

District Data Brief

Did the COVID-19 Pandemic Cause an Urban Exodus? Follow-Up Questions and Answers

By Stephan Whitaker, Federal Reserve Bank of Cleveland

March 25, 2021

This follow-up answers common inquiries related to the release of the Cleveland Fed *District Data Brief*, “[Did the COVID-19 Pandemic Cause an Urban Exodus?](#)” For detailed descriptions of the data, the definition used to identify urban neighborhoods, and methods, please read the original brief.

Did the people who left urban neighborhoods during the pandemic move to suburbs, less-expensive metros, smaller metros, or small towns and rural areas?

To address these questions, I use the following list of high-housing-cost, high-population metro areas that may have experienced increased out-migration during the pandemic: New York, Los Angeles, Chicago, Washington DC, Miami, Boston, San Francisco, Riverside, Seattle, San Diego, Denver, Portland, Sacramento, and San Jose.¹

In Table 1, I report the estimates of the migration flows during the pandemic (April to December 2020) from urban neighborhoods to suburban neighborhoods of the same metro area and regions with lower costs and smaller populations. The percentage increases reported are relative to the average migration estimates for the same months in 2017, 2018, and 2019.

Overall, the estimated total of local moves from all urban neighborhoods in the country to suburbs in the same metro area were up 2.5 percent during the pandemic relative to the equivalent flows averaged over 2017, 2018, and 2019. Notable increases of more than 5 percent occurred in the metro areas of New York, San Francisco, Philadelphia, Riverside, Phoenix, Atlanta, Tampa, and Orlando.

¹ As indicated in “[Did the COVID-19 Pandemic Cause an Urban Exodus?](#)” the list was selected as follows. I started with all metro areas with the top-quartile median list prices per square foot, according to data from the National Association of Realtors (www.realtor.com/research/data/). I then removed all metro areas with populations smaller than 2 million except for San Jose, because its population was close to 2 million (1,990,660) and its housing costs are the second highest in the country. Finally, I added New York and Chicago to the list because the price of housing that is within normal commute times (25–30 minutes) of their employment centers would easily place in the top quartile.

Moves from the urban neighborhoods of high-cost, large metro areas to lower-cost, large metros (populations of more than 2 million) were up 5–25 percent in 10 of the 14 high-cost, large metro areas. Moves to midsized metros, with populations between 500,000 and 2 million, are up by even more, with gains of more than 10 percent among departures from New York, Los Angeles, Miami, San Francisco, Boston, Seattle, and Sacramento. Departures for small metro areas, towns, and rural areas are up more than 20 percent from New York, Washington, San Francisco, Philadelphia, Houston, and San Antonio.

There are instances where the flows from urban neighborhoods to less populous regions have declined, but these are outnumbered by the increased flows from other areas.

Table 1. Estimated Number of Migrants Leaving Urban Neighborhoods of Metro Areas by Type of Destination During the Pandemic

	To suburb of the same metro area		To high-cost, large metro areas (>2M)		To lower-cost, large metro areas (>2M)		To mid-sized metro areas (500K–2M)		To small metro areas (<500K), towns, and rural areas	
	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change
New York	168,140	13.7	67,040	10.7	69,460	21.4	67,480	26.4	50,560	29.8
Los Angeles	134,300	-1.6	85,300	0.9	35,280	7.9	28,160	15.3	27,320	12.6
Chicago	85,260	4.6	16,660	-11.6	19,820	9.7	11,600	4.0	16,640	11.6
Miami	91,660	2.3	11,840	-3.9	15,480	-1.4	11,520	12.4	12,120	5.3
Washington DC	74,160	3.7	15,600	-12.5	19,100	6.3	12,800	9.2	12,780	23.6
San Francisco	46,960	8.5	48,660	20.6	10,900	21.9	13,320	23.0	19,100	28.2
Boston	49,960	1.8	18,520	6.4	8,480	4.8	18,580	26.3	10,520	14.8
San Diego	44,000	-1.7	16,860	-1.7	7,820	9.2	6,840	3.1	8,760	12.8
San Jose	22,480	1.5	25,560	1.2	5,120	13.4	6,640	14.0	7,440	5.7
Seattle	39,380	0.9	9,140	0.7	4,580	3.3	3,860	9.5	8,800	9.0
Riverside	36,000	8.2	12,200	-2.3	2,940	1.4	2,120	21.8	2,900	7.7
Denver	35,380	1.6	3,960	-5.9	4,680	7.7	4,100	4.9	8,280	10.6
Sacramento	20,640	-8.6	4,280	-10.7	1,680	25.4	2,240	4.7	4,380	10.1
Portland, OR	20,340	-5.9	3,020	-24.6	2,100	21.6	1,920	12.1	5,420	6.7
Philadelphia	47,260	6.3	12,200	0.5	6,500	14.7	6,940	3.0	8,420	4.6
Dallas	54,200	5.5	3,740	-8.2	4,540	-11.1	3,660	23.1	4,660	-6.6
Houston	52,380	1.8	3,680	-9.8	5,400	-8.7	2,880	5.9	4,200	-12.7
Las Vegas	32,720	-2.7	6,840	-4.3	3,760	19.0	3,260	-9.6	6,060	18.2
Phoenix	35,280	8.8	3,040	-2.1	1,880	1.4	1,840	-8.9	4,380	20.1
Baltimore	23,720	-5.6	7,580	-0.1	3,300	0.4	2,420	-10.8	3,300	-6.1
Minneapolis	26,580	4.5	2,400	-29.7	2,140	13.0	1,620	-1.2	4,800	22.7
Detroit	20,400	-2.6	1,440	23.4	1,660	8.7	1,360	-3.3	2,080	-9.6
Pittsburgh	17,480	0.9	2,900	-10.5	2,120	-19.9	1,660	-3.5	2,800	10.5
Cleveland	16,980	-5.5	1,660	-17.3	2,440	-1.1	2,700	3.1	1,760	-4.7

Table 1. Estimated Number of Migrants Leaving Urban Neighborhoods of Metro Areas by Type of Destination During the Pandemic (continued)

	To suburb of the same metro area		To high-cost, large metro areas (>2M)		To lower-cost, large metro areas (>2M)		To mid-sized metro areas (500K–2M)		To small metro areas (<500K), towns, and rural areas	
	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change
Atlanta	16,880	7.5	1,740	-22.1	1,380	1.5	1,340	-7.8	1,420	-11.3
Columbus	13,380	0.6	1,260	-12.1	1,640	-13.7	1,520	21.9	1,640	-5.7
St. Louis	13,520	0.0	1,640	-12.5	1,680	8.6	840	-11.9	1,920	13.4
Tampa	11,640	7.1	1,280	7.9	1,080	-4.7	1,160	-2.8	1,180	24.6
Cincinnati	11,560	1.3	880	-27.5	1,400	-0.5	1,300	25.0	1,100	5.8
San Antonio	12,520	-1.8	560	-15.2	1,240	-14.7	800	-3.2	1,260	-14.1
Austin	8,060	-2.4	520	-40.0	1,700	-5.2	580	22.5	920	2.2
Indianapolis	7,580	7.2	740	-5.9	600	1.1	420	-12.5	1,000	-18.9
Kansas City	6,360	-5.2	880	-11.4	640	-22.6	460	-17.9	680	-21.5
Providence	14,880	-4.0	5,000	8.7	1,760	21.7	2,060	-12.5	2,120	33.6
Urban Honolulu	10,920	0.7	4,620	0.9	2,540	-2.3	2,340	-4.1	3,560	-3.4
Milwaukee	13,580	-1.0	1,940	-11.8	2,020	-6.2	1,240	-21.2	2,720	-16.4
Bridgeport	9,060	20.5	3,380	-4.9	1,140	11.0	3,320	11.4	960	10.8
Virginia Beach	11,400	-4.4	1,520	-29.2	1,440	-6.1	1,700	-10.2	2,240	-2.3
Salt Lake City	10,480	-3.1	1,220	-24.4	900	-4.3	2,840	1.4	1,960	-0.3
New Orleans	10,380	11.5	1,980	14.7	1,820	-2.2	1,120	-20.0	2,020	1.7
Buffalo	8,480	-4.9	1,720	2.4	1,440	8.5	1,440	10.2	1,160	4.2
Albany	7,360	1.8	1,840	-5.8	720	13.7	820	-12.1	1,480	1.8
Hartford	7,460	1.5	920	-27.7	680	-7.3	1,460	-8.8	960	33.3
New Haven	5,880	10.8	1,880	-4.4	940	23.7	1,820	-9.9	860	0.8
Stockton	6,080	-5.0	2,780	-0.2	520	0.0	1,080	-1.2	840	-18.7
Oxnard	6,280	-1.6	2,120	-22.6	840	0.8	980	25.6	1,340	-2.9
Allentown	6,360	12.8	1,360	12.7	1,100	5.1	540	-10.0	1,080	23.7
Worcester	5,940	-6.4	2,000	25.5	380	-8.1	1,020	6.3	840	34.0

Table 1. Estimated Number of Migrants Leaving Urban Neighborhoods of Metro Areas by Type of Destination During the Pandemic (continued)

	To suburb of the same metro area		To high-cost, large metro areas (>2M)		To lower-cost, large metro areas (>2M)		To mid-sized metro areas (500K–2M)		To small metro areas (<500K), towns, and rural areas	
	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change	Migrants	Percent Change
Fresno	7,100	1.2	700	-18.0	340	21.4	420	23.5	1,140	-11.4
Rochester	5,840	-5.1	760	12.9	520	-21.2	580	-23.7	700	-18.6
El Paso	5,460	-20.0	300	-42.3	980	-9.8	280	-43.2	1,220	22.8
Louisville	5,560	-3.9	220	-45.0	520	-13.3	640	41.2	820	18.3
Springfield	4,620	-7.4	840	-4.5	460	-16.9	860	-14.0	500	-29.2
Bakersfield	5,200	-6.0	840	0.0	300	50.0	400	7.1	700	-13.2
Omaha	5,260	8.2	500	29.3	620	29.2	300	-23.7	740	-5.1
Scranton	4,420	-11.8	780	-28.7	720	-2.7	640	2.1	1,200	27.7
Toledo	4,080	5.5	280	0.0	660	-4.8	400	36.4	680	-18.4
Syracuse	3,400	-1.7	640	-4.0	480	9.1	520	-12.4	560	-16.8

Notes: Metro areas included in this table have at least 100,000 urban residents. The city name indicates the core based statistical area (www.census.gov/geographies/reference-maps/2020/geo/cbsa.html). Populations indicated in parentheses. The pandemic period is the second, third, and fourth quarters of 2020. The percentage change is relative to the equivalent migration flows in the same quarters of the year averaged over 2017, 2018, and 2019.

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

Table 2 categorizes by distance all moves in which someone left an urban neighborhood and its metro area. For several of the metro areas with the largest urban populations, such as Chicago, Miami, Washington, and Boston, migration to nearby metro areas accounted for almost all of the increase in out-migration from urban neighborhoods during the pandemic. This phenomenon was not repeated everywhere, however. Of the 60 metro areas with urban populations of more than 100,000, about half (29) had larger increases in urban out-migration heading to nearby regions.

Table 2. Estimates of Migrants Leaving Urban Neighborhoods of Metro Areas During the Pandemic by Distance

	To another region within 150 miles		To another region beyond 150 miles	
	Migrants	Percent Change	Migrants	Percent Change
New York	63,520	37.5	191,660	16.4
Los Angeles	62,160	9.0	114,820	4.6
Chicago	9,140	23.6	55,600	-0.1
Miami	6,640	30.5	44,960	-0.8
Washington	15,160	17.2	45,140	0.3
San Francisco	32,560	19.5	59,460	24.3
Boston	19,280	29.9	36,900	6.5
San Diego	9,960	3.0	30,400	4.5
San Jose	23,280	2.3	21,540	8.1
Seattle	5,100	2.7	21,320	5.8
Riverside	10,460	-4.4	9,720	9.2
Denver	4,620	15.1	16,500	3.2
Sacramento	5,100	-0.1	7,480	4.6
Portland, OR	2,880	-0.2	9,600	-0.5
Philadelphia	14,340	3.1	19,860	5.9
Dallas	1,240	-21.2	15,360	-1.5
Houston	1,780	-27.4	14,380	-4.7
Las Vegas	840	57.5	19,120	3.1
Phoenix	1,260	19.6	9,900	2.6
Baltimore	6,700	-2.3	9,900	-3.7
Minneapolis	2,080	29.5	8,880	-4.0
Detroit	1,820	6.6	4,720	0.6
Pittsburgh	1,620	13.6	7,860	-10.0
Cleveland	3,480	18.6	5,200	-14.7
Atlanta	660	-10.0	5,220	-11.9
Columbus	2,580	12.5	3,480	-13.9
St. Louis	740	15.6	5,340	-1.7
Tampa	1,220	31.7	3,500	-1.5
Cincinnati	1,460	32.7	3,280	-9.2
San Antonio	540	-37.2	3,320	-7.4
Austin	1,260	18.9	2,460	-17.3
Indianapolis	620	-25.6	2,160	-5.0
Kansas City	240	-37.9	2,440	-15.1
Providence	5,240	21.9	5,700	-0.1
Urban Honolulu	400	7.1	12,860	-2.1
Milwaukee	2,820	-21.8	5,100	-8.8

Table 2. Estimates of Migrants Leaving Urban Neighborhoods of Metro Areas During the Pandemic by Distance (continued)

	To another region within 150 miles		To another region beyond 150 miles	
	Migrants	Percent Change	Migrants	Percent Change
Bridgeport	5,580	15.0	3,220	-10.1
Virginia Beach	1,180	-18.1	5,720	-11.2
Salt Lake City	2,700	4.7	4,220	-11.5
New Orleans	1,260	6.8	5,720	-1.5
Buffalo	880	3.9	4,940	7.7
Albany	2,420	-5.2	2,440	0.8
Hartford	2,160	-2.7	1,860	-11.7
New Haven	3,220	7.3	2,280	-12.3
Stockton	3,180	-1.4	2,040	-7.6
Oxnard	1,940	-17.8	3,340	-1.2
Allentown	2,620	21.7	1,480	-6.3
Worcester	2,500	20.2	1,740	14.5
Fresno	1,080	-10.0	1,520	-2.6
Rochester	420	-35.1	2,160	-6.4
El Paso	260	25.8	2,520	-13.1
Louisville	680	4.1	1,520	1.3
Springfield	1,400	-16.0	1,260	-14.5
Bakersfield	960	1.4	1,280	0.5
Omaha	200	-37.5	1,980	15.1
Scranton	2,120	12.8	1,220	-20.1
Toledo	940	-11.3	1,080	3.2
Syracuse	500	-12.8	1,740	-5.1

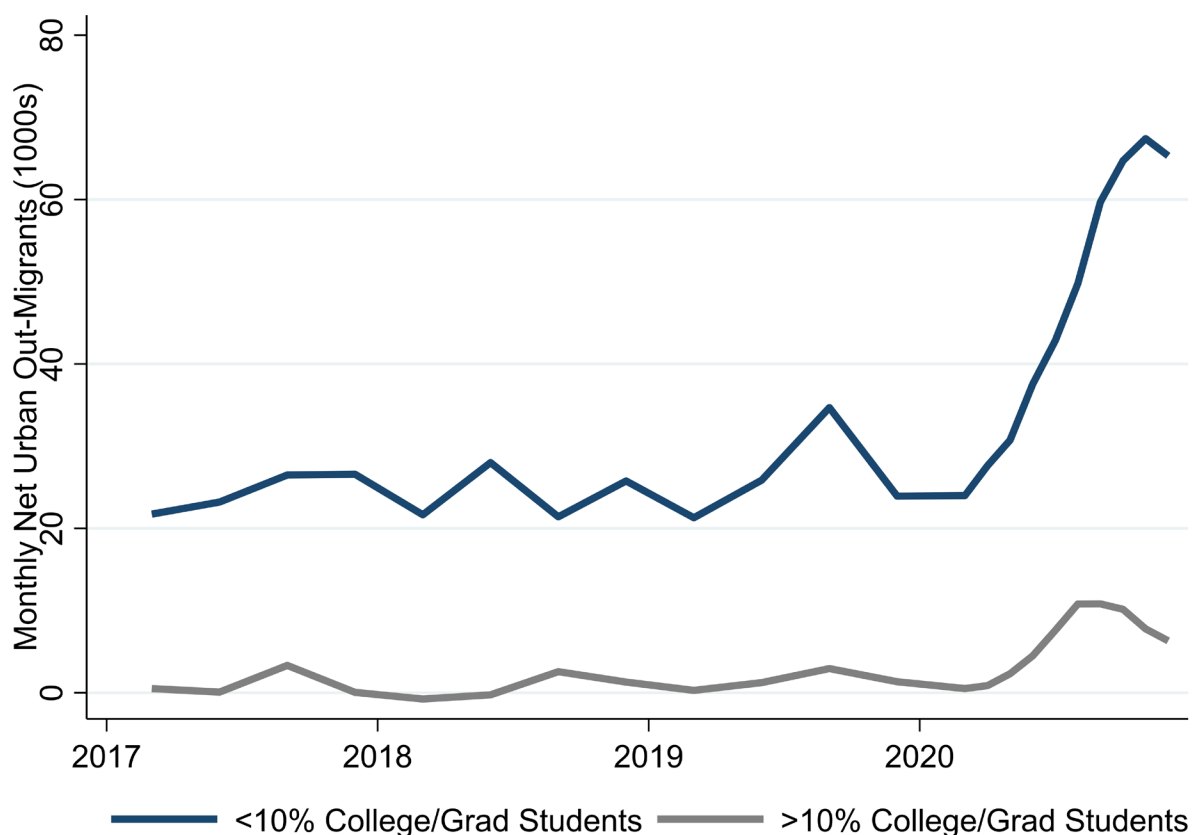
Notes: Metro areas included in this table have at least 100,000 urban residents. The city name indicates the core based statistical area (www.census.gov/geographies/reference-maps/2020/geo/cbsa.html). The pandemic period is the second, third, and fourth quarters of 2020. The percentage change is relative to the equivalent migration flows in the same quarters of the year averaged over 2017, 2018, and 2019.

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

Is the decline of in-migration to urban neighborhoods driven by college and graduate students staying at home because their universities are teaching remotely?

I identified the urban tracts for which at least 10 percent of the adults are undergraduate or graduate students.² Figures 1 and 2 demonstrate that student moves, or a lack of student moves, are not materially driving the net migration associated with urban tracts. The trends for the tracts that lack student concentrations dominate the national aggregates. The increase in net out-migration is still evident when the near-campus tracts are excluded.

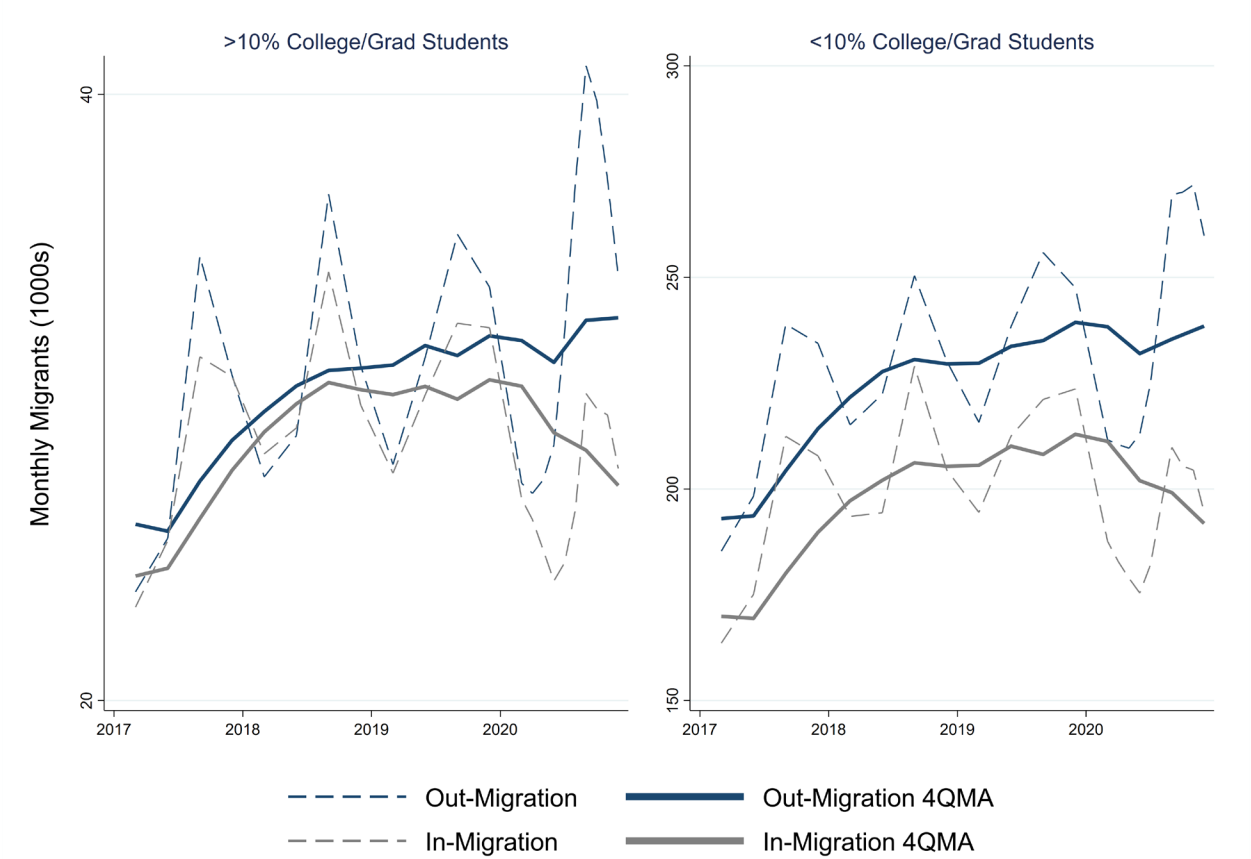
Figure 1. Estimated Net Migration from Urban Neighborhoods by Neighborhood Student Percentage



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

² The percentage of students in each tract is from the American Community Survey 5-year estimates in Table S1401. These estimates are based on the surveys from 2015 to 2019. To estimate a demographic such as student enrollment at the tract level, the ACS combines five years of responses to reach an adequate sample size.

Figure 2. Estimated Gross Migration from Urban Neighborhoods by Neighborhood Student Percentage



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