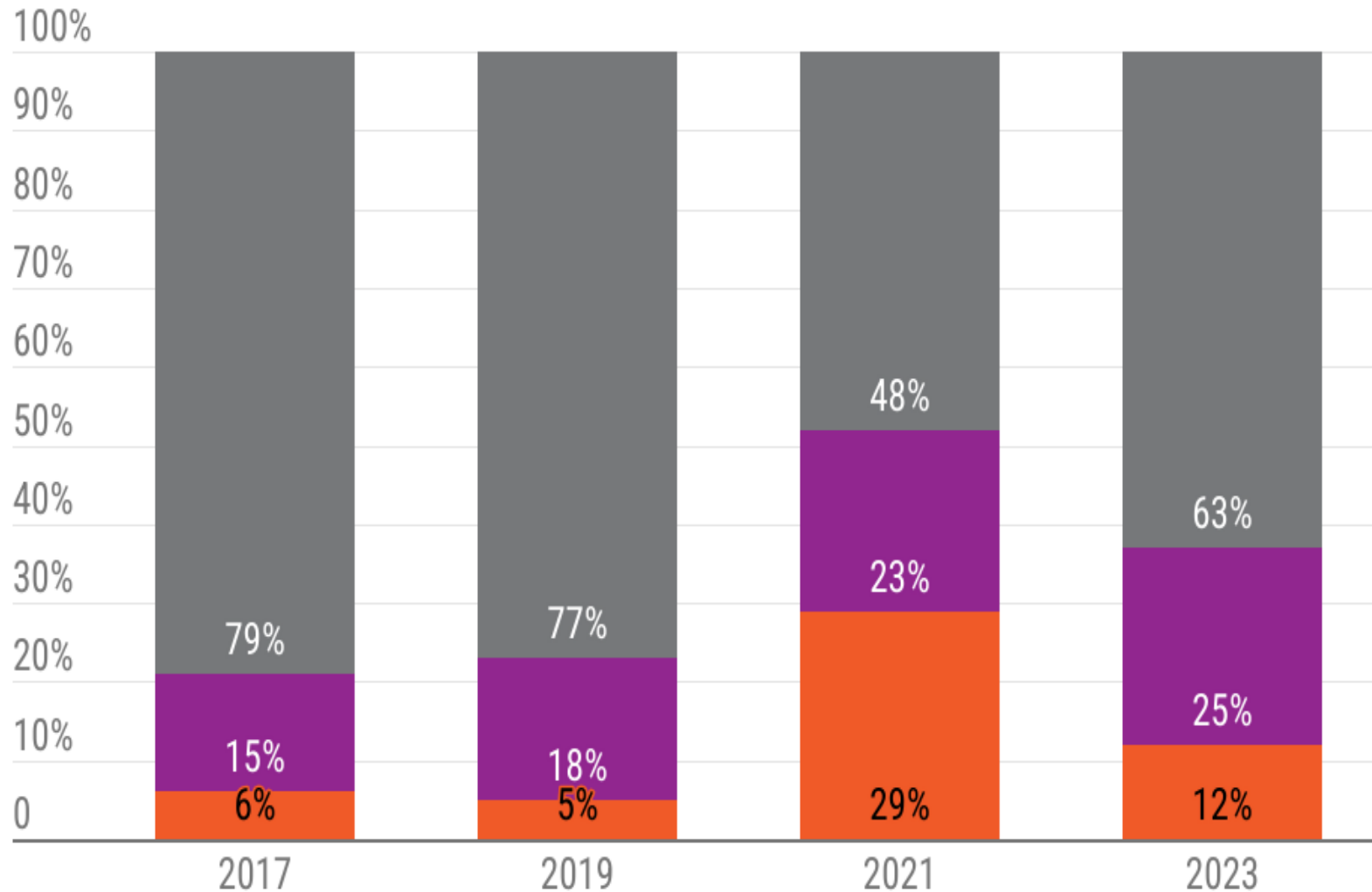
Work Locations and Travel Behaviors



Work at Home Trends

% of workers regionally

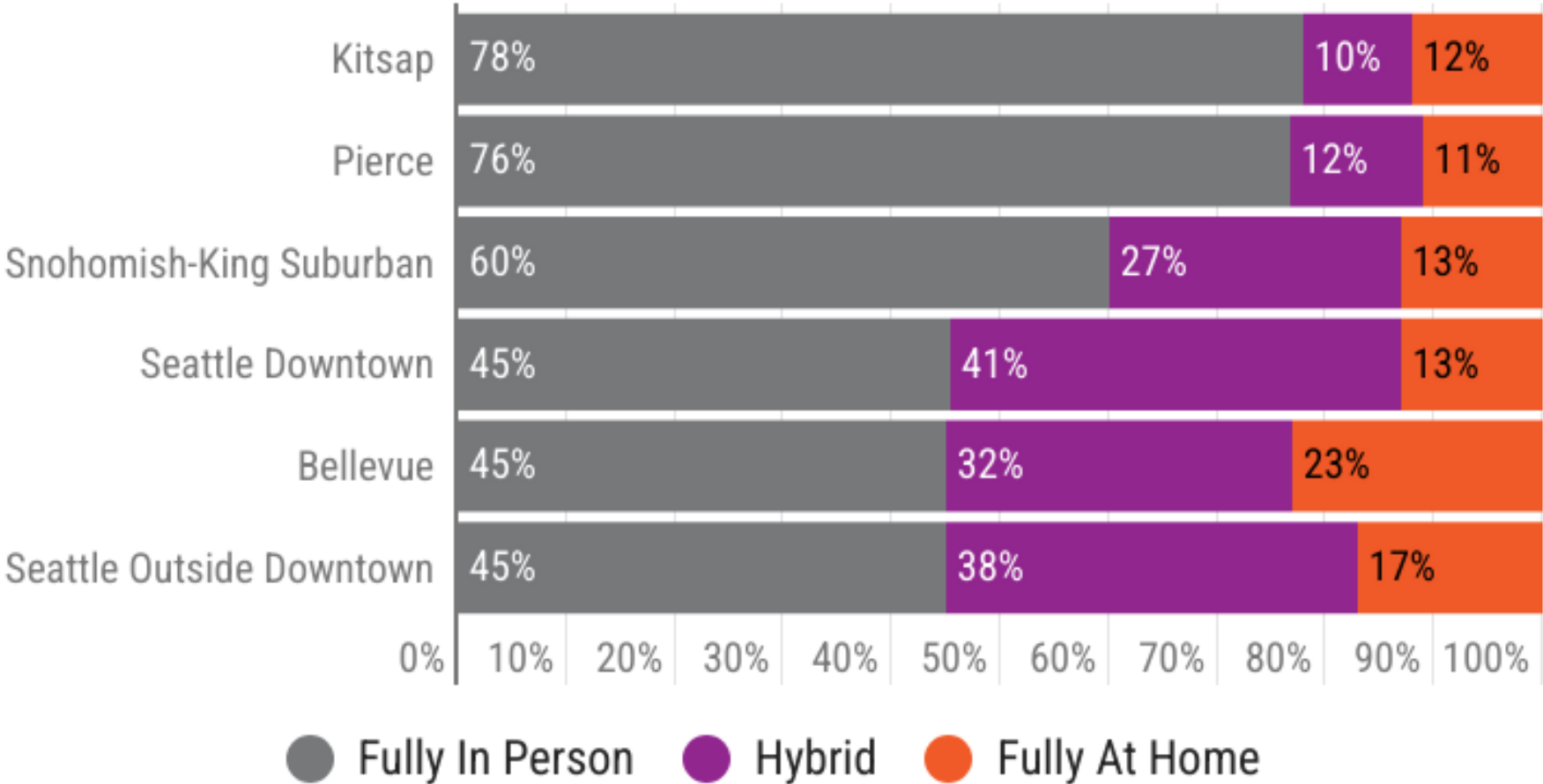
● Fully At Home ● Hybrid ● Fully in Person



Remote work peaked in 2021. Working fully in person increased in 2023.



All Workers by Home Location Including Work at Home (2023)



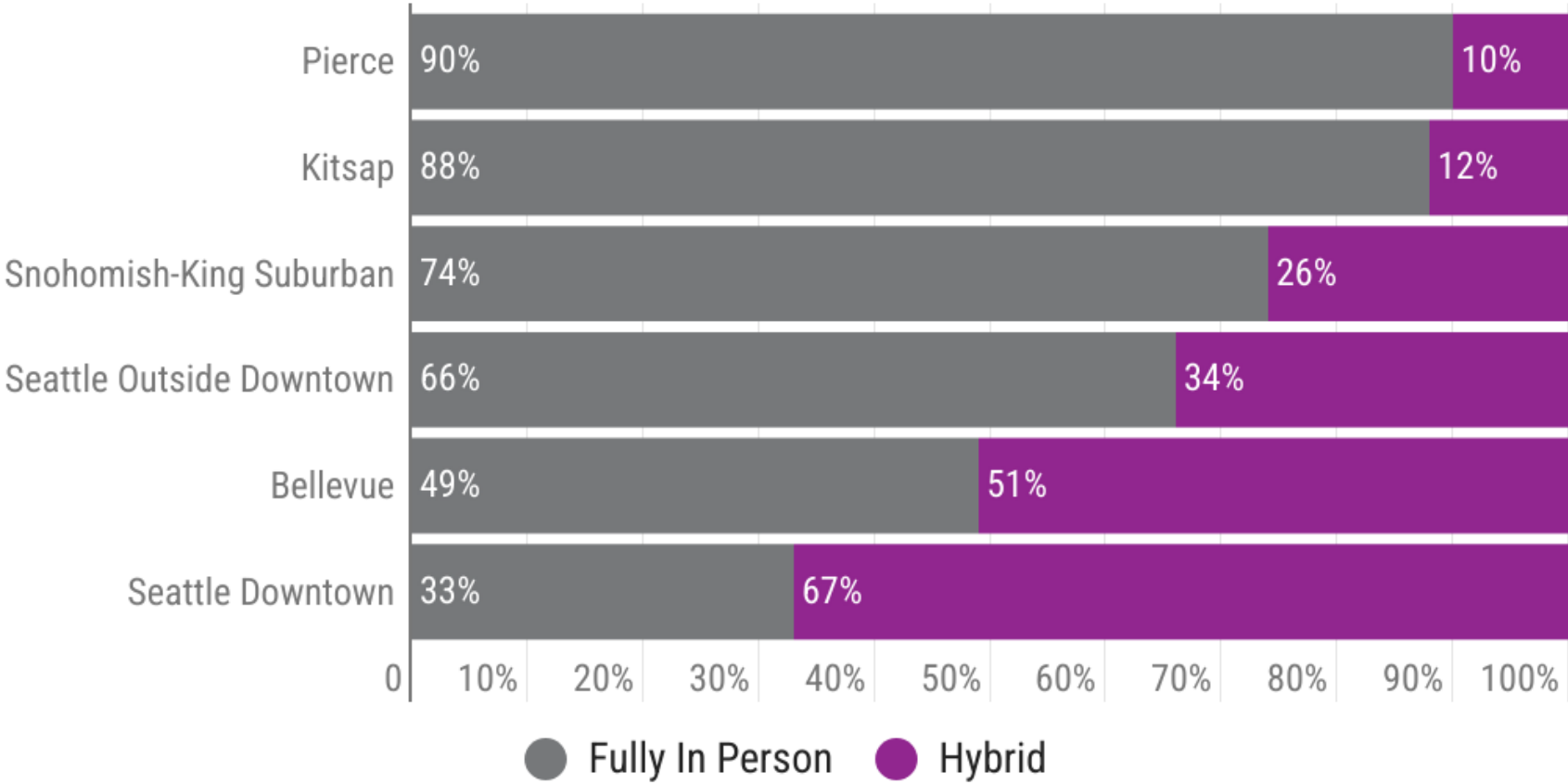
Working fully at home does not have strong variation with home geography.

Substantially more hybrid workers live in Bellevue and Seattle.



Workers by Work Location Away from Home (2023)

(excluding those who always work at home)

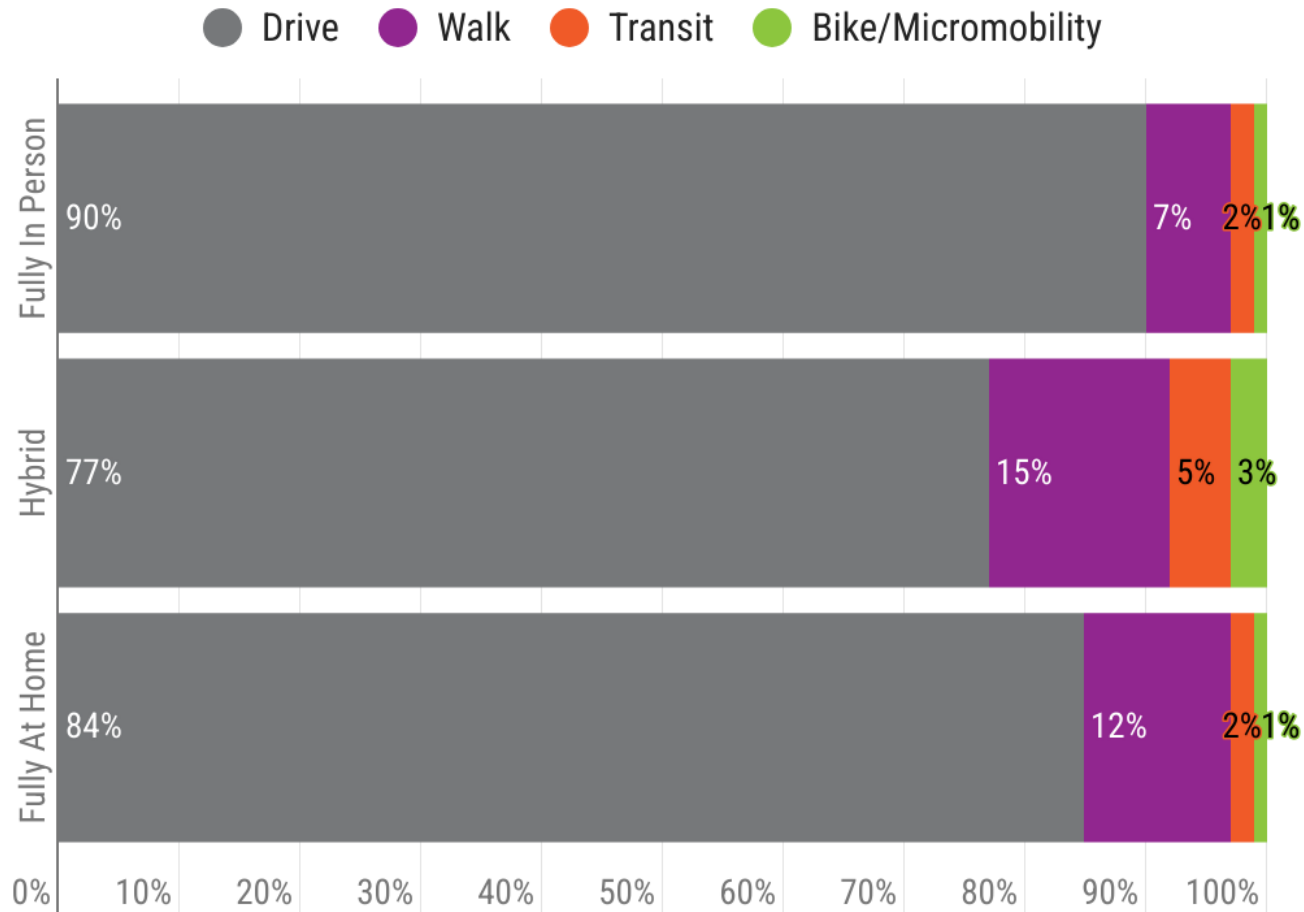


Those who always work from home do not list an external work location (and are excluded from this chart).

Very wide variation in hybrid work rates based on where workers who work outside the home sometimes work. This is likely due to correlation between industry and geography.



All Trip Mode Share by Work Location (2023)



Includes trips for all purposes such as shopping or recreation.

Walking rates are higher for people who work from home and hybrid workers.

Transit rates are higher for hybrid workers.

Working from home correlates with geography.

Geography correlates with transit use.



Key Takeaways

- Fully working from home doubled from 2017 to 2023
- The lowest income households use transit the most
- Workers in the lowest and highest income groups have the highest shares of employer subsidized transit passes
- Walking has decreased to pre-pandemic levels while transit has recovered some but not completely
- People with disabilities use transit more than those who do not have a disability
- Residents of Regional Growth Centers drive less, use transit more, and take more bike and walk trips



2023 HTS presentation schedule

Group	Date	Time	Topic
Transportation Demand Management (TDM)	8/27 Tue	10am- 12pm	Workplaces, commutes, telework
Bicycle Pedestrian Advisory Committee (BPAC)	9/10 Tue	10am- 12pm	Walk, bike, roll
Coordinated Mobility & Accessibility Committee (CMAC)	9/18 Wed	9:30- 11:30am	People with disabilities, older adults, youth, people with lower income, people with limited English proficiency
Transit-Oriented Development (TOD)	9/20 Fri	10am- 12pm	Transit & other modes, Regional Growth Centers (RGC) & High-Capacity Transit (HCT) communities
Freight Advisory Committee (FAC)	10/9 Wed	9:30- 11am	Deliveries & other travels induced by residents
Transit Operator Committees (TOC)	10/23 Wed	10am- 12pm	Focus on transit behaviors
Regional Staff Committee (RSC)	11/21 Thu	9:30- 11:30am	Highlights from all topics



2025 HTS Timeline

2024	October	Start 2025 HTS project with consultants
2025	February – June	Data collection
	July	Data cleaning, processing, weighting begins
2026	March	Final data delivery & publication





Kristin Mitchell

Assistant Planner, kmitchell@psrc.org

Suzanne Childress

Principal Data Scientist, schildress@psrc.org

Brian H. Y. Lee, Ph.D.

Program Manager, blee@psrc.org

Thank You!



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