

Supplement to:

Marlow, Thomas, Kinga Makovi, and Bruno Abrahao. 2021. "Neighborhood Isolation during the COVID-

19 Pandemic." Sociological Science 8: 170-190.



**Figure 1:** Weekly mobility network for New York City, Chicago Cook County, Houston Harris County, and San Francisco. Edges are the scaled count of trips between census tracts. The four time points correspond with the pre-pandemic period (January 1), the week with greatest overall mobility disruption in our analysis (April 7), July 22, when most cities were returning to baseline and finally fall (November 3) when cases nationwide were beginning to increase again. In the Harris county network maps, communities outside of the Houston City boundary are also visible.



**Figure 2:** Complementary empirical cumulative distribution function (1-ECDF) of indegree of tracts in four cities. The greater concentration of indegree values at lower indegree values, indicates that places with large indegree values like hubs, decline in importance in the distribution.



**Figure 3:** Relative EMI and CMI calculated using ZIP Codes as the neighborhood boundaries as opposed to the tracts in previous figures.



Figure 4: Relative EMI and CMI calculated using city boundaries to select tracts.

2019	2020
0	0
0.00 (0.00, 0.00)	0.00 (0.00, 0.00)
54025.70	52347.04
131.40	131.40
1,520.42 (622.66, 4,716.62)	1,428.75 (593.02, 4,263.89)
54025.70	52347.05
	2019 0 0.00 (0.00, 0.00) 54025.70 131.40 1,520.42 (622.66, 4,716.62) 54025.70

 Table 1: Summary Statistics of Distance Traveled in Meters

S6