COVID-19 (Coronavirus) Outbreak Transportation Survey

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Motivation

- Rapid changes to travel behavior
- online shopping, delivery services)
- Disproportionate effects of COVID-19 on the health & economy of communities of color and low-income households
- Equity of access to recreation and trails
- Anticipated changes to revenue (motor vehicle sales tax, transit fares)
- Metro Transit: consideration of policies that would protect health of riders

Whether some travel behavior changes might be permanent (e.g., teleworking,







Survey sample

- TBI, provided an email address, and agreed to be re-contacted
- 8,800 adults eligible
- $\sim 37\%$ response rate = 3,244 responses
- 9% non-white
- income, household size)
- Survey was conducted May 14 May 22
- Data received June 9
- Two additional waves planned (near-identical survey, timing TBD)

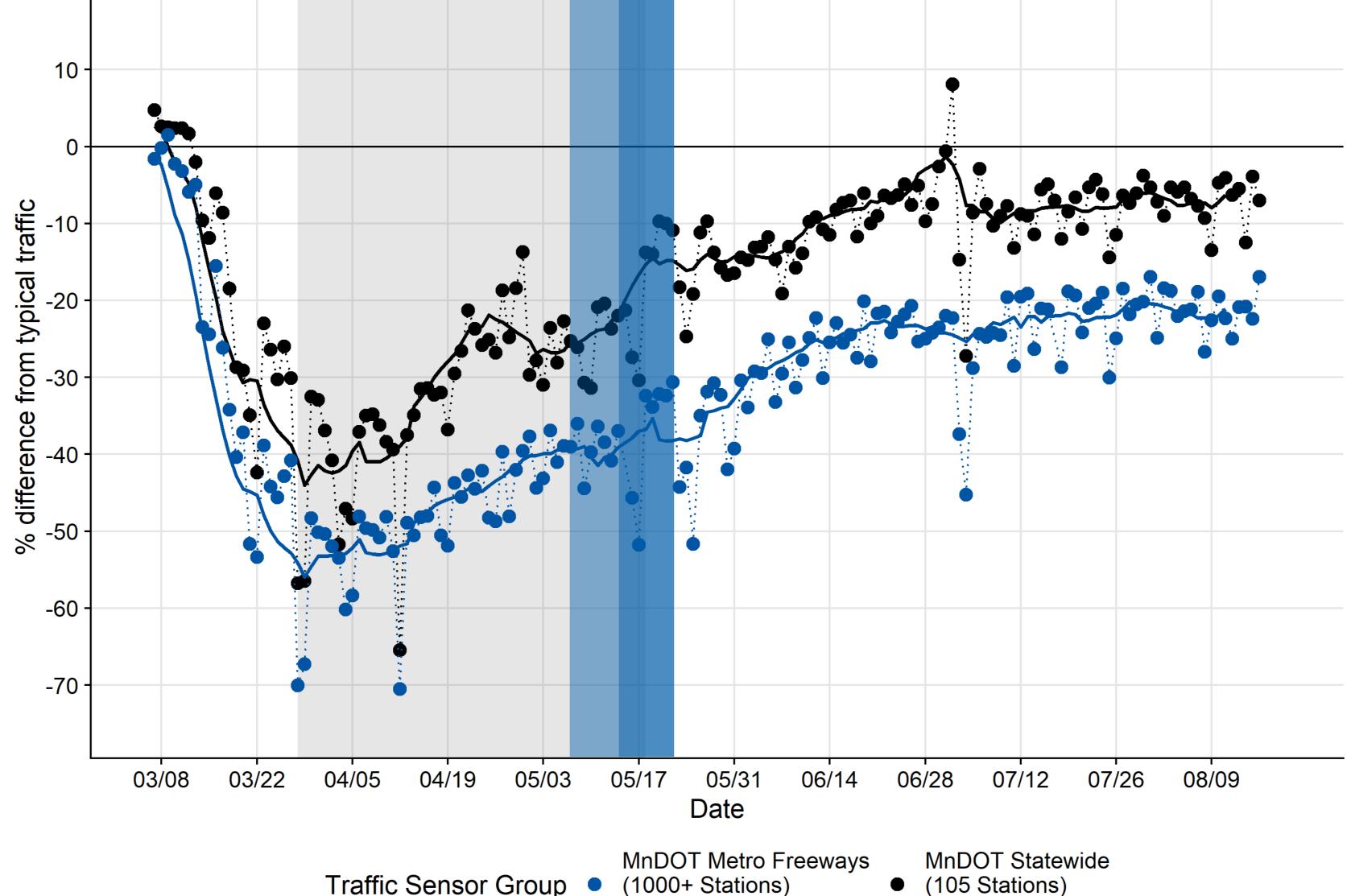
Pool of eligible participants: all metro-area adults who participated in the 2019

Individual responses weighted to reflect the regional population (race, age,





Survey timing relative to traffic trends



Traffic Sensor Group

https://metrotransitmn.shinyapps.io/covid-traffic-trends/



Some of the topics we asked about

- Work: employment status, telecommuting, transportation to work
- Maintenance: grocery visits, online shopping, delivery services, telehealth
- Recreation: use of trails and newly widened paths
- Perceptions of COVID-19 health risks
- Attitudes towards new/proposed COVID-19 policies in transit and air travel Likelihood of car and bike purchases

(Full list of topics at end of presentation)

All responses can be linked back to 2019 TBI Household Survey

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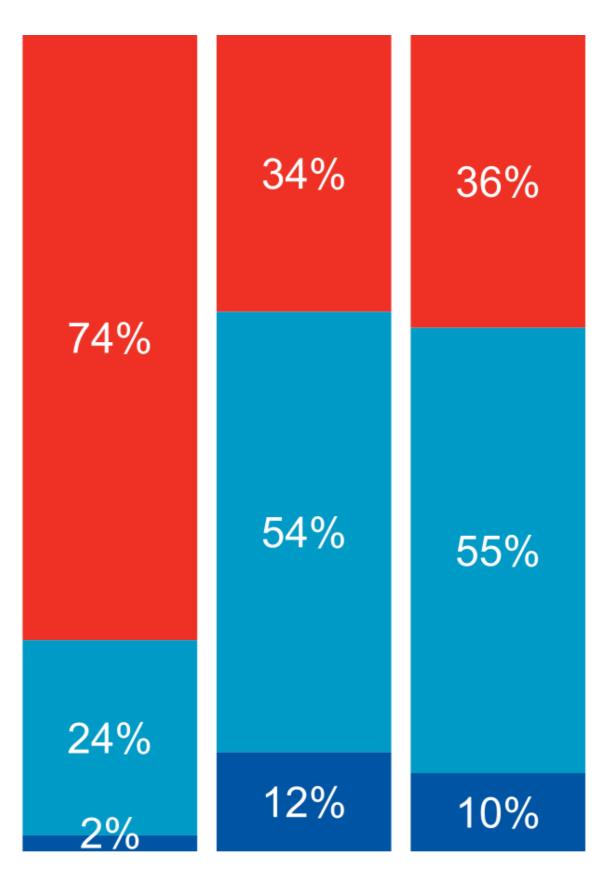


Perceived health threat of COVID-19

- Question borrowed from Pew Research Center's American Trends Panel survey¹
- Vast majority see COVID-19 as a threat to public & personal health
- 2%* of respondents had been tested for COVID-19; <1%* had tested positive
- 10%* of respondents believed they previously had COVID-19, regardless of whether they had tested positive for it

¹<u>https://www.pewresearch.org/topics/coronavirus-disease-2019-covid-19/</u> *unweighted data

% of Adults



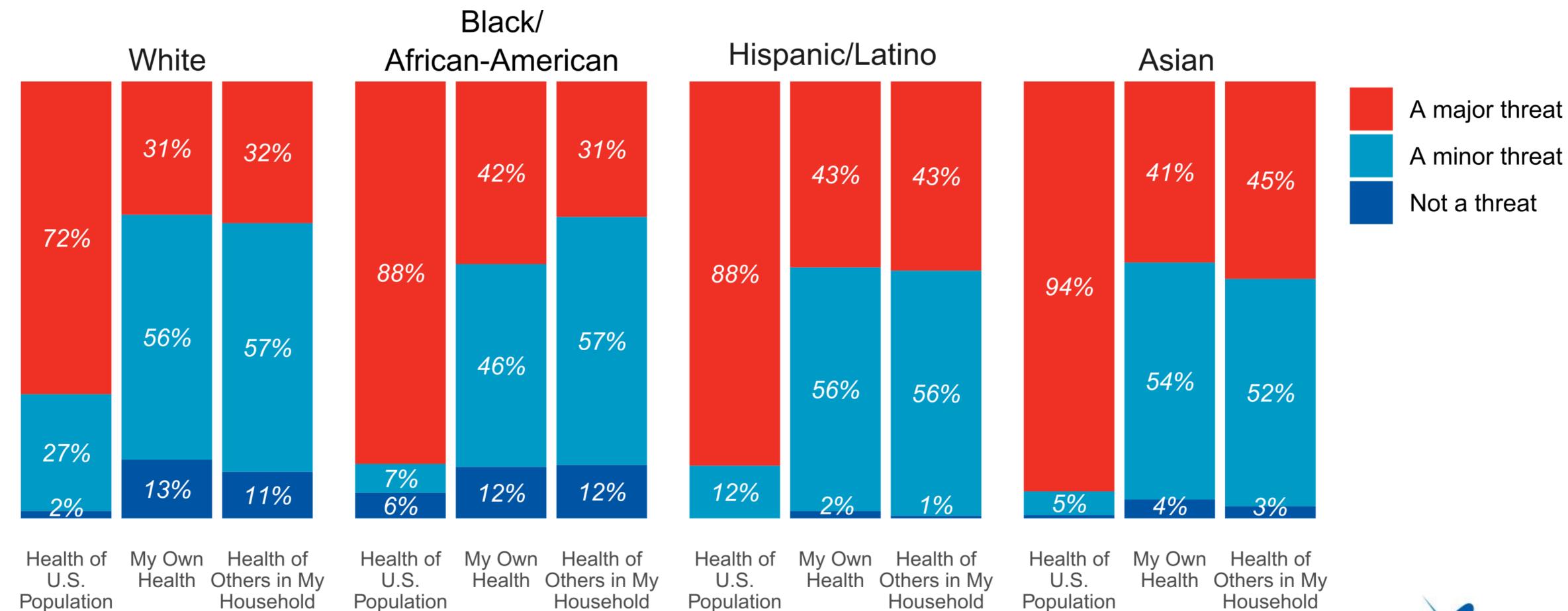
A major threat A minor threat Not a threat

Health of My Own U.S. Health Population

Health of Others in My Household



Perceived threat of COVID-19 by race

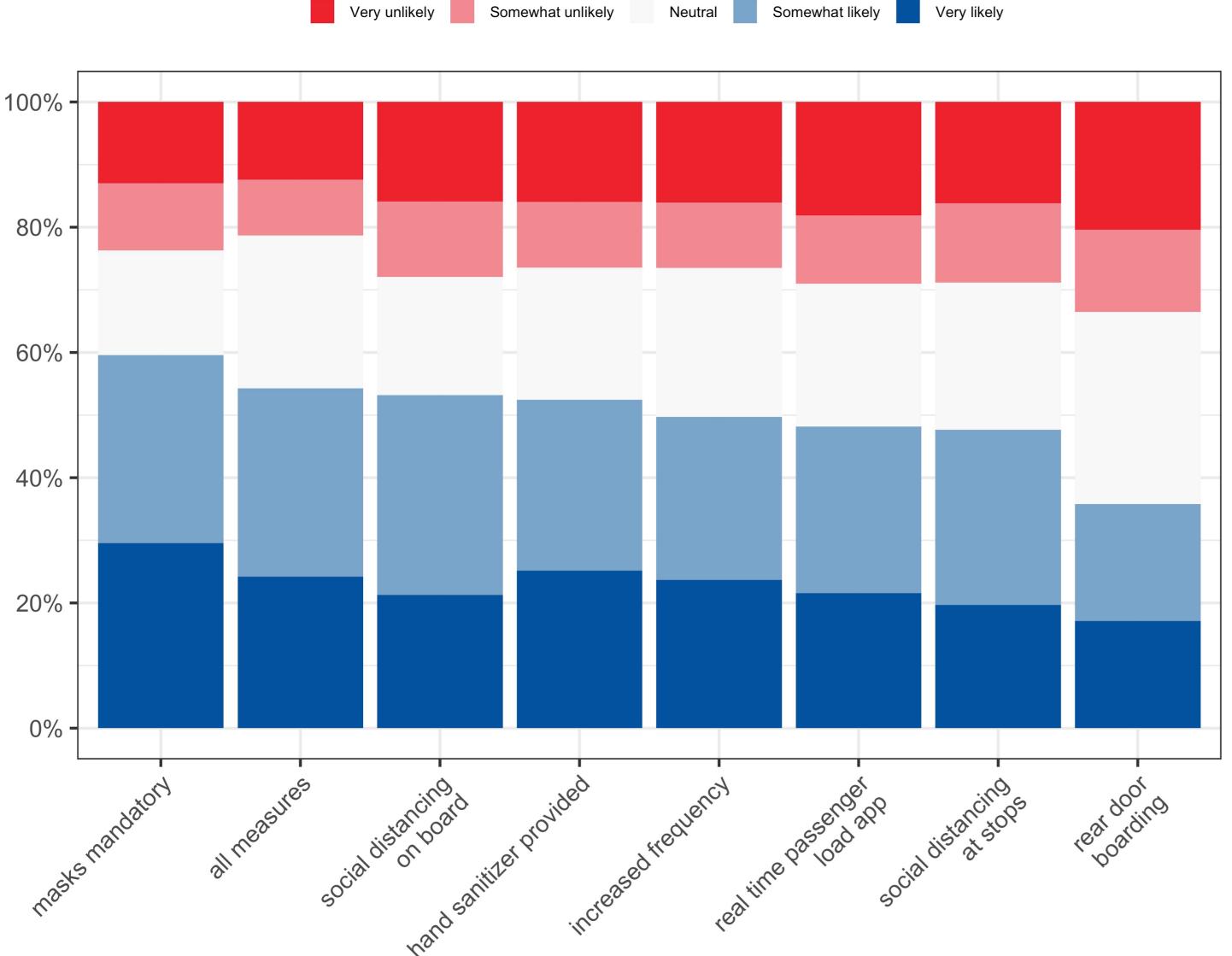


of Adults %



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Feeling safe on board public transit



How likely are you to use public transit without a vaccine, given the specified measure?

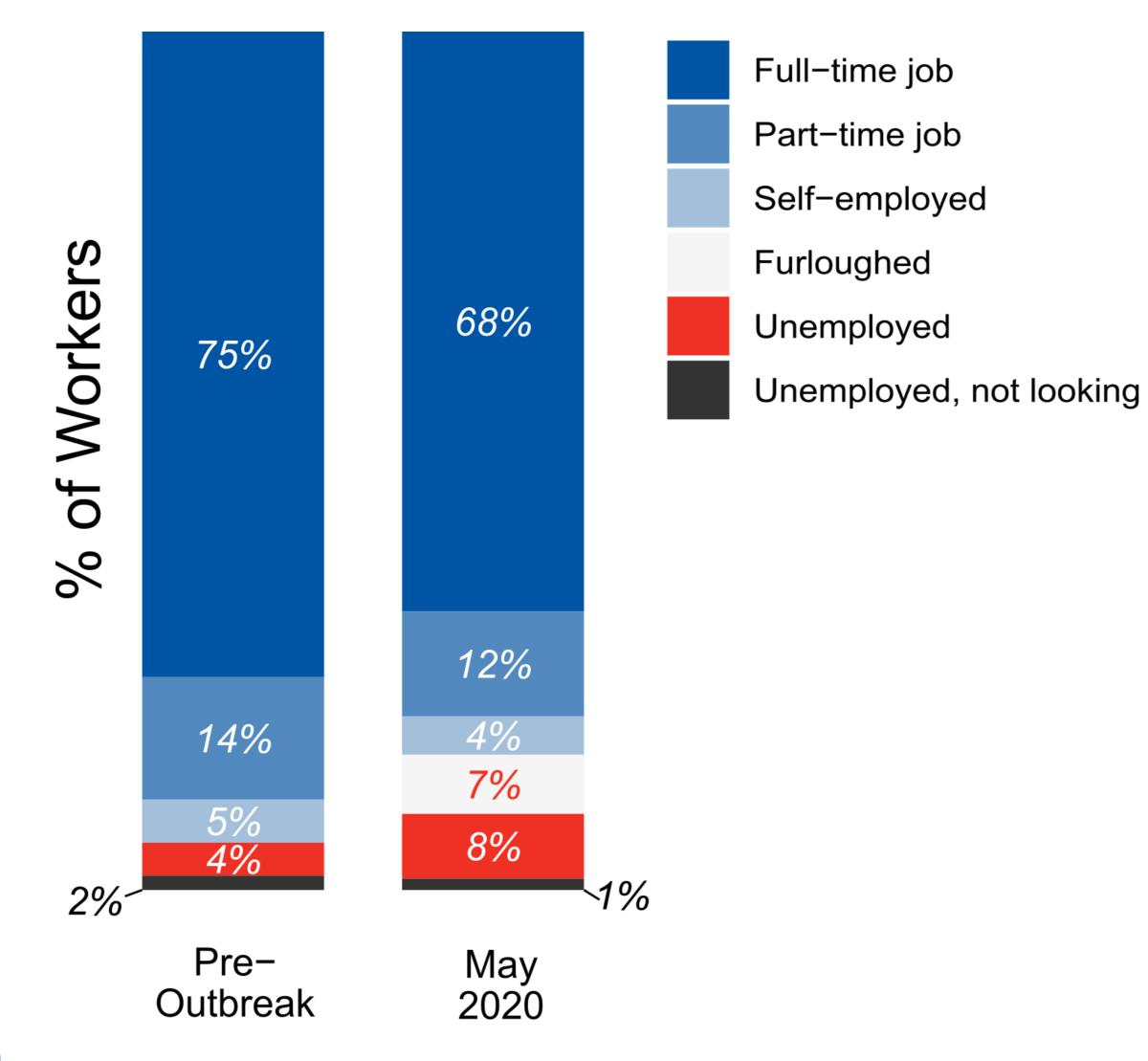
- 825 respondents
- Metro Transit currently requires facemasks
- half of respondents neutral or unlikely to ride transit without a vaccine
- rear door boarding not as important – facilitates return to front door boarding & fare collection







Employment, Then and Now



Our survey estimate: 8% of workers lost jobs + 7% of workers furloughed (most without pay) = 15% unemployment

> Met Council Community **Development Research team** estimate for early May 2020: 25%*

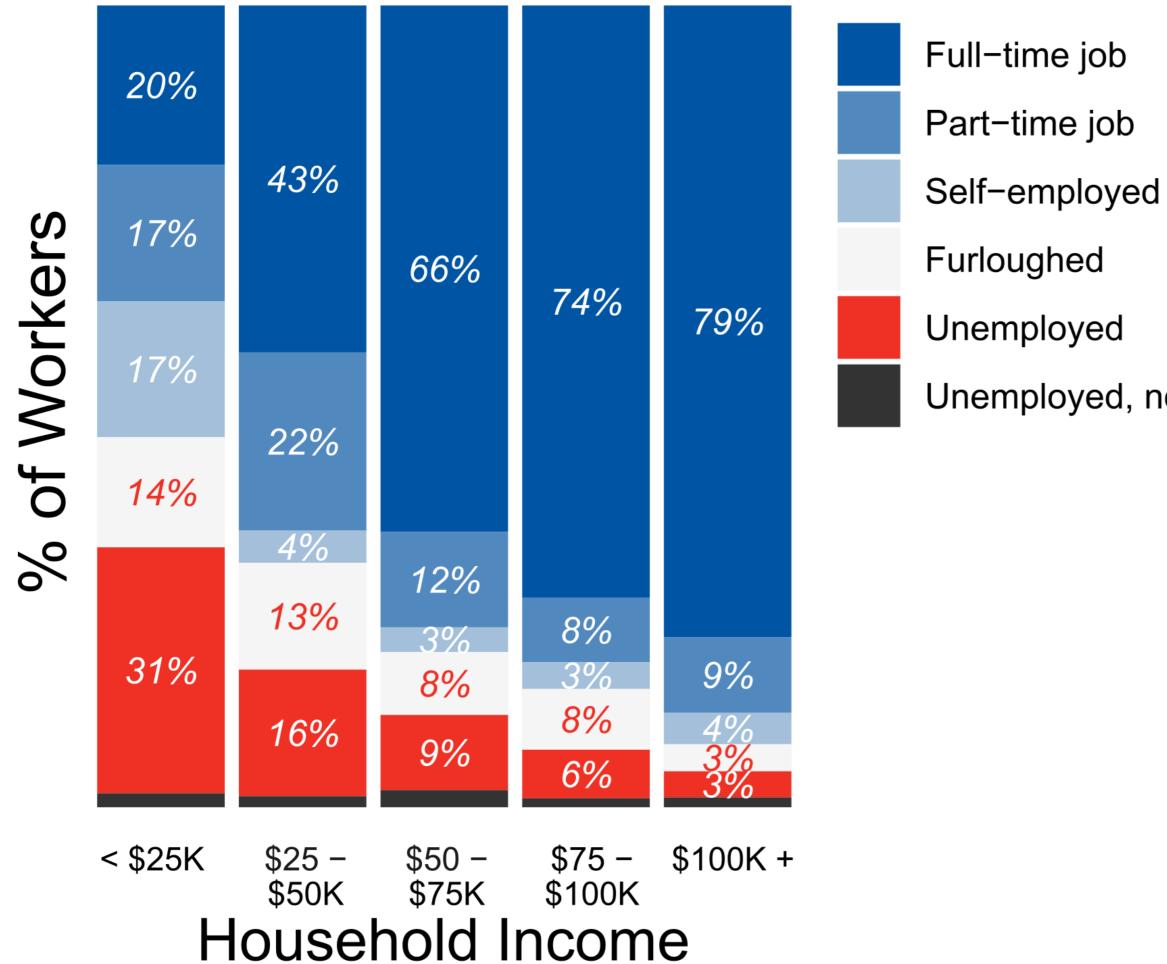
U.S. BLS estimates for April: 9.2% Metro, 8.1% MN, 14% US

*https://metrocouncil.org/Data-and-Maps/Research-and-Data/Research-by-topic/COVID-19-Economic-Impacts.aspx



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May 2020 Employment by Income



- Unemployed, not looking

Unemployment is highest for lowestincome households (up to 45%).

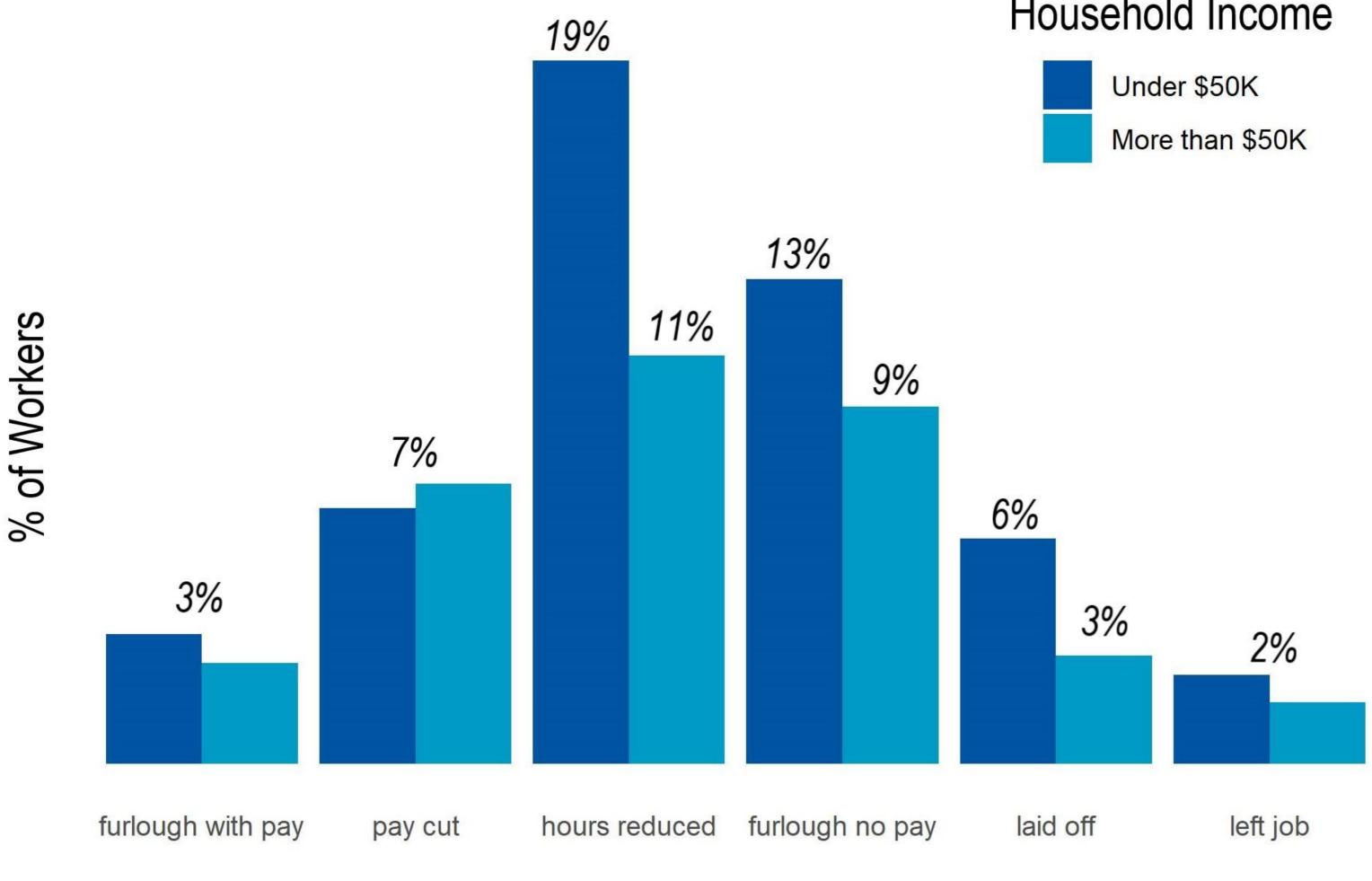
Our survey data, a small sample, also showed slightly higher unemployment among workers of color, but Met Council research indicates more severe disparities:

→ 38% unemployment among Black workers and 47% unemployment among Indigenous workers compared to have applied for unemployment from March 21-June 9, compared to 23% unemployment for white workers.*

*https://metrocouncil.org/Data-and-Maps/Research-and-Data/Research-by-topic/COVID-19-Economic-Impacts.aspx



Changes to Employment, Beyond Layoffs



Employment Change

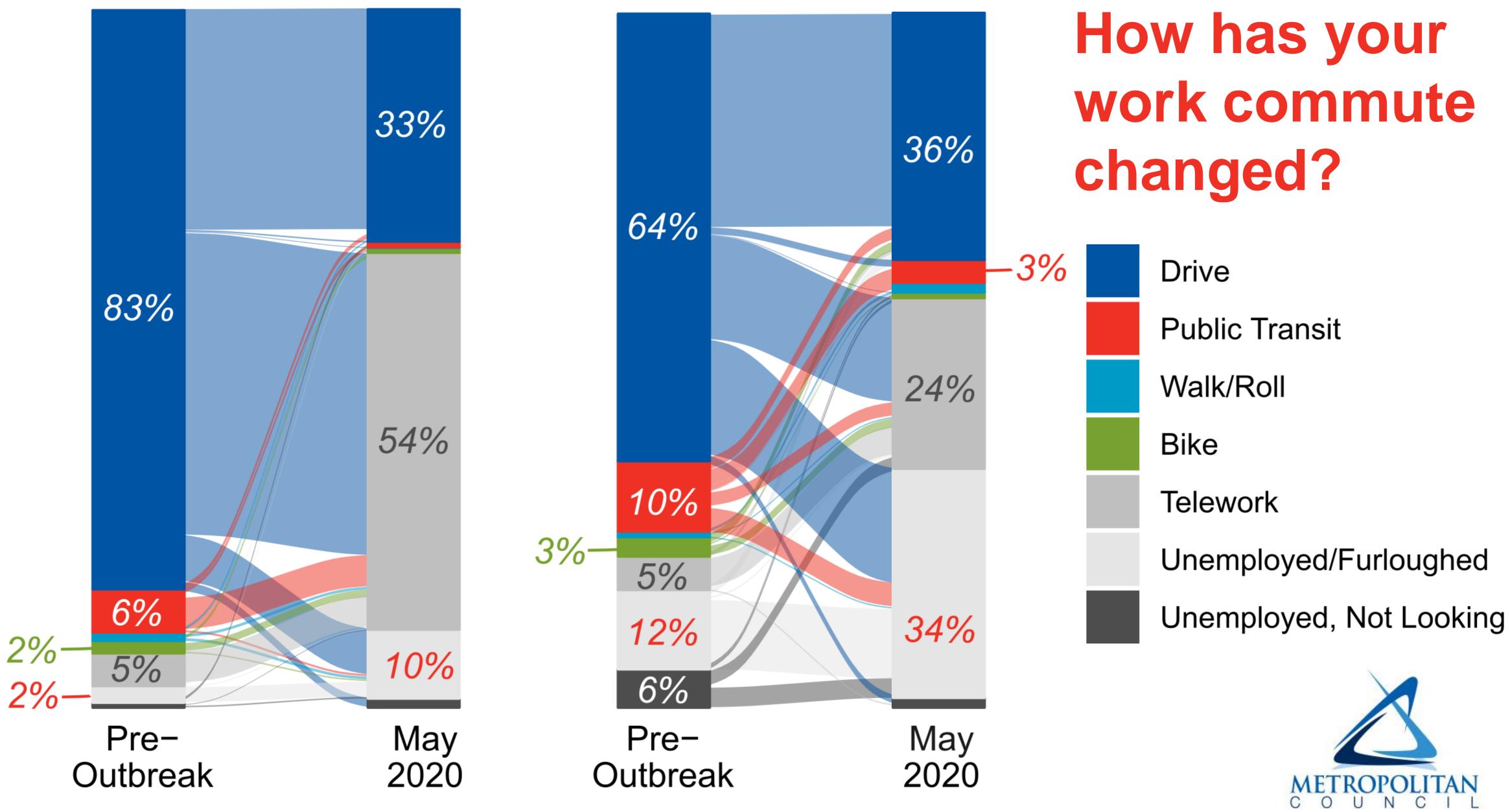


Household Income





More than \$50K



Under \$50K

How has your commute changed?

Across all incomes, workers who used to ...

unemployed (16%). Only 11% continue to take transit to work.

smaller share unemployed or furloughed (13%).

very few unemployed (2%).

respectively).

- use public transit are primarily teleworking (58%), driving (12%) or
- drive to work are teleworking (48%), or still driving to work (39%), with a
- telework continue to do so (91%), with some now driving to work (7%) and
- bike or walk to work are most likely teleworking (62% and 31%)





How has your work commute changed?

Relative to pre-Outbreak, & including those newly-unemployed, the number of...

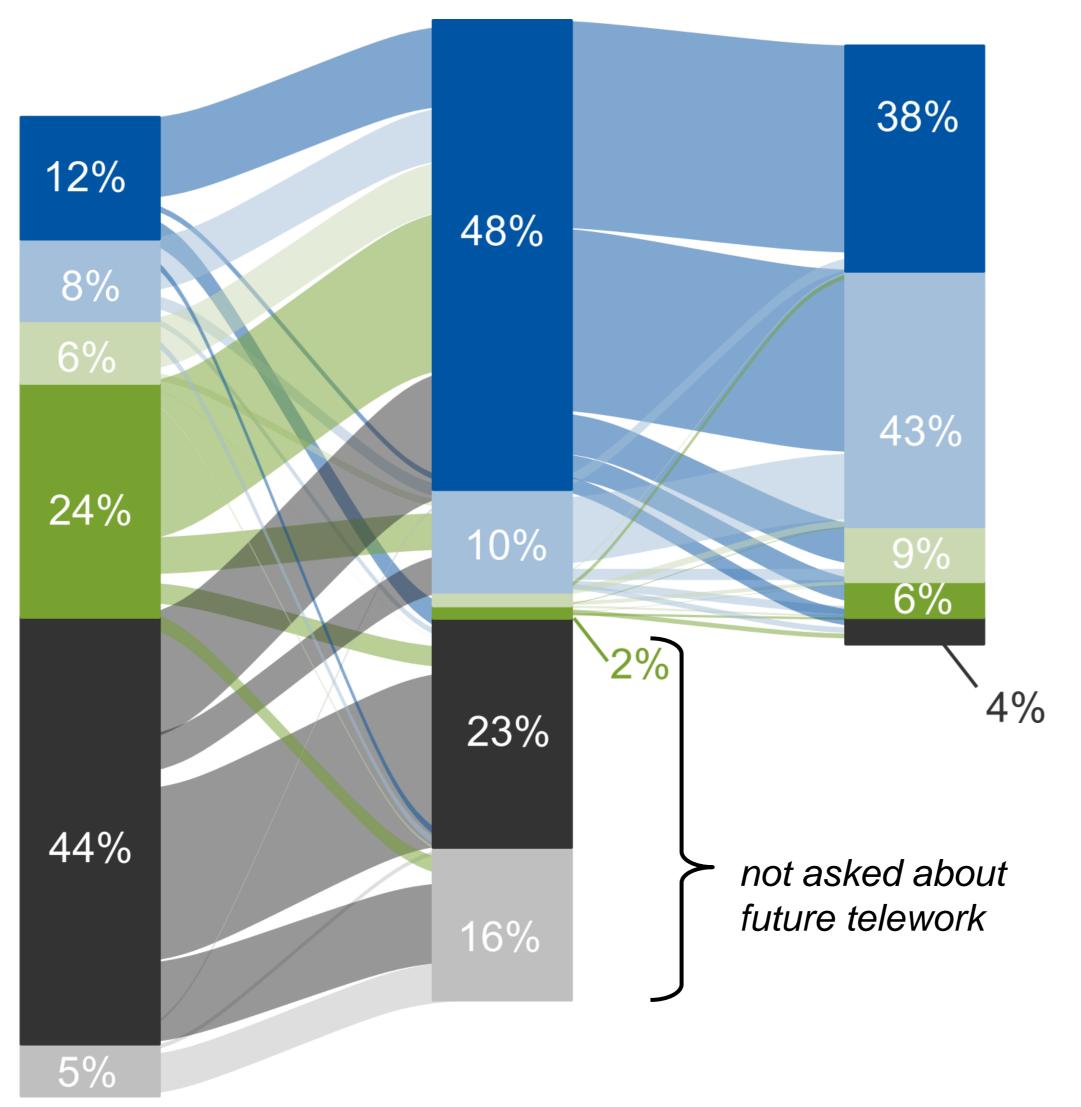
car commuters shrank by 58% bike commuters shrank by 67% transit commuters shrank by 85%

teleworkers increased 8x



Pre-Outbreak

May 2020



Future/ Preferred

Telework Frequency

- 5+ days a week
- 2-4 days a week
- 1 day a week

less than weekly

Never

Unemployed/Furloughed

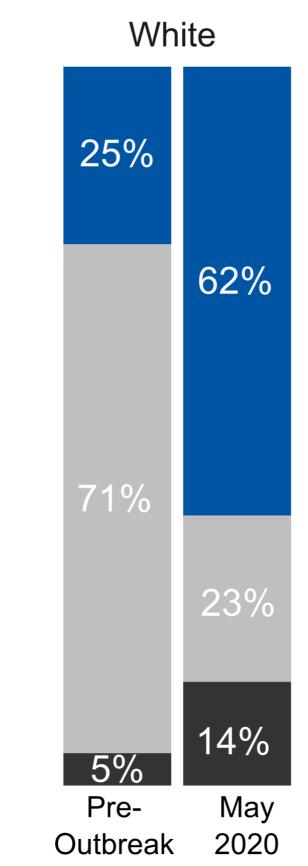


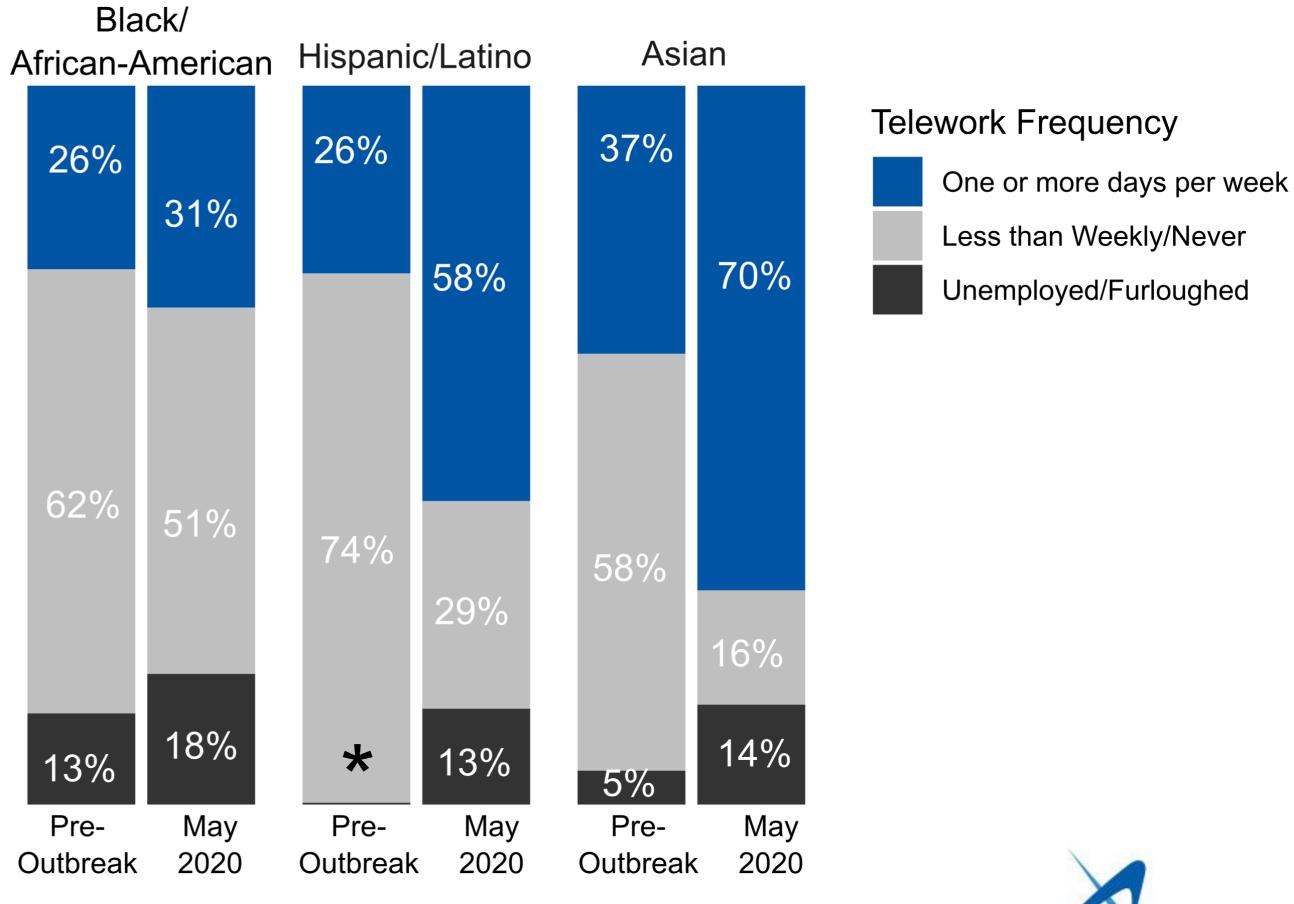
Changes to telework frequency, by race

Although many workers moved from not teleworking to almost exclusively doing so, Black workers were just as likely to become unemployed as they were to move to telework.

* Levels of/disparities in unemployment found in this survey are almost certainly an underestimate, see:

https://metrocouncil.org/Data-and-Maps/Research-and-Data/Research-by-topic/COVID-19-Economic-Impacts.aspx







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Anticipated transportation purchases

- likely, 6% somewhat likely)
- somewhat likely)

 9% (est. 193,000 people) say they are likely to buy a new/used car from a dealer in next six months (3% say they are very likely, 5% somewhat likely) For comparison: 250,000 cars sold statewide in Minnesota in 2018 9% say they might buy a new bike in next six months (3% say they are very

• 5% say they might buy a transit pass in next six months (2% very likely, 3%)



Perceived employer support of telework

Employees who currently teleworked were asked "How likely do you think your employer would be to allow you to continue to work from home after you can commute to work again?"

- 39% say their employer would be very likely to allow continued telework
- 30% somewhat likely
- 9% neutral
- 11% somewhat unlikely
- 11% very unlikely





Will the new telework culture reduce VMT?

Employees who are currently teleworking some amount said that they preferred to work from home 2 days more per week* than they did before the pandemic.

Counting only those who also said their employer was "Very likely" to support continued telework, this represents a reduction of ~650,000 round-trip commutes per week across the region.

Our next step is to translate these rough trip estimates into VMT and emissions numbers by leveraging 2019 TBI data on personal vehicles, mode type, and commute distance/route.

**unweighted average.*





Employer attitudes are important – an example

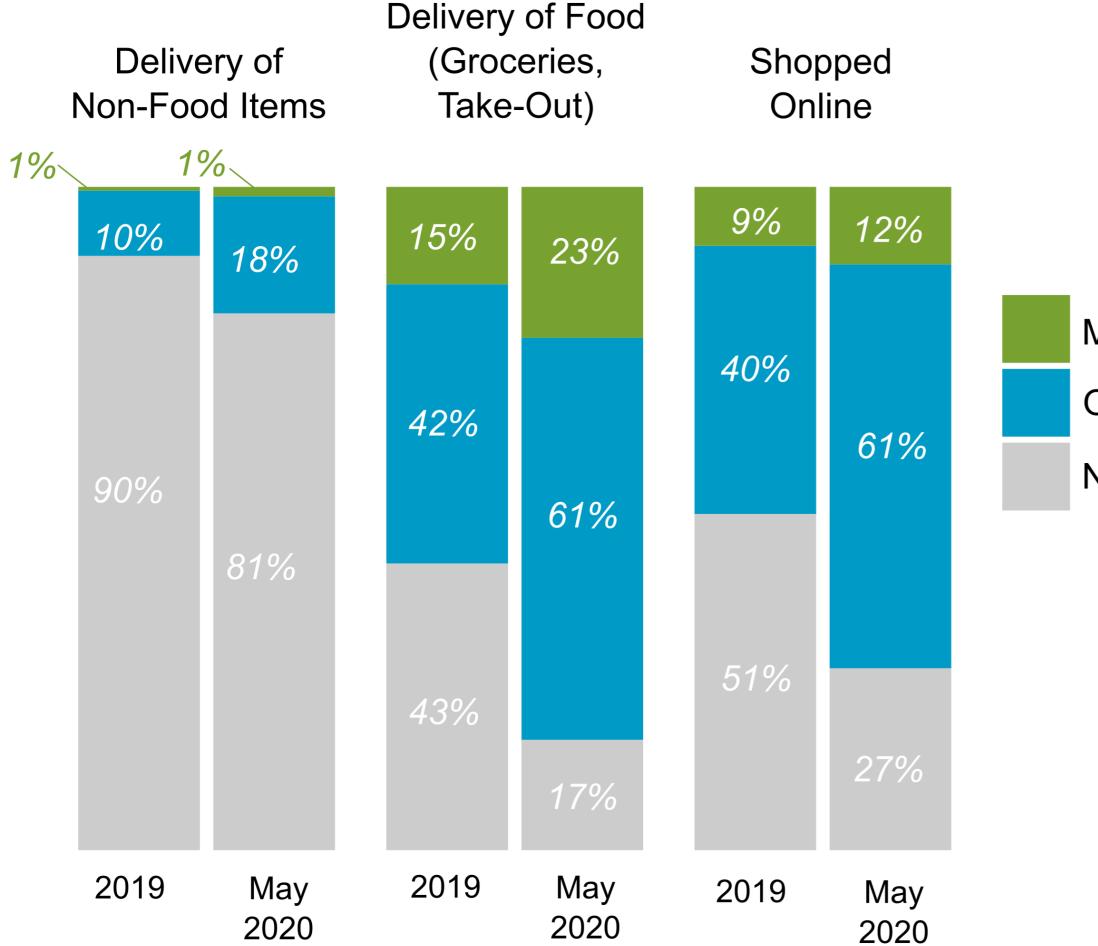
never teleworked before are now teleworking five days a week.

unfavorable to continued telework.

- An estimated **216,000** Metro workers (13% of the adult workforce) who had
 - Of these new teleworkers, ~183,000 (11% of the adult workforce) say they would like to continue teleworking at least one day per week in the future, with the vast majority saying they would like to telework 2+ days per week.
 - Of these, about half (~83,000 workers, 5% of the adult workforce) say their employer would be likely to support continued telework,
 - While another half (~81,000 workers) say their employer would be



Home delivery & Online Shopping



*Comaprison includes only those survey participants who completed a 6- or 7-day 2019 TBI survey (n = 2321).

Most days (3-7 days)

One or two days

Not in last week

Who had groceries delivered in last 7 days?

- 16% of all adults
- 12% of adults in households earning <\$25K
- 32% of adults with disabilities

Only 3% of adults with disabilities used to have food (groceries, take-out) delivered one or two days per week; now, that number is 19%.





Outdoor recreation

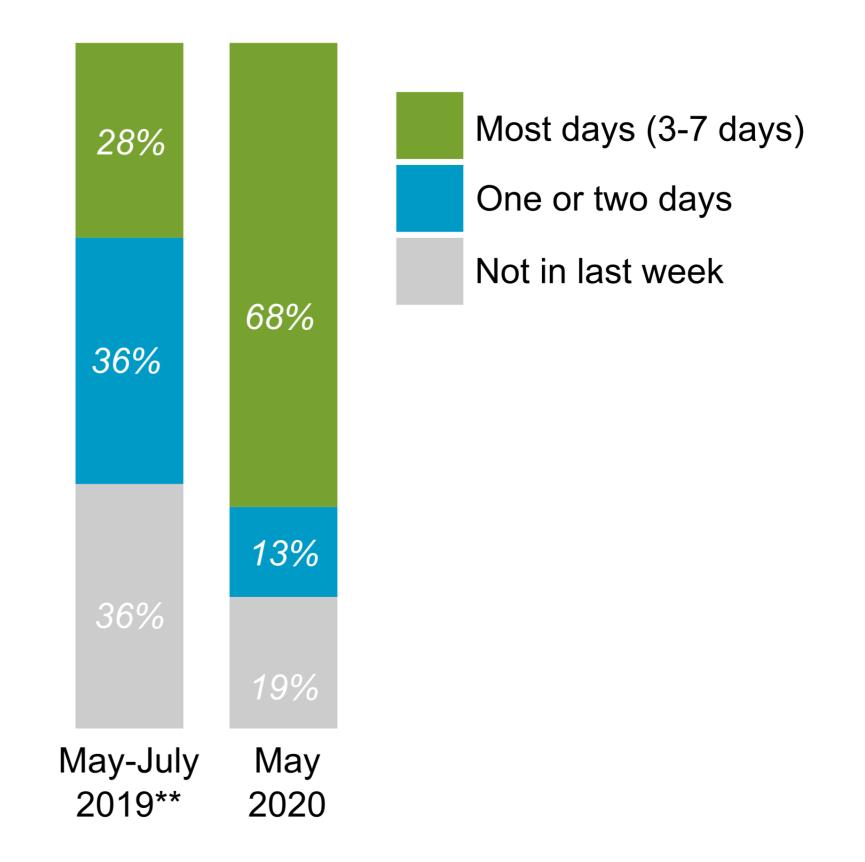
Overall, we observed greatly increased rates of outdoor exercise/recreation.

11% of adults had recently used streets that have temporarily restricted vehicle traffic to expand space for people walking, biking and rolling during the COVID-19 outbreak.

45% of respondents said they had recently used a park or trail for recreation or exercise. Of those who had recently used a park or

trail, 40% said they drove to a park or trail at least once in the past week.

In the past 7 days, on how many days did you go outside to walk, jog, or roll using a mobility device, such as a wheelchair for exercise or recreation?*



*Comparison includes only those survey participants who completed a 6- or 7-day 2019 TBI survey in summer months (n = 597). **Values for summer 2019 may be over-estimates, because they include trips to gyms and other indoor exercise facilities that were closed in May 2020.



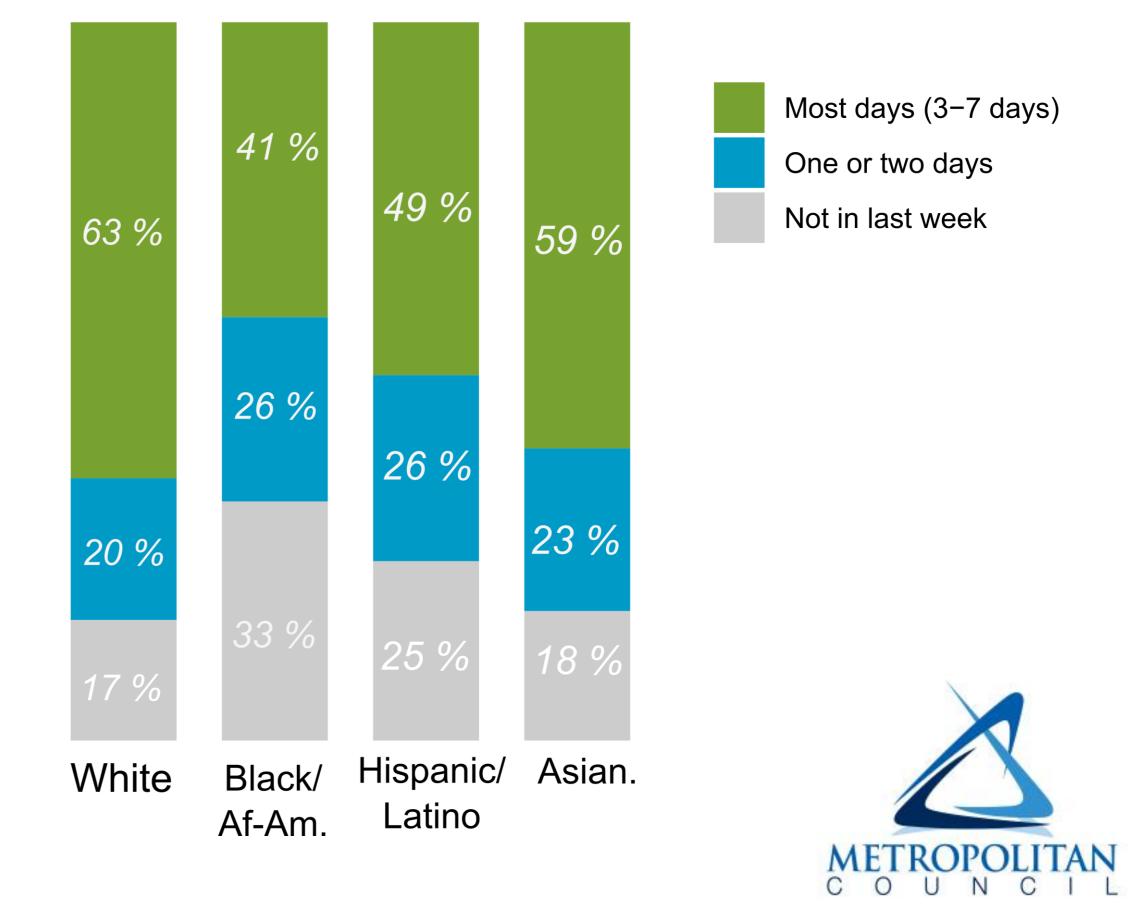
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Outdoor recreation, by race

Black/African American adults and Hispanic/Latino adults using outdoors for exercise and recreation at much lower rates than white adults



Frequency of outdoor exercise/ recreation by race/ethnicity, May 2020



List of topics covered in survey

- Exercise frequency and location
- Use of streets that have temporarily restricted vehicle traffic for social distancing
- Access to parks and trails: driving to reach parks Attitudes towards public health policies in air travel and trails for exercise/recreation Attitudes towards public health policies on transit
- Bicycle frequency, trip purpose, bike share
- Grocery shopping type: in-store, delivery, pick-up
- Grocery shopping frequency
- Online shopping frequency
- All modes used last week
- All trip purposes for last week
- Travel to medical visits (and telehealth)
- Transit replacement modes

- Likelihood of purchasing a car, bike, scooter, bike share or transit pass in next six months
- Barriers to transportation

- Demographics change in residence, disability status, income, age, gender, race
- Size of household
- Employment status before and now
- Teleworking rates and preferences
- COVID-19 test, Missed work due to COVID-19
- Perception of COVID-19 risks
- Job type





