

Did the COVID-19 Pandemic Cause an Urban Exodus? First Quarter 2022 Update for Tables and Figures

By Stephan Whitaker, Federal Reserve Bank of Cleveland May 26, 2022

This document contains tables and figures from "Did the COVID-19 Pandemic Cause an Urban Exodus?" and "Did the COVID-19 Pandemic Cause an Urban Exodus? Follow-Up Questions and Answers" that have been updated with data through March 30, 2022.

This update is substantially different from the original DDB and first four updates. The measures in the original data brief were designed to characterize the immediate impact of the pandemic and lockdowns. The duration of the pandemic has grown quite long and has exhibited enough variation that measures aggregating over the whole pandemic period are not as useful. To provide a more accurate sense of recent developments on an ongoing basis, the tables now report migration in the most recent four quarters, rather than the whole pandemic era. Where percentage changes are reported in tables, they are the increase or decrease of the most recent four quarters relative to the comparable averages from the three years just before the pandemic (2017:Q2 through 2020:Q1). This update continues to display the time series figures, so the recent estimates can be compared to the series' history.

Net out-migration from urban neighborhoods declined 6 percent in the first quarter of 2022 to 41,000 people per month (see Figure 1). In Figure 2, we see that the four-quarter moving average of gross flows into urban neighborhoods declined by approximately 3,800 people, but the moving average of people exiting urban neighborhoods declined by more, shifting down by 7,700 movers. The fact that the national aggregate of net urban out-migration is declining but still elevated reflects that some metro areas' net flows have returned to normal while others have not. The Boston (Figure A8), Dallas (Figure A15), Denver (Figure A16), and Washington DC (Figure A54) metros have almost fully reversed their increases in net out-migration. Metros that are in the process of returning to normal but still have net out-migration far above prepandemic levels include Buffalo (Figure A9), Chicago (Figure A11), Los Angeles (Figure A24), New York (Figure A32), San Francisco (Figure A49), and San Jose (Figure A50). The Philadelphia

metro area (Figure A35) is unique in that the net outflows from its urban neighborhoods remain three times higher than they were prepandemic and have made little recovery.

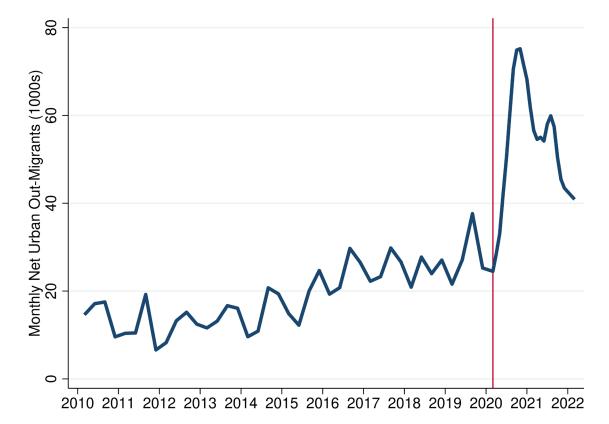


Figure 1. Estimated Net Out-Migration from Urban Neighborhoods

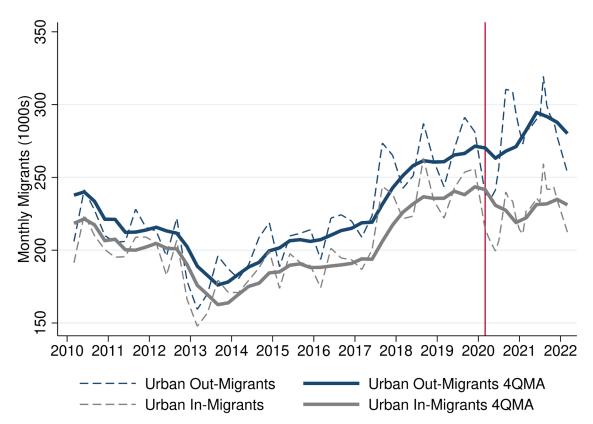
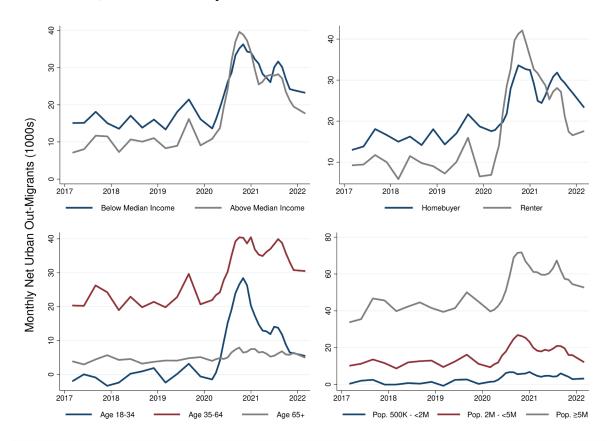


Figure 2. Estimated Gross Migration into and from Urban Neighborhoods

Figure 3. Estimated Net Migration from Urban Neighborhoods by Neighborhood Income, Migrant Characteristics, and Metro Area Population



Follow-Up Table 1. Estimated Number of Migrants Leaving Urban Neighborhoods of Metro Areas by Type of Destination from 2021:Q2 through 2022:Q1.

				To high-cost, large metro areas (>2M)		To lower-cost, large metro areas (>2M)		To midsized metro areas (500K–2M)		To small metro areas (<500K), towns, and rural areas	
	Migrants	Percent change		Percent change	Migrants	Percent change	Migrants	Percent	Migrants	Percent change	
New York, NY	214,580	10.7	84,580	7.3	97,040	30.0		26.6	62,960	23.6	
Los Angeles, CA	170,800	-3.7	122,120	9.8	56,940	31.6		26.1	35,740	13.1	
Chicago, IL	113,180	8.6	24,300	1.9	27,480	18.8	16,220	13.5	22,900	17.7	
Miami, FL	121,820	3.6	16,300	0.6	23,560	15.0	16,620	24.5	16,360	9.0	
San Francisco, CA	58,500	3.3	60,560	16.9	16,380	36.2	17,220	23.0	25,220	30.0	
Washington, DC	90,280	-2.9	19,680	-12.2	24,440	5.3	15,840	5.4	14,740	8.4	
Boston, MA	63,380	-0.4	23,120	4.9	10,880	2.6	24,000	25.7	13,840	18.0	
Philadelphia, PA	64,480	11.4	16,480	6.5	10,100	34.0	10,600	23.1	12,280	17.8	
San Diego, CA	55,840	-4.8	23,140	3.5	10,240	9.6	9,220	9.2	10,860	5.2	
Houston, TX	71,080	5.1	4,580	-14.7	7,480	-3.8	3,140	-13.4	5,700	-8.2	
Dallas, TX	68,020	1.0	5,240	-3.0	6,680	0.7	3,900	-3.5	6,760	4.0	
San Jose, CA	30,120	3.9	34,340	4.5	8,520	43.0	9,600	28.3	9,880	9.5	
Seattle, WA	51,340	1.9	12,620	8.5	6,660	17.9	4,760	4.7	11,240	10.0	
Riverside, CA	42,740	-1.4	17,120	6.0	5,520	43.5	2,860	20.2	4,460	27.9	
Las Vegas, NV	45,240	2.3	11,040	21.5	5,960	45.4	4,720	3.2	8,540	23.8	
Denver, CO	43,940	-0.9	5,880	9.7	6,380	14.5	6,560	29.8	11,060	14.7	
Phoenix, AZ	46,380	8.6	4,380	8.2	3,120	31.5	3,480	31.8	5,500	17.5	
Baltimore, MD	32,720	0.8	8,940	-8.9	4,660	11.0	3,660	10.2	4,840	5.8	
Minneapolis, MN	32,960	3.1	3,900	-9.4	2,520	3.6	2,420	20.2	5,460	6.2	
Sacramento, CA	28,400	-3.4	6,380	3.5	2,320	27.9	2,760	-1.0	6,100	15.1	
Portland, OR	26,100	-6.6	5,520	5.5	2,800	25.4	2,460	11.5	7,880	21.5	
Detroit, MI	28,260	2.7	2,000	27.1	2,520	18.5	2,120	14.4	2,980	0.7	
Cleveland, OH	24,160	3.7	2,660	7.3	3,740	19.9	3,960	17.2	2,240	-5.4	
Pittsburgh, PA	21,320	-5.2	4,900	19.5	3,500	6.7	2,520	9.9	3,880	22.8	
Providence, RI	19,060	-6.4	7,100	16.8	2,420	27.8	3,260	5.4	2,980	39.3	
Atlanta, GA	20,980	1.7	2,920	3.1	1,820	4.6	2,080	8.7	2,300	13.1	
Milwaukee, WI	19,360	9.5	3,040	2.7	2,980	8.5	2,020	3.8	4,440	6.7	
Urban Honolulu, HI	14,000	-2.1	5,440	-10.7	3,560	4.7	3,300	9.3	5,200	9.1	
St. Louis, MO	16,740	-4.4	2,320	-4.9	2,480	25.7	1,460	21.7	2,640	17.2	
Columbus, OH	17,480	3.4	1,700	-6.2	1,920	-18.9	1,720	4.9	2,280	2.4	
Virginia Beach, VA	15,460	-0.9	2,800	2.9	2,240	10.9	2,200	-11.3	3,020	0.2	
Salt Lake City, UT	14,020	1.1	2,440	12.6	1,380	19.0	3,700	0.2	3,160	23.8	
San Antonio, TX	17,640	5.2	720	-12.9	1,900	3.3	1,140	8.9	1,700	-11.8	
Bridgeport, CT	9,320	-7.6	5,120	12.4	1,800	33.0	4,720	21.6	1,520	31.8	
New Orleans, LA	12,280	1.3	2,140	2.6	3,240	38.5	2,200	18.7	3,040	18.4	
Cincinnati, OH	14,520	-0.4	1,660	12.7	1,800	2.7	1,740	17.6	1,300	-4.9	
Tampa, FL	14,500	0.3	1,480	-3.1	1,440	2.9	2,100	35.2		26.6	
Buffalo, NY	12,240	3.2	2,260	5.6	1,780	3.5		7.7	2,300	58.3	
Austin, TX	11,040	1.4	1,200	14.6	2,560	12.6		30.1	1,340	19.6	
Albany, NY	10,260	7.2	2,360	-5.3	1,120	30.2	1,220	0.0	2,380	26.1	
Hartford, CT	9,940	4.3	1,300	-22.6	940	-4.1	2,420	16.7	960	-0.7	

Follow-Up Table 1. Estimated Number of Migrants Leaving Urban Neighborhoods of Metro Areas by Type of Destination from 2021:Q2 through 2022:Q1.

	To suburb of the same metro area		To high-cost, large metro areas (>2M)		U		To midsized metro areas (500K–2M)		To small metro areas (<500K), towns, and rural areas	
		Percent		Percent		Percent		Percent		Percent
	Migrants	change	Migrants		Migrants		Migrants		Migrants	change
Stockton, CA	7,640	-8.0		19.4	760	14.0	1,920	32.7	1,640	24.9
Oxnard, CA	8,280	-1.7	3,240	-6.9	1,140	7.5	1,200	16.9	1,800	1.9
New Haven, CT	7,460	1.7	2,220	-10.2	1,220	37.6	2,940	13.7	1,180	14.2
Worcester, MA	8,280	-3.0	2,540	21.7	540	-4.7	1,640	33.7	1,180	37.2
Allentown, PA	8,260	12.4	2,100	28.6	1,380	-3.7	1,120	42.4	2,100	65.8
Indianapolis, IN	9,260	3.2	780	-22.0	1,000	32.7	720	20.0	1,780	10.3
Fresno, CA	9,440	2.6	1,400	24.3	460	25.5	460	9.5	1,640	0.0
Kansas City, MO	8,560	-1.7	940	-18.0	1,180	17.2	700	8.2	1,040	-6.0
Rochester, NY	7,880	-0.8	1,160	27.9	920	1.5	1,220	13.7	1,120	0.0
Scranton, PA	6,640	6.3	1,460	-1.4	1,320	41.4	1,160	39.2	1,660	27.7
El Paso, TX	8,480	-4.8	500	-18.5	1,040	-23.5	480	-25.8	1,200	-11.8
Louisville/Jefferson	8,080	7.9	560	15.1	800	7.1	620	16.3	1,020	16.8
County, KY										
Bakersfield, CA	7,660	2.5	1,140	11.0	520	100.0	480	5.9	780	-20.9
Omaha, NE	6,320	-1.1	920	74.7	940	58.4	940	80.8	1,180	16.4
Springfield, MA	5,960	-10.6	860	-20.9	740	2.8	1,340	8.6	800	-13.0
Toledo, OH	5,420	5.4	260	-29.1	1,120	21.7	460	13.1	1,080	-2.4
Syracuse, NY	4,520	-1.9	1,020	22.4	880	55.3	800	9.1	800	-10.4

Notes: Metro areas included in this table have at least 100,000 urban residents. The changes are calculated as the sum of the differences between the quarterly flows from 2021:Q2 through 2022:Q1 and the average of the equivalent quarterly flows from 2017:Q2 through 2020:Q1 divided by the sum of the same prepandemic average quarterly flows.

Sources: Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data, American Community Survey, National Association of Realtors, and author's calculations.

Follow-Up Table 2. Estimates of Migrants Leaving Urban Neighborhoods of Metro Areas from 2021:Q2 through 2022:Q1, by Distance

		To another region within 150 miles		ion beyond les	
	Migrants	Change	Migrants	Change	
New York, NY	80,020	32.0	253,380	18.4	
Los Angeles, CA	88,640	17.9	166,820	16.5	
Chicago, IL	11,920	23.8	78,980	11.1	
Miami, FL	10,260	49.9	62,580	7.5	
San Francisco, CA	43,540	23.6	75,840	22.3	
Washington, DC	18,920	11.6	55,780	-2.7	
Boston, MA	23,400	22.4	48,440	9.2	
Philadelphia, PA	20,180	12.7	29,280	21.2	
San Diego, CA	13,160	4.3	40,300	6.4	
Houston, TX	3,300	5.5	17,600	-11.3	
Dallas, TX	2,260	10.1	20,320	-1.0	
San Jose, CA	32,040	9.1	30,300	16.8	
Seattle, WA	6,820	8.7	28,460	10.5	
Riverside, CA	15,440	8.9	14,520	24.2	
Las Vegas, NV	1,080	45.9	29,180	22.0	
Denver, CO	6,460	23.6	23,420	14.8	
Phoenix, AZ	1,940	28.8	14,540	18.9	
Baltimore, MD	8,700	-0.2	13,400	1.6	
Minneapolis, MN	2,260	3.4	12,040	2.8	
Sacramento, CA	7,080	6.6	10,480	11.2	
Portland, OR	4,700	28.4	13,960	11.7	
Detroit, MI	2,560	14.6	7,060	12.4	
Cleveland, OH	3,640	-4.4	8,960	18.8	
Pittsburgh, PA	2,360	27.8	12,440	13.2	
Providence, RI	7,060	23.9	8,700	15.9	
Atlanta, GA	1,120	20.0	8,000	5.4	
Milwaukee, WI	4,260	-7.0	8,220	13.6	
Urban Honolulu, HI	600	21.6	16,900	0.7	
St. Louis, MO	1,080	22.7	7,820	11.9	
Columbus, OH	2,980	0.4	4,640	-8.7	
Virginia Beach, VA	1,580	-13.2	8,680	3.2	
Salt Lake City, UT	3,380	-3.8	7,300	20.5	
San Antonio, TX	980	-10.4	4,480	-1.5	
Bridgeport, CT	7,900	25.4	5,260	13.4	
New Orleans, LA	1,960	21.0	8,660	19.8	
Cincinnati, OH	1,520	0.0	4,980	9.4	
Tampa, FL	2,100	67.6	4,540	0.7	
Buffalo, NY	,			13.4	
· · · · · · · · · · · · · · · · · · ·	1,500 1,520	33.1	6,620	17.5	
Austin, TX	,	14.0	4,300		
Albany, NY	3,460	7.0	3,620	12.2	
Hartford, CT	2,780	-4.1	2,840	1.4	
Stockton, CA	5,540	33.8	3,000	6.4	
Oxnard, CA	2,940	-3.5	4,440	3.6	
New Haven, CT	4,200	10.9	3,360	5.2	

Follow-Up Table 2. Estimates of Migrants Leaving Urban Neighborhoods of Metro Areas from 2021:Q2 through 2022:Q1, by Distance

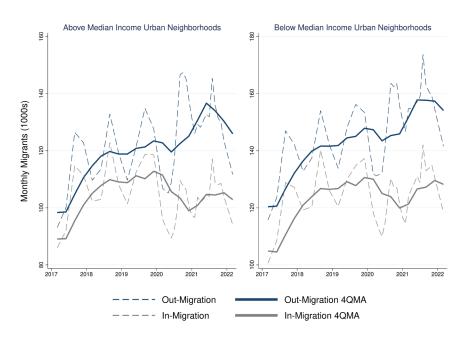
		To another region within 150 miles		gion beyond iles
	Migrants	Change	Migrants	Change
Worcester, MA	3,520	31.7	2,380	15.2
Allentown, PA	4,120	33.5	2,580	26.9
Indianapolis, IN	1,160	7.4	3,120	8.1
Fresno, CA	1,580	0.9	2,380	19.8
Kansas City, MO	420	-16.0	3,440	1.0
Rochester, NY	1,000	9.5	3,420	10.6
Scranton, PA	3,260	30.7	2,340	14.0
El Paso, TX	260	-2.5	2,960	-20.3
Louisville/Jefferson County, KY	1,100	32.0	1,900	5.2
Bakersfield, CA	1,020	-7.8	1,900	17.3
Omaha, NE	680	70.0	3,300	46.4
Springfield, MA	1,920	-5.0	1,820	-6.2
Toledo, OH	1,480	7.8	1,440	0.9
Syracuse, NY	720	-2.7	2,780	21.6

Notes: Metro areas included in this table have at least 100,000 urban residents. The changes are calculated as the sum of the differences between the quarterly flows from 2021:Q2 through 2022:Q1 and the average of the equivalent quarterly flows from 2017:Q2 through 2020:Q1 divided by the sum of the same prepandemic average quarterly flows.

Sources: Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data, American Community Survey, National Association of Realtors, and author's calculations.

Appendix

Figure A1a. Gross Flows into and out of Urban Neighborhoods That Contribute to Net Flows Presented in Figure 3, by Neighborhood Income



Sources: Federal Reserve Bank of New York/Equifax Consumer Credit Panel, American Community Survey, and author's calculations.

Figure A1b. Gross Flows into and out of Urban Neighborhoods That Contribute to Net Flows Presented in Figure 3, by Migrant Homeowner Status

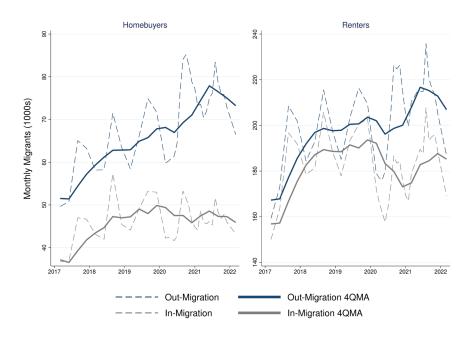


Figure A1c. Gross Flows into and out of Urban Neighborhoods That Contribute to Net Flows Presented in Figure 3, by Migrant Age

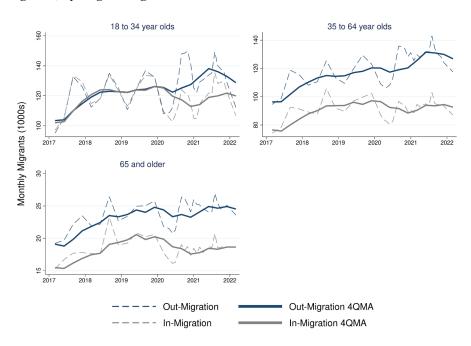


Figure A1d. Gross Flows into and out of Urban Neighborhoods That Contribute to Net Flows Presented in Figure 3, by Metro Area Population

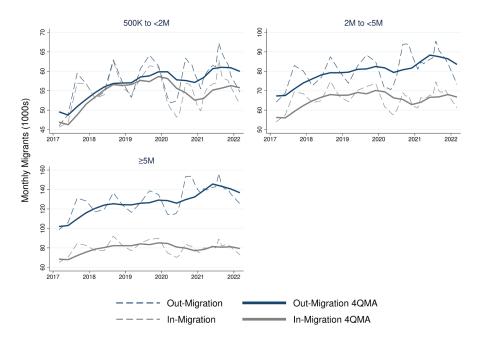


Figure A4. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Atlanta-Sandy Springs-Roswell, GA

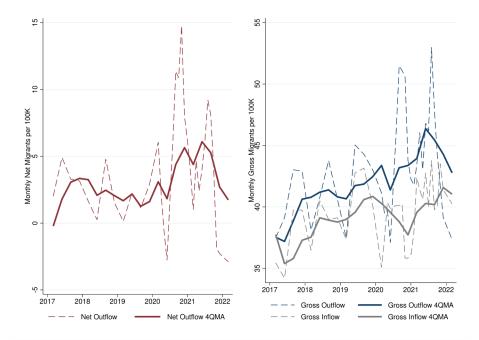


Figure A5. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Austin-Round Rock, TX

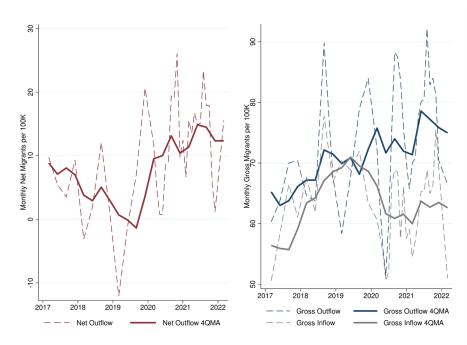


Figure A6. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Baltimore–Columbia–Towson, MD

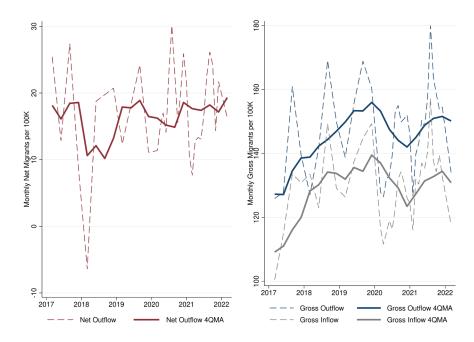


Figure A7. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Birmingham–Hoover, AL

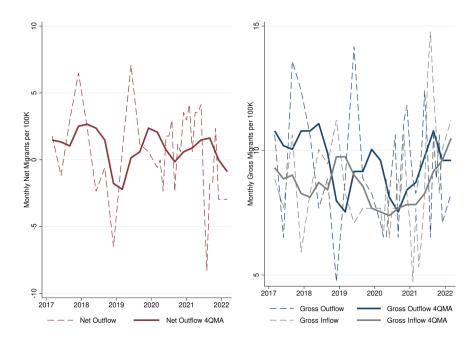


Figure A8. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Boston–Cambridge–Newton, MA–NH

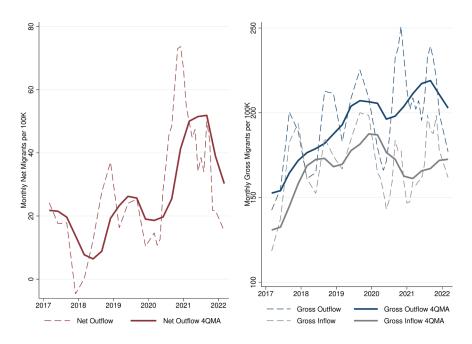


Figure A9. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Buffalo-Cheektowaga-Niagara Falls, NY

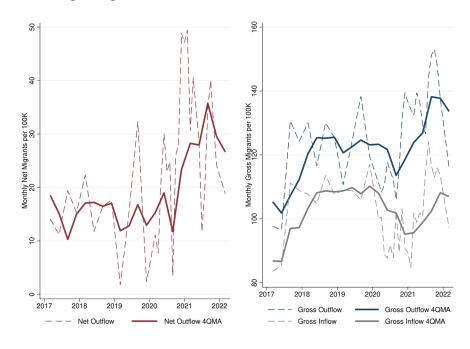


Figure A10. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Charlotte-Concord-Gastonia, NC-SC

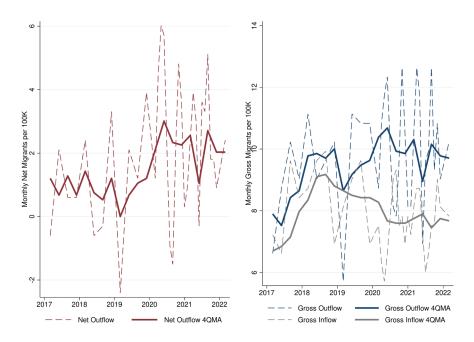


Figure A11. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Chicago-Naperville-Elgin, IL-IN-WI

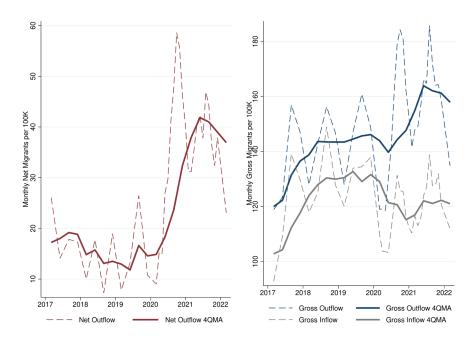


Figure A12. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Cincinnati, OH–KY–IN

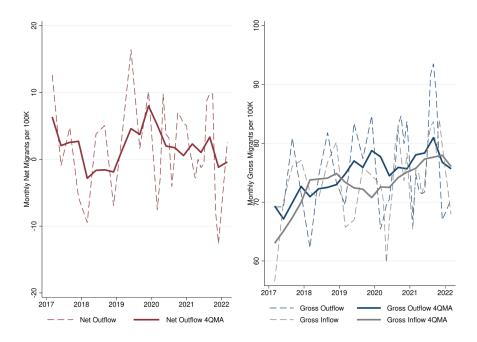


Figure A13. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Cleveland-Elyria, OH

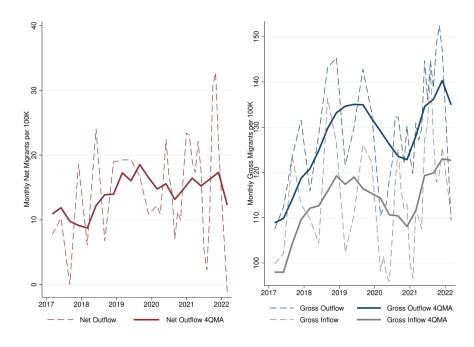


Figure A14. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Columbus, OH

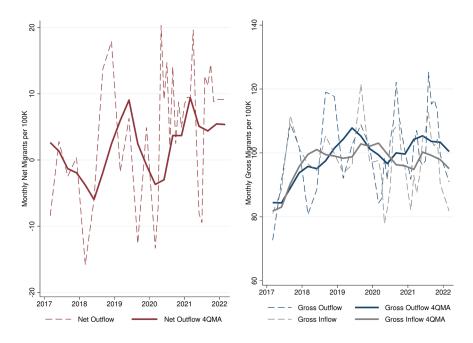


Figure A15. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Dallas-Fort Worth-Arlington, TX

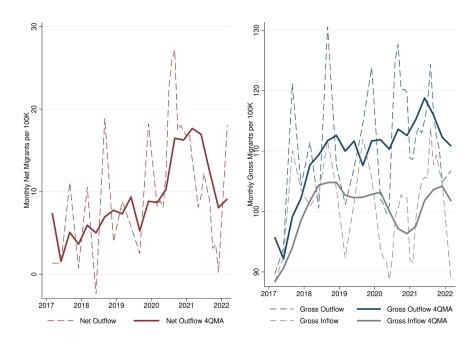


Figure A16. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Denver-Aurora-Lakewood, CO

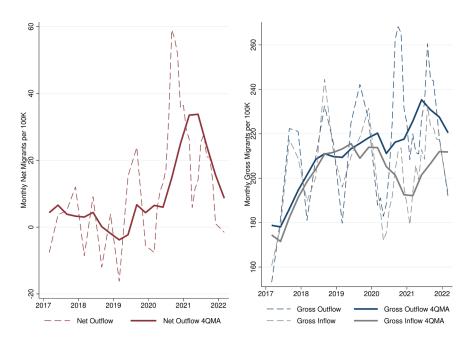


Figure A17. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Detroit-Warren-Dearborn, MI

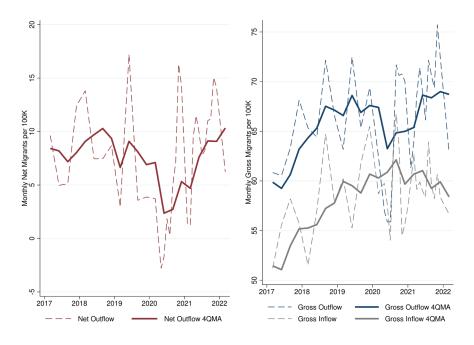


Figure A18. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Hartford-West Hartford-East Hartford, CT

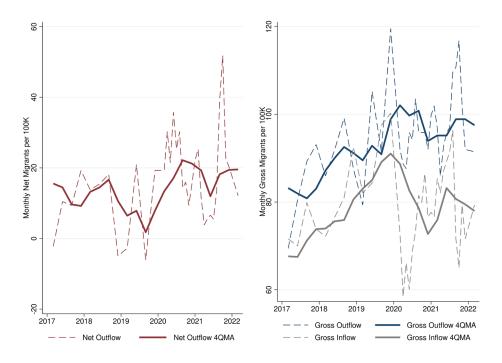


Figure A19. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Houston-The Woodlands-Sugar Land, TX

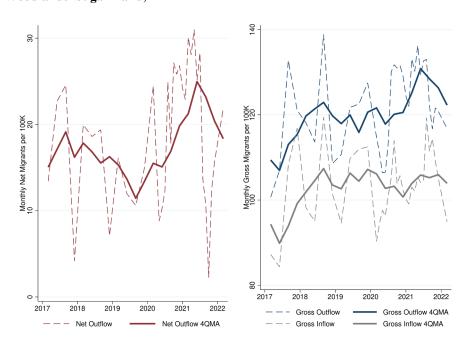


Figure A20. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Indianapolis—Carmel–Anderson, IN

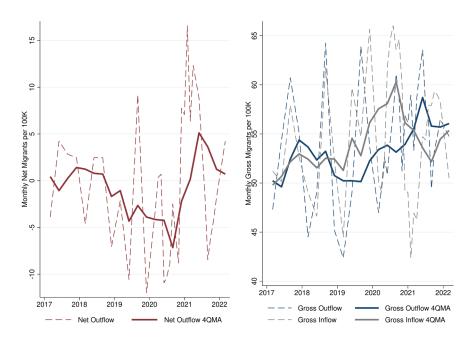


Figure A21. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Jacksonville, FL

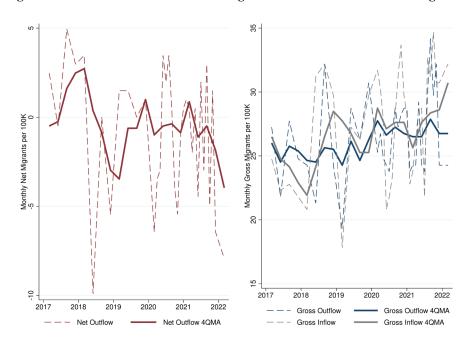


Figure A22. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Kansas City, MO-KS

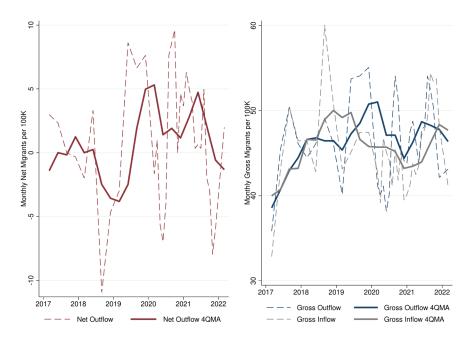


Figure A23. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Las Vegas-Henderson-Paradise, NV

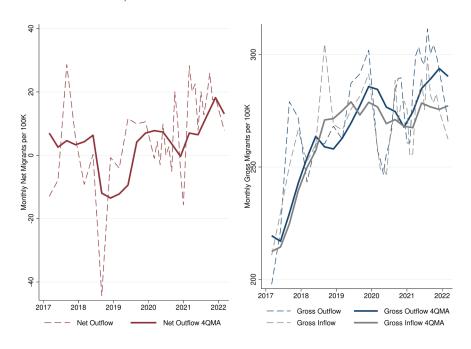


Figure A24. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Los Angeles-Long Beach-Anaheim, CA

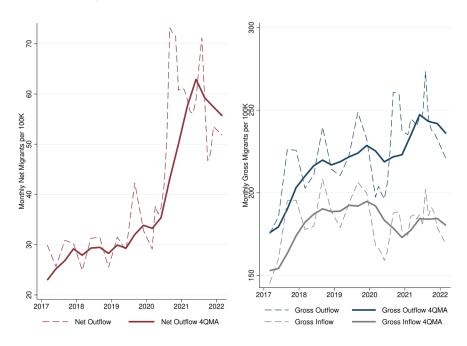


Figure A25. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Louisville/Jefferson County, KY–IN

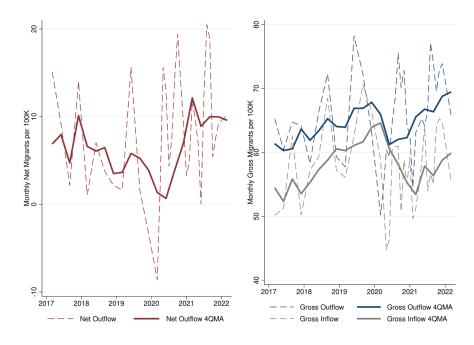


Figure A26. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Memphis, TN-MS-AR

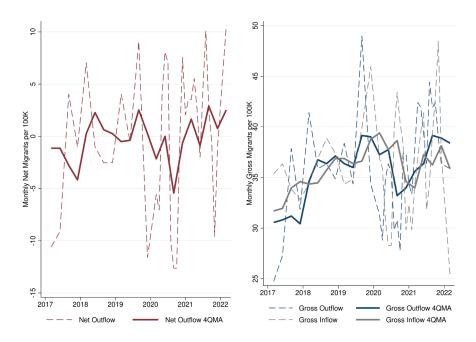


Figure A27. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Miami-Fort Lauderdale-West Palm Beach, FL

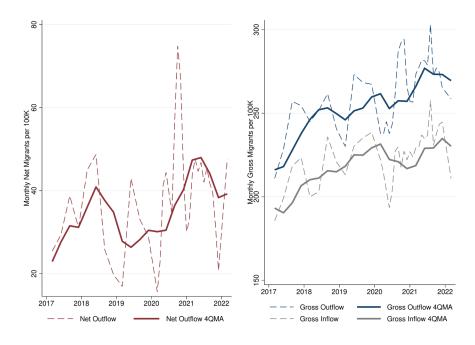


Figure A28. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Milwaukee–Waukesha–West Allis, WI

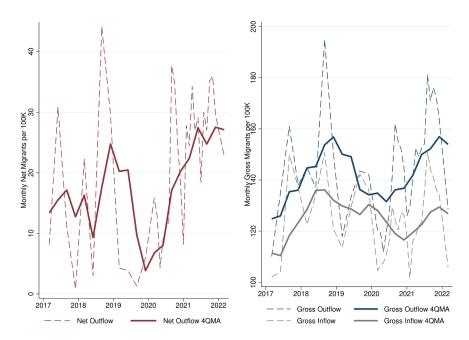


Figure A29. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Minneapolis-St. Paul-Bloomington, MN-WI

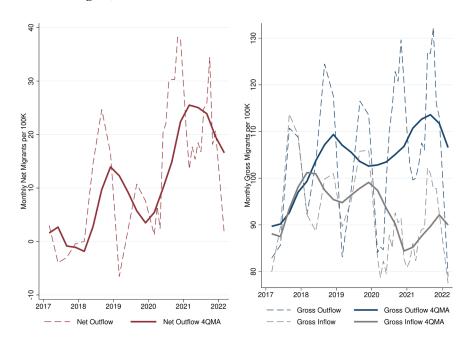


Figure A30. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Nashville–Davidson–Murfreesboro–Franklin, TN

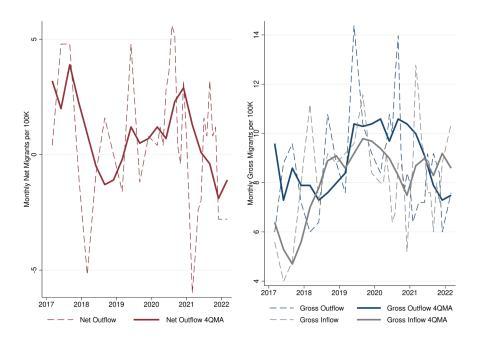


Figure A31. Estimated Gross and Net Migration into and out of Urban Neighborhoods: New Orleans-Metairie, LA

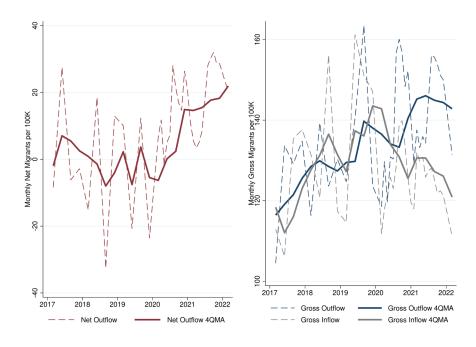


Figure A32. Estimated Gross and Net Migration into and out of Urban Neighborhoods: New York-Newark-Jersey City, NY-NJ-PA

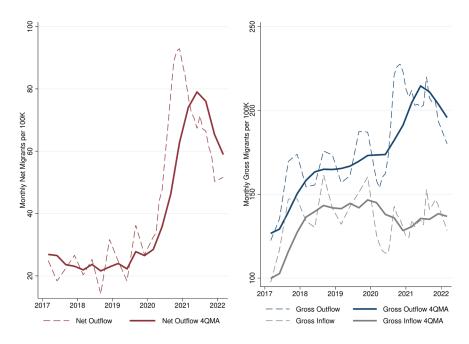


Figure A33. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Oklahoma City, OK

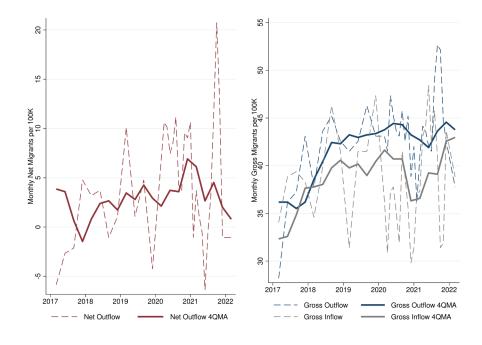


Figure A34. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Orlando-Kissimmee-Sanford, FL

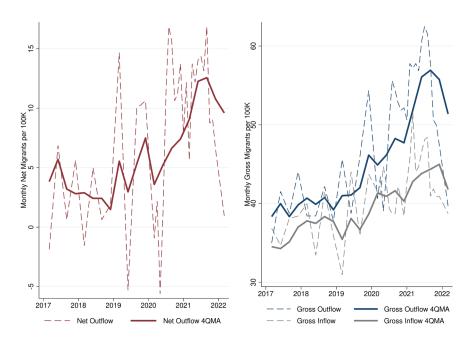


Figure A35. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Philadelphia—Camden—Wilmington, PA-NJ-DE-MD

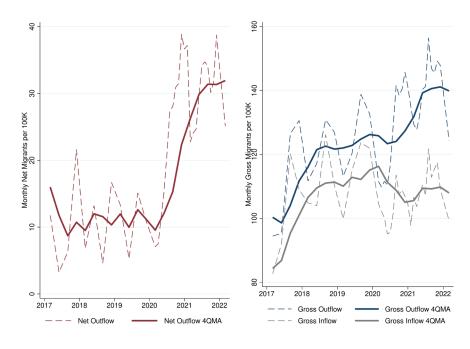


Figure A36. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Phoenix-Mesa-Scottsdale, AZ

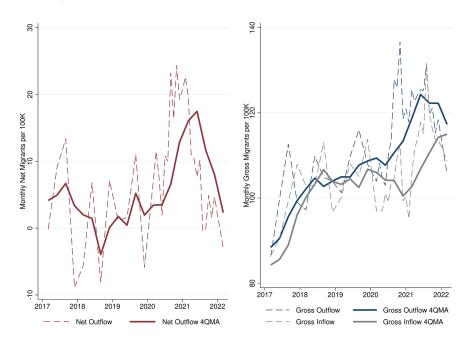


Figure A37. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Pittsburgh, PA

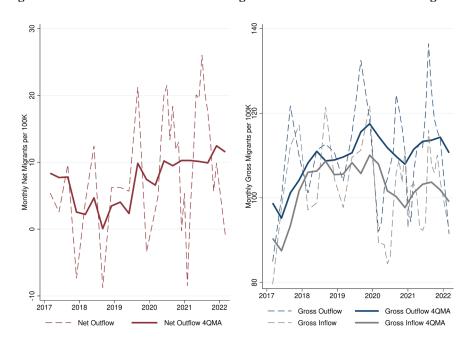


Figure A38. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Portland–Vancouver–Hillsboro, OR–WA

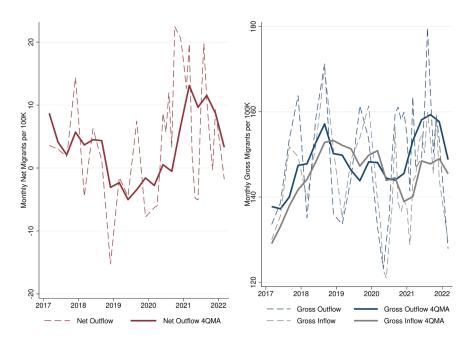


Figure A39. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Providence—Warwick, RI-MA

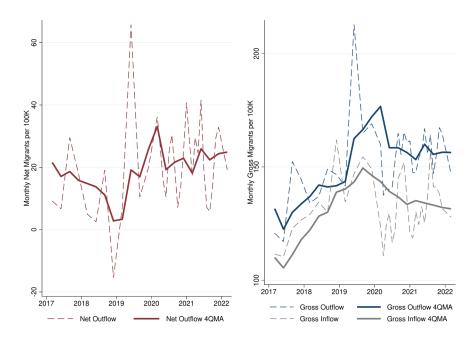


Figure A40. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Raleigh, NC

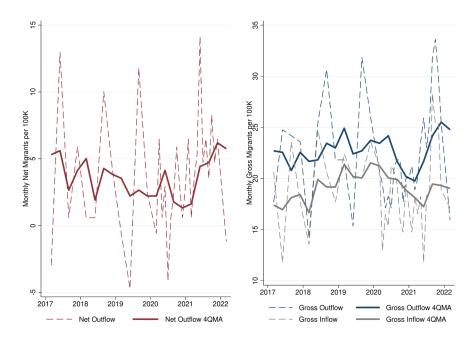


Figure A41. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Richmond, VA

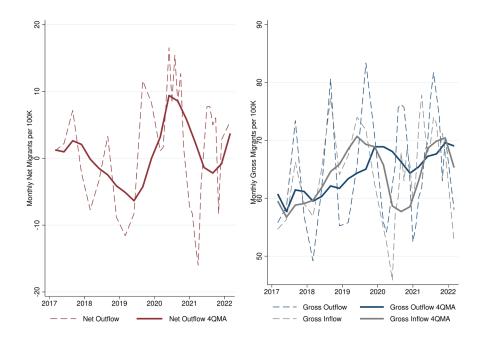


Figure A42. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Riverside–San Bernardino–Ontario, CA

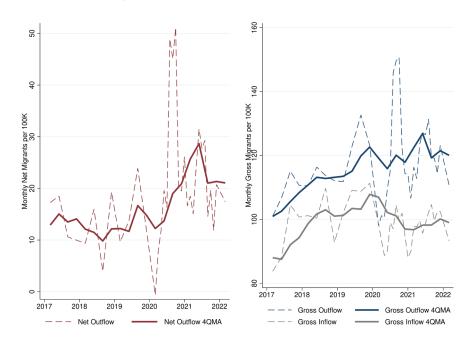


Figure A43. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Rochester, NY

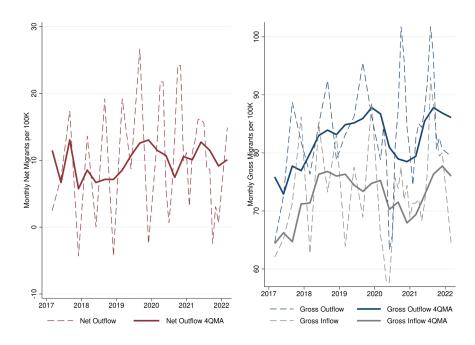


Figure A44. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Sacramento–Roseville–Arden–Arcade, CA

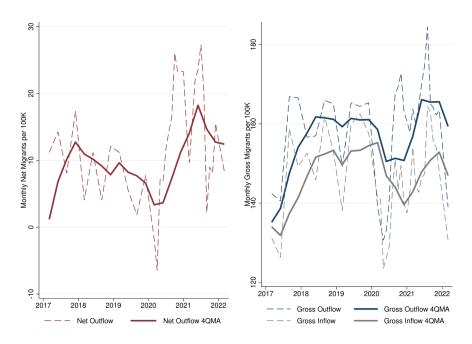


Figure A45. Estimated Gross and Net Migration into and out of Urban Neighborhoods: St. Louis, MO-IL

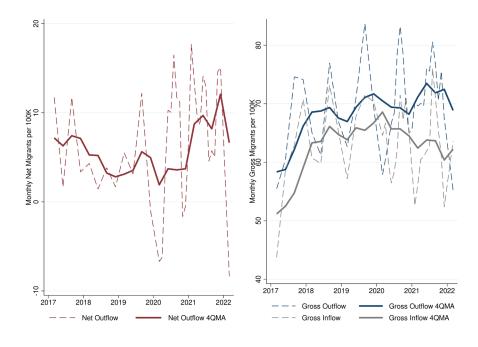


Figure A46. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Salt Lake City, UT

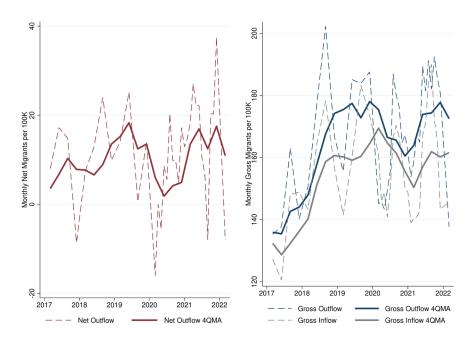


Figure A47. Estimated Gross and Net Migration into and out of Urban Neighborhoods: San Antonio-New Braunfels, TX

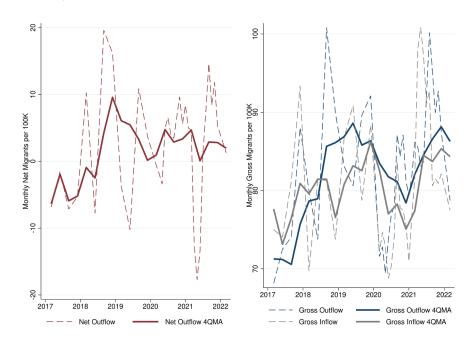


Figure A48. Estimated Gross and Net Migration into and out of Urban Neighborhoods: San Diego-Carlsbad, CA

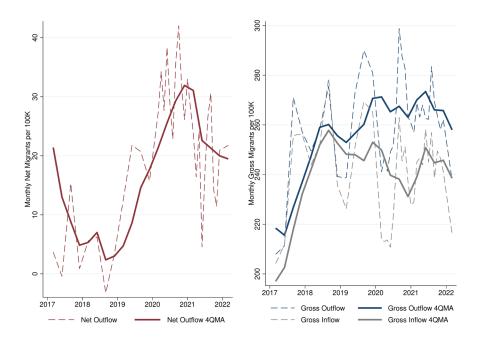


Figure A49. Estimated Gross and Net Migration into and out of Urban Neighborhoods: San Francisco-Oakland-Hayward, CA

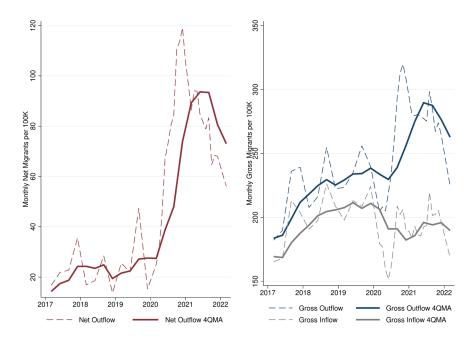


Figure A50. Estimated Gross and Net Migration into and out of Urban Neighborhoods: San Jose-Sunnyvale-Santa Clara, CA

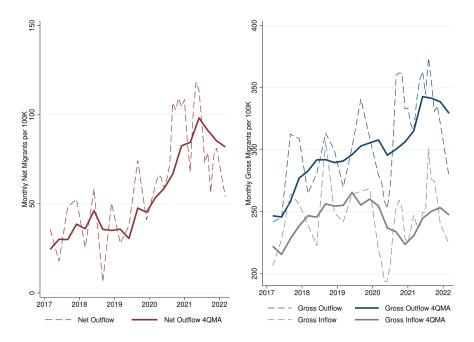


Figure A51. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Seattle-Tacoma-Bellevue, WA

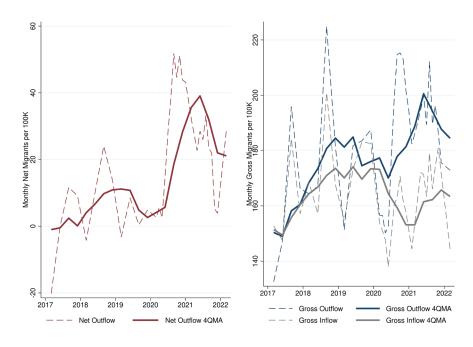


Figure A52. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Tampa–St. Petersburg–Clearwater, FL

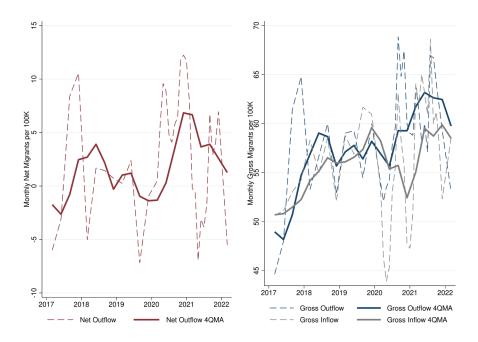
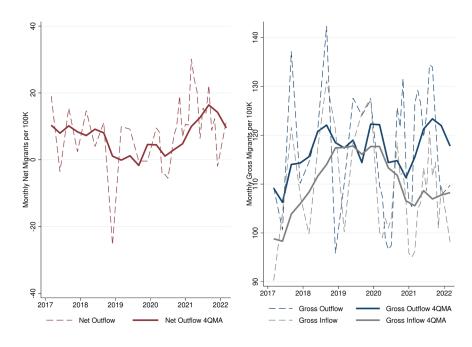


Figure A53. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Virginia Beach–Norfolk–Newport News, VA–NC



 $Figure\ A54.\ Estimated\ Gross\ and\ Net\ Migration\ into\ and\ out\ of\ Urban\ Neighborhoods:\ Washington-Arlington-Alexandria,\ DC-VA-MD-WV$

