Puget Sound Regional Household Travel Survey 2021 Results

Bicycle and Pedestrian Access Committee

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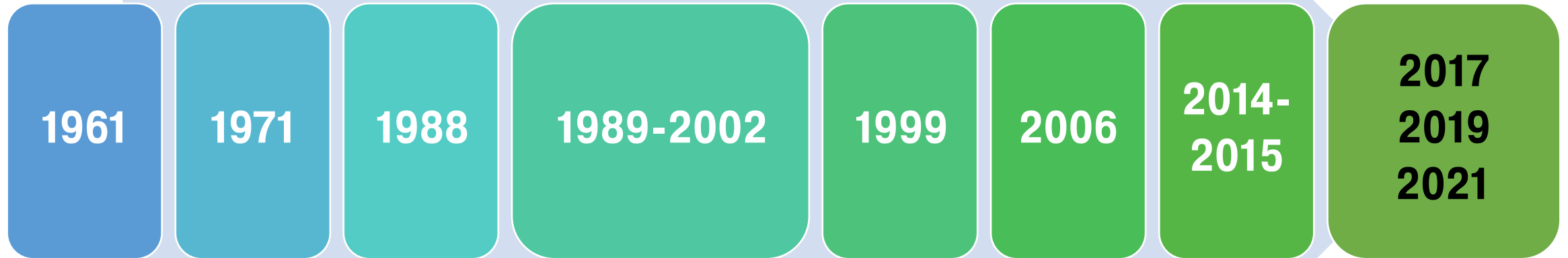
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Presentation Outline

Topics covered today include:

- Brief intro to the Household Travel Survey (HTS) Program

- Highlights from the 2021 survey about walking and biking

- Discussion of your survey data needs

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Puget Sound Regional Travel Studies

More frequent snapshots allows for more timely analysis and monitoring of trends. Data can be combined.

| 1961 | 1971 | 1988 | 1989-2002 | 1999 | 2006 | 2014-2015 | 2017 2019 2021 |

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

Multi-year HTS Programs

Goal: The surveys seek to capture quality, regionally representative data for residents' activity and travel behavior on a typical weekday.

- 6-year program, 3 waves (2017, 2019, 2021): COMPLETED

- 8-year program, 4 waves (2023, 2025, 2027, 2029): STARTED

- For additional info, see
https://www.psrc.org/our-work/household-travel-survey-program

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Research Questions Explored

- How did people get around in 2021? How did trip mode shares change in 2021 as compared to 2017/2019?

- How did people access transit in 2021, as compared to before?

- How much did people go for a walk and bike in 2021? How much more or less was that compared to before?

Mode Question on the Survey

What is the main way you traveled on your trip?

- Household vehicle
- Other vehicle
- Vanpool
- Bicycle or e-bike
- Walked, jogged, or used a wheelchair
- Bus (public transit)
- Private bus or shuttle
- Paratransit
- School bus
- Commuter rail (Sounder, Amtrak)
- Urban rail (Link light rail, monorail, streetcar)

- Ferry or water taxi
- Taxi (e.g., Yellow Cab)
- Other hired service (Uber, Lyft, or other smartphone-app car service)
- Airplane or helicopter
- Scooter or e-scooter (e.g., Lime, Bird, Razor)
- Other (e.g., skateboard, kayak, motor home)

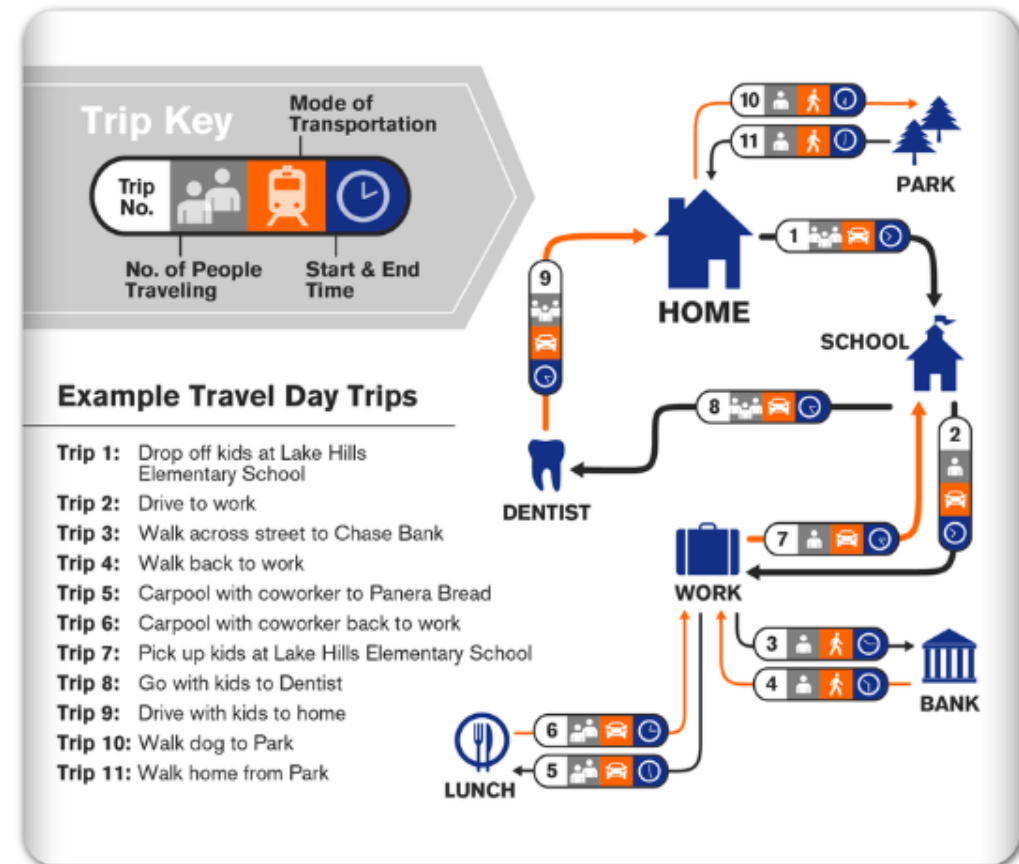# Definition of A Trip

What is a trip?

Anytime you traveled for 5 or more minutes and stopped at a new location, that equals 1 trip. Even if you stopped briefly for gas, at an ATM, or to drop a child off at school, each stop equals 1 trip.

What are some example trips?

- Drive to work
- Ride the bus to the bank
- Bike to the grocery store
- Get a ride to the movies
- Walk to school

What if I went out, but didn't make a stop (e.g., walked the dog or went for a bike ride)?

Please report 2 trips. The place that was farthest from where you began (such as the place that you turned around on a bike ride) is the "destination."

Trip Key

- Trip No.
- No. of People Traveling
- Mode of Transportation
- Start & End Time

Example Travel Day Trips

Trip 1: Drop off kids at Lake Hills Elementary School
Trip 2: Drive to work
Trip 3: Walk across street to Chase Bank
Trip 4: Walk back to work
Trip 5: Carpool with coworker to Panera Bread
Trip 6: Carpool with coworker back to work
Trip 7: Pick up kids at Lake Hills Elementary School
Trip 8: Go with kids to Dentist
Trip 9: Drive with kids to home
Trip 10: Walk dog to Park
Trip 11: Walk home from Park

PARK

HOME

SCHOOL

DENTIST

WORK

BANK

LUNCH

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Trip Mode Share by Adults

2017/2019 vs 2021

- Driving is still by the most popular mode with about 80% of trips

- Walking went up during 2021, as compared to 2017/2019. Transit went down.
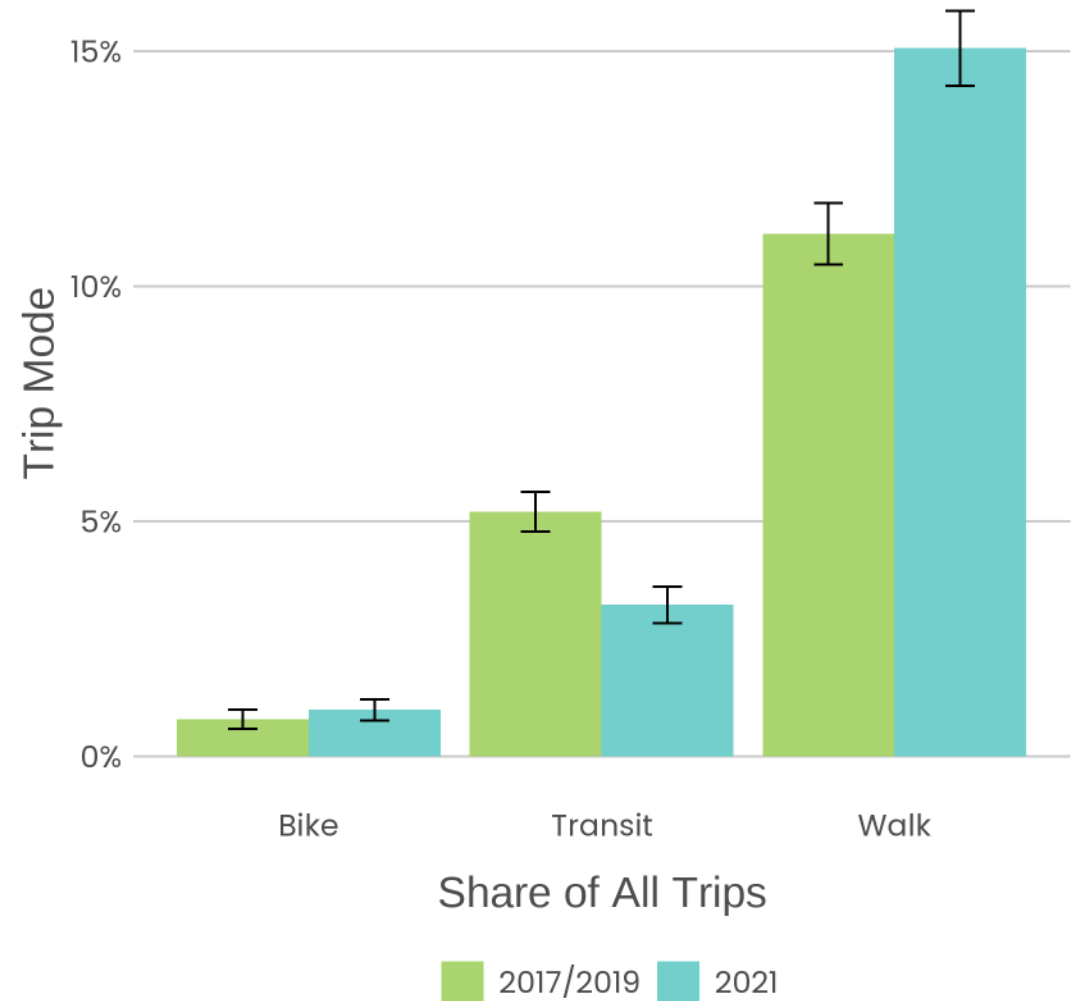
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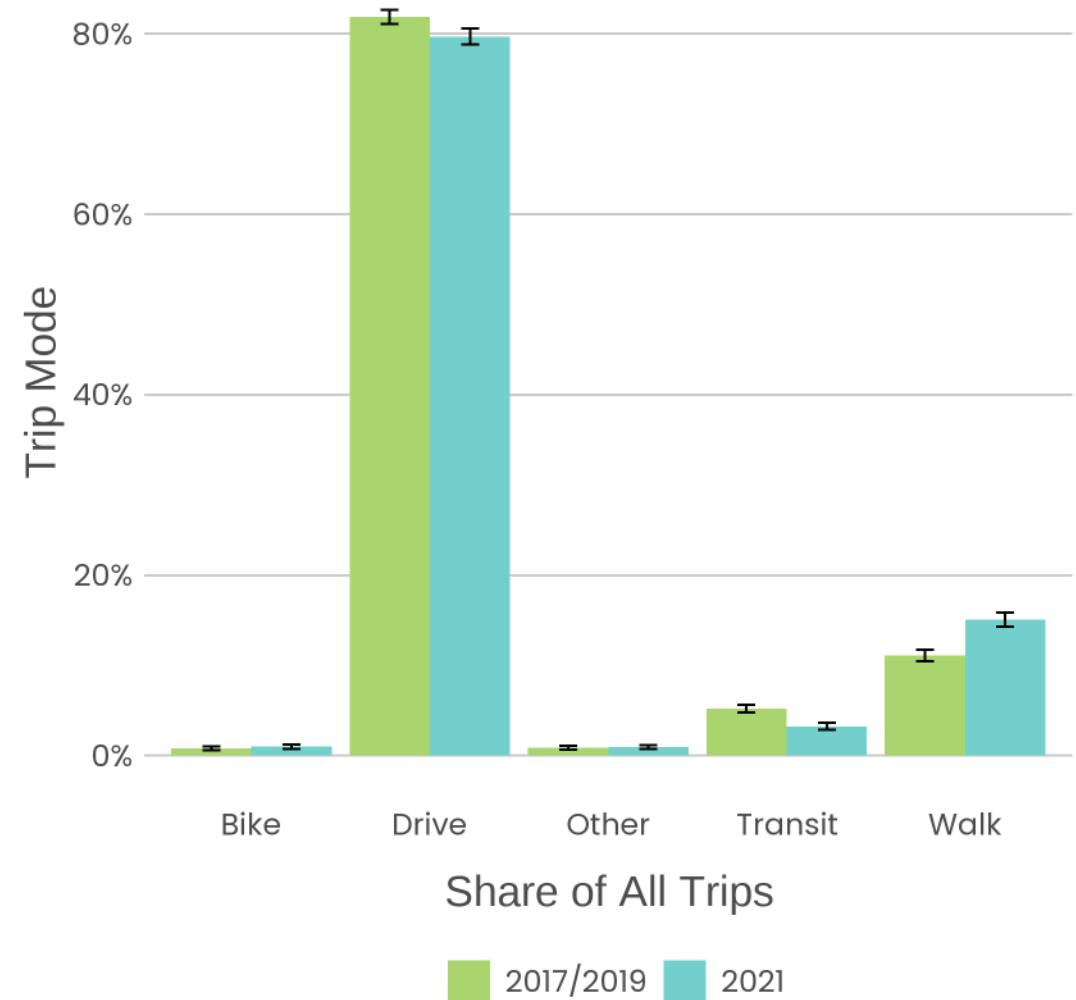
Walk, Bike, and Transit Shares

2017/2019 vs 2021

- Walking went up during 2021, as compared to 2017/2019, from 11% of trips to 15% of trips. Transit went down from 5% of trips to 3% of trips.

- The difference for bike was not statistically significant.

- Does this data match what you've seen? What are the potential causes?

2017/2019 vs 2021

- The average number of trips per day went down modestly to 4.1 trips per weekday by adults in 2021, as compared to 4.4 trips per person per day in 2017/2019.

- A greater share of trips were made in 2021 for social, recreation, and meal purposes – trips where walking is a more popular mode. A smaller share of trips were made in 2021 for work and school, trips where walking is less common, but transit is more significant, usually.
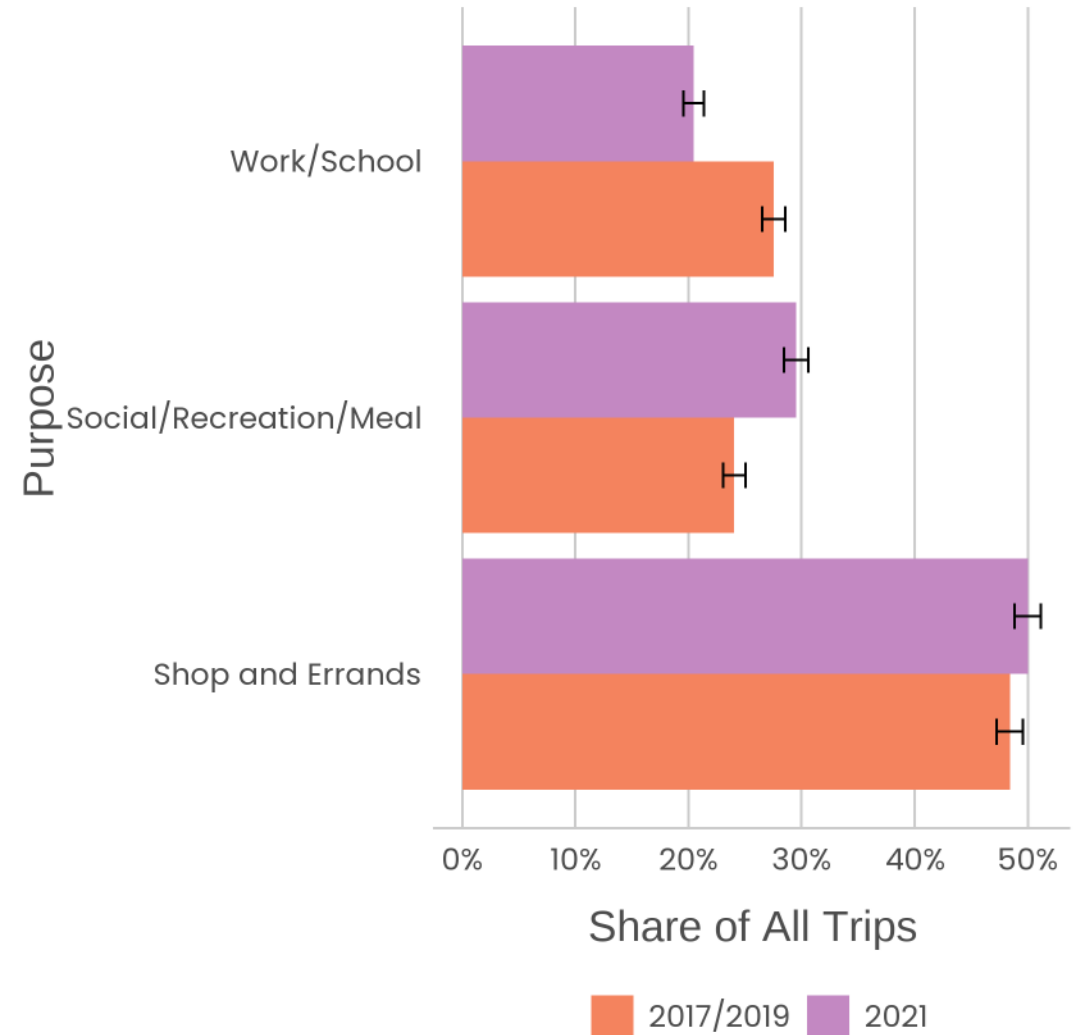
Walking Trip Mode Shares

Research Questions Explored

- How much were different demographics walking as percent of all their trips in 2021?
- How do the walk shares by demographic differ over time?

2021

- People living in Regional Growth Centers walked on about a third of their trips!

2017/2019 vs 2021

- Walking mode shares increased for both groups.
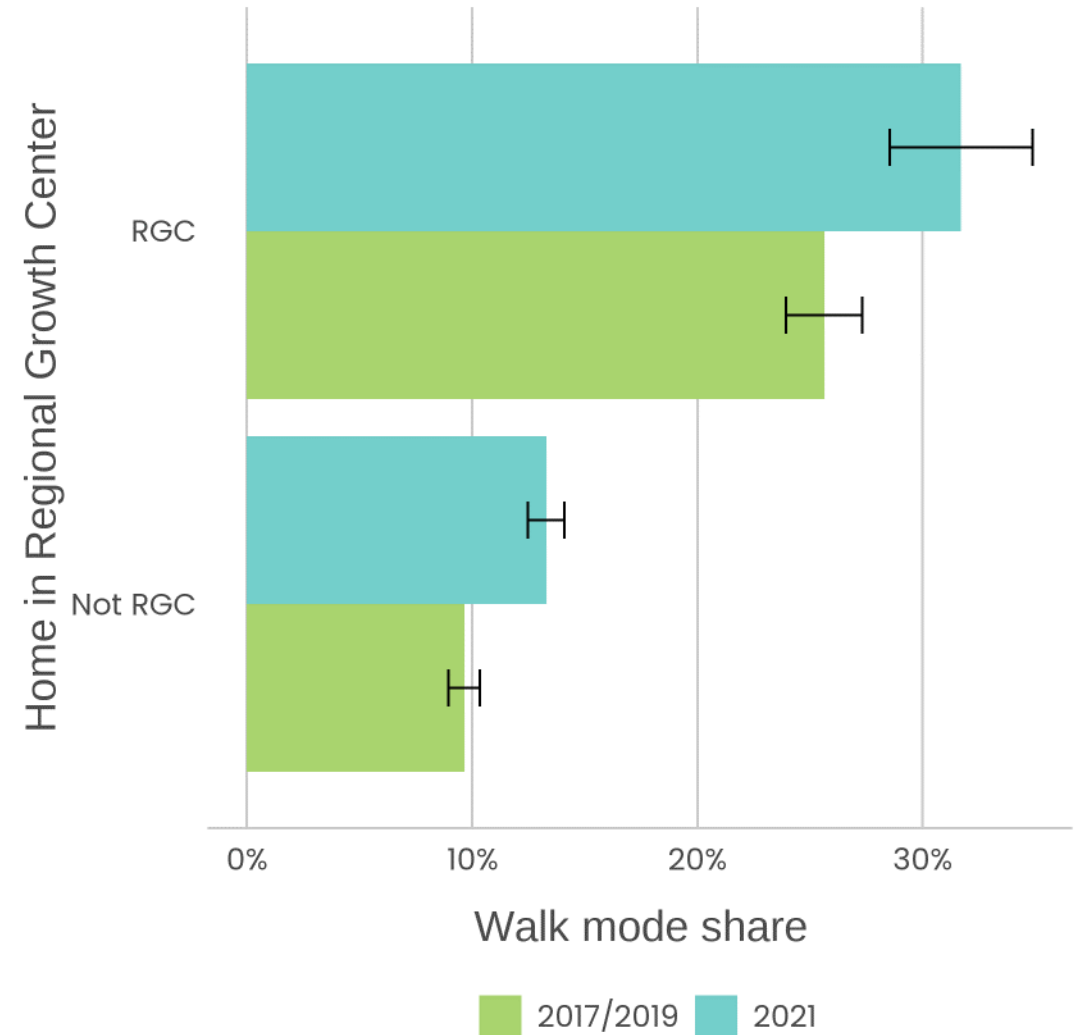
Walk Mode Share by Household Vehicle Ownership

2021

- Walk mode share is nearly 50% for people who live in households without a vehicle.
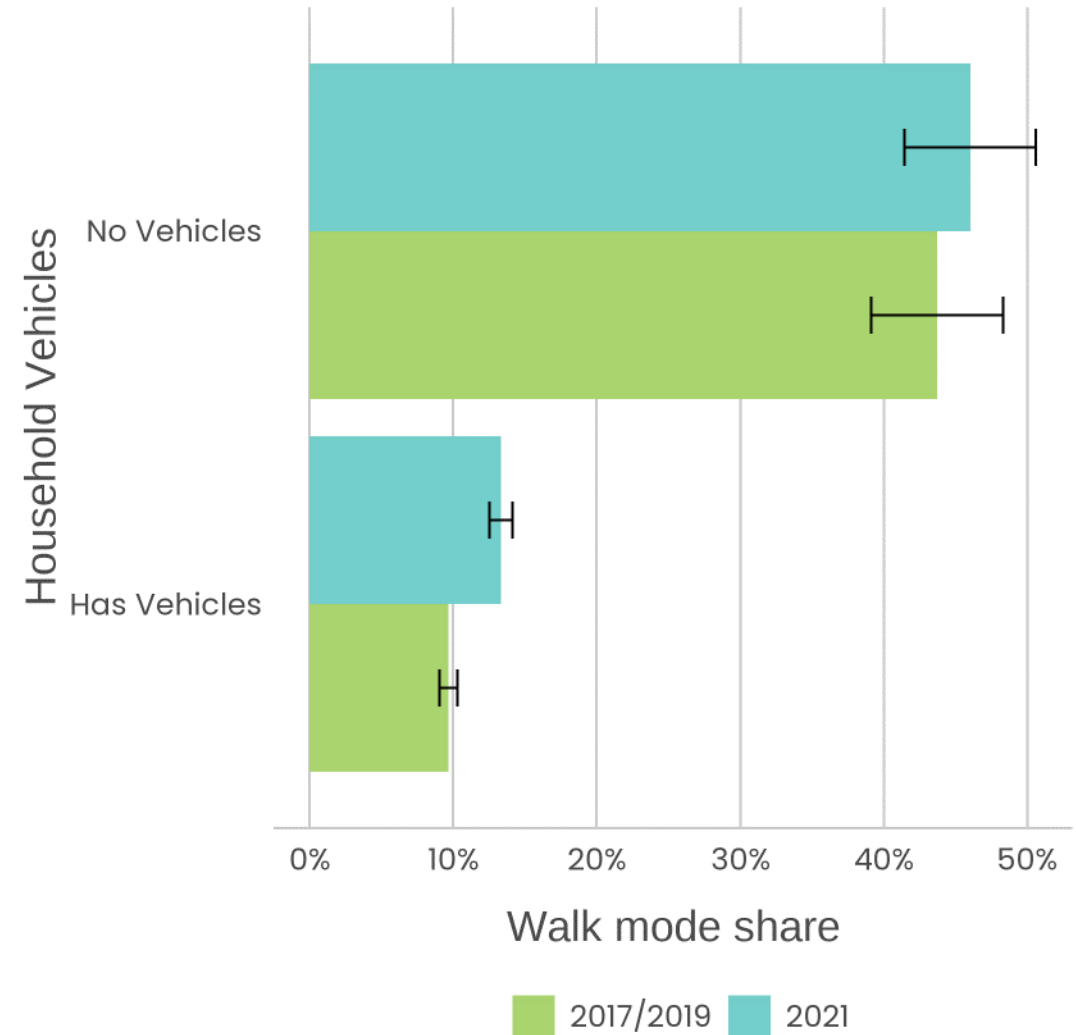
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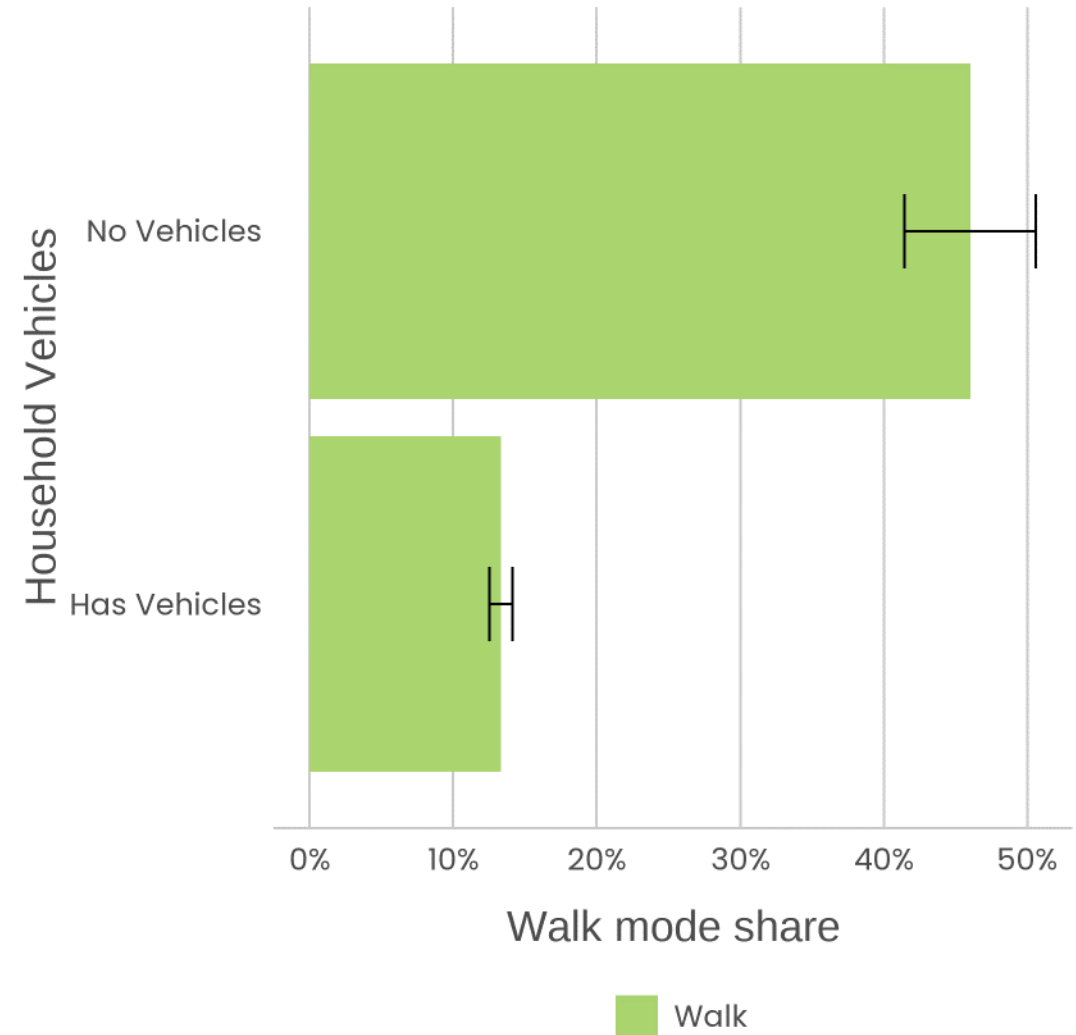
Walk Mode Share by Household Vehicle Ownership

2017/2019 vs 2021

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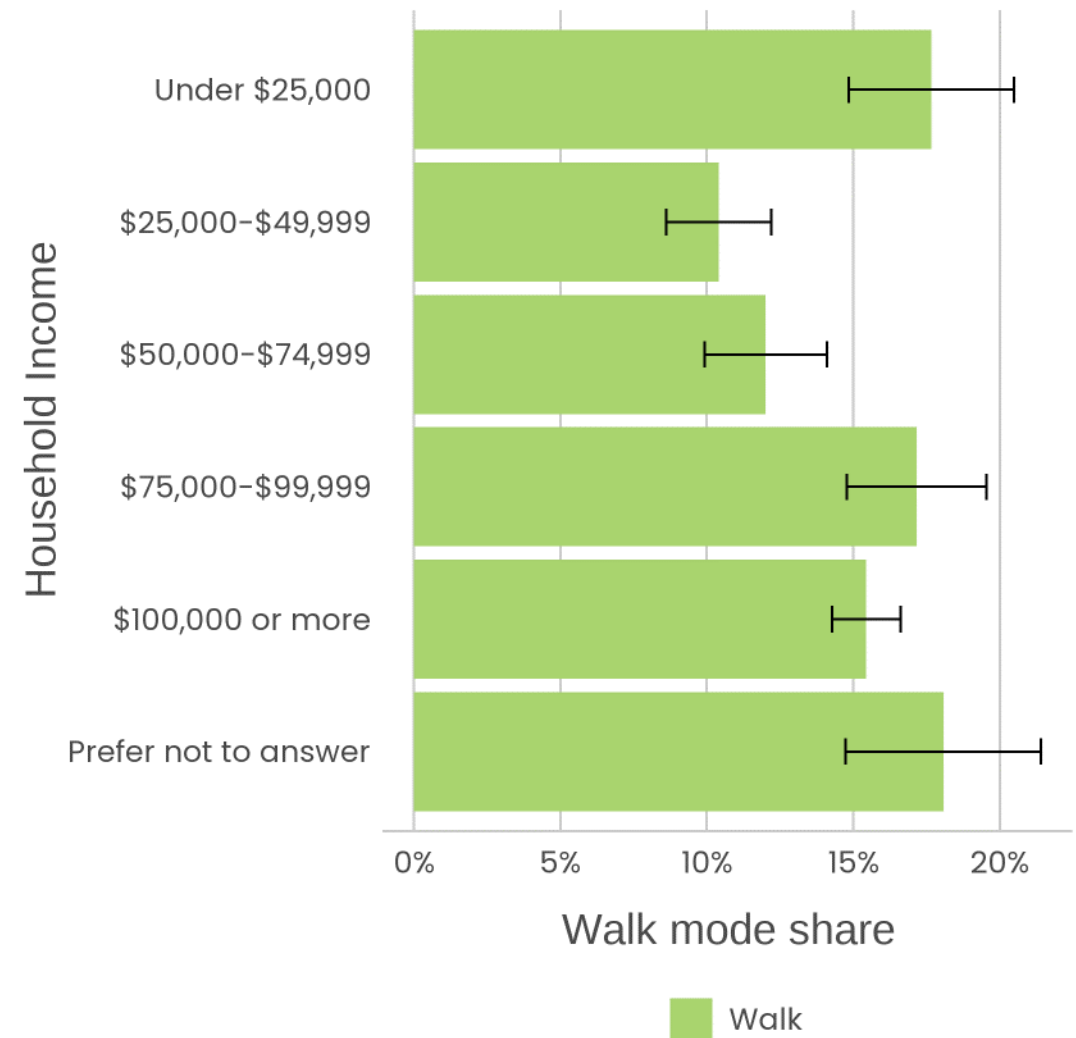Puget Sound Regional Council

2021

- Walk mode share has a u-shaped distribution with respect to income. The lower and higher income people are more likely to walk than middle income people.

- Has your work supported or refuted this finding?

- What factors do we hypothesize may contribute to this data?

2017/2019 vs 2021

- Walk mode share increased the most for people living in households making more than 75K.

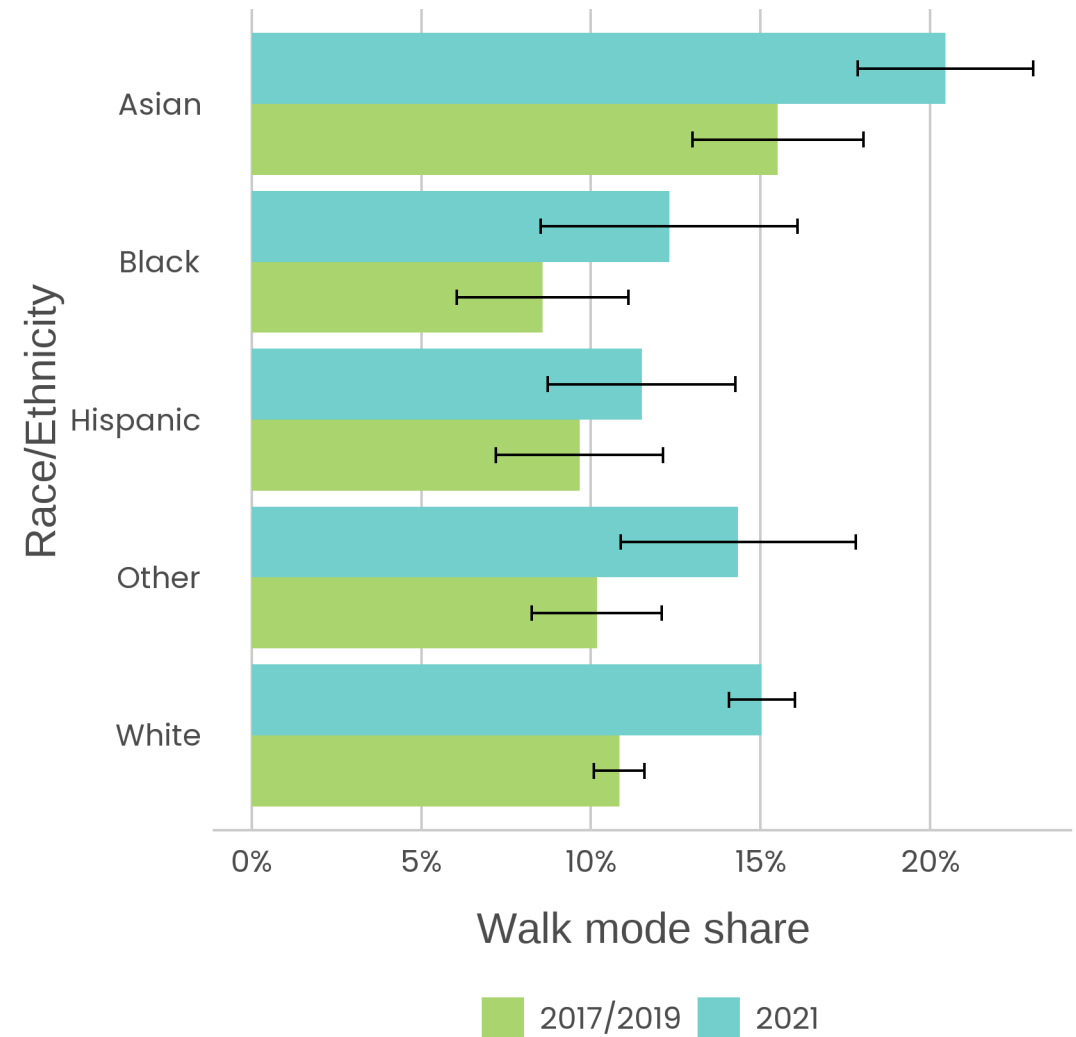- What factors do we hypothesize may contribute to this data?

2017/2019 vs 2021

- Walk mode share most likely went up for all racial groups.
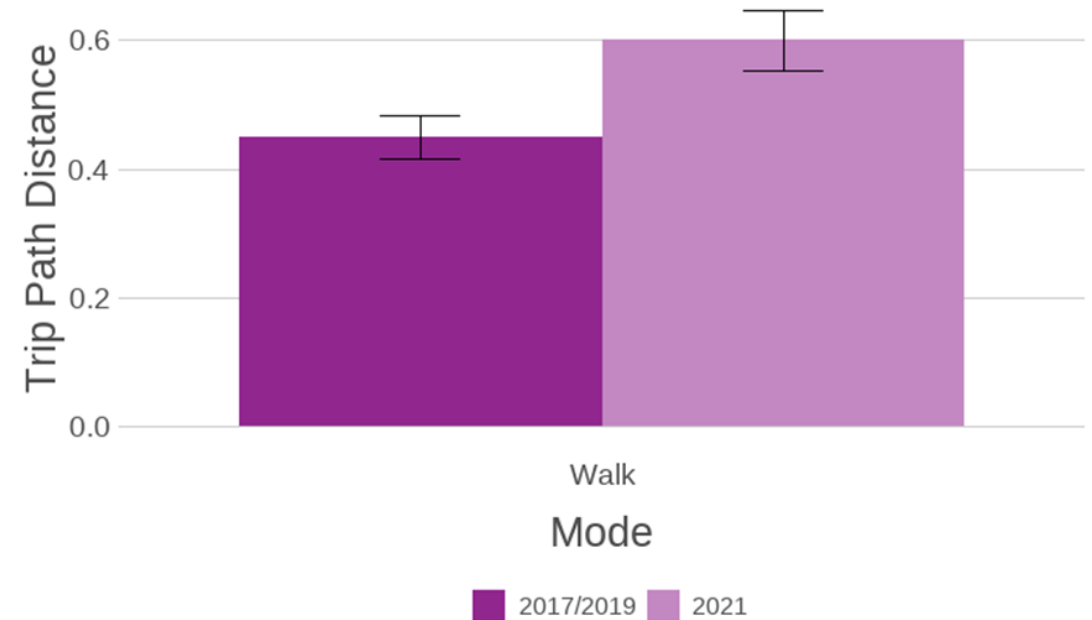- MOEs are wide, makes interpretation difficult over time and across groups.

Walk Trip Distances went up a little.

2017/2019 vs 2021

- The median walk trip distance went up from 0.4 miles to 0.6 miles.

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Walk Mode Share by Trip Purpose

2017/2019 vs 2021

- The walk mode share is highest across purposes for social and recreation purposes, and lowest for work and school.

- Walking mode shares went up for non-work and school purposes from 2017/2019 to 2021.

- Walking mode share went down for work and school purposes. Why do we think this is?

Share of All Trips
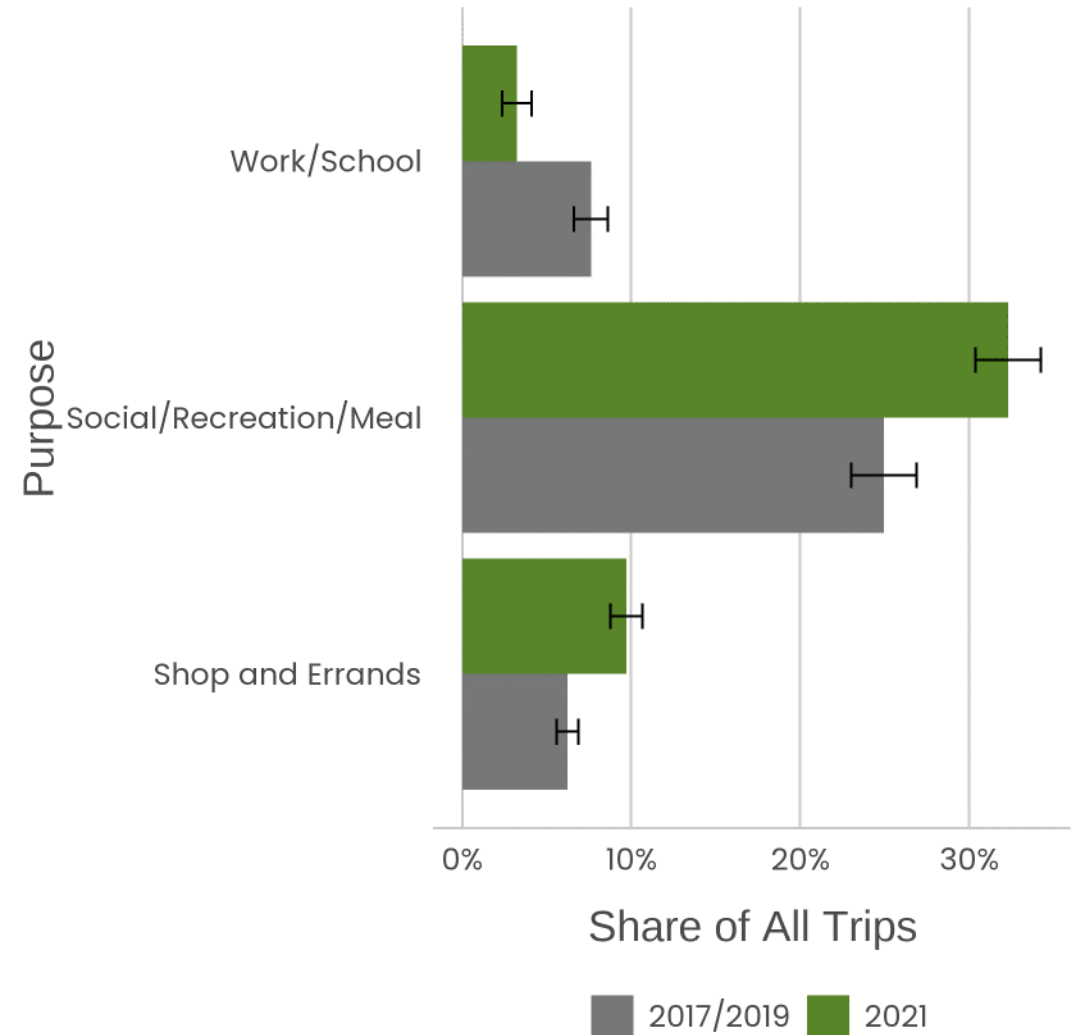
■ 2017/2019   ■ 2021

Bike Mode Share by Trip Purpose

2017/2019 vs 2021

- Bike mode share is difficult to measure because of insufficient samples.

- Work and school bike mode share most likely increased from 2017/2019 to 2021.

- Are there other data sources to corroborate this?

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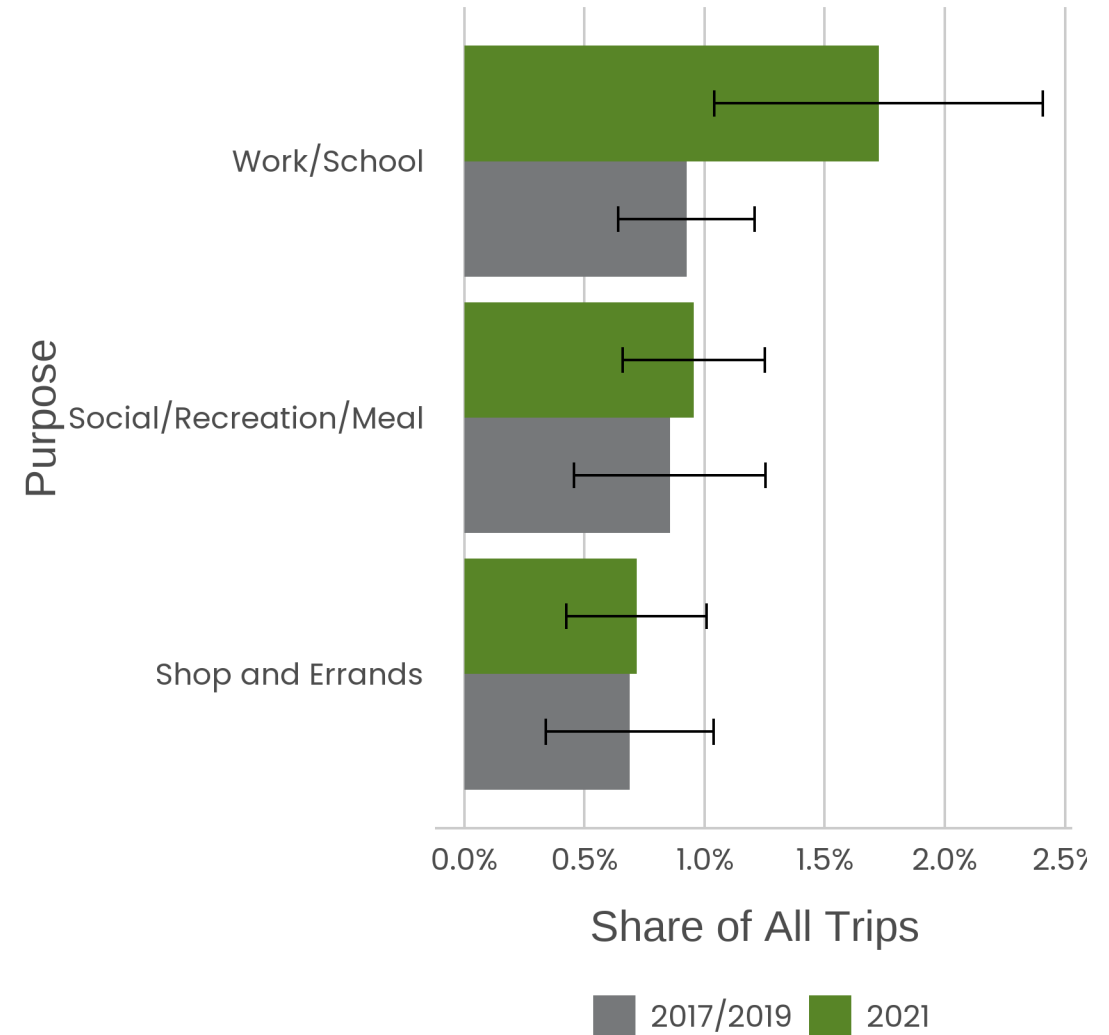
Transit Access Question on Survey

if mode = bus, train, ferry, streetcar
How did you travel from <place x> to the first transit stop/station?

- Walked, jogged, or used a wheelchair

- Rode a bike

- Drove and parked a car (e.g., a vehicle in my household)

- Drove and parked a carshare vehicle (e.g., Turo, ZipCar, , Getaround, GIG)

- Got dropped off

- Took a taxi (e.g., Yellow Cab)

- Took ride-share/other hired car service (e.g., Uber, Lyft, or other smartphone-app car service)

- Other

Transit Access Mode

2017/2019 vs 2021

- Most Transit trips were accessed by walk, jog, or wheelchair. The share that of transit trips that were accessed by walking or jogging in 2021 most likely went down over 2017/2019. Not enough data to measure which other modes went up.

- Other access modes, few observations
- In both years
    - <10% Drove and Parked
    - <5% Rode a Bike
    - <5% Got Dropped Off
    - 5-10% said Other? What is that?
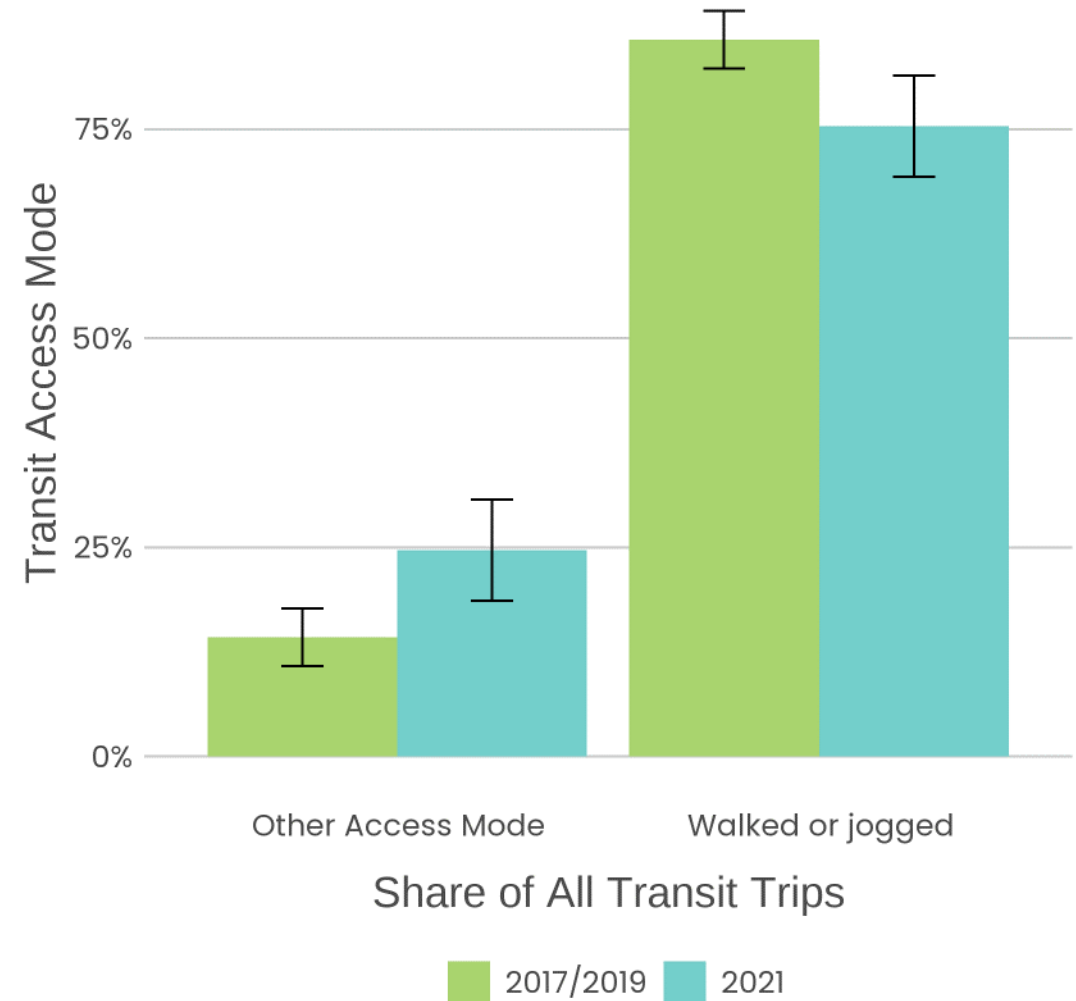
if age = 18+

In the past 30 days, how often have <you/Name> traveled in each of the following ways?

Only allow one selection in each row. Randomize order.

	6-7 days/week	5 days/week	2-4 days/week	1 day/week	1-3 times in the past 30 days	<I do/Name does> this, but not in the past 30 days	I never do this
Ridden transit (e.g., bus, rail, ferry)							
Ridden a bike (for 15-minutes or more)							
Gone for a walk (for 15-minutes or more)							
Carshare (e.g., Turo, ZipCar, Getaround, GIG)							
Rideshare (Uber, Lyft, or other smartphone-app car service)							

2017/2019 vs 2021

- Most people went for walks sometimes, even before COVID-19.

- During COVID-19 the share of people who sometimes went for a walk went up about 15%, to 85% of adults going for a walk sometimes.
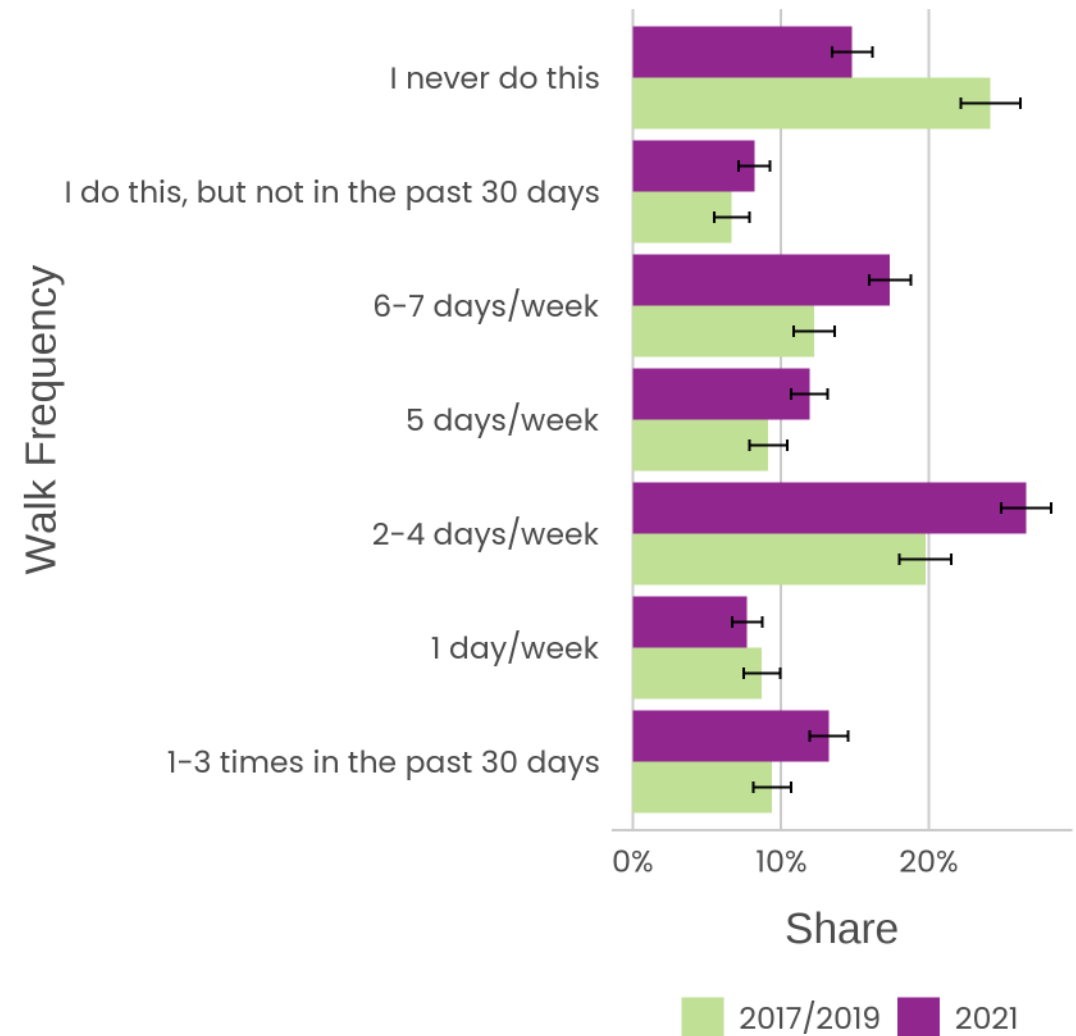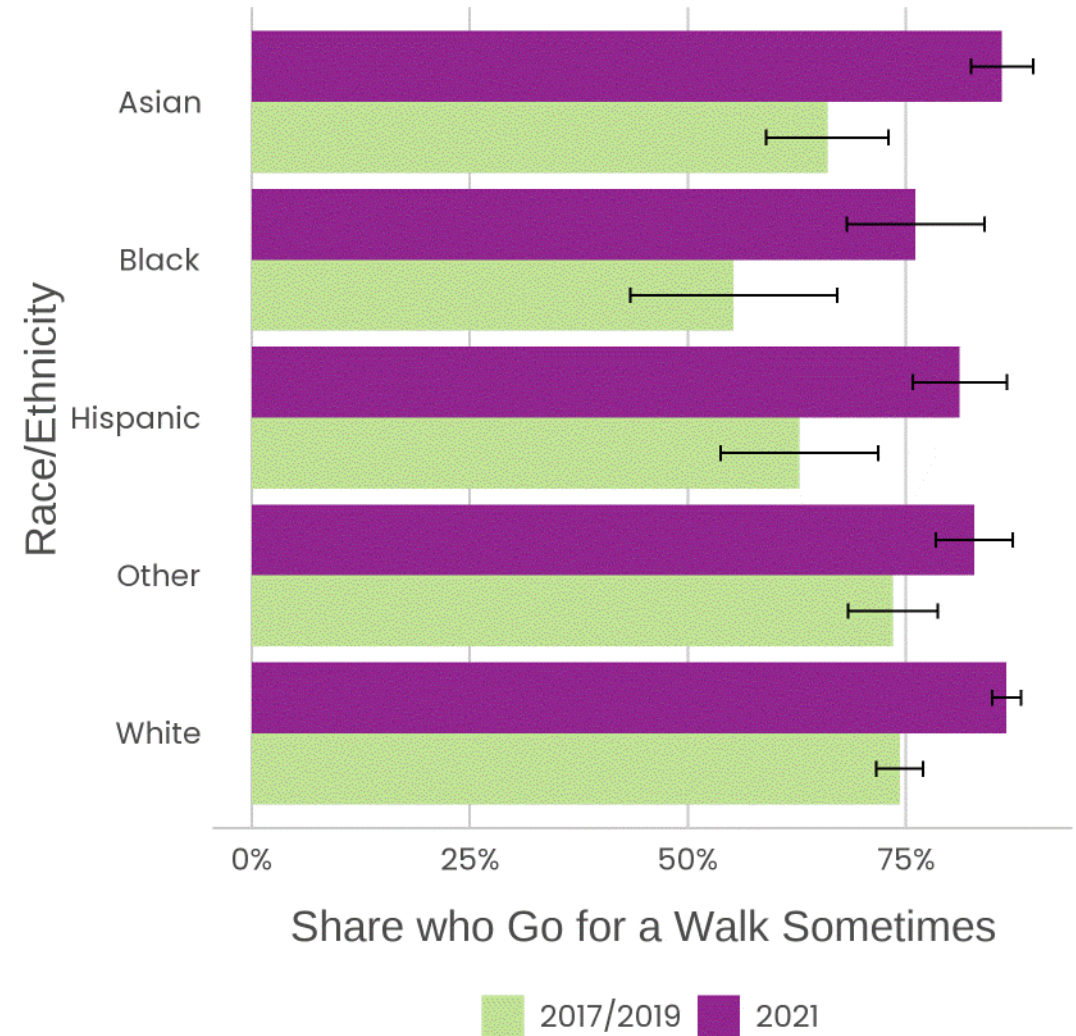
Frequency of Going for a Walk

2017/2019 vs 2021

- All racial groups had a greater share of people who went for walks in 2021 than 2017/2019.
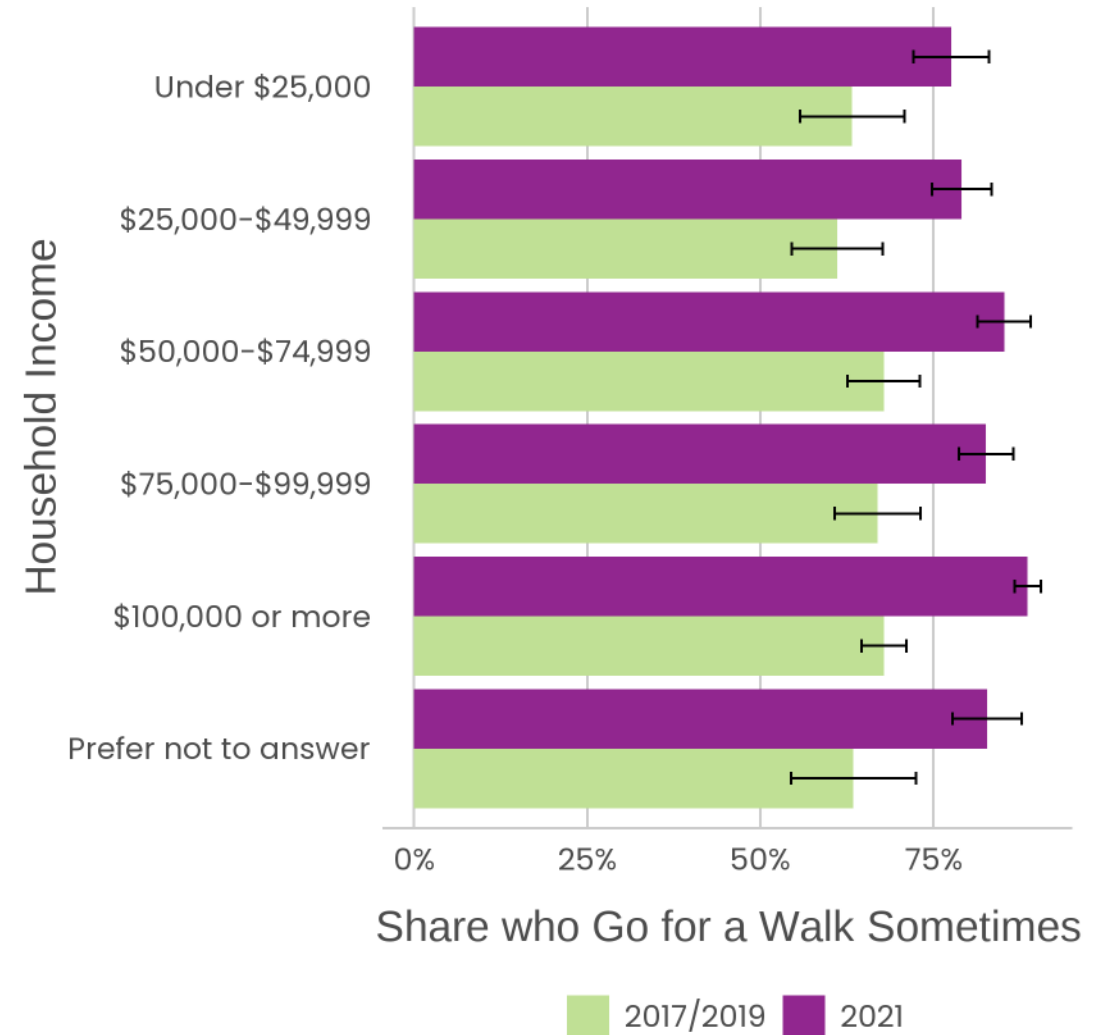
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2017/2019 vs 2021

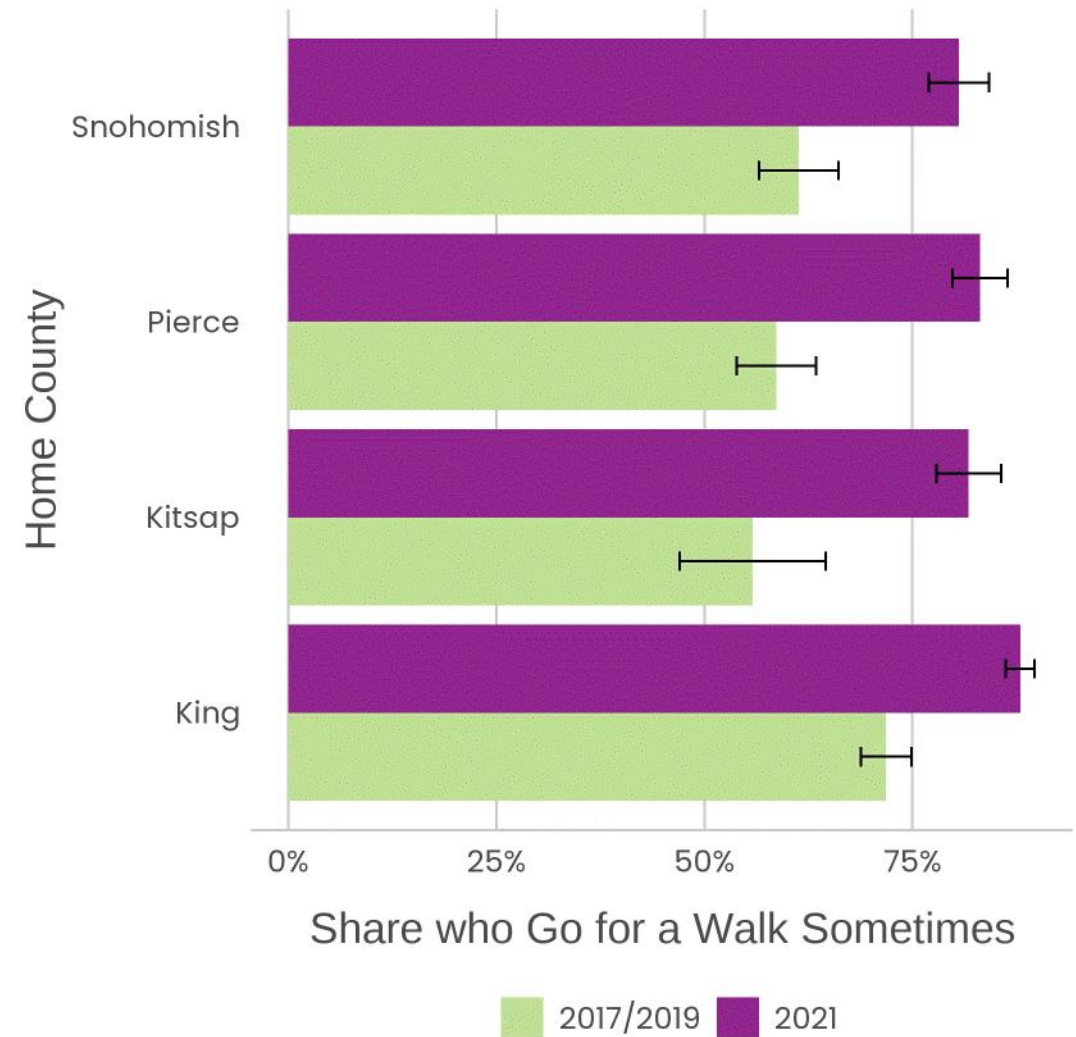- All income groups had a greater share of people who went for walks in 2021 than 2017/2019.

2017/2019 vs 2021

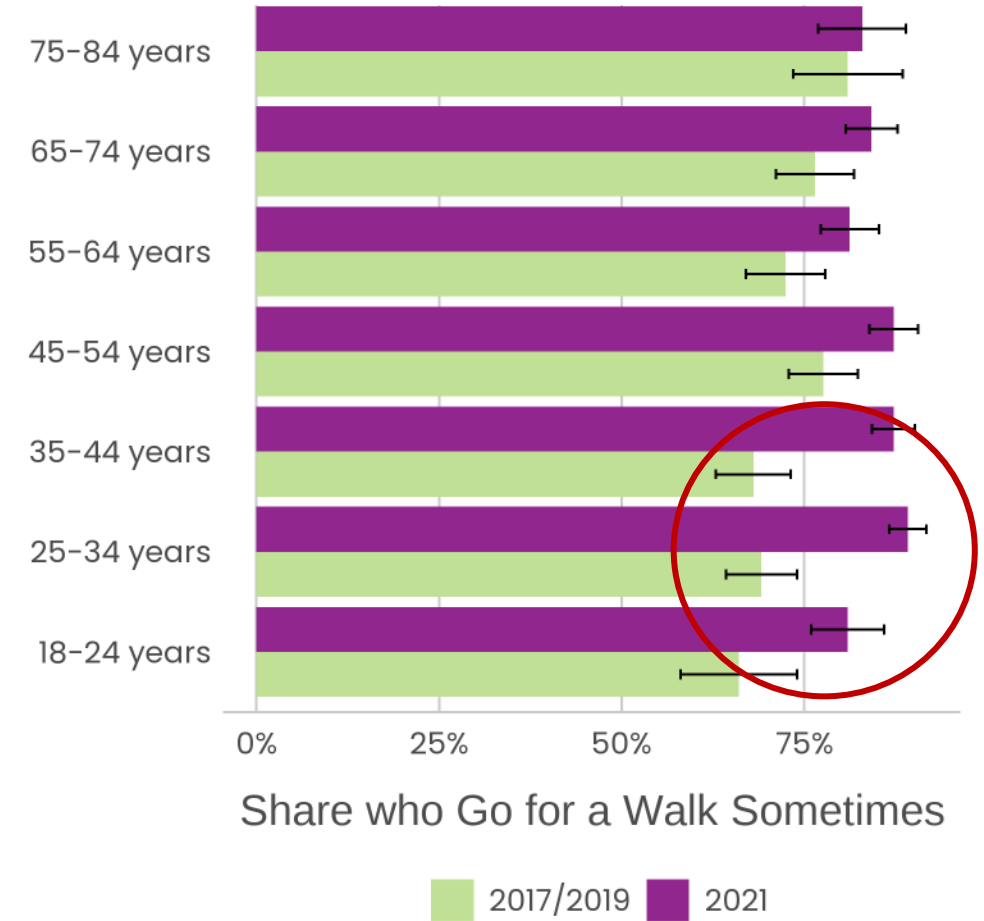- People who live in all counties went for a walk more frequently in 2021 than in 2017/2019.

2017/2019 vs 2021

- Adults under 44 had the greatest increases in going for walks.

- Any hypotheses?

Share who Go for a Walk Sometimes
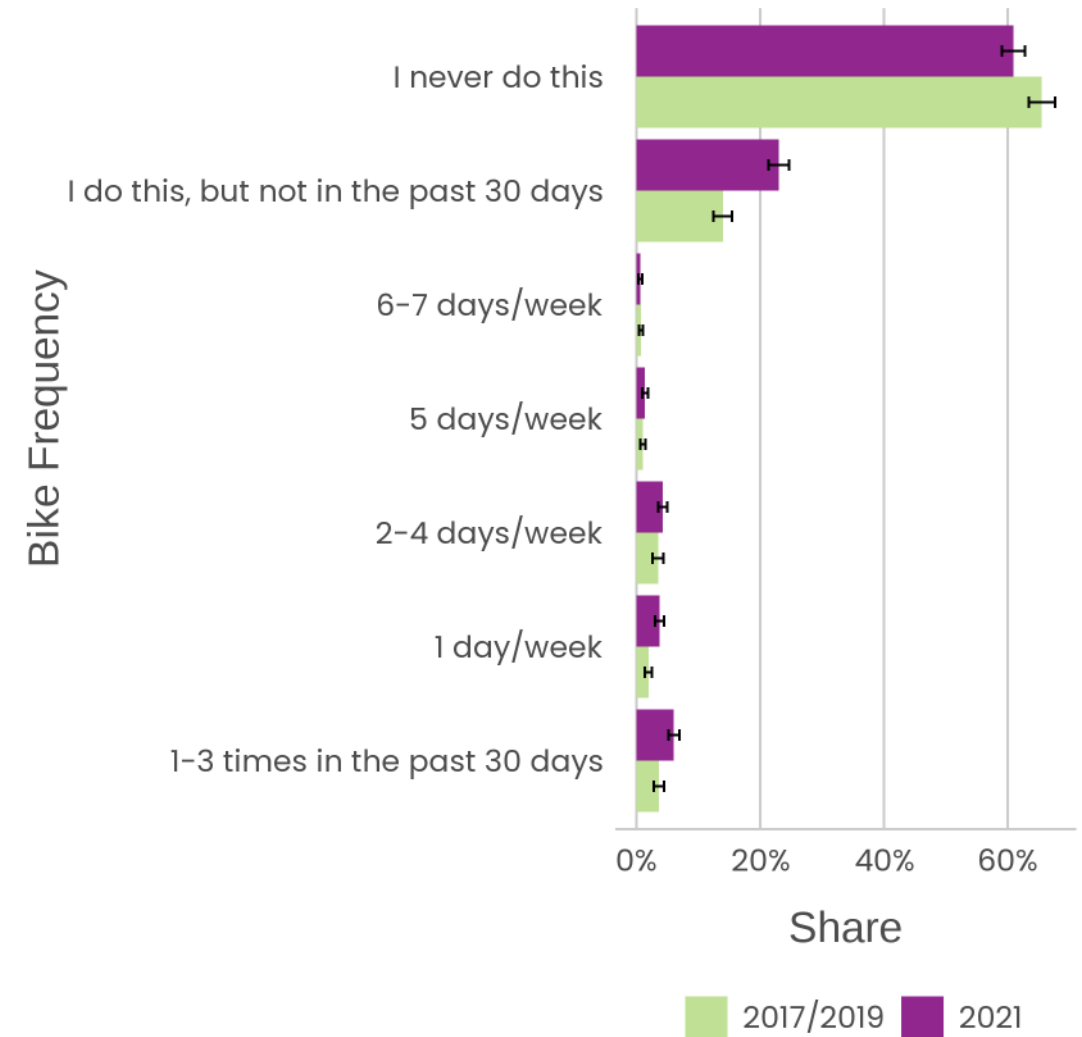
2017/2019   2021

Bike Frequency

2017/2019 vs 2021

- People were biking a little more frequently in 2021 than in 2017/2019. There was a noticeable increase for "I do this, but not the past 30 days".
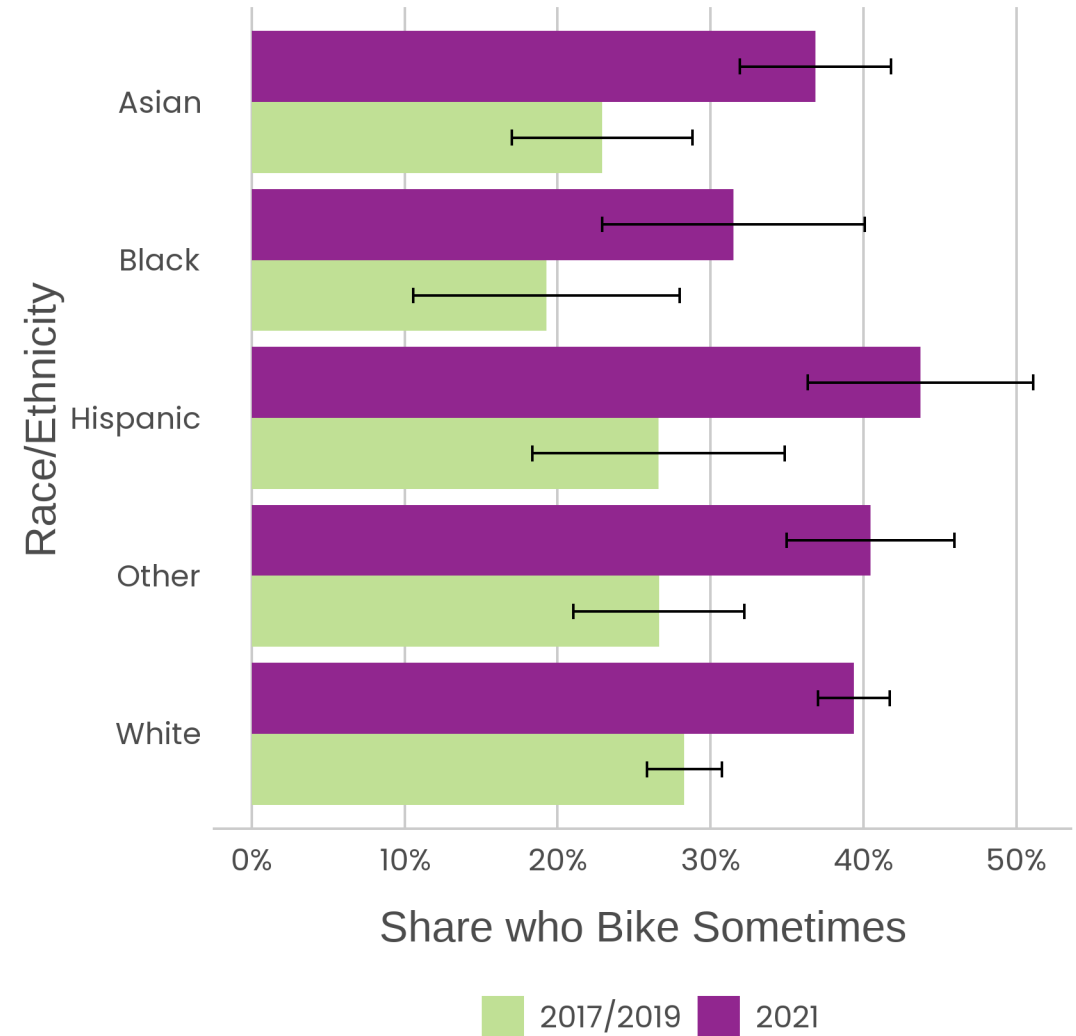
Share who bike sometimes by Race and Ethnicity

2017/2019 vs 2021

• The increase in people who bike sometimes was across all races and ethnicities.

Chart: Share who Bike Sometimes by Race/Ethnicity, comparing 2017/2019 (light green) vs 2021 (purple), for Asian, Black, Hispanic, Other, and White.

- In 2021, during COVID, the regional walk mode share was 15%, and the regional bike mode share was 1%

- Driving was at about 80% of trips, where it has been for many years.

- During COVID-19, walking went up, and transit went down as compared to before.

- The walk trip mode share was over 30% in 2021 for social, recreational, and meal trips. A greater proportion of trips was made for these purposes in 2021 than before.

- Around 75% of trips access transit by walking, jogging, or wheelchair in 2021. The remaining 25% of trips are not dominated by one mode – they are a combination of driving and parking, getting dropped off, other, and biking. The bike access share is under 5%

- Substantially more people went for walks and bike rides during COVID-19 than before.

- People who do not own vehicles and/or living in regional growth centers walk and bike much more than others.

- Our survey asks residents about the travel of their household members on a typical weekday. We may not have capacity to add new survey questions.

- What types of information would be helpful to you? We shared with you some of the data we already collect today, but it would be good to know both if this data we gather is useful to you, and what else you might like to ask?

- What surveys are you planning, or have you heard about any recent surveys?

Contact info

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