

Supporting Information

S1. Population and racial-ethnic compositions changes over time

The changes of population and racial-ethnic compositions of all 31 metropolitan divisions during the study period are illustrated in Figure S1. It shows clearly that the total population and racial-ethnic compositions are relatively steady for all the metropolitan divisions from 2013 to 2022.



Figure S1. The changes of racial/ethnic group populations between 2013 and 2022 for all 31 metropolitan divisions.

S2. Name, area, population, and population density for each metropolitan division

Table S1 lists each metropolitan division's name, area, population, and population density, with demographic data derived from the 2020 ACS. According to Figure S1, there have been no significant variations in population change over the past decade. Consequently, the demographic data presented in Table S1 is representative of the entire study period from 2013 to 2022.

Table S1. The list of each metropolitan division's name, area, population, and population density based on 2020 ACS demographical data (ordered by total population).

I D	NAME	Area (km ²)	Populatio n	Population density (capital/km ²)
1	New York-Jersey City-White Plains, NY-NJ	4,143.51	11,966,304	2888
2	Los Angeles-Long Beach-Glendale, CA	10,513.49	9,590,652	912
3	Chicago-Naperville-Evanston, IL	8,106.98	8,020,260	989
4	Washington-Arlington-Alexandria, DC-VA-MD-WV	14,022.16	5,020,548	358
5	Dallas-Plano-Irving, TX	13,667.29	4,344,924	318
6	Warren-Troy-Farmington Hills, MI	8,496.19	3,815,832	449
7	Seattle-Bellevue-Kent, WA	10,882.49	3,452,200	317
8	Anaheim-Santa Ana-Irvine, CA	2,053.45	3,244,865	1580
9	Nassau County-Suffolk County, NY	3,096.89	2,970,097	959
10	Cambridge-Newton-Framingham, MA	3,393.86	2,801,791	826
11	Newark, NJ-PA	5,649.32	2,485,839	440
12	Boston, MA	2,882.30	2,449,822	850
13	Philadelphia, PA	824.06	2,406,591	2920
14	Detroit-Dearborn-Livonia, MI	1,584.65	2,374,339	1498
15	Miami-Miami Beach-Kendall, FL	4,920.73	2,372,289	482
16	Oakland-Berkeley-Livermore, CA	3,766.86	2,351,811	624
17	New Brunswick-Lakewood, NJ	4,422.55	2,323,091	525
18	Fort Worth-Arlington-Grapevine, TX	8,801.25	2,117,211	241
19	Montgomery County-Bucks County-Chester County, PA	4,760.10	1,903,987	400
20	Fort Lauderdale-Pompano Beach-Sunrise, FL	3,115.06	1,599,527	513
21	Camden, NJ	3,477.45	1,517,337	436
22	San Francisco-San Mateo-Redwood City, CA	1,283.43	1,436,891	1120
23	West Palm Beach-Boca Raton-Boynton Beach, FL	5,087.51	1,432,273	282

2 4	Frederick-Gaithersburg-Rockville, MD	2,988.07	1,327,84 7	444
2 5	Tacoma-Lakewood, WA	4,320.00	1,123,41 0	260
2 6	Gary, IN	4,864.69	814,474	167
2 7	Lake County-Kenosha County, IL-WI	1,853.01	779,388	421
2 8	Wilmington, DE-MD-NJ	2,860.64	778,965	272
2 9	Elgin, IL	3,809.72	774,539	203
3 0	Rockingham County-Strafford County, NH	2,752.80	450,733	164
3 1	San Rafael, CA	1,347.89	215,329	160