

# COMMUTER CONNECTIONS TDM EVALUATION PROJECT

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## 2022 State of the Commute Survey Highlights

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Transportation Planning Board Technical Committee  
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# Presentation Outline

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- A. Commuter Patterns
- B. Telecommuting / Teleworking
- C. Commuter Ease and Satisfaction
- D. Technological Initiatives and Driverless Cars
- E. Employer Services & Marketing Awareness

# Survey Background

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- Conducted as part of COG/TPB's Commuter Connections program
- Conducted every three years – since 2001
- The State of the Commute Survey (SOC) is different from and complements the Regional Travel Survey (RTS)
- 2022 SOC survey
  - First since onset of COVID19 Pandemic (2020)
  - Contrasts with last survey before COVID19 Pandemic (2019)
  - Included additional questions related to travel impacts of the pandemic

# Differences between RTS and SOC Surveys

|                          | Regional Travel Survey<br>(2017-2018)   | State of the Commute<br>Survey (2022)   |
|--------------------------|---|---|
| Frequency                | Every 10 years  | Every 3 years   |
| Duration                 | 15 months   | 3 months  |
| Sampling Frame           | Households & individuals  | Employed persons  |
| Sample Size              | 15,976  | Over 8,000  |
| Recruitment              | Mail using address based sampling   |   |
| Methodology              | Internet/Phone Option   | Internet Only in 2022   |
| Geographic Coverage      | TPB Modeled Area  | Non-Attainment Region   |
| Primary Data of Interest | Detailed all purpose trips<br>and typical weekday travel  | Commute patterns and<br>commuter opinions   |
| Primary Purpose          | Analyze household and<br>person trips to develop<br>COG/TPB's regional travel<br>demand forecasting model | Analyze commute trends /<br>attitudes to evaluate the<br>effectiveness of commuter<br>services programs |

# SOC Survey Methodology

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- Interviewed 8,396 employed residents of COG region (95% +/- 1.1%)
- Address-based sample (ABS) method – randomly-selected postal addresses received postcard in mail with link to Internet survey
- Sample plan set minimum target for each jurisdiction, with higher targets for larger jurisdictions and jurisdictions in center of region
- Jurisdiction counts ranged from 511 – 971 (95%  $\pm$  4.3% for smallest sample)
- County level results were expanded to match the worker population
- Data also were weighted to ACS data to adjust sample for race/ethnicity and age
- Survey designed and administered through LDA Consulting, WBA Research, ESTC, and CUTR

# SOC 2022 Survey Topics

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## Continued tracking questions

- Current/past commute patterns
- Telework
- Commute satisfaction, commute ease
- Work/home location moves and impact on commute
- Access to transit, HOV/Express lanes, P&R
- Commute advertising awareness and influence
- Awareness of CC, regional and local commute services
- Employer commute assistance
- Technology initiatives and driverless cars

## New questions in 2022

- Commute and TW before pandemic (early 2020)
- Pandemic significance on commute changes
- Telework experience

# A. Commute Patterns

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- Effect of Pandemic on Commutes
- Commute Modes and Trips
- HOV and Express/Toll Lanes

# Coronavirus Pandemic Upended Commuting in 2022 vs 2019

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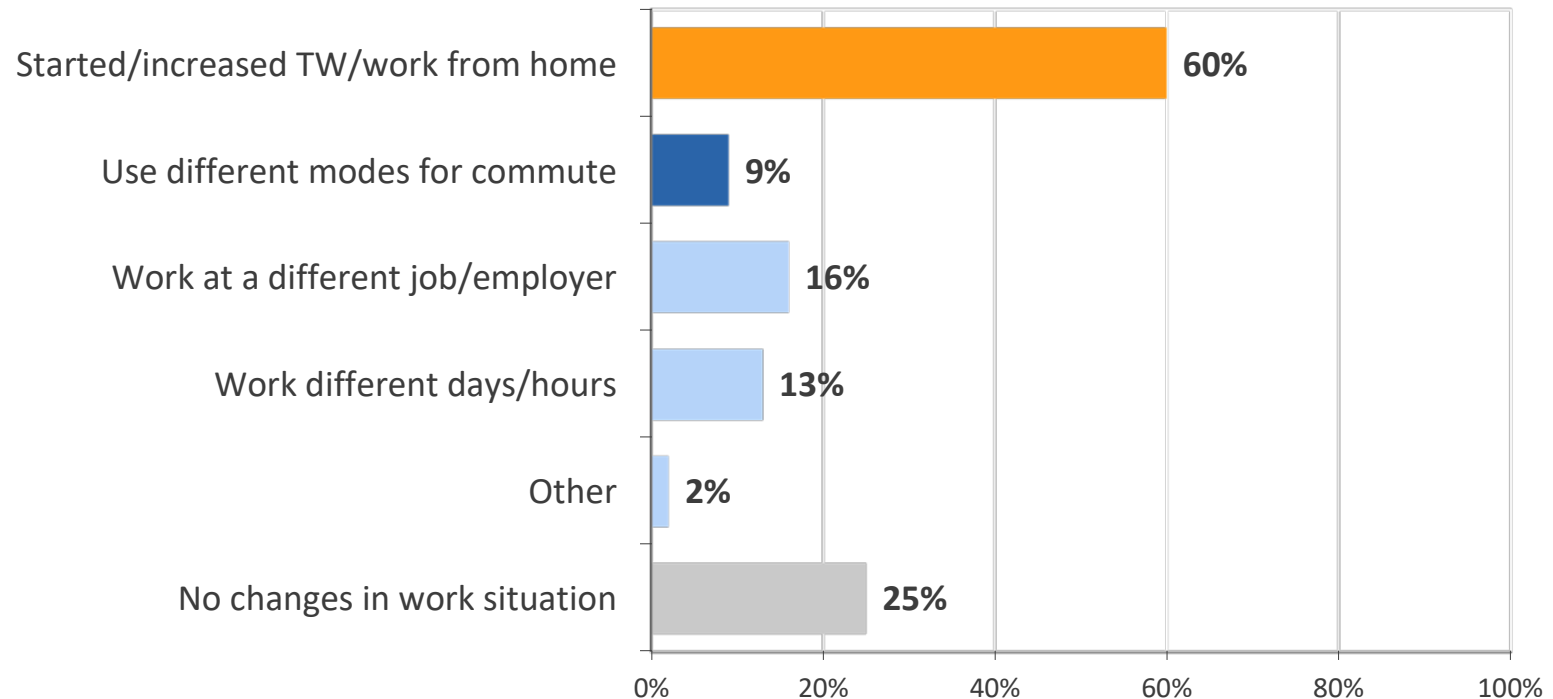
Many aspects of commuting changed but some stayed surprisingly consistent

- Widespread commute disruptions
- Telework explosion!
- Increased use of drive alone for commute trips to outside locations
- Declines in transit use across ALL commuter characteristics
- Stable commute distance (mi) but shorter commute time (min)
- Stable commute satisfaction but higher share of workers with easier commutes
- Stable % of work location changes but higher % of home location changes
- Lower awareness of commute ads and info resources, but similar access to employer commute services



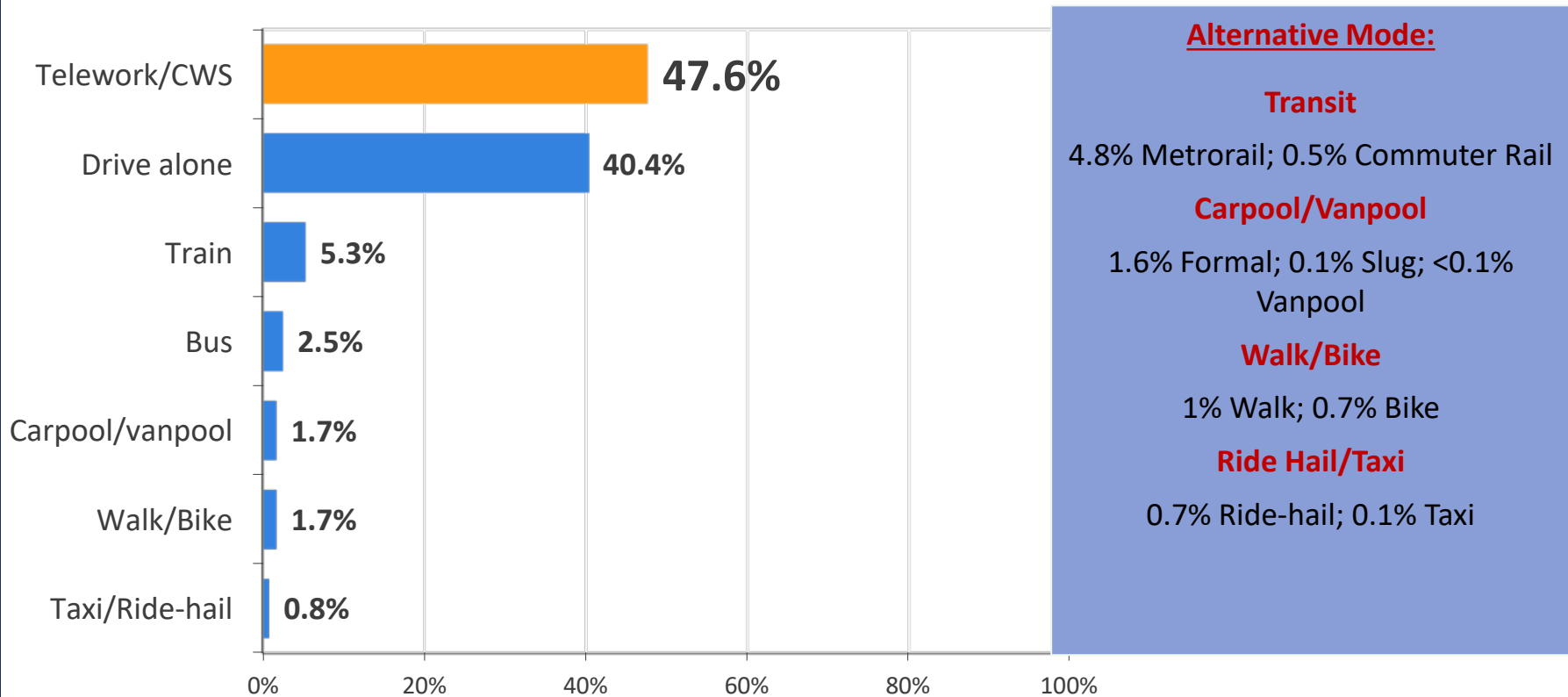
# Pandemic Worker Commute Changes

- 60% started or increased telework (32% shifted to full-time telework).
- Almost one in ten changed the travel mode on days they commute.
- Almost three in ten made change in their work arrangement



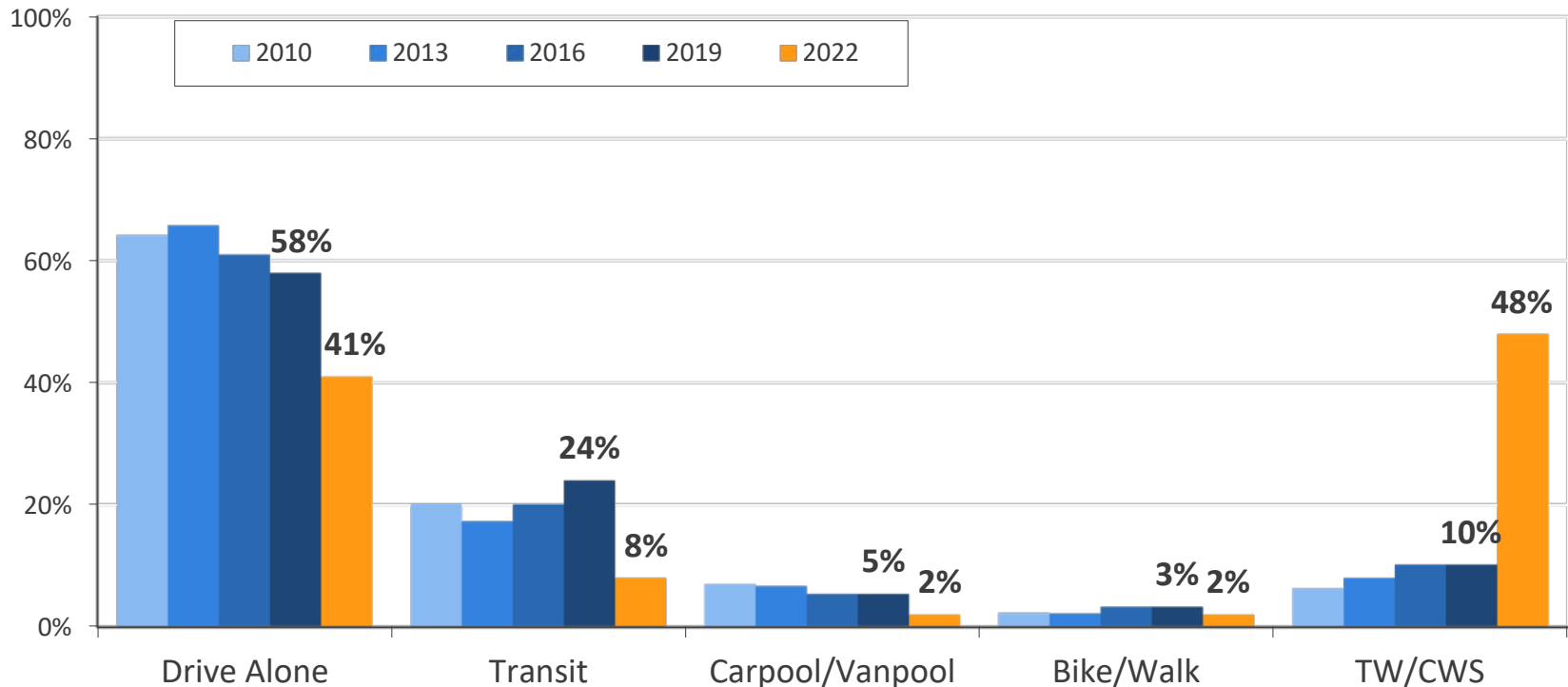
# Weekly Commute Trips By Mode

- Telework Accounted for almost half of Weekly Commute Trips
- Drive alone closely followed at 40%
- Transit accounted or less than 1 in 10 trips



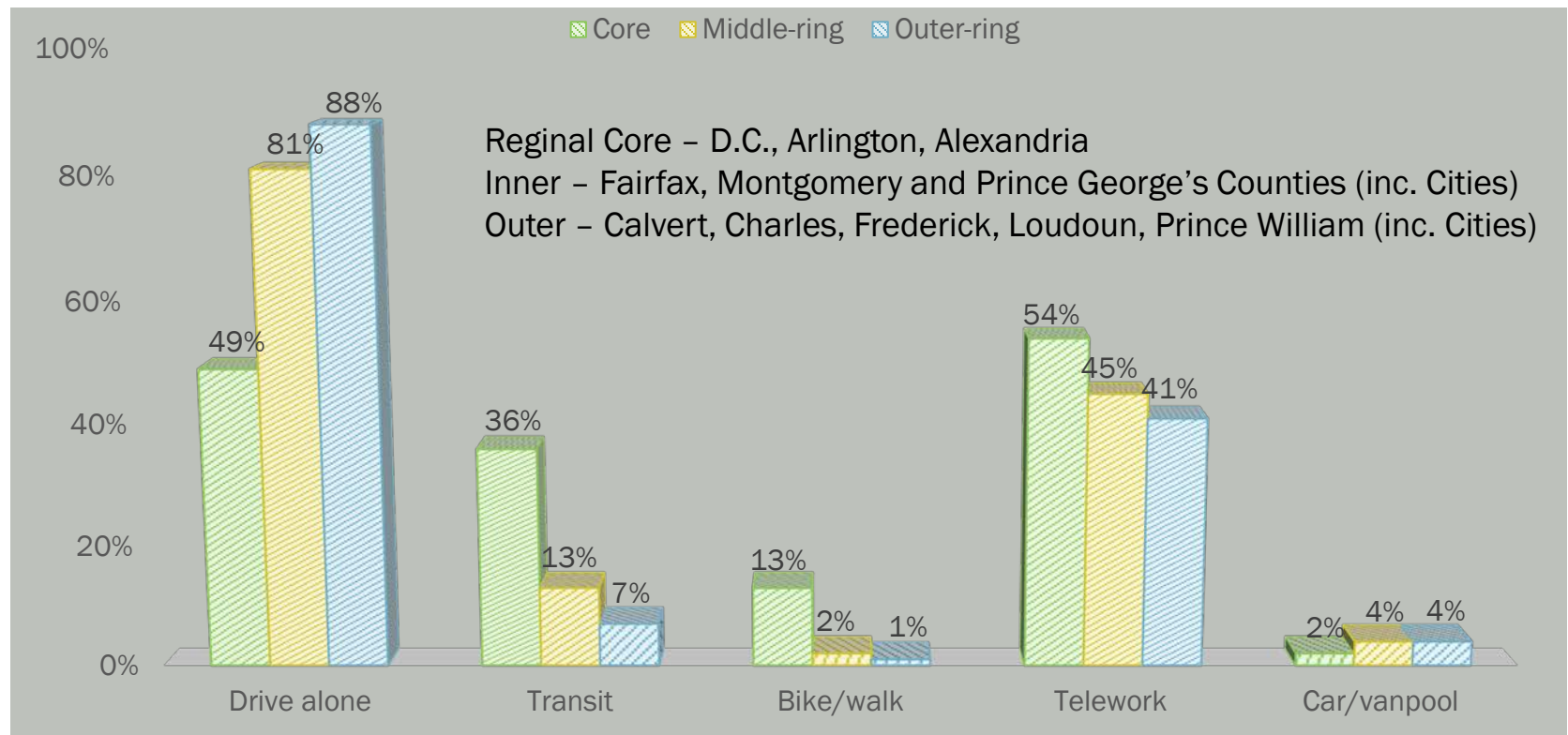
# Weekly Commute Trips by Mode Trend

- Pandemic has caused a major shift in travel mode trend
  - Five fold increase in Telework
  - Three fold decrease in Transit
  - Largest drop in drive alone trips since 2010



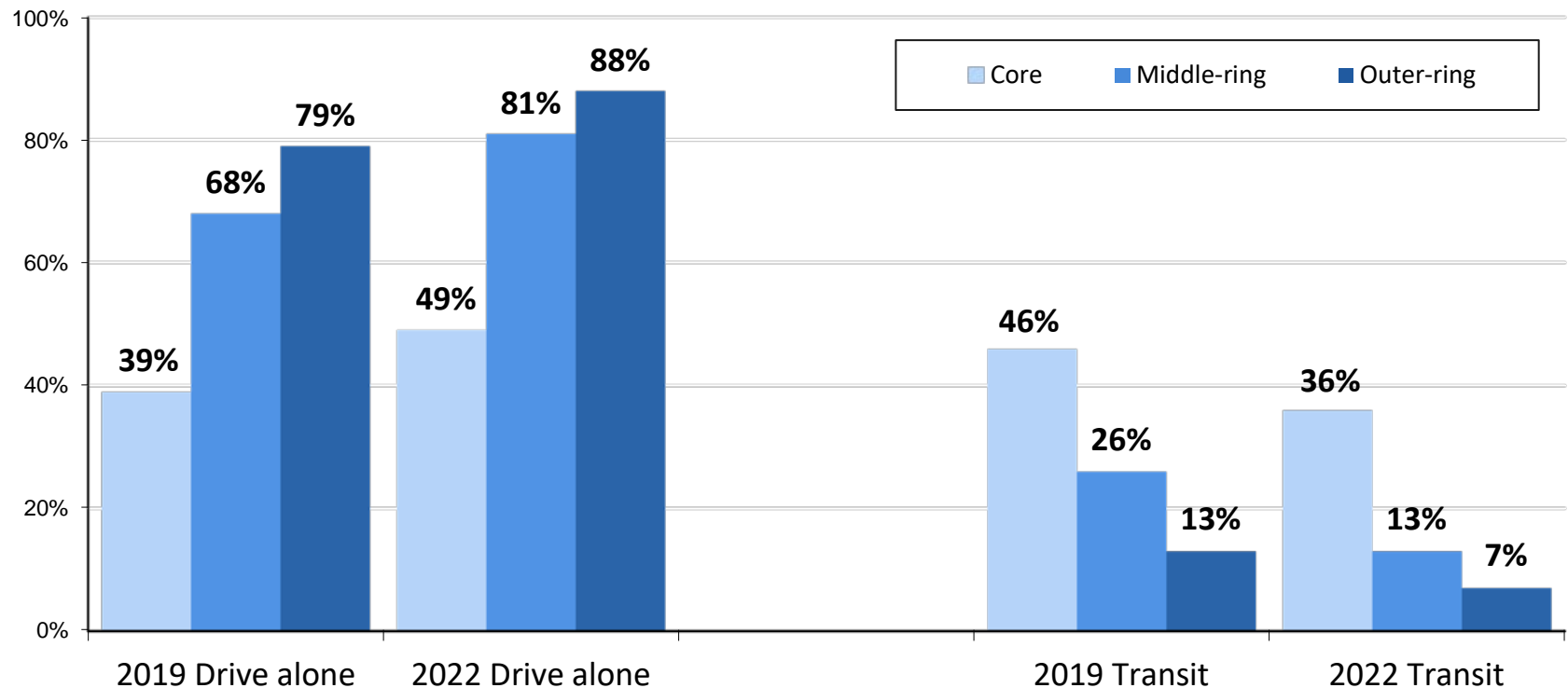
# Variations in Commute Mode by Home Area

- Regional Core – Telework, Drive Alone, Transit
- Inner and Outer Jurisdictions – Drive alone, Telework, Transit
- Proportion of Drive alone twice that of Telework in Inner & Outer jurisdictions
- Proportion of drive alone close to that of Telework in Regional core



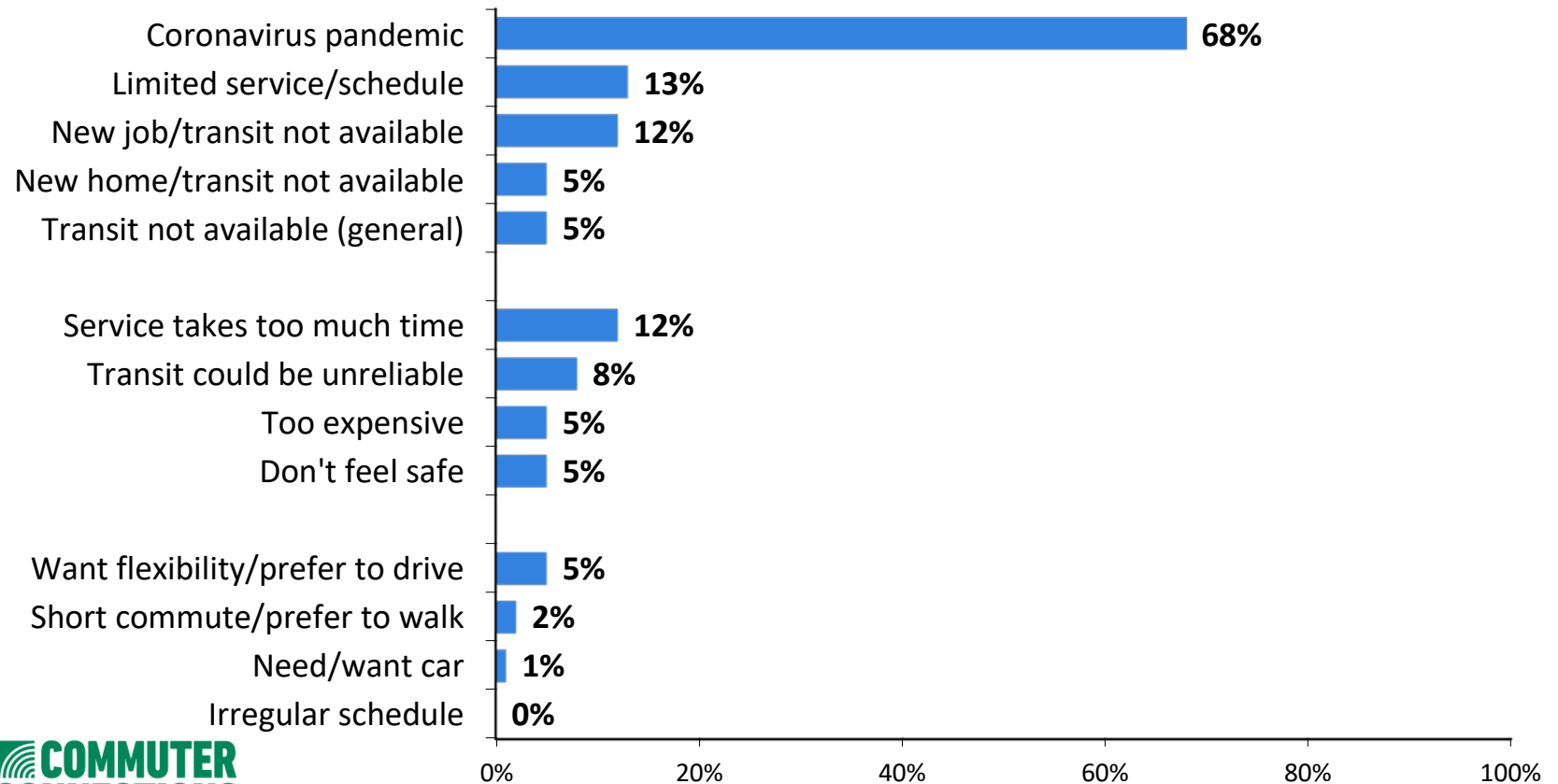
# Driving Alone vs. Transit Use

- Pre-pandemic pattern still holds: Core Higher transit / Inner & Outer Higher drive alone
- Transit mode share loss in all 3 sub-areas; most (50%) in Inner and Outer
- Drive alone increases in all 3 sub areas; most in Inner jurisdictions



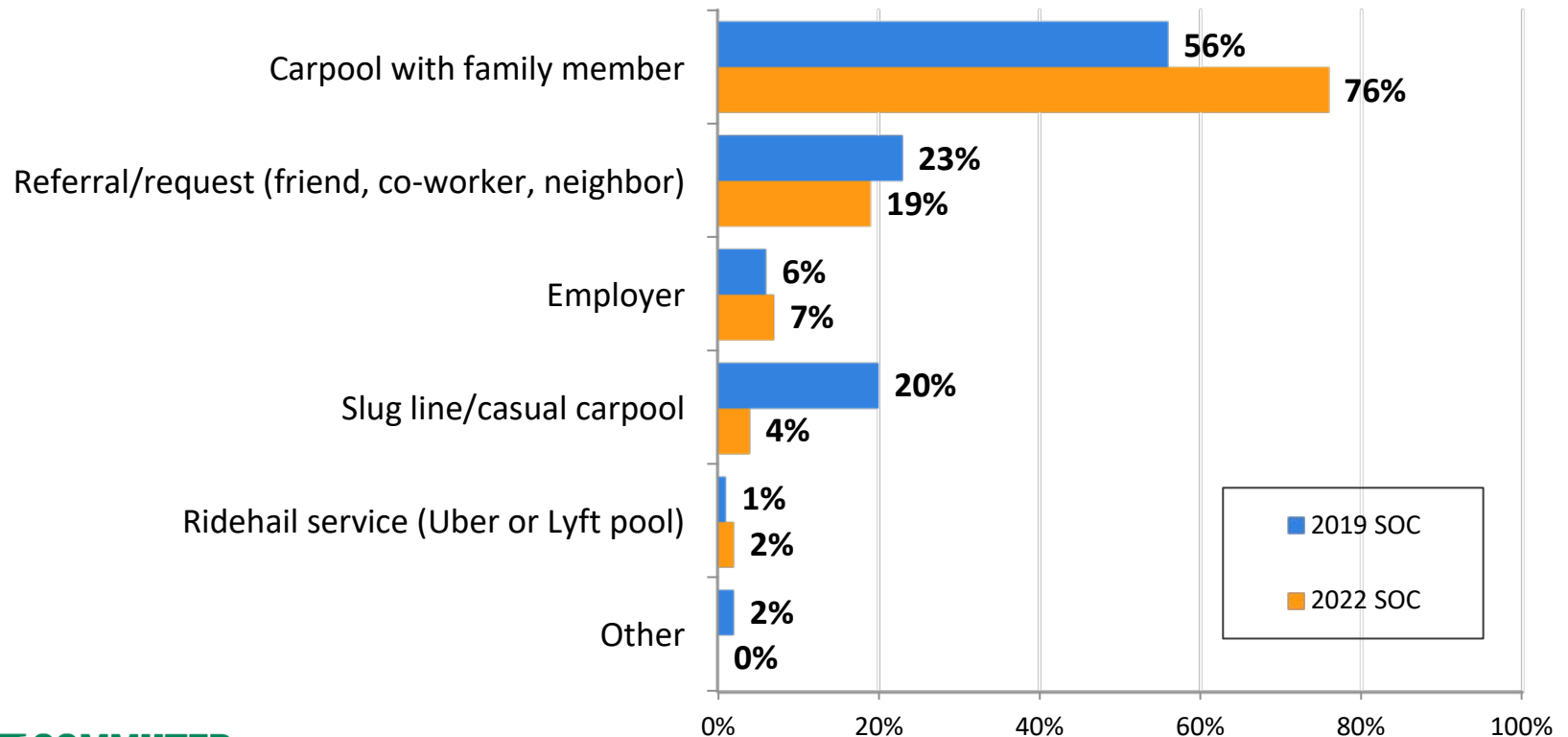
# Reasons For Discontinuing Transit Use

- Pandemic related concerns by far main reason (68%)
- Limited Service/Schedule Issues (some pandemic related) next highest (13%)
- Unavailability of transit at new job (12%)
- Service taking too much time (some non-pandemic 12%)



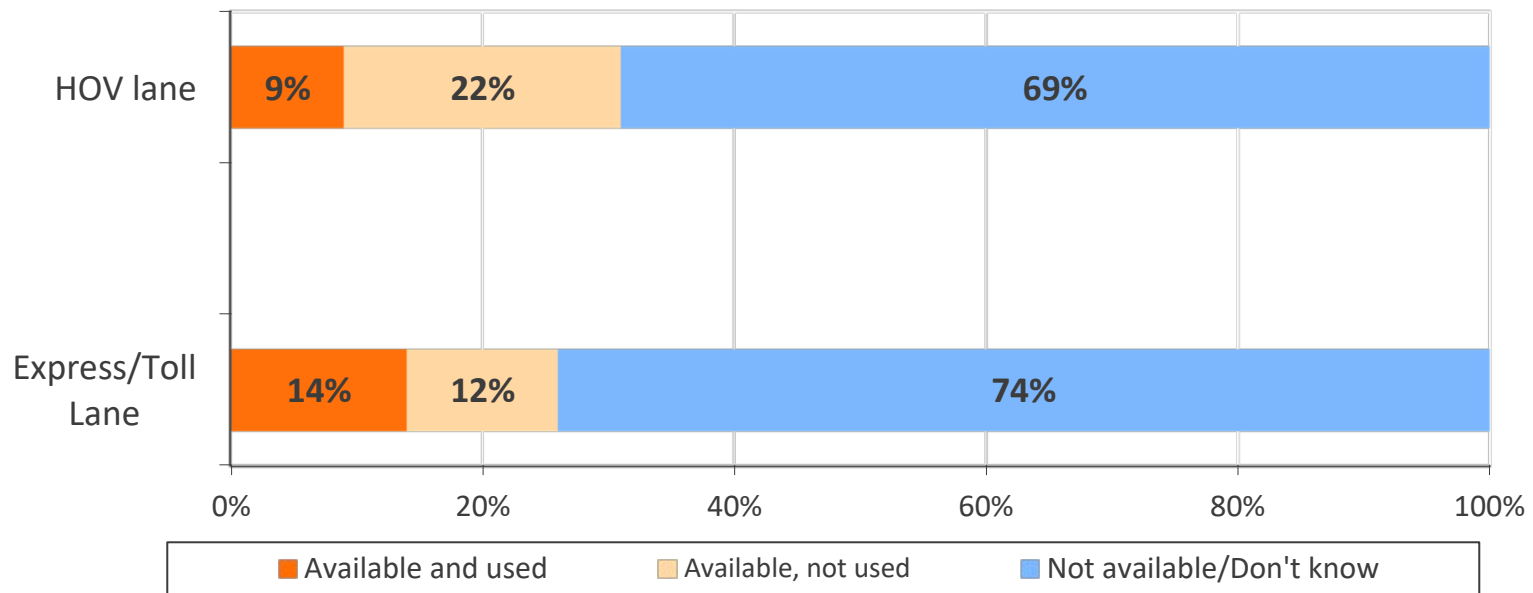
# Carpool Formation

- Pandemic caused major change - 76% of Carpool with Family Members (Pre-pandemic, 2019, 56% were Household Carpools)
- Casual carpooling (Slugging) dropped significantly – 4% of all carpools (Pre-pandemic, 2019, 20% of all carpools)



# Access to HOV and Express/Toll Lanes

- HOV Lanes – along the work route for 31% of commuters and 9% use it
- Express/Toll Lanes - along the work route for 26% of commuters and 14% use it

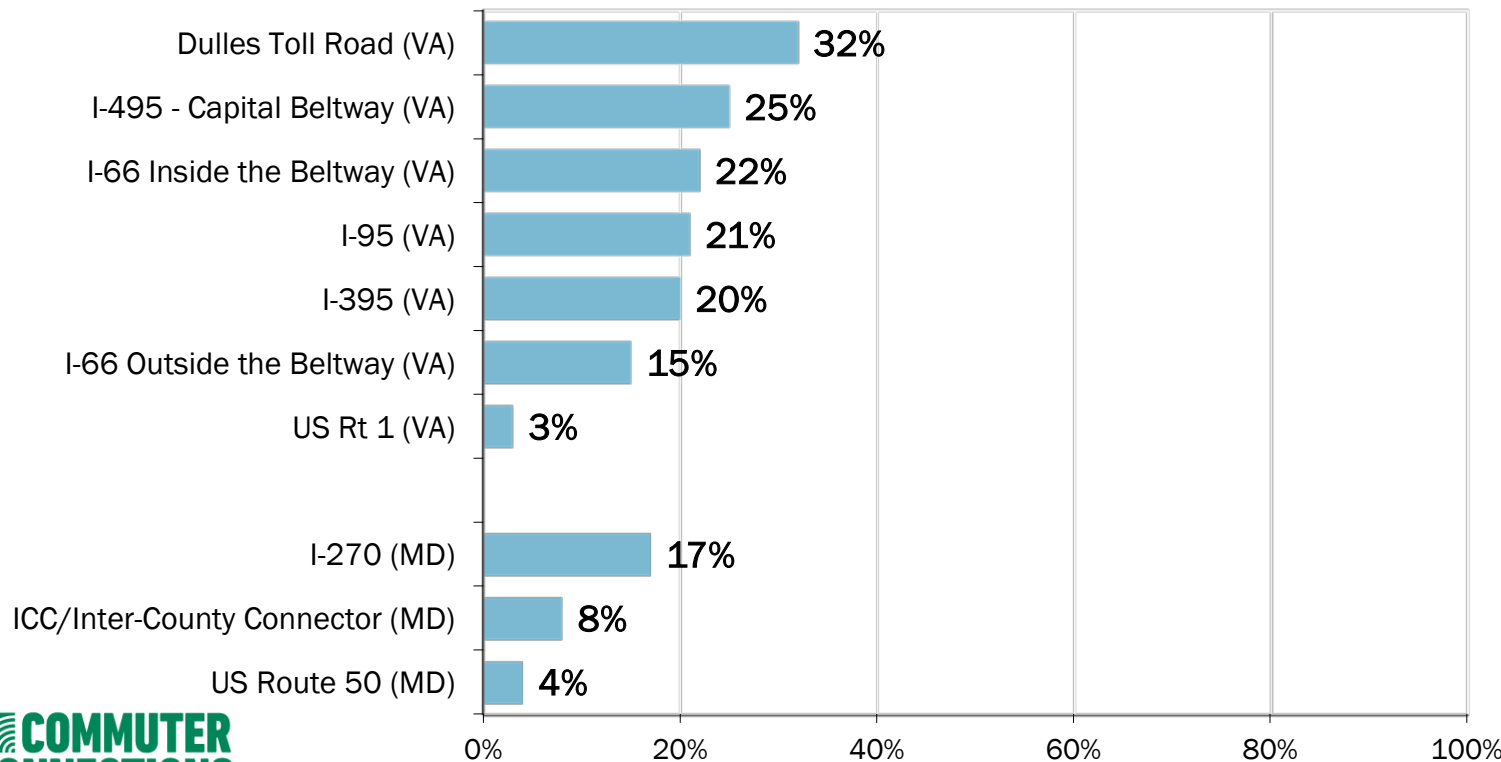


- CP/VP Use is 9% With Access to HOV Lane vs 3% with No HOV or Express Lane Access



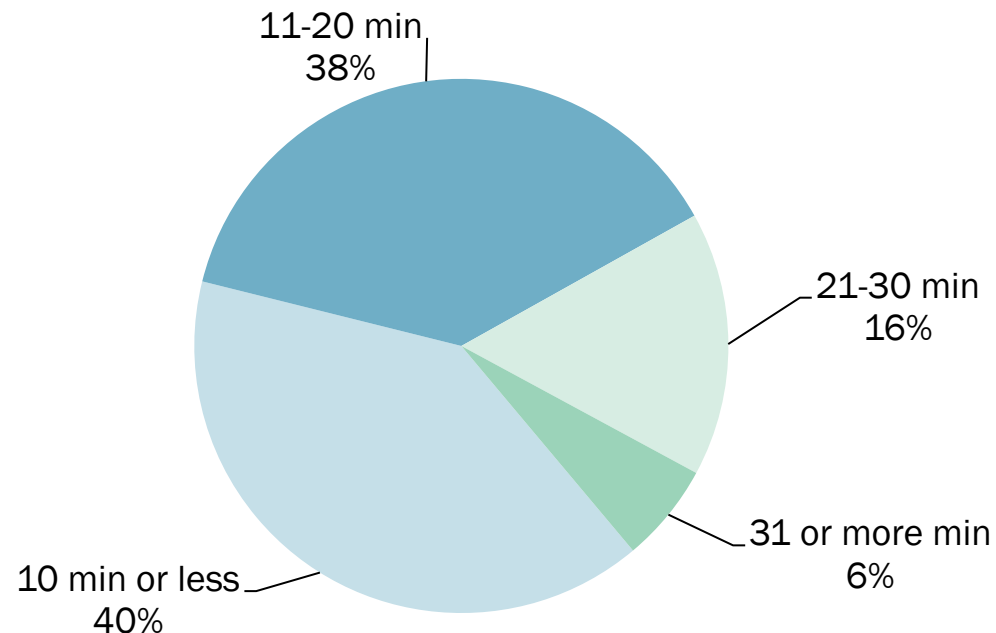
# HOV and Express/Toll Lanes Use

- HOV and HOT lanes in Virginia used by more commuters than those in Maryland
- Dulles Corridor has the highest HOV lane usage
- Usage of Virginia's Capital Beltway HOT Lanes has a higher share than those along I 95/I 395



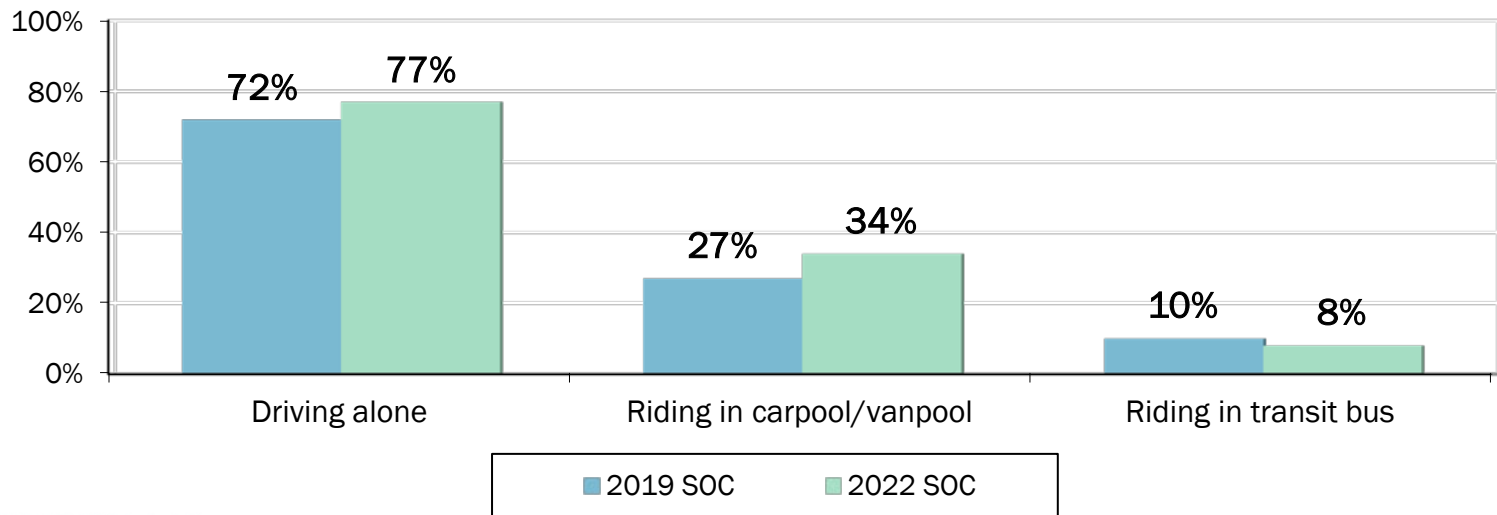
# HOV and Express Lanes Time Savings

- About 60% of HOV/HOT lane users cite time savings of 11 to more than 30 minutes
- A bit more than 1 in 5 cite time savings of more than 20 minutes



# HOV and Express Lanes Usage

- More than three-quarters of Express/Toll Lane users drove alone while riding in the Express/Toll Lanes.
- About one-third (34%) rode in a carpool or vanpool (at least some days).



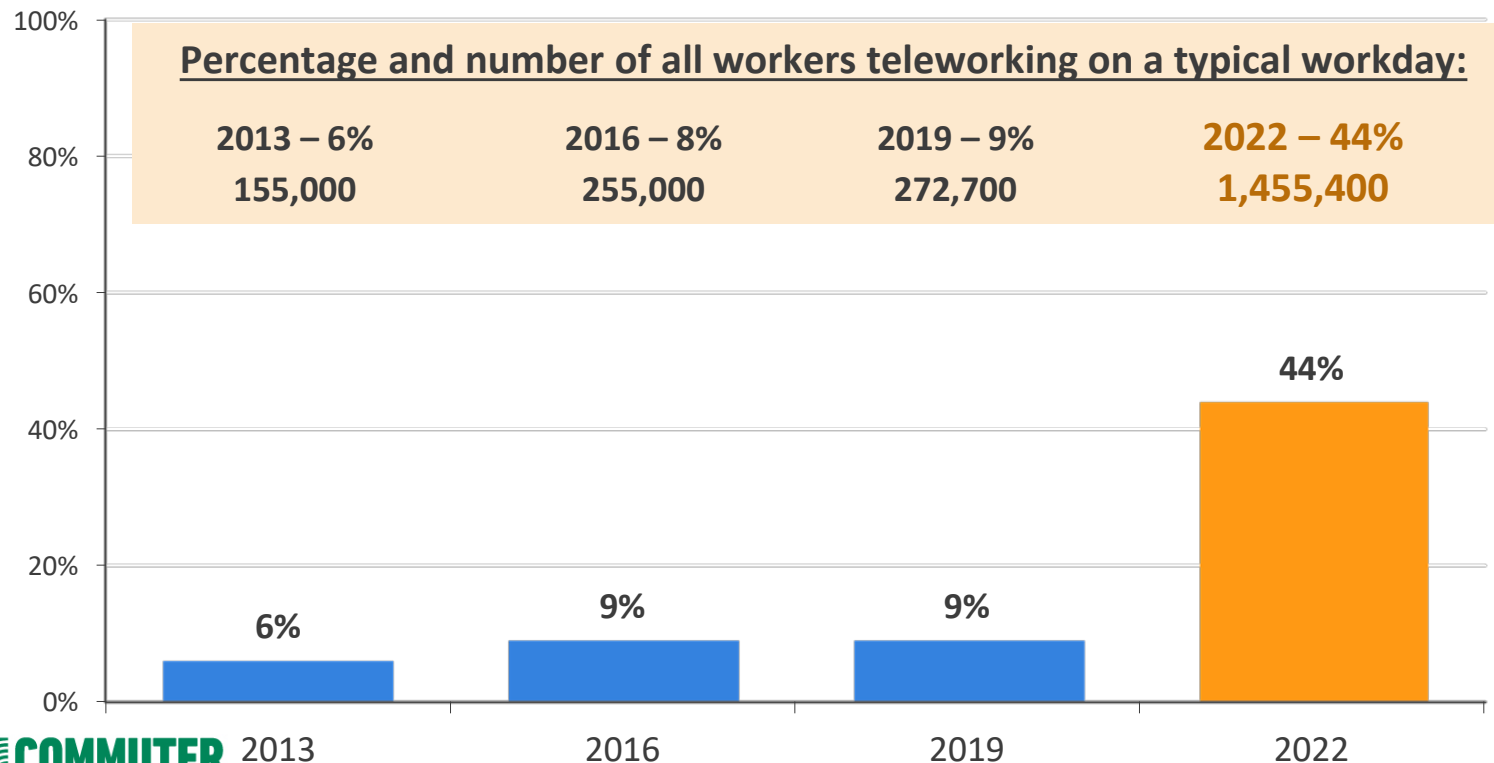
# B. Telecommuting / Teleworking

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- Number of Teleworkers
- Telework Frequency
- Teleworking Experience
- Future Teleworking

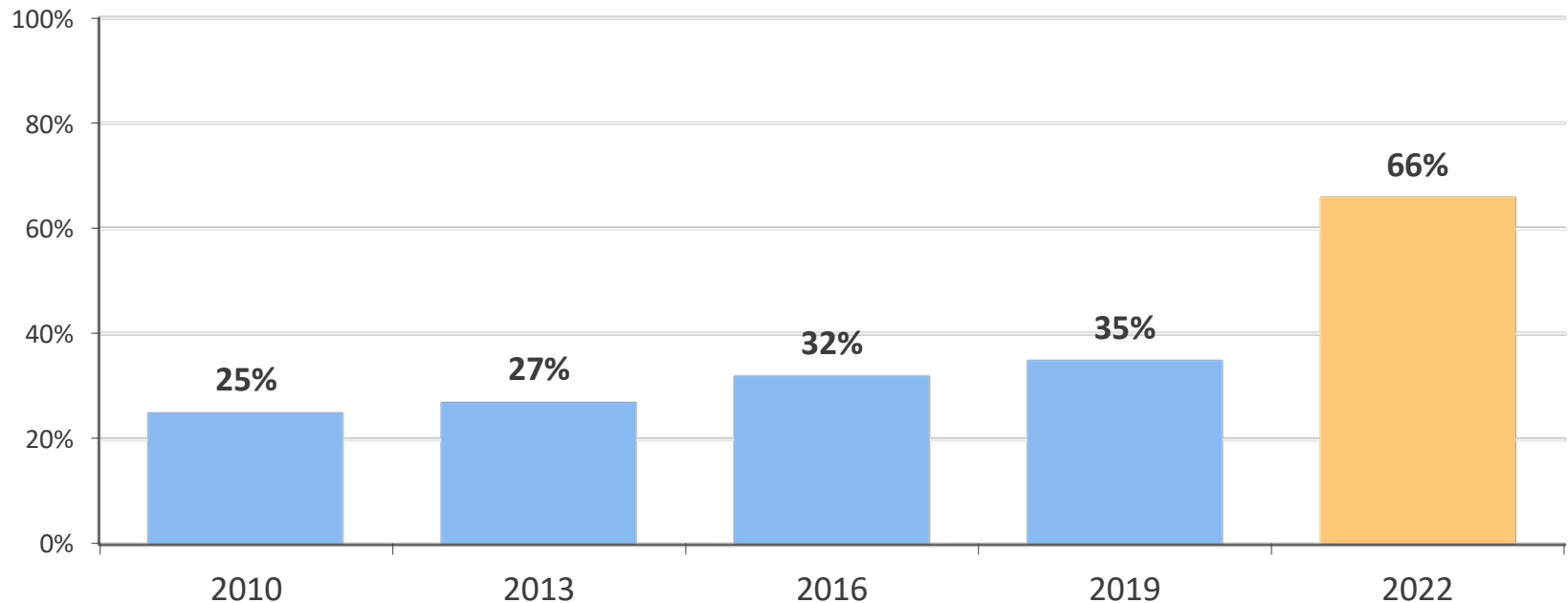
# Number of Telecommuters/Teleworkers

- Telework Has Had a Dramatic Impact on Workday Commuting in 2022
  - More than fourfold increase since 2019
  - Nearly 1.5 Million Regional Workers Telework on a Typical Workday



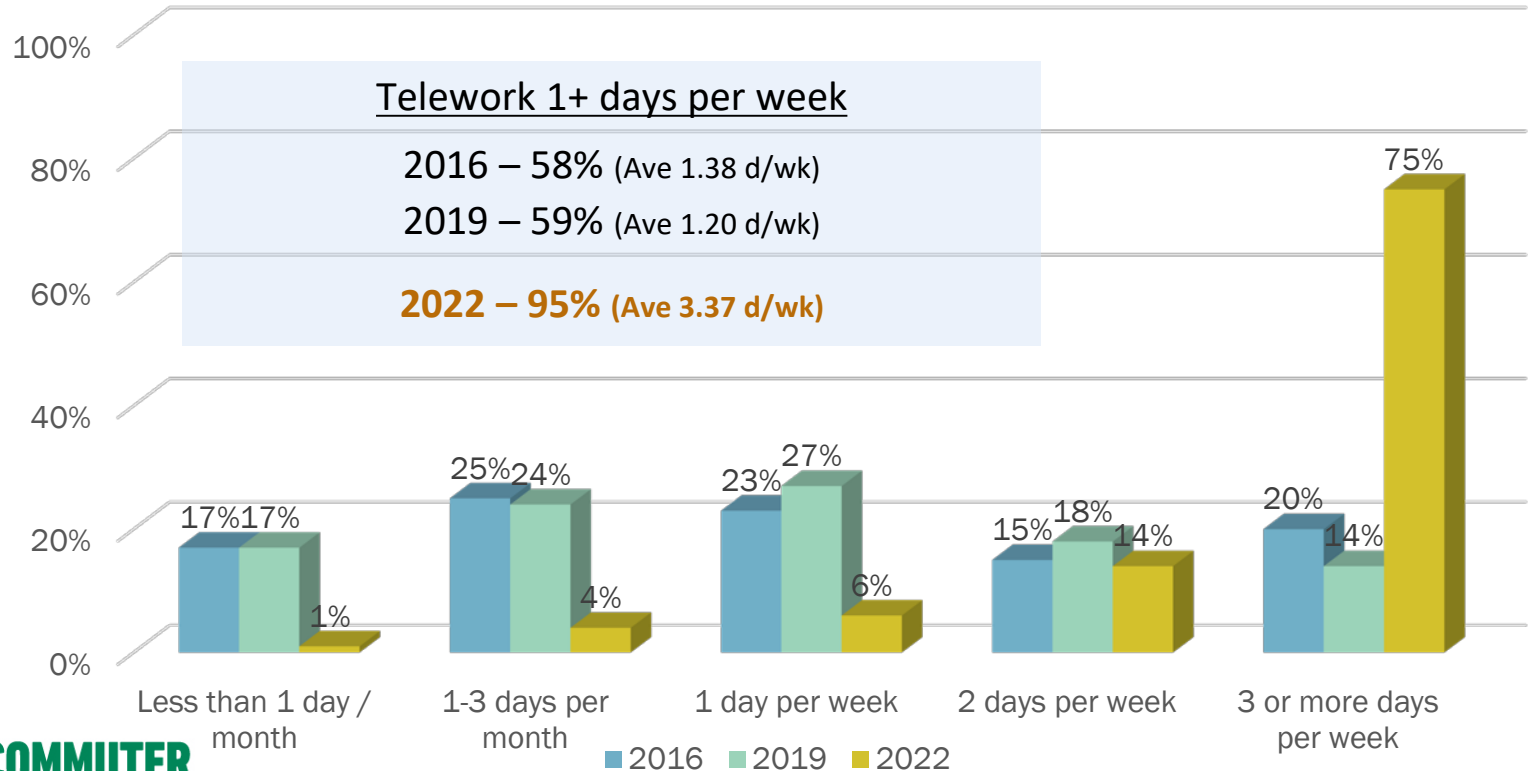
# Number of Telecommuters/Teleworkers

- Proportion of commuters who teleworked occasionally or regularly doubled from 2019 levels
  - About 2.3 million of region's workers telework occasionally or regularly



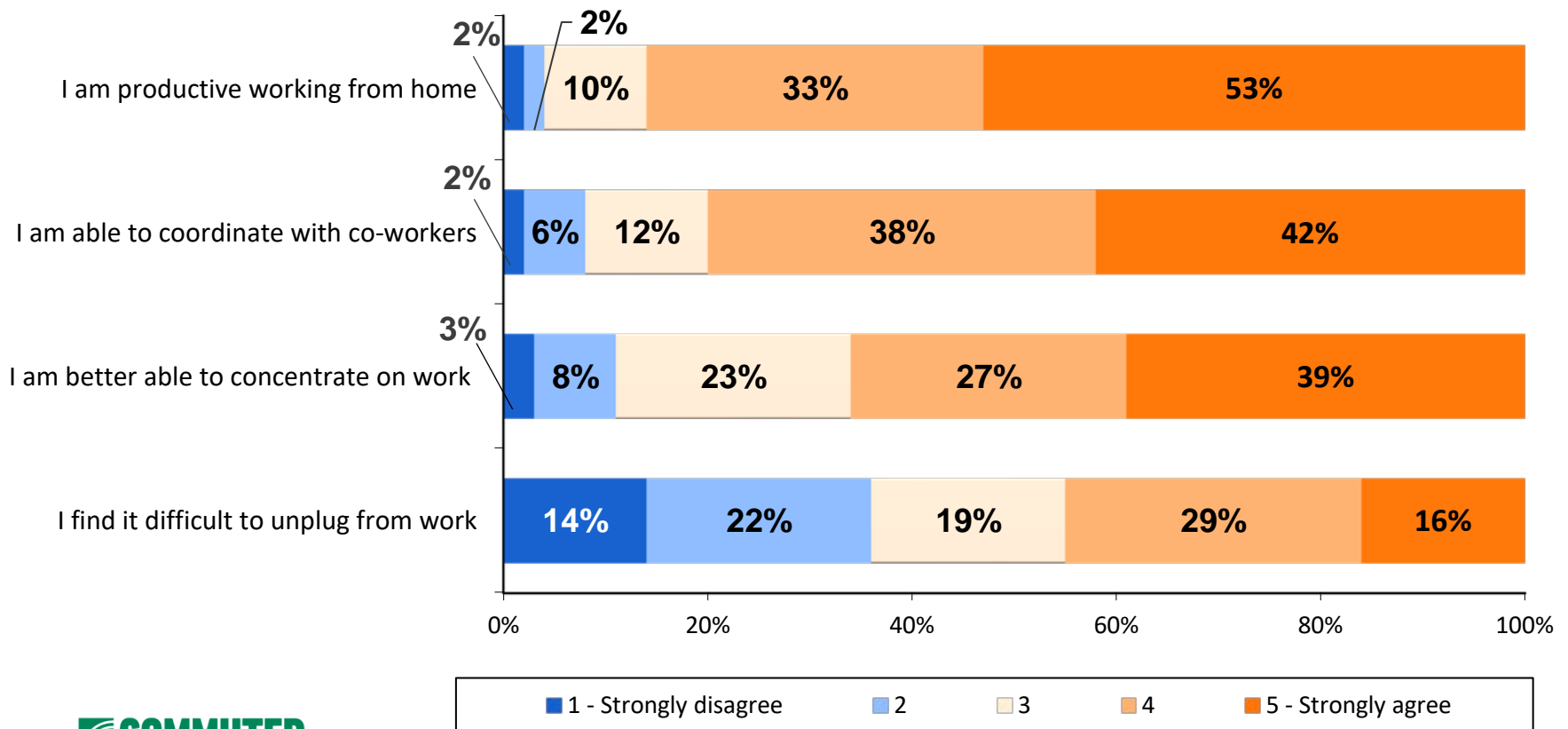
# Telework Frequency

- Average Frequency of Weekly Telework almost tripled since 2019
  - From 1.2 days/week to 3.4 days/week
- Three quarters of commuters now telework 3 or more days / week
- Only 6% of commuters telework 1 day a week



# Teleworking Experience

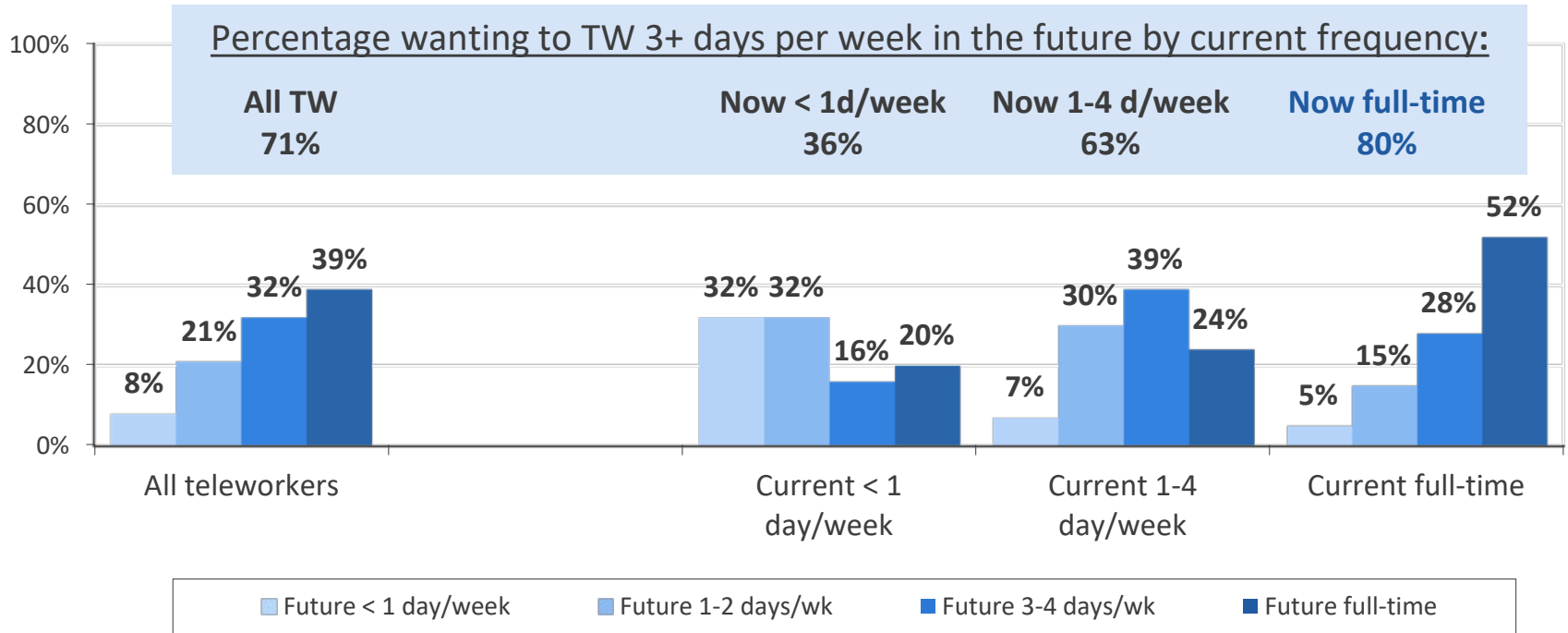
- At least 80% of Teleworkers reported being more productive and able to coordinate with co-workers
- 45% of Teleworkers reported difficulty “unplugging” from work





# Future Teleworking

- 71% of all current Teleworkers would like to Telework 3 or more days a week
- 36% of commuters teleworking less than 1 day/week would like to Telework 3 or more days/week
- About 25% of commuters teleworking 1-4 days/week would like to Telework full-time



# C. COMMUTE EASE & SATISFACTION

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- Commute Satisfaction  
(by geographic area and mode)
- Ease of Commute
- Modes Considered as Part of Moving

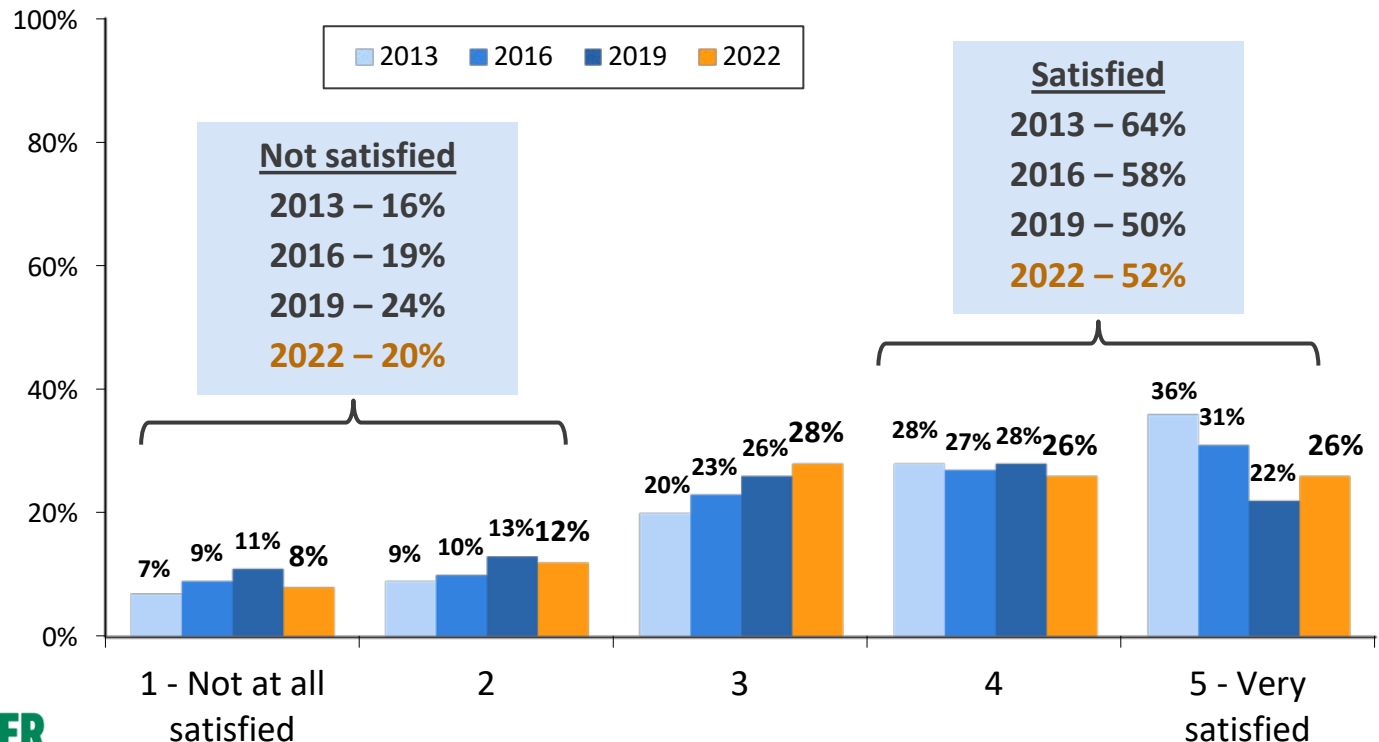
# Satisfaction by Location & Time

**52% of 2022 Respondents Were Satisfied with their Commute, About the Same as in 2019 (50%)**

Core area residents were more satisfied (60%) than were Middle Ring (54%) or Outer Ring (45%) residents; Satisfaction dropped as travel time increased.

## Satisfied by Travel Time

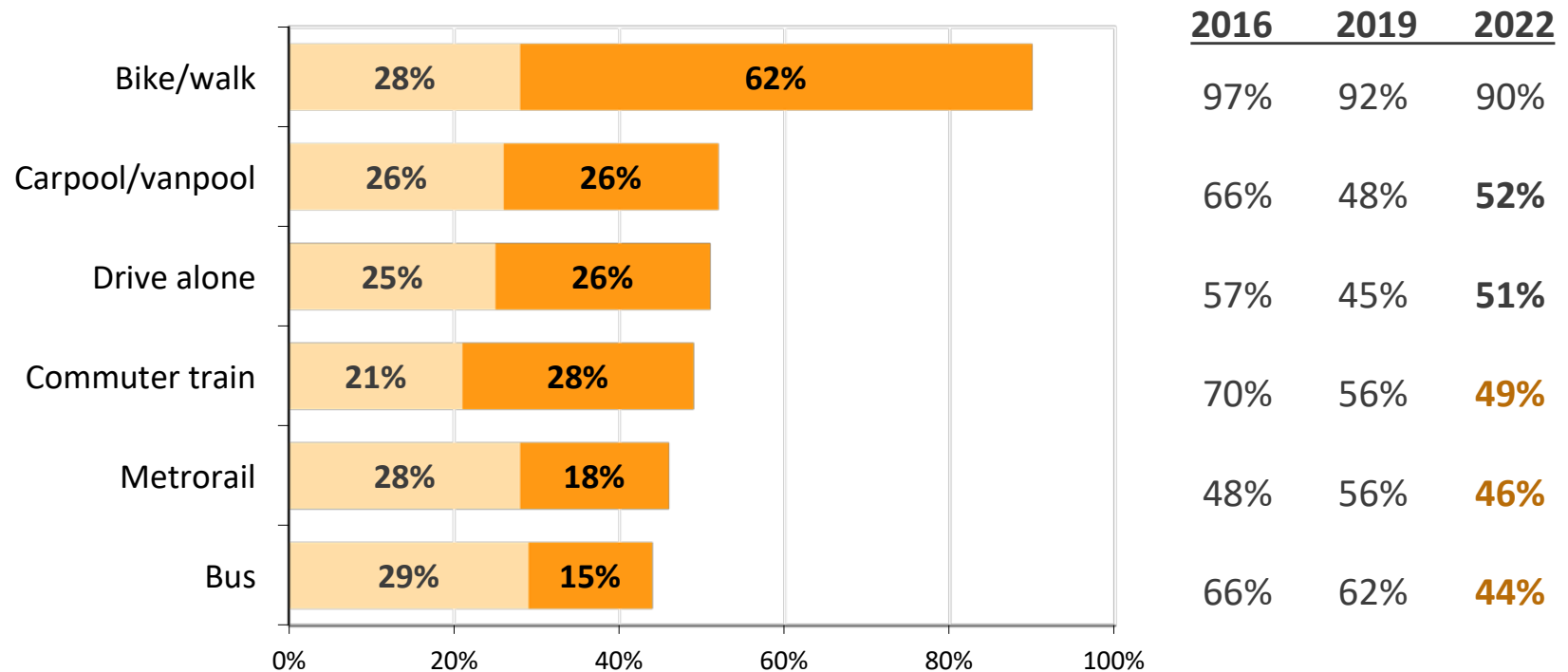
- 1-10 min – 91%
- 11-20 min – 79%
- 21-30 min – 59%
- 31-45 min – 40%
- 46-60 min – 28%
- > 60 min – 17%



# Satisfaction by Mode

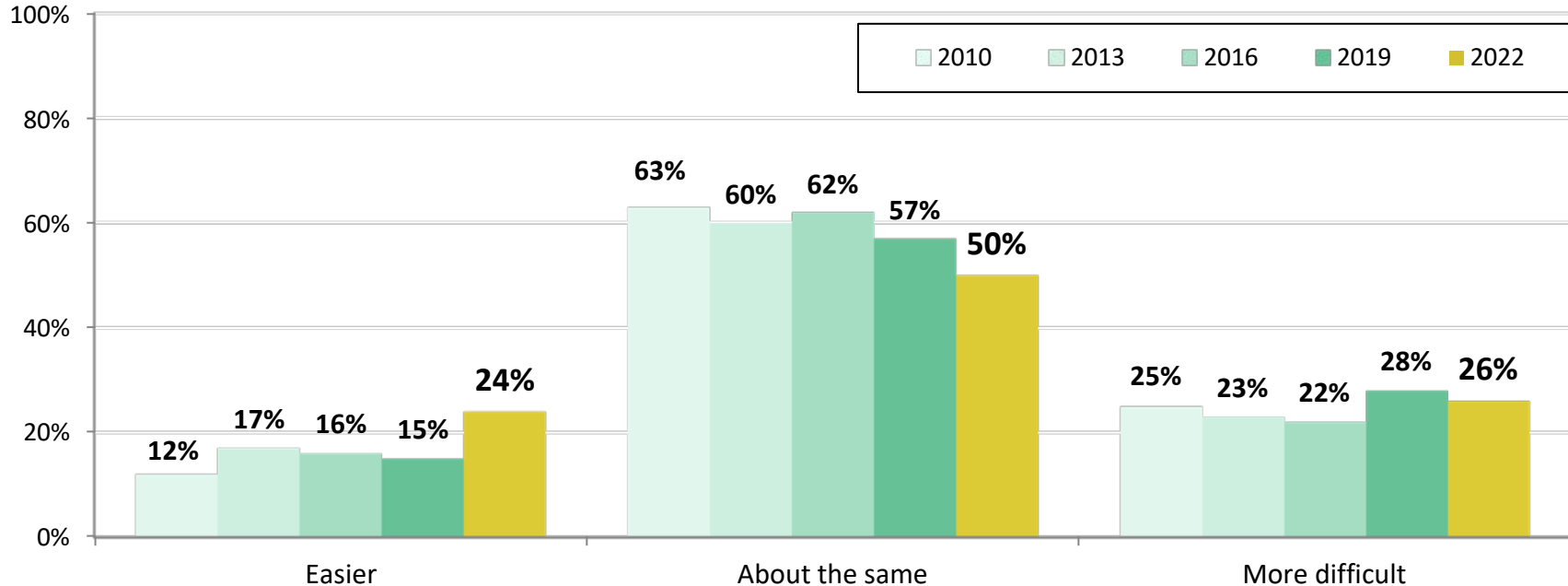
Bikers/Walkers Were Most Satisfied; Metrorail & Bus Riders Were Least Satisfied

Commuters who carpooled/vanpooled or drove alone reported higher satisfaction in 2022 than in 2019. Transit riders were LESS satisfied in 2022



# Commute Ease

- More commuters reported easier commute / Fewer reported difficult commute
- Commuters in region’s core area reported more difficult commute than those in inner jurisdiction (33% Vs 24%)
- Significantly higher proportion of transit commuters reported difficult commute (42% Bus, 50% Train)

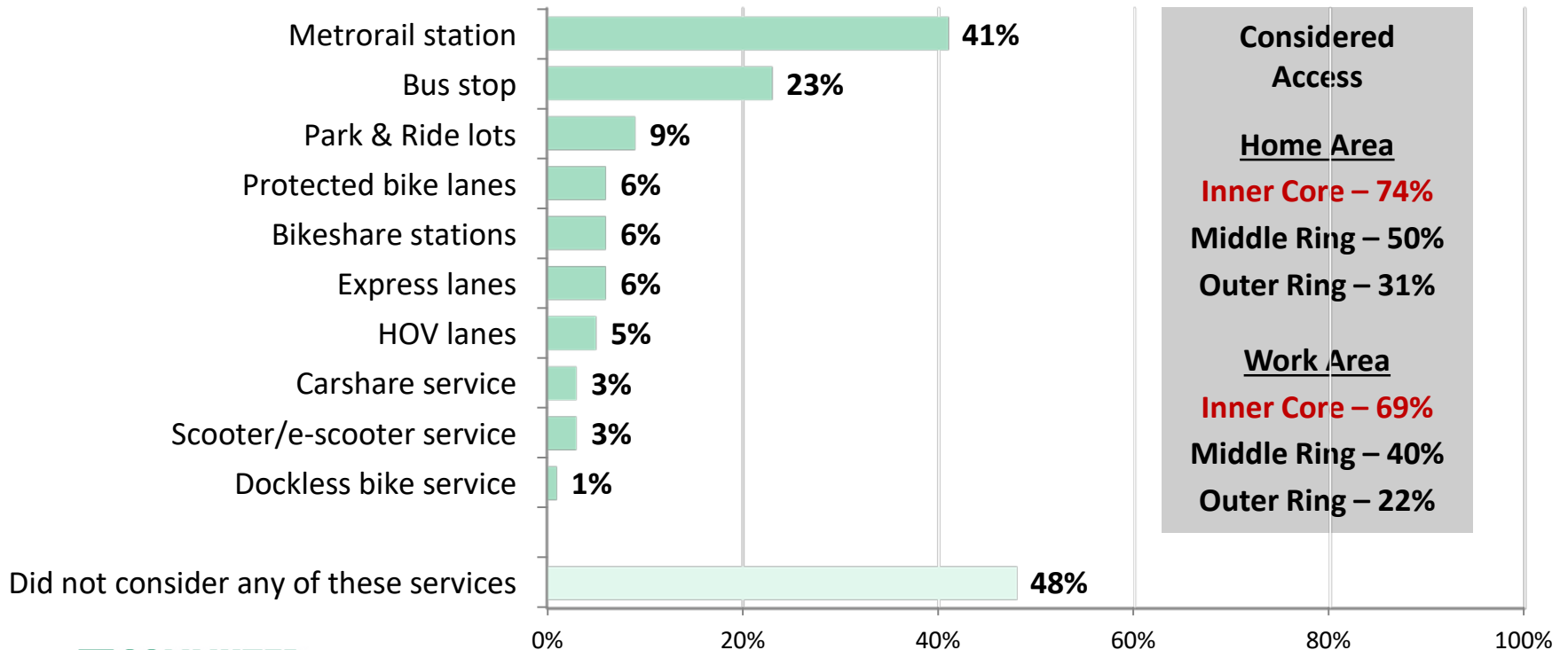


**More Difficult Commute**  
**Home Area: Inner Core – 33%, Middle Ring – 24%, Outer Ring – 35%**

# Mode Access Considered When Moving

52% of Commuters who Moved Home/Work Considered Availability of Transportation Services at the New Location

Most likely to consider availability: Younger than 35 years, Limited access to personal vehicle, Use alt mode to commute, Live/work in Inner Core



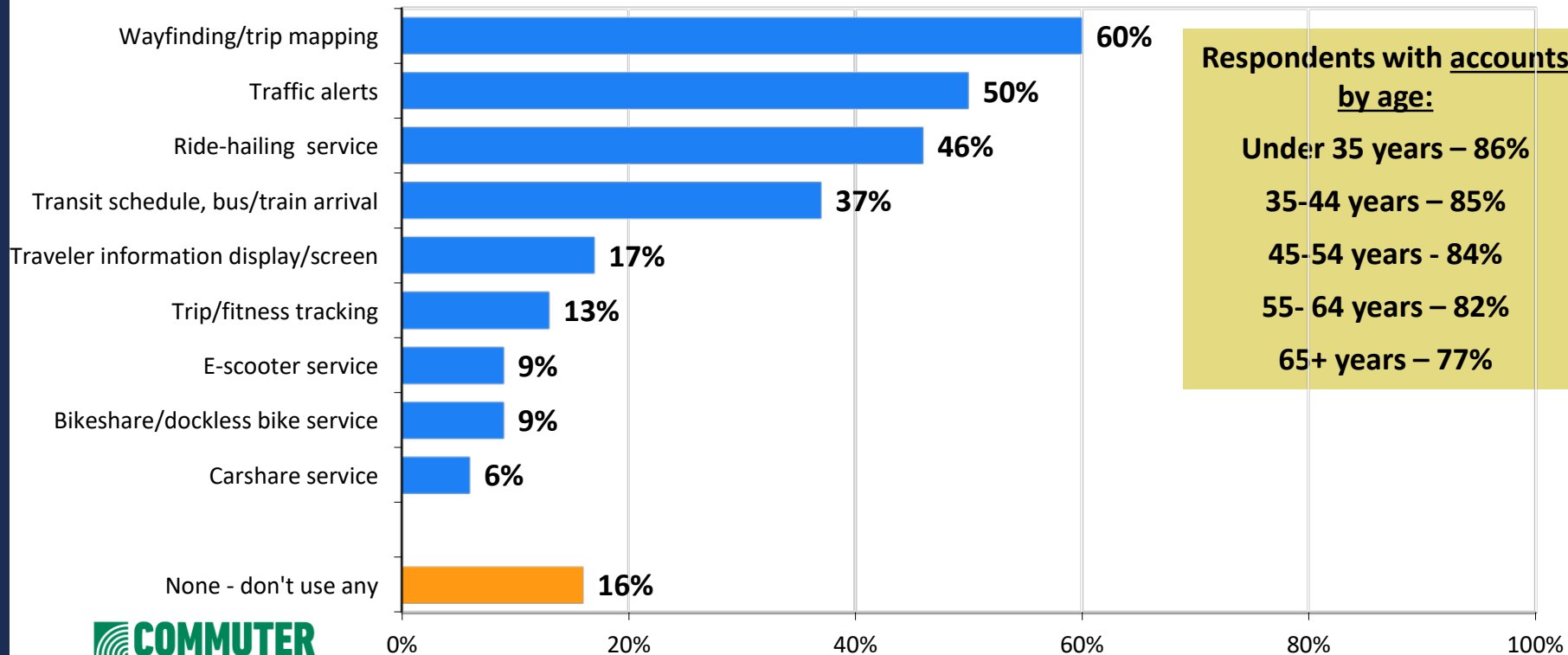
# D. Technology Initiatives and Driverless Cars

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- Travel Trip Applications
- Driverless Cars

# Travel/Trip Information Application Use

- 84% of Respondents Had an Account With at Least One Travel/Trip Information Application
  - Wayfinding/Trip Mapping (60%), Traffic Alerts (50%)
  - Use of accounts declined slightly with increasing age





# Driverless Cars – Familiarity

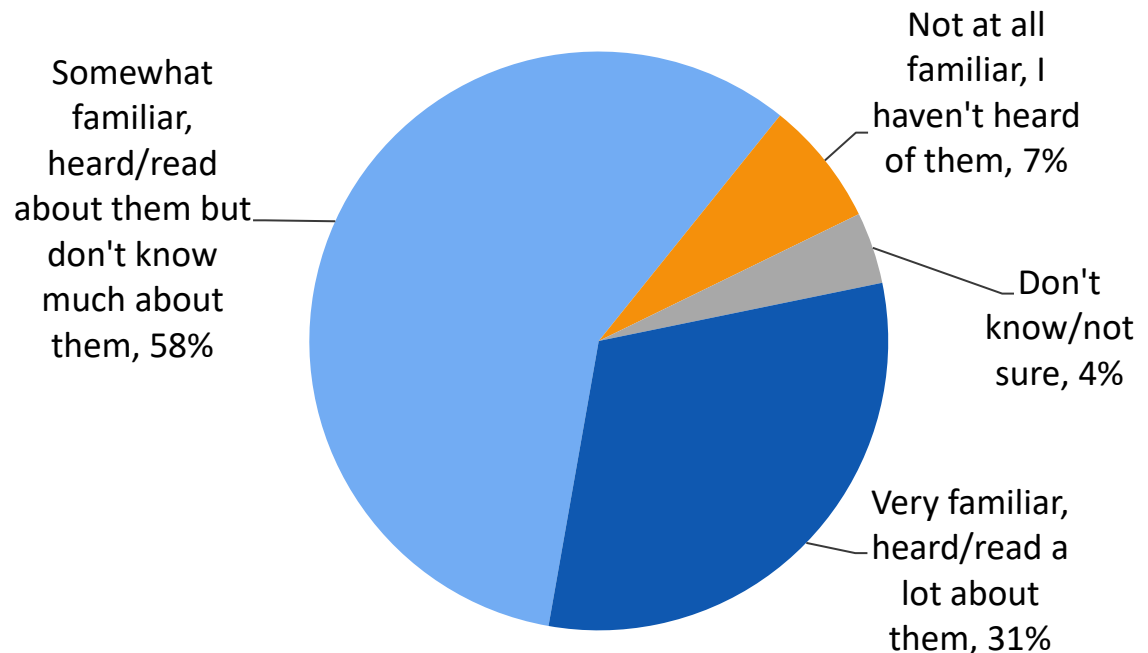
- About 90% commuters familiar with concept of driverless cars
  - One-third “Very Familiar”; 58% “Somewhat Familiar”
  - Significant gender disparity in familiarity / Not much disparity by age

## Reported Being very familiar:

Male – 42%  
Female – 19%

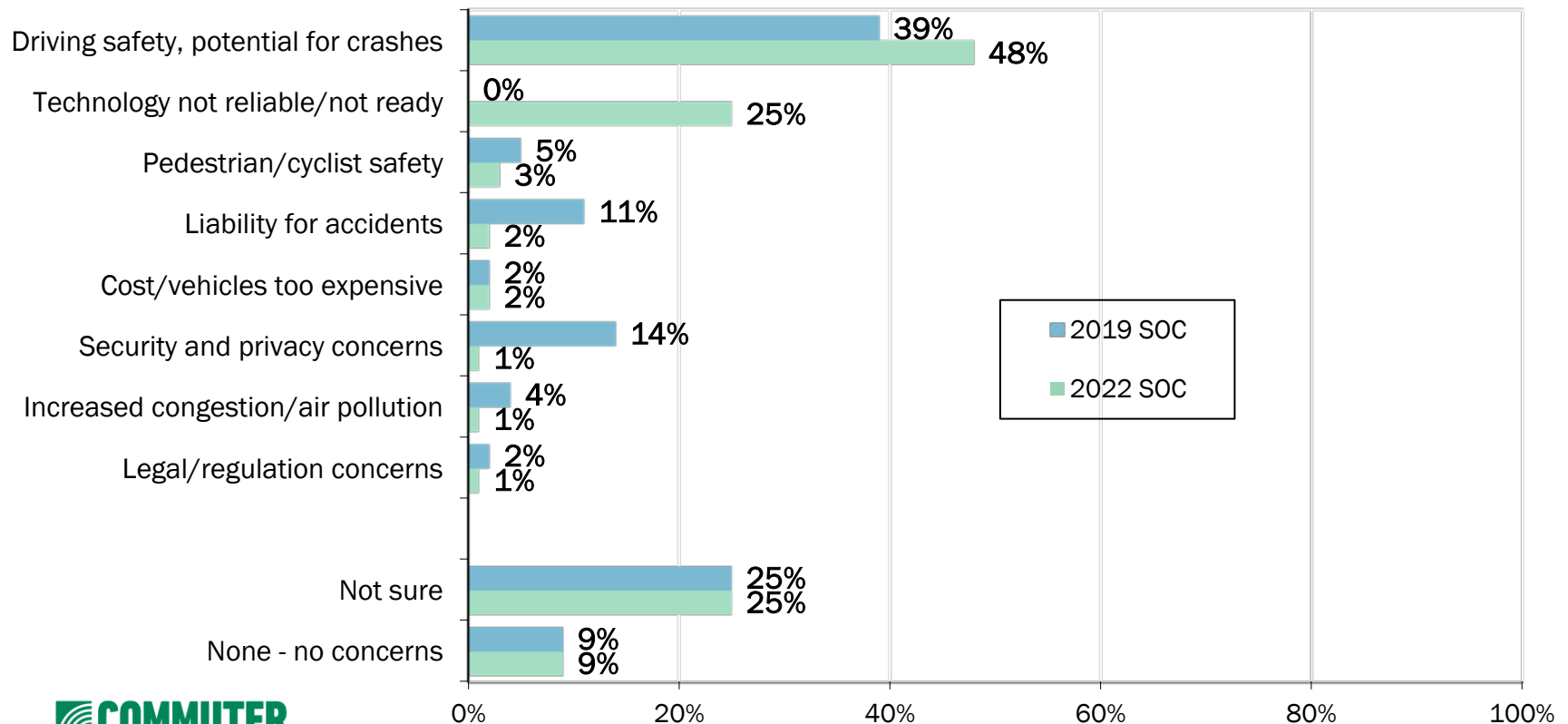
\$160K+ – 37%  
\$100-\$159K – 30%  
< \$100K – 27%

18-24 years – 94%  
25-44 years – 90%  
45 -54 years – 88%  
55- 64 years – 89%  
65+ years – 90%



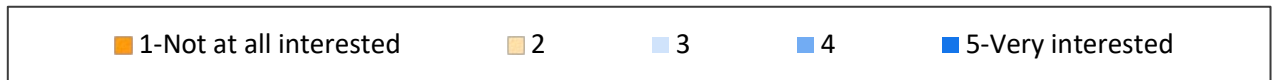
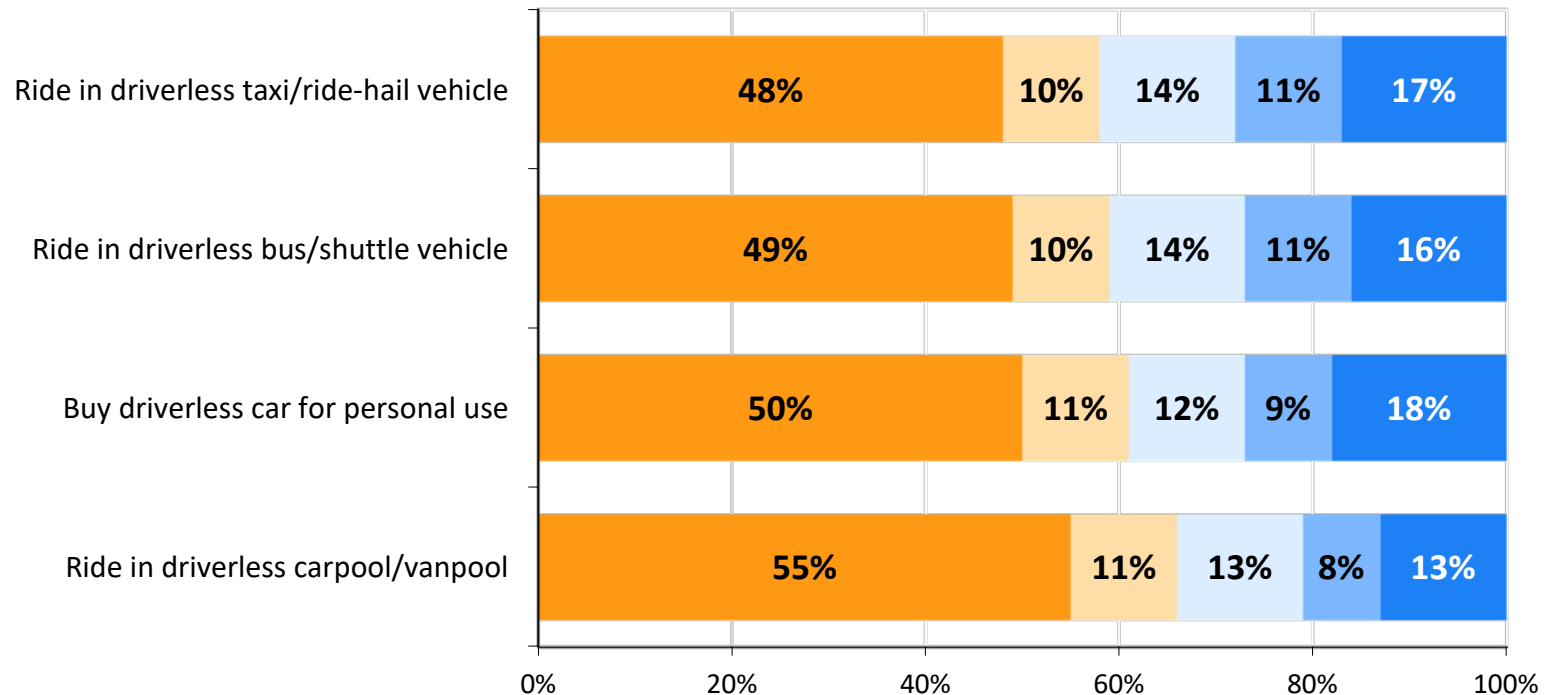
# Concerns With Driverless Cars

- More commuters now cite reduced safety / potential for crashes
- Far fewer now cite liability and privacy as a concern
- A quarter of the commuters have concerns about reliability



# Interest in Driverless Cars

Overall level of interest was similar across scenarios, regardless of the type of vehicle described in the scenario and/or whether the vehicle was owned or rented by the respondent.



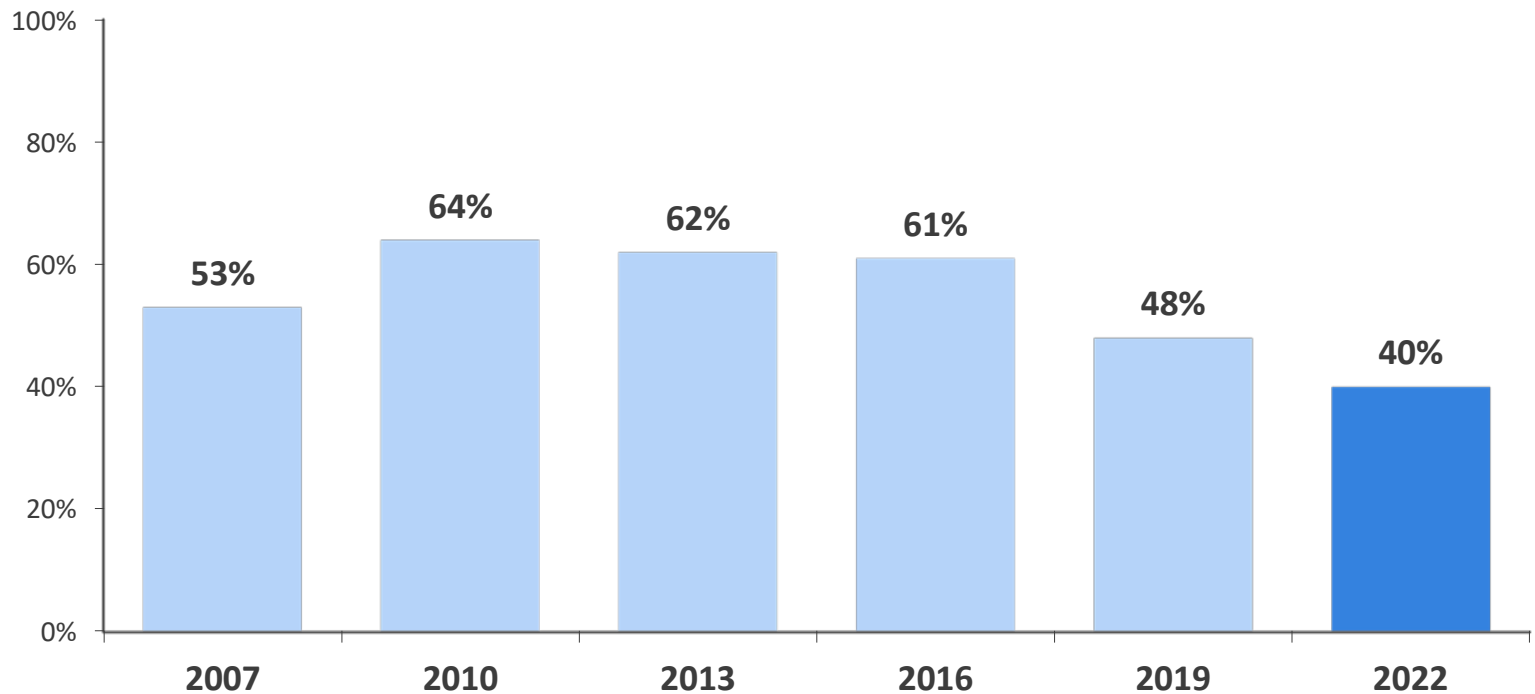
# E. Employer Services /Marketing Awareness

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- Regional Commute Advertising/Brand Awareness
- Advertising Effectiveness
- Commute Services Offered and Used at the Workplace

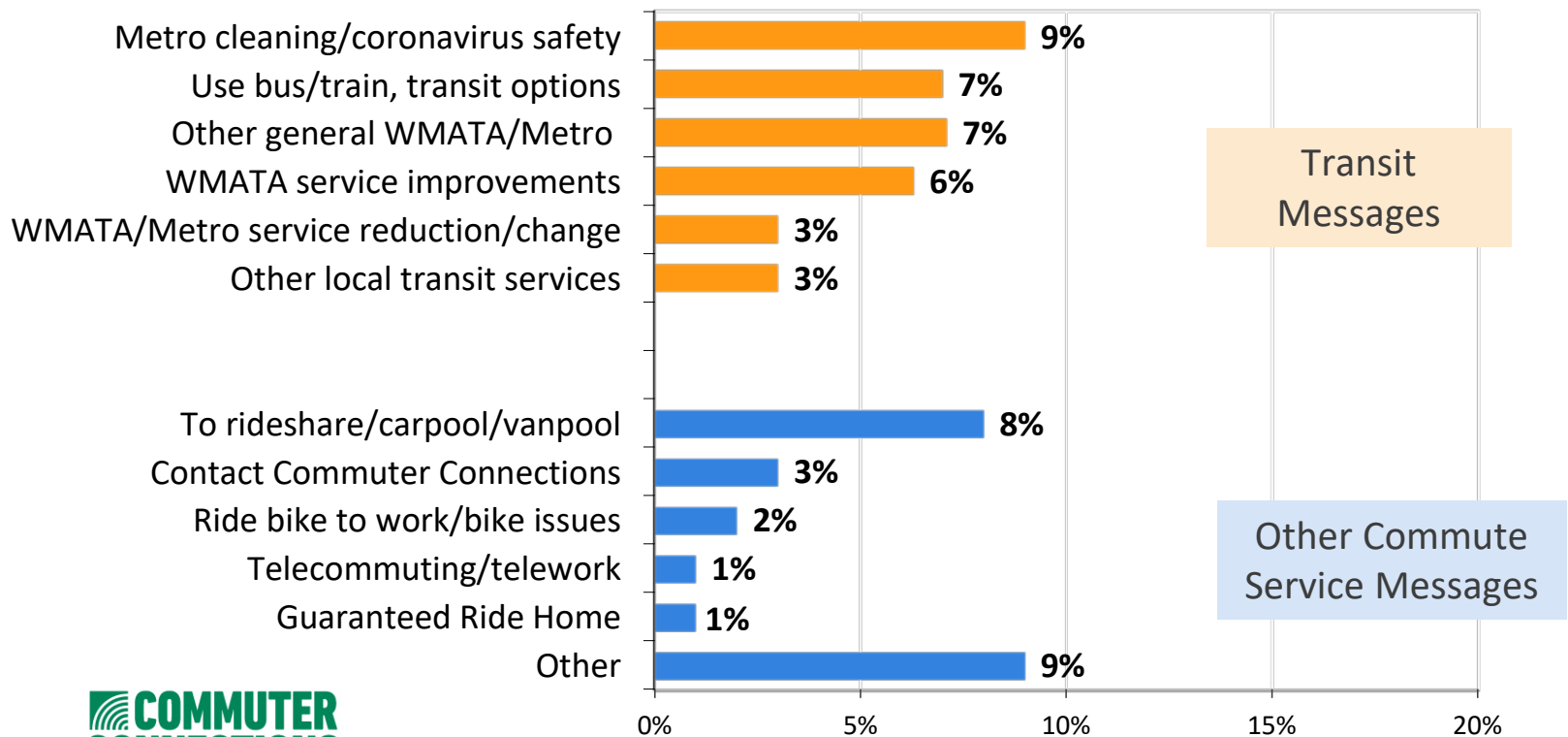
# Brand Awareness

- Drop in Awareness of Commuter Connections Services
- Drop in Contacts by Commuters Aware of the Program (11% to 5%)
- Correlates with significant drop in ridesharing & reduced marketing campaign



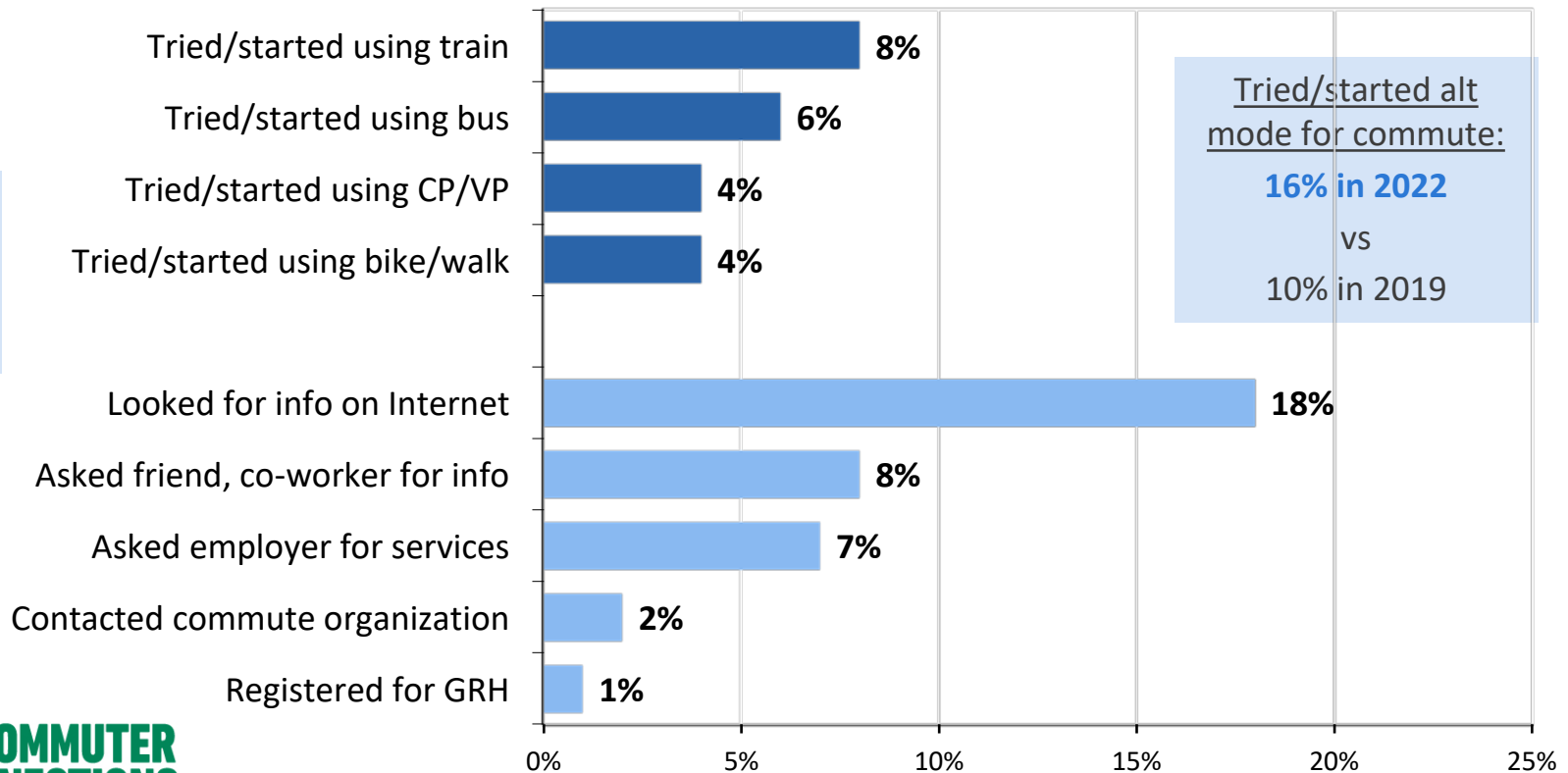
# Ad Recall

- 27% of Respondents Recalled Hearing/Seeing Commute Ads in the Past Year (45% in 2019)
- About half who were aware of ads could name a specific message
- Transit messages dominated recall (highest for pandemic measures)



# Actions Taken After Seeing/Hearing Ad

- 34% of Respondents who Recalled Messages Took an Action to Try to Change their Commute
- 16% who knew ads tried or started using an alternative mode for their commute, higher than the 10% who made a mode change in 2019

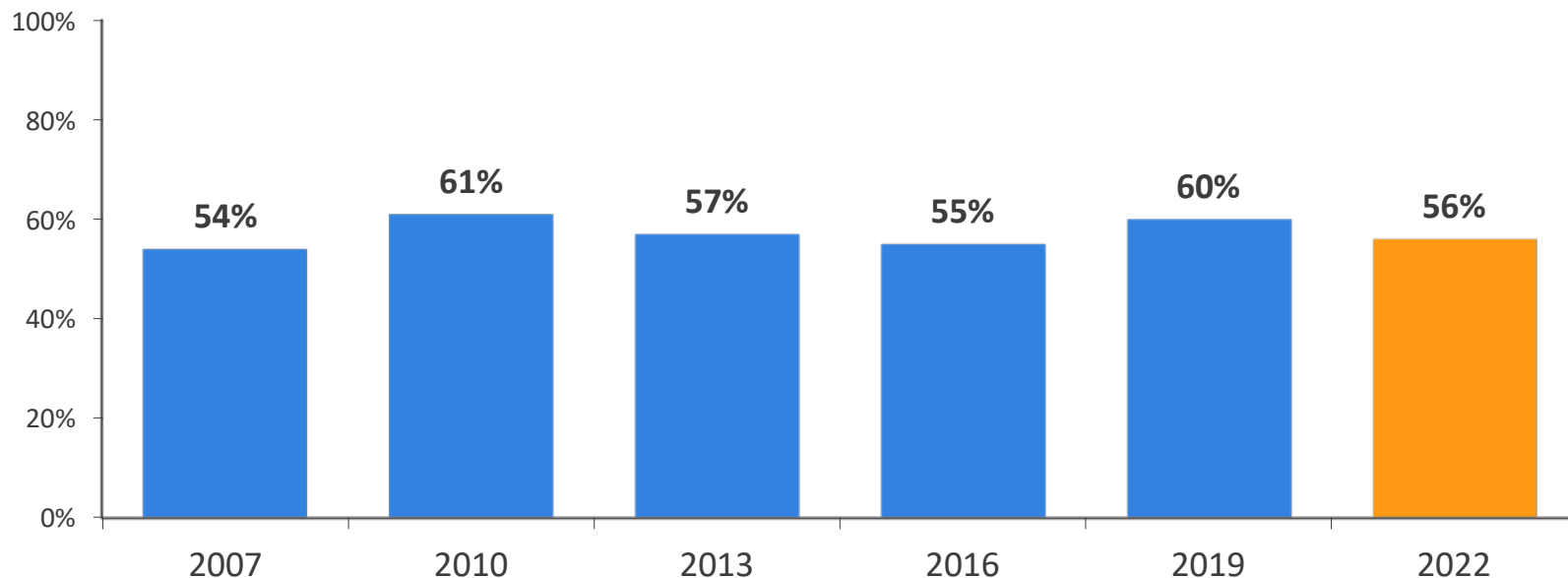


35% who took action said the ad encouraged the action

# Employer Commute Services Offered

56% of Respondents Said their Employers Offered Commute Services at the Workplace

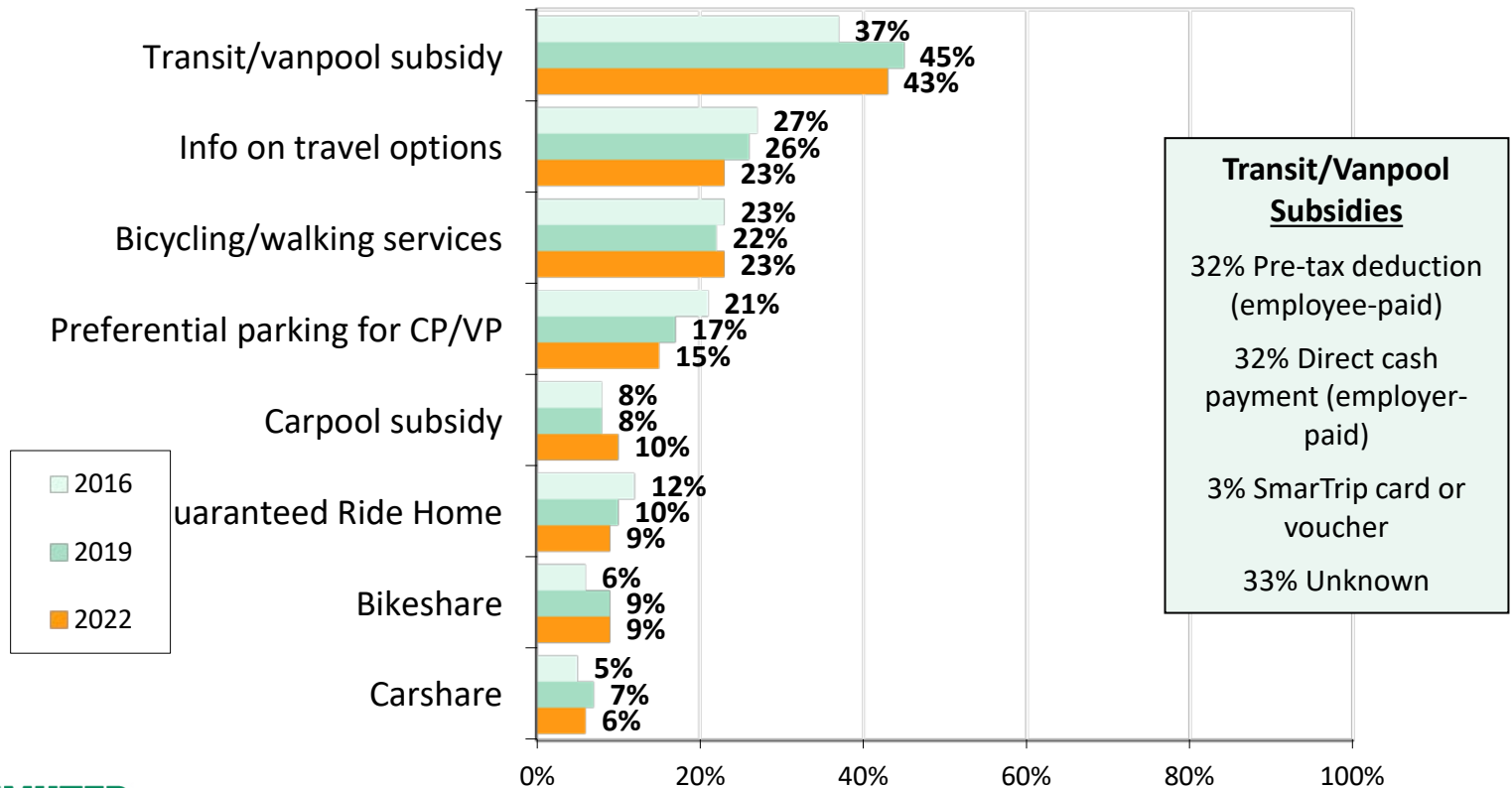
- Availability was slightly lower in 2022 than in 2019 (60%)
- Some employers may have paused or reduced services during the pandemic OR employees were less aware of services because they teleworked some or all workdays





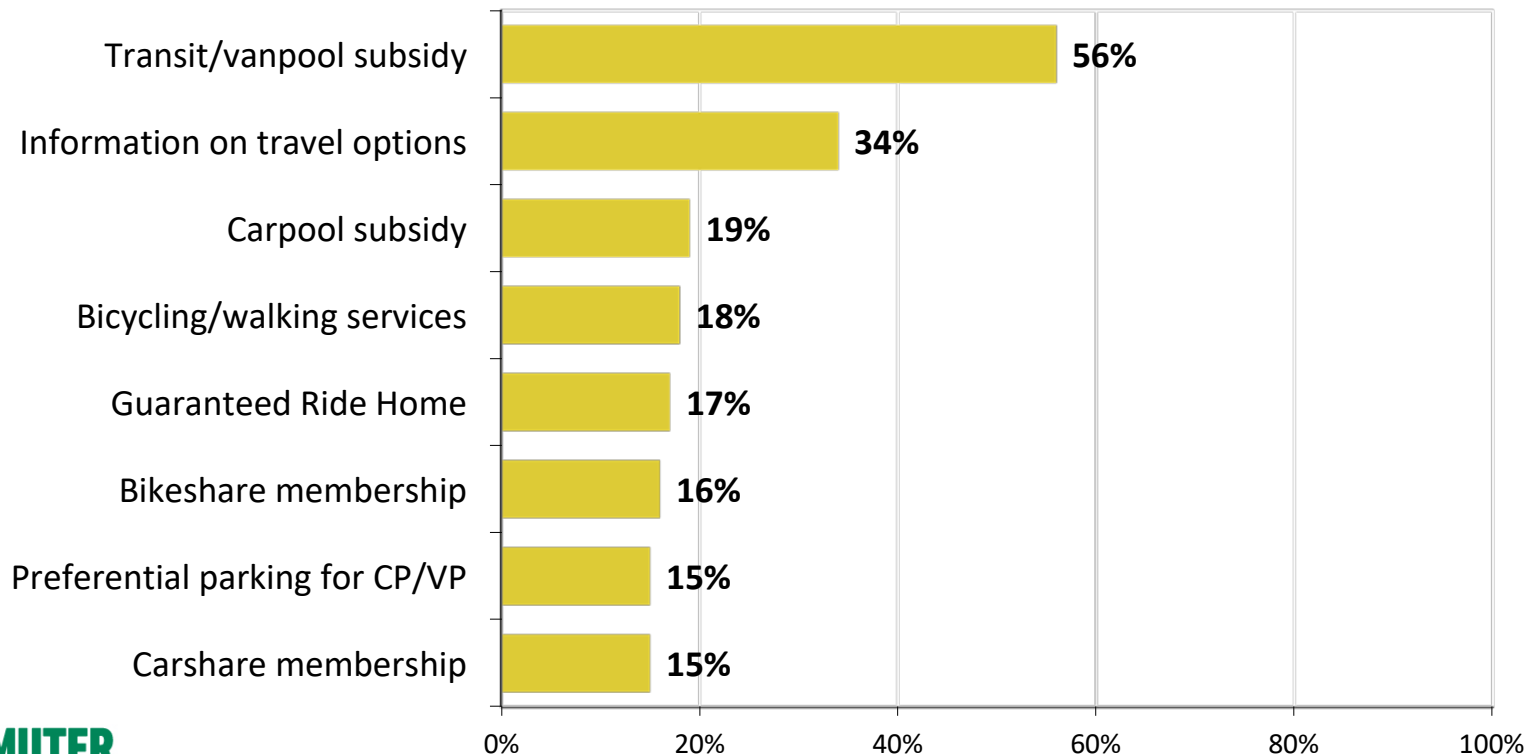
# Type of Employer Commute Services

- Transit/Vanpool Subsidy Was Most Widely Available Service (43%)
- Availability of most services was not statistically different than in 2019



# Use of Employer Commute Services

- Transit/VP Subsidy Also Was Most Widely USED Employer Service (56%)
- 34% used travel option info and 19% used carpool subsidy; other services used by about two in ten with access



# Parking at Worksites

- Free Parking increased at worksites between 2019 and 2022
- 8% of Core workers with free parking said it was not free before the pandemic, compared with 3% of Middle Ring and 1% of Outer Ring

| Parking Facilities and Services           | 2010 | 2013 | 2016 | 2019 | 2022       |
|---|------|------|------|------|------------|
| Free on-site parking (all employees)      | 63%  | 63%  | 64%  | 60%  | <b>69%</b> |
| Free on-site parking (some employees)*    | ---- | ---- | 6%   | 5%   | <b>6%</b>  |
| Free off-site parking                     | 2%   | 2%   | 1%   | 1%   | <b>1%</b>  |
| Employee pays all parking charges         | 22%  | 23%  | 24%  | 28%  | <b>22%</b> |
| Employee/employer share parking charge    | 7%   | 7%   | 5%   | 5%   | <b>3%</b>  |
|   |      |      |      |      |            |
| Parking discounts for carpools/vanpools** | 16%  | 14%  | 14%  | 9%   | <b>6%</b>  |

# Next Steps

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- Review of Technical Report/Comment Period
- Finalize Technical Report this month (FY 2023)
- Prepare General Public Report in FY 2023
- Publish and distribute General Public Report in July/August 2023 (FY2024)

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