BICYCLING
PARTICIPATION STUDY

2022 SURVEY OF U.S. RESIDENTS

peopleforbikes

CORONAINSIGHTS

Contents

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Executive Summary

Research Overview

PeopleForBikes mission is to get more people riding bikes more often. To make bike riding better for everyone.

Accurate information on bicycling participation is essential in evaluating PeopleForBikes overall work and the effectiveness of its key projects.

This report summarizes findings from a bicycling participation survey commissioned by PeopleForBikes and conducted by Corona Insights. The study was designed to measure participation in bicycling and track it over time.

Key project objectives:

- Provide a reliable statistical metric for bicycling participation among U.S. residents aged three or older.
- Implement a methodological approach that can be applied in specific locations to quantify participation and the impact of investments in infrastructure.
- Track bicycling participation rates over time to measure the return-on-investment of programs designed to increase participation.

Learn more about PeopleForBikes: https://www.peopleforbikes.org

peopleforbikes

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Bike Riding Participation

The percentage of Americans who ride bikes was slightly, yet statistically significantly, higher in 2022 (34%) compared to 2018 and 2016 (both at 32%).

- Bike ridership increased from 33% in 2020 to 34% in 2022, though that difference was not statistically significant.
- Adult participation increased from 28% in 2020 to 30% in 2022, a statically significant difference. Adult participation has slowly but steadily increased since 2016, with the greatest participation growth in the 25 to 44 age range.
- Youth (ages 3-17) participation, however, continued a slow but steady decline, decreasing from 52% in 2020 to 49% in 2022, a statistically significant drop.
- Compared to 2020, slight bicycle participation rate increases were seen by people with higher incomes, White Americans, and residents in the Northeast and Western Census regions.
- But overall, participation rates in 2022 were similar to rates in 2020. This is surprising considering other information suggested bike riding increased notably during and since the COVID pandemic.

Bike Riding Frequency

While the *average* number of days ridden (bicycle riding frequency) did not differ in 2022 compared to 2020, the median number of days decreased over a broader time period (2014 to 2022). The median biker rode for 13 days in 2022, compared to 20 days in 2014 and 2016.

The share of bikers riding 6 or more days a year continued to slowly, but steadily, decrease.

- This trend held true for both recreation and transportation riding.
- This trend has been more consistent among youth riders than adult riders.

Key Findings: Contextual and Psychographic Trends

- Worry about safety on a bike increased since 2020.
  - Being worried about getting hit by a motor vehicle increased from 47% in 2020 to 52% in 2022.
  - Being worried about personal safety when riding a bike (e.g., being mugged) increased from 33% in 2020 to 38% in 2022.
- Among non-riders, most (86%) had ridden a bike in the past.
  - However, only 29% intend to in the future.
- A greater proportion of bike riders transported their bike by motor vehicle in 2022 than 2014, 2016, or 2018.
  - 43% of bikers transported by car/truck in 2022.
- Half of Americans had an adult bike at their household, and most of those were reported to be operational. Most youth bikes were reported to be operational too.
  - Tires were the most common reasons for bikes being non-operational.

Key Metrics: Overall

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34%

of Americans* (108. million) rode a bicycle in the past year.

All Bicycling	Participating 1+ Days		Participating 6+ Days	
	%	# (millions)	%	# (millions)
2014	34%	104	24%	73
2016	32%	98	23%	70
2018	32%	98	21%	65
2020	33%	103	22%	68
2022	34%	108	21%	68

59%

of those who rode did so twice a month or less often.

	All Bicycling				
	2014	2016	2018	2020	2022
Occasional (1-24 days)	54%	53%	59%	57%	59%
Moderate (25-103 days)	32%	32%	29%	29%	26%
Committed (104+ days)	14%	14%	12%	14%	15%
Mean	54	54	48	53	55
Median	20	20	15	15	13
Person-days ridden (billions)	5.6	5.3	4.7	5.5	6.0

*of Americans ages 3 or older

Key Metrics: Recreation

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30%

of Americans* (95 million) rode a bicycle for recreation in the past year.

66%

of those who rode for recreation did so twice a month or less often.

Recreation	Participating 1+ Days		Participating 6+ Days	
	%	# (millions)	%	# (millions)
2014	32%	96	21%	64
2016	30%	91	20%	62
2018	29%	90	18%	56
2020	30%	94	19%	59
2022	30%	95	17%	54

	Recreation				
	2014	2016	2018	2020	2022
Occasional (1-24 days)	59%	59%	64%	62%	66%
Moderate (25-103 days)	31%	31%	27%	28%	24%
Committed (104+ days)	10%	10%	9%	11%	10%
Mean	43	42	37	43	39
Median	15	15	10	12	10
Person-days ridden (billions)	4.1	3.8	3.4	4.1	3.7

*of Americans ages 3 or older

Key Metrics: Transportation

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18%

of Americans* (58 million) rode a bicycle for transportation in the past year.

71%

of those who rode for transportation did so twice a month or less often.

Transportation	Participating 1+ Days		Participating 6+ Days	
	%	# (millions)	%	# (millions)
2014	15%	45	9%	27
2016	14%	44	9%	27
2018	14%	45	8%	25
2020	16%	51	9%	28
2022	18%	58	9%	30

	Transportation				
	2014	2016	2018	2020	2022
Occasional (1-24 days)	64%	64%	69%	69%	71%
Moderate (25-103 days)	25%	26%	22%	21%	19%
Committed (104+ days)	11%	11%	9%	10%	11%
Mean	40	42	37	39	39
Median	10	10	10	9	6
Person-days ridden (billions)	1.8	1.8	1.6	2.0	2.3

*of Americans ages 3 or older

Detailed Results

Reporting Note

Throughout this report, up facing (green) and downfacing (orange) arrows indicate 2022 increases and decreases (respectively) from 2020 that were statistically significant when the likelihood of a false positive rate was less than 5%. That is, out of 100 statistically significant results, we could expect 5 of those results to be due to random chance rather than actual differences between years or differences within the population.

Also, note that statistically significant results do not necessarily indicate the importance of the result. Small or trivial differences between large groups may be statistically significant. Conversely noteworthy trends, especially between or within smaller populations, may be important, even if not statistically significant.

Detailed Findings

Bicycling Participation Trends

About one-third of Americans rode a bike last year.

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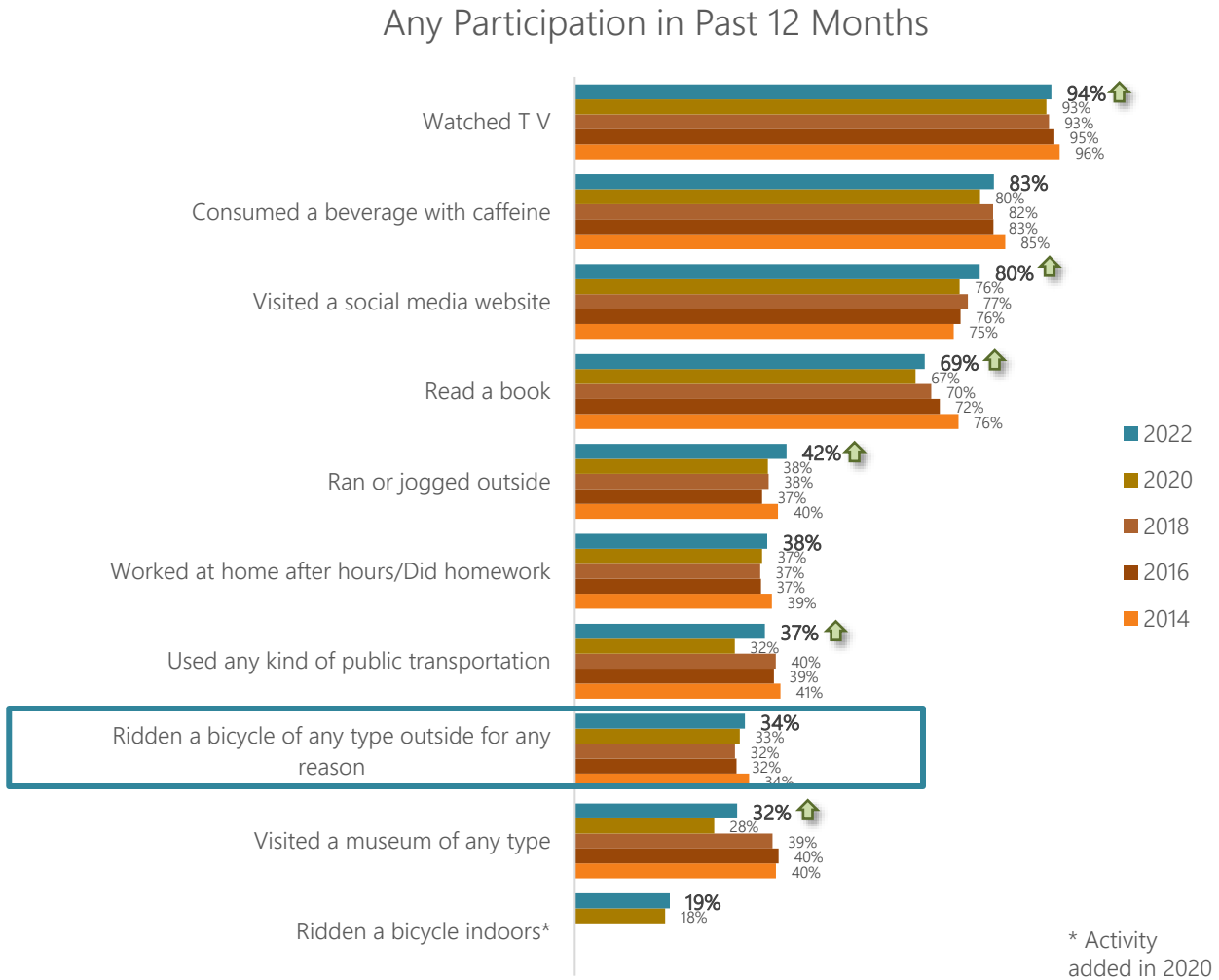
- 34% of Americans rode a bike outside in the past year, marking a return to 2014 levels.
- 19% rode a bike indoors (e.g., spin class, riding on a trainer/rollers).
- Running increased notably compared to 2020, and so did social media use.
- Public activities such as visiting a museum and riding a bus/train have mostly bounced back to pre-pandemic levels.
- Bicycle riding remained relatively uncommon compared to other activities listed.



Q1. In the past 12 months, how many days have you participated in the following activities?

Base: All (2014: 25,051; 2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

Bicycle participation continued to slide down for youth, but it increased for middle-aged Americans.

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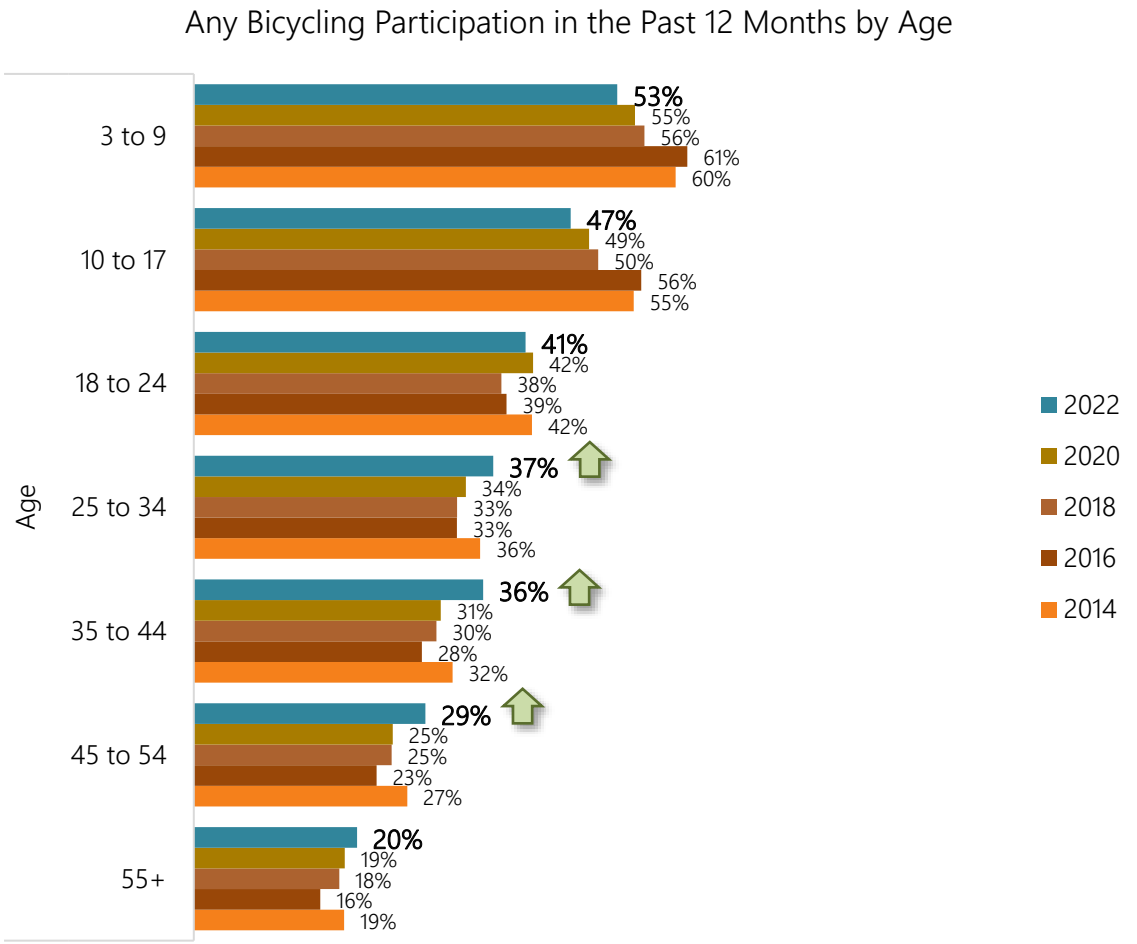
- Although a majority (53%) of 3- to 9-year-olds biked in 2022, their participation continued to slip from 2016 levels.
  - Participation also continued to slip for 10- to 17-year-olds.
- However, bicycling participation increased in 2022 (compared to 2020) among 25- to -54-year-olds.
  - 17% increase among 35-44-year-olds
  - 16% increase among 45-54-year-olds
  - 10% increase among 25-34-year-olds



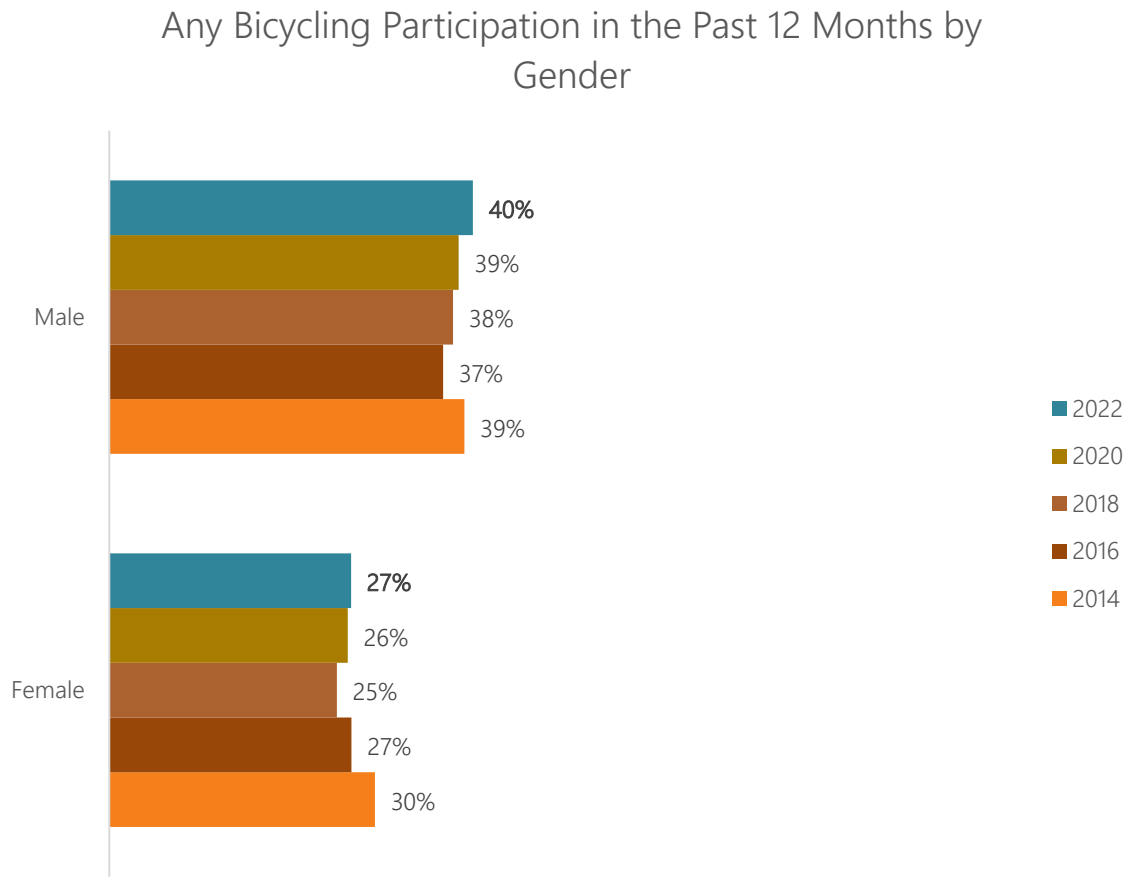
Q1a. In the past 12 months, how many days have you participated in bicycling?

Base: All (2014: 25,051; 2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

Males continued to be more likely than females to bike.

CORONAINSIGHTS

- Bike riding among males inched up from 2016 but was not statistically greater than 2020.
- Bike riding among females inched up from 2018 but was not statistically greater than 2020.



Q1a. In the past 12 months, how many days have you participated in bicycling?

Base: All (2014: 25,051; 2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

Middle-income Americans were less likely than others to be bike riders.

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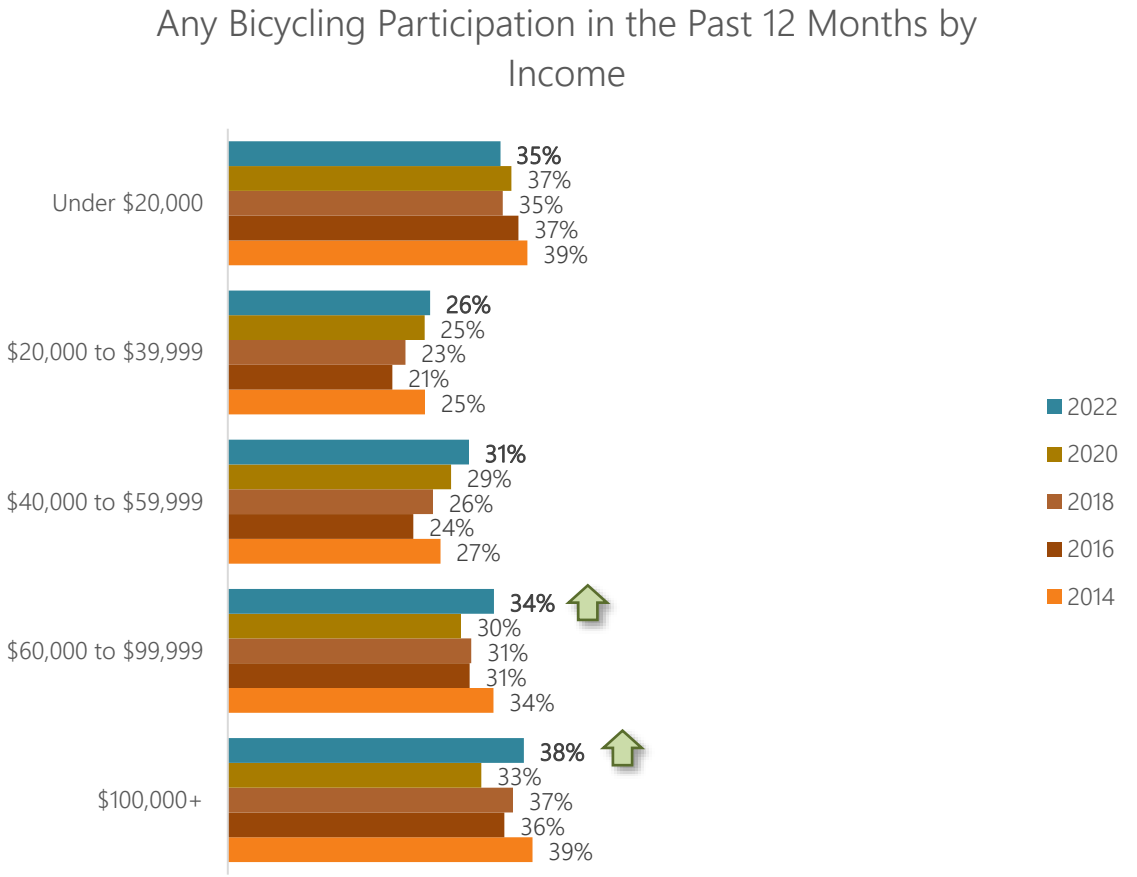
- Lower-income Americans (household income less than $20,000) were more likely to be bike riders than middle-income Americans (income between $20,000 and $59,999).
- Higher-income Americans (household income $100,000 or more) were more likely to be bike riders than people in any other income category.
  - They also participated in biking at a greater rate in 2022 than 2020.
- Since 2016, bike riding has steadily increased among people living in households with incomes between $20,000 and $59,999, even though the increase between 2020 and 2022 was not statistically significant.



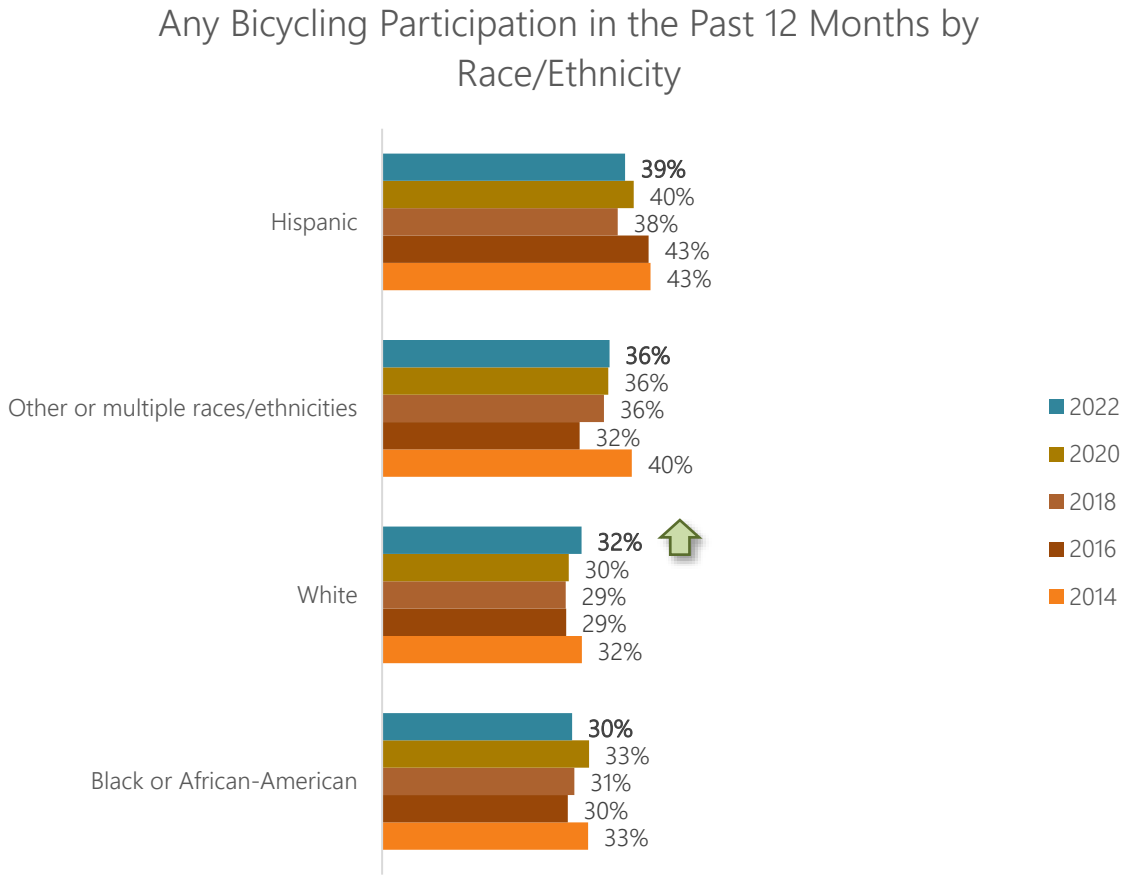
Q1a. In the past 12 months, how many days have you participated in bicycling?

Base: All (2014: 25,051; 2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

Hispanic residents continued to be the racial/ethnic group most likely to ride a bike.

CORONAINSIGHTS

- About two-in-five Hispanic residents (3 or older) rode a bike at least one day in the past 12 months - a percentage similar to prior years.
- There was not much difference across years in the percentage of bike riders by race or ethnicity, with the exception of a slight uptick among White Americans.



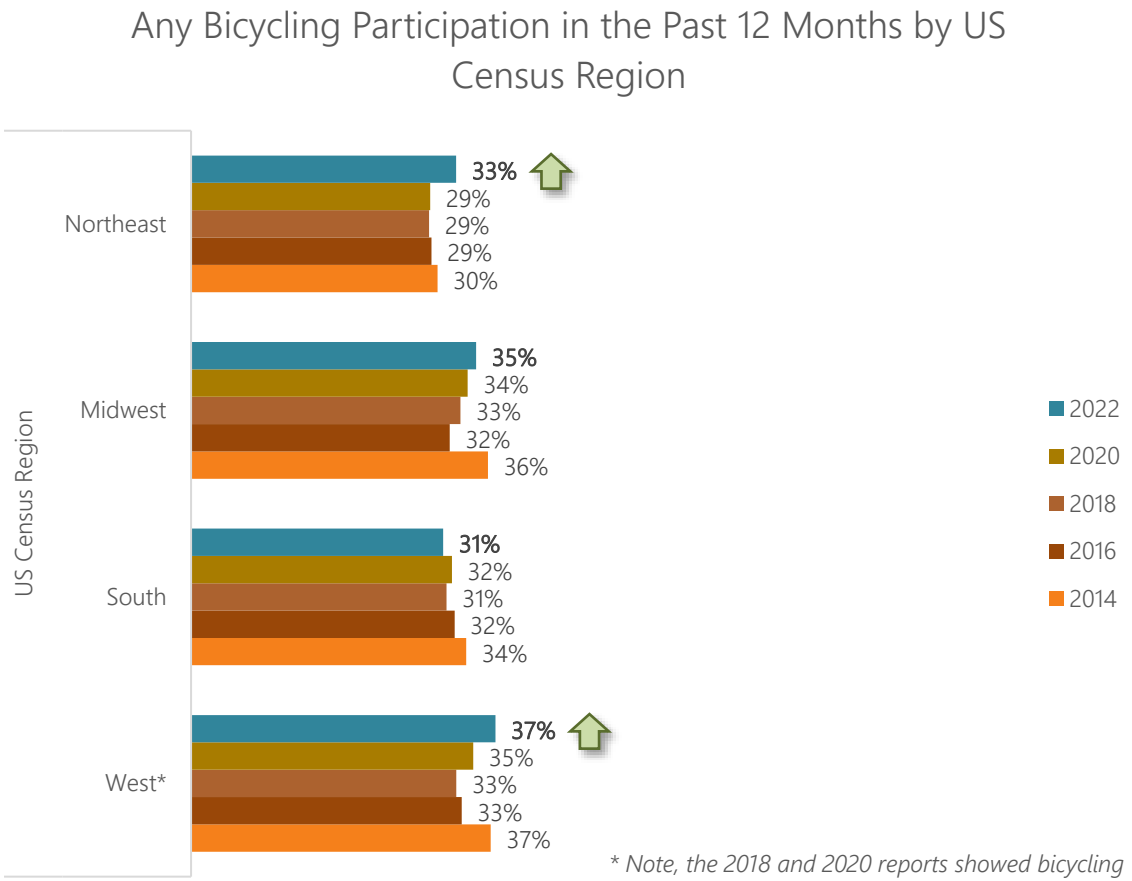
Q1a. In the past 12 months, how many days have you participated in bicycling?

Base: All (2014: 25,051; 2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

In the Northeast and West, bike riding became more common in 2022 than 2020.

CORONAINSIGHTS

- The percentage of residents who rode a bike in the Northeast region increased by 14% since 2020.
  - Bike riding also ticked up in the West region.
- Akin to 2020, bike riding was more common in the West region than in the rest of the country.
- In 2022, bike riding was less common in the South than the rest of the country.



** Note, the 2018 and 2020 reports showed bicycling participation in West was 29% for both years. Our analysis this year showed it was actually 33% in 2018 and 35% in 2020.*

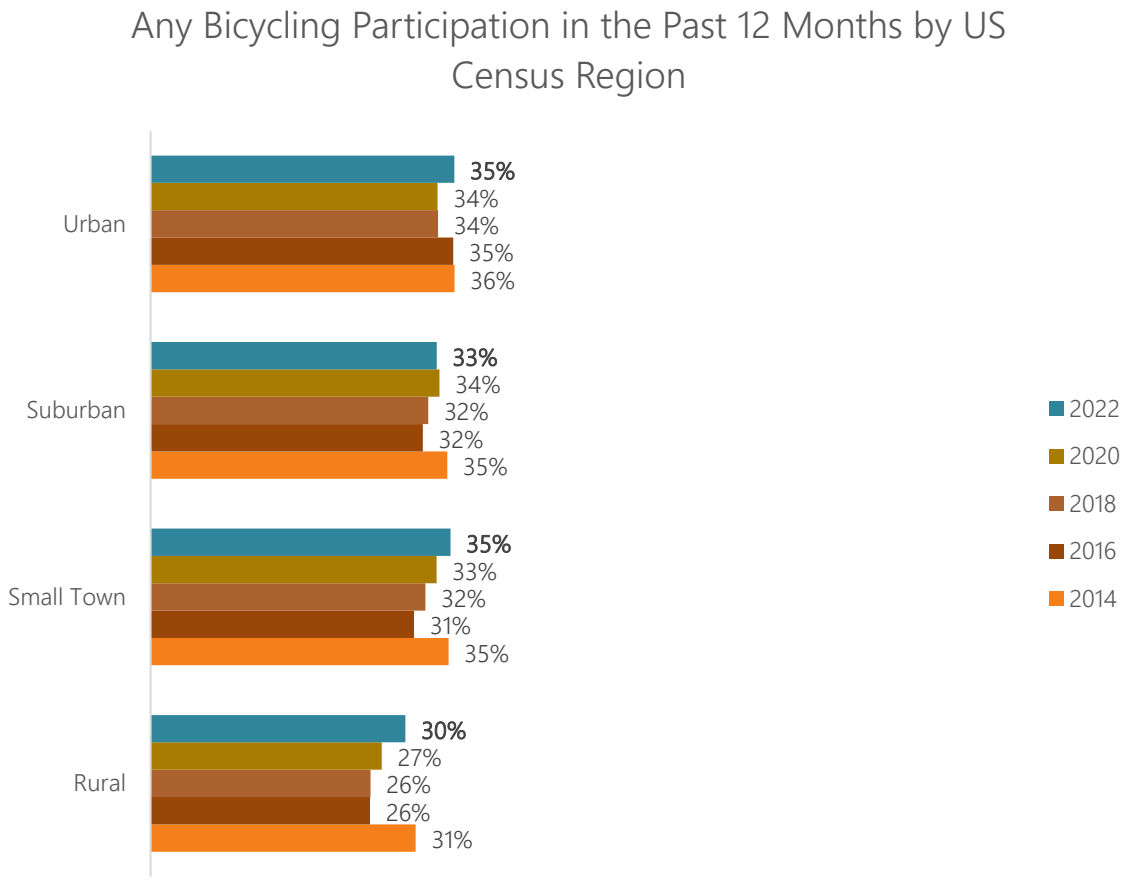
Q1a. In the past 12 months, how many days have you participated in bicycling?

Base: All (2014: 25,051; 2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

The rate of bicycling participation is similar across neighborhood settings.

CORONAINSIGHTS

- Bicycling was about as common for people living in urban, suburban, and small town areas.
- Bicycling has become more common in small towns since 2016, but was not statistically greater in 2022 than 2020.
- Americans living in rural areas were slightly less likely than others to bike ride.



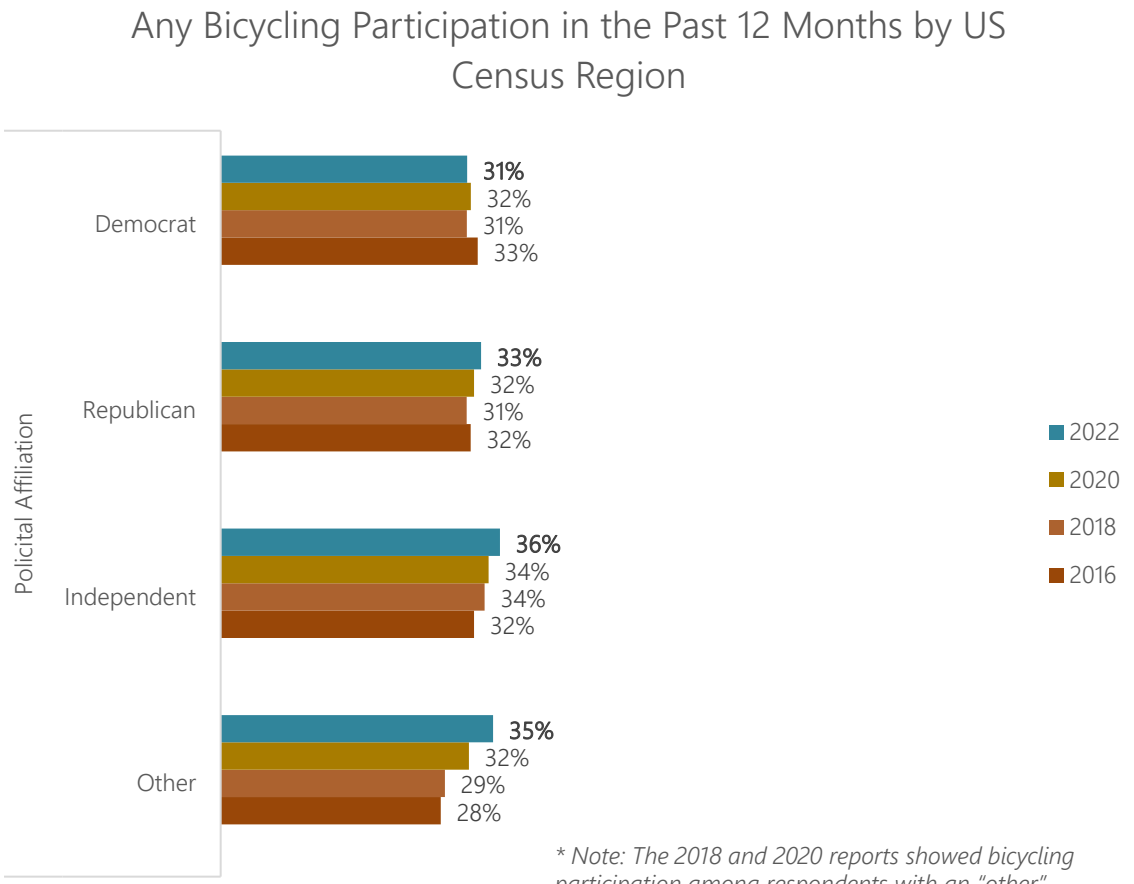
Q1a. In the past 12 months, how many days have you participated in bicycling?

Base: All (2014: 25,051; 2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

Democrats and Republicans were equally likely to have ridden a bike.

CORONAINSIGHTS

- In 2022, respondents with an independent affiliation were more likely than democrats to be bike riders.
- A greater proportion of independents rode bikes in 2022 compared to 2016. Likewise, a greater proportion of people with an other affiliation rode bikes in 2022 compared to 2016.
- *Note: This question was not asked in 2014*



** Note: The 2018 and 2020 reports showed bicycling participation among respondents with an "other" political affiliation as 31% in 2018. Our analysis this year showed it was actually 29% in 2018.*

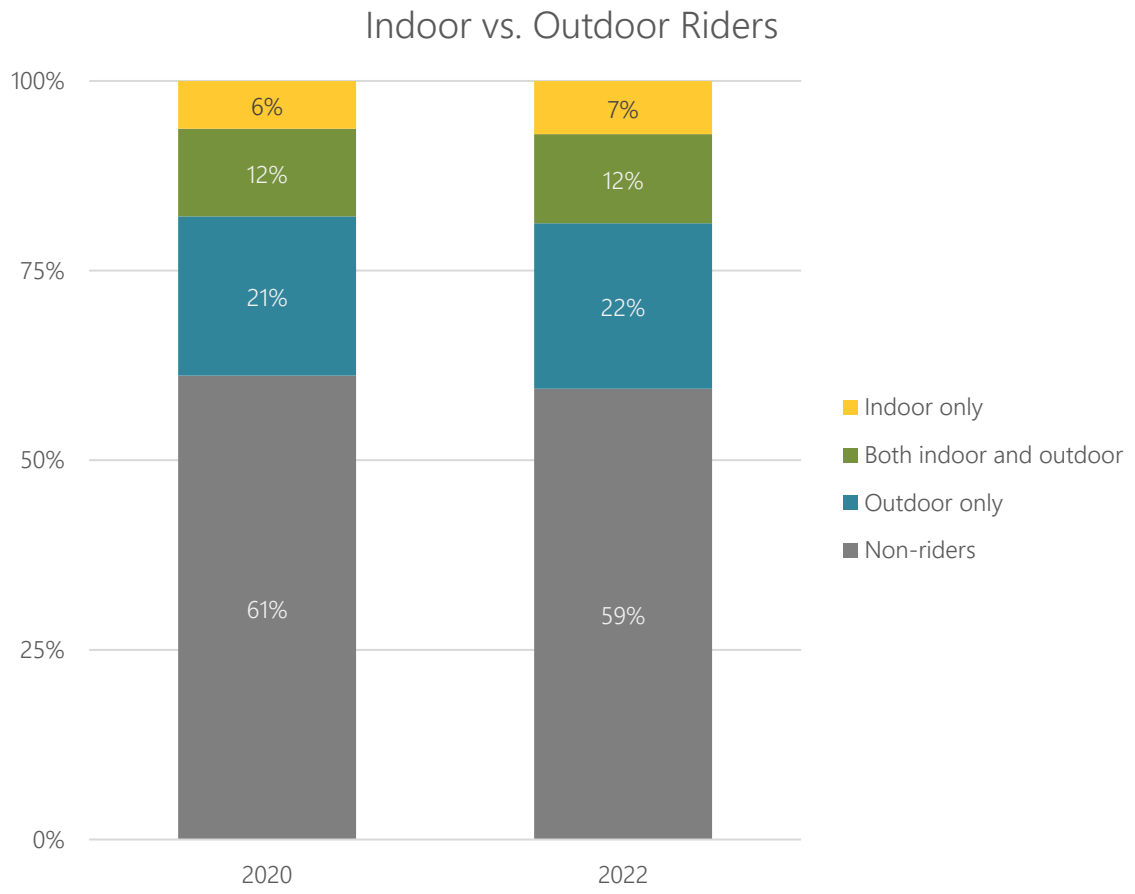
Q1a. In the past 12 months, how many days have you participated in bicycling?

Base: All (2016: 24,230; 2018: 21,896; 2020: 22,123; 2022: 24,216)

Outdoor verses indoor ridding did not change much since 2020.

CORONAINSIGHTS

> Among bike riders in 2022, just over half rode outdoors only.



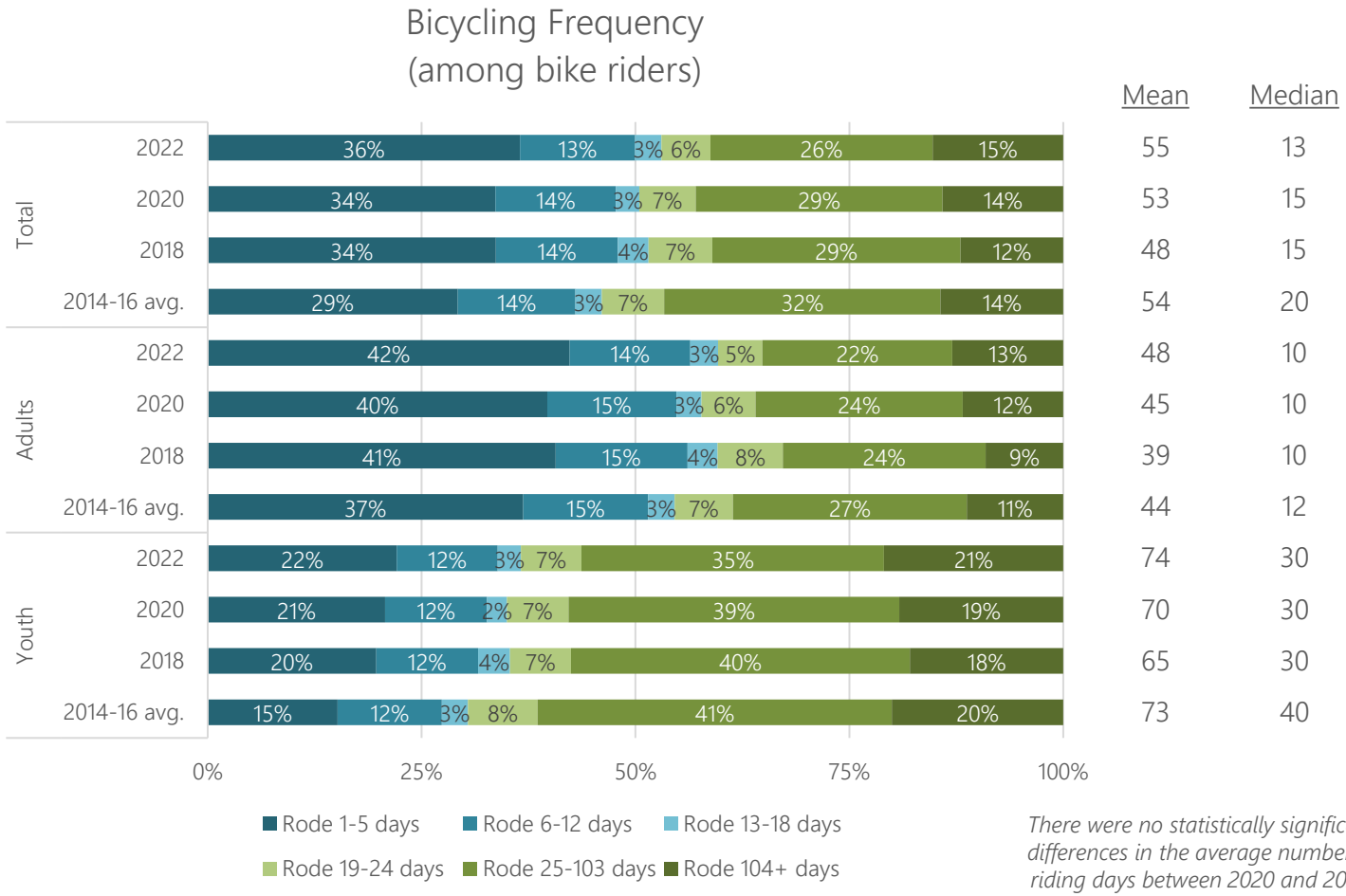
Q1. In the past 12 months, how many days have you participated in the following activities?

Base: All (2020: 22,123; 2022: 24,216)

Youth continued to ride more days per year than adults.

CORONAINSIGHTS

- Half of youth bike riders were reported to have ridden at least 30 days in the past year, a similar finding to prior years.
- Half of adult bike riders reported riding at least 10 days in the past year.
- However, the proportion of bikers riding 1-5 days has slowly but steadily increased since 2014.
- Conversely, the proportion of bikers riding 25-103 days per year has decreased since 2014.



There were no statistically significant differences in the average number of riding days between 2020 and 2022.

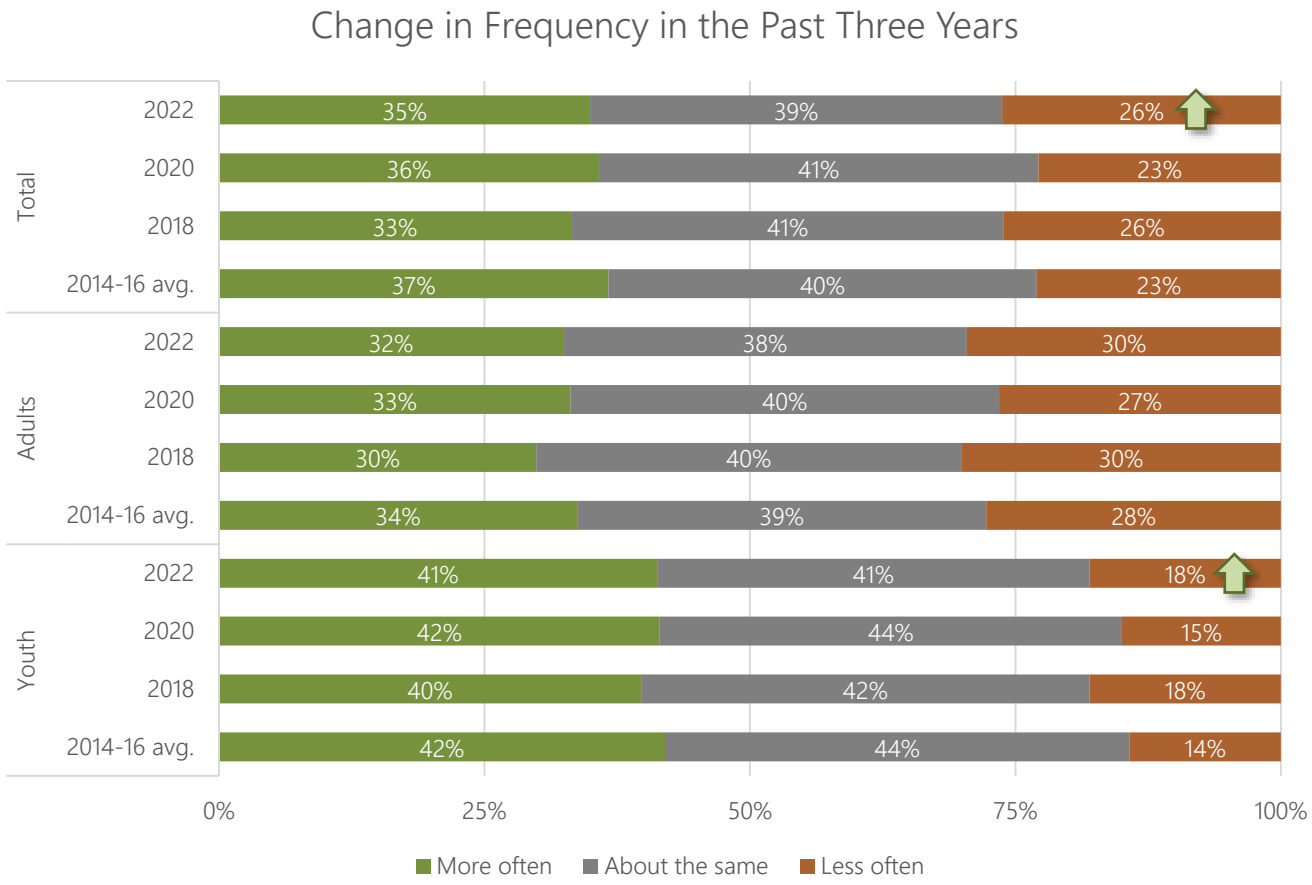
Q1a. In the past 12 months, how many days have you participated in bicycling?

Overall Base: Those who rode a bicycle at least once in the past 12 months (2014: 11,233; 2016: 10,358; 2018: 9,072; 2020: 9,144; 2022: 10,467)

Most bikers rode about the same or more often in the past year as they did three years ago.

CORONAINSIGHTS

- In 2022, 26% of all bikers reported biking less often this year than they did three years ago. This was three percentage points higher than findings in 2020 - a statistically significant increase.
- Just over one-third of all bikers rode more often than they did three years ago.

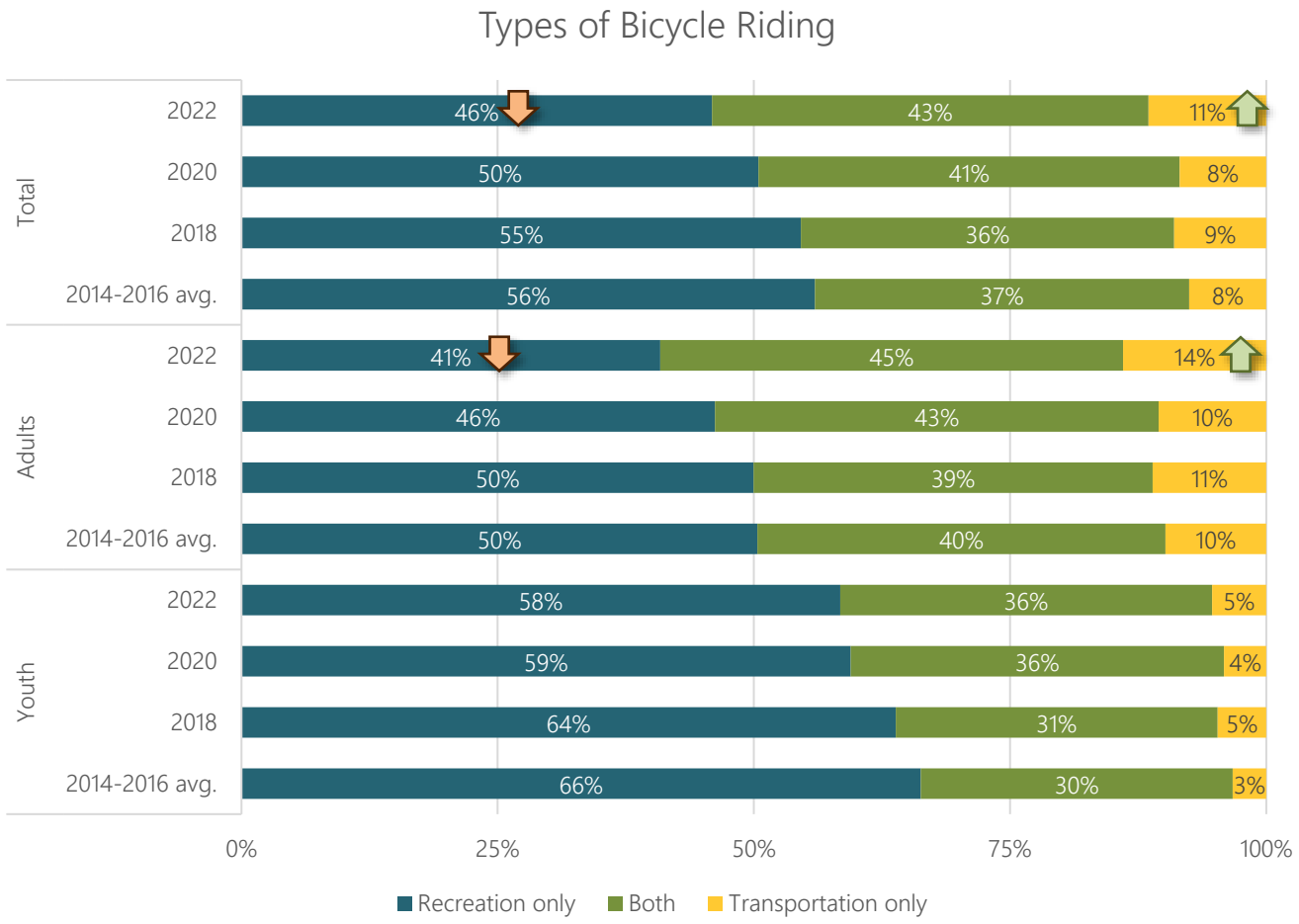


Q2. Over the past 12 months, did you ride a bicycle more often, about the same, or less often than three years ago?
Overall Base: Those who rode a bicycle at least once in the past 12 months (2014: 11,233; 2016: 10,358; 2018: 9,072; 2020: 9,144; 2022: 10,467)

Bicycling for recreation alone was still common, but less so than prior years.

CORONAINSIGHTS

- Bicycling for both recreation and transportation has increased.
  - In 2022, 43% of bikers rode for both recreation and transportation, up from 36% in 2014.
- Bicycling for "transportation only" increased among all riders and among adult riders, compared to 2020.



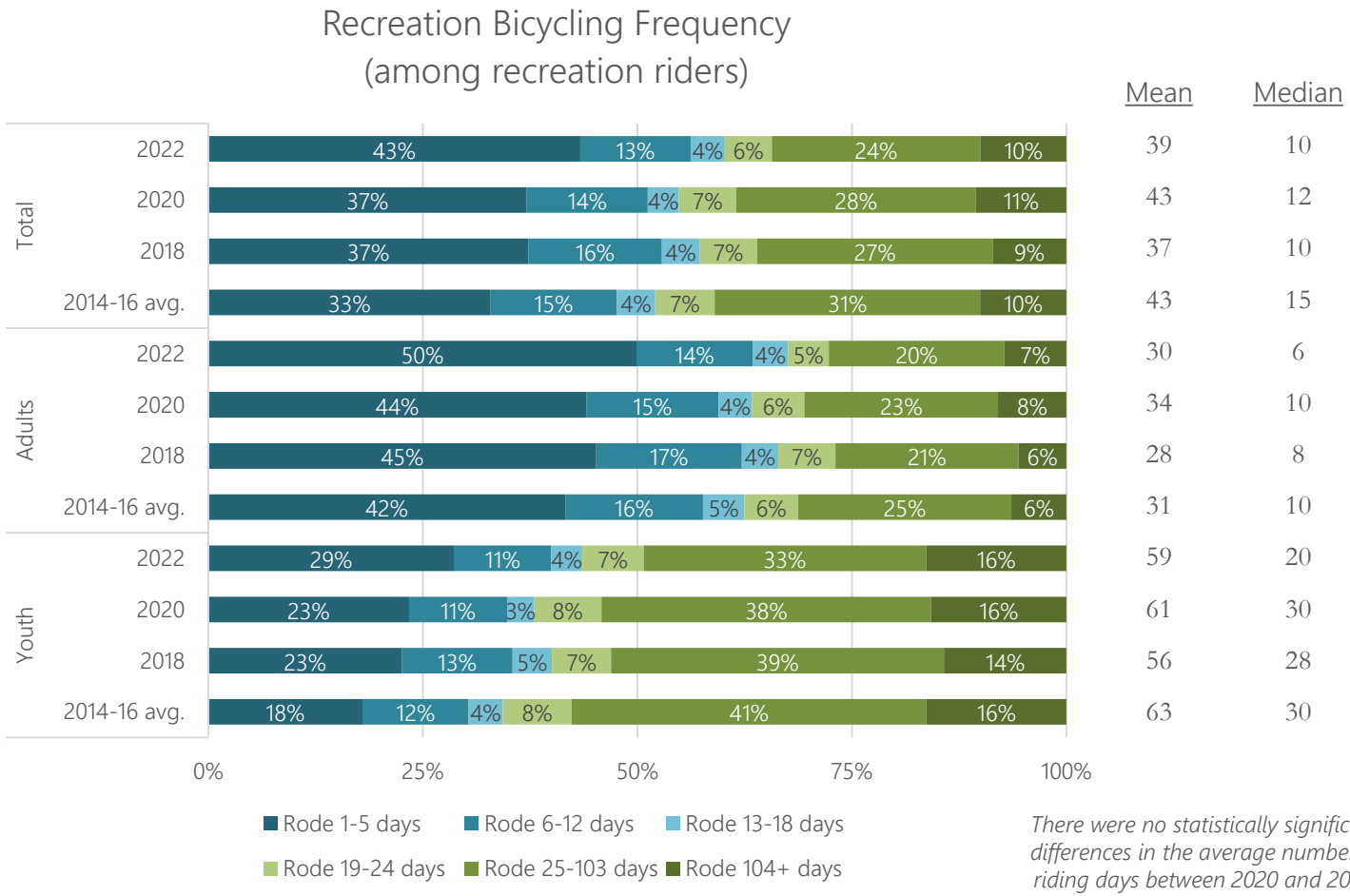
Q4. How many of those days did you participate in each of the following types of bicycling?

Overall Base: Those who rode a bicycle at least once in the past 12 months
(2014: 11,233; 2016: 10,358; 2018: 9,072; 2020: 9,144; 2022: 10,467)

Half of recreation bikers rode 10 days or fewer.

CORONAINSIGHTS

- The distribution of annual recreation riding days has slightly but steadily moved towards more infrequent (1-5 day) riders since 2014.
  - In 2022, 43% of all recreation bikers rode fewer than 6 days, up from 33% in 2014.
  - In 2022, 34% of recreation bikers rode 25 or more days, down from 41% in 2014.
- The pattern of increasing infrequent recreation riders was more evident among youth than adults.



There were no statistically significant differences in the average number of riding days between 2020 and 2022.

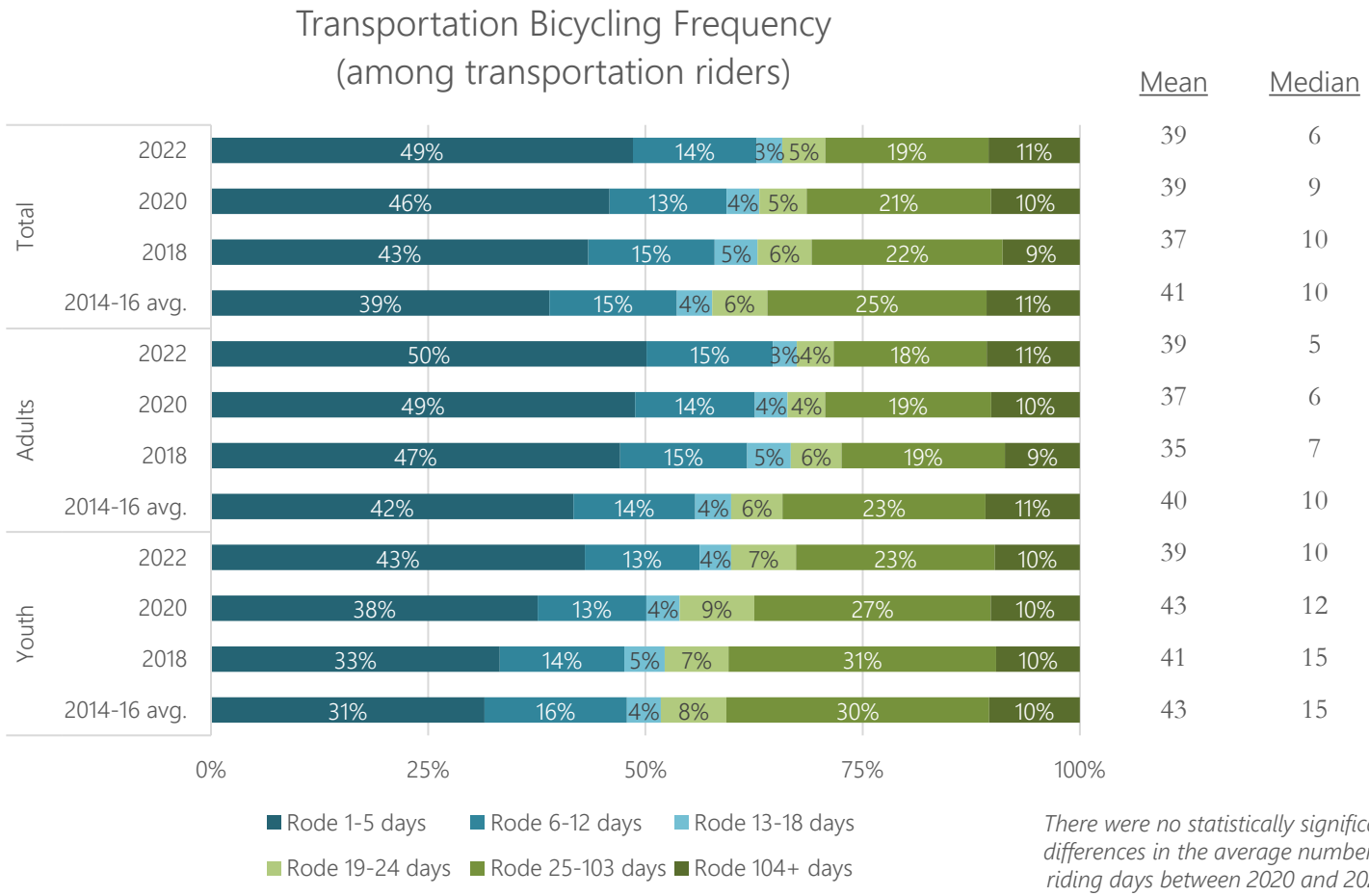
Q4. How many of those days did you participate in each of the following types of bicycling?

Overall Base: Those who ride for recreation
(2014: 10,540; 2016: 9,798; 2018: 8,423; 2020: 8,546; 2022: 9,695)

Half of transportation bikers rode six days or fewer.

CORONAINSIGHTS

- The distribution of annual transportation riding days has slightly but steadily decreased since 2014.
  - In 2022, almost half (49%) of all transportation bikers rode fewer than 6 days, up from 40% in 2014.
  - In 2022, 30% of transportation bikers rode 25 or more days, down from 36% in 2014.
- The pattern of increasing occasional transportation riders was evident among youth and adults.
  - Among adults, half rode for transportation at least 5 days in the past year, down from 10 in 2014.
  - Among youth, half rode for transportation at least 10 days in the past year, down from 15 in 2014.



There were no statistically significant differences in the average number of riding days between 2020 and 2022.

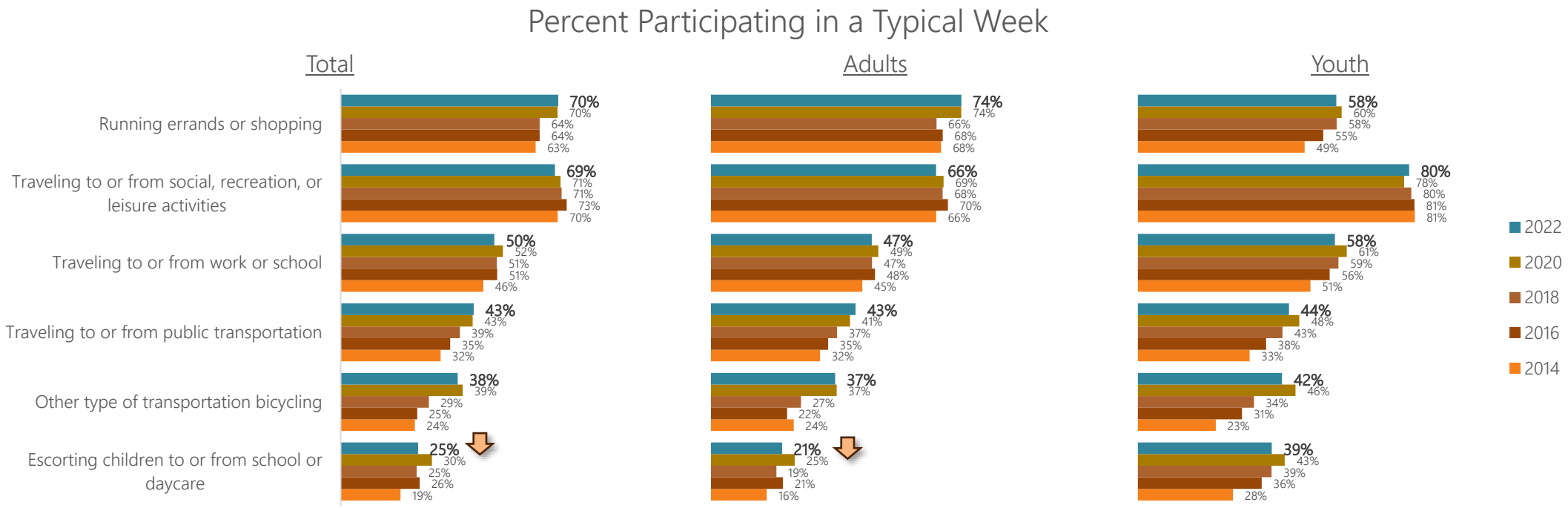
Q4. How many of those days did you participate in each of the following types of bicycling?

Overall Base: Those who ride for transportation
(2014: 4,478; 2016: 4,341; 2018: 3,625; 2020: 4,165; 2022: 4,945)

Running errands and traveling to social/recreation/leisure activities remined the most common reasons for transportation riding.

CORONAINSIGHTS

- Youth were more likely than adults to ride a bike to travel to social/recreation/leisure activities.
- Youth were also more likely than adults to bike to get to work/school.
- Since 2014, there has been a steady increase in biking to get to other forms of public transportation.



Q5. During a typical week, how many of the following types of transportation-related bicycle trips/rides do you take?
Overall Base: Those who ride for transportation
(2014: 4,478; 2016: 4,341; 2018: 3,625; 2020: 4,165; 2022: 4,945)

Detailed Findings

Psychographic Trends

Biking continued to be the least used travel mode.

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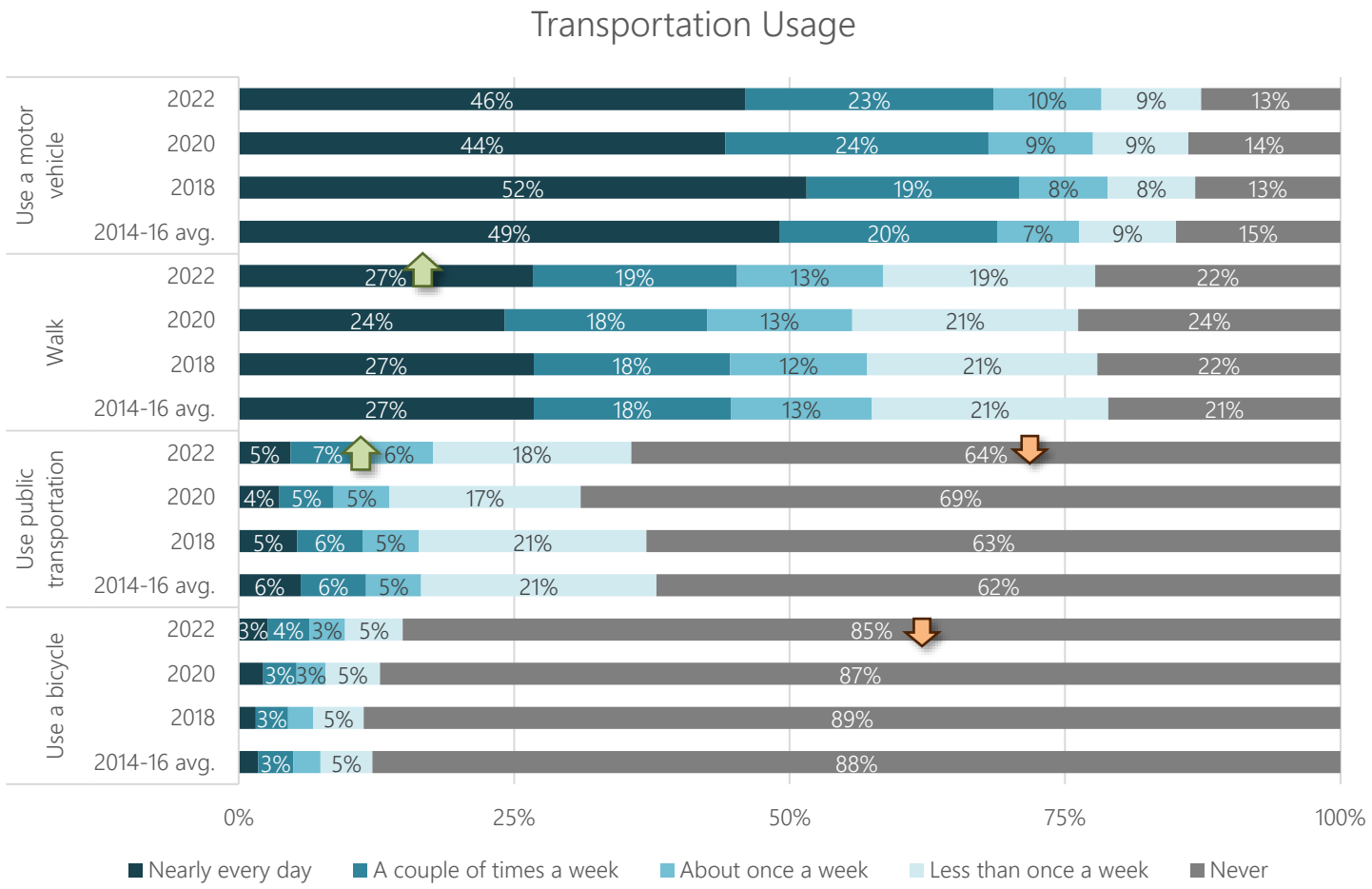
- In 2022, 10% of Americans reported using a bicycle at least once a week to travel from place to place.
- Driving a car remained the most common and frequent form of transportation.
- Frequency of walking and using public transit bounced back towards pre-pandemic levels.
  - 59% walked at least once a week
  - 18% used public transportation at least once a week



Q11. Thinking about how you travel from place to place in your daily life, how often do you use each of the following?

Base: Adults 18+ (2014: 16,193; 2016: 15,982; 2018: 14,467; 2020: 14,531; 2022: 15,871)

Most (86%) non-bikers have ridden a bike in the past, but only 29% intend to in the future.

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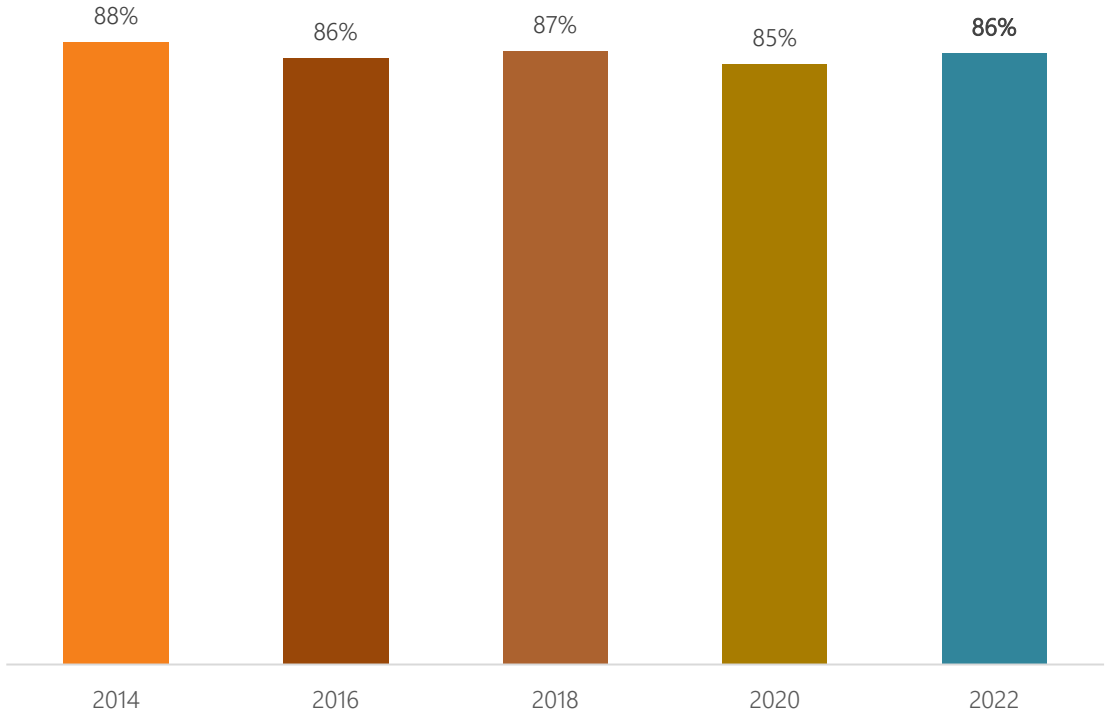
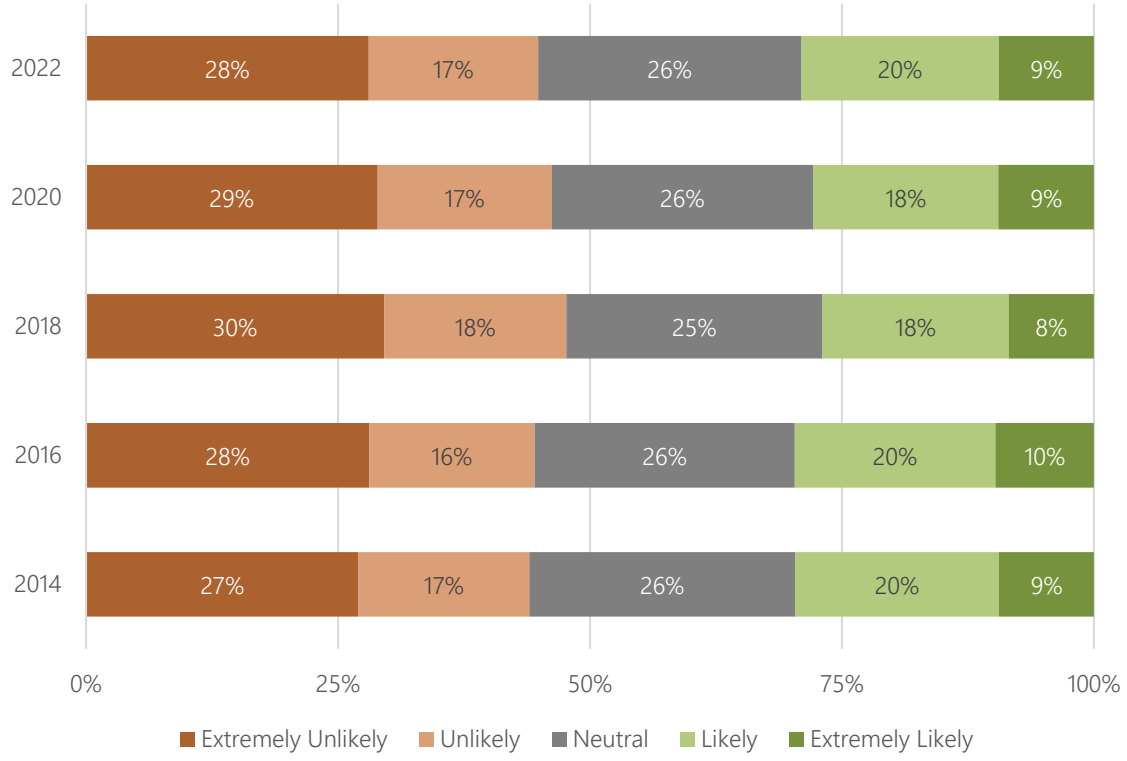
Ever Ridden a Bicycle
(among non-riders)



Intent to Ride a Bicycle in the Future
(among non-riders)



Q12. Have you ever ridden a bicycle?

Base: Adults 18+ who have not ridden a bicycle within the last 12 months (2014: 10,463; 2016: 10,789; 2018: 9,742; 2020: 9,547; 2022: 10,096)

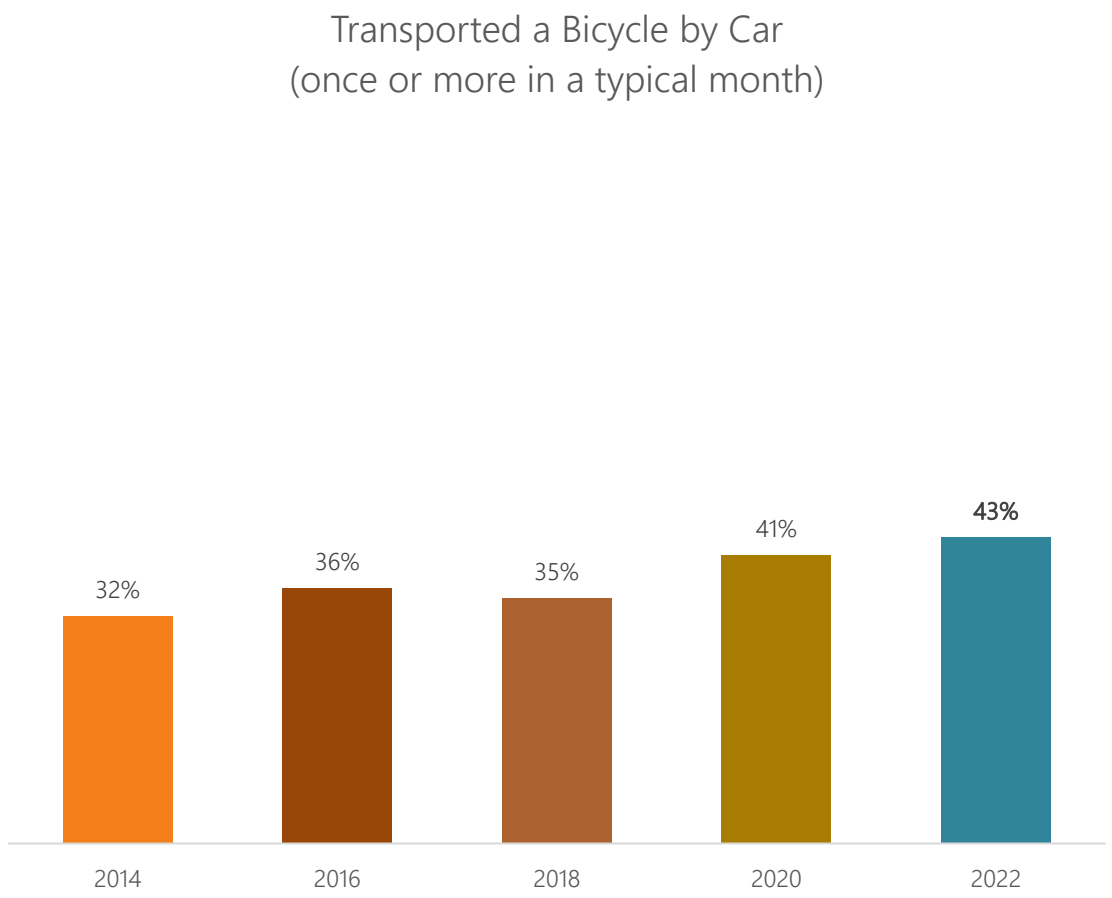
Q13. How likely are you to ride a bicycle in the future?

Base: Adults 18+ who have not ridden a bicycle within the last 12 months (2014: 10,463; 2016: 10,789; 2018: 9,742; 2020: 9,547; 2022: 10,096)

Transporting a bicycle by car/truck continued to be more common over time.

CORONAINSIGHTS

- 43% of bike riders reported transporting a bike with a motor vehicle at least one time in a typical month.
- Transporting bikes by cars/trucks has climbed steadily since 2014.
- Among those who did so, the average number of days reported transporting a bicycle by vehicle per month was 12, which was similar to prior years.



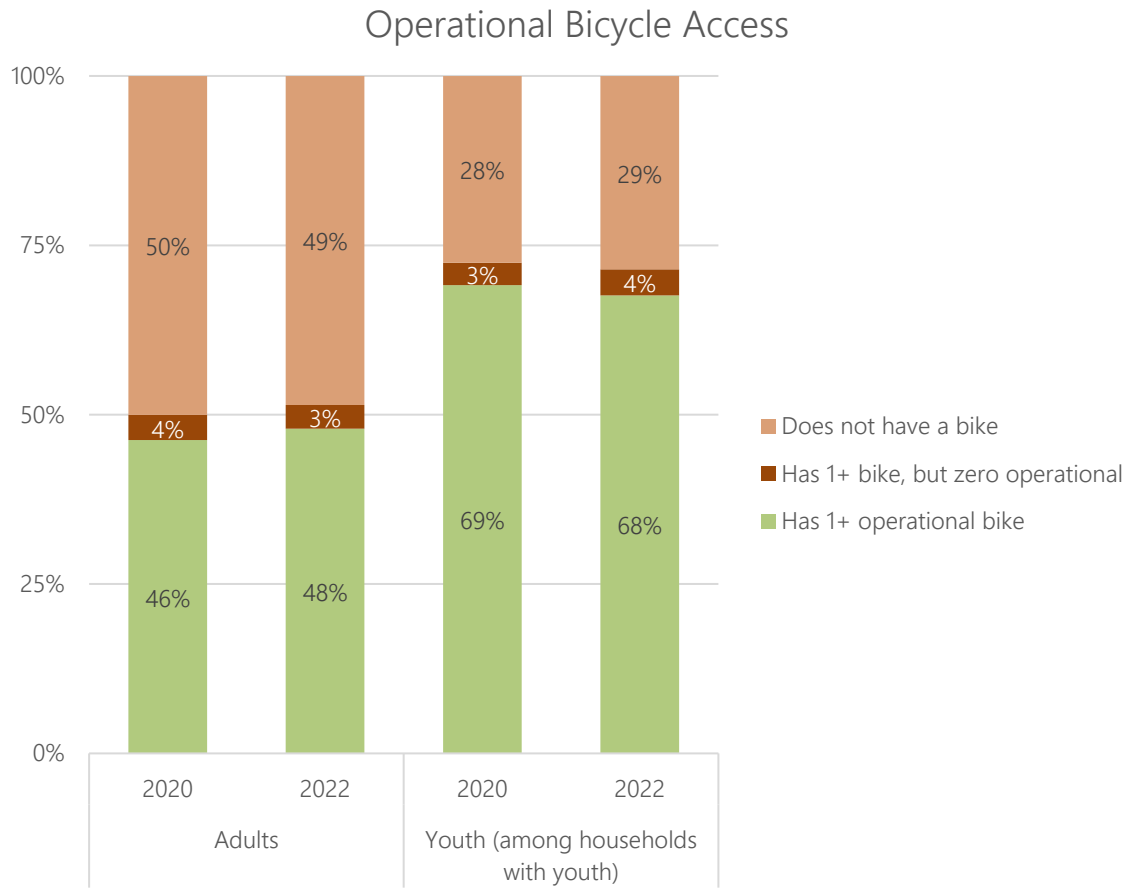
Q14. In a typical month, how many days do you transport a bike with a motor vehicle?

Base: Adults 18+ who rode a bicycle within the last 12 months
(2014: 5,730; 2016: 5,193; 2018: 4,711; 2020: 4,984; 2022: 5,775)

Most bikes were reported to be operational.

CORONAINSIGHTS

- Just over half of adult respondents said their household owned an adult bike, and most of those were operational.
- 71% of households with youth owned at least one youth bike, and most of those were operational.
- Findings in 2022 did not notably differ from 2020.

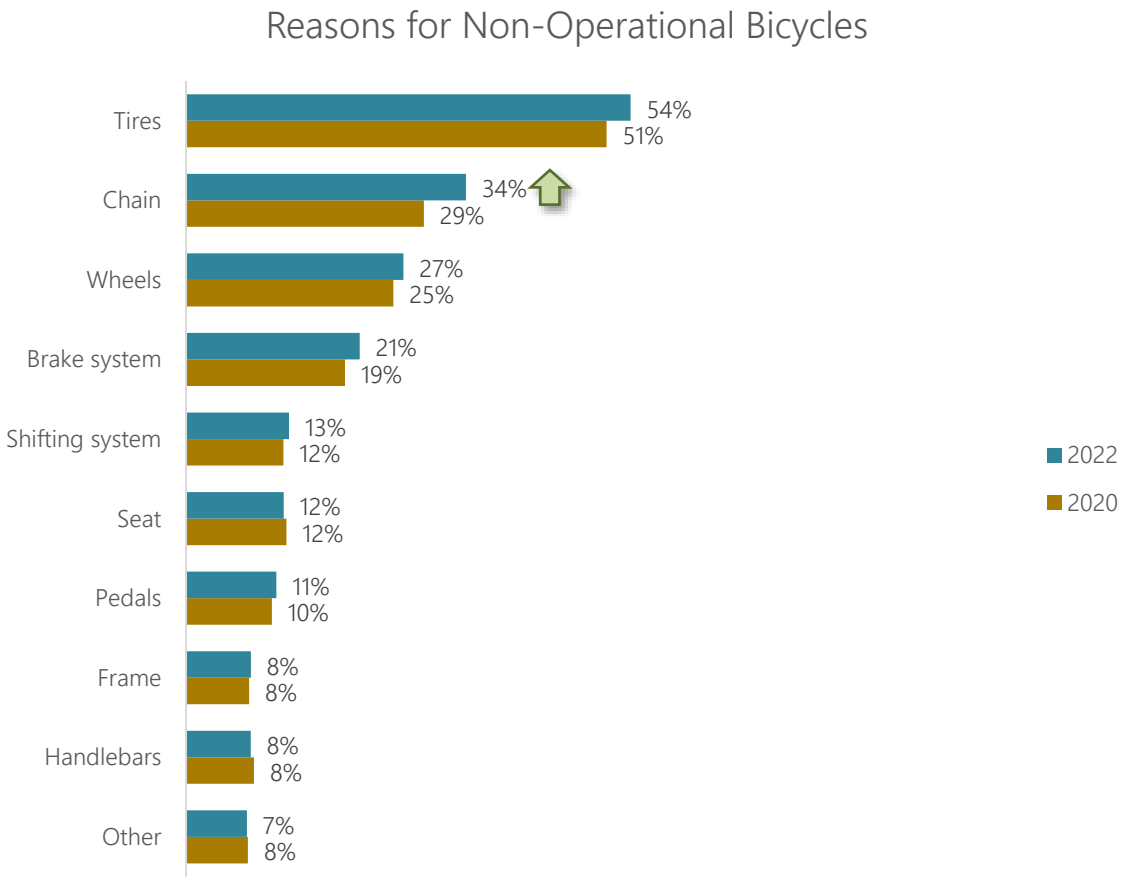


Q15. How many [adult/child] bicycles does your household own (adult bicycles)? How many of those bicycles are operational?
Base: Adults 18+: 2020: 14,531; 2022: 15,871. Adults with children: 2020: 4,349; 2022: 4,875)

Tires continued to be the most common reason for bicycles being non-operational.

CORONAINSIGHTS

- Just over half (54%) of bike owners with non-operational bikes said that tires were one of the reasons any bike they owned was not operational.
- In 2022, just over one-third (34%) of bike owners with non-operational bikes answered that a chain was not functioning; this was a five percentage-point (and statistically significant) increase from 2020.

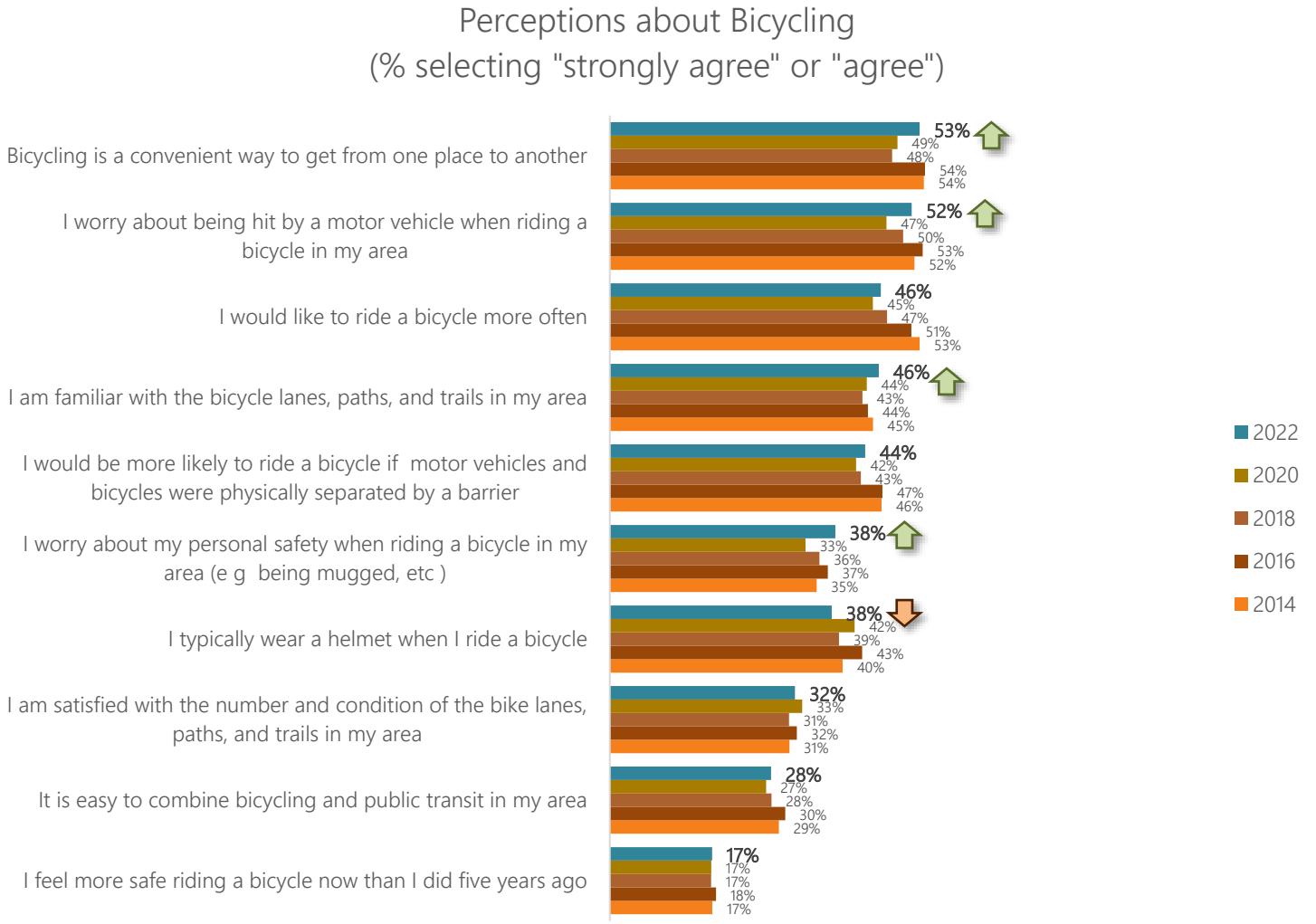


Q15. What part(s) are causing any of your bicycles to be non-operational?
Base: Adults 18+ with a non-operational bicycle in the household (2020: 1,529; 2022: 1,865)

The share of Americans who worried about safety on a bike increased since 2020.

CORONAINSIGHTS

- A slight majority (52%) worried about being hit by a motor vehicle when riding a bike in their area.
  - Being worried about getting hit by a motor vehicle increased by five percentage points since 2020.
- Being worried about personal safety when riding a bike (e.g., being mugged) increased from 33% in 2020 to 38% in 2022.
- In 2022, 38% of respondents said they typically wear a helmet when riding a bike, down from 42% in 2020.
- Respondents were slightly more familiar with bike lanes and paths than they were in 2020.



Q16. Please indicate how much you agree with the following statements.

Base: Adults 18+ (2014: 16,193; 2016: 15,982; 2018: 14,467; 2020: 14,531; 2022: 15,871))

Appendix

Survey Methodology Details (1 of 3)

CORONAINSIGHTS

- **Data collection strategy:** Corona Insights surveyed 15,871 adults nationwide. Respondents with youth (age 3 to 17) living in their home answered additional survey questions that represented and additional 8,345 youth.
- **Survey sponsor and funder**: People for Bikes (https://www.peopleforbikes.org/)
- **Survey conducted by**: Corona Insights (www.CoronaInsights.com)
- **Definition of population**: Adults (18+) residing in the United States and youth (age 3 to 17) living in their household
- **Geography**: United States (50 states and the District of Columbia)
- **Dates of data collection**: September 22 to October 3, 2022
- **Survey mode**: Online
- **Languages:** English only
- **Sample supplier**: Dynata (https://www.dynata.com)
- **Description of sampling**: The survey was conducted using non-probability opt-in sampling
  - Coverage: All U.S. adults in Dynata's panel
  - Population not covered: Adults who were not a member of the Dynata panel, including people who do not have internet access
- **Incentive:** Incentives were provided to respondents by Dynata

Survey Methodology Details (2 of 3)

- **Quotas:** Nested quota targets were employed during data collection to ensure sufficient sample sizes for population segments.

	U.S. Census Region							
	Northeast		Midwest		South		West	
Age	Males	Females	Males	Females	Males	Females	Males	Females
18-24	400	400	400	400	400	400	400	400
25-34	400	400	400	400	400	400	400	400
35-44	400	400	400	400	400	400	400	400
45-54	400	400	400	400	400	400	400	400
55-64	200	200	200	200	200	200	200	200
65+	200	200	200	200	200	200	200	200

- **Data entry**: Survey participants anonymously entered their answers online.
- **Data quality:** Multiple data quality checks were implemented during and after fielding.
  - One attention-check question that asked about visiting a fake website was used to exclude respondents before submitting their survey.
  - Submitted surveys that responded to open-ended questions with offensive language were removed.
  - Responses that failed two of the following quality indicators were removed: gibberish open-end responses, inconsistent age and birth year, and duplicate IP addresses or mismatch between IP location and state answer.
  - Additionally, responses were removed that failed two of three straight-line tests.

Survey Methodology Details (3 of 3)

CORONAINSIGHTS

- **Weighting:** Post-survey corrective weights were calculated and applied to the data using a marginal weighting technique.
  - Weights were based on the demographic categories employed in the survey quotas.
  - Weighting targets were informed by 2021 population estimates derived from the U.S. Census Bureau's American Community Survey. The sample was weighted (using a Rim weighting technique) to reflect U.S. Census estimates of the distribution of Americans by age, gender, region, income, and race/ethnicity.
  - For children between the ages of 3 and 17
    - Age and gender were reported by adults with children in their homes
    - Region and race/ethnicity were assumed to be the same as the reporting adult
    - Personal earnings were assumed to be $0
  - The resultant weights ranged from 0.122 to 22.09.
  - The table to the right presents the weighting targets, unweighted sample distributions, and weighted sample distributions for all weighting strata.

	Targets	Unweighted Sample	Weighted Sample
Gender			
Male	49%	51%	49%
Female	51%	49%	51%
Age			
Ages 3 to 9	9%	17%	9%
Ages 10 to 17	11%	18%	11%
Ages 18 to 24	9%	13%	9%
Ages 25 to 34	14%	13%	14%
Ages 35 to 44	14%	13%	14%
Ages 45 to 54	13%	13%	13%
Ages 55 to 64	13%	7%	13%
Ages 65+	17%	7%	17%
Region			
Northeast	17%	25%	17%
Midwest	21%	26%	21%
South	38%	25%	38%
West	24%	25%	24%
Income			
Under $20k	49%	47%	49%
$20,000-$39,999	18%	14%	18%
$40,000-$59,999	12%	12%	12%
$60,000-$99,999	12%	14%	12%
More than $100k	9%	13%	9%
Ethnicity			
White alone (Caucasian)	58%	67%	58%
Black alone (African-American)	12%	11%	12%
Hispanic	19%	12%	19%
Other race or Multiple races	11%	10%	11%

Additional Reference

- **Survey instrument:** The survey instrument was provided as a separate Word file.
- **Analysis tables:** Top level tabulations and segmented cross-tabulations were provided in a separate Excel file.
- **Data:** Clean survey response data, including derived variables and weights, were provided in a separate SAV file.

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1401 Lawrence Street

Suite 1600

Denver, CO 80202

303.894.8246

CoronaInsights.com