Benchmarking Central Ohio

2019



Benchmarking Central Ohio 2019

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Benchmarking Central Ohio 2019

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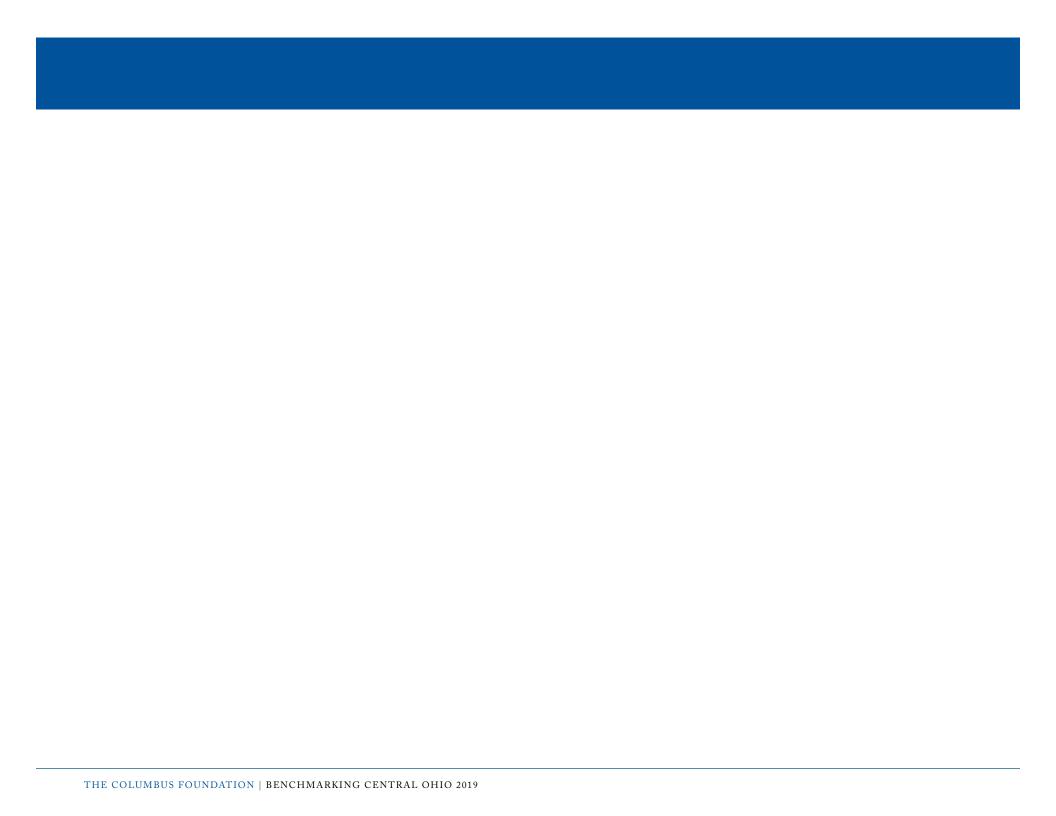


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Introduction

About the Benchmarking Project

Welcome to the 2019 Benchmarking Report. This year's report once again analyzes key indicators that impact the health, economic competitiveness, and quality of life for our community. Data are benchmarked for the population of the Columbus, Ohio metropolitan area alongside comparative or 'peer' metropolitan areas. This year's Benchmarking Report retains most of the features of the 2016 study, with some slight updates.

The structure of this year's Benchmarking Report remains the same. Indictors are grouped by section under the following topic areas: Population Vitality, Economic Strength, Personal Prosperity, Lifelong Learning, and Community Wellbeing. Within these topic areas, this study explores the data that underpin our daily lives. While updated data were not available for some of the indicators retained for 2016, data are presented alongside an expanded metro list for new rankings and comparisons.

Sponsored by The Columbus Foundation, Benchmarking Central Ohio 2019 represents the seventh edition of the benchmarking project.

Methodology

Since its inception in 2005, the benchmarking project is designed to:

Benchmark against both similar and best-in-class communities. Compare Columbus with other metropolitan areas that represent both "peer communities" (similar demographics/geography) and "best-in-class" communities (having characteristics that other communities emulate).

Select indicators from a broad framework, with a focus on economic competitiveness. Identify indicators that describe characteristics of the population, economy, and quality of life that contribute to the economic competitiveness of the region.

Use easily accessible, recent data. Collect data from existing, centralized sources. The process will not include conducting new research or collecting

data from individual communities. If possible, the report will use indicator data no more than three years old that can also be regularly updated.

Produce a product that is useful to a wide audience. Prepare a report that (1) is easy for a variety of users to understand, (2) can be used to guide program and policy development, (3) informs the community about how Columbus stacks up, and (4) inspires the community to act.

Provide regular updates. After the initial report, produce follow-up reports to assess progress and trends.

The Indicator Groups

As with the previous report, the indicators in Benchmarking Central Ohio 2016 are organized into five topic sections:

- 1. Population Vitality
- 2. Economic Strength
- 3. Personal Prosperity
- 4. Lifelong Learning
- 5. Community Wellbeing

Most indicators have returned from the 2016 report. Due to discontinuation or irregular updates of data, four indicators from the previous report were removed:

Clean Jobs Traffic Congestion
Festivals & Celebrations Carbon Footprint

As a result, four new indicators have been added:

Housing Starts (3.10) Broadband Availability (4.07)
Overdose Deaths (5.06) Access to Care (5.07)

Introduction

The Metro Areas

The Benchmarking Report compares Columbus to the same 22 metro areas as the 2016 report. Where data have been updated, the indicators apply the Metropolitan Statistical Area (MSA) geographies defined by the U.S. Office of Management and Budget in 2013, as used by the Census Bureau and other federal agencies for statistical purposes. Not all metro areas were represented in the source datasets. In these cases, an "N/A" is used to indicate no available data.

Most of the indicator data has been collected for the top 100 MSAs by population. Where possible, a figure for the top 100 MSAs is included for comparison purposes. In some other cases a national figure is presented.

A map of the geographies covered in this report is included for reference on page iv. On each indicator page, metro areas are colored by region, with red for Midwest, blue for South, green for West, and black for Northeast (Providence only).

About the Rankings

Each indicator page contains a bar graph that rank-orders the metro areas. Columbus is always highlighted in red. Many of the graphs display data as a percentage to enable comparisons of metro areas with different populations. For most of the indicators, 1 indicates the "highest" and "best" or otherwise the preferred condition, and 23rd indicates the "lowest" and "worst" or undesired condition. For some indicators, such as unemployment rate, poverty rate, and crime rate, a low value for the measure is the preferred condition, and accordingly, is ranked higher.

Where the Columbus MSA's ranking is tied with another MSA, its ranking number is marked with a T. Some tied metros will not be listed alphabetically, as there was a slight difference in value between them, ranking one higher than the other(s). However, they are presented as ties based on rounding to the appropriate number of significant digits.

Columbus ranking tables are presented at the beginning of each of the five topic sections. This provides a quick way of visually scanning where the Columbus metro falls among the indicators in a given topic. Note that due to tied metros in this ranking system, the possible ranking values may not always end on a rank of 23.

It is important to acknowledge the ranking in this report within the context of each specific indicator. For data where the spread between the highest and lowest figures is small, ranking may be a less useful tool for analysis. Similarly, the trend charts show how Columbus changes over time; small changes over time may not indicate statistically significant change. Notes indicate if the metro area boundaries themselves have changed over time, which may impact the value. Data sources may use old or updated boundaries when describing the MSA. Readers should consider the geography included in each indicator and how it could impact the interpretation of the data. Trend charts depicting dollar figures are not adjusted for inflation.

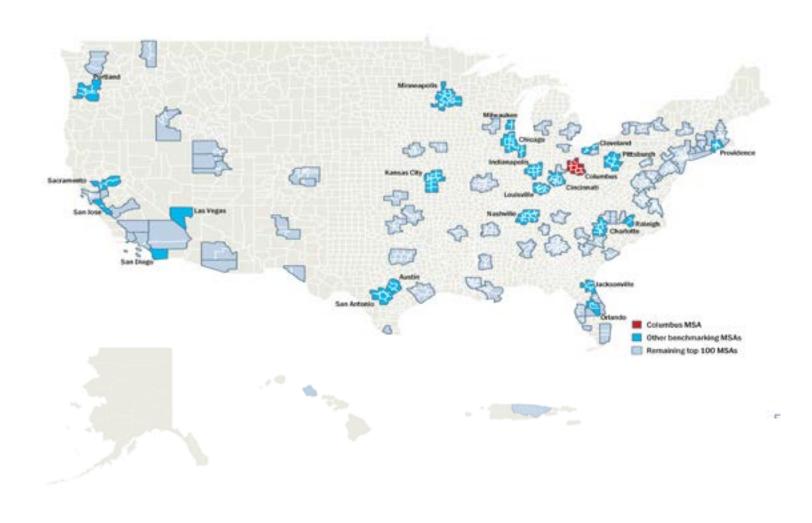
Accuracy

The project team has been careful in collecting, analyzing, checking, and presenting data from a variety of sources to prepare this report. Data sources (indicated on each indicator page and listed in the Data Sources section starting on page 6-1) have been judged to be reliable, but it was not possible to authenticate all data. If careful readers of the report discover data or typographical errors, feedback and future corrections will be welcome.

Introduction

Metro Area	2013 MSA Geography (counties and states, principal city county highlighted in red)
	(counties and states, principal city county highlighted in red)
Austin	Bastrop, Caldwell, Hays, Travis, Williamson, TX
Charlotte	Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Union, NC; Chester, Lancaster, York, SC
Chicago	Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry, Will, IL; Jasper, Lake, Newton, Porter, IN; Kenosha, WI
Cincinnati	Brown, Butler, Clermont, Hamilton, Warren, OH; Boone, Bracken, Campbell, Gallatin, Grant, Kenton, Pendleton, KY; Dearborn, Ohio, Union, IN
Cleveland	Cuyahoga, Geauga, Lake, Lorain, Medina, OH
Columbus	Delaware, Fairfield, Franklin, Hocking, Licking, Madison, Morrow, Perry, Pickaway, Union, OH
Indianapolis	Boone, Brown, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Putnam, Shelby, IN
Jacksonville	Baker, Clay, Duval, Nassau, St. Johns, FL
Las Vegas	Clark, NV
Louisville	Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, Trimble, KY; Clark, Floyd, Harrison, Scott, Washington, IN
Kansas City	Bates, Caldwell, Cass, Clay, Clinton, Jackson, Lafayette, Platte, Ray, MO; Johnson, Leavenworth, Linn, Miami, Wyandotte, KS
Milwaukee	Milwaukee, Ozaukee, Washington, Waukesha, WI
Minneapolis	Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Le Sueur, Mille Lacs, Ramsey, Scott, Sherburne, Sibley, Washington, Wright, MN; Pierce, St. Croix, WI
Nashville	Cannon, Cheatham, Davidson, Dickson, Hickman, Macon, Maury, Robertson, Rutherford, Smith, Sumner, Trousdale, Williamson, Wilson, TN
Orlando	Lake, Orange, Osceola, Seminole, FL
Pittsburgh	Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, Westmorland, PA
Portland	Clackamas, Columbia, Multnomah, Washington, Yamhill, OR; Clark, Skamania, WA
Providence	Bristol, MA; Bristol, Kent, Newport, Providence, Washington, RI
Raleigh	Franklin, Johnston, Wake, NC
Sacramento	El Dorado, Placer, Sacramento, Yolo, CA
San Antonio	Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, Wilson, TX
San Diego	San Diego, CA
San Jose	San Benito, Santa Clara, CA

Top 100 MSAs by Population, 2017



Section 1: Population Vitality

This section includes indicators of population growth, diversity, age, and households that describe the vitality of the metro area populations.

The following are the Population Vitality indicator categories:

1.01 Population Growth 1.05 Households

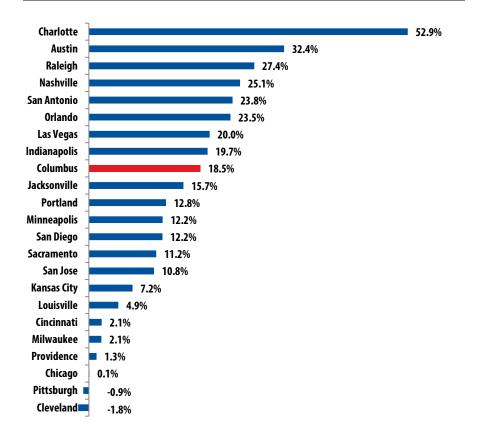
1.02 Race and Ethnicity 1.06 Same-Sex Couples

1.03 Senior Population 1.07 Urban Density

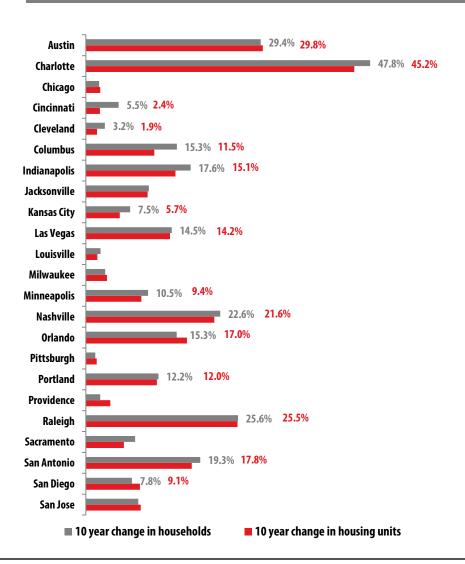
1.04 Median Age

Population Vitality Section Highlights

In 2007 the Columbus metro was smaller by two counties and had a population of 1.7 million people, trailing Cleveland's 2 million and Cincinnati's 2.1 million. By 2017 Columbus's growth has led it to surpass Cleveland and is on track to surpass Cincinnati in the 2020's. How has the rest of the cohort's population changed between 2007 and 2017? (1.01)

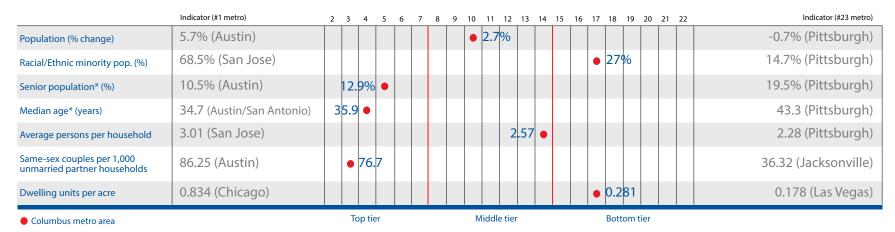


Housing affordability has increased as a topic of discussion, both regionally and nationally. Between 2007 and 2017 it is estimated more than 100,000 households were added to the Columbus metro, whereas the total number of housing units grew by 89,000. How have other metros in the cohort fared in the same time period? (1.05, 3.08)



Population Vitality Ranking

Where does Columbus rank among the 23 cohort metros in this section? This table displays Columbus's rank for each indicator, along with the top and bottom ranking metros in the cohort.



These indicators are ranked from highest (1) to lowest (23), except (*) ranked lowest (1) to highest (23).

Indicator 1.01: Population Growth

This indicator includes Census Bureau data on the total metro area populations in 2015 and 2017 and the percentage change in that two year time period.

Columbus continues to stand out among Midwestern metros, growing by 2.7% since 2015. Since the region's boundaries were expanded in 2013, the population has increased by an estimated 107,000 residents.

0% 2003-2005 2006-2008 2009-2011 2012-2014

8%

6% 4%

2%

2.1%

Columbus Trends: Percentage of population change

2.5%

Note: Estimates revised upward in 2011 following official 2010 Census count.

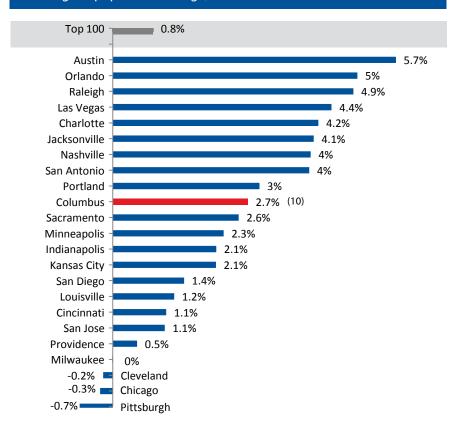
Total population, 2015-2017

	Metro Area	2015	2017
1	Austin	2,000,784	2,115,827
2	Orlando	2,391,028	2,509,831
3	Raleigh	1,272,875	1,335,079
4	Las Vegas	2,110,330	2,204,079
5	Charlotte	2,424,115	2,525,305
6	Jacksonville	1,445,986	1,504,980
7	Nashville	1,829,513	1,903,045
7	San Antonio	2,379,054	2,473,974
9	Portland	2,382,181	2,453,168
10	Columbus	2,023,198	2,078,725
11	Sacramento	2,266,892	2,324,884
12	Minneapolis	3,521,325	3,600,618
13	Indianapolis	1,986,872	2,028,614
13	Kansas City	2,085,221	2,128,912
15	San Diego	3,290,044	3,337,685
16	Louisville	1,277,992	1,293,953
17	Cincinnati	2,155,674	2,179,082
17	San Jose	1,977,584	1,998,463
19	Providence	1,613,155	1,621,122
20	Milwaukee	1,576,376	1,576,236
21	Cleveland	2,062,842	2,058,844
	Chicago	9,557,503	9,533,040
23	Pittsburgh	2,349,139	2,333,367

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Bureau of the Census, Population Estimates

Percentage of population change, 2015-2017



6.9%

2.7%

2.7%

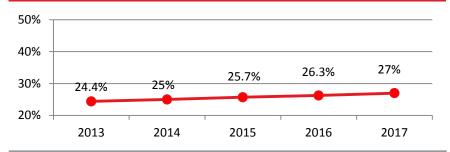
2015-2017

Indicator 1.02: Race & Ethnicity

This indicator includes American Community Survey data on racial and ethnic diversity across metro areas. These data reflect self-identification by people according to the race and ethnicity with which they most closely identify. Not all classifications are shown here; as such percentages in the data table do not total 100%.

While Columbus has become more racially and ethnically diverse, these populations are not the main drivers of the regions overall growth, with under 30% of the metro population of a racial or ethnic minority.

Columbus Trends: Percentage of population of a racial or ethnic minority



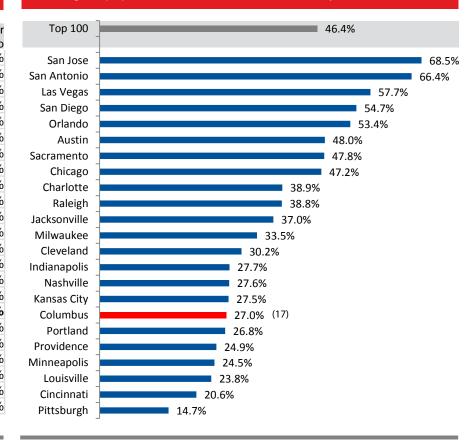
Population by race and ethnicity, 2017

	Metro Area	White	Black or African American	Asian	Hispanic or Latino
1	San Jose	31.5%	2.4%	35.2%	26.6%
2	San Antonio	33.6%	6.4%	2.2%	55.4%
3	Las Vegas	42.3%	11.4%	10.0%	31.3%
4	San Diego	45.3%	4.6%	11.8%	33.9%
5	Orlando	46.6%	15.3%	4.2%	30.5%
6	Austin	52.0%	6.8%	5.8%	32.5%
7	Sacramento	52.2%	6.7%	12.9%	21.7%
8	Chicago	52.8%	16.3%	6.5%	22.3%
9	Charlotte	61.1%	22.3%	3.6%	10.2%
10	Raleigh	61.2%	19.2%	5.8%	10.7%
11	Jacksonville	63.0%	21.0%	4.1%	8.8%
12	Milwaukee	66.5%	16.3%	3.7%	10.8%
13	Cleveland	69.8%	19.5%	2.2%	5.8%
14	Indianapolis	72.3%	14.9%	3.1%	6.8%
15	Nashville	72.4%	14.8%	2.7%	7.2%
16	Kansas City	72.5%	12.2%	2.9%	9.1%
17	Columbus	73.0%	15.4%	4.3%	4.1%
18	Portland	73.2%	2.7%	6.7%	12.0%
19	Providence	75.1%	5.0%	3.1%	12.8%
20	Minneapolis	75.5%	8.6%	6.7%	5.9%
21	Louisville	76.2%	14.3%	2.2%	4.7%
22	Cincinnati	79.4%	12.0%	2.6%	3.3%
23	Pittsburgh	85.3%	7.9%	2.4%	1.7%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of population of a racial or ethnic minority, 2017



Indicator 1.03: Senior Population

This indicator includes American Community Survey data on the number and percentage of individuals age 65 and over.

The percentage of senior citizens in Columbus has steadily increased over time, consistent with an aging population in the United States as a whole. Many neighboring metros are aging faster however, making Columbus one of the youngest metros outside the southern and western regions of the country.

Columbus Trends: Percentage of population age 65 and over 20% 18% 16% 12.9% 12.6% 12.3% 14% 12% 11.7% 12% 10% 2013 2014 2015 2016 2017

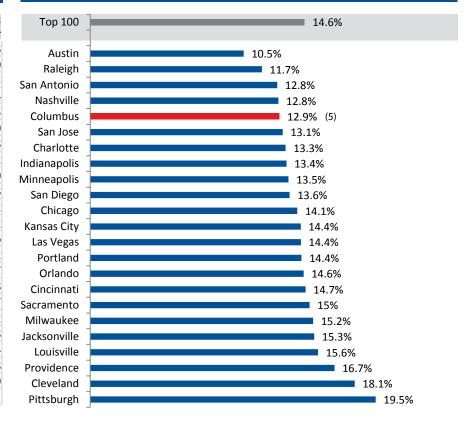
Population 65 and over, 2017

	Metro Area	Total population age 65
1		and over
Ι,	Austin	221,738
2	Raleigh	156,510
3	San Antonio	315,915
3	Nashville	244,674
5	Columbus	268,575
6	San Jose	262,660
7	Charlotte	336,968
8	Indianapolis	271,642
9	Minneapolis	487,410
10	San Diego	454,528
11	Chicago	1,348,232
12	Kansas City	305,702
12	Las Vegas	317,116
12	Portland	353,652
15	Orlando	365,787
16	Cincinnati	320,758
17	Sacramento	348,127
18	Milwaukee	239,972
19	Jacksonville	230,228
20	Louisville	201,244
21	Providence	270,388
22	Cleveland	371,910
23	Pittsburgh	454,911

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of population age 65 and over, 2017

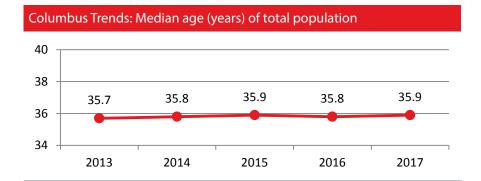


(#) ranked from lowest to highest

Indicator 1.04: Median Age

This indicator includes American Community Survey data on the median age of area populations, as well as of their racial and ethnic populations. The median age is expressed in years and divides populations into two groups, with half the population younger than the median and the other half older.

Following from a relatively small senior population, continued migration to Columbus has resulted in a steady median age for the metro over time, making it one of the youngest in the cohort.



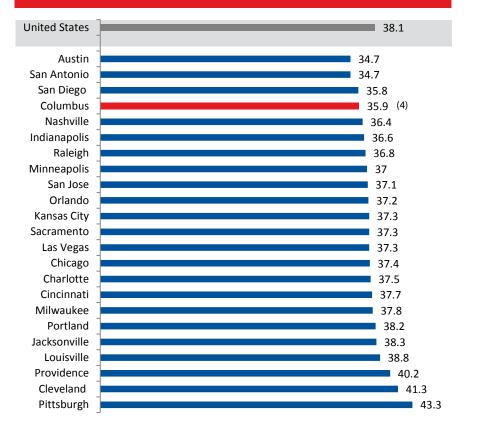
Median age (years) by race and ethnicity, 2017

	Metro Area	White	Black or African- American	Asian	Hispanic or Latino
1	Austin	36	33.9	33.1	29.1
1	San Antonio	35.9	32.9	35.5	31.1
3	San Diego	37.8	33.5	38	29.1
4	Columbus	38.2	30.8	31.9	24.7
5	Nashville	37.9	33	34.8	25.1
6	Indianapolis	38.8	32.7	31.9	24
7	Raleigh	39	35.7	35	26.7
8	Minneapolis	40.6	28.1	29.9	25.5
9	San Jose	40.7	34.9	37.8	30
10	Orlando	40.1	32.2	38.4	32.7
11,	Kansas City	39.7	33.5	32.1	25.9
11	Sacramento	41.4	34	36.5	28.1
11,	Las Vegas	40.9	32.8	42.3	28.5
14	Chicago	39.9	35.9	37.5	29
15	Charlotte	40.4	34.1	34.5	26.5
16	Cincinnati	39.8	33.4	32.5	23.8
17	Milwaukee	42.3	29.7	31.1	26.5
18	Portland	39.9	34.1	37.8	26.4
19	Jacksonville	41.6	32.3	37.1	30.8
20	Louisville	40.9	32.9	31.4	26
21	Providence	43.8	29.5	31.7	27
22	Cleveland	44.7	35.5	35.9	28.3
23	Pittsburgh	45.5	34.3	32.6	29.5

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Median age (years) of total population, 2017



(#) ranked from lowest to highest

Indicator 1.05: Households

This indicator includes American Community Survey data on the number and type of households in metro areas. A household is defined as an occupied housing unit, and households are categorized into types based on characteristics of the primary householder and his, her, or their relationship with others in the household. Not all types are represented here, so percentages do not add up to 100%. Average household size is calculated by dividing the total number of households in an area by the total number of households.

The rankings for average household size are fairly similar to that of Racial and Ethnic diversity (1.02), with more diverse metros in the south and west estimated to have larger household sizes.

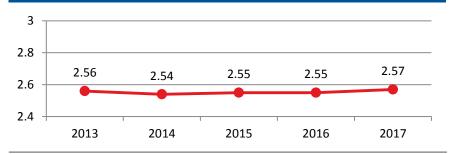
Number and percentage of households by type, 2017

	Metro Area	Total households	Married couples	Women w/ children (no spouse present)	Persons living alone
1	San Jose	651,006	56.6%	10.1%	20.1%
2	San Antonio	810,473	49.0%	14.6%	25.8%
3	San Diego	1,126,419	49.9%	12.3%	23.6%
4	Orlando	875,259	48.4%	13.6%	25.1%
5	Las Vegas	781,796	44.0%	14.3%	27.3%
6	Sacramento	829,772	49.1%	12.4%	25.2%
7	Austin	755,333	48.9%	9.4%	27.6%
8	Chicago	3,488,312	47.3%	12.8%	29.0%
9	Raleigh	493,879	53.5%	11.5%	23.9%
10	Charlotte	944,261	49.3%	12.4%	27.1%
10	Jacksonville	560,169	48.3%	14.0%	26.6%
12	Nashville	717,370	50.8%	11.9%	25.5%
13	Portland	935,722	49.5%	9.4%	26.8%
14	Indianapolis	773,361	46.7%	11.9%	30.1%
14	Columbus	788,946	46.8%	12.7%	28.0%
14	Minneapolis	1,376,557	51.0%	9.5%	27.8%
17	Kansas City	829,475	47.9%	11.3%	29.6%
18	Louisville	502,581	46.5%	12.7%	29.8%
19	Cincinnati	852,639	47.2%	12.1%	29.0%
20	Providence	627,318	46.2%	13.0%	30.2%
21	Milwaukee	625,495	44.2%	12.6%	31.6%
22	Cleveland	862,586	41.6%	13.5%	33.9%
23	Pittsburgh	996,798	46.5%	10.1%	33.0%

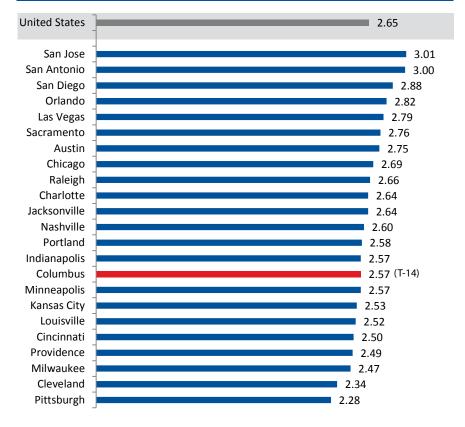
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Columbus Trends: Average persons per household



Average persons per household, 2017



Indicator 1.06: Same-Sex Couples

This indicator includes American Community Survey data on same-sex partner households. This indicator has been modified from the 2016 Benchmarking report; as same-sex marriage has become recognized throughout the country but not delineated in marriage estimates, the scope of the data analyzed has changed to unmarried partner households.

Although the data have changed somewhat, the presence of same-sex couples in Columbus remains strong, ranking third highest in the cohort and highest among Midwestern metros.

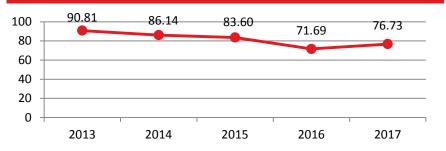
Unmarried same-sex households by sex, 2017

	Metro Area	Male couples	Female couples
1	Austin	1,667	2,389
2	San Antonio	1,849	1,411
3	Columbus	2,241	2,385
4	Indianapolis	1,190	2,040
5	Portland	2,007	2,926
6	Raleigh	1,172	776
7	Minneapolis	2,796	2,824
8	Cleveland	1,101	1,939
9	Chicago	7,514	3,707
10	Louisville	709	1,027
11	Charlotte	1,616	1,412
12	Las Vegas	2,316	755
13	Kansas City	1,148	1,514
14	San Diego	2,271	1,344
15	Pittsburgh	848	2,009
16	San Jose	1,034	536
17	Sacramento	800	1,503
18	Providence	741	1,121
19	Orlando	1,345	1,252
20	Milwaukee	722	885
21	Cincinnati	1,178	971
22	Nashville	588	910
23	Jacksonville	841	387

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

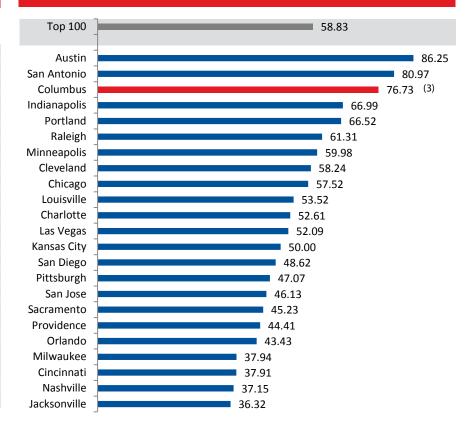
Source: U.S. Bureau of the Census, American Community Survey

Columbus Trends: Same-sex couples per 1,000 unmarried partner HHs



Note: Trend data in 2016 and 2017 may not reflect the full estimate of same-sex couples, following the U.S. Supreme Court's 2015 decision overturning the Defense of Marriage Act.

Same-sex couples per 1,000 unmarried partner households, 2017



Indicator 1.07: Urban Density

This indicator includes data providing multiple perspectives on urban density. First, data from the Center for Neighborhood Technology uses the number of road intersections per square mile to describe the extent a region's road network permits (or restricts) the movement of vehicles or people. Second, American Community Survey data includes persons per square mile and dwelling units per acre to describe regional population and residential density.

Columbus's growth has brought greater population density in Franklin County, rising from about 2,200 persons per square mile in 2010 to over 2,400 in 2017. The suburban and rural nature of the metro's other nine counties however, keep overall density low.

Columbus Trends: Dwelling units per acre 0.600 0.500 0.400 0.281 0.274 0.275 0.277 0.271 0.300 0.200 2013 2014 2015 2016 2017

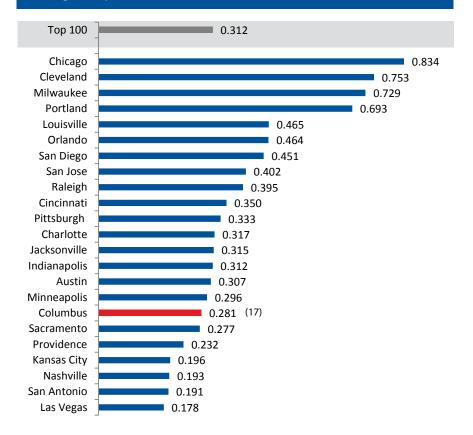
Intersection and population density

	Metro Area	Intersections per sq mi, 2018	Persons per sq mi, 2017
1	Chicago	54	1,325
2	Cleveland	34	1,031
3	Milwaukee	42	1,084
4	Portland	18	1,022
5	Louisville	19	692
6	Orlando	28	722
7	San Diego	27	793
8	San Jose	26	746
9	Raleigh	24	630
10	Cincinnati	24	523
11,	Pittsburgh	33	442
12	Charlotte	23	498
13	Jacksonville	25	470
14	Indianapolis	28	471
15	Austin	20	501
16	Minneapolis	26	471
17	Columbus	21	433
18	Sacramento	18	456
19	Providence	56	367
20	Kansas City	21	293
21	Nashville	16	302
22	San Antonio	16	338
23	Las Vegas	9	279

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Dwelling units per acre, 2017



Section 2: Economic Strength

This section includes indicators of industries & innovation, business growth, business size & ownership, productivity, employment, and workforce that describe the strength of metro area economies.

The following are the Economic Strength indicator categories:

2.01 Industry Sector Employment 2.07 Women's Business Ownership

2.02 High Tech Industries 2.08 Income & Wages

2.03 Entrepreneurship 2.09 Occupations

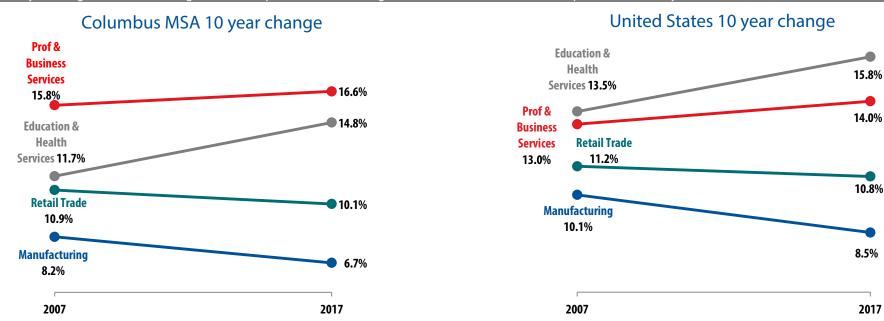
2.04 Small Business Firms 2.10 Workforce

2.05 Small Business Startups 2.11 Unemployment

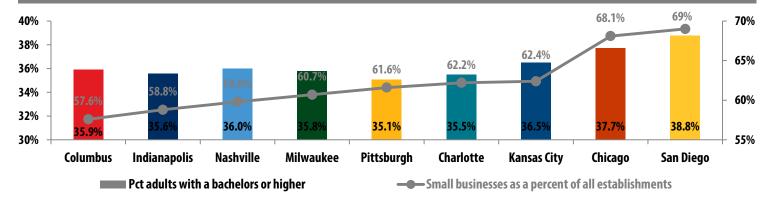
2.06 Minority Business Ownership 2.12 Brain Gain

Economic Strength Section Highlights

Columbus has long been characterized by a diversified economy, never having to rely upon employment in one particular sector such as manufacturing or government as conditions fluctuate. The metro's population growth and changing national trends over the last 10 years are highlighted in a changing labor force, with four sectors regionally showing considerable change in this time period. How do changes in Columbus's labor market compare to the country as a whole? (2.01)

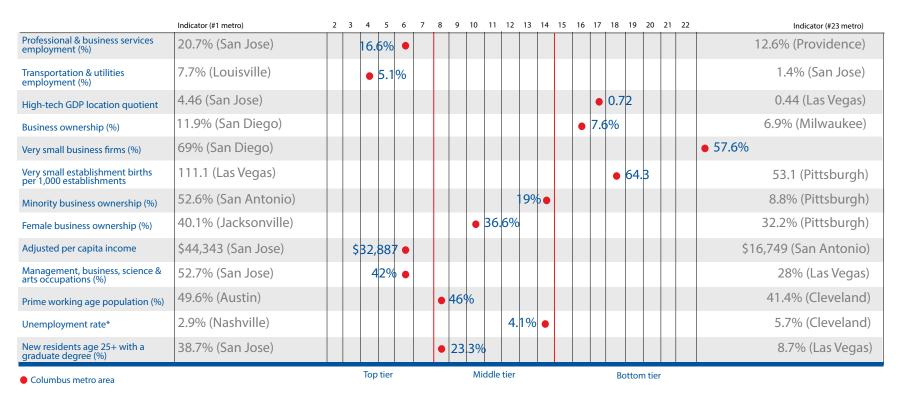


Columbus has remained relatively unchanged in the presence of small businesses in the regional economy, which has been low compared to other cohort metros. While educational attainment is one among several factors driving innovation and entrepreneurship, Columbus does not appear to be at a disadvantage to its peers in the rate of adults with a college education (2.04, 4.02)



Economic Strength Rankings

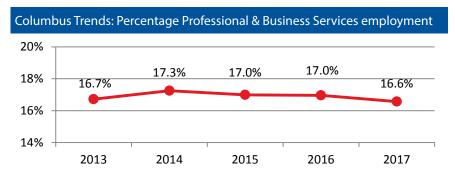
Where does Columbus rank among the 23 cohort metros in this section? This table displays Columbus's rank for each indicator, along with the top and bottom ranking metros in the cohort.



These indicators are ranked from highest (1) to lowest (23), except (*) ranked lowest (1) to highest (23).

Indicator 2.01: Industry Sector Employment (1 of 2)

This indicator includes data from the Bureau of Labor Statistics (BLS) on the distribution of employment by industry. The BLS uses the North American Industry Classification System (NAICS) to group similar establishments into industry sectors.



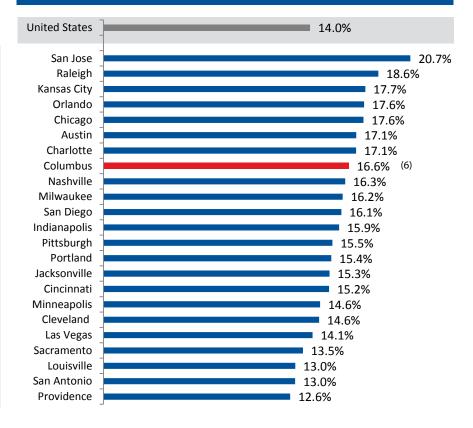
Percentage of total employment by industry sector, 2017

Metro Area	Education & Health Services	Financial Activities	Information	Government
1 San Jose	15.4%	3.3%	7.8%	8.7%
2 Raleigh	12.2%	5.1%	3.6%	15.7%
3 Kansas City	14.0%	7.4%	1.6%	13.8%
4 Orlando	12.2%	6.0%	1.9%	10.0%
4 Chicago	15.4%	6.5%	1.7%	11.7%
6 Austin	11.7%	5.8%	2.9%	17.4%
6 Charlotte	10.2%	7.8%	2.4%	13.0%
8 Columbus	14.8%	7.9%	1.6%	16.2%
9 Nashville	15.3%	6.7%	2.4%	11.9%
10 Milwaukee	16.6%	7.3%	1.9%	12.5%
11 San Diego	14.1%	5.1%	1.7%	17.1%
12 Indianapolis	14.9%	6.3%	1.4%	12.4%
13 Pittsburgh	21.2%	6.2%	1.6%	9.9%
14 Portland	14.4%	6.0%	2.2%	13.3%
15 Jacksonville	15.2%	9.8%	1.3%	11.1%
16 Cincinnati	15.1%	6.8%	1.3%	11.9%
17 Minneapolis	19.4%	5.9%	1.6%	10.0%
17 Cleveland	19.0%	6.3%	1.3%	12.9%
19 Las Vegas	9.9%	5.2%	1.2%	10.5%
20 Sacramento	15.7%	5.4%	1.3%	24.4%
21 Louisville	14.0%	6.9%	1.4%	11.2%
21 San Antonio	15.5%	8.6%	2.0%	16.5%
23 Providence	21.5%	6.6%	1.3%	12.1%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Bureau of Labor Statistics, Current Employment Statistics

Percentage Professional & Business Services employment, 2017



Indicator 2.01: Industry Sector Employment (2 of 2)

This indicator includes data from the Bureau of Labor Statistics (BLS) on the distribution of employment by industry. The BLS uses the North American Industry Classification System (NAICS) to group similar establishments into industry sectors.

Columbus maintains a high standing among cohort metros for the percentage of transportation & utilities employment. As distribution and warehousing centers have grown in visibility throughout the region, related employment continues to maintain a presence.

Columbus Trends: Percentage Transportation & Utilities employment 8% 4.7% 4.7% 5.1% 5.1% 5.1% 2013 2014 2015 2016 2017

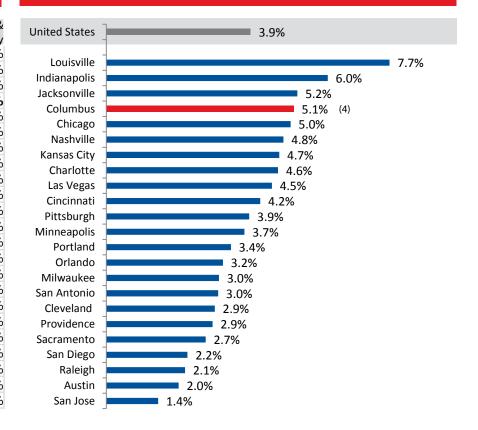
Percentage of total employment by industry sector, 2017

Metro Area	Manufacturing	Retail Trade	Wholesale Trade	Leisure & Hospitality
1 Louisville	12.3%	10.4%	4.5%	10.4%
2 Indianapolis	8.7%	10.5%	4.7%	10.2%
3 Jacksonville	4.5%	11.6%	3.7%	12.4%
4 Columbus	6.7%	10.1%	3.9%	9.8%
5 Chicago	8.9%	9.9%	5.4%	10.2%
6 Nashville	8.6%	10.1%	4.2%	11.3%
7 Kansas City	7.1%	10.3%	4.8%	10.0%
8 Charlotte	9.0%	10.7%	5.1%	11.5%
9 Las Vegas	2.4%	11.1%	2.3%	29.6%
10 Cincinnati	10.6%	9.9%	5.6%	11.2%
11 Pittsburgh	7.3%	10.6%	3.7%	10.2%
12 Minneapolis	9.9%	9.5%	4.9%	9.4%
13 Portland	10.5%	10.1%	4.9%	10.4%
14 Orlando	3.6%	12.0%	3.6%	20.6%
15 Milwaukee	13.6%	9.3%	4.5%	9.1%
15 San Antonio	4.7%	11.0%	3.5%	12.9%
17 Cleveland	11.5%	9.4%	4.9%	9.9%
17 Providence	8.6%	10.9%	3.4%	11.5%
19 Sacramento	3.7%	10.5%	2.7%	10.7%
20 San Diego	7.5%	10.2%	3.3%	13.5%
21 Raleigh	5.7%	11.4%	4.3%	11.3%
22 Austin	5.5%	10.2%	5.0%	12.2%
23 San Jose	15.2%	7.9%	3.2%	9.3%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Bureau of Labor Statistics, Current Employment Statistics

Percentage Transportation & Utilities employment, 2017



Indicator 2.02: High Tech Industries

This indicator provides two perspectives on high tech industries. First, BLS data is included on information technology (IT) occupations, including computer, information systems, and database occupations. Second, the Milken Institute's High-Tech GDP location quotient (LQ) measures the extent to which a metro area's high tech concentration is above or below the U.S. concentration, which equals 1.0.

Despite Columbus's LQ placing it in the lower third of the cohort, the metro's share of IT occupations is tied for 8th highest among the group. While Columbus's large employers, such as Nationwide Insurance or Chase, demand tech talent to fill IT jobs, their core business of finance and insurance may not contribute as much to high tech GDP.

1.25 1 0.8 0.74 0.77 0.7 0.72 0.5 2013 2014 2015 2016 2017

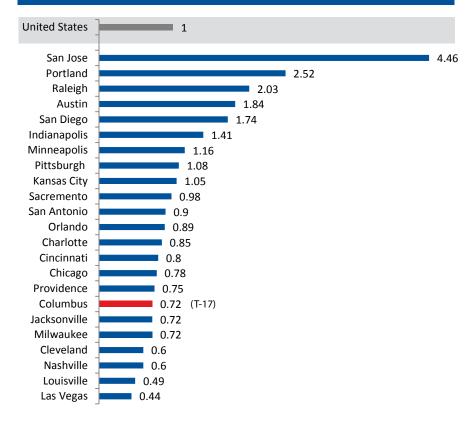
IT Occupations, 2017

Metro Area	Total IT Occupations	IT occupations as percentage of all occupations
1 San Jose	133,530	12.3%
2 Portland	42,710	3.7%
3 Raleigh	31,080	5.1%
4 Austin	55,100	5.5%
5 San Diego	49,980	3.5%
6 Indianapolis	29,690	2.9%
7 Minneapolis	75,130	3.9%
8 Pittsburgh	34,880	3.1%
9 Kansas City	42,650	4.0%
10 Sacremento	31,830	3.3%
11 San Antonio	24,680	2.5%
12 Orlando	29,740	2.5%
13 Charlotte	46,690	3.9%
14Cincinnati	30,750	2.9%
15 Chicago	115,520	3.2%
16 Providence	13,600	2.4%
17 Columbus	41,280	4.0%
17 Jacksonville	16,290	2.4%
17 Milwaukee	24,730	2.9%
20 Cleveland	29,450	2.9%
20 Nashville	20,100	2.1%
22 Louisville	13,640	2.1%
23 Las Vegas	13,340	1.4%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Bureau of Labor Statistics, Occupational Employment Statistics; Milken Institute, Best Performing Cities

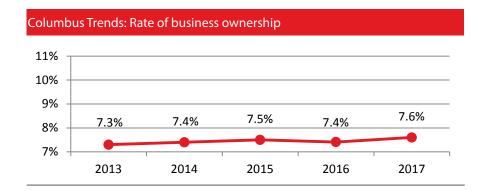
High Tech GDP Location Quotient, 2017



Indicator 2.03: Entrepreneurship

This indicator uses American Community Survey data on self-employment. Workers are considered business owners if they report being self-employed in their own business, with distinctions between incorporated and non-incorporated businesses.

The rate of self-employed workers in Columbus has receded since the late 2000's recession, from 8.8% in 2007 to 7.6% in 2017.



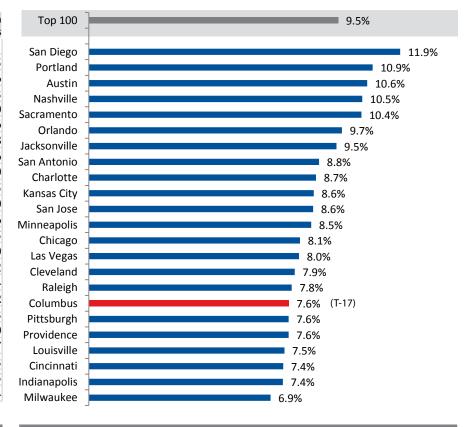
Business owners age 16 and older by incorporation, 2017

	T-t-1 16 1:	T-t-1 16 1:
Metro Area	Total self-employed in own not incorporated business	Total self-employed in own incorporated business
1 San Diego	125,328	66,531
2 Portland	82,050	55,875
3 Austin	76,737	43,786
4 Nashville	75,371	29,633
5 Sacramento	80,356	31,040
6 Orlando	58,254	60,546
7 Jacksonville	34,106	32,898
8 San Antonio	68,348	31,576
9 Charlotte	63,875	45,610
10 Kansas City	57,529	35,845
10 San Jose	60,077	29,350
12 Minneapolis	89,799	77,886
13 Chicago	198,273	184,475
14 Las Vegas	55,984	27,970
15 Cleveland	44,062	34,092
16 Raleigh	29,185	24,534
17 Columbus	53,124	27,752
17 Pittsburgh	55,770	32,953
17 Providence	41,665	21,250
20 Louisville	26,961	20,807
21 Cincinnati	50,798	30,253
21 Indianapolis	45,341	29,425
23 Milwaukee	33,464	21,484

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Rate of business ownership, 2017*



Indicator 2.04: Small Business Firms

This indicator uses Bureau of the Census data on small employer firms, distinguished by firm size. A "small business firm" is defined as an employer firm with fewer than 500 employees, whereas a "very small firm" is defined as one with fewer than 20 employees. Note that Columbus metro trend data is partially based on 2003 boundaries up to 2012.

Columbus has consistently ranked at or near the bottom of very small firms' presence in the overall economy, dating back to earlier Benchmarking reports in the mid-2000s.



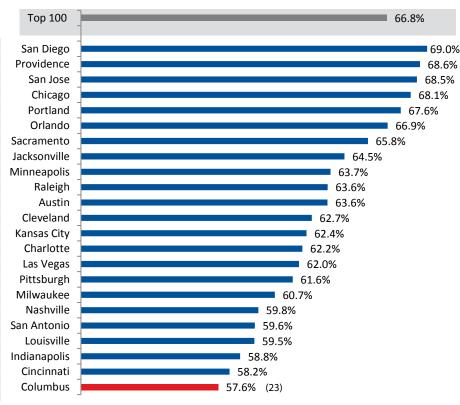
Small business firms and their employment by firm size, 2014-2015

			Very small firm
Metro Area	Small firm employment as	Small firms as percentage of all firms	employment as percentage
	percentage of total employment		or total employment
1 San Diego	31.8%	14.6%	17.8%
2 Providence	34.3%	15.5%	19.1%
3 San Jose	27.6%	15.2%	14.2%
4Chicago	30.4%	14.5%	15.3%
5 Portland	32.4%	16.2%	19.4%
6 Orlando	23.4%	11.7%	14.7%
7 Sacramento	30.1%	14.9%	19.0%
8 Jacksonville	26.0%	13.2%	16.0%
9 Minneapolis	32.3%	18.0%	13.5%
10 Raleigh	31.4%	15.8%	16.7%
10 Austin	33.0%	16.5%	16.7%
12 Cleveland	31.6%	16.5%	15.5%
13 Kansas City	30.2%	16.2%	14.7%
14Charlotte	27.8%	14.9%	14.9%
15 Las Vegas	26.0%	16.5%	13.2%
16 Pittsburgh	30.4%	17.1%	15.2%
17 Milwaukee	34.2%	19.5%	13.7%
18 Nashville	28.3%	16.5%	13.9%
19 San Antonio	28.7%	16.5%	14.2%
20 Louisville	29.1%	16.8%	13.8%
21 Indianapolis	29.3%	17.2%	13.4%
22 Cincinnati	29.5%	17.7%	13.6%
23 Columbus	28.1%	17.9%	13.0%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Bureau of the Census, Statistics of U.S. Businesses (SUSB)

Very small business firms as a percentage of all firms, 2014-2015



Indicator 2.05: Small Business Startups

This indicator uses Bureau of the Census data on business establishment births. An establishment "birth" is defined as a business with zero employment in the first quarter of the initial year and positive employment in the first quarter of the subsequent year. An establishment differs from an employer firm in that it represents a physical location where business is conducted, and a firm may include one or more establishments. Note that Columbus metro trend data is partially based on 2003 boundaries up to 2012.

The rate of business creation has slowed recently with an improving economy and existing firms being more attractive to the workforce. Columbus is no different and its position is relatively unchanged within the cohort from the last Benchmarking report.

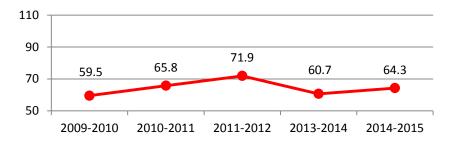
New business establishments and establishment births, 2014-2015

Metro Area	Total number of new establishments	Establishment births per 1k establishments	New very small establishments (<20 employees)
1 Las Vegas	5,242	142.5	4,088
2 Orlando	6,998	134.1	5,631
3 Austin	5,641	134.0	4,222
4 San Diego	8,384	119.0	6,903
5 Jacksonville	3,870	123.3	2,947
6 San Jose	4,844	112.9	3,947
7 Sacramento	4,746	114.6	3,728
8 Portland	6,498	111.0	5,196
9 Raleigh	3,144	115.1	2,416
10 Charlotte	5,756	113.8	4,294
11 Kansas City	5,120	110.0	3,895
12 Chicago	21,796	103.5	17,361
13 San Antonio	4,511	114.0	3,136
14 Minneapolis	8,027	97.9	6,274
15 Nashville	4,142	111.2	2,846
16 Providence	3,241	89.3	2,589
17 Indianapolis	4,181	102.3	2,792
18 Columbus	3,576	95.3	2,411
19 Louisville	2,407	91.7	1,621
20 Milwaukee	2,857	83.0	2,109
21 Cincinnati	3,654	86.9	2,434
22 Cleveland	4,169	89.8	2,570
23 Pittsburgh	4,262	77.4	2,928

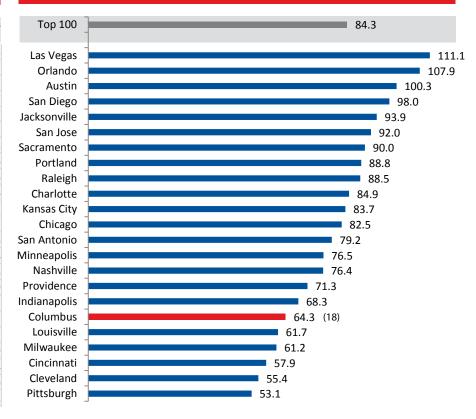
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Bureau of the Census, Statistics of U.S. Businesses (SUSB)

Columbus Trends: Very small establishment births per 1k establishments

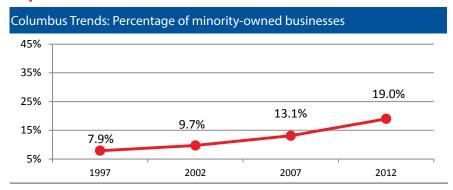


Very small business establishment births per 1k establishments, 2014-2015



Indicator 2.06: Minority Business Ownership

This indicator includes Census Bureau data on minority business ownership, defined as firms whose sole proprietor, or at least 51% of the ownership, is Black or African-American, Asian, Pacific Islander, American Indian/Alaska Native, or Hispanic/Latino. These data are unchanged from the 2016 report, with recalculations to reflect the current 100 largest metro areas. Note these data are based on 2003 metro boundaries.



Number of businesses by race and ethnicity of owner, 2012

Metro Area	Number of Hispanic-owned businesses	Number of racial minority-owned businesses (non-Hispanic)
1 San Antonio	81,126	96,601
2 San Jose	23,913	84,336
3 Orlando	61,157	103,243
4 Las Vegas	28,630	62,564
5 San Diego	62,753	106,432
6 Chicago	89,523	293,106
6 Sacramento	18,194	55,249
8 Jacksonville	7,343	33,724
9 Austin	33,900	52,320
10 Charlotte	11,610	53,357
11 Raleigh	5,868	27,803
12 Milwaukee	4,185	23,381
13 Cleveland	4,742	34,574
14 Columbus	3,599	30,781
15 Indianapolis	4,873	26,336
16 Nashville	6,194	25,875
17 Kansas City	6,310	25,164
18 Portland	9,149	29,592
19Cincinnati	2,744	22,282
20 Louisville	2,543	13,602
21 Providence	9,494	18,201
22 Minneapolis	7,189	40,824
23 Pittsburgh	1,745	14,987

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

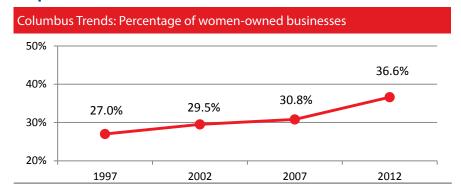
Source: U.S. Bureau of the Census, Survey of Business Owners

Minority-owned businesses as a percentage of all businesses, 2012



Indicator 2.07: Women's Business Ownership

This indicator includes Census Bureau data on minority business ownership, defined as firms whose sole proprietor, or at least 51% of the ownership, is a woman. These data are unchanged from the 2016 report, with recalculations to reflect the current 100 largest metro areas. Note these data are based on 2003 metro area boundaries.



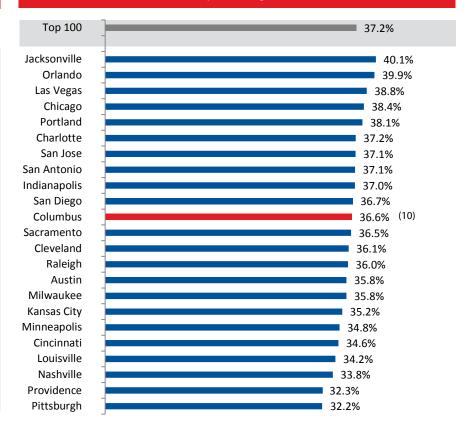
Number of women-owned businesses, 2012

Metro Area	Number of businesses owned by women
1 Jacksonville	44,290
2 Orlando	91,290
3 Las Vegas	62,885
4Chicago	340,336
5 Portland	77,097
6 Charlotte	73,756
6 San Jose	60,189
8 San Antonio	68,128
9 Indianapolis	57,362
10 San Diego	105,329
11 Columbus	59,239
12 Sacramento	61,073
13 Cleveland	63,378
14 Raleigh	38,337
15 Austin	63,918
16 Milwaukee	40,520
17 Kansas City	58,155
18 Minneapolis	109,300
19 Cincinnati	54,762
20 Louisville	33,222
21 Nashville	55,389
22 Providence	42,559
23 Pittsburgh	54,959

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

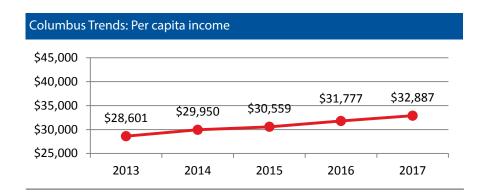
Source: U.S. Bureau of the Census, Survey of Business Owners

Women-owned businesses as a percentage of all businesses, 2012



Indicator 2.08: Income & Wages

This indicator includes data from the American Community Survey and BLS to compare median hourly wages and per capita income across metro areas. Per capita income is an average obtained by dividing aggregate income by the total population of an area; it does not reflect income distribution. Here per capita income is adjusted via the Cost of Living Index to reflect cost of living in the Columbus metro. This results in a lower per capita income than the estimate for locations with a high cost of living, such as San Jose or Chicago.



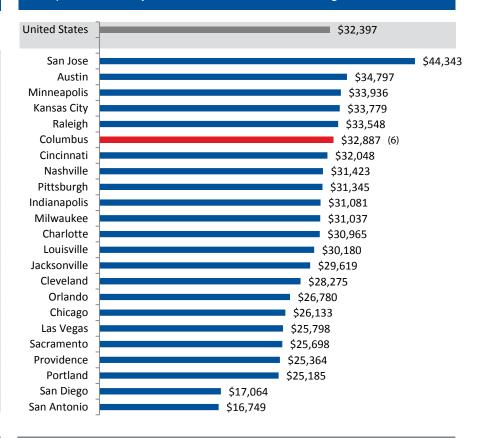
Median hourly wage and per capita income, 2017

Metro Area	Median hourly wage (unadjusted \$)	Per capita income (unadjusted \$)
1 San Jose	\$27.66	\$51,857
2 Austin	\$18.56	\$37,823
3 Minneapolis	\$21.26	\$39,686
4 Kansas City	\$18.47	\$34,457
5 Raleigh	\$18.52	\$36,054
6 Columbus	\$18.38	\$32,887
7 Cincinnati	\$18.18	\$33,048
8 Nashville	\$17.67	\$33,875
9 Pittsburgh	\$18.12	\$34,804
10 Indianapolis	\$17.68	\$32,086
11 Milwaukee	\$18.59	\$33,598
12 Charlotte	\$18.04	\$33,209
13 Louisville	\$16.99	\$31,055
14 Jacksonville	\$16.78	\$31,303
15 Cleveland	\$18.43	\$31,900
16 Orlando	\$15.52	\$28,512
17 Chicago	\$19.67	\$36,010
18 Las Vegas	\$16.54	\$29,479
19 Sacramento	\$20.15	\$33,548
20 Providence	\$19.01	\$34,950
21 Portland	\$20.41	\$36,303
22 <mark>San Diego</mark>	\$20.15	\$36,697
23 San Antonio	\$16.65	\$27,280

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

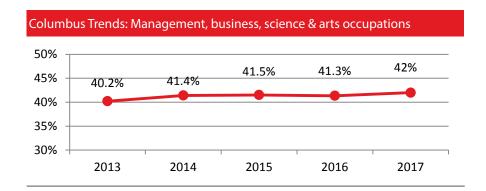
Source: U.S. Bureau of the Census, American Community Survey; U.S. Bureau of Labor Statistics, Occupational Employment Statistics; Council for Community and Economic Research, Cost of Living Index

Per capita income adjusted for Columbus' cost of living, 2017



Indicator 2.09: Occupations

This indicator includes American Community Survey data on the distribution of jobs in five selected major occupational categories. Occupations describe a set of activities or tasks that employees are paid to perform. Management, business, science, and arts occupations highlighted in the graph are commonly known as white-collar or professional occupations, which tend to require higher levels of education.



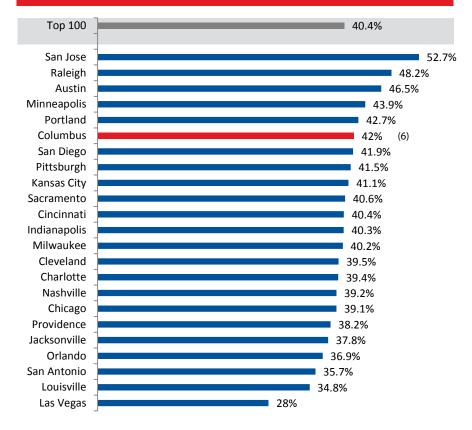
Percentage of total employment by occupational categories, 2017

Metro Area	Service	Sales & Office	Natural resources, construction, maint.	Production, transportation, material moving
1 San Jose	15.1%	17.9%	6.6%	7.8%
2 Raleigh	14.3%	22.0%	7.6%	7.9%
3 Austin	15.3%	22.5%	7.8%	7.9%
4 Minneapolis	15.8%	22.3%	6.8%	11.3%
5 Portland	15.9%	22.0%	7.9%	11.4%
6 Columbus	16.7%	22.4%	6.0%	12.8%
7 San Diego	20.0%	22.2%	7.6%	8.3%
8 Pittsburgh	16.7%	22.8%	7.7%	11.3%
9 Kansas City	15.6%	23.3%	8.0%	12.0%
10 Sacramento	19.3%	22.9%	8.1%	9.1%
11 Cincinnati	16.1%	23.6%	7.0%	13.0%
12 Indianapolis	15.3%	24.0%	7.5%	12.9%
13 Milwaukee	17.2%	23.1%	6.3%	13.2%
14Cleveland	17.5%	23.2%	6.4%	13.4%
15 Charlotte	15.8%	23.6%	8.2%	12.9%
16 Nashville	16.0%	23.8%	8.0%	13.0%
17 Chicago	17.0%	23.7%	6.8%	13.4%
18 Providence	19.2%	22.8%	8.7%	11.1%
19 Jacksonville	18.1%	25.9%	8.3%	10.0%
20 Orlando	20.1%	25.7%	8.0%	9.3%
21 San Antonio	18.2%	25.6%	9.7%	10.8%
22 Louisville	15.4%	24.4%	7.2%	18.2%
23 Las Vegas	29.0%	25.3%	7.8%	9.9%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

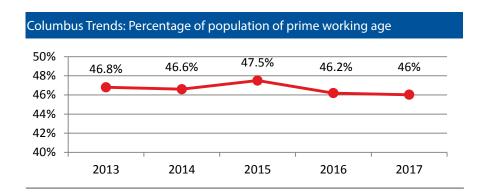
Source: U.S. Bureau of the Census, American Community Survey

Percentage management, business, science & arts occupations, 2017



Indicator 2.10: Workforce

This indicator includes American Community Survey data on population of working age. The entry to exit ratio compares a metro area's ages 15 to 24 population to its ages 55 to 64 population, with a higher (>1) ratio indicating a greater percentage of younger people. The workforce participation rate is the proportion of the population in the labor force, which includes persons employed or unemployed and looking for work. The ages 25 to 34 age bracket represents the "young professionals" population segment of a metro area. The population percentage of prime working age includes all persons ages 22 to 54.



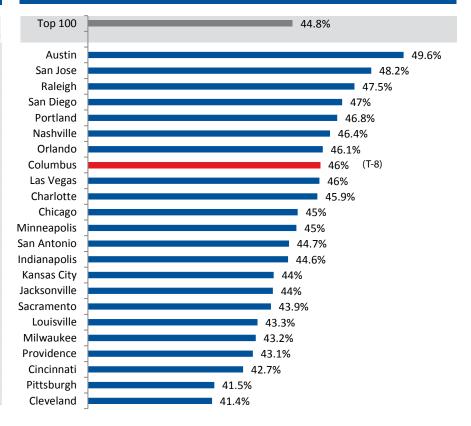
Workforce entry and exit ratio and participation rate, 2017

Metro Area	Workforce entry to exit population ratio	Workforce participation rate (ages 16-64)	Percentage of population ages 25-34
1 Austin	1.28	77.9%	17.3%
2 San Jose	1.04	77.2%	16.0%
3 Raleigh	1.12	77.6%	14.3%
4 San Diego	1.18	76.3%	16.5%
5 Portland	0.94	78.1%	15.3%
6 Nashville	1.07	78.3%	15.3%
7 Orlando	1.15	74.3%	15.0%
8 Columbus	1.09	76.8%	15.7%
8 Las Vegas	1.04	74.5%	15.0%
10 Charlotte	1.07	76.2%	13.9%
11 Chicago	1.03	76.8%	14.3%
11 Minneapolis	0.95	82.8%	14.7%
13 San Antonio	1.27	72.4%	15.0%
14 Indianapolis	1.03	76.9%	14.4%
15 Kansas City	0.95	79.0%	14.0%
15 Jacksonville	0.93	74.6%	14.3%
17 Sacramento	1.05	72.3%	14.3%
18 Louisville	0.91	76.6%	13.8%
19 Milwaukee	0.97	77.4%	13.9%
20 Providence	1.00	76.9%	13.4%
21 Cincinnati	0.98	76.7%	13.5%
22 Pittsburgh	0.77	76.8%	13.2%
23 Cleveland	0.86	75.8%	12.7%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

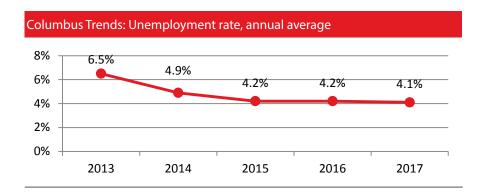
Source: U.S. Bureau of the Census, American Community Survey

Percentage of population of prime working age, 2017



Indicator 2.11: Unemployment

This indicator includes BLS data on employment and unemploment as an annual average for the previous year. A person is considered unemployed if he, she, or they are willing and able to work for pay but unable to find work, thus still in the labor force. The percentage of these persons in the labor force represents the unemployment rate.



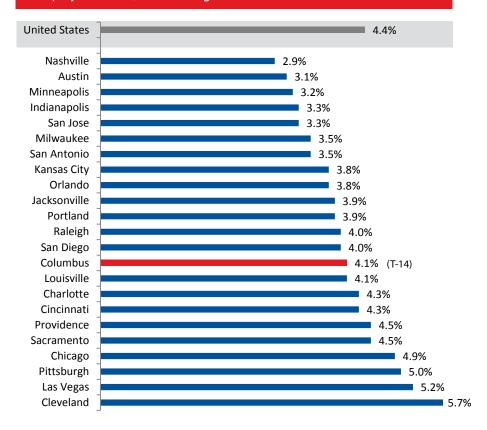
Number in civilian workforce and unemployed, 2017 average

Metro Area	Number in the workforce	Number unemployed
1 Nashville	1,005,655	25,573
2 Austin	1,149,397	34,409
3 Minneapolis	1,984,759	58,726
4 Indianapolis	1,042,731	31,797
4San Jose	1,060,367	32,575
6 Milwaukee	827,761	27,751
6 San Antonio	1,158,967	39,482
8 Kansas City	1,121,041	40,042
8 Orlando	1,299,512	47,619
10 Jacksonville	761,571	29,199
10 Portland	1,300,364	46,676
12 Raleigh	694,574	26,212
12 San Diego	1,573,912	58,239
14 Columbus	1,074,757	40,202
14Louisville	658,865	27,557
16 Charlotte	1,311,955	53,145
16 Cincinnati	1,110,279	44,416
18 Providence	677,845	27,553
18 Sacramento	1,072,845	44,775
20 Chicago	4,887,412	213,177
21 Pittsburgh	1,208,762	59,659
22 Las Vegas	1,066,716	54,970
23 Cleveland	1,029,479	56,679

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

Unemployment rate, 2017 average



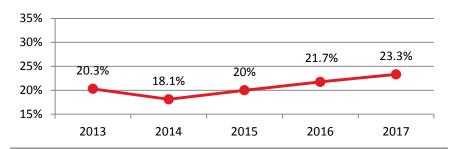
(#) ranked from lowest to highest

Indicator 2.12: Brain Gain

This indicator includes American Community Survey data on the educational attainment of persons age 25 and older who moved to a metro area from a different state or abroad in the previous year.

Nearly 29,000 adults from outside Ohio were estimated to have moved to the Columbus metro in 2017. Over half hold a Bachelor's degree or higher, reflecting opportunity in more skilled positions that may not all be filled by regional college graduates.

Columbus Trends: Percentage new residents age 25+ with a graduate degree



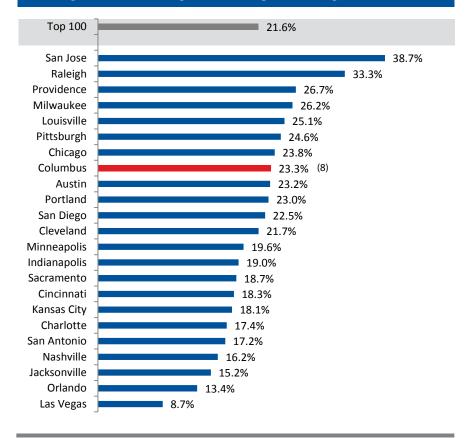
Level of education among new residents age 25+, 2017

	Percent without a HS	Percent with HS diploma or	Percent with a Bachelor's
Metro Area	diploma	GED only	degree
1 San Jose	8.8%	8.1%	34.6%
2 Raleigh	3.7%	9.7%	31.3%
3 Providence	9.5%	20.6%	26.5%
4Milwaukee	9.8%	18.0%	25.2%
5 Louisville	8.0%	16.4%	24.6%
6 Pittsburgh	6.5%	16.5%	31.0%
7 Chicago	8.2%	17.4%	31.0%
8 Columbus	7.2%	18.9%	28.8%
9 Austin	7.1%	13.8%	33.3%
10 Portland	5.3%	16.9%	27.7%
11 San Diego	5.1%	14.7%	34.1%
12 Cleveland	8.3%	21.6%	29.3%
13 Minneapolis	7.2%	17.6%	33.1%
14 Indianapolis	8.2%	16.0%	30.4%
15 Sacramento	12.2%	21.7%	23.9%
16 Cincinnati	7.4%	22.2%	29.9%
17 Kansas City	8.9%	20.2%	27.9%
18 Charlotte	9.8%	17.2%	32.9%
19 San Antonio	5.8%	17.8%	26.8%
20 Nashville	3.5%	17.3%	32.5%
21 Jacksonville	6.6%	17.3%	28.1%
22 Orlando	7.2%	20.4%	30.6%
23 Las Vegas	10.4%	26.4%	21.7%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage new residents age 25+ with a graduate degree, 2017



(#) ranked from highest to lowest

Section 3: Personal Prosperity

This section includes indicators of income, economic equity, homeownership, and housing affordability that describe the prosperity of residents of the metro areas.

The following are the Personal Prosperity indicator categories:

3.01 Household Income 3.07 Earned Income Tax Credit

3.02 Income Gap 3.08 Foreclosures

3.03 Pay Equality 3.09 Homeownership

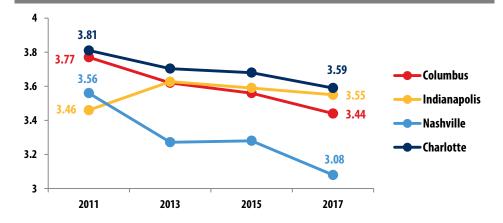
3.04 Poverty 3.10 Housing Starts

3.05 Low Income Population 3.11 Housing & Transportation Costs

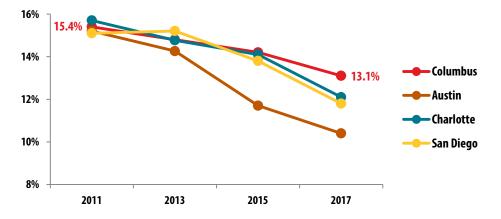
3.06 Income Supports

Personal Prosperity Section Highlights

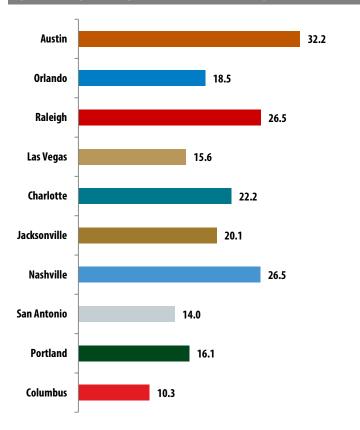
Columbus has made strides in narrowing the gap between high and low earners (3.02)



Compared to other fast growing metros, Columbus has faced difficulty lowering its poverty rate over the course of this decade compared to its peers. (3.04)



Among the 10 fastest growing metros in the cohort, Columbus lags in issuing building permits for new housing units (3.10, 1.01)



Personal Prosperity Ranking

Where does Columbus rank among the 23 cohort metros in this section? This table displays Columbus's rank for each indicator, along with the top and bottom ranking metros in the cohort.

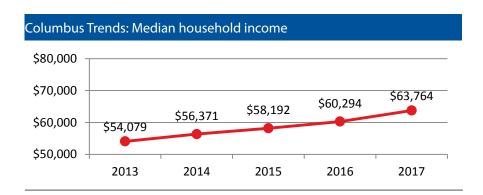
	Indicator (#1 metro)	2	3	4	5	6	7	8	9 10) 1	1 12	13	14	15	16	17	18	19	20	21	2	22	In	dicator (#23 metro)
Median household income	\$117,474 (San Jose)										\$6	53,7	764	Γ									\$52,489 ((Cleveland)
Income gap ratio *	3.08 (Nashville, Raleigh)								• 3.	44													4.41 (F	rovidence)
Pay ratio, women to men cents per \$1	89.4 (San Diego)			85	.1	•																	71.6	(San Jose)
Persons in poverty* (%)	7.3% (San Jose)													l	•	13	19	ó					14.8%	(Cleveland)
Persons below 200% of poverty* (%)	17.9% (San Jose)										28%	6											35.5%	% (Orlando)
Households receiving public assistance (%)	5.7% (San Jose)										11	.8%	6										15.9% (F	Providence)
Tax returns claiming EITC (%)	24% (Orlando)								• 10	5.7	%												10.1%	(San Jose)
Foreclosures headed to auction* (%)	11% (Cleveland)							• 2	8.99	%				l									59.7% (Sa	n Antonio)
Homeownership (%)	70.2% (Minneapolis)														•	6	89	ó					53.5% (San Diego)
Permits issued per 1,000 housing units	32.2 (Austin)														•	10).3						2.9 (F	Providence)
H+T Affordability Index*	45% (Minneapolis)			• 4	19%	ó																	58%	% (Orlando)
Columbus matra area				Tor	tier						Mide	n. e						D.		tier				

Columbus metro area
 Top tier
 Middle tier
 Bottom tier

These indicators are ranked from highest (1) to lowest (23), except (*) ranked lowest (1) to highest (23).

Indicator 3.01: Household Income

This indicator includes American Community Survey data on median household income for metro populations as a whole and selected racial and ethnic populations. Median household income splits all households in a metro into two halves: half earn below the median and half earn above. Household incomes are derived from numerous sources including wages & salary; interest; dividends; Social Security; Supplemental Security Income; other cash assistance payments; and any other sources of income received regularly, such as unemployment compensation, child support, or alimony.



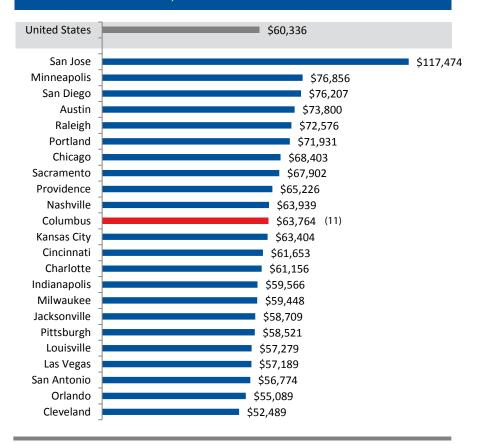
Median household income by race & ethnicity, 2017

		Black or African		Hispanic or Latino
Metro Area	White	American	Asian	(any race)
1 San Jose	\$116,268	\$79,090	\$141,922	\$74,174
2 Minneapolis	\$81,950	\$39,746	\$76,945	\$54,690
3 San Diego	\$77,484	\$46,866	\$95,631	\$57,334
4 Austin	\$77,683	\$53,443	\$90,093	\$58,510
5 Raleigh	\$81,581	\$53,943	\$99,882	\$47,417
6 Portland	\$72,952	\$39,557	\$85,115	\$54,392
7 Chicago	\$77,972	\$39,067	\$87,226	\$54,416
8 Sacramento	\$72,820	\$46,709	\$74,254	\$56,184
9 Providence	\$69,395	\$39,803	\$74,904	\$37,977
10 Nashville	\$68,089	\$49,294	\$79,364	\$49,862
11 Columbus	\$69,985	\$39,898	\$74,700	\$45,965
12 Kansas City	\$70,394	\$36,976	\$70,794	\$48,750
13 Cincinnati	\$67,575	\$35,039	\$80,845	\$53,350
14Charlotte	\$67,848	\$45,526	\$90,781	\$48,534
15 Indianapolis	\$65,533	\$35,868	\$69,837	\$45,621
16 Milwaukee	\$69,057	\$29,013	\$67,171	\$41,758
17 Jacksonville	\$64,122	\$39,214	\$74,328	\$53,098
18 Pittsburgh	\$61,505	\$30,552	\$78,799	\$49,739
19 Louisville	\$61,304	\$37,757	\$70,326	\$46,377
20 Las Vegas	\$61,798	\$39,941	\$64,279	\$50,973
21 San Antonio	\$58,995	\$46,814	\$70,847	\$48,495
22 Orlando	\$58,064	\$41,731	\$69,948	\$44,659
23 Cleveland	\$61,608	\$29,661	\$65,851	\$31,740

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Median household income, 2017



(#) ranked from highest to lowest

Indicator 3.02: Income Gap

This indicator includes American Community Survey data on household income distribution and the gap between those in the highest quintile (top 20%, or 80th percentile) and lowest quintile (bottom 20%, or 20th percentile). The income gap ratio is the difference between the highest and lowest quintiles, divided by the lowest quintile. A higher ratio indicates a greater wealth disparity between the highest and lowest earning households.

Columbus has made progress in narrowing the income gap in recent years, but more work is left to be done. Based on <u>2015 research</u> from the Martin Prosperity Institute, the region has high levels of segregation along lines of household income, educational attainment, and occupation class.

Household incomes at 20th and 80th percentiles, 2017

Metro Area	Income level,	Income level,
Metro Area	20th percentile	80th percentile
1 Nashville	\$29,528	\$120,565
1 Raleigh	\$33,671	\$137,485
3 Minneapolis	\$34,948	\$143,588
4 Austin	\$33,673	\$141,962
5 Las Vegas	\$25,685	\$108,751
6 Jacksonville	\$25,837	\$110,780
6 Kansas City	\$28,413	\$121,917
8 Portland	\$31,307	\$134,759
9 Columbus	\$27,083	\$120,271
10 Louisville	\$24,896	\$111,887
11 Indianapolis	\$25,850	\$117,500
12Charlotte	\$26,426	\$121,363
13 Orlando	\$23,773	\$110,019
14Cincinnati	\$25,892	\$120,682
15 San Diego	\$31,929	\$149,250
16 San Antonio	\$23,773	\$112,588
17 Sacramento	\$27,562	\$132,401
18 Milwaukee	\$24,462	\$117,817
19 Pittsburgh	\$23,543	\$115,220
20 San Jose	\$45,835	\$226,135
21 Chicago	\$27,296	\$136,058
22 Cleveland	\$21,076	\$107,883
23 Providence	\$23,830	\$128,849

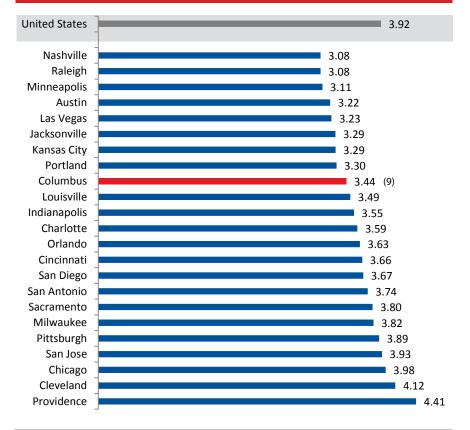
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Columbus Trends: Income gap ratio, 80th and 20th percentile



Income gap ratio, 80th and 20th percentiles, 2017



Indicator 3.03: Pay Equality

This indicator includes American Community Survey data on disparities in median income between men and women working full-time, year-round (FTYR). It compares women's pay equality with that of men for the same amount of work in terms of cents on the dollar. Also included are median earnings for all female workers, including those working part-time or not year-round.

Similar to overall pay equality, Columbus has also made progress in closing the gender pay gap recently, having the most parity among Midwest metros in the cohort. As the south and west continue to lead the way in this category however, more work could be made.

Women's median earnings, 2017

Metro Area	Median earnings for all workers who are women	Median earnings for FTYR workers who are women
1 San Diego	\$31,499	\$47,028
2 San Antonio	\$26,819	\$37,535
3 Las Vegas	\$29,479	\$37,407
4 Sacramento	\$31,660	\$47,991
5 Austin	\$32,922	\$47,075
6 Columbus	\$31,111	\$44,415
7 Orlando	\$25,477	\$35,833
8 Jacksonville	\$28,334	\$39,535
9 Providence	\$31,123	\$47,100
9 Minneapolis	\$35,460	\$50,453
11 Milwaukee	\$31,004	\$43,487
11 Nashville	\$30,436	\$40,275
13 Cincinnati	\$30,564	\$42,036
14Charlotte	\$30,260	\$41,461
15 Portland	\$31,467	\$46,548
16 Kansas City	\$31,398	\$41,945
17 Louisville	\$29,351	\$39,849
18 Indianapolis	\$30,738	\$41,128
19 Cleveland	\$28,804	\$41,312
20 Chicago	\$31,184	\$46,284
21 Pittsburgh	\$29,649	\$41,997
22 Raleigh	\$34,036	\$45,398
23 San Jose	\$40,122	\$61,603

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Columbus Trends: Pay ratio, women to men, cents per \$1 90 85 82.2 81.8 80.6 80.9

2015

2016

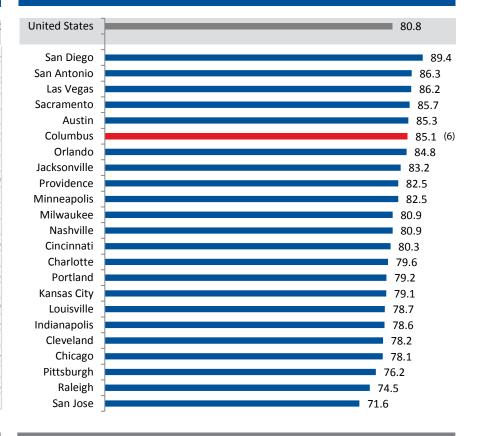
2017

Pay ratio, women to men, cents per \$1, 2017

2014

75

2013



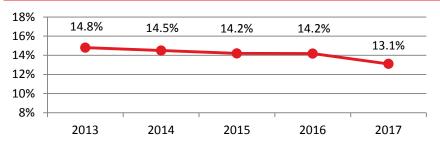
(#) ranked from highest to lowest

Indicator 3.04: Poverty

This indicator includes American Community Survey data on poverty rates for total metro area populations and selected racial and ethnic groups. The poverty rate is the percentage of a population in households living below the federal poverty level (FPL), as defined by the U.S. Census Bureau.

While Columbus has made some progress reducing the racial and ethnic disparities in poverty, it has struggled to reduce its overall poverty rate. This is dependent on multiple factors, from continued population growth to broader economic changes as well as access to housing and resources. How the region addresses short and long-term solutions will be important in future years.

Columbus Trends: Percentage of the total population below poverty level



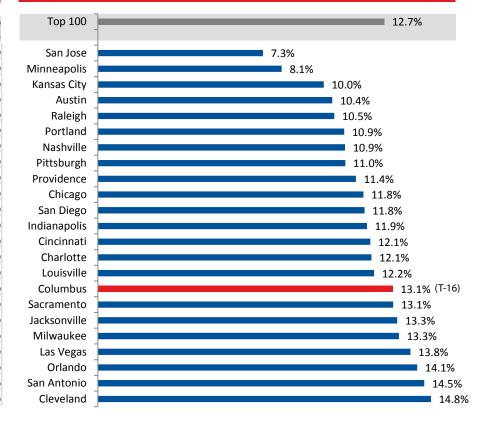
Percentage of the population below poverty level by race/ethnicity, 2017

Metro Area	White	Black or African American	Asian	Hispanic/Latino (any race)
1 San Jose	6.3%	11.6%	6.7%	10.2%
2 Minneapolis	5.4%	25.5%	10.9%	16.2%
3 Kansas City	6.9%	23.3%	14.3%	15.5%
4 Austin	9.1%	14.9%	11.8%	15.2%
5 Raleigh	8.6%	13.1%	8.8%	24.5%
6 Portland	10.0%	24.4%	12.5%	17.5%
6 Nashville	9.2%	19.2%	9.4%	22.3%
8 Pittsburgh	8.8%	28.1%	14.1%	20.6%
9 Providence	9.2%	24.1%	12.5%	26.1%
10 Chicago	8.3%	24.2%	9.7%	14.5%
10 San Diego	10.9%	21.4%	9.0%	16.1%
12 Indianapolis	9.2%	23.2%	12.8%	22.9%
13 Cincinnati	9.1%	27.0%	13.4%	25.7%
13 Charlotte	9.8%	17.0%	10.8%	19.7%
15 Louisville	9.4%	25.2%	16.6%	20.5%
16 Columbus	9.6%	25.7%	15.8%	28.4%
16 Sacramento	10.9%	21.5%	13.6%	16.3%
18 Jacksonville	10.3%	22.4%	11.7%	13.3%
18 Milwaukee	8.1%	30.4%	20.0%	20.6%
20 Las Vegas	10.7%	28.1%	9.9%	16.4%
21 Orlando	12.5%	19.8%	10.4%	19.1%
22 San Antonio	13.9%	16.3%	17.4%	17.7%
23 Cleveland	9.4%	32.2%	16.4%	28.6%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

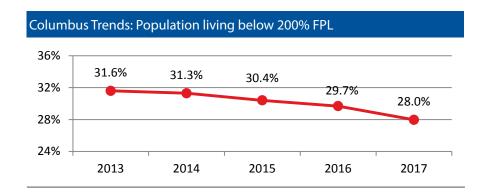
Percentage of the total population below poverty level, 2017



Indicator 3.05: Low Income Population

This indicator includes American Community Survey data on persons living in households with incomes below 200% of the FPL, a common threshold for identifying low-income households. Eligibility for some public assistance programs is capped at 200% FPL, and households living between 100% and 200% of the FPL can fall below the poverty line with one unexpected expense.

Compared to the last Benchmarking report's 2015 data, about 6% fewer individuals are below the 200% threshold in Columbus. This represents an improvement but a smaller rate of change than the majority of the cohort, potentially raising questions about upward mobility in the metro.



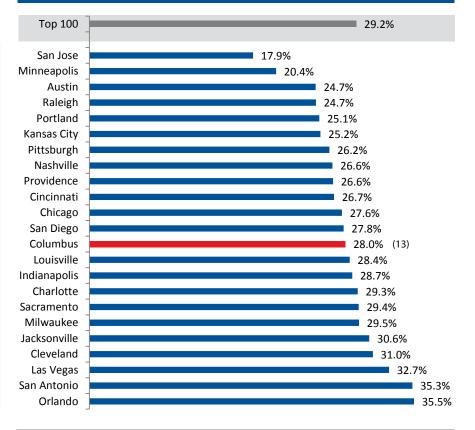
Population living below 200% FPL, 2017

Metro Area	Population for whom poverty status is determined	Population in households with incomes below 200% FPL
1 San Jose	1,968,281	352,101
2 Minneapolis	3,541,902	722,648
3 Austin	2,075,485	513,150
3 Raleigh	1,311,431	324,559
5 Portland	2,416,359	606,815
6 Kansas City	2,093,648	528,557
7 Pittsburgh	2,274,436	596,390
8 Nashville	1,866,893	495,811
8 Providence	1,563,712	416,265
10 Cincinnati	2,129,686	569,344
11 Chicago	9,377,896	2,586,803
12 San Diego	3,256,674	904,584
13 Columbus	2,022,554	565,700
14 Louisville	1,266,860	360,265
15 Indianapolis	1,985,375	570,147
16 Charlotte	2,489,929	730,116
17 Sacramento	2,291,340	674,197
18 Milwaukee	1,545,491	455,216
19 Jacksonville	1,476,247	451,426
20 Cleveland	2,016,558	624,482
21 Las Vegas	2,174,635	712,091
22 San Antonio	2,429,570	857,326
23 Orlando	2,465,956	874,685

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of the population living below 200% FPL, 2017



Indicator 3.06: Income Supports

This indicator includes American Community Survey data on households that received government income supports in the previous 12 months. These include Supplemental Security Income (SSI), cash public assistance payments from state or local governments, or food stamps/Supplemental Nutrition Assistance Program (SNAP) benefits.

20% 15.1% 14.1% 14.0% 12.8% 11.8% 10% 2013 2014 2015 2016 2017

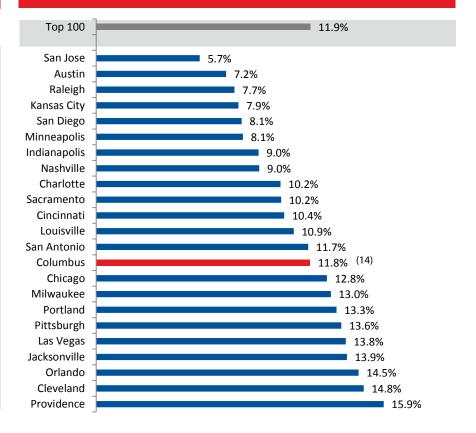
Households receiving SSI, cash assistance, and food stamps/SNAP, 2017

	cci	Cash public	Food stamps/
Metro Area	SSI	assistance	SNAP
1 San Jose	30,935		30,274
2 Austin	19,561	9,111	50,322
3 Raleigh	17,296	4,082	36,307
4 Kansas City	29,775	14,815	61,316
5 San Diego	53,339	25,048	82,106
6 Minneapolis	58,306	45,460	99,693
7 Indianapolis	34,367	8,962	66,124
8 Nashville	31,589	10,404	62,053
9 Charlotte	37,043	13,167	91,855
10 Sacramento	52,858	30,080	78,524
11 Cincinnati	47,148	21,185	84,335
12 Louisville	27,480	7,452	52,693
13 San Antonio	44,854	11,970	92,206
14 Columbus	46,383	19,206	88,021
15 Chicago	154,410	70,387	423,732
16 Milwaukee	36,103	10,715	77,084
17 Portland	40,933	31,340	117,755
18 Pittsburgh	55,468	28,995	129,096
19Las Vegas	32,666	20,778	102,385
20 Jackson ville	26,779	12,949	73,673
21 Orlando	36,503	20,729	121,854
22 Cleveland	53,155	25,176	122,219
23 Providence	46,802	24,545	94,307

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of households receiving cash public assistance or food stamps/SNAP, 2017



Indicator 3.07: Earned Income Tax Credit

This indicator includes data from the Brookings Institution and Internal Revenue Service (IRS) on tax returns claiming the Earned Income Tax Credit (EITC). The EITC is a federal income tax credit for low-income workers reducing the amount of tax an individual owes and may be returned in the form of a refund. Note that Columbus trend data for 2012 and earlier are based on 2003 MSA boundaries.

25% 20% 17.9% 17.9% 17.7% 18.1% 16.7% 10% 2010 2011 2012 2013 2014

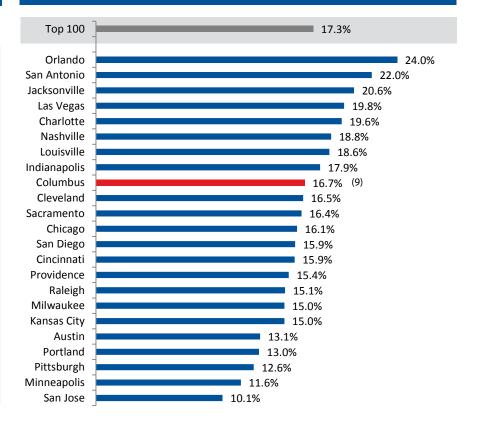
Total number of tax returns, 2014

Metro Area	Total number of	Tax returns
Metro Area	tax returns	claiming EITC
1 Orlando	1,117,700	268,767
2 San Antonio	1,057,600	232,923
3 Jacksonville	682,090	140,597
4 Las Vegas	957,920	189,806
5 Charlotte	1,081,420	212,181
6 Nashville	794,890	149,269
7 Louisville	600,430	111,940
8 Indianapolis	946,020	169,312
9 Columbus	964,490	160,788
10 Cleveland	1,034,780	171,145
11 Sacramento	999,130	164,031
12 Chicago	4,608,660	739,929
13 San Diego	1,531,220	243,530
13 Cincinnati	1,029,540	163,296
15 Providence	789,140	121,514
16 Raleigh	569,440	85,999
17 Milwaukee	767,170	115,423
17 Kansas City	982,620	147,836
19 Austin	977,490	128,144
20 Portland	1,118,280	145,654
21 Pittsburgh	1,190,990	150,102
22 Minneapolis	1,751,440	202,680
23 San Jose	924,540	93,478

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Brookings Institute, IRS

Percentage of tax returns claiming the EITC, 2014



(#) ranked highest to lowest

Indicator 3.08: Foreclosures

This indicator includes data from Attom Data on foreclosure activity. This indicator has been modified from the 2016 report, no trend data are available.

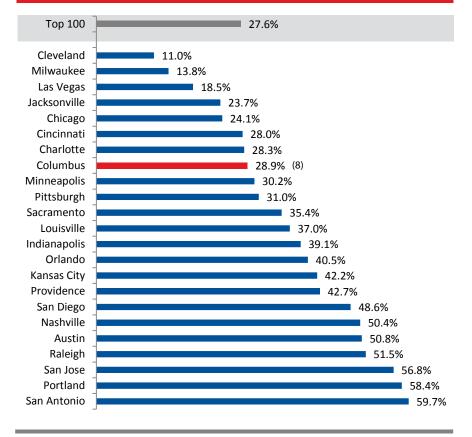
Housing units in foreclosure, 2017

Metro Area	Total foreclosures	Foreclosures as a percent of all housing units
1 Cleveland	21,984	2.3%
2 Milwaukee	6,330	0.9%
3 Las Vegas	11,547	1.3%
4 Jacksonville	11,154	1.8%
5 Chicago	82,388	2.2%
6 Cincinnati	12,591	1.4%
7 Charlotte	14,972	0.9%
8 Columbus	9,733	1.2%
9 Minneapolis	10,810	0.8%
10 Pittsburgh	11,085	1.0%
11 Sacramento	5,034	0.6%
12 Louisville	6,429	1.2%
13 Indianapolis	9,169	1.1%
14Orlando	7,127	0.7%
15 Kansas City	5,762	0.7%
16 Providence	5,907	0.9%
17 San Diego	4,428	0.4%
18 Nashville	2,994	0.4%
19 Austin	2,991	0.4%
20 Raleigh	2,099	0.4%
21 San Jose	1,297	0.2%
22 Portland	5,167	0.5%
23 San Antonio	6,791	0.8%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Attom Data Solutions

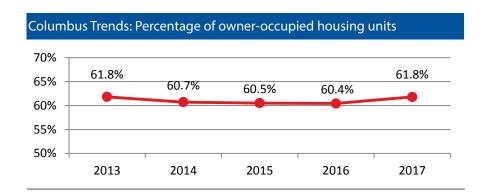
Percentage of units in foreclosure heading to auction, 2017



Indicator 3.09: Homeownership

This indicator includes American Community Survey data on homeownership. A housing unit is considered owner-occupied if the owner or co-owner lives in the unit, and includes both units with a mortgage and units fully paid off.

In past Benchmarking reports Columbus has typically been in the lower half of the cohort for homeownership rates. The region's percentage has not returned to pre-recession levels, with 2017's 61.8% well below the 65.3% rate in 2007. As regional population grows, inventories of for sale homes remain tight, and preferences in owning compared to renting continue to evolve, implications of these data for regional prosperity may warrant reconsideration in future years.



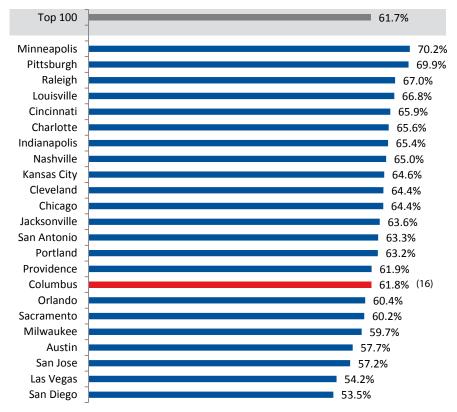
Owner-occupied housing units, 2017

Metro Area	Total occupied housing	Total owner-occupied
Metro Area	units	housing units
1 Minneapolis	1,376,557	966,189
2 Pittsburgh	996,798	696,799
3 Raleigh	493,879	330,894
4 Louisville	502,581	335,692
5 Cincinnati	852,639	562,099
6 Charlotte	944,261	619,400
7 Indianapolis	773,361	506,088
8 Nashville	717,370	466,441
9 Kansas City	829,475	535,882
10 Cleveland	862,586	555,762
10 Chicago	3,488,312	2,245,904
12 Jacksonville	560,169	356,519
13 San Antonio	810,473	512,780
14Portland	935,722	591,456
15 Providence	627,318	388,061
16 Columbus	788,946	487,442
17 Orlando	875,259	529,087
18 Sacramento	829,772	499,903
19 Milwaukee	625,495	373,298
20 Austin	755,333	435,922
21 San Jose	651,006	372,227
22 Las Vegas	781,796	423,630
23 San Diego	1,126,419	602,549

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of owner-occupied units, 2017

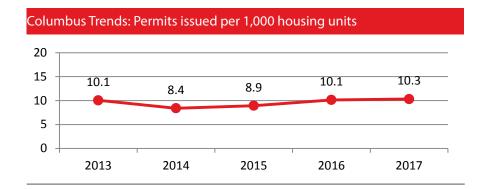


(#) ranked highest to lowest

Indicator 3.10: Housing Starts

This indicator includes Census Bureau data on new housing unit permits. As metro populations and households change, the type of housing stock that accommodates them may need to be built, such as multifamily apartments for persons living alone or single family homes for larger households. This indicator returns after last being featured in the 2011 Benchmarking report.

As the fastest growing metro in the Midwest, Columbus is not building new housing at the same rate as similarly growing areas.



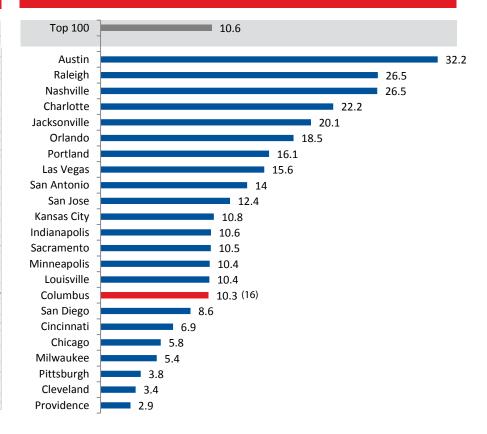
Housing permits issued and total housing units 2017

Matur A	Number of housing	Percent permits issued to	Takal bassala assala
Metro Area	permits issued	multifamily units	Total housing units
1 Austin	26,700	40.6%	828,696
2 Raleigh	14,180	24.9%	534,938
2 Nashville	20,631	35.0%	779,973
4Charlotte	22,869	34.2%	1,028,021
5 Jacksonville	12,959	24.7%	644,398
6 Orlando	19,065	25.1%	1,033,259
7 Portland	15,983	62.8%	992,546
8 Las Vegas	14,073	31.4%	899,735
9 San Antonio	12,516	41.5%	893,291
10 San Jose	8,539	71.5%	690,031
11 Kansas City	9,851	40.9%	909,213
12 Indianapolis	9,079	26.7%	860,025
13 Sacramento	9,503	29.6%	901,954
14 Minneapolis	15,100	42.3%	1,447,758
14 Louisville	5,785	42.1%	556,413
16 Columbus	8,892	54.0%	861,794
17 San Diego	10,441	63.2%	1,214,271
18 Cincinnati	6,465	32.8%	932,500
19 Chicago	22,132	63.6%	3,843,175
20 Milwaukee	3,644	58.3%	678,822
21 Pittsburgh	4,328	31.7%	1,126,506
22 Cleveland	3,227	15.4%	962,092
23 Providence	2,010	14.7%	703,740

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Bureau of the Census, Survey of Building Permits, American Community Survey

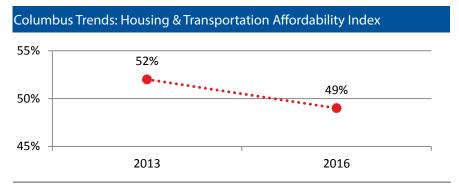
Permits issued per 1,000 housing units 2017



(#) ranked highest to lowest

Indicator 3.11: Housing & Transportation Costs

This indicator includes data on housing and transportation costs from the Center for Neighborhood Technology. Traditional definitions of affordability include housing costs but not transportation costs. The H+T Affordability Index was designed to measure true affordability by adding both together as a percentage of household income, with housing costs based on American Community Survey estimates and transportation costs based on motor vehicle ownership and use, transit use, and costs associated with those variables. Due to rounding, bar chart figures may differ slightly from data in the table.



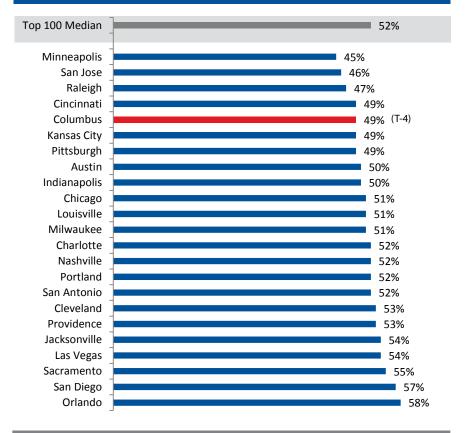
Housing & Transportation affordability, 2016

Metro Area	Housing costs as a percentage of median household income	Transportation costs as a percentage of median household income
1 Minneapolis	26%	20%
2 San Jose	30%	16%
3 Raleigh	25%	22%
4Cincinnati	26%	23%
4 Columbus	27%	23%
4 Kansas City	26%	23%
4 Pittsburgh	26%	23%
8 Austin	28%	21%
8 Indianapolis	25%	25%
10 Chicago	31%	20%
10 Louisville	26%	25%
10 Milwaukee	29%	22%
13 Charlotte	27%	25%
13 Nashville	28%	25%
13 Portland	30%	22%
13 San Antonio	27%	25%
17 Cleveland	29%	24%
17 Providence	31%	21%
19 Jacksonville	30%	24%
19 Las Vegas	30%	24%
21 Sacramento	32%	24%
22 San Diego	35%	22%
23 Orlando	32%	26%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Center for Neighborhood Technology, H+T Affordability Index

Housing and Transportation Affordability Index, 2016



Section 4: Lifelong Learning

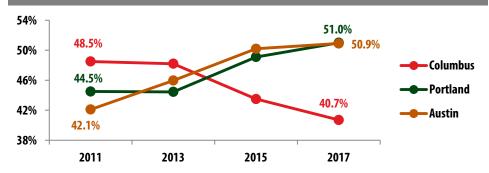
This section includes indicators of literacy, school engagement, educational attainment, and access to research and learning that describe the educational resources of metro areas.

The following are the Lifelong Learning indicator categories:

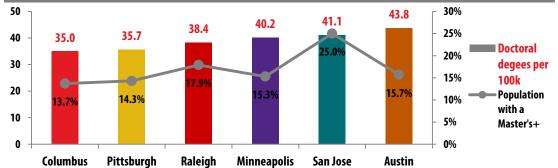
- 4.01 High School Attendance
- 4.02 Educational Attainment
- 4.03 Pre-K Enrollment
- 4.04 School Lunch Assistance
- 4.05 Libraries
- 4.06 Research Universities
- 4.07 Broadband Availability

Lifelong Learning Section Highlights

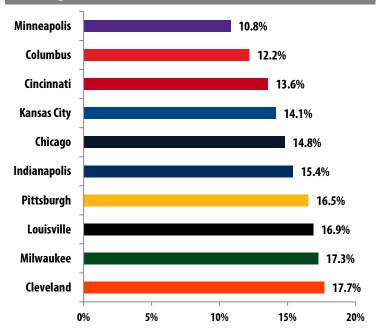




Six metros stand out in awarding doctoral degrees- does it lead to a more educated population? (4.02, 4.06)

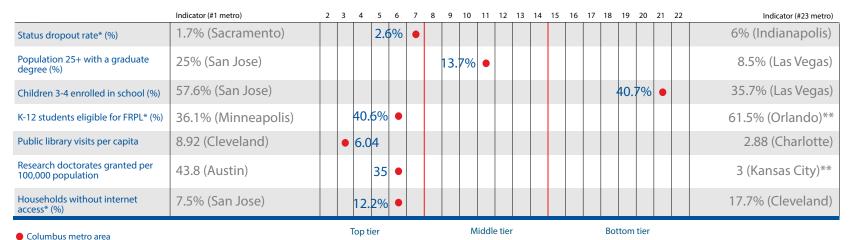


Among Midwestern metros, Columbus households are less likely to be lacking in internet access (4.07)



Lifelong Learning Ranking

Where does Columbus rank among the 23 cohort metros in this section? This table displays Columbus's rank for each indicator, along with the top and bottom ranking metros in the cohort.

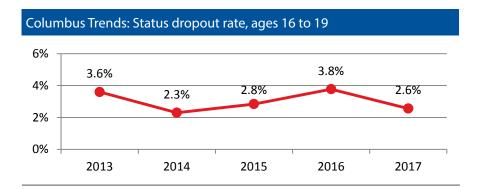


These indicators are ranked from highest (1) to lowest (23), except (*) ranked lowest (1) to highest (23).

(**) denotes ranked 22nd, data missing for one metro in the cohort.

Indicator 4.01: High School Attendance

This indicator includes data from the American Community Survey on high school attendance. It measures the percentage of teens age 16 to 19 that are neither currently enrolled in school nor hold a high school diploma, known as the status dropout rate. Also measured is the idle teen rate, or the percentage of 16 to 19-year-olds who are neither in school nor the labor force. These teens may or may not also be high school dropouts.



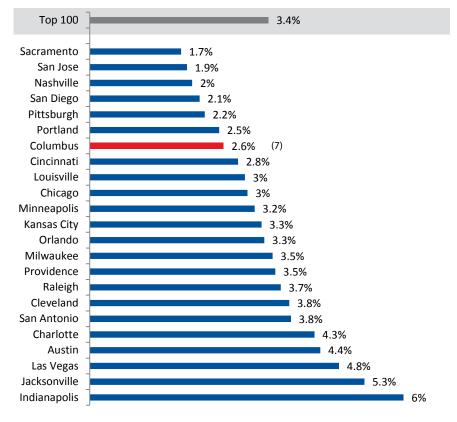
Idle teens, ages 16 to 19, 2017

Metro Area	Percentage of population ages 16-19 not in school & not in labor force
1 Sacramento	6.5%
2 San Jose	2.6%
3 Nashville	4.4%
4 San Diego	3.4%
5 Pittsburgh	2.7%
6 Portland	3.3%
7 Columbus	3.9%
8 Cincinnati	3.0%
9 Louisville	3.5%
9 Chicago	4.1%
11 Minneapolis	2.4%
12 Kansas City	3.4%
12 Orlando	4.7%
14 Milwaukee	4.3%
14 Providence	2.8%
16 Raleigh	3.6%
17 Cleveland	3.5%
17 San Antonio	6.1%
19 Charlotte	4.0%
20 Austin	6.1%
21 Las Vegas	5.5%
22 Jacksonville	5.1%
23 Indianapolis	4.8%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Status dropout rate, ages 16 to 19, 2017

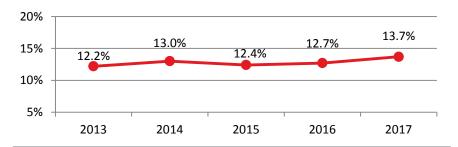


Indicator 4.02: Educational Attainment

This indicator includes data from the American Community Survey on the educational attainment of the entire adult population (ages 25 years and up) in a given region.

Despite concentrations of employment in knowledge-intensive industries and four-year colleges, Columbus's ranking for adults with college degrees slipped slightly from the last Benchmarking report. This may be attributed to continued population growth, but may also invite questions about the state of opportunities in the region.

Columbus Trends: Population 25 years and older with a graduate degree



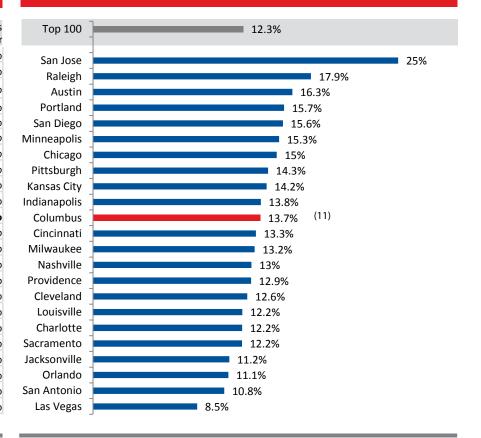
Educational attainment, population 25 years and older, 2017

Metro Area	Percent without a HS diploma	Percent with a HS diploma only	Percent with a bachelor's degree or higher
1 San Jose	11.8%	14.9%	50.8%
2 Raleigh	9.0%	17.8%	46.2%
3 Austin	9.4%	19.9%	44.8%
4 Portland	7.3%	20.1%	40.3%
5 San Diego	12.4%	18.6%	38.8%
6 Minneapolis	6.4%	21.5%	41.7%
7 Chicago	11.5%	24.1%	37.7%
8 Pittsburgh	6.1%	32.3%	35.1%
9 Kansas City	8.5%	25.5%	36.5%
10 Indianapolis	10.6%	27.2%	35.6%
11 Columbus	8.7%	27.9%	35.9%
12 Cincinnati	9.1%	30.0%	33.2%
13 Milwaukee	8.4%	27.3%	35.8%
14 Nashville	9.5%	27.0%	36.0%
15 Providence	12.7%	29.9%	31.9%
16 Cleveland	9.5%	28.7%	30.8%
17 Louisville	10.0%	30.6%	28.8%
17 Charlotte	10.9%	23.7%	35.5%
17 Sacramento	10.9%	21.9%	32.7%
20 Jacksonville	9.6%	28.4%	30.7%
21 Orlando	9.8%	24.9%	32.1%
22 San Antonio	14.4%	26.5%	28.1%
23 Las Vegas	13.9%	29.1%	24.4%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of population 25 years and older with a graduate degree, 2017

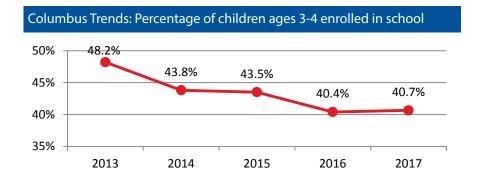


(#) ranked from highest to lowest

Indicator 4.03: Pre-K Enrollment

This indicator includes data from the American Community Survey on school enrollment of children ages 3 and 4, including the type of school (public or private). A limitation of the data is it does not represent all nursery and preschool enrollment, as these institutions include children outside the 3 to 4 age range.

Within Columbus, school enrollment in this age group has been on the decline as the decade has progressed. Ranked 21st at 40.7%, this is the metro's lowest rank in the cohort yet.



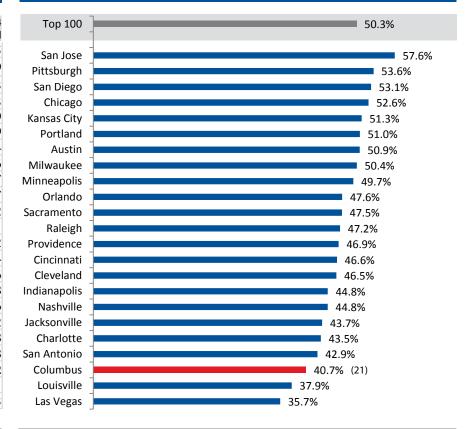
Number of children ages 3-4 enrolled in school, 2017

Metro Area	Number of children ages 3-4 enrolled in public school	Number of children ages 3-4 enrolled in private school
1 San Jose	9,797	19,935
2 Pittsburgh	13,202	13,269
3 San Diego	23,551	23,533
4Chicago	74,006	53,353
5 Kansas City	17,328	13,269
6 Portland	12,221	18,229
7 Austin	14,026	14,884
8 Milwaukee	13,576	6,376
9 Minneapolis	29,861	18,277
10 Orlando	16,370	13,217
11 Sacramento	18,512	9,712
12 Raleigh	8,273	8,581
13 Providence	8,042	7,802
14Cincinnati	13,629	12,074
15 Cleveland	10,892	9,976
16 Indianapolis	14,730	9,978
16 Nashville	10,447	11,156
18 Jacksonville	8,358	7,702
19Charlotte	14,680	14,018
20 San Antonio	20,084	10,868
21 Columbus	13,827	9,572
22 Louisville	5,272	7,981
23 Las Vegas	12,227	8,353

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of children ages 3-4 enrolled in school, 2017



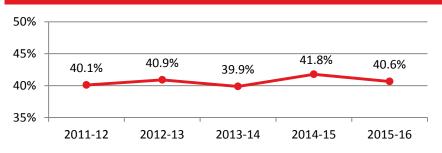
(#) ranked from highest to lowest

Indicator 4.04: School Lunch Assistance

This indicator includes data from the National Center for Education Statistics on all K-12 students that are eligible for free or reduced price lunch (FRPL).

While fluctuating from year to year, most metros in the cohort have trended toward an increase in FRPL eligibility from the beginning of the current decade. Columbus is not an exception, but its proportion has remained low compared to other Benchmarking metros throughout.

Columbus Trends: Percentage of K-12 students eligible for FRPL



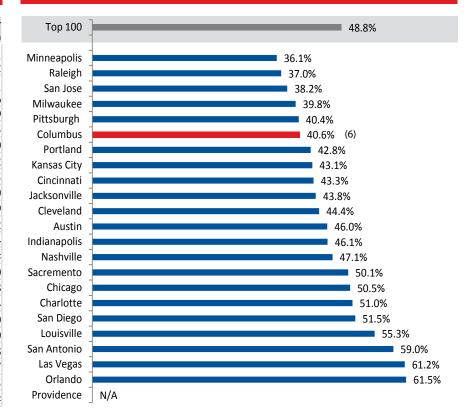
K-12 students eligible for free and reduced price lunch, 2015-2016

Metro Area	Number of K-12 Students eligible for free lunch	Number of K-12 students eligible for reduced price lunch
1 Minneapolis	168,941	37,051
2 Raleigh	69,168	9,542
3 San Jose	88,805	19,861
4 Milwaukee	84,856	7,686
5 Pittsburgh	112,859	9,029
6 Columbus	122,866	11,845
7 Portland	124,473	22,610
8 Kansas City	128,478	21,332
9 Cincinnati	124,490	12,785
10 Jacksonville	76,949	4,950
11 Cleveland	115,999	9,929
12 Austin	135,107	21,882
13 Indianapolis	136,898	21,024
14 Nashville	#	‡
15 Sacramento	153,942	30,140
16 Chicago	730,933	43,308
17 Charlotte	189,325	16,834
18 San Diego	207,593	49,850
19 Louisville	92,466	9,270
20 San Antonio	238,280	24,658
21 Las Vegas	182,284	30,307
22 Orlando	173,908	22,525
N/A Providence	‡	‡

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: National Center for Education Statistics, Common Core of Data

Percentage of K-12 students eligible for FRPL, 2015-2016



Indicator 4.05: Libraries

This indicator includes data from the Institute of Museum and Library Services on public library statistics. A public library is a library accessible to residents and generally funded from public sources.

Throughout the decade Columbus and many other cohort metros have trended toward a decrease in library visits per capita, but with a greater array of digital services have trended upward in total registered borrowers and annual circulation. Columbus has often ranked high among Benchmarking metros in this area, ranking third in visits per capita and fifth in total circulation in 2016.

Columbus Trends: Annual public library visits per capita 10 8.40 7.87 7.32 6.26 6.04 6 4 2012 2013 2014 2015 2016

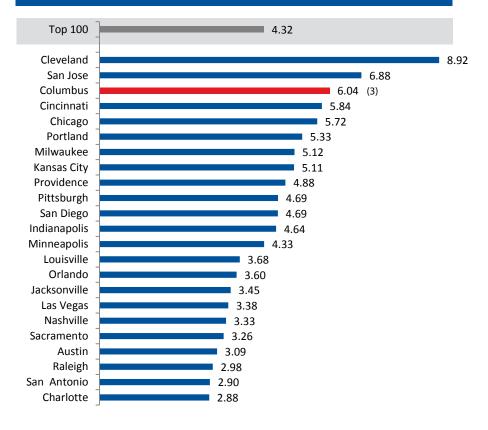
Circulation, attendance, library cards, and visits, 2016

	Total annual	Total annual	Total registered	Total annual library
Metro Area	circulation	program attendance	harrowers (thousands)	visits (thousands)
	(thousands)	(thousands)		, ,
1 Cleveland	43,189	1,367	2,168	18,383
2 San Jose	26,819	891	1,255	13,700
3 Columbus	36,553	797	1,411	12,368
4Cincinnati	37,906	1,272	1,519	12,653
5 Chicago	89,430	4,134	4,655	54,608
6 Portland	41,710	1,022	1,263	12,905
7 Milwaukee	14,383	581	968	8,074
8 Kansas City	21,982	764	1,408	10,762
9 Providence	9,388	606	680	7,893
10 Pittsburgh	14,241	1,070	854	10,981
11 San Diego	21,571	1,339	2,195	15,542
12 Indianapolis	26,189	1,163	968	9,304
13 Minneapolis	36,263	835	2,905	15,386
14 Louisville	6,254	537	570	4,733
15 Orlando	17,306	802	1,047	8,836
16 Jacksonville	8,397	367	984	5,090
17 Las Vegas	16,439	671	866	7,296
18 Nashville	10,169	675	877	6,215
19 Sacramento	13,123	464	1,118	7,489
20 Austin	12,119	656	982	6,362
21 Raleigh	10,886	364	500	3,884
22 San Antonio	9,747	480	1,261	7,039
23 Charlotte	12,115	813	1,633	7,136

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Institute for Museum and Library Services, Public Libraries in the United States Survey

Annual public library visits per capita, 2016



(#) ranked highest to lowest

Indicator 4.06: Research Universities

This indicator includes data from the National Science Foundation on doctorate-granting institutions. It measures the annual number of research doctoral degrees (excluding professional doctoral degrees, such as those in medicine and law) awarded at regional colleges and universities.

Columbus ranks in a class apart from the other Benchmarking metros in granting doctorates, joining five other metros characterized by either land grant public institutions (Ohio State in Columbus, North Carolina State in Raleigh, University of Minnesota in Minneapolis), flagship public universities (University of Texas at Austin), or private schools strongly rooted in scientific research (Carnegie Mellon in Pittsburgh, Stanford near San Jose).

Research degrees and research universities, 2016

Metro Area	Number of institutions granting research doctoral degrees	Number of research doctoral degrees awarded
1 Austin	2	902
2 San Jose	2	818
3 Minneapolis	3	1,430
4 Raleigh	2	501
5 Pittsburgh	3	835
6 Columbus	1	716
7 Providence	4	357
8 Sacramento	1	501
9 San Diego	5	648
10 Nashville	4	361
11 Milwaukee	4	283
12 Chicago	14	1,521
13 Cincinnati	3	329
14 Louis ville	2	173
15 Cleveland	2	266
16 Orlando	1	245
17 San Antonio	4	165
18 Las Vegas	1	110
19 Portland	2	110
20 Charlotte	1	105
21 Indianapolis	1	74
22 Kansas City	1	64
N/A Jacksonville	0	0

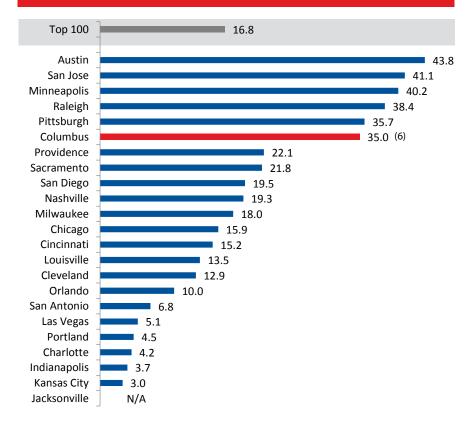
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: National Science Foundation, Survey of Earned Doctorates

Columbus Trends: Research doctoral degrees per 100,000 population



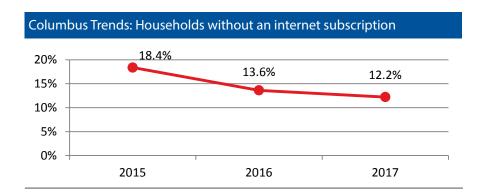
Research doctoral degrees awarded per 100,000 population, 2016



(#) ranked highest to lowest

Indicator 4.07: Broadband Availability

This indicator includes data from the American Community Survey on internet availability in households. As more educational, healthcare, and employment resources move to online formats, the "digital divide" among households with reliable internet access and those that do not becomes a salient issue. Households with a cellular data plan can only access the internet on a mobile device, and would need a school or library to access a computer or laptop. Households with non-broadband subscriptions, such as dial-up, are also measured.



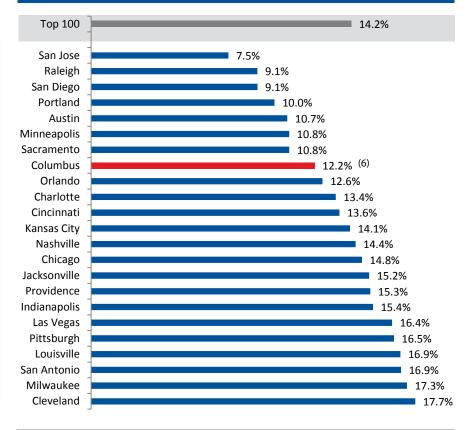
Households with limited internet subscriptions, 2017

Metro Area	Percent with internet via cellular data plan only	Percent with non-broadband internet subsciption (dial-up, DSL)
1 San Jose	7.2%	0.2%
2 Raleigh	7.6%	0.2%
2 San Diego	7.7%	0.3%
3 Portland	8.3%	0.3%
4 Austin	10.5%	0.3%
5 Minneapolis	9.7%	0.4%
5 Sacramento	9.6%	0.3%
6 Columbus	9.8%	0.2%
7 Orlando	9.4%	0.1%
8 Charlotte	11.1%	0.2%
9Cincinnati	10.6%	0.4%
10 Kansas City	10.6%	0.2%
11 Nashville	12.0%	0.1%
12 Chicago	9.6%	0.3%
13 Jacksonville	12.1%	0.3%
14 Providence	9.8%	0.3%
15 Indianapolis	11.3%	0.2%
16 Las Vegas	11.8%	0.2%
17 Pittsburgh	9.0%	0.5%
18 Louisville	11.7%	0.2%
18 San Antonio	13.4%	0.2%
19 Milwaukee	10.4%	0.3%
20 Cleveland	8.8%	0.3%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of households without an internet subscription, 2017



Section 5: Community Wellbeing

This section includes indicators of health, safety, civic life, transportation, environmental quality, and cultural opportunities that describe the wellbeing of the metro areas.

The following are the Community Wellbeing indicator categories:

5.01 Local Foods 5.11 Women in Corporate Leadership

5.02 Obesity 5.12 Crime

5.03 Diabetes 5.13 Road Safety

5.04 Asthma 5.14 Commute Time

5.05 Infant Mortality 5.15 Commute Mode

5.06 Overdose Deaths 5.16 Walking & Biking

5.07 Access to Care 5.17 Public Transportation

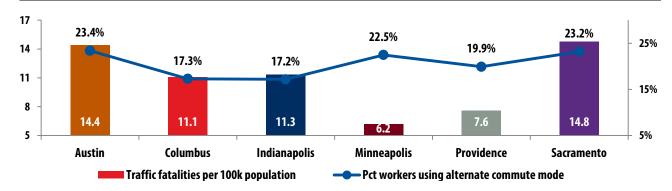
5.08 Charitable Giving 5.18 Air Travel

5.09 Volunteering 5.19 Air Quality

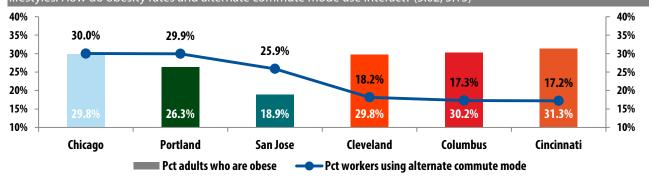
5.10 Women in Political Leadership

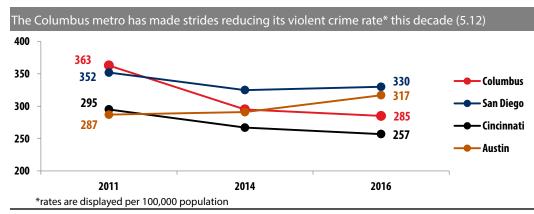
Community Wellbeing Section Highlights

In metros with comparable urban density, commute modes and traffic fatalities vary considerably. (1.08, 5.13, 5.15)



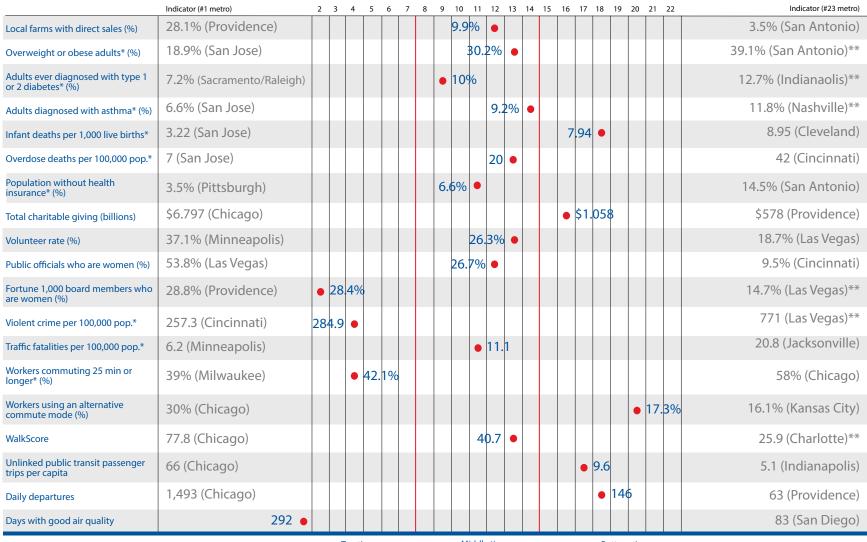
Commute modes can impact health, with alternate modes such as walking or biking contributing to less sedentary lifestyles. How do obesity rates and alternate commute mode use interact? (5.02, 5.15)





Community Wellbeing Section Rankings

Where does Columbus rank among the 23 cohort metros in this section? This table displays Columbus's rank for each indicator, along with the top and bottom ranking metros in the cohort.



● Columbus metro area Top tier Middle tier Bottom tier

These indicators are ranked from highest (1) to lowest (23), except (*) ranked lowest (1) to highest (23). (**) denotes ranked lower than 23rd, data missing for at least one metro in the cohort.

Indicator 5.01: Local Foods

This indicator includes data from the U.S. Department of Agriculture's Food Environment Atlas on farms and farmers' markets. The percentage of local farms selling goods directly to final consumers- whether at rural farm stands or farmers' markets- is a measure of sustainability in local food economies.

Both the total number of farms in Columbus and the percentage selling locally rank in the middle of the cohort, a ranking virtually unchanged from the 2007 data.

Columbus Trends: Local farms with direct sales to final consumers 13% 11% 9.9% 9.6% 9% 7% 2007 2012

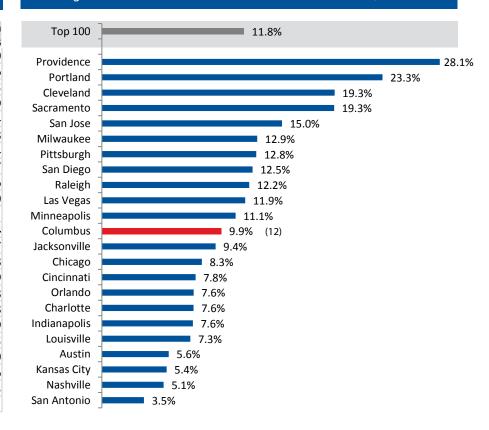
Local farms with direct sales to final consumers, 2012

	Metro Area	Total number of local farms	Number of local farms with direct sales to final consumers
1	Providence	1,960	550
2	Portland	10,838	2,526
3	Cleveland	2,975	575
3	Sacramento	5,076	979
5	San Jose	1,631	244
6	Milwaukee	1,767	228
7	Pittsburgh	7,048	904
8	San Diego	5,732	717
9	Raleigh	2,500	306
10	Las Vegas	252	30
11,	Minneapolis	13,251	1,471
12	Columbus	8,198	814
13	Jacksonville	1,768	167
14	Chicago	6,841	568
15	Cincinnati	9,242	719
16	Orlando	3,123	238
	Charlotte	7,328	558
16	Indianapolis	6,205	469
19	Louisville	7,555	555
20	Austin	8,819	490
21	Kansas City	12,757	686
22	Nashville	13,301	683
23	San Antonio	14,598	511

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Department of Agriculture, Food Environment Atlas

Percentage of local farms with direct sales to final consumers, 2012

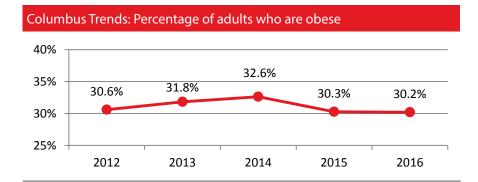


(#) ranked from highest to lowest

Indicator 5.02: Obesity

This indicator includes data from the Centers for Disease Control and Prevention's survey on the percentage of adults reporting a Body Mass Index (BMI) of 25.0 or greater. BMI is calculated as weight (in kilograms) divided by height (in meters) squared. A BMI of 25.0 to 25.9 indicates the individual is overweight, and a BMI of 30.0 or greater indicates obesity.

Since the data from 2012 benchmarked in the 2016 report, Columbus's obesity percentage has gone down slightly, improving its ranking in the cohort as many metros have seen an increase.



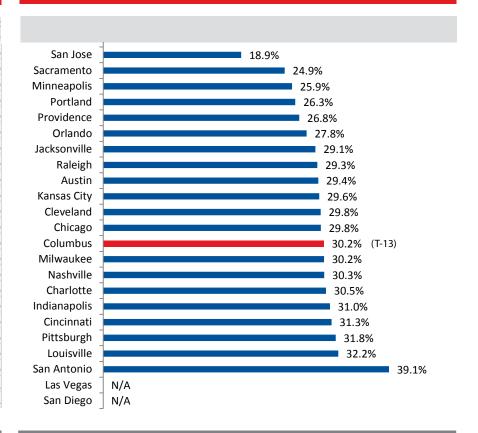
Percentage adults who are overweight or obese (BMI 25.0 or higher), 2016

	Metro Area	Percent adults overweight
		or obese
1	San Jose	55.3%
2	Sacramento	61.9%
3	Minneapolis	62.3%
4	Portland	60.9%
5	Providence	63.7%
6	Orlando	63.1%
7	Jacksonville	64.4%
8	Raleigh	63.2%
9	Austin	62.3%
10	Kansas City	66.1%
11	Cleveland	64.1%
11	Chicago	64.5%
13	Columbus	64.4%
13	Milwaukee	64.4%
15	Nashville	65.3%
	Charlotte	65.2%
17	Indianapolis	66.8%
18	Cincinnati	69.1%
	Pittsburgh	66.9%
20	Louisville	65.3%
21	San Antonio	71.5%
	Las Vegas	N/A
N/A	San Diego	N/A

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

Percentage of adults who are obese (BMI 30 or greater), 2016



Indicator 5.03: Diabetes

This indicator includes data from the Centers for Disease Control and Prevention's survey on the percentage of adults reporting that they have ever been diagnosed with diabetes.

Columbus Trends: Percentage of adults ever diagnosed with Type 1 or 2 diabetes 13% 12.0% 10.3% 10.0% 9% 2012 2013 2014 2015 2016

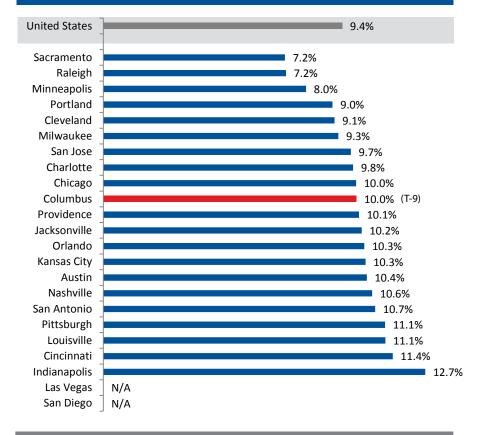
Adults ever diagnosed with prediabetes or gestational diabetes, 2016

	Metro Area	Percent of adults ever diagnosed with prediabetes	Percent of adults ever diagnosed with gestational prediabetes
1	Sacramento	3.4%	N/A
1	Raleigh	N/A	N/A
3	Minneapolis	1.3%	1.2%
4	Portland	1.5%	1.3%
5	Cleveland	N/A	N/A
6	Milwaukee	N/A	N/A
7	San Jose	N/A	N/A
8	Charlotte	1.6%	N/A
9	Chicago	0.9%	0.7%
9	Columbus	1.5%	N/A
11	Providence	1.1%	0.8%
12	Jacksonville	N/A	
13	Orlando	2.2%	N/A
13	Kansas City	1.8%	
15	Austin	1.1%	
16	Nashville	N/A	
17	San Antonio	N/A	N/A
18	Pittsburgh	0.9%	
18	Louisville	1.3%	
20	Cincinnati	1.0%	N/A
21	Indianapolis	1.4%	
	Las Vegas	N/A	
I/A	San Diego	N/A	N/A

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

Percentage of adults ever diagnosed with Type 1 or 2 diabetes, 2016



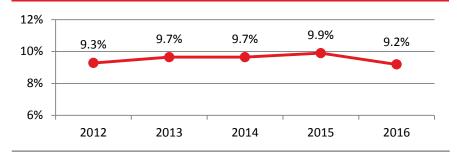
(#) ranked from lowest to highest

N

Indicator 5.04: Asthma

This indicator includes data from the Centers for Disease Control and Prevention's survey on the percentage of adults reporting they have ever had Asthma, as diagnosed by a physician.

Columbus Trends: Percentage of adults currently diagnosed with asthma



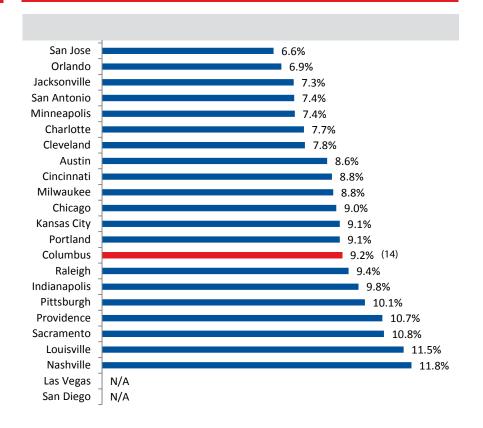
Percentage of adults that have ever been diagnosed with asthma, 2016

	Metro Area	Percent of adults ever diagnosed with asthma
1	San Jose	11.9%
2	Orlando	12.4%
3	Jacksonville	11.7%
4	San Antonio	11.8%
4	Minneapolis	11.1%
6	Charlotte	12.1%
7	Cleveland	12.6%
8	Austin	14.0%
9	Cincinnati	13.4%
9	Milwaukee	12.0%
11	Chicago	14.2%
12	Kansas City	13.3%
12	Portland	15.6%
14	Columbus	13.9%
15	Raleigh	13.1%
16	Indianapolis	14.1%
17	Pittsburgh	13.5%
18	Providence	15.7%
19	Sacramento	17.0%
20	Louisville	16.2%
21	Nashville	17.3%
N/A	Las Vegas	N/A
N/A	San Diego	N/A

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

Percentage of adults currently diagnosed with asthma, 2016



Indicator 5.05: Infant Mortality

This indicator includes data from the Centers for Disease Control and Prevention's survey on the deaths of children under one year of age. Linked birth and death records are tied to the county of the mother's residence rather than the county of an infant's birth or death. The CDC only reports county-level infant death data for counties with populations larger than 250,000. For that reason, this indicator has been modified from the 2016 Benchmarking report to reflect only the principal county in each cohort metro (e.g., Franklin County for Columbus, Clark County for Las Vegas, etc.).

Rankings somewhat fall along geographic lines, with Western counties observing much lower rates compared to Midwestern counties.

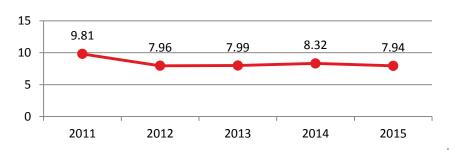
Infant deaths per 1,000 live births by mother's race, 2016

	Metro Area	White	Black or African American
1	San Jose	3.39	N/A
2	San Diego	3.64	8.77
	Austin	3.89	9.23
2	Sacramento	4.64	9.26
5	Las Vegas	4.28	9.18
6	Portland	4.7	10.35
6	Raleigh	3.52	10.46
8	Minneapolis	3.76	10.02
8	Kansas City	4.2	9.45
10	Louisville	4.48	9.79
10	San Antonio	5.72	10.83
12	Pittsburgh	4.48	13.78
13	Charlotte	4.44	9.38
14	Orlando	4.94	10.05
14	Chicago	4.7	12.1
16	Providence	6.08	8.65
16	Nashville	5.06	10.44
16	Columbus	5.67	13.12
19	Indianapolis	7.06	11.12
19	Jacksonville	5.78	13.25
21	Milwaukee	5.2	13.97
22	Cincinnati	6.06	14.53
23	Cleveland	5.41	14.61

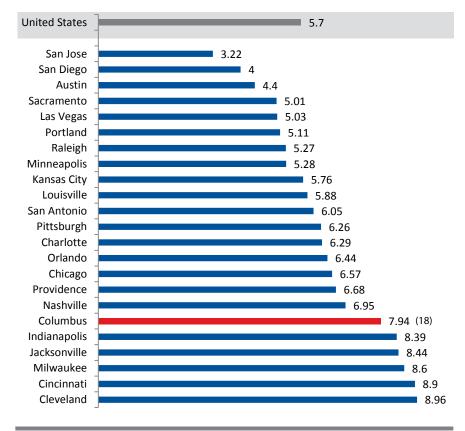
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

Columbus Trends: Infant deaths per 1,000 live births



Infant deaths per 1,000 live births, 2016



Indicator 5.06: Overdose Deaths

This indicator includes data from the Centers for Disease Control and the Robert Wood Johnson Foundation on deaths from drug overdose over a three year period from 2014-2016. Deaths are measured to include both legal prescription medication and illegal substances, such as heroin. This indicator is new to the Benchmarking Report.

A limitation of this indicator is the time range- rates nationwide have been increasing since 2016, so the dataset may not show the full extent of the problem today. In the three year time period however, Columbus's 20 deaths per 100,000 residents is in the middle of the cohort but higher than the national average. Higher death rates in neighboring metros such as

Indianapolis, Cleveland, Cincinnati, and Pittsburgh demonstrate the regional impact of the opioid epidemic.

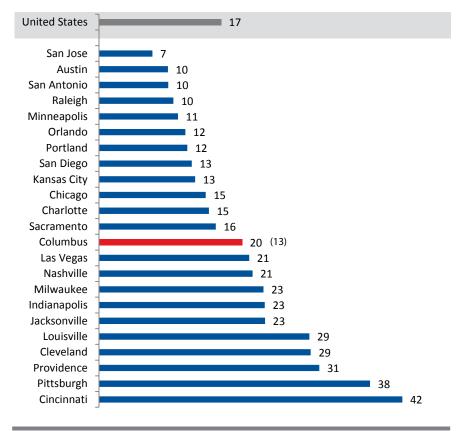
Total deaths from drug overdose, 2014-2016

	Metro Area	Total deaths from drug overdose
1	San Jose	438
2	Austin	574
2	San Antonio	687
2	Raleigh	394
5	Minneapolis	1,160
6	Orlando	1,063
6	Portland	878
8	San Diego	1,272
8	Kansas City	836
10	Chicago	4,240
10	Charlotte	1,111
12	Sacramento	1,105
13	Columbus	1,202
14	Las Vegas	1,321
14	Nashville	1,169
16	Milwaukee	1,077
16	Indianapolis	1,371
16	Jacksonville	1,001
19	Louisville	1,117
19	Cleveland	1,815
21	Providence	1,478
22	Pittsburgh	2,651
23	Cincinnati	2,722

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Centers for Disease Control and Prevention, Robert Wood Johnson Foundation County Health Rankings

Overdose deaths per 100,000 population, 2014-2016



Indicator 5.07: Access to Care

This indicator includes data on the availability of medical professionals and health insurance coverage. First, data from the Center for Disease Control and Prevention, Robert Wood Johnson Foundation, and the American Community Survey analyzed the ratio of metro area population to one practicing primary care physician, dentist, and mental health provider. Second, data from the American Community Survey on the percentage of the population with no health insurance coverage is measured. This indicator is new to the Benchmarking report.

The rankings tend to reflect states that have or have not expanded Medicaid; metros in non-expansion states like Texas, North Carolina, and Florida see higher rates of uninsured persons.

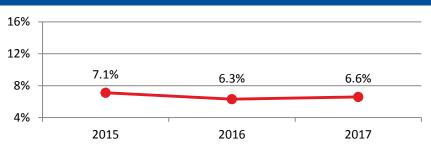
Ratio of population to one medical professional, by provider type

	Metro Area	Primary care providers	Dentists	Mental health providers
1	Pittsburgh	1,136	1,270	479
2	Providence	1,225	1,580	257
3	San Jose	993	908	339
3	Minneapolis	1,112	1,370	426
5	Cincinnati	1,222	1,861	542
5	Sacramento	1,097	1,260	313
7	Cleveland	1,113	1,207	446
8	Louisville	1,328	1,314	485
9	Milwaukee	1,086	1,262	443
10	Portland	1,000	1,210	235
11	Columbus	1,138	1,464	586
12	Chicago	1,155	1,221	489
	San Diego	1,271	1,174	319
14	Indianapolis	1,157	1,441	603
15	Kansas City	1,274	1,482	587
16	Nashville	1,357	1,693	639
17	Raleigh	1,353	1,695	446
18	Charlotte	1,404	1,894	522
19	Jacksonville	1,045	1,281	652
20	Austin	1,382	1,697	591
21	Las Vegas	1,805	1,629	586
22	Orlando	1,355	2,220	632
23	San Antonio	1,478	1,355	743

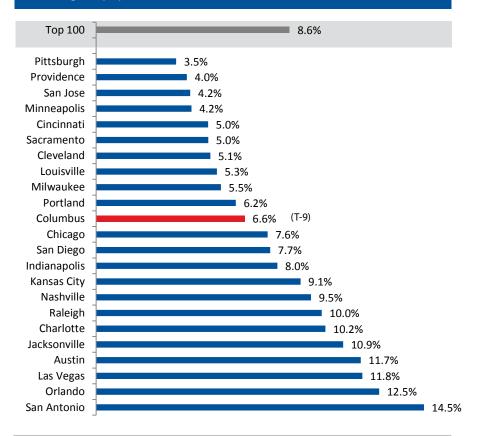
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Centers for Disease Control and Prevention, Robert Wood Johnson Foundation County Health Rankings; U.S. Bureau of the Census, American Community Survey

Columbus Trends: Percentage of population without health insurance



Percentage of population without health insurance, 2017



Indicator 5.08: Charitable Giving

This indicator includes data from the Chronicle of Philanthropy on charitable giving. The giving ratio is defined as charitable contributions as a percentage of adjusted gross income. Giving per itemizer is an average charitable contribution, analyzed among Americans earning at least \$50,000 and itemize charitable contributions on their tax returns. The total charitable contribution represents total giving in billions of dollars. This indicator has been modified from the 2016 Benchmarking report.

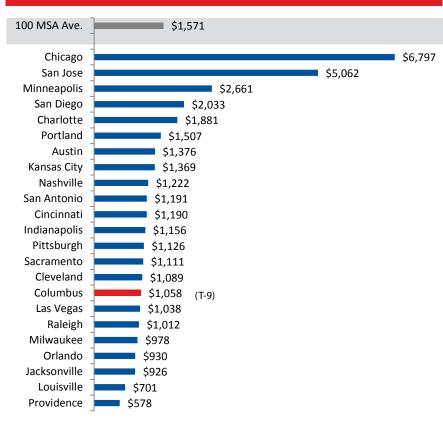
Charitable contributions and giving ratio

	Metro Area	Giving Ratio	Giving per itemizer
1	Chicago	2.7	\$5,289
2	San Jose	4.6	\$14,046
3	Minneapolis	2.6	\$4,532
4	San Diego	2.5	\$4,709
5	Charlotte	3.6	\$6,457
6	Portland	2.6	\$4,169
7	Austin	3	\$6,249
8	Kansas City	3.1	\$5,259
9	Nashville	4	\$7,641
9	San Antonio	3.8	\$6,576
11	Cincinnati	2.7	\$4,580
12	Indianapolis	3.2	\$5,413
13	Pittsburgh	2.5	\$4,510
14	Sacramento	2.4	\$3,689
15	Cleveland	2.8	\$4,437
16	Columbus	2.7	\$4,189
17	Las Vegas	3.3	\$6,097
18	Raleigh	3.3	\$5,511
19	Milwaukee	2.8	\$4,629
20	Orlando	3.2	\$5,520
21	Jacksonville	4.2	\$7,434
22	Louisville	3.1	\$4,836
23	Providence	1.8	\$2,748

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Chronicle of Philanthropy, How America Gives

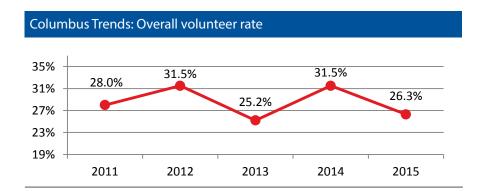
Total charitable giving in billions, 2017



(#) ranked from highest to lowest

Indicator 5.09: Volunteering

This indicator includes data from the Corporation for National & Community Service's Volunteering and Civic Life in America program. The data are based on responses to the Current Population Survey's Volunteer Supplement. The overall volunteer rate is the percentage of adults who reported they had performed unpaid volunteer activities at any point during the 12-month period preceding the survey.



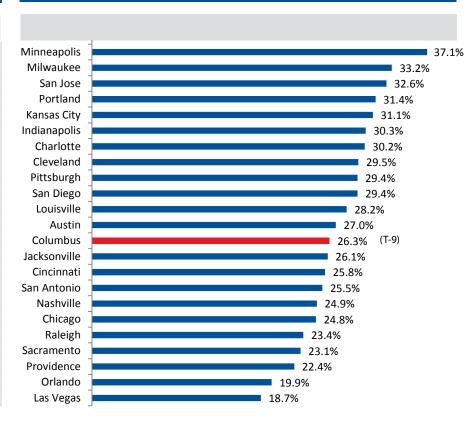
Volunteer average annual hours and retention rates, 2015

		Average annual volunteer	Volunteer retention
	Metro Area	hours per resident	rate
1	Minneapolis	33.3	71.1%
2	Milwaukee	39.1	69.4%
3	San Jose	38	64.8%
4	Portland	35	64.2%
5	Kansas City	38.4	71.3%
6	Indianapolis	26.5	62.5%
7	Charlotte	35	73.2%
8	Cleveland	33.2	61.2%
9	Pittsburgh	32	67.5%
9	San Diego	46.5	64.4%
11	Louisville	27.1	69.0%
12	Austin	33.7	65.9%
13	Columbus	37	69.3%
14	Jacksonville	24.9	N/A
15	Cincinnati	24.5	67.8%
16	San Antonio	33.9	57.1%
17	Nashville	31.4	56.7%
18	Chicago	27.9	61.9%
19	Raleigh	26.1	N/A
20	Sacramento	27.9	63.5%
21	Providence	21.5	63.4%
22	Orlando	34.6	N/A
23	Las Vegas	18.9	54.9%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Corporation for National and Community Service, Volunteering and Civic Life in America

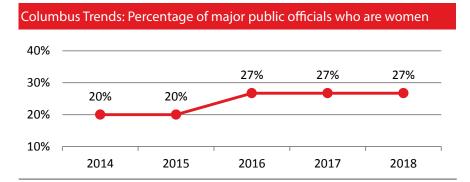
Overall volunteer rate, 2015



Indicator 5.10: Women in Political Leadership

This indicator includes data from the U.S. Senate and House of Representatives, Rutgers University's Center for American Women and Politics, and individual city websites on the number of major public officials who are women. For local governments, major public officials include members of city council for the principal city of the metro area and mayors of cities and towns with a population of 100,000 or higher.

Since 2016 the Columbus City Council has included three women, and Rep. Joyce Beatty has represented part of the metro since 2013.



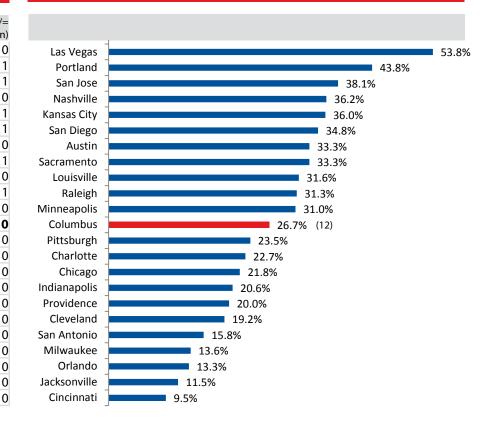
Major public officials who are women, by office, 2018

	Metro Area	Senators	Representatives	City Council (primary urban area)	Mayors (Cities >/= 100k population)
1	Las Vegas	1	2	4	0
2	Portland	2	1	3	1
3	San Jose	2	2	3	1
4	Nashville	0	2	15	0
5	Kansas City	1	2	5	1
6	San Diego	2	1	4	1
7	Austin	0	0	7	0
8	Sacramento	2	2	1	1
9	Louisville	0	0	12	C
10	Raleigh	0	0	4	1
11	Minneapolis	3	1	5	0
12	Columbus	0	1	3	0
13	Pittsburgh	0	0	4	0
14	Charlotte	0	2	3	0
15	Chicago	2	1	14	0
16	Indianapolis	0	1	6	0
17	Providence	1	0	4	0
18	Cleveland	0	2	3	0
19	San Antonio	0	0	3	0
20	Milwaukee	1	2	0	0
21	Orlando	0	0	2	0
22	Jacksonville	0	0	3	0
23	Cincinnati	0	0	2	0

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

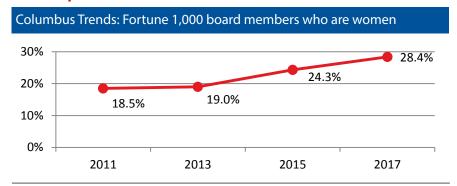
Source: Various, see Data Sources in appendix

Percentage of major public officials who are women, 2018



Indicator 5.11: Women in Corporate Leadership

This indicator includes data from 2020 Women on Boards on women serving on the boards of directors of Fortune 1,000 companies headquartered within a metro area. Data are compiled in two year intervals.



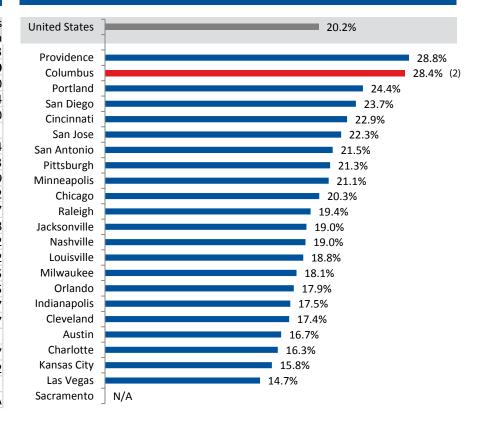
Fortune 1,000 corporation board members, 2017

	Metro Area	Total board	Total board members
	Metro Area	members	who are women
1	Providence	80	23
2	Columbus	141	40
3	Portland	41	10
4	San Diego	59	14
5	Cincinnati	131	30
6	San Jose	318	71
7	San Antonio	65	14
8	Pittsburgh	108	23
9	Minneapolis	279	59
10	Chicago	602	122
11	Raleigh	36	7
12	Jacksonville	42	8
12	Nashville	116	22
14	Louisville	64	12
15	Milwaukee	138	25
16	Orlando	28	5
17	Indianapolis	97	17
18	Cleveland	155	27
19	Austin	6	1
20	Charlotte	104	17
21	Kansas City	76	12
22	Las Vegas	75	11
N/A	Sacramento	N/A	N/A

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: 2020 Women on Boards, 2020 Gender Diversity Directory

Percentage Fortune 1,000 board members who are women, 2017



Indicator 5.12: Crime

This indicator includes data from the Federal Bureau of Investigation's Uniform Crime Reporting Program (UCR) on violent and property crime. The UCR defines violent crimes as those involving force or threat of force, including criminal homicide, forcible rape, robbery, and aggravated assault. Property crimes include the offenses of burglary, larceny-theft, motor vehicle theft, and arson. The UCR is a voluntary reporting program and Charlotte, Kansas City, and Raleigh did not participate in 2016.

When considering the entire region Columbus has one of the lower violent crime rates in the cohort, and lower than the combined rate of the 100 largest metros. However, its property crime rate is fifth highest in the cohort.

295 285 300 250 2014 2015 2016

298

Columbus Trends: Violent crimes per 100,000 population

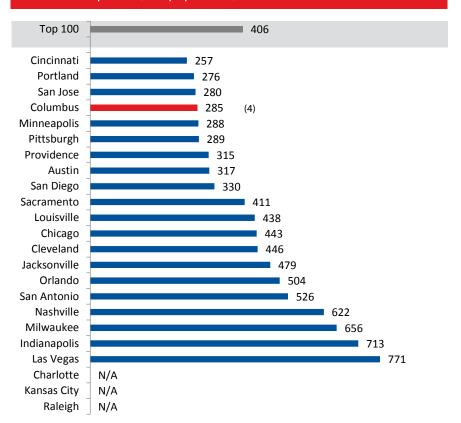
Property crime and violent crime, 2016

	Metro Area	Number of	Property crimes per	Number of violent
	Metro Area	property crimes	100k population	crimes
1	Cincinnati	54,312	2,617	5,377
2	Portland	66,937	2,794	6,635
3	San Jose	43,340	2,177	5,578
4	Columbus	56,162	2,911	5,585
5	Minneapolis	82,192	2,316	10,218
6	Pittsburgh	40,207	1,747	6,694
7	Providence	N/A	N/A	5,079
8	Austin	52,484	2,555	6,510
9	San Diego	61,371	1,850	10,959
10	Sacramento	54,595	2,391	9,384
11	Louisville	42,026	3,359	5,502
12	Chicago	192,468	2,082	41,539
13	Cleveland	42,264	2,384	8,691
14	Jacksonville	42,653	2,894	7,058
15	Orlando	72,038	2,964	12,275
16	San Antonio	99,000	4,082	12,767
17	Nashville	46,171	2,478	11,580
18	Milwaukee	42,858	2,718	10,345
19	Indianapolis	57,721	3,207	13,615
20	Las Vegas	58,811	2,728	16,622
N/A	Charlotte	N/A	N/A	N/A
N/A	Kansas City	N/A	N/A	N/A
N/A	Raleigh	N/A	N/A	N/A

Violent crimes per 100,000 population, 2016

400

350



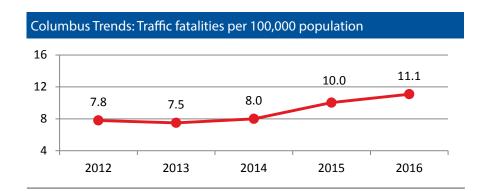
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Department of Justice, Federal Bureau of Investigation, Uniform Crime Reporting Program, Crime in the United States

Indicator 5.13: Road Safety

This indicator includes data from the National Highway Traffic Safety Administration on fatalities resulting from a motor vehicle traffic accident. A fatality is counted when a motorist's, pedestrian's, or bicyclist's death occurs within 30 days of a crash involving at least one motor vehicle in transport.

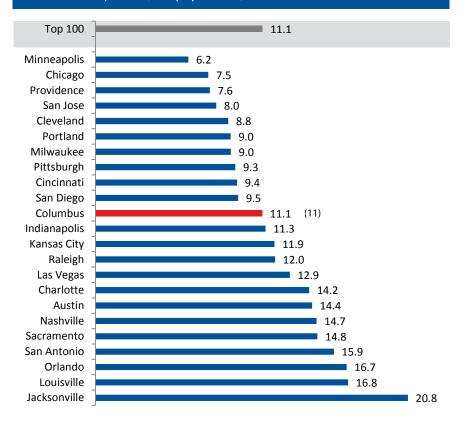
Since the last Benchmarking report, the traffic fatality rate has increased in every metro in the cohort. In Columbus, the total number of traffic fatalities in 2016 was 44% higher than in 2014, with much of this increase coming from motorists.



Total, pedestrian, and bicycle traffic fatalities, 2016

	Metro Area	Total traffic fatalities	Pedestrians as a percentage of all traffic fatalities	Bicyclists as a percentage of all traffic fatalities
1	Minneapolis	220	15.5%	
2	Chicago	717	16.6%	
3	_	123	13.0%	
4	San Jose	160	21.3%	3.8%
5	Cleveland	182	13.7%	0.5%
6	Portland	218	17.9%	4.1%
6	Milwaukee	142	14.1%	2.8%
8	Pittsburgh	218	11.9%	0.9%
9	Cincinnati	204	11.8%	1.0%
10	San Diego	315	22.5%	1.6%
11	Columbus	227	14.1%	1.3%
12	Indianapolis	227	12.3%	4.0%
13	Kansas City	251	11.6%	0.8%
14	Raleigh	156	13.5%	0.6%
15	Las Vegas	279	20.4%	1.8%
16	Charlotte	352	11.9%	0.9%
17	Austin	297	16.2%	1.0%
18	Nashville	275	9.5%	0.7%
19	Sacramento	339	18.0%	5.6%
20	San Antonio	385	19.7%	1.6%
21	Orlando	410	20.2%	2.7%
	Louisville	216	14.4%	0.9%
23	Jacksonville	307	16.9%	2.6%

Traffic fatalities per 100,000 population, 2016



Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatality Accident Reporting System

Indicator 5.14: Commute Time

This indicator includes data from the American Community Survey on travel to work times. Commute time is reported for two groups: persons traveling alone by car (excluding taxicabs), and persons traveling by public transportation (bus or trolley bus, streetcar or trolley car, subway or elevated railway, or ferryboat). The percentage of workers commuting 25 minutes or longer is reported for all workers 16 years and older, regardless of commute mode.

Although the percentage of workers with longer commutes in Columbus has steadily gone up, average commute time by traveling alone has barely changed since 2011. In the same time, average commute time by public transportation has gone up by nearly 10 minutes.

Columbus Trends: Workers commuting 25 minutes or longer 50% 45% 40% 39.4% 39.9% 40.3% 41.6% 2013 2014 2015 2016 2017

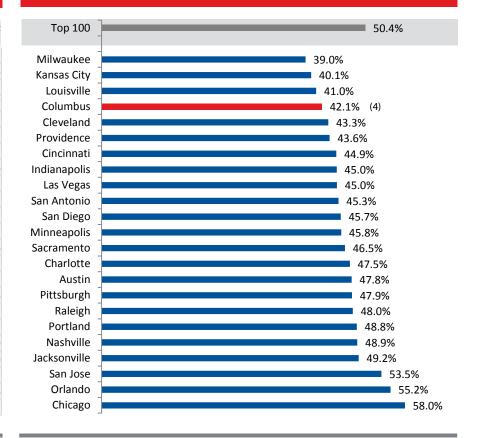
Average commute time by mode, 2017

	Metro Area	Average commute time by traveling alone (min.)	Average commute time by public transportation (min.)
1	Milwaukee	22.6	43.5
2	Kansas City	23.2	38.6
3	Louisville	23.6	42.2
4	Columbus	23.7	48.7
5	Cleveland	24	47
6	Providence	25.8	60.1
7	Cincinnati	25	38.3
8	Indianapolis	24.9	41.4
9	Las Vegas	23.4	56.1
10	San Antonio	25.9	54.7
11	San Diego	25.6	49.1
12	Minneapolis	24.8	41.2
13	Sacramento	26.7	51.4
14	Charlotte	26.6	47.2
15	Austin	26.6	39.1
16	Pittsburgh	26.3	43.6
17	Raleigh	26.5	46.2
18	Portland	26.4	45.5
19	Nashville	27.7	42.9
20	Jacksonville	26.3	50
21	San Jose	28.9	55.5
22	Orlando	28.8	54
23	Chicago	29.7	49.5

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

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

Percentage of workers commuting 25 minutes or longer, 2017



Indicator 5.15: Commute Mode

This indicator includes data from the American Community Survey on the usual mode of transportation to work for commuters age 16 and over. Alternative commute modes include all means of transportation except driving alone by car, truck, or van. Not all commute modes are included in the data table, as such percentages do not equal 100%.

Alternate commute modes have gone down in Columbus since the last Benchmarking report, with fewer commuters going by public transit or walking. As such, the metro has one of the highest rates in the cohort of commuters driving alone.

25% 20% 17.4% 17% 17.5% 17.5% 17.3% 2013 2014 2015 2016 2017

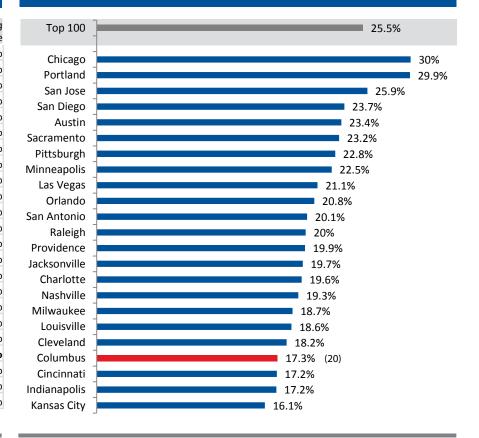
Alternative commute modes for workers age 16 and over, 2017

	Metro Area	Carpooling to work	Public transit to work	Biking to work	Walking to work	Working from home
1	Chicago	7.6%	12.3%	0.7%	2.9%	5.1%
2	Portland	9.2%	6.3%	2.2%	3.4%	7.7%
3	San Jose	10.8%	4.7%	1.7%	2.2%	5.2%
4	San Diego	8.4%	3.1%	0.8%	2.7%	6.9%
5	Austin	9.3%	1.8%	0.8%	1.9%	8.7%
6	Sacramento	9.4%	2.4%	1.2%	1.7%	7.3%
7	Pittsburgh	7.9%	5.7%	0.3%	3.3%	4.9%
8	Minneapolis	8.0%	4.8%	0.8%	2.1%	5.7%
9	Las Vegas	9.2%	3.3%	0.3%	1.7%	4.3%
10	Orlando	9.7%	1.8%	0.4%	1.3%	5.8%
11	San Antonio	10.4%	1.8%	0.2%	1.4%	4.8%
12	Raleigh	8.0%	0.8%	0.2%	1.0%	9.1%
13	Providence	9.1%	2.3%	0.2%	3.2%	4.4%
14	Jacksonville	8.5%	1.1%	0.5%	1.8%	6.1%
15	Charlotte	8.9%	1.6%	0.1%	1.3%	6.7%
16	Nashville	9.5%	1.0%	0.1%	1.3%	6.4%
17	Milwaukee	7.1%	3.2%	0.5%	2.6%	4.6%
18	Louisville	8.7%	2.0%	0.2%	1.4%	4.9%
19	Cleveland	7.9%	2.7%	0.3%	1.9%	4.4%
20	Columbus	7.1%	1.5%	0.4%	2.0%	5.2%
21	Cincinnati	7.7%	1.8%	0.2%	1.8%	4.8%
21	Indianapolis	8.0%	0.9%	0.2%	1.6%	5.2%
23	Kansas City	7.6%	0.8%	0.2%	1.3%	5.3%

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

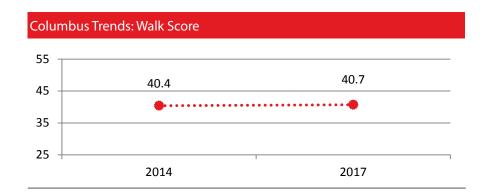
Source: U.S. Bureau of the Census, American Community Survey

Percentage of workers using an alternative commute mode, 2017



Indicator 5.16: Walking & Biking

This indicator includes data from WalkScore on bicycle and pedestrian accessibility. Bike Score measures ease of cycling based on bicycle infrastructure, hills, road connectivity, and destinations. Walk Score measures walkability on a scale from 0 to 100 based on the presence of sidewalk infrastructure and walking distance to amenities such as retail, schools, and parks. This indicator has been modified from the 2016 Benchmarking report.



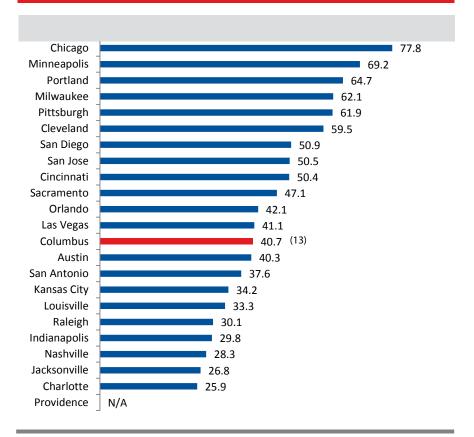
Bikeability, 2017

	Metro Area	Bike Score
1	Chicago	71.5
2	Minneapolis	81.9
3	Portland	81.2
4	Milwaukee	54.4
5	Pittsburgh	51.5
6	Cleveland	50.3
7	San Diego	39.4
8	San Jose	59.3
9	Cincinnati	35.0
10	Sacramento	65.9
11	Orlando	54.8
	Las Vegas	43.9
13	Columbus	46.9
14	Austin	51.2
15	San Antonio	41.9
16	Kansas City	31.8
17	Louisville	39.7
18	Raleigh	37.4
19		42.4
20	Nashville	25.4
21	Jacksonville	40.4
	Charlotte	30.4
N/A	Providence	N/A

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: Walk Score

Walk Score, 2017



Indicator 5.17: Public Transportation

This indicator includes data from the American Public Transportation Association on the frequency of public transit use. Unlinked passenger trips are defined as the number of passengers who board public transportation vehicles, with passengers counted each time they board a vehicle regardless of the number used to travel from origin to destination. Data are for urban areas within metro areas.

In Columbus the total number of unlinked trips increased from the 2016 Benchmarking report, but with an expanded urban area population not all taking public transit the trips per capita has gone down. Note the data do not reflect recent updates, such as COTA's 2017 system redesign.

Urban area population and unlinked passenger trips, 2015

	Metro Area	Urban area population	Unlinked passenger trips (millions)
1	Chicago	9,557,503	630.8
2	Portland	2,382,181	114.4
3	Las Vegas	2,110,330	71.9
4	San Diego	3,290,044	111.5
5	Pittsburgh	2,349,139	67.5
6	Minneapolis	3,521,325	98.7
7	Milwaukee	1,576,376	41.3
8	Cleveland	2,062,842	47.8
9	San Jose	1,977,584	45.1
10	Austin	2,000,784	34.7
11,	San Antonio	2,379,054	39.7
12	Sacramento	2,266,892	30.6
13	Orlando	2,391,028	30.3
14	Providence	1,613,155	19.6
15	Louisville	1,277,992	14.9
16	Charlotte	2,424,115	27.7
17	Columbus	2,023,198	19.4
18	Cincinnati	2,155,674	20.5
19	Jacksonville	1,445,986	13.4
20	Kansas City	2,085,221	16.5
21	Raleigh	1,272,875	9.6
22	Nashville	1,829,513	10.9
23	Indianapolis	1,986,872	10.1

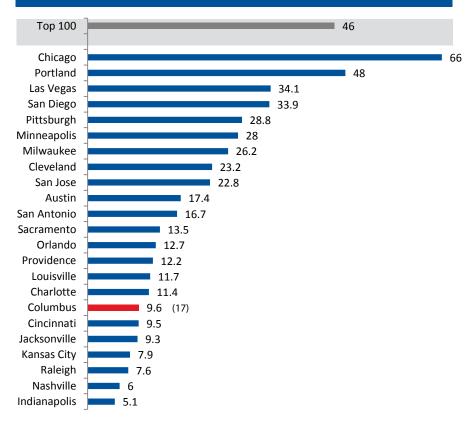
Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: American Public Transportation Association, Public Transportation Fact Book

Columbus Trends: Unlinked passenger trips per capita



Unlinked passenger trips per capita, 2015



Indicator 5.18: Air Travel

This indicator includes data from the U.S. Department of Transportation on air travel from area airports. Average daily weekday departures are measured, as airlines tend to reduce weekend departures at most airports. These data, along with daily enplaned passengers and seats per departure, are based on annual averages. This indicator has been modified from the 2016 Benchmarking report.

Columbus's lower average departures can be attributed to John Glenn and Rickenbacker International Airports not being airline hubs, a concentration of a given airline's passenger traffic and flight operations, or a focus city, where an airline operate multiple point-to-point routes. Despite not having either

designation, the Columbus metro is still one of the 40 most traveled regions in the country in terms of average daily departures.

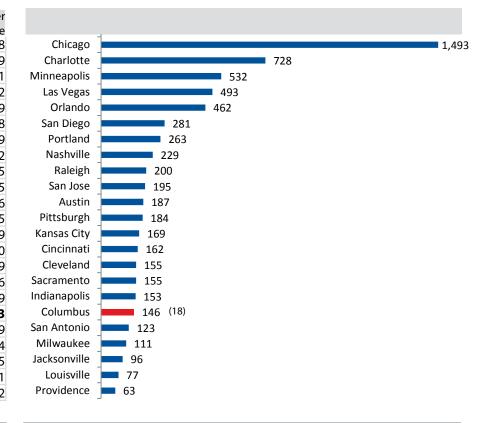
Passenger boardings and flight data, 2018

		Number of nonstop	Average daily enplaned	Average seats per
	Metro Area	destinations	passengers	departure
1	Chicago	261	134,056	118
2	Charlotte	177	60,536	109
3	Minneapolis	164	49,305	121
4	Las Vegas	145	63,849	162
5	Orlando	201	63,205	169
6	San Diego	73	31,873	148
7	Portland	75	25,930	129
8	Nashville	64	20,107	122
9	Raleigh	61	15,974	115
10	San Jose	54	17,936	135
11	Austin	80	19,818	146
12	Pittsburgh	68	12,140	95
13	Kansas City	54	15,844	129
14	Cincinnati	58	10,888	100
15	Cleveland	51	12,475	109
16	Sacramento	39	15,460	136
17	Indianapolis	49	12,254	109
18	Columbus	46	10,753	103
19	San Antonio	53	12,519	139
20	Milwaukee	43	9,412	114
21	Jacksonville	40	7,636	115
22	Louisville	31	4,776	91
23	Providence	33	5,613	122

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Department of Transportation, T-100 Onboard Data

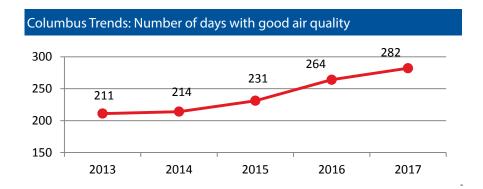
Average daily weekday departures, 2018



Indicator 5.19: Air Quality

This indicator includes data from the U.S. Environmental Protection Agency's Air Quality Index (AQI). The AQI is used to report the level of pollution in the air, including ground-level ozone, particule pollution carbon monoxide, sulfur dioxide, and nitrogen dioxide. An AQI between 0 and 50 is considered good air quality. A value between 101 and 150 is unhealthy for "sensitive groups" such as people with lung disease, older adults, and children. An AQI greater than 150 is unconsidered unhealthy for everyone.

Columbus's good air quality has steadily climbed over the last five years, allowing it to take the number one ranking in the cohort.



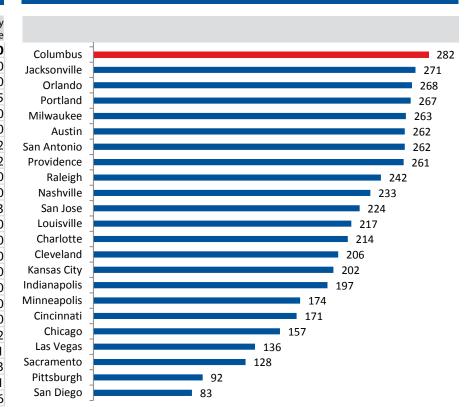
Number of days with unhealthy air quality, 2017

	Metro Area	Number of days with unhealthy air quality for sensitive groups	Number of days with unhealthy air quality for everyone
1	Columbus	3	0
2	Jacksonville	1	0
3	Orlando	3	0
4	Portland	10	5
5	Milwaukee	8	0
6	Austin	4	0
6	San Antonio	4	2
8	Providence	5	2
9	Raleigh	0	0
10	Nashville	1	0
11	San Jose	9	3
12	Louisville	6	0
13	Charlotte	5	0
14	Cleveland	12	0
15	Kansas City	7	0
16	Indianapolis	9	0
17	Minneapolis	1	0
18	Cincinnati	10	0
19	Chicago	23	2
20	Las Vegas	28	1
21	Sacramento	62	3
22	Pittsburgh	31	1
23	San Diego	56	6

Regions: Red= Midwest; Blue=South; Green=West; Black=Northeast

Source: U.S. Environmental Protection Agency, Air Quality Index Report

Number of days with good air quality (AQI 0-50), 2017



Data Sources

The following are the web addresses for the data sources used in this report:

1.01 Population Growth

U.S. Department of Commerce, Bureau of the Census, Population Estimates http://www.census.gov/popest/

1.02 - 1.06

 $\label{lem:u.s.} U.S.\ Department\ of\ Commerce,\ Bureau\ of\ the\ Census,\ American\ Community\ Survey\ http://factfinder2.census.gov/$

1.07 Urban Density

Center for Neighborhood Technology, H+T Affordability Index http://htaindex.cnt.org/

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

2.01 Industry Sector Employment

U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics http://www.bls.gov/sae/home.htm

2.02 High Tech Industries

 $\label{lem:u.s.} U.S.\ Department\ of\ Labor,\ Bureau\ of\ Labor\ Statistics,\ Occupational\ Employment\ Statistics\ http://www.bls.gov/oes/home.htm$

Milken Institute, Best-Performing Cities

http://best-cities.org/bestcities.taf?rankyear=2015&type=large-cities-rankings

2.03 Entrepreneurship

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

2.04 Small Business Firms & 2.05 Small Business Startups

U.S. Department of Commerce, Bureau of the Census, Statistics of U.S. Businesses (SUSB) https://www.census.gov/programs-surveys/susb.html

2.06 Minority Business Ownership & 2.07 Women's Business Ownership U.S. Department of Commerce, Bureau of the Census, Survey of Business Owners http://www.census.gov/econ/sbo/

2.08 Income and Wages

Council for Community and Economic Research, Cost of Living Index

http://www.coli.org/

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics http://www.bls.gov/oes/home.htm

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

2.09 Occupations & 2.10 Workforce

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

2.12 Unemployment

U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics http://www.bls.gov/lau/home.htm

2.13 - 3.06

 $\label{lem:u.s.} U.S.\ Department\ of\ Commerce,\ Bureau\ of\ the\ Census,\ American\ Community\ Survey\ http://factfinder2.census.gov/$

3.07 Earned Income Tax Credit

Brookings Institution, Earned Income Tax Credit (EITC) interactive and resources http://www.brookings.edu/research/interactives/eitc

3.08 Foreclosures

Attom Data Solutions

https://www.attomdata.com/data/#

3.09 Homeownership

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

3.10 Housing Starts

U.S. Census Bureau, Building Permits Survey

https://www.census.gov/construction/bps/

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

Data Sources

The following are the web addresses for the data sources used in this report:

3.11 Housing and Transportation Costs

Center for Neighborhood Technology, H+T Affordability Index http://htaindex.cnt.org/

4.01 - 4.03

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

4.04 School Lunch Assistance

U.S. Department of Education, Institute of Education Sciences,

National Center for Education Statistics, Common Core of Data, Elementary/Secondary Information System

http://nces.ed.gov/ccd/elsi/

4.05 Libraries

Institute for Museum and Library Services, Public Libraries in the United States Survey http://www.imls.gov/research/public_libraries_in_the_united_states_survey.aspx

4.06 Research Universities

National Science Foundation, Survey of Earned Doctorates: 2014 http://www.nsf.gov/statistics/2016/nsf16300/data-tables.cfm

4.07 Broadband Availability

U.S. Department of Commerce, Bureau of the Census, American Community Survey http://factfinder2.census.gov/

5.01 Local Foods

U.S. Department of Agriculture, Economic Research Service, Food Environment Atlas http://www.ers.usda.gov/data-products/food-environment-atlas.aspx#.UWcJcZPqIDA

5.02 - 5.04

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services, Public Health Surveillance Program, Behavioral Risk Factor Surveillance System, Selected Metropolitan/Micropolitan Area Risk Trends http://www.cdc.gov/brfss/

5.05 Infant Mortality

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Linked Birth and Infant Death Data

http://www.cdc.gov/nchs/linked.htm

5.06 Overdose Deaths

Robert Wood Johnson Foundation, County Health Rankings http://www.countyhealthrankings.org/

5.07 Access to Care

Robert Wood Johnson Foundation, County Health Rankings http://www.countyhealthrankings.org/

5.08 Charitable Giving

The Chronicle of Philanthropy, "How America Gives" (Interactive Tool) https://www.philanthropy.com/interactives/how-america-gives#search

5.09 Volunteering

Corporation for National and Community Service, Volunteering and Civic Life in America http://www.volunteeringinamerica.gov/

5.10 Women in Political Leadership

Rutgers University, Center for American Women and Politics

http://www.cawp.rutgers.edu/

U.S. House of Representatives, Directory of Representatives

http://www.house.gov/representatives/

U.S. Senate

https://www.senate.gov/

City councils:

Austin, TX

http://www.austintexas.gov/government

Charlotte, NC

http://charlottenc.gov/CityCouncil/Pages/Default.aspx

Chicago, IL

http://www.chicagotribune.com/ct-the-chicago-city-council-meet-the-members-20150516-

htmlstory.html

Cincinnati, OH

http://www.cincinnati-oh.gov/council/council-members/

Cleveland, OH

http://www.clevelandcitycouncil.org/council-members

Columbus, OH

https://www.columbus.gov/council/members/

Indianapolis, IN

Data Sources

The following are the web addresses for the data sources used in this report:

Indianapolis, IN

http://www.indy.gov/eGov/Council/Councillors/Biography/Documents/2016 public councillist.pdf

Jacksonville, FL

 $http://downtownjacksonville.org/Media/Contact_Jacksonville_City_Council.aspx$

Kansas City, MO

http://kcmo.gov/city-officials/city-council-members/

Las Vegas, NV

http://www.lasvegasnevada.gov/portal/faces/home/our-city/oc-government?_adf.ctrl-

state=16brkb5z1i_97&_afrLoop=294632841113151

Louisville, KY

https://louisvilleky.gov/government/metro-council/districts-1-26

Milwaukee, WI

http://city.milwaukee.gov/CommonCouncil#.WAZm648rKUk

Minneapolis, MN

http://www.ci.minneapolis.mn.us/council/

Nashville, TN

http://www.nashville.gov/Metro-Council/Metro-Council-Members.aspx

Orlando, FL

http://www.cityoforlando.net/council/

Pittsburgh, PA

http://www.pittsburghpa.gov/council/

Portland, OR

http://www.portlandoregon.gov/25999

Providence, RI

http://council.providenceri.com/members

Raleigh, NC

http://www.raleighnc.gov/government/content/BoardsCommissions/Articles/CityCouncil.html

Sacramento, CA

http://www.cityofsacramento.org/Mayor-Council

San Antonio, TX

https://www.sanantonio.gov/council

San Diego, CA

https://www.sandiego.gov/citycouncil

San Jose, CA

http://www.sanjoseca.gov/index.aspx?NID=146

5.11 Women in Corporate Leadership

2020 Women on Boards, 2020 Gender Diversity Directory

http://www.2020wob.com/companies/

5.12 Crime

U.S. Department of Justice, Federal Bureau of Investigation, Uniform Crime Reporting Program, Crime in the United States

http://www.fbi.gov/about-us/cjis/ucr

5.13 Road Safety

U.S. Department of Transportation, National Highway Traffic Safety Administration,

Fatality Analysis Reporting System

http://www-fars.nhtsa.dot.gov/Main/index.aspx

5.14 Communte Time & 5.15 Commute Mode

U.S. Department of Commerce, Bureau of the Census, American Community Survey

http://factfinder2.census.gov/

5.16 Walking and Biking

Walk Score, City and Neighborhood Walkability Rankings

http://www.walkscore.com/rankings/cities/

5.17 Public Transportation

American Public Transportation Association, Public Transportation Fact Book

http://www.apta.com/resources/statistics/Pages/transitstats.aspx

5.18 Air Travel

U.S. Department of Transportation, Research and Innovation Technology Administration,

Bureau of Transportation Statistics, TranStats, Data Elements

http://www.transtats.bts.gov/Data_Elements.aspx?Data=2

5.19 Air Quality

U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards,

Air Quality Analysis Group, Air Data, Air Quality Index Report

https://www.epa.gov/outdoor-air-quality-data







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