COMMUTER CONNECTIONS TDM EVALUATION PROJECT

2022 State of the Commute Survey Highlights

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Bicycle and Pedestrian Subcommittee September 20, 2022



Presentation Outline

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



Survey Background

- 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 (2017-2018) | State of the Commute 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 and typical weekday travel | Commute patterns and commuter opinions | | | | |
| Primary Purpose | Analyze household and person trips to develop COG/TPB's regional travel demand forecasting model | Analyze commute trends / attitudes to evaluate the effectiveness of commuter services programs | | | | |



SOC Survey Methodology

- 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% <u>+</u> 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

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

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



Coronavirus Pandemic Upended Commuting in 2022 vs 2019

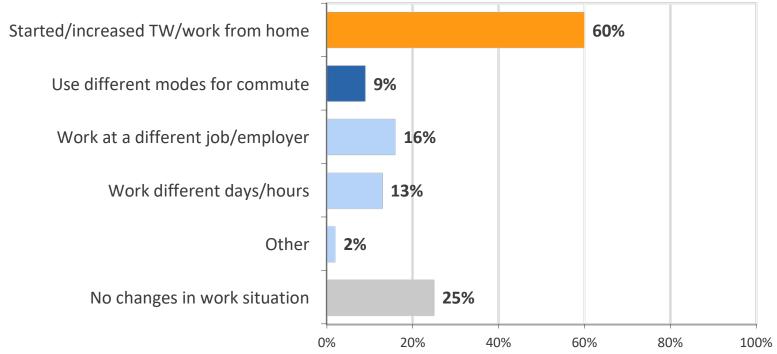
Many aspects of commuting changed but some stayed surprisingly consistent

- 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
- Similar access to employer commute services



Pandemic Worker Commute Changes

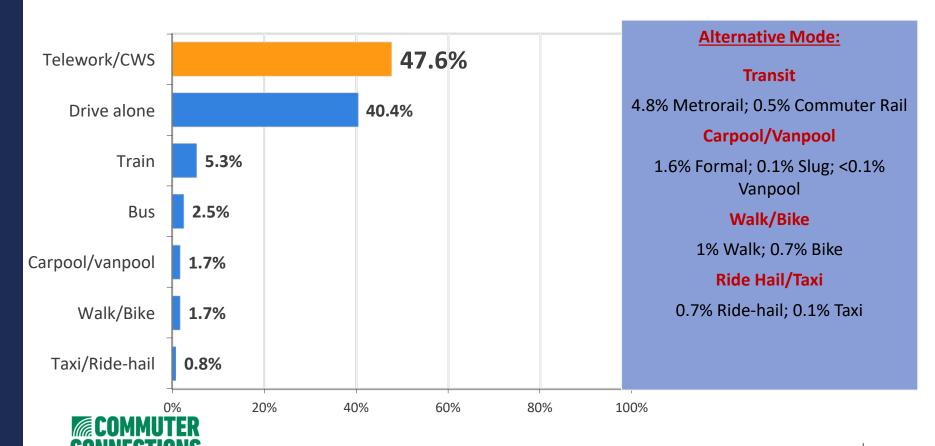
- 60% started or increased telework (32% shifted to full-time telework).
- Almost one in ten changed the travel mode on days they commute.
- Almost three in ten made change in their work arrangement





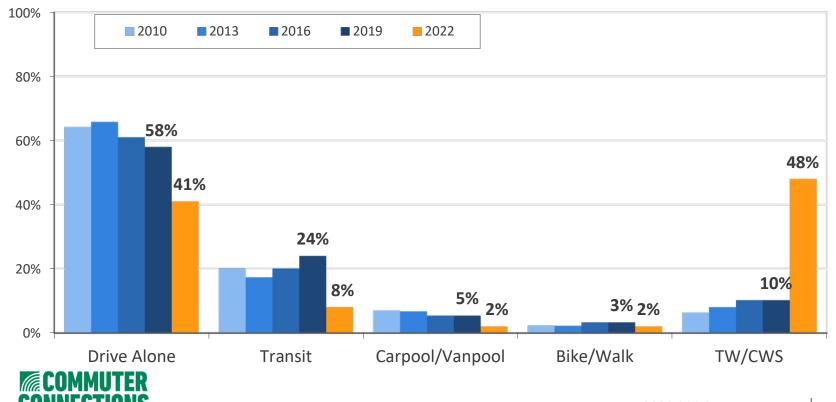
Weekly Commute Trips By Mode

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



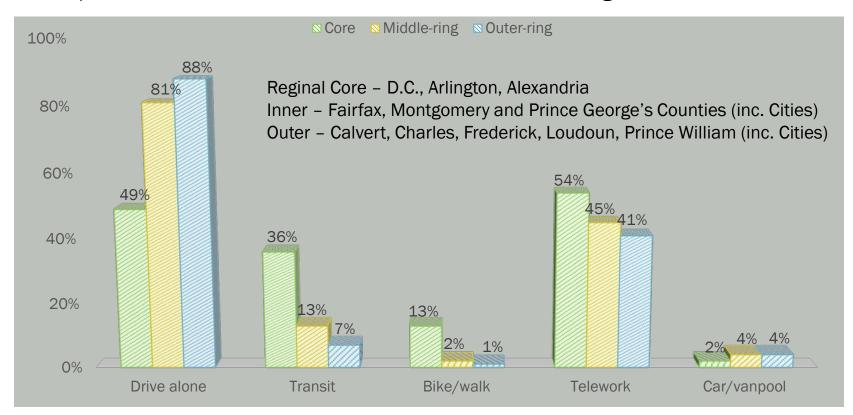
Weekly Commute Trips by Mode Trend

- 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

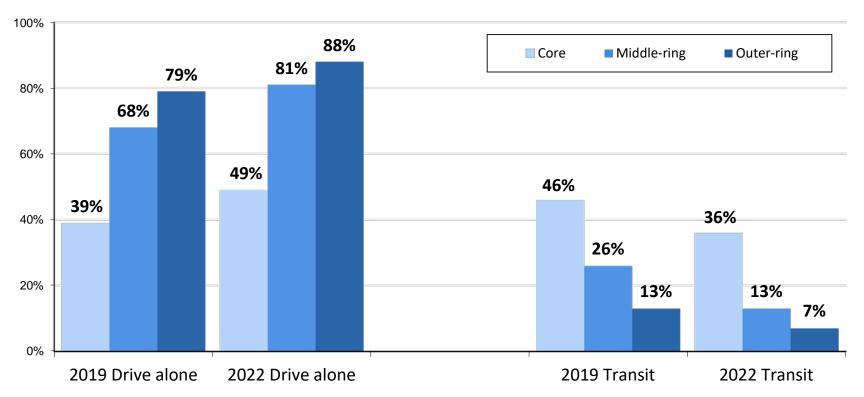
- Regional Core Telework, Drive Alone, Transit
- Inner and Outer Jurisdictions Drive alone, Telework, Transit
- Proportion of Drive alone twice that of Telework in Inner & Outer jurisdictions
- Proportion of drive alone close to that of Telework in Regional core





Driving Alone vs. Transit Use

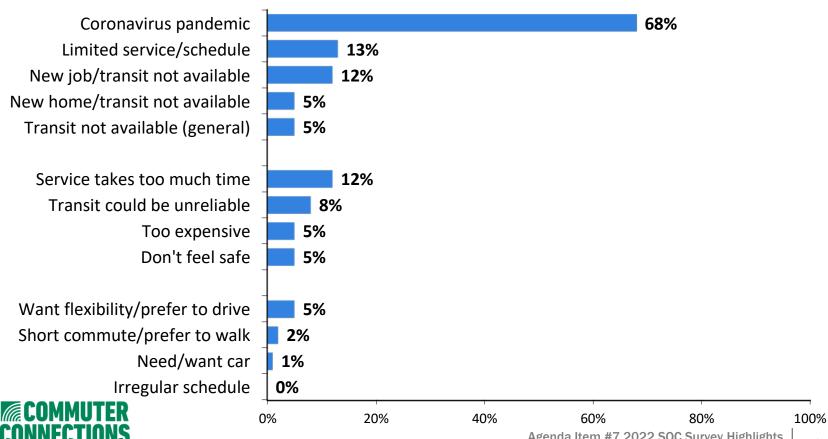
- Pre-pandemic pattern still holds: Core Higher transit / Inner & Outer Higher drive alone
- Transit mode share loss in all 3 sub-areas; most (50%) in Inner and Outer
- Drive alone increases in all 3 sub areas; most in Inner jurisdictions





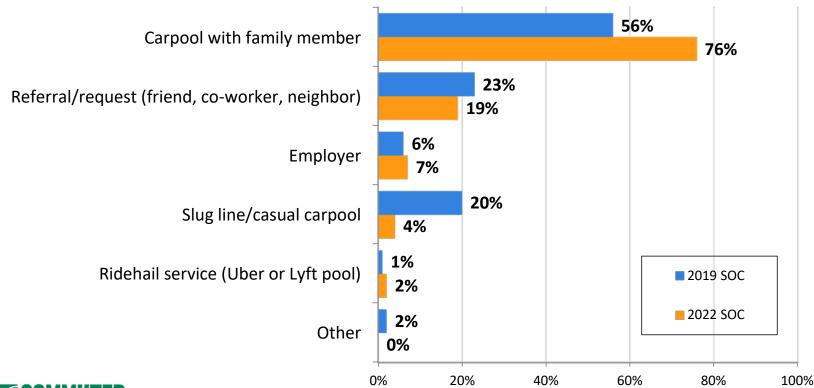
Reasons For Discontinuing Transit Use

- 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

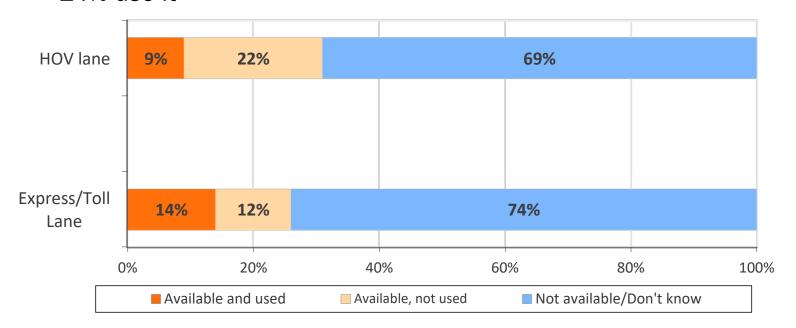
- Pandemic caused major change 76% of Carpool with Family Members (Pre-pandemic, 2019, 56% were Household Carpools)
- Casual carpooling (Slugging) dropped significantly 4% of all carpools (Pre-pandemic, 2019, 20% of all carpools)





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

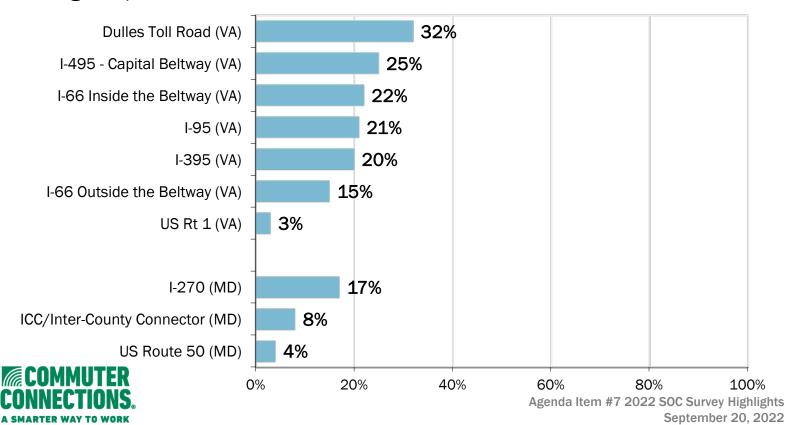


 CP/VP Use is 9% With Access to HOV Lane vs 3% with No HOV or Express Lane Access



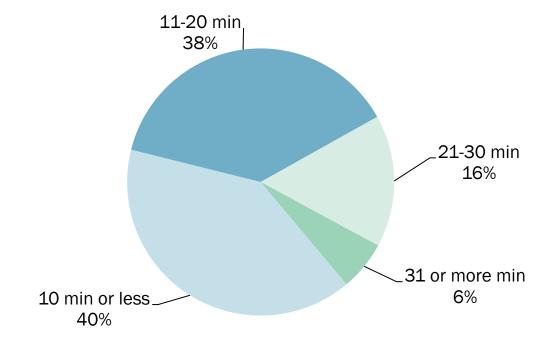
HOV and Express/Toll Lanes Use

- 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

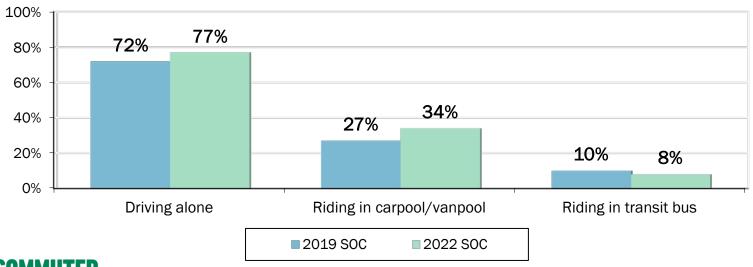
- About 60% of HOV/HOT lane users cite time savings of 11 to more than 30 minutes
- A bit more than 1 in 5 cite time savings of more than 20 minutes





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).



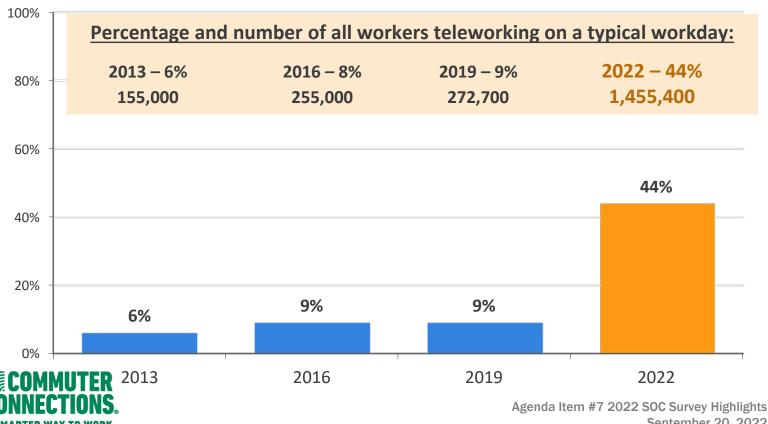
B. Telecommuting / Teleworking

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



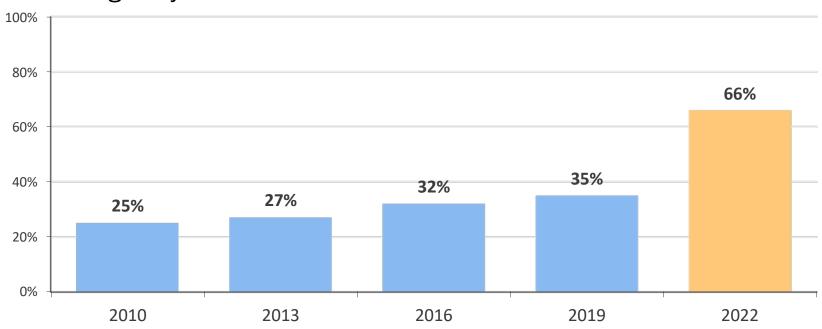
Number of Telecommuters/Teleworkers

- 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

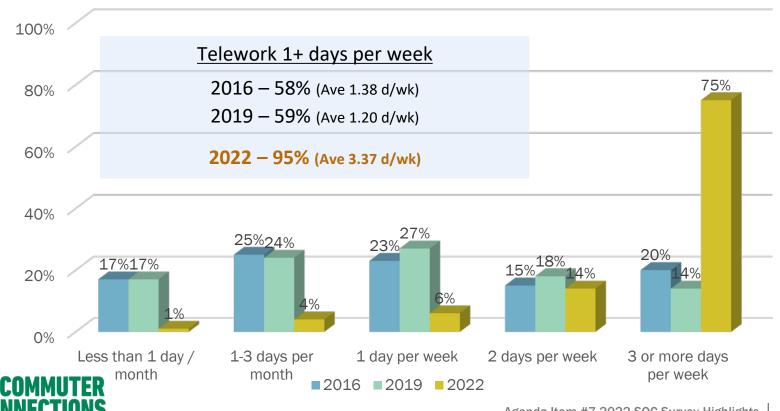
- Proportion of commuters who teleworked occasionally or regularly doubled from 2019 levels
 - About 2.3 million of region's workers telework occasionally or regularly





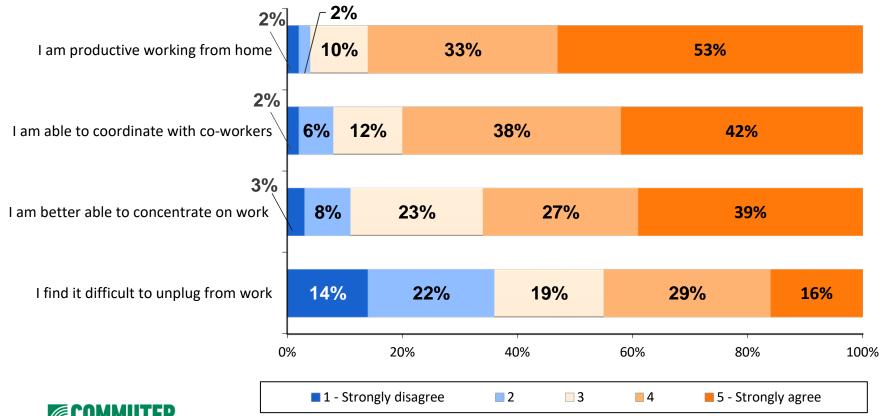
Telework Frequency

- 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

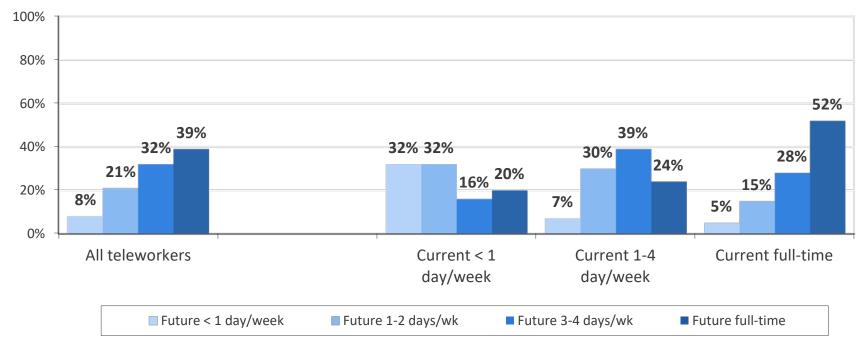
- At least 80% of Teleworkers reported being more productive and able to coordinate with co-workers
- 45% of Teleworkers reported difficulty "unplugging" from work





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 fulltime





C. COMMUTE EASE & SATISFACTION

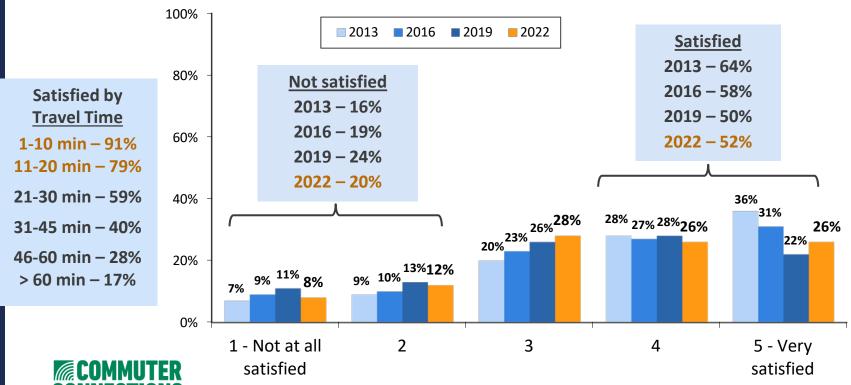
- Commute Satisfaction (by geographic area and mode)
- Modes Considered as Part of Moving



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.

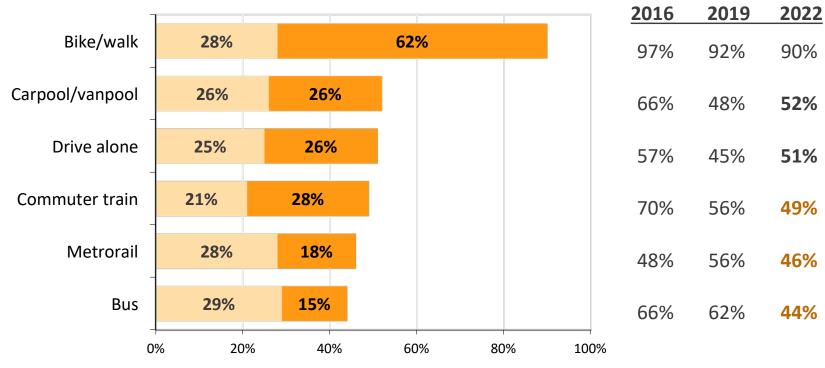




Satisfaction by Mode

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

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



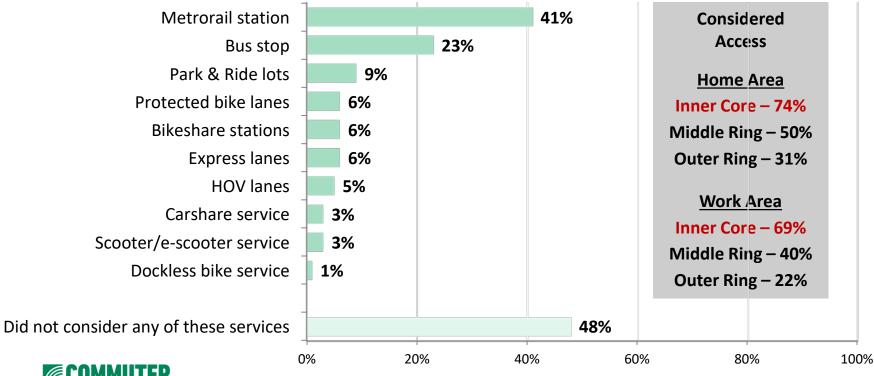
■ 5 - Very satisfied



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





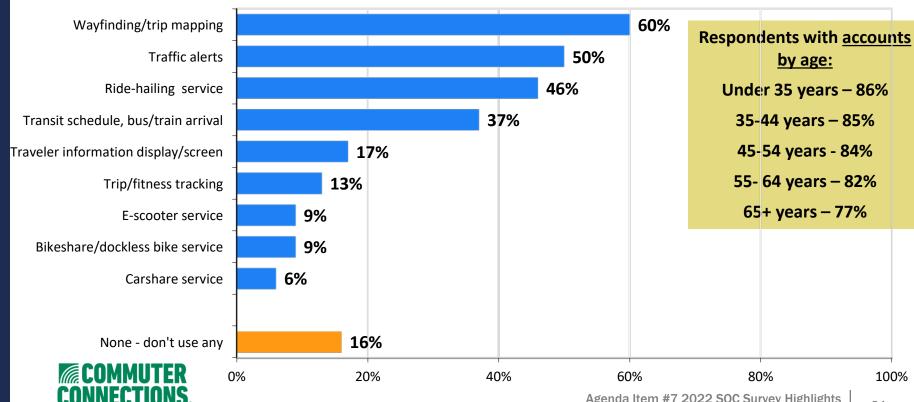
D. Technology Initiatives and Driverless Cars

- 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

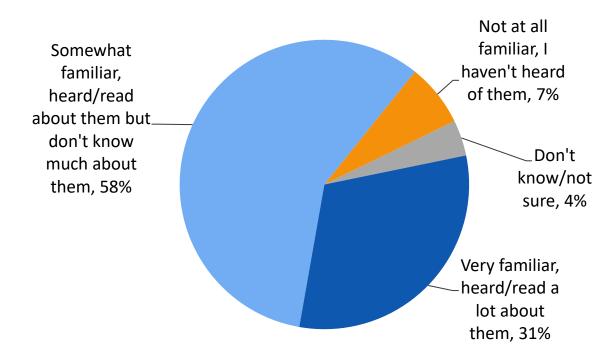
Reported Being very familiar:

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%

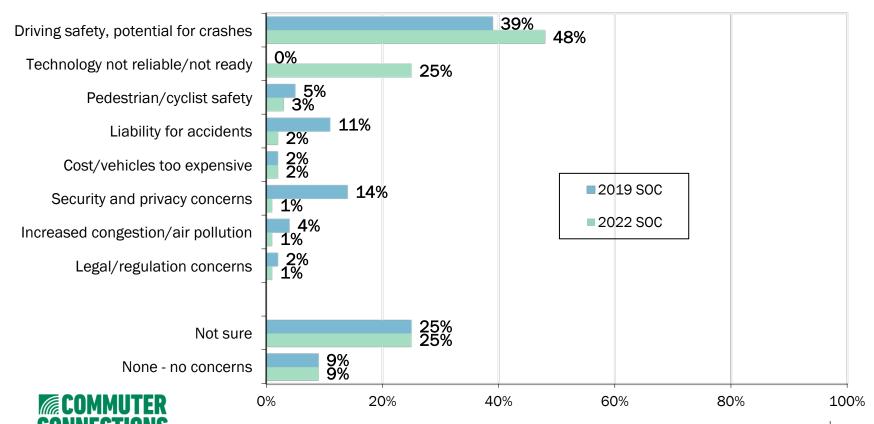
65+ years – 90%





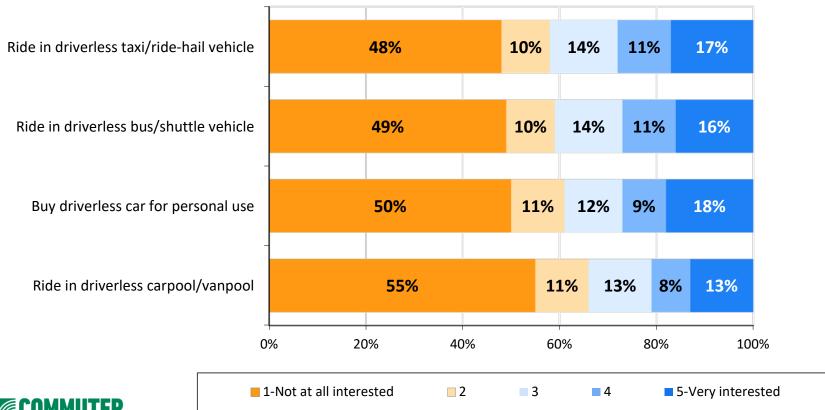
Concerns With Driverless Cars

- 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

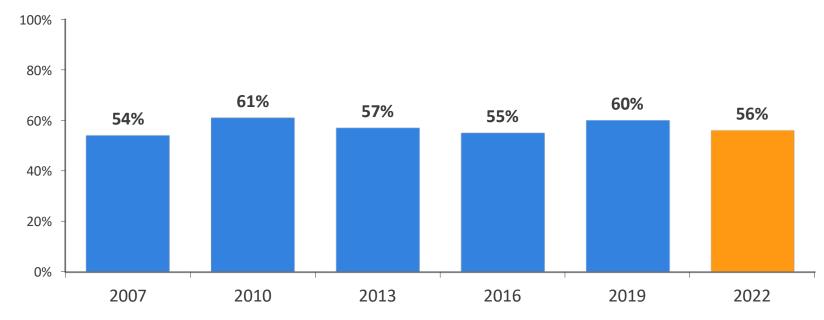
Commute Services Offered and Used at the Workplace



Employer Commute Services Offered

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

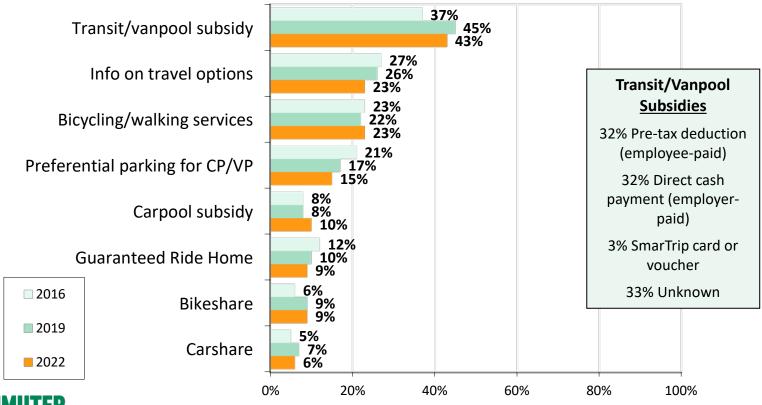
- Availability was slightly lower in 2022 than in 2019 (60%)
- Some employers may have paused or reduced services during the pandemic OR employees were less aware of services because they teleworked some or all workdays





Type of Employer Commute Services

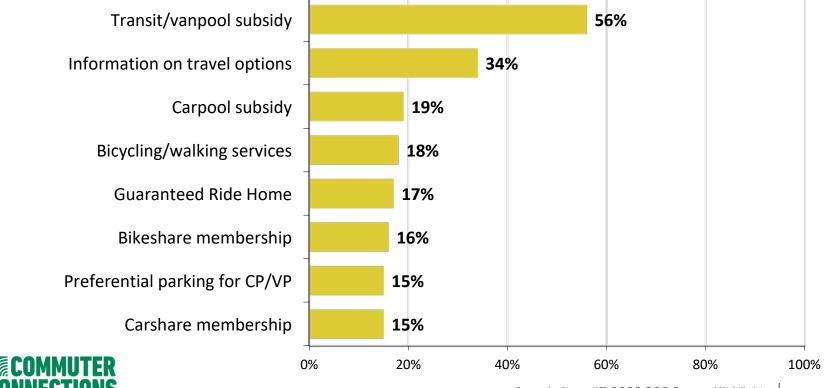
- Transit/Vanpool Subsidy Was Most Widely Available Service (43%)
- Availability of most services was not statistically different than in 2019





Use of Employer Commute Services

- Transit/VP Subsidy Also Was Most Widely <u>USED</u> 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% | 69% |
| Free on-site parking (some employees)* | | | 6% | 5% | 6% |
| Free off-site parking | 2% | 2% | 1% | 1% | 1% |
| Employee pays all parking charges | 22% | 23% | 24% | 28% | 22% |
| Employee/employer share parking charge | 7% | 7% | 5% | 5% | 3% |
| | | | | | |
| Parking discounts for carpools/vanpools** | 16% | 14% | 14% | 9% | 6% |



Next Steps

- 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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