



FW-HTF-P/Collaborative Research: Designing a Market-based Optimization Tool for the Future of Work: Balancing Remote Work and Community Vitality in Post-COVID American Cities (2128782/2128856)

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MOTIVATION: COVID-19 caused many people to switch to work-from-home (WFH), resulting in dramatic changes in commute behavior and affecting the vitality of urban cores.

RESEARCH QUESTIONS:

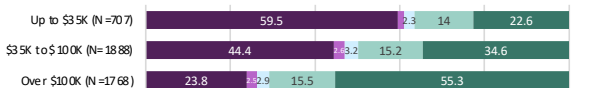
- 1) How has the commuting behavior evolved from pre- to during- and post covid?
- 2) How much have service workers (e.g., food businesses) relied on commuters? And how does the reliance vary by industry mixes in an area?
- 3) What policy strategies may help cities in reviving urban cores?

Evolution of Commuting Behaviors

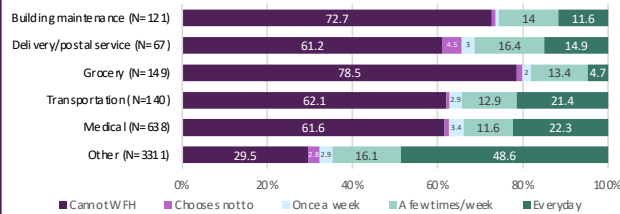
WHO TELECOMMUTES? HOW FREQUENTLY?

- Data: the COVIDFuture longitudinal survey
- Designed to assess the effects of the COVID-19 pandemic on the population, the survey reports on actual and expected WFH behaviors pre-/during/post-pandemic (in three waves).

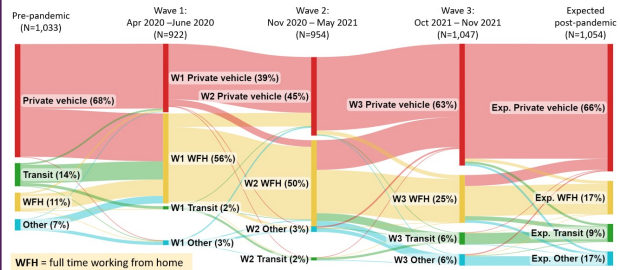
Frequency of Telecommuting Among Income Groups (Wave 1)



Frequency of Telecommuting Across Industries (Wave 1)

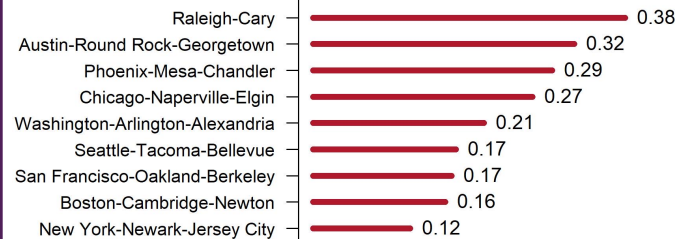
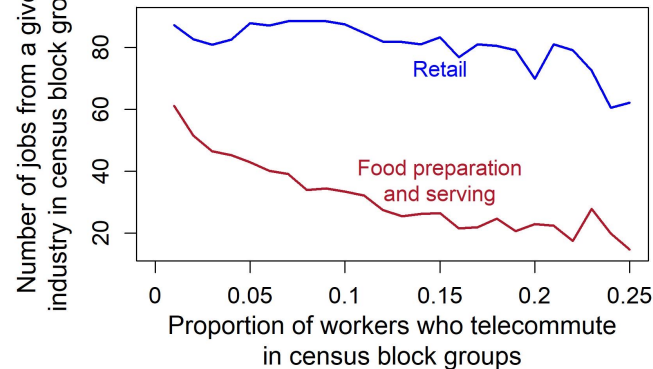


THE EVOLUTION OF COMMUTE MODE PRE-/DURING/POST-PANDEMIC

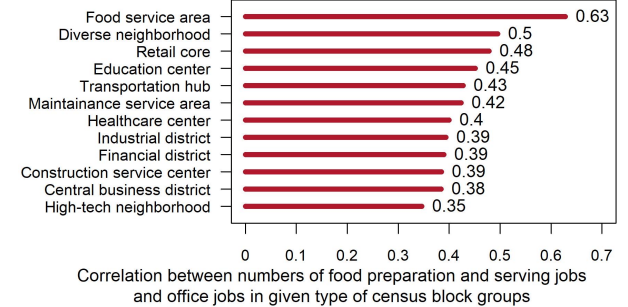


RELIANCE OF FOOD BUSINESSES ON OFFICE JOBS AND POLICY STRATEGIES

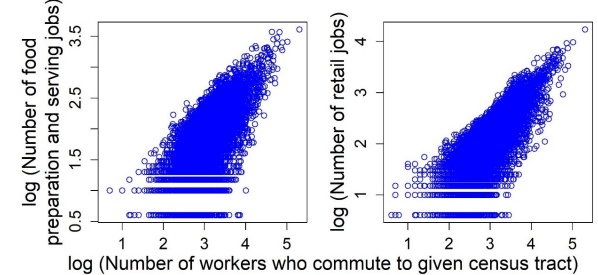
CORRELATION BETWEEN OFFICE JOBS AND FOOD RELATED JOBS AT CENSUS BLOCK GROUPS



Correlation between numbers of food preparation and serving jobs and office jobs in given metropolitan area



Relationship between commuters and local food/retail businesses



POLICY STRATEGIES

- Communities may seek to identify strategies to revitalize central business districts through such actions as diversifying the activity mix (such as add residential, tourism and entertainment activities to restore a critical mass of markets)
- Communities may seek initiatives to sustain 5-7 day activity levels so that support businesses can survive. This might include a variety of actions from use of public space, pricing and availability of transportation elements (service levels, parking pricing and management, signal/traffic operations changes), promotional and regulatory actions, etc..