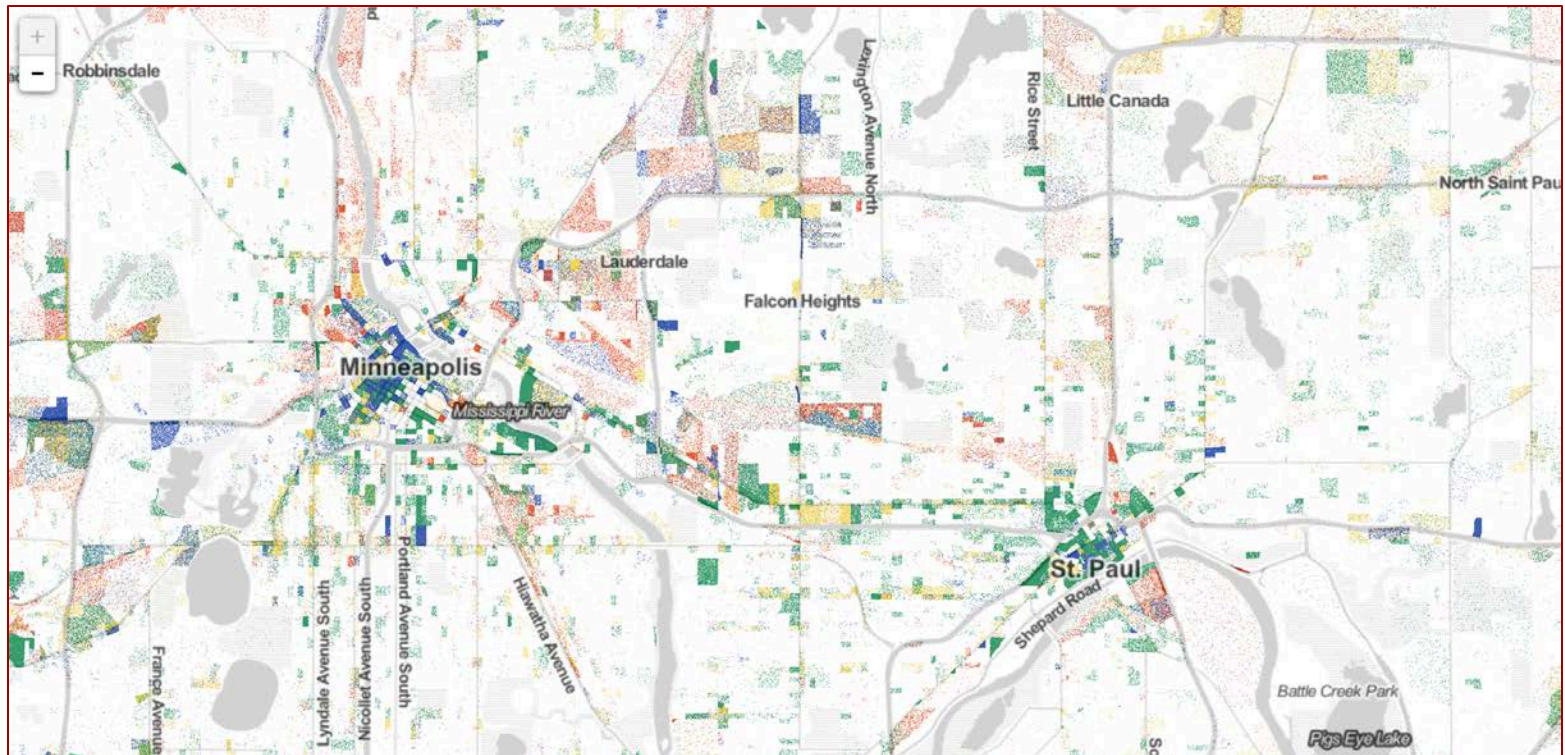
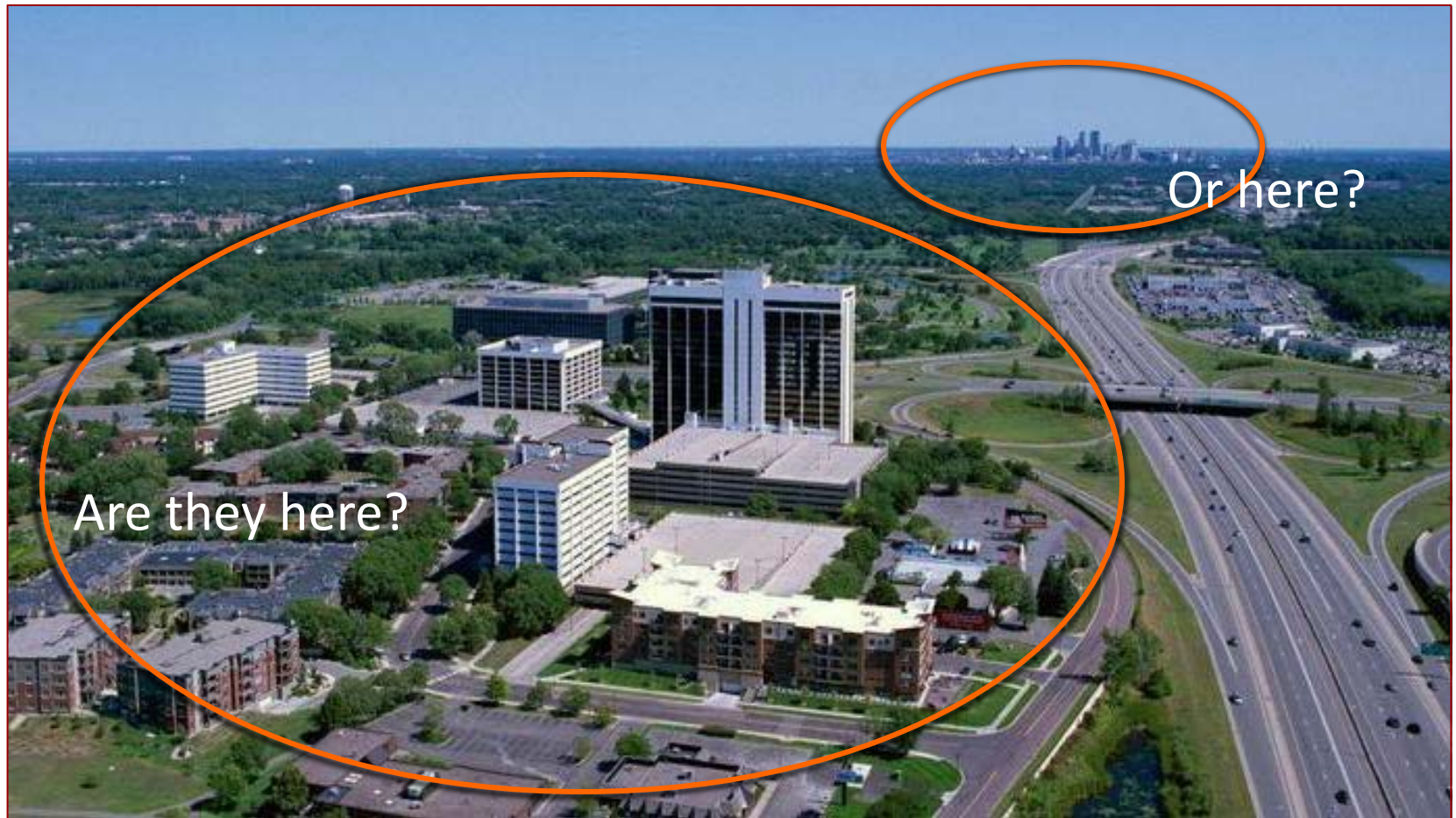


The Spatial Structure of American Employment

Robert Manduca – LED Workshop – June 23, 2015



Where are the Jobs?



Scholars: US Cities have Dispersed Employment

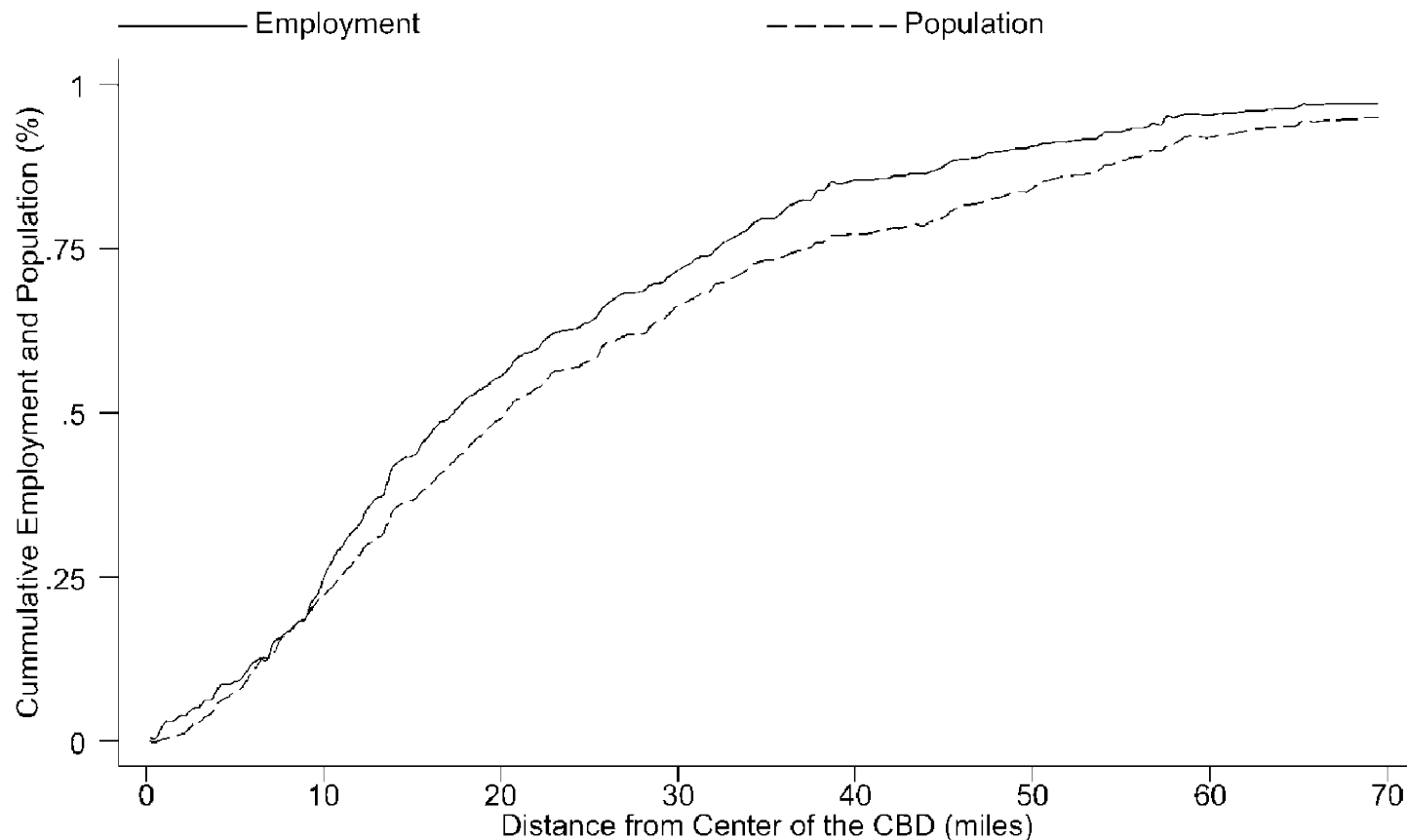


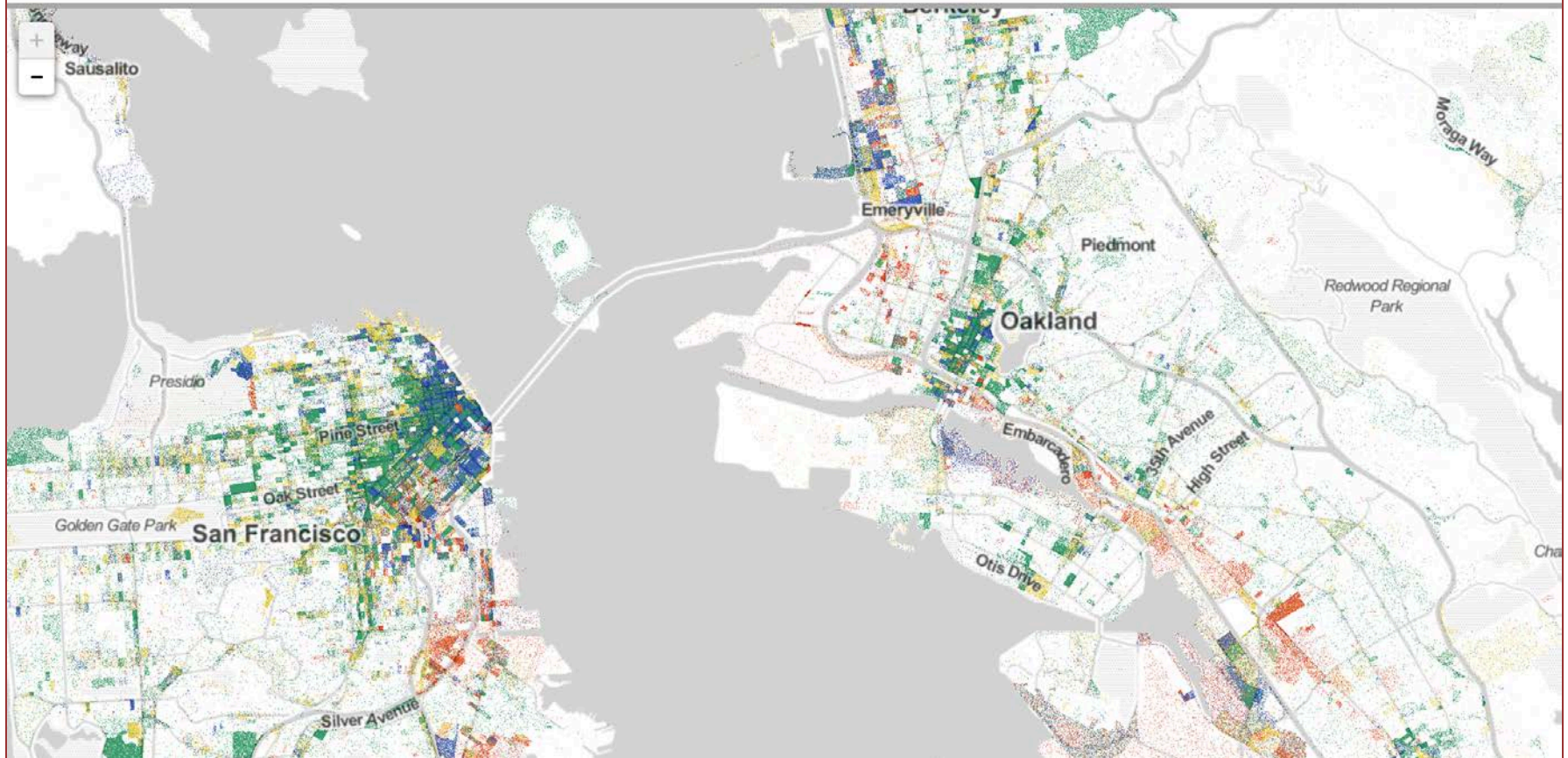
Fig. 2. Los Angeles CMSA.

Source: Wheaton 2004, "Commuting, congestion, and employment dispersal in cities with mixed land use"

LODES Data Allows us to Map Jobs

Where Are The Jobs?

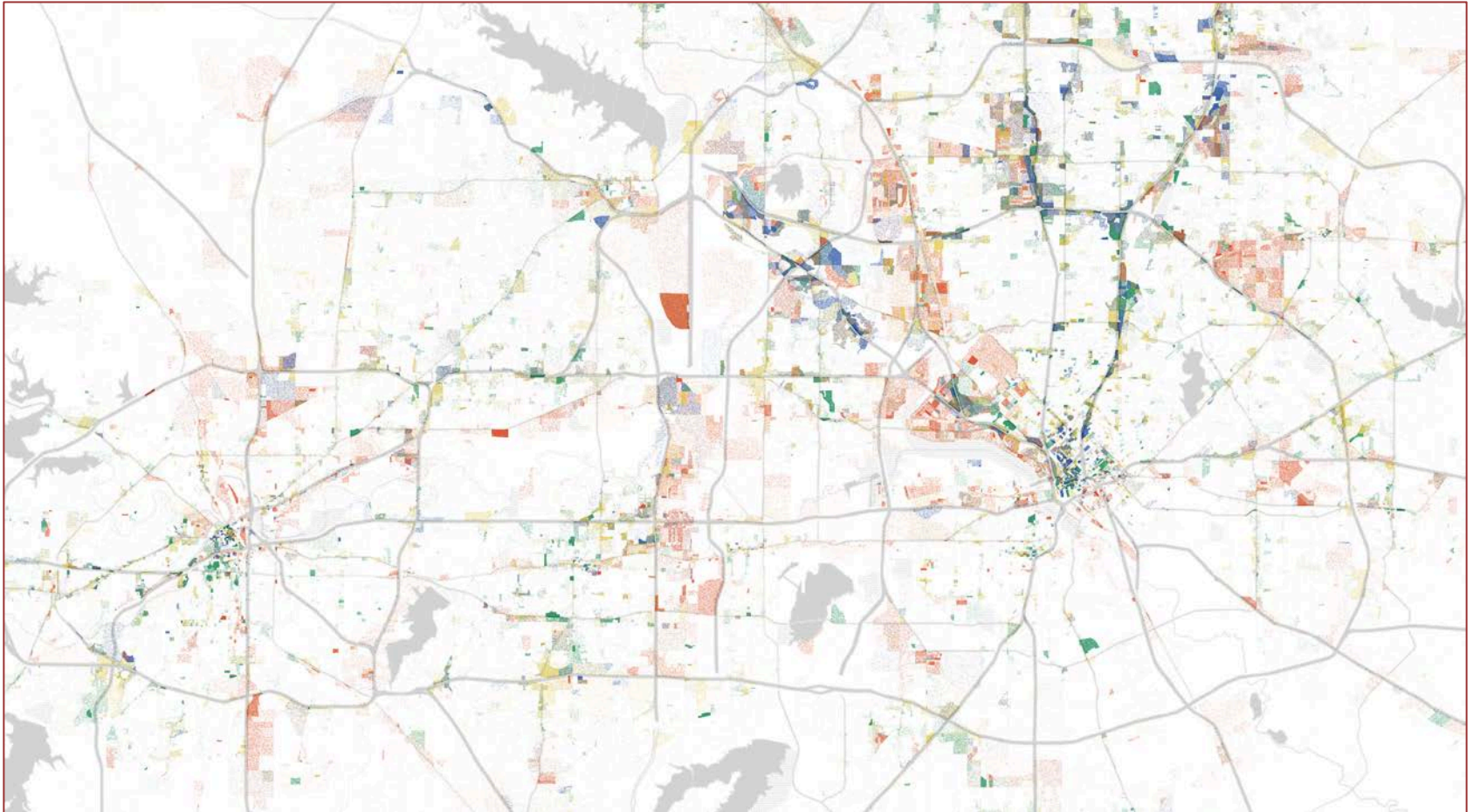
Employment in America, 2010



Jobs appear more concentrated than (I at least) believed

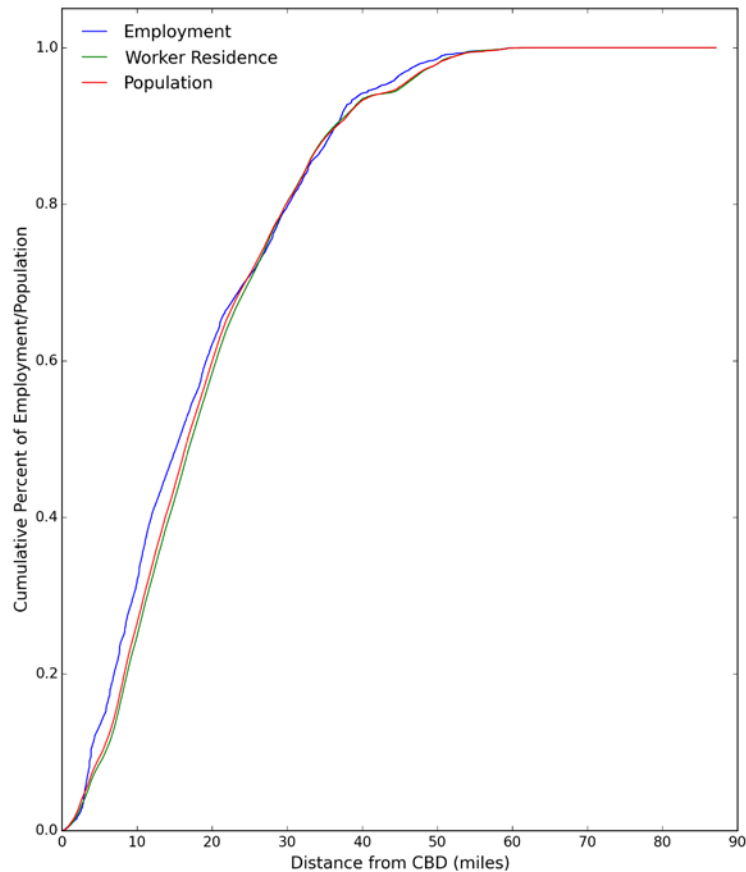
- ◆ CBDs still have a large number of jobs
- ◆ Suburban jobs are frequently clustered into subcenters or corridors
 - ◆ In contrast to residences, which are spread far more evenly throughout the metro area
- ◆ How does this square with previous work?

Concentration Analysis in Two Dimensions

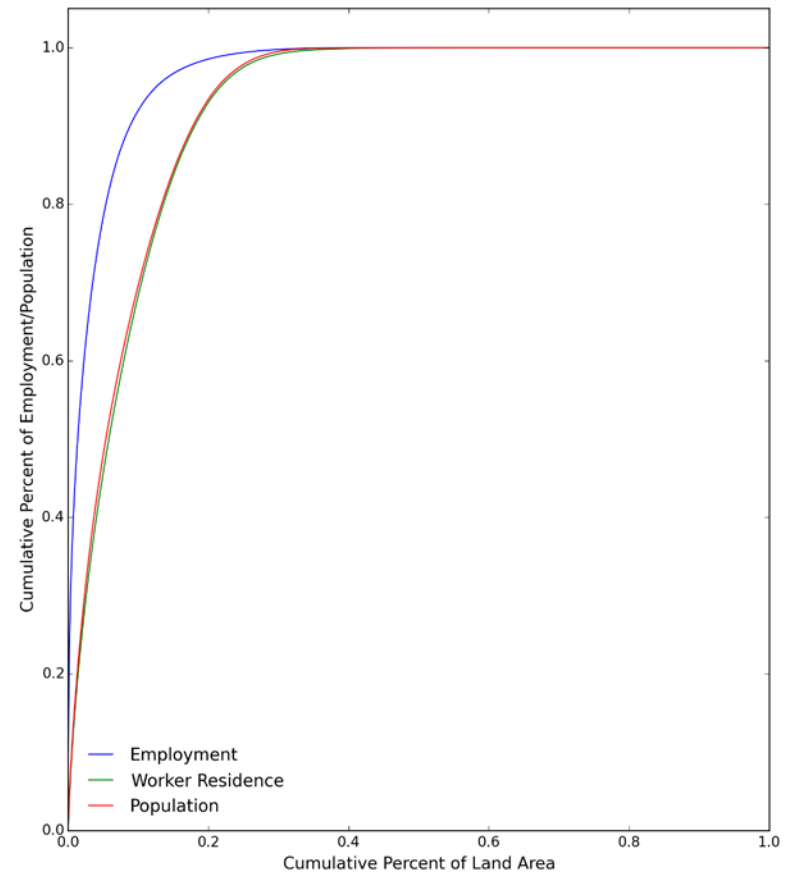


Distance from CBD vs Cumulative Density

Cumulative Distribution of Employment and Population from CBD,
Los Angeles-Long Beach-Santa Ana, CA Metro Area



Cumulative Distribution of Employment and Population vs Area,
Los Angeles-Long Beach-Santa Ana, CA Metro Area

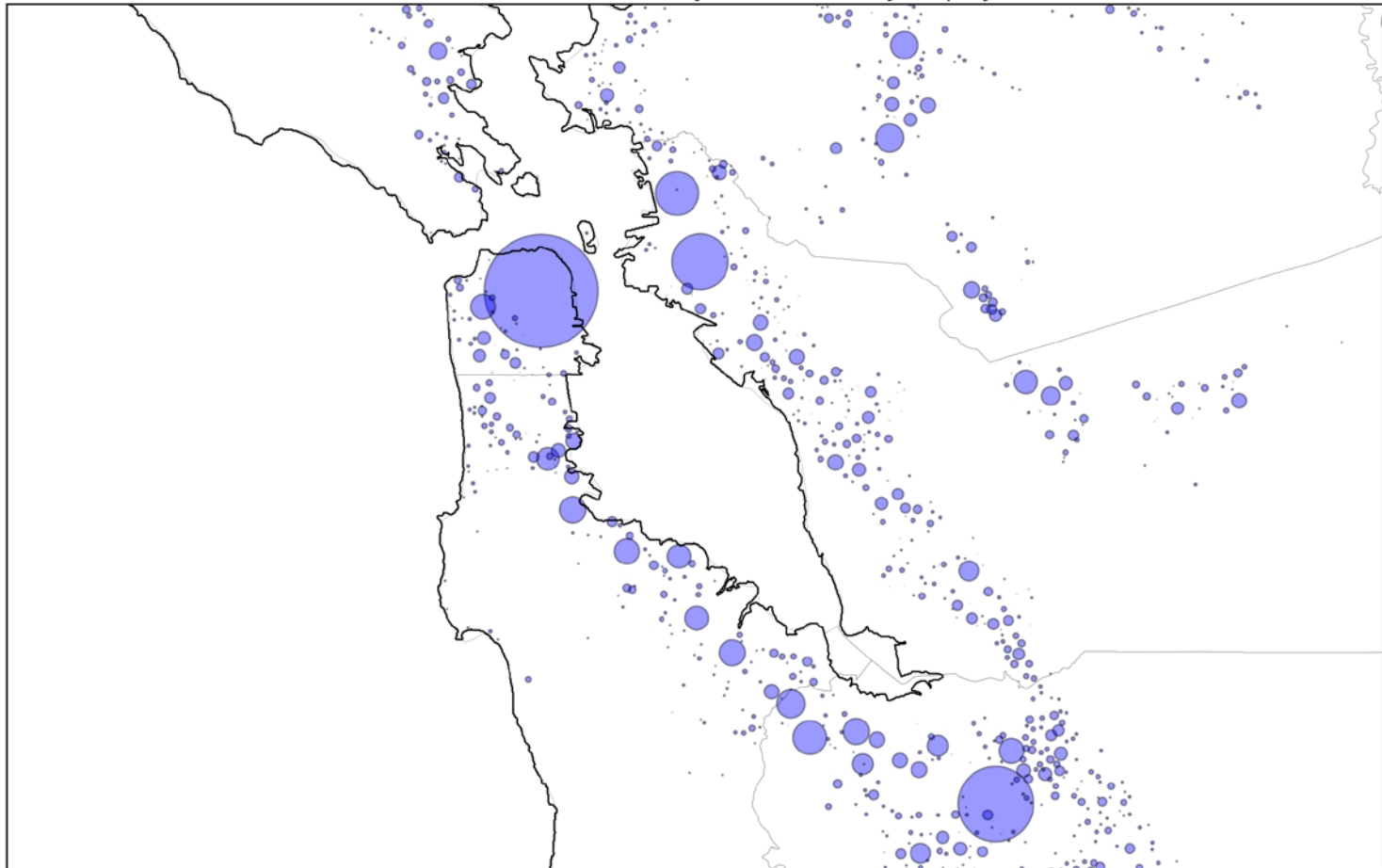


Identifying and Mapping Business Districts

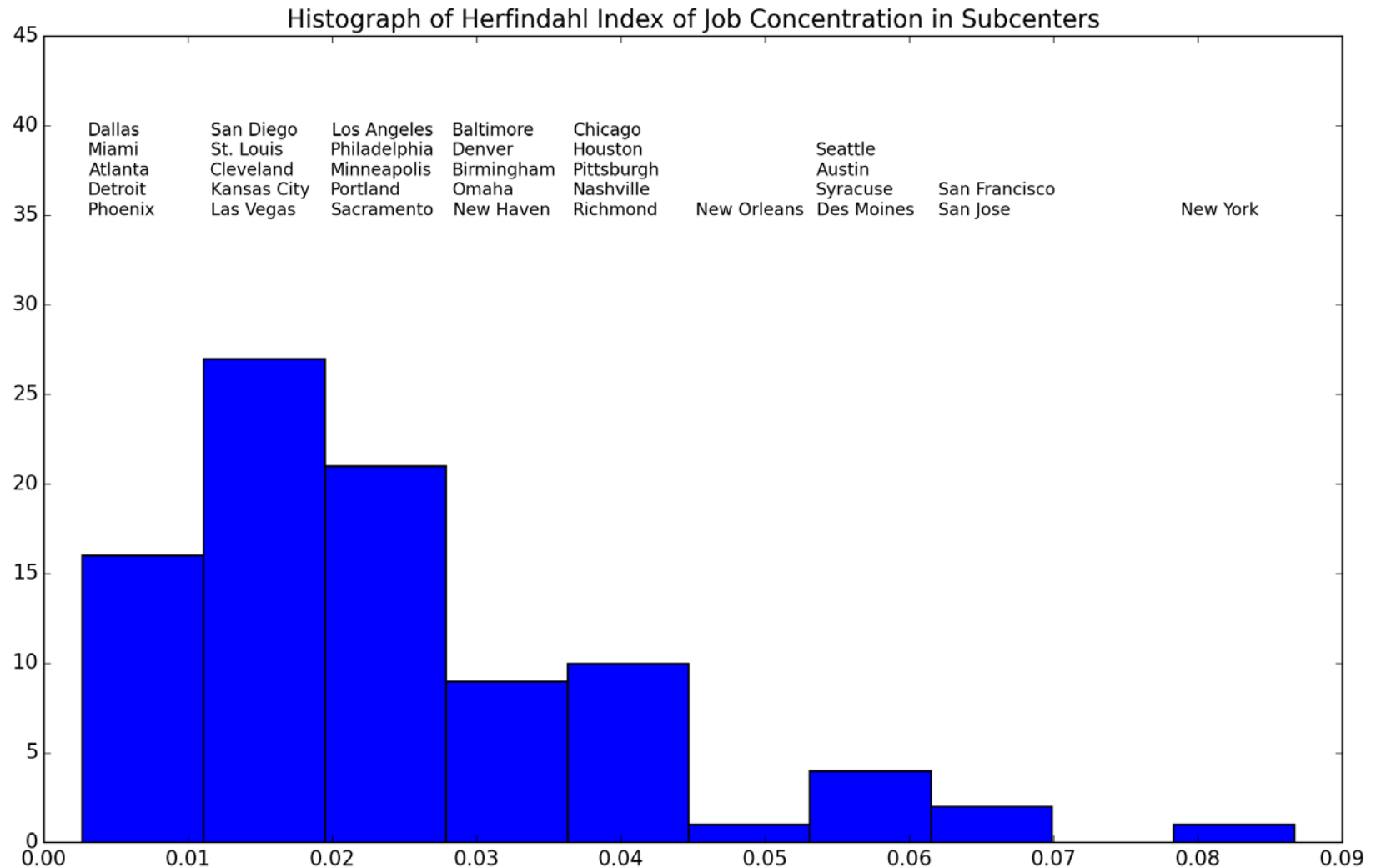
- ◆ Basic algorithm based on Giuliano and Small 1991
- ◆ Subcenters are blocks with > 2000 jobs / sq km (8 jobs per acre)
 - ◆ Across top 100 MSAs, 59% of jobs are in blocks with at least this employment density
- ◆ Two blocks are part of the same subcenter if their centroids are < 400 meters (a quarter mile) apart
 - ◆ Much easier to compute than actual adjacency, but maybe less ideal.

Example: The Bay Area

Business Districts of the SF Bay Area, Scaled by Employment



Subcenter Distributions across MSAs





Thank you!

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