

## Codebook for Table 11: Neighborhood Characteristics by Commuting Zone

### *Description*

This table provides commuting zone-level covariates used throughout the paper or shown in the Opportunity Atlas as neighborhood characteristics. Each CZ is uniquely identified by one identifier: cz. All covariates in this table are constructed based on data from publicly available sources.

All CZ-level covariates are computed as the population weighted means of the corresponding tract-level covariate, except for: ann\_avg\_job\_growth\_2004\_2013, job\_density\_2013, and popdensity. All variables are numeric.

The statistics reported in this table have been cleared by the Census Bureau's Disclosure Review Board release authorization number CBDRB-FY18-319.

### *Codebook*

<b>Variable</b>	<b>Description</b>
cz	Commuting zone identifier
ann_avg_job_growth_2004_2013	Average annualized job growth rate over the time period 2004 to 2013. Constructed using the Local Area Unemployment Statistics (LAUS) released by the Bureau of Labor Statistics.
emp2000	The rate of employment computed as total employed population (the sum of employed females and employed males) divided by the total population 16 years and over. Obtained from 2000 Decennial Census
foreign_share2010	Number of foreign born residents in the 2010 Census divided by the sum of native and foreign born residents. Obtained from the ACS 2006-2010
frac_coll_plus[year]	Number of people aged 25 or older who have a bachelor's degree, master's degree, professional school degree, or doctorate degree, divided by the total number of people aged 25 or older in a CZ. We use the 2000 Census to obtain the estimate for 2000, and the 2006-2010 ACS to obtain the estimate for 2010.

gsmn_math_g3_2013	Mean 3rd grade math test scores in 2013. Obtained from the Stanford Education Data Archive and measured at the district level. We create a crosswalk from districts to tracts by weighting by the proportion of land area that a given school district covers in a tract. We then take the population weighted mean of the variable at the CZ level.
hhinc_mean2000	Mean household income. Obtained from 2000 Decennial Census
job_density_2013	Number of jobs per square mile in each CZ. Constructed using the Local Area Unemployment Statistics (LAUS) released by the Bureau of Labor Statistics
job_growth_1990_2010	Job growth rate from 1990 to 2010 (percentage change). Constructed using the Local Area Unemployment Statistics (LAUS) released by the Bureau of Labor Statistics.
ln_wage_growth_hs_grad	Wage growth for high school graduates. Constructed by dividing the average high school graduate annual earnings by the product of overall average weekly hours worked and 52. High school graduate wage growth is then computed as the difference in logarithms between high school graduate wages in 2010-2014 and school graduate wages in 2005-2009. Wages are measured in the 2005-2009 and 2010-2014 American Community Surveys
mail_return_rate2010	The 2010 Census return rate, measured as the number of 2010 Census mail forms completed and returned over the number of valid occupied housing units where a Census form was expected to be delivered for mail return to Census. Taken from the Census planning database.
mean_commutetime2000	Mean commute time for workers over 16 years old in the CZ, as measured in the 2000 Decennial Census
med_hhinc[year]	Median household income. The data for 1990 is measured in the 1990 Census, while the data for 2016 comes from the 2012-2016 American Community Survey.
nonwhite_share2010	One minus the share of non-Hispanic white residents in the CZ, measured in the 2010 Decennial Census.

poor_share[year]	Share of individuals in the CZ below the federal poverty line, measured in the decennial Census of the relevant year for the 1990 and 2000 estimates, and measured in the 2006-2010 ACS for the 2010 estimate.
popdensity[year]	Number of residents per square mile, calculated by dividing the total CZ level population in the decennial Census (of the relevant year) by CZ land area in square miles, calculated as the sum of the tract-level area from the 2010 Census Gazetteer Files
rent_twobed2015	The median gross rent for renter-occupied housing units with two bedrooms that pay cash rent (from the 2011-2015 ACS)
share_[race][year]	Racial Shares in the decennial Census. All races (except Hispanic) exclude Hispanics and Latinos
singleparent_share[year]	The number of households with females heads (and no husband present) or male heads (and no wife present) with own children under 18 years old present divided by the total number of households with own children present (1990 and 2000 estimates are from the decennial Census, and the 2010 estimate is from the 2006-2010 estimate).
traveltime15_2010	Share of workers 16 years and over who do not work at home whose commute is shorter than 15 minutes.
wrluri	Wharton Residential Land Use Regulatory Index. Constructed using city-level data from Gyourko et al. (2008) and crosswalked to CZs