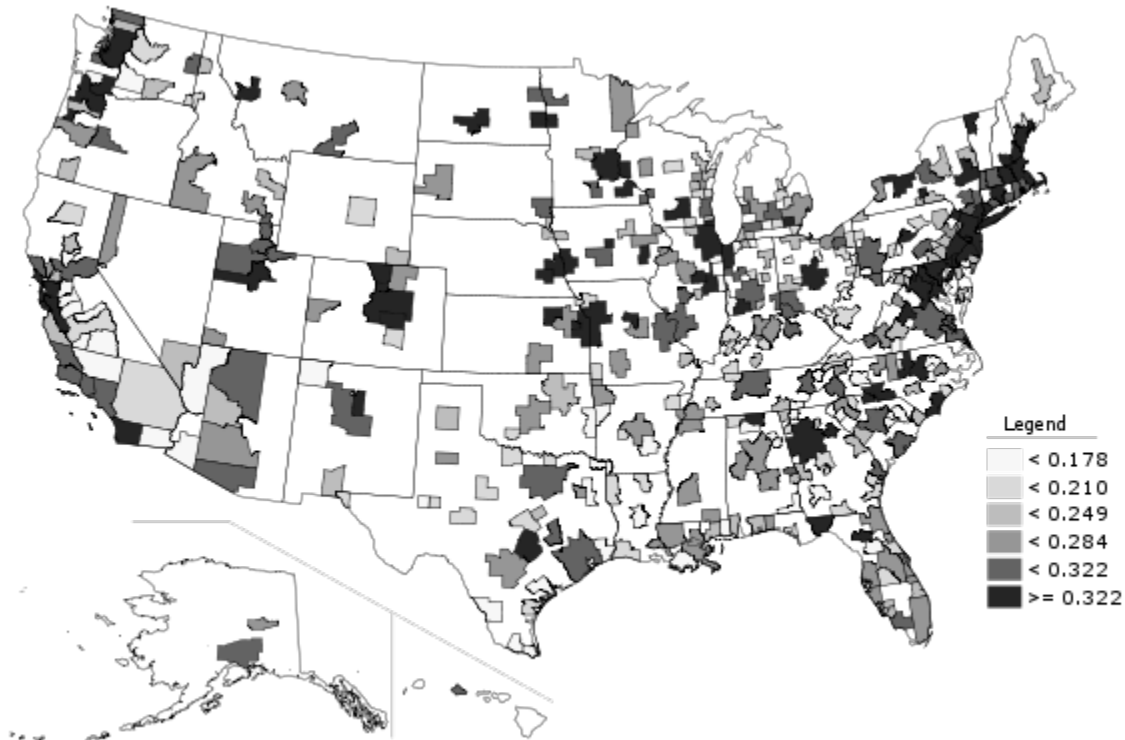


San Antonio Talent Migration Connectivity Profile

Introduction: Brain Drain San Antonio

Among metropolitan statistical areas (MSAs) with over 1 million people, San Antonio-New Braunfels, Texas is ranked 13th best out of 51 for population gains during 2000-2010 (U.S. Census data). Using relocation data from IRS returns over the same period, the San Antonio metro posted positive net migration of almost 180,000 people (i.e. exemptions). That was good enough for 10th place. Without question, San Antonio is a major destination for U.S. movers.

Unlike many Rust Belt MSAs, San Antonio is not struggling with demographic decline. The population is both growing robustly and relatively young. Concerning college educational attainment rates, the picture is not as rosy. Again using the 51 largest US metros as a benchmark (see Appendix A), San Antonio-New Braunfels is (in 2010) ranked 48th with 25.4% of those aged 25 years and older holding a bachelor's degree or higher. See map below for all MSAs (raw data in Appendix B):

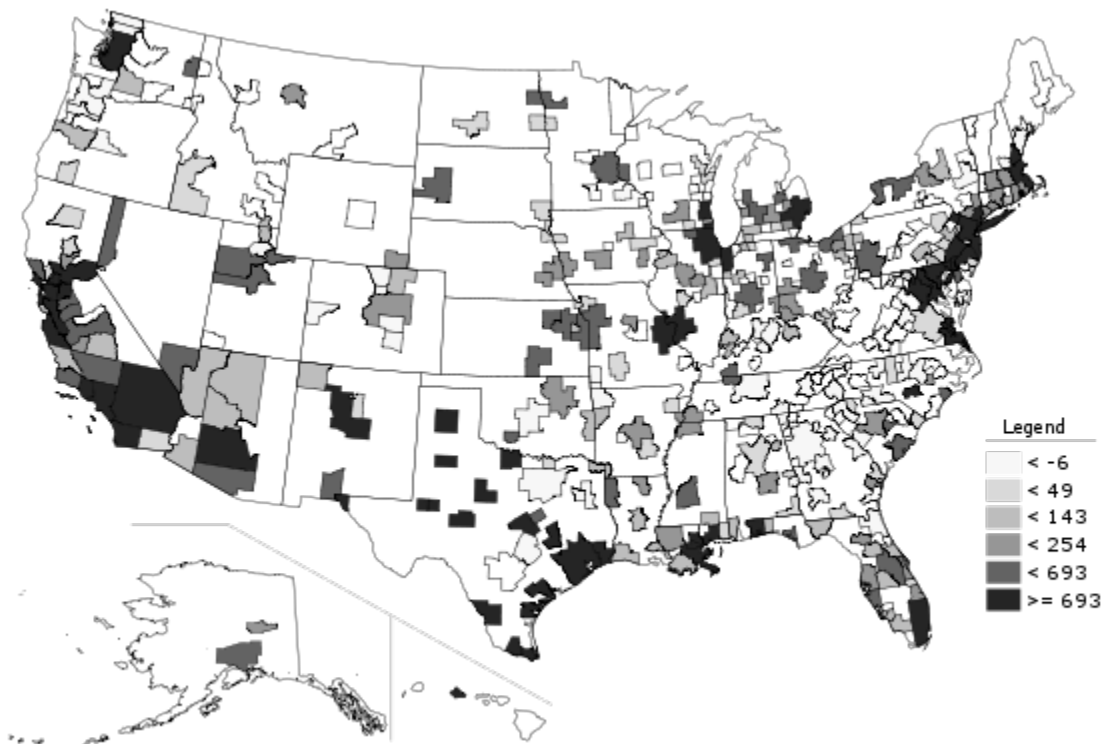


Relatively speaking, the picture improves a bit. However, bordering Greater San Antonio to the northeast is Austin–Round Rock–San Marcos with over 32.2% (see legend) of the 25+ population securing a bachelor's degree or more (39.4% in 2010). Both metros are gaining population through natural increase (more births than deaths) and net migration (more immigration than outmigration). Demographically, the glaring difference is education. Greater Austin is talent rich and renowned as a hotbed of innovation. How might San Antonio become more like its neighbor?

The purpose of this report is to lay the demographic foundation needed to answer the above question. Below is a talent migration analysis used to better understand Greater San Antonio's assets and liabilities. Net migration will be disaggregated into immigration and outmigration in order to highlight the talent churn informing the low college educational attainment rate. Furthermore, total migration (immigration + outmigration) will be mapped to expose major talent links that can help Greater San Antonio achieve its economic development goals. Lastly, avenues of ironic brain gain will be suggested. The recommend line of inquiry would result in a talent migration strategy for Greater San Antonio.

Disaggregating Greater San Antonio Net Migration

Using IRS data from 1996-2010, below is a map of Greater San Antonio net migration (immigration – outmigration):



With most metros, San Antonio is importing more people (i.e. exemptions) than exporting. Note the strength of net migration within Texas. On the next two pages is a data comparison of to the top-30 net positive MSAs with all metros versus those outside of Texas. On the first list, Texas metros are in bold.

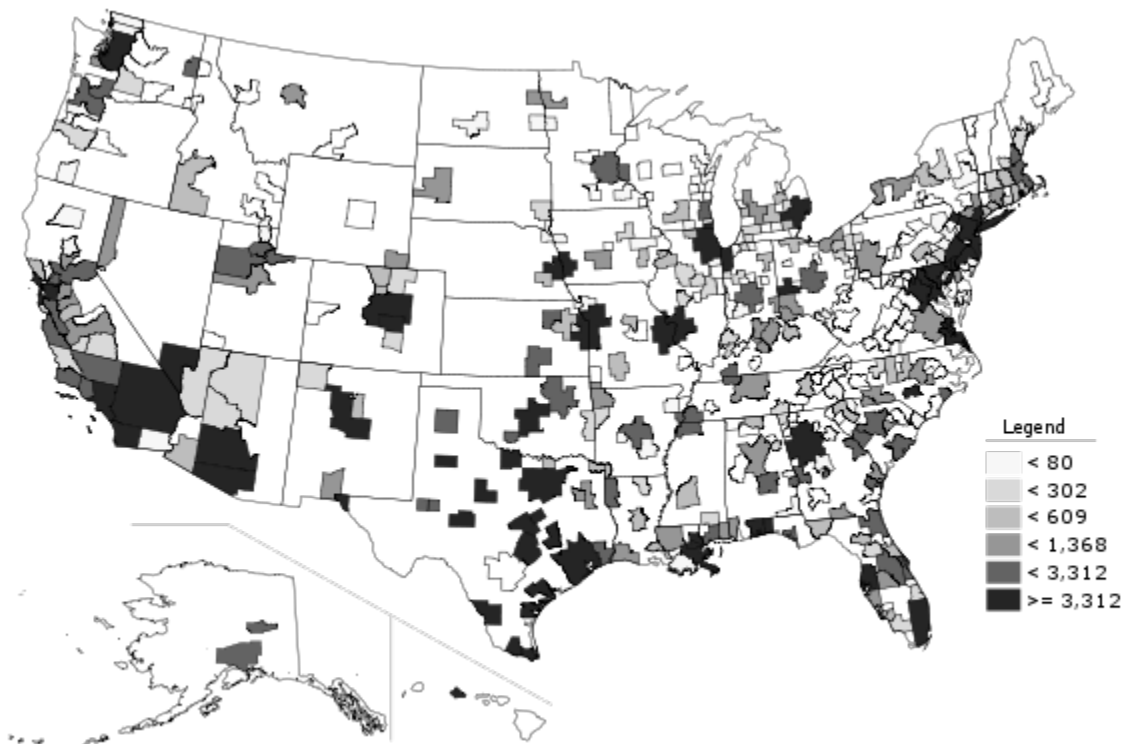
Net Migration (Exemptions) for San Antonio-New Braunfels, TX (1996-2010)

<u>MSA</u>	<u>Total</u>
1. Los Angeles-Long Beach-Santa Ana, CA	14866
2. Corpus Christi, TX	9280
3. Houston-Sugar Land-Baytown, TX	7825
4. El Paso, TX	7669
5. Riverside-San Bernardino-Ontario, CA	7037
6. Chicago-Joliet-Naperville, IL-IN-WI	6610
7. Laredo, TX	6080
8. Brownsville-Harlingen, TX	4531
9. New York-Northern New Jersey-Long Island, NY-NJ-PA	4215
10. McAllen-Edinburg-Mission, TX	4147
11. Honolulu, HI	3716
12. San Diego-Carlsbad-San Marcos, CA	3588
13. Killeen-Temple-Fort Hood, TX	3053
14. New Orleans-Metairie-Kenner, LA	2988
15. Lubbock, TX	2633
16. San Angelo, TX	2535
17. St. Louis, MO-IL	1977
18. San Francisco-Oakland-Fremont, CA	1905
19. Miami-Fort Lauderdale-Pompano Beach, FL	1837
20. Wichita Falls, TX	1781
21. Salinas, CA	1624
22. Victoria, TX	1519
23. Detroit-Warren-Livonia, MI	1513
24. Virginia Beach-Norfolk-Newport News, VA-NC	1402
25. Sacramento--Arden-Arcade--Roseville, CA	1398
26. Beaumont-Port Arthur, TX	1377
27. Baltimore-Towson, MD	1238
28. Abilene, TX	1171
29. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1140
30. Pensacola-Ferry Pass-Brent, FL	1089

<u>MSA</u>	<u>Total</u>
1. Los Angeles-Long Beach-Santa Ana, CA	14866
2. Riverside-San Bernardino-Ontario, CA	7037
3. Chicago-Joliet-Naperville, IL-IN-WI	6610
4. New York-Northern New Jersey-Long Island, NY-NJ-PA	4215
5. Honolulu, HI	3716
6. San Diego-Carlsbad-San Marcos, CA	3588
7. New Orleans-Metairie-Kenner, LA	2988
8. St. Louis, MO-IL	1977
9. San Francisco-Oakland-Fremont, CA	1905
10. Miami-Fort Lauderdale-Pompano Beach, FL	1837
11. Salinas, CA	1624
12. Detroit-Warren-Livonia, MI	1513
13. Virginia Beach-Norfolk-Newport News, VA-NC	1402
14. Sacramento--Arden-Arcade--Roseville, CA	1398
15. Baltimore-Towson, MD	1238
16. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1140
17. Pensacola-Ferry Pass-Brent, FL	1089
18. San Jose-Sunnyvale-Santa Clara, CA	1013
19. Phoenix-Mesa-Glendale, AZ	1008
20. Fayetteville, NC	959
21. Seattle-Tacoma-Bellevue, WA	914
22. Oxnard-Thousand Oaks-Ventura, CA	822
23. Stockton, CA	808
24. Boston-Cambridge-Quincy, MA-NH	739
25. Vallejo-Fairfield, CA	734
26. Washington-Arlington-Alexandria, DC-VA-MD-WV	713
27. Albuquerque, NM	710
28. Milwaukee-Waukesha-West Allis, WI	709
29. Gulfport-Biloxi, MS	693
30. Minneapolis-St. Paul-Bloomington, MN-WI	688

Proximity breeds familiarity, which is why many Texas MSAs (regardless of population size) send so many people to San Antonio. The two biggest deficits are also located in Texas, Austin (-2965) and Dallas (-5914). Outside of Texas, metros with the largest populations dominate. The patterns are consistent with domestic Latino migration (outmigration from immigrant gateways such as Los Angeles and New York City)¹ and military service (e.g. Honolulu and Virginia Beach). Neither flow trend is promising in terms of boosting San Antonio's college educational attainment rate.

By disaggregating net migration, we can begin to understand San Antonio's relationship with other metros. Is immigration or lack of outmigration driving the positive net migration? Via immigration, we can get a sense of Greater San Antonio's power of attraction. Below is a map of migration to San Antonio using IRS data from 1996-2010:



Generally, San Antonio exerts a strong pull on residents in other Texas metros, including Austin and Dallas. To see the differences with net migration, compare the lists on the next two pages with the ones on the previous two.

¹ "Immigrant Gateways and Hispanic Migration to New Destinations," by Daniel T. Lichter and Kenneth M. Johnson at *International Migration Review* Volume 43 Number 3 (Fall 2009):496–518. (Not available online)

Inmigration (Exemptions) for San Antonio-New Braunfels, TX (1996-2010)

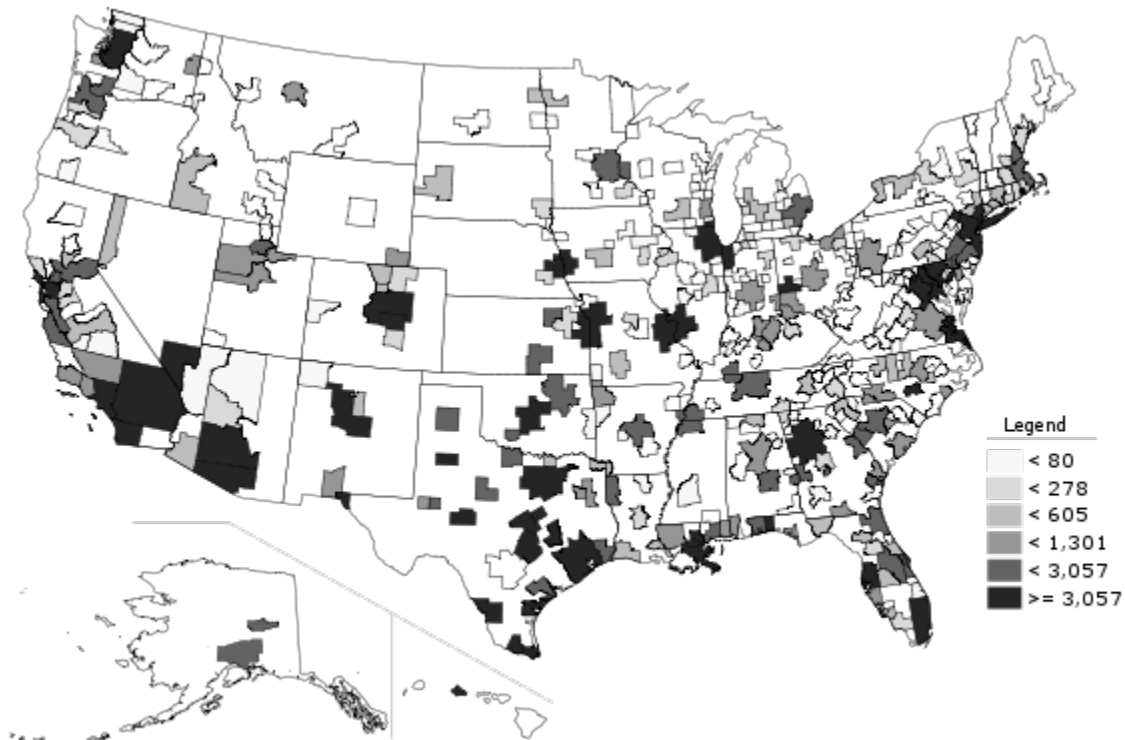
<u>MSA</u>	<u>Total</u>
1. Austin-Round Rock-San Marcos, TX	65779
2. Houston-Sugar Land-Baytown, TX	63860
3. Dallas-Fort Worth-Arlington, TX	53877
4. Corpus Christi, TX	28301
5. Los Angeles-Long Beach-Santa Ana, CA	24732
6. Washington-Arlington-Alexandria, DC-VA-MD-WV	17836
7. El Paso, TX	16925
8. Killeen-Temple-Fort Hood, TX	15911
9. McAllen-Edinburg-Mission, TX	15169
10. Laredo, TX	14671
11. Chicago-Joliet-Naperville, IL-IN-WI	13988
12. Brownsville-Harlingen, TX	11921
13. Riverside-San Bernardino-Ontario, CA	11722
14. San Diego-Carlsbad-San Marcos, CA	11464
15. Phoenix-Mesa-Glendale, AZ	10390
16. Honolulu, HI	10383
17. Seattle-Tacoma-Bellevue, WA	8550
18. New York-Northern New Jersey-Long Island, NY-NJ-PA	8424
19. Colorado Springs, CO	8124
20. Virginia Beach-Norfolk-Newport News, VA-NC	7514
21. St. Louis, MO-IL	6983
22. Las Vegas-Paradise, NV	6361
23. Denver-Aurora-Broomfield, CO	6302
24. Lubbock, TX	6080
25. New Orleans-Metairie-Kenner, LA	6045
26. Baltimore-Towson, MD	5937
27. Fayetteville, NC	5716
28. Miami-Fort Lauderdale-Pompano Beach, FL	5681
29. San Angelo, TX	5652
30. Oklahoma City, OK	5365

<u>MSA</u>	<u>Total</u>
1. Los Angeles-Long Beach-Santa Ana, CA	24732
2. Washington-Arlington-Alexandria, DC-VA-MD-WV	17836
3. Chicago-Joliet-Naperville, IL-IN-WI	13988
4. Riverside-San Bernardino-Ontario, CA	11722
5. San Diego-Carlsbad-San Marcos, CA	11464
6. Phoenix-Mesa-Glendale, AZ	10390
7. Honolulu, HI	10383
8. Seattle-Tacoma-Bellevue, WA	8550
9. New York-Northern New Jersey-Long Island, NY-NJ-PA	8424
10. Colorado Springs, CO	8124
11. Virginia Beach-Norfolk-Newport News, VA-NC	7514
12. St. Louis, MO-IL	6983
13. Las Vegas-Paradise, NV	6361
14. Denver-Aurora-Broomfield, CO	6302
15. New Orleans-Metairie-Kenner, LA	6045
16. Baltimore-Towson, MD	5937
17. Fayetteville, NC	5716
18. Miami-Fort Lauderdale-Pompano Beach, FL	5681
19. Oklahoma City, OK	5365
20. Atlanta-Sandy Springs-Marietta, GA	5053
21. Tampa-St. Petersburg-Clearwater, FL	5023
22. San Francisco-Oakland-Fremont, CA	5018
23. Albuquerque, NM	4756
24. Tucson, AZ	3813
25. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	3751
26. Dayton, OH	3636
27. Omaha-Council Bluffs, NE-IA	3581
28. Crestview-Fort Walton Beach-Destin, FL	3574
29. Kansas City, MO-KS	3484
30. Detroit-Warren-Livonia, MI	3435

For immigration, the instate orientation is even more pronounced than it is for net migration. 8 of the top-10 sending metros are in Texas. In Houston and Austin, 6 of the top-10 sending metros are in Texas. For Dallas, only 3 metros are instate. Clearly, Dallas is much more of a national talent draw. San Antonio has a lot of room for improvement on that score.

Looking outside of Texas, metros that are in both top-10 lists for net migration and immigration are in bold. Greater Washington, DC moves up from 26th for net migration to 2nd for immigration. DC has a high concentration of college graduates (#1 for metros with over 1 million people). This region is likely a strong source of talent for San Antonio. Other notable MSAs, Phoenix moves up from 19th (net migration) to 6th (immigration). Seattle climbs from 21st to 8th. Phoenix is 42nd (out of 51 largest metros) and Seattle is 9th with percentages of adults 25 years and older with a bachelor's degree or higher. That puts Seattle on the map for tech/innovations workers who would move to San Antonio.

Outmigration, or brain drain, will tell a different story. Below, a map of outmigration for the San Antonio MSA from 1996-2008:



The Texas orientation looks to be breaking down a bit. San Antonio is sending people all over the country in large numbers. Regarding economic development, that's a positive attribute. College educated people are the ones most likely to leave and move to an out-of-state destination. The relatively diffuse patterns suggest that the metro is good at developing talent. Below are the top-30 lists for outmigration:

Total Outmigration (Exemptions) for San Antonio-New Braunfels, TX (1996-2010)

MSA	Total
1. Austin-Round Rock-San Marcos, TX	68744
2. Dallas-Fort Worth-Arlington, TX	59791
3. Houston-Sugar Land-Baytown, TX	56035
4. Corpus Christi, TX	19021
5. Washington-Arlington-Alexandria, DC-VA-MD-WV	17123
6. Killeen-Temple-Fort Hood, TX	12858
7. McAllen-Edinburg-Mission, TX	11022
8. Los Angeles-Long Beach-Santa Ana, CA	9866
9. Phoenix-Mesa-Glendale, AZ	9382
10. El Paso, TX	9256
11. Colorado Springs, CO	8691
12. Laredo, TX	8591
13. San Diego-Carlsbad-San Marcos, CA	7876
14. Seattle-Tacoma-Bellevue, WA	7636
15. Brownsville-Harlingen, TX	7390
16. Chicago-Joliet-Naperville, IL-IN-WI	7378
17. Oklahoma City, OK	7182
18. Honolulu, HI	6667
19. Virginia Beach-Norfolk-Newport News, VA-NC	6112
20. Las Vegas-Paradise, NV	6097
21. Denver-Aurora-Broomfield, CO	6072
22. Atlanta-Sandy Springs-Marietta, GA	5617
23. St. Louis, MO-IL	5006
24. Tampa-St. Petersburg-Clearwater, FL	4788
25. Fayetteville, NC	4757
26. Baltimore-Towson, MD	4699
27. Riverside-San Bernardino-Ontario, CA	4685
28. New York-Northern New Jersey-Long Island, NY-NJ-PA	4209
29. Albuquerque, NM	4046
30. College Station-Bryan, TX	3846

MSA	Total
1. Washington-Arlington-Alexandria, DC-VA-MD-WV	17123
2. Los Angeles-Long Beach-Santa Ana, CA	9866
3. Phoenix-Mesa-Glendale, AZ	9382
4. Colorado Springs, CO	8691
5. San Diego-Carlsbad-San Marcos, CA	7876
6. Seattle-Tacoma-Bellevue, WA	7636
7. Chicago-Joliet-Naperville, IL-IN-WI	7378
8. Oklahoma City, OK	7182
9. Honolulu, HI	6667
10. Virginia Beach-Norfolk-Newport News, VA-NC	6112
11. Las Vegas-Paradise, NV	6097
12. Denver-Aurora-Broomfield, CO	6072
13. Atlanta-Sandy Springs-Marietta, GA	5617
14. St. Louis, MO-IL	5006
15. Tampa-St. Petersburg-Clearwater, FL	4788
16. Fayetteville, NC	4757
17. Baltimore-Towson, MD	4699
18. Riverside-San Bernardino-Ontario, CA	4685
19. New York-Northern New Jersey-Long Island, NY-NJ-PA	4209
20. Albuquerque, NM	4046
21. Miami-Fort Lauderdale-Pompano Beach, FL	3844
22. Crestview-Fort Walton Beach-Destin, FL	3472
23. Dayton, OH	3432
24. Omaha-Council Bluffs, NE-IA	3390
25. Tucson, AZ	3250
26. San Francisco-Oakland-Fremont, CA	3113
27. Kansas City, MO-KS	3096
28. New Orleans-Metairie-Kenner, LA	3057
29. Clarksville, TN-KY	2914
30. Anchorage, AK	2708

7 of the 10 outmigration destinations are within Texas. Austin, Dallas, and Houston dominate in sheer numbers. With this data, the Texas talent urban hierarchy is evident. San Antonio is a first-tier peer. There is tremendous churn within the Texas Triangle, with people elsewhere in the state trying to move into the megaregion. Outmigration variance within the Triangle includes 6 out-of-state destinations for Dallas, with Houston and Austin claiming 4. Dallas is clearly the best Triangle metro at developing talent. Again, San Antonio has considerable room to improve.

Beyond Texas, the top-10 outmigrant destinations are similar to the major sending metros. Washington, DC leaps to the top, displacing Los Angeles. The gap between #1 and #2 is quite large. DC attracts almost 60% more people (exemptions) than LA from San Antonio. DC is a logical choice for the talent attraction strategy primary market, something an analysis of only net migration numbers would overlook. In the next section, total migration is investigated to provide a more complete picture of San Antonio's migration connectivity profile.

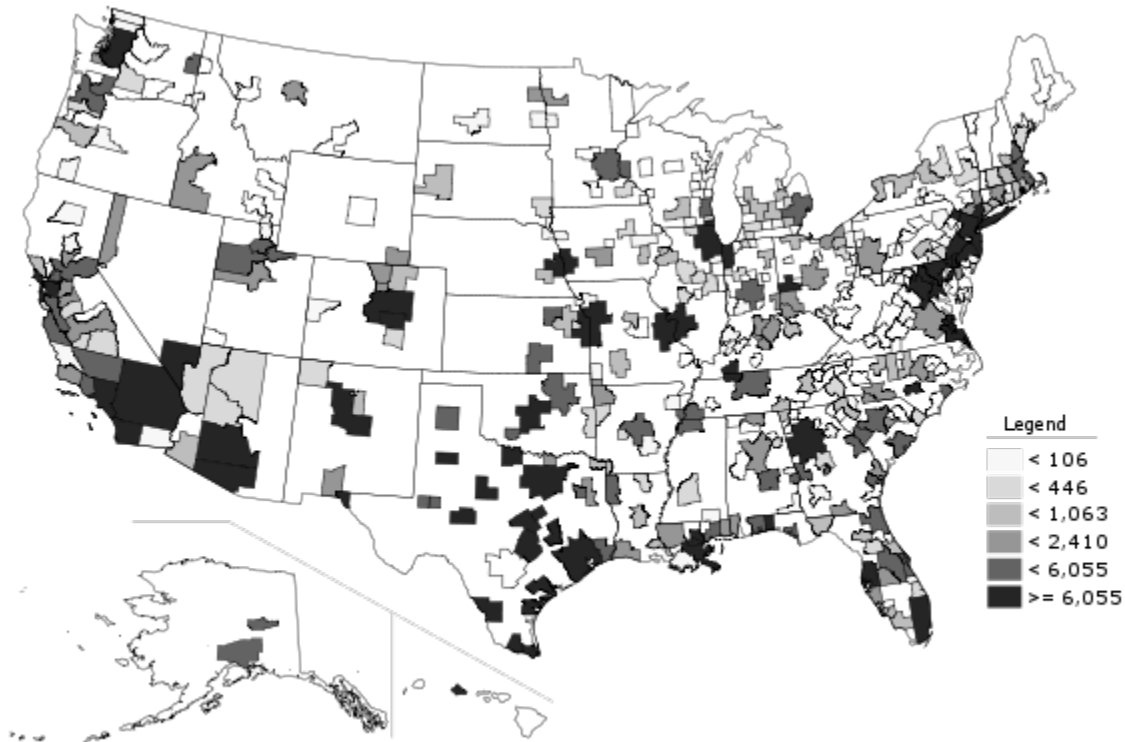
Total Migration: San Antonio's Talent Connectivity Profile

Net migration numbers hide more than they reveal. For all MSAs (including those in Texas), Washington, DC does not show up in the top-30. For metros outside of Texas, DC chimes in as the 26th most important source of population gain via migration for Greater San Antonio. Only upon disaggregating the numbers does Washington's tremendous impact rise to the surface. The differences between immigration and outmigration are not dramatic. A better measure of talent migration is to assess the total flow (immigration + outmigration). The term for this is "total migration" or "gross migration". Total migration is amount of migrant "trade" between two regions.

From well-established migration theory, we know that outflows generate return flows.² The size of the churn between two MSAs is indicative of potential immigration. Financial capital, ideas, knowledge, and trust all move easily along established pathways. Through relocation, metros develop a deeper economic connection.

From the standpoint of improving the amount of college educated workers moving to San Antonio, the top total migration markets outside of Texas represent low-hanging fruit. Most migrants adhere to path dependency. Deciding to move to a foreign place where you don't know anyone is rare, highly unlikely. People tend to follow friends and family, or return to a familiar environment (i.e. home). On the next page is a map of Greater San Antonio's total migration using IRS data from 1996-2010:

² "From the earliest work on basic laws of migration, research shows that every major migration stream generates a counterstream. Large flows from point A to point B all but guarantee partially offsetting flows from point B to point A. Though not exclusively composed of returnees, counterstreams tend to be dominated by returnees together with newcomers who are moving as part of return migration households, most typically spouses and children of returnees." From "Nonmetropolitan Outmigration Counties: Some Are Poor, Many Are Prosperous" on page 8 at <http://www.ers.usda.gov/media/135038/err107.pdf>.



San Antonio has excellent national connectivity, with strong churn with most major cities. Metros further down the urban hierarchy are more parochial. Much, if not most, of the talent trade remains in-state. The largest cities of Texas serve as a gateway to the rest of the country. Like Dallas, Austin, and Houston; San Antonio is a springboard to opportunities outside of Texas.

There are two caveats to using the total migration metric. First, proximity explains a lot of relocation. Most moves are short distances. We would expect Texas metros to dominate San Antonio’s profile. Second, the largest cities as a function of population tend to be major talent trading partners for every US metro. Size is a good predictor of total migration. Therefore, strong total migration with a small city that is far away would be remarkable. Such anomalies are worthy of further research in order to better understand the connection. Such an endeavor is beyond the scope of this project, but would be a future consideration.

Over the next two pages, top-30 “Total Migration (Exemptions) for San Antonio-New Braunfels, TX (1996-2010)” for all MSAs and those located outside Texas:

<u>MSA</u>	Total
1. Austin-Round Rock-San Marcos, TX	134523
2. Houston-Sugar Land-Baytown, TX	119895
3. Dallas-Fort Worth-Arlington, TX	113668
4. Corpus Christi, TX	47322
5. Washington-Arlington-Alexandria, DC-VA-MD-WV	34959
6. Los Angeles-Long Beach-Santa Ana, CA	34598
7. Killeen-Temple-Fort Hood, TX	28769
8. McAllen-Edinburg-Mission, TX	26191
9. El Paso, TX	26181
10. Laredo, TX	23262
11. Chicago-Joliet-Naperville, IL-IN-WI	21366
12. Phoenix-Mesa-Glendale, AZ	19772
13. San Diego-Carlsbad-San Marcos, CA	19340
14. Brownsville-Harlingen, TX	19311
15. Honolulu, HI	17050
16. Colorado Springs, CO	16815
17. Riverside-San Bernardino-Ontario, CA	16407
18. Seattle-Tacoma-Bellevue, WA	16186
19. Virginia Beach-Norfolk-Newport News, VA-NC	13626
20. New York-Northern New Jersey-Long Island, NY-NJ-PA	12633
21. Oklahoma City, OK	12547
22. Las Vegas-Paradise, NV	12458
23. Denver-Aurora-Broomfield, CO	12374
24. St. Louis, MO-IL	11989
25. Atlanta-Sandy Springs-Marietta, GA	10670
26. Baltimore-Towson, MD	10636
27. Fayetteville, NC	10473
28. Tampa-St. Petersburg-Clearwater, FL	9811
29. Lubbock, TX	9527
30. Miami-Fort Lauderdale-Pompano Beach, FL	9525

<u>MSA</u>	<u>Total</u>
1. Washington-Arlington-Alexandria, DC-VA-MD-WV	34959
2. Los Angeles-Long Beach-Santa Ana, CA	34598
3. Chicago-Joliet-Naperville, IL-IN-WI	21366
4. Phoenix-Mesa-Glendale, AZ	19772
5. San Diego-Carlsbad-San Marcos, CA	19340
6. Honolulu, HI	17050
7. Colorado Springs, CO	16815
8. Riverside-San Bernardino-Ontario, CA	16407
9. Seattle-Tacoma-Bellevue, WA	16186
10. Virginia Beach-Norfolk-Newport News, VA-NC	13626
11. New York-Northern New Jersey-Long Island, NY-NJ-PA	12633
12. Oklahoma City, OK	12547
13. Las Vegas-Paradise, NV	12458
14. Denver-Aurora-Broomfield, CO	12374
15. St. Louis, MO-IL	11989
16. Atlanta-Sandy Springs-Marietta, GA	10670
17. Baltimore-Towson, MD	10636
18. Fayetteville, NC	10473
19. Tampa-St. Petersburg-Clearwater, FL	9811
20. Miami-Fort Lauderdale-Pompano Beach, FL	9525
21. New Orleans-Metairie-Kenner, LA	9102
22. Albuquerque, NM	8802
23. San Francisco-Oakland-Fremont, CA	8131
24. Dayton, OH	7068
25. Tucson, AZ	7063
26. Crestview-Fort Walton Beach-Destin, FL	7046
27. Omaha-Council Bluffs, NE-IA	6971
28. Kansas City, MO-KS	6580
29. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	6362
30. Clarksville, TN-KY	6125

Only two of the top ten MSAs for total migration are not in Texas. (Texas metros are in boldface.) Given proximity, connectivity will be strong with other Texas urban regions regardless of policy. There is little to be gained by trying to change instate flows. These patterns are a product of geography.

As one's level of education increases, out-of-state (i.e. long distance) moves become more likely. The college educated comprises the most geographically mobile demographic cohort. Thus, talent churn with MSAs outside of Texas contains more people with a bachelor's degree or higher.

In bold are the metros that also rank in the top-10 for net migration. Washington, DC and Los Angeles are clearly San Antonio's most important talent trading partners. Given Latino domestic migration patterns (see above), LA is likely an immigrant gateway feeder to San Antonio. Such flows are typically dominated by people with less than a college degree. Furthermore, much of the outflow from San Antonio is probably return migration to Los Angeles. LA does a lot to boost San Antonio's overall population, but hurts the college educational attainment rate.

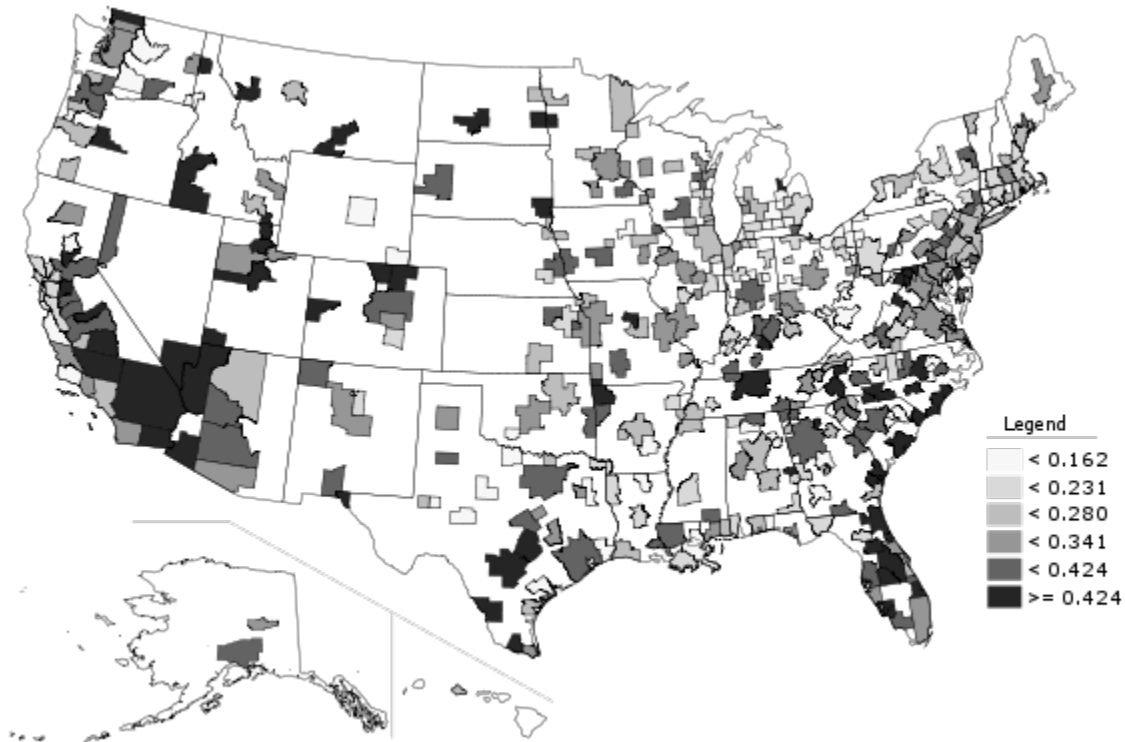
One way to test the theoretical contrast between Washington, DC and Los Angeles is to use IRS data to track the average adjusted gross income (AGI) per return for outmigration and immigration. Income is an excellent proxy for educational attainment. People with college degrees earn more than people with only a high school diploma.

For all MSAs (1996-2010), the average AGI per return for immigrants is \$39,936 (131st) for Los Angeles and \$64,144 (11th) for Washington, DC. The metro ranking is in parentheses. For outmigrants, the LA average is \$40,573 (109th) and the DC average is \$57,721 (17th). The average migrant coming from DC makes over 60% more than average migrant coming from LA. This analysis matches the above theoretical expectations. The churn between San Antonio and Washington, DC is much better educated than the one between San Antonio and Los Angeles.

Ironic Brain Gain San Antonio

In the introduction of this report, much was made of San Antonio's relatively poor college educational attainment rate. The implication is that the metro suffers from brain drain, talent leaving home for greener pastures. After extensive migration analysis, a more nuanced picture appears. On net, Los Angeles is a major factor in San Antonio's population boom. However, this flow is predominately below a bachelor's degree. Concerning Washington, DC, net migration gains are meager. Yet the DC region is one of the top exporters of people to Greater San Antonio. The average income of these migrants is much higher than those from LA. In addition, Washington has a much higher concentration of bachelor degrees (47% to 31%) for those aged 25 and over. For San Antonio, Washington, DC is a major source of college educated talent. In effect, the population gains for people with less than college degree are glossing over the substantial gains being made in college educated workforce.

The map below illustrates this point. For all metros (using American Community Survey data), the "Percent Change in Total Number of Bachelors Degree or Higher (2000-2010)":



Both San Antonio and Austin are in the top bracket ($\geq 42.4\%$, see legend). Both outpace Texas Triangle peers Dallas and Houston. Below are the numbers for the MSAs with a population over 1 million:

<u>MSA</u>	<u>2000</u>	<u>2010</u>	<u>Pct Change</u>
1. Las Vegas-Paradise, NV	156083	278387	78%
2. Riverside-San Bernardino-Ontario, CA	312257	499663	60%
3. Raleigh-Cary, NC	193937	301012	55%
4. Austin-Round Rock-San Marcos, TX	281822	429163	52%
5. Charlotte-Gastonia-Rock Hill, NC-SC	244104	370330	52%
6. San Antonio-New Braunfels, TX	232508	344247	48%
7. Jacksonville, FL	164699	241801	47%
8. Orlando-Kissimmee-Sanford, FL	268727	394026	47%
9. Nashville-Davidson--Murfreesboro--Franklin, TN	218873	311696	42%
10. Phoenix-Mesa-Glendale, AZ	515058	731643	42%
11. Tampa-St. Petersburg-Clearwater, FL	367507	513182	40%
12. Houston-Sugar Land-Baytown, TX	761798	1062750	40%
13. Louisville/Jefferson County, KY-IN	163080	224392	38%
14. Portland-Vancouver-Hillsboro, OR-WA	362687	497622	37%
15. Dallas-Fort Worth-Arlington, TX	914197	1251190	37%
16. Atlanta-Sandy Springs-Marietta, GA	853073	1161379	36%

17. Sacramento--Arden-Arcade--Roseville, CA	302310	410461	36%
18. Denver-Aurora-Broomfield, CO	482108	651661	35%
19. Indianapolis-Carmel, IN	260705	350706	35%
20. Oklahoma City, OK	167389	223506	34%
21. Richmond, VA	200444	267456	33%
22. Columbus, OH	291995	388900	33%
23. Miami-Fort Lauderdale-Pompano Beach, FL	826541	1088935	32%
24. Virginia Beach-Norfolk-Newport News, VA-NC	234120	307230	31%
25. Seattle-Tacoma-Bellevue, WA	661216	867193	31%
26. Kansas City, MO-KS	334225	437752	31%
27. Salt Lake City, UT	151452	197657	31%
28. Washington-Arlington-Alexandria, DC-VA-MD-WV	1347618	1758297	30%
29. Minneapolis-St. Paul-Bloomington, MN-WI	633112	822321	30%
30. Baltimore-Towson, MD	493842	640127	30%
31. San Diego-Carlsbad-San Marcos, CA	523511	678356	30%
32. St. Louis, MO-IL	435940	564557	30%
33. Cincinnati-Middletown, OH-KY-IN	319469	409843	28%
34. Los Angeles-Long Beach-Santa Ana, CA	2021132	2581036	28%
35. Memphis, TN-MS-AR	164846	209987	27%
36. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1037440	1319126	27%
37. Birmingham-Hoover, AL	157420	198856	26%
38. Chicago-Joliet-Naperville, IL-IN-WI	1679306	2108307	26%
39. New York-Northern New Jersey-Long Island, NY-NJ-PA	3707827	4613445	24%
40. Milwaukee-Waukesha-West Allis, WI	260981	324489	24%
41. Providence-New Bedford-Fall River, RI-MA	248934	308860	24%
42. Rochester, NY	187377	231645	24%
43. San Jose-Sunnyvale-Santa Clara, CA	455910	558519	23%
44. Pittsburgh, PA	396981	485351	22%
45. Boston-Cambridge-Quincy, MA-NH	1094850	1335276	22%
46. Hartford-West Hartford-East Hartford, CT	236794	286019	21%
47. Buffalo-Niagara Falls, NY	182144	218722	20%
48. San Francisco-Oakland-Fremont, CA	1105519	1317354	19%
49. Detroit-Warren-Livonia, MI	676906	786335	16%
50. Cleveland-Elyria-Mentor, OH	343103	394362	15%
51. New Orleans-Metairie-Kenner, LA	190609	209916	10%

The Austin and San Antonio metros are in boldface. Over the last Census decade, Greater San Antonio has one of the most impressive brain gains in the entire country (6th out of 51 largest MSAs). Without a doubt, the region strongly attracts college educated talent. That strength has been hidden under overall population growth, as exemplified by the comparison between Los Angeles and Washington, DC. (See

above talent migration analysis.) The next step is do more research for how that talent flow is impacting the local landscape in order to catalyze more immigration as well as better focus economic development strategies. For example, simple cohort analysis can be used to identify neighborhoods that are experiencing brain gain that otherwise would go unnoticed given the general population statistics.³ Once completed, various talent attraction initiatives can be devised. More evident are the neighborhoods best targeted for revitalization and greater investment. Most importantly, the story of brain gain San Antonio must be told. Businesses, venture capital firms, and entrepreneurs should be made aware of the quality of talent found in the metro area.

The research question posed at the beginning of this report is:

Greater Austin is talent rich and renowned as a hotbed of innovation. How might San Antonio become more like its neighbor?

After drilling down into the migration numbers, a different research question is deemed more appropriate:

How is San Antonio already succeeding in attracting college educated migrants?

³ Please see "Not Dead Yet: The Infill of Cleveland's Urban Core" at http://www.metrotrends.org/spotlight/Cleveland_Spotlight.cfm for more details about this approach to demographic analysis.

Appendix A

Bachelors Degree or Higher as % of Total Adult (25+) Population (2010) for MSAs over 1 Million People

MSA	2010
1. Washington-Arlington-Alexandria, DC-VA-MD-WV	47%
2. San Jose-Sunnyvale-Santa Clara, CA	45%
3. San Francisco-Oakland-Fremont, CA	43%
4. Boston-Cambridge-Quincy, MA-NH	43%
5. Raleigh-Cary, NC	41%
6. Austin-Round Rock-San Marcos, TX	39%
7. Denver-Aurora-Broomfield, CO	38%
8. Minneapolis-St. Paul-Bloomington, MN-WI	38%
9. Seattle-Tacoma-Bellevue, WA	37%
10. New York-Northern New Jersey-Long Island, NY-NJ-PA	36%
11. Baltimore-Towson, MD	35%
12. Hartford-West Hartford-East Hartford, CT	35%
13. Atlanta-Sandy Springs-Marietta, GA	34%
14. Chicago-Joliet-Naperville, IL-IN-WI	34%
15. San Diego-Carlsbad-San Marcos, CA	34%
16. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	33%
17. Portland-Vancouver-Hillsboro, OR-WA	33%
18. Rochester, NY	33%
19. Columbus, OH	33%
20. Kansas City, MO-KS	32%
21. Charlotte-Gastonia-Rock Hill, NC-SC	32%
22. Milwaukee-Waukesha-West Allis, WI	32%
23. Richmond, VA	32%
24. Dallas-Fort Worth-Arlington, TX	31%
25. Los Angeles-Long Beach-Santa Ana, CA	31%
26. Indianapolis-Carmel, IN	31%
27. St. Louis, MO-IL	30%
28. Nashville-Davidson--Murfreesboro--Franklin, TN	30%
29. Sacramento--Arden-Arcade--Roseville, CA	29%
30. Cincinnati-Middletown, OH-KY-IN	29%
31. Pittsburgh, PA	29%
32. Salt Lake City, UT	29%
33. Virginia Beach-Norfolk-Newport News, VA-NC	29%
34. Providence-New Bedford-Fall River, RI-MA	29%
35. Houston-Sugar Land-Baytown, TX	28%
36. Buffalo-Niagara Falls, NY	28%

37. Miami-Fort Lauderdale-Pompano Beach, FL	28%
38. Orlando-Kissimmee-Sanford, FL	28%
39. Cleveland-Elyria-Mentor, OH	28%
40. Oklahoma City, OK	28%
41. Detroit-Warren-Livonia, MI	27%
42. Phoenix-Mesa-Glendale, AZ	27%
43. Jacksonville, FL	27%
44. New Orleans-Metairie-Kenner, LA	27%
45. Birmingham-Hoover, AL	26%
46. Tampa-St. Petersburg-Clearwater, FL	26%
47. Louisville/Jefferson County, KY-IN	26%
48. San Antonio-New Braunfels, TX	25%
49. Memphis, TN-MS-AR	25%
50. Las Vegas-Paradise, NV	22%
51. Riverside-San Bernardino-Ontario, CA	19%

Appendix B

Bachelors Degree or Higher as % of Total Adult (25+) Population (2010)

MSA	2010
1. Boulder, CO	58%
2. Ithaca, NY	53%
3. Ann Arbor, MI	50%
4. Lawrence, KS	50%
5. Columbia, MO	49%
6. Ames, IA	48%
7. Corvallis, OR	48%
8. Washington-Arlington-Alexandria, DC-VA-MD-WV	47%
9. Fort Collins-Loveland, CO	46%
10. Iowa City, IA	46%
11. San Jose-Sunnyvale-Santa Clara, CA	45%
12. Bridgeport-Stamford-Norwalk, CT	44%
13. San Francisco-Oakland-Fremont, CA	43%
14. Madison, WI	43%
15. Boston-Cambridge-Quincy, MA-NH	43%
16. Durham-Chapel Hill, NC	43%
17. Charlottesville, VA	42%
18. Raleigh-Cary, NC	41%
19. State College, PA	41%
20. Missoula, MT	41%
21. Bloomington-Normal, IL	40%
22. Burlington-South Burlington, VT	40%
23. Austin-Round Rock-San Marcos, TX	39%
24. Barnstable Town, MA	39%
25. Trenton-Ewing, NJ	39%
26. Denver-Aurora-Broomfield, CO	38%
27. Santa Fe, NM	38%
28. Minneapolis-St. Paul-Bloomington, MN-WI	38%
29. Champaign-Urbana, IL	38%
30. Gainesville, FL	38%
31. Seattle-Tacoma-Bellevue, WA	37%
32. New York-Northern New Jersey-Long Island, NY-NJ-PA	36%
33. Fargo, ND-MN	36%
34. Rochester, MN	35%
35. Provo-Orem, UT	35%
36. Manchester-Nashua, NH	35%
37. Baltimore-Towson, MD	35%

38. Athens-Clarke County, GA	35%
39. Hartford-West Hartford-East Hartford, CT	35%
40. Huntsville, AL	34%
41. Manhattan, KS	34%
42. Tallahassee, FL	34%
43. Atlanta-Sandy Springs-Marietta, GA	34%
44. Colorado Springs, CO	34%
45. Chicago-Joliet-Naperville, IL-IN-WI	34%
46. San Diego-Carlsbad-San Marcos, CA	34%
47. Santa Cruz-Watsonville, CA	34%
48. Portland-South Portland-Biddeford, ME	34%
49. Lincoln, NE	34%
50. Albany-Schenectady-Troy, NY	33%
51. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	33%
52. Omaha-Council Bluffs, NE-IA	33%
53. Portland-Vancouver-Hillsboro, OR-WA	33%
54. Rochester, NY	33%
55. Bloomington, IN	33%
56. Worcester, MA	33%
57. Columbus, OH	33%
58. Kansas City, MO-KS	32%
59. Wilmington, NC	32%
60. Bismarck, ND	32%
61. Charlotte-Gastonia-Rock Hill, NC-SC	32%
62. Santa Rosa-Petaluma, CA	32%
63. College Station-Bryan, TX	32%
64. Bellingham, WA	32%
65. Des Moines-West Des Moines, IA	32%
66. Charleston-North Charleston-Summerville, SC	32%
67. Honolulu, HI	32%
68. Sioux Falls, SD	32%
69. New Haven-Milford, CT	32%
70. Milwaukee-Waukesha-West Allis, WI	32%
71. Logan, UT-ID	32%
72. Richmond, VA	32%
73. Billings, MT	32%
74. Springfield, IL	31%
75. Flagstaff, AZ	31%
76. Auburn-Opelika, AL	31%
77. Lexington-Fayette, KY	31%
78. Mankato-North Mankato, MN	31%
79. Olympia, WA	31%

80.	Dallas-Fort Worth-Arlington, TX	31%
81.	Naples-Marco Island, FL	31%
82.	Los Angeles-Long Beach-Santa Ana, CA	31%
83.	Poughkeepsie-Newburgh-Middletown, NY	31%
84.	San Luis Obispo-Paso Robles, CA	31%
85.	Oxnard-Thousand Oaks-Ventura, CA	31%
86.	Anchorage, AK	31%
87.	Indianapolis-Carmel, IN	31%
88.	Kalamazoo-Portage, MI	31%
89.	Lafayette, IN	30%
90.	Bend, OR	30%
91.	Norwich-New London, CT	30%
92.	Ogden-Clearfield, UT	30%
93.	Lansing-East Lansing, MI	30%
94.	Tucson, AZ	30%
95.	Blacksburg-Christiansburg-Radford, VA	30%
96.	St. Louis, MO-IL	30%
97.	Columbia, SC	30%
98.	Santa Barbara-Santa Maria-Goleta, CA	30%
99.	Nashville-Davidson--Murfreeseboro--Franklin, TN	30%
100.	Morgantown, WV	30%
101.	Holland-Grand Haven, MI	29%
102.	Sacramento--Arden-Arcade--Roseville, CA	29%
103.	Asheville, NC	29%
104.	La Crosse, WI-MN	29%
105.	Cincinnati-Middletown, OH-KY-IN	29%
106.	Albuquerque, NM	29%
107.	Syracuse, NY	29%
108.	Springfield, MA	29%
109.	Pittsburgh, PA	29%
110.	Kingston, NY	29%
111.	Salt Lake City, UT	29%
112.	Pittsfield, MA	29%
113.	Grand Forks, ND-MN	29%
114.	Knoxville, TN	29%
115.	Harrisburg-Carlisle, PA	29%
116.	Bremerton-Silverdale, WA	29%
117.	Virginia Beach-Norfolk-Newport News, VA-NC	29%
118.	Akron, OH	29%
119.	Providence-New Bedford-Fall River, RI- MA	29%

120.	Spokane, WA	28%
121.	Savannah, GA	28%
122.	Houston-Sugar Land-Baytown, TX	28%
123.	Boise City-Nampa, ID	28%
124.	Jackson, MS	28%
125.	Buffalo-Niagara Falls, NY	28%
126.	Miami-Fort Lauderdale-Pompano Beach, FL	28%
127.	Cedar Rapids, IA	28%
128.	Dubuque, IA	28%
129.	Orlando-Kissimmee-Sanford, FL	28%
130.	Lubbock, TX	28%
131.	Fairbanks, AK	28%
132.	Eugene-Springfield, OR	28%
133.	Napa, CA	28%
134.	Rapid City, SD	28%
135.	Cleveland-Elyria-Mentor, OH	28%
136.	Oklahoma City, OK	28%
137.	Montgomery, AL	28%
138.	Roanoke, VA	28%
139.	Ocean City, NJ	27%
140.	Detroit-Warren-Livonia, MI	27%
141.	Topeka, KS	27%
142.	Phoenix-Mesa-Glendale, AZ	27%
143.	St. George, UT	27%
144.	Wichita, KS	27%
145.	Winston-Salem, NC	27%
146.	Jacksonville, FL	27%
147.	Greenville-Mauldin-Easley, SC	27%
148.	North Port-Sarasota-Venice, FL	27%
149.	New Orleans-Metairie-Kenner, LA	27%
150.	Greenville, NC	27%
151.	Pocatello, ID	27%
152.	Baton Rouge, LA	27%
153.	Allentown-Bethlehem-Easton, PA-NJ	27%
154.	Harrisonburg, VA	26%
155.	Birmingham-Hoover, AL	26%
156.	Grand Rapids-Wyoming, MI	26%
157.	Tampa-St. Petersburg-Clearwater, FL	26%
158.	Little Rock-North Little Rock-Conway, AR	26%
159.	Peoria, IL	26%
160.	Eau Claire, WI	26%

161.	Appleton, WI	26%
162.	Reno-Sparks, NV	26%
163.	Sebastian-Vero Beach, FL	26%
164.	Louisville/Jefferson County, KY-IN	26%
165.	Palm Coast, FL	26%
166.	Crestview-Fort Walton Beach-Destin, FL	26%
167.	Greensboro-High Point, NC	26%
168.	San Antonio-New Braunfels, TX	25%
169.	Great Falls, MT	25%
170.	Johnson City, TN	25%
171.	Lafayette, LA	25%
172.	Hattiesburg, MS	25%
173.	Davenport-Moline-Rock Island, IA-IL	25%
174.	Fayetteville-Springdale-Rogers, AR-MO	25%
175.	Tuscaloosa, AL	25%
176.	Greeley, CO	25%
177.	Memphis, TN-MS-AR	25%
178.	Palm Bay-Melbourne-Titusville, FL	25%
179.	Grand Junction, CO	25%
180.	Duluth, MN-WI	25%
181.	Jefferson City, MO	25%
182.	Springfield, MO	25%
183.	Tyler, TX	25%
184.	Tulsa, OK	25%
185.	Waterloo-Cedar Falls, IA	25%
186.	Amarillo, TX	25%
187.	Bowling Green, KY	25%
188.	Augusta-Richmond County, GA-SC	24%
189.	Pensacola-Ferry Pass-Brent, FL	24%
190.	Las Cruces, NM	24%
191.	Dayton, OH	24%
192.	South Bend-Mishawaka, IN-MI	24%
193.	Toledo, OH	24%
194.	Bangor, ME	24%
195.	Kennewick-Pasco-Richland, WA	24%
196.	Fort Wayne, IN	24%
197.	Lancaster, PA	24%
198.	Columbus, IN	24%
199.	Muncie, IN	24%
200.	Medford, OR	24%
201.	Cape Girardeau-Jackson, MO-IL	24%
202.	Fayetteville, NC	24%
203.	Idaho Falls, ID	24%

204.	Green Bay, WI	24%
205.	Binghamton, NY	24%
206.	Gainesville, GA	24%
207.	Racine, WI	23%
208.	Erie, PA	23%
209.	Salisbury, MD	23%
210.	Cape Coral-Fort Myers, FL	23%
211.	Glens Falls, NY	23%
212.	Myrtle Beach-North Myrtle Beach- Conway, SC	23%
213.	Chattanooga, TN-GA	23%
214.	Atlantic City-Hammonton, NJ	23%
215.	Coeur d'Alene, ID	23%
216.	Vallejo-Fairfield, CA	23%
217.	Salinas, CA	23%
218.	Reading, PA	23%
219.	Cheyenne, WY	23%
220.	Salem, OR	23%
221.	Waco, TX	23%
222.	Chico, CA	22%
223.	Sioux City, IA-NE-SD	22%
224.	Punta Gorda, FL	22%
225.	Scranton--Wilkes-Barre, PA	22%
226.	Mount Vernon-Anacortes, WA	22%
227.	Oshkosh-Neenah, WI	22%
228.	Decatur, IL	22%
229.	St. Cloud, MN	22%
230.	Niles-Benton Harbor, MI	22%
231.	Jackson, TN	22%
232.	Gulfport-Biloxi, MS	22%
233.	Port St. Lucie, FL	22%
234.	York-Hanover, PA	22%
235.	Las Vegas-Paradise, NV	22%
236.	Prescott, AZ	22%
237.	Elmira, NY	22%
238.	Winchester, VA-WV	22%
239.	Utica-Rome, NY	21%
240.	Lynchburg, VA	21%
241.	Dover, DE	21%
242.	Mobile, AL	21%
243.	Rockford, IL	21%
244.	Columbus, GA-AL	21%
245.	Burlington, NC	21%

246.	Deltona-Daytona Beach-Ormond Beach, FL	21%
247.	Abilene, TX	21%
248.	Hot Springs, AR	21%
249.	Carson City, NV	21%
250.	Brunswick, GA	21%
251.	Spartanburg, SC	21%
252.	Valdosta, GA	21%
253.	Wausau, WI	20%
254.	Shreveport-Bossier City, LA	20%
255.	Bay City, MI	20%
256.	Macon, GA	20%
257.	Midland, TX	20%
258.	Warner Robins, GA	20%
259.	Hagerstown-Martinsburg, MD-WV	20%
260.	Evansville, IN-KY	20%
261.	Fresno, CA	20%
262.	Sheboygan, WI	20%
263.	Corpus Christi, TX	20%
264.	Panama City-Lynn Haven-Panama City Beach, FL	20%
265.	Killeen-Temple-Fort Hood, TX	20%
266.	Florence-Muscle Shoals, AL	20%
267.	Canton-Massillon, OH	20%
268.	Janesville, WI	20%
269.	Johnstown, PA	20%
270.	Monroe, LA	20%
271.	El Paso, TX	20%
272.	Pueblo, CO	20%
273.	Charleston, WV	20%
274.	Lake Charles, LA	20%
275.	Wheeling, WV-OH	19%
276.	Riverside-San Bernardino-Ontario, CA	19%
277.	Redding, CA	19%
278.	Youngstown-Warren-Boardman, OH-PA	19%
279.	San Angelo, TX	19%
280.	Sandusky, OH	19%
281.	Flint, MI	19%
282.	Wenatchee-East Wenatchee, WA	19%
283.	Sherman-Denison, TX	19%
284.	Lebanon, PA	19%
285.	Kokomo, IN	19%
286.	St. Joseph, MO-KS	19%

287.	Jonesboro, AR	19%
288.	Elizabethtown, KY	19%
289.	Joplin, MO	19%
290.	Clarksville, TN-KY	19%
291.	Hinesville-Fort Stewart, GA	19%
292.	Rome, GA	19%
293.	Kingsport-Bristol-Bristol, TN-VA	19%
294.	Lewiston-Auburn, ME	19%
295.	Wichita Falls, TX	18%
296.	Monroe, MI	18%
297.	Lewiston, ID-WA	18%
298.	Williamsport, PA	18%
299.	Fond du Lac, WI	18%
300.	Jacksonville, NC	18%
301.	Casper, WY	18%
302.	Lakeland-Winter Haven, FL	18%
303.	Lawton, OK	18%
304.	Saginaw-Saginaw Township North, MI	18%
305.	Jackson, MI	18%
306.	Stockton, CA	18%
307.	Florence, SC	18%
308.	Anderson, SC	18%
309.	Terre Haute, IN	18%
310.	Michigan City-La Porte, IN	18%
311.	Hickory-Lenoir-Morganton, NC	18%
312.	Yuba City, CA	17%
313.	Pascagoula, MS	17%
314.	Battle Creek, MI	17%
315.	Springfield, OH	17%
316.	Anderson, IN	17%
317.	Alexandria, LA	17%
318.	Laredo, TX	17%
319.	Cleveland, TN	17%
320.	Elkhart-Goshen, IN	17%
321.	Owensboro, KY	16%
322.	Dothan, AL	16%
323.	Lima, OH	16%
324.	Ocala, FL	16%
325.	Altoona, PA	16%
326.	Muskegon-Norton Shores, MI	16%
327.	Texarkana, TX-Texarkana, AR	16%
328.	Huntington-Ashland, WV-KY-OH	16%
329.	Kankakee-Bradley, IL	16%

330.	Modesto, CA	16%
331.	Fort Smith, AR-OK	16%
332.	Albany, GA	16%
333.	McAllen-Edinburg-Mission, TX	16%
334.	Longview, TX	16%
335.	Sumter, SC	16%
336.	Yakima, WA	16%
337.	Victoria, TX	15%
338.	Parkersburg-Marietta-Vienna, WV-OH	15%
339.	Madera-Chowchilla, CA	15%
340.	Goldsboro, NC	15%
341.	Farmington, NM	15%
342.	Beaumont-Port Arthur, TX	15%
343.	Bakersfield-Delano, CA	15%
344.	Decatur, AL	15%
345.	Cumberland, MD-WV	15%
346.	Anniston-Oxford, AL	15%
347.	Mansfield, OH	15%
348.	Danville, VA	15%
349.	Steubenville-Weirton, OH-WV	14%
350.	Longview, WA	14%
351.	Brownsville-Harlingen, TX	14%
352.	Morristown, TN	14%
353.	Rocky Mount, NC	14%
354.	Pine Bluff, AR	14%
355.	Yuma, AZ	14%
356.	Danville, IL	13%
357.	Visalia-Porterville, CA	13%
358.	El Centro, CA	13%
359.	Vineland-Millville-Bridgeton, NJ	13%
360.	Dalton, GA	13%
361.	Odessa, TX	13%
362.	Houma-Bayou Cane-Thibodaux, LA	13%
363.	Gadsden, AL	13%
364.	Lake Havasu City-Kingman, AZ	13%
365.	Merced, CA	12%
366.	Hanford-Corcoran, CA	11%