

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

By Stephan Whitaker, Federal Reserve Bank of Cleveland August 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 June 30, 2022.

As many types of migration slowed in the second quarter of 2022, net migration flows to urban neighborhoods became moderately more favorable. Net outmigration from urban neighborhoods declined 4 percent, to 39,000 people, per month (see Figure 1). The four-quarter moving average of both outflows and inflows of migrants declined (see Figure 2), with the decline in outflows being roughly twice as large as the decline of inflows. Declines were observed in the gross flows in people of all age, income, and metro population categories, as well as homebuyers and renters (see Figure A1). Of the 53 largest metros, 36 (68 percent) experienced a slowdown in both the inflow to and outflow from their urban neighborhoods.

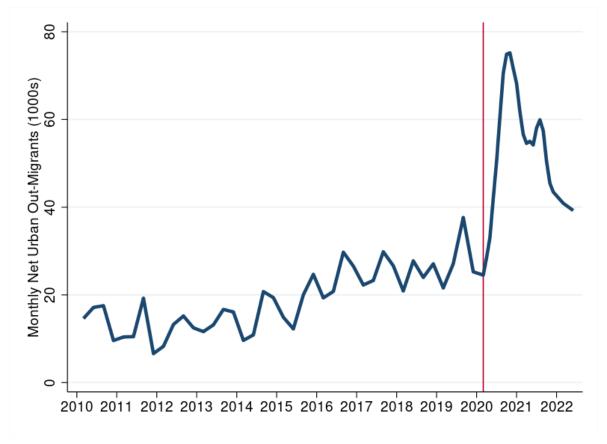


Figure 1. Estimated Net Out-Migration from Urban Neighborhoods

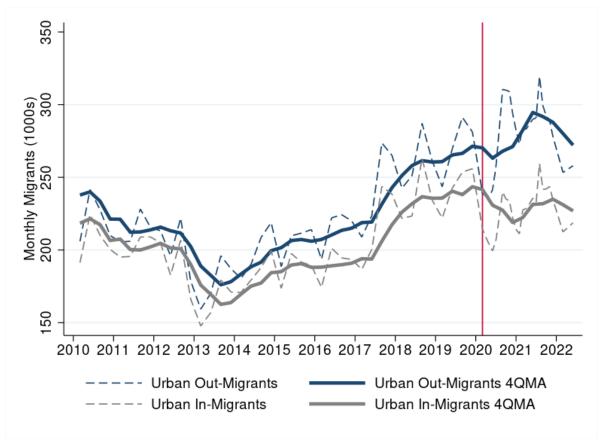


Figure 2. Estimated Gross Migration into and from Urban Neighborhoods

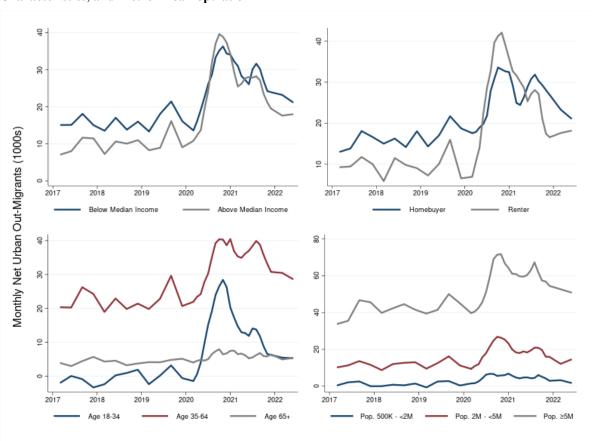


Figure 3. Estimated Net Migration from Urban Neighborhoods by Neighborhood Income, Migrant Characteristics, and Metro Area Population

Follow-Up Table 1. Estimated Number of Migrants Leaving Urban Neighborhoods of Metro Areas by Type of Destination from 2021:Q3 through 2022:Q2.

			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	Migrants	Percent change		Percent change
New York, NY	208,020	7.3	80,100	1.6	94,000	25.9		21.6		18.3
Los Angeles, CA	164,060	-7.5	119,320	7.3	55,760	28.8		21.0		8.0
Chicago, IL	109,240	4.8	23,420	-1.8	25,960	12.2	15,340	7.3	22,340	14.8
Miami, FL	118,480	0.8	16,020	-1.1	23,440	14.4	16,000	19.9		6.7
Washington, DC	86,620	-6.8	19,740	-12.0	23,700	2.1	15,420	2.6		7.5
San Francisco, CA	55,400	-2.2	57,980	11.9	15,620	29.9		15.9		23.2
Boston, MA	61,780	-2.9	23,320	5.8	10,560	-0.4	23,660	24.0		16.0
Philadelphia, PA	62,380	7.8	17,000	9.8	10,520	39.5	10,100	17.3	12,560	20.5
San Diego, CA	54,300	-7.5	22,920	2.5	9,580	2.5	9,260	9.6	10,980	6.3
Houston, TX	69,800	3.2	4,560	-15.0	7,620	-2.0	3,200	-11.8	5,600	-9.8
Dallas, TX	66,600	-1.1	5,280	-2.2	6,720	1.3	4,060	0.5	6,120	-5.8
San Jose, CA	28,320	-2.3	33,020	0.5	7,880	32.2	8,660	15.8	9,280	2.8
Seattle, WA	47,900	-5.0	13,340	14.7	6,760	19.7	4,640	2.1	10,400	1.8
Riverside, CA	41,020	-5.4	16,540	2.4	5,540	44.0	2,760	16.0	4,340	24.5
Las Vegas, NV	44,500	0.7	10,780	18.6	6,080	48.3	4,260	-6.9	8,860	28.4
Denver, CO	42,820	-3.4	6,060	13.1	6,280	12.7	6,720	33.0	11,020	14.2
Phoenix, AZ	46,160	8.1	4,580	13.2	3,100	30.6	3,200	21.2	5,280	12.8
Baltimore, MD	31,400	-3.2	9,000	-8.3	4,960	18.1	3,420	3.0	5,080	11.1
Minneapolis, MN	31,980	0.0	4,120	-4.3	2,260	-7.1	2,360	17.2	5,300	3.1
Sacramento, CA	27,740	-5.6	6,420	4.1	2,280	25.7	2,720	-2.4	6,060	14.3
Portland, OR	25,820	-7.6	5,520	5.5	2,780	24.5	2,260	2.4	8,240	27.0
Detroit, MI	28,240	2.6	1,880	19.5	2,300	8.2	1,980	6.8	3,100	4.7
Cleveland, OH	23,660	1.5	2,700	8.9	3,600	15.4	3,480	3.0	2,040	-13.8
Pittsburgh, PA	20,740	-7.8	5,140	25.4	3,560	8.5	2,620	14.2	3,780	19.6
Providence, RI	18,360	-9.8	7,220	18.8	2,560	35.2	3,080	-0.4	2,820	31.8
Atlanta, GA	20,200	-2.0	3,060	8.0	1,720	-1.1	2,060	7.7	2,180	7.2
Milwaukee, WI	19,020	7.5	3,020	2.0	2,900	5.6		-2.4	4,360	4.8
Urban Honolulu, HI	13,300	-7.0	5,780	-5.1	3,460	1.8		0.0		9.5
Columbus, OH	17,620	4.2	1,940		2,020	-14.6	1,580	-3.7	2,400	
St. Louis, MO	15,820	-9.7	2,420	-0.8	2,440	23.6	1,300	8.3	2,420	7.4
Virginia Beach, VA	14,460	-7.3	2,760	1.5	2,040	1.0	2,620	5.6	2,940	-2.4
Bridgeport, CT	9,340	-7.4	4,880	7.2	1,900	40.4		14.9	1,480	28.3
San Antonio, TX	16,700	-0.4	780	-5.6	1,960	6.5	1,040	-0.6	1,520	-21.1
New Orleans, LA	12,220	0.8	2,420	16.0	3,480	48.7	2,120	14.4	3,040	18.4
Salt Lake City, UT	12,740	-8.1	2,400	10.8	1,360	17.2	3,560	-3.6	2,940	15.1
Cincinnati, OH	15,120	3.8	1,580	7.2	1,480	-15.6	1,600	8.1	1,320	-3.4
Tampa, FL	14,440	-0.1	1,360	-10.9	1,460	4.3	2,040	31.3	1,840	43.8
Buffalo, NY	12,040	1.5	2,200	2.8	1,860	8.1	1,900	14.9	2,160	48.6
Hartford, CT	10,100	5.9	1,420	-15.5	1,020	4.1	2,320	11.9	880	-9.0
Austin, TX	10,140	-6.9	1,240	18.5	2,660	17.0	800	44.6	1,380	23.2
Albany, NY	9,600	0.3	2,540	1.9	1,140	32.6	1,340	9.8	2,380	26.1

Follow-Up Table 1. Estimated Number of Migrants Leaving Urban Neighborhoods of Metro Areas by Type of Destination from 2021:Q3 through 2022:Q2.

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	To suburb of the		To high-cost, large		0		To midsized metro		· ·	
	same met		metro areas (>2M)		(>2M)		areas (500K-2M)		areas	
	3.5	Percent	3.4	Percent	3.4	Percent	3.6	Percent	N	Percent
g. 1. g.	Migrants	change		0)		Migrants		Migrants)
Stockton, CA	7,420	-10.7		18.3	740	11.0	1,820	25.8		
Worcester, MA	8,700	1.9	2,620	25.6	560	-1.2	1,760	43.5	1,020	18.6
New Haven, CT	6,840	-6.7	2,620	5.9	1,100	24.1	3,000	16.0	1,080	4.5
Oxnard, CA	7,460	-11.4	2,780	-20.1	1,260	18.9	1,220	18.8	1,780	0.8
Allentown, PA	7,840	6.7	2,240	37.1	1,460	1.9	1,100	39.8	1,920	51.6
Kansas City, MO	8,640	-0.8	1,000	-12.8	1,080	7.3	760	17.5	1,000	-9.6
Indianapolis, IN	8,820	-1.7	680	-32.0	840	11.5	700	16.7	1,740	7.9
Rochester, NY	7,720	-2.8	1,060	16.9	940	3.7	1,200	11.8	1,340	19.6
Fresno, CA	8,600	-6.5	1,120	-0.6	480	30.9	380	-9.5	1,860	13.4
El Paso, TX	8,320	-6.6	480	-21.7	1,160	-14.7	420	-35.1	1,200	-11.8
Louisville/Jefferson	8,060	7.7	540	11.0	820	9.8	520	-2.5	960	9.9
County, KY										
Bakersfield, CA	7,860	5.2	1,060	3.2	460	76.9	540	19.1	600	-39.2
Scranton, PA	6,360	1.8	1,220	-17.6	1,180	26.4	1,020	22.4	1,640	26.2
Springfield, MA	6,120	-8.2	960	-11.7	880	22.2	1,480	20.0	800	-13.0
Omaha, NE	6,040	-5.5	940	78.5	900	51.7	720	38.5	1,280	26.3
Syracuse, NY	4,380	-4.9	1,160	39.2	920	62.4	800	9.1	740	-17.2
Toledo, OH	5,160	0.4	280	-23.6	1,080	17.4	400	-1.6	980	-11.4

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:Q3 through 2022:Q2, by Distance

		To another region within 150 miles		To another region beyond 150 miles		
	Migrants	Change	Migrants	Change		
New York, NY	76,000	25.3	243,640	13.9		
Los Angeles, CA	85,480	13.7	162,740	13.7		
Chicago, IL	12,020	24.9	75,040	5.5		
Miami, FL	9,880	44.3	61,600	5.8		
Washington, DC	18,740	10.5	54,740	-4.5		
San Francisco, CA	41,360	17.4	72,360	16.7		
Boston, MA	22,700	18.7	48,440	9.2		
Philadelphia, PA	20,700	15.6	29,480	22.0		
San Diego, CA	13,020	3.2	39,720	4.9		
Houston, TX	2,900	-7.2	18,080	-8.9		
Dallas, TX	1,880	-8.4	20,300	-1.1		
San Jose, CA	29,980	2.1	28,860	11.2		
Seattle, WA	6,420	2.3	28,720	11.5		
Riverside, CA	15,080	6.4	14,100	20.7		
Las Vegas, NV	1,140	54.1	28,840	20.6		
Denver, CO	6,520	24.7	23,560	15.5		
Phoenix, AZ	1,500	-0.4	14,660	19.8		
Baltimore, MD	8,900	2.1	13,560	2.8		
Minneapolis, MN	2,060	-5.8	11,980	2.3		
Sacramento, CA	6,860	3.3	10,620	12.7		
Portland, OR	4,700	28.4	14,100	12.8		
Detroit, MI	2,180	-2.4	7,080	12.7		
Cleveland, OH	3,540	-7.0	8,280	9.8		
Pittsburgh, PA	2,380	28.9	12,720	15.8		
Providence, RI	6,760	18.6	8,920	18.8		
Atlanta, GA	1,180	26.4	7,840	3.3		
Milwaukee, WI	4,260	-7.0	7,920	9.5		
Urban Honolulu, HI	580	17.6	16,900	0.7		
Columbus, OH	2,780	-6.3	5,160	1.6		
St. Louis, MO	860	-2.3	7,720	10.5		
Virginia Beach, VA	1,580	-13.2	8,780	4.4		
Bridgeport, CT	7,560	20.0	5,160	11.2		
San Antonio, TX	860	-21.3	4,440	-2.3		
New Orleans, LA	1,760	8.6	9,300	28.7		
Salt Lake City, UT	3,200	-8.9	7,060	16.5		
Cincinnati, OH	1,340	-11.8		1.9		
Tampa, FL	2,120	69.1	4,580	1.6		
Buffalo, NY	1,460	29.6	6,660	14.0		
Hartford, CT	2,800	-3.4	2,840	1.4		
Austin, TX	1,640	23.0	4,440	21.3		
Albany, NY	3,600	11.3	3,800	17.8		
Stockton, CA	5,100	23.2	3,040	7.8		
Worcester, MA	3,540	32.4	2,420	17.1		
New Haven, CT	4,520	19.4	3,280	2.7		

Follow-Up Table 2. Estimates of Migrants Leaving Urban Neighborhoods of Metro Areas from 2021:Q3 through 2022:Q2, by Distance

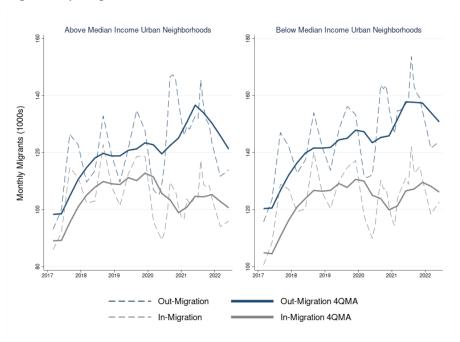
	To another re 150 m		To another region beyond 150 miles		
	Migrants	Change	Migrants	Change	
Oxnard, CA	2,540	-16.6	4,500	5.0	
Allentown, PA	3,960	28.3	2,760	35.7	
Kansas City, MO	400	-20.0	3,440	1.0	
Indianapolis, IN	1,220	13.0	2,740	-5.1	
Rochester, NY	1,040	13.9	3,500	13.1	
Fresno, CA	1,620	3.4	2,220	11.7	
El Paso, TX	260	-2.5	3,000	-19.2	
Louisville/Jefferson County, KY	1,000	20.0	1,840	1.8	
Bakersfield, CA	900	-18.7	1,760	8.6	
Scranton, PA	2,900	16.3	2,160	5.2	
Springfield, MA	1,960	-3.0	2,160	11.3	
Omaha, NE	640	60.0	3,200	42.0	
Syracuse, NY	680	-8.1	2,940	28.6	
Toledo, OH	1,220	-11.2	1,520	6.5	

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

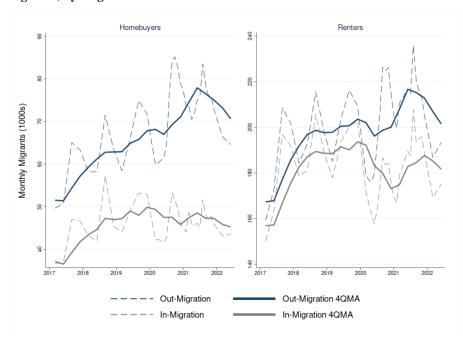


Figure A1c. Gross Flows into and out of Urban Neighborhoods That Contribute to Net Flows Presented in Figure 3, by Migrant Age

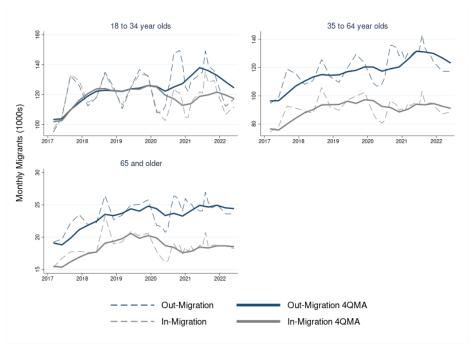


Figure A1d. Gross Flows into and out of Urban Neighborhoods That Contribute to Net Flows Presented in Figure 3, by Metro Area Population

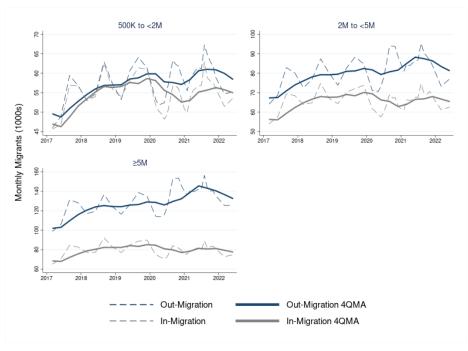
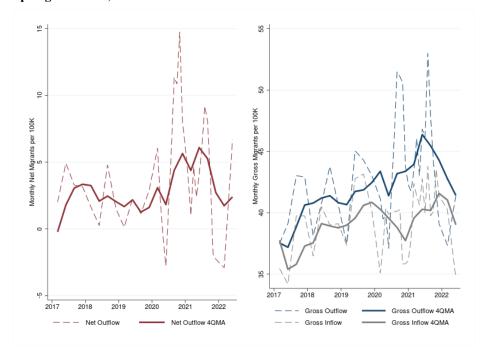


Figure A4. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Atlanta-Sandy Springs-Roswell, GA



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

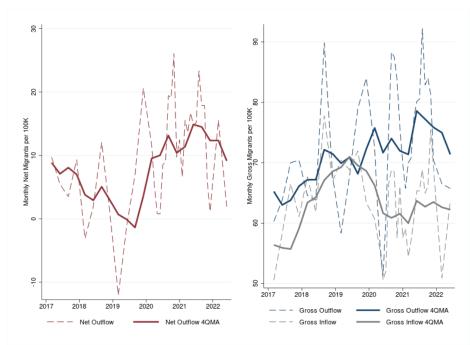


Figure A6. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Baltimore–Columbia–Towson, MD

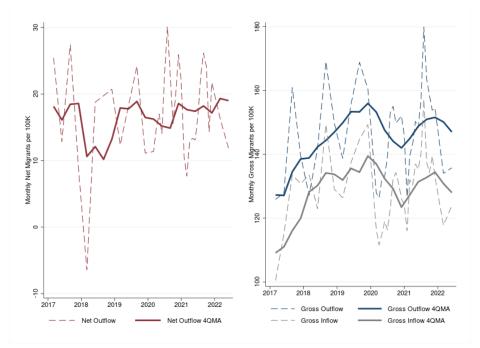
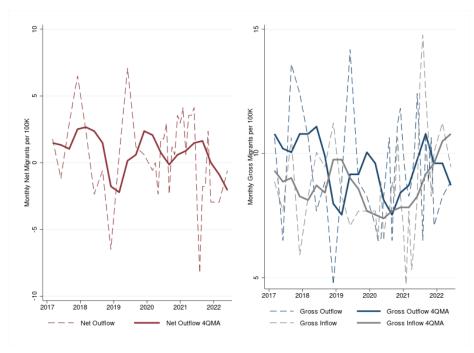


Figure A7. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Birmingham–Hoover, AL



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

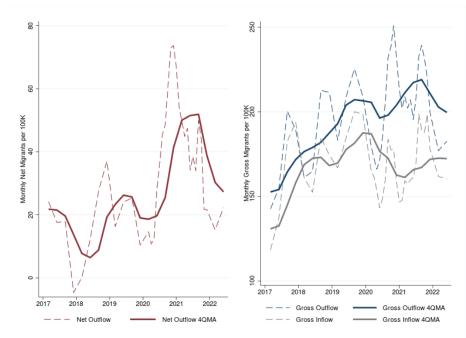


Figure A9. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Buffalo-Cheektowaga-Niagara Falls, NY

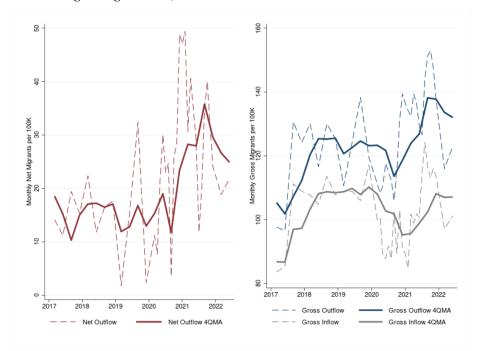


Figure A10. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Charlotte-Concord-Gastonia, NC-SC

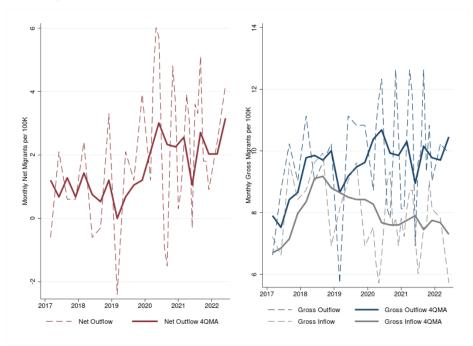


Figure A11. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Chicago-Naperville-Elgin, IL-IN-WI

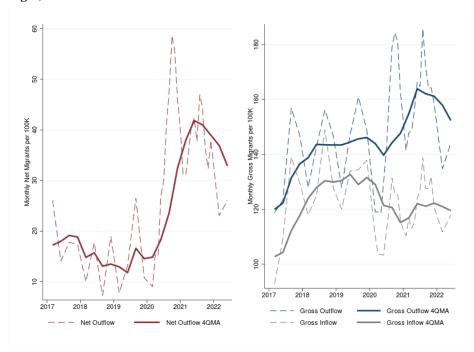


Figure A12. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Cincinnati, OH–KY–IN

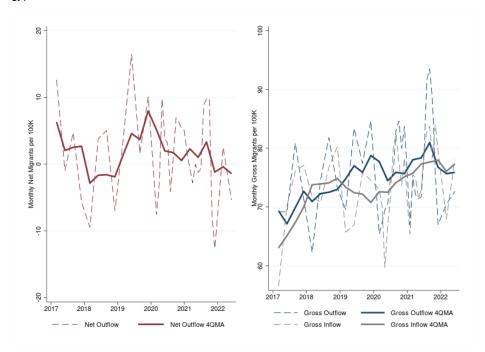
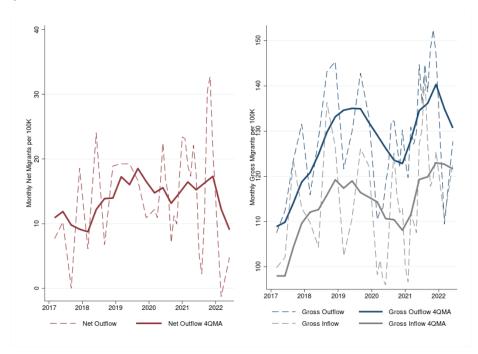


Figure A13. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Cleveland–Elyria, OH



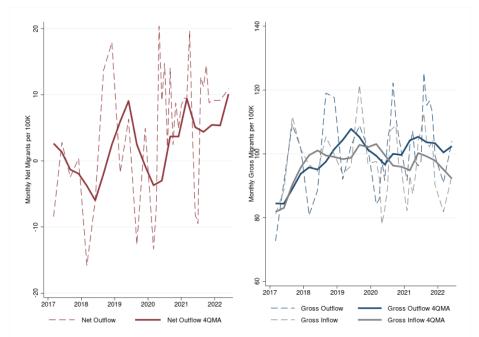


Figure A14. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Columbus, OH

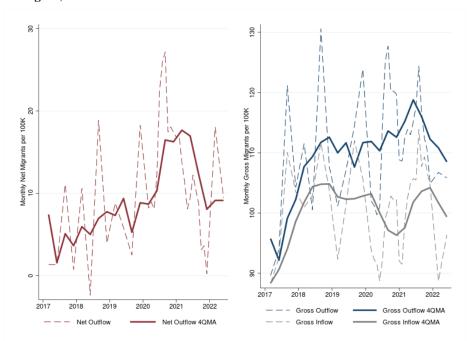


Figure A15. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Dallas-Fort Worth-Arlington, TX

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

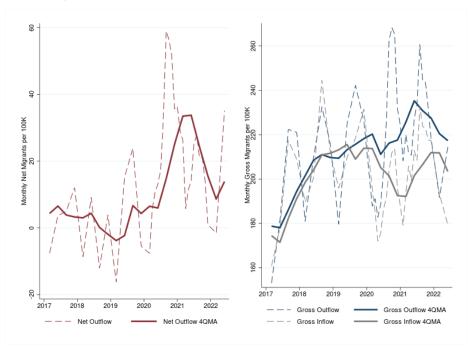
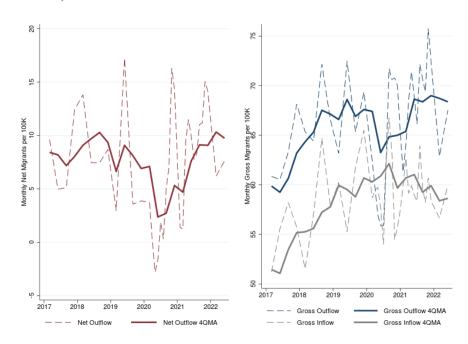
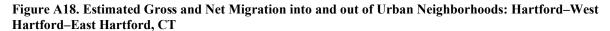


Figure A17. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Detroit-Warren-Dearborn, MI





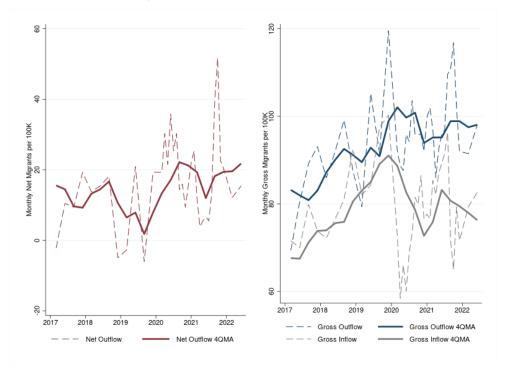


Figure A19. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Houston-The Woodlands-Sugar Land, TX

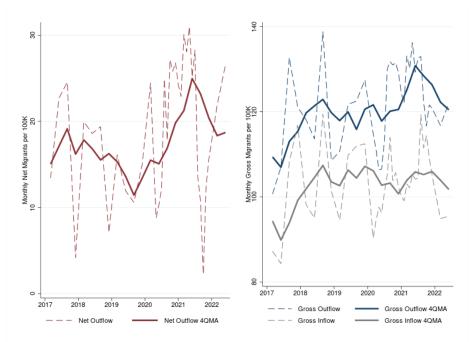


Figure A20. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Indianapolis—Carmel–Anderson, IN

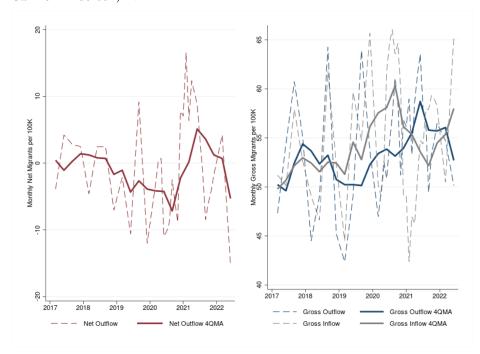
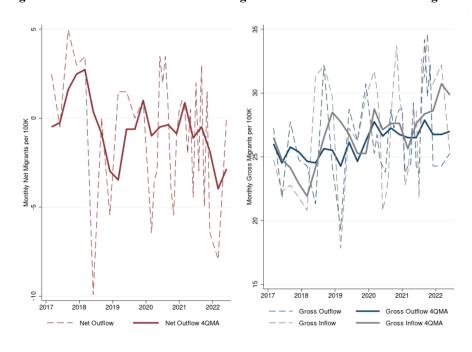
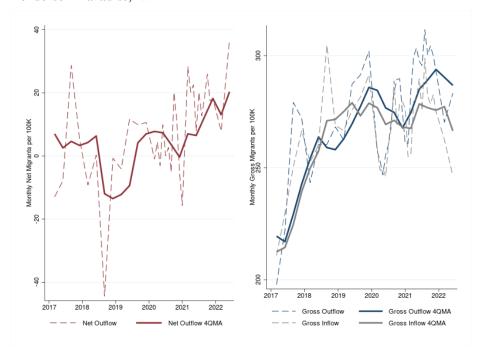


Figure A21. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Jacksonville, FL



2017 2018 2019 2020 2021 2022 2017 2018 2019 2020 2021 2022 — — Gross Outflow Gross Inflow 4OMA — Gross Inflow 4OMA Gross Inflow 4OMA

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

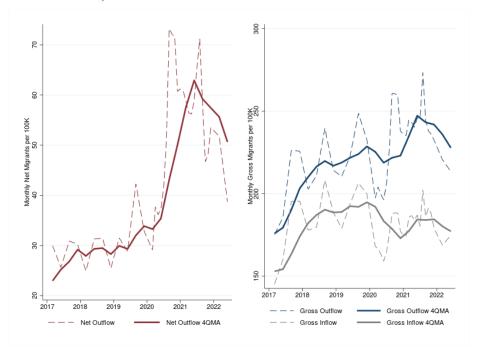


Figure A25. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Louisville/Jefferson County, KY-IN

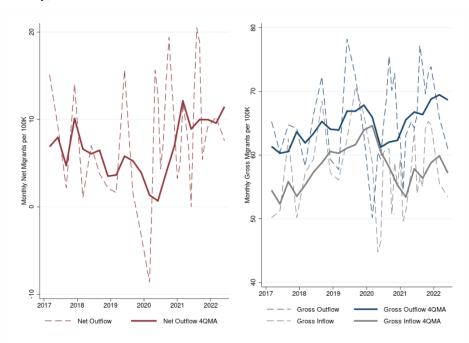


Figure A26. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Memphis, TN-MS-AR

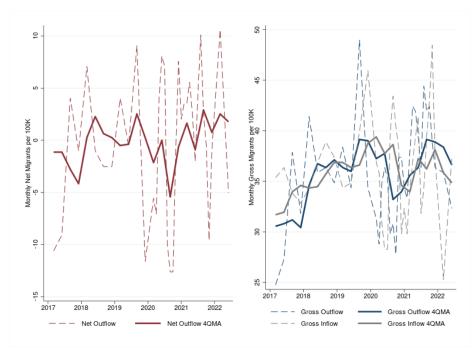


Figure A27. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Miami-Fort Lauderdale-West Palm Beach, FL

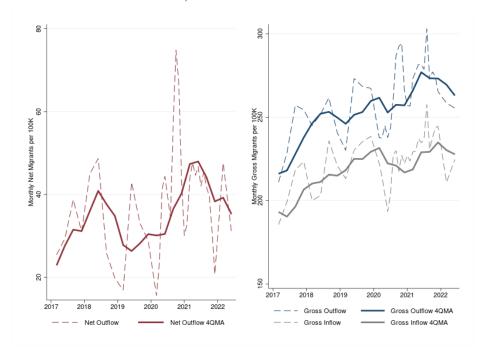


Figure A28. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Milwaukee–Waukesha–West Allis, WI

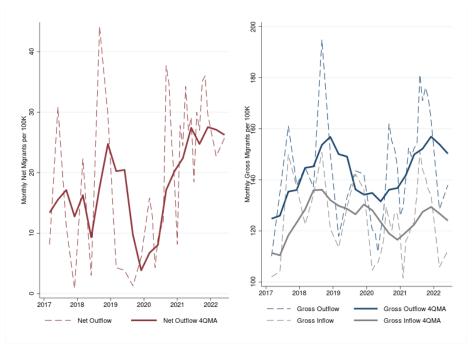


Figure A29. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Minneapolis-St. Paul-Bloomington, MN-WI

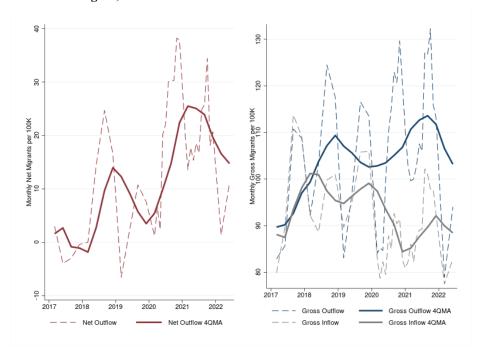


Figure A30. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Nashville-Davidson-Murfreesboro-Franklin, TN

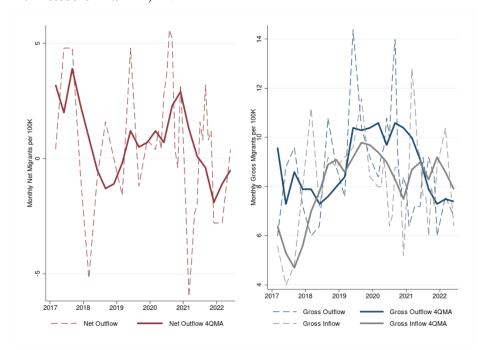


Figure A31. Estimated Gross and Net Migration into and out of Urban Neighborhoods: New Orleans—Metairie, LA

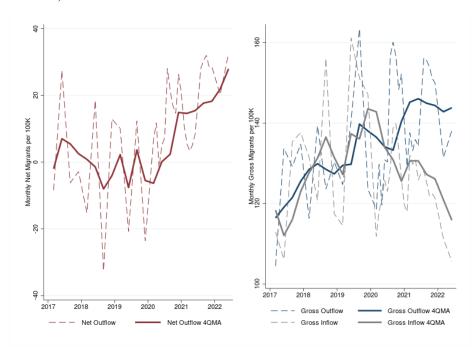


Figure A32. Estimated Gross and Net Migration into and out of Urban Neighborhoods: New York-Newark-Jersey City, NY-NJ-PA

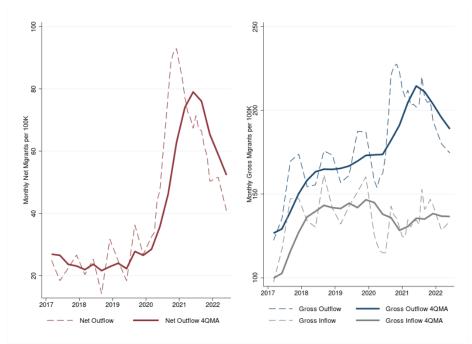
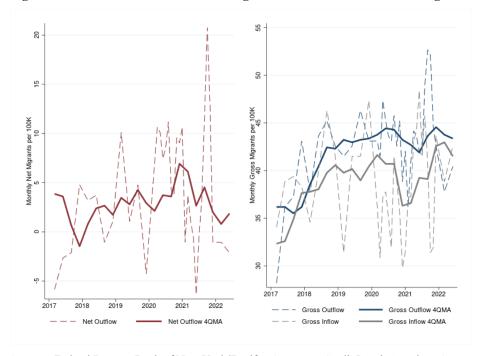


Figure A33. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Oklahoma City, OK



 $\label{lem:continuous} \textbf{Figure A34. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Orlando-Kissimmee-Sanford, FL}$

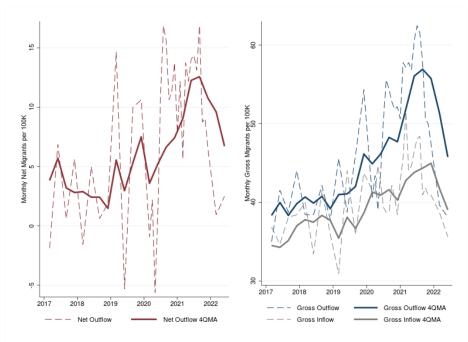
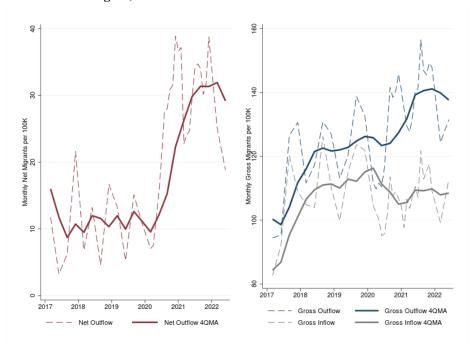


Figure A35. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Philadelphia—Camden—Wilmington, PA-NJ-DE-MD



 $\label{thm:control_problem} \begin{tabular}{ll} Figure A36. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Phoenix-Mesa-Scottsdale, AZ \\ \end{tabular}$

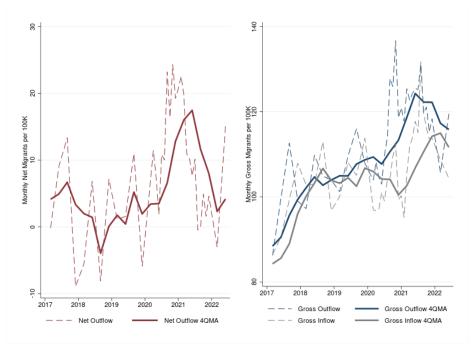


Figure A37. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Pittsburgh, PA

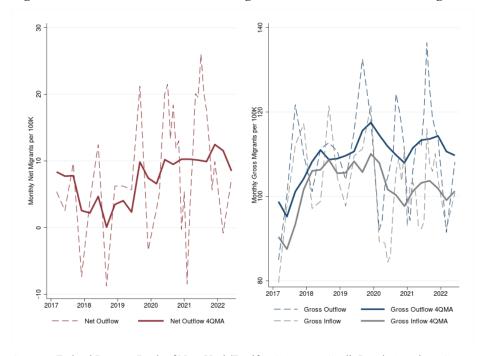


Figure A38. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Portland-Vancouver-Hillsboro, OR-WA

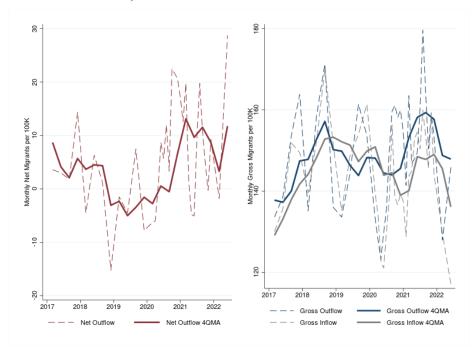
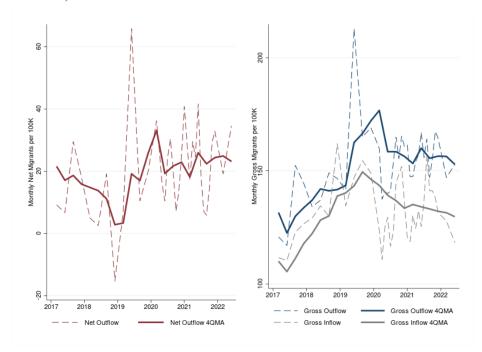


Figure A39. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Providence—Warwick, RI-MA



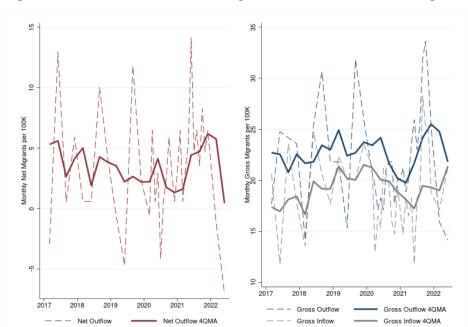


Figure A40. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Raleigh, NC

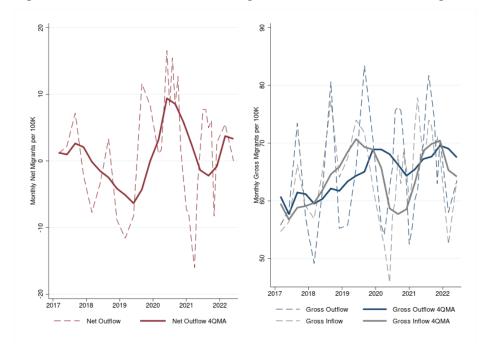


Figure A41. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Richmond, VA

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

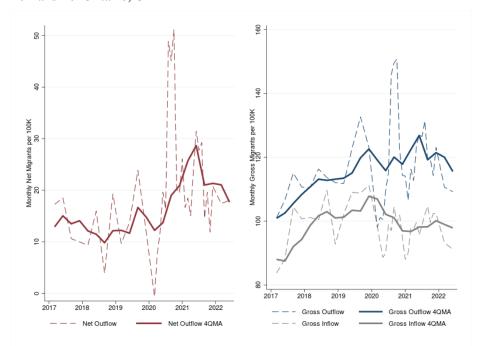


Figure A43. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Rochester, NY

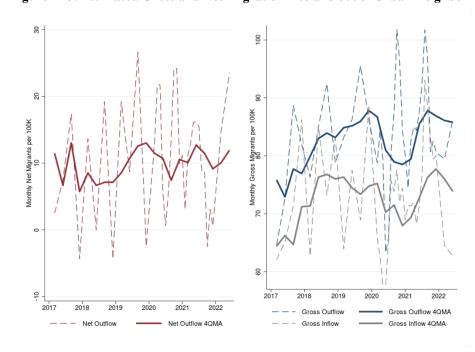


Figure A44. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Sacramento–Roseville–Arden–Arcade, CA

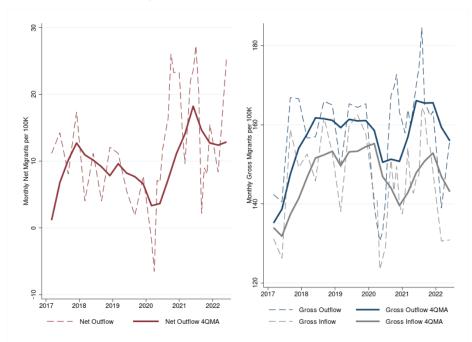
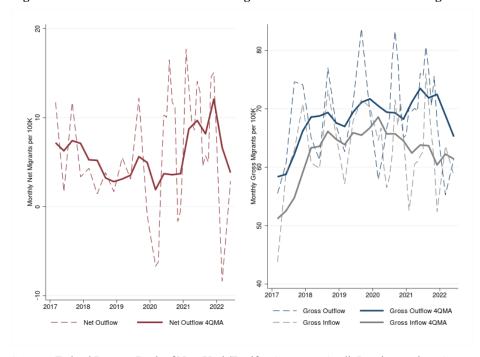


Figure A45. Estimated Gross and Net Migration into and out of Urban Neighborhoods: St. Louis, MO-IL



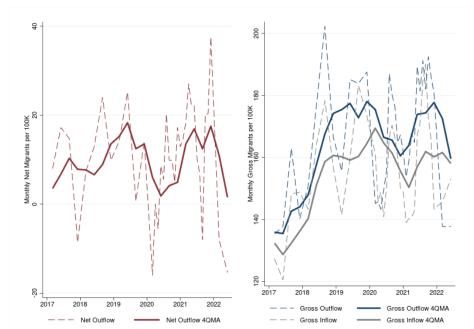


Figure A46. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Salt Lake City, UT

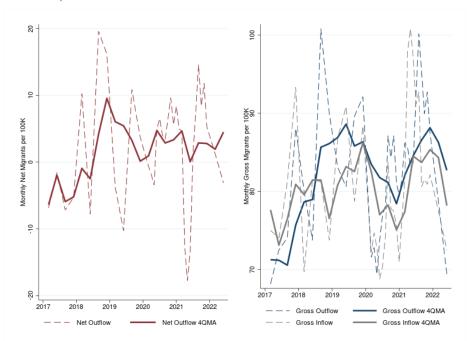


Figure A47. Estimated Gross and Net Migration into and out of Urban Neighborhoods: San Antonio-New Braunfels, TX

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

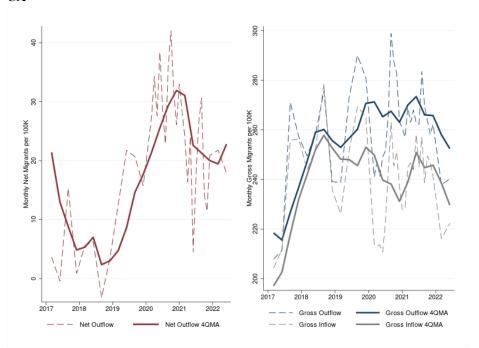


Figure A49. Estimated Gross and Net Migration into and out of Urban Neighborhoods: San Francisco-Oakland-Hayward, CA

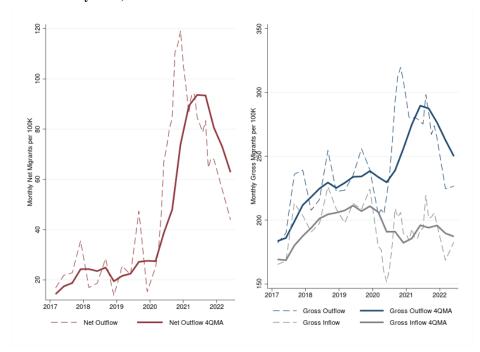


Figure A50. Estimated Gross and Net Migration into and out of Urban Neighborhoods: San Jose-Sunnyvale-Santa Clara, CA

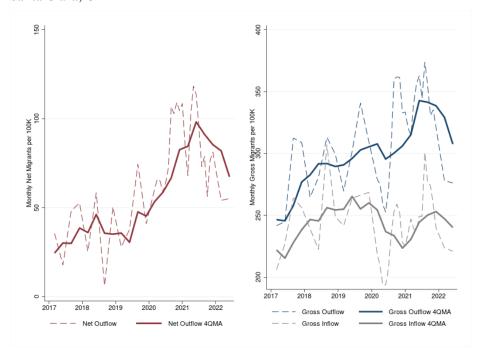


Figure A51. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Seattle-Tacoma-Bellevue, WA

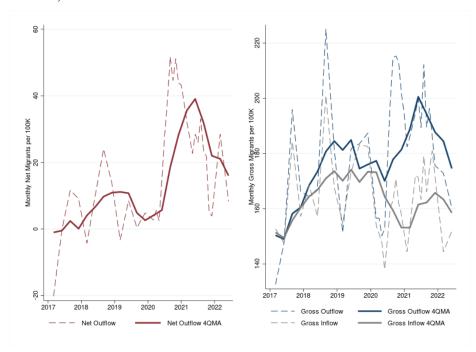


Figure A52. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Tampa–St. Petersburg–Clearwater, FL

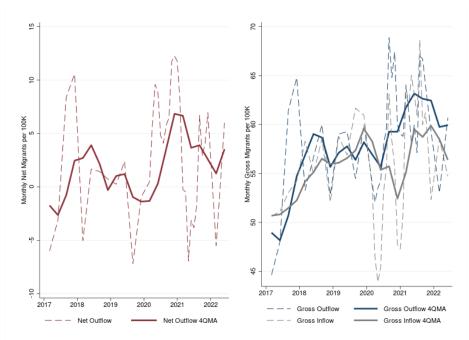
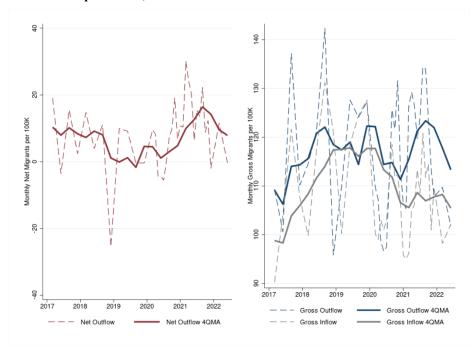


Figure A53. Estimated Gross and Net Migration into and out of Urban Neighborhoods: Virginia Beach–Norfolk–Newport News, VA–NC



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

