Title: How Do Cities Change when We Work from Home?

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Abstract: The COVID-19 pandemic has caused a massive surge in telecommuting. How would the shape of our cities change if this event leads to a permanent increase in working from home? We study this question using a quantitative general equilibrium model of development, residence and employment choices in Los Angeles metropolitan area. An increase in telecommuting has four important effects: (1) House prices fall, as telecommuters leave central neighborhoods to buy bigger houses in the periphery. This also allows those who still have to commute to afford houses closer to employment centers. (2) Wages increase as jobs move out of the periphery and into the most productive parts of the city. (3) Travel times drop due to reduced traffic congestion. (4) Wage inequality across neighborhoods goes down. This is because high earning workers are able to live farther away from their places of work, causing more mixing across income levels. We find that an increase of the share telecommuting workers from 3.7% to 33% would lead to a 22% increase in overall welfare and 20% fall in total miles traveled while commuting.

Data description: We use data from the American Community Survey, DataQuick, LEHD Origin-Destination Employment Statistics, and the Census Transportation Planning Products database.

JEL codes: E24, J81, R31, R33, R41

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