



WHERE WE STAND UPDATE: MANUFACTURING SECTOR

Since its first publication in 1990, Where We Stand has come to be recognized as an authoritative source of information about the competitive position of the St. Louis region in the national marketplace. We track over 100 variables that together tell a story about the health of our region compared to 34 peer MSAs.¹ These regions are our domestic competition and provide a consistent yardstick to gauge “Where We Stand.” Now in its sixth edition, Where We Stand is issued about every three years with periodic updates in between each publication. These briefings provide an opportunity to update the St. Louis region’s standing with new data or provide further insight on a specific topic. This issue builds on the data included in the WWS sixth edition, providing a greater understanding of the manufacturing sector in the St. Louis region and introduces new indicators on manufacturing exports.

Introduction

Despite the dramatic loss in manufacturing jobs over the past three decades, manufacturing is a vital contributor to the national and St. Louis regional economies. The manufacturing sector provides employment to an estimated 12.0 million people in the U.S. and 111,200 people in the St. Louis region.² Over the last 40 years, the number of manufacturing jobs has decreased substantially, affecting the economy and the lives of many families. In recent years, however, the number of manufacturing jobs in the region has increased. There is evidence that the U.S. is once again competitive in manufacturing, and that St. Louis is poised to benefit from the rebound in American manufacturing. This *Where We Stand Update* compares the St. Louis region’s manufacturing industry to that of 34 peer regions and examines the importance of manufacturing to the regional economy.

Manufacturing in the St. Louis Region

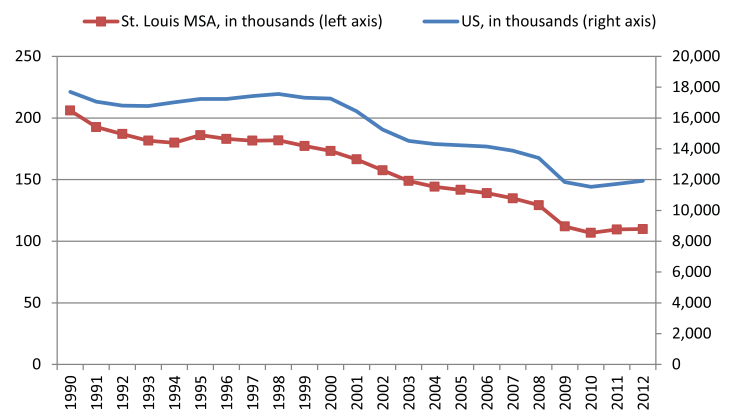
- Continues to provide high paying jobs with average salary of \$79k (2011)
- Contributes to 24 percent of Gross Domestic Product (2010)
- Accounts directly for 9 percent of jobs in the region (Feb 2012)
- Accounts for more than half of the region’s foreign exports

¹ The U.S. Census Bureau defines a MSA, or metropolitan statistical area, as “that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. MSAs comprise one or more counties...the Office of Management and Budget (OMB) defines metropolitan areas for purposes of collecting, tabulating, and publishing federal data. Metropolitan area definitions result from applying published standards to Census Bureau data.”

The Fall and Rise of Manufacturing Jobs

In 1969, manufacturing jobs accounted for 26 percent of employment in the St. Louis region with 292,000 jobs in the industry. The number of jobs steadily decreased to a low of 106,800 jobs in 2010. Over the last couple of years, the number of jobs increased to an estimated 111,200 jobs, as of July 2013. Despite the recent increase, the number of manufacturing jobs remains below what it was before the recession (134,900 in 2007), and the percentage of workers engaged in manufacturing (8.5 percent in 2012) is still much lower than historical levels.³

Chart 1: Manufacturing Jobs in United States and St. Louis MSA, 1990 to 2012



Since 1990, manufacturing employment in the St. Louis MSA increased annually in only four years: 1995, 1998, 2011, and 2012. The 2.6 percent increase from 2010 (106,800) to 2011 (109,600) was the largest increase in manufacturing employment in the region since 1995, when there was a 3.4 percent increase. The other

² Bureau of Labor Statistics, July 2013.

³ Bureau of Labor Statistics, July 2013.

increases were minimal with a 0.2 percent rise in 1998 and 0.3 percent in 2012. The region continues to see some growth with an additional increase of 1.2 percent in the first six months of 2013.

The drop and recent increase in manufacturing jobs is not unique to the St. Louis region. As seen in Chart 2, the percent change in manufacturing employment in the St. Louis region tracks the national trend fairly closely. The recent increase in manufacturing employment followed the largest decrease in decades, for both the region and the nation. In 2009, manufacturing employment decreased 13.4 percent for the St. Louis region and 11.6 percent for the United States. The following year, additional decreases occurred in both geographies; -4.6 percent for St. Louis and -2.7 percent for the United States. Over the next two years (2011 and 2012) manufacturing employment increased 2.9 percent for the St. Louis region and 3.4 percent for the nation.

Manufacturing is....

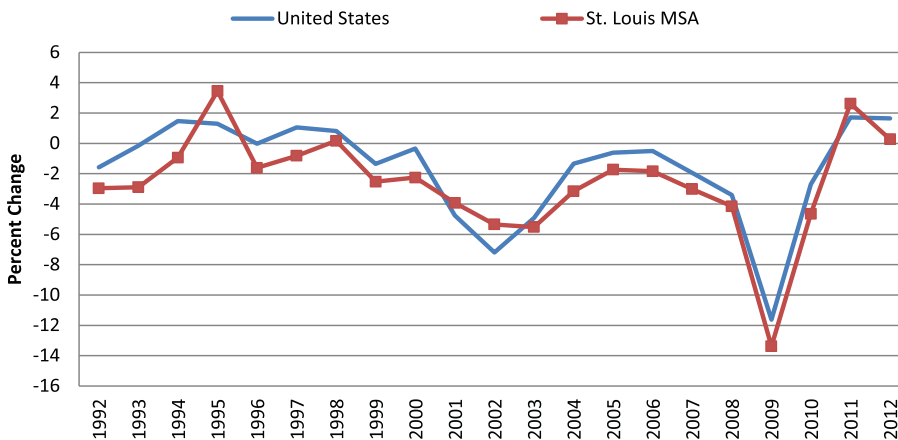
The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector.

Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

~ North American Industry Classification System

Chart 2: Manufacturing Employment, Percent Change, United States and St. Louis MSA, 1992 to 2012



Source: Bureau of Labor Statistics

Although the pattern is not unique to St. Louis, the region experienced one of the largest decreases in manufacturing employment among the 35 peers; ranking 30th in percent change from 1992 to 2012. Over this 20-year period, the St. Louis MSA experienced a drop in manufacturing employment from 187,000 employees to 109,900 employees. This decrease also dropped the region's ranking in total manufacturing employment from 12th to 17th. Almost all regions lost manufacturing employment over this time period with only three regions—Houston, Salt Lake City and San Antonio—experiencing increases in total manufacturing employment. Two of these regions—Salt Lake City and San Antonio—continue to have low total number of manufacturing jobs, ranking 30th and 33rd, respectively.

Looking at the patterns of manufacturing employment in the United States over the past few decades, a Brookings study concluded that there has been a shift in manufacturing back to the Midwest. The Northeast and Midwest have traditionally been the hubs for manufacturers, but between 1980 and 2000, these regions lost manufacturing jobs while the South and West saw gains. From 2000 to 2010, this shift halted with all regions losing manufacturing jobs and the South and Midwest seeing the same percent loss as the nation as a whole.⁴

MANUFACTURING EMPLOYMENT

In thousands, 1992

1	Los Angeles	901.2
2	New York	751.5
3	Chicago	644.4
4	Detroit	343.7
5	Boston	315.2
6	Philadelphia	311.6
7	Dallas	309.5
8	Seattle	222.2
9	Minneapolis	213.3
10	Houston	203.4
Average		199.4
11	Cleveland	196.4
12	St. Louis	187.0
13	Atlanta	181.1
14	San Francisco	161.9
15	Milwaukee	154.2
16	Cincinnati	148.8
17	Miami	148.2
18	Phoenix	129.5
19	Pittsburgh	122.2
20	Portland	120.9
21	Charlotte	115.5
22	San Diego	111.8
23	Baltimore	111.8
24	Indianapolis	109.3
25	Columbus	92.7
26	Nashville	88.9
27	Kansas City	88.6
28	Louisville	87.6
29	Denver	79.7
30	Washington DC	66.4
31	Memphis	64.5
32	Austin	53.7
33	Salt Lake City	49.0
34	Oklahoma City	46.0
35	San Antonio	45.6

Source: Bureau of Labor Statistics

MANUFACTURING EMPLOYMENT

In thousands, 2012

1	Los Angeles	523.5
2	Chicago	413.7
3	New York	357.9
4	Dallas	257.2
5	Houston	243.2
6	Detroit	219.0
7	Boston	193.6
8	Seattle	184.1
9	Philadelphia	182.6
10	Minneapolis	181.0
11	Atlanta	148.2
Average		137.2
12	Cleveland	123.0
13	Milwaukee	119.5
14	Phoenix	117.0
15	San Francisco	116.1
16	Portland	114.2
17	St. Louis	109.9
18	Cincinnati	105.8
19	San Diego	93.4
20	Pittsburgh	89.7
21	Indianapolis	83.1
22	Miami	76.9
23	Kansas City	72.1
24	Charlotte	70.7
25	Louisville	70.5
26	Nashville	67.3
27	Columbus	65.9
28	Denver	63.2
29	Baltimore	59.1
30	Salt Lake City	55.2
31	Austin	50.9
32	Washington DC	48.7
33	San Antonio	46.8
34	Memphis	44.1
35	Oklahoma City	35.0

Source: Bureau of Labor Statistics

PERCENT CHANGE IN MANUFACTURING EMPLOYMENT 1992-2012

1	Houston	19.6
2	Salt Lake City	12.7
3	San Antonio	2.6
4	Austin	-5.2
5	Portland	-5.5
6	Phoenix	-9.7
7	Minneapolis	-15.1
8	San Diego	-16.5
9	Dallas	-16.9
10	Seattle	-17.1
11	Atlanta	-18.2
12	Kansas City	-18.6
13	Louisville	-19.5
14	Denver	-20.7
15	Milwaukee	-22.5
16	Oklahoma City	-23.9
17	Indianapolis	-24.0
18	Nashville	-24.3
Average		-24.4
19	Pittsburgh	-26.6
20	Washington DC	-26.7
21	San Francisco	-28.3
22	Cincinnati	-28.9
23	Columbus	-28.9
24	Memphis	-31.6
25	Chicago	-35.8
26	Detroit	-36.3
27	Cleveland	-37.4
28	Boston	-38.6
29	Charlotte	-38.8
30	St. Louis	-41.2
31	Philadelphia	-41.4
32	Los Angeles	-41.9
33	Baltimore	-47.1
34	Miami	-48.1
35	New York	-52.4

Source: Bureau of Labor Statistics

4 Helper, Susan, Timothy Krueger, and Howard Wial; *Locating American Manufacturing: Trends in the Geography of Production*; Metropolitan Policy Program at Brookings, April 2012.

PERCENT CHANGE
IN MANUFACTURING
EMPLOYMENT
2010-2012

1	Detroit	17.5
2	Oklahoma City	12.9
3	Houston	11.9
4	Louisville	11.7
5	Nashville	11.4
6	Seattle	10.3
7	Charlotte	7.4
8	Austin	6.9
9	Portland	6.7
10	Milwaukee	6.0
11	San Antonio	5.9
12	Phoenix	5.7
13	Cleveland	5.6
14	Salt Lake City	5.5
15	Minneapolis	4.5
16	Columbus	4.1
Average		3.9
17	Atlanta	3.9
18	Denver	3.4
19	St. Louis	2.9
20	Pittsburgh	2.6
21	Cincinnati	2.4
22	Dallas	2.4
23	Chicago	2.3
24	Indianapolis	1.5
25	Miami	1.2
26	San Diego	0.5
27	Los Angeles	0.0
28	Boston	-0.4
29	San Francisco	-0.5
30	Memphis	-1.3
31	Kansas City	-1.4
32	New York	-2.1
33	Philadelphia	-2.5
34	Baltimore	-4.7
35	Washington DC	-6.5

Source: Bureau of Labor Statistics

The most recent data is even more positive for the Midwest with nearly half of all manufacturing jobs gains from 2010 to 2012 occurring in that region of the US.⁵ Metro peer regions in the Northwest, South and Midwest saw gains in manufacturing employment in the last two years. Of the regions that experienced over 10 percent growth, three (Houston, Detroit and Seattle) have some of the largest numbers of total manufacturing jobs while the other three are below average in the total number of jobs in the sector. The increase experienced in the St. Louis region from 2010 to 2012 was the 19th largest among the peer regions, just below the average increase of 3.9 percent.

Importance of the Manufacturing Industry

Despite the decline in manufacturing employment, the sector remains a key component of the United States and the St. Louis regional economies. Not only does the sector continue to provide a large number of jobs, it also has substantial positive impacts on the economy.

- Manufacturing jobs are relatively high paying, particularly for less formally educated workers.
- Manufacturers account for 68 percent of domestic research and development spending by US companies.⁶
- Over half of all U.S. foreign exports are attributed to the manufacturing sector.
- For every dollar in final sales of manufactured products, \$1.34 is generated in other sectors, compared to 55 and 58 cents for retail and wholesale trade, respectively.
- Manufacturing provides 11.9 million direct U.S. jobs and supports an additional 5.8 million jobs in other sectors.⁷



5 Helper, Susan, Timothy Krueger, and Howard Wial; *Locating American Manufacturing: Trends in the Geography of Production*; Metropolitan Policy Program at Brookings, April 2012.

6 Helper, Susan, Timothy Krueger, and Howard Wial, *Why Does Manufacturing Matter? Which Manufacturing Matters?*, Metropolitan Policy Program at

Brookings, February 2012 and Facts about Manufacturing, Manufacturing Institute, November 2012.

7 Helper, November 2012.

Employment Remains High and High Paying

For the St. Louis region, the importance of manufacturing to the economy is illustrated by the percent of total employment the industry encompasses. The MSA's ranking on this indicator slipped, but the region remains above average, ranking 16th among the peers in 2012 with 8.5 percent of total employment in the manufacturing sector. All regions saw a decrease in the proportion of their employment consisting of manufacturing jobs. St. Louis experienced one of the largest decreases with a 7.5 percentage point decrease. Yet, St. Louis remains above average among the peer regions with a larger proportion of employment attributed to manufacturing than 19 of the peer regions.

MANUFACTURING, PERCENT OF TOTAL EMPLOYMENT, 1992

1	Charlotte	20.7
2	Milwaukee	20.3
3	Cleveland	19.6
4	Los Angeles	18.3
5	Detroit	18.2
6	Cincinnati	17.2
7	Louisville	17.0
8	Seattle	16.7
9	Nashville	16.5
10	Chicago	16.3
11	Portland	16.2
12	St. Louis	16.0
13	Indianapolis	15.9
14	Dallas	15.4
15	Minneapolis	15.1
16	Boston	15.0
Average		13.6
17	Memphis	13.0
18	Philadelphia	13.0
19	Phoenix	12.7
20	Austin	12.7
21	Columbus	12.6
22	Salt Lake City	12.3
23	San Diego	11.8
24	Pittsburgh	11.8
25	Houston	11.3
26	Atlanta	11.1
27	Kansas City	10.5
28	Oklahoma City	10.4
29	Baltimore	10.2
30	New York	10.2
31	San Francisco	9.1
32	Denver	9.0
33	Miami	8.9
34	San Antonio	8.1
35	Washington DC	3.0

Source: Bureau of Labor Statistics

MANUFACTURING, PERCENT OF TOTAL EMPLOYMENT, 2012

1	Milwaukee	14.5
2	Cleveland	12.1
3	Detroit	12.0
4	Louisville	11.5
5	Portland	11.3
6	Seattle	10.8
7	Cincinnati	10.6
8	Minneapolis	10.2
9	Los Angeles	9.9
10	Chicago	9.5
11	Indianapolis	9.1
12	Houston	9.0
13	Salt Lake City	8.6
14	Nashville	8.6
15	Dallas	8.5
16	St. Louis	8.5
17	Charlotte	8.3
Average		8.0
18	Boston	7.7
19	Pittsburgh	7.7
20	San Diego	7.4
21	Memphis	7.3
22	Kansas City	7.2
23	Columbus	6.9
24	Philadelphia	6.7
25	Phoenix	6.7
26	Atlanta	6.3
27	Austin	6.2
28	Oklahoma City	5.9
29	San Francisco	5.9
30	San Antonio	5.3
31	Denver	5.1
32	Baltimore	4.5
33	New York	4.2
34	Miami	3.4
35	Washington DC	1.6

Source: Bureau of Labor Statistics

CHANGE IN THE PORTION OF TOTAL EMPLOYMENT THAT WAS MANUFACTURING 1992-2012

1	Washington DC	-1.4
2	Houston	-2.3
3	San Antonio	-2.7
4	San Francisco	-3.2
5	Kansas City	-3.3
6	Salt Lake City	-3.7
7	Denver	-3.9
8	Pittsburgh	-4.0
9	San Diego	-4.4
10	Oklahoma City	-4.5
11	Atlanta	-4.8
12	Minneapolis	-4.8
13	Portland	-4.9
14	Louisville	-5.4
15	Miami	-5.5
Average		-5.6
16	Columbus	-5.6
17	Memphis	-5.7
18	Milwaukee	-5.7
19	Baltimore	-5.8
20	Seattle	-6.0
21	New York	-6.0
22	Phoenix	-6.0
23	Detroit	-6.3
24	Philadelphia	-6.3
25	Austin	-6.5
26	Cincinnati	-6.7
27	Chicago	-6.8
28	Indianapolis	-6.8
29	Dallas	-6.9
30	Boston	-7.2
31	Cleveland	-7.5
32	St. Louis	-7.5
33	Nashville	-8.0
34	Los Angeles	-8.3
35	Charlotte	-12.3

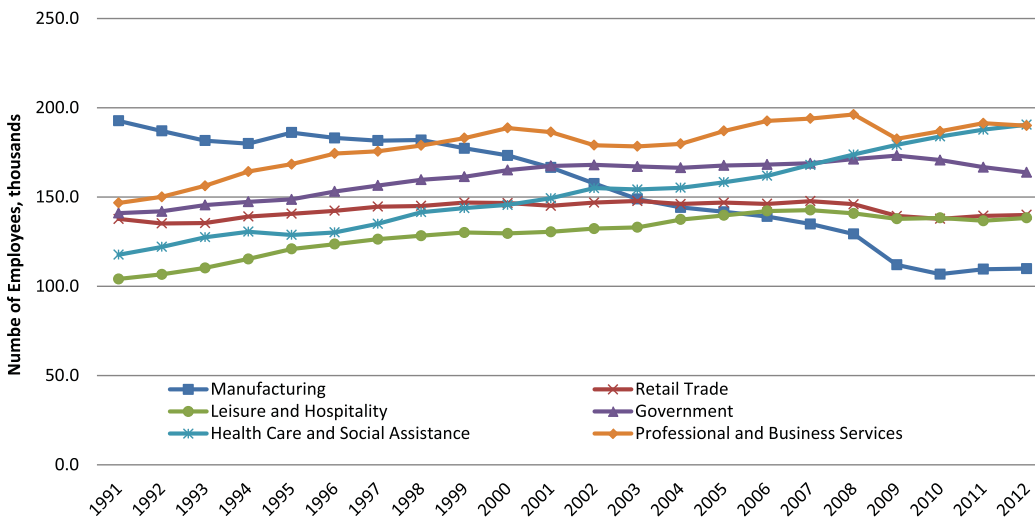
Source: Bureau of Labor Statistics

Although manufacturing remains one of the largest employment sectors in the St. Louis region, it went from the largest in the 1990s to the sixth largest. Over the past two decades, manufacturing, leisure and hospitality, health care and social assistance, retail trade, government, and professional and business services sectors each maintained employment of over 100,000 persons in the region (See Chart 3).

With average earnings per employee of \$79,851 in 2011, manufacturing jobs are among the highest paying jobs in the region, particularly among the top six employing industries. Comparatively, retail trade has an average earnings of \$27,925, health care \$47,925, and government \$65,131. In the St. Louis region,

manufacturing has seen one of the largest increases in the average compensation per employee with a 9.6 percent increase over the past decade. In a 2012 report, the Brookings Institution looked at the type of manufacturing jobs in the United States for the largest 100 metropolitan areas. The portion of the St. Louis region's manufacturing jobs that are in "very high tech" and "moderately high tech" industries is 40.1 percent, compared to 34.7 percent for the U.S. as a whole. On average, jobs in these industries pay two to three times as much as all other manufacturing jobs.⁸

Chart 3: Six Largest Industries, St. Louis MSA 1992 to 2012



Source: Bureau of Labor Statistics

**Table 1: Compensation per Full Time and Part Time Employee
St. Louis MSA, 2011 Dollars**

NAICS Industry	2001 (2011 Dollars)	2011 (Dollars)	Percent Change 2001 to 2011
Government and government enterprises	56,629	65,131	15.0
Management of companies and enterprises	105,169	120,105	14.2
Administrative and waste management services	29,629	33,043	11.5
Health care and social assistance	43,662	47,925	9.8
Manufacturing	72,837	79,851	9.6
Average compensation per job for all wage and salary employees	55,062	58,822	6.8
Wholesale trade	71,366	74,999	5.1
Professional, scientific, and technical services	58,084	58,762	1.2
Finance and insurance	56,081	55,655	-0.8
Retail trade	28,268	27,925	-1.2
Accommodation and food services	19,750	19,038	-3.6
Arts, entertainment, and recreation	30,278	28,675	-5.3
Educational services	40,636	35,838	-11.8
Real estate and rental and leasing	17,733	12,738	-28.2

Note: Compensation includes wage and salary disbursements and supplements to wages and salaries (including employer contributions for employee pension and insurance funds and for government social insurance)

Source: Bureau of Economic Analysis⁹



⁹ The source for compensation data is the Bureau of Economic Analysis (BEA) while the remainder of employment data is from the Bureau of Labor Statistics (BLS). Both bureaus provide employment estimates. BEA is considered more comprehensive while BLS provides more timely data. Both provide consistent descriptions of recent employment trends.

The Role of Exports

Exports are a key component to the manufacturing industry as well as a strong indicator of economic competitiveness.

Manufacturing comprises an estimated 61 percent of U.S. exports and US manufacturing exports support an estimated 6.4 million jobs (2.5 million directly and 3.9 million non-manufacturing jobs).

In 2011, \$18.5 billion worth of goods and services were produced in the St. Louis MSA and exported to other countries. Manufacturing was the largest exporting sector, accounting for 62 percent (\$11.6 billion) of total foreign exports (See Chart 4). Wholesale trade and management of companies and enterprises are the next two largest exporting sectors, each accounting for about 8 percent of total foreign exports for the MSA.

The largest two exporting manufacturing industries for the MSA are transportation equipment and chemical (See Table 2). Within the transportation equipment industry, aircraft (\$2.8 billion) and light truck and utility vehicle (\$618 million) manufacturing account for a majority (91 percent combined) of the value of transportation equipment exports. For chemical manufacturing, plastics and resin (\$385 million) comprise the largest portion of the sales but medicinal and botanical, soap and cleaning compound, pharmaceutical preparation, and petrochemical manufacturing also each account for over \$200 million in sales.

Table 2: Manufacturing Share of Foreign Exports, St. Louis MSA, 2011

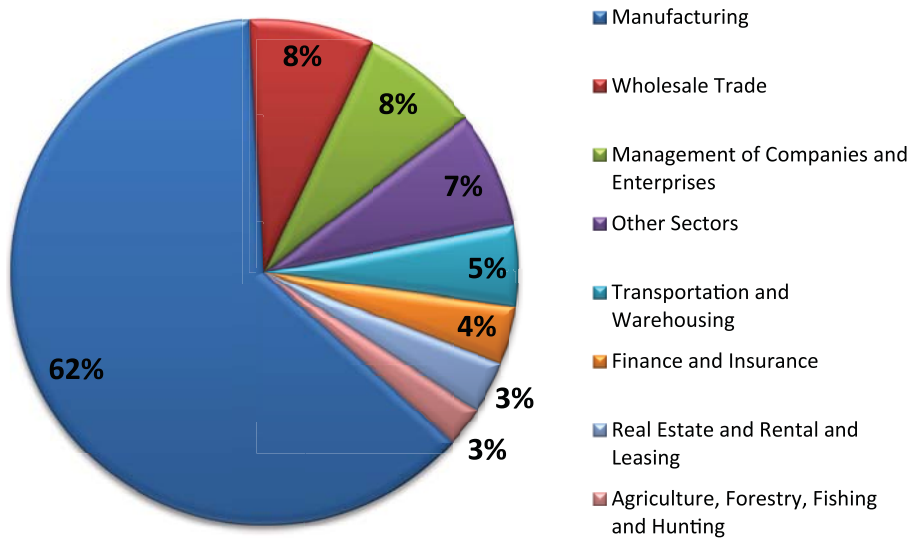
Manufacturing Industry Description	Foreign Exports 2011 (Dollars)	Percent of Total Foreign Exports
Transportation Equipment	3,812,992,625	20.6
Chemical	2,056,846,212	11.1
Primary Metal	1,288,593,051	7.0
Petroleum and Coal Products	1,079,007,171	5.8
Machinery	954,814,000	5.2
Fabricated Metal Product	380,144,184	2.1
Food	335,795,839	1.8
Miscellaneous Manufacturing	274,379,760	1.5
Beverage and Tobacco Product	250,703,165	1.4
Electrical Equipment and Appliance	245,231,726	1.3
Computer and Electronic Product	235,934,329	1.3
Plastics and Rubber Products	232,201,016	1.3
Foreign Exports - All Manufacturing	11,570,966,948	62.4
MSA Total Exports	18,529,732,507	

Source: Implan, 2011

10 Istrate, Emilia and Nicholas Marchio, Export Nation 2012: How U.S. Metropolitan Areas Are Driving National Growth, Brookings Institution, 8 March 2012. <http://www.brookings.edu/research/reports/2012/03/08-exports#4>

11 <http://trade.gov/press/press-releases/2013/export-factsheet-september2013-090413.pdf>

Chart 4: Foreign Exports by Sector, St. Louis MSA, 2011



Source: Implan, 2011

Tides are Changing in the Manufacturing Industry and St. Louis is Poised to Increase Manufacturing Employment

The recent upswing in manufacturing jobs in the U.S. can partially be attributed to an economy that is rebuilding and bringing jobs back that were lost during the recession but there are also signs that the U.S. is regaining its competitive edge in manufacturing. There are several reasons that are given for this resurgence, including:^{12 13 14}

- Rising oil prices and cheaper natural gas ~ The United States has increased energy production, making natural gas plentiful and much more affordable in the U.S. than in Europe or Asia. Oil prices in China have increased five-fold since 2000.
- Higher wages in China and lower wages and higher productivity in U.S. ~ it is estimated that the wage gap between the U.S. and China will close from 22 times higher wages in the U.S. in 2000 to just four times as high by 2015. This along with U.S.'s higher gains in productivity and lower worker turnover rates are making the labor force in the U.S. more competitive.
- Rising land prices in China ~ to secure lower industrial land prices in China, companies will need to move

inland, which will add to transportation costs. Industrial land in some U.S. states is much lower. For example, the national average in China is \$10.22 per square foot compared to \$1.86 to \$7.43 per square foot in Alabama and \$3.96 in the St. Louis region.¹⁵

- Leader in research and development ~ The U.S. remains a leader in global innovation with 31 percent of total global spending on research and development, 16 of the world's top 20 universities and U.S. organizations owning more than one-third of all patents globally. Additionally, the U.S. provides companies with certainty that their intellectual property and property rights will be protected. These factors are important not only for the research and development jobs but also for production jobs because companies are realizing the benefits of having their research and development operations close to their operations.
- Strong interest from the administration in creating a national network of manufacturing innovation institutes ~ President Barack Obama has expressed support for creating 15 manufacturing institutes in the country that will help companies, particularly small manufacturers, capitalize on cutting-edge technologies.

12 Sirkin, Harold L., Michael Zinser, and Douglas Hohner; *Made in America, Again: Why Manufacturing will Return to the U.S.*, Boston Consulting Group; August 2011.

13 Welsch, Hugh, *Why Manufacturing Jobs are Returning to America for the First Time in Decades*, 27 February 2013; accessed on 1 March 2013 at http://www.businessinsider.com/manufacturing-jobs-returning-to-america-2013-2?goback=%2Egde_3698300_member_218197156

14 Prah, Pamela M., *States in Recovery: Manufacturing*; Stateline: The Daily News Service of The Pew Charitable Trusts, 27 February 2013; accessed on 1 March 2013 at <http://www.pewstates.org/projects/stateline/headlines/states-in-recovery-manufacturing-85899454454>

15 St. Louis Industrial Market Report, Research and Forecast, Colliers International, Q2 2013.

The Future of Manufacturing in the St. Louis Region

If manufacturing jobs are returning to the United States in the long term, the St. Louis region has several assets that make it poised to capture some of that growth. The region's history in manufacturing means the workforce is skilled and the infrastructure is in place to support further training and education for these jobs. The strong base in manufacturing, particularly in aerospace and defense and food products, means there is opportunity to spur growth that is dependent on clustering. The region's central location and highly developed integrated transportation infrastructure—the confluence of three major rivers, access to six Class 1 railroads, four major interstates and the second largest inland port in the US—are seen as tremendous assets for the manufacturing sector.

The St. Louis Regional Chamber and the Southwestern Illinois Economic Development Network both recently initiated efforts with specific target areas that seek to build on these manufacturing assets. Additionally, regional leaders are coming together as a result of a regional freight study to better coordinate transportation and land use to facilitate growth of freight in the region which will support a growth in the manufacturing sector.



WHERE WE STAND UPDATE: TRANSPORTATION EMISSIONS

Since its first publication in 1990, *Where We Stand* has come to be recognized as an authoritative source of information about the competitive position of the St. Louis region in the national marketplace. We track over 100 variables that together tell a story about the health of our region compared to 34 peer MSAs.¹ These regions are our domestic competition and provide a consistent yardstick to gauge “Where We Stand.” Now in its sixth edition, *Where We Stand* is issued about every three years with periodic updates in between each publication. These briefings provide an opportunity to update the St. Louis region’s standing with new data or provide further insight on a specific topic. This issue introduces new indicators, comparing St. Louis to the 34 peer regions on vehicle miles traveled (VMT) and transportation-related emissions.

Transportation-Related Emissions

According to the EPA, transportation accounts for approximately 27 percent of all greenhouse gas (GHG) emissions nationwide, making it the second largest contributing sector.² The industrial sector is the largest, contributing 30 percent, with residential, commercial, and agriculture comprising the remaining 43 percent. Over the last 20 years, the transportation sector had the highest absolute increase in emissions of the five sectors.³

In the St. Louis region, transportation-related emissions are substantial. The average St. Louis metro resident emitted 1.71 tons of carbon dioxide from highway transportation in 2005, which is higher than the average of the 100 largest metro areas (1.31 tons per capita) and higher than the national average (1.44 tons per capita).⁴

Based on estimates of travel by residents on all roads in 2007, the St. Louis region had 8.54 tons of transportation-related GHG emissions per household. In comparison to our 34 peer regions, the St. Louis MSA ranks 14th, which is 0.15 tons above the peer average of 8.29 tons per household. This measure of GHG emissions is based on national average fuel efficiency and average emissions factor per gallon of gasoline.

Greenhouse gases are compounds that prevent heat from escaping the earth’s atmosphere, and are created by both natural and man-made processes. The primary types of GHG emissions are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O).⁵ Each gas has a unique ability to trap heat, which is measured by its Global Warming Potential (GWP). Total GHG emissions are measured in carbon dioxide equivalents, which are calculated by converting each gas according to its GWP.

1 The U.S. Census Bureau defines a MSA, or metropolitan statistical area, as “that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. MSAs comprise one or more counties...the Office of Management and Budget (OMB) defines metropolitan areas for purposes of collecting, tabulating, and publishing federal data. Metropolitan area definitions result from applying published standards to Census Bureau data.”

2 *Fast Facts: U.S. Transportation Sector Greenhouse Gas Emissions 1990 – 2010*, Office of Transportation and Air Quality, EPA, 2012.

3 The EPA study provides one analysis of GHG emissions. Other methods and parameters are used to analyze GHG emissions, which produce different results.

4 Brown, Marilyn A., Frank Southworth, and Andrea Sarzynski. *Shrinking the Carbon Footprint of Metropolitan America*. Metropolitan Policy Program at Brookings, 2008.

5 *Inventory of U.S. Greenhouse Emissions 1990 – 2010*, EPA, 2012.

Transportation GHG Emissions Tons per Household, 2007

1	Nashville	9.43
2	Atlanta	9.43
3	Charlotte	9.15
4	Kansas City	8.97
5	Austin	8.89
6	Cincinnati	8.89
7	Indianapolis	8.78
8	Columbus	8.67
9	Minneapolis	8.65
10	Oklahoma City	8.62
11	Dallas	8.58
12	Salt Lake City	8.56
13	Memphis	8.55
14	St. Louis	8.54
15	Houston	8.48
16	Louisville	8.44
17	Washington, DC	8.39
18	San Diego	8.36
19	San Antonio	8.35
Average		8.29
20	Phoenix	8.27
21	Baltimore	8.25
22	Pittsburgh	8.20
23	Detroit	8.12
24	Portland	8.11
25	Boston	8.05
26	Milwaukee	8.01
27	Seattle	8.00
28	Cleveland	7.95
29	Philadelphia	7.67
30	Chicago	7.66
31	Denver	7.48
32	Miami	7.45
33	San Francisco	7.43
34	Los Angeles	7.20
35	New York	6.48

Source: Center for Neighborhood Technology

CHANGE IN AVERAGE DAILY VMT ON FREEWAYS AND ARTERIALS,
Percent Change, 1991 - 2011

1	Charlotte	208.8
2	Austin	131.2
3	Nashville	99.0
4	Phoenix	89.6
5	Cincinnati	82.8
6	Atlanta	81.9
7	Miami	80.7
8	San Antonio	79.5
9	Columbus	78.2
10	Denver	77.5
11	Houston	72.7
12	Washington, DC	67.8
13	St. Louis	67.0
Average	Average	62.2
14	Louisville	61.8
15	Indianapolis	61.6
16	New York	61.5
17	Dallas	60.9
18	Memphis	59.2
19	Oklahoma City	58.1
20	Minneapolis	56.9
21	Portland	52.4
22	Chicago	48.5
23	Salt Lake City	48.3
24	Seattle	47.1
25	Boston	46.0
26	Philadelphia	45.0
27	Kansas City	43.2
28	Baltimore	42.2
29	Cleveland	40.2
30	Milwaukee	34.3
31	San Diego	33.9
32	San Francisco	21.0
33	Detroit	17.8
34	Los Angeles	13.8
35	Pittsburgh	5.0

Source: Urban Mobility Report, 2012, Texas Transportation Institute

CHANGE IN AVERAGE DAILY VMT ON FREEWAYS AND ARTERIALS,
Percent Change, 2001 - 2011

1	Charlotte	46.7
2	Austin	35.9
3	Phoenix	26.5
4	Nashville	26.1
5	Washington, DC	25.1
6	New York	22.2
7	Portland	20.8
8	Cincinnati	20.2
9	Columbus	19.3
10	Miami	19.2
11	San Antonio	18.3
12	Oklahoma City	18.0
13	Chicago	18.0
14	Indianapolis	17.7
15	Louisville	17.0
16	Denver	15.9
17	Milwaukee	15.2
Average	Average	15.2
18	Salt Lake City	14.5
19	Boston	14.2
20	St. Louis	13.7
21	Seattle	13.6
22	Baltimore	12.3
23	Philadelphia	11.0
24	Houston	10.7
25	Dallas	10.5
26	Memphis	10.3
27	Cleveland	9.7
28	San Francisco	8.7
29	Minneapolis	7.2
30	Atlanta	6.4
31	San Diego	6.0
32	Kansas City	5.4
33	Los Angeles	0.9
34	Detroit	-1.9
35	Pittsburgh	-4.4

Source: Urban Mobility Report, 2012, Texas Transportation Institute

Change in Traffic Volume

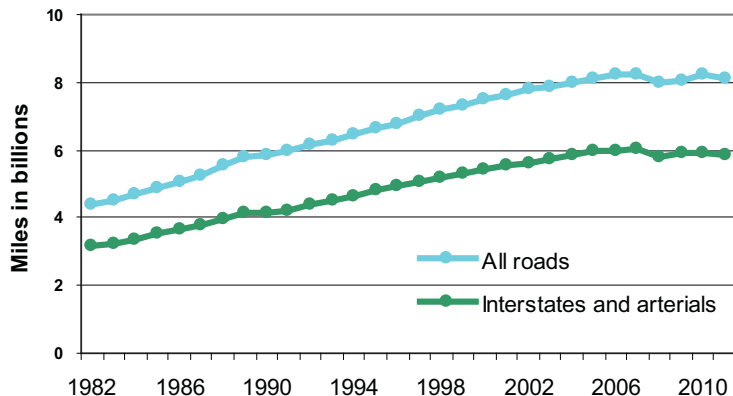
Traffic volume is one of the key determinants of GHG emissions from transportation. Traffic volume is measured by the total number of miles traveled by each vehicle, also known as Vehicle Miles Traveled (VMT). For comparison between the peer metro regions, the best available data on traffic volume is VMT on freeways and arterial roads in each metro region's "urban area", as defined by the Texas Transportation Institute.

Over the last twenty years, the average daily VMT on freeways and arterials in St. Louis increased from just under 30 million miles per day in 1991 to about 50 million miles per day in 2011, a 67.0 percent increase. The increase in average daily VMT in St. Louis is just above the average increase for the 35 peer regions.

In the last ten years the growth in average daily VMT slowed in the peer regions. From 1991 to 2001 the peer region average increase in VMT was 39.7 percent, whereas from 2001 to 2011 the peer region average increase was only 15.2 percent. St. Louis also experienced this trend, with a 46.9 percent increase in VMT from 1991 to 2001, compared to a 13.7 percent increase from 2001 to 2011. The St. Louis region had slightly lower growth in average daily VMT than peer regions from 2001 to 2011.

Nationwide, VMT on all roads and on interstates and arterials increased almost every year between 1982 and 2011, with several annual decreases since 2007 (See Figure 1). The total growth in VMT for both road categories over this time span was approximately 86 percent.

In the St. Louis region, VMT on all roads and on freeways and arterials has stagnated or declined in recent years (See Figure 2).⁶ Between 1982 and 2011, VMT on all roads grew by 72.5 percent, with an average annual increase of 3.4 percent between 1982 and 2000, and an average annual decline of 0.4 percent between 2000 and 2011. VMT on freeways and arterials grew by 116.6 percent between 1982 and 2011, with an average annual increase of 2.6 percent between 1982 and 2000 and an average annual increase of 1.3 percent between 2000 and 2011.

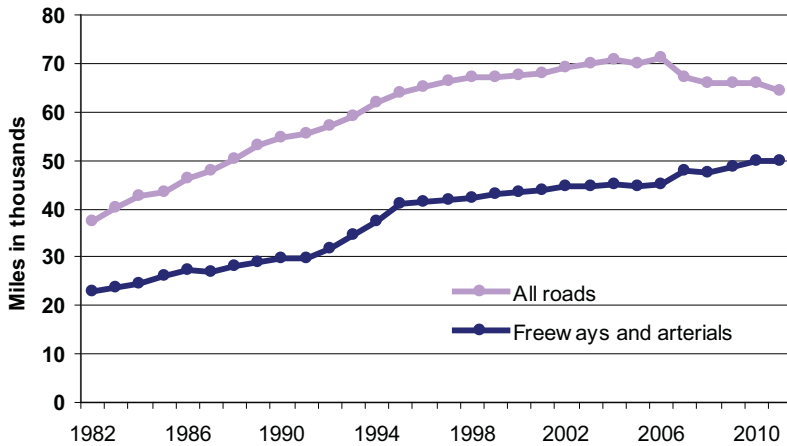


Source: Traffic Volume Trends, Federal Highway Administration

Note: VMT on interstates and arterials from 1982 to 1989 is based on VMT for all roads multiplied by the average proportion of VMT driven on freeways and arterials from 1990 to 2011.

⁶ VMT data on all roads is based on the eight county region, and VMT data on freeways and arterials is based on a slightly smaller "urban area" defined by the Texas Transportation Institute.

Figure 2: Average Daily VMT in the St. Louis Region, 1982-2011



Source for all roads: HPMS, Federal Highway Administration
 Source for freeways and arterials: Urban Mobility Report, Texas Transportation Institute

AVERAGE DAILY VMT PER CAPITA ON FREEWAYS AND ARTERIALS, 2011

1	Oklahoma City	24.1
2	Houston	23.1
3	Indianapolis	23.1
4	Nashville	23.0
5	Kansas City	21.4
6	Charlotte	21.4
7	St. Louis	21.3
8	Atlanta	21.3
9	Columbus	21.2
10	San Antonio	20.8
11	Detroit	20.6
12	Dallas	20.3
13	Memphis	20.2
14	San Francisco	20.1
15	Louisville	20.0
16	Minneapolis	19.7
17	Washington, DC	19.5
18	Los Angeles	19.3
Average	19.1	
19	San Diego	19.1
20	Cincinnati	19.0
21	Denver	18.6
22	Seattle	18.6
23	Cleveland	18.1
24	Boston	17.9
25	Baltimore	17.9
26	Milwaukee	17.8
27	Phoenix	17.6
28	Austin	17.6
29	Miami	17.2
30	Salt Lake City	16.4
31	Pittsburgh	15.7
32	Portland	15.1
33	Philadelphia	14.9
34	Chicago	13.3
35	New York	12.1

Source: Urban Mobility Report, 2012, Texas Transportation Institute

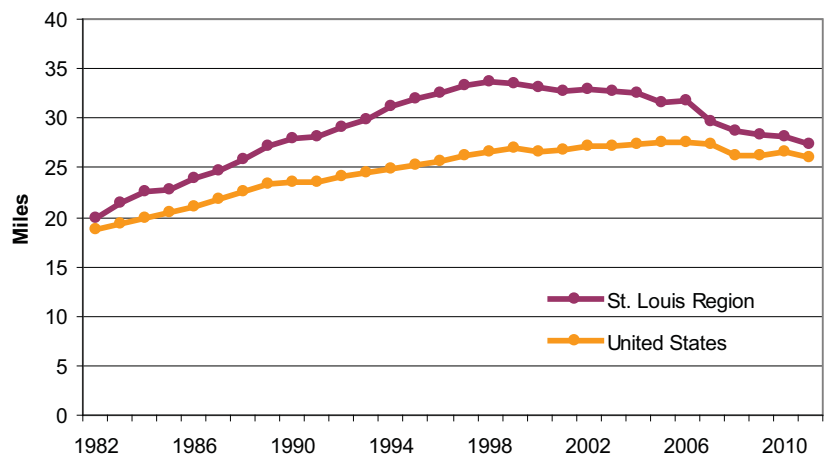
VMT per Capita

Traffic volume is affected by many factors, including population, density, household size, car ownership, labor force participation, the economy, and gas prices. Per capita VMT reflects the combined effect of factors other than population size, and enables comparison between regions. In 2011, the average St. Louis resident drove 21.3 miles per day on freeways and arterials, ranking 7th among the peer regions, and 2.2 miles per day higher than the peer region average.

Over the last several decades VMT per capita on all roads in the St. Louis region had a greater increase than the United States followed by a greater decline than the United States (See Figure 3). Average daily VMT per capita peaked in the St. Louis region in 1998 at 33.6 miles per day, and declined by 18.6 percent to 27.4 miles per day in 2011. In the U.S., average daily VMT per capita peaked in 2005 at 27.5 miles per day, with a decline of 5.3 percent to 26.1 miles per day in 2011. Both the St. Louis region and the United States had similar overall increases in VMT over this time span, with a 37.7 percent increase in average daily VMT per capita in St. Louis and a 38.3 percent increase in the United States.

Unlike the United States, which had a decline of 3.4 percent in average daily VMT per capita on interstates and arterials from 2001 to 2011, the peer metro regions averaged a slight increase of 1.1 percent. In St. Louis, the average daily VMT per capita increased 0.7 percent, ranking 16th among the 35 peer regions.

Figure 3: Average Daily VMT Per Capita, 1982-2011



Sources: HPMS, Federal Highway Administration; Traffic Volume Trends, Federal Highway Administration; and Resident Population Estimates, U.S. Census Bureau

CHANGE IN AVERAGE
DAILY VMT PER CAPITA
ON FREEWAYS AND
ARTERIALS,
Percent Change 2001 - 2011

1	Charlotte	18.6
2	Cleveland	15.2
3	Chicago	11.7
4	New York	11.0
5	Washington, DC	9.3
6	Miami	7.9
7	Milwaukee	7.8
8	Cincinnati	7.8
9	Philadelphia	5.7
10	Columbus	5.5
11	San Francisco	4.2
12	Boston	4.1
13	Salt Lake City	2.6
14	Detroit	2.1
15	Memphis	2.1
Average		1.1
16	St. Louis	0.7
17	Baltimore	0.2
18	Denver	0.0
19	Portland	-0.2
20	Phoenix	-0.3
21	Indianapolis	-1.7
22	Houston	-2.6
23	Oklahoma City	-2.8
24	Austin	-3.0
25	Pittsburgh	-4.1
26	San Antonio	-4.3
27	Los Angeles	-5.0
28	Kansas City	-5.2
29	Seattle	-5.3
30	Minneapolis	-5.5
31	San Diego	-5.6
32	Atlanta	-6.1
33	Nashville	-6.4
34	Louisville	-7.2
35	Dallas	-12.6

Source: Urban Mobility Report,
2012, Texas Transportation Institute

Conclusion

The St. Louis region has higher transportation-related GHG emissions and higher VMT per capita than the peer region average. However, VMT and VMT per capita in St. Louis have increased slowly or declined in recent years, paralleling the slower growth in VMT found in the peer regions and nationally. There are several factors that make it likely that VMT will continue this slower growth pattern, including the projected continuation of high gasoline prices, the aging of the workforce, and the increasing preferences of younger generations for less auto-oriented lifestyles.⁷

The slower growth in VMT should have a positive effect on GHG emissions, since smaller increases in driving will limit the increase in GHG emissions from transportation. To eliminate increases in transportation-related emissions a variety of strategies are necessary, including increasing fuel efficiency, supporting alternative fuel vehicles, and promoting alternative modes of transportation.

These strategies and the overall reduction in VMT present an obstacle for transportation funding. The slower growth in VMT has reduced gasoline tax revenue, the primary source of funding for highways, which is already strained due to increases in fuel efficiency and the effects of inflation.⁸ The reduction in gas tax revenue has made it more difficult to finance transportation projects and the projected continuation of slow growth in VMT will increase this strain. However, the slow growth in VMT also presents an opportunity to consider alternative transportation options and funding sources to provide a better transportation system.

⁷ Dutzik, Tony and Phineas Baxandall. A New Direction: Our Changing Relationship with Driving and the Implications for America's Future. U.S. PIRG Education Fund and Frontier Group, 2013.

⁸ Ibid.



WHERE WE STAND UPDATE: POPULATION CHANGE

Since its first publication in 1990, Where We Stand has come to be recognized as an authoritative source of information about the competitive position of the St. Louis region in the national marketplace. We track more than 100 variables that together tell a story about the health of our region compared to 34 peer MSAs.¹ These regions are our domestic competition and provide a consistent yardstick to gauge “Where We Stand.” Now in its sixth edition, Where We Stand is issued about every three years with periodic updates in between each publication. These briefings provide an opportunity to update the St. Louis region’s standing with new data or provide further insight on a specific topic. This issue takes a look at new population data released by the United States Census for 2012.

Metropolitan Area Population Change

In the past year the St. Louis metropolitan statistical area (MSA)² added a net of 2,419 people, bringing the MSA’s total population to 2.8 million. Based on new data released by the U.S. Census, the St. Louis region’s population increased an estimated 9,070 people due to natural increase (births minus deaths) from July 2011 to July 2012. The region also saw an increase of 4,300 people from international migration, but an estimated 10,990 more U.S. residents moved out of the region than moved to the St. Louis MSA; resulting in net out migration of 6,600.

Over the past year, all 35 metropolitan peer regions gained population, except for Cleveland. The St. Louis region’s gain of 0.09 percent was the 3rd lowest gain in population among the 35 peers. The average increase for the 35 peers was just over one percent with 17 regions seeing more than a one percent increase in their population. The regions with the largest percentage increase were mostly in the south and west. All four of the highest percentage gainers are metro areas in Texas.

The St. Louis region remained the 17th most populous MSA among the 35 peer regions; a ranking the region has held since the MSA boundary changes after the 2000 Census. At that time, the boundary changes resulted in Seattle, Miami, and San Francisco increasing 2000 population enough to move up in ranks and push St. Louis from 14th to 17th.

The boundary changes after the 2010 Census did not result in much change in the rankings of the 35 peer regions.³

1 The U.S. Census Bureau defines a MSA, or metropolitan statistical area, as “that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. MSAs comprise one or more counties...the Office of Management and Budget (OMB) defines metropolitan areas for purposes of collecting, tabulating, and publishing federal data. Metropolitan area definitions result from applying published standards to Census Bureau data.”

Population 2012

1 New York	19,831,858
2 Los Angeles	13,052,921
3 Chicago	9,522,434
4 Dallas	6,700,991
5 Houston	6,177,035
6 Philadelphia	6,018,800
7 Washington DC	5,860,342
8 Miami	5,762,717
9 Atlanta	5,457,831
10 Boston	4,640,802
11 San Francisco	4,455,560
12 Phoenix	4,329,534
13 Detroit	4,292,060
Average	4,110,708
14 Seattle	3,552,157
15 Minneapolis	3,422,264
16 San Diego	3,177,063
17 St. Louis	2,795,794
18 Baltimore	2,753,149
19 Denver	2,645,209
20 Pittsburgh	2,360,733
21 Charlotte	2,296,569
22 Portland	2,289,800
23 San Antonio	2,234,003
24 Cincinnati	2,128,603
25 Cleveland	2,063,535
26 Kansas City	2,038,724
27 Columbus	1,944,002
28 Indianapolis	1,928,982
29 Austin	1,834,303
30 Nashville	1,726,693
31 Milwaukee	1,566,981
32 Memphis	1,341,690
33 Oklahoma City	1,296,565
34 Louisville	1,251,351
35 Salt Lake City	1,123,712

Source: US Census

Population Change Percent Change 2011 - 2012

1 Austin	3.01
2 Houston	2.07
3 Dallas	2.01
4 San Antonio	1.93
5 Phoenix	1.82
6 Denver	1.80
7 Charlotte	1.75
8 Nashville	1.67
9 Oklahoma City	1.63
10 Seattle	1.55
11 Atlanta	1.55
12 Washington DC	1.54
13 Salt Lake City	1.51
14 San Francisco	1.33
15 Miami	1.32
16 Portland	1.28
17 San Diego	1.24
Average	1.08
18 Indianapolis	0.99
19 Minneapolis	0.98
20 Columbus	0.98
21 Los Angeles	0.83
22 Boston	0.81
23 Baltimore	0.71
24 Kansas City	0.68
25 Memphis	0.62
26 Louisville	0.53
27 New York	0.52
28 Milwaukee	0.36
29 Philadelphia	0.36
30 Cincinnati	0.30
31 Chicago	0.28
32 Detroit	0.10
33 St. Louis	0.09
34 Pittsburgh	0.03
35 Cleveland	-0.24

Source: US Census

2 The St. Louis MSA includes Bond, Calhoun, Clinton, Jersey, Macoupin, Madison, Monroe, and St. Clair counties in Illinois and the city of St. Louis, Franklin, Jefferson, Lincoln, St. Charles, St. Louis and Warren counties in Missouri. As of 2-28-13 Washington County, Missouri is no longer a part of the St. Louis MSA.

The regions with the largest percentage population gains—Austin, Houston, Dallas, San Antonio, Phoenix, and Denver—experienced the largest increase in net migration, particularly domestic migration. Dallas, Houston, Phoenix, and Austin had the greatest net domestic migration among the peer MSAs. Over 30,000 more people moved into each of these regions from other places in the United States than migrated out of the regions. The most populated regions continue to be the largest attractors for international migration with Miami, Washington DC, and New York experiencing the largest percentage increases. New York experienced the largest influx of international immigrants from July 2011 to July 2012 with

more than 120,000 people moving to the region from other countries. Los Angeles and Miami also drew large numbers of immigrants with more than 50,000 moving into each region.

The St. Louis region ranks 33rd on net migration with 0.24 percent of the 2011 population moving out of the region over the one-year period. The region was one of seven to experience negative net migration. All of the peer regions experienced population increases due to international migration with the St. Louis region increasing population by 0.16 percent due to immigrants, which ranks it 31st.

Net Migration
Percent of 2011
Population
2011-2012

1 Austin	2.01
2 San Antonio	1.17
3 Charlotte	1.16
4 Dallas	1.10
5 Nashville	1.10
6 Phoenix	1.09
7 Houston	1.08
8 Denver	1.04
9 Oklahoma City	0.99
10 Miami	0.99
11 Seattle	0.93
12 San Francisco	0.82
13 Atlanta	0.80
14 Portland	0.73
15 Washington DC	0.73
Average	0.51
16 San Diego	0.47
17 Boston	0.46
18 Columbus	0.39
19 Baltimore	0.35
20 Salt Lake City	0.35
21 Indianapolis	0.35
22 Minneapolis	0.30
23 Pittsburgh	0.19
24 Louisville	0.16
25 Kansas City	0.11
26 Los Angeles	0.10
27 Memphis	0.02
28 Philadelphia	0.02
29 New York	-0.02
30 Milwaukee	-0.13
31 Detroit	-0.13
32 Cincinnati	-0.13
33 St. Louis	-0.24
34 Chicago	-0.31
35 Cleveland	-0.34

Source: US Census

**Net International
Migration**
Percent of 2011
Population
2011 - 2012

1 Miami	0.90
2 Washington DC	0.65
3 New York	0.63
4 San Francisco	0.51
5 Boston	0.51
6 Seattle	0.49
7 San Diego	0.47
8 Houston	0.42
9 Los Angeles	0.40
10 Atlanta	0.34
11 Baltimore	0.32
12 Minneapolis	0.31
Average	0.31
13 Austin	0.31
14 Dallas	0.31
15 Philadelphia	0.30
16 Chicago	0.26
17 Charlotte	0.25
18 Portland	0.25
19 Columbus	0.25
20 Salt Lake City	0.23
21 Detroit	0.23
22 Nashville	0.22
23 Phoenix	0.22
24 San Antonio	0.21
25 Indianapolis	0.20
26 Oklahoma City	0.19
27 Denver	0.18
28 Cleveland	0.17
29 Louisville	0.17
30 Kansas City	0.16
31 St. Louis	0.16
32 Cincinnati	0.15
33 Memphis	0.14
34 Milwaukee	0.14
35 Pittsburgh	0.11

Source: US Census

Population Change by County

Table 1 provides the components of population change for the 15 counties in the St. Louis MSA. St. Charles County continued to be the leader in population growth with a net increase of 3,600 residents. St. Louis County experienced a population increase, inching back over one million residents. Jefferson County experienced net out-migration, but saw a population increase due to more births than deaths. Monroe was the only county in the Illinois portion of the region to experience a population increase as well as the only Illinois county to experience net positive migration. Despite a population decrease, the city of St. Louis had the second largest influx of international immigrants among the counties.

Table 1: Population Change by County, St. Louis MSA July 2011 to July 2012

County	Population 2012	Population Change 2011 to 2012	Natural Increase (Births -Deaths)	Inter- national Migration	Domestic Migration
Illinois					
Bond	17,644	-93	17	4	-113
Calhoun	5,014	-52	-12	3	-43
Clinton	38,061	-75	52	22	-149
Jersey	22,742	-115	10	7	-133
Macoupin	47,231	-587	-105	13	-502
Madison	267,883	-626	439	177	-1,249
Monroe	33,357	80	51	5	28
St. Clair	268,858	-1,261	1,032	527	-2,857
Missouri					
Franklin	101,412	-269	313	21	-608
Jefferson	220,209	544	812	103	-356
Lincoln	53,354	297	374	6	-81
St. Charles	368,666	3,685	2,174	371	1,180
St. Louis	1,000,438	1,117	2,019	2,036	-2,913
Warren	32,753	165	124	3	40
City of St. Louis	318,172	-391	1,778	1,062	-3,235
MSA Total	2,795,794	2,419	9,078	4,360	-10,991

Note: In addition to the population changes outlined in this table, the Census also calculates a residual. For 2012 the residual for the St. Louis MSA was 28.

Source: US Census

To receive future WWS Updates, contact wws@ewgateway.org

To view past editions of WWS and WWS Updates, visit www.ewgateway.org/wws/wws.htm

3 On February 28, 2013 the Office of Management and Budget issued revised delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas. The delineations are based on the Standards for Delineating Metropolitan and Micropolitan Statistical Areas published on June 28, 2010, in the Federal Register (75 FR 37246-37252) and the application of those standards to Census Bureau population and Journey-to-work data. <http://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b-13-01.pdf>

WHERE WE STAND

An Update from



EAST-WEST GATEWAY
Council of Governments

Creating Solutions Across Jurisdictional Boundaries

January, 2013 • 6th Edition, Update #3

WHERE WE STAND UPDATE: TWENTY YEARS LATER

Since its first publication in 1990, Where We Stand has come to be recognized as an authoritative source of information about the competitive position of the St. Louis region in the national marketplace. We track over 100 variables that together tell a story about the health of our region compared to 34 peer MSAs.¹ These regions are our domestic competition and provide a consistent yardstick to gauge “Where We Stand”. Now in its sixth edition, Where We Stand is issued about every three years with periodic updates in between each publication. These briefings provide an opportunity to update St. Louis’ standing with new data or provide further insight on a specific topic. This issue takes a look at the trends and themes seen throughout the six editions of the publication and how St. Louis’ rankings among its peers have changed from 1990 to 2011.

Introduction

What makes a community attractive? What makes a region thrive? Is the St. Louis region making the strategic decisions necessary to elevate our standing in the national marketplace? What is required to broaden and strengthen our approach to problem solving? These are just some of the questions *Where We Stand: the Strategic Assessment of the St. Louis Region* has prompted for 20 years.

This update takes a look back at the six editions published in 1992, 1996, 1999, 2002, 2006 and 2011, finding that the St. Louis region on most aspects has not made great strides but also has not fallen behind our peers dramatically. The region is holding steady. The general themes are those that are very familiar to those of us in the region—we are slow growing, our economy has been hurt by the loss of manufacturing jobs, the region is relatively affordable, our population aging faster, and we have a fragmented government structure.

Although these themes are well known it remains important that we, as the residents and leaders of the region, continue to take an objective look at the facts. Not only so we can understand how we compare with those we compete with for jobs and people but also so we can make fact-based decisions to improve the quality of life for the people who work and live in the region, and potentially attract more people.



¹ The U.S. Census Bureau defines a MSA, or metropolitan statistical area, as “that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. MSAs comprise one or more counties...the Office of Management and Budget (OMB) defines metropolitan areas for purposes of collecting, tabulating, and publishing federal data. Metropolitan area definitions result from applying published standards to Census Bureau data.”

St. Louis and Our Peer Regions

For the first edition of *Where We Stand (WWS)* in 1990, 29 regions were chosen as St. Louis' peers. These regions were seen as the major metropolitan regions that St. Louis competes with for population and jobs. For the second edition in 1996, five regions were added to the list based on the same criteria used in the first edition—regions with a population of 950,000 or more and within 500 miles of St. Louis or areas that had an economic function similar to the St. Louis region's. The publication continued with the same regions through the sixth edition, recognizing these are the areas that continue to be the region's main competition as well as to allow for analysis over time. The *Where We Stand* Peer Regions map depicts the 35 peer regions used in the publication.

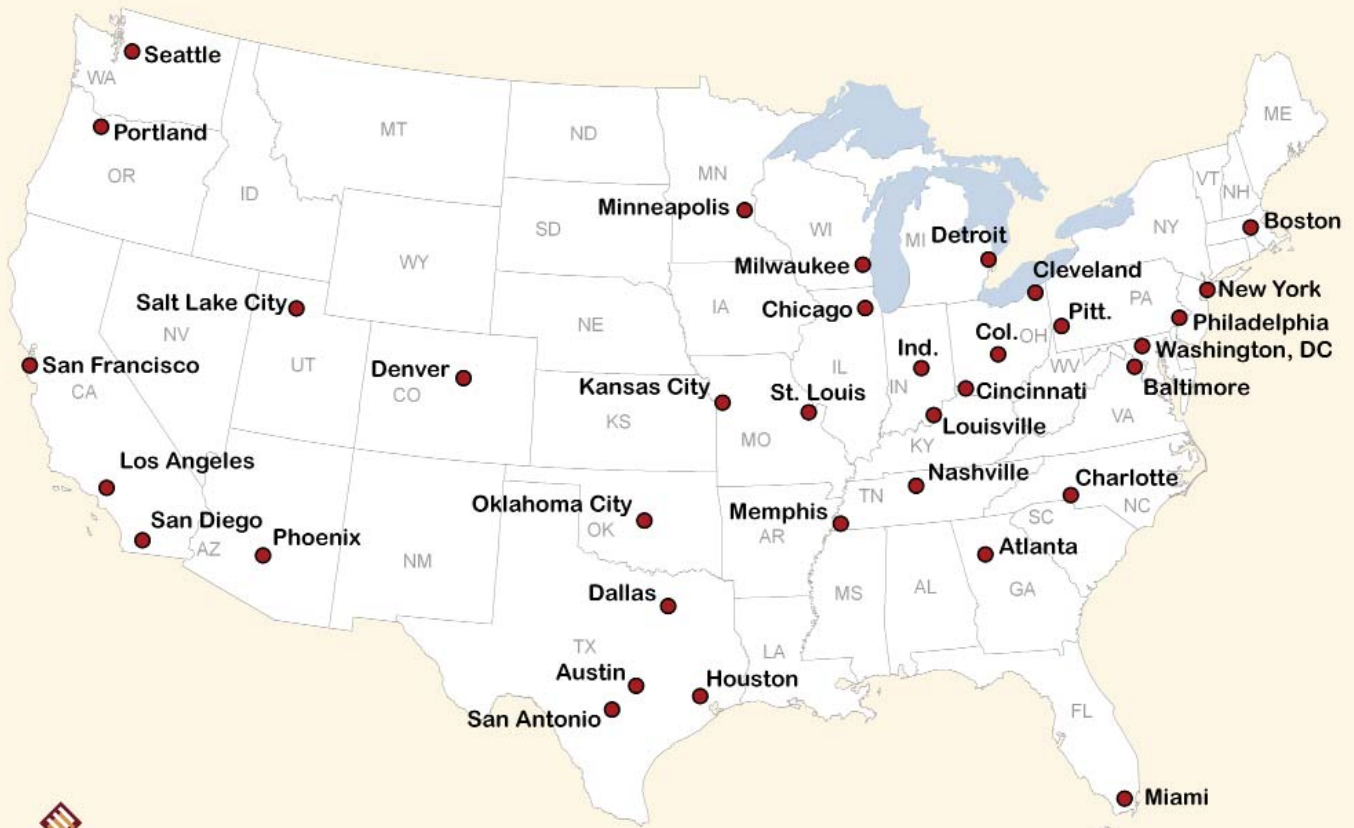
Demographics

Who are the residents of the St. Louis region? How do the demographics of our population differ from those of other regions? How have these differences changed? Compared to other major metropolitan areas in the country, the themes seen in the demographic data for the St. Louis region are a slow but positive population growth, negative net migration, not as ethnically diverse, a more dispersed population and a population that is aging faster than the rest of the country.

A Peer Region...

- Has a population of 950,000 or more AND
- Is within 500 miles of St. Louis OR
- Has an economic function similar to that of the St. Louis region.

Where We Stand Peer Regions



Slow Steady Population Growth

The Metro Area Population 2010 table shows St. Louis is currently the 17th most populated region among the 35 peers. The region has maintained this close to the middle of the pack standing with a steady population growth of over four percent for each of the last two decades. The region did not experience the substantial population increases as seen in several regions in the South and West but the region has not lost population, as is the case in several of the peer Midwest regions. St. Louis' population has grown slowly, ranking 31st for population change from 1990 to 2000 and 27th from 2000 to 2010. Across the board the 35 metropolitan regions saw less population growth in the last decade than in the 1990s, indicating an overall trend of fewer population shifts and less movement.

METRO AREA POPULATION 1990

1 Los Angeles	8,863,164
2 New York City	8,546,846
3 Chicago	6,069,974
4 Philadelphia	4,856,881
5 Detroit	4,382,299
6 Washington DC	3,923,674
7 Boston	3,783,817
8 Houston	3,301,937
9 Atlanta	2,833,611
Average	2,724,967
10 Dallas	2,553,362
11 Minneapolis	2,464,124
12 St. Louis	2,444,099
13 Baltimore	2,382,172
14 Phoenix	2,122,101
15 Pittsburgh	2,056,705
16 Seattle	1,972,961
17 Miami	1,937,094
18 Cleveland	1,831,122
19 Denver	1,622,960
20 San Francisco	1,603,678
21 Kansas City	1,566,280
22 Cincinnati	1,452,645
23 Milwaukee	1,432,149
24 Columbus	1,377,419
25 Indianapolis	1,249,822
26 Portland	1,239,842
27 Nashville	985,026
28 Memphis	981,747
29 Oklahoma City	958,839
30 Louisville	952,662

Source: 1990 Census

METRO AREA POPULATION 2010

1 New York	18,897,109
2 Los Angeles	12,828,837
3 Chicago	9,461,105
4 Dallas	6,371,773
5 Philadelphia	5,965,343
6 Houston	5,946,800
7 Washington D.C.	5,582,170
8 Miami	5,564,635
9 Atlanta	5,268,860
10 Boston	4,552,402
11 San Francisco	4,335,391
12 Detroit	4,296,250
13 Phoenix	4,192,887
Average	3,980,077
14 Seattle	3,439,809
15 Minneapolis	3,279,833
16 San Diego	3,095,313
17 St. Louis	2,812,896
18 Baltimore	2,710,489
19 Denver	2,543,482
20 Pittsburgh	2,356,285
21 Portland	2,226,009
22 San Antonio	2,142,508
23 Cincinnati	2,130,151
24 Cleveland	2,077,240
25 Kansas City	2,035,334
26 Columbus	1,836,536
27 Charlotte	1,758,038
28 Indianapolis	1,756,241
29 Austin	1,716,289
30 Nashville	1,589,934
31 Milwaukee	1,555,908
32 Memphis	1,316,100
33 Louisville	1,283,566
34 Oklahoma City	1,252,987
35 Salt Lake City	1,124,197

Source: U.S. Census Bureau

POPULATION CHANGE

By percent, 1990-2000

1 Austin	47.7
2 Phoenix	45.3
3 Atlanta	38.9
4 Dallas	31.5
5 Denver	30.0
6 Charlotte	29.0
7 Portland	26.6
8 Houston	25.8
9 Nashville	25.0
10 Salt Lake City	24.4
11 San Antonio	20.2
12 Seattle	18.8
13 Minneapolis	16.9
14 Washington DC	16.6
Average	16.5
15 Indianapolis	16.4
16 Miami	16.3
17 Columbus	14.5
18 Oklahoma City	13.0
19 Memphis	12.7
20 San Diego	12.6
21 Kansas City	12.2
22 Chicago	11.6
23 New York	9.0
24 Louisville	8.1
25 San Francisco	8.0
26 Cincinnati	7.9
27 Los Angeles	7.4
28 Baltimore	7.2
29 Boston	5.5
30 Milwaukee	4.8
31 St. Louis	4.5
32 Detroit	4.1
33 Philadelphia	3.6
34 Cleveland	2.2
35 Pittsburgh	-1.5

Source: U.S. Census Bureau

POPULATION CHANGE

Percent change,
2000-2010

1 Austin	35.6
2 Charlotte	31.2
3 Phoenix	27.9
4 Houston	25.5
5 San Antonio	24.6
6 Atlanta	23.0
7 Dallas	22.6
8 Nashville	20.7
9 Denver	15.9
10 Washington D.C.	15.8
11 Salt Lake City	15.6
12 Portland	15.0
13 Indianapolis	14.7
14 Oklahoma City	14.1
15 Columbus	13.4
16 Seattle	12.7
Average	12.0
17 Miami	10.7
18 Kansas City	10.4
19 Louisville	10.2
20 Minneapolis	10.0
21 San Diego	9.6
22 Memphis	8.9
23 Baltimore	6.0
24 Cincinnati	5.7
25 San Francisco	4.8
26 Philadelphia	4.8
27 St. Louis	4.1
28 Chicago	3.8
29 Milwaukee	3.6
30 Los Angeles	3.5
31 Boston	3.4
32 New York	3.0
33 Pittsburgh	-3.0
34 Cleveland	-3.3
35 Detroit	-3.6

Source: U.S. Census Bureau

Negative Net Migration

The regions that have experienced the highest population gains have also seen the largest gains in net migration, particularly domestic migration. The regions with the largest populations have experienced some of the highest levels of international migration but were less likely to experience the highest levels of domestic migration, often resulting in low or negative net migration.

As a midsized region among its peers with a relatively small population increase, St. Louis follows this pattern. The region ranked below average on net migration in five of the six editions of *WWS*. The 2006 edition is the only one in which the region recorded a positive net migration rate with 22,000 more people moving into the region than moving out between 2000 and 2005.

By the end of the decade, the recorded net migration was again negative. Similar to other slow growing regions with a large population, St. Louis has a higher rate of international migration compared to domestic migration. Yet, the region's international migration is still not enough to make up for the loss in population due to domestic migration.

Net Migration St. Louis

1990: 24th
1996: 27th
1999: 27th
2002: 27th
2006: 21st
2011: 25th

NET INTERNATIONAL MIGRATION

Percent of
2000 population,
2000-2009

1	Miami	10.1
2	Phoenix	6.5
3	Los Angeles	6.5
4	Washington D.C.	6.4
5	Dallas	6.2
6	San Francisco	6.2
7	Houston	6.1
8	New York	5.9
9	Austin	5.2
10	Atlanta	4.8
11	Boston	4.3
12	Denver	4.3
13	Salt Lake City	4.2
14	Seattle	4.2
15	Chicago	4.0
16	Portland	3.7
Average		3.6
17	Charlotte	3.6
18	San Diego	3.5
19	Minneapolis	2.8
20	Nashville	2.8
21	Columbus	2.5
22	Oklahoma City	2.2
23	Philadelphia	2.2
24	Detroit	2.1
25	Kansas City	1.9
26	San Antonio	1.8
27	Indianapolis	1.8
28	Milwaukee	1.8
29	Baltimore	1.7
30	Memphis	1.6
31	Louisville	1.4
32	Cleveland	1.3
33	Cincinnati	1.1
34	St. Louis	1.1
35	Pittsburgh	0.8

Source: U.S. Census Bureau

NET DOMESTIC MIGRATION

Percent of
2000 population,
2000-2009

1	Charlotte	18.2
2	Austin	17.7
3	Phoenix	16.2
4	San Antonio	10.2
5	Atlanta	9.6
6	Nashville	9.2
7	Portland	6.2
8	Dallas	5.9
9	Houston	5.1
10	Indianapolis	4.6
11	Oklahoma City	3.8
12	Louisville	2.9
13	Denver	2.8
14	Columbus	2.0
15	Kansas City	1.6
16	Seattle	1.4
Average		0.9
17	Memphis	-0.7
18	Minneapolis	-0.8
19	Cincinnati	-0.9
20	Baltimore	-1.4
21	St. Louis	-1.6
22	Philadelphia	-2.0
23	Pittsburgh	-2.0
24	Washington D.C.	-2.3
25	Salt Lake City	-3.4
26	San Diego	-4.5
27	Milwaukee	-4.8
28	Boston	-5.3
29	Miami	-5.7
30	Chicago	-6.0
31	Cleveland	-6.2
32	Detroit	-8.1
33	San Francisco	-8.3
34	New York	-10.5
35	Los Angeles	-10.8

Source: U.S. Census Bureau

NET MIGRATION

Percent of
2000 population,
2000-2009

1	Austin	22.9
2	Phoenix	22.7
3	Charlotte	21.8
4	Atlanta	14.5
5	Dallas	12.2
6	San Antonio	12.0
7	Nashville	11.9
8	Houston	11.2
9	Portland	9.9
10	Denver	7.1
11	Indianapolis	6.4
12	Oklahoma City	5.9
13	Seattle	5.5
Average		4.5
14	Columbus	4.4
15	Miami	4.4
16	Louisville	4.3
17	Washington D.C.	4.1
18	Kansas City	3.5
19	Minneapolis	2.1
20	Memphis	0.9
21	Salt Lake City	0.9
22	Baltimore	0.3
23	Cincinnati	0.2
24	Philadelphia	0.2
25	St. Louis	-0.5
26	Boston	-1.0
27	San Diego	-1.0
28	Pittsburgh	-1.2
29	Chicago	-2.0
30	San Francisco	-2.1
31	Milwaukee	-3.1
32	Los Angeles	-4.3
33	New York	-4.6
34	Cleveland	-4.9
35	Detroit	-6.0

Source: U.S. Census Bureau

Not as Diverse

Another theme that is apparent in the *WWS* publications is that the St. Louis region is not as diverse as many of its peer regions. The region is primarily white and African American with very small portions of the population being of other races and ethnicities. The region has seen an increase in the Asian and Hispanic populations yet they continue to comprise a very small portion of the population, 2.1 and 2.6 percent, respectively.

These indicators are closely related to the international immigration variable with larger regions having larger Asian and Hispanic populations; being more diverse. Most of the regions that have seen the largest population gains over the last 20 years—Austin, Phoenix, Houston, San Antonio, Dallas, and Denver—also have large Hispanic and

Latino populations. Washington D.C. is the only one of the regions in the top 10 for population increase to also have a large portion of its population be Asian as well. Not all of the regions with large population gains are as diverse. Charlotte, Atlanta, and Nashville are three regions that have seen large population gains but have below average Asian and Hispanic population proportions.

2010 St. Louis 75% White 18% Black 2% Asian 3% Hispanic	Peer Average 62% White 14% Black 5% Asian 16% Hispanic
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POPULATION BY RACE
Asians as a percent of total population, 1996

1 San Francisco	24.9
2 Los Angeles	12.9
3 San Diego	10.2
4 New York	8.4
5 Seattle	7.7
6 Washington D.C.	6.2
7 Houston	5.2
8 Portland	4.3
9 Chicago	4.3
Average	3.9
10 Minneapolis	3.4
11 Dallas	3.4
12 Boston	3.4
13 Salt Lake City	3.0
14 Austin	3.0
15 Philadelphia	2.9
16 Denver	2.9
17 Atlanta	2.6
18 Baltimore	2.4
19 Phoenix	2.2
20 Oklahoma City	2.2
21 Columbus	1.9
22 Miami	1.8
23 Detroit	1.8
24 Milwaukee	1.7
25 San Antonio	1.6
26 Nashville	1.4
27 Kansas City	1.4
28 Charlotte	1.4
29 Cleveland	1.3
30 St. Louis	1.2
31 Memphis	1.1
32 Indianapolis	1.0
33 Cincinnati	1.0
34 Pittsburgh	0.9
35 Louisville	0.8

Source: U.S. Census Bureau

POPULATION BY ETHNICITY
Hispanics as a percent of total population, 1994

1 Miami	54.4
2 San Antonio	52.1
3 Los Angeles	43.0
4 San Diego	25.1
5 New York	24.7
6 Austin	24.3
7 Houston	24.2
8 Phoenix	19.5
9 San Francisco	17.2
10 Dallas	15.1
11 Denver	14.2
12 Chicago	13.6
Average	11.2
13 Salt Lake City	7.3
14 Washington D.C.	6.8
15 Boston	5.1
16 Portland	4.7
17 Oklahoma City	4.6
18 Milwaukee	4.4
19 Philadelphia	4.3
20 Seattle	4.0
21 Kansas City	3.5
22 Atlanta	3.0
23 Cleveland	2.7
24 Detroit	2.3
25 Minneapolis	2.0
26 Baltimore	1.7
27 Charlotte	1.5
28 St. Louis	1.3
29 Nashville	1.1
30 Memphis	1.1
31 Indianapolis	1.1
32 Columbus	1.0
33 Louisville	0.8
34 Pittsburgh	0.7
35 Cincinnati	0.6

Source: U.S. Census Bureau

ASIAN POPULATION
(Not Hispanic or Latino)
Percent of total, 2010

1 San Francisco	22.9
2 Los Angeles	14.5
3 Seattle	11.3
4 San Diego	10.6
5 New York	9.8
6 Washington D.C.	9.2
7 Houston	6.5
8 Boston	6.4
9 Minneapolis	5.7
10 Portland	5.6
11 Chicago	5.6
12 Dallas	5.3
Average	5.1
13 Philadelphia	4.9
14 Atlanta	4.8
15 Austin	4.7
16 Baltimore	4.5
17 Denver	3.6
18 Detroit	3.3
19 Phoenix	3.2
20 Charlotte	3.1
21 Columbus	3.1
22 Salt Lake City	3.0
23 Milwaukee	2.9
24 Oklahoma City	2.8
25 Nashville	2.3
26 Kansas City	2.2
27 Indianapolis	2.2
28 Miami	2.2
29 St. Louis	2.1
30 San Antonio	2.0
31 Cleveland	1.9
32 Cincinnati	1.9
33 Memphis	1.8
34 Pittsburgh	1.7
35 Louisville	1.5

Source: U.S. Census Bureau

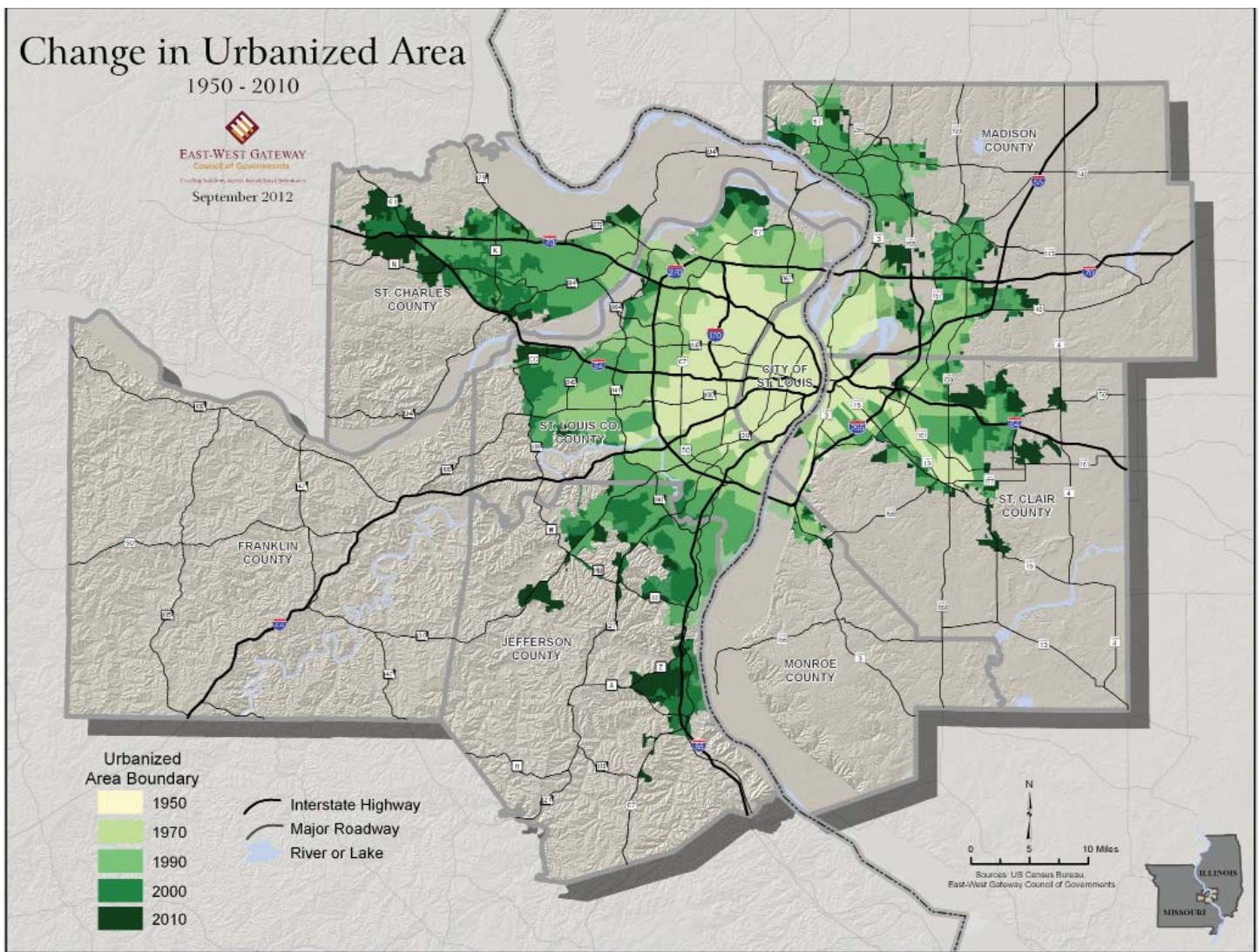
HISPANIC AND LATINO POPULATION
Percent of total, 2010

1 San Antonio	54.1
2 Los Angeles	44.4
3 Miami	41.6
4 Houston	35.3
5 San Diego	32.0
6 Austin	31.4
7 Phoenix	29.5
8 Dallas	27.5
9 New York	22.9
10 Denver	22.5
11 San Francisco	21.7
12 Chicago	20.7
13 Salt Lake City	16.6
Average	15.7
14 Washington D.C.	13.8
15 Oklahoma City	11.3
16 Portland	10.9
17 Atlanta	10.4
18 Charlotte	9.8
19 Milwaukee	9.5
20 Boston	9.0
21 Seattle	9.0
22 Kansas City	8.2
23 Philadelphia	7.8
24 Nashville	6.6
25 Indianapolis	6.2
26 Minneapolis	5.4
27 Memphis	5.0
28 Cleveland	4.7
29 Baltimore	4.6
30 Louisville	3.9
31 Detroit	3.9
32 Columbus	3.6
33 Cincinnati	2.6
34 St. Louis	2.6
35 Pittsburgh	1.3

Source: U.S. Census Bureau

Population is More Dispersed

While the St. Louis region's population is not the largest and the population growth is relatively low, the region's geographic footprint is one of the largest among its peers. The St. Louis region's urbanized area from 1950 to 2010 is depicted in the map below. In 2010, St. Louis had the 5th largest land area at 8,649 square miles. This equates to a more dispersed population than many of our peer regions. St. Louis ranks 32nd for "largest city share of metro population" with 11.4 percent of the region's population living in the city of St. Louis. Most of the region's population growth has been in the outer counties with population loss in the core counties—city of St. Louis, St. Louis and St. Clair counties. Most of the regions that have seen large population gains over the last decade have also seen large increases in the population of their largest city, or urban core.



LAND AREA
In square miles,
2003 MSA boundaries

1	Phoenix	14,573
2	Salt Lake City	9,539
3	Dallas	8,990
4	Houston	8,928
5	St. Louis	8,649
6	Denver	8,385
7	Atlanta	8,376
8	Kansas City	7,858
9	San Antonio	7,341
10	Chicago	7,212
11	New York	6,726
12	Portland	6,684
13	Minneapolis	6,063
14	Seattle	5,894
Average		5,725
15	Nashville	5,687
16	Washington D.C.	5,626
17	Oklahoma City	5,518
18	Pittsburgh	5,280
19	Miami	5,126
20	Los Angeles	4,851
21	Philadelphia	4,630
22	Memphis	4,572
23	Cincinnati	4,398
24	Austin	4,224
25	San Diego	4,200
26	Louisville	4,135
27	Columbus	3,984
28	Detroit	3,914
29	Indianapolis	3,864
30	Boston	3,507
31	Charlotte	3,099
32	Baltimore	2,609
33	San Francisco	2,473
34	Cleveland	2,004
35	Milwaukee	1,460

Source: U.S. Census Bureau,
2000; OMB, 2003

LARGEST CITY SHARE OF METRO POPULATION
Percent of total, 2010*

1	San Antonio	62.0
2	Memphis	49.2
3	Indianapolis	46.7
4	Louisville	46.5
5	Oklahoma City	46.3
6	Austin	46.1
7	New York	43.3
8	Columbus	42.9
9	San Diego	42.2
10	Charlotte	41.6
11	Milwaukee	38.2
12	Nashville	37.8
13	Houston	35.3
14	Phoenix	34.5
15	Kansas City	29.8
16	Los Angeles	29.6
Average		28.7
17	Chicago	28.5
18	Portland	26.2
19	Philadelphia	25.6
20	Denver	23.6
21	Baltimore	22.9
22	Minneapolis	20.4
23	Cleveland	19.1
24	Dallas	18.8
25	San Francisco	18.6
26	Seattle	17.7
27	Detroit	16.6
28	Salt Lake City	16.6
29	Cincinnati	13.9
30	Boston	13.6
31	Pittsburgh	13.0
32	St. Louis	11.4
33	Washington D.C.	10.8
34	Atlanta	8.0
35	Miami	7.2

Source: U.S. Census Bureau

* Kansas City includes Kansas City, MO and Kansas City, KS; Minneapolis also includes St. Paul

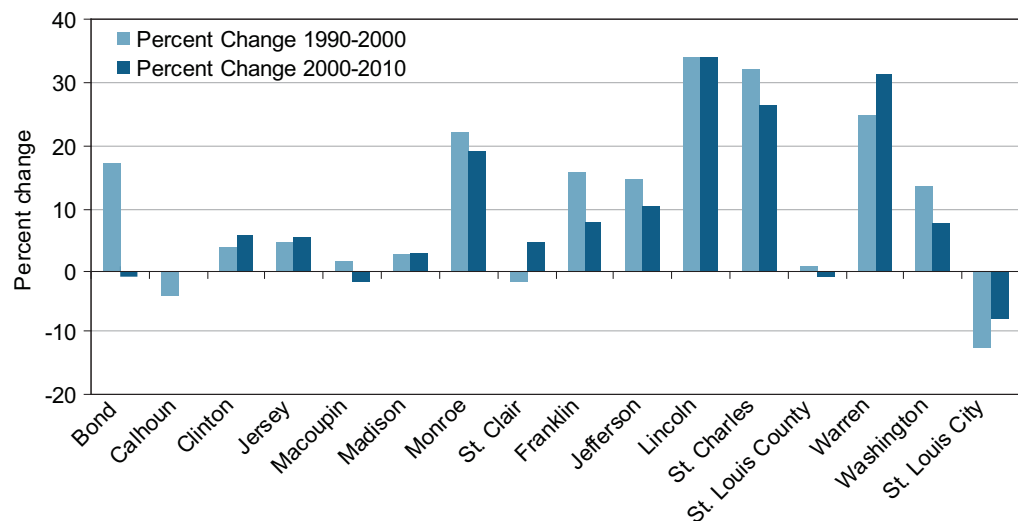
CHANGE IN LARGEST CITY POPULATION
Percent change,
2000-2010*

1	Charlotte	35.2
2	Austin	20.4
3	San Antonio	16.0
4	Oklahoma City	14.6
5	Columbus	10.6
6	Portland	10.3
7	Nashville	10.2
8	Miami	10.2
9	Phoenix	9.4
10	Denver	8.2
11	Seattle	8.0
12	Louisville	7.8
13	Houston	7.5
14	San Diego	6.9
15	Washington D.C.	5.2
16	Indianapolis	4.9
17	Boston	4.8
18	San Francisco	3.7
Average		3.6
19	Kansas City	2.9
20	Los Angeles	2.6
21	Salt Lake City	2.6
22	New York	2.1
23	Atlanta	0.8
24	Dallas	0.8
25	Philadelphia	0.6
26	Minneapolis	-0.3
27	Milwaukee	-0.4
28	Memphis	-0.5
29	Baltimore	-4.6
30	Chicago	-6.9
31	St. Louis	-8.3
32	Pittsburgh	-8.6
33	Cincinnati	-10.4
34	Cleveland	-17.1
35	Detroit	-25.0

Source: U.S. Census Bureau

* Kansas City includes Kansas City, MO and Kansas City, KS; Minneapolis also includes St. Paul

Population Change by County
St. Louis MSA, 1990 to 2010



Aging Faster

The median age for the nation and the St. Louis region have steadily increased with the St. Louis region aging faster. In 1990, St. Louis ranked 14th with a median age of 34.4. In 2010, the median age for the region had increased to 37.9 and the ranking had moved up to 8th. From 1990 to 2010, the average median age for the peer regions increased less (2.3 years) than for the nation as a whole (4.3 years) and less than half that of the St. Louis region (5.0 years).

Median Age, 2010

US: 37.2
St. Louis: 38.2

U.S. Expected Growth 2010 to 2040

Working Age Population: 16.8%
65+ Population: 75%

MEDIAN AGE 1990

1	Pittsburgh	38.2
2	San Francisco	37.0
3	Cleveland	36.0
4	Louisville	35.5
5	Miami	35.2
6	Portland	35.2
7	Philadelphia	35.2
8	Baltimore	34.9
9	Boston	34.9
10	New York	34.8
11	Seattle	34.8
12	Denver	34.8
13	Detroit	34.7
14	St. Louis	34.4
15	Milwaukee	34.4
16	Kansas City	34.4
17	Charlotte	34.1
18	Indianapolis	34.1
19	Cincinnati	34.0
20	Washington D.C.	33.9
Average		33.8
21	Phoenix	33.7
22	Nashville	33.7
23	Chicago	33.5
24	Minneapolis	33.4
25	Oklahoma City	33.2
26	Columbus	33.0
27	Atlanta	32.8
28	Memphis	32.4
29	San Diego	32.3
30	Dallas	32.1
31	San Antonio	32.0
32	Houston	31.8
33	Los Angeles	31.5
34	Austin	30.8
35	Salt Lake City	28.2

Source: 1990 Census

MEDIAN AGE 2000

1	Pittsburgh	40.0
2	Cleveland	37.3
2	San Francisco	37.3
4	Louisville	36.5
5	Philadelphia	36.4
6	Boston	36.3
6	Baltimore	36.3
8	St. Louis	36.0
9	Miami	35.6
10	Seattle	35.5
10	Detroit	35.5
12	Milwaukee	35.4
13	Kansas City	35.2
14	Cincinnati	35.1
15	Washington D.C.	34.9
16	Portland	34.8
17	Indianapolis	34.6
17	New York	34.6
19	Nashville	34.5
Average		34.5
20	Charlotte	34.3
21	Minneapolis	34.2
22	Oklahoma City	34.1
22	Denver	34.1
24	Chicago	33.7
25	Columbus	33.6
26	Memphis	33.2
26	San Diego	33.2
26	Phoenix	33.2
29	Atlanta	32.9
30	San Antonio	32.7
31	Los Angeles	32.0
32	Dallas	31.8
33	Houston	31.6
34	Austin	30.9
35	Salt Lake City	28.6

Source: 2000 Census

MEDIAN AGE 2005

1	Pittsburgh	41.7
2	Cleveland	39.0
3	Miami	38.6
4	San Francisco	38.0
5	Boston	37.9
5	Philadelphia	37.9
7	Louisville	37.7
8	Baltimore	37.5
9	St. Louis	37.3
10	New York	37.2
11	Milwaukee	37.1
12	Detroit	36.9
13	Seattle	36.8
14	Cincinnati	36.4
15	Nashville	36.2
16	Kansas City	36.1
17	Washington DC	36.0
Average		35.8
18	Minneapolis	35.8
19	Portland	35.7
20	Oklahoma City	35.1
21	Chicago	35.0
21	Indianapolis	35.0
23	Charlotte	34.9
23	Columbus	34.9
25	Memphis	34.7
26	Denver	34.6
27	San Diego	34.4
28	Atlanta	34.1
29	Los Angeles	34.0
30	San Antonio	33.8
31	Phoenix	33.5
32	Dallas	32.9
32	Houston	32.9
34	Austin	32.5
35	Salt Lake City	30.2

Source: American Community Survey, U.S. Census Bureau

MEDIAN AGE 2009

1	Pittsburgh	42.3
2	Cleveland	40.2
3	Miami	39.2
4	Detroit	38.7
5	Boston	38.4
6	San Francisco	38.2
7	Philadelphia	38.0
8	St. Louis	37.9
9	Baltimore	37.8
10	Louisville	37.8
11	New York	37.8
12	Milwaukee	37.0
13	Cincinnati	36.9
14	Seattle	36.5
15	Portland	36.4
16	Kansas City	36.2
17	Washington D.C.	36.1
Average		36.1
18	Minneapolis	36.0
19	Nashville	35.5
20	Chicago	35.4
21	Denver	35.4
22	Indianapolis	35.4
23	Charlotte	35.1
24	Memphis	34.8
25	Columbus	34.7
26	San Diego	34.7
27	Los Angeles	34.6
28	Atlanta	34.4
29	Oklahoma City	34.2
30	Phoenix	33.7
31	San Antonio	33.7
32	Dallas	33.0
33	Houston	32.9
34	Austin	32.5
35	Salt Lake City	30.9

Source: American Community Survey, U.S. Census Bureau

Most of the regions with the largest increases in employment over the last decade also have the lowest median ages—Austin, San Antonio, Houston, Salt Lake City, Phoenix, Oklahoma City and Dallas. The flip of this is also true with many of the regions with the oldest median ages having some of the largest decreases in employment—Detroit, Cleveland, San Francisco, Louisville, Boston and St. Louis. Is the younger median age attracting businesses or are jobs attracting a labor force?

Economic Vitality

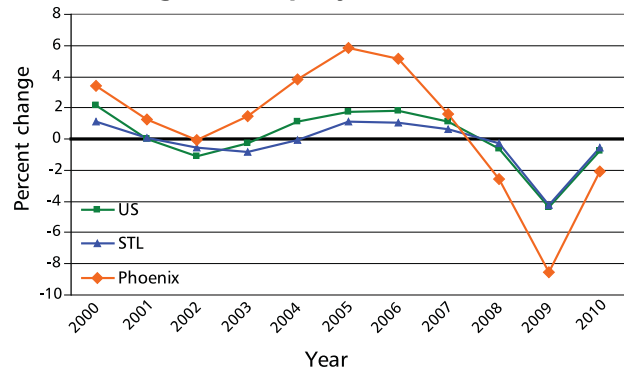
Despite its steep loss in manufacturing jobs, the St. Louis region has maintained a large number of jobs in the manufacturing sector, has seen increases in the health care and financial industries and did not feel the effects of the recession as much as many of our peer regions. Positive aspects of the region's economy also include the region's low cost of living and the region is largely considered affordable.

Decreasing Employment

Whether jobs follow people or people follow jobs, the regions that have seen the largest increases in population have also seen the largest increases in employment. These high growth areas are mostly in the Sunbelt region with the three largest employment gainers in Texas. Like most of the peer regions, the St. Louis region saw employment gains in the 1980's and 1990's but saw a decrease in the last decade. St. Louis ranked 19th (of 30) in employment growth from 1980 to 1989, 24th from 1990 to 1996, 34th from 1996 to 2000 and 26th from 2000 to 2010. The Change in Employment graph uses Phoenix as an example

of a boom and bust region and compares the St. Louis region's change in employment to that of Phoenix and the nation. While St. Louis and the U.S. as a whole saw growth in mid-decade and a drop in employment when the recession hit, neither was as dramatic as was seen in Phoenix.

Change in Employment, 2000-2010



CHANGE IN EMPLOYMENT

Percent change, 2007-2010

1 Austin	1.2
2 San Antonio	0.8
3 Houston	-0.7
4 Washington D.C.	-0.9
5 Pittsburgh	-2.0
6 Oklahoma City	-2.2
7 Boston	-2.4
8 Dallas	-2.6
9 New York	-3.2
10 Baltimore	-3.5
11 Nashville	-3.9
12 Denver	-4.0
13 Philadelphia	-4.0
14 Columbus	-4.1
15 Salt Lake City	-4.8
16 Kansas City	-4.9
17 St. Louis	-5.0
18 Indianapolis	-5.1
Average	-5.2
19 Louisville	-5.4
20 Milwaukee	-5.8
21 Minneapolis	-5.9
22 Seattle	-6.0
23 Cincinnati	-6.3
24 Portland	-6.7
25 San Diego	-6.8
26 Chicago	-6.8
27 Charlotte	-6.9
28 San Francisco	-7.5
29 Cleveland	-7.6
30 Atlanta	-7.9
31 Memphis	-8.3
32 Los Angeles	-9.2
33 Miami	-9.6
34 Detroit	-11.7
35 Phoenix	-12.0

Source: Bureau of Labor Statistics, Current Employment Statistics

CHANGE IN EMPLOYMENT

Percent change, 2000-2010

1 Austin	13.9
2 San Antonio	12.9
3 Houston	12.4
4 Washington D.C.	10.7
5 Salt Lake City	7.4
6 Phoenix	6.9
7 Nashville	5.0
8 Charlotte	4.4
9 Oklahoma City	3.8
10 Dallas	3.7
11 San Diego	2.2
12 Indianapolis	1.9
13 Baltimore	1.7
14 Miami	1.3
Average	-0.4
15 Seattle	-0.6
16 Portland	-0.8
17 New York	-1.2
18 Columbus	-1.2
19 Atlanta	-1.3
20 Denver	-1.7
21 Kansas City	-1.7
22 Philadelphia	-1.7
23 Pittsburgh	-2.0
24 Minneapolis	-3.4
25 Cincinnati	-3.5
26 St. Louis	-3.6
27 Boston	-4.4
28 Louisville	-4.8
29 Memphis	-5.9
30 Los Angeles	-6.2
31 Milwaukee	-6.9
32 Chicago	-7.1
33 San Francisco	-11.4
34 Cleveland	-12.7
35 Detroit	-21.4

Source: Bureau of Labor Statistics, Current

JOB GROWTH

Percent increase in jobs, 1996-2000

1 Austin	22.8
2 Phoenix	19.2
3 Dallas	17.7
4 Denver	17.0
5 Atlanta	16.3
6 San Diego	16.1
7 Houston	15.4
8 Charlotte	14.6
9 Seattle	14.3
10 San Francisco	13.1
11 Nashville	12.9
12 Salt Lake City	12.5
13 San Antonio	12.4
13 Washington D.C.	12.4
Average	11.5
15 Columbus	11.4
16 Portland	11.1
17 Indianapolis	10.7
18 New York	10.6
19 Kansas City	10.2
19 Boston	10.2
21 Minneapolis	10.1
22 Miami	9.9
22 Oklahoma City	9.9
22 Memphis	9.6
25 Baltimore	9.0
26 Louisville	8.9
27 Philadelphia	8.4
28 Cincinnati	8.3
29 Chicago	7.9
29 Los Angeles	7.9
31 Detroit	7.8
32 Milwaukee	7.0
33 Pittsburgh	6.0
34 St. Louis	5.9
35 Cleveland	5.8

Source: Bureau of Economic Analysis

PERCENT GROWTH IN JOBS

1980-1989

1 Phoenix	56.0
2 Atlanta	51.6
3 Washington DC	38.6
4 Nashville	38.0
5 Seattle	38.0
6 Dallas	36.1
7 Columbus	27.8
8 Indianapolis	25.9
9 Baltimore	24.9
10 Minneapolis	24.3
11 Memphis	23.2
Average	23.2
12 Boston	22.6
13 Miami	22.4
14 Kansas City	22.2
15 Cincinnati	22.1
16 Los Angeles	21.5
17 Portland	21.3
18 Denver	20.9
19 St. Louis	19.9
20 Philadelphia	18.3
21 Louisville	17.3
22 San Francisco	16.4
23 Detroit	15.7
24 Milwaukee	14.1
25 Chicago	13.9
26 Houston	12.5
27 New York	11.4
28 Oklahoma City	10.3
29 Cleveland	6.5
30 Pittsburgh	3.0

Source: Bureau of Economic Analysis

Decline in Manufacturing Employment

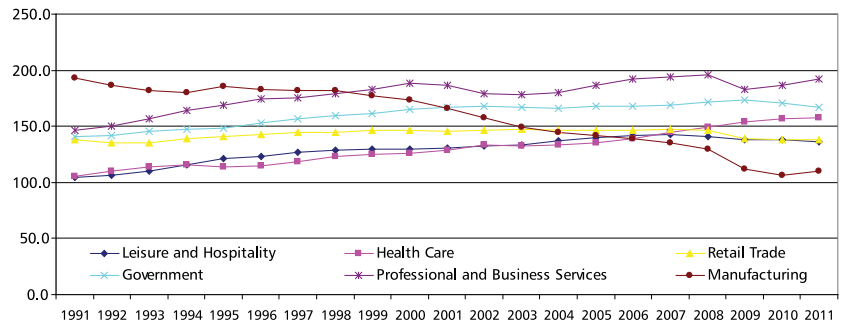
The main reason the St. Louis region ranks poorly on the employment variables is due to the large portion of the region's employment that was, and continues to be, manufacturing. Manufacturing was the largest employment sector in the early 1990's before it started steadily declining. From 1990 to 2010, manufacturing employment declined 50 percent in the St. Louis region but remains one of the region's top employment sectors. All of the peer regions have seen a decline in manufacturing employment but this decrease has not had as dramatic of an impact on those regions that were not as reliant on the manufacturing sector as St. Louis was.

The decline in manufacturing jobs is not only problematic because of the size of the industry in the region but also because of the types of jobs the sector provides. Historically, manufacturing jobs have provided a wage that would support

a family along with health care and retirement benefits while the same is not true of many of the service sector jobs that have replaced them.

On the Six Largest Industries chart the growth of a variety of service sector jobs can be seen—waste management, accommodation and food services, and leisure and hospitality. There has also been growth in some typically good paying sectors such as health care and education services.

Six Largest Industries, St. Louis MSA
Employees, in thousands



CHANGE IN
MANUFACTURING
EMPLOYMENT
1996--2000

1 Austin	24.0
2 San Diego	9.8
3 San Antonio	6.6
3 Phoenix	6.6
5 Dallas	5.4
5 Houston	5.4
7 Portland	3.9
8 Oklahoma City	3.2
9 Detroit	3.1
10 Atlanta	3.0
11 Columbus	2.6
12 Indianapolis	2.4
13 Pittsburgh	2.1
13 Seattle	2.1
15 Salt Lake City	1.3
16 Minneapolis	0.8
Average	0.5
17 Denver	0.3
18 Cincinnati	0.0
19 Nashville	-0.5
20 Louisville	-0.7
21 Milwaukee	-1.1
22 Memphis	-1.2
23 Boston	-1.8
24 Cleveland	-2.2
25 Philadelphia	-2.3
26 Kansas City	-2.5
27 Los Angeles	-2.8
28 Baltimore	-3.7
28 Chicago	-3.7
30 San Francisco	-5.9
31 St. Louis	-8.1
32 Charlotte	-8.8
33 New York	-9.0
34 Miami	-10.9

Source: Bureau of Labor
Statistics, Current
Employment Statistics

CHANGE IN
MANUFACTURING
EMPLOYMENT
Percent increase in jobs,
2001-2004

1 Kansas City	-3.5
2 Nashville	-4.4
3 Salt Lake City	-5.7
4 Indianapolis	-6.8
5 Denver	-7.2
6 Philadelphia	-8.2
7 Memphis	-9.3
8 Minneapolis	-9.9
9 Cincinnati	-10.3
9 Houston	-10.3
11 Atlanta	-10.4
12 Dallas	-11.1
13 Milwaukee	-11.3
14 St. Louis	-11.4
15 Louisville	-11.9
16 San Diego	-12.1
17 Portland	-12.3
18 Phoenix	-12.9
Average	-13.6
19 Columbus	-14.5
20 San Antonio	-14.6
20 San Francisco	-14.6
22 Los Angeles	-14.8
23 Chicago	-14.9
24 New York	-15.4
25 Baltimore	-16.3
26 Pittsburgh	-16.4
27 Miami	-16.5
28 Charlotte	-17.9
29 Detroit	-18.1
30 Seattle	-18.9
31 Oklahoma City	-20.1
32 Boston	-20.3
33 Austin	-23.9
34 Cleveland	-37.3

Source: Bureau of
Economic Analysis

MANUFACTURING
EMPLOYMENT
Percent change,
2001-2009

1 Houston	-1.6
2 Salt Lake City	-4.5
3 Kansas City	-14.4
4 Seattle	-15.1
5 Denver	-17.5
6 San Antonio	-18.3
7 San Diego	-19.5
8 Portland	-19.9
9 Dallas	-20.3
10 Minneapolis	-20.5
11 Memphis	-20.5
12 Indianapolis	-21.7
13 Cincinnati	-23.9
14 Phoenix	-24.5
15 Milwaukee	-24.6
16 Atlanta	-25.1
Average	-25.2
17 San Francisco	-26.9
18 Nashville	-27.2
19 Pittsburgh	-27.5
20 Louisville	-28.1
21 Chicago	-29.0
22 Columbus	-29.2
23 Baltimore	-29.3
24 St. Louis	-29.8
25 Los Angeles	-29.9
26 Boston	-30.7
27 Miami	-31.0
28 Oklahoma City	-32.3
29 Cleveland	-32.9
30 Philadelphia	-33.3
31 Austin	-33.4
32 Charlotte	-33.5
33 New York	-34.2
34 Detroit	-47.9

Source: Bureau of
Economic Analysis

St. Louis Manufacturing

7% of Total Employment

6th Largest Sector

\$80,388 Average Pay

50% Decrease in
Employment from 1990
to 2010

Lower Earnings but also Low Cost of Living

The earnings per job in the St. Louis region was below the peer region average in 1989 (ranking 15th of 30) and has slipped since to 23rd (of 35) in 2009. In real dollars, the average earnings per job in the St. Louis region has increased from \$42,486 in 1989 (in 2009 dollars) to \$45,553 in 2009, a seven percent increase. The average earnings per job for the peer regions increased 12 percent over the same time period, indicating the St. Louis region is not keeping up with its peers.

The St. Louis region ranks better when income is adjusted for cost of living. In 1994, the St. Louis region ranked 3rd with an adjusted median household income of \$24,227 (or \$35,071 in 2009 dollars). In 2009, the region's ranking fell to 6th, although in absolute numbers, the region's adjusted median household income increased 65 percent to \$57,755.

AVERAGE EARNINGS PER JOB 1989

1	New York	34,061
2	San Francisco	30,748
3	Washington D.C.	28,960
4	Detroit	28,755
5	Los Angeles	28,523
6	Chicago	28,452
7	Boston	27,767
8	Philadelphia	26,872
9	Houston	26,588
10	Dallas	26,499
11	Cleveland	25,549
12	Seattle	25,473
Average		25,194
13	Minneapolis	25,159
14	Atlanta	24,871
15	St. Louis	24,557
16	Pittsburgh	24,296
17	Denver	24,286
18	Baltimore	23,815
19	Cincinnati	23,413
20	Kansas City	23,360
21	Indianapolis	23,327
22	Milwaukee	23,206
23	Portland	22,772
24	Miami	22,761
25	Columbus	22,315
26	Nashville	22,310
27	Memphis	22,310
28	Phoenix	22,128
29	Louisville	21,688
30	Oklahoma City	21,023

Source: Bureau of Economic Analysis

EARNINGS PER JOB In dollars, 2009

1	San Francisco	66,683
2	Washington D.C.	64,601
3	New York	63,043
4	Boston	59,763
5	Seattle	54,864
6	Houston	54,282
7	Los Angeles	52,915
8	Denver	52,634
9	Chicago	52,318
10	Philadelphia	51,808
11	Baltimore	51,528
12	San Diego	50,719
13	Dallas	49,856
14	Minneapolis	49,773
15	Atlanta	49,649
Average		48,984
16	Detroit	48,546
17	Charlotte	47,513
18	Austin	47,054
19	Portland	46,164
20	Miami	46,016
21	Phoenix	45,959
22	Kansas City	45,641
23	St. Louis	45,553
24	Milwaukee	45,246
25	Cincinnati	44,537
26	Columbus	44,160
27	Cleveland	44,103
28	Pittsburgh	43,986
29	Indianapolis	43,968
30	Nashville	43,737
31	Memphis	43,204
32	Salt Lake City	43,073
33	Louisville	40,928
34	Oklahoma City	40,334
35	San Antonio	40,297

Source: Bureau of Economic Analysis

The regions that saw an increase in employment over the past decade are dispersed in their rankings on both earnings per job and purchasing power with more of the top employment gainers ranking toward the top on purchasing power than on earnings per job. Six of the regions with the highest employment gains rank in the top 10 on purchasing power while only two of the top 10 employment gainers rank that well on the earnings per job variable.

INCOME ADJUSTED FOR COST OF LIVING, 1994

1	Nashville	25,306
2	Minneapolis	24,289
3	St. Louis	24,227
4	Indianapolis	24,161
5	Louisville	24,154
6	Atlanta	24,034
7	Dallas	23,796
8	Houston	23,704
9	Washington D.C.	23,317
10	Denver	23,265
11	Kansas City	23,250
12	Baltimore	23,041
13	Charlotte	22,851
14	Cincinnati	22,790
15	Seattle	22,570
16	Milwaukee	22,369
17	Cleveland	22,346
18	Memphis	22,096
19	San Francisco	21,758
Average		21,487
20	Detroit	21,309
21	Chicago	21,264
22	Portland	21,250
23	Columbus	21,224
24	Austin	20,598
25	Phoenix	20,502
26	Oklahoma City	20,470
27	Pittsburgh	20,077
28	Philadelphia	19,556
29	San Antonio	19,149
30	Boston	19,071
31	Miami	18,624
32	Salt Lake City	18,270
33	Los Angeles	17,483
34	San Diego	17,246
35	New York	12,634

Source: Bureau of Economic Analysis and American Chamber of Commerce Researchers Association

PURCHASING POWER Median household income, 2009 Adjusted for cost of living

1	Washington D.C.	62,375
2	Houston	60,503
3	Dallas	59,077
4	Atlanta	58,920
5	Austin	58,834
6	St. Louis	57,755
7	Nashville	57,564
8	Denver	57,344
9	Salt Lake City	57,138
10	Cincinnati	57,046
11	Kansas City	56,971
12	Minneapolis	56,832
13	Indianapolis	56,768
14	Charlotte	54,949
15	Columbus	54,129
16	Seattle	53,885
17	Baltimore	53,821
18	Phoenix	53,654
19	Boston	52,967
20	Chicago	52,950
Average		52,626
21	Louisville	52,217
22	Milwaukee	51,407
23	San Antonio	50,479
24	Pittsburgh	50,434
25	Oklahoma City	49,906
26	Portland	49,797
27	Memphis	49,639
28	Philadelphia	48,798
29	Detroit	47,959
30	San Francisco	47,935
31	Cleveland	45,577
32	San Diego	45,117
33	Miami	41,655
34	Los Angeles	40,807
35	New York	36,692

Source: American Community Survey, U.S. Census Bureau; ACCRA Cost of Living Index

Affordable, but How Affordable?

The St. Louis region is typically promoted as affordable. This is in part due to the low cost of living discussed previously but also because of the cost of housing. As seen in the Housing Affordability 1991 and Housing Opportunity 2010 tables, a large percent of the homes in the region were and continue to be affordable to a median income earning household. In 1991, 66.7 percent (ranking 13th of 30) of homes were affordable to such a household and in 2010 the percent rose to 84.3 (ranking 7th of 33).

Another way to look at housing affordability is to look at what percent of households are paying more than 35 percent² of their income on housing. In 1989, 16.6 percent of households in the St. Louis region were paying

more than what was considered affordable. In recent years, the Center for Neighborhood Technology's (CNT) alternate definition of affordability has become commonly used. This definition sets the threshold at 45 percent of household income and factors in housing as well as transportation costs. CNT recognized that as metropolitan regions expand and become more dispersed, people can often find less expensive housing further from job centers but their transportation costs increase. Therefore, to discuss affordability, both costs should be factored. Using this definition, the St. Louis region's ranking comes in below average among its peers with the average housing plus transportation costs for the region comprising 48 percent of the median household income.

HOUSING AFFORDABILITY INDEX 1991

1	Kansas City	88.7
2	Milwaukee	84.9
3	Oklahoma City	83.3
4	Detroit	82.4
5	Minneapolis	81.3
6	Louisville	74.4
7	Cincinnati	74.2
8	Denver	72.6
9	Columbus	72.3
10	Cleveland	69.5
11	Portland	67.4
12	Nashville	67.2
13	St. Louis	66.7
14	Phoenix	66.5
14	Dallas	66.5
16	Atlanta	65.9
17	Indianapolis	65.8
18	Houston	63.5
19	Miami	62.2
Average		66.7
20	Pittsburgh	61.6
21	Chicago	61.0
22	Baltimore	60.6
23	Memphis	58.6
24	Washington D.C.	56.5
25	Philadelphia	55.4
26	Boston	43.8
27	Seattle	40.9
28	New York	21.9
29	Los Angeles	12.9
30	San Francisco	9.2

Source: National Association of Home Builders

HOUSING OPPORTUNITY
Percent of homes affordable for family earning median income, 2010

1	Indianapolis	93.9
2	Detroit	91.5
3	Cleveland	87.0
4	Cincinnati	86.6
5	Minneapolis	85.2
6	Columbus	84.9
7	St. Louis	84.3
8	Pittsburgh	84.1
9	Oklahoma City	83.5
10	Louisville	82.3
11	Phoenix	82.3
12	Milwaukee	81.4
13	Atlanta	80.2
14	Memphis	79.2
15	Dallas	78.4
16	Austin	77.8
17	Houston	76.7
18	Salt Lake City	75.1
19	Charlotte	75.1
20	San Antonio	74.7
Average		74.4
21	Washington D.C.	74.1
22	Baltimore	74.0
23	Denver	73.5
24	Philadelphia	72.4
25	Miami	72.1
26	Chicago	69.8
27	Portland	68.1
28	Boston	66.1
29	Seattle	64.1
30	San Francisco	52.8
31	San Diego	48.1
32	New York	39.1
33	Los Angeles	38.0

Source: National Association of Home Builders/Wells Fargo

PERCENT OF HOUSHOLDS PAYING MORE THAN 35% OF INCOME FOR HOUSING, 1989

1	Indianapolis	15.3
2	Louisville	15.7
3	Kansas City	16.2
4	St. Louis	16.6
5	Cincinnati	16.9
6	Columbus	17.4
7	Pittsburgh	17.6
8	Minneapolis	17.7
9	Baltimore	17.9
10	Nashville	18.4
11	Houston	18.7
12	Oklahoma City	18.8
13	Cleveland	18.9
14	Seattle	18.9
15	Portland	19.0
16	Detroit	19.3
17	Dallas	19.4
18	Milwaukee	19.8
19	Washington D.C.	20.1
20	Atlanta	20.2
21	Denver	20.5
Average		20.5
22	Philadelphia	20.8
23	Memphis	21.5
24	Chicago	21.9
25	Phoenix	23.2
26	Boston	24.0
27	San Francisco	28.9
28	New York	29.6
29	Los Angeles	31.2
30	Miami	31.3

Source: US Census Bureau

HOUSING PLUS TRANSPORTATION AFFORDABILITY
Transportation and housing costs as a percent of median household income, 2008

1	Miami	59.6
2	Memphis	55.4
3	San Diego	54.7
4	Los Angeles	54.2
5	Nashville	51.2
6	Phoenix	51.0
7	Detroit	50.7
8	Cleveland	49.9
9	Seattle	49.7
10	Charlotte	49.6
11	Chicago	49.5
12	Portland	49.3
13	Atlanta	49.2
14	San Francisco	49.2
15	Dallas	49.1
16	Milwaukee	49.0
Average		49.0
17	San Antonio	48.9
18	Oklahoma City	48.7
19	Indianapolis	48.7
20	St. Louis	48.1
21	Austin	48.1
22	Louisville	48.0
23	Cincinnati	48.0
24	Pittsburgh	47.9
25	Columbus	47.5
26	Denver	47.4
27	New York	46.9
28	Kansas City	46.8
29	Philadelphia	46.7
30	Houston	46.3
31	Salt Lake City	45.6
32	Baltimore	45.6
33	Boston	45.5
34	Minneapolis	45.5
35	Washington D.C.	43.1

Source: Center for Neighborhood Technology; American Community Survey, U.S. Census Bureau

2 Thirty percent is also commonly used.

The regions with the largest increases in population and employment as well as the most populated regions vary in their ranking on the H+T index with no apparent correlation between this affordability variable and growth. The top 10 population and employment gainers rank in the middle of the peer regions on the Housing Opportunity index with 73 to 84 percent of homes affordable to a family earning the median income in their regions. The most populated regions tend to be less affordable with more of the regions ranking higher and 38 to 80 percent of homes affordable to a family earning the median income.

Education & Youth

On education there is an overall trend of a larger portion of the U.S. population being more educated with more high school graduates and more college degrees. St. Louis has maintained a fairly average ranking on many of the education variables and has seen some improvement on several of the others over the past two decades.

Increasing Education Levels

St. Louis ranks 15th on both the Adults with Advanced Degrees variable and the Change in Percent of Adults with a Bachelor's Degree or Higher. For adults with advanced degrees, the region is just below average with 11.6 percent of adults having a master's, professional or doctorate degree. Washington D.C., Boston and San Francisco rank the highest on this variable with over 15 percent of adults having an advanced degree. Seven of the 10 regions with the largest employment gains over the past decade rank in the bottom 10 on this variable, with some of the lowest percent of adults with advanced degrees.

On the change in percent of adults with a bachelor's degree or higher, St. Louis is above average with 4.6 percent growth over the last decade. Many of the regions with the fastest growing populations and the largest increases in employment are experiencing some of the slowest growth in adults with bachelor's degrees. They rank toward the bottom with less than half the growth rate of the St. Louis region.

The Highest Level of Education Attainment graph below shows the percent of adults in St. Louis with varying levels of education for 2000 and 2009. All four levels of college education increased while the percent of adults with either no high school diploma or high school as the highest level of education both decreased.

ADULTS WITH ADVANCED DEGREES

Percent persons age 25 and older with master's, professional, or doctorate degrees, 2009

1	Washington D.C.	22.6
2	Boston	18.3
3	San Francisco	16.9
4	Baltimore	14.8
5	New York	14.7
6	Austin	13.1
7	Seattle	13.0
8	Chicago	13.0
9	Denver	12.9
10	Phoenix	12.9
11	San Diego	12.6
12	Minneapolis	12.4
13	Portland	12.0
14	Atlanta	11.9
Average		11.8
15	St. Louis	11.6
16	Kansas City	11.5
17	Columbus	11.0
18	Milwaukee	10.6
19	Philadelphia	10.6
20	Cincinnati	10.5
21	Cleveland	10.3
22	Indianapolis	10.3
23	Los Angeles	10.3
24	Detroit	10.3
25	Miami	10.1
26	Nashville	10.1
27	Charlotte	10.1
28	Dallas	9.8
29	Salt Lake City	9.7
30	Pittsburgh	9.7
31	Louisville	9.6
32	Houston	9.5
33	San Antonio	9.1
34	Oklahoma City	9.0
35	Memphis	8.7

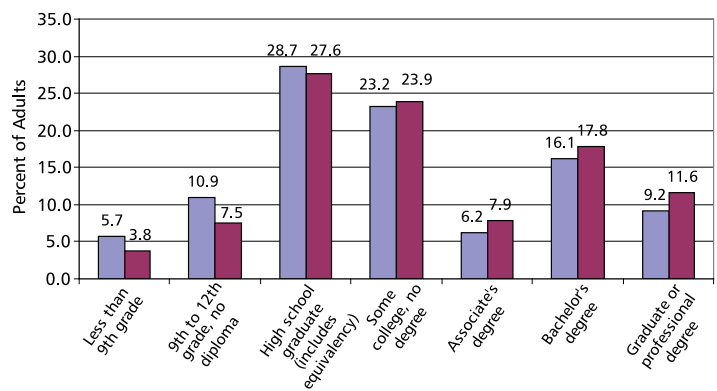
CHANGE IN PERCENT OF ADULTS WITH A BACHELOR'S DEGREE OR HIGHER

In percentage points, adults age 25 years or older, 2000-2009

1	Baltimore	5.5
2	Nashville	5.3
3	New York	5.3
4	Boston	5.2
5	Portland	5.1
6	San Diego	5.0
7	Columbus	5.0
8	Washington D.C.	4.8
9	Kansas City	4.7
10	Seattle	4.7
11	San Francisco	4.7
12	Philadelphia	4.6
13	Indianapolis	4.6
14	Chicago	4.6
15	St. Louis	4.6
16	Pittsburgh	4.4
17	Charlotte	4.4
18	Minneapolis	4.3
19	Los Angeles	3.9
20	Milwaukee	3.9
Average		3.9
21	Miami	3.7
22	Cincinnati	3.7
23	Louisville	3.7
24	Denver	3.5
25	Oklahoma City	3.1
26	Detroit	3.1
27	Cleveland	3.0
28	Atlanta	2.7
29	San Antonio	2.7
30	Memphis	2.2
31	Phoenix	2.2
32	Salt Lake City	2.1
33	Austin	2.0
34	Houston	1.5
35	Dallas	1.5

Source: American Community Survey, U.S. Census Bureau

Highest Level of Education Attainment, St. Louis Region



Source: American Community Survey, U.S. Census Bureau

On the Adults with a High School Diploma or Equivalent graph, St. Louis is the blue line and the peer region average is the green line. St. Louis has increased the percent of high school graduates from 76 percent in 1990 to 89 percent in 2009; also improving the region's ranking from 17th to 12th. Between 1995 and 2000 the percent of adults with a high school diploma in St. Louis rose above the peer average. In 2009, the region stood just above the average with 88.7 percent of adults having a high school diploma and the peer average just below that at 86.9 percent.

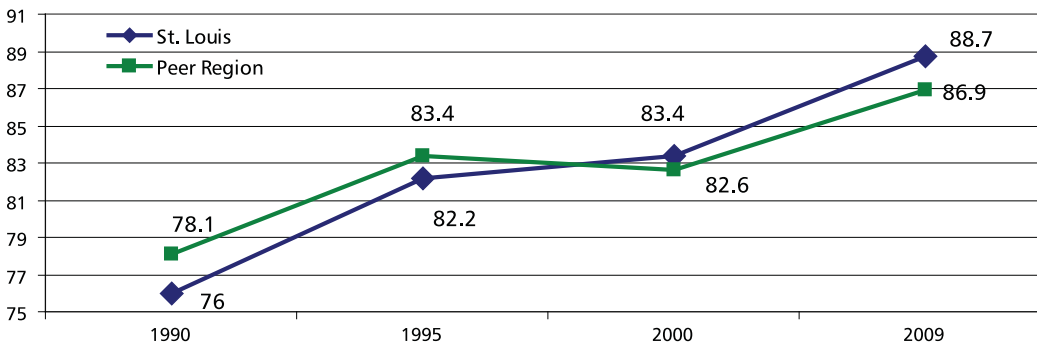
The Adults without a High School Diploma table shows the flip of this—the percent of adults without a high school diploma. St. Louis ranks below average with 11.3 percent of adults having no high school diploma. The region is doing much better than Los Angeles, Houston, Dallas and Memphis, regions that all have over 15 percent of adults with no high school diploma. Regions with the largest employment gains rank both low and high on this variable.

ADULTS WITHOUT A HIGH SCHOOL DIPLOMA OR EQUIVALENT

Percent of persons age 25 and older, 2009

1	Los Angeles	22.4
2	Houston	20.0
3	San Antonio	18.5
4	Dallas	18.1
5	Miami	17.5
6	Memphis	16.2
7	New York	15.7
8	Pittsburgh	15.4
9	San Diego	14.6
10	Chicago	14.1
11	Austin	13.4
12	Charlotte	13.3
13	Louisville	13.2
14	San Francisco	13.1
15	Atlanta	13.1
16	Nashville	13.1
Average		13.1
17	Detroit	13.1
18	Oklahoma City	12.8
19	Indianapolis	12.4
20	Cincinnati	12.4
21	Cleveland	12.3
22	Baltimore	11.9
23	Phoenix	11.8
24	St. Louis	11.3
25	Denver	11.2
26	Milwaukee	11.2
27	Salt Lake City	11.1
28	Columbus	10.2
29	Kansas City	10.0
30	Washington D.C.	10.0
31	Portland	9.9
32	Boston	9.4
33	Philadelphia	9.0
34	Seattle	8.7
35	Minneapolis	7.5

Percent of Adults with a High School Diploma or Equivalent
St. Louis Region and Peer Average, 1990 to 2009



Source: American Community Survey, U.S. Census Bureau

The St. Louis region has maintained a high ranking on percent of children enrolled in pre-primary education. The rank of 5th in the percent of children enrolled in early childhood education is one of the region's highest rankings of all the variables recorded in *WWS*, but it has slipped. While other regions, such as Boston who has maintained the number one spot, has seen an increase, St. Louis' percent has decreased from 31 percent of youth to 28 percent of youth being enrolled in early childhood education.

For spending on education the region is slightly above average, ranking 13th and spending \$9,600 per student on curriculum. In 1987, the St. Louis region was below average, ranking 19th. When looking at overall increased spending on education, the region has not increased spending as much as the peer regions. St. Louis has increased spending by 22 percent while, on average, peers have increased spending by 25 percent.

1987 to 2008
Increase in Education Spending

St. Louis: 22%
Peer Average: 25%

**CHILDREN
ENROLLED IN
PRESCHOOL**

Percent persons younger than age 5, 2000

1	Boston	31.9
2	St. Louis	31.5
3	Philadelphia	31.4
4	Atlanta	31.3
5	Pittsburgh	30.0
6	Kansas City	29.7
7	Cleveland	29.2
8	Chicago	28.7
8	San Francisco	28.7
10	Charlotte	28.2
11	Seattle	28.1
12	Washington D.C.	28.0
13	Minneapolis	27.8
14	Baltimore	27.7
14	Cincinnati	27.7
16	Memphis	27.5
17	Miami	27.1
18	Detroit	27.0
19	Columbus	26.9
20	Louisville	26.8
Average		26.7
21	Denver	26.4
22	Indianapolis	26.2
23	Austin	25.6
24	Oklahoma City	25.3
25	New York	25.2
26	Dallas	24.8
26	Nashville	24.8
28	Houston	24.1
29	San Antonio	23.5
30	San Diego	23.2
31	Portland	23.0
31	Milwaukee	23.0
33	Salt Lake City	22.8
34	Los Angeles	21.6
35	Phoenix	21.2

Source: Centers for Disease Control and Prevention

**CHILDREN
ENROLLED IN
PRESCHOOL**

Percent of persons younger than age 5, 2009

1	Boston	32.1
2	Philadelphia	30.5
3	Pittsburgh	29.9
4	San Francisco	28.1
5	St. Louis	28.0
6	Atlanta	27.7
7	New York	27.7
8	Chicago	27.3
9	Detroit	27.2
10	Cleveland	27.1
11	Charlotte	26.9
12	Minneapolis	26.6
13	Kansas City	26.5
14	Baltimore	26.4
15	Columbus	25.8
16	Austin	25.7
17	Denver	25.5
18	Miami	25.2
Average		25.0
19	San Antonio	24.9
20	Washington D.C.	24.9
21	Nashville	24.4
22	Cincinnati	24.4
23	Indianapolis	24.2
24	Louisville	23.9
25	Los Angeles	23.6
26	Portland	23.4
27	Houston	23.4
28	San Diego	22.5
29	Seattle	22.4
30	Dallas	22.1
31	Oklahoma City	21.6
32	Salt Lake City	21.3
33	Milwaukee	20.1
34	Memphis	17.4
35	Phoenix	16.7

Source: American Community Survey, U.S. Census Bureau

**EDUCATIONAL
EXPENDITURES
PER PUPIL
1987**

1	New York	5,946
2	Philadelphia	5,570
3	Milwaukee	5,360
4	Pittsburgh	5,355
5	Portland	5,147
6	Washington D.C.	5,108
7	Miami	5,097
8	Cleveland	5,053
9	San Francisco	5,003
10	Minneapolis	4,846
11	Detroit	4,747
12	Denver	4,656
13	Boston	4,631
14	Phoenix	4,420
15	Los Angeles	4,414
16	Baltimore	4,363
Average		4,337
17	Seattle	4,199
18	St. Louis	4,183
19	Kansas City	4,051
20	Dallas	4,002
21	Atlanta	3,825
22	Columbus	3,782
23	Cincinnati	3,760
24	Indianapolis	3,573
25	Houston	3,291
26	Louisville	3,055
27	Oklahoma City	2,990
28	Nashville	2,686
29	Memphis	2,651

Source: US Census Bureau

Note: Original document did not have a #12 and only included 29 regions as shown here.

**EDUCATION
CURRICULUM
SPENDING
Dollars per pupil,
2007/2008**

1	New York	17,923
2	Boston	13,578
3	Philadelphia	13,256
4	Washington D.C.	12,814
5	Baltimore	12,124
6	Pittsburgh	11,528
7	Cleveland	11,162
8	Milwaukee	10,577
9	Chicago	10,309
10	Columbus	10,307
11	Detroit	10,073
12	Los Angeles	9,699
13	St. Louis	9,668
14	Minneapolis	9,608
Average		9,602
15	Cincinnati	9,597
16	San Francisco	9,582
17	Atlanta	9,430
18	San Diego	9,384
19	Denver	9,379
20	Kansas City	9,216
21	Miami	9,129
22	Portland	9,027
23	Seattle	8,600
24	Louisville	8,548
25	Indianapolis	8,524
26	Austin	8,086
27	San Antonio	7,833
28	Dallas	7,702
29	Memphis	7,636
30	Houston	7,599
31	Charlotte	7,529
32	Nashville	7,504
33	Phoenix	6,917
34	Oklahoma City	6,804
35	Salt Lake City	5,418

Source: National Center for Education Statistics

Worse than Average on Health of Youth

Where We Stand tracks several other variables that look at youth, particularly their health. The St. Louis region ranks well on some and poorly on others.

Asthma risk is one of the only variables where the St. Louis region ranks number one. Unfortunately, it is not a number one the region can brag about. The asthma risk index is developed by the Asthma & Allergy Foundation of America and considers 12 variables the foundation has found associated with increased risk for asthma. This variable was only included in the two most recent editions of WWS. From 2006 to 2010, 30 of the 35 peer regions improved their score, some substantially. St. Louis was one of the five regions that saw an increase in asthma risk, from 94.6 in 2006 to 97.4 in 2010.

Lead is a common environmental contaminant that exists in all areas of the U.S. In 2008, a reported 46,000 children in St. Louis were tested for elevated levels of lead poisoning, 542 of these children tested positive for high levels. To compare to other regions, the number of children that tested positive for high levels per 1,000 tested was calculated. The St. Louis region ranks just above average with 11.6 children per 1,000 tested testing positive for elevated levels.

Infant mortality is one of the variables the St. Louis region's ranking has worsened on although the region has improved overall. In 1988, St. Louis ranked 18th with 9.6 deaths per 1,000 live births and in 2007, ranked 9th with 7.9 deaths. All regions have improved on this variable with the peer average decreasing from 10.3 deaths to 6.7 deaths per 1,000 live births. The peer Midwest regions, such as Memphis, Cleveland, and Detroit, continue to have some of the highest infant mortality rates while others such as New York and Louisville have decreased their rate from 12 to 5 deaths per 1,000 live births.

On percent of children living in poverty, St. Louis ranked just below average with 18.6 percent of those under 18 living in poverty in 2009. The region's ranking, as well as the rate, has been fairly steady over the last 20 years but has increased some. In 1989, the region ranked 16th with nearly 16 percent of youth living in poverty.

INFANT MORTALITY RATE

Deaths of infants less than one year old per 1,000 births, 2007

1	Memphis	12.5
2	Cleveland	8.8
3	Baltimore	8.5
4	Detroit	8.3
5	Philadelphia	8.1
6	Columbus	8.1
7	Cincinnati	8.0
8	Indianapolis	8.0
9	St. Louis	7.9
10	Oklahoma City	7.7
11	Milwaukee	7.4
12	Kansas City	7.3
13	Atlanta	7.1
14	Washington D.C.	7.1
15	Dallas	6.9
16	Pittsburgh	6.9
17	Chicago	6.8
18	Charlotte	6.7
Average		6.7
19	Phoenix	6.4
20	Nashville	6.3
21	Miami	6.3
22	San Antonio	6.1
23	Houston	6.0
24	Denver	6.0
25	Minneapolis	5.9
26	Louisville	5.3
27	San Diego	5.2
28	Los Angeles	5.2
29	Seattle	5.2
30	Portland	5.1
31	Salt Lake City	5.0
32	New York	5.0
33	Austin	4.7
34	Boston	4.6
35	San Francisco	4.6

Source: Centers for Disease Control and Prevention

ASTHMA RISK

Index of 12
indicators of risk, 2010

1	St. Louis	97.4
2	Milwaukee	95.5
3	Memphis	95.3
4	Philadelphia	94.0
5	Atlanta	92.1
6	Detroit	88.9
7	Pittsburgh	88.8
8	Nashville	88.7
9	San Antonio	88.5
10	Indianapolis	87.6
11	Louisville	86.7
12	Oklahoma City	86.1
13	New York	85.1
14	Columbus	84.9
15	Washington D.C.	83.3
16	Cincinnati	83.2
17	Cleveland	82.9
18	Charlotte	82.5
19	Baltimore	82.1
20	Chicago	81.4
Average		81.3
21	Boston	81.0
22	Los Angeles	79.6
23	Houston	79.5
24	Phoenix	79.2
25	San Diego	78.3
26	Denver	77.8
27	Salt Lake City	76.9
28	Dallas	74.0
29	Miami	71.5
30	Kansas City	68.7
31	Portland	68.3
32	Seattle	67.6
33	Austin	65.6
34	San Francisco	62.1
35	Minneapolis	61.3

Source: Asthma & Allergy
Foundation of America
Note: Higher scores indicate
increased risk

CHILDREN LIVING IN POVERTY

Percent of persons
under age 18, 2009

1	Memphis	29.5
2	Detroit	23.3
3	San Antonio	23.3
4	Cleveland	22.3
5	Houston	22.2
6	Columbus	22.1
7	Phoenix	21.7
8	Milwaukee	21.1
9	Los Angeles	21.1
10	Miami	20.8
11	Dallas	20.7
12	Oklahoma City	20.5
13	Indianapolis	19.7
14	Louisville	19.5
15	Charlotte	19.2
16	Nashville	18.8
17	Austin	18.7
18	St. Louis	18.6
Average		18.2
19	Atlanta	18.2
20	New York	18.1
21	Chicago	17.8
22	Cincinnati	17.7
23	Pittsburgh	17.1
24	Denver	17.1
25	San Diego	16.8
26	Kansas City	16.6
27	Portland	16.0
28	Philadelphia	15.9
29	Baltimore	13.5
30	Minneapolis	13.5
31	Seattle	12.7
32	San Francisco	12.4
33	Salt Lake City	11.9
34	Boston	11.0
35	Washington D.C.	9.5

Source: American Community
Survey, U.S. Census Bureau

CHILDHOOD LEAD POISONING

Percent of children under
age 6 with elevated lead
levels per 1,000 children
tested, 2008

1	San Diego	45.4
2	Cleveland	39.2
3	Chicago	32.1
4	Philadelphia	27.2
5	Pittsburgh	25.6
6	Milwaukee	24.1
7	Detroit	16.4
8	Cincinnati	12.2
9	Indianapolis	11.8
10	St. Louis	11.6
Average		11.1
11	San Antonio	10.2
12	New York	7.2
13	Dallas	7.2
14	Oklahoma City	6.8
15	Austin	6.4
16	Houston	6.3
17	San Francisco	6.1
18	Boston	5.2
19	Minneapolis	5.0
20	Columbus	4.8
21	Los Angeles	4.7
22	Louisville	4.6
23	Portland	4.2
24	Kansas City	3.9
25	Baltimore	3.2
26	Miami	3.2
27	Washington D.C.	2.7
28	Phoenix	2.7
29	Atlanta	1.8
30	Memphis	1.5
31	Charlotte	0.6

Source: Centers for Disease
Control and Prevention

Crime & Safety

Lower Crime but Still High

Reporting crime data is tricky for several reasons. The first difficulty comes when reporting crime data over time. If a police department makes a concerted effort to encourage residents to report crimes the crime rate could go up. This rise would not necessarily be due to more crime but due to more reported crime. When comparing crime data from different areas, additional problems arise including, simply, that police departments have different ways of reporting crimes. Further, crime rates will change depending on where you draw the line for the "community." This is the issue that arises from a highly publicized crime report that casts St. Louis as one of the

most dangerous cities in the U.S. Since the city of St. Louis is independent of St. Louis County, unlike most central cities in the U.S., the data for St. Louis reflects a more dense urban area than it does for most of the other cities. Despite the challenges of analyzing crime data, it is worth examining to give people an idea of what is occurring with crime. Often the perception is that there is more crime than there really is.

Overall crime rates have gone down in all of the peer regions, in most cases substantially. This is true for St. Louis as well. St. Louis' ranking in total crimes has

changed from 19th with 6,305 crimes per 100,000 persons in 1991 to 21st with 3,641 crimes per 100,000 persons in 2009. The two graphs in this section show the property crimes and violent crimes per 100,000 for St. Louis and the average for the peer regions, as recorded in each of the six editions of WWS. The crime rates have decreased with St. Louis maintaining a rate below the average on property crimes and only one year—1995—recording an above average number of violent crimes.

Total Crime St. Louis Rank	
1991:	19th
1995:	17th
1997:	25th
2000:	17th
2004:	23rd
2009:	21st

The region's murder rate has decreased in murders per 100,000 from 12.4 in 1995 to 7.4 in 2009 but its ranking has fluctuated from 9th, up to 14th, and most recently at the 6th highest murder rate.

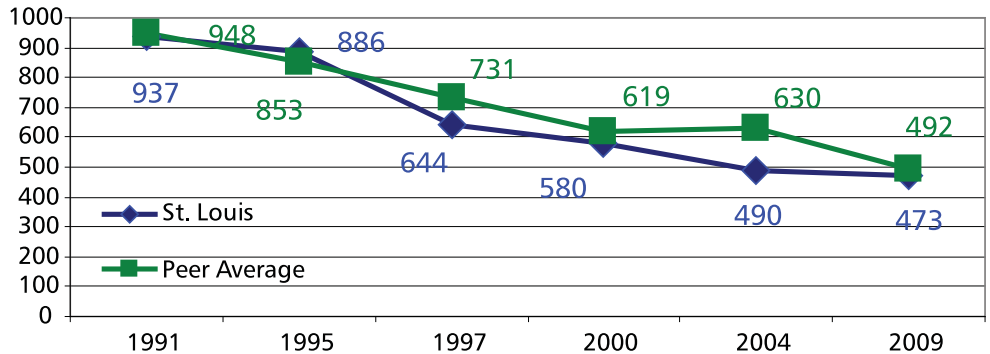
TOTAL CRIME RATE
Per 100,000 population,
2009

1	Memphis	6,219
2	San Antonio	5,954
3	Miami	5,122
4	Salt Lake City	5,090
5	Houston	4,828
6	Columbus	4,661
7	Indianapolis	4,455
8	Charlotte	4,430
9	Seattle	4,415
10	Austin	4,381
11	Dallas	4,323
12	Milwaukee	4,122
13	Baltimore	4,018
14	Nashville	4,013
15	Phoenix	3,996
16	Atlanta	3,980
17	San Francisco	3,931
Average		3,911
18	Detroit	3,728
19	Louisville	3,698
20	Cincinnati	3,647
21	St. Louis*	3,641
22	Cleveland	3,267
23	Philadelphia	3,213
24	Portland	3,197
25	Denver	3,144
26	Washington D.C.	3,127
27	Los Angeles	2,832
28	San Diego	2,741
29	Boston	2,550
30	Pittsburgh	2,386
31	New York	2,132

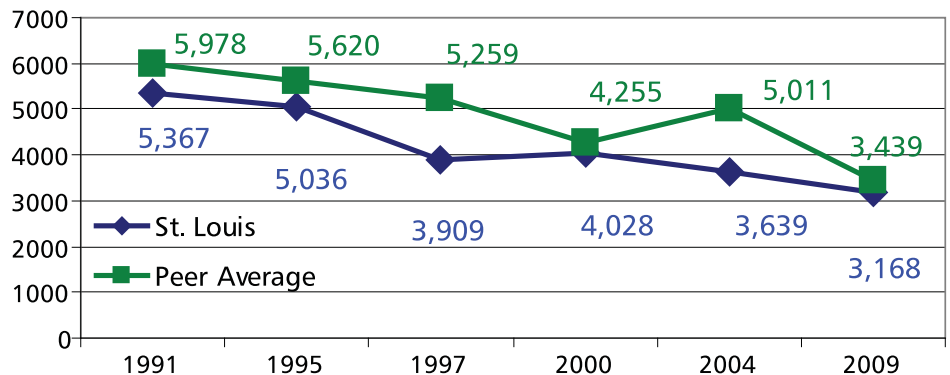
Source: FBI Crime Statistics

*St. Louis forcible rape statistics from 2008

Violent Crimes per 100,000 Population
St. Louis Region and Peer Average,
1991 to 2009



Property Crimes per 100,000
St. Louis Region and Peer Region Average,
1991 to 2009



Racial Disparity

Not Closing the Gap

Racial disparity is one of the issues St. Louis has consistently ranked poorly on. In the first four editions, the publication used a racial disparity index that considered 12 to 15 variables together. Recognizing this as a key challenge in the St. Louis region, in more recent editions the variables have been separated to better gauge where the region stands.

These six tables show the ratio of blacks to whites for a variety of variables on social and economic well-being. Racial disparities exist in all regions with black people

DISPARITY IN EDUCATION

Ratio of black to white, age 25 years or older, with less than a high school diploma, 2009

1	Minneapolis	4.8
2	Salt Lake City	4.0
3	Austin	3.9
4	Milwaukee	3.3
5	San Francisco	3.3
6	Miami	3.0
7	Boston	2.8
8	Washington D.C.	2.7
9	Denver	2.5
10	Seattle	2.5
11	Chicago	2.5
12	Memphis	2.4
13	Kansas City	2.3
14	New York	2.3
Average		2.3
15	Cleveland	2.1
16	Houston	2.1
17	Philadelphia	2.1
18	Portland	2.0
19	Los Angeles	2.0
20	San Antonio	1.9
21	Baltimore	1.9
22	St. Louis	1.9
23	Dallas	1.9
24	Charlotte	1.8
25	Columbus	1.8
26	Indianapolis	1.8
27	Pittsburgh	1.7
28	Detroit	1.7
29	Cincinnati	1.7
30	San Diego	1.6
31	Oklahoma City	1.5
32	Phoenix	1.5
33	Nashville	1.5
34	Atlanta	1.4
35	Louisville	1.3

Source: American Community Survey, U.S. Census Bureau

DISPARITY IN POVERTY RATES

Ratio of black to white poverty rates, 2009

1	Minneapolis	5.4
2	Salt Lake City	5.1
3	Milwaukee	4.9
4	Chicago	4.4
5	Denver	4.1
6	Cleveland	3.9
7	Pittsburgh	3.8
8	Philadelphia	3.7
9	San Francisco	3.5
10	Washington D.C.	3.5
11	St. Louis	3.4
12	Detroit	3.3
13	Memphis	3.3
14	Dallas	3.3
Average		3.2
15	Boston	3.1
16	Baltimore	3.1
17	Seattle	3.1
18	Houston	3.0
19	Indianapolis	3.0
20	Cincinnati	3.0
21	Louisville	2.9
22	Kansas City	2.9
23	New York	2.9
24	Miami	2.8
25	Oklahoma City	2.7
26	Atlanta	2.7
27	San Antonio	2.7
28	Phoenix	2.6
29	Columbus	2.5
30	Los Angeles	2.4
31	Charlotte	2.4
32	Nashville	2.3
33	Austin	2.2
34	Portland	2.1
35	San Diego	2.0

Source: American Community Survey, U.S. Census Bureau

experiencing hardship to a greater extent. On average for the 35 peer regions, blacks are over 3.2 times as likely to be in poverty, 2.2 times as likely to die during infancy, twice as likely to be unemployed and the median household income is about half that of whites.

The disparity in St. Louis is equal to or worse than the peer average on all six of these variables.

DISPARITY IN INFANT MORTALITY

Ratio of black to white infant deaths (less than one year old) per 1,000 live births, 2007

1	Pittsburgh	3.8
2	St. Louis	3.6
3	Milwaukee	3.6
4	Miami	2.8
5	Philadelphia	2.8
6	Baltimore	2.8
7	Chicago	2.6
8	Memphis	2.6
9	Cincinnati	2.6
10	Kansas City	2.6
11	Detroit	2.5
12	Cleveland	2.5
13	San Francisco	2.5
14	Minneapolis	2.4
15	Seattle	2.3
Average		2.2
16	Los Angeles	2.2
17	Atlanta	2.2
18	Columbus	2.2
19	Austin	2.0
20	Washington D.C.	2.0
21	Oklahoma City	2.0
22	Indianapolis	2.0
23	Dallas	2.0
24	San Diego	1.9
25	Charlotte	1.9
26	Denver	1.9
27	Nashville	1.9
28	Houston	1.8
29	Phoenix	1.7
30	Louisville	1.7
31	Boston	1.7
32	New York	1.7
33	San Antonio	1.4
34	Portland*	1.4
35	Salt Lake City**	1.1

Source: Centers for Disease Control and Prevention

* Combined data for 2006 and 2007 due to low African American sample size

** Combined data for 2001 - 2007 due to low African American sample size

DISPARITY IN UNEMPLOYMENT

Ratio of black to white unemployment rates, 2009

1	Milwaukee	3.2
2	Minneapolis	2.9
3	Phoenix	2.5
4	Memphis	2.5
5	Indianapolis	2.4
6	Louisville	2.3
7	Austin	2.2
8	St. Louis	2.0
9	Boston	2.0
10	Columbus	2.0
11	Kansas City	2.0
12	Cleveland	1.9
13	Baltimore	1.9
14	Portland	1.9
Average		1.9
15	New York	1.9
16	Nashville	1.9
17	Denver	1.9
18	Houston	1.9
19	Atlanta	1.8
20	Oklahoma City	1.8
21	San Diego	1.8
22	Pittsburgh	1.7
23	Cincinnati	1.7
24	Miami	1.7
25	Philadelphia	1.7
26	Chicago	1.7
27	Washington D.C.	1.7
28	Detroit	1.5
29	Dallas	1.5
30	Charlotte	1.5
31	Los Angeles	1.3
32	San Francisco	1.3
33	San Antonio	1.3
34	Seattle	1.2

Source: Bureau of Labor Statistics, Geographic Profile of the United States

DISPARITY IN INCOME

Ratio of white to black median household income, 2009

1	Minneapolis	2.5
2	Milwaukee	2.3
3	Pittsburgh	2.2
4	Salt Lake City	2.2
5	Cleveland	2.2
6	Denver	2.1
7	San Francisco	2.1
8	St. Louis	2.0
9	Chicago	2.0
10	Kansas City	2.0
11	Philadelphia	1.9
12	Memphis	1.9
13	Cincinnati	1.9
14	Dallas	1.9
15	Houston	1.9
16	Detroit	1.9
Average		1.8
17	Baltimore	1.8
18	New York	1.8
19	Indianapolis	1.8
20	Seattle	1.8
21	Oklahoma City	1.8
22	Louisville	1.8
23	Boston	1.8
24	Austin	1.8
25	Portland	1.7
26	Columbus	1.7
27	Los Angeles	1.7
28	Washington D.C.	1.7
29	Charlotte	1.7
30	Atlanta	1.7
31	Miami	1.6
32	Nashville	1.6
33	San Antonio	1.5
34	San Diego	1.4
35	Phoenix	1.4

Source: American Community Survey, U.S. Census Bureau

DISPARITY IN HIGHER EDUCATION

Ratio of white to black, age 25 years or older, with a bachelor's degree or higher, 2009

1	Milwaukee	2.8
2	Austin	2.5
3	San Francisco	2.4
4	Cleveland	2.3
5	Memphis	2.3
6	Philadelphia	2.2
7	Chicago	2.2
8	Miami	2.2
9	Indianapolis	2.1
10	Pittsburgh	2.1
11	Minneapolis	2.1
12	Denver	2.1
13	Boston	2.1
14	Washington D.C.	2.0
15	New York	2.0
16	Kansas City	2.0
17	Baltimore	2.0
18	St. Louis	2.0
19	Seattle	2.0
Average		2.0
20	Detroit	2.0
21	Los Angeles	1.9
22	Houston	1.9
23	Cincinnati	1.8
24	Dallas	1.8
25	San Diego	1.8
26	Louisville	1.8
27	Columbus	1.8
28	Salt Lake City	1.7
29	San Antonio	1.7
30	Charlotte	1.6
31	Atlanta	1.6
32	Portland	1.5
33	Oklahoma City	1.5
34	Phoenix	1.4
35	Nashville	1.3

Source: American Community Survey, U.S. Census Bureau

Governance & Public Finance

Another much discussed issue in the St. Louis region is governance and the fragmented nature of the region's government structure.

The St. Louis region has consistently ranked toward the top on number of local governments in total and per capita. In 1987, the region ranked 2nd with 28.4 government units per 100,000 population and in 2007 the region had 31.5 units per 100,000, ranking 3rd.

LOCAL GOVERNMENT UNITS

Per 100,000 population, 1987

1	Pittsburgh	29.8
2	St. Louis	28.4
3	Louisville	28.3
4	Indianapolis	26.0
5	Kansas City	24.8
6	Houston	21.7
7	Columbus	21.7
8	Portland	20.5
9	Minneapolis	19.6
10	Cincinnati	19.5
11	Philadelphia	17.5
12	Oklahoma City	17.2
Average		14.2
13	Seattle	13.8
14	Denver	13.5
15	Chicago	12.7
16	Milwaukee	12.3
17	Cleveland	11.7
18	San Francisco	11.1
19	Dallas	10.5
20	Nashville	10.3
21	Boston	9.3
22	Detroit	8.9
23	Atlanta	8.4
24	Memphis	7.8
25	Phoenix	7.3
26	Los Angeles	3.8
27	Washington D.C.	3.2
28	Baltimore	2.5
29	New York	2.3
30	Miami	1.9

Source: U.S. Census Bureau

Low Tax or Low Service?

Despite a high number of governments, the region has consistently had some of the lowest per capita government revenues and expenditures. On local government expenditures the region ranked toward the lower end, ranking 28th (of 30) in 1987 and 33rd in 2006. While this can be seen as a positive since it means low taxes, it could also mean lower services.

The Reliance on Sales Tax and Reliance on Property Tax tables show that the St. Louis region's governments are more reliant on sales tax and less reliant on property tax than most of the peer regions.

Does our government structure make us competitive?

200 Municipalities
9.8 per 100,000 People

135 School Districts
4.8 per 100,000 People

111 Fire Districts +
60 Municipal Fire Departments

LOCAL GOVERNMENTS
Per 100,000 population, 2007

1	Pittsburgh	32.9
2	Denver	32.1
3	St. Louis	31.5
4	Kansas City	30.5
5	Louisville	26.4
6	Indianapolis	23.6
7	Cincinnati	18.1
8	Columbus	16.8
9	Houston	15.4
10	Chicago	14.3
11	Minneapolis	14.2
Average		
12	Austin	11.5
13	Oklahoma City	11.2
14	Philadelphia	11.2
15	Portland	10.9
16	Cleveland	10.1
17	Milwaukee	10.0
18	Boston	9.0
19	Salt Lake City	9.0
20	Memphis	8.6
21	Nashville	8.6
22	Seattle	8.2
23	San Francisco	6.8
24	Atlanta	6.5
25	Detroit	6.3
26	Dallas	6.0
27	San Antonio	5.8
28	New York	5.2
29	Miami	5.2
30	Charlotte	4.8
31	San Diego	3.9
32	Phoenix	3.3
33	Washington D.C.	2.8
34	Los Angeles	2.6
35	Baltimore	1.5

Source: 2007 Census of Governments, U.S. Census Bureau

RELIANCE ON SALES TAX
As a percent of total tax revenue, 2006

1	Oklahoma City	41.1
2	Denver	36.7
3	Seattle	31.9
4	Phoenix	29.8
5	Nashville	29.5
6	Atlanta	29.4
7	Los Angeles	28.6
8	Kansas City	27.7
9	Salt Lake City	27.7
10	Memphis	25.6
11	St. Louis	22.4
12	San Diego	20.3
13	San Francisco	18.3
14	Charlotte	18.3
Average		
15	Washington D.C.	15.6
16	Chicago	15.5
17	Houston	13.7
18	Dallas	13.7
19	New York	13.7
20	Miami	13.5
21	San Antonio	13.3
22	Cleveland	11.4
23	Columbus	8.2
24	Portland	7.3
25	Austin	6.9
26	Louisville	6.2
27	Pittsburgh	5.0
28	Minneapolis	4.8
29	Cincinnati	4.7
30	Detroit	4.5
31	Milwaukee	4.0
32	Baltimore	3.6
33	Philadelphia	2.6
34	Indianapolis	1.6
35	Boston	1.2

Source: State and Local Government Finance, U.S. Census Bureau

RELIANCE ON PROPERTY TAX
As a percent of total tax revenue, 2006

1	Boston	96.6
2	Milwaukee	92.9
3	Austin	91.8
4	Indianapolis	91.4
5	Minneapolis	90.5
6	Detroit	86.9
7	Houston	85.0
8	San Antonio	84.8
9	Dallas	83.8
10	Miami	81.8
11	Chicago	81.4
12	Pittsburgh	78.1
13	Charlotte	76.6
14	San Diego	72.4
15	Cincinnati	72.3
Average		
16	Philadelphia	71.9
17	Portland	70.6
18	Cleveland	69.6
19	Memphis	68.8
20	St. Louis	68.1
21	Columbus	67.6
22	Salt Lake City	67.5
23	Atlanta	66.7
24	San Francisco	66.7
25	Phoenix	64.3
26	Nashville	63.9
27	Kansas City	62.9
28	Los Angeles	62.6
29	New York	59.7
30	Denver	58.2
31	Seattle	57.9
32	Louisville	56.3
33	Oklahoma City	53.8
34	Washington D.C.	51.4
35	Baltimore	48.7

Source: State and Local Government Finance, U.S. Census Bureau

LOCAL GOVERNMENT EXPENDITURES
Dollars per capita, 2006

1	San Francisco	7,570
2	New York	7,333
3	Los Angeles	6,789
4	Charlotte	6,419
5	Washington D.C.	6,333
6	Miami	6,176
7	San Diego	6,139
8	Seattle	5,966
9	Cleveland	5,347
10	Indianapolis	5,281
11	Denver	5,234
12	San Antonio	5,075
13	Memphis	5,003
14	Milwaukee	4,934
15	Phoenix	4,902
16	Chicago	4,894
Average		
17	Philadelphia	4,825
18	Kansas City	4,781
19	Portland	4,721
20	Minneapolis	4,684
21	Columbus	4,598
22	Boston	4,526
23	Detroit	4,390
24	Atlanta	4,345
25	Salt Lake City	4,247
26	Dallas	4,228
27	Houston	4,151
28	Baltimore	4,127
29	Pittsburgh	3,835
30	Nashville	3,774
31	Austin	3,523
32	Cincinnati	3,406
33	St. Louis	3,327
34	Louisville	3,275
35	Oklahoma City	3,102

Source: State and Local Government Finance, U.S. Census Bureau

Conclusion

What do these rankings tell us? The regions with the largest growth in population and employment tend to be more diverse, have larger increases in their central city population, and have lower median ages but they also do not have the highest earnings per job, are not as affordable as St. Louis, do not have as many adults with advanced degrees, and have higher crime rates. What makes a region competitive? What makes a community a good place to live?

Where does the St. Louis region want to stand in these rankings? Are we content with ranking above average on indicators of racial disparity and being number one for asthma risk? How can we improve our standing on economic variables? Where do we want to concentrate our resources? Can we learn from other regions that have improved on their rankings?

These are just some of the questions that *Where We Stand* asks of the people that live and work in the St. Louis area. The sixth edition provides data on 129 variables that can be used to assess the region. Many of these variables were used in earlier editions of the publication, providing an opportunity to examine St. Louis and its peers over a 20 year period. We present these facts for you to make your own assessment and challenge you to use the data to drive decisions and set priorities.



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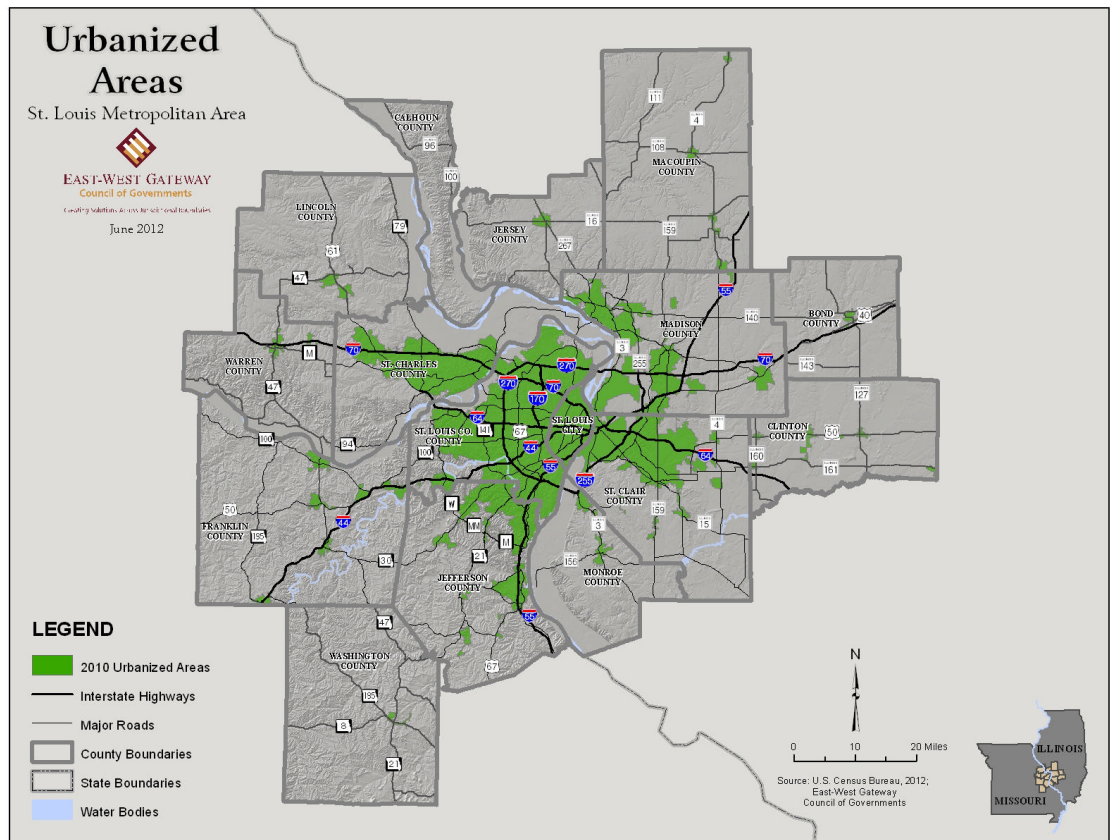
WHERE WE STAND UPDATE: POPULATION CHANGE—AGING

Since its first publication in 1990, Where We Stand has come to be recognized as an authoritative source of information about the competitive position of the St. Louis region in the national marketplace. We track over 100 variables that together tell a story about the health and competitive position of our region compared to 34 peer MSAs.¹ These regions are our domestic “competition” and are generally a consistent yardstick to gauge “Where We Stand.” Now in its sixth edition, Where We Stand is issued about every three years with periodic updates in between each publication. These briefings provide an opportunity to update St. Louis’ standing with new data or provide further insight on a specific topic. This issue builds on the data included in the WWS sixth edition, providing a greater understanding of where people of different age groups, with a focus on seniors, reside throughout our region and in our peer regions. Having an understanding of where people live and what their differing issues are can help us plan to meet housing, transportation, and other social service needs.

Aging Population

The aging of the population in the United States has been an increasingly discussed topic as the baby boom generation approaches and surpasses age 65.² Less frequently discussed is that rural areas are aging faster than the rest of the country. Now that the first of this generation has reached the historical retirement age, the need to understand these nuances is even more important. There are many challenges that surface due to changing age demographics. At the federal level Social Security and Medicaid are greatly affected. At the state and local level the challenges are similar, with the senior population reliant on public programs. Additionally, these changes have significant impacts on housing and transportation planning as well as implications for the workforce and tax revenues. While this is true for both rural and urban areas, the growing senior population in rural

areas is of particular concern because they tend to be poorer, less educated, have lower incomes, fewer resources for retirement, less adequate housing, poorer health and less access to services than their urban counterparts.³



1 The U.S. Census Bureau defines a MSA, or metropolitan statistical area, as “that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan statistical areas comprise one or more counties...the Office of Management and Budget (OMB) defines metropolitan areas for purposes of collecting, tabulating, and publishing federal data. Metropolitan area definitions result from applying published standards to Census Bureau data.”

2 The baby boom generation refers to those born between 1946 and 1964.

3 Rogers, Carolyn, *Changes in the Older Population and Implications for Rural Areas*, Food and Rural Economic Division, Economic Research Service, U.S. Department of Agriculture. Rural Development Research Report Number 90, Washington DC, December 1999.

To gain a better understanding of the concentration of seniors in rural areas, this update documents the change in rural and urban age distributions for the St. Louis MSA relative to the 34 metropolitan areas used to gauge "Where We Stand." Trends among age groups under 18 (youth), 18 to 34 (young adults), 35 to 64 (older adults) and 65 and older (seniors) are examined, comparing the population shifts in rural and urban boundaries.

Urbanization of America

Most of the population of the United States lives in urbanized areas.⁴ As of 2010, 80.7 percent of the population in the United States reside in Census designated urban areas or urban clusters. This represents a slight increase (1.7 percent) from 2000.⁵ To determine what portion of this increase is due to the change in how the geographic boundaries of the urbanized areas were redrawn, the 2000 and 2010 population demographics were both examined using the 2010 defined boundaries. This revealed that about 1.1 percent of the increase in the urbanized area population in the U.S. can be attributed to population growth while the remainder of the growth is due to the revised geographic boundaries. The 2010 boundaries are used throughout this update for both 2000 and 2010 data to mitigate the effects of the redrawn boundaries.

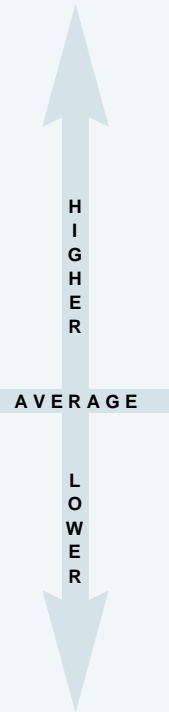
Although it may seem counterintuitive, metropolitan regions contain both urban and rural areas. In the St. Louis MSA, 86.2 percent of the population lives in urbanized areas while the remainder of the MSA population lives in rural areas. The rural areas of the MSA comprise 87.2 percent of the land area.

Each of the WWS MSAs, except Louisville and Nashville (80.7 percent and 76.8 percent, respectively), has a higher rate of urbanization than the full United States. St. Louis ranks 28th among the 35 peer regions. The map on page 1 depicts the urbanized area of the St. Louis region. The "urban area" includes the city of St. Louis, the areas of the region considered suburbs, and higher populated areas in the more rural parts of the region. The peer MSA average urbanized land area is about eight times (24.3 percent) the national average (3.0 percent), ranging from 3.3 percent (Salt Lake City) to a high of 57.4 percent (Boston). St. Louis ranks 26th out of 35 with 12.8 percent of its land considered "urbanized area."

PERCENT OF POPULATION LIVING IN URBANIZED AREAS

2010

1	Miami	99.6
2	Los Angeles	99.5
3	San Francisco	99.0
4	New York	98.0
5	Chicago	97.4
6	Salt Lake City	97.0
7	San Diego	96.7
8	Phoenix	95.9
9	Philadelphia	94.9
10	Boston	94.5
11	Seattle	94.4
12	Denver	94.3
13	Milwaukee	93.4
14	Detroit	93.2
15	Houston	93.1
16	Dallas	92.8
17	Washington DC	92.7
18	Cleveland	91.9
19	Baltimore	91.0
	Average	90.8
20	Portland	90.1
21	Atlanta	89.1
22	Minneapolis	88.9
23	Indianapolis	88.4
24	Charlotte	87.9
25	Austin	87.2
26	Kansas City	87.1
27	San Antonio	86.2
28	St. Louis	86.2
29	Columbus	85.6
30	Cincinnati	85.4
31	Memphis	85.3
32	Pittsburgh	82.2
33	Oklahoma City	81.7
34	Louisville	80.7
35	Nashville	76.8



Source: U.S. Census Bureau



4 Urbanized areas are defined for this update to include both urban areas and urban clusters, which adhere to specific thresholds in population and density. Urban areas meet or exceed 50,000 population thresholds with density requirements of 500 or 1,000 people per square mile, depending on block level population. Urban clusters range, in population, from 2,500 to 50,000, with similar

density requirements (For more details see the Federal Register at www.census.gov/geo/www/ua/fedregv76n164.pdf) See Map 1 for a depiction of urbanized areas in the St. Louis region.

5 US Census Bureau, 2000 and 2010.

RURAL AREA POPULATION

Percent change, 2000-2010

1 Phoenix	50.2
2 Austin	30.7
3 Atlanta	28.7
4 San Antonio	28.2
5 Dallas	19.8
6 Oklahoma City	18.8
7 Houston	16.4
8 Denver	15.5
9 Minneapolis	12.9
10 Nashville	11.4
11 Louisville	10.8
12 Memphis	10.7
13 Salt Lake City	10.6
14 Washington DC	9.4
15 Charlotte	8.2
16 Kansas City	6.4
17 St. Louis	6.3
Average	6.2
18 Columbus	4.1
19 Chicago	4.0
20 Boston	3.3
21 Cleveland	3.1
22 Milwaukee	2.8
23 Cincinnati	2.7
24 Detroit	1.4
25 Philadelphia	1.2
26 Portland	0.5
27 Baltimore	0.5
28 Seattle	0.4
29 New York	-0.1
30 Indianapolis	-0.4
31 Pittsburgh	-6.5
32 Los Angeles	-15.9
33 San Diego	-20.1
34 Miami	-21.9
35 San Francisco	-37.0

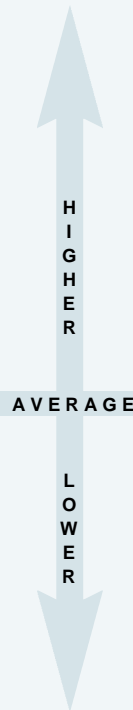
Source: U.S. Census Bureau
Note: 2010 Urbanized Area
Boundaries used

URBANIZED AREA POPULATION

Percent change, 2000-2010

1 Austin	38.4
2 Charlotte	36.3
3 Phoenix	28.2
4 Houston	26.9
5 San Antonio	24.7
6 Nashville	24.5
7 Dallas	23.7
8 Atlanta	23.5
9 Indianapolis	17.6
10 Portland	17.4
11 Washington DC	17.0
12 Denver	16.8
13 Salt Lake City	16.2
14 Columbus	15.7
15 Seattle	13.9
16 Oklahoma City	13.4
Average	13.0
17 Kansas City	11.5
18 San Diego	11.4
19 Miami	11.3
20 Louisville	10.4
21 Minneapolis	10.2
22 Memphis	8.9
23 Baltimore	6.8
24 Cincinnati	6.6
25 San Francisco	5.9
26 Philadelphia	5.1
27 Chicago	4.0
28 St. Louis	3.9
29 Los Angeles	3.9
30 Milwaukee	3.7
31 Boston	3.7
32 New York	3.2
33 Pittsburgh	-2.3
34 Cleveland	-3.8
35 Detroit	-3.9

Source: U.S. Census Bureau
Note: 2010 Urbanized Area
Boundaries used



Among the 35 MSAs, the population in 2010 rural boundaries increased by an average of 6.2 percent between 2000 and 2010. This represents an increase of almost twice the aggregate rural population of the United States (3.5 percent). The change in rural population for the peer MSAs varies widely, from a decrease of 37.0 percent (San Francisco) to an increase of 50.2 percent (Phoenix). In St. Louis the rural population grew slightly above average, ranking 17th with a 6.3 percent increase.

The average increase for the peer MSAs was higher for the urban areas, 13.0 percent, compared to the average for the United States, 11.3 percent. Although the range among the peer regions was not as substantial as was seen for the rural areas, the difference between the fastest growing urban population, 38.4 percent increase in Austin, and the slowest growing, 3.9 percent decrease in Detroit, was still large. The urban population in St. Louis fell at the lower end of this spectrum, growing 3.9 percent over the past decade and ranking 28th among the 35 peers. St. Louis shared this low urban population growth with many of its Midwest peers while the region's rural population growth was larger than many of these counterparts.

“St. Louis shared this low urban population growth with many of its Midwest peers...”



Aging in Metro Areas

In each of the 35 metro areas, the rural population is aging faster than the urban population. In 2000, the average median age for the 35 peer MSAs in urbanized areas was 34.2, while the median age in rural areas was 37.5, an age gap of 3.3.⁶ In 2010, the regions' average

median age in urbanized areas increased to 35.8, while the median age in rural areas increased to 42.3, an age gap of 6.5. Therefore, the average age gap between rural and urban areas increased 3.2⁷ years from 2000 to 2010.

RURAL AREA POPULATION MEDIAN AGE

2010

1 San Francisco	47.5
2 Denver	45.6
3 Pittsburgh	45.3
4 Baltimore	44.9
5 Portland	44.8
6 New York	44.4
7 Cleveland	44.4
8 Milwaukee	44.3
9 Seattle	44.1
10 Philadelphia	44.1
11 Los Angeles	43.4
12 Boston	43.2
13 Kansas City	43.2
14 Chicago	43.1
15 Washington DC	43.0
16 Miami	42.9
17 Indianapolis	42.8
18 San Diego	42.6
19 Detroit	42.4
Average	42.3
20 St. Louis	41.9
21 Cincinnati	41.9
22 Columbus	41.7
23 San Antonio	41.4
24 Charlotte	41.2
25 Louisville	40.9
26 Nashville	40.8
27 Minneapolis	40.7
28 Memphis	40.6
29 Oklahoma City	40.3
30 Dallas	40.1
31 Austin	39.7
32 Atlanta	39.6
33 Houston	39.6
34 Phoenix	38.9
35 Salt Lake City	35.3

Source: U.S. Census Bureau

URBANIZED AREA POPULATION MEDIAN AGE

2010

1 Pittsburgh	41.9
2 Cleveland	40.2
3 Miami	39.7
4 Detroit	38.7
5 San Francisco	38.2
6 Boston	38.0
7 Philadelphia	37.6
8 New York	37.4
9 St. Louis	37.4
10 Louisville	37.3
11 Baltimore	37.3
12 Seattle	36.4
13 Milwaukee	36.2
14 Cincinnati	36.2
15 Portland	36.0
Average	35.8
16 Kansas City	35.6
17 Chicago	35.6
18 Washington DC	35.6
19 Minneapolis	35.4
20 Denver	35.2
21 Los Angeles	35.1
22 Charlotte	34.7
23 Indianapolis	34.7
24 Phoenix	34.5
25 San Diego	34.5
26 Atlanta	34.4
27 Nashville	34.3
28 Memphis	34.2
29 Columbus	34.1
30 Oklahoma City	33.5
31 Dallas	33.1
32 San Antonio	33.1
33 Houston	32.8
34 Austin	31.9
35 Salt Lake City	30.8

Source: U.S. Census Bureau

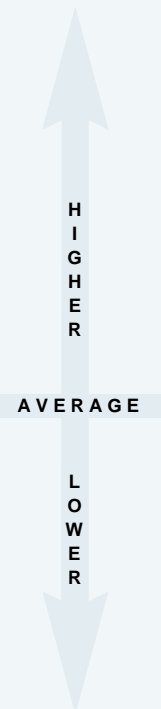
CHANGE IN DIFFERENCE OF RURAL AND URBANIZED AREAS MEDIAN AGE

2000-2010

1 San Diego	7.5
2 Milwaukee	4.7
3 Miami	4.7
4 Seattle	4.7
5 San Francisco	4.5
6 Denver	4.4
7 Indianapolis	4.2
8 San Antonio	4.1
9 Washington DC	3.9
10 Portland	3.8
11 Baltimore	3.6
12 Kansas City	3.6
13 Charlotte	3.6
14 Cincinnati	3.4
15 Philadelphia	3.4
16 Nashville	3.4
17 Minneapolis	3.4
18 Boston	3.3
Average	3.3
19 Louisville	3.1
20 Pittsburgh	3.1
21 St. Louis	3.0
22 New York	3.0
23 Chicago	3.0
24 Columbus	3.0
25 Oklahoma City	2.8
26 Memphis	2.5
27 Detroit	2.3
28 Houston	2.3
29 Dallas	2.3
30 Los Angeles	2.2
31 Cleveland	2.1
32 Salt Lake City	2.0
33 Atlanta	1.9
34 Austin	1.8
35 Phoenix	1.6

Source: U.S. Census Bureau

Note: 2010 Urbanized Area Boundaries used



6 2010 Urbanized Area Boundaries were used to allow for comparison, controlling for the change in the geographic boundaries.

7 Numbers in the table differ due to rounding error.

Youth: Under 18 Years Old

Among the 35 peer MSAs, the under 18 rural population declined an average of 4.9 percent between 2000 and 2010. St. Louis ranks just below average at 18th with a 6.4 percent decrease in the rural youth population

Conversely, the urban youth population grew an average of 7.8 percent among the peer MSAs. The change in this demographic ranged from a decrease of 11.9 percent (Cleveland) to an increase of 40.9 percent (Charlotte). St. Louis ranked 31st with a 5.0 percent loss of urbanized area youth.

Ten of the twelve regions that saw increases in their rural youth population also had above average growth in urban youth population. All of the regions that saw decreases in their urban youth population also experienced decreases in their rural youth population.

The fastest growing regions for this age group are among the regions with the largest gains in overall population as well. Austin, Charlotte, Phoenix, Houston, San Antonio, Atlanta, Dallas, Nashville, and Denver experienced the largest overall population gains among the 35 regions.⁸

RURAL AREA UNDER 18 POPULATION CHANGE

Percent change, 2000-2010

1 Phoenix	26.6
2 Atlanta	21.6
3 Austin	21.4
4 San Antonio	13.1
5 Oklahoma City	12.4
6 Dallas	9.2
7 Houston	7.6
8 Salt Lake City	6.6
9 Nashville	2.7
10 Louisville	1.4
11 Memphis	0.7
12 Denver	0.6
13 Washington DC	-0.3
14 Minneapolis	-0.8
15 Columbus	-2.1
16 Charlotte	-2.4
17 Kansas City	-3.8
Average	-4.9
18 St. Louis	-6.4
19 Cincinnati	-8.2
20 New York	-8.3
21 Philadelphia	-8.4
22 Milwaukee	-8.7
23 Cleveland	-9.0
24 Chicago	-9.2
25 Boston	-9.5
26 Indianapolis	-10.8
27 Baltimore	-11.5
28 Detroit	-11.6
29 Portland	-13.9
30 Pittsburgh	-18.3
31 Seattle	-19.4
32 Miami	-27.8
33 San Diego	-28.3
34 Los Angeles	-29.1
35 San Francisco	-47.4

Source: U.S. Census Bureau
Note: 2010 Urbanized Area Boundaries used

URBANIZED AREA UNDER 18 POPULATION CHANGE

Percent change, 2000-2010

1 Charlotte	40.9
2 Austin	39.9
3 Phoenix	26.9
4 Nashville	25.0
5 Atlanta	23.7
6 Dallas	23.3
7 Houston	22.6
8 San Antonio	19.4
9 Indianapolis	16.3
10 Denver	13.3
11 Columbus	12.5
12 Salt Lake City	11.7
13 Oklahoma City	10.9
14 Washington DC	10.7
15 Portland	10.1
16 Kansas City	8.6
Average	7.8
17 Seattle	7.0
18 Louisville	6.9
19 Minneapolis	3.9
20 Memphis	3.0
21 Miami	2.2
22 San Diego	1.3
23 Cincinnati	1.3
24 San Francisco	-0.3
25 Chicago	-2.7
26 Baltimore	-2.7
27 Milwaukee	-2.9
28 Philadelphia	-3.4
29 Boston	-4.1
30 New York	-4.4
31 St. Louis	-5.0
32 Los Angeles	-8.5
33 Pittsburgh	-10.8
34 Detroit	-11.7
35 Cleveland	-11.9

Source: U.S. Census Bureau
Note: 2010 Urbanized Area Boundaries used



⁸ East-West Gateway Council of Governments, Where We Stand Update: Population Growth in St. Louis, November 2011.

Young Adults: 18 to 34 Years Old

Between 2000 and 2010, the 18 to 34 year old cohort in rural areas declined at a similar rate to the under 18 age group (5.6 percent peer MSA average). Only about one-quarter (nine out of 35) of the peer MSAs experienced positive growth among this cohort. St. Louis ranked just below that at 10th with a 1.0 percent decrease.

The urban young adult population grew faster than the under 18 counterparts (9.2 percent average MSA increase) with only five regions experiencing a decrease in this population. None of these five regions were among those that saw an increase in their rural young adult population. St. Louis' urban young adult population grew 7.4 percent more than the rural counterparts at 6.4 percent, ranking 24th.

The regions with the highest urban young adult population were also among the regions with the highest net migration rates. Austin, San Antonio, Charlotte, Houston, Nashville, and Phoenix all had net migration rates of over 11 percent, some of the highest among the 35 peer regions.⁹

RURAL AREA 18-34 YEAR OLD POPULATION CHANGE

Percent change, 2000-2010

1 Phoenix	53.0
2 Austin	18.2
3 San Antonio	14.4
4 Oklahoma City	11.2
5 Dallas	10.4
6 Atlanta	9.9
7 Houston	5.9
8 Minneapolis	0.8
9 Memphis	0.2
10 St. Louis	-1.0
11 Denver	-2.2
12 Kansas City	-2.6
13 Nashville	-2.6
14 Chicago	-2.7
15 Louisville	-3.2
16 Baltimore	-5.0
17 Seattle	-5.4
Average	-5.6
18 Washington DC	-5.9
19 Portland	-6.7
20 Salt Lake City	-7.8
21 Cleveland	-7.8
22 Charlotte	-9.1
23 Philadelphia	-10.8
24 Boston	-11.0
25 New York	-11.2
26 Cincinnati	-11.8
27 Columbus	-11.9
28 Indianapolis	-13.2
29 Detroit	-14.5
30 Milwaukee	-15.2
31 Los Angeles	-15.6
32 Pittsburgh	-17.0
33 San Diego	-39.5
34 Miami	-41.1
35 San Francisco	-45.7

Source: U.S. Census Bureau

Note: 2010 Urbanized Area
Boundaries used

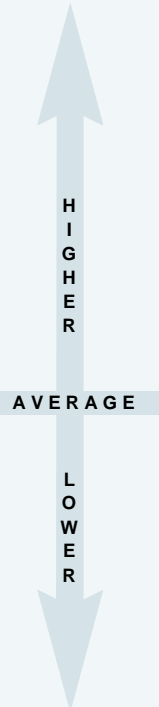
URBANIZED AREA 18-34 YEAR OLD POPULATION CHANGE

Percent change, 2000-2010

1 Austin	24.5
2 San Antonio	24.4
3 Charlotte	22.3
4 Houston	22.1
5 Nashville	20.0
6 Phoenix	18.6
7 Washington DC	16.3
8 Oklahoma City	15.9
9 Indianapolis	12.7
10 San Diego	12.6
11 Portland	12.2
12 Dallas	11.6
13 Seattle	10.9
14 Baltimore	10.8
15 Salt Lake City	10.8
16 Miami	10.7
17 Denver	10.4
18 Columbus	10.2
Average	9.2
19 Louisville	8.8
20 Kansas City	8.7
21 Atlanta	8.5
22 Philadelphia	7.5
23 Minneapolis	6.6
24 St. Louis	6.4
25 Milwaukee	5.5
26 Memphis	5.4
27 Pittsburgh	2.7
28 Cincinnati	2.7
29 New York	2.0
30 Boston	1.7
31 Chicago	-0.2
32 San Francisco	-0.4
33 Los Angeles	-1.1
34 Cleveland	-7.8
35 Detroit	-12.8

Source: U.S. Census Bureau

Note: 2010 Urbanized Area
Boundaries used



“The regions with the highest urban young adult population were also among the regions with the highest net migration rates.”

⁹ East-West Gateway Council of Governments, *Where We Stand Update: Population Growth in St. Louis*, November 2011.

Older Adults: 35 to 64 Years Old

In 2000, the baby boom cohort ranged in age from 36 to 54. Therefore, it is not surprising then that the older adult age group increased in both urban and rural areas in most MSAs.

The older adult rural population increased by 8.8 percent nationally and an average of 11.3 percent for the peer MSAs. The rural population in St. Louis for this age group grew at a slightly higher rate, 12.2 percent, ranking 16th. This growth is in contrast to the decreases experienced for the rural population in St. Louis among the youth (6.4 percent decrease) and the young adults (1.0 percent decrease).

The urban population for this age demographic grew at the fastest rate for the peer MSA average (18.3 percent) compared to 7.8 percent for the youth, 9.2 percent for young adults and 17.2 percent for seniors. St. Louis' older adult urban population grew at less than half the rate of the peer average, at 8.3 percent, ranking 30th out of 35.

RURAL AREA 35-64 YEAR OLD POPULATION CHANGE

Percent change, 2000-2010

1 Phoenix	56.5
2 San Antonio	37.5
3 Austin	36.3
4 Atlanta	35.0
5 Dallas	24.2
6 Houston	21.2
7 Oklahoma City	20.6
8 Minneapolis	20.1
9 Salt Lake City	18.5
10 Denver	18.4
11 Nashville	18.0
12 Charlotte	16.9
13 Louisville	16.6
14 Memphis	16.6
15 Washington DC	13.9
16 St. Louis	12.2
Average	11.3
17 Boston	10.0
18 Kansas City	9.5
19 Cincinnati	9.1
20 Milwaukee	8.3
21 Columbus	8.0
22 Detroit	7.6
23 Chicago	7.1
24 Seattle	6.6
25 Cleveland	6.5
26 Philadelphia	5.4
27 Indianapolis	3.9
28 New York	3.8
29 Portland	2.1
30 Baltimore	2.0
31 Pittsburgh	0.2
32 San Diego	-9.2
33 Los Angeles	-12.8
34 Miami	-17.4
35 San Francisco	-38.0

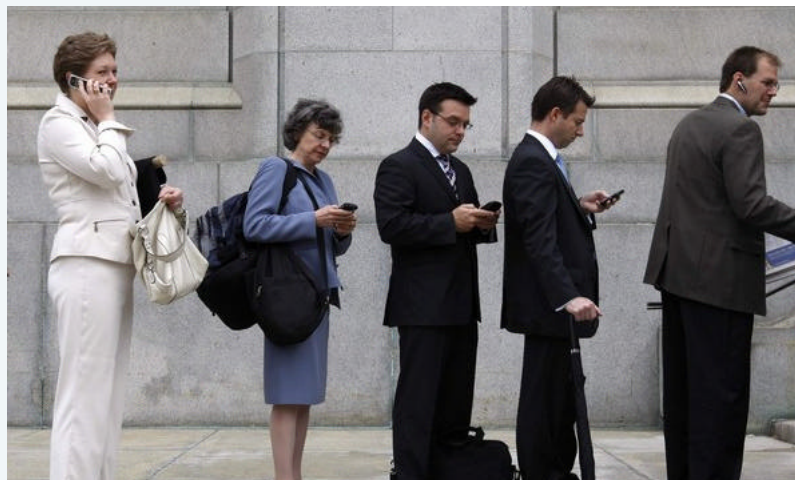
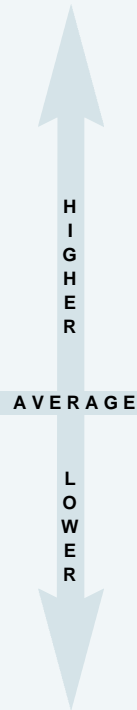
Source: U.S. Census Bureau
Note: 2010 Urbanized Area
Boundaries used

URBANIZED AREA 35-64 YEAR OLD POPULATION CHANGE

Percent change, 2000-2010

1 Austin	48.0
2 Charlotte	43.2
3 Phoenix	35.2
4 Houston	31.2
5 Atlanta	30.7
6 Dallas	30.5
7 San Antonio	29.9
8 Nashville	27.5
9 Portland	23.8
10 Salt Lake City	23.2
11 Indianapolis	22.3
12 Columbus	21.6
13 Denver	20.8
14 Miami	19.0
15 Washington DC	18.9
16 Seattle	18.5
Average	18.3
17 San Diego	17.7
18 Memphis	15.2
19 Kansas City	15.2
20 Minneapolis	14.4
21 Louisville	13.7
22 Los Angeles	13.6
23 Oklahoma City	13.3
24 Cincinnati	12.6
25 San Francisco	11.1
26 Chicago	10.3
27 Philadelphia	9.8
28 Baltimore	9.5
29 Boston	8.7
30 St. Louis	8.3
31 Milwaukee	8.0
32 New York	7.6
33 Detroit	4.3
34 Cleveland	2.5
35 Pittsburgh	2.3

Source: U.S. Census Bureau
Note: 2010 Urbanized Area
Boundaries used



RURAL AREA 65 YEARS AND OLDER POPULATION CHANGE

Percent change, 2000-2010

1 Denver	84.3
2 Phoenix	79.7
3 Atlanta	62.7
4 Austin	59.8
5 San Antonio	56.2
6 Minneapolis	55.2
7 Dallas	50.4
8 Salt Lake City	49.9
9 Detroit	47.4
10 Portland	43.6
11 Houston	43.1
12 Washington DC	42.7
13 Seattle	41.8
14 Oklahoma City	40.9
15 Milwaukee	40.4
16 Louisville	39.5
Average	37.6
17 Cleveland	35.0
18 Chicago	34.6
19 Charlotte	34.5
20 Boston	34.2
21 Nashville	34.0
22 Columbus	33.7
23 Memphis	32.2
24 Cincinnati	31.8
25 Kansas City	30.6
26 Indianapolis	30.4
27 Baltimore	28.5
28 Miami	27.5
29 St. Louis	26.6
30 Philadelphia	23.7
31 New York	16.7
32 San Diego	9.7
33 Pittsburgh	5.4
34 Los Angeles	4.7
35 San Francisco	4.1

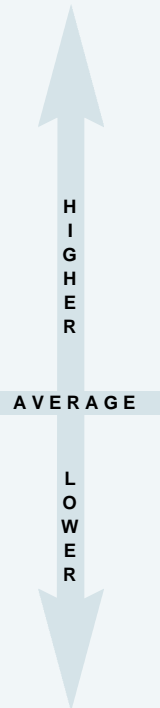
Source: U.S. Census Bureau
Note: 2010 Urbanized Area Boundaries used

URBANIZED AREA 65 YEARS AND OLDER POPULATION CHANGE

Percent change, 2000-2010

1 Austin	51.7
2 Atlanta	41.6
3 Houston	38.9
4 Dallas	36.7
5 Charlotte	36.0
6 Phoenix	31.0
7 Washington DC	27.8
8 Denver	27.7
9 Nashville	24.6
10 Salt Lake City	24.6
11 Portland	24.4
12 San Antonio	22.4
13 Minneapolis	19.7
14 Seattle	19.3
15 Columbus	17.6
16 Los Angeles	17.3
Average	17.2
17 Indianapolis	15.6
18 Oklahoma City	13.8
19 San Francisco	13.4
20 Kansas City	12.3
21 San Diego	12.1
22 Memphis	11.7
23 Louisville	9.9
24 Baltimore	9.8
25 Chicago	8.4
26 Miami	7.6
27 Cincinnati	7.3
28 New York	6.8
29 Boston	6.5
30 St. Louis	4.5
31 Detroit	4.4
32 Philadelphia	3.5
33 Milwaukee	1.9
34 Cleveland	-0.8
35 Pittsburgh	-7.5

Source: U.S. Census Bureau
Note: 2010 Urbanized Area Boundaries used



Seniors: 65 Years and Older

Much like the older adult age group, the senior population grew in both the rural and urban areas for almost all MSAs. Decreases were only seen in the urban areas of two regions—Cleveland (-0.8 percent) and Pittsburgh (-7.5 percent). The average senior population growth among the peer MSAs of 37.6 percent was the highest increase seen among the age groups for the rural population. Seven of the regions experienced over fifty percent growth in this cohort. In the St. Louis region, the population of rural seniors increased at a slower rate (26.6 percent) than most of the peer MSAs, ranking 32nd out of 35, but was still the largest growth rate among any of the age cohorts, rural or urban, for the region.

The senior population in urbanized area boundaries grew at a slightly slower rate (17.2 percent) for the peer MSA average than for the older adult urban counterpart (18.3 percent). The growth rates were about double the youth (7.8 percent) and the young adult (9.2 percent) age groups. Compared to the peer MSAs the urban senior population in St. Louis grew slowly (4.5 percent) over the past decade, ranking 30th out of 35.



Proportional Changes

Examining the proportional changes in the age demographics helps see how much of a difference these age shifts have on the overall makeup of the population. In 2010 four in ten people in the United States were over the age of 45 (39 percent), up from 34 percent in 2000 and 31 percent in 1990.¹⁰ For the peer MSAs the over 65 population has grown from 11.1 percent of the population in 2000 to 11.6 percent of the population in 2010. In contrast, the under 18 population has decreased from 26.0 percent in 2000 to 24.6 percent in 2010.

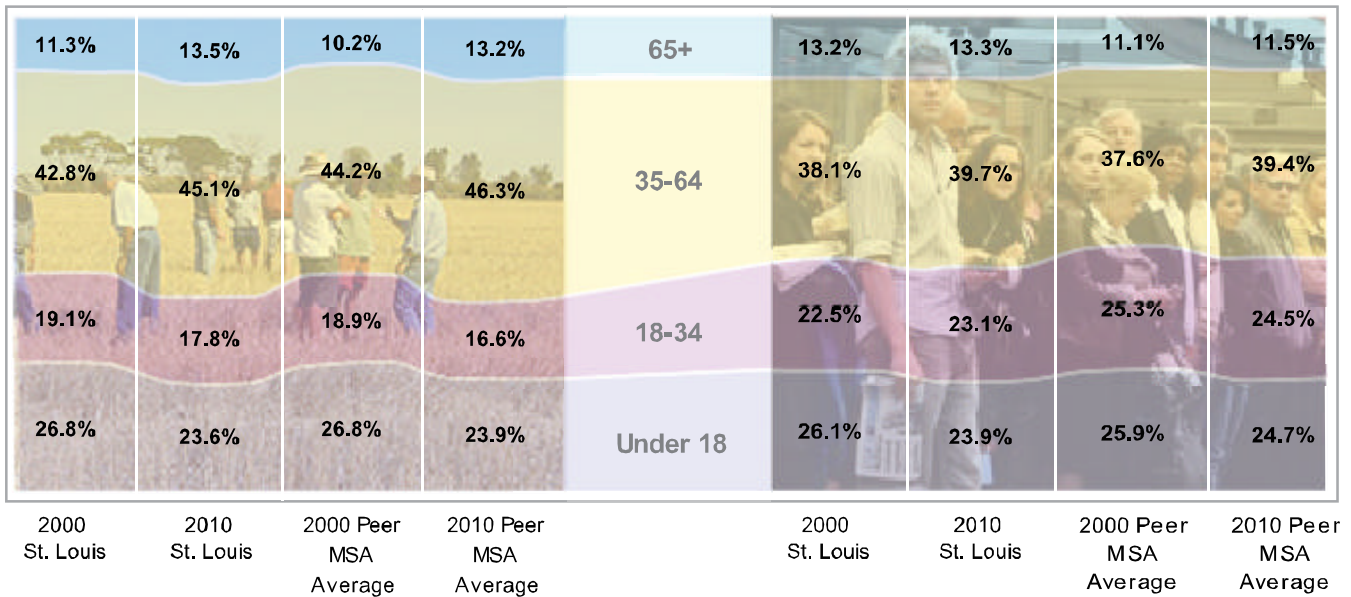
While this is true in both rural and urban areas, the changes are more pronounced in the rural areas than in the urbanized areas. For the 35 peer MSAs the rural senior population increased 3.0 percent from 2000 to 2010 while the urban counterparts only increased 0.4 percent. On the other end of the spectrum, the rural youth population decreased 2.9 percent compared to 1.2 percent in the urban areas. For the St. Louis region the rural senior population increased 2.2 percent (11.3 percent in 2000 to 13.5 percent in 2010) and the urban senior population increased 0.1 percent (13.2 to 13.3 percent).

Today, 40 million people in the United States are ages 65 and older, but this number is projected to more than double to 89 million by 2050. Although the "oldest old"—those ages 85 and older—represent only 15 percent of the population ages 65 and older today, their numbers are projected to rise rapidly over the next 40 years. By 2050, the oldest old will number 19 million, over one-fifth of the total population ages 65 and older.

—Population Reference Bureau—

Rural Area Age Distribution

Urbanized Area Age Distribution



10 Frey, William H., *The Uneven Aging and 'Younging' of America: State and Metropolitan Trends in the 2010 Census*, Metropolitan Policy Program at Brookings, June 2011.

Challenges Associated with the Changing Age Demographics

- **Greater need for healthcare.** Most older persons have at least one chronic condition and many have multiple conditions resulting in a need for more frequent visits to the doctor and more specialized needs.¹¹ While this is true for all seniors, health care in rural areas tends to be less accessible, provide fewer choices or alternatives, is more costly and provides fewer specialized services.¹²
- **Less tax revenue.** As people leave the workforce they contribute less to the tax base. This is true of the income tax as well as sales tax since the older age demographic tends to be on a fixed income and therefore spends less on retail sales.
- **More dependent on public transportation.** The combination of being on a fixed income and declining health results in seniors having a greater need for public transit.¹³
- **Aging in place.** A survey of older adults found that that nearly three-quarters (73 percent) of respondents said they want to live in their current residence as long as possible.¹⁴ Desire to age in place means a need for adapted housing such as implementation of universal design features or multigenerational housing that provides easier access and a lower financial burden for seniors.¹⁵
- **Lower participation in the workforce.** As boomers leave the workforce, the working age population will decline unless there is an increase in immigration. This raises concerns about potential workforce shortages.
- **Changing household dynamics.** Seniors are increasingly deciding to live alone, rather than move in with their children, with 30 percent of seniors now living alone.¹⁶ For some seniors this could mean less ability to rely on family caregivers.

Conclusion

Although all areas of the country are aging, the rural portions of the metropolitan areas have the highest concentration of older adults and seniors. These changes will require careful consideration in planning for the changing transportation, housing and social service needs, particularly for the rural senior population.



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11 A Profile of Older Americans: 2011, Administration on Aging, U.S. Department of Human Services, 2011.

12 Rogers, Carolyn C., *Changes in the Older Population and Implications for Rural Areas*, Food and Rural Economic Division, Economic Research Service, U.S. Department of Agriculture. Rural Development Research Report Number 90, Washington, DC, December 1999.

13 DeGood, Kevin, *Aging in Place, Stuck without Options*, Transportation for America, 2011.

14 Keenan, Teresa A. *Home and Community Preferences of the 45+ Population*, AARP, November 2010.

15 Hodgson, Kimberley, *Multigenerational Planning: Family-Friendly Communities Briefing Papers*, American Planning Association, Chicago, IL, 2011.

16 Farnsworth Riche, Martha, *How Changes in the Nation's Age and Household Structure Will Reshape Housing Demand in the 21st Century*, Issue Papers on Demographic Trends Important to Housing, Economic Research, Prepared for: U.S. Department of Housing and Urban Development Office of Policy Development and Research, February 2003.



WHERE WE STAND UPDATE: POPULATION GROWTH IN ST. LOUIS

Since its first publication in 1990, *Where We Stand* has come to be recognized as an authoritative source of information about the competitive position of the St. Louis region in the national marketplace. We track over 100 variables that together tell a story about the health and competitive position of our region compared to 34 peer metropolitan statistical areas (MSAs).¹ Now in its sixth edition, *Where We Stand* is issued about every five years with periodic updates between each publication. These briefings provide an opportunity to update St. Louis' standing with new data or provide further insight on a specific topic. This issue builds on the data included in the *WWS* sixth edition, providing a greater understanding of the factors that influence population change in St. Louis, while also identifying noteworthy settlement patterns in other metropolitan regions.

National Population Change

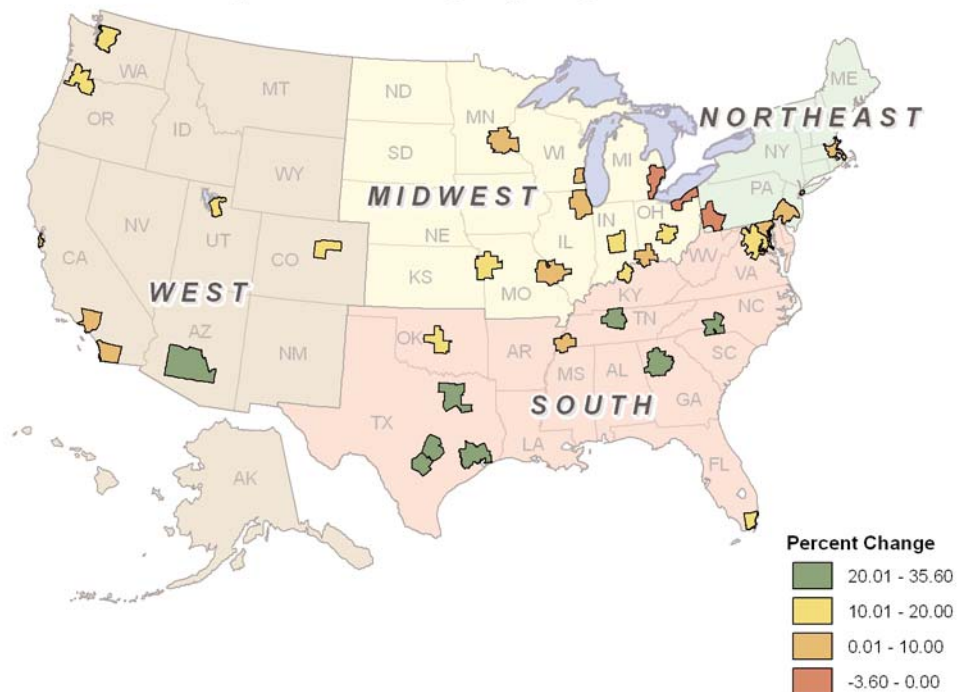
Five years ago the United States reached a milestone as it joined the ranks of China and India as one of only three countries with a population exceeding 300 million. It took the U.S. almost 200 years to amass its first 200 million people and only 40 years to add its last 100 million.

Since 2000, the U.S. experienced a 9.7 percent increase in population (from 281.4 million in 2000 to 308.7 million in 2010),² the slowest rate in the past six decades and the second slowest since 1900.³

The nation did not experience widespread population growth over the past decade; rather it saw concentrated regional gains.⁴ From 2000 to 2010, regional growth in the South and West outpaced the national average (14.3 and 13.8 percent, respectively). The Midwest and Northeast, on the other hand, grew at a much slower pace than the national average over this time period (3.9 and 3.2 percent, respectively).

St. Louis is typical of other Midwestern regions—a slower pace of population growth with relatively lower rates of

MSA Population Change by Region, 2000-2010



international and domestic migration but some growth due to natural increases. This briefing compares the St. Louis region with 34 peer regions on population change dynamics.

1 The U.S. Census Bureau defines a MSA, or metropolitan statistical area, as "that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan statistical areas comprise one or more counties ... the Office of Management and Budget (OMB) defines metropolitan areas for purposes of collecting, tabulating, and publishing federal data. Metropolitan area definitions result from applying published standards to Census Bureau data".

2 U.S. Census Bureau, 2010 Census; Census 2000.

3 U.S. Census Bureau, 2010 Census; Census 2000; Hobbs, F., & Stoops, N. (2002). *Demographic trends in the 20th century*. Washington D.C.: U.S. Census Bureau; Forstall, R. (1996). *Population of the states and counties of the United States: 1790 to 1990*. Washington D.C.: U.S. Census Bureau.

4 The U.S. Census Bureau, 2010 Census divides the country into four regions (South, West, Midwest & Northeast). Regional population data from U.S. Census Bureau, 2010 Census; Census 2000.

Metropolitan Population Change

Much of the population boom in the South and West can be attributed to the rapid growth of metropolitan areas in those regions. Of the 20 WWS peer regions that experienced growth above the national average (9.7 percent) over the past decade, 16 were located in the South and West. The top 12 fastest-growing MSAs were located in these regions with the top eight growing at a rate more than double that of the national average. Additionally, the three fastest growing metropolitan areas, Phoenix, Charlotte and Austin, grew roughly three times faster than the nation as a whole (27.9, 31.2 and 35.6 percent, respectively).

Slow or negative population growth in some metropolitan areas of the Midwest and Northeast has contributed to the slow population growth in these regions. Of the 15 WWS peer regions that experienced below average growth over the past decade, 10 were located in these two regions. Furthermore, the only three metropolitan regions to lose population over the past decade, Pittsburgh, Cleveland and Detroit (-3.0, -3.3 and -3.6 percent respectively), are located in these slow-growth regions.

In the past decade, the St. Louis MSA grew at the ninth slowest rate among the WWS peers. St. Louis' population grew from 2,698,687 in 2000 to 2,812,896 in 2010, a 4.1 percent increase. This rate is far below the peer average growth rate of 12 percent but is in line with the population trends of MSAs throughout the Midwest and is a higher rate than some of the most populated regions such as New York, Chicago, and Los Angeles.

Components of Population Change

There are two components of population change: migration and natural increase. Migration is the number of immigrants (both international and domestic) that move in to or out of an area. Natural increase is the number of births over deaths.

International Migration

Foreign-born residents make up about 12.5 percent of the total population of the United States⁵ and a majority of them live in metropolitan areas. This settlement pattern has held up for over a century and American cities continue to host large immigrant populations.

METRO AREA POPULATION 2010

1	New York	18,897,109
2	Los Angeles	12,828,837
3	Chicago	9,461,105
4	Dallas	6,371,773
5	Philadelphia	5,965,343
6	Houston	5,946,800
7	Washington D.C.	5,582,170
8	Miami	5,564,635
9	Atlanta	5,268,860
10	Boston	4,552,402
11	San Francisco	4,335,391
12	Detroit	4,296,250
13	Phoenix	4,192,887
Average		3,980,077
14	Seattle	3,439,809
15	Minneapolis	3,279,833
16	San Diego	3,095,313
17	St. Louis	2,812,896
18	Baltimore	2,710,489
19	Denver	2,543,482
20	Pittsburgh	2,356,285
21	Portland	2,226,009
22	San Antonio	2,142,508
23	Cincinnati	2,130,151
24	Cleveland	2,077,240
25	Kansas City	2,035,334
26	Columbus	1,836,536
27	Charlotte	1,758,038
28	Indianapolis	1,756,241
29	Austin	1,716,289
30	Nashville	1,589,934
31	Milwaukee	1,555,908
32	Memphis	1,316,100
33	Louisville	1,283,566
34	Oklahoma City	1,252,987
35	Salt Lake City	1,124,197

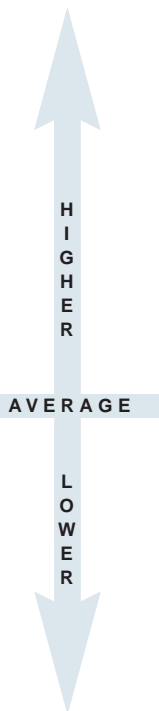
Source: U.S. Census Bureau

POPULATION CHANGE

Percent change, 2000-2010

1	Austin	35.6
2	Charlotte	31.2
3	Phoenix	27.9
4	Houston	25.5
5	San Antonio	24.6
6	Atlanta	23.0
7	Dallas	22.6
8	Nashville	20.7
9	Denver	15.9
10	Washington D.C.	15.8
11	Salt Lake City	15.6
12	Portland	15.0
13	Indianapolis	14.7
14	Oklahoma City	14.1
15	Columbus	13.4
16	Seattle	12.7
Average		12.0
17	Miami	10.7
18	Kansas City	10.4
19	Louisville	10.2
20	Minneapolis	10.0
21	San Diego	9.6
22	Memphis	8.9
23	Baltimore	6.0
24	Cincinnati	5.7
25	San Francisco	4.8
26	Philadelphia	4.8
27	St. Louis	4.1
28	Chicago	3.8
29	Milwaukee	3.6
30	Los Angeles	3.5
31	Boston	3.4
32	New York	3.0
33	Pittsburgh	-3.0
34	Cleveland	-3.3
35	Detroit	-3.6

Source: U.S. Census Bureau



In the past decade, all 35 of the WWS peer regions experienced positive population gains from international migration. Six of the 10 fastest growing regions were also among the top 10 metro regions for high rates of international migration. Five of those metros (Austin, Phoenix, Dallas, Houston and Atlanta) are located in the booming Sunbelt region. Another metro in the Sunbelt, Miami, has below-average population growth but ranks first among the peer regions with over 10 percent of its population increase coming from international migration.

Only three metropolitan regions in the Northeast or Midwest (New York, Boston and Chicago) had international migration rates above the average (3.6 percent) for WWS peer regions. Eleven of the 19 peer regions that had international migration rates below the average were located in the Northeast or Midwest. Pittsburgh experienced the slowest rate, a mere 0.8 percent.

⁵ Hall, M., Singer, A., De Jong, G., & Roempke Graefe, D. (2011). *The geography of immigrant skills: Educational profiles of metropolitan areas*. Washington D.C.: Metropolitan Policy Program at Brookings.

A relatively small cohort of foreign-born residents settled in the St. Louis MSA over the past decade. International migration grew the regional population by only 1.1 percent (roughly 11,500 people), the second smallest rate among WWS peer regions. This rate is well below the 3.6 percent peer average, another example of the slow-growth of metropolitan areas in the Midwest.

percent and Los Angeles losing 10.8 percent of its population base. Los Angeles is not the only region feeling the negative effects of domestic migration. In the last 10 years, over half of the WWS peer regions saw more residents move to another area of the nation than they saw move into their region from elsewhere.

Domestic migration patterns for metropolitan regions mirrored those of overall population growth and international migration, with the South and West regions experiencing higher rates (the nine metros that gained population from domestic migration at the highest rate are located in these regions).

Charlotte, Austin and Phoenix, the three fastest growing regions in the past decade, also had the highest rates of domestic migration (all exceeding 16 percent).

At the other end of the spectrum, seven of the 10 slowest growing metropolitan regions over the past decade also experienced the greatest loss of population due to domestic migration (all exceeding 4 percent). Six of these 10 regions were located in the slow-growth areas of the Northeast and Midwest. Across

the nation, though, 19 of the 35 WWS regions lost population due to domestic migration.

The St. Louis metropolitan area was among the 19 WWS peer regions experiencing more domestic out-migration than in-migration. On average, domestic migration contributed to roughly 1 percent increase in population in the WWS regions over the past decade. St. Louis lost 1.6 percent of its population due to more people moving out of the region than in but several Midwestern peer regions (Chicago, Milwaukee, Cleveland and Detroit) experienced a greater proportional loss of population due to domestic migration.

NET INTERNATIONAL MIGRATION

Percent of 2000 population, 2000-2009

1 Miami	10.1
2 Phoenix	6.5
3 Los Angeles	6.5
4 Washington D.C.	6.4
5 Dallas	6.2
6 San Francisco	6.2
7 Houston	6.1
8 New York	5.9
9 Austin	5.2
10 Atlanta	4.8
11 Boston	4.3
12 Denver	4.3
13 Salt Lake City	4.2
14 Seattle	4.2
15 Chicago	4.0
16 Portland	3.7
Average	3.6
17 Charlotte	3.6
18 San Diego	3.5
19 Minneapolis	2.8
20 Nashville	2.8
21 Columbus	2.5
22 Oklahoma City	2.2
23 Philadelphia	2.2
24 Detroit	2.1
25 Kansas City	1.9
26 San Antonio	1.8
27 Indianapolis	1.8
28 Milwaukee	1.8
29 Baltimore	1.7
30 Memphis	1.6
31 Louisville	1.4
32 Cleveland	1.3
33 Cincinnati	1.1
34 St. Louis	1.1
35 Pittsburgh	0.8

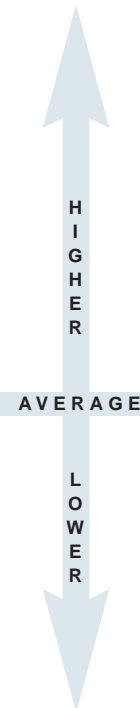
Source: U.S. Census Bureau

NET DOMESTIC MIGRATION

Percent of 2000 population, 2000-2009

1 Charlotte	18.2
2 Austin	17.7
3 Phoenix	16.2
4 San Antonio	10.2
5 Atlanta	9.6
6 Nashville	9.2
7 Portland	6.2
8 Dallas	5.9
9 Houston	5.1
10 Indianapolis	4.6
11 Oklahoma City	3.8
12 Louisville	2.9
13 Denver	2.8
14 Columbus	2.0
15 Kansas City	1.6
16 Seattle	1.4
Average	0.9
17 Memphis	-0.7
18 Minneapolis	-0.8
19 Cincinnati	-0.9
20 Baltimore	-1.4
21 St. Louis	-1.6
22 Philadelphia	-2.0
23 Pittsburgh	-2.0
24 Washington D.C.	-2.3
25 Salt Lake City	-3.4
26 San Diego	-4.5
27 Milwaukee	-4.8
28 Boston	-5.3
29 Miami	-5.7
30 Chicago	-6.0
31 Cleveland	-6.2
32 Detroit	-8.1
33 San Francisco	-8.3
34 New York	-10.5
35 Los Angeles	-10.8

Source: U.S. Census Bureau



NET MIGRATION

Percent of 2000 population, 2000-2009

1 Austin	22.9
2 Phoenix	22.7
3 Charlotte	21.8
4 Atlanta	14.5
5 Dallas	12.2
6 San Antonio	12.0
7 Nashville	11.9
8 Houston	11.2
9 Portland	9.9
10 Denver	7.1
11 Indianapolis	6.4
12 Oklahoma City	5.9
13 Seattle	5.5
Average	4.5
14 Columbus	4.4
15 Miami	4.4
16 Louisville	4.3
17 Washington D.C.	4.1
18 Kansas City	3.5
19 Minneapolis	2.1
20 Memphis	0.9
21 Salt Lake City	0.9
22 Baltimore	0.3
23 Cincinnati	0.2
24 Philadelphia	0.2
25 St. Louis	-0.5
26 Boston	-1.0
27 San Diego	-1.0
28 Pittsburgh	-1.2
29 Chicago	-2.0
30 San Francisco	-2.1
31 Milwaukee	-3.1
32 Los Angeles	-4.3
33 New York	-4.6
34 Cleveland	-4.9
35 Detroit	-6.0

Source: U.S. Census Bureau

Domestic Migration

Along with international migration, domestic migration plays an important role in population change. In 2008 alone, more than 10 million Americans “shuffled the deck” by moving from one county to another.⁶ Yet, over the past decade domestic migration among WWS peer regions occurred on average at a significantly slower rate (0.9 percent) than international migration (3.6 percent).

The rate at which domestic migration took place among WWS regions is quite varied, with Charlotte growing 18.2

6 This includes migration both within metropolitan areas and between them; Bruner, J. (Designer). (2010). *Where Americans are moving*. [Web Map]. Retrieved from <http://www.forbes.com/2010/06/04/migration-moving-wealthy-interactive-counties-map.html>.

Natural Increase

While international and domestic migration largely influence population change, so does natural change, i.e. births and deaths. The natural rate of increase is calculated by determining the difference between the number of births and deaths in a given area.

Of the over 27 million person increase in population in the United States over the past decade, roughly 17 million (63 percent)⁷ is due to natural increases. The remaining 10 million is a result of international migration into the United States. The metropolitan and regional trends associated with natural increase are similar to those seen with total population change, international migration and domestic migration.

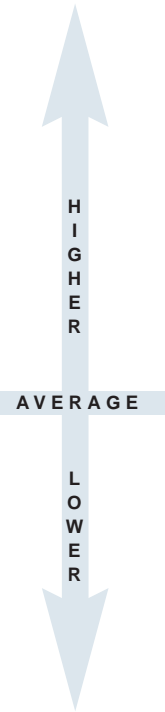
Three of the top five fastest growing metropolitan areas over the last decade had natural increase rates among the top five (Austin, Houston and Phoenix). These Sunbelt, metropolitan areas are leading population growth in the United States with natural increase rates all exceeding 10 percent. Additionally, these regions boast impressive top-10 net migration rates (22.9, 11.2, and 22.7 percent, respectively).

Meanwhile, Pittsburgh was the lone WWS peer region that experienced negative natural growth, losing 1.2 percent of its population due to more people dying than being born. Other older Midwestern and Northeastern metro areas fared better, though not by much. Cleveland had a 2.2 percent natural increase rate, while Philadelphia managed to increase its population by just 3.5 percent over the past decade. Ten out of the 19 peer regions that had below-average natural increase rates were located in the Midwest or Northeast.

NATURAL INCREASE

Percent of 2000 population,
2000-2009

1	Salt Lake City	13.6
2	Austin	12.2
3	Dallas	11.5
4	Houston	11.4
5	Phoenix	10.6
6	Atlanta	10.5
7	Denver	9.5
8	San Antonio	9.0
9	Charlotte	8.9
10	Washington D.C.	8.9
11	Los Angeles	8.7
12	San Diego	8.3
13	Minneapolis	8.1
14	Indianapolis	7.5
15	Columbus	7.2
16	Chicago	7.1
Average		6.9
17	Memphis	6.9
18	Nashville	6.9
19	Kansas City	6.7
20	Portland	6.5
21	Oklahoma City	6.5
22	Seattle	6.3
23	San Francisco	5.9
24	New York	5.7
25	Cincinnati	5.3
26	Milwaukee	5.2
27	Boston	4.2
28	Miami	4.1
29	Louisville	4.1
30	Baltimore	4.0
31	Detroit	3.9
32	St. Louis	3.8
33	Philadelphia	3.5
34	Cleveland	2.2
35	Pittsburgh	-1.2



Source: U.S. Census Bureau

Since the St. Louis metropolitan area had a negative net migration rate (-0.5 percent), the region relied on natural growth to increase the population. The metro area experienced a 3.8 percent natural increase rate over the past decade. This rate, however, was the fourth lowest among WWS peers and is well below the peer average rate of 6.9 percent.

⁷ Norris, D. (2011, June 08). *Comparing population growth in Canada and the United States*. Retrieved from <http://environicsanalytics.wordpress.com/2011/06/08/comparing-population-growth-in-canada-and-the-united-states/>.

Conclusion

What do these population statistics tell us? Why are metropolitan areas in the South and West experiencing substantially greater population gains than regions in the Midwest and the Northeast? What factors are contributing to the pattern of urbanization that we see today?

Over the last century, many theorists have viewed concentrated population growth as an outcome of industrialization and local economic development.⁸ Today, however, popular thought revolves around the belief that urban growth is a result of shifting population dynamics. Local amenities and personal preferences are now some of the most popularly researched and scrutinized attributes of population change.⁹ Some theorists, however, worry that policy focused on increasing local amenities and targeting the “creative class” can be problematic, as it exacerbates the urban economic and social divide.¹⁰

While the 6th edition of WWS does not directly theorize about population growth, it does provide baseline objective data that can help explain such changes. For one thing, the data show us that there has been a shift in international immigration patterns to the United States. Older cities like New York, Philadelphia and Boston were once the traditional entrance points for immigrants into the country. While these cities are still home to large immigrant populations, metropolitan regions in the South and West (Phoenix, Miami and Dallas) are now emerging as the new gateways for international migration, fueled in large part by Latin Americans.

Economic development and jobs may also contribute to population change. The three WWS regions that experienced the greatest increase in employment over the past decade (Austin, San Antonio and Houston) were also among the five fastest growing areas in terms of population. Additionally, regions in the Midwest that have historically been reliant on manufacturing (St. Louis, Detroit and Cleveland) have felt the brunt of the decline in that industry—reflected in both employment and population numbers. There is no doubt an important connection between employment opportunities and population settlement, but do jobs follow people or do people follow jobs?¹¹

Population growth is a complex process that indeed warrants the diverse set of theories dedicated to it. It would be reckless though, to postulate that any one theory could describe all the complexities of urbanization. A regional growth strategy must take a holistic approach by considering human capital, infrastructure, entrepreneurship and amenities when formulating policy. When it comes to planning around population change, area leaders must look at these and other factors to meet the needs and desires of a rapidly changing and highly mobile population.



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8 Weber, F. (1899). *The Growth of Cities in the Nineteenth Century*. New York: Macmillan Company.

9 Florida, R. (2003). *The Rise of the Creative Class*. New York: Basic Books ; Glaeser, E.L. (2005). *Smart Growth: Education, Skilled Workers and the Future of Cold-Weather Cities*. Cambridge, MA: Harvard University, Kennedy School, Policy Brief PB-2005-1.

10 Scott, M. and Storper, M. (2009). Rethinking human capital, creativity and urban growth. *Journal of Economic Geography*, 9: 147-167.

11 Mazek, W.F. and Chang, J. (1972). The chicken or egg fowl-up in migration: a comment. *Southern Economic Journal*, 39: 133-139 ; Muth, R. F. (1971) Migration—chicken or egg. *Southern Economic Journal*, 37: 295-306.