

WHERE WE STAND

Where We Stand tracks the health of the St. Louis region compared to 34 peer MSAs.¹ The peer regions are our domestic competition and provide a consistent yardstick to gauge “Where We Stand.”

This update compares the St. Louis region to its peers on indicators of a sustainable region. These indicators, along with others, are used to measure the region’s progress in meeting the goals of the regional plan for sustainable development, OneSTL.

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Sustainability

The OneSTL plan for sustainable development provides a vision, goals and strategies for achieving a more sustainable St. Louis region. The plan, developed with input from over 2,000 residents, covers a wide range of topics that are organized by nine themes and includes 58 performance indicators that measure the region’s progress. This update examines the OneSTL indicators that can be assessed for St. Louis and its 34 peer metropolitan regions, providing a look at where the St. Louis region stands on sustainability.

The OneSTL indicators are organized into the nine themes that guide the OneSTL plan. According to the subset of indicators presented in this update, the St. Louis region:

- performs better than most of its peer regions on measures of poverty, crime, housing affordability, income inequality, and volunteering;
- performs worse than most of its peer regions on measures of economic output and growth, racial disparity in income, exercise, land development, air quality, heat- and cold-related deaths, public transit, transportation choice, access to healthy foods, and college attainment.

The last section of this update examines the relationships among the OneSTL indicators to provide further insight into regional performance. Correlations between measures indicate which OneSTL goals tend to work together and which present tradeoffs. Analysis of these relationships can be helpful to consider in identifying strategies and setting regional priorities.

This update does not provide a complete picture of how the region is performing on sustainability because it only presents indicators that can be assessed for the peer regions. Data for the other OneSTL indicators as well as additional information on the indicators presented in this update is available on the plan website at www.onestl.org/indicators.

OneSTL Themes

The nine themes collectively define sustainability for the St. Louis region. Residents, local officials, and regional leaders envision a St. Louis region that is

Collaborative
Prosperous
Distinctive
Inclusive
Green
Prepared
Connected
Efficient
Educated

• • • Collaborative

“Promote inclusive and on-going efforts that involve communication, cooperation, and action among local and regional leaders and residents.”²

The collaborative theme addresses the need for cooperation and coordination among local governments, public and private agencies, and residents. The four indicators in this theme examine collaboration among local governments, the geographic extent of community development corporations, and two direct measures of OneSTL—one on the number of OneSTL network members, and another on the use of OneSTL resources. The indicators in this theme area are specific to the St. Louis region and therefore comparable data is not available for the peer regions.

¹ MSAs (Metropolitan Statistical Areas) are geographic entities delineated by the Office of Management and Budget (OMB). MSAs are areas with “at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.”

² In this update, a theme statement is provided under each theme title. Theme statements are direct quotes from the OneSTL plan document and serve as a summary statement of the theme’s goals.

• • • Prosperous

“Coordinate economic development efforts to create high quality employment and development opportunities and build a diverse, innovative, and entrepreneurial economy.”

A strong and resilient economy is critical for the sustainability of the region. Nine OneSTL indicators measure the size and strength of the economy, as well as the equality of opportunity for residents. Of the four measures presented in this update, the St. Louis region performs worse than most of the peer regions on three measures—gross metropolitan product, change in personal income, and racial disparity in income—and better than most of the peer regions on poverty. Together, these measures indicate that the St. Louis region’s economy is not as strong or equitable as most of its peer regions.

The gross metropolitan product (GMP) measures economic output by totaling the market value of all goods and services produced in the region. To compare to peer regions, GMP is divided by each region’s population to account for varying population sizes. The St. Louis region ranks 30th, with a GMP per capita that is lower than most of the peer regions. In 2013 the St. Louis region’s GMP per capita was \$52,135, more than 15 percent lower than the peer region average of \$61,755. Although the region

GROSS METROPOLITAN PRODUCT

Dollars per capita, 2013

1	San Francisco	85,972
2	Houston	81,951
3	Boston	79,151
4	Seattle	78,936
5	Washington D.C.	77,968
6	New York	73,745
7	Portland	70,707
8	Salt Lake City	66,801
9	Denver	66,306
10	Minneapolis	65,852
11	Dallas	65,700
12	Indianapolis	64,737
13	Philadelphia	63,533
14	Los Angeles	62,965
Average	61,755	
15	Chicago	61,890
16	San Diego	61,623
17	Baltimore	60,939
18	Milwaukee	60,124
19	Charlotte	59,529
20	Cleveland	59,513
21	Columbus	58,083
22	Nashville	57,380
23	Kansas City	57,173
24	Cincinnati	55,803
25	Atlanta	55,611
26	Pittsburgh	55,600
27	Austin	55,172
28	Oklahoma City	54,522
29	Detroit	52,323
30	St. Louis	52,135
31	Louisville	51,115
32	Memphis	50,553
33	Miami	48,227
34	Phoenix	47,632
35	San Antonio	42,164

Source: Bureau of Economic Analysis; American Community Survey, U.S. Census Bureau

CHANGE IN PERSONAL INCOME PER CAPITA

Percent change, 2008-2013
adjusted to 2013 dollars

1	Columbus	6.2
2	Pittsburgh	5.3
3	Nashville	5.1
4	San Francisco	4.0
5	Cleveland	3.5
6	San Antonio	3.5
7	Austin	3.0
8	Baltimore	2.4
9	Boston	2.1
10	Philadelphia	1.9
11	Cincinnati	1.4
12	Memphis	1.4
13	San Diego	1.2
14	Milwaukee	0.8
15	Los Angeles	0.8
Average	0.6	
16	Indianapolis	0.4
17	Louisville	0.4
18	Oklahoma City	0.3
19	Detroit	0.1
20	Charlotte	0.0
21	Minneapolis	-0.1
22	Denver	-0.2
23	Seattle	-0.2
24	New York	-0.2
25	Portland	-0.5
26	St. Louis	-0.5
27	Dallas	-0.7
28	Houston	-0.8
29	Kansas City	-1.4
30	Chicago	-1.7
31	Salt Lake City	-1.9
32	Washington D.C.	-2.7
33	Miami	-4.3
34	Atlanta	-4.3
35	Phoenix	-4.8

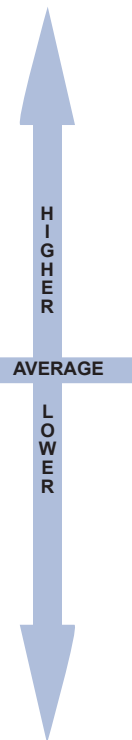
Source: Bureau of Economic Analysis, Bureau of Labor Statistics

POVERTY

Percent of residents living in poverty, 2013

1	Memphis	19.8
2	Miami	17.7
3	Los Angeles	17.6
4	Phoenix	17.6
5	Detroit	16.9
6	Houston	16.4
7	San Antonio	16.3
8	Atlanta	15.9
9	Milwaukee	15.9
10	Cleveland	15.6
11	Indianapolis	15.2
12	San Diego	15.2
13	Dallas	15.0
14	Oklahoma City	14.9
15	Charlotte	14.8
16	Columbus	14.8
17	New York	14.6
18	Cincinnati	14.5
19	Chicago	14.4
20	Austin	14.3
Average	14.3	
21	Louisville	13.8
22	Nashville	13.7
23	Philadelphia	13.5
24	Portland	13.5
25	St. Louis	12.9
26	Pittsburgh	12.8
27	Kansas City	12.6
28	Seattle	12.6
29	Salt Lake City	12.4
30	Denver	12.1
31	San Francisco	11.5
32	Baltimore	11.2
33	Boston	10.4
34	Minneapolis	10.3
35	Washington D.C.	8.5

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





has seen a steady increase in GMP over the last few years, the region has yet to reach the same level of output attained in 2008.

The St. Louis region also ranks below the peer region average for change in personal income per capita. From 2008 to 2013 the personal income per capita in St. Louis declined by 0.5 percent, from \$46,231 in 2008 (in 2013 dollars) to \$45,992 in 2013. St. Louis ranks 26th on this measure, with most other regions experiencing

a smaller decline or an increase in personal income over the same time period. The decrease in personal income indicates that the St. Louis region is experiencing a slower recovery from the Great Recession than other regions.

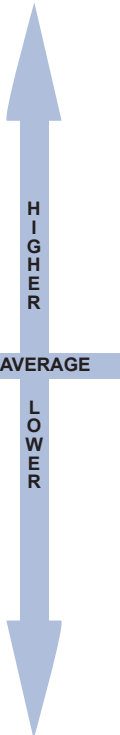
St. Louis ranks 25th on the poverty rate, with a rate lower than most of its peer regions. In 2013 the percent of residents living in poverty in the St. Louis region was 12.9 percent. The poverty rate increased by 1.6 percentage points between 2008 and 2013 in St. Louis, and increased by 2.4 percentage points on average among the peer regions.

The racial disparity in income indicator measures the ratio of the median white household income to the median black household income. In St. Louis, the median white household income is \$60,300, while the median black household income is \$30,600 (based on 2011-2013 average). The resulting ratio of white to black income—2.0—ranks St. Louis as 9th highest for racial disparity among 34 peer regions.

RACIAL DISPARITY IN INCOME

Ratio of white to black median household income, 2011-2013

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



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

• • • • *Distinctive*

“Maintain, develop, and enhance the unique places and communities in our region through investment that reflects local values, diversity, and character.”

This OneSTL theme recognizes the importance of improving the quality of life in communities while preserving each community’s unique character. Of the four OneSTL indicators for this theme, two are presented here: crime rate and healthy and active. The St. Louis region performs better than most of its peers on crime and worse than most of its peers on the healthy and active indicator.

The St. Louis region ranks 20th out of 29 of its peer regions for the 2013 crime rate, with 3,102 crimes per 100,000 population in St. Louis compared with 3,451 crimes per 100,000 population on average for the peer regions. Like most of the peer regions, the crime rate in St. Louis declined over the last decade, with an overall decrease of 24.9 percent between 2004 and 2013, same as the peer region average decrease of 24.9 percent.

The healthy and active indicator measures the percent of adults meeting the recommended exercise standard, which calls for 150 minutes or more of aerobic exercise per week. Exercise is critical for health and well-being. The percentage of adults who exercise depends in part on whether the built environment has the infrastructure to allow for exercise (such as sidewalks and cycling paths), and whether residents feel safe and secure while outdoors. The St. Louis region ranks 27th on this measure, with 49.5 percent of adults exercising the recommended amount in 2011. This is a decrease from 52.2 percent of adults meeting the recommendation in 2009. The St. Louis region performs worse than most of the peer regions on this measure.

CRIME RATE
Violent and property crimes per 100,000 population, 2013

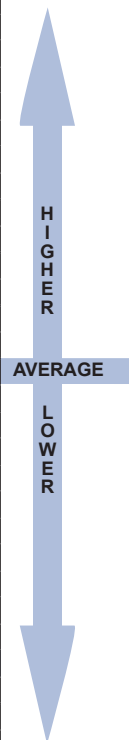
1	Memphis	5,183
2	San Antonio	4,875
3	Salt Lake City	4,705
4	Oklahoma City	4,459
5	Seattle	4,347
6	Miami	4,229
7	San Francisco	4,130
8	Houston	4,048
9	Kansas City	3,723
10	Atlanta	3,720
11	Milwaukee	3,651
12	Baltimore	3,646
Average		3,451
13	Austin	3,450
14	Cincinnati	3,433
15	Charlotte	3,385
16	Dallas	3,369
17	Nashville	3,314
18	Portland	3,242
19	Detroit	3,149
20	St. Louis	3,102
21	Denver	3,075
22	Philadelphia	2,975
23	Minneapolis	2,869
24	Los Angeles	2,561
25	San Diego	2,541
26	Washington D.C.	2,500
27	Boston	2,245
28	Pittsburgh	2,149
29	New York	2,000

Source: FBI Crime Statistics

HEALTHY AND ACTIVE
Percent of adults meeting recommended exercise standard, 2011

1	San Francisco	62.4
2	Denver	61.5
3	San Diego	61.0
4	Portland	60.3
5	Milwaukee	58.8
6	Los Angeles	56.3
7	Boston	56.0
8	Austin	55.9
9	Minneapolis	55.5
10	Salt Lake City	55.4
11	Washington D.C.	54.3
12	Cleveland	53.9
13	Seattle	53.5
14	Phoenix	52.9
15	Chicago	52.3
16	Atlanta	52.1
Average		52.1
17	Philadelphia	52.0
18	Detroit	51.9
19	New York	51.2
20	Houston	51.1
21	Cincinnati	50.9
22	Pittsburgh	50.6
23	Miami	50.6
24	San Antonio	50.3
25	Charlotte	50.3
26	Columbus	50.0
27	St. Louis	49.5
28	Kansas City	48.6
29	Dallas	48.4
30	Louisville	47.2
31	Baltimore	46.1
32	Indianapolis	46.1
33	Oklahoma City	44.8
34	Nashville	43.1
35	Memphis	37.8

Source: Centers for Disease Control and Prevention



• • • • Inclusive

“Engage all citizens in regional civic and cultural life by providing quality, equitable services and opportunities.”

The inclusive theme is about promoting diversity, ensuring access to opportunities for all individuals, and creating a more resilient economy and community. Of the five indicators for this theme, two are presented here: housing affordability and income inequality. Housing affordability is important for sustainability, since housing is a fundamental human need. The second measure, income inequality, describes the distribution of income among households. A more equal distribution of income enhances sustainability by reducing disparities. In addition, recent research indicates that more equal income distribution at the regional level reduces economic turbulence and may prolong periods of economic expansion.³ The St. Louis region performs better than most of its peers on both of these indicators.

The St. Louis region ranks 15th on housing affordability, with 33.1 percent of housing units affordable and available to households earning a low or moderate income (based on the 2006-2010 average).⁴ Housing units that are affordable are those that cost less than 30 percent of the household’s income, and available units are those that are vacant or those that are occupied by low-to moderate-income families. St. Louis exceeds the peer region average by 3.5 percentage points, and is 3.4 percentage points lower than the leading metro region, Pittsburgh. While the St. Louis region performs better than most of the other peer regions, there is still a gap in the availability of affordable units. There are 504,000 households with low or moderate incomes in the St. Louis region, but only 372,000 housing units that are affordable and available.⁵

The Gini index of income inequality describes the distribution of income on a scale from zero to one, with one representing the most unequal distribution (one household earns all of the income), and zero representing the most equal distribution (each household earns the same income). According to data for 2013, the St. Louis region ranks 22nd on this measure, indicating the region has less income inequality than most of its peer regions. The region’s Gini index of 0.463 is statistically significantly lower than the peer region average of 0.471. In recent years, income inequality increased in St. Louis and throughout the U.S. Between 2006 and 2013 income inequality increased in the St. Louis region by 2.7 percent, in peer regions by an average of 3.6 percent, and nationwide by 3.7 percent.

HOUSING AFFORDABILITY

Percent of units affordable and available to households earning 80% of HUD Area Median Family Income, 2006-2010

1	Pittsburgh	36.5
2	Columbus	35.6
3	Houston	35.4
4	San Antonio	35.2
5	Cincinnati	34.9
6	Oklahoma City	34.6
7	Kansas City	34.5
8	Denver	34.2
9	Cleveland	34.1
10	Dallas	33.8
11	Louisville	33.5
12	Indianapolis	33.5
13	Austin	33.4
14	Memphis	33.4
15	St. Louis	33.1
16	Detroit	32.1
17	Milwaukee	31.8
18	Charlotte	31.2
19	Nashville	31.1
20	Philadelphia	30.6
Average		29.6
21	Atlanta	29.3
22	Los Angeles	28.5
23	Minneapolis	27.6
24	Salt Lake City	27.0
25	Chicago	26.1
26	Miami	26.0
27	Baltimore	25.6
28	New York	24.9
29	Portland	24.0
30	Phoenix	23.5
31	Seattle	22.3
32	San Diego	21.8
33	San Francisco	21.6
34	Boston	20.1
35	Washington D.C.	15.8

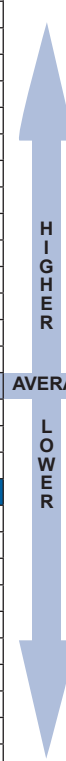
Source: Comprehensive Housing Affordability Strategy data, U.S. Department of Housing and Urban Development; American Community Survey, U.S. Census Bureau

INCOME INEQUALITY

Gini index, 2013

1	New York	0.512
2	Miami	0.512
3	Los Angeles	0.499
4	San Francisco	0.494
5	Memphis	0.486
6	Chicago	0.486
7	Houston	0.485
8	Philadelphia	0.485
9	Boston	0.484
10	Cleveland	0.482
11	San Diego	0.479
12	Dallas	0.477
12	Charlotte	0.477
14	Detroit	0.474
15	Atlanta	0.474
16	Indianapolis	0.474
17	Cincinnati	0.472
18	Milwaukee	0.471
Average		0.471
19	Pittsburgh	0.469
20	Phoenix	0.465
21	Louisville	0.464
22	St. Louis	0.463
23	Austin	0.462
24	Baltimore	0.461
25	Denver	0.461
25	Columbus	0.459
27	Seattle	0.459
28	Nashville	0.458
29	Kansas City	0.454
30	Oklahoma City	0.453
31	San Antonio	0.453
32	Portland	0.449
33	Minneapolis	0.442
34	Washington D.C.	0.442
35	Salt Lake City	0.436

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



3 Benner, Chris and Manuel Pastor. Brother, Can You Spare Some Time? Sustaining Prosperity and Social Inclusion in America’s Metropolitan Regions, Urban Studies, 2014.

4 Low or moderate income households are those that earn 80 percent or less of the HUD Area Median Family Income (MFI). In the St. Louis region, 80 percent of the HUD MFI was \$55,280 in 2013. The MFI is calculated for a 4-person household and adjusted to account for various household sizes.

5 The housing affordability indicator does not measure affordability for current homeowners. Instead, it measures the availability of affordable units to a generic household. The cost of owner-occupied units includes the cost of mortgage payments given current values and current mortgage market conditions. Since the indicator uses income to determine affordability, it does not account for household wealth.

• • • • **Green**

“Protect and enhance the quality of water, air, land, and biodiversity in order to maintain a healthy population, economy, and ecosystem.”

The green theme recognizes the importance of protecting the natural environment to improve quality of life and strengthen the economy. There are nine indicators for this theme, two of which are presented here: developed land per capita and air quality. The first indicator examines the amount of developed land per resident in the region over time. Increases in the amount of development per capita indicate greater loss of natural resource and agricultural land. The air quality indicator examines the number of days when ozone levels were high enough to cause health concerns. The St. Louis region ranks worse than most of its peer regions on both measures, indicating lower environmental quality in the St. Louis region.

The developed land per capita indicator measures how efficiently the region’s land resource is used. Building more densely reduces the need to develop on natural resource and agricultural lands, which are beneficial to the region because they provide plant and wildlife habitat, air and water filtering, open space viewsheds, and recreational opportunities. The St. Louis region has more developed land per population than most other peer regions, ranking 5th in 2011 with 0.30 acres of developed land per capita. The St. Louis region also ranks 5th for change in developed land per capita, with a 0.9 percent increase in developed acres per capita from 2006 to 2011, compared to a peer metro average decrease of 2.9 percent. The decrease in developed acres per capita experienced by most of the peer regions indicates that they are developing more densely.

DEVELOPED LAND PER CAPITA

Developed acres per capita, 2011

1	Kansas City	0.36
2	Oklahoma City	0.34
3	Memphis	0.33
4	Nashville	0.30
5	St. Louis	0.30
6	Charlotte	0.30
7	Pittsburgh	0.29
8	Indianapolis	0.28
9	San Antonio	0.27
10	Minneapolis	0.26
11	Columbus	0.26
12	Atlanta	0.25
13	Cincinnati	0.25
14	Austin	0.25
15	Cleveland	0.24
16	Louisville	0.24
17	Detroit	0.23
Average		0.22
18	Houston	0.22
19	Portland	0.22
20	Dallas	0.21
21	Milwaukee	0.21
22	Seattle	0.21
23	Phoenix	0.20
24	Denver	0.19
25	Salt Lake City	0.18
26	Baltimore	0.18
27	Chicago	0.17
28	Boston	0.17
29	Philadelphia	0.17
30	Washington D.C.	0.16
31	San Diego	0.16
32	Miami	0.13
33	San Francisco	0.12
34	New York	0.10
35	Los Angeles	0.09

Sources: National Land Cover Database; U.S. Census Bureau, Population Division

CHANGE IN DEVELOPED LAND PER CAPITA

Percent change in developed acres per capita, 2006-2011

1	Detroit	3.8
2	Cleveland	3.2
3	Pittsburgh	1.9
4	Chicago	1.6
5	St. Louis	0.9
6	Milwaukee	0.2
7	Philadelphia	-0.4
8	Memphis	-0.5
9	New York	-0.8
10	Cincinnati	-0.8
11	Phoenix	-0.8
12	Boston	-0.9
13	Baltimore	-1.2
14	Los Angeles	-1.5
15	Minneapolis	-2.0
16	Columbus	-2.4
17	Kansas City	-2.7
Average		-2.9
18	Indianapolis	-3.0
19	Louisville	-3.0
20	Miami	-3.2
21	Oklahoma City	-3.6
22	San Diego	-5.1
23	Salt Lake City	-5.1
24	Dallas	-5.2
25	Houston	-5.2
26	San Francisco	-5.3
27	Atlanta	-5.3
28	Nashville	-5.7
29	Seattle	-5.7
30	Washington D.C.	-6.0
31	Portland	-6.3
32	San Antonio	-6.8
33	Denver	-7.0
34	Charlotte	-8.8
35	Austin	-9.2

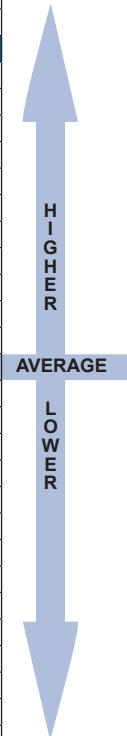
Sources: National Land Cover Database; U.S. Census Bureau, Population Division

AIR QUALITY

Number of days air quality index exceeded 100 for ozone, 2011-2013 average

1	Los Angeles	72.3
2	Dallas	35.3
3	Houston	29.0
4	St. Louis	26.3
5	Denver	21.3
6	Atlanta	21.3
7	Phoenix	21.0
8	New York	19.3
9	Cincinnati	19.0
10	Kansas City	18.0
11	Oklahoma City	17.0
12	Baltimore	15.7
13	Washington D.C.	15.7
14	Chicago	15.3
15	Louisville	15.0
Average		14.6
16	Philadelphia	14.3
17	Memphis	14.0
18	Cleveland	13.7
19	Pittsburgh	13.3
20	Nashville	11.7
21	Detroit	11.3
22	Charlotte	9.7
23	Indianapolis	9.7
24	San Antonio	9.3
25	Columbus	9.0
26	Milwaukee	9.0
27	San Diego	9.0
28	Salt Lake City	7.3
29	Austin	4.0
30	Boston	3.7
31	San Francisco	2.7
32	Minneapolis	1.7
33	Miami	1.3
34	Seattle	0.7
35	Portland	0.3

Source: U.S. Environmental Protection Agency



• • • • Prepared

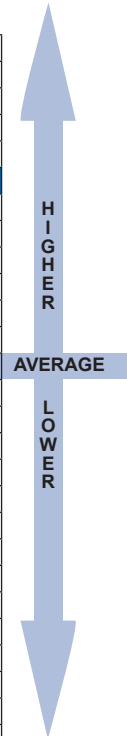
“Equip the region’s communities with the infrastructure, knowledge, communications, and partnerships to be safe and resilient.”

The prepared theme is focused on anticipating and mitigating man-made and natural disasters with the goal of reducing their impact and creating a safe and resilient region. The seven indicators in this theme cover topics such as flooding, hazard mitigation, and climate change. Peer region data is only available for one indicator, heat/cold mortality. The heat/cold mortality indicator measures the number of deaths due to excessive natural heat or cold. Some of these deaths are likely preventable through efforts such as better communications systems and the provision of public shelters during extreme weather.

HEAT- AND COLD-RELATED DEATHS

Average deaths per year per 100,000 population, 2008-2012

1	Phoenix	1.77
2	Baltimore	1.39
3	Memphis	1.12
4	Philadelphia	0.99
5	Oklahoma City	0.94
6	St. Louis	0.86
7	Kansas City	0.85
8	Milwaukee	0.75
9	Salt Lake City	0.73
10	Washington D.C.	0.72
11	Detroit	0.65
12	Minneapolis	0.61
Average		0.59
13	Indianapolis	0.57
14	Chicago	0.57
15	Cleveland	0.57
16	Seattle	0.57
17	Dallas	0.56
18	Denver	0.56
19	Cincinnati	0.51
20	Louisville	0.50
21	Nashville	0.45
22	Pittsburgh	0.40
23	Portland	0.39
24	Charlotte	0.39
25	Austin	0.37
26	New York	0.36
27	Columbus	0.35
28	Houston	0.33
29	Atlanta	0.31
30	San Francisco	0.29
31	Boston	0.26
32	San Antonio	0.25
33	San Diego	0.25
34	Miami	0.17
35	Los Angeles	0.16



The St. Louis region ranks higher than most of the peer regions, with 0.86 heat- and cold-related deaths per 100,000 population per year based on data for the 2008-2012 time period, compared with 0.59 deaths per 100,000 population for the peer region average. The St. Louis region also has a higher rate of heat- and cold-related deaths than the nation, which had 0.64 deaths per 100,000 population per year for the 2008-2012 time period.



With regard to ozone, air quality in the St. Louis region is unhealthier than most of the peer regions. The air quality index measures the level of ozone and assigns a score based on expected health effects. Scores between 101 and 150 (signified by the color orange) indicate that air quality is unhealthy for sensitive groups, such as children, older adults, people with lung disease, or people who exercise outdoors. Scores above 151 are unhealthy for everybody (signified by the color red). Between 2011 and 2013 the St. Louis region had an average of 26.3 days of unhealthy air per year, ranking 4th among the 35 peer regions. Most of the unhealthy days (91 percent) were in the orange range, with only 9 percent in the red range.

Source: Wonder Multiple Cause of Death Database, Centers for Disease Control and Prevention

• • • • Connected

“Develop and maintain a safe, accessible, multi-modal transportation system that connects local communities and links the region to the nation.”

The transportation system is the focus of this theme, including how transportation can be leveraged to improve quality of life and the economy while reducing environmental impact. The two indicators presented here are transportation choice and transit ridership. The St. Louis region ranks lower than most of its peers on both measures.

TRANSPORTATION CHOICE

Total percent of workers commuting via walking, bicycling, transit, or rideshare, 2013

1	New York	44.2
2	San Francisco	32.5
3	Washington D.C.	27.9
4	Boston	26.0
5	Seattle	23.8
6	Chicago	23.6
7	Philadelphia	22.2
8	Portland	21.8
9	Los Angeles	19.3
Average	17.4	
10	Salt Lake City	18.4
11	Baltimore	17.7
12	Pittsburgh	17.1
13	San Diego	16.5
14	Denver	16.3
15	Miami	16.1
16	Minneapolis	16.0
17	Phoenix	15.8
18	San Antonio	15.4
19	Houston	15.2
20	Milwaukee	15.1
21	Atlanta	15.0
22	Austin	14.8
23	Charlotte	13.3
24	Dallas	12.9
25	Cleveland	12.8
26	Cincinnati	12.5
27	Columbus	12.5
28	Memphis	12.5
29	Oklahoma City	12.2
30	St. Louis	11.9
31	Indianapolis	11.7
32	Louisville	11.7
33	Detroit	11.7
34	Nashville	11.7
35	Kansas City	11.6

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

TRANSIT RIDERSHIP

Annual transit boardings per capita, 2012

1	New York	218.3
2	San Francisco	97.8
3	Boston	88.3
4	Washington D.C.	83.6
5	Chicago	69.7
6	Philadelphia	64.3
7	Seattle	55.4
8	Los Angeles	51.4
9	Portland	49.9
10	Baltimore	41.0
11	Denver	37.3
Average	36.7	
12	Salt Lake City	36.5
13	San Diego	32.4
14	Milwaukee	30.3
15	Miami	28.9
16	Pittsburgh	28.7
17	Minneapolis	28.0
18	Atlanta	26.5
19	Cleveland	23.8
20	San Antonio	22.7
21	Austin	19.4
22	St. Louis	17.6
23	Phoenix	16.7
24	Charlotte	15.7
25	Louisville	13.3
26	Houston	13.1
27	Dallas	11.9
28	Detroit	11.2
29	Cincinnati	10.0
30	Columbus	10.0
31	Kansas City	8.5
32	Memphis	7.5
33	Nashville	6.3
34	Indianapolis	5.7
35	Oklahoma City	2.4

Source: National Transit Database; American Community Survey, U.S. Census Bureau



The transportation choice indicator measures the percent of workers who commute via walking, bicycling, transit, or carpool. The St. Louis region ranks lower than most of its peer regions on transportation choice with 11.9 percent of workers commuting by one of those modes in 2013, compared with 17.4 percent for the peer region average. The region ranks 30th on this measure with a relatively small portion of residents choosing non-auto modes of transportation.

St. Louis also ranks lower than most of its peers on transit ridership, ranking 22nd with 17.6 annual transit boardings per capita in 2012.⁶ The peer region average (36.7 boardings per capita) is almost twice as high as the transit ridership in the St. Louis region. There is a large range of ridership among the peer regions: New York ranks 1st with 218.3 transit boardings per capita, while Oklahoma City ranks 35th with 2.4 transit boardings per capita. Strong transit systems benefit regions by enabling workers to reach jobs, providing transportation options for users of all ages and abilities, and reducing pollution, energy use, and congestion.

⁶ Transit boardings are also known as unlinked passenger trips, and are measured by the number of times a passenger boards a transit vehicle. Each passenger boarding is counted even if it is a transfer. Although this method over counts the total number of trips, it provides a more accurate estimate of ridership than linked passenger trips because there is less room for error. Ridership statistics include trips by bus, light rail, van pool, and paratransit (a transportation service that helps the elderly or disabled reach medical appointments, school, or work.)

• • • • **Efficient**

“Promote regional energy and resource efficiency to maintain the health, safety, and economic vitality of our communities.”

ACCESS TO HEALTHY FOOD CHOICES

Percent of population that live in a low-income census tract and reside far from a supermarket or large grocery store,* 2010

1	San Antonio	11.0
2	Austin	10.1
3	Memphis	9.7
4	Atlanta	9.0
5	Oklahoma City	7.9
6	Charlotte	7.7
7	Dallas	7.5
8	Houston	6.9
9	Kansas City	6.6
10	Indianapolis	6.3
11	St. Louis	6.0
12	Nashville	5.9
13	Pittsburgh	5.8
14	Cincinnati	5.8
15	Denver	5.6
16	Columbus	5.5
17	Phoenix	5.2
18	Minneapolis	5.0
Average		4.9
19	Louisville	3.5
20	Philadelphia	3.3
21	Seattle	3.2
22	Cleveland	3.0
23	Detroit	3.0
24	Salt Lake City	2.9
25	Milwaukee	2.9
26	Chicago	2.8
27	Miami	2.7
28	Washington D.C.	2.7
29	Baltimore	2.6
30	Boston	2.5
31	Portland	2.5
32	San Francisco	2.2
33	New York	1.2
34	San Diego	1.2
35	Los Angeles	1.1



The efficient theme addresses the need to reduce waste and use resources wisely while providing residents with efficient access to resources. Of the six indicators in this theme, one is presented here: access to healthy food choices. This indicator measures the percent of population that live in a low-income census tract and far from a grocery store. Low-income areas are less likely to have access to healthy, affordable food, and instead are likely to have more fast-food and convenience stores that offer unhealthy food.⁷

The St. Louis region performs worse than most of the peer regions on the access to healthy food choices measure. The region ranks 11th, with 6.0 percent of residents living in low-income areas with low access to healthy food in 2010. The peer region average is slightly lower, at 4.9 percent. Access to healthy foods is important, especially for low-income populations who are less likely to have reliable access to an automobile.

Source: Food Access Research Atlas, U.S. Department of Agriculture

*More than one mile in urban census tracts and more than 10 miles in rural census tracts

7 Treuhaft, Sarah and Allison Karpyn. The Grocery Gap: Who Has Access to Healthy Food and Why it Matters, PolicyLink and The Food Trust, 2010; accessed on 14 May 2014 at http://thefoodtrust.org/uploads/media_items/grocerygap.original.pdf

• • • • Educated

“Strengthen learning, education, and training opportunities and increase public support for the region’s education, research, arts, and cultural institutions.”

The educated theme focuses on improving the quality of education, increasing opportunities for life-long learning, and strengthening citizen participation. There are six indicators for this theme, two of which are presented here: volunteer rate and college attainment. The St. Louis region performs better than most peers on the volunteer rate, but worse than most peers on college attainment.

VOLUNTEER RATE

Percent of residents who volunteer, 2011-2013

1	Minneapolis	35.8
2	Salt Lake City	35.1
3	Seattle	34.0
4	Milwaukee	33.4
5	Portland	33.2
6	Charlotte	33.1
7	Washington D.C.	32.2
8	Kansas City	31.8
9	San Francisco	31.0
10	Denver	30.8
11	Indianapolis	30.6
12	St. Louis	30.6
13	San Diego	29.7
14	Austin	28.6
15	Columbus	28.1
Average		27.8
16	Pittsburgh	27.7
17	Dallas	27.6
18	Nashville	27.1
19	Baltimore	27.0
20	Detroit	27.0
21	Louisville	26.7
22	Atlanta	26.6
23	Oklahoma City	26.6
24	Memphis	26.5
25	Cincinnati	26.2
26	Philadelphia	26.1
27	Chicago	25.9
28	Boston	25.8
29	Cleveland	25.8
30	San Antonio	23.2
31	Phoenix	23.1
32	Houston	21.9
33	Los Angeles	21.1
34	New York	17.7
35	Miami	14.3

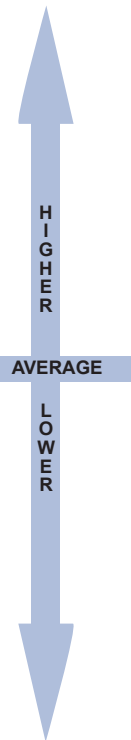
Source: Volunteering in America

COLLEGE ATTAINMENT

Percent of adults age 25 and over with a bachelor’s degree or higher, 2011-2013

1	Washington D.C.	48.1
2	San Francisco	44.8
3	Boston	43.7
4	Austin	40.8
5	Denver	39.7
6	Minneapolis	38.8
7	Seattle	38.1
8	New York	36.8
9	Baltimore	36.3
10	Atlanta	35.1
11	Chicago	34.8
12	Portland	34.8
13	San Diego	34.5
14	Philadelphia	33.9
Average		33.5
15	Kansas City	33.4
16	Columbus	33.2
17	Milwaukee	32.6
18	Dallas	31.9
19	Los Angeles	31.6
20	Nashville	31.4
21	St. Louis	31.4
22	Salt Lake City	31.3
23	Charlotte	31.2
24	Pittsburgh	30.8
25	Indianapolis	30.6
26	Cincinnati	30.2
27	Houston	29.9
28	Miami	29.2
29	Phoenix	29.0
30	Cleveland	28.7
31	Detroit	28.3
32	Oklahoma City	28.2
33	Louisville	26.6
34	San Antonio	26.5
35	Memphis	26.3

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



The St. Louis region ranks 12th for the volunteer rate, with 30.6 percent of residents volunteering at least once during the year (based on the 2011-2013 average). The high volunteer rate in St. Louis may reflect a higher amount of social capital than most of the peer regions. Social capital refers to the amount of trust and cooperation in the community and the value of social networks among residents. Furthermore, volunteering benefits the region by providing valuable community services, and improves the quality of life for volunteers by reducing isolation, improving health,⁸ and improving employability for unemployed volunteers.⁹

The college attainment rate, which measures the percent of adults age 25 and over with a bachelor’s degree or higher, is 31.4 percent in the St. Louis region for the 2011-2013 time period. The St. Louis region ranks 21st, with a rate 2.1 percentage points lower than the peer region average. Regions where the average educational attainment is higher are found to have higher levels of economic activity (GMP) and increased wages.¹⁰

8 Grimm, Robert, Kimberly Spring, and Nathan Dietz. The Health Benefits of Volunteering: A Review of Recent Research Corporation for National & Community Service, April 2007; accessed on 12 December 2013 at http://www.nationalservice.gov/pdf/07_0506_hbr.pdf

9 Spera, Christopher, Robin Ghertner, Anthony Nerino, and Adrienne DiTommaso. Volunteering as a Pathway to Employment: Does Volunteering Increase Odds of Finding a Job for the Out of Work? Corporation for National & Community Service, June 2013; accessed on 12 December 2013 at http://www.nationalservice.gov/sites/default/files/upload/employment_research_report.pdf

10 DeVol, Ross C., I-Ling Shen, Armen Bedroussian, and Nan Zhang. Matter of Degrees: The Effect of Educational Attainment on Regional Economic Prosperity, Milken Institute, February 2013; accessed on 31 December 2014 at <http://assets1.c.milkeninstitute.org/assets/Publication/ResearchReport/PDF/Matter-of-Degrees-FR.pdf>

Relationships Among OneSTL Indicators

The variety of indicators included in this report points to the breadth of issues covered by OneSTL. These issues are not isolated from one another, and by analyzing the regions' performance on the indicators, it is possible to uncover relationships between the OneSTL indicators. The peer regions' raw scores were analyzed for correlations to determine if performance on one indicator is associated with performance on another. Out of the 120 relationships between the 16 indicators, there are 24 statistically significant ($P < 0.01$) correlations (See Figure 1). Positive correlations indicate that peer regions that have high (or low) values for one indicator tend to also have high (or low) values on the other indicator. Negative correlations indicate that peer regions that have high values for one indicator tend to have low values for the other.

Five of the negative correlations among the indicators reveal divergences, or tradeoffs, for performance on OneSTL indicators. For example, the negative correlation between housing affordability and transit ridership (-0.58) reveals that regions with greater housing affordability tend to have lower transit ridership. The correlation does not imply a causal relationship between the two indicators, but shows that performance on the two indicators is linked. One possible explanation is that regions with higher transit ridership tend to have less

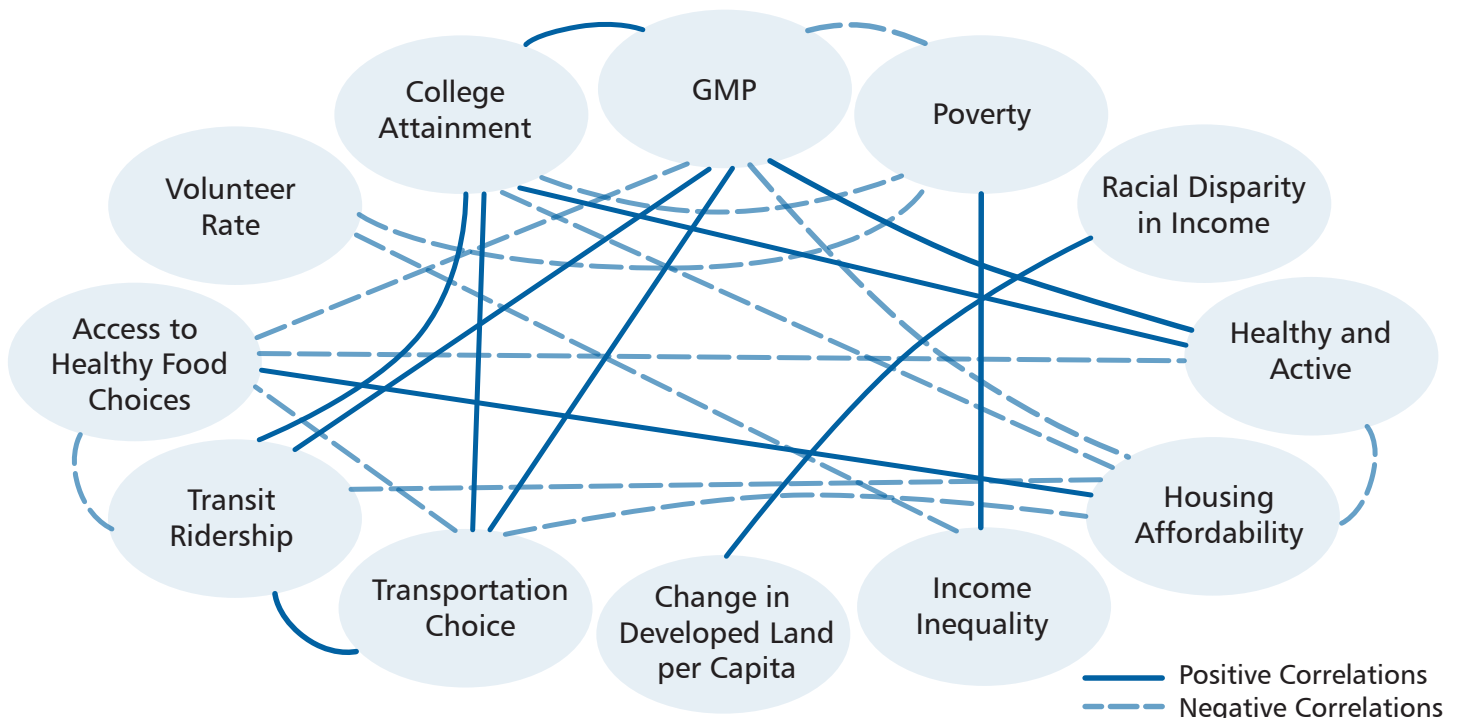
housing that is affordable due to higher densities and increased demand. Housing affordability is also negatively correlated with transportation choice (-0.67), GMP (-0.52), healthy and active (-0.44), and college attainment (-0.65). These correlations also present tradeoffs, suggesting that it may be challenging to make progress on certain goals simultaneously.

Most of the correlations between indicators dovetail in regards to the OneSTL sustainability goals. For example, college attainment is negatively correlated with poverty (-0.74), revealing that metro areas with higher college attainment tend to have lower poverty rates. College attainment is also positively correlated with GMP (0.70), revealing a positive relationship between educational attainment and GMP. The correlation between volunteer rate and income inequality (-0.70) reveals that metro areas with lower income inequality tend to have higher volunteer rates.

The correlations between indicators may help the region better understand its performance and how to pursue its sustainability goals. Although causality cannot be determined based on the correlations, organizations working to achieve the OneSTL goals can explore these relationships and how they may influence strategies or priorities.

Figure 1: Correlations for Peer Region Performance on OneSTL Indicators

This diagram represents the statistically significant correlations ($p < 0.01$) between indicators based on each region's raw score. Positive correlations indicate that peer regions that have high (or low) values for one indicator tend to also have high (or low) values on the other indicator. Negative correlations indicate that peer regions that have high values for one indicator tend to have low values for the other. Correlations between indicators signify associations, but do not imply causality.



OneSTL Network

Network Members are public agencies, not-for-profit organizations, businesses, private funders, community groups and residents who support OneSTL.

OneSTL Network membership is free and open to the public.

To sign up, go to OneSTL.org and click on "Get Involved."

Conclusion

For the 16 OneSTL indicators presented in this update, the St. Louis region performs worse than most of its peers on the majority of them (11) and better than most of its peers on five. While these 16 measures are only a subset of the OneSTL indicators, they provide an indication of how the region compares to other large metro regions on sustainability-related measures. Overall, they indicate that the St. Louis region is less sustainable than most of its peer regions.

As the St. Louis region works to advance sustainability, it is important for the region to build on its strengths and address its weaknesses. Many individuals and agencies are working together to advance sustainability, and nearly 200 organizations and individuals have joined the OneSTL Network to share ideas and build collaborative efforts. The data in this update, including the comparison with other metropolitan regions and the relationships among the OneSTL indicators, can help the Network Members set priorities, determine strategies and set realistic targets.



EAST-WEST GATEWAY Council of Governments

Creating Solutions Across Jurisdictional Boundaries

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