COVID-19 Survey

Assessing behaviors and attitudes towards transportation since the onset of Covid-19

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Purpose of Study

- trips
- transportation options and EVs
- and those above to understand how different income levels were influenced by COVID



The spread of COVID-19 and subsequent mandated and voluntary restrictions in activity outside of the home resulted in significant economic impacts and greatly reduced the amount of commuting and other

CSE designed and executed a survey of licensed drivers in California to understand how the swift expansion of remote work and health concerns about the use of public has influenced consumers' views towards

Consumers were asked about their interactions with transportation and vehicle purchasing commencing with the State's Executive Order declaring a statewide emergency that set forth travel and other restrictions

Survey responses are differentiated between individuals who are under 400% of the Federal Poverty Line



Survey Administration Summary

Target Population

Dates of Administration

Reponses Collected

Respondents who reported household income and household size

Respondent income brackets



18 and over licensed drivers in California

3/10/2021 thru 4/12/2021

2,330

2,233

At or under 400% FPL: 1,229 (55%)

Over 400% FPL: 1,004 (45%)



Working Situation During COVID

• Working from home is a **temporary situation** for both income groups

It's a temporary situation that will continue into the future with no clear end date

It's a temporary situation that has a tentative end date

It's a temporary situation that has a clear end date

It's a permanent situation for all days of the week

It's a permanent situation for some days of the week

I have not been given any information about my work from home status

Other

under 400% FPL (N=309)





^{*&}quot;Not applicable" and blank responses are excluded.



COVID Impact on Household Income

- 40% of all respondents said that their income was reduced, with the LMI population more significantly impacted
- 54% of all respondents said that their income was not affected during the pandemic







Commuting Changes During COVID

Increase in personal vehicle use is similarly reflected to the decrease in use of public transportation

Personal vehicle

Rideshare (e.g. Uber, Lyft, etc.)

Carpool / Vanpool

Active (e.g. walking, biking, etc.)

Public transportation

Electric motorcycles and scooters, or other similar modes

Other

| | -2.1 |
|-------|------|
| -4.1% | |
| | |
| | |
| | |
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| | |

under 400% FPL over 400% FPL

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*Before pandemic, under 400% FPL N=672, over 400% FPL N=644. During pandemic, under 400% FPL N=397, over 400% FPL N=364. Blank responses are excluded.





Majority of Respondents Traveled Less During COVID

• Miles driven since the start of the pandemic decreased for all economic groups





Changes in the Frequency of Transportation Choices - LMI

All modes of motor transportation were less likely to be used during COVID





*Left column (darker colored) of each option represent LMI respondents, right column (lighter colored) represent non-LMI respondents. "Not applicable" and blank responses are excluded.



Changes in the Frequency of Transportation Choices – Non-LMI



Non-LMI said they were less likely to continue using public transit and more likely to bike or walk



Preferred Modes of Travel for Long-distance Trips

- Increase in preference for road travel
- Decrease in preference for air travel





Vehicle Purchasing Plans During Pandemic

- 45% of respondents planned to acquire a vehicle before the pandemic (N=2,228) • 29% of respondents said that the pandemic affected their plans to acquire a vehicle
- (N=2,227)
- Of the group that owned a vehicle before the pandemic and the pandemic changed their plans to acquire another vehicle, 66% decided to delay their purchase (N=540)
 - Of those that decided to delay their vehicle purchase, **56% of LMI respondents** plan to acquire a less expensive vehicle as compared to 38% for non-LMI (N=356)



*Blank responses are excluded.



Changes in Vehicle Shopping Preference

dealerships



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*Upper rows (darker colored) of each option represent LMI respondents, lower rows (lighter colored) represent non-LMI respondents. "Not sure" and blank responses are excluded.

• Almost one-third are more likely to shop online, and many want to avoid



Fuel Type Consideration for Next Vehicle





*Blank responses are excluded.

• PHEV is still preferred over BEV for both LMI and non-LMI



Maximum Monthly Payment for Vehicle Financing

- 47% of LMI respondents said they preferred to spend less than \$299 monthly • 71% of non LMI respondents expected to pay more than \$300 monthly



*Blank responses are excluded.



Consideration of BEVs for Next Vehicle (Non-BEV owners)

vehicle purchase whereas **non-LMI** population were more likely to consider a BEV





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*Blank responses are excluded.

Majority of **LMI** population responses said they were **not** going to consider BEV as their next



Affordability of Available BEVs (Non-BEV Owners)

• Nearly half of LMI drivers consider current BEV options unaffordable





*Blank responses are excluded.



EV Incentive Awareness





*Percentage indicates awareness of the incentive. Blank responses are excluded.

One-third of **LMI** respondents are **not aware** of the available incentives for adopting EVs

EV Grant or Rebate Awareness

others on the list





*Blank responses are excluded. Percentages may not accurately represent the awareness throughout the entire state of CA due to due similar programs names, some programs are regionally specific, and Clean Cars for All is a more recent program.

• Respondents are more aware of the California Clean Fuel Reward program compared to

Knowledge of Potential to Combine Incentives





*Outer circle (darker colored) represent LMI respondents, N=1,225. Inner circle (lighter colored) represent non-LMI respondents, N=995. Blank responses are excluded.

• 7% more non-LMI respondents are aware of stackable incentives





Conclusions

- COVID reduced travel, commuting to work, and air travel, while increasing the use of personal vehicles
 - Decreasing the need for commuting vehicle contrasts with increasing the use of personal vehicle for other travel
- COVID delayed many vehicle purchases which contributed to pent up demand and early 2021 sales surge
- Incentives continue to influence EV purchases
 - Nearly half of the LMI drivers consider current BEV options unaffordable
- Higher income individuals were more likely to consider air quality in transportation choices



