LABarometer

Mobility & Sustainability

TRACKING REPORT, WAVES 1-4

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Table of Contents

Background and Methods

The LABarometer Mobility & Sustainability survey tracks environmental sustainability, transportation behavior, and climate vulnerability in Los Angeles County. It is inspired by county-wide efforts to reduce automobile congestion, minimize environmental impacts, and increase resilience to climate change in the region.

The survey covers a variety of topics, including heat and pollution exposure, natural disaster preparedness, pro-environmental behavior, transportation sentiment, transportation access and behavior, and the steps Los Angeles County residents are taking to adapt to climate change.

This document tracks key outcomes of interest from Waves 1-4 of the Mobility & Sustainability survey. For an exhaustive list of variables included in the Mobility & Sustainability surveys, please refer to the Longitudinal File codebook.

Survey Methodology

All LABarometer surveys are fielded to the LABarometer Panel, a probability-based Internet panel of adults living in households throughout Los Angeles County. From 2019 to 2022, LABarometer survey waves comprise four surveys, fielded three to six months apart. The surveys cover the following topics: Livability, Mobility, Sustainability & Resilience, and Affordability & Prosperity.

In 2022, LABarometer moved to a biannual survey frequency and these four surveys were combined and reduced in size to two surveys, one on Livability & Affordability and one Mobility & Sustainability. The Mobility & Sustainability survey is fielded in January of each year and the Livability & Affordability Survey is fielded in July of each year. Field periods range from 8-12 weeks.

Following UAS protocols, all LABarometer surveys are fielded in English and in Spanish. To participate in a survey, panel members can use any computer, cell phone, or tablet with Internet access. The majority of panel members have their own internet access. Panel members who do not have access to internet are provided with an internet-enabled tablet to ensure their regular participation in our surveys.

Survey and Sample Information

A total of 1,207-1,499 Los Angeles County residents completed any given wave of the Mobility & Sustainability survey. Participants were recruited from the LABarometer Panel and survey participation rates ranged from 70% to 78%.

Details for each survey, including links to individual survey toplines, are provided in the informational table below. For waves 1 and 2, "M" is used to denote the Mobility survey module and "S" is used to denote the Sustainability survey module.

Variable names and question wording are not provided in this release. To see the questions used in any given survey, please refer to the associated survey codebook, questionnaire, or topline.

Survey	UAS #	Sample Size	Completion Rate	Field Dates	Topline Link
Wave 1 (M)	UAS 219	1394	76%	Dec 11, 2019 – Feb 7, 2020	UAS 219 Topline
Wave 1 (S)	UAS 286	1421	75%	Jun 3, 2020 – July 13, 2020	UAS 286 Topine
Wave 2 (M)	UAS 379	1345	78%	Mar 2, 2021 – Apr 30, 2021	UAS 379 Topline
Wave 2 (S)	UAS 403	1256	74%	Jul 19, 2021 – Sep 5, 2021	UAS 403 Topline
Wave 3	UAS 510	1207	73%	Jan 27, 2023 – Mar 31, 2023	UAS 510 Topline
Wave 4	USC 595	1499	70%	Feb 21, 2024 – Apr 21, 2024	UAS 595 Topline

Survey Weights

The method for creating sample weights for the tracking survey follows the general procedure for UAS surveys described in CESR's online methodology documentation. Sample weights are constructed in two steps. First, we calculate a base weight that corrects for unequal probabilities of selection of different households into the UAS. Second, we generate post-stratification weights, which align sample distributions of key demographics, namely gender, race/ethnicity, age, education, and geographic location, with their population counterparts. Population benchmarks are derived from the Basic Monthly Current Population Survey (CPS). The provided sample weights bring the sample in line with the L.A. County adult population.

About the Panel

The LABarometer Panel is a probability-based, Internet panel of approximately 2,100 adults living in households throughout Los Angeles County. It is a sub-panel of the Understanding America Study (UAS), a national Internet panel of 14,000 Americans maintained by the USC Dornsife Center for Economic and Social Research. Following UAS procedures, LABarometer panel members are recruited in batches and refreshed through address-based sampling using postal codes. Eligible individuals are all non-institutionalized adults aged 18 and older living in a contacted household in Los Angeles County.

About LABarometer

LABarometer is a research center housed at the USC Dornsife Center for Economic and Social Research (CESR). We conduct basic and applied social science research on issues affecting Los Angeles County residents, with the aim of informing academic research, public discourse, and

policy. At the heart of our research is the LABarometer Panel, a probability-based Internet survey panel of approximately 2,100 adults randomly selected from households throughout Los Angeles County.

LABarometer surveys are fielded to the LABarometer Panel on a biannual basis to monitor social and economic conditions in Los Angeles County. These longitudinal surveys focus on four dimensions of individual and community well-being: livability, affordability, mobility, and sustainability. LABarometer surveys include questions about residents' lives, their attitudes and behaviors, and the challenges they encounter in their communities, filling data gaps on topics ranging from housing insecurity and climate resilience, to transportation behavior and the economy.

Survey Team

Kyla Thomas, Ph.D., is the Director of LABarometer and a Sociologist at the USC Dornsife Center for Economic and Social Research.

Marco Angrisani, Ph.D., is the Survey Methodologist for LABarometer and a Senior Economist at the USC Dornsife Center for Economic and Social Research.

Evan Sandlin, Ph.D. is the Data Analyst for LABarometer and a Research Manager at the USC Dornsife Center for Economic and Social Research.

Greg Steigerwald is a Research Assistant for LABarometer and an M.P.A. Candidate at the USC Price School for Public Policy.

Michele Warnock is Center Assistant for the USC Dornsife Center for Economic and Social Research.

Contact Us

If you would like to learn more about LABarometer or have any specific questions about our report, please contact us at labarometer-l@maillist.usc.edu.

Report Highlights

Snapshot of L.A. County Residents

- Transportation behavior
  - 92% used a private vehicle in the last year
  - 24% used public transportation in the last year
  - 64% of bus riders, 41% of metro riders used it at least once a week
- Transportation perceptions
  - Private vehicle: 74% think it is safe, 76% think it is convenient
  - Bus: 21% think it is safe, 24% think it is convenient
  - Metro: 16% think it is safe, 29% think it is convenient
- Transportation access
  - Average number of vehicles per household: 1.9
  - 18% are likely to buy or lease a new vehicle in the next year
- Coolness and heat
  - 53% visited some place to cool down in the last year
  - 44% experienced symptoms of heat exposure in the last year
- Pollution
  - 19% stayed indoors due to poor air quality related to wildfires
  - 13% stayed indoors due to poor air quality unrelated to wildfires
  - 58% think the air quality in their neighborhood is safe
- Climate change attitudes
  - 69% believe climate change is a threat to the well-being of residents
  - 19% believe local government is doing enough to fight climate change
- Sustainable behavior
  - 13% have solar panels, 19% compost, 7% have an electric vehicle
  - 57% say their next car is likely to be a hybrid, electric, or hydrogen vehicle
- Natural disasters
  - 41% are at least moderately prepared for a natural disaster
  - 16% experienced psychological distress from a natural disaster in the last year

Notable Changes from Last Year (2023)

- Fewer residents stayed indoors due to air quality concerns
  - Reports of staying indoors due to air quality concerns related to wildfire decreased from 31% to 19%
- More residents engaged in sustainable behaviors
  - Reports of energy-efficient landscaping, well-insulated doors/windows, tankless water heaters, low-flow plumbing, composting, and EV ownership increased
- Fewer reports of negative impacts from a natural disaster
  - Reports of psychological distress from a disaster decreased from 26% to 16%
  - Reports of higher utility costs from a disaster decreased from 14% to 10%

Transportation Behavior

Private Vehicle Use in Last Year

Ride Hailing Use in Last Year
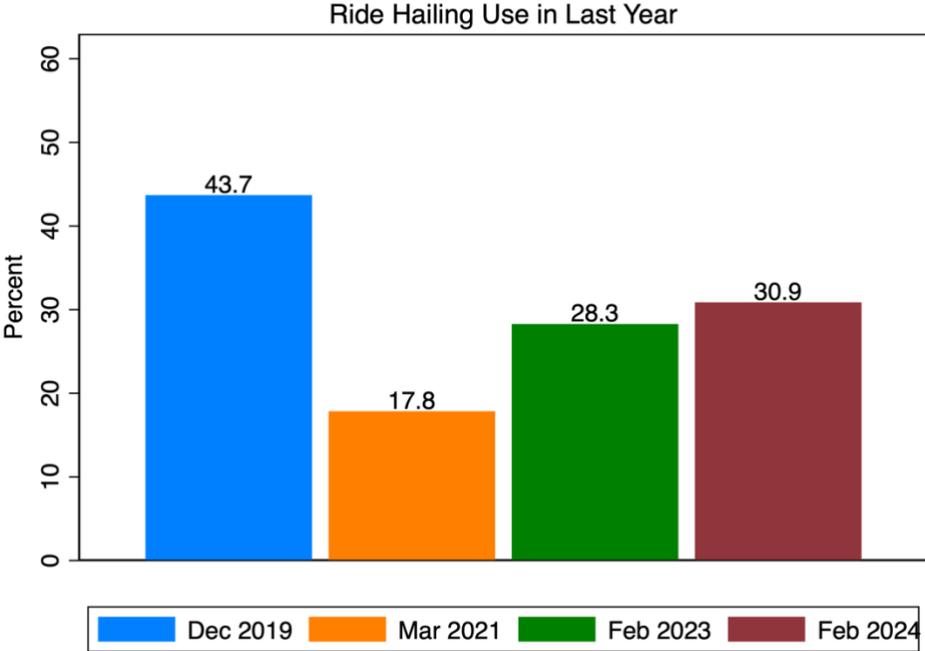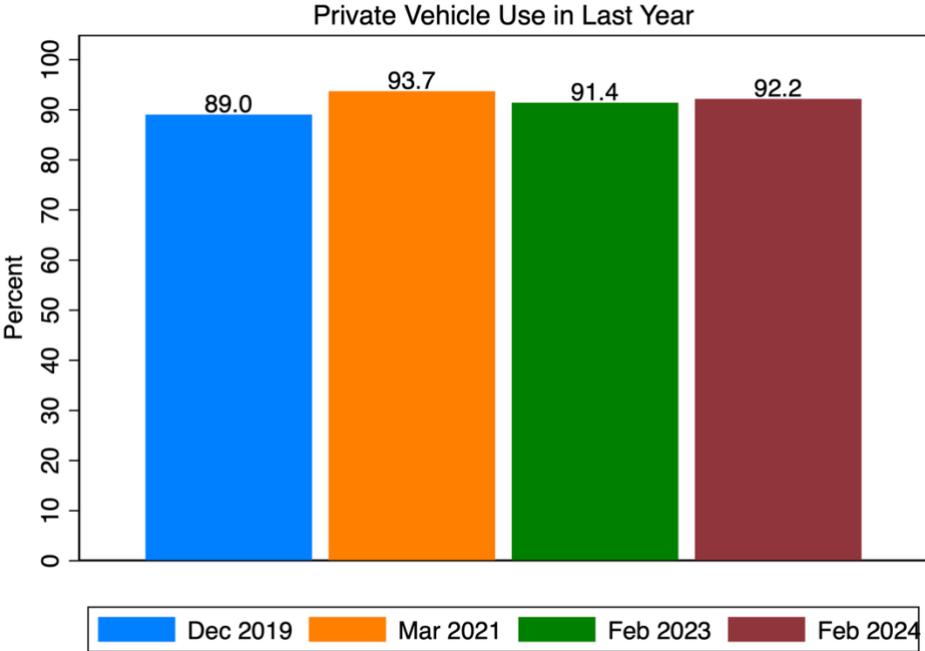
Taxi/Limo/Hired Car Use in Last Year
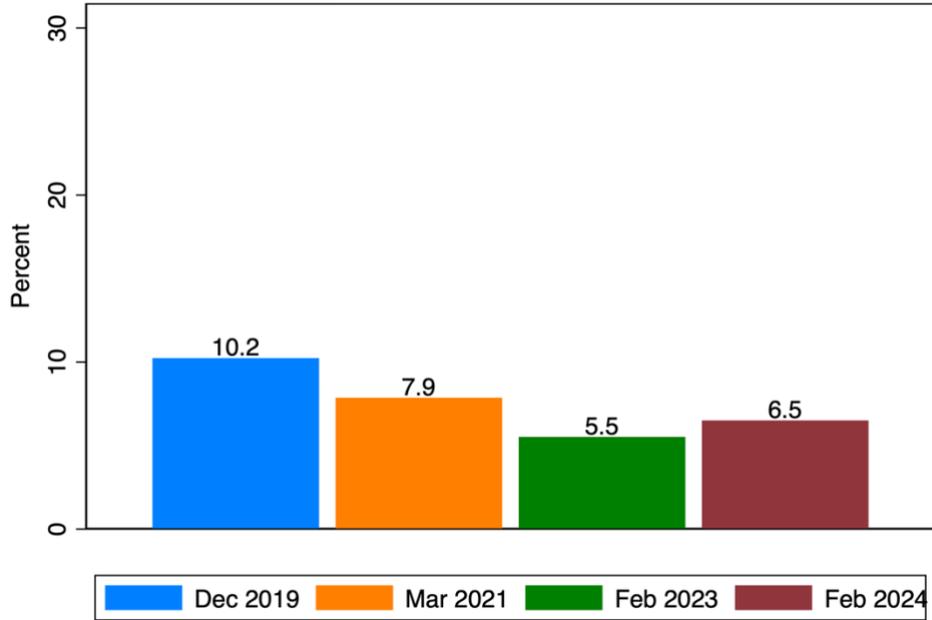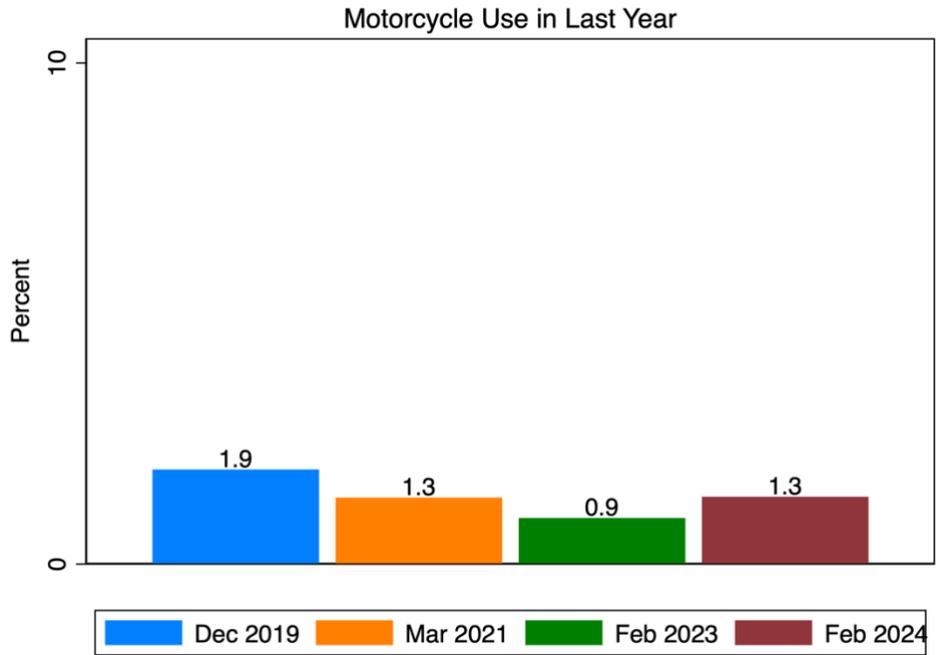

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |
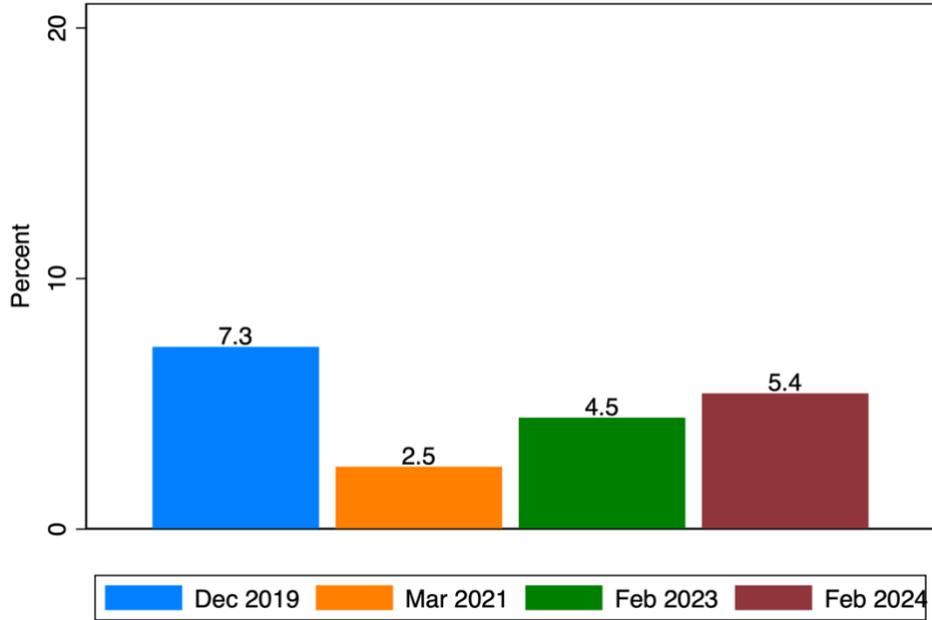
Public Transportation Use in Last Year

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Bus Use in Last Year

	Percent
Dec 2019	27.3
Mar 2021	11.1
Feb 2023	18.6
Feb 2024	18.8

Metro Use in Last Year

	Percent
Dec 2019	28.5
Mar 2021	8.0
Feb 2023	13.1
Feb 2024	15.4

8
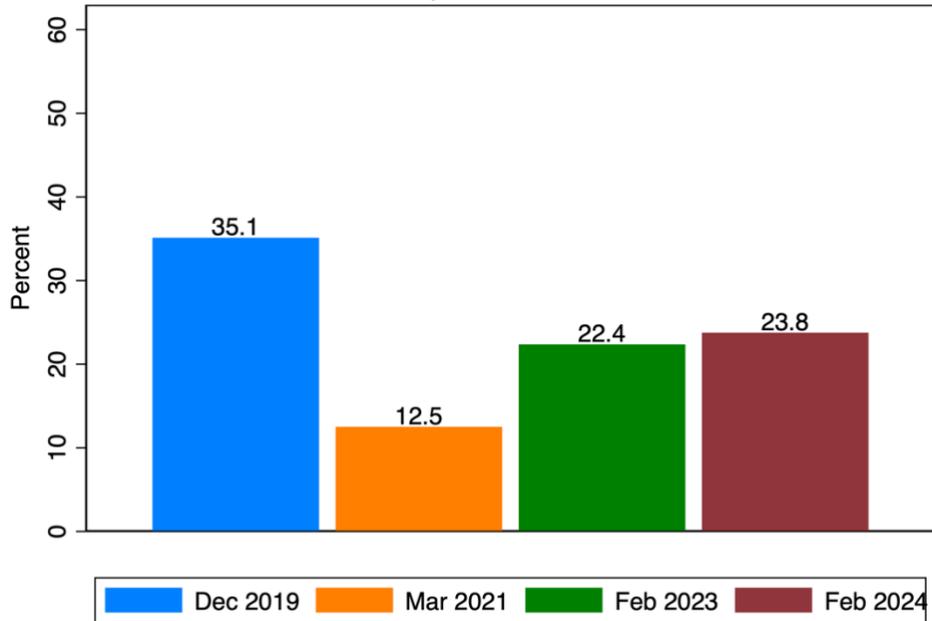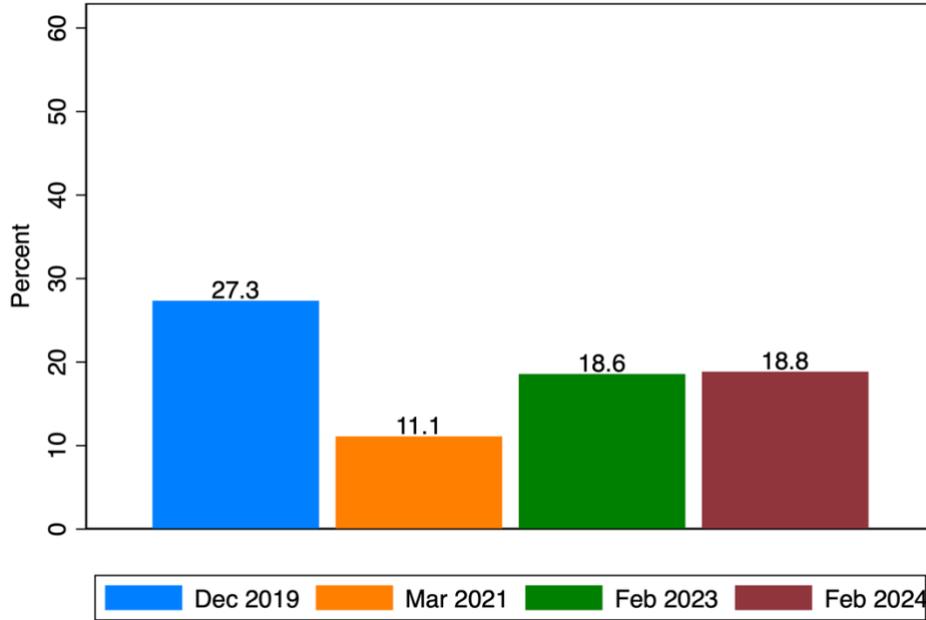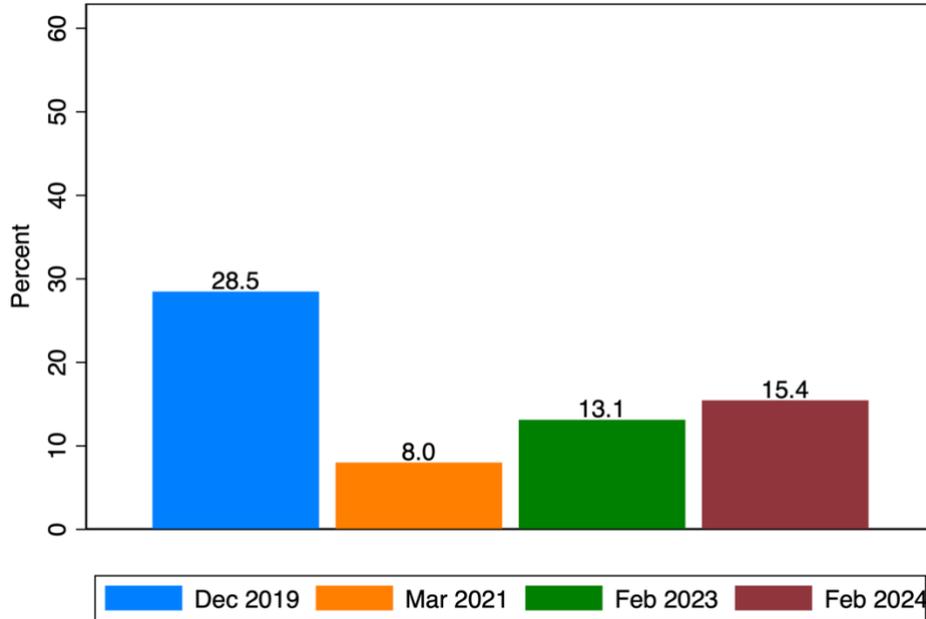
Metrolink Use in Last Year

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Amtrak Use in Last Year

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

9

Dial-A-Ride Use in Last Year

Dec 2019	Mar 2021	Feb 2023	Feb 2024

Walk/Skateboard/Kick Scooter Use in Last Year

Dec 2019	Mar 2021	Feb 2023	Feb 2024
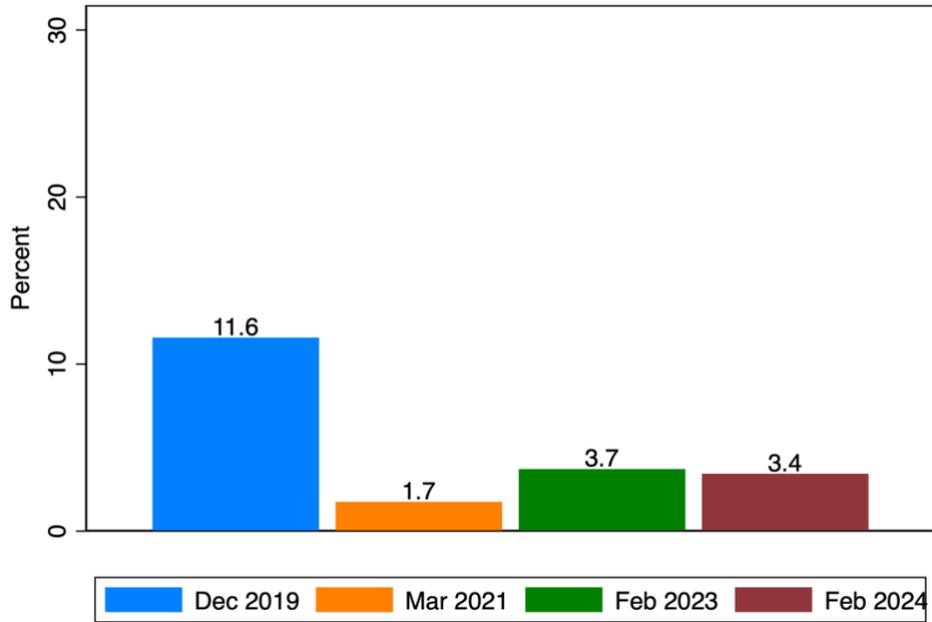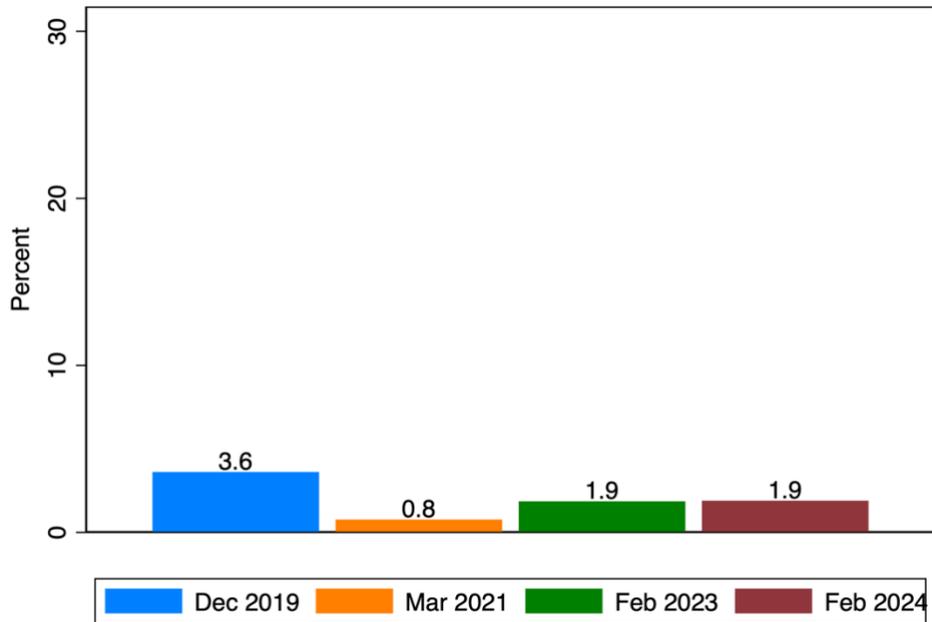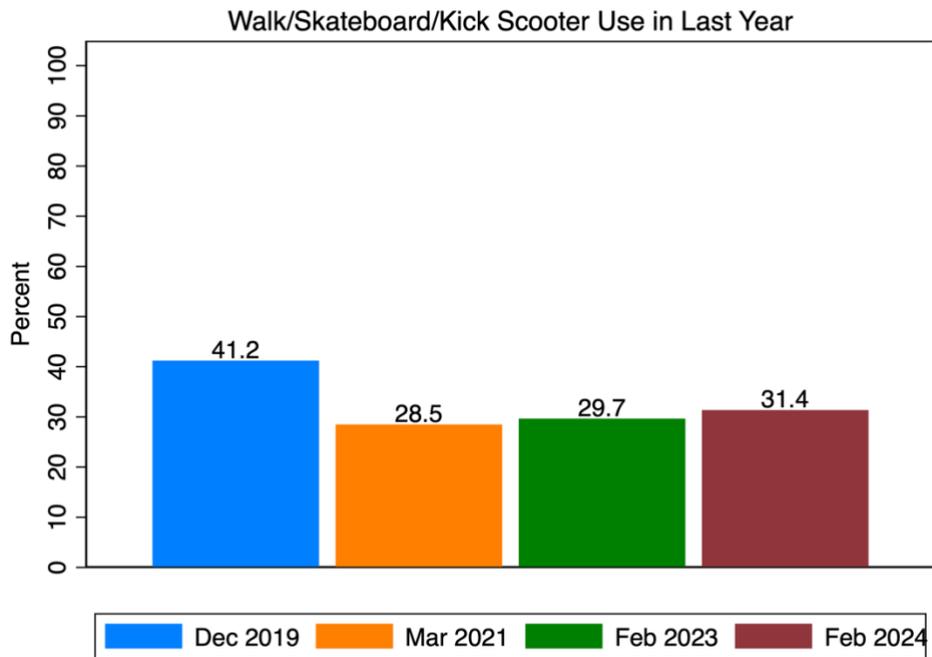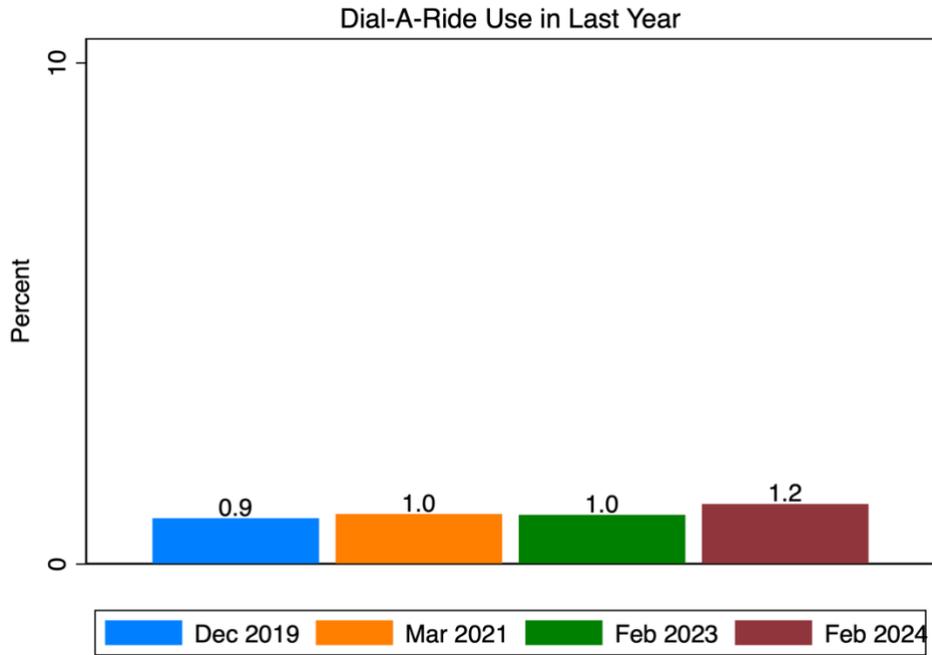
Bicycle or Bikeshare Use in Last Year

Percent

10.2 — Dec 2019
7.9 — Mar 2021
5.5 — Feb 2023
6.5 — Feb 2024

Electric Scooter/Bike/Skateboard Use in Last Year

Percent

5.9 — Dec 2019
2.3 — Mar 2021
3.3 — Feb 2023
3.6 — Feb 2024

Motorcycle Use in Last Year

Bar chart showing Percent of motorcycle use in the last year: Dec 2019 = 1.9, Mar 2021 = 1.3, Feb 2023 = 0.9, Feb 2024 = 1.3

Legend: Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024

Use Private Vehicle at Least One Day A Week
Among Private Vehicle Users

Bar chart showing Percent of private vehicle use at least one day a week among private vehicle users: Dec 2019 = 83.9, Mar 2021 = 76.0, Feb 2023 = 81.5, Feb 2024 = 82.9

Legend: Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024

Use Ride Hailing at Least One Day A Week
Among Ride Hailing Users

Percent

Dec 2019	Mar 2021	Feb 2023	Feb 2024

25.6   21.2   16.9   19.7
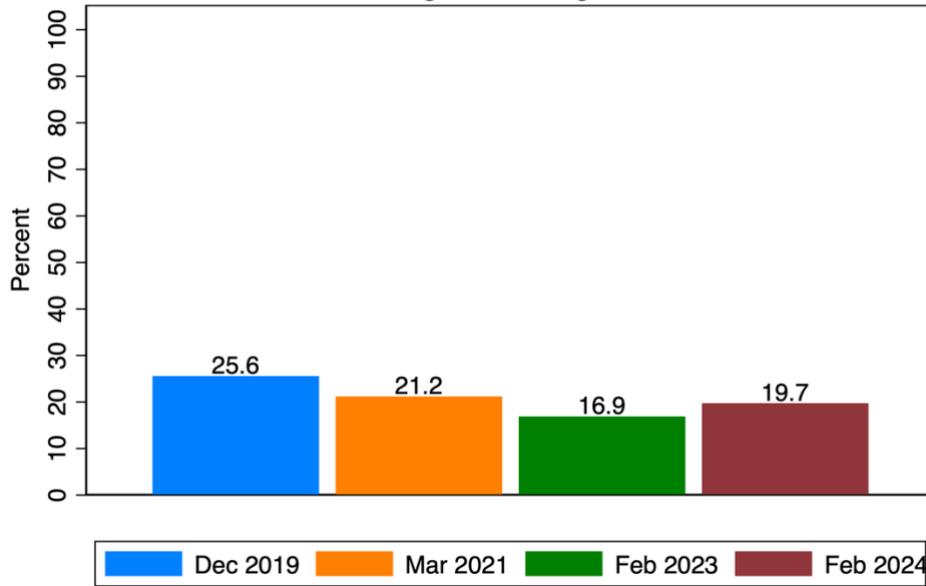
Use Taxi/Limo/Hired at Least One Day A Week
Among Ride Hailing Users

Percent

Dec 2019	Mar 2021	Feb 2023	Feb 2024

11.8   17.8   0.8   13.5
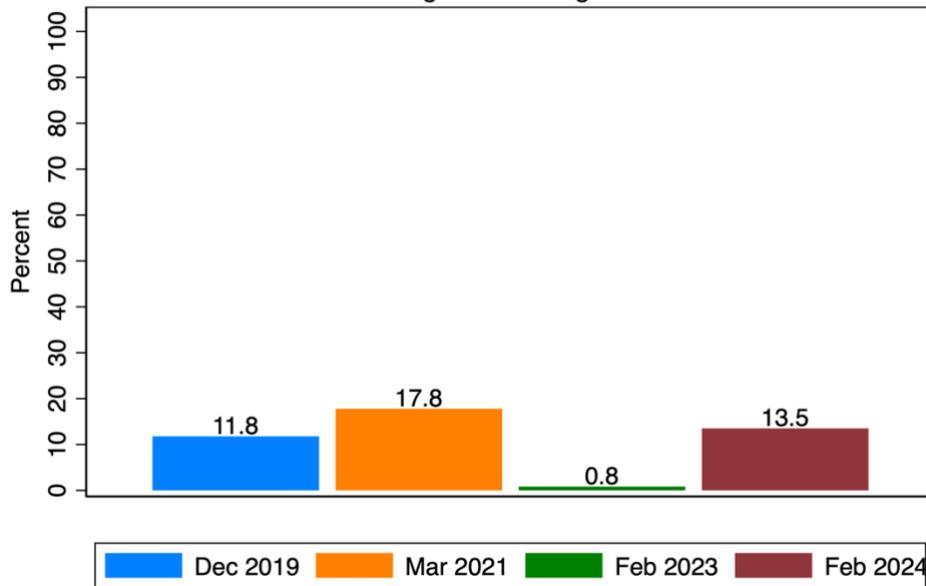
Use Bus at Least One Day A Week
Among Bus Users

Dec 2019	Mar 2021	Feb 2023	Feb 2024
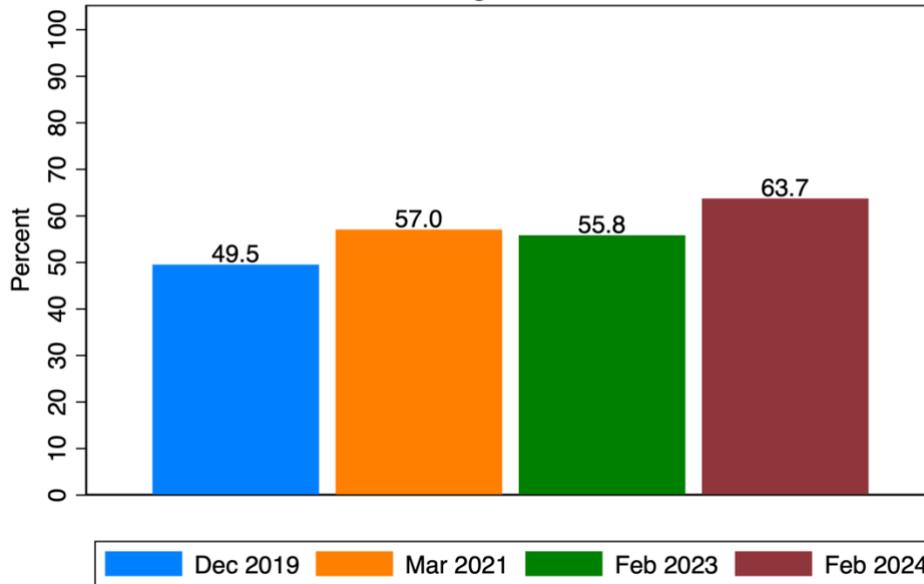
Use Metro at Least One Day A Week
Among Metro Users

Dec 2019	Mar 2021	Feb 2023	Feb 2024

14
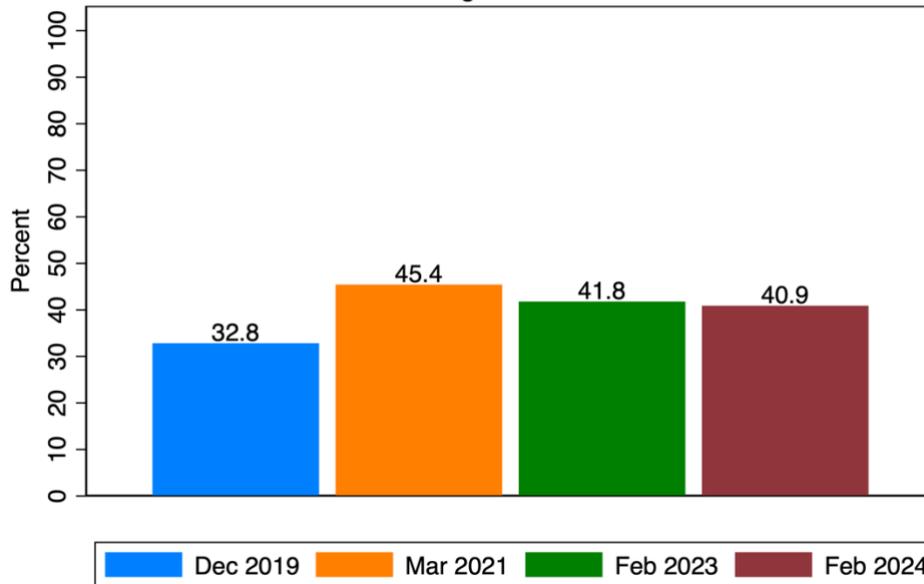
Use Metrolink/Amtrak/Dial-A-Ride at Least One Day A Week
Among Metrolink/Amtrak/Dial-A-Ride Users

	Dec 2019	Mar 2021	Feb 2023	Feb 2024
	31.1	44.1	28.6	27.8
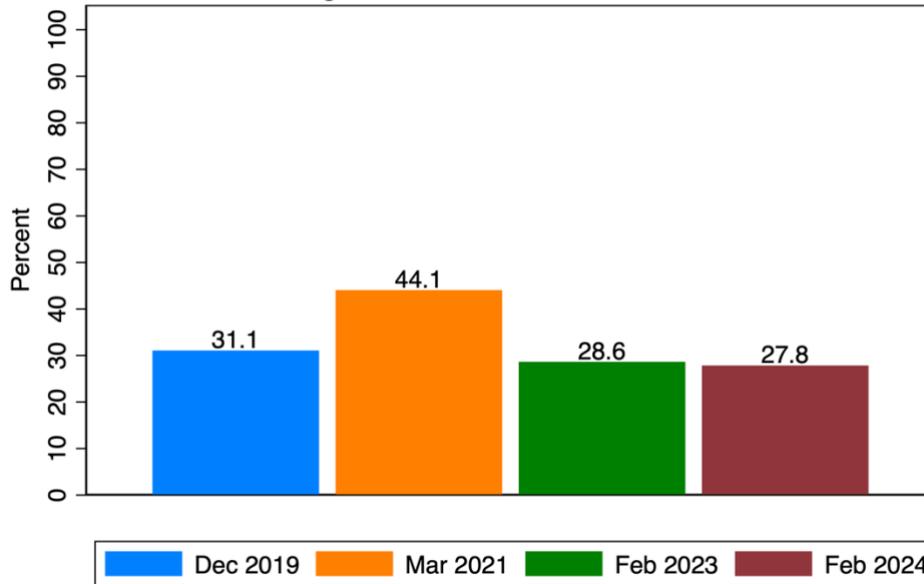
Walk/Skateboard/Kick Scooter at Least One Day A Week
Among Walkers/Skateboarders/Kick Scooterers

	Dec 2019	Mar 2021	Feb 2023	Feb 2024
	69.2	72.6	77.5	74.1
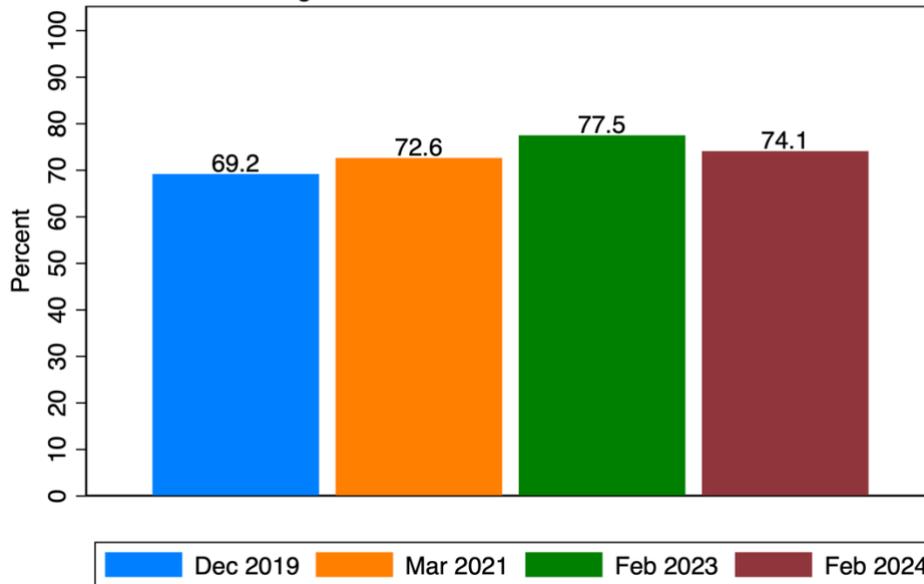
Bicycle or Bikeshare at Least One Day A Week
Among Bicycle or Bikeshare Users

Dec 2019	Mar 2021	Feb 2023	Feb 2024
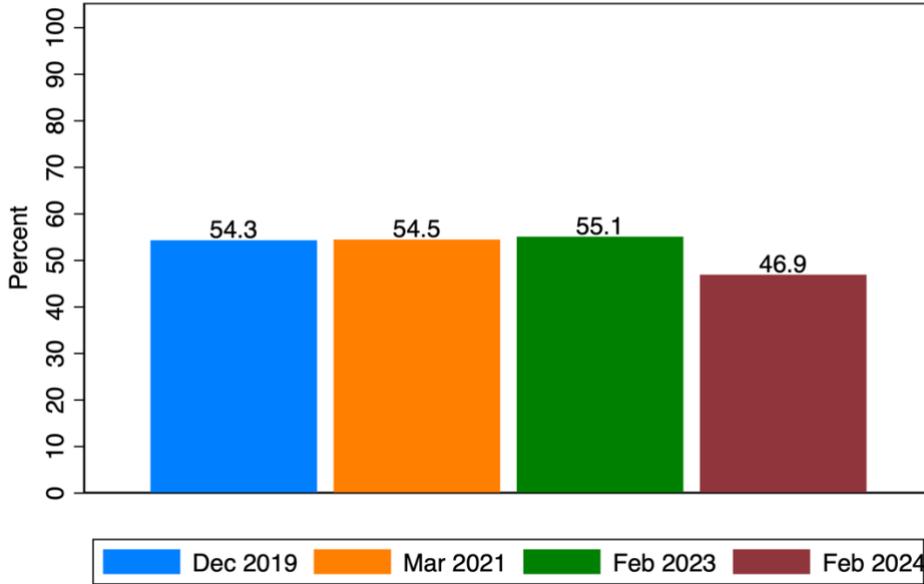
Use Electric Scooter/Bike/Skateboard at Least One Day A Week
Among Electric Scooter/Bike/Skateboard Users

Dec 2019	Mar 2021	Feb 2023	Feb 2024
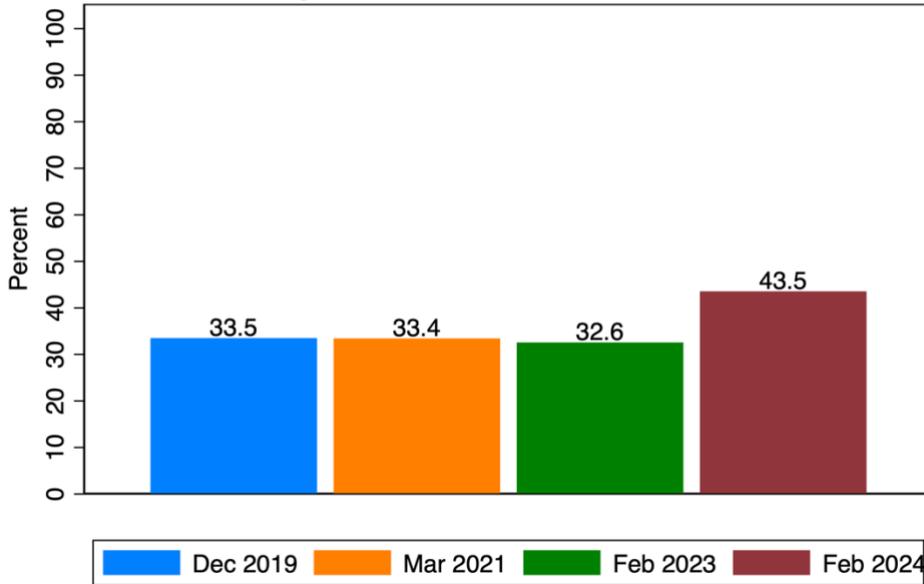
Use Motorcycle at Least One Day A Week
Among Motorcycle Users

Transportation Perceptions

Private Vehicle Safe

| | Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Values: 74.5, 77.0, 75.5, 73.7

Bus Safe

| | Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Values: 25.2, 17.7, 20.1, 20.9

Metro Safe

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Ride Hailing Safe

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |
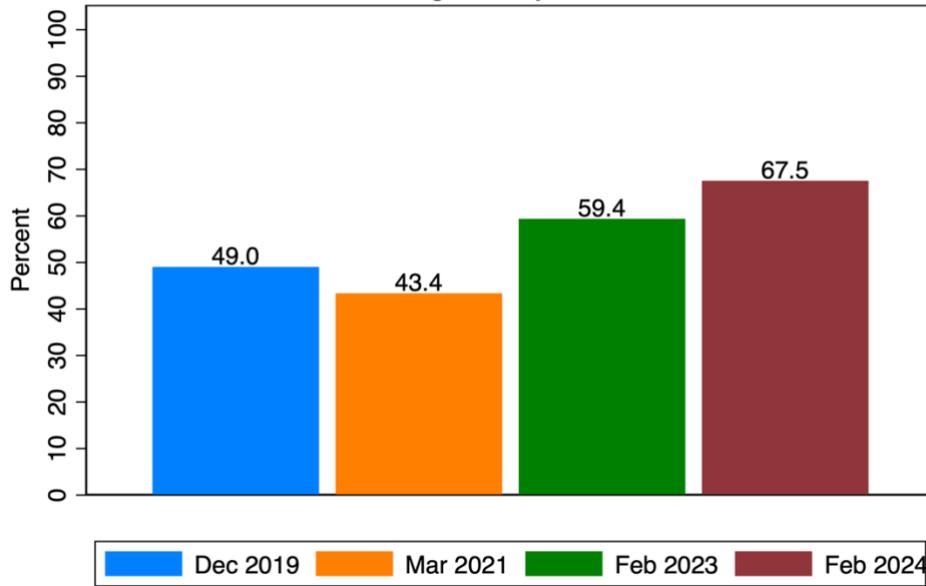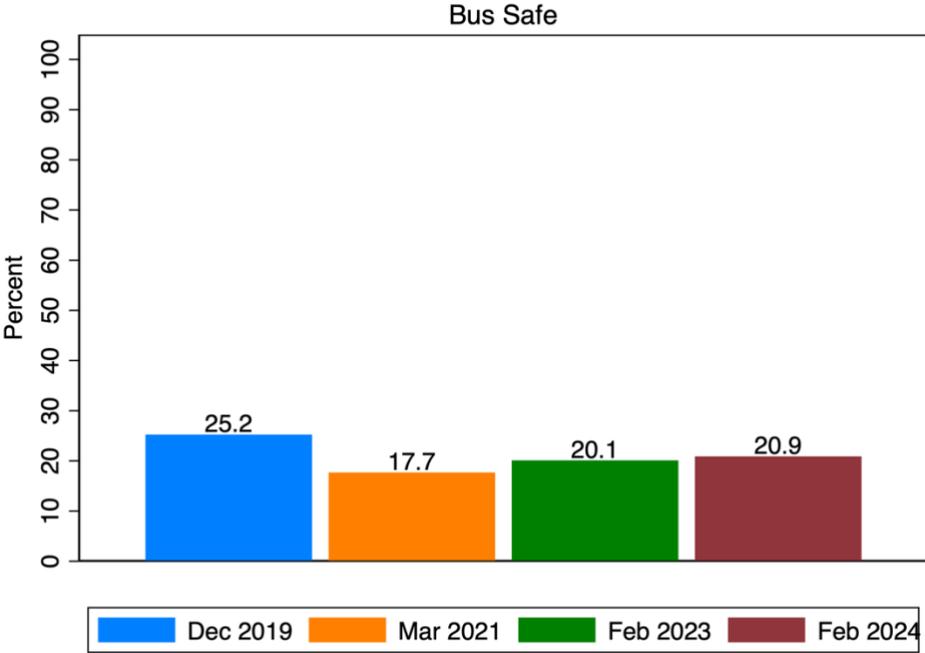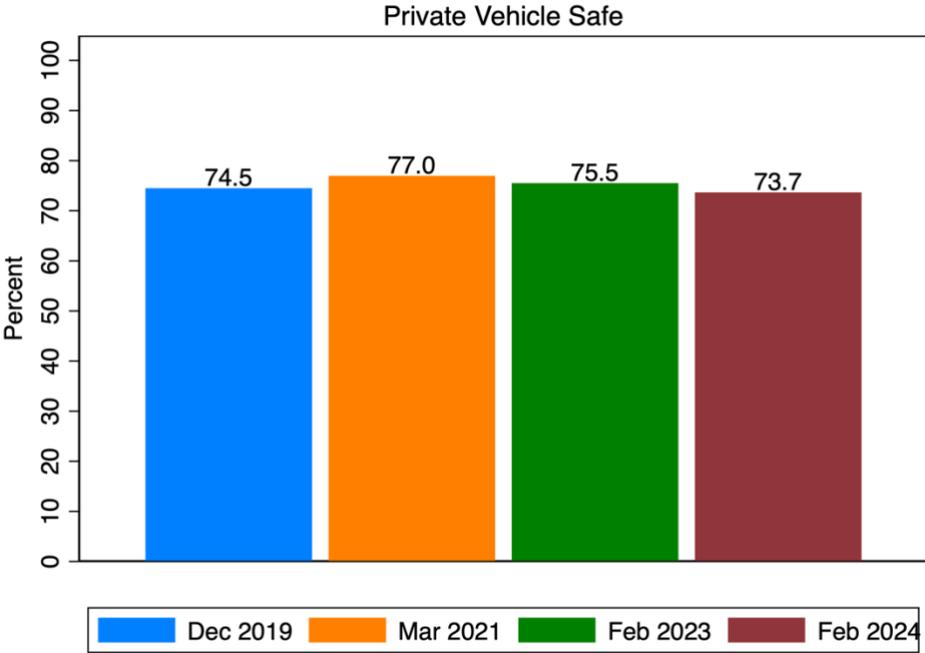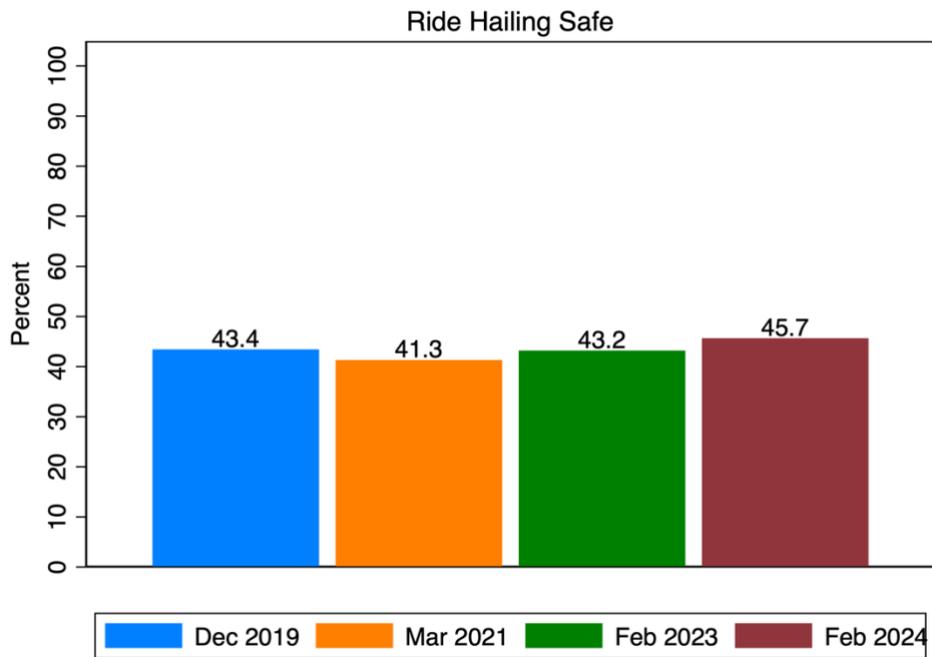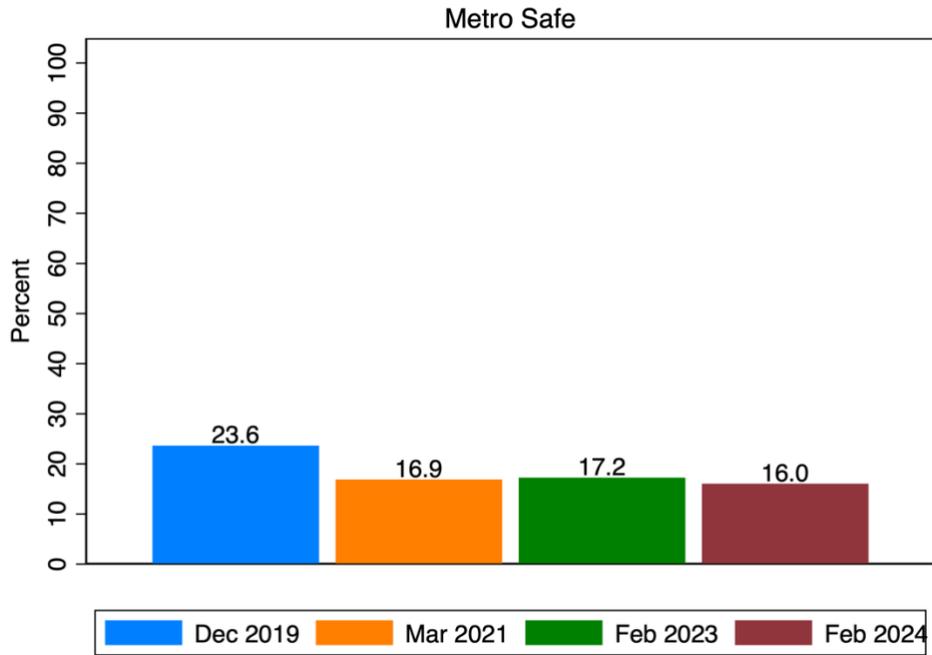
Ride Hailing Inexpensive
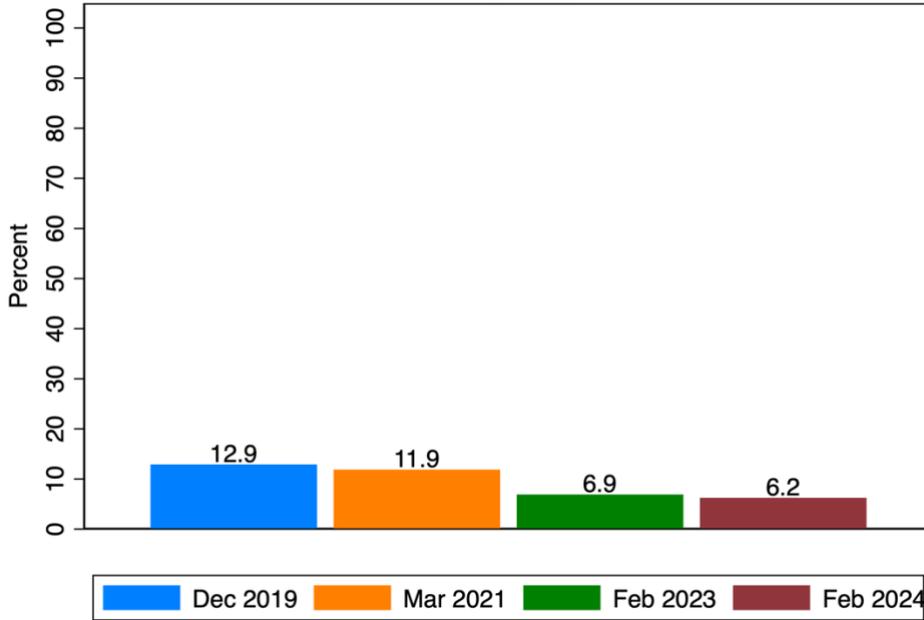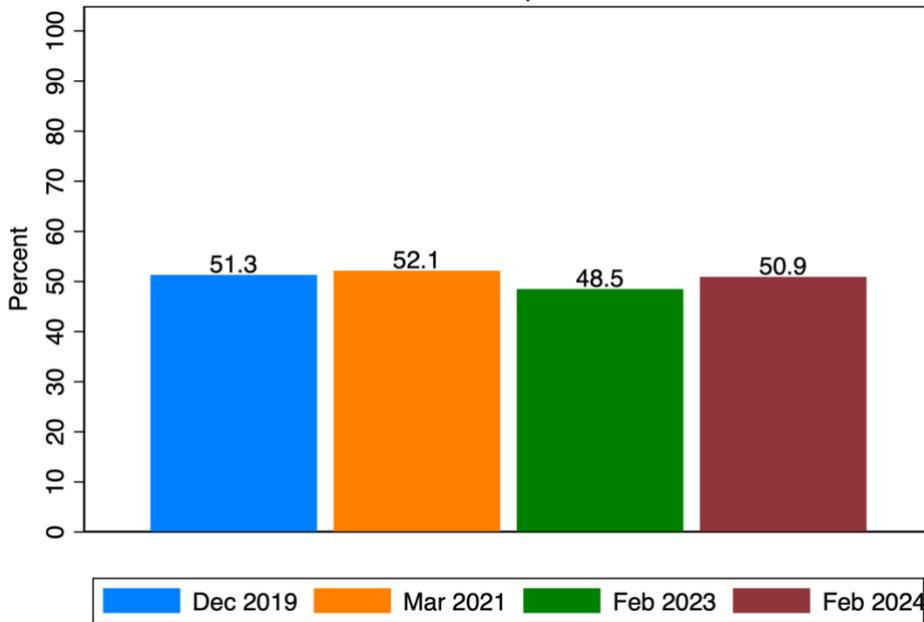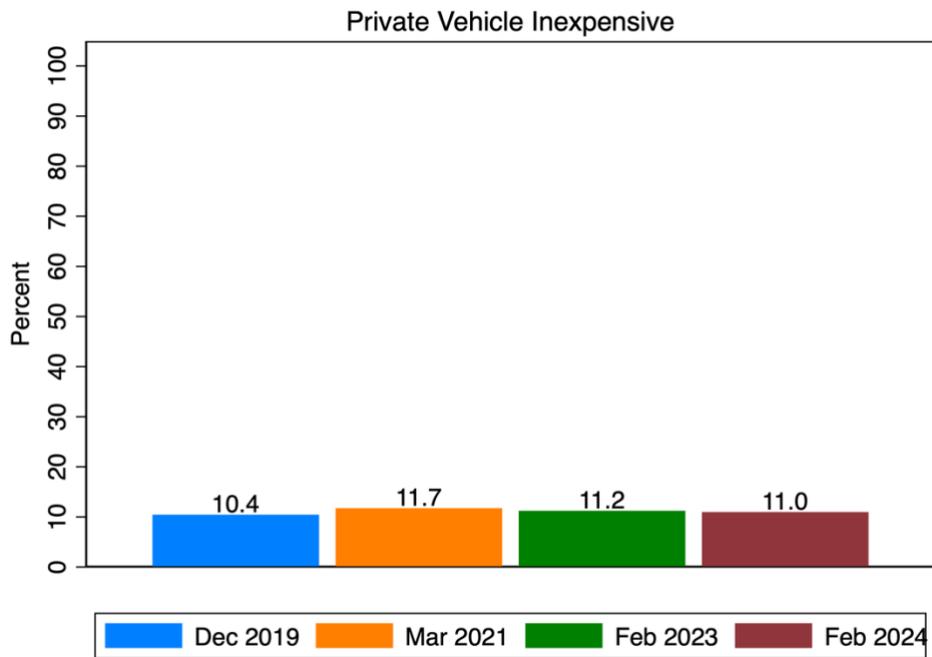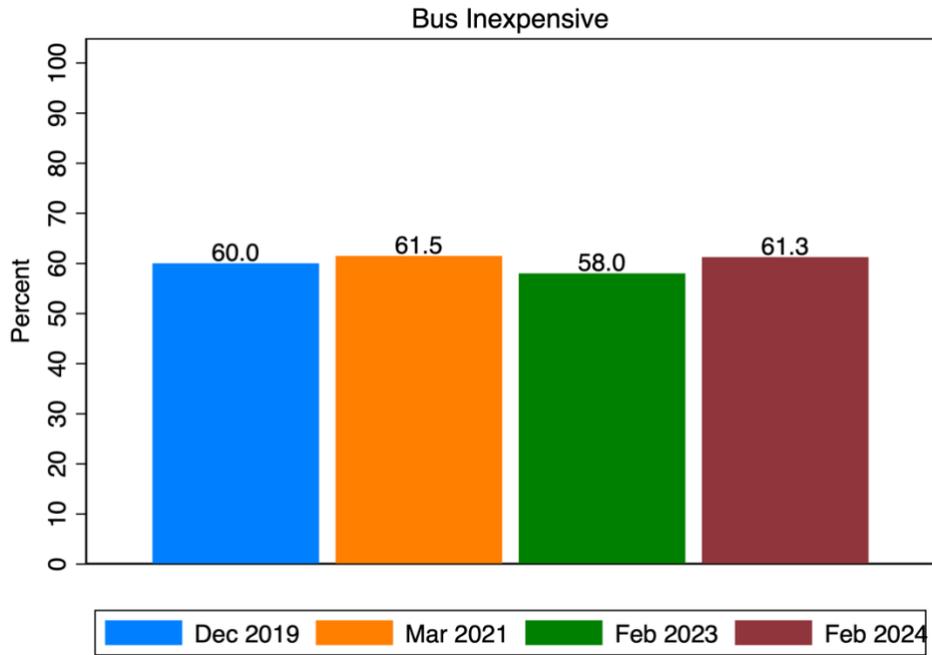
Percent

12.9	Dec 2019
11.9	Mar 2021
6.9	Feb 2023
6.2	Feb 2024

Metro Inexpensive

Percent

51.3	Dec 2019
52.1	Mar 2021
48.5	Feb 2023
50.9	Feb 2024

20

Bus Inexpensive

| | Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Private Vehicle Inexpensive

| | Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

21

Ride Hailing Convenient for Personal/Leisure

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Metro Convenient for Personal/Leisure

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |
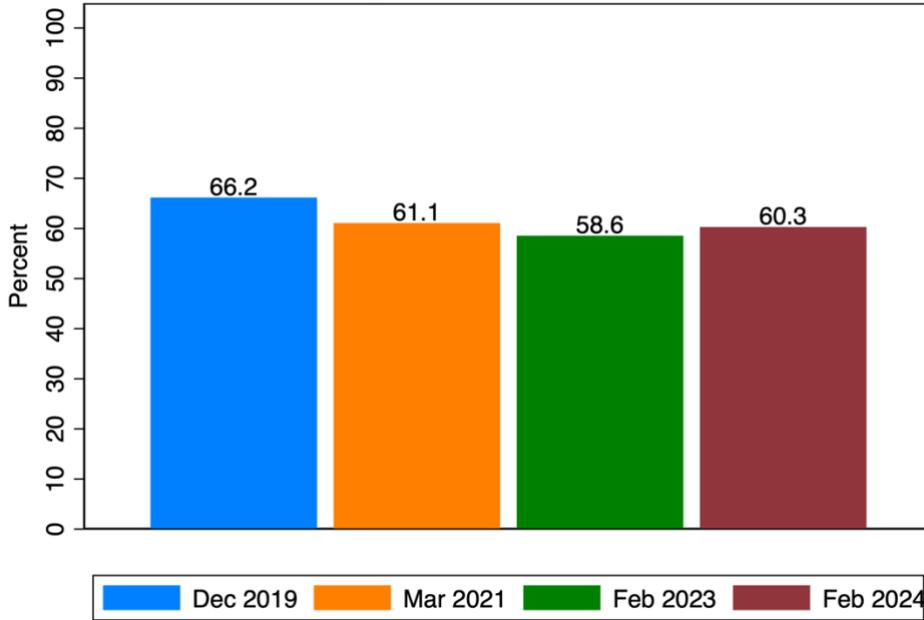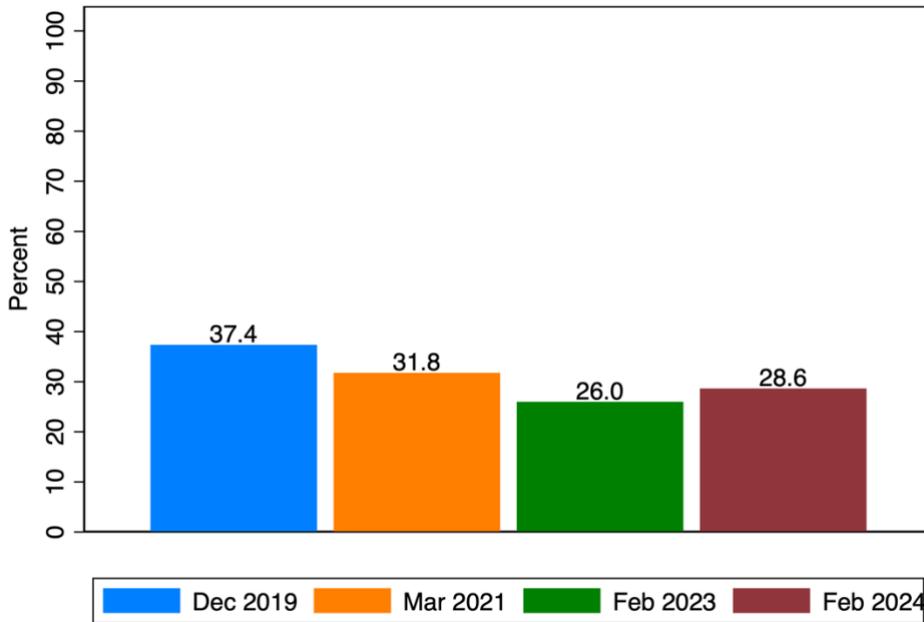
Bus Convenient for Personal/Leisure
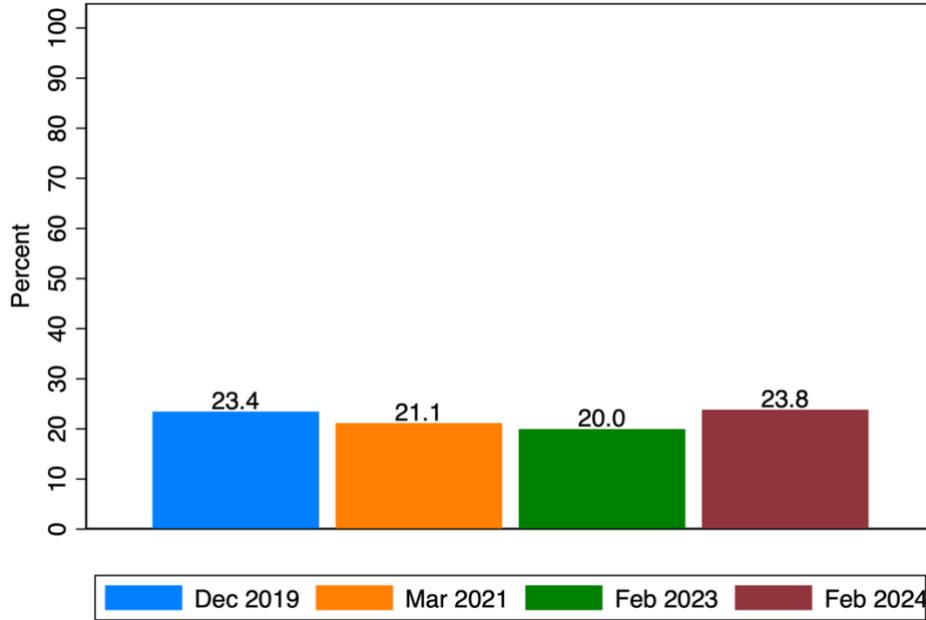
Private Vehicle Convenient for Personal/Leisure

Ride Hailing Convenient for Work/School

Percent

	Dec 2019	Mar 2021	Feb 2023	Feb 2024
	60.9	59.9	56.9	59.2

Metro Convenient for Work/School

Percent

	Dec 2019	Mar 2021	Feb 2023	Feb 2024
	34.2	28.8	26.3	29.0

Bus Convenient for Work/School

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

Private Vehicle Convenient for Work/School

| Dec 2019 | Mar 2021 | Feb 2023 | Feb 2024 |

25

Transportation Access

Vehicles Own or Lease

Mean # of Vehicles

| | 2.0 | 2.0 | 1.9 | 1.9 |

Dec 2019   Mar 2021   Feb 2023   Feb 2024

Enrolled in Commuter Benefit Program
Among those offered program by employer

Percent

| 25.5 | 20.4 | 19.6 | 23.8 |

Jun 2020   Jul 2021   Feb 2023   Feb 2024

Likely to Buy Vehicle in the next 12 Months

A bar chart titled "Likely to Buy Vehicle in the next 12 Months" with the y-axis labeled "Percent" ranging from 0 to 100. The bars show:
- Dec 2019 (blue): 25.2
- Mar 2021 (orange): 24.1
- Feb 2023 (green): 19.5
- Feb 2024 (dark red): 18.0

Coolness and Heat

Visited Some Place to Cool Down

Visited Some Place to Warm Up

Experienced Symptoms Related to Heat Exposure

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |

Hospitalized Due to Heat

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |

Pollution

Agree Safe Air Quality in Home

Agree Safe Air Quality in Neighborhood

Agree Safe Water for Drinking in Neighborhood

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
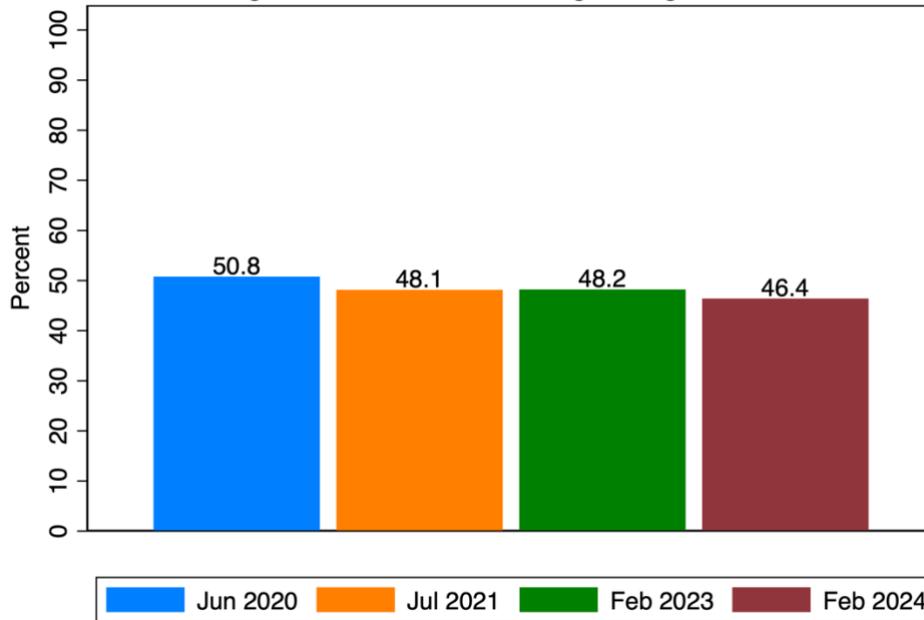
Agree Safe Air Quality at Work

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
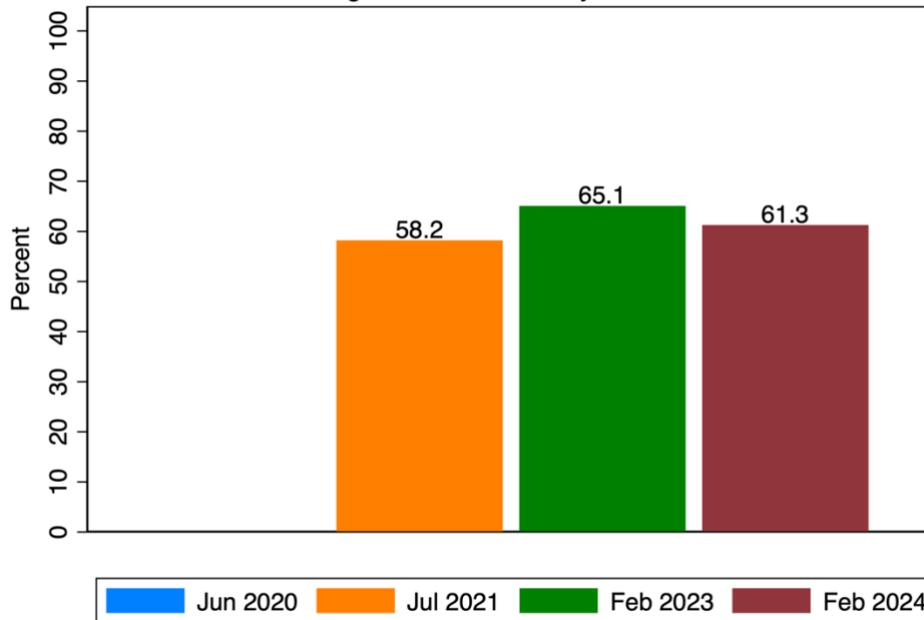
Avoided Going Outside Due to Wildfire

Jun 2020	Jul 2021	Feb 2023	Feb 2024
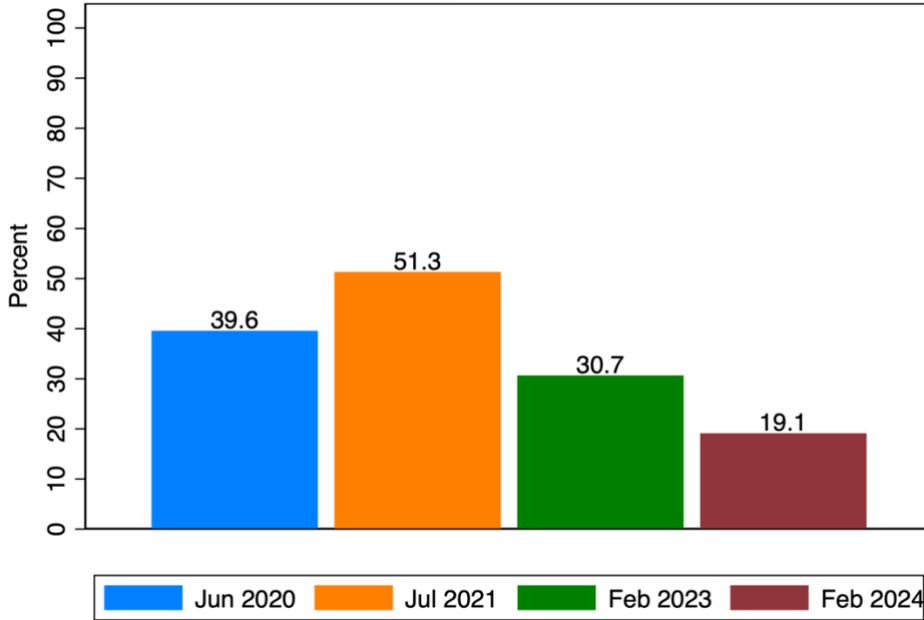
Avoided Going Outside NOT Due to Wildfire

Jun 2020	Jul 2021	Feb 2023	Feb 2024
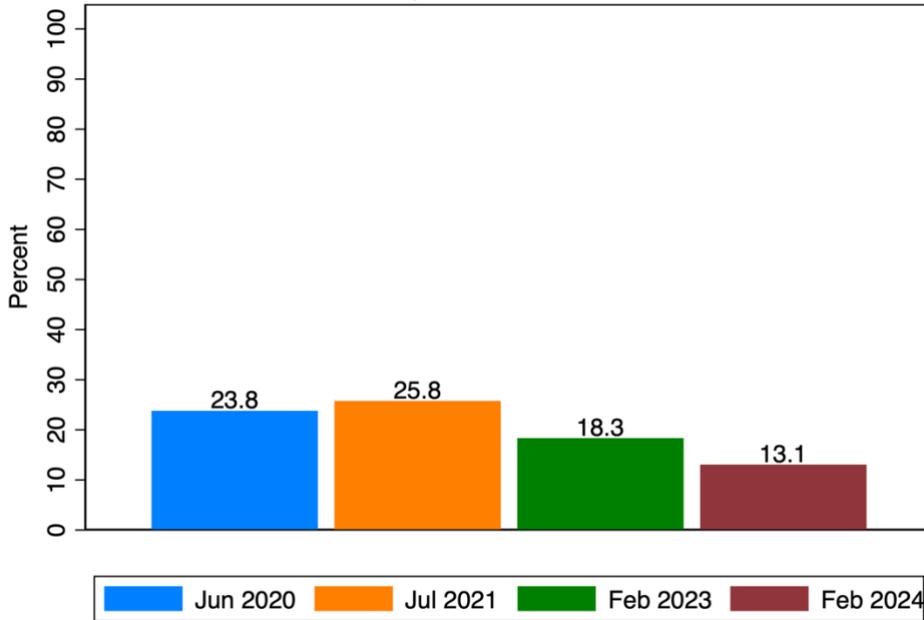
Avoided Specific Places Due to Air Quality Concern
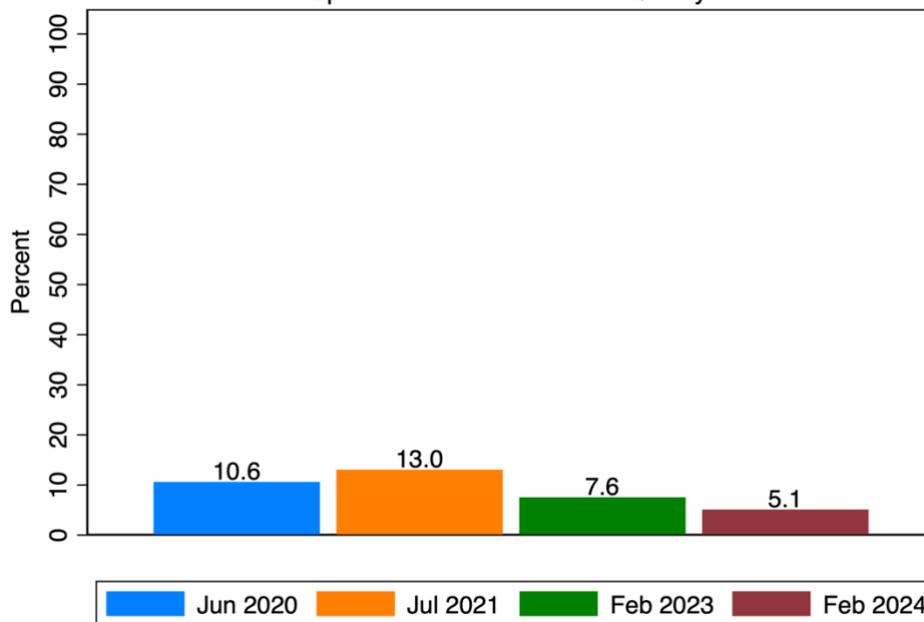
Climate Change Attitudes

Believe Climate Change is Threat to LA County Residents

72.3   76.7   72.7   69.0

Jun 2020   Jul 2021   Feb 2023   Feb 2024

Believe Local Government is Doing Enough

18.0   17.1   18.8   19.1

Jun 2020   Jul 2021   Feb 2023   Feb 2024
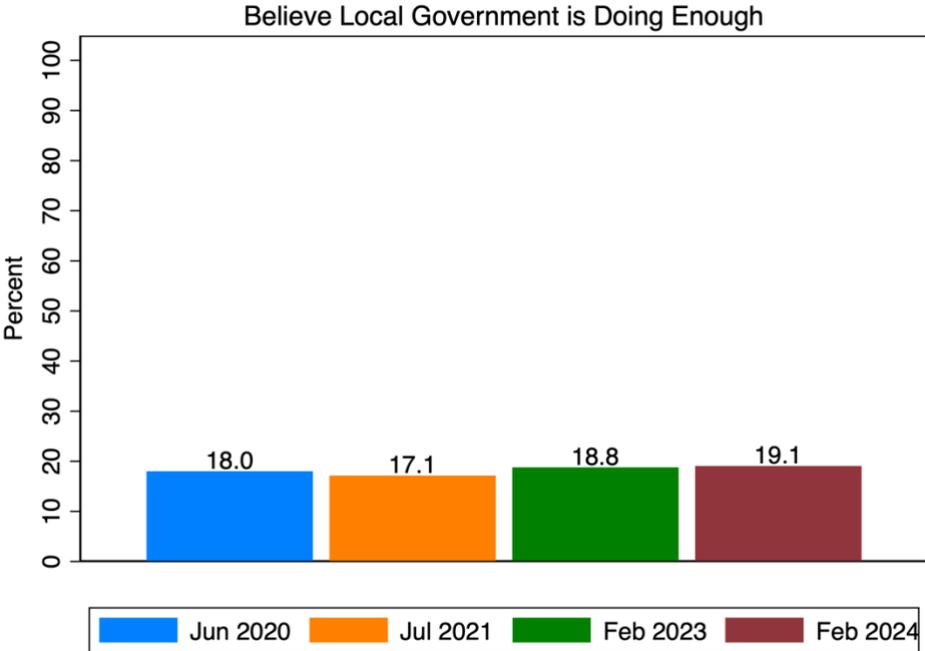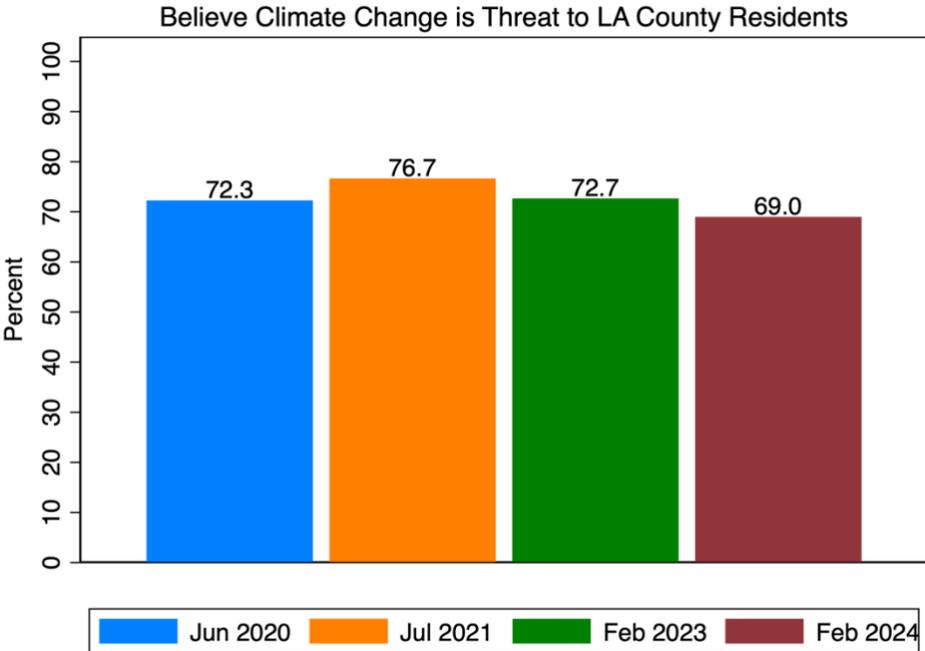
Believe Climate Change is Caused by Humans
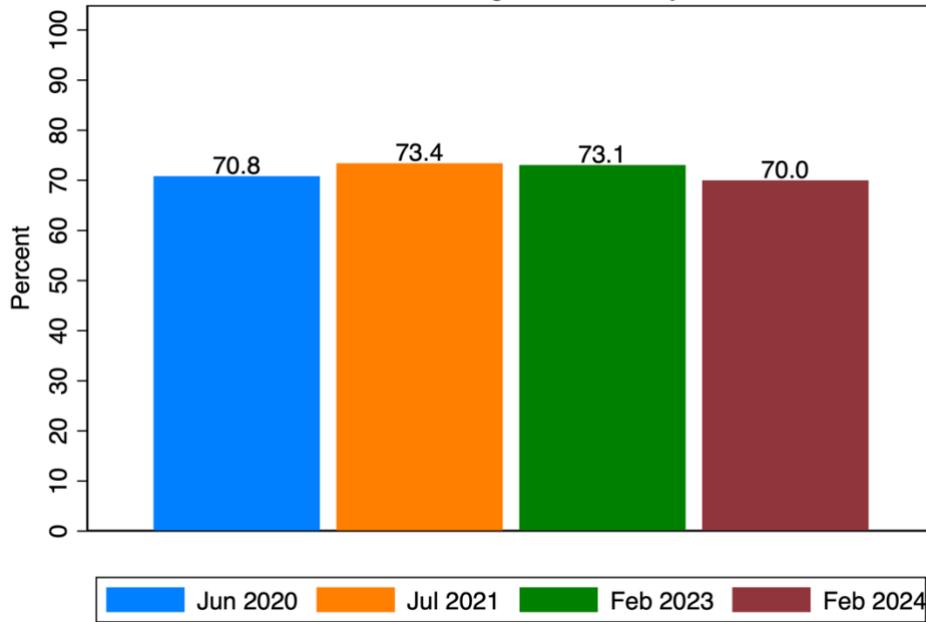
Sustainable Behavior

Home Has: Solar Panels

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |

Values: 8.0, 8.6, 10.6, 13.2

Home Has: Energy-Efficient Landscaping

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |

Values: 19.8, 22.5, 25.8, 33.6
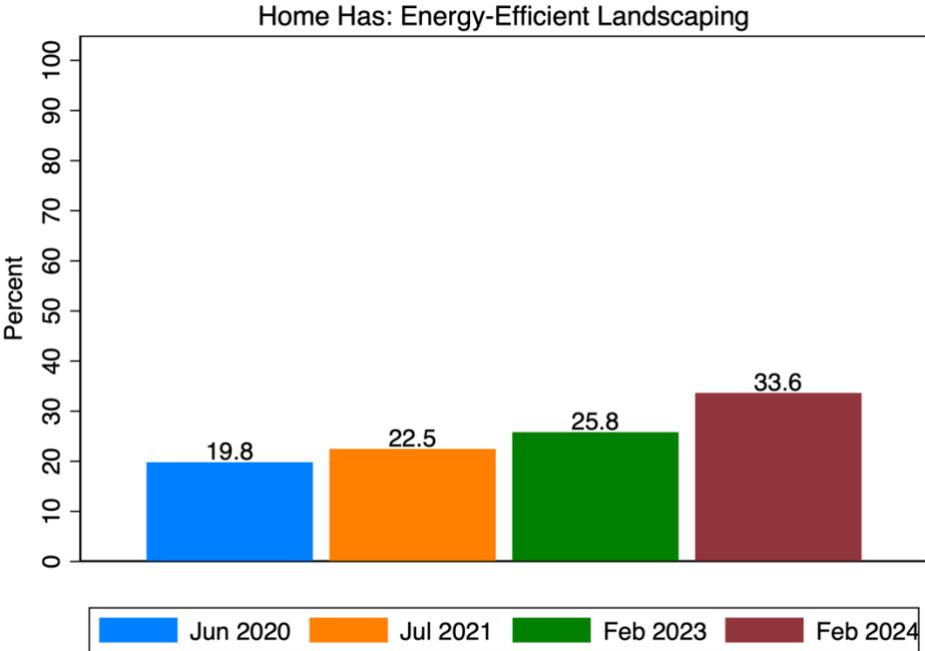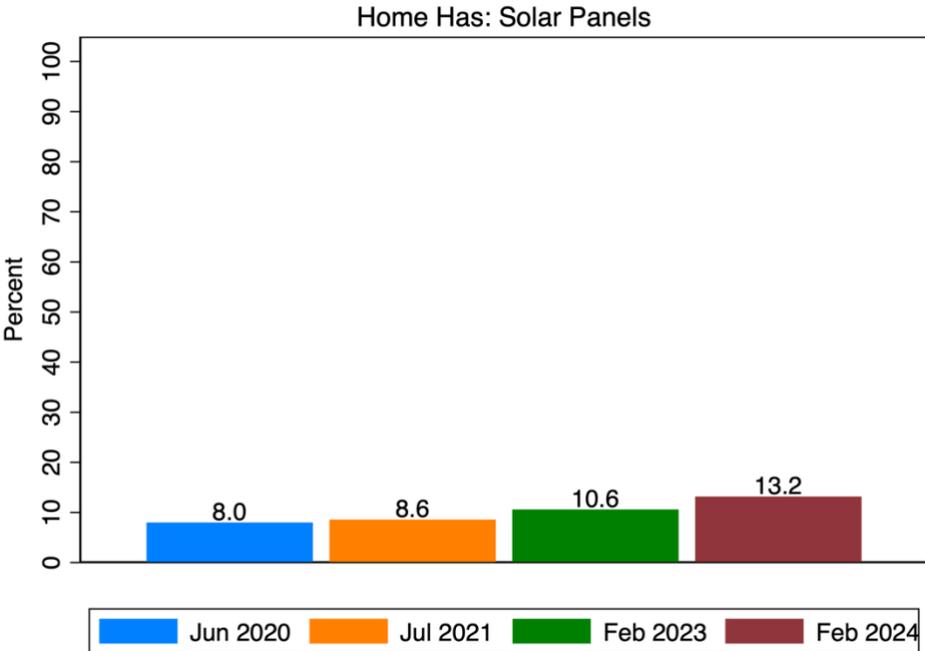
Home Has: Energy-Efficient Appliances/Eletronics
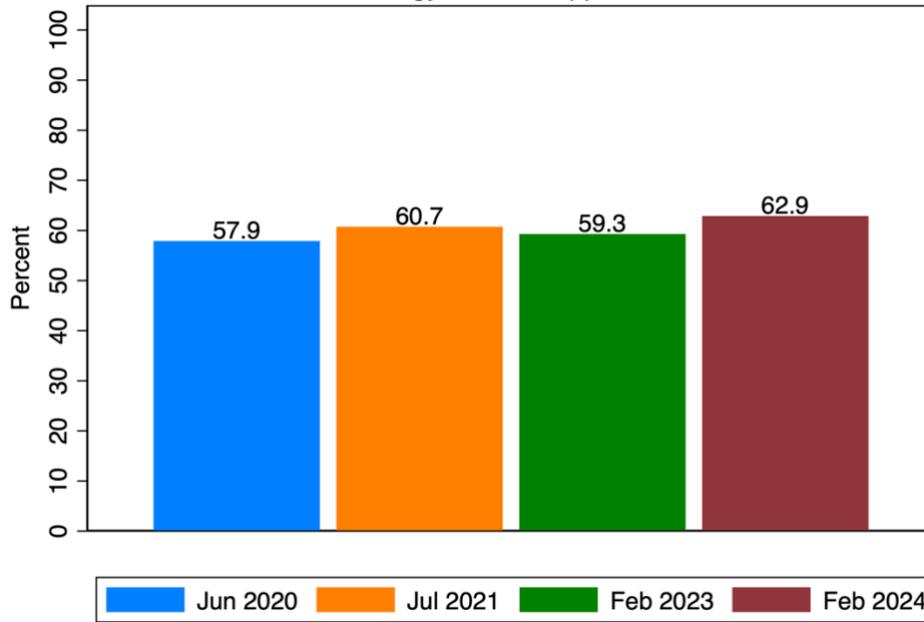
Home Has: Well-Insulated Windows/Doors
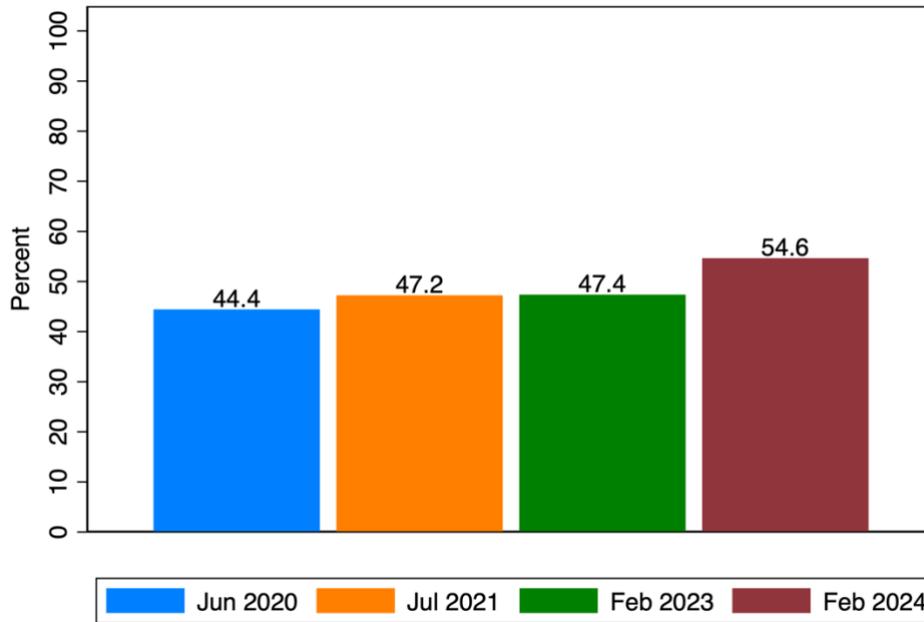
Home Has: Programmable Thermostat

	Jun 2020	Jul 2021	Feb 2023	Feb 2024
Percent	40.4	40.0	45.6	39.7

Home Has: Ceiling fan

	Jun 2020	Jul 2021	Feb 2023	Feb 2024
Percent	57.6	55.9	56.8	56.9

Home Has: Daylights

	Percent
Jun 2020	19.5
Jul 2021	17.8
Feb 2023	22.0
Feb 2024	20.9
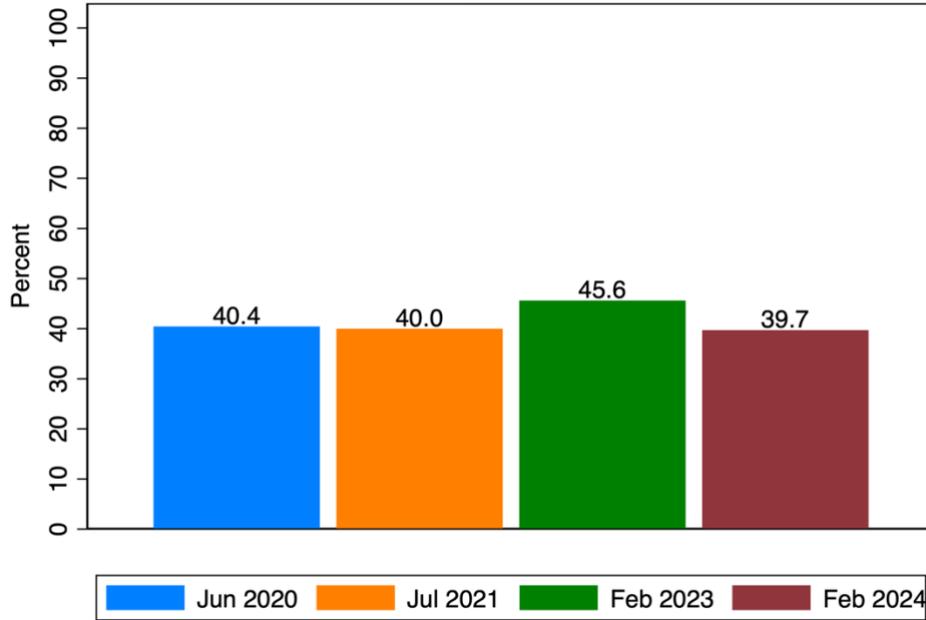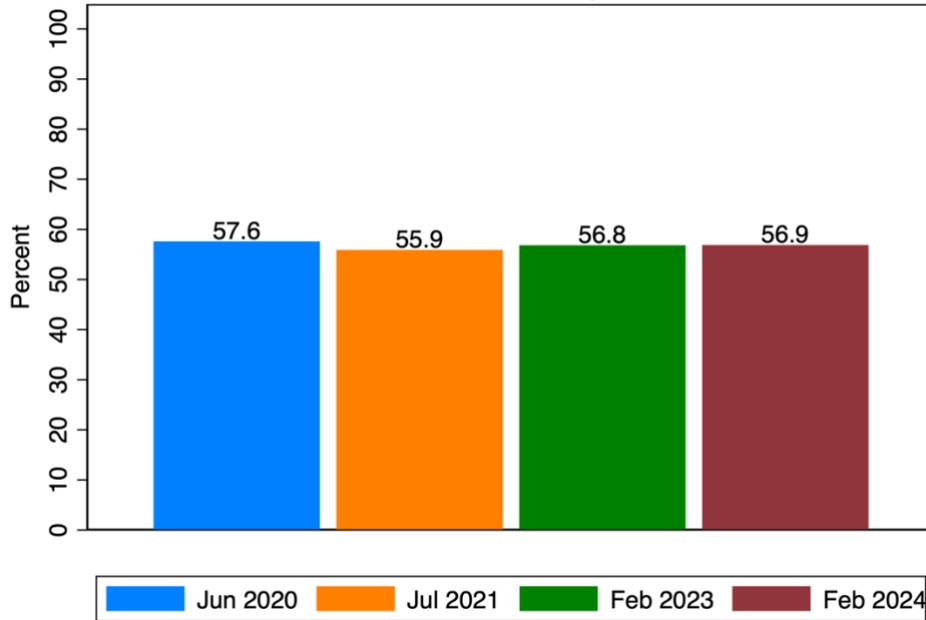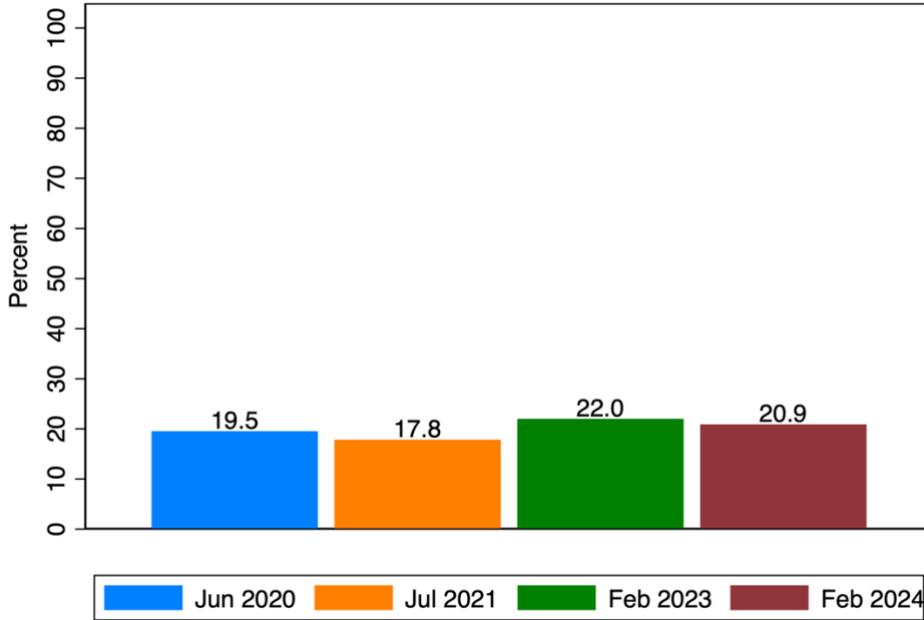
Home Has: LED or CFL Light Bulbs

	Percent
Jun 2020	74.3
Jul 2021	71.4
Feb 2023	78.7
Feb 2024	73.4
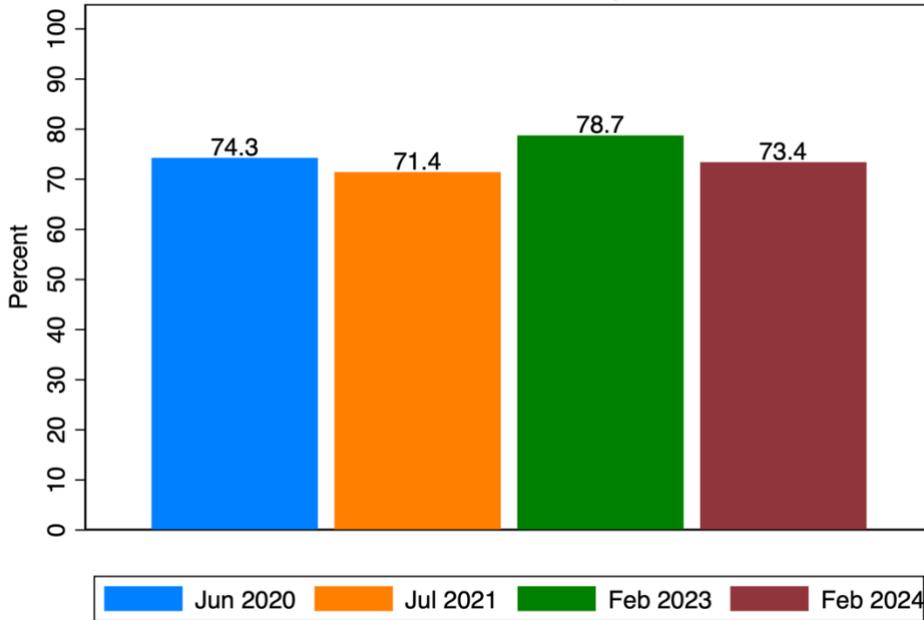
Home Has: Tankless Water Heater

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
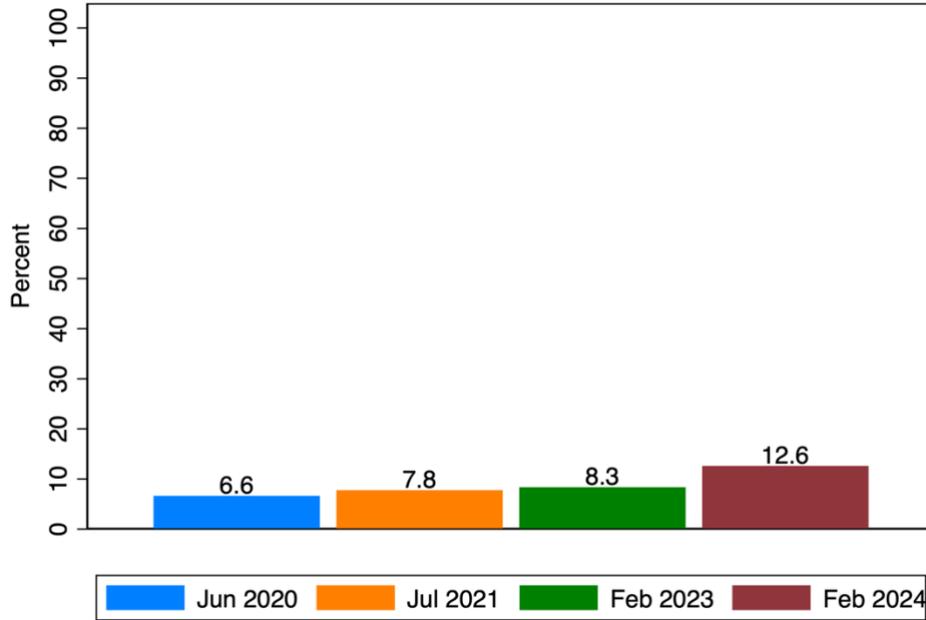
Home Has: Low-flow plumbing fixtures

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
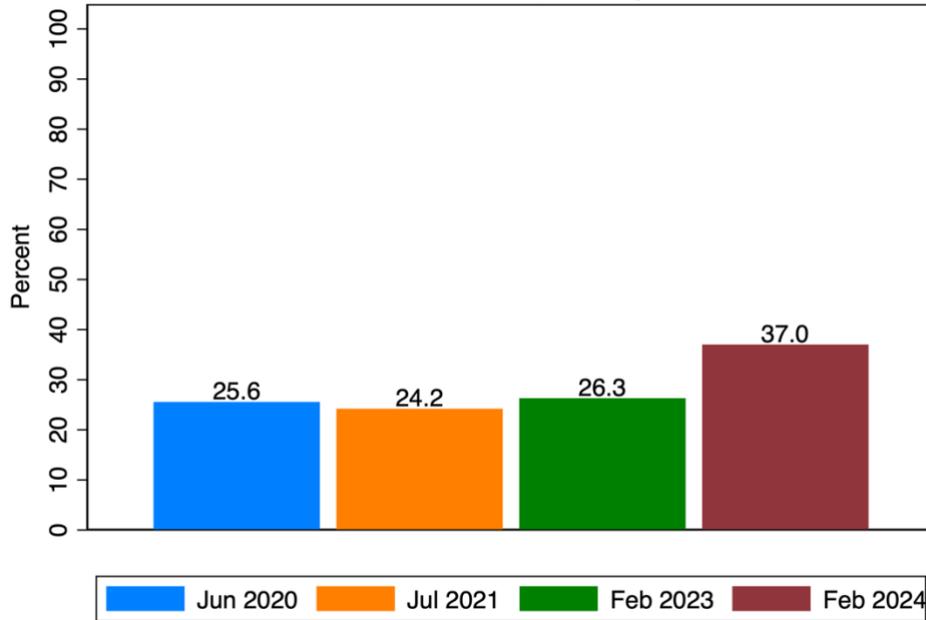
Home Has: Solar water heater

	Jun 2020	Jul 2021	Feb 2023	Feb 2024

How Often: Recycle

	Jun 2020	Jul 2021	Feb 2023	Feb 2024
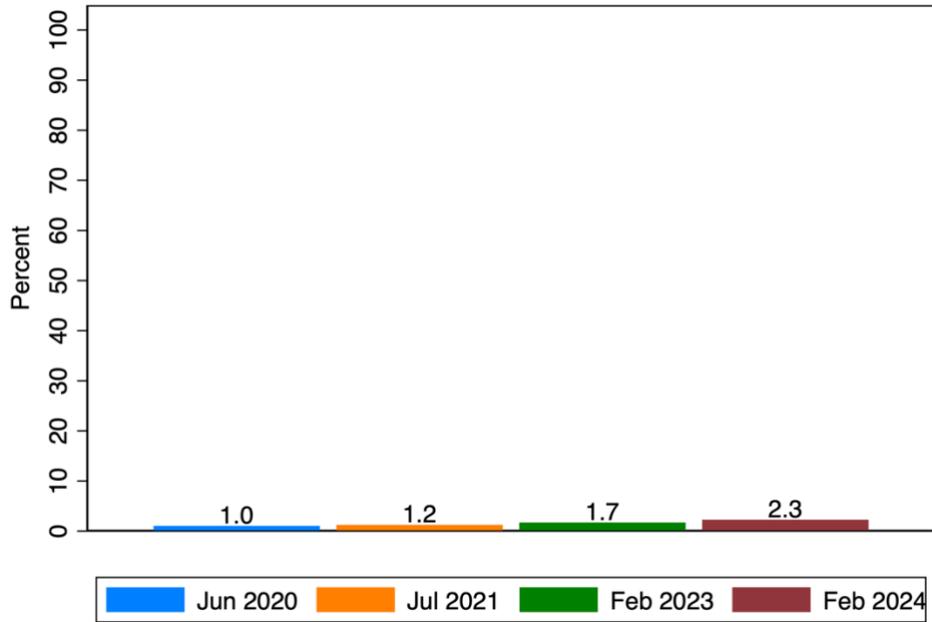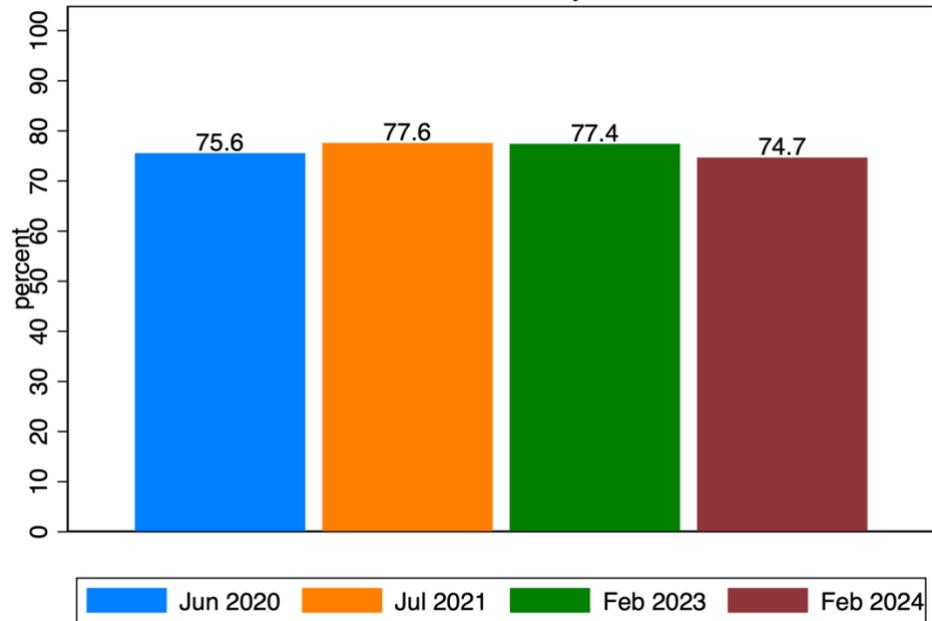
How Often: Limit Air Conditioning

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
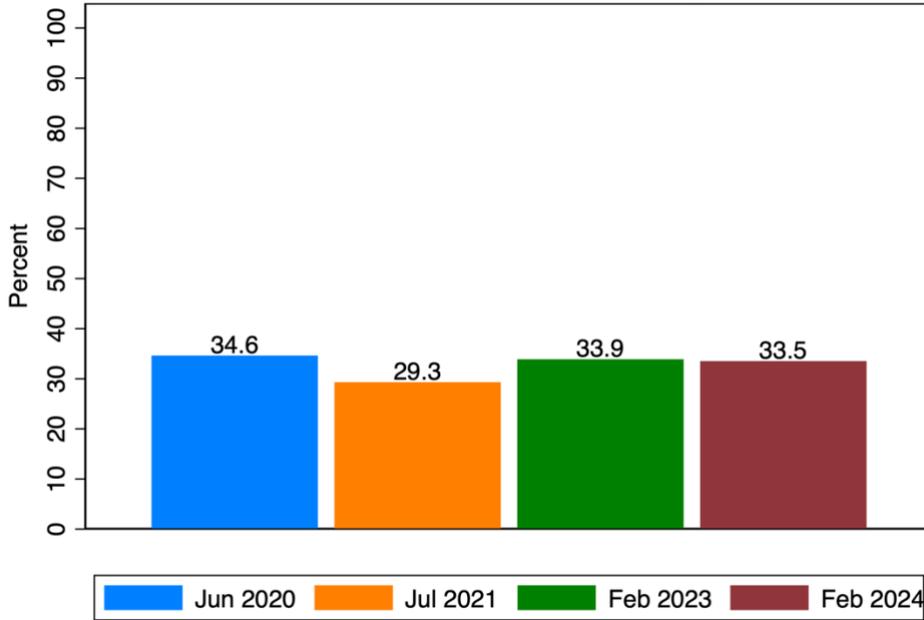
How Often: Hang Clothes to Dry

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
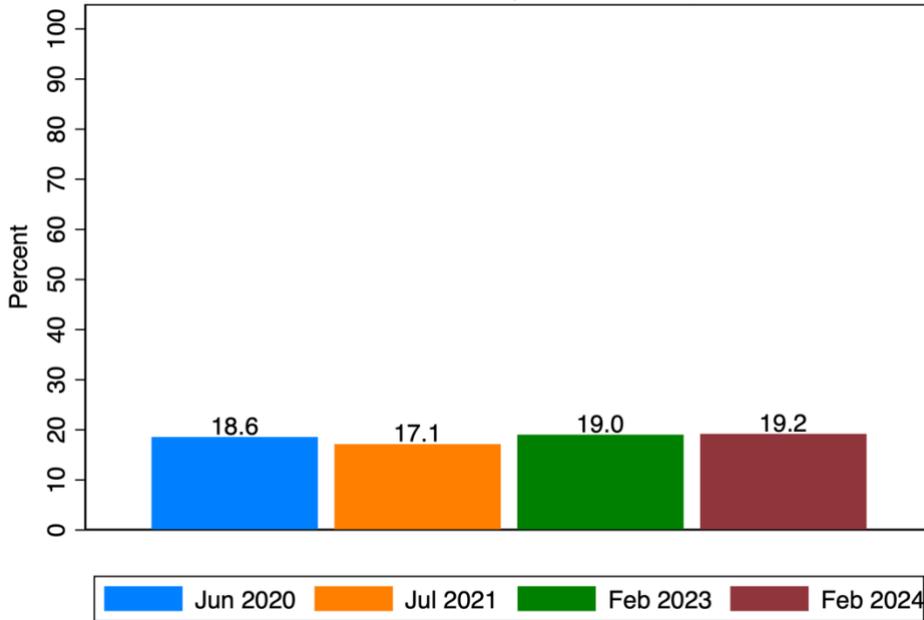
How Often: Limit Use of Plastic

Jun 2020	Jul 2021	Feb 2023	Feb 2024
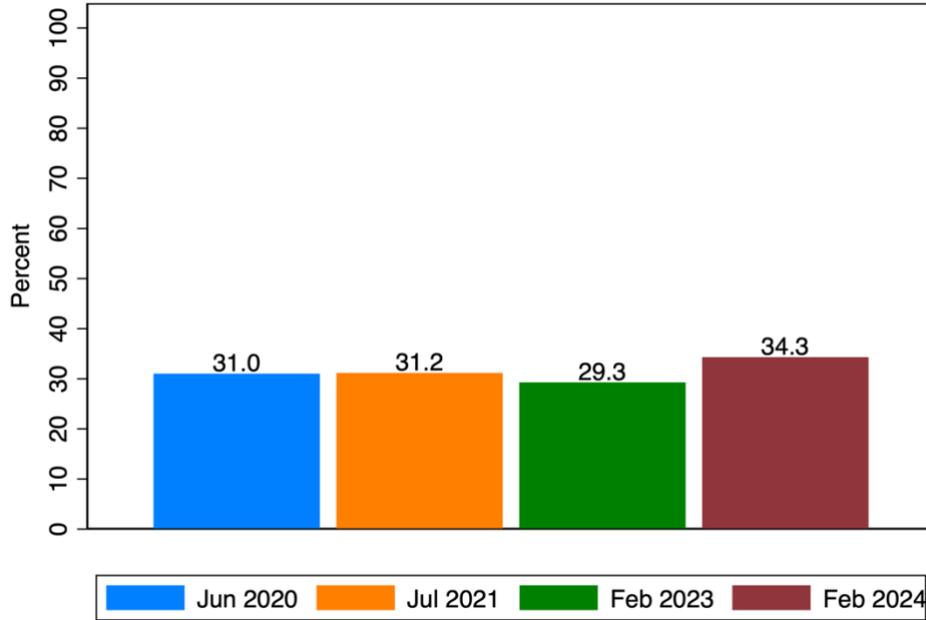
How Often: Limit Use of Food that Comes in Packaging

Jun 2020	Jul 2021	Feb 2023	Feb 2024
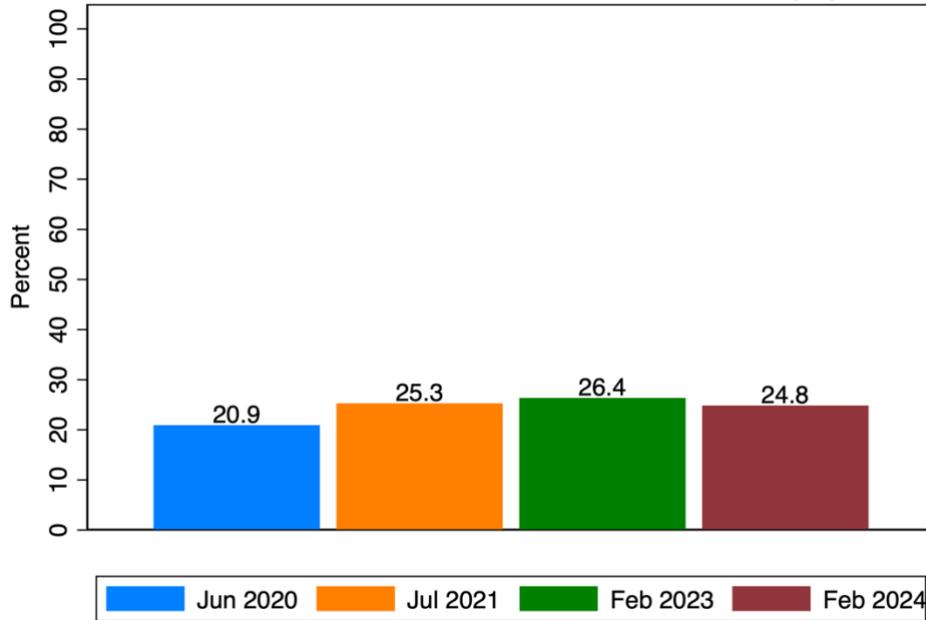
How Often: Buy/Eat Low/Unprocessed Food

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
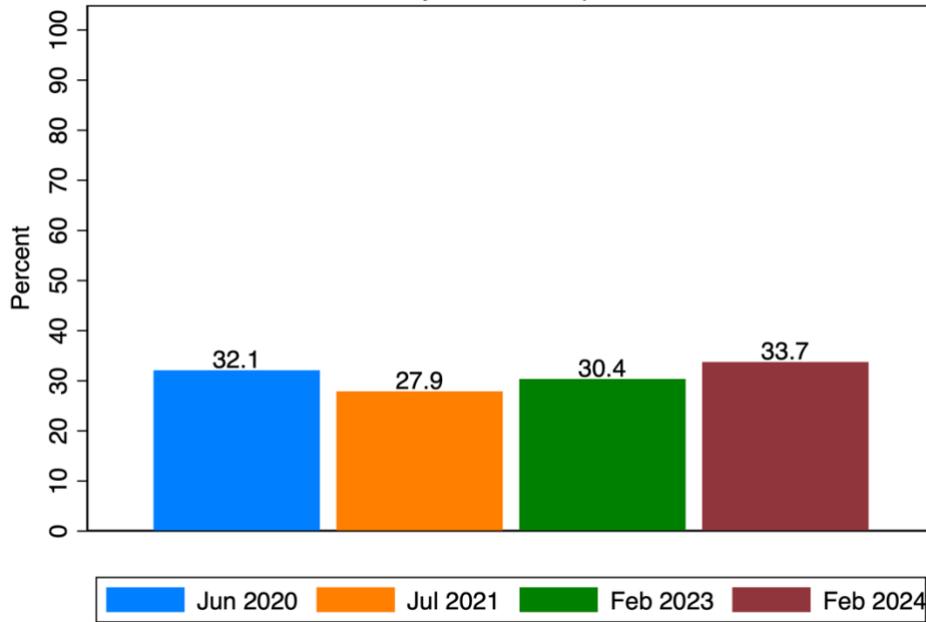
How Often: Buy/Eat Organic

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
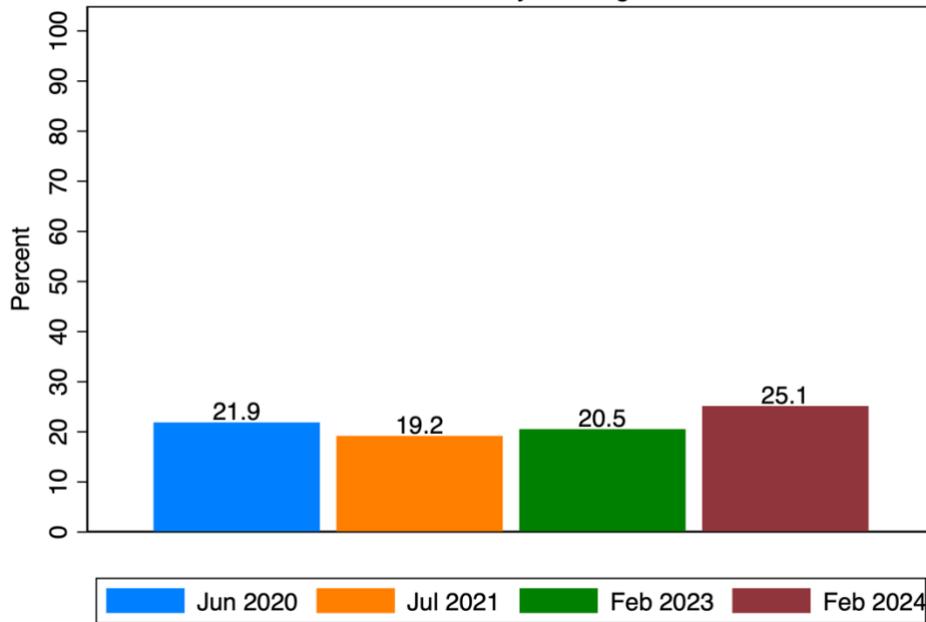
How Often: Buy/Eat Food Grown in SoCal

	Jun 2020	Jul 2021	Feb 2023	Feb 2024
Percent	25.8	35.3	35.4	41.1
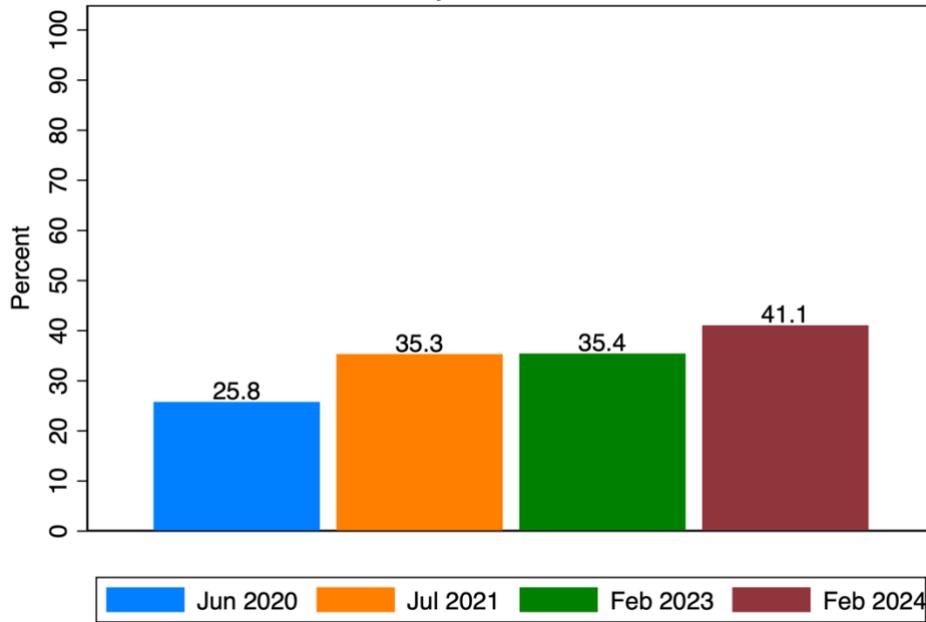
How Often: Limit/Eliminate Meat Consumption

	Jun 2020	Jul 2021	Feb 2023	Feb 2024
Percent	27.2	27.9	28.5	25.3
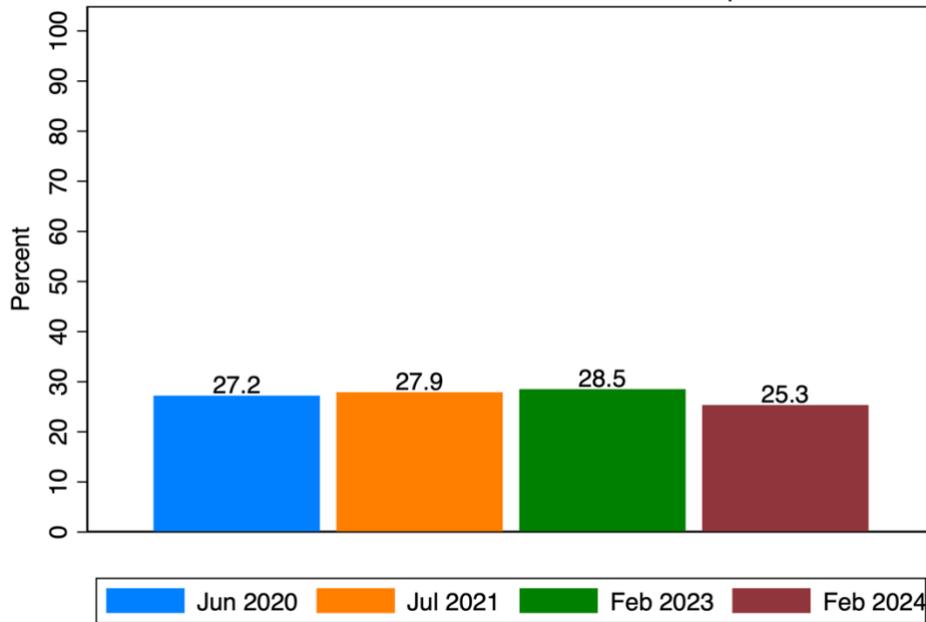
How Often: Limit Food Waste

	Jun 2020	Jul 2021	Feb 2023	Feb 2024

Bar values: 56.5, 55.4, 52.6, 55.2
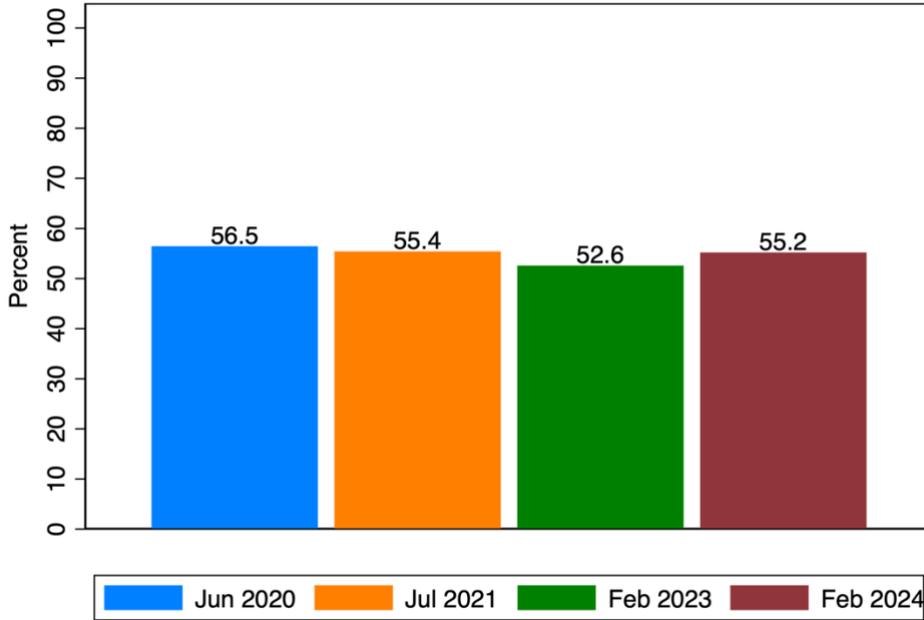
How Often: Limit Electricity Usage

	Jun 2020	Jul 2021	Feb 2023	Feb 2024

Bar values: 46.1, 44.0, 47.5, 41.6
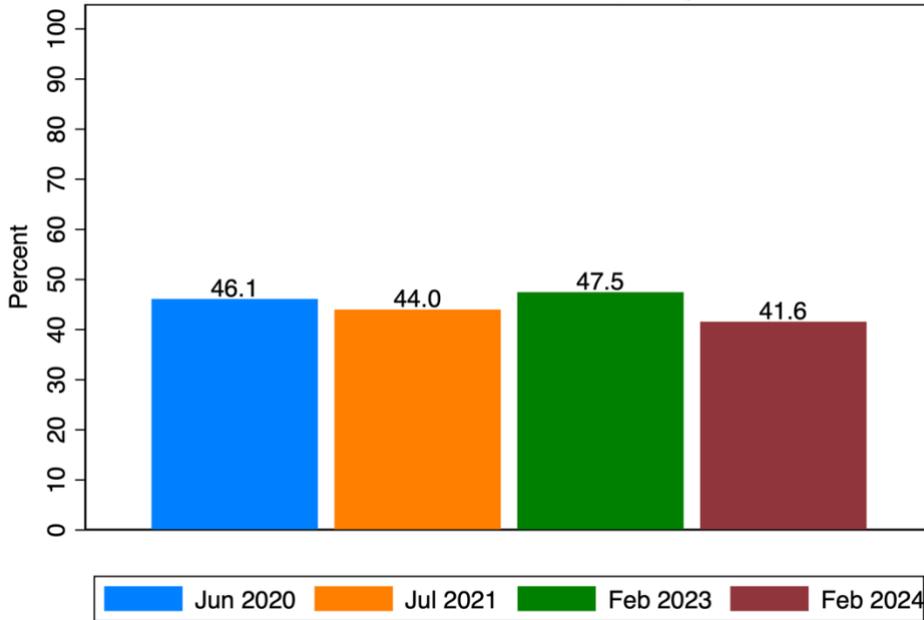
How Often: Limit Water Usage

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
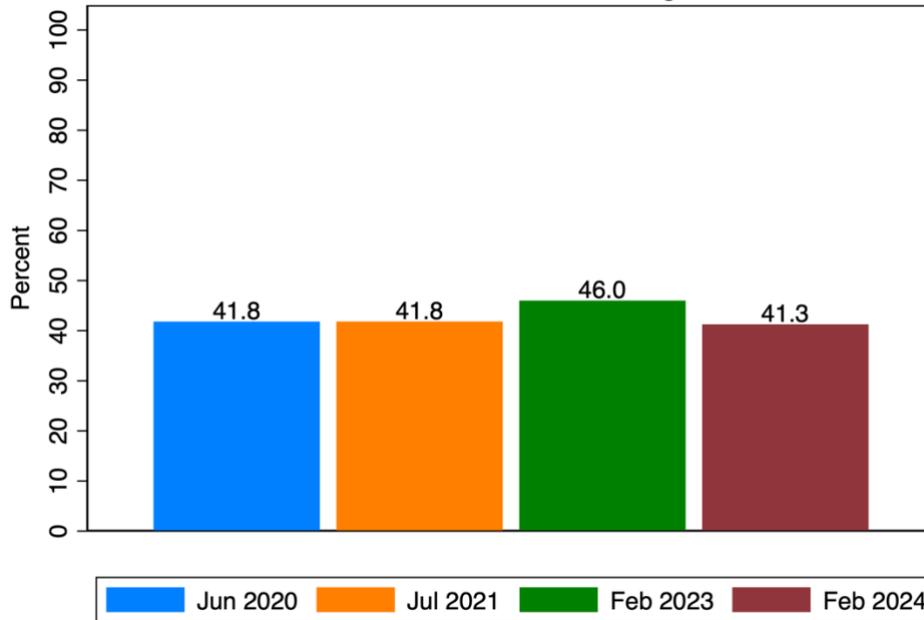
How Often: Limit Car Usage

| Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |

How Often: Compost

	Jun 2020	Jul 2021	Feb 2023	Feb 2024
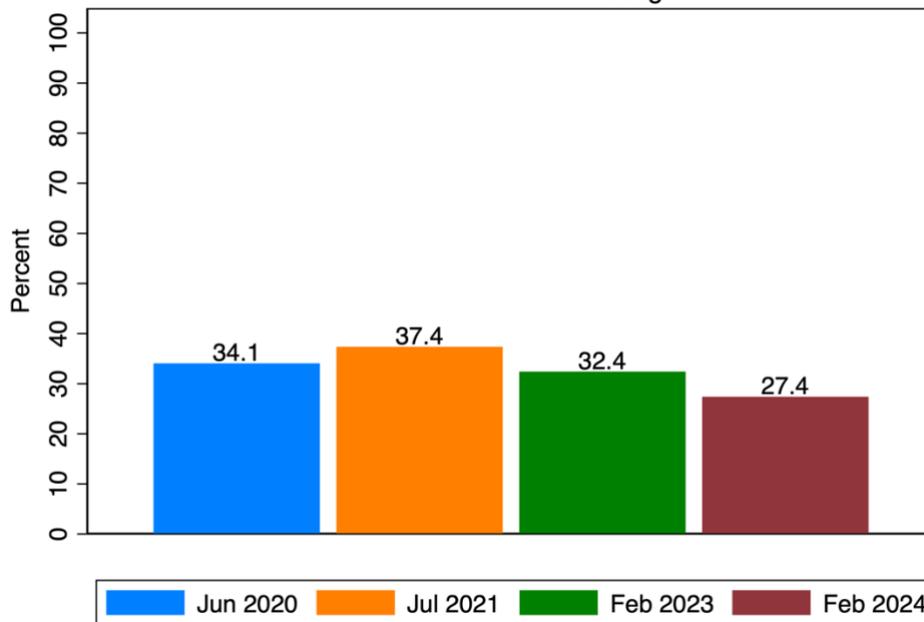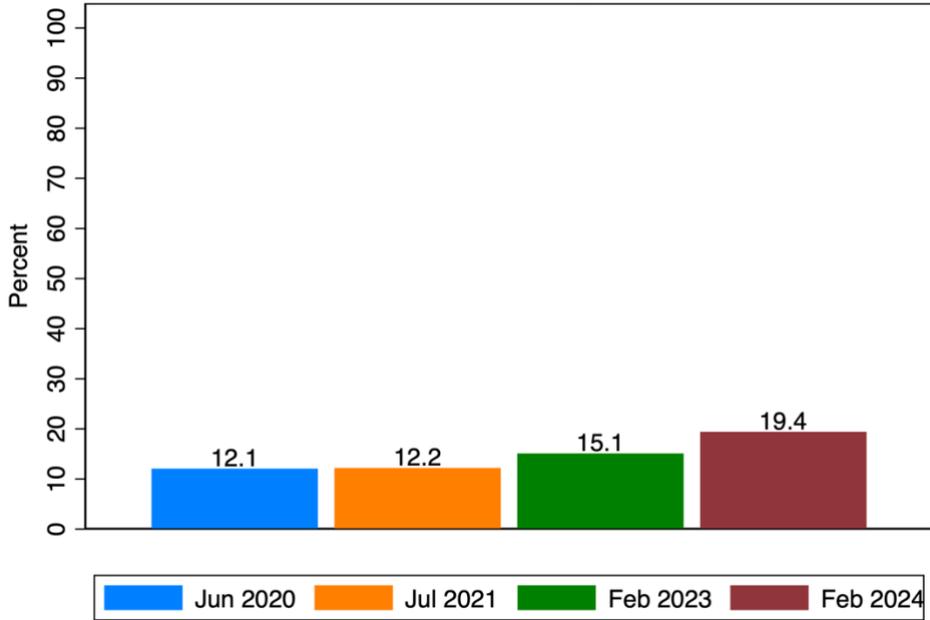
Own/Lease Electric Car
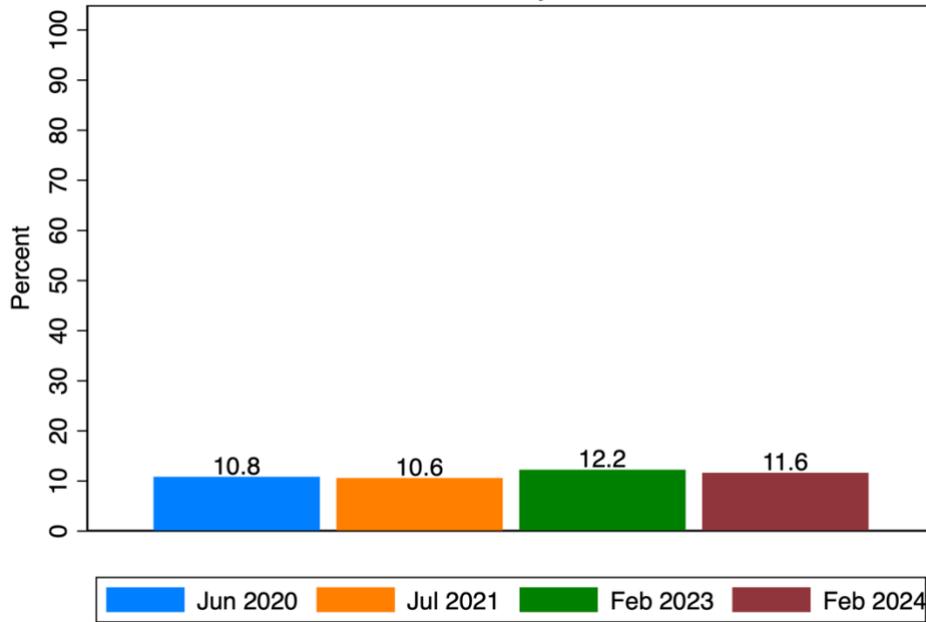

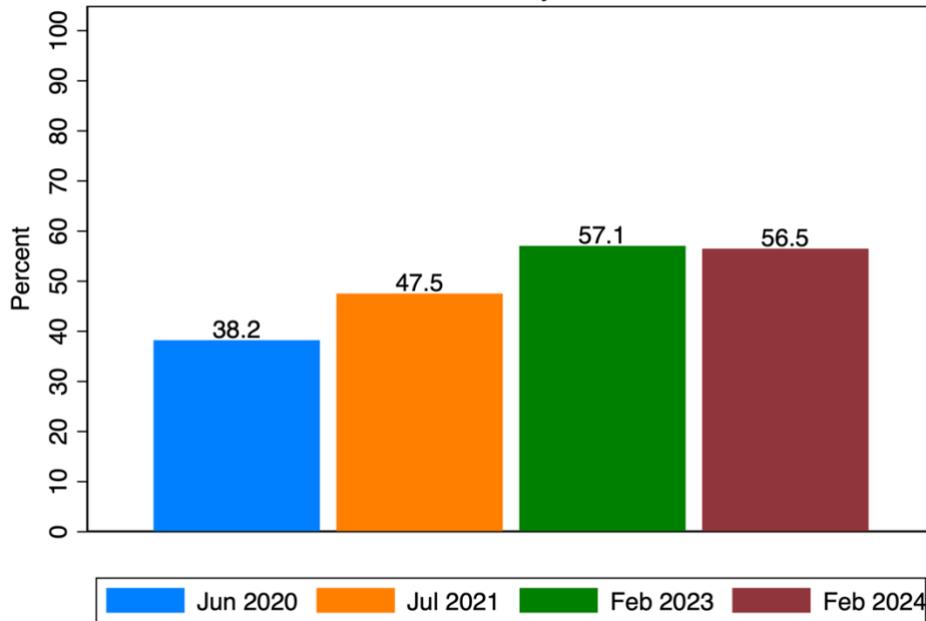|	Jun 2020	Jul 2021	Feb 2023	Feb 2024
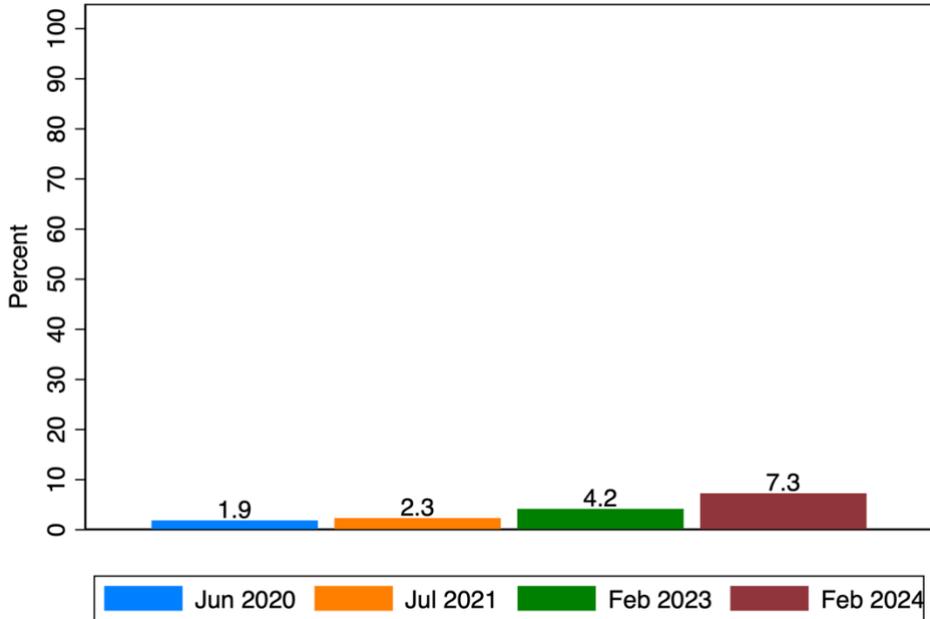
Own/Lease Hydrogen Car

Own/Lease Hybrid Car

49

Own/Lease Hybrid Car

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |
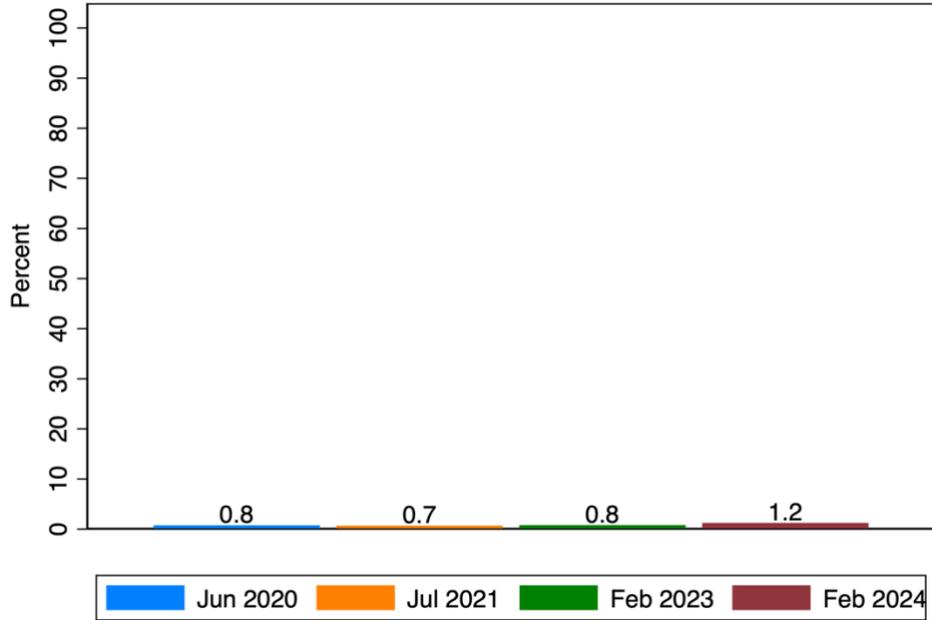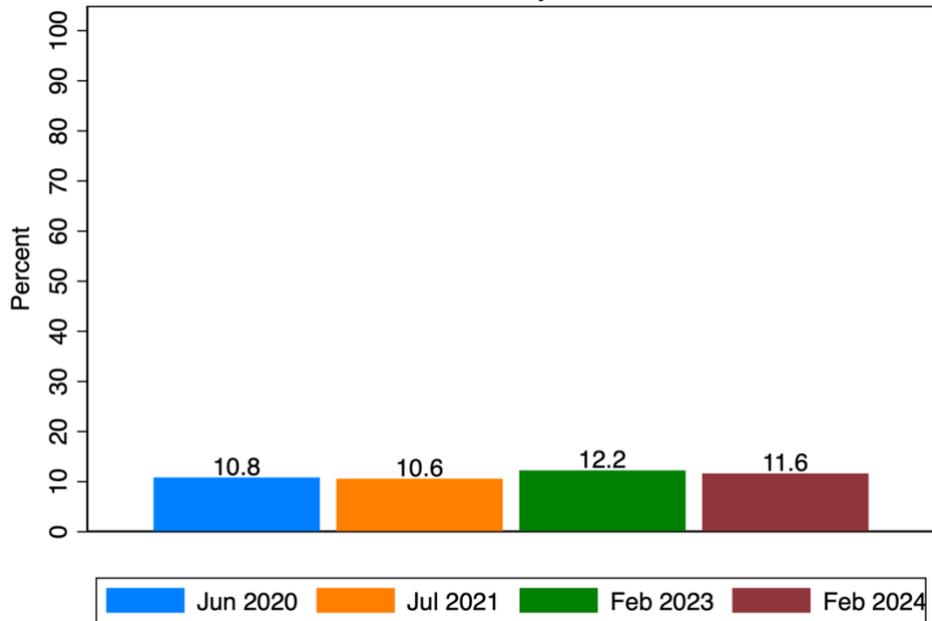
Next Car Likely Electric

| | Jun 2020 | Jul 2021 | Feb 2023 | Feb 2024 |

Natural Disasters

At Least Moderately Prepared for Natural Disaster

Jun 2020	Jul 2021	Feb 2023	Feb 2024

Disaster Impact: Lost Income Due to Inability to Work

Jun 2020	Jul 2021	Feb 2023	Feb 2024
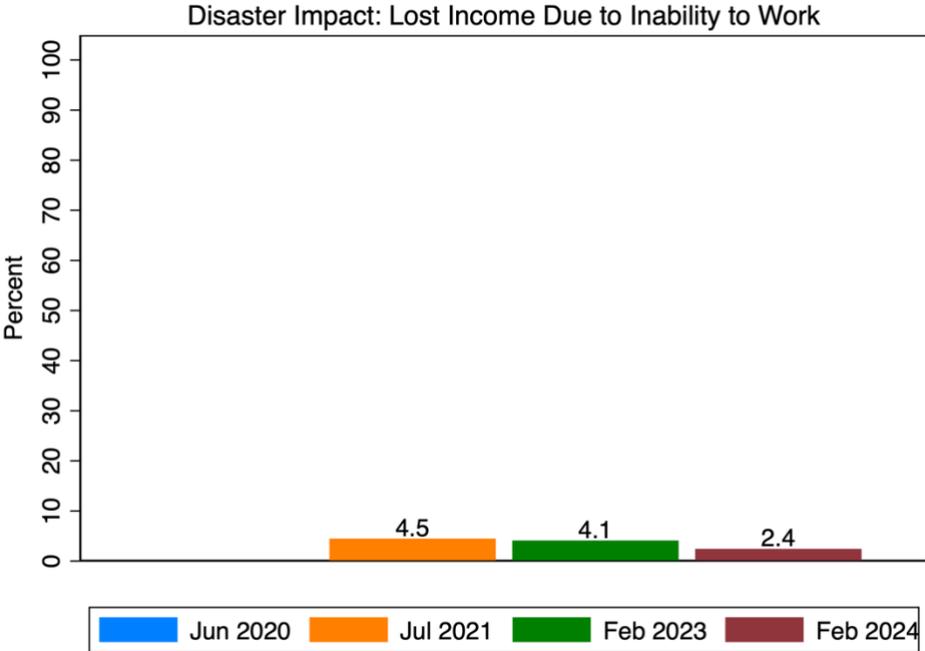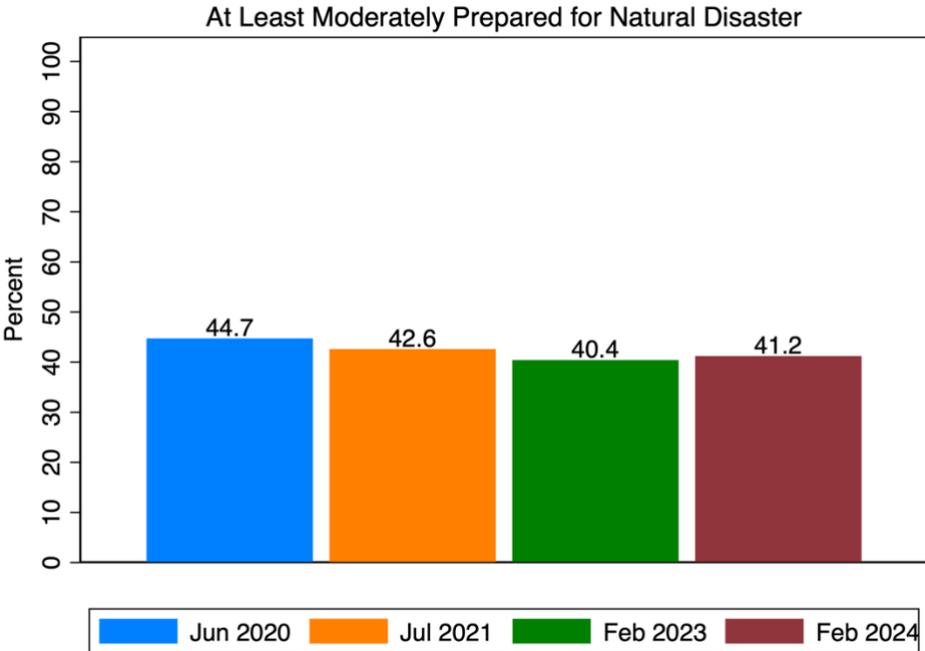
Disaster Impact: Health Problems
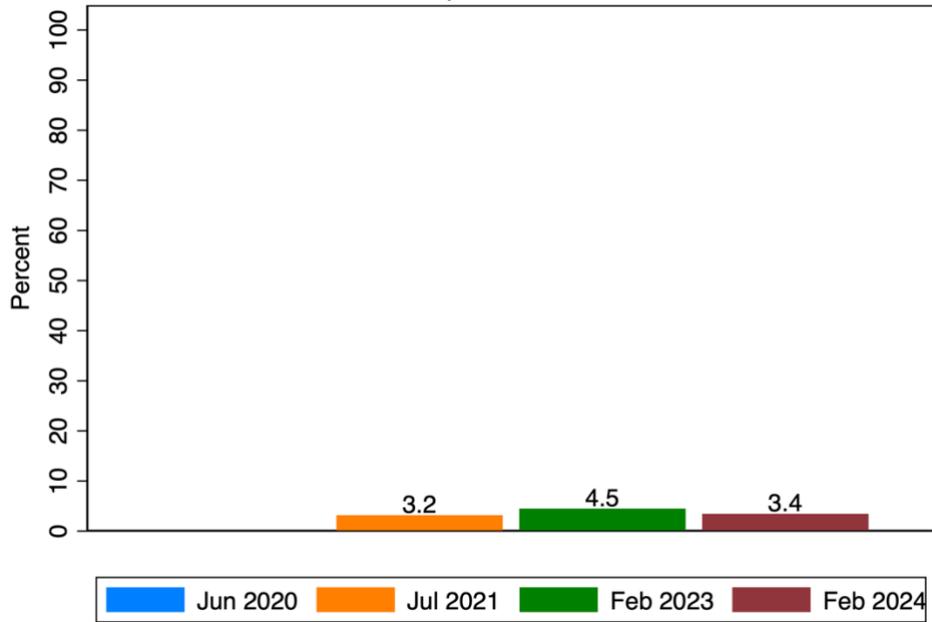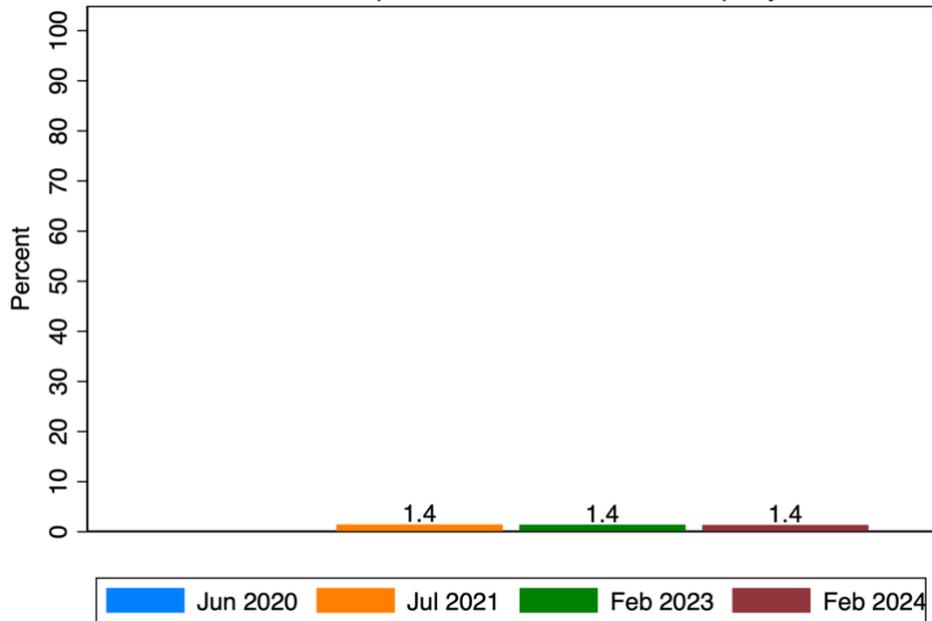
| | 3.2 | 4.5 | 3.4 |

Jun 2020   Jul 2021   Feb 2023   Feb 2024

Disaster Impact: Loss/Destruction of Property

| | 1.4 | 1.4 | 1.4 |

Jun 2020   Jul 2021   Feb 2023   Feb 2024

Disaster Impact: Loss/Destruction of Property

Percent

1.4   1.4   1.4

Jun 2020   Jul 2021   Feb 2023   Feb 2024

Disaster Impact: Loss/Destruction of Posessions

Percent

1.1   1.1   1.2
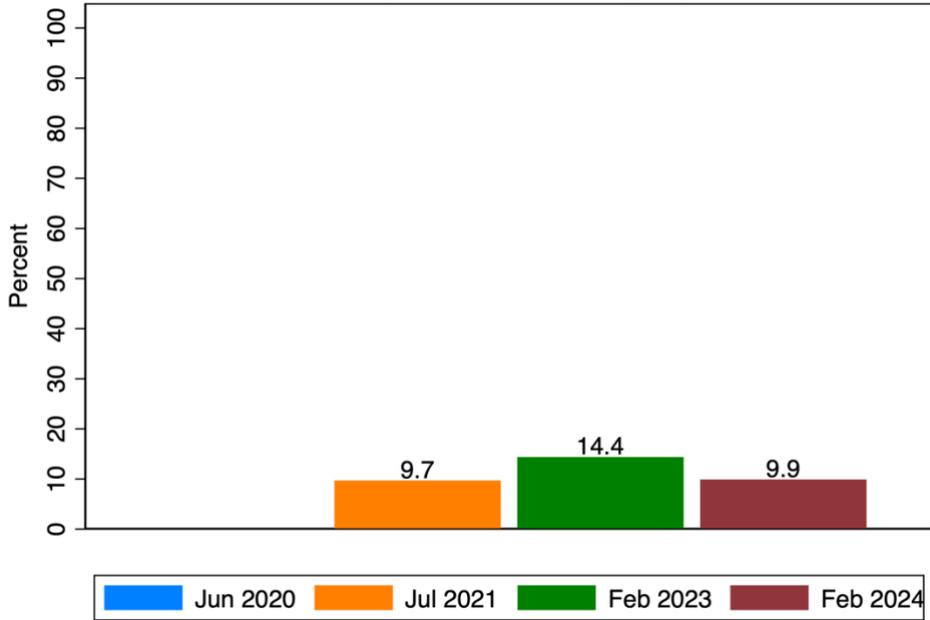
Jun 2020   Jul 2021   Feb 2023   Feb 2024
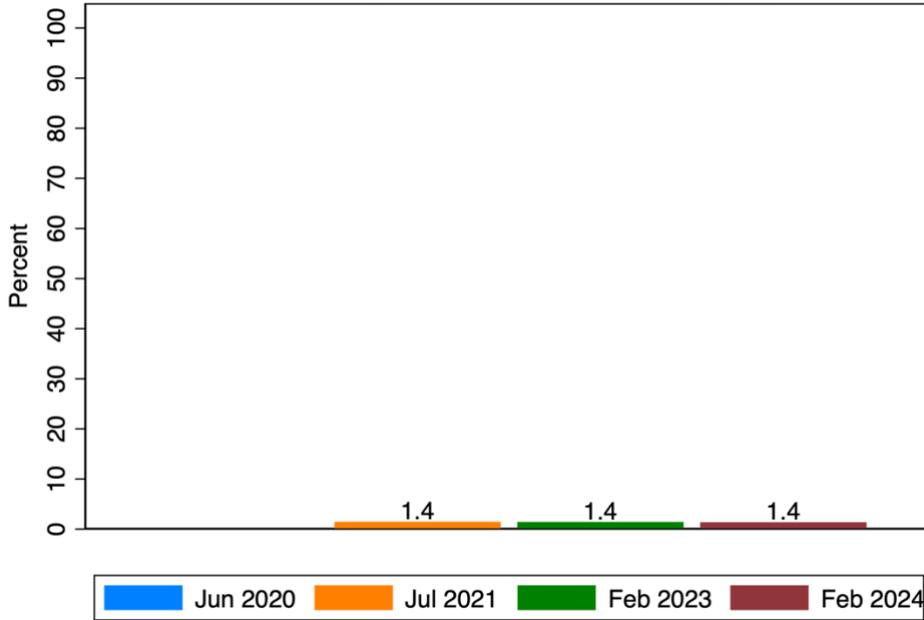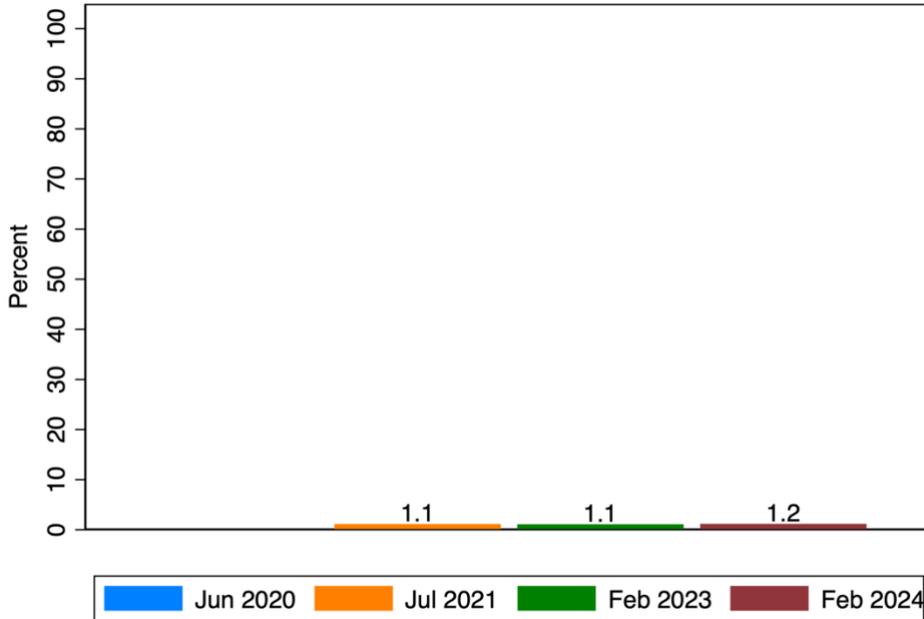
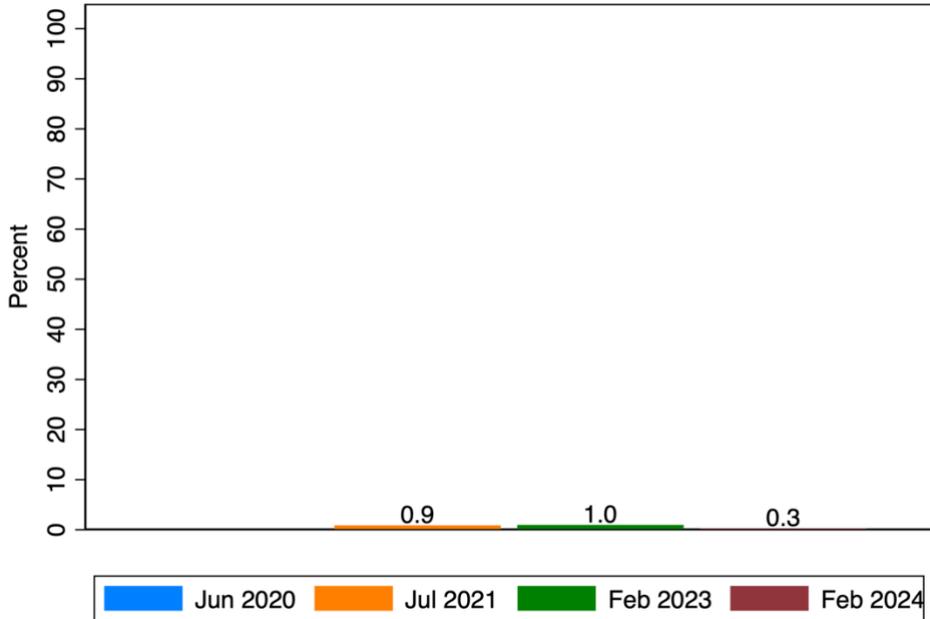Disaster Impact: Loss/Destruction of Posessions
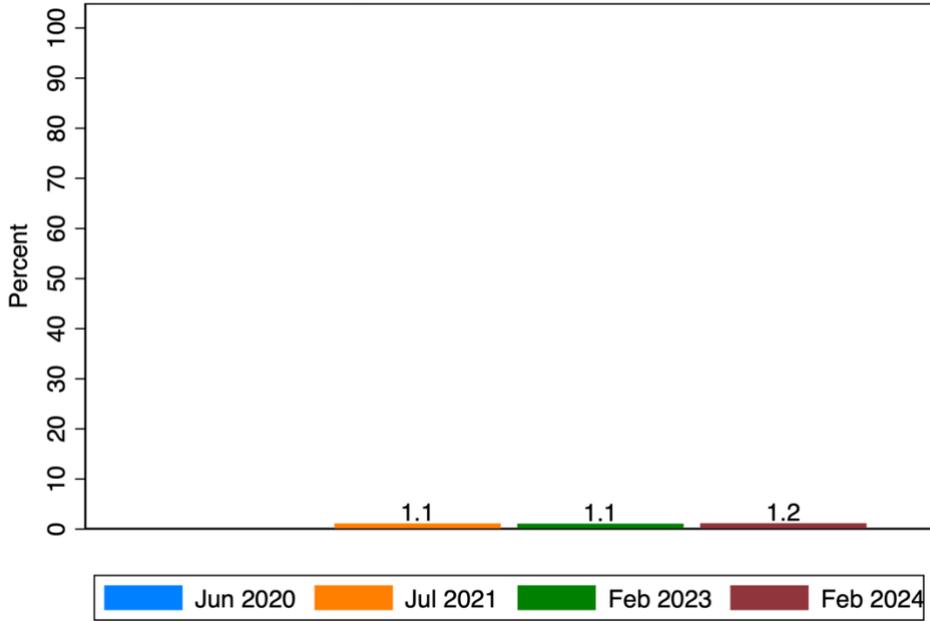
Disaster Impact: Loss/Destruction of Posessions
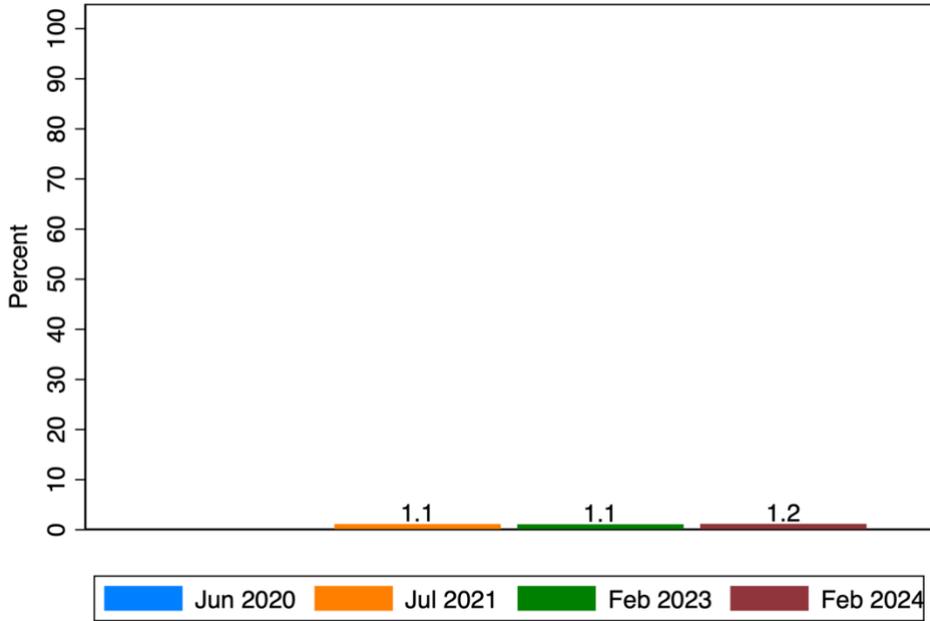
Disaster Impact: Increased Utility Expenses

Disaster Impact: Temporary Evacuation

55

Psychological Distress due to Natural Disaster