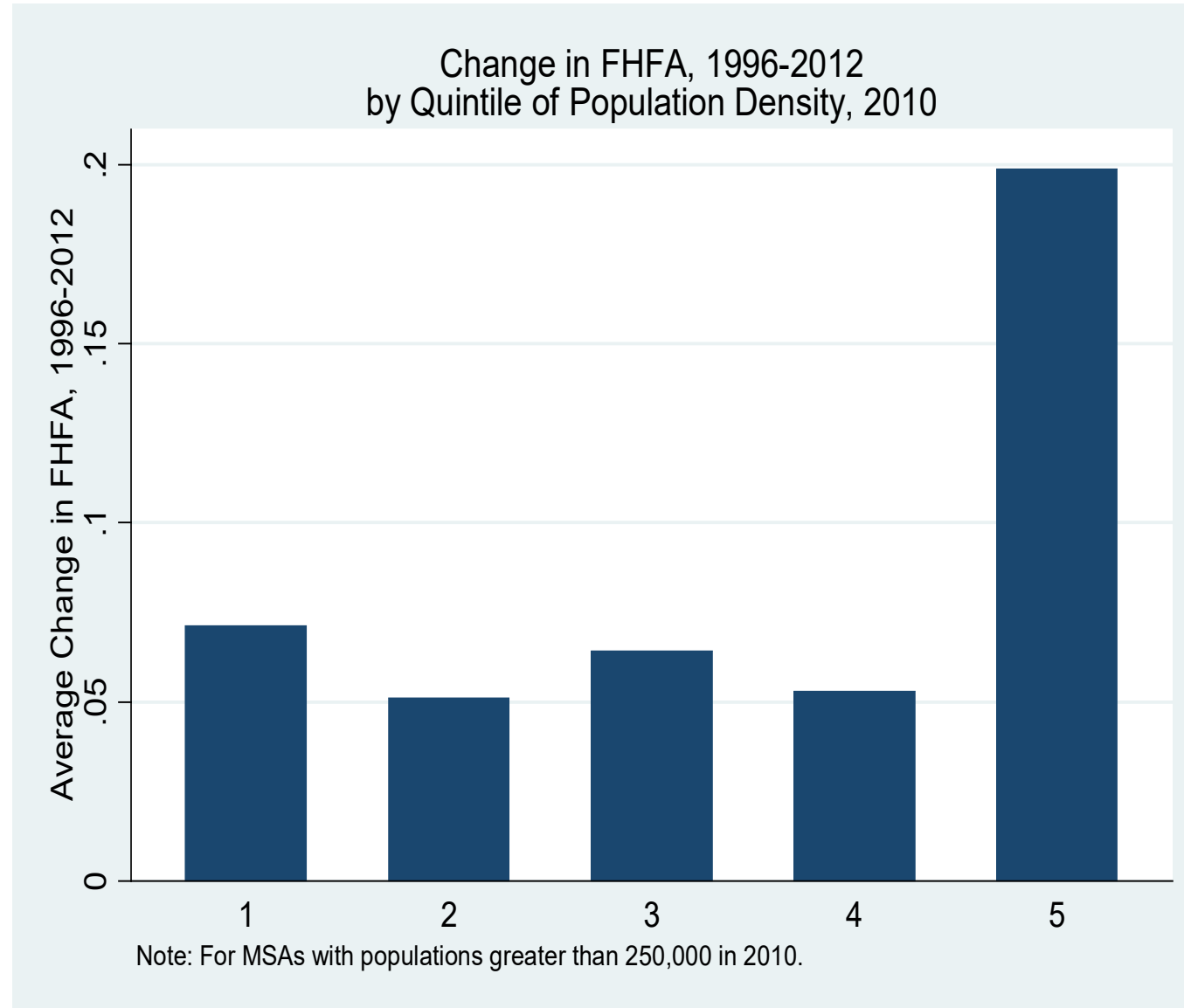


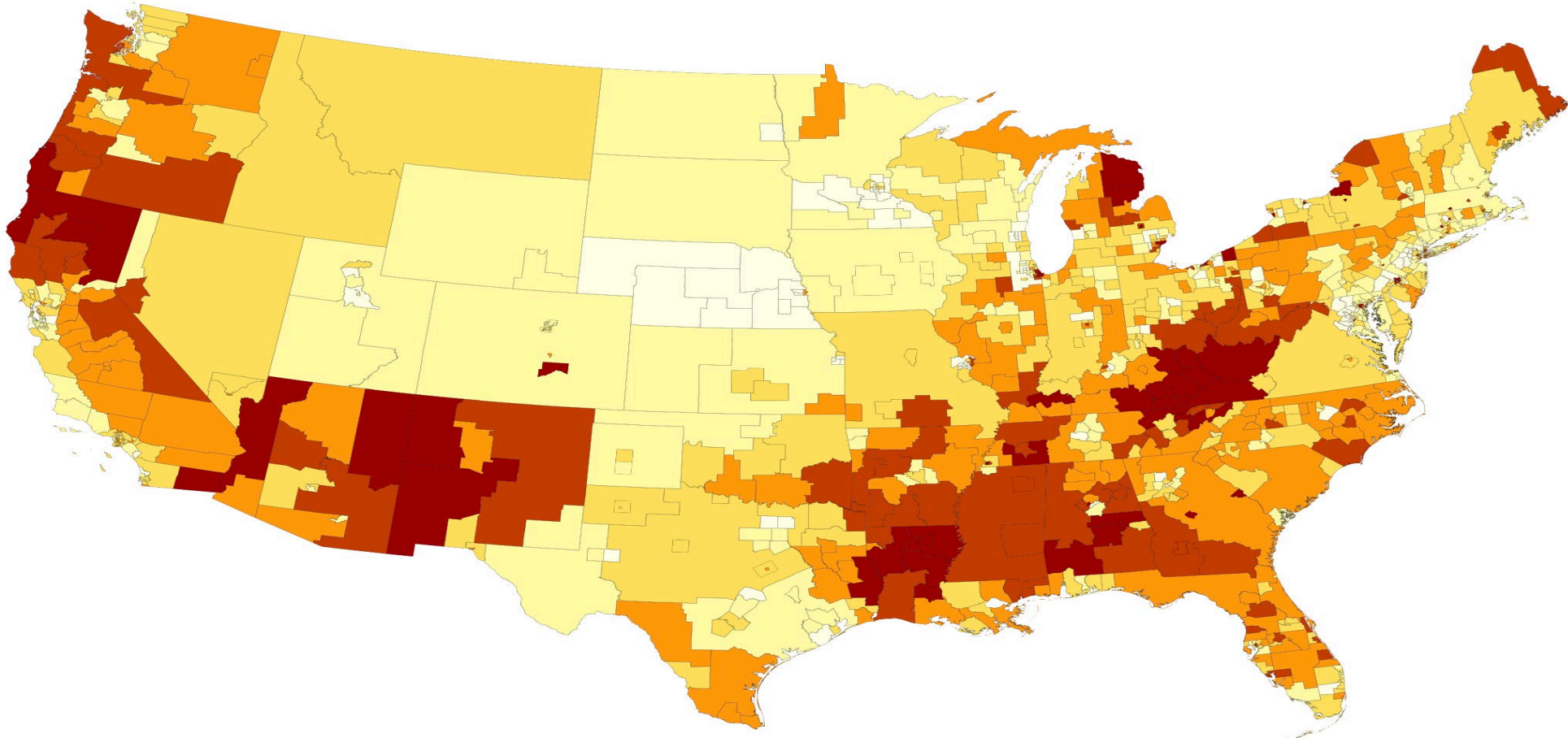
The Rise of the Consumer City



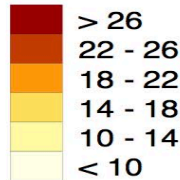
Photo by Dietmar Rabich



Geography of not working: Prime men 2015



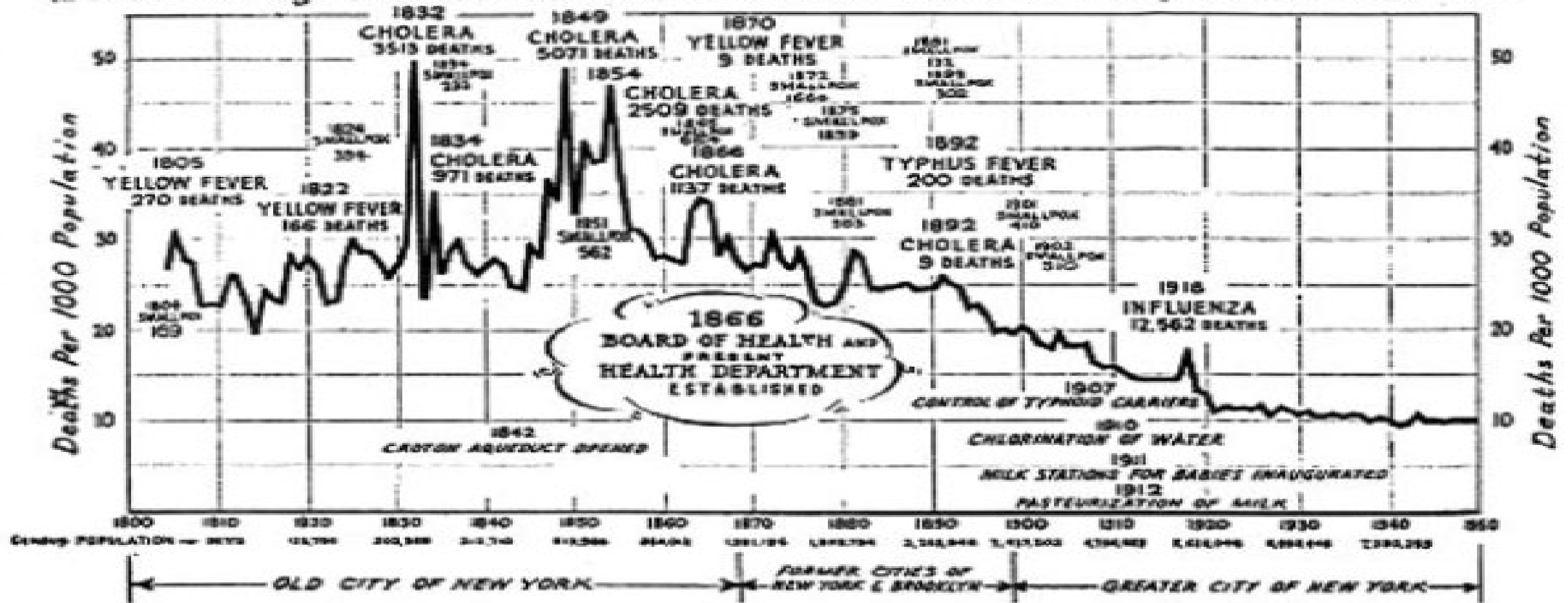
Not Working Rate, percent





The CONQUEST OF PESTILENCE in NEW YORK CITY ~

... As Shown by the Death Rate as Recorded in the Official Records of The Department of Health.

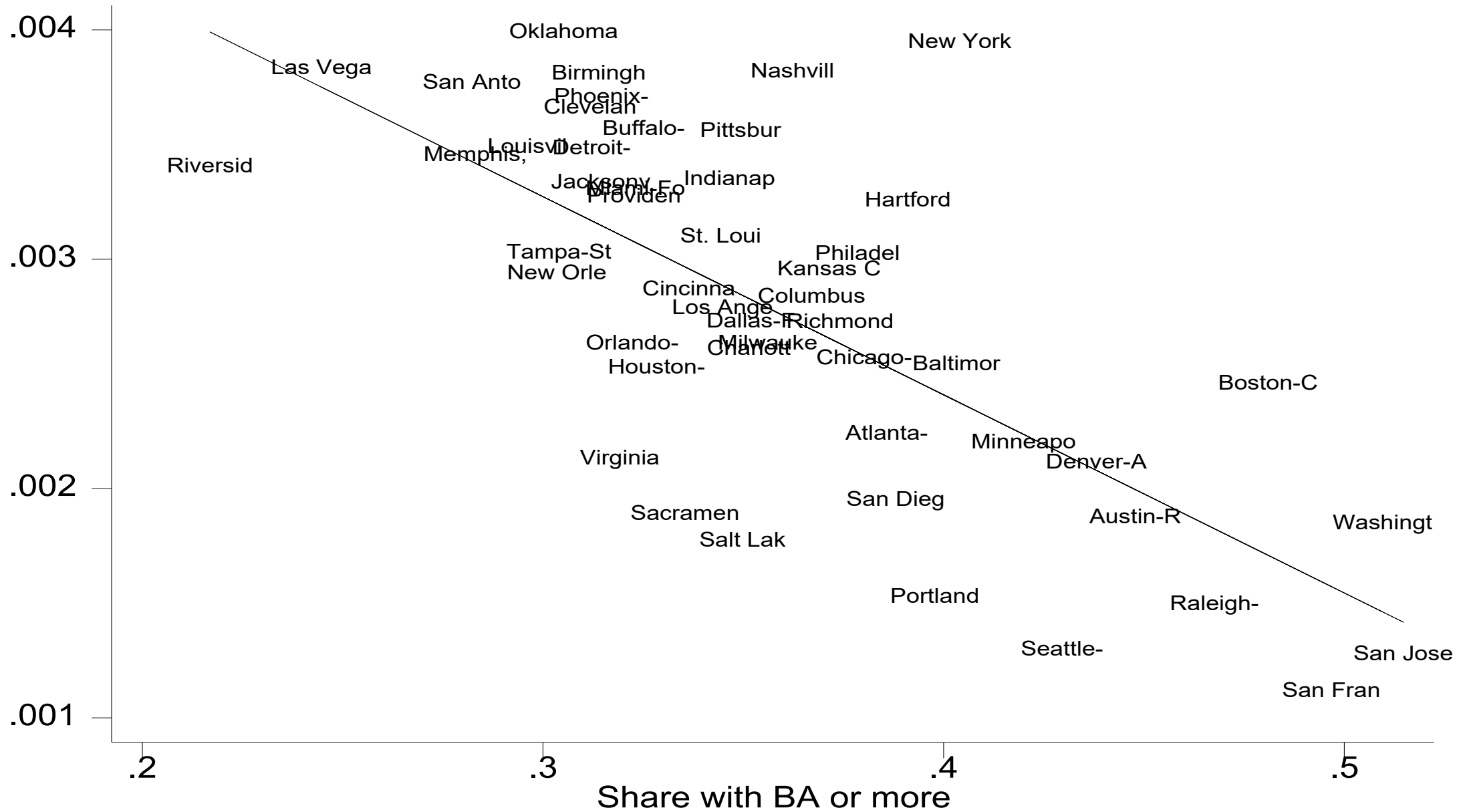


New York City's Department of Health shows the timeline of the city's mortality rate, which sharply dropped with the provision of clean water in the nineteenth century.

New York City Department of Health and Mental Hygiene

Total Death Rate COVID-19

Fitted values



What is going to happen to offices?

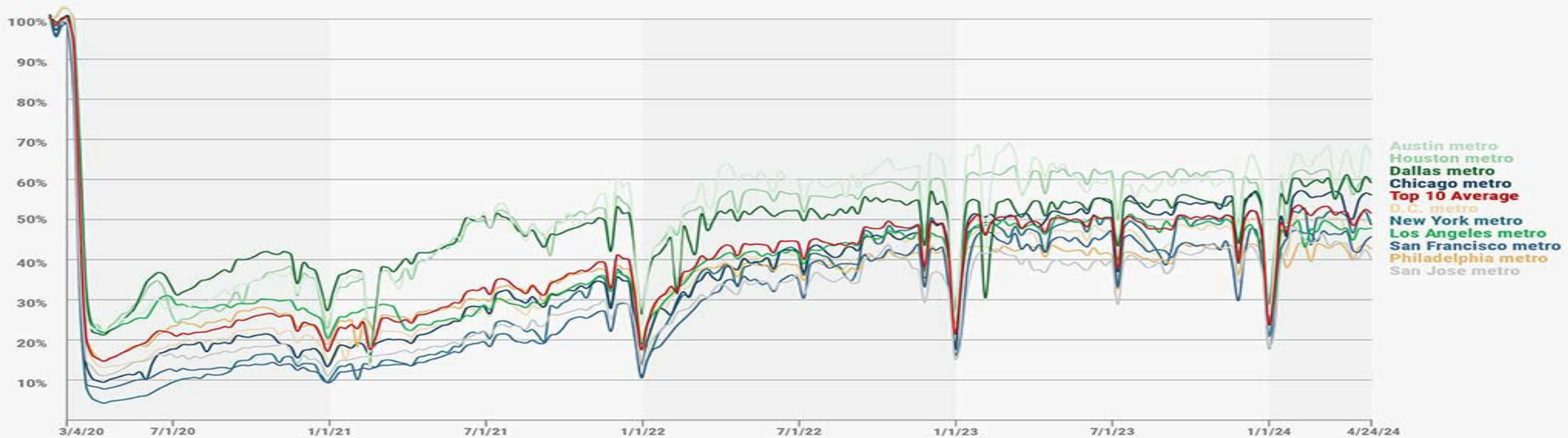


KASTLE BACK TO WORK BAROMETER

Weekly Occupancy Report from Kastle Access Control System Data

4.29.24

OCCUPANCY OVER TIME - MARCH 4, 2020 TO APRIL 24, 2024



*On March 22, 2021, Kastle moved from daily to weekly data reporting to provide a more robust and comprehensive picture of office occupancy. We have also recalculated data back to the start of the time series for consistency. This has only a marginal impact on most cities and the national average.



Technology and the City



Photo by Bernard Gagnon

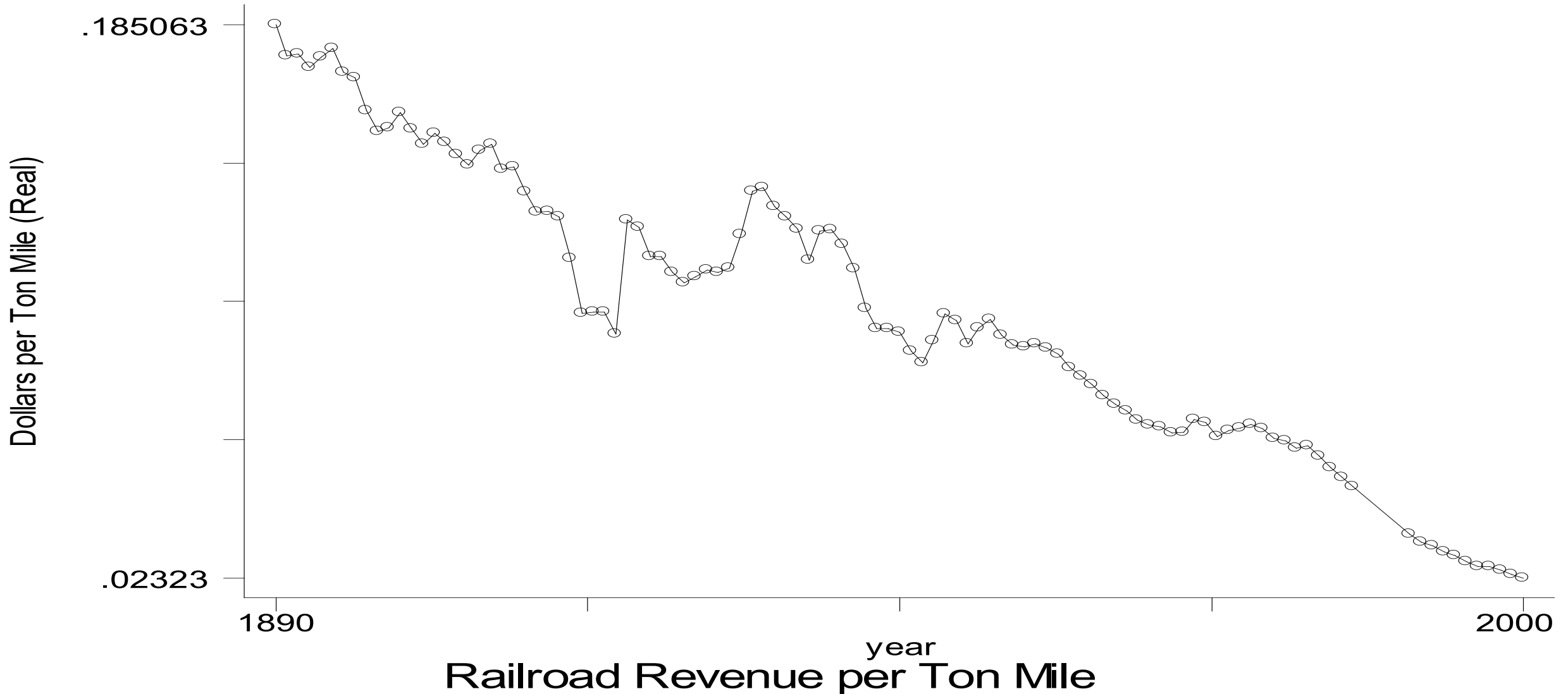
Centripetal Technologies: Transportation and Manufacturing in Chicago and Atlanta



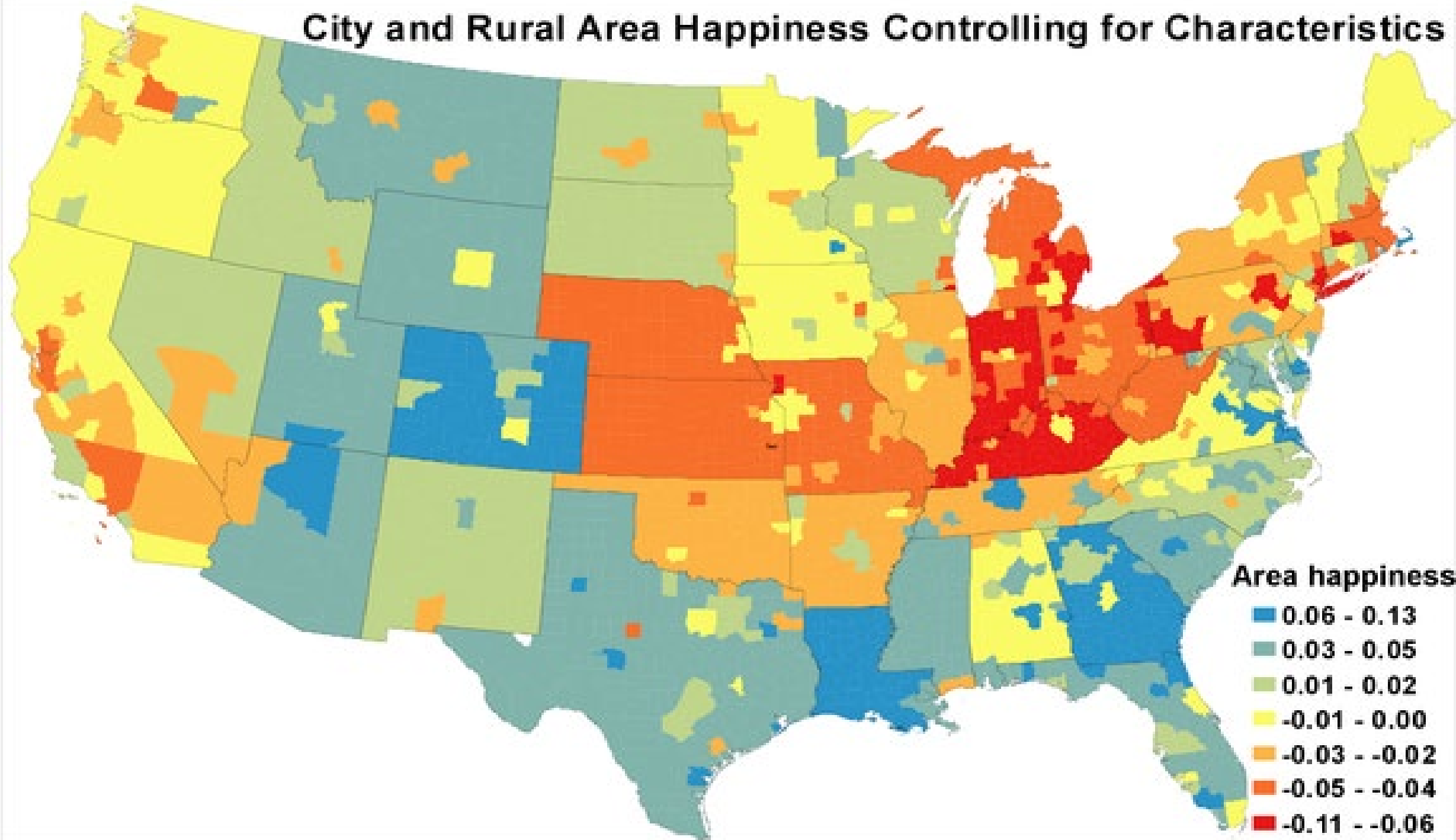
The Age of Centrifugal Cars (and Radios and TVs)



The Decline of the Costs of Moving Goods



City and Rural Area Happiness Controlling for Characteristics





FINAL **DAILY NEWS** **15¢**
NEW YORK'S PIONEER NEWSPAPER
SATURDAY, JULY 11, 1975

FORD TO CITY: DROP DEAD

Vows He'll Veto Any Bail-Out



**Abe, Carey
Rip Stand**

***Stocks Skid,
Dow Down 12***

Three pages of stories
begin on page 10. Full text
of Ford's speech on page 16.

Cities are so monumental that we easily forget how fast they can fall—and rise. In the 1970s, New York verged on bankruptcy; President Ford refused to bail it out (left), and President Carter toured the grim ruins of the South Bronx (above). Three decades before these iconic images, Gotham had been an urban paragon, and three decades after them, it is again.

[Art 1:] *New York Daily News Archive / Getty Images*

[Art 2:] *Teresa Zabala / The New York Times / Redux Pictures*

Will the last person to leave Seattle please turn out the lights?

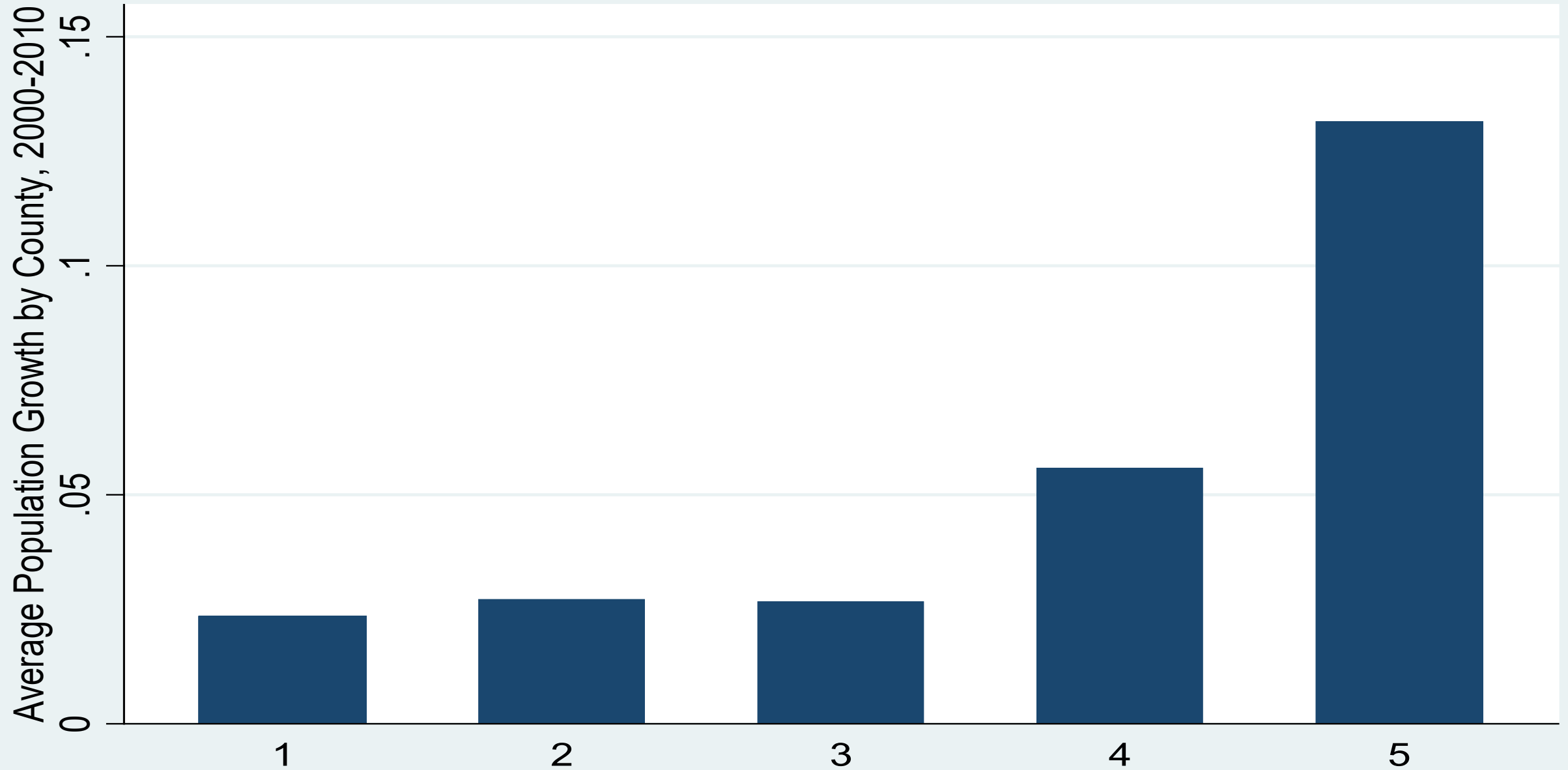


Photo by Postdil



Image by M2545

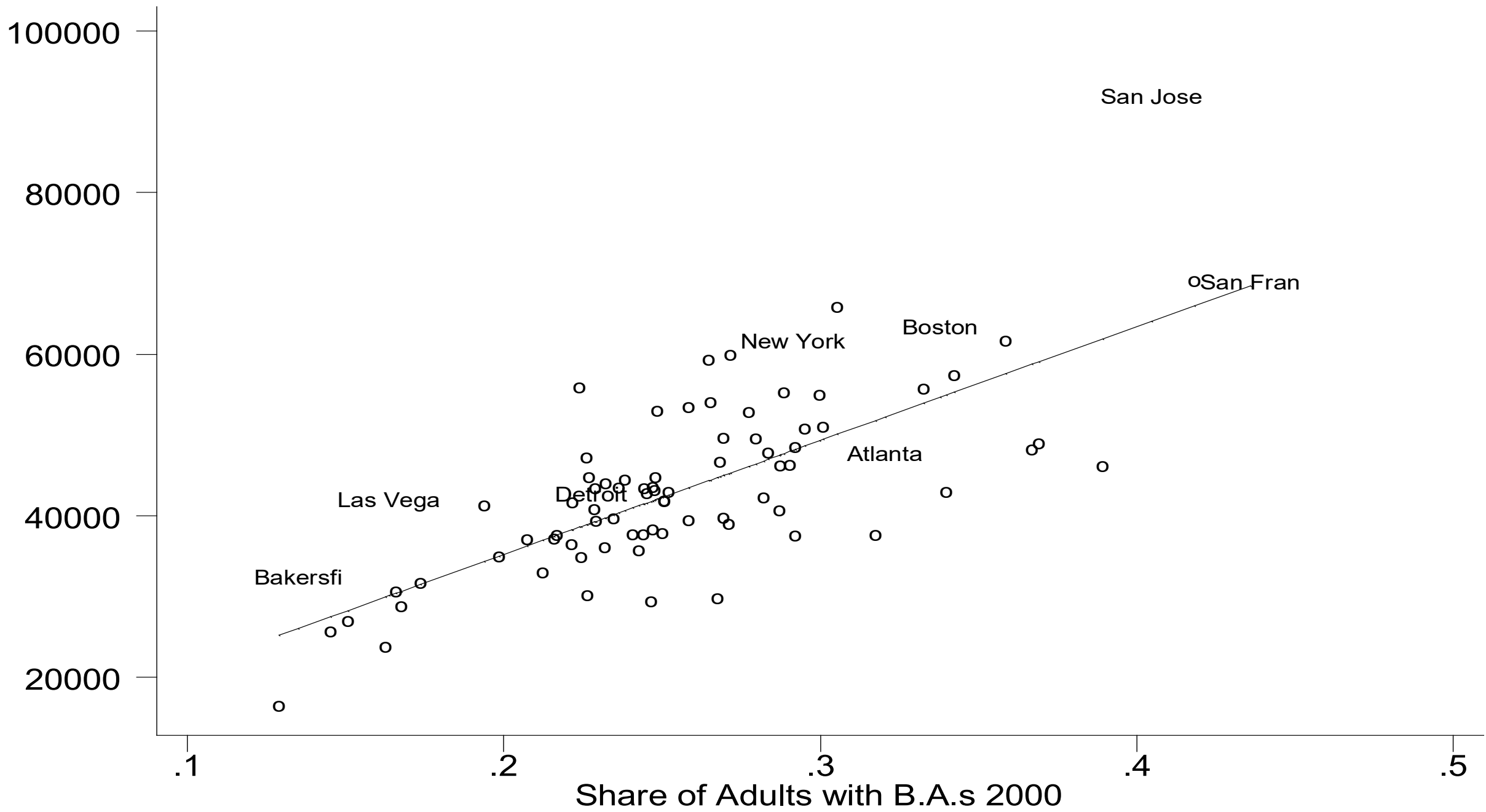
Average Population Growth by Share with BA in 2000 (Quintiles)



The rise of urban knowledge industries



Per Capita GDP 2010



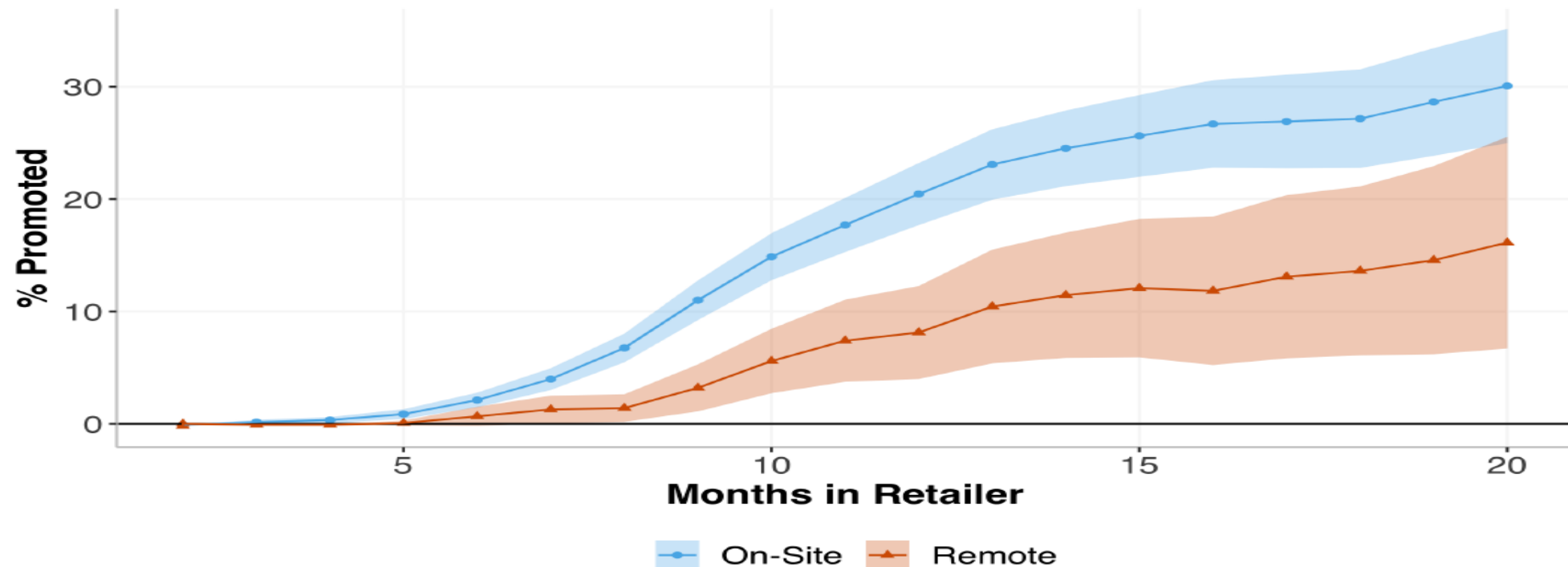
Could Zoom Mean More Competition for Global Talent rather than an End to Offices?



Image by perzon seo

The Dynamic Consequences of Working Remotely: Emmanuel and Harrington (2021)

Figure 1: Promotion among Remote and On-Site Workers

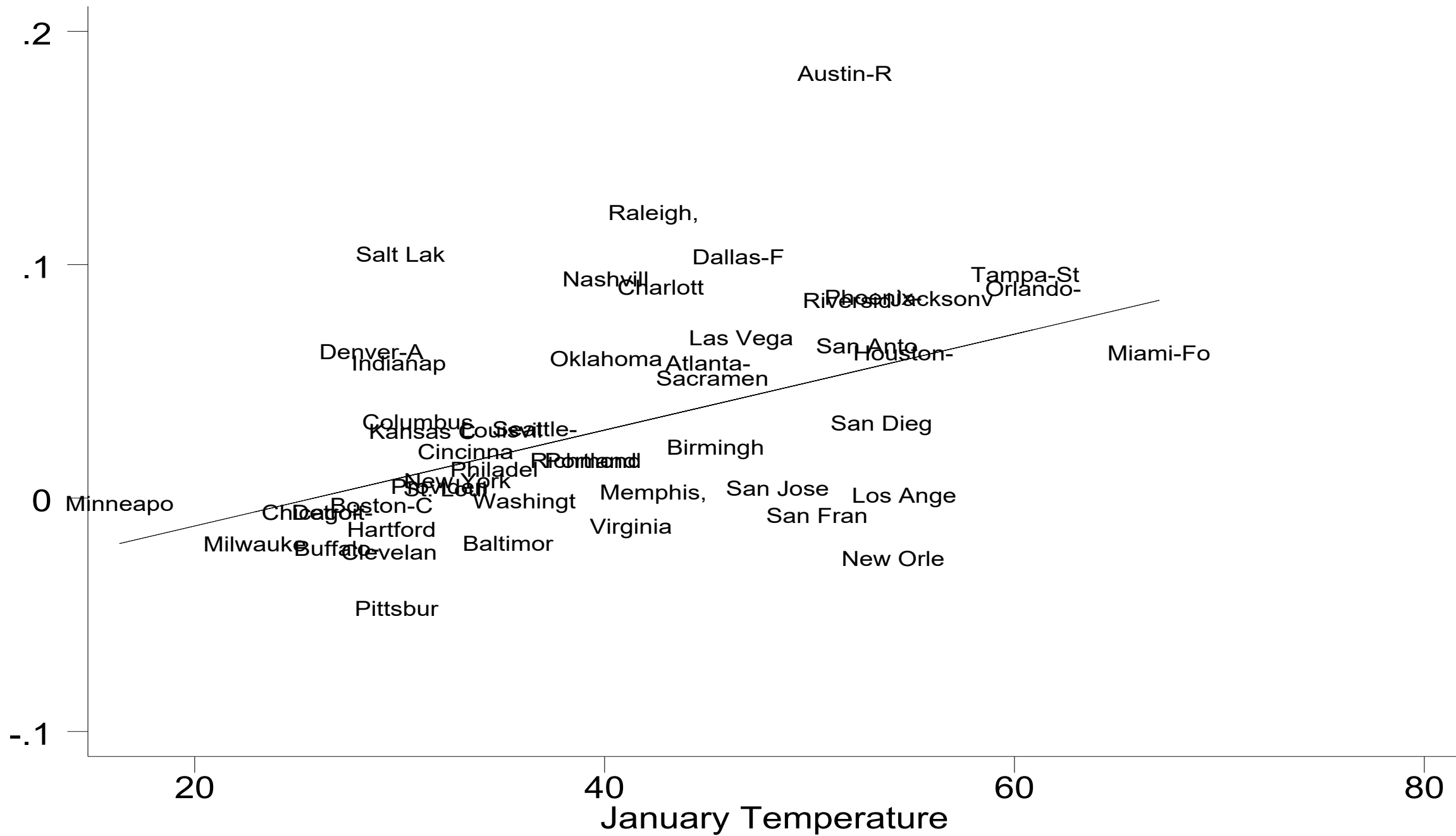


Note: This figure considers the promotion rates of remote workers (in blue circles) and on-site workers (in orange triangles). The x-axis plots the workers' tenure and the y-axis plots the percent who have been promoted among those who persist at the retailer. The error ribbons reflect 95% confidence intervals with standard errors clustered at the worker level. The sample limits to workers hired after July 2018 when the retailer began to hire workers directly into remote jobs and before April 2020 when on-site call-centers closed due to COVID-19.

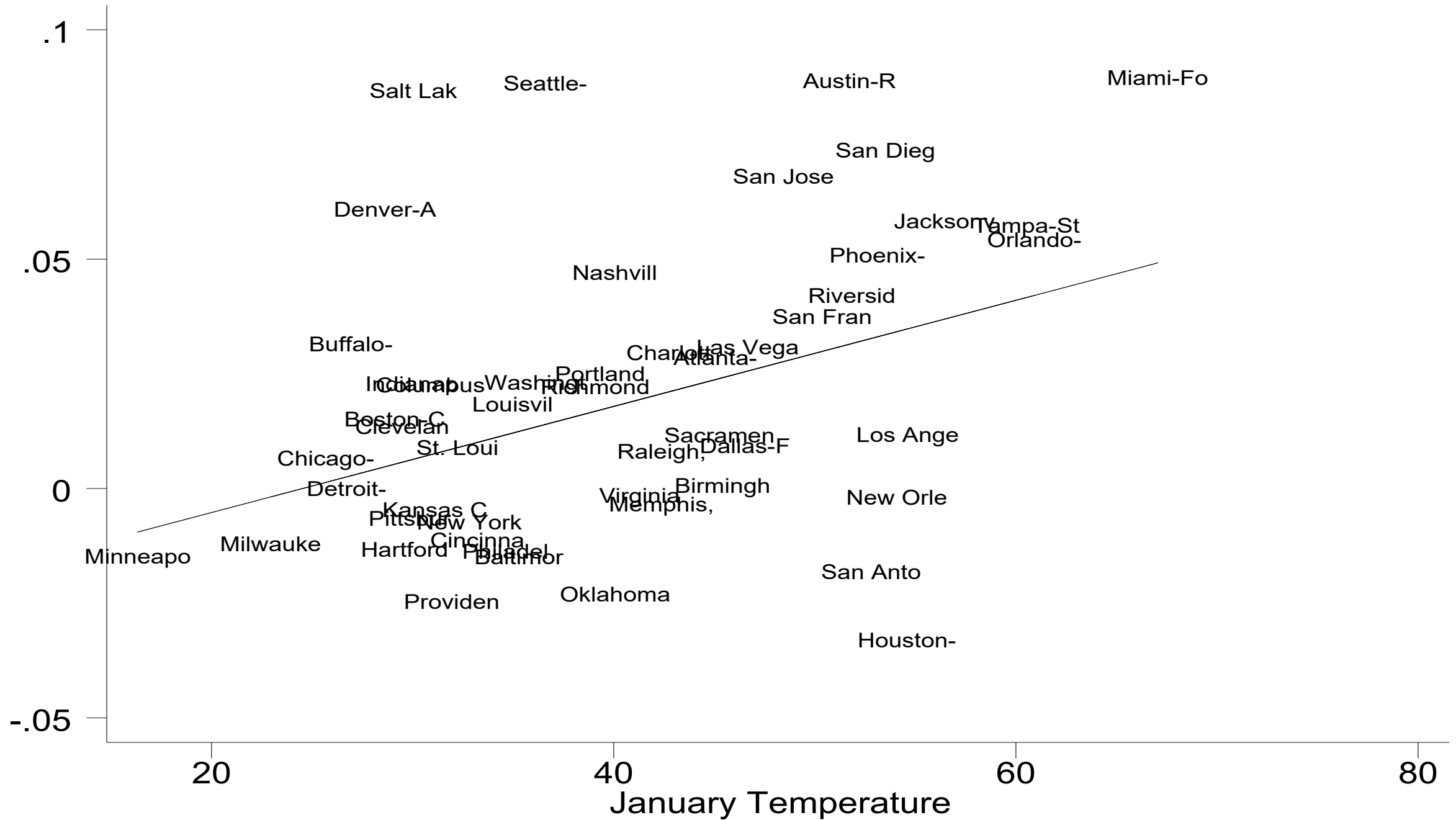
Measuring Urban Winners and Losers

- Earnings and employment data from the Quarterly Census of Employment and Wages goes to Third Quarter 2021
- Repeat home sales data from the Federal Housing Finance Agency (FHFA) from December 2021.
- Permit data from the Census of Construction covers the entire year 2021.
- Strategy is always to take percent changes over two year period.
- For the nominal variables (prices and earnings) we correct for inflation (CPI)– 7% from Q3 2019 to Q3 2021.
- The data are interesting on their own, but we also produce an index.

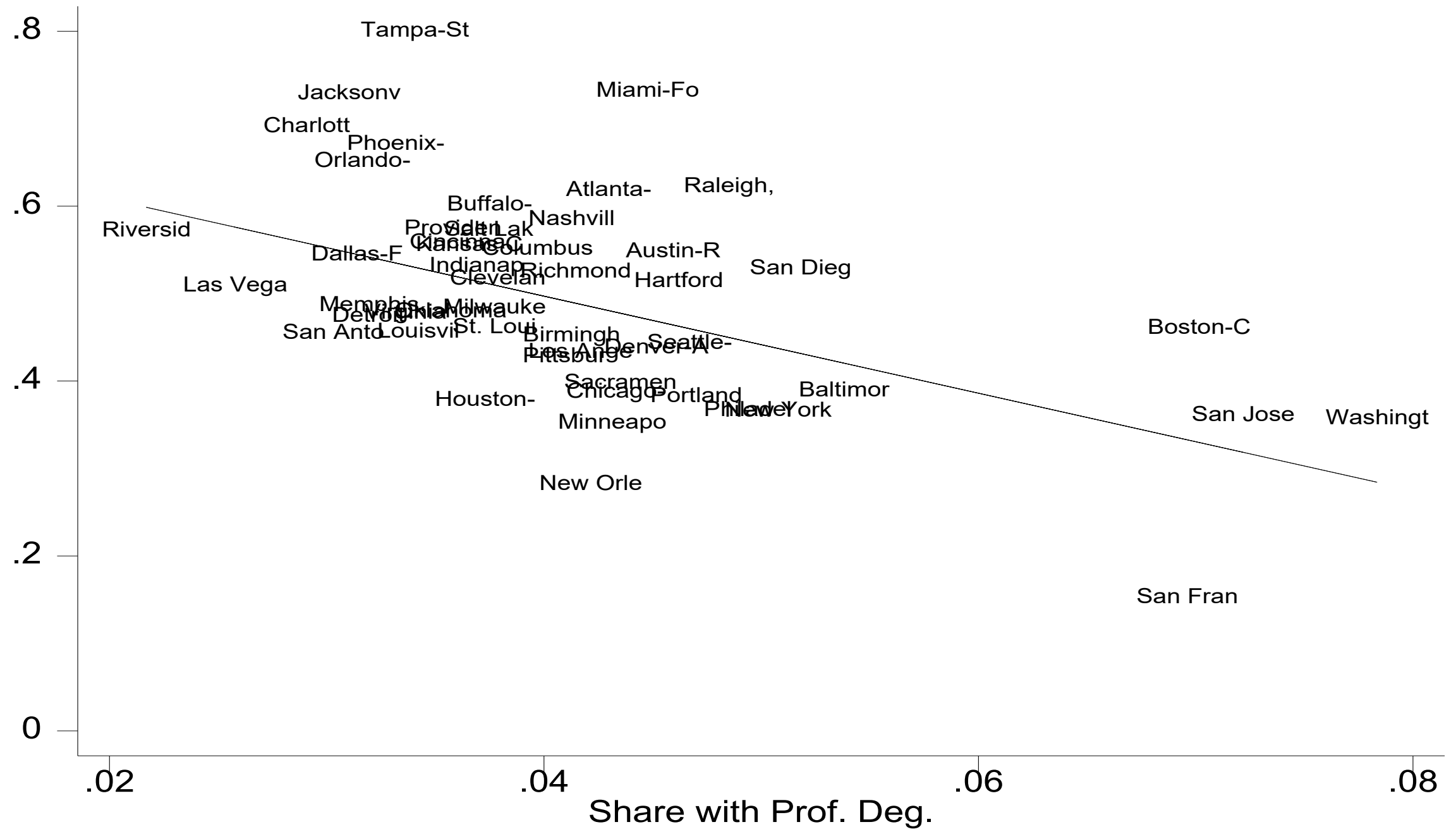
Employment Change 2019-23



Change in Wage 2019-23



Change in Home Prices 2019-23



Metropolitan Area	Percent Employment Growth	Percentage Weekly Wage Growth	Percentage Home Price Growth	Percent Change in Housing Permits
Austin-Round Rock-Georgetown, TX	14.12	5.67	32.95	24.29
Miami-Fort Lauderdale-Pompano Beach, FL	3.33	6.89	41.93	26.43
Tampa-St. Petersburg-Clearwater, FL	5.79	3.76	48.54	8.36
Salt Lake City, UT	7.81	2.84	32.79	57.15
Jacksonville, FL	5.97	3.01	39.70	42.16
Phoenix-Mesa-Chandler, AZ	5.23	2.03	41.08	48.21
Charlotte-Concord-Gastonia, NC-SC	5.47	2.55	40.38	34.53
Raleigh-Cary, NC	8.45	-3.04	34.90	97.66
Orlando-Kissimmee-Sanford, FL	5.46	3.08	34.68	14.01
Riverside-San Bernardino-Ontario, CA	7.42	0.69	29.00	49.35
Nashville-Davidson--Murfreesboro--Franklin, TN	6.02	1.24	34.56	29.53
San Diego-Chula Vista-Carlsbad, CA	1.66	2.59	27.24	42.88
Atlanta-Sandy Springs-Alpharetta, GA	3.53	0.32	34.06	25.47
Indianapolis-Carmel-Anderson, IN	3.82	0.62	28.49	36.98
Pittsburgh, PA	-5.57	-1.10	16.85	211.78
Dallas-Fort Worth-Arlington, TX	7.39	-0.81	28.50	3.58
San Antonio-New Braunfels, TX	4.22	0.33	23.97	32.46
Columbus, OH	1.09	-0.72	27.66	62.91
Denver-Aurora-Lakewood, CO	3.13	2.50	19.65	15.22
Sacramento-Roseville-Folsom, CA	3.14	0.62	15.48	55.89
Richmond, VA	0.14	0.21	27.95	27.57
Las Vegas-Henderson-Paradise, NV	4.03	0.69	21.73	1.53
Memphis, TN-MS-AR	0.76	1.00	31.50	-10.07
Virginia Beach-Norfolk-Newport News, VA-NC	-1.67	1.08	21.48	49.49
Providence-Warwick, RI-MA	-1.14	0.65	28.94	18.94

Metropolitan Area	Percent Employment Growth	Percentage Weekly Wage Growth	Percentage Home Price Growth	Percent Change in Housing Permits
Cincinnati, OH-KY-IN	0.60	-2.91	29.19	63.18
Louisville-Jefferson County, KY-IN	1.40	0.25	20.14	21.02
Seattle-Tacoma-Bellevue, WA	1.27	1.83	17.94	-12.40
Birmingham-Hoover, AL	1.02	-0.95	22.88	11.39
Buffalo-Cheektowaga, NY	-4.97	2.68	25.75	-7.48
Baltimore-Columbia-Towson, MD	-3.10	0.37	12.74	64.34
Boston-Cambridge-Newton, MA-NH	-1.53	0.07	18.28	25.81
Portland-Vancouver-Hillsboro, OR-WA	0.02	2.58	14.35	-24.60
St. Louis, MO-IL	-1.95	-1.16	19.46	26.99
Kansas City, MO-KS	0.71	-0.19	26.49	-58.36
Los Angeles-Long Beach-Anaheim, CA	-0.25	-0.64	17.36	-2.64
Cleveland-Elyria, OH	-3.51	0.68	23.67	-19.94
Milwaukee-Waukesha, WI	-3.02	-0.18	24.76	-24.87
Detroit-Warren-Dearborn, MI	-2.73	-1.37	20.97	-1.35
Chicago-Naperville-Elgin, IL-IN-WI	-1.97	-0.79	12.32	12.42
San Jose-Sunnyvale-Santa Clara, CA	0.43	0.71	9.64	-37.22
Houston-The Woodlands-Sugar Land, TX	2.96	-5.13	15.90	15.11
Oklahoma City, OK	2.84	-4.01	20.94	-29.46
Minneapolis-St. Paul-Bloomington, MN-WI	-2.18	-0.09	12.27	-14.14
New York-Newark-Jersey City, NY-NJ-PA	-1.90	-1.32	12.68	-2.73
New Orleans-Metairie, LA	-3.52	0.26	8.74	-1.03
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	-0.69	-1.91	12.07	-11.31
Hartford-East Hartford-Middletown, CT	-2.86	-4.28	22.52	-21.56
Washington-Arlington-Alexandria, DC-VA-MD-WV	-1.26	-2.93	11.83	-20.11
San Francisco-Oakland-Berkeley, CA	-1.12	2.99	-6.45	-56.94

Beyond Housing: Safe Streets and Fast Commutes in the Battle for Talent



Empowering Urban Entrepreneurs

Economic Growth and Firm Size

MSA Employment Growth (1977-2010)
by Average Firm Size (1977) Quintiles

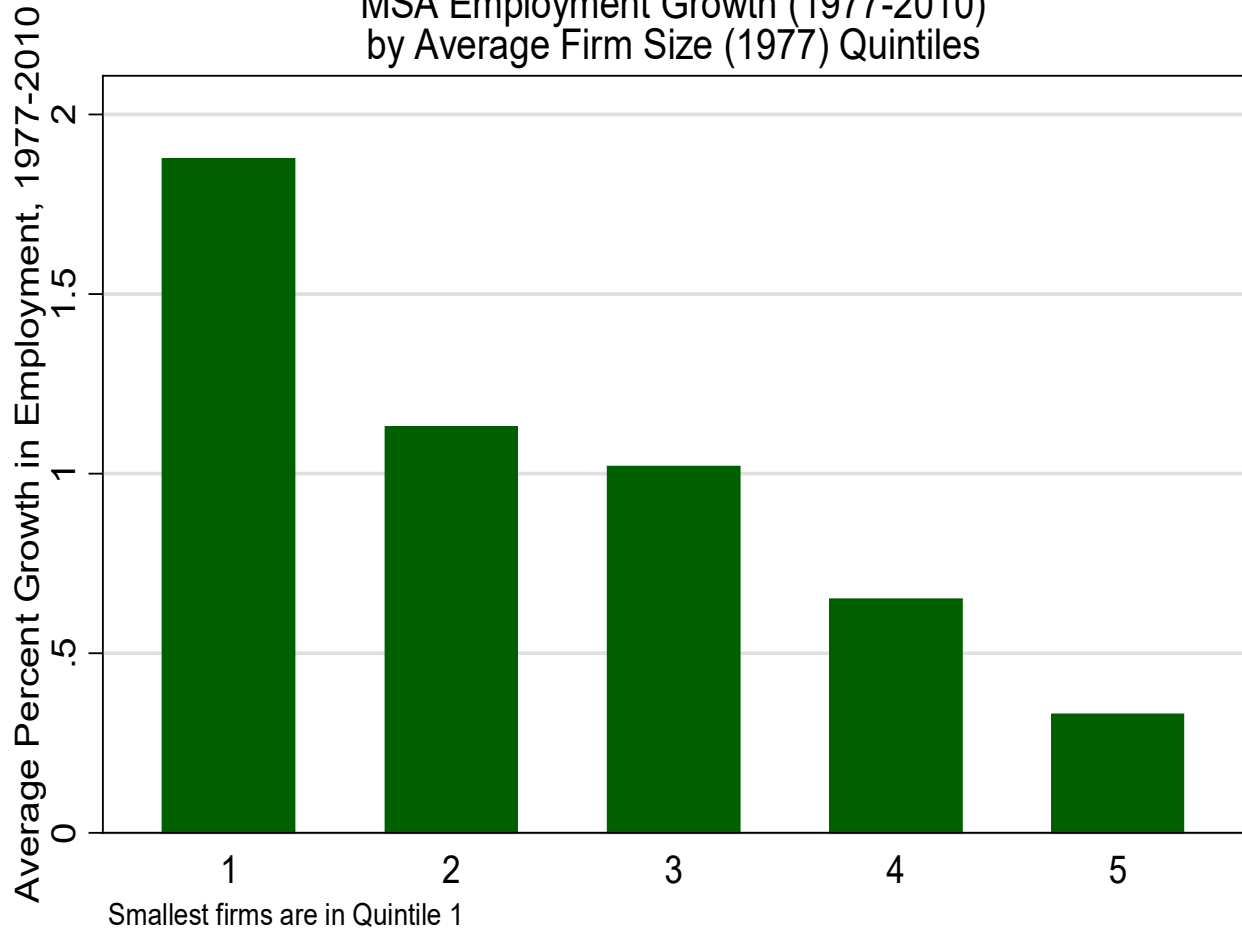


Image by Jamie

Public Safety is Not Optional – which means investing in the police, not defunding them.



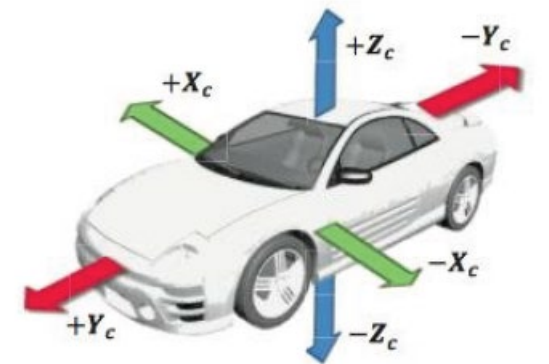
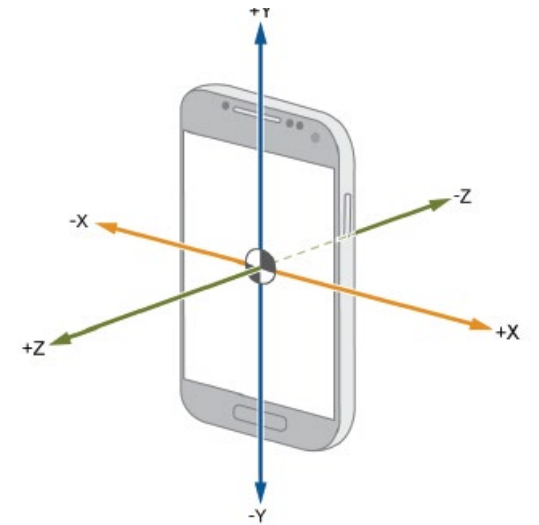
Photo by Ochlo

Incentives and Infrastructure: Singapore



Data: Raw Uber Smartphone Vertical Acc Data

- Accelerometer data from smartphones of active Uber drivers during Uber trips ($\sim 5\text{Hz}$)
 - Uber proprietary algorithm to re-align axes: vertical acceleration – measures **bumpiness of the trip**
- Map-matched to road segments covering roughly a block
 - Based on Open Street Map (OSM) road segments
- Data periods:
 - entire US (August 2021)
 - Chicago (April 2018 and March-August 2021)



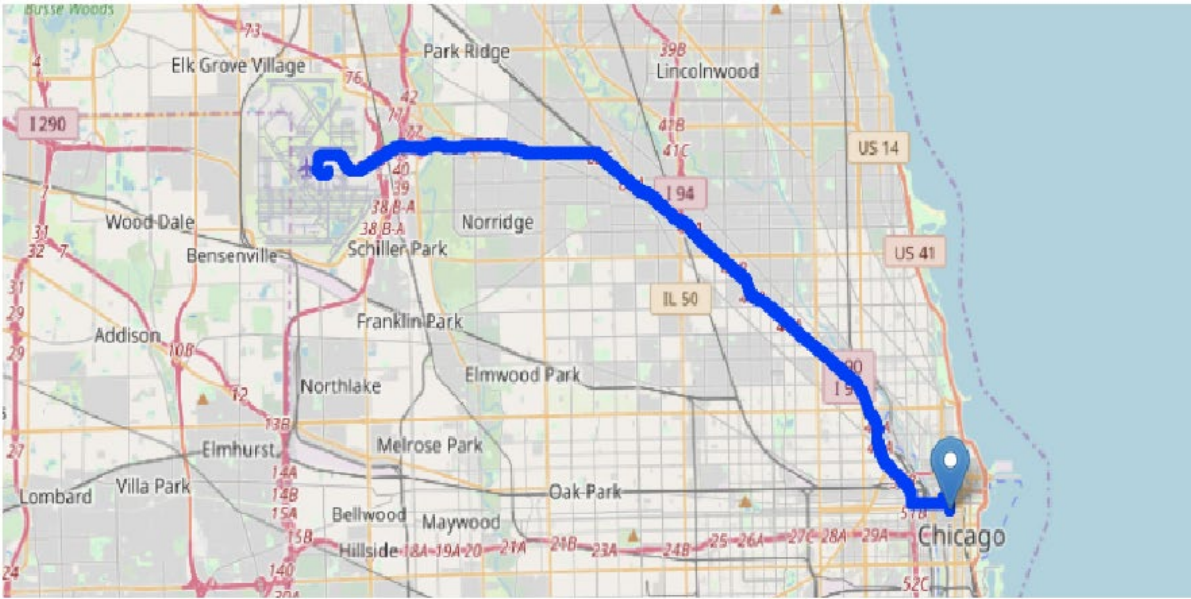
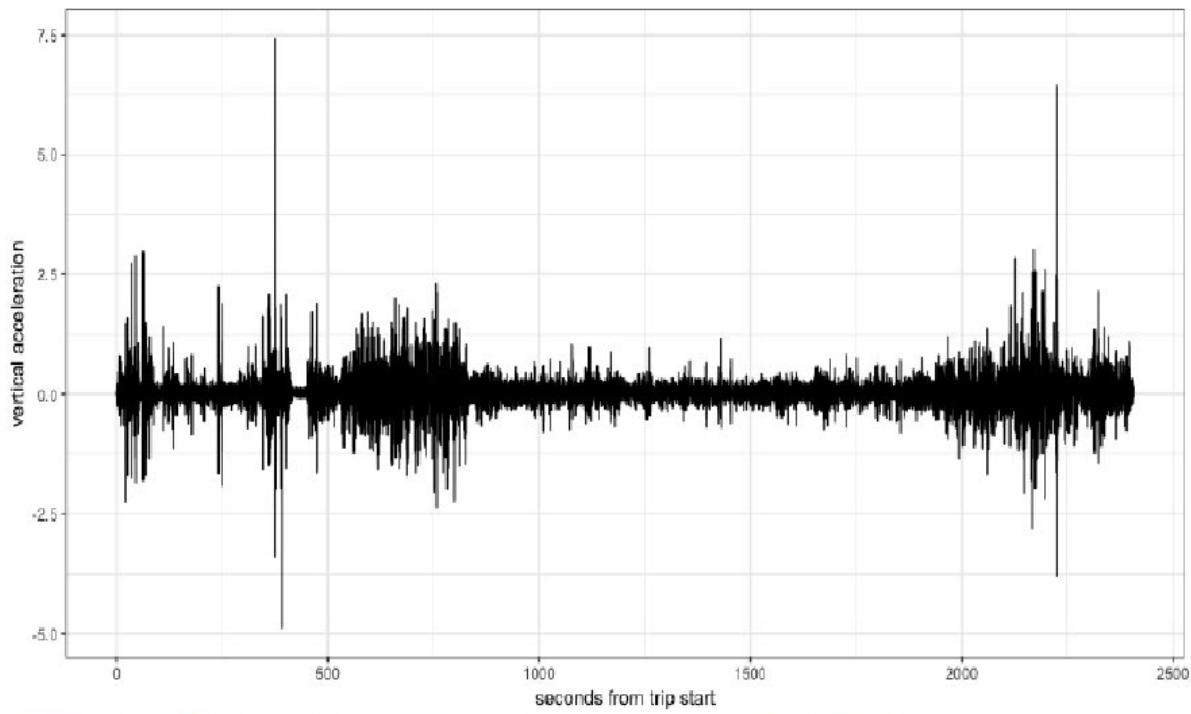


Figure 1: Uber Data Has Signal: Different Types of Roads

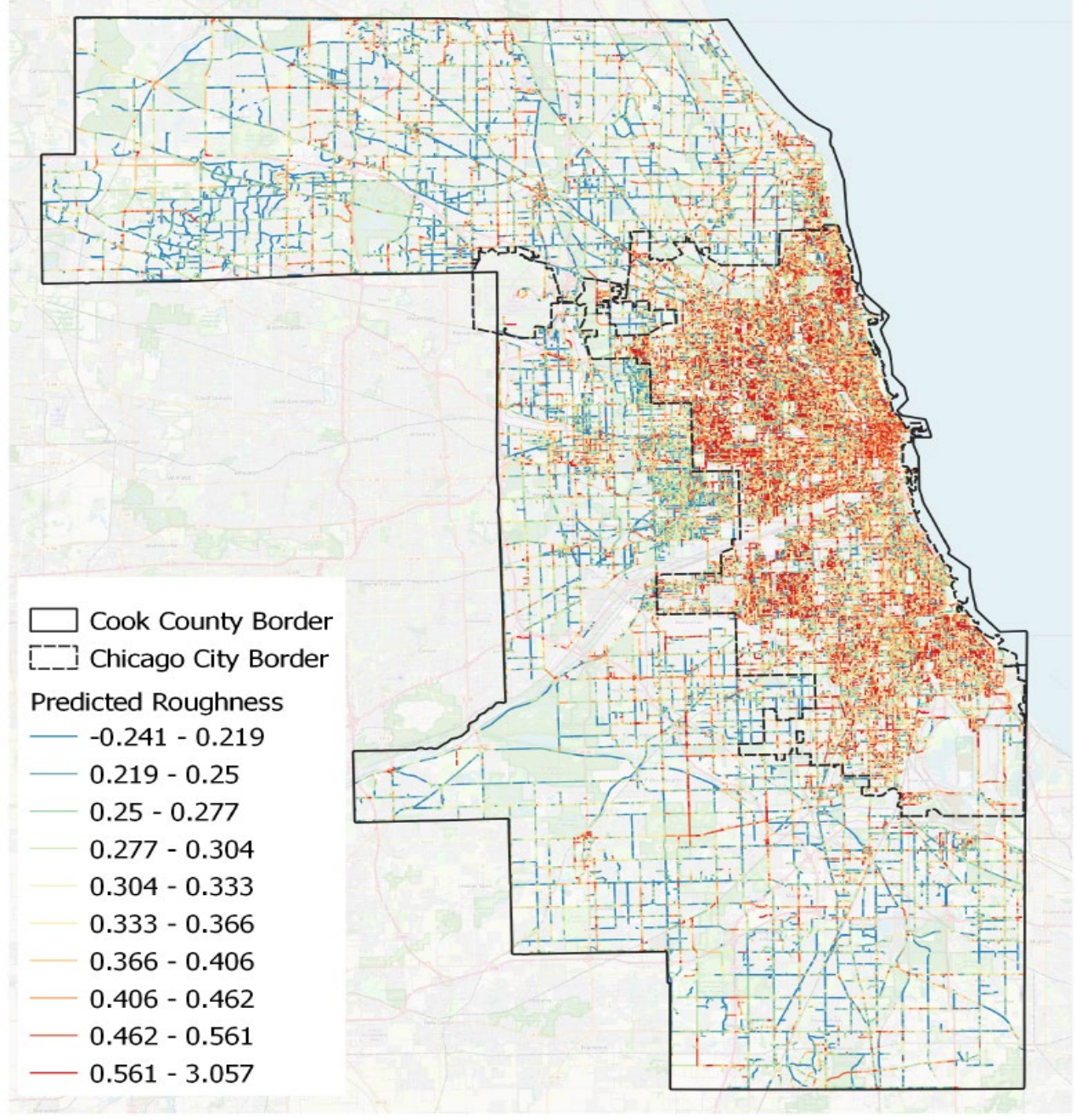
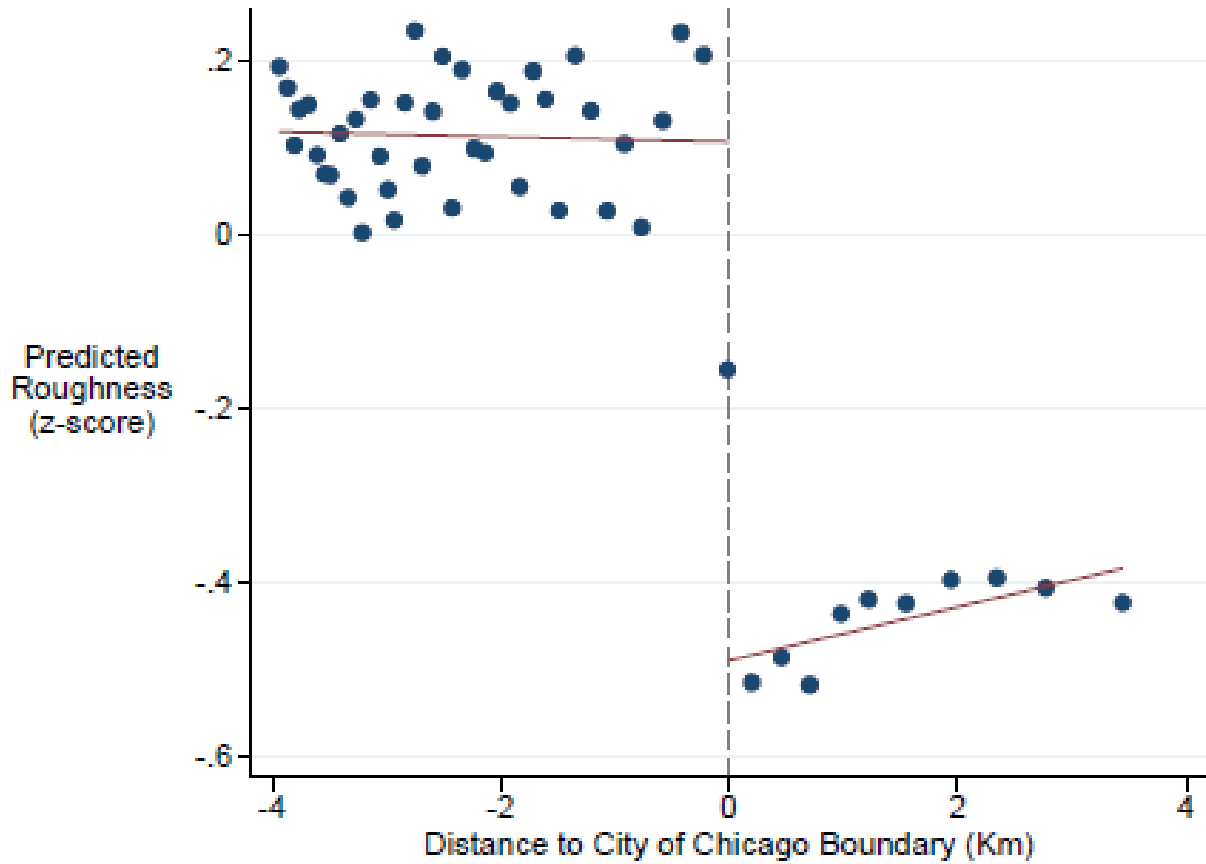
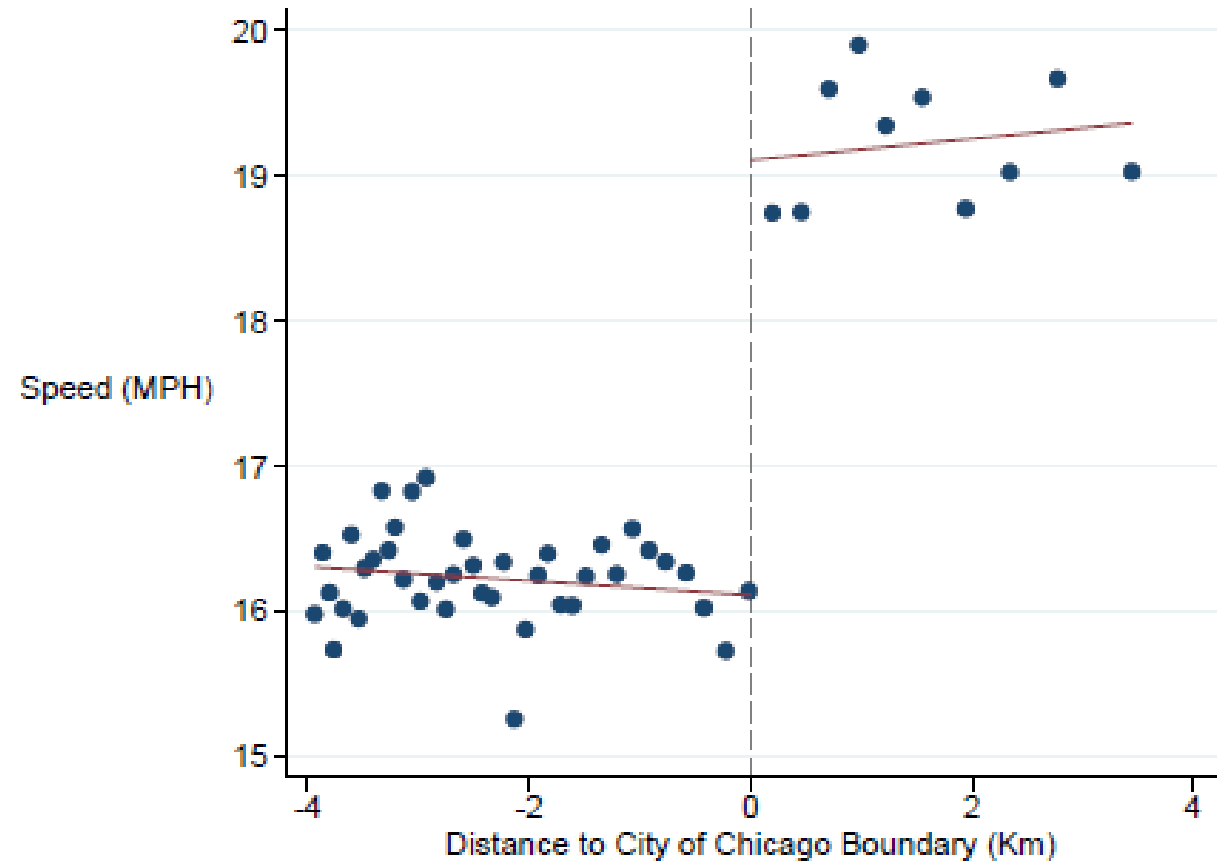


Figure 3: Predicted Roughness at 29 mph in Cook County, IL

Figure 8: Predicted Roughness and Speed around the Chicago border

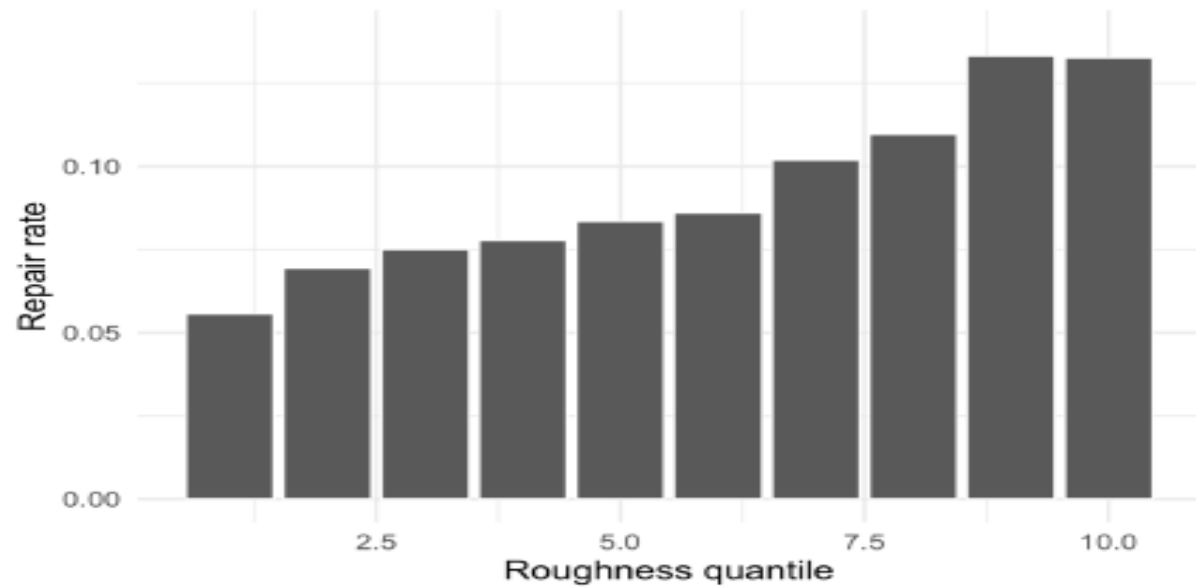


Panel (A) Predicted Roughness

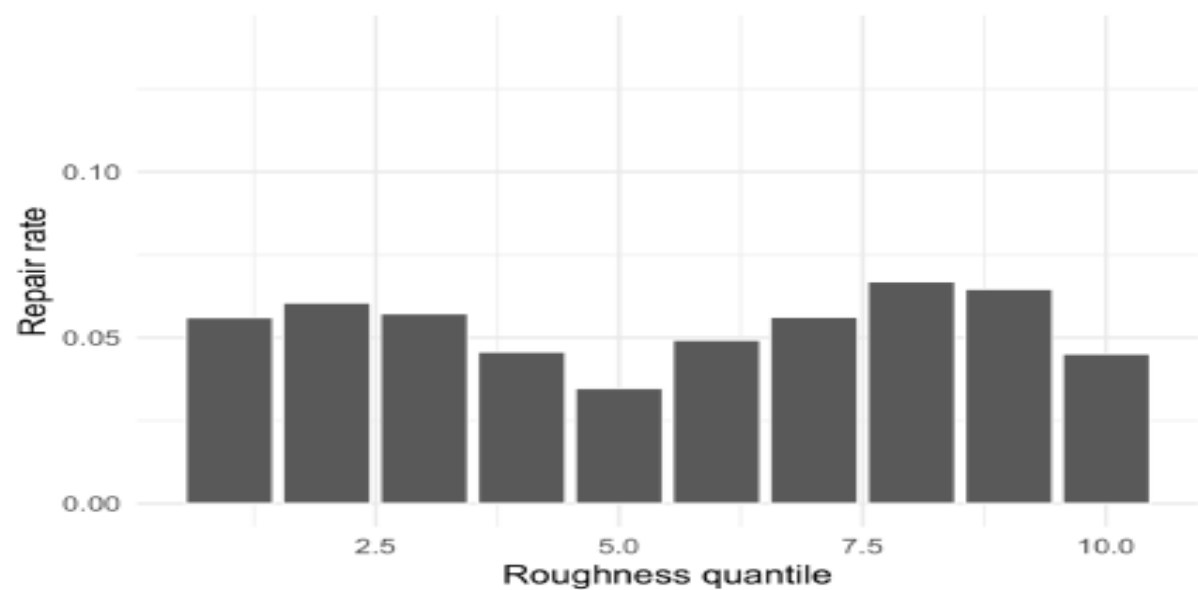


Panel (B) Speed

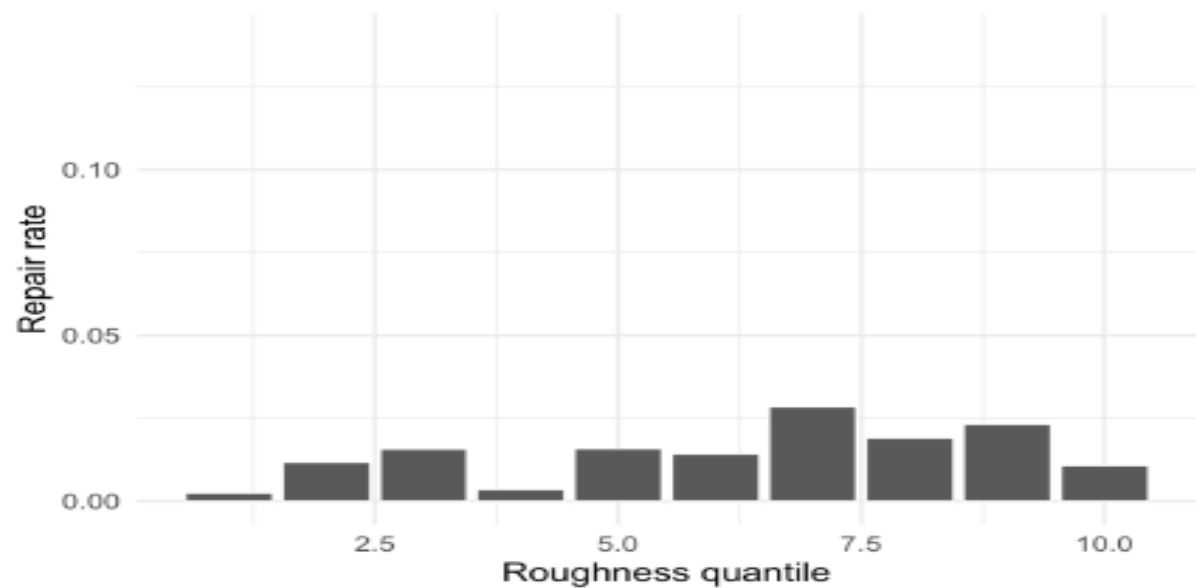
Figure 13: Local Road Roughness and Resurfacing Decisions in Four Cities



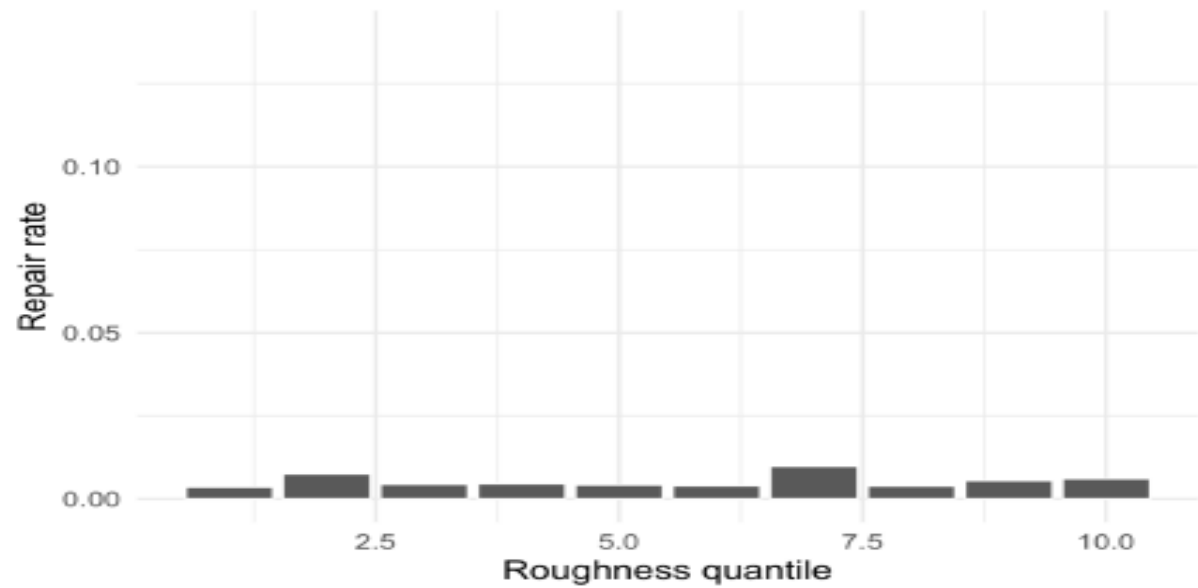
(a) New York City, NY



(b) Dallas, TX



(c) Columbus, OH



(d) Portland, OR

Cities are resilient! (Milan 1943 and 2014)



Photo by Jose Luis