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How is the COVID-19 Pandemic Shifting Retail Purchases and Related Travel in the Sacramento Region?

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Issue

A significant portion of the population stayed, and continue to stay, at home due to the COVID-19 pandemic. With more people staying home, online shopping increased along with trips related to pickups and deliveries. To gain a better understanding of the change in retail purchases and related travel, UC Berkeley researchers compared pre-pandemic shopping to pandemic-related shifts in consumer purchases in the greater Sacramento area for nine types of essential and non-essential commodities (e.g., groceries, meals, clothing, paper products, cleaning supplies). In May 2020, the research team resampled 327 respondents that participated in the 2018 Sacramento Area Council of Governments (SACOG) household travel survey. The 2018 SACOG survey collected responses over a rolling six-week period from April to May 2018 and asked residents about their motivations for, attitudes toward, and ease of use of online shopping. They were also were asked about the number of e-commerce purchases made, and the number of deliveries and pickups made from those e-commerce purchases for each commodity type. In addition, respondents also reported changes (less or more) in their behavior from a typical week in January or February 2020 (prior to the COVID-19 pandemic) for: 1) tripmaking, e-commerce purchases, and delivery and pick up frequencies; 2) purchase sizes; 3) distances traveled; and 4) modes used for in-person trips. This brief highlights findings from an analysis on changes in frequency of purchases, deliveries and pickups, and order sizes.

Key Research Findings

More households engaged in online food shopping during the pandemic. Figure 1 shows that between 2018 and 2020 there was a shift away from only in-person household food shopping toward e-commerce food shopping (i.e., online ordering of groceries, prepared food, and take out). More than half of those who only shopped in person in 2018 did both (shopped online and in-person) in 2020. About two-thirds of those who engaged in both in person and online shopping in 2018 continued to do so in 2020, while almost one quarter switched to only shopping in person in 2020 (this may be due to online fees and that many e-commerce services do not accept Supplemental Nutrition Assistance Program (or SNAP) benefits). Altogether about 40 percent of the sample population shopped only in-store for food during the observation week in 2020.

Online food deliveries increased significantly during the pandemic. E-commerce food deliveries rose 375 percent, and food pickups complemented grocery trips (and potentially induced some additional grocery trips). Even with that level of increase in deliveries, e-commerce food purchases did not result in comparable reductions in inperson trips for food items (e.g., restaurant food, groceries, etc.), as 85 percent of food purchases among the sample population still involved taking a trip.

E-commerce orders replaced a large percentage of non-food trips. Even though overall trip-making fell 54 percent during the 2020 observation week compared with 2018, retail e-commerce deliveries were down only two percentage points.



Figure 1. The percent change in households' miles traveled by various travel modes during the study period. Car travel includes travel via the provided chauffeured vehicle.

In-person shoppers during the pandemic were more likely to be older and from households earning below median income. Of the households continuing to shop only in-person, those earning under \$50,000 per year were overrepresented in the sample, while households earning \$100,000 per year were underrepresented. These households may represent lagging adopters of e-commerce, possibly due to difficulties meeting the added costs from upcharges and fees associated with e-commerce use, particularly for restaurant food and grocery e-commerce platforms.

Policy Considerations

Encourage the expansion of online payment. Since in person shoppers are disproportionately elderly populations at higher risk for serious complications from the virus and less-affluent populations, who may have difficulty accessing e-commerce platforms, delivery platforms and participating grocery stores should expand SNAP acceptance, a step that some large platforms have already taken.

Limit item markups and/or fees based upon payment type. E-commerce platforms could further reduce the burden on eligible households by reducing fees and item markups specifically for SNAP users. Offer call-in order options. Order-by-phone might present an easier customer experience for those with difficulties bridging the digital divide; however, the high costs associated with staffed phone lines may require grants and funding to set up a non-profit network for processing orders.

More Information

This policy brief is drawn from the research report "Who Has Access to E-Commerce During the COVID-19 Pandemic in the Sacramento Region? Implications for Future E-Commerce and Shopping Tripmaking" prepared by Teddy Forscher, Elizabeth Deakin, Joan Walker, and Susan Shaheen with the University of California at Berkeley. The report is available at: www.ucits.org/research-project/2020-22. For more information about findings presented in this brief, please contact Susan Shaheen at sshaheen@berkeley.edu.

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