

Financial Impacts of a Road Usage Charge on Super-Commuters

Nov 15, 2024

Key Study Questions

Geography

- Where do super-commuters live and work in California?
- What are the geographic classifications of tracts in which super-commuters reside?

Race/Ethnicity, Income, Occupation

- What racial/ethnic groups, income groups, and occupation groups are super-commuters a part of?

Travel Behavior

- What are typical travel behavior patterns of super-commuters? (E.g., do they drive solo or carpool?)

Vehicle Characteristics

- What are typical characteristics of vehicles that super-commuters drive? (E.g., are they gas powered or hybrid, new or old, fuel efficient or inefficient?)

Revenue Equity

- Will super-commuters pay more or less under a RUC compared to current fuel taxes and surcharges?
- By geographic grouping, racial/ethnic grouping, income grouping, and occupation grouping?



Populations of Interest

Super-commuters, or workers that commute via car, truck, or van more than 3 hours per day round trip (90 minutes one-way in the AM)

- Diverse group of commuters that includes everything from hybrid software engineers to workers commuting long distances to construction, extraction, or mining sites

Super commuters make up approximately 3.7 percent of car, truck, or van commuters in California

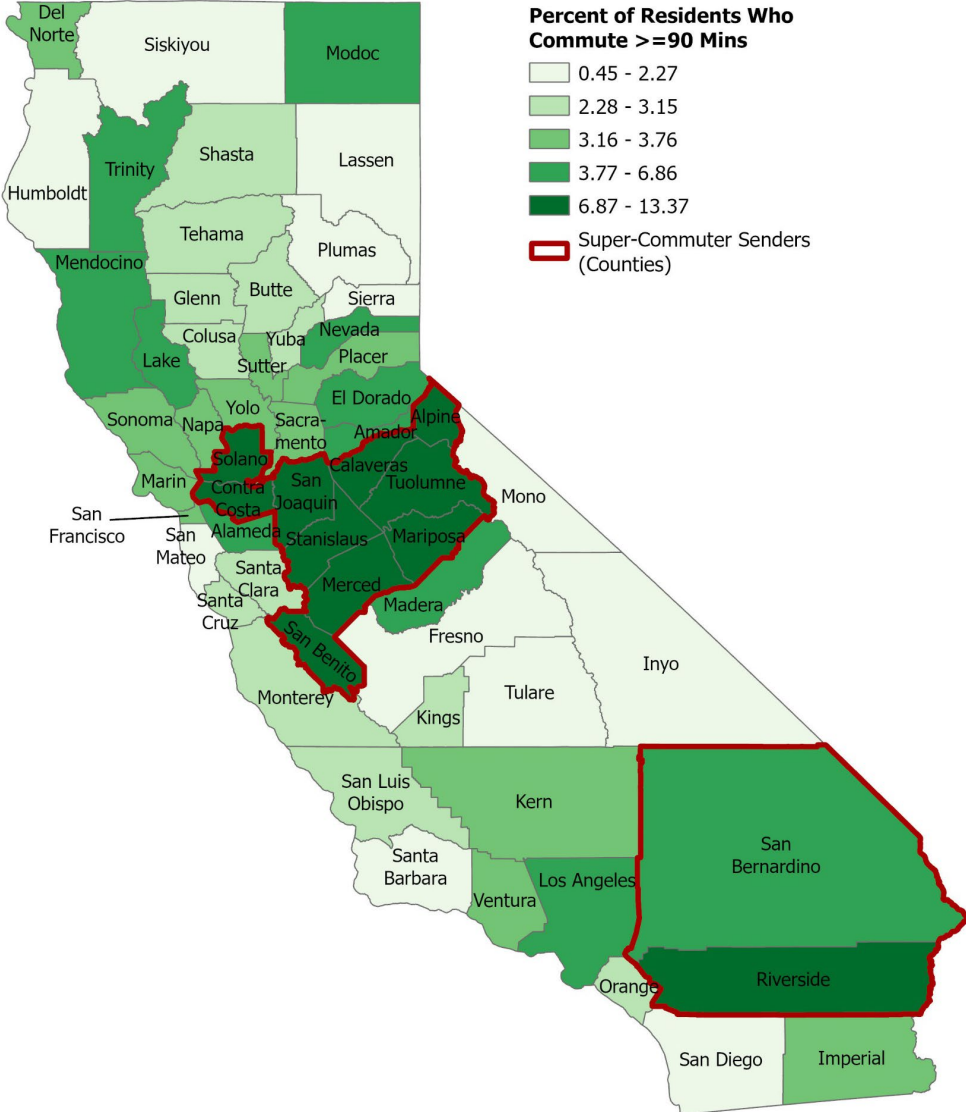
Comparison groups

- **Non-super-commuters**, or workers that commute via car, truck, or van *less than* 3 hours per day round trip
- **Other auto travelers**, or all other car, truck, and van users; includes teleworkers and those who commute via transit but use car, truck, or van recreationally (and therefore, would still experience household impacts of a RUC)



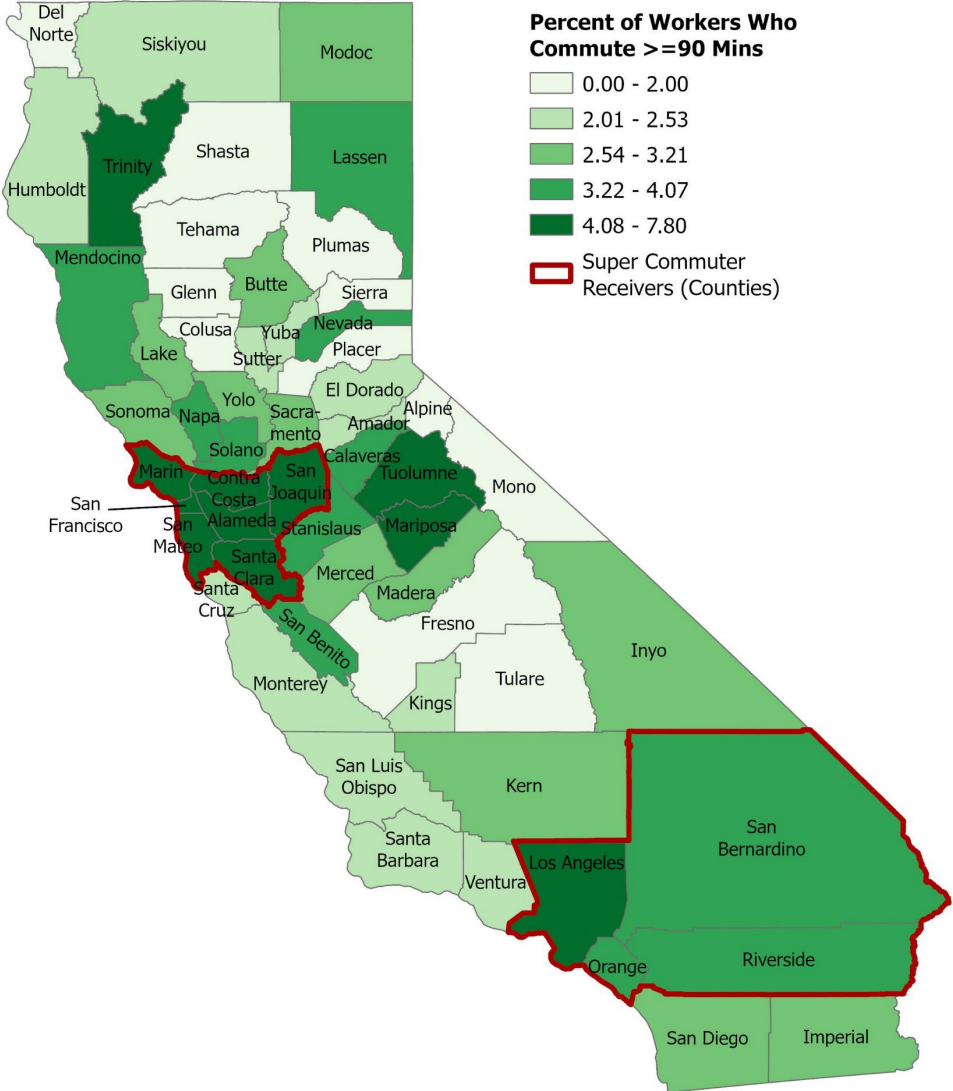
Where Do Super-Commuters Live in California?

County Residence	Percent Super-Commuters
Alpine County	13.4%
San Joaquin County	10.9%
San Benito County	9.9%
Merced County	9.5%
Calaveras County	9.0%
Stanislaus County	8.8%
Contra Costa County	8.6%
Tuolumne County	7.9%
Riverside County	7.6%
Solano County	7.2%
Mariposa County	6.9%
San Bernardino County	6.9%

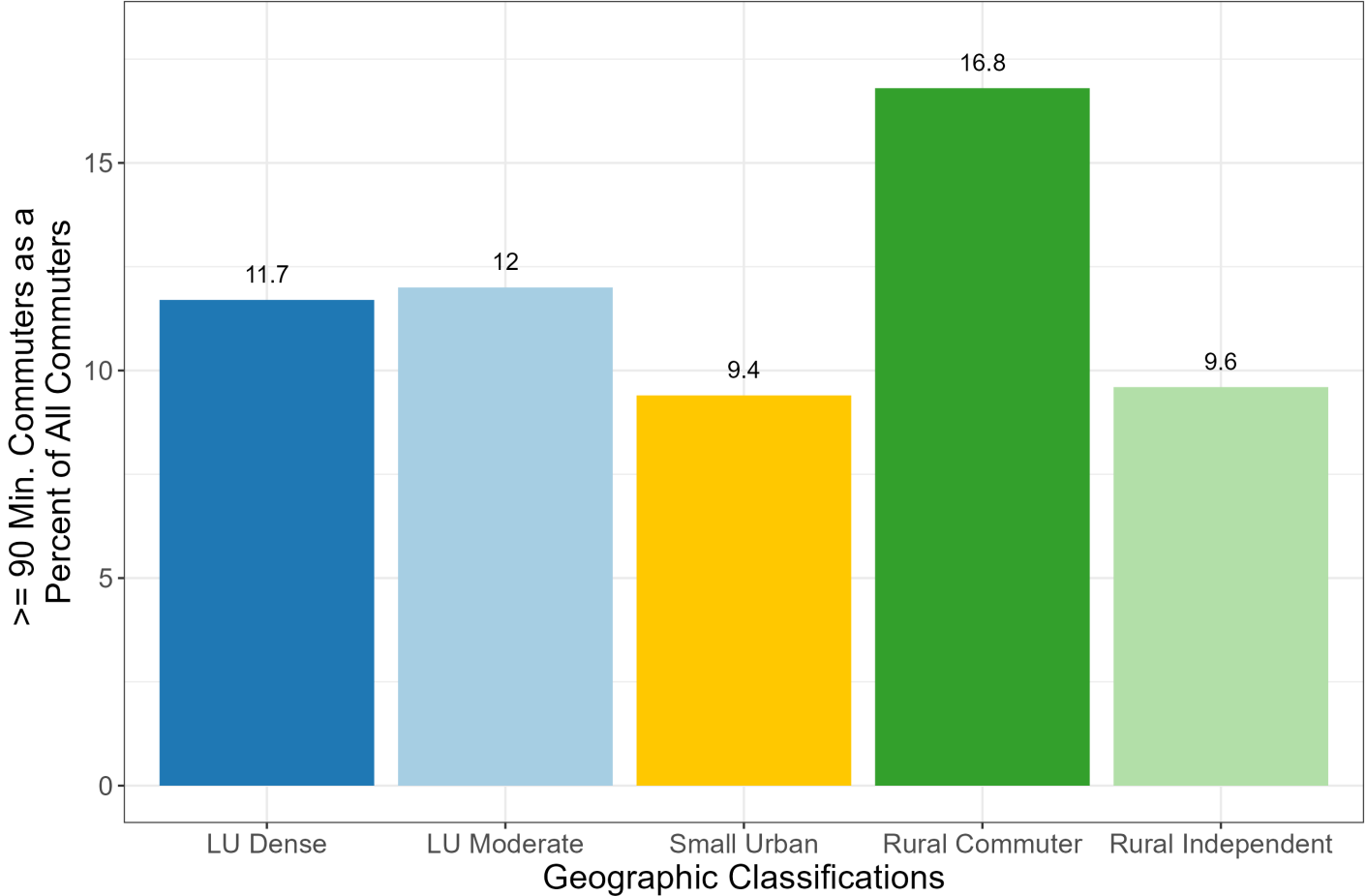
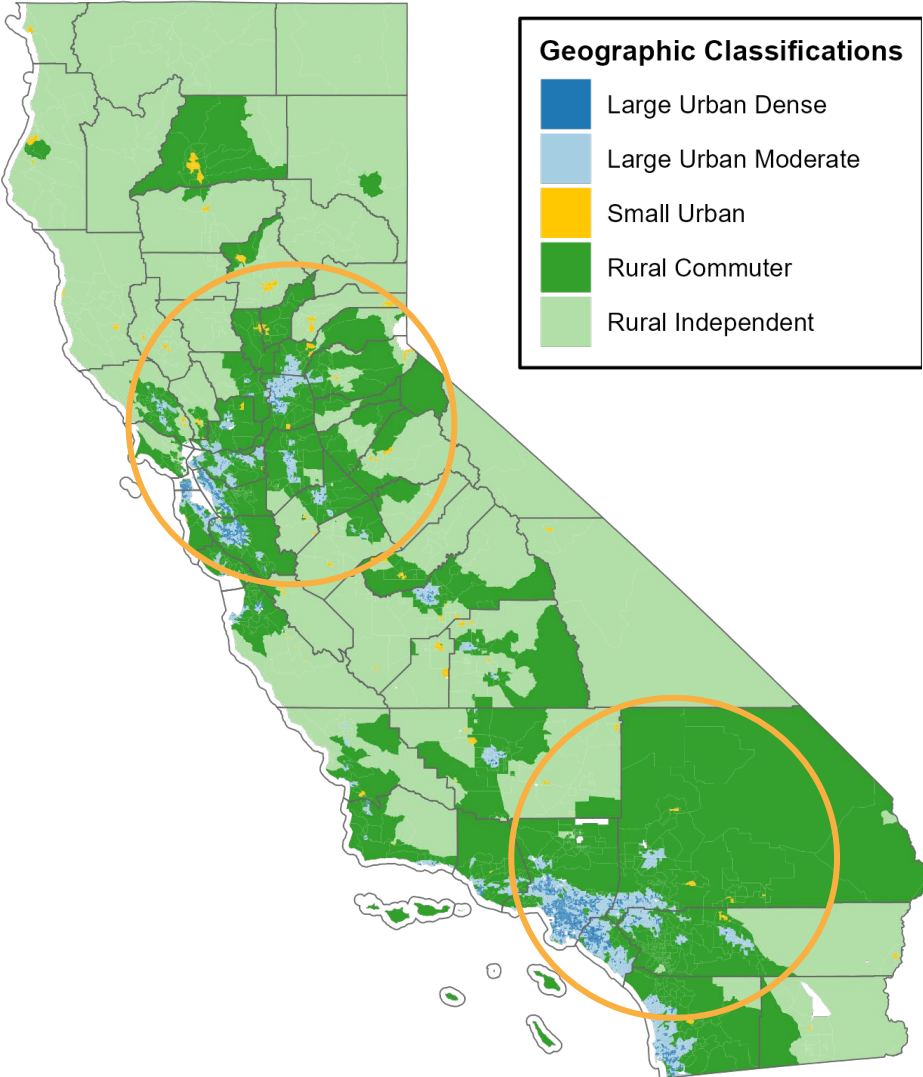


Where Do Super-Commuters Work in California?

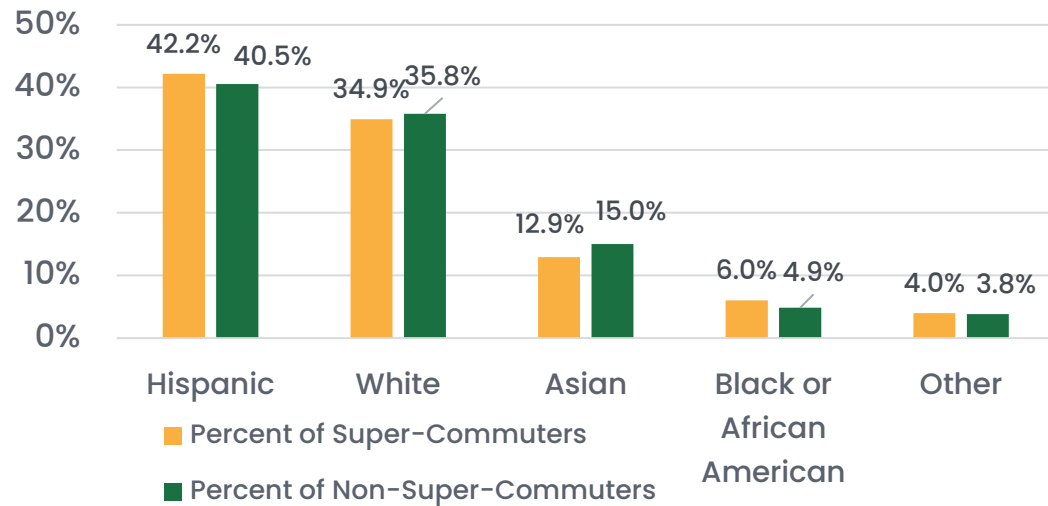
County Workplace	Percent Super-Commuters
San Francisco County	7.8%
San Mateo County	7.5%
Alameda County	6.5%
Santa Clara County	6.1%
San Joaquin County	4.9%
Contra Costa County	4.9%
Los Angeles County	4.8%
Marin County	4.2%
Riverside County	4.0%
San Bernardino County	3.9%
Orange County	3.7%



What Geographic Classifications Do Super-Commuter Households Reside in?



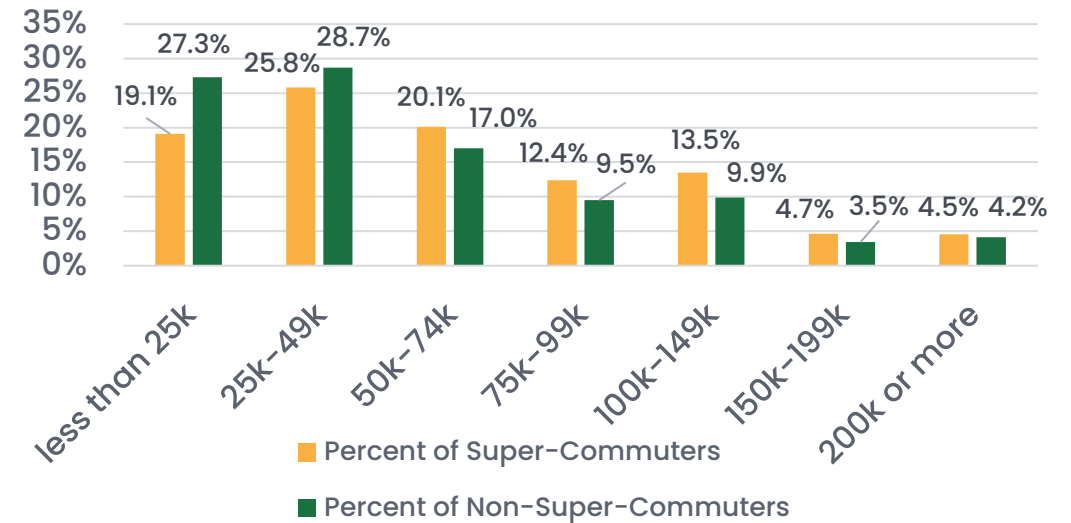
Which Racial/Ethnic Groups and Income Groups are Super-Commuters a Part of?



Race and Ethnicity

- Hispanic populations represent the largest percentage of super-commuters (42.4 percent), followed by White populations (34.9 percent) and Asian populations (12.9 percent)
- Compared to non-super-commuters, there is a greater percentage of Hispanic, Black or African American, or Other* super-commuters, and a lower percentage of White and Asian super-commuters

Other: American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, Multiple Races, Some Other Race (NHTS, 2017)



Income (Personal Earnings)

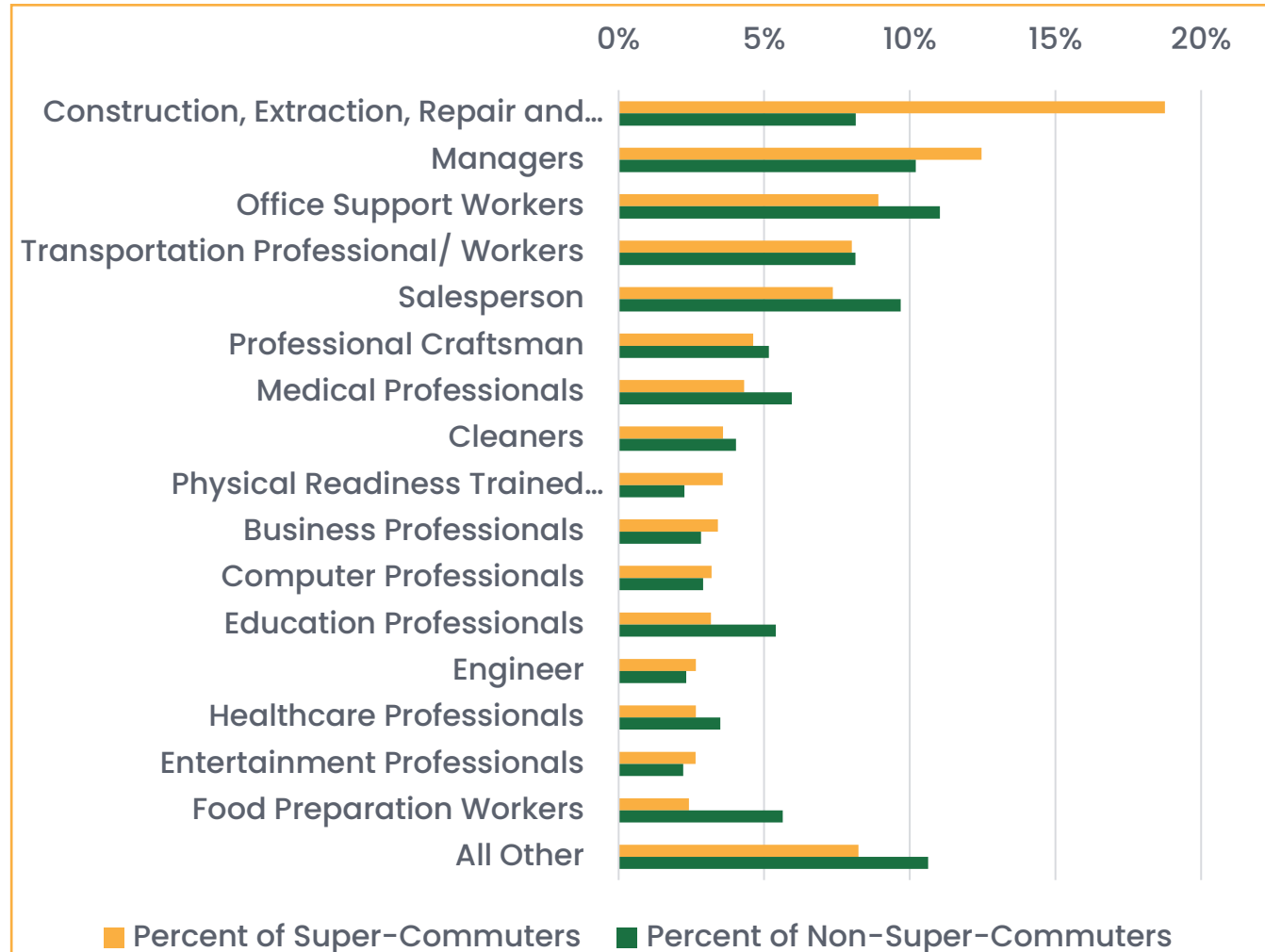
- Super-commuters are most prevalent in the \$25-49K grouping (25.8 percent), the \$50-74K grouping (20.1 percent), and the < \$25K grouping (19.1 percent), but are also spread across the \$75-99K grouping (12.4 percent) and \$100-149K grouping (13.5 percent)
- Compared to non-super-commuters, there is lower representation in the less than \$25K and \$25-49K groupings, but greater representation in all other income categories



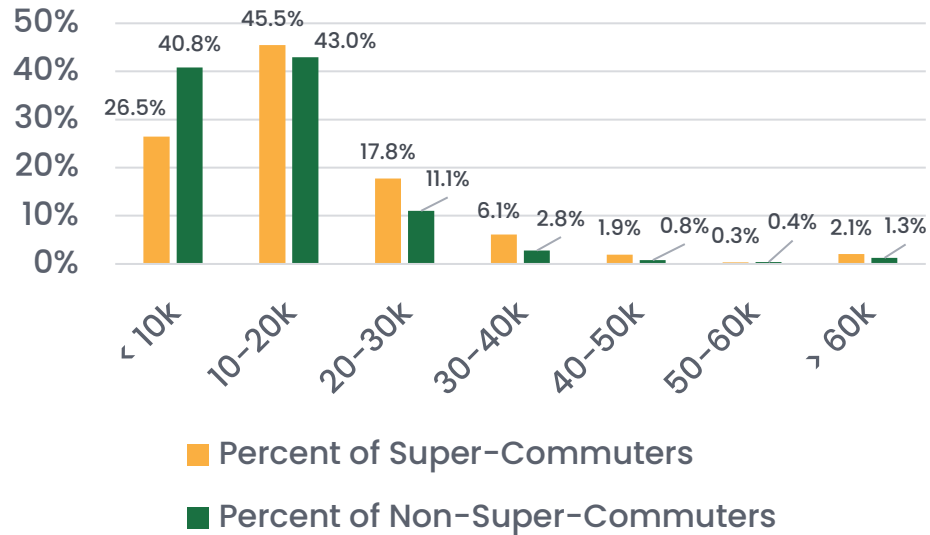
Which Occupation Groups are Super-Commuters a Part of?

Occupation

- Jobs in construction, extraction, repair, and maintenance have the highest representation of super-commuters (18.8 percent) followed by managerial roles (12.5 percent), and office support workers (8.9 percent)
- Compared to non-super-commuters, super-commuters have greater relative representation in the following roles:
 - Construction, extraction, repair, and maintenance
 - Management
 - Physical readiness (EMT, Firefighters, etc.)
 - Business
 - Computing/engineering
 - Entertainment

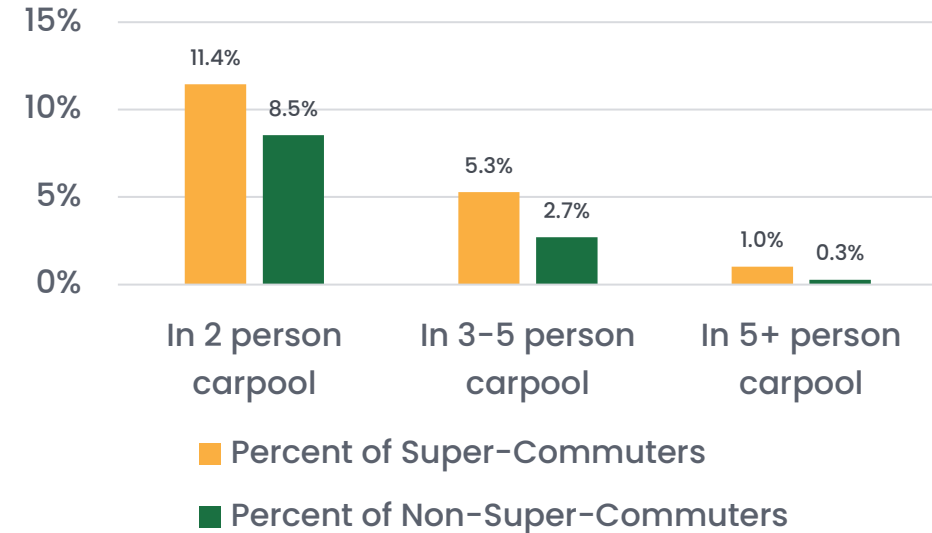


What are typical travel behavior patterns of super-commuters?



Vehicle Mileage

- 45.5 percent drive 10-20K miles annually, followed by 26.5 percent who drive less than 10K annually (some super-commuters don't super-commute everyday, so mileage isn't always high), and 17.8 percent who drive 20-30K annually
- Compared to non-super-commuters, super-commuters have greater representation in every mileage group, except for the <10k and 50-60k groups (the latter of which has a small sample size)

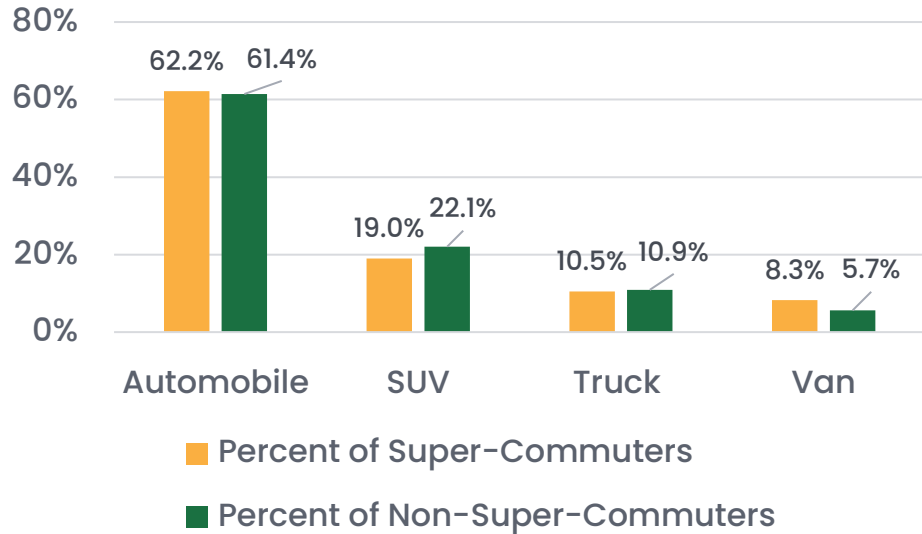


Vehicle Occupancy

- Super-commuters are more likely than non-super-commuters to carpool to work with several other commuters (82 percent of super-commuters and 89 percent of non-super-commuters do not carpool)
- The 3-5 person carpool group has double the distribution of super-commuters, and the 5+ person group has triple the distribution of super-commuters, compared to non-super-commuters

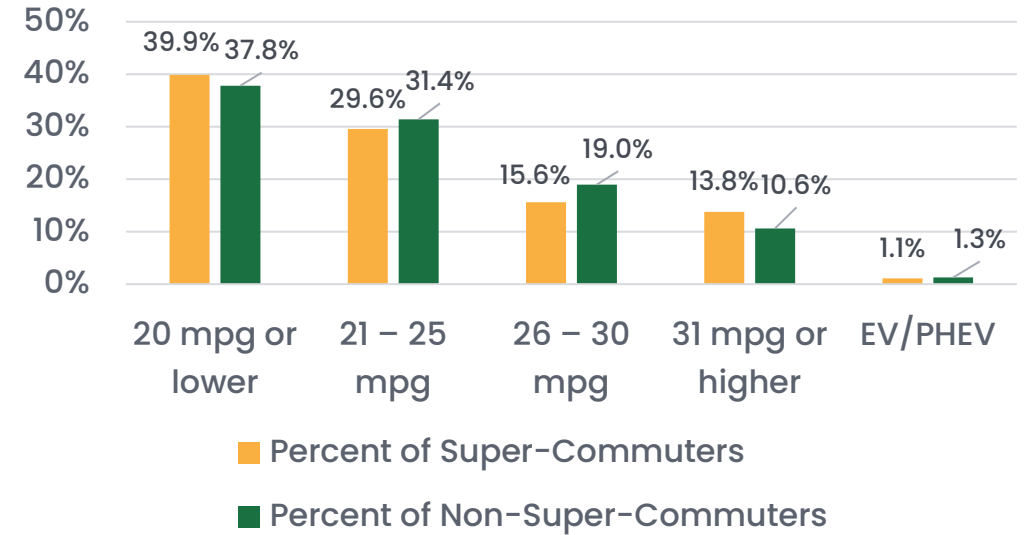


What are Typical Characteristics of Vehicles that Super-Commuters Drive?



Vehicle Type

- The majority of super-commuters drive automobiles (62.2 percent), followed by SUVs (19 percent) and trucks (10.5 percent)
- Super-commuters are less likely to drive SUVs and trucks compared to non-super-commuters and are more likely to drive vans and automobiles compared to non-super-commuters



Vehicle Efficiency/Age

- The super-commuter group had a higher percent distribution in the 20 mpg or lower and 31 mpg or higher groupings, indicative of a diverging vehicle efficiency pattern for distinct types of super-commuters
- This pattern is also seen via vehicle age, where super-commuters are more likely to own very new or very old cars, compared to non-super-commuters

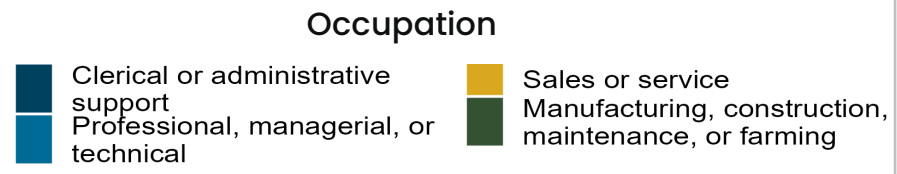
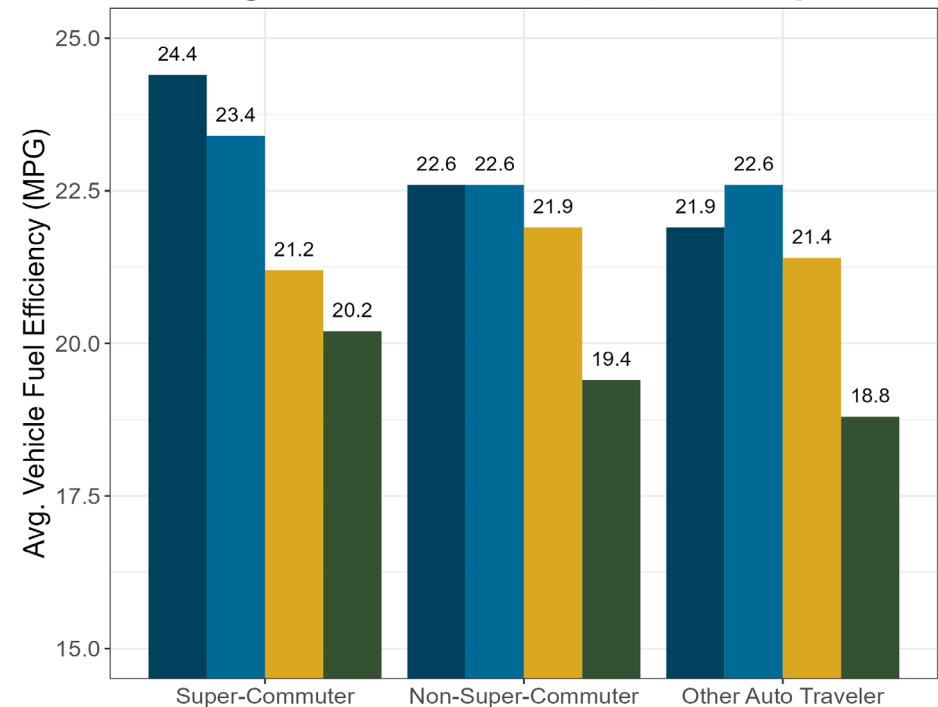


Changes in Revenue – Occupation

Category of Traveler	Clerical or administrative support	Manufacturing, construction, maintenance, or farming	Professional, managerial, or technical	Sales or service
Non-Super-Commuter	\$13	-\$44	\$14	\$5
Super-Commuter	\$29	-\$37	\$40	-\$8

- For super-commuters and non-super-commuters, commuters in manufacturing, construction, maintenance, or farming roles save under a RUC (\$37 and \$44, respectively)
 - This group has the lowest efficiency vehicles on average across all groups
- Super-commuters in clerical or admin. support roles will pay \$29 extra per year; professional, managerial, or technical roles will pay \$40 extra per year
 - These two groupings have higher efficiency vehicles on average across all groups

Average Fuel Efficiency by Occupation



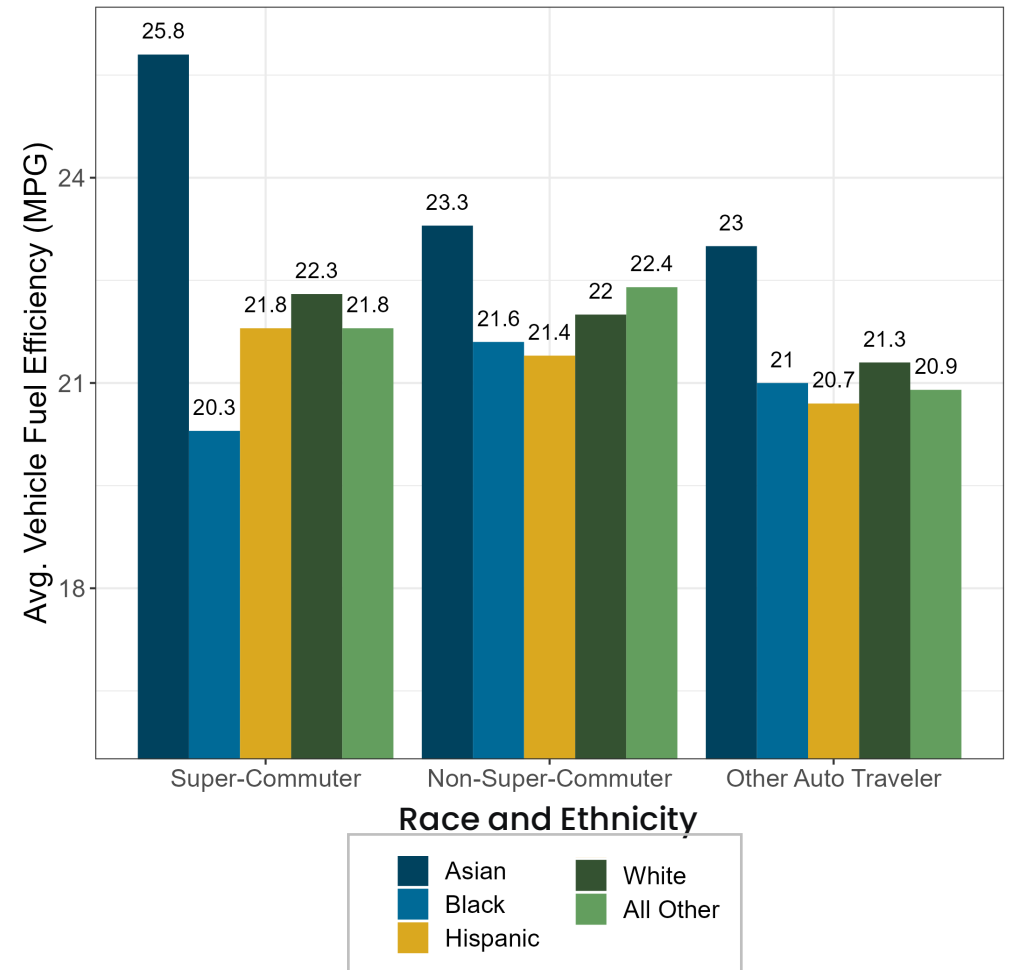
Changes in Revenue – Race and Ethnicity

Category of Traveler	Asian	Black	Hispanic	White	Other*
Non-Super-Commuter	\$30	\$2	-\$4	\$1	\$10
Super-Commuter	\$62	-\$9	\$8	\$11	-\$17
Other Auto Travelers	\$21	-\$10	-\$14	-\$4	-\$13

- Super-commuters who self-identified as Black or Other* saved on average (\$9 and \$1/year, respectively). Hispanic non-super-commuters, and Black, Hispanic, White, and 'Other' other auto travelers also saved
 - Hispanic, Black, and Other drivers had lower fuel efficiency on average compared to Asian and White drivers
- Asian commuters and travelers saw payment increases across the board (\$21-62/year)
 - Asian drivers had the highest fuel efficiency across all groups

*All Other: American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, Multiple Races, Some Other Race (NHTS, 2017)

Average Fuel Efficiency by Race and Ethnicity



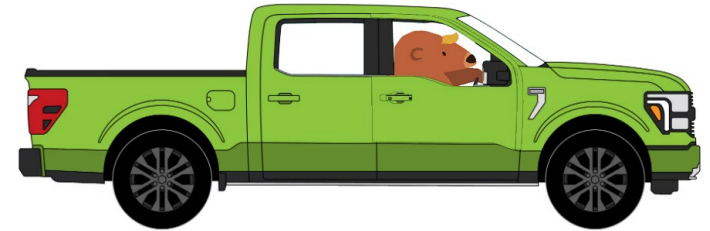
Conclusions: A Tale of Two Super Commuters

While a diverse group, two typical types of super-commuters start to emerge



One type drives a more fuel-efficient vehicle than the average Californian and is likely to work in managerial roles and be Asian or White.

This super-commuter may pay more in a shift to a road charge system because they are not currently contributing an equal amount to road maintenance in the gas tax system.



The second tends to work in the construction, transportation, mining, or extraction industries, be lower-income, more likely to be Hispanic, and drives a less fuel-efficient vehicle.

This super-commuter will pay less in a shift to a road charge system because they currently contribute more than average to road maintenance in the gas tax system.



Questions?

Lauren Prehoda
Road Charge Program Manager, Caltrans
lauren.prehoda@dot.ca.gov
916-654-4227

www.caroadcharge.com