

Low-income people saw smallest drop in travel during COVID-19

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Low-income people were the least likely to reduce their local travel during the COVID-19 lockdown, probably because they still had to go to work, a case study in Columbus suggests.

In fact, their average travel distances increased during the pandemic, as they were often forced to find work further away from their homes.

Meanwhile, high-income people reduced their travel the most during the lockdown, most often leaving home for recreational and non-work purposes and taking shorter trips, The Ohio State University study showed.

Researchers used cell phone location data to compare trips made by people living in high-, middle- and low-income areas of Columbus during the early days of the lockdown in Ohio (March 15 to April 30, 2020) with the same period in 2019.

Results showed that people living in low-income areas reduced their travel 41% during the lockdown—significantly less than the 51% reduction found for people living in high-income areas and 49% reduction for those from middle-income neighborhoods.

The findings reveal the stark differences between people whose jobs allowed them to work from home with those mostly lower-income residents who worked in person for essential businesses, said Armita Kar, lead author of the study and a Ph.D. student in geography at Ohio State.

"The COVID-19 pandemic highlighted which socioeconomic groups could work from home and limit their trips to stay safe and which groups couldn't avoid traveling to work," Kar said.

Kar conducted the study with Huyen T.K. Le, assistant professor, and Harvey Miller, professor, both in geography at Ohio State. Their research was published yesterday (Oct. 4, 2021) in the *Annals of the American Association of Geographers*.

The researchers used cell phone data that allowed them to see travel flow between specific Columbus neighborhoods and destinations around the city.

They classified trips as originating in low-, middle- or high-income areas of the city based on U.S. Census data. Destinations were classified by the dominant business categories at each location, such as service jobs, arts and recreation, and accommodation and food services, among others.

There wasn't just a change in the amount of travel during the pandemic lockdown, results showed. The nature of travel also changed, with the pandemic revealing how socioeconomic status affected where people needed to go or were able to go.

For high-income people, trips became shorter as they didn't have to commute to work and they patronized businesses closer to home. They also showed increased travel during the lockdown to places like parks and outdoor recreation, which was not seen in the lower socioeconomic groups.

"Now instead of traveling because they had to, higher-income residents were traveling more because they wanted to, for discretionary and recreational purposes," said Miller, who is also director of Ohio State's Center for Urban and Regional Analysis, which supported this project.

"They had the work flexibility to seek stress relief at area parks and recreational facilities when they wanted to."

In contrast, [low-income people](#) actually traveled greater distances during the lockdown than they did before. The results suggest that many residents in this category had to travel to multiple jobs to make ends meet during the pandemic, according to the researchers.

"We believe their job opportunities became more scattered and so they had to travel more to get to their jobs," Kar said.

Results showed that low-income residents traveled more during the lockdown to areas with concentrations of fast-food restaurants. That was probably both because they were more likely to be working at these businesses and they had to rely more on them for their meals, according to the researchers.

Middle-income residents of Columbus didn't reduce travel as much as high-income people did during the [lockdown](#), probably because they had a wider variety of occupations that couldn't work from home.

Some of them may have been [construction workers](#), the researchers said, since these workers were considered essential by the state of Ohio, as well as other states.

The results of this study suggest that transportation planners and government leaders need to reconsider how they invest in travel infrastructure, Le said.

"We need to focus travel infrastructure more in the lower-income areas of the city," Le said.

"Lower-income residents are the ones that don't have a choice and will have to continue to travel to work when others can stay at home."

Added Miller: "When we think of travel and travel demand, it is not one size fits all. Different social groups have different needs for [travel](#) and mobility. COVID-19 really exposed that."

More information: Armita Kar, Huyen T. K. Le, Harvey J. Miller, What Is Essential Travel? Socioeconomic Differences in Travel Demand

in Columbus, Ohio, during the COVID-19 Lockdown, *Annals of the American Association of Geographers* (2021). [DOI: 10.1080/24694452.2021.1956876](https://doi.org/10.1080/24694452.2021.1956876)

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