

Greater Baltimore State of the Region Report



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2018



Growth and Confidence in the Baltimore Region



Donald C. Fry



Michael B. Kelly

When the State of the Region report was first issued in 1998, Baltimore City and the surrounding six county region was the second most affordable among its peers and the population was largely White. Large-scale manufacturing still played a key role in the economy, and only a quarter of residents were college-educated.

But as this new report makes clear, in the 20 years since, much has changed. The cost of living has jumped, making the region the seventh most expensive among its peers. There's been a huge shift in the demographic make-up of the population with significant growth in the number of Hispanic and Black residents, diversification away from manufacturing to healthcare, higher-education and high-tech jobs, and a sizeable increase in residents with college degrees. Major changes occurred, as well, in

many of the other 19 peer metro areas that were selected by the Greater Baltimore Committee (GBC) and Baltimore Metropolitan Council (BMC) to which we compare the Baltimore region in this new report.

As these evolutions in Baltimore and elsewhere highlight, metropolitan areas are dynamic and sizable shifts in populations, economic drivers, intellectual capital and other key elements that make metro regions thrive or die often go unnoticed over a decade or more.

Taking stock of these factors periodically is vital. Why? Getting a clear view of the strengths and weaknesses that have emerged over time is critical for elected officials, business leaders, philanthropic organizations and others to make policy, budget, transportation and other decisions that have a significant effect on thousands of employers, institutions and residents.

Fully informed decisions are essential to ensure a region has a prosperous future that includes strong quality of life amenities, such as access to affordable housing and excellent



medical care, modern transportation networks that support jobs and economic growth, and a business climate that is nurturing and stable.

The data compiled and analyzed in this report will inform decision makers of strengths that can be leveraged to ensure an attractive business climate and economic vitality, as well as weaknesses that need to be addressed to ensure the region doesn't falter and become inconsequential compared to its peers.

The GBC and BMC share the view that elected and community leaders throughout a region must have strong ties, collaborative relationships, and a unified vision on major policy, budget and other decisions so that all residents, employers and visitors in the region benefit.

The GBC and BMC urge elected and regional leaders to use this report to chart a smart course for a strong future for the entire Baltimore region. Doing so will ensure growth and confidence in the Baltimore region locally and nationally.

Meanwhile our organizations will return to it often as we develop policy recommendations, competitiveness strategies and programs that promote skills, diversity and inclusiveness in the workforce.

Our hope is that when the next State of the Region Report is issued, many will look back and note that the 2018 report helped frame the critical decisions that secured the Baltimore region's reputation nationally as a dynamic, thriving and inclusive economic engine.

Sincerely,

Donald C. Fry
President & CEO
Greater Baltimore Committee

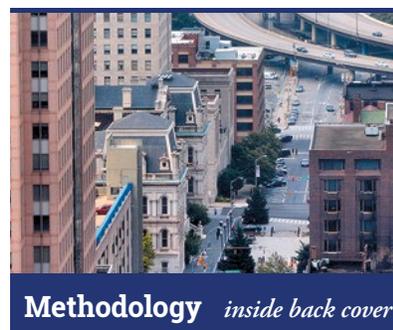
Michael B. Kelly
Executive Director
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Acknowledgment

The Greater Baltimore Committee and Baltimore Metropolitan Council thank Daraius Irani, Ph.D., Vice President of the Division of Strategic Partnerships and Applied Research (SPAR) of Towson University and the Regional Economic Studies Institute (RESI) at Towson University for the valuable assistance provided reviewing and analyzing metropolitan data and drafting the Summary of Findings and chapter introductions.

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Summary of Findings



The 20 years that have passed since the initial publication of the State of the Region report have seen tumultuous changes to the economy of the nation and the Baltimore region.

Along with the economic, social, and cultural transformations brought on by the rapid growth of the Internet, mobile smart phones, and globalization in trade and commerce, the nation and the region have weathered two economic recessions and two recoveries. These dynamic forces have contributed to changes, good and bad, in the region over the time period studied.

A snapshot of the Baltimore Metropolitan Statistical Area (MSA) in 1998 shows:

The ethnic makeup of the population of 2.47 million people was predominately White, and the traditional manufacturing-based economy was transitioning to one increasingly fueled by professional services, such as investment finance, banking, and computer technology. The Baltimore region ranked in the bottom half of the 20 region peer group for the percentage of the population that was well-educated and had the highest unemployment rate of all the regions studied.

Today, the snapshot has changed. The region's population has grown to 2.8 million people and is more diversified, most notably with a 125 percent rise in the Hispanic population. The region also realized the fourth highest increase in the percentage of the population that is African-American and the largest percentage decline

in White population among the peer regions.

The Baltimore region has also become much more highly-educated than in 1998. The Baltimore MSA currently ranks 7th among its peer group for the percentage of the population ages 25 and older with a college degree, up from 13th in 1998.

Meanwhile the economy and jobs have also diversified and strengthened with growth in higher education, medicine, defense, cybersecurity, bioscience and other advanced technologies. More minorities and women own businesses than 20 years ago—another sign of economic strength and expanded opportunity. Since 1998, the number of African-American owned firms has increased by more than 45 percent while the number of women-owned firms has increased by more than 36 percent.

As if mirroring this sweep of change, the skyline of the Baltimore region

On the whole, there are many positive trends in the region. If these trends act as a rising tide that lifts all boats, the next 20 year assessment should be positive across the board. It will be important that our regional elected officials and stakeholders take the necessary steps to ensure that our region provides opportunities that can be enjoyed by all.

has been altered dramatically over the last two decades, especially since the Great Recession of 2007 to 2009.

Real estate development and investment along Baltimore City’s waterfront, including Harbor East, Locust Point, and Canton, has made the greater downtown area a highly attractive place to live, work, play, and start a business. Much of this development boom has been a mix of retail and residential construction, including luxury apartments in the downtown core. This has drawn more households to sections of the city that previously did not have a large residential population. Additionally, new high-tech offices have emerged in former industrial sites converted for modern business needs.

Similar real estate investment and development activity has taken hold throughout the metropolitan region. Towson has grown from a sleepy county seat to a vibrant business hub with desirable shopping and entertainment options, as highlighted by a number of recently completed or planned residential and mixed-use developments. To the south, a \$1 billion revitalization of Downtown Columbia by the Howard Hughes Corp. is making that suburb between Baltimore and Washington, D.C. a highly sought after location. The area adjacent to Baltimore/ Washington International

Thurgood Marshall Airport has seen a boom in hotels, office buildings, defense contractors and other businesses. Harford County, another suburb along I-95 where Aberdeen Proving Ground (APG) sits, has become a magnet for defense contractors. Carroll County is seeing growth in the manufacturing and distribution industries, including the Strouse Corporation’s new die cut adhesive plant and Random House Publishing’s expanded distribution facility.

The U.S. Department of Defense’s Base Realignment and Closure (BRAC) program had a significant economic impact on the region.

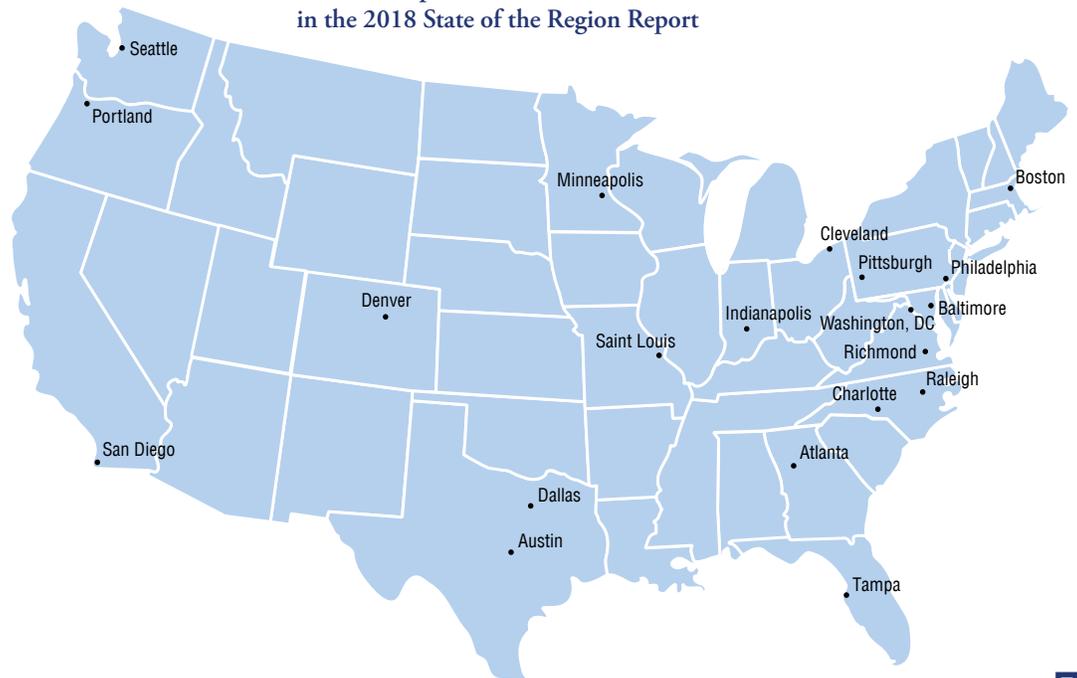
The latest BRAC round in 2005 strengthened Baltimore’s economy by establishing the region as a hub for cybersecurity-related agencies, defense-related companies, and high-paying government contracting jobs. Military installations, such as Aberdeen Proving Ground and Fort Meade, also gained personnel, supporting nearby communities.

Changes in Key Industries

The Port and Related Industry

While there have been many changes in the region’s economy since 1998, one stalwart in Baltimore continues to grow and drive economic activity: the Port of Baltimore. The port has

**Metropolitan Areas Studied
in the 2018 State of the Region Report**





become one of the nation's fastest growing shipping facilities, directly generating more than 13,000 jobs and supporting 33,900 indirect jobs across the state.

In Fiscal Year 2017, the port processed a record 10.3 million tons of general cargo. According to JOC Group, Inc., which tracks trade information, container shipping currently comprises the largest growth segment at the port.

Helping fuel the growth, the Port of Baltimore entered into an agreement in 2010 with Ports America to dredge channels and improve berths to accommodate giant container ships, known as Post-Panamax ships. This was accompanied by significant infrastructure investment in and around the port to handle the larger vessels and increased cargo traffic.

The biggest challenge to future growth at the Port of Baltimore is the inability to double-stack railcar containers due to the height limitations of the aging Howard Street Tunnel, an underground

freight rail line which runs through downtown Baltimore. The willingness of CSX and government partners to coalesce around a plan to expand the tunnel remains to be seen.

Retail Sector

While the port has experienced economic growth since 1998, the retail industry—a once important source of jobs and commerce in the region—has been battered by a dramatic shift in the retail landscape over the same time frame.

As online shopping has become the norm rather than the exception, malls across the nation have been shuttered or transformed for other uses. The Baltimore region has not escaped this trend. Several malls in the area have closed or been transformed while others have undergone significant expansions to cater to consumers demanding upscale casual dining, luxury brands, and a shopping experience not afforded by the Internet.

Commercial Office Sector

The commercial office market has undergone significant changes brought on by BRAC, mobile technology and other shifts in the local and national economic landscape.

The increased federal government presence and the rise of a startup business culture in the Baltimore region, combined with the loss of many insurance, financial and company headquarters has brought impactful changes to the traditional regional office space market.

The location and office space needs of the late 1990s no longer hold true in 2017. Many businesses have traded uniform high-rise commercial spaces in the central business district of Baltimore City for custom-built or repurposed buildings and less dense environs.

This mindset change has resulted in the growth of suburban office markets, particularly near federal installations and government agencies, in order to keep contractors and

other support businesses closer to the clients they serve.

Many startup businesses, which have no need for large, physical office spaces, are opting for smaller offices or space in technology incubators. This has affected the office market in the Baltimore region as reflected by a doubling of the office vacancy rate in the downtown area. Although many traditional office spaces remain vacant, the alternative or specialized spaces, such as those with labs for research, rapidly fill with occupants.

Support for Entrepreneurship Grows

Startup companies have fueled a burgeoning sector of entrepreneurs who have contributed to changes in the region’s economic landscape since 1998.

Beginning with the dotcom bubble, which began in the late 1990s, an appetite for entrepreneurship

emerged in a number of urban areas, including the Baltimore area. Today, there are more than 16 business incubator and accelerator sites in the Baltimore region, all geared toward nurturing and growing local companies.

Much of the focus on supporting entrepreneurs has been led by higher education institutions in the region, including the Johns Hopkins University and Medical Center, the University of Maryland, Baltimore, UM Biopark and the University of Maryland, Baltimore County.

Towson University, Morgan State University and the University of Baltimore are also participating in this entrepreneurial ecosystem by offering incubator space, technology assistance and encouraging students to think more like an entrepreneur—even if they have no immediate plans to start a business.

This university-based support for startup companies and innovators is fueling innovation in fields such as bioscience and cybersecurity, which should serve the Baltimore region well in the years ahead. The State of Maryland and local county governments are key partners in these efforts.

The success of the Baltimore region’s technology ecosystem is evident from the number of homegrown companies that have progressed to become global enterprises. Under Armour and its visionary founder Kevin Plank are examples of the innovators setting the stage for the Baltimore region’s growth.

Unfortunately, while there is a great deal of entrepreneurial activity in the Baltimore region, a lack of focus and coordination exists between entities. This was the conclusion drawn in the recently released Excel Maryland report—an initiative of Maryland

Baltimore Area Top 5 Rankings

Indicator	Rank
Average Air Fares	1
Hispanic or Latino Population Change	1
Total Government Units per 100,000	1
Per Capita Personal Income Change	2
Black or African American Population	3
Median Household Income Change	3
Total Government Units	3
Black or African American Population Change	4
Education and Health Services as Percentage of Total Non-Farm Employment	4
Median Household Income	4
Per Capita Personal Income	4
Population Density	4
Public Transit Score	4
Total Air Passenger Change	4
Downtown Walkability	5
Government Employment as Percentage of Total Non-Farm Employment	5
Transit Ridership—Bus	5

Baltimore Area Bottom 5 Rankings

Indicator	Rank
Change in Women-Owned Firms	16
Reduction in Unhealthy Air Days	16
Violent Crime	16
Average Travel Time to Work	17
Change in Establishments with Payroll	17
Leisure and Hospitality as Percentage of Total Non-Farm Employment	17
Office Vacancy Rate—Downtown	17
Population Change	17
Hispanic or Latino Population	18
Roadway Miles per 1,000 Persons	18
White Population	18
White Population Change	20

Rankings should not necessarily be interpreted as a strength or weakness, but merely where the region falls along a spectrum relative to its peers.



Governor Larry Hogan to build a comprehensive, statewide economic development strategy.

Recession and Recovery

The years following the end of the Great Recession have been one of the longest periods of economic expansion since World War II.

During the last eight years the national economy has been growing in economic activity and job creation. According to the Bureau of Labor Statistics (BLS), more than 15 million new jobs have been created since 2010. The Baltimore region has benefitted from this recovery, although not to the level of some peer regions, such as Austin and Dallas, Texas, which experienced significant growth.

The national unemployment rate has fallen from more than 10 percent in 2009 to about 4 percent in 2017. Meanwhile in the Baltimore MSA, unemployment stood at 4.4 percent.

The Baltimore region has not been immune to negative national economic trends and hurdles since the Recession ended. But its industry composition of a strong higher education and healthcare presence, along with a growing federal workforce presence, has provided a buffer.

Fuel prices have fallen from close to \$4 per gallon to near \$2.50 per gallon in the same period, putting more dollars in consumers' pockets. According to the S&P CoreLogic Case-Shiller Index, home prices across the U.S. have risen to pre-recession levels. In the Baltimore region, the median home sale price peaked around \$260,000 in 2008, just prior to the recession. Today, the median home price is \$277,000. Additionally, interest rates remain very low while equity markets have been booming, as evidenced by the Dow Jones Industrial Average increasing from 7,900 points in 2009 to more than 23,000 points in 2017.

While these statistics paint a picture of a robust economic recovery in the U.S., there are pockets of concern. Although the average annual GDP growth exceeds 2 percent, according to BLS, it remains lower than the historical average of 3 percent growth and the 3.5 percent growth experienced during the 1991 to 2001 economic expansion (the longest post-war economic recovery).

Also of concern is the decline in the labor force participation rate (LFPR), defined as the percentage of the population ages 16 and older who are working or actively seeking employment. This is an important measure of economic health because it provides additional insight of the public's confidence in the economy. The LFPR for those ages 16 to 64 has declined slightly from 67.3 percent in 2008 to approximately 66.1 percent in 2017.

Key Indicators

When comparing the state of the Baltimore region today to 1998, it is important to note that each report captures data at a single point in time. The data in each report is fluid from year to year. None of it moved in an entirely linear fashion in the two intervening decades. Among the ebbs and flows are some major shifts that outpace or run contrary to national trends. These shifts relative to the peer regions provide critical insight into the Baltimore MSA and its development, strengths and future challenges.

Eighty indicators from the 20 region peer group, ranging from unemployment to quality of life measures, were studied. The Baltimore MSA achieved top-five rankings in 17 indicators, including median household income and per capita personal income growth,

but ranked among the bottom five in 12 categories, including population growth.

The Baltimore region posted one of the lowest rates of population growth over the study period but still ranks in the middle of the pack when compared to the peer regions.

Some highlights for the Baltimore MSA include the region's growth in total GDP and personal income, which increased by 95.5 percent and 51.5 percent, respectively. Both

rates of growth were among the best of all the peer regions. The single largest shift for the region was the increase in cost of living, where the region dropped from the 2nd most affordable to 14th among its peers.

A bright spot in the Baltimore region has been an increase in the educational attainment of the population. The percentage of the population with a college degree has increased by more than 50 percent since 1998, while the percentage of the population without a high school

diploma has decreased significantly. This improvement in educational attainment has strengthened the region at a time when employers, from manufacturing to service and retail, value and seek highly-skilled labor. The region has also seen gains in college enrollment, ranking 7th among peer regions for total college enrollment per capita.

While firms in the Baltimore region do encounter workforce challenges finding employees with the relevant education and skills, these challenges

Upward Change in Rank 2017 vs. 1998

Indicator	Rank
Black or African American Population	9 to 3
Asian, Hawaiian, or Other Pacific Islander Population	12 to 11
Median Age	14 to 13
Population Age 20–64	12 to 9
Population Density	5 to 4
Median Household Income	7 to 4
Per Capita Personal Income	10 to 4
GDP	11 to 10
Office Vacancy—Metro Area	12 to 8
CBD Office Lease Rates Class A	11 to 7
Women-Owned Firms with Paid Employees	8 to 6
Startup Density (2015 vs. 2017)	16 to 15
Annual Unemployment Rate	20 to 10
Labor Force Participation	12 to 10
Professional and Business Services as Percentage of Total Non-Farm Employment	16 to 10
College Education 25+	13 to 7
High School Education 25+	10 to 8
Total College Enrollment per 100,000 Population	9 to 7
Total Air Passengers	12 to 9
Average Air Fares	5 to 1
Travel Congestion: Annual Delay per Auto Commuter	13 to 10
Transit Ridership—Bus	7 to 5
Violent Crime	20 to 16
Property Crime	16 to 12
Total Government Units	4 to 3

Downward Change in Rank 2017 vs. 1998

Indicator	Rank
Metropolitan Population	9 to 12
White Population	9 to 18
Convention Center Size	11 to 12
Office Vacancy Rate—Downtown	7 to 17
Establishments with Payroll	11 to 13
Black or African American Owned Firms	5 to 6
Hispanic Owned Firms	12 to 14
Kauffman Index of Startup Activity (All Regions 2015 vs. 2017)	17 to 35
Total Non-Farm Employment	9 to 10
Financial Activities as Percentage of Total Non-Farm Employment	12 to 15
Wholesale and Retail Trade as Percentage of Total Non-Farm Employment	10 to 17
Trade, Transportation, and Utilities as Percentage of Total Non-Farm Employment	12 to 15
Government Employment as Percentage of Total Non-Farm Employment	4 to 5
Leisure and Hospitality as Percentage of Total Non-Farm Employment	11 to 17
Less than High School Education 25+	10 to 11
Workers 16 and Over Using Transit	4 to 6
Average Travel Time to Work	15 to 17
Roadway Miles per 1,000 Persons	14 to 18
Daily Vehicle Miles of Travel per Capita	8 to 11
Transit Ridership—Heavy and Light Rail	6 to 10
Cost of Living	2 to 14
Median Home Price	10 to 11
Home Ownership Rates	5 to 8
Cancer Hospitals in Top 40	3 to 6
Unhealthy Air Days	9 to 15

Rankings should not necessarily be interpreted as a strength or weakness, but merely where the region falls along a spectrum relative to its peers.

are largely tempered by a strong focus on science, technology, engineering, and math (STEM) education in primary and secondary schools and institutions of higher learning.

The State of Maryland also enjoys a comparative advantage in scientific research and development services, an industry where most jobs require a bachelor's degree or higher. This advantage stems from the presence of military installations, federal labs, agencies and contractors, which provide significant funding through government contracts. There are 2.7 times more people per capita employed in this industry sector in Maryland than nationwide, and the highest concentration of scientific research and development (R&D) employees in the state is found in the Baltimore MSA.

Development Opportunities

The Baltimore MSA's growth in highly-educated residents and its improved racial diversity and quality of life have put the region in a unique position to pursue economic development projects that have the potential to change the whole landscape of the city and region.

Port Covington, the 260-acre South Baltimore redevelopment site where Under Armour plans a new headquarters campus employing thousands of workers, holds great opportunities for the region. Port Covington will include a mix of office, retail and housing.

Another major economic opportunity for the region lies with Tradepoint Atlantic, along the waterfront in southeastern Baltimore County. The former location of the massive Bethlehem Steel operation is being redeveloped by privately-held Tradepoint Atlantic into a major



logistics and distribution center, employing an estimated 10,000 people in 10 years. Tradepoint Atlantic already has several tenants and recently inked a deal with Amazon for a major new distribution facility that will employ 1,500.

These two large redevelopment projects, along with others occurring along Baltimore's waterfront and the suburbs, hold the promise of generating thousands of new jobs and opportunities in the region. However, many may require needed educational credentials and workforce skills to match.

Challenges Ahead

There are many indicators in this year's report that suggest that the region is becoming more diverse and expensive at a faster pace than its peers. At the same time it is becoming wealthier and more educated.

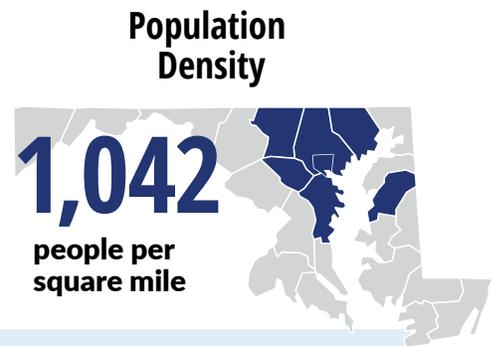
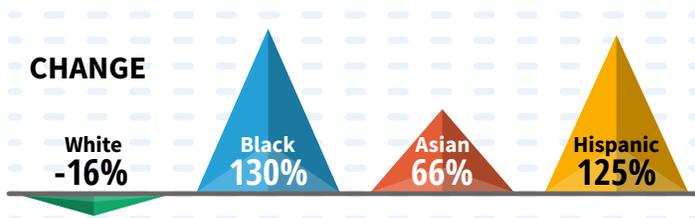
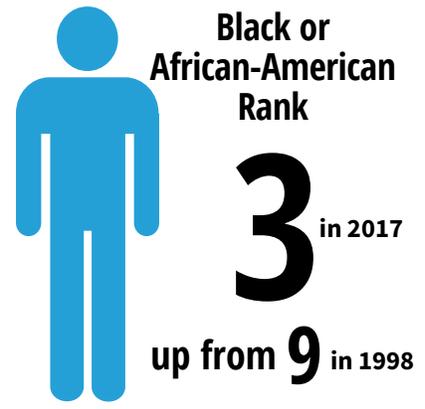
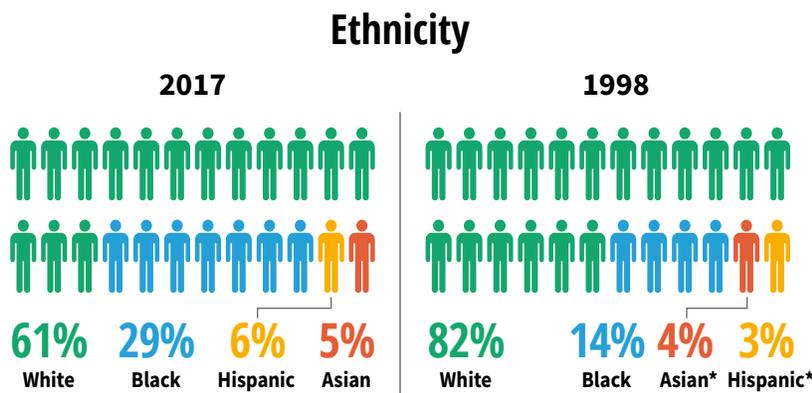
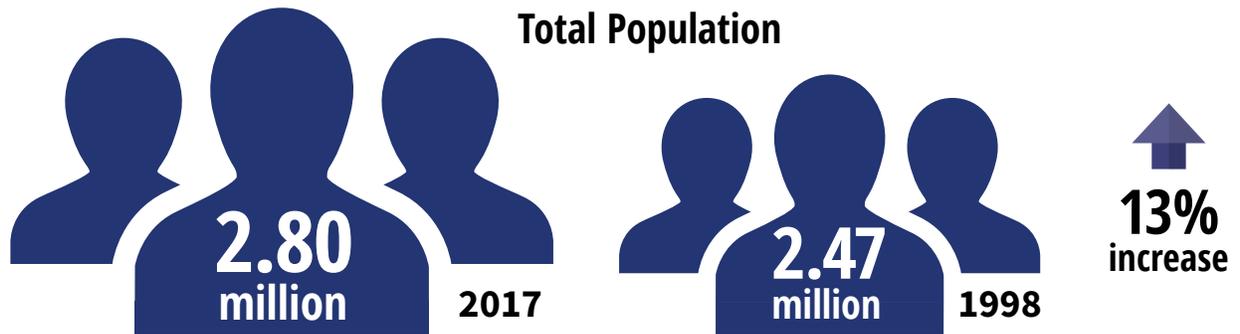
As the region advances, it will be crucial to track whether the increased personal wealth and educational attainment benefit everyone in this increasingly diverse region and what impact the rising cost of living has on those who struggle to meet the needs of a modern labor market that requires education and advanced skills.

On the whole, there are many positive trends in the region. If these trends act as a rising tide that lifts all boats, the next 20 year assessment should be positive across the board. It will be important that our regional elected officials and stakeholders take the necessary steps to ensure that our region provides opportunities that can be enjoyed by all. Failure to do so may result in the region confronting an entirely new set of issues including income inequality, increasing crime, and other socio-economic challenges.

Demographics



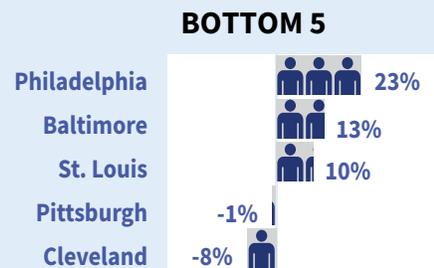
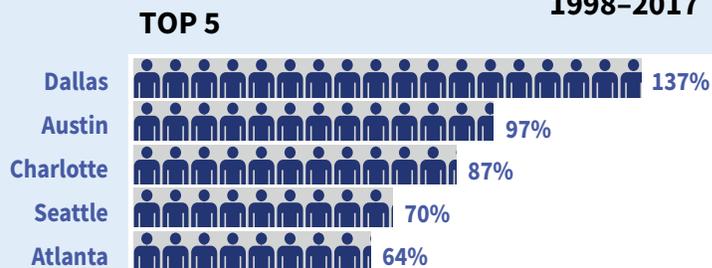
BALTIMORE



Note: Figures add up to more than 100 percent because individuals can select more than one ethnic category in the census. *Data from 2005

PEERS

Population Change 1998-2017



Demographics

In 20 years the population of the Baltimore region grew more than 13 percent to almost 2.8 million residents, but that growth lagged behind others in its peer group, such as Denver, Dallas and Seattle, which saw explosive growth between 1998 and 2017.

Among its 20 region peer group the Baltimore MSA landed as the 12th largest region—down from 9th in 1998.

The Dallas metro area led the regional group during the 20-year span with a staggering 137 percent rise in its population, which ballooned to more than 7 million residents.

The Baltimore area continued to be a densely populated area, placing 4th, up from 5th, in the peer group, with more than 1,000 people residing per square mile. The Boston MSA remained the most densely populated with 1,300 people per square mile.

As Baltimore's regional population numbers grew in the 20-year time period studied it also became more racially diverse. In fact, Maryland is steadily moving to become a majority-minority state, which is already the case in several jurisdictions.

It is worth noting that the White population saw large declines. In 1998 the Baltimore region was almost 82 percent White, ranking 9th for that racial group. But by 2017, Baltimore's White population had fallen to about 61 percent of the total, pushing the region to 18th among its peer group.

The African-American demographic group led the growth among minority groups in the Baltimore region, jumping to more than 29 percent of the total population, up from 14 percent in 1998. That growth pushed Baltimore to No. 3, up from No. 9, among the peer group for the percentage of African-American residents.

The Hispanic or Latino population also saw substantial gains in the Baltimore MSA, some likely driven by immigration.

In 1998, less than 3 percent of the population was Hispanic or Latino. By 2017 the region's total population had grown to about 6 percent Hispanic or Latino. But in terms of individual numbers, the Hispanic or Latino ethnic group increased more than 125 percent. That dramatic growth led the peer group and pushed Baltimore to

the No. 1 spot for Hispanic or Latino population growth. The Charlotte, N.C. and Richmond, VA. MSAs followed close behind that explosive growth.

The percentage of those aged 65 and older in the Baltimore MSA increased 3 points in the 20 year period to almost 15 percent of the total population. Meanwhile the percentage of those ages 20 to 64—which typically make up the bulk of the workforce—fell to 61 percent of the population, down from 64 percent.

The Austin region, with its booming tech sector and economy—now leads the nation for the percentage of residents in the 20 to 64 age range, while the Tampa–St. Petersburg region, a hot retirement market, had the fewest in that age demographic.





Metropolitan Population 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Dallas	1	7,232,599	5	3,047,983
Washington, DC	2	6,133,552	2	4,563,123
Philadelphia	3	6,070,500	1	4,952,929
Atlanta	4	5,790,210	3	3,541,230
Boston	5	4,794,447	4	3,263,060
Seattle	6	3,798,902	11	2,234,707
Minneapolis	7	3,551,036	6	2,765,116
San Diego	8	3,317,749	7	2,655,463
Tampa	9	3,032,171	13	2,199,231
Denver	10	2,853,077	14	1,866,978
St. Louis	11	2,807,954	8	2,548,238
Baltimore	12	2,798,886	9	2,474,118
Charlotte	13	2,474,314	17	1,321,068
Portland	14	2,425,325	15	1,758,937
Pittsburgh	15	2,342,299	10	2,361,019*
Austin	16	2,056,405	18	1,041,330
Cleveland	17	2,055,612	12	2,233,288
Indianapolis	18	2,001,737	16	1,492,297
Raleigh	19	1,302,946	19	1,025,253
Richmond	20	1,282,066	20	935,174

Sources: American Community Survey, 2016 Estimates. 1998: Bureau of the Census, March 1998. *Data from July 1, 1997.

Population Change 1998–2017

Region	Rank	Raw Percentage
Dallas	1	137.29%
Austin	2	97.48%
Charlotte	3	87.30%
Seattle	4	70.00%
Atlanta	5	63.51%
Denver	6	52.82%
Boston	7	46.93%
Tampa	8	37.87%
Portland	9	37.89%
Richmond	10	37.09%
Washington, DC	11	34.42%
Indianapolis	12	34.14%
Minneapolis	13	28.42%
Raleigh	14	27.09%
San Diego	15	24.94%
Philadelphia	16	22.56%
Baltimore	17	13.13%
St. Louis	18	10.19%
Pittsburgh	19	-0.79%*
Cleveland	20	-7.96%

Sources: American Community Survey, 2016 Estimates. 1998: Bureau of the Census, December 1997. *Data from July 1, 1997.

White Population 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Pittsburgh	1	86.78%	1	90.7%*
Portland	2	81.30%	3	87.8%
Denver	3	80.76%	10	79.1%
Minneapolis	4	79.10%	2	90.3%
Tampa	5	78.19%	8	82.6%
Austin	6	77.42%	19	64.5%
Indianapolis	7	76.71%	6	83.7%
Boston	8	76.58%	4	86.7%
St. Louis	9	76.09%	5	86.5%
Cleveland	10	73.39%	11	77.7%
San Diego	11	71.90%	20	61.9%
Dallas	12	69.22%	18	65.4%
Seattle	13	69.01%	7	82.9%
Raleigh	14	67.63%	15	70.2%
Charlotte	15	67.40%	12	75.8%
Philadelphia	16	66.83%	13	73.8%
Richmond	17	61.88%	16	67.5%
Baltimore	18	60.74%	9	81.7%
Washington, DC	19	53.95%	17	66.4%
Atlanta	20	53.61%	14	70.8%

Sources: American Community Survey, 2016 Estimates. 1998: U.S. Market Forecasts, 1997. *Data from 1996.

White Population Change 1998–2017

Region	Rank	Raw Percentage
Dallas	1	151.2%
Austin	2	137.0%
Charlotte	3	66.5%
Denver	4	56.0%
San Diego	5	45.1%
Seattle	6	41.5%
Tampa	7	30.5%
Boston	8	29.8%
Portland	9	27.7%
Richmond	10	25.7%
Atlanta	11	23.8%
Indianapolis	12	22.9%
Raleigh	13	22.4%
Minneapolis	14	12.5%
Philadelphia	15	11.0%
Washington, DC	16	9.2%
St. Louis	17	-3.1%
Pittsburgh	18	-5.1%*
Cleveland	19	-13.1%
Baltimore	20	-15.9%

Sources: American Community Survey, 2016 Estimates. 1998: U.S. Market Forecasts, 1997. *Data from 1996.



Black or African American Population 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Atlanta	1	34.03%	3	24.2%
Richmond	2	29.27%	1	28.9%
Baltimore	3	29.11%	9	14.3%
Washington, DC	4	25.42%	4	24.1%
Charlotte	5	22.56%	5	21.2%
Philadelphia	6	20.77%	6	18.5%
Raleigh	7	20.08%	2	25.5%
Cleveland	8	19.79%	7	17.8%
St. Louis	9	18.17%	11	10.9%
Dallas	10	15.42%	8	14.4%
Indianapolis	11	15.03%	10	13.8%
Tampa	12	11.99%	12	9.0%
Boston	13	8.16%	17	4.6%
Minneapolis	14	8.09%	19	3.7%
Pittsburgh	15	8.01%	14	8.3%*
Austin	16	7.21%	13	8.6%
Denver	17	5.84%	16	5.4%
Seattle	18	5.55%	18	4.2%
San Diego	19	5.00%	15	5.8%
Portland	20	2.87%	20	2.8%

Sources: American Community Survey, 2016 Estimates. 1998: US Market Forecasts, 1997. *Data from 1996.

Black or African American Population Change 1998–2017

Region	Rank	Raw Percentage
Minneapolis	1	180.91%
Boston	2	160.80%
Dallas	3	154.16%
Baltimore	4	130.32%
Atlanta	5	129.91%
Seattle	6	124.77%
Charlotte	7	99.33%
St. Louis	8	83.69%
Tampa	9	83.68%
Austin	10	65.54%
Denver	11	65.16%
Indianapolis	12	46.09%
Washington, DC	13	41.80%
Portland	14	41.52%
Richmond	15	38.86%
Philadelphia	16	37.60%
San Diego	17	7.70%
Cleveland	18	2.34%
Raleigh	19	0.07%
Pittsburgh	20	-4.00%*

Sources: American Community Survey, 2016 Estimates. 1998: US Market Forecasts, 1997. *Data from 1996.

Asian, Hawaiian, or Other Pacific Islander Population 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Seattle	1	13.90%	1	11.08%
San Diego	2	12.17%	2	10.93%
Washington, DC	3	10.12%	3	8.37%
Boston	4	7.83%	4	5.76%
Portland	5	6.95%	5	5.75%
Dallas	6	6.63%	7	4.69%
Minneapolis	7	6.43%	6	5.16%
Philadelphia	8	5.89%	9	4.19%
Atlanta	9	5.76%	10	4.08%
Austin	10	5.75%	8	4.37%
Baltimore	11	5.46%	12	3.56%
Raleigh	12	5.41%	11	3.76%
Denver	13	4.34%	13	3.47%
Richmond	14	3.92%	16	2.55%
Charlotte	15	3.56%	15	2.58%
Tampa	16	3.47%	14	2.58%
Indianapolis	17	3.00%	19	1.73%
St. Louis	18	2.56%	17	1.76%
Pittsburgh	19	2.29%	20	1.34%
Cleveland	20	2.14%	18	1.76%

Sources: American Community Survey, 2016 Estimates. American Community Survey, 2005.

Asian, Hawaiian, or Other Pacific Islander Population Change 1998–2017

Region	Rank	Raw Percentage
Charlotte	1	128.94%
Indianapolis	2	115.40%
Raleigh	3	102.94%
Austin	4	92.26%
Dallas	5	78.47%
Richmond	6	74.32%
Pittsburgh	7	73.10%
Atlanta	8	69.44%
Baltimore	9	66.29%
Tampa	10	57.10%
Denver	11	53.39%
Boston	12	52.74%
Seattle	13	52.19%
Philadelphia	14	51.02%
St. Louis	15	49.85%
Washington, DC	16	44.77%
Minneapolis	17	43.90%
Portland	18	42.08%
San Diego	19	30.81%
Cleveland	20	19.97%

Sources: American Community Survey, 2016 Estimates. American Community Survey, 2005.



Hispanic or Latino Population 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
San Diego	1	33.53%	1	29.88%
Austin	2	32.21%	2	29.12%
Dallas	3	28.55%	3	25.84%
Denver	4	22.91%	4	21.71%
Tampa	5	18.64%	5	13.17%
Washington, DC	6	15.46%	6	11.28%
Portland	7	11.73%	7	9.35%
Boston	8	10.82%	11	7.51%
Atlanta	9	10.53%	8	8.67%
Raleigh	10	10.42%	9	7.91%
Charlotte	11	9.93%	10	7.55%
Seattle	12	9.85%	12	6.65%
Philadelphia	13	9.22%	13	6.01%
Indianapolis	14	6.62%	15	4.04%
Richmond	15	5.89%	17	3.20%
Minneapolis	16	5.75%	14	4.28%
Cleveland	17	5.64%	16	3.82%
Baltimore	18	5.62%	18	2.70%
St. Louis	19	2.96%	19	1.83%
Pittsburgh	20	1.69%	20	0.85%

Sources: American Community Survey, 2016 Estimates. American Community Survey, 2005, Sex by Age (Hispanic or Latino).

Hispanic or Latino Population Change* 2005–2016

Region	Rank	Raw Percentage
Baltimore	1	125.20%
Charlotte	2	118.19%
Richmond	3	108.31%
Indianapolis	4	103.81%
Pittsburgh	5	102.07%
Raleigh	6	85.79%
Seattle	7	79.48%
St. Louis	8	66.53%
Tampa	9	65.32%
Philadelphia	10	64.88%
Washington, DC	11	64.24%
Austin	12	61.74%
Boston	13	61.62%
Minneapolis	14	54.99%
Portland	15	47.40%
Cleveland	16	45.83%
Atlanta	17	45.55%
Dallas	18	39.55%
San Diego	19	31.81%
Denver	20	29.36%

Sources: American Community Survey, 2016 Estimates. American Community Survey, 2005, Sex by Age (Hispanic or Latino). *Based on actual numbers.





Median Age 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Austin	1	34.4	1	31.1
Dallas	2	34.8	2	32.1
San Diego	3	35.7	3	32.6
Atlanta	4	36.2	4	33.1
Indianapolis	5	36.3	9	34.4
Raleigh	6	36.4	6	33.5
Denver	7	36.5	8	34.4
Minneapolis	8	36.9	5	33.2
Washington, DC	9	36.9	7	34.3
Seattle	10	37.1	12	35.1
Charlotte	11	37.4	10	34.7
Portland	12	37.8	16	35.6
Baltimore	13	38.3	14	35.3
Philadelphia	14	38.6	18	35.8
Boston	15	38.8	15	35.5
Richmond	16	39.0	13	35.1
St. Louis	17	39.2	11	35.0
Cleveland	18	41.2	19	36.5
Tampa	19	42.3	20	40.6
Pittsburgh	20	43.1	na	na

Sources: American Community Survey, 2016 Estimates. 1998: Sales and Marketing Management, Survey of Buying Power, 1997.

Population Age 65 and Older 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Austin	1	10.24%	1	7.8%
Dallas	2	10.81%	3	8.1%
Raleigh	3	11.21%	6	9.5%
Atlanta	4	11.56%	2	7.9%
Washington, DC	5	12.16%	4	8.6%
Denver	6	12.27%	5	9.1%
Seattle	7	12.88%	8	10.6%
Charlotte	8	12.95%	9	10.9%
Indianapolis	9	13.01%	12	11.3%
Minneapolis	10	13.10%	7	9.7%
San Diego	11	13.44%	10	11.0%
Portland	12	14.09%	14	11.9%
Baltimore	13	14.74%	13	11.6%
Richmond	14	14.88%	11	11.0%
Boston	15	14.99%	15	12.7%
Philadelphia	16	15.18%	17	13.4%
St. Louis	17	15.58%	16	12.8%
Cleveland	18	17.38%	18	14.1%
Pittsburgh	19	19.08%	19	17.7%
Tampa	20	19.30%	20	21.7%

Sources: American Community Survey, 2016 Estimates. 1998: Boston information based on NECMA data. US Market Forecasts, 1997.

Population Age 20–64 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Austin	1	63.4%	3	66.5%
Seattle	2	63.1%	5	65.4%
Denver	3	62.3%	6	64.7%
Washington, DC	4	62.2%	2	67.5%
San Diego	5	61.9%	8	64.6%
Boston	6	61.8%	9	64.4%
Portland	7	61.7%	15	62.2%
Raleigh	8	61.3%	1	67.7%
Baltimore	9	60.8%	12	64.3%
Atlanta	10	60.8%	4	66.0%
Minneapolis	11	60.7%	13	63.7%
Richmond	12	60.5%	9	64.4%
Charlotte	13	60.2%	9	64.4%
Philadelphia	14	60.2%	16	62.1%
Dallas	15	60.1%	6	64.7%
Indianapolis	16	59.6%	14	62.4%
St. Louis	17	59.5%	18	60.8%
Pittsburgh	18	59.3%	na	na
Cleveland	19	58.7%	17	60.8%
Tampa	20	58.2%	19	57.9%

1998 data is for ages 18–64.
Source: American Community Survey, 2016 Estimates.

Population Density (population per square mile) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Boston	1	1,305.4	1	1,630.9
Philadelphia	2	1,296.2	2	1,380.5
Tampa	3	1,107.3	6	809.5
Baltimore	4	1,041.9	5	913.0
Cleveland	5	1,040.0	3	1,210.9
Washington, DC	6	997.1	4	989.1
San Diego	7	735.8	8	594.1
Dallas	8	713.7	9	571.1
Atlanta	9	631.9	10	553.3
Seattle	10	585.8	12	467.9
Charlotte	11	569.8	17	344.0
Minneapolis	12	544.2	11	487.8
Raleigh	13	533.7	16	364.8
Indianapolis	14	455.6	15	407.0
Pittsburgh	15	446.1	7	604.9
Austin	16	406.7	20	280.0
Portland	17	333.0	18	331.2
St. Louis	18	326.2	13	458.5
Denver	19	304.8	14	431.5
Richmond	20	221.3	19	294.0

Sources: 2017: Bureau of the Census, 2010. 1998: Bureau of the Census, 1990 Census.

Economy



BALTIMORE

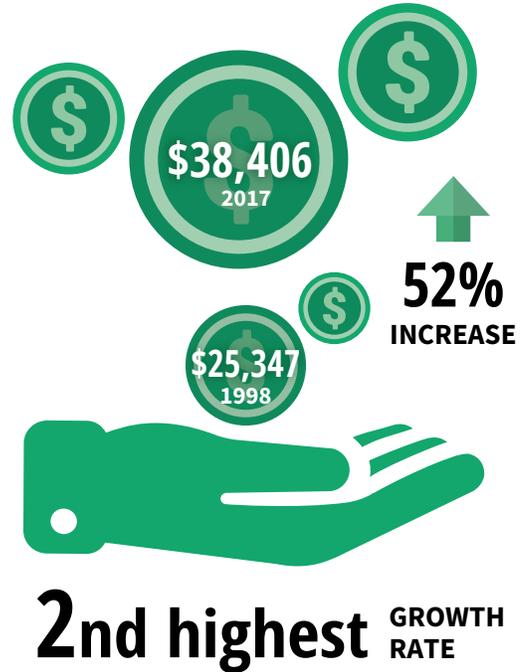
Median Household Income



100%
 INCREASE

3rd highest
 GROWTH RATE

Per Capita Personal Income



PEERS

Office Vacancy Rate Downtown

5 HIGHEST VACANCY RATES—2017

Dallas		21.9%
Cleveland		20.9%
St. Louis		20.3%
Baltimore		17.7%
Minneapolis		16.9%

5 HIGHEST VACANCY RATES—1998

Dallas		31.4%
San Diego		18.3%
Indianapolis		17.7%
Cleveland		16.9%
Atlanta		16.9%

Economy

From 1998 to 2017, the Baltimore region experienced an economic transition that echoed technological advances and market changes seen in the national economy. These market changes included a transition from a manufacturing-based economy to a knowledge-based economy.

With a GDP of \$187.4 billion, the Baltimore region's economy advanced to 10th place in 2017 among the 20 metro areas studied. The GDP of the Baltimore MSA represents almost half of Maryland's GDP, which stood at \$378.3 billion in the same year, according to the U.S. Bureau of Economic Analysis. Driven largely by growth in the number of jobs created in the region—many of them higher-paying jobs—rather than an increase in population, the Baltimore region experienced a 95.5 percent increase in GDP in the last two decades.

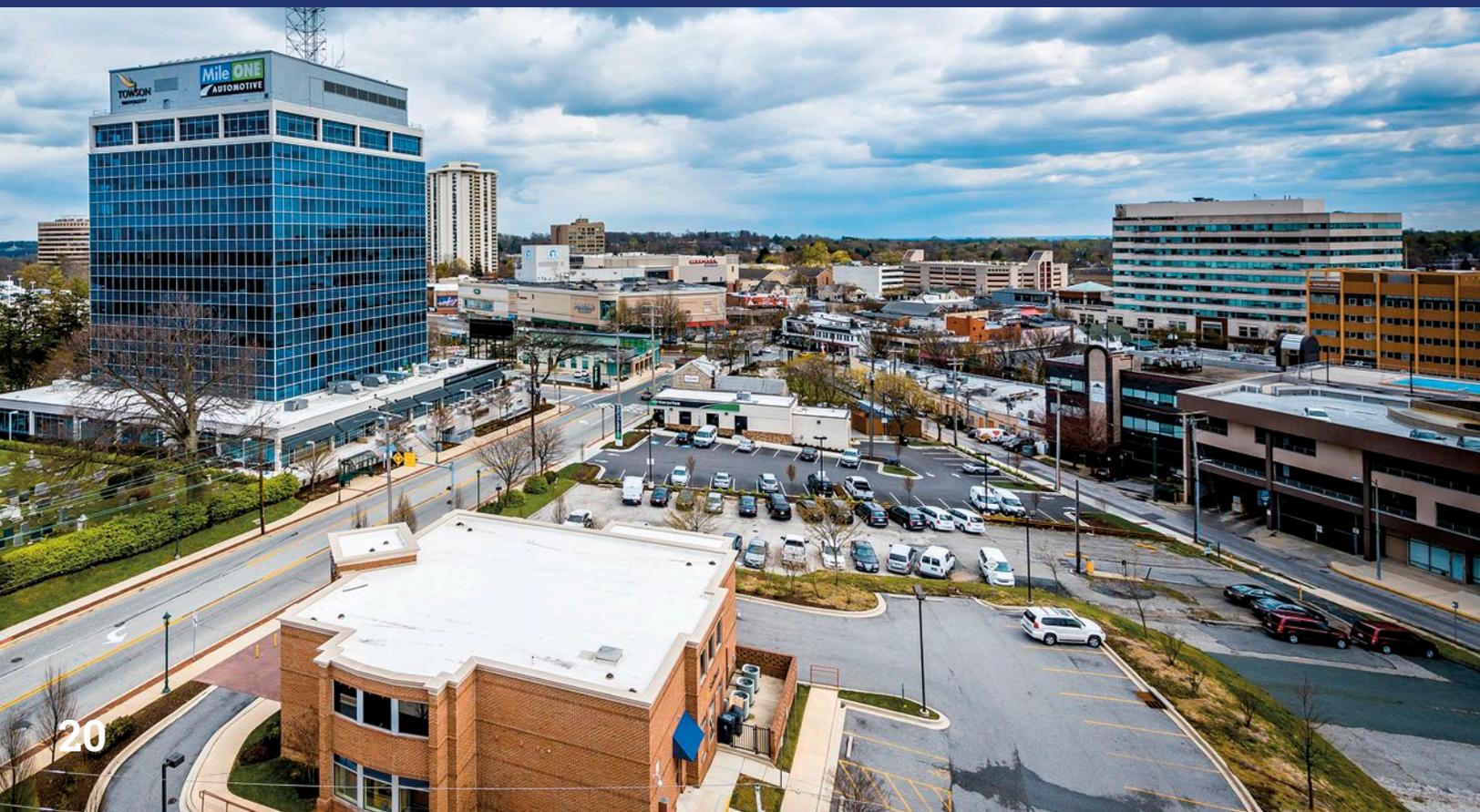
Neighbors to the south in the Greater Washington region also saw a significant increase in GDP largely attributable to job growth. In contrast, the Austin MSA, with the largest relative growth in its economy among the 20 peer regions, attributes some of the spike to population increases.

In spite of the increase in skilled employment opportunities, the rise of new suburban office parks, as well as a shift away from traditional office spaces has resulted in increases in commercial office vacancies, especially in downtown Baltimore. The Baltimore MSA's office market ranked 9th in size among the 20 MSA's in 2017. However, the downtown district in the Baltimore MSA saw a 120 percent increase in vacancy rates over the same time period. Today downtown Baltimore

has the 4th highest office vacancy among its peers.

The Baltimore region saw significant income gains over the last 20 years. Median household income in the region doubled since 1998, from \$38,361 to \$76,788. This is the 3rd highest rate of growth among its peers.

Only the Austin and San Diego regions fared better during this time period. The Baltimore region's per capita income, which measures the income per person as opposed to per household, was \$38,406 in 2017, the 4th highest among the peer regions. Over the last two decades, the Baltimore region saw the second highest rate of growth in per capita income while the Austin region ranked 1st.





Median Household Income 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Washington, DC	1	\$95,843	1	\$48,241
Boston	2	\$82,380	3	\$43,450
Seattle	3	\$78,612	2	\$43,934
Baltimore	4	\$76,788	7	\$38,361
Minneapolis	5	\$73,231	5	\$40,696
Denver	6	\$71,926	11	\$36,606
Raleigh	7	\$71,685	12	\$36,453
Austin	8	\$71,000	18	\$34,444
San Diego	9	\$70,824	17	\$34,445
Portland	10	\$68,676	13	\$35,325
Philadelphia	11	\$65,996	4	\$41,192
Dallas	12	\$63,812	6	\$39,072
Richmond	13	\$62,929	14	\$35,133
Atlanta	14	\$62,613	8	\$37,976
Charlotte	15	\$59,979	15	\$34,876
St. Louis	16	\$59,780	9	\$37,415
Indianapolis	17	\$56,750	10	\$37,379
Pittsburgh	18	\$56,063	na	na
Cleveland	19	\$52,131	16	\$34,506
Tampa	20	\$51,115	20	\$29,922

Sources: American Community Survey, 2016 1-year Estimate. 1998: Sales and Marketing Management, Survey of Buying Power, 1997.

Median Household Income Change 1998–2017

Region	Rank	Raw Percentage
Austin	1	106.13%
San Diego	2	105.61%
Baltimore	3	100.17%
Washington, DC	4	98.68%
Raleigh	5	96.65%
Denver	6	96.49%
Portland	7	94.41%
Boston	8	89.60%
Minneapolis	9	79.95%
Richmond	10	79.12%
Seattle	11	78.93%
Charlotte	12	71.98%
Tampa	13	70.83%
Atlanta	14	64.88%
Dallas	15	63.32%
Philadelphia	16	60.22%
St. Louis	17	59.78%
Indianapolis	18	51.82%
Cleveland	19	51.08%
Pittsburgh	na	na

Sources: American Community Survey, 2016 1-year Estimate. 1998: Sales and Marketing Management, Survey of Buying Power, 1997.

Per Capita Personal Income 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Washington, DC	1	\$45,545	1	\$30,924
Boston	2	\$43,044	3	\$28,564
Seattle	3	\$41,584	2	\$28,773
Baltimore	4	\$38,406	10	\$25,347
Denver	5	\$38,106	5	\$27,069
Minneapolis	6	\$37,765	4	\$27,436
Austin	7	\$36,708	20	\$22,185
Raleigh	8	\$35,661	13	\$24,675
Philadelphia	9	\$35,292	6	\$26,959
Portland	10	\$35,290	15	\$24,553
San Diego	11	\$34,328	17	\$23,263
Richmond	12	\$34,250	8	\$25,851
St. Louis	13	\$33,160	12	\$25,170
Pittsburgh	14	\$32,582	18	\$22,751*
Dallas	15	\$32,156	7	\$26,803
Atlanta	16	\$32,055	9	\$25,563
Charlotte	17	\$31,733	16	\$24,022
Cleveland	18	\$31,321	11	\$25,303
Indianapolis	19	\$31,186	14	\$24,664
Tampa	20	\$29,616	19	\$22,646

Sources: American Community Survey, 2016 1-year Estimate. US Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis. *Data from 1996.

Per Capita Personal Income Change 1998–2017

Region	Rank	Raw Percentage
Austin	1	65.46%
Baltimore	2	51.52%
Boston	3	50.69%
San Diego	4	47.56%
Washington, DC	5	47.28%
Raleigh	6	44.52%
Seattle	6	44.52%
Portland	8	43.73%
Pittsburgh	9	43.21%*
Denver	10	40.77%
Minneapolis	11	37.65%
Richmond	12	32.49%
Charlotte	13	32.10%
St. Louis	14	31.74%
Philadelphia	15	30.91%
Tampa	16	30.78%
Indianapolis	17	26.44%
Atlanta	18	25.40%
Cleveland	19	23.78%
Dallas	20	19.97%

Source: American Community Survey, 2016 1-year Estimate. *Data from 1996.



Retail Sales (thousands) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Dallas	1	\$97,494,678	2	\$62,298,014
Philadelphia	2	\$85,570,297	1	\$67,476,234
Seattle	3	\$80,843,313	7	\$37,994,312
Washington, DC	4	\$74,306,705	3	\$55,882,147
Atlanta	5	\$69,477,912	5	\$52,509,412
Boston	6	\$67,308,112	4	\$53,092,482
Minneapolis	7	\$51,537,072	6	\$38,699,748
St. Louis	8	\$44,947,430	10	\$30,087,571
Tampa	9	\$39,880,016	9	\$30,089,543
San Diego	10	\$39,786,069	8	\$31,586,056
Baltimore	11	\$36,505,448	11	\$28,316,554
Denver	12	\$35,076,012	12	\$27,988,644
Pittsburgh	13	\$34,250,092	13	\$25,138,463
Charlotte	14	\$29,996,779	18	\$17,091,039
Portland	15	\$29,004,377	15	\$21,750,097
Indianapolis	16	\$28,311,295	17	\$19,132,257
Austin	17	\$27,852,908	16	\$21,024,158
Cleveland	18	\$25,943,889	14	\$23,714,767
Richmond	19	\$16,923,048	19	\$12,657,431
Raleigh	20	\$16,847,255	20	\$11,145,427

Sources: 2017: Economic Census, US Census Bureau, 2012. 1998: Economic Census, US Census Bureau, 2002.



GDP Change (percentage) 1998-2017

Region	Rank	Raw Percentage
Austin	1	152.4%
Raleigh	2	120.9%
Portland	3	113.1%
Seattle	4	112.2%
Charlotte	5	102.4%
Dallas	6	100.6%
Baltimore	7	95.5%
Washington, DC	8	92.5%
San Diego	9	91.5%
Indianapolis	10	90.6%
Tampa	11	84.4%
Boston	12	83.2%
Denver	13	81.4%
Atlanta	14	79.4%
Philadelphia	15	78.2%
Richmond	16	74.4%
Minneapolis	17	72.8%
St. Louis	18	63.7%
Pittsburgh	19	60.4%
Cleveland	20	54.2%

Sources: BEA, GDP by Metro Area, 2016. BEA, GDP by Metro Area, 2001.

GDP (millions) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Dallas	1	\$511,606	2	\$255,038
Washington, DC	2	\$509,224	1	\$264,478
Philadelphia	3	\$431,038	3	\$241,831
Boston	4	\$422,660	4	\$230,658
Atlanta	5	\$363,768	5	\$202,783
Seattle	6	\$330,409	6	\$155,695
Minneapolis	7	\$246,689	7	\$142,733
San Diego	8	\$215,343	8	\$112,435
Denver	9	\$197,969	9	\$109,152
Baltimore	10	\$187,395	11	\$95,869
Portland	11	\$164,466	16	\$77,181
Charlotte	12	\$163,637	14	\$80,839
St. Louis	13	\$159,888	10	\$97,659
Tampa	14	\$142,633	15	\$77,330
Pittsburgh	15	\$138,187	12	\$86,131
Indianapolis	16	\$135,444	17	\$71,062
Austin	17	\$135,010	18	\$53,497
Cleveland	18	\$129,440	13	\$83,939
Richmond	19	\$80,702	19	\$46,285
Raleigh	20	\$79,843	20	\$36,141

Sources: BEA, GDP by Metro Area, 2016. 1998: BEA, GDP by Metro Area, 2001.



Convention Center Size (square feet) 1998* – 2017**

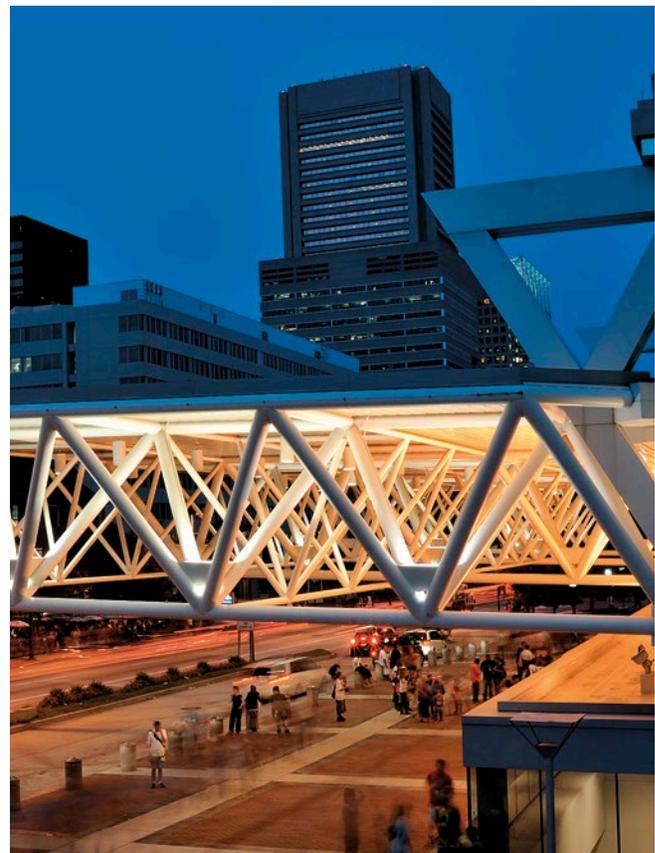
Region	Facility	2017 Rank	2017 Raw Number**	1998 Rank	1998 Raw Number*
Atlanta	Georgia World Congress Center	1	1,400,000	1	1,450,000
Cleveland	International Exposition Center	2	1,050,000	2	902,000
Dallas	Kay Bailey Hutchinson Convention Center	3	1,018,942	3	800,000
Indianapolis	Indiana Convention Center & Lucas Oil Stadium	4	749,100	10	430,000
Washington, DC	Walter E. Washington Convention Center	5	703,000	4	727,400
Philadelphia	Pennsylvania Convention Center	6	679,000	9	440,000
San Diego	San Diego Convention Center	7	615,701	6	526,000
Denver	Colorado Convention Center	8	584,000	5	601,500
Boston	Boston Convention Center	9	516,000	13	198,000
St. Louis	America's Center	10	502,000	7	502,000
Minneapolis	Minneapolis Convention Center	11	475,000	12	280,000
Baltimore	Baltimore Convention Center	12	300,000	11	300,000
Charlotte	Charlotte Convention Center	13	280,000	8	478,000
Portland	Oregon Convention Center	14	255,000	14	150,000
Austin	Austin Convention Center	15	247,052	15	126,000
Pittsburgh	David L. Lawrence Convention Center	16	236,900	na	na
Seattle	Washington State Convention Center	17	205,700	16	102,000
Tampa	Tampa Convention Center	18	200,000	na	na
Richmond	Greater Richmond Convention Center	19	178,159	na	na
Raleigh	Raleigh Convention Center	20	150,000	na	na

Sources: Baltimore Area Convention and Visitors Association, 1998. Trade Show Executive Magazine, September 2013 http://www.tradeshowexecutive.com/pdf/convcenters/TSX-ConvCenters_2013-09.pdf; and individual convention center websites, 2017. *1998: Total Facility Size. **2017: Exhibit Space Size.

Rank of Office Market Size 2017

Region	2017 Rank	2017 Raw Number
Washington, DC	1	327,925,737
Dallas	2	175,458,239
Boston	3	166,843,976
Atlanta	4	134,482,992
Philadelphia	5	133,719,042
Denver	6	109,701,857
Seattle	7	97,410,327
San Diego	8	78,152,884
Baltimore	9	72,363,073
Minneapolis	10	69,634,043
Portland	11	59,980,293
Austin	12	51,290,468
Pittsburgh	13	50,984,591
Charlotte	14	47,981,322
Raleigh	15	47,335,503
St. Louis	16	42,493,994
Tampa	17	34,983,805
Indianapolis	18	32,343,840
Cleveland	19	28,240,930
Richmond	20	24,417,004

Sources: 2017: Jones Lang LaSalle, IP, Inc, Q2 2017.





Office Vacancy—Metro Area 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Indianapolis	1	7.0%	16	13.0%
Raleigh	2	9.6%	na	na
Austin	3	10.3%	4	6.1%
Seattle	4	10.4%	1	5.0%
Portland	5	10.5%	2	5.1%
St. Louis	6	11.2%	10	9.1%
Boston	7	11.9%	5	6.3%
Baltimore	8	12.5%	12	9.7%
San Diego	9	13.0%	13	10.5%
Philadelphia	10	14.4%	14	10.9%
Denver	11	15.1%	8	8.4%
Washington, DC	12	16.2%	7	7.2%
Pittsburgh	13	16.3%	na	na
Cleveland	14	16.4%	15	12.7%
Atlanta	15	17.2%	11	9.5%
Dallas	16	19.25%	17	14.0%
Charlotte	na	na	6	7.2%
Minneapolis	na	na	3	5.7%
Richmond	na	na	na	na
Tampa	na	na	9	8.9%

Sources: 2017: Newmark Knight Frank US Market Reports. 1998: CB Commercial, December 1997.

Office Vacancy Rate—Downtown 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Charlotte	1	8.3%	3	4.8%
Raleigh	2	8.9%	11	13.2%
Seattle	3	9.0%	4	5.9%
Boston	4	9.3%	2	3.7%
Portland	5	9.4%	6	7.3%
Washington, DC	6	10.1%	8	9.6%
Philadelphia	7	11.0%	13	15.3%
Austin	8	11.4%	9	10.4%
San Diego	9	11.5%	18	18.3%
Tampa	10	12.8%	12	14.7%
Pittsburgh	11	14.5%	na	na
Indianapolis	12	15.1%	17	17.7%
Richmond	13	15.2%	na	na
Denver	14	15.6%	10	10.5%
Atlanta	15	16.7%	15	16.9%
Minneapolis	16	16.9%	5	6.9%
Baltimore	17	17.7%	7	8.0%
St. Louis	18	20.3%	14	16.8%
Cleveland	19	20.9%	16	16.9%
Dallas	20	21.9%	21	31.4%

Sources: 2017: Jones Lang LaSalle, IP, Inc, Q2 2017. 1998: CB Commercial, December 1997.

Change in Office Vacancy Rate—Metro Area 2017 vs. 1998

Region	Rank	Raw Percentage
Washington, DC	1	125.0%
Seattle	2	108.0%
Portland	3	105.9%
Boston	4	88.9%
Atlanta	5	81.1%
Denver	6	79.8%
Austin	7	68.9%
Dallas	8	37.1%
Philadelphia	9	32.1%
Cleveland	10	29.1%
Baltimore	11	28.9%
San Diego	12	23.8%
St. Louis	13	23.1%
Indianapolis	14	-46.2%
Minneapolis	na	na
Pittsburgh	na	na
Raleigh	na	na
Richmond	na	na
Tampa	na	na
Charlotte	na	na

Sources: 2017: Newmark Knight Frank US Market Reports. 1998: CB Commercial, December 1997.

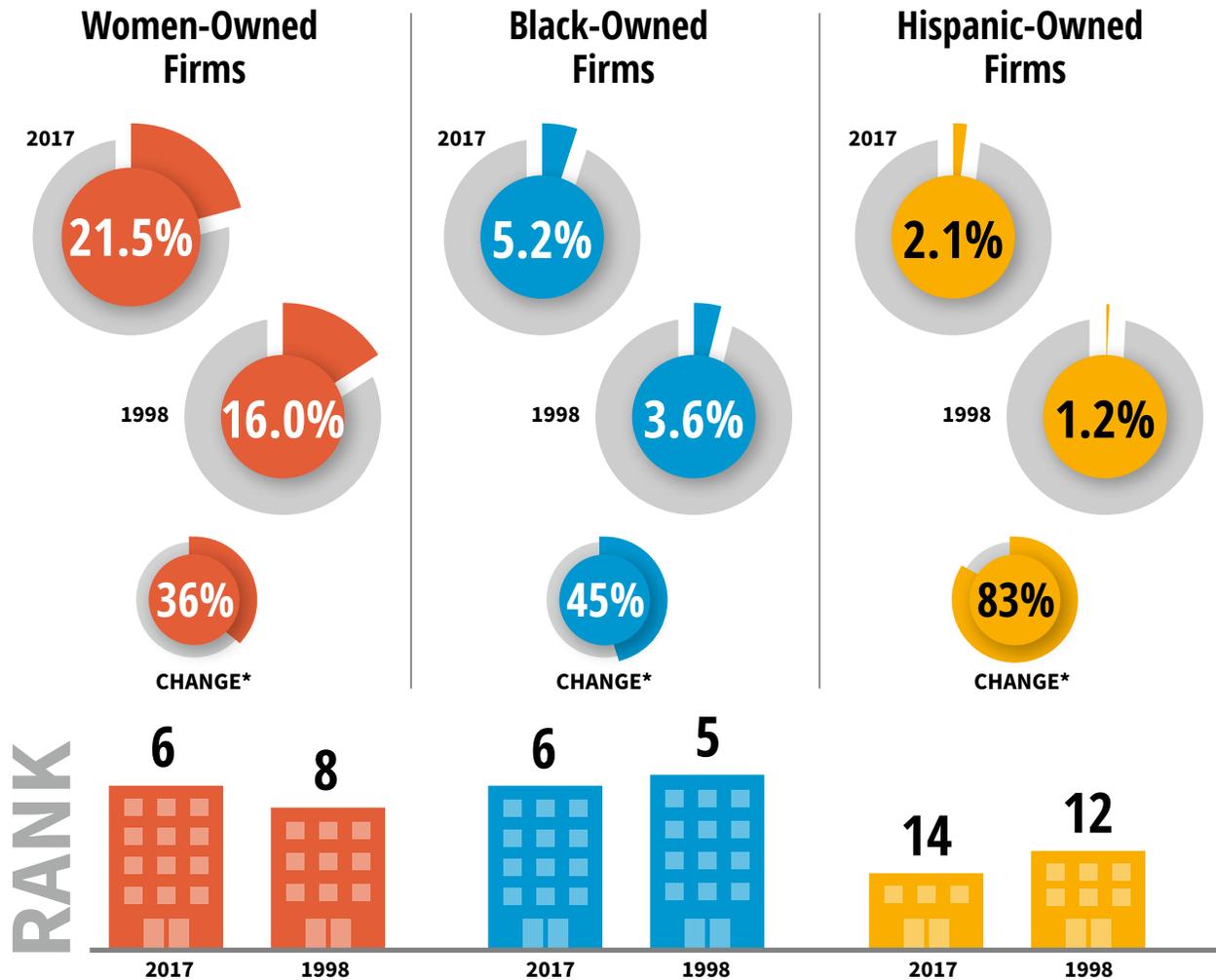
CBD Office Lease Rates Class A (per square foot) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Cleveland	1	\$19.18	10	\$21.95
St. Louis	2	\$19.30	7	\$20.16
Richmond	3	\$19.31	na	na
Indianapolis	4	\$20.13	1	\$16.91
Raleigh	5	\$21.88	2	\$17.40
Pittsburgh	6	\$23.05	na	na
Baltimore	7	\$24.00	11	\$23.05
Tampa	8	\$24.17	4	\$18.50
Atlanta	9	\$24.46	14	\$24.42
Charlotte	10	\$24.74	9	\$21.60
Minneapolis	11	\$26.24	17	\$28.88
Philadelphia	12	\$26.26	15	\$24.67
Dallas	13	\$26.61	6	\$19.90
Denver	14	\$28.21	5	\$18.92
Portland	15	\$28.31	12	\$23.29
San Diego	16	\$32.16	8	\$20.81
Seattle	17	\$35.60	16	\$26.22
Boston	18	\$36.52	19	\$36.78
Austin	19	\$37.34	13	\$23.67
Washington, DC	20	\$38.48	18	\$35.13

Sources: 2017: Jones Lang LaSalle, IP, Inc, Q2 2017. 1998: CB Commercial, December 1997.



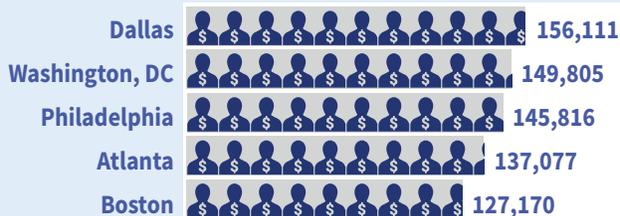
BALTIMORE



PEERS

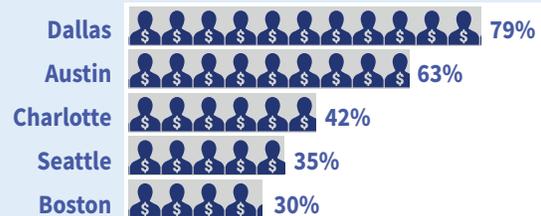
Establishments with Payroll

TOP 5—2017



Change in Establishments with Payroll

TOP 5—1998-2017



*Percentage changes reflected are based on raw numbers.

Business

The number of business operations grew in the Baltimore MSA between 1998 and 2017 and minority ownership improved as well, with a healthy 36 percent jump in the number of women-owned firms.

Despite these gains, the Baltimore region lagged behind other peer cities in business growth, particularly Dallas–Fort Worth.

The Dallas metro region saw explosive business growth with more than 68,000 new operations forming, propelling it to 1st place in the rankings in 2017 for the number of establishments with payroll, up from 5th in 1998. Corporate relocations, the energy industry, and small businesses contributed to that growth.

Despite a gain of nearly 5,000 establishments with payroll in the 20 year period and Baltimore continuing its status as one of the economic engines of the state, the Baltimore MSA fell back in the national peer rankings, from 11th to 13th in total businesses.

The nearby Washington, D.C.–Northern Virginia metro area, with its large contingency of federal government institutions, also slipped. It was bumped from 1st to 2nd place, despite a gain of more than 25,000 establishments with payroll.

On the plus side, the Baltimore metro region saw gains in the diversity of business ownership, specifically among women, African-Americans and Hispanics.

Regional economic experts believe expanded federal government



and institutional contracting opportunities, along with new programs to support minority ownership, contributed to the growth in business ownership diversity in the MSA. The Hispanic population in the area also saw a large increase, likely fueling business ownership in that demographic group.

The number of women-owned firms in the region grew to about 21 percent of the total number of employers in 2017, up from just under 16 percent in 1998. That growth helped the Baltimore MSA move up two notches to the 6th position for women-owned firms with employees.

However, other peer cities saw stronger growth in women business ownership during the 20 year span, including Atlanta, St. Louis and Portland.

Atlanta, for example, moved up to 3rd place from 9th. Meanwhile the St. Louis MSA—a metro area with approximately the same population as the Baltimore MSA—jumped

from 7th to 2nd. The Portland metro area saw a big boom in women-owned firms, jumping from 10th in 1998 to 5th place in 2017.

The Hispanic population in the Baltimore region also saw a large increase, likely fueling business ownership in that demographic group. However this did not keep pace with similar business formation in other peer cities. As a result, the region dropped to 14th from 12th in the percentage of Hispanic-owned operations.

The Baltimore region also saw growth in the number of African-American owned firms. But the St. Louis, MO metro area saw slightly stronger growth, pushing Baltimore out of the 5th place ranking to 6th among the peer group.

The Portland region, which showed robust growth in women and Hispanic ownership in the same period, tumbled to last place for African-American business ownership.



Establishments with Payroll 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Dallas	1	156,111	5	87,356
Washington, DC	2	149,805	1	124,335
Philadelphia	3	145,816	2	123,490
Atlanta	4	137,077	3	108,111
Boston	5	127,170	4	98,202
Seattle	6	101,754	7	75,150
Minneapolis	7	94,806	6	81,314
San Diego	8	81,710	9	64,413
Denver	9	80,560	10	63,068
St. Louis	10	75,922	8	66,394
Tampa	11	74,726	12	60,694
Portland	12	66,947	15	55,436
Baltimore	13	66,489	11	61,736
Pittsburgh	14	59,858	14	59,279
Charlotte	15	57,660	17	40,611
Cleveland	16	51,551	13	59,334
Austin	17	48,893	19	30,029
Indianapolis	18	45,981	16	41,537
Raleigh	19	31,493	18	31,893
Richmond	20	31,020	20	26,717

Sources: 2017: County Business Patterns, 2015. 1998: County Business Patterns, 1998.

Change in Establishments with Payroll 1998–2017

Region	Rank	Raw Percentage
Dallas	1	78.71%
Austin	2	62.82%
Charlotte	3	41.98%
Seattle	4	35.40%
Boston	5	29.50%
Denver	6	27.74%
San Diego	7	26.85%
Atlanta	8	26.79%
Tampa	9	23.12%
Portland	10	20.76%
Washington, DC	11	20.48%
Philadelphia	12	18.08%
Minneapolis	13	16.59%
Richmond	14	16.11%
St. Louis	15	14.35%
Indianapolis	16	10.70%
Baltimore	17	7.70%
Pittsburgh	18	0.98%
Raleigh	19	-1.25%
Cleveland	20	-13.12%

Sources: 2017: County Business Patterns, 2015. 1998: County Business Patterns, 1998.

Women-Owned Firms (with Paid Employees) 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Denver	1	23.62%	4	16.91%
St. Louis	2	23.13%	7	16.37%
Atlanta	3	22.64%	9	15.64%
Washington, DC	4	22.55%	3	18.00%
Portland	5	21.47%	10	15.33%
Baltimore	6	21.45%	8	15.96%
Austin	7	21.28%	2	18.54%
Tampa	8	21.23%	5	16.89%
Seattle	9	21.21%	6	16.56%
Raleigh	10	19.66%	13	15.01%
Dallas	11	19.54%	1	18.56%
Minneapolis	12	19.49%	18	13.77%
San Diego	13	19.41%	11	15.32%
Pittsburgh	14	18.98%	12	15.08%
Richmond	15	18.52%	20	13.09%
Cleveland	16	17.81%	14	14.96%
Indianapolis	17	17.53%	19	13.40%
Charlotte	18	17.46%	16	14.17%
Philadelphia	19	17.22%	17	14.04%
Boston	20	17.04%	15	14.29%

Sources: 2017: Annual Survey of Entrepreneurs, 2015. 1998: Bureau of the Census, 1997 Economic Census

Change in Women-Owned Firms 1998–2017

Region	Rank	Raw Percentage
Atlanta	1	78.92%
Austin	2	77.91%
Dallas	3	71.28%
Denver	4	69.84%
Charlotte	5	62.79%
Seattle	6	62.52%
Portland	7	61.33%
Minneapolis	8	59.90%
Richmond	9	59.30%
San Diego	10	57.63%
St. Louis	11	46.67%
Tampa	12	46.57%
Boston	13	44.48%
Washington, DC	14	40.97%
Philadelphia	15	36.77%
Baltimore	16	36.28%
Indianapolis	17	34.12%
Raleigh	18	28.27%
Pittsburgh	19	17.83%
Cleveland	20	-2.40%

Sources: 2017: Annual Survey of Entrepreneurs, 2015. 1998: Bureau of the Census, 1997 Economic Census



Black or African American Owned Firms (% of total firms) 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Richmond	1	6.77%	1	5.57%
St. Louis	2	6.62%	9	2.38%
Atlanta	3	6.48%	3	4.08%
Washington, DC	4	6.34%	2	4.68%
Raleigh	5	5.25%	4	3.78%
Baltimore	6	5.20%	5	3.62%
Charlotte	7	3.34%	6	3.58%
Indianapolis	8	2.86%	10	2.31%
Philadelphia	9	2.74%	8	2.50%
Dallas	10	2.71%	7	2.81%
Cleveland	11	2.51%	11	2.17%
Tampa	12	2.15%	14	1.15%
Minneapolis	13	1.64%	18	0.71%
Seattle	14	1.58%	17	0.91%
Denver	15	1.48%	15	1.09%
Pittsburgh	16	1.45%	12	1.21%
San Diego	17	1.40%	20	0.19%
Boston	18	1.29%	16	1.07%
Austin	19	1.06%	13	1.18%
Portland	20	0.83%	19	0.71%

Sources: 2017: Annual Survey of Entrepreneurs, 2015. 1998: Bureau of the Census, 1997 Economic Census

Change in Black-Owned Firms 1998–2017

Region	Rank	Raw Percentage
San Diego	1	826.26%
St. Louis	2	188.67%
Minneapolis	3	159.69%
Seattle	4	120.93%
Tampa	5	117.44%
Atlanta	6	96.28%
Denver	7	64.99%
Dallas	8	56.79%
Washington, DC	9	52.34%
Boston	10	46.52%
Baltimore	11	45.46%
Austin	12	39.15%
Richmond	13	36.87%
Raleigh	14	35.86%
Portland	15	34.80%
Indianapolis	16	27.07%
Charlotte	17	23.55%
Philadelphia	18	21.84%
Pittsburgh	19	12.21%
Cleveland	20	-5.03%

Sources: 2017: Annual Survey of Entrepreneurs, 2015. 1998: Bureau of the Census, 1997 Economic Census





**Hispanic Owned Firms (% of total firms)
2017 vs. 1998**

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
San Diego	1	9.79%	2	8.65%
Austin	2	8.37%	3	8.56%
Tampa	3	8.19%	1	8.78%
Dallas	4	6.63%	4	6.26%
Washington, DC	5	5.80%	6	2.98%
Denver	6	5.33%	5	4.05%
Portland	7	3.70%	10	1.20%
Charlotte	8	3.54%	11	1.17%
Atlanta	9	3.23%	8	1.49%
Raleigh	10	3.10%	9	1.44%
Richmond	11	2.87%	13	1.15%
Seattle	12	2.74%	7	1.84%
Boston	13	2.46%	15	1.05%
Baltimore	14	2.09%	12	1.16%
Philadelphia	15	2.05%	14	1.12%
Indianapolis	16	1.83%	19	0.53%
St. Louis	17	1.57%	16	0.83%
Minneapolis	18	1.50%	20	0.48%
Cleveland	19	0.87%	18	0.55%
Pittsburgh	20	0.84%	17	0.67%

Sources: 2017: Annual Survey of Entrepreneurs, 2015. 1998: Bureau of the Census, 1997 Economic Census

**Change in Hispanic-Owned Firms
1998–2017**

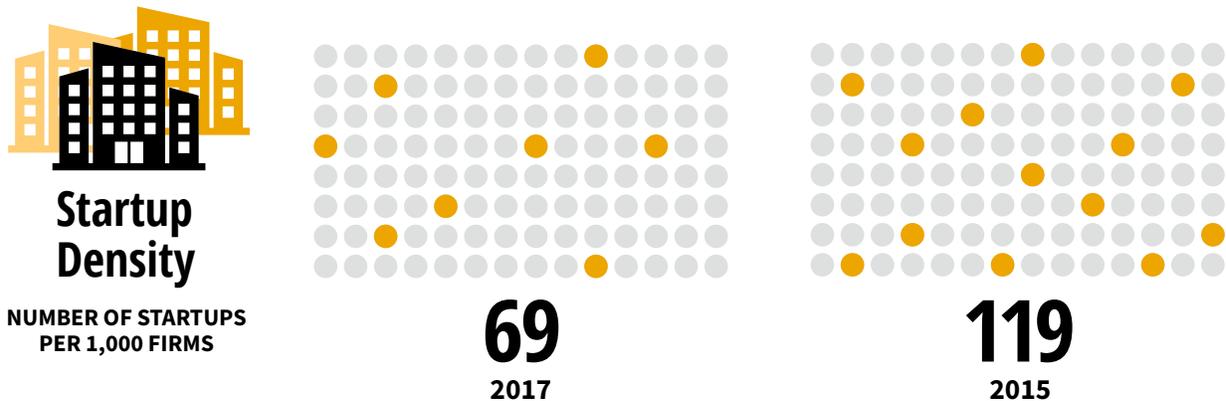
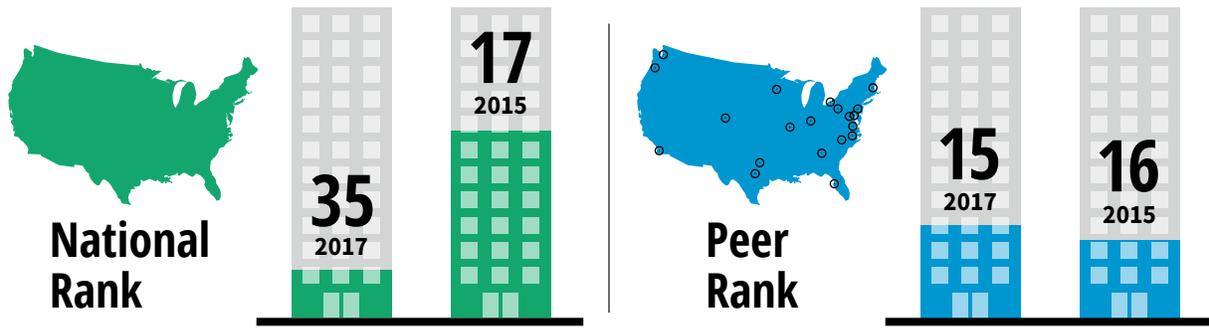
Region	Rank	Raw Percentage
Charlotte	1	300.27%
Portland	2	255.25%
Indianapolis	3	253.25%
Minneapolis	4	251.96%
Boston	5	182.66%
Richmond	6	180.85%
Atlanta	7	168.53%
Washington, DC	8	119.07%
Raleigh	9	111.63%
Philadelphia	10	104.69%
St. Louis	11	97.45%
Seattle	12	88.22%
Baltimore	13	82.93%
Dallas	14	72.12%
Denver	15	60.03%
Austin	16	51.72%
San Diego	17	40.87%
Cleveland	18	30.38%
Pittsburgh	19	17.86%
Tampa	20	8.85%

Sources: 2017: Annual Survey of Entrepreneurs, 2015. 1998: Bureau of the Census, 1997 Economic Census

Kauffman Index of Startup Activity (Startup Density)

Region	2017			2015		
	Startup Density Rank (Peer Regions)	Overall Kauffman Rank (All Regions)	Raw Number	Startup Density Rank (Peer Regions)	Overall Kauffman Rank (All Regions)	Raw Number
Austin	1	2	104.5	1	1	180.8
St. Louis	2	26	96.7	13	38	126.6
San Diego	3	4	95.9	6	9	154.7
Dallas	4	12	94.2	9	15	142.5
Denver	5	10	92.3	2	5	177.8
Atlanta	6	12	89.9	7	13	154.5
Tampa	7	18	89.0	3	20	174.8
Charlotte	8	17	87.5	8	25	150.6
Seattle	9	24	85.0	4	16	167.9
Portland	10	27	82.8	5	26	165.8
Washington, DC	11	25	78.0	11	30	133.7
Indianapolis	12	38	72.7	15	28	122.1
Minneapolis	13	37	72.5	12	37	132.1
Philadelphia	14	36	69.7	14	31	124.1
Baltimore	15	35	69.2	16	17	118.8
Boston	16	21	68.2	10	22	136.1
Pittsburgh	17	39	57.2	18	40	98.3
Cleveland	18	37	54.3	17	35	105.9
Raleigh	na	na	na	na	na	na
Richmond	na	na	na	na	na	na

Number of startup firms per 1,000 firm population. Startup businesses here are defined as firms less than one-year-old employing at least one person besides the owner. Source: Kauffman Index.



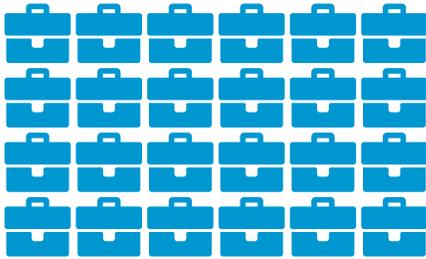
Employment



BALTIMORE

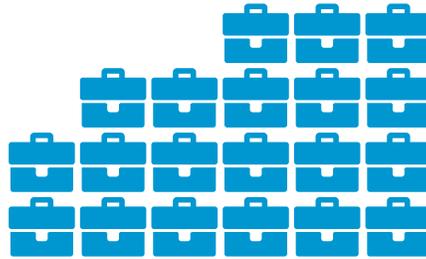
Total Non-Farm Employment

1.40 million



2017

1.19 million



1998



Annual Unemployment Rate

4.4%
2017

5.4%
1998

Labor Force Participation

66.1%



2017

67.3%



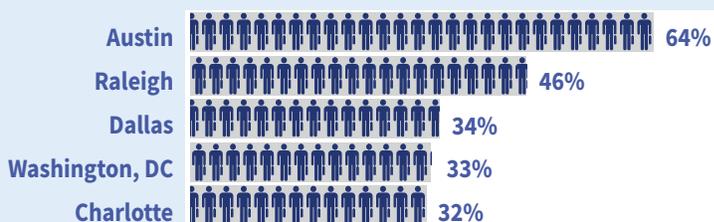
1998

PEERS

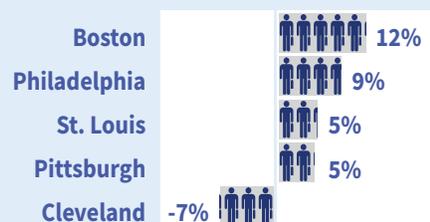
Total Non-Farm Employment Growth

1998-2017

TOP 5



BOTTOM 5



Employment

The Baltimore region saw a 17 percent jump in non-farm employment growth between 1998 and 2017, but that was outpaced—in some cases dramatically—by a number of peer regions, especially the Austin, Dallas and Charlotte MSAs.

Oddly, despite Austin's leading 64 percent gain in non-farm employment in the period, the region did not move up in the rankings for total non-farm employment, likely because its economy in 1998 was relatively small compared to other cities. It remained No. 18 in the peer group.

Dallas's 34 percent gain in the same category pushed it from the No. 2 to No. 1 spot in the peer group. Baltimore was bumped down to No. 10 from the No. 9 spot.

As for unemployment in the Baltimore MSA, it came in at 4.4 percent compared to 5.4 percent when the first State of the Region report was released.

The metro region with the lowest unemployment, 3.1 percent, was Denver, where the construction, education, healthcare, financial services and leisure sectors are booming.

Meanwhile, the Baltimore region's labor force participation rate (LFPR), which represents the number of people who are either employed or actively seeking employment, fell a little more than one point—66 percent in 2017, compared to 67 percent in 1998. That dip is likely due to a slightly

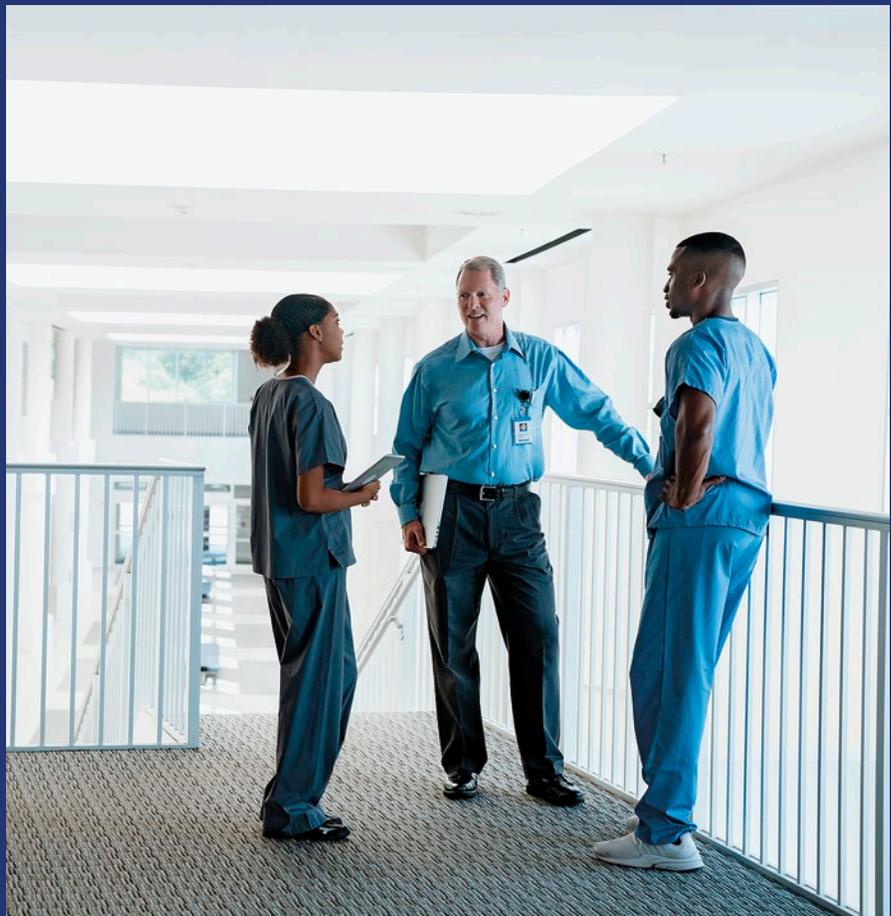
greater percentage of the total population hitting retirement age.

By comparison, the Minneapolis–St. Paul MSA continued to have the highest LFPR at almost 72 percent, despite experiencing a drop from 78 percent in 1998.

The mix of jobs in the Baltimore region shifted slightly during the 20 year time span, as the percentage of government-related jobs fell to 16 percent, down from 18 percent. On the plus side, in the education and health services category, employment grew to more than 19 percent of total non-farm related jobs, up from 15 percent in 1998.

The professional and business services sector also saw robust employment expansion in the Baltimore MSA—so much so that the region moved from 16th to 10th among the peer group—although the finance epicenters of New York and Chicago, due to their population size, were not among the regions studied.

Perhaps it is no surprise that jobs in the wholesale and retail trades sectors—battered by online sales and automation—slid to about 14 percent of total non-farm jobs in the Baltimore region, down from 16 percent.





Total Non-Farm Employment (thousands) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Dallas	1	3,508.5	2	2,613.2
Philadelphia	2	2,870.3	1	2,644.7
Atlanta	3	2,667.8	3	2,139.2
Washington, DC	4	2,635.5	4	1,980.5
Minneapolis	5	1,958.5	5	1,707.0
Seattle	6	1,952.0	7	1,589.0
Boston	7	1,816.4	6	1,622.8
Denver	8	1,433.0	11	1,120.8
San Diego	9	1,422.6	12	1,115.1
Baltimore	10	1,395.2	9	1,191.1
St. Louis	11	1,363.2	8	1,295.7
Tampa	12	1,296.8	14	1,070.2
Pittsburgh	13	1,163.2	13	1,109.1
Charlotte	14	1,149.5	16	867.8
Portland	15	1,144.5	15	948.0
Cleveland	16	1,054.5	10	1,137.5
Indianapolis	17	1,044.1	17	852.5
Austin	18	999.8	18	610.5
Richmond	19	664.3	19	551.8
Raleigh	20	601.5	20	411.3

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, Yearly Average.

Total Non-Farm Employment Growth 1998–2017

Region	Rank	Raw Percentage
Austin	1	63.77%
Raleigh	2	46.24%
Dallas	3	34.26%
Washington, DC	4	33.07%
Charlotte	5	32.46%
Denver	6	27.86%
San Diego	7	27.58%
Atlanta	8	24.71%
Seattle	9	22.84%
Indianapolis	10	22.48%
Tampa	11	21.17%
Portland	12	20.73%
Richmond	13	20.39%
Baltimore	14	17.14%
Minneapolis	15	14.73%
Boston	16	11.93%
Philadelphia	17	8.53%
St. Louis	18	5.21%
Pittsburgh	19	4.88%
Cleveland	20	-7.30%

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, Yearly Average.

Annual Unemployment Rate (low to high) 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Denver	1	3.1%	8	3.8%
Austin	2	3.2%	2	3.0%
Boston	3	3.4%	5	3.7%
Minneapolis	4	3.6%	3	3.1%
Dallas	5	3.8%	12	4.0%
Washington, DC	6	3.8%	10	3.9%
Indianapolis	7	4.0%	4	3.2%
Richmond	8	4.1%	5	3.7%
Raleigh	9	4.3%	1	2.3%
Baltimore	10	4.4%	20	5.4%
Seattle	11	4.5%	16	5.0%
St. Louis	12	4.6%	14	4.5%
Tampa	13	4.6%	10	3.9%
Charlotte	14	4.7%	5	3.7%
Portland	15	4.7%	13	4.5%
San Diego	16	4.7%	18	5.3%
Atlanta	17	5.1%	8	3.8%
Philadelphia	18	5.1%	18	5.3%
Cleveland	19	5.3%	17	5.2%
Pittsburgh	20	5.7%	16	5.0%

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, March 1998.

Labor Force Participation 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Minneapolis	1	71.5%	1	77.9%
Denver	2	70.7%	3	75.2%
Washington, DC	3	70.4%	6	72.3%
Austin	4	70.3%	na	na
Dallas	5	68.3%	2	76.1%
Charlotte	6	67.4%	8	71.2%
Boston	7	67.1%	10	69.9%
Seattle	8	66.8%	4	73.7%
St. Louis	9	66.7%	11	68.7%
Baltimore	10	66.1%	12	67.3%
Indianapolis	11	65.8%	9	70.6%
Richmond	12	65.5%	na	na
Atlanta	13	65.3%	5	73.6%
Portland	14	64.4%	7	71.7%
Philadelphia	15	63.4%	15	64.9%
Pittsburgh	16	63.4%	16	61.9%
Cleveland	17	62.9%	14	65.8%
San Diego	18	60.3%	13	67.1%
Tampa	19	59.5%	17	60.1%
Raleigh	na	na	na	na

Sources: 2014, Bureau of Labor Statistics. 1998, Bureau of Labor Statistics.



**Financial Activities
as Percentage of Total Non-Farm Employment
2017 vs. 1998**

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Boston	1	8.53%	1	9.37%
Tampa	2	8.26%	4	7.88%
Dallas	3	8.05%	5	7.67%
Charlotte	4	7.68%	9	7.06%
Richmond	5	7.56%	8	7.27%
Philadelphia	6	7.39%	3	8.05%
Denver	7	7.38%	2	8.29%
Minneapolis	8	7.24%	6	7.59%
St. Louis	9	6.32%	17	5.92%
Indianapolis	10	6.26%	7	7.39%
Atlanta	11	6.24%	10	6.88%
Cleveland	12	6.18%	13	6.31%
Pittsburgh	13	6.10%	14	6.02%
Portland	14	5.95%	11	6.79%
Baltimore	15	5.68%	12	6.45%
Austin	16	5.67%	18	5.45%
Raleigh	17	5.15%	20	4.94%
San Diego	18	5.13%	16	5.95%
Seattle	19	4.98%	15	6.02%
Washington, DC	20	4.47%	19	5.12%

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, Yearly Average.

**Wholesale and Retail Trade
as Percentage of Total Non-Farm Employment
2017 vs. 1998**

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Washington, DC	1	19.09%	20	12.15%
Tampa	2	16.79%	2	18.27%
Atlanta	3	16.70%	1	18.67%
Dallas	4	16.06%	3	17.63%
Charlotte	5	15.99%	6	16.66%
Raleigh	6	15.76%	5	16.80%
Austin	7	15.33%	18	14.17%
Indianapolis	8	15.22%	4	17.09%
St. Louis	9	15.08%	15	15.56%
Portland	10	15.07%	7	16.52%
Philadelphia	11	14.62%	12	16.05%
Denver	12	14.59%	11	16.09%
Minneapolis	13	14.58%	9	16.19%
Cleveland	14	14.57%	13	15.96%
Pittsburgh	15	14.56%	8	16.47%
Richmond	16	14.32%	14	15.57%
Baltimore	17	13.83%	10	16.15%
San Diego	18	13.51%	17	14.45%
Seattle	19	12.66%	16	15.43%
Boston	20	11.34%	19	13.05%

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, Yearly Average.





Trade, Transportation, and Utilities as Percentage of Total Non-Farm Employment 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Atlanta	1	22.16%	1	23.99%
Dallas	2	21.36%	2	22.60%
Indianapolis	3	21.27%	3	22.19%
Charlotte	4	20.46%	5	21.26%
Tampa	5	19.13%	4	21.61%
Seattle	6	18.87%	13	19.45%
St. Louis	7	18.73%	10	19.57%
Pittsburgh	8	18.41%	6	21.12%
Portland	9	18.38%	7	20.47%
Richmond	10	18.38%	17	19.06%
Denver	11	18.34%	9	20.25%
Philadelphia	12	18.23%	11	19.51%
Minneapolis	13	18.15%	8	20.38%
Raleigh	14	17.87%	14	19.28%
Baltimore	15	17.62%	12	19.47%
Cleveland	16	17.54%	15	19.23%
Austin	17	17.10%	19	15.94%
San Diego	18	15.58%	18	17.01%
Boston	19	13.74%	20	15.76%
Washington, DC	20	10.14%	16	19.09%

Sources: 2017: Bureau of Labor Statistics, 2016 Yearly Average. 1998: Bureau of Labor Statistics, Yearly Average.



Government Employment as Percentage of Total Non-Farm Employment 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Washington, DC	1	26.39%	1	24.15%
Austin	2	17.79%	2	21.75%
San Diego	3	17.02%	5	17.45%
Richmond	4	16.65%	3	18.30%
Baltimore	5	16.28%	4	18.04%
Raleigh	6	15.88%	6	16.97%
Seattle	7	14.15%	7	14.26%
Denver	8	13.60%	9	13.31%
Portland	9	13.42%	11	12.96%
Charlotte	10	13.14%	18	11.85%
Cleveland	11	12.92%	16	12.00%
Minneapolis	12	12.62%	8	13.35%
Indianapolis	13	12.47%	10	13.29%
Atlanta	14	12.30%	13	12.55%
Dallas	15	12.12%	19	11.59%
Tampa	16	11.98%	14	12.54%
Philadelphia	17	11.67%	12	12.63%
St. Louis	18	11.60%	15	12.12%
Boston	19	10.91%	17	11.94%
Pittsburgh	20	9.98%	20	11.43%

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, Yearly Average.

Education and Health Services as Percentage of Total Non-Farm Employment 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Boston	1	22.52%	1	18.44%
Philadelphia	2	21.69%	3	16.76%
Pittsburgh	3	20.93%	2	17.30%
Baltimore	4	19.42%	4	15.21%
Cleveland	5	19.36%	8	12.70%
St. Louis	6	18.09%	6	13.08%
Minneapolis	7	16.46%	11	10.42%
Tampa	8	15.42%	5	13.34%
Richmond	9	14.83%	16	9.10%
Indianapolis	10	14.47%	9	10.49%
Portland	11	14.44%	10	10.45%
San Diego	12	13.95%	13	10.02%
Seattle	13	13.38%	7	10.96%
Washington, DC	14	13.04%	12	10.03%
Denver	15	12.85%	18	8.86%
Atlanta	16	12.52%	19	7.99%
Dallas	17	12.28%	17	9.04%
Raleigh	18	12.07%	14	9.41%
Austin	19	11.64%	15	9.29%
Charlotte	20	10.16%	20	7.50%

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, Yearly Average.



**Professional and Business Services
as Percentage of Total Non-Farm Employment
2017 vs. 1998**

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Washington, DC	1	23.15%	1	19.63%
Boston	2	19.33%	2	17.66%
Raleigh	3	18.67%	3	17.43%
Atlanta	4	18.40%	4	16.65%
Denver	5	17.93%	7	15.75%
Tampa	6	17.84%	15	12.58%
Charlotte	7	16.93%	13	13.31%
Austin	8	16.92%	14	12.84%
Richmond	9	16.84%	6	15.77%
Baltimore	10	16.59%	16	12.46%
Dallas	11	16.55%	11	13.45%
San Diego	12	16.45%	5	16.16%
Minneapolis	13	16.31%	8	15.13%
Indianapolis	14	16.08%	20	11.81%
Philadelphia	15	16.04%	9	14.29%
Pittsburgh	16	15.71%	19	12.09%
St. Louis	17	15.47%	10	13.78%
Portland	18	15.42%	12	13.41%
Seattle	19	14.28%	17	12.42%
Cleveland	20	14.25%	18	12.31%

Sources: 2017: Bureau of Labor Statistics, 2016. 1998: Bureau of Labor Statistics, Yearly Average.

**Leisure and Hospitality
as Percentage of Total Non-Farm Employment
2017 vs. 1998**

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
San Diego	1	13.41%	2	10.69%
Austin	2	12.19%	6	8.94%
Tampa	3	11.48%	1	10.83%
Charlotte	4	11.42%	10	8.56%
Raleigh	5	11.27%	14	8.34%
Denver	6	11.24%	4	9.52%
St. Louis	7	10.95%	3	9.86%
Atlanta	8	10.65%	9	8.61%
Dallas	9	10.43%	12	8.44%
Portland	10	10.33%	7	8.78%
Indianapolis	11	10.27%	5	9.42%
Pittsburgh	12	10.21%	13	8.41%
Boston	13	10.09%	19	7.67%
Washington, DC	14	10.07%	17	7.95%
Seattle	15	9.91%	8	8.65%
Cleveland	16	9.71%	16	8.00%
Baltimore	17	9.70%	11	8.47%
Richmond	18	9.56%	18	7.77%
Minneapolis	19	9.27%	15	8.08%
Philadelphia	20	9.03%	20	7.00%

Sources: 2017: Bureau of Labor Statistics, 2016.

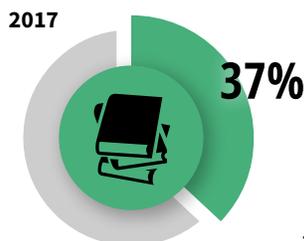
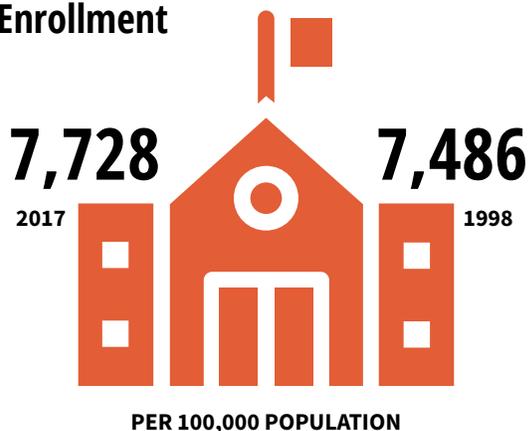


Education & Workforce

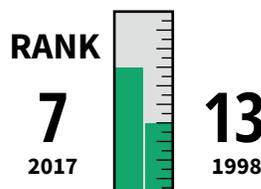
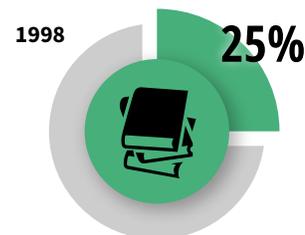


BALTIMORE

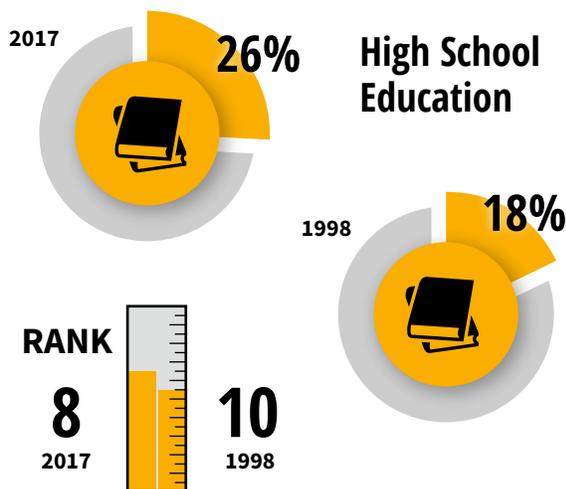
Total College Enrollment



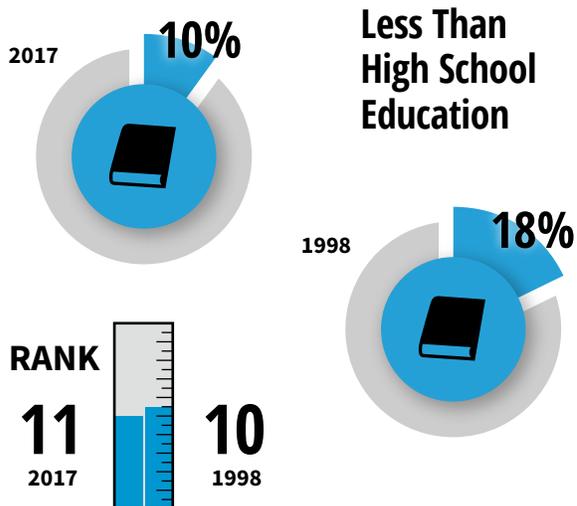
College Education*



High School Education

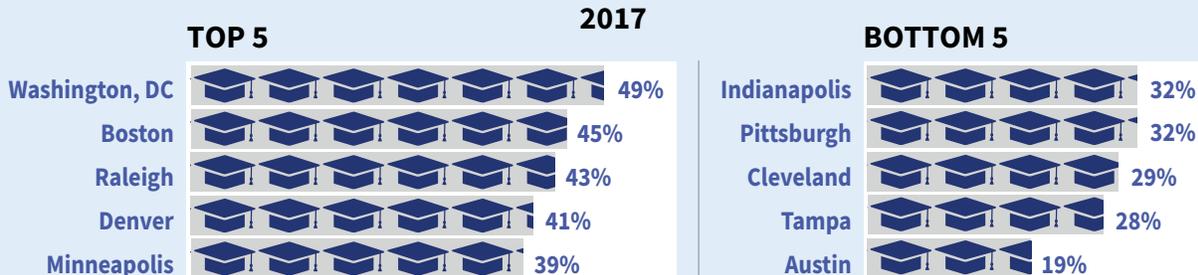


Less Than High School Education



PEERS

College Education 25+*



*Four year or higher degrees.

Education & Workforce

Since the last State of the Region report was released, the Baltimore region has seen dramatic increases in educational attainment. Among the 20 peer regions, the Baltimore MSA had the third highest increase in the percentage of the population ages 25 and older with a college degree, jumping more than 50 percent during the time period studied.

The region is now ranked 7th among its peers for college degree attainment, up from 13th in 1998. In contrast, the Pittsburgh MSA experienced the largest growth in this category, increasing almost 60 percent during the same period. This trend was sparked by the decline of the steel industry in the region and corresponding growth in the cyber and IT sectors. Google's strong presence in the Pittsburgh area has also likely contributed to growth in these sectors.

The share of the population ages 25 and older with only a high school diploma in the Baltimore region also increased, moving from 18 percent to 26 percent between 1998 and today. The Seattle region posted one of the lowest percentages of the population with only a high school diploma, driven again by market demand for workers with college and professional degrees.

One notable positive finding is that almost all of the metro regions experienced significant declines in the percentage of the adult population with less than a high school diploma. The Baltimore MSA had the 7th largest decline in the population ages 25 and older without a high school degree, dropping from 18.4 percent in 1998 to 10.2 percent in 2017. The Raleigh region also experienced significant declines in this population, dropping from 20 percent in 1998 to 9.8 percent in 2017.

Driving the changes in educational attainment is the evolution of the Baltimore MSA's economy. The decline of manufacturing-based employment has given rise to new technology-centered industries. Additionally, the economic recession of the early 2000s created downward pressure on workers with less education, encouraging many to stay in or return to school. Workers in the Baltimore MSA are working in manufacturing facilities with greater training and more technology compared to 1998.

In addition, cybersecurity, the medical and higher education fields, federal agencies, and military bases have increased their footprint in the Baltimore MSA. Many of the jobs and occupations associated with these employers require at least a high school diploma and, more often, a bachelor's degree.

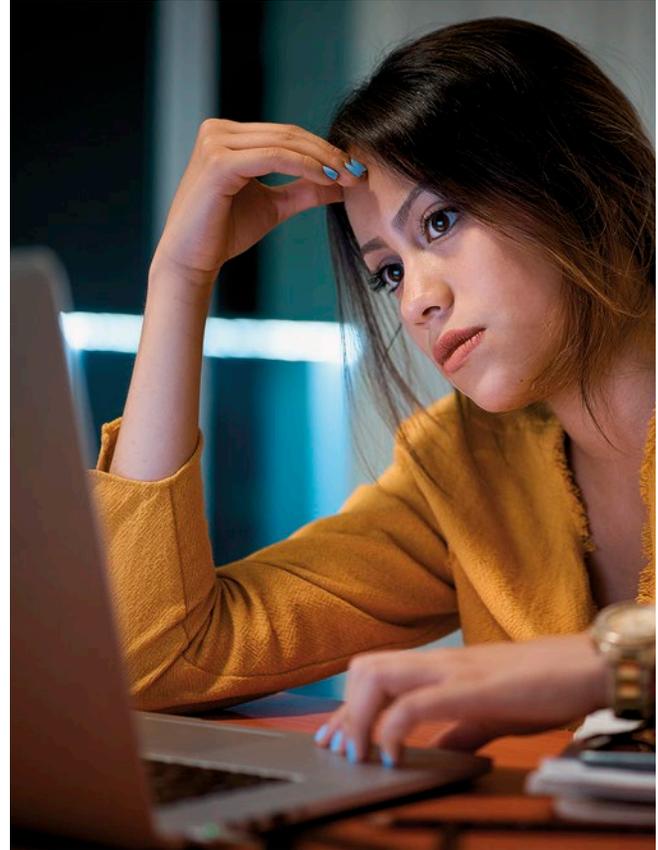




College Education 25+* 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Washington, DC	1	48.9%	2	38.2%
Boston	2	44.6%	1	38.5%
Raleigh	3	43.2%	5	31.7%
Denver	4	40.6%	3	36.2%
Minneapolis	5	39.4%	9	29.3%
Seattle	6	39.2%	4	35.1%
Baltimore	7	37.3%	13	24.8%
Atlanta	8	35.8%	6	31.3%
Portland	9	35.8%	10	29.1%
San Diego	10	35.7%	12	25.3%
Philadelphia	11	34.8%	15	23.8%
Richmond	12	33.7%	16	23.8%
Dallas	13	32.5%	8	29.4%
Charlotte	14	32.2%	17	23.2%
St. Louis	15	31.9%	18	21.2%
Indianapolis	16	31.5%	11	28.6%
Pittsburgh	17	31.5%	20	19.7%
Cleveland	18	29.3%	14	24.2%
Tampa	19	27.5%	19	20.5%
Austin	20	19.1%	7	30.7%

Sources: 2017: 2015 American Community Survey. 1998: Bureau of the Census, 1990.
*Four year or higher degrees.



High School Education 25+ 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Pittsburgh	1	34.9%	2	27.0%
Philadelphia	2	30.3%	20	8.0%
Cleveland	3	30.0%	1	28.2%
Tampa	4	29.8%	4	21.1%
Indianapolis	5	29.1%	6	20.2%
San Diego	6	27.0%	17	13.4%
Richmond	7	26.4%	13	16.4%
Baltimore	8	26.3%	10	18.0%
Charlotte	9	24.9%	14	15.1%
Atlanta	10	24.6%	15	14.2%
Boston	11	23.7%	8	18.9%
Dallas	12	22.7%	5	20.2%
Minneapolis	13	22.4%	11	17.9%
Portland	14	21.5%	9	18.0%
St. Louis	15	20.8%	7	18.9%
Denver	16	20.4%	12	17.1%
Raleigh	17	19.5%	18	12.4%
Austin	18	19.3%	19	10.6%
Seattle	19	19.0%	3	23.0%
Washington, DC	20	18.8%	16	13.8%

Sources: 2017: 2015 American Community Survey. 1998: Bureau of the Census, 1990.

Less than High School Education 25+ 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Dallas	1	15.7%	15	19.9%
Seattle	2	14.0%	3	10.5%
Charlotte	3	12.6%	11	18.4%
Richmond	4	11.9%	20	24.2%
Atlanta	5	11.8%	9	15.9%
Tampa	6	11.6%	12	18.7%
Austin	7	11.4%	13	18.8%
Indianapolis	8	11.1%	8	14.9%
Cleveland	9	10.8%	7	14.5%
Philadelphia	10	10.6%	18	20.6%
Baltimore	11	10.2%	10	18.4%
Denver	12	9.9%	1	9.4%
Raleigh	13	9.8%	16	20.0%
Washington, DC	14	9.7%	6	12.0%
San Diego	15	9.3%	17	20.2%
Boston	16	9.1%	5	11.3%
Portland	17	9.0%	4	11.1%
St. Louis	18	8.1%	14	19.1%
Pittsburgh	19	7.5%	19	22.7%
Minneapolis	20	7.0%	2	9.7%

Source: 2017: 2015 American Community Survey.



Total College Enrollment per 100,000 Population 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Richmond	1	10,022.11	8	7,933.00
Boston	2	9,106.89	3	9,793.00
Austin	3	8,621.49	18	4,276.00
St. Louis	4	8,203.78	6	8,560.00
Washington, DC	5	8,051.30	11	7,361.00
Raleigh	6	7,858.65	1	11,222.00
Baltimore	7	7,727.62	9	7,486.00
Seattle	8	7,564.57	7	8,099.00
Philadelphia	9	7,336.03	13	6,776.00
Atlanta	10	7,028.02	16	5,011.00
Minneapolis	11	6,806.37	10	7,398.00
Portland	12	6,787.33	4	9,421.00
Dallas	13	6,599.42	19	3,858.00
Tampa	14	6,469.02	14	6,466.00
Pittsburgh	15	6,432.80	20	1,842.64
Cleveland	16	6,408.97	15	6,379.00
Charlotte	17	6,286.66	5	9,053.00
Denver	18	6,240.41	12	7,327.00
San Diego	19	6,019.68	2	10,129.00
Indianapolis	20	5,626.57	17	4,426.00

Sources: 2017: American Community Survey 2016. 1998: Places Rated Almanac 1997.

Average Scores in National Assessment of Educational Progress 2017 vs. 1998

Region	2017 Rank	2017 Grade	1998 Rank	1998 Grade
Charlotte	1	286	1	263
Austin	2	284	3	261
Boston	3	281	4	258
San Diego	4	280	2	262
Dallas	5	271	6	250
Philadelphia	6	267	7	248
Atlanta	7	266	5	252
Washington, DC	8	258	8	245
Baltimore	9	255	9	243
Cleveland	10	254	10	240
Denver	na	na	na	na
Indianapolis	na	na	na	na
Minneapolis	na	na	na	na
Pittsburgh	na	na	na	na
Portland	na	na	na	na
Raleigh	na	na	na	na
Richmond	na	na	na	na
Seattle	na	na	na	na
St. Louis	na	na	na	na
Tampa	na	na	na	na

Source: Nation's Report Card.



Transportation



BALTIMORE

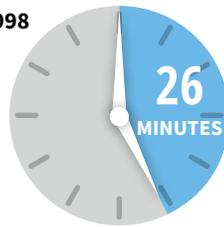
Average Travel Time to Work



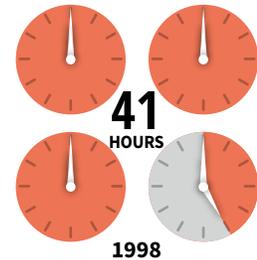
2017



1998



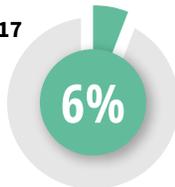
Annual Delay Per Auto Commuter



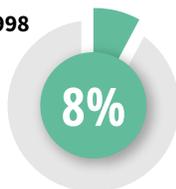
Daily Vehicle Miles Per Capita



2017



1998



Workers 16+ Years Old Using Transit

Transit Ridership Per Capita

2017



Each bus represents 10 passenger boardings.

1998



PEERS

Average Air Fares TOP 5—2017

Baltimore		\$313
Tampa		\$317
Portland		\$321
Denver		\$322
Seattle		\$327

Average fares are listed lowest first.

Public Transit Score TOP 5—2017

Boston		74
Washington, DC		71
Philadelphia		67
Baltimore		58
Minneapolis		58

Walk Score assigns transit score values based on public transit frequency, variety (rail, bus, etc.), and distance between stations. Scores are between 0-100.

Transportation

The Baltimore region enjoys a substantial transportation network responsible for moving a growing population safely and efficiently from home to work and points beyond. While the region has seen increased affordability in air travel, road congestion continues to be a concern. Bus and rail ridership has decreased significantly in the MSA.

Spurred in part by Southwest Airlines' decision to make Baltimore/Washington International Thurgood Marshall Airport a travel hub, between 1998 and 2017 the number of air passengers in the Baltimore region nearly doubled from 13.4 million to 25.1 million, the 4th largest percentage growth among its peers. Only Austin, Charlotte, and Seattle saw greater air passenger growth during that time. While airfares have significantly increased since 1998, the Baltimore

MSA boasts the lowest average air fares of all peer cities.

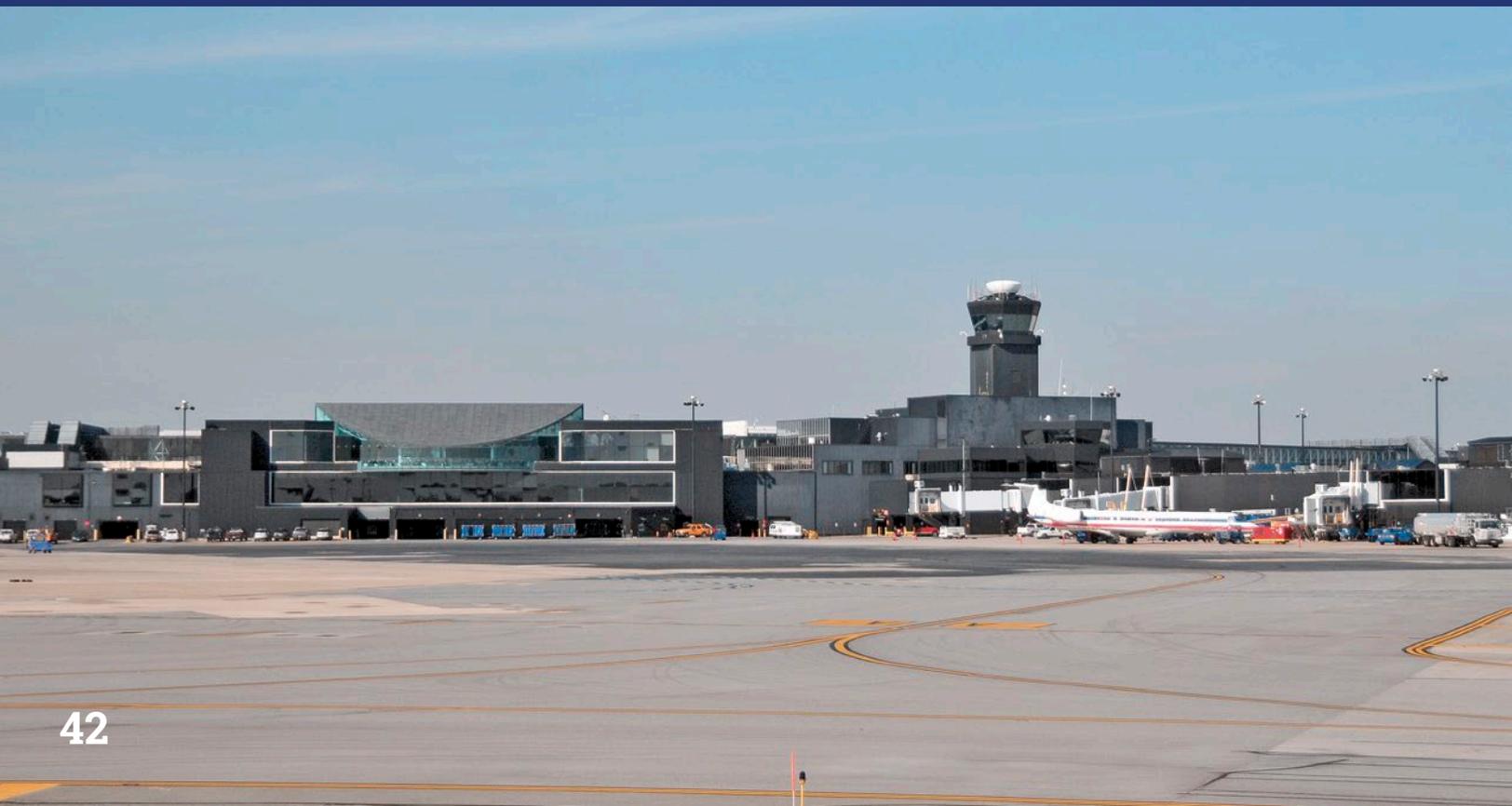
On the ground, public transportation in the Baltimore MSA continues to be well used by workers comparatively, ranking 6th, but the percentage of workers ages 16 and over using transit has decreased since 1998. In nearby Washington, D.C. where there is a robust metro rail system, more than double the percentage of workers ages 16 and older use transit.

The region's transit ridership per capita, which measures the number of annual passenger boardings on public transportation for a typical resident, has increased from 43.2 in 1998 to 49.3 today. By comparison, the Boston MSA was ranked number one in transit ridership per capita at 91.5 in 2017, despite falling from 104.4 in 1998. The Raleigh MSA increased by almost

200 percent, jumping from 3.2 to 9.4 in the same period.

A bright spot for the Baltimore MSA was Baltimore City's high score on Walkscore.com's 2017 list of transit friendly cities, ranking 4th among the 20 peer cities included in this report. Of its peers, only Boston, Washington, D.C., and Philadelphia scored higher.

One area of concern remains the average travel time to work, which rose across all regions included in the study. Average travel time in the Baltimore region increased from 26 minutes in 1998 to 31 minutes in 2017 giving the region the 4th longest commute time of its peer cities. Clevelanders, by contrast, have the shortest commutes at 24.6 minutes while Washington, D.C. residents rank worst at 34.8 minutes.





Public Transit Score 2017

Region	Rank	Raw Score
Boston	1	74
Washington, DC	2	71
Philadelphia	3	67
Baltimore	4	58
Minneapolis	4	58
Seattle	6	57
Pittsburgh	7	54
Portland	8	51
Cleveland	9	47
Denver	9	47
St. Louis	11	45
Atlanta	12	44
Dallas	13	39
San Diego	14	37
Austin	15	34
Tampa	16	30
Indianapolis	17	24
Raleigh	18	23
Charlotte	na	na
Richmond	na	na

Walk Score assigns transit score values based on public transit frequency, variety (rail, bus, etc.), and distance between stations. Scores are between 0–100. Data for cities only. Source: walkscore.com.

Total Air Passengers 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Atlanta	1	104,171,935	2	63,303,171
Dallas	2	65,670,691	1	65,099,018
Denver	3	58,266,515	3	32,296,174
Seattle	4	45,736,700	8	24,324,596
Charlotte	5	44,422,022	9	21,849,879
Minneapolis	6	37,413,728	4	28,771,750
Boston	7	36,356,917	7	25,167,741
Philadelphia	8	30,155,090	10	19,317,220
Baltimore	9	25,122,651	12	13,431,922
Washington, DC	10	23,568,586	5	27,870,638
San Diego	11	20,725,901	11	13,788,725
Tampa	12	18,931,922	13	13,001,091
Portland	13	18,352,767	14	12,593,013
St. Louis	14	13,959,126	6	27,274,846
Austin	15	12,436,849	18	5,691,233
Raleigh	16	11,049,143	17	6,478,776
Indianapolis	17	8,511,959	16	7,069,039
Cleveland	18	8,422,676	15	11,582,164
Pittsburgh	na	na	na	na
Richmond	na	na	19	2,154,603

Sources: 2017: Airports Council International 2016 North American Airport Traffic Summary (Passenger). 1998: Airports Council International, March, 1998.

Total Air Passenger Change 1998–2017

Region	Rank	Raw Percentage
Austin	1	118.5%
Charlotte	2	103.3%
Seattle	3	88.0%
Baltimore	4	87.0%
Denver	5	80.4%
Raleigh	6	70.5%
Atlanta	7	64.6%
Philadelphia	8	56.1%
San Diego	9	50.3%
Portland	10	45.7%
Tampa	11	45.6%
Boston	12	44.5%
Minneapolis	13	30.0%
Indianapolis	14	20.4%
Dallas	15	0.9%
Washington, DC	16	-15.4%
Cleveland	17	-27.3%
St. Louis	18	-48.8%
Pittsburgh	na	na
Richmond	na	na

Sources: 2017: US Department of Transportation, 2017. 1998: US Department of Transportation, April 1998.

Average Air Fares 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Baltimore	1	\$313.00	5	\$140.00
Tampa	2	\$316.60	2	\$130.00
Portland	3	\$321.22	3	\$138.00
Denver	4	\$322.29	13	\$187.00
Seattle	5	\$327.08	8	\$152.00
Boston	6	\$338.89	15	\$205.00
Dallas	7	\$345.30	11	\$181.00
San Diego	8	\$345.89	1	\$129.00
Washington, DC	9	\$349.21	14	\$204.00
Raleigh	10	\$350.32	12	\$181.00
Cleveland	11	\$355.60	9	\$153.00
Atlanta	12	\$356.50	10	\$164.00
Indianapolis	13	\$364.21	7	\$146.00
St. Louis	14	\$375.66	6	\$145.00
Pittsburgh	15	\$376.57	na	na
Philadelphia	16	\$377.68	16	\$208.00
Minneapolis	17	\$385.09	17	\$222.00
Austin	18	\$386.60	4	\$140.00
Charlotte	19	\$416.99	18	\$227.00
Richmond	20	\$417.76	na	na

Sources: 2017: US Department of Transportation, 2017. 1998: US Department of Transportation, April 1998.



Workers 16 and Over Using Transit 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Washington, DC	1	13.4%	2	13.7%
Boston	2	13.1%	1	14.2%
Seattle	3	9.5%	5	7.4%
Philadelphia	4	9.3%	2	11.6%
Portland	5	6.4%	7	6.0%
Baltimore	6	6.1%	4	7.7%
Pittsburgh	7	6.0%	na	na
Minneapolis	8	4.7%	8	5.3%
Denver	9	4.0%	10	4.4%
Atlanta	10	3.1%	9	4.7%
Cleveland	11	3.1%	6	6.2%
San Diego	12	2.9%	11	3.3%
St. Louis	13	2.6%	13	3.0%
Austin	14	2.2%	na	na
Charlotte	15	1.4%	15	1.8%
Dallas	16	1.4%	12	3.2%
Richmond	17	1.4%	na	na
Tampa	18	1.4%	16	1.5%
Raleigh	19	1.2%	na	na
Indianapolis	20	0.7%	14	2.1%

Sources: 2017: American Community Survey, 2016. 1998: Bureau of the Census, 1990.

Average Travel Time to Work (minutes) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Cleveland	1	24.6	7	22.6
Indianapolis	2	24.7	5	21.9
Minneapolis	3	25.3	1	21.1
Richmond	4	25.6	na	na
Raleigh	5	25.9	na	na
San Diego	6	26.0	6	22.2
St. Louis	7	26.0	9	23.1
Charlotte	8	26.5	2	21.6
Pittsburgh	9	26.7	na	na
Austin	10	27.1	na	na
Tampa	11	27.2	4	21.8
Denver	12	27.3	8	22.7
Portland	13	27.5	3	21.8
Dallas	14	28.6	12	24.6
Philadelphia	15	29.8	13	24.8
Seattle	16	30.8	10	24.4
Baltimore	17	31.0	15	26.0
Atlanta	18	32.1	14	26.0
Boston	19	32.2	11	24.5
Washington, DC	20	34.8	16	29.5

Sources: 2017: American Community Survey, 2016. 1998: Bureau of the Census, 1990.

Roadway Miles per 1,000 Persons 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Raleigh	1	5.81	20	1.93
Pittsburgh	2	5.70	5	3.55
Richmond	3	5.67	6	3.44
Atlanta	4	5.52	3	3.67
St. Louis	5	5.44	8	3.15
Indianapolis	6	5.10	12	2.81
Minneapolis	7	5.05	2	3.87
Charlotte	8	4.75	19	1.94
Austin	9	4.59	11	3.09
Dallas	10	4.50	1	5.86
Boston	11	4.23	10	3.10
Tampa	12	4.17	7	3.37
Cleveland	13	4.15	15	2.49
Portland	14	3.95	9	3.15
Denver	15	3.86	4	3.66
Philadelphia	16	3.83	13	2.70
Seattle	17	3.52	18	2.17
Baltimore	18	3.22	14	2.64
Washington, DC	19	2.94	16	2.24
San Diego	20	2.76	17	2.23

Urbanized area data only.
Sources: 2017: Highway Statistics 2015. 1998: Highway Statistics 1998.

Daily Vehicle Miles of Travel per Capita 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Charlotte	1	36.44	1	12.87
Raleigh	2	35.87	2	13.54
Atlanta	3	34.17	19	28.37
Richmond	4	34.03	5	17.16
Indianapolis	5	33.10	13	18.78
St. Louis	6	31.22	18	22.92
Austin	7	28.55	7	17.55
Dallas	8	27.40	20	35.61
Tampa	9	27.38	12	18.27
Minneapolis	10	26.23	14	20.34
Baltimore	11	25.86	8	17.84
Boston	12	24.77	11	18.25
San Diego	13	24.29	15	21.56
Denver	14	24.23	16	21.98
Cleveland	15	23.27	6	17.39
Seattle	16	22.82	17	22.63
Washington, DC	17	22.72	9	18.00
Pittsburgh	18	20.24	3	15.20
Portland	19	19.99	10	18.14
Philadelphia	20	19.26	4	15.44

Urbanized area data only.
Sources: 2017: Highway Statistics 2015. 1998: Highway Statistics 1998.



**Travel Congestion:
Annual Delay per Auto Commuter (hours)
2017 vs. 1998**

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Raleigh	1	34	4	26
Richmond	2	34	1	13
Cleveland	3	38	3	20
Pittsburgh	4	39	8	35
Tampa	5	41	5	27
San Diego	6	42	8	35
Charlotte	7	43	2	19
Indianapolis	8	43	6	31
St. Louis	9	43	14	44
Baltimore	10	47	13	41
Minneapolis	11	47	17	48
Philadelphia	12	48	7	32
Denver	13	49	15	47
Atlanta	14	52	19	52
Austin	15	52	10	36
Portland	16	52	11	38
Dallas	17	53	12	40
Seattle	18	63	18	49
Boston	19	64	14	44
Washington, DC	20	82	20	73

Sources: 2017: Bureau of Transportation Statistics, 2015. NACTO.

**Transit Ridership (rides per capita per year)
2017 vs. 1998**

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Boston	1	91.5	1	104.41
Washington, DC	2	89.1	2	80.68
Seattle	3	65.3	7	38.93
Philadelphia	4	63.1	3	56.99
Portland	5	58.1	4	55.70
Baltimore	6	49.3	6	43.18
Denver	7	39.3	8	38.19
Pittsburgh	8	34.6	10	30.88
San Diego	9	34.5	9	35.06
Minneapolis	10	33.8	13	23.89
Atlanta	11	29.2	5	45.34
Cleveland	12	26.4	11	29.72
St. Louis	13	21.6	14	21.83
Austin	14	21.0	12	28.34
Charlotte	15	17.5	17	8.80
Dallas	16	14.7	15	18.72
Tampa	17	11.5	18	8.33
Raleigh	18	9.4	20	3.22
Richmond	19	9.4	16	17.38
Indianapolis	20	6.3	19	6.79

Urbanized area data only.

Sources: 2017: The Transport Politic, 2016. 1998: Federal Transit Administration, 1998.

**Transit Ridership—Heavy and Light Rail
2017 vs. 1998**

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Washington, DC	1	249,453,656	2	214,947,042
Boston	2	238,307,304	1	221,768,063
Atlanta	3	72,632,048	4	77,802,000
Portland	4	44,365,871	10	11,846,048
San Diego	5	39,319,897	7	23,907,225
Dallas	6	34,881,370	11	11,455,993
Philadelphia	7	27,111,822	3	140,667,878
Denver	8	24,853,313	5	66,499,328
Minneapolis	9	23,294,698		*
Baltimore	10	19,805,222	6	24,617,937
Seattle	11	15,909,742	13	429,520
St. Louis	12	15,777,499	8	14,560,291
Cleveland	13	9,012,296	9	12,470,283
Pittsburgh	14	7,427,765	12	7,591,553
Charlotte	15	5,275,592		*
Tampa	16	277,816	14	320,258
Austin		*		*
Indianapolis		*		*
Raleigh		*		*
Richmond		*		*

Urbanized area data only. *Not ranked.

Sources: 2017: The Transport Politic, 2016. 1998: Federal Transit Administration, 1998.





Transit Ridership—Bus 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Washington, DC	1	180,307,800	1	153,201,847
Philadelphia	2	170,062,481	2	141,609,794
Seattle	3	159,889,425	4	86,560,423
Boston	4	121,052,916	3	118,924,234
Baltimore	5	80,445,964	7	82,220,003
Denver	6	73,585,811	19	4,806,896
Minneapolis	7	67,222,002	9	66,048,771
Atlanta	8	66,596,031	6	82,770,975
Portland	9	65,236,852	5	86,127,440
San Diego	10	60,620,436	8	69,182,853
Pittsburgh	11	50,569,052	10	65,321,364
Dallas	12	41,945,310	12	45,595,448
Cleveland	13	36,572,413	11	53,893,438
Austin	14	30,374,562	14	29,514,261
St. Louis	15	30,194,149	13	41,060,789
Tampa	16	28,556,435	15	17,996,152
Charlotte	17	18,326,251	17	11,630,697
Indianapolis	18	9,459,853	18	10,130,503
Richmond	19	8,670,904	16	16,256,562
Raleigh	20	8,590,888	20	3,300,157

Urbanized area data only.
Sources: 2017: The Transport Politic, 2016. 1998: Federal Transit Administration, 1998.

Downtown Walkability 2017

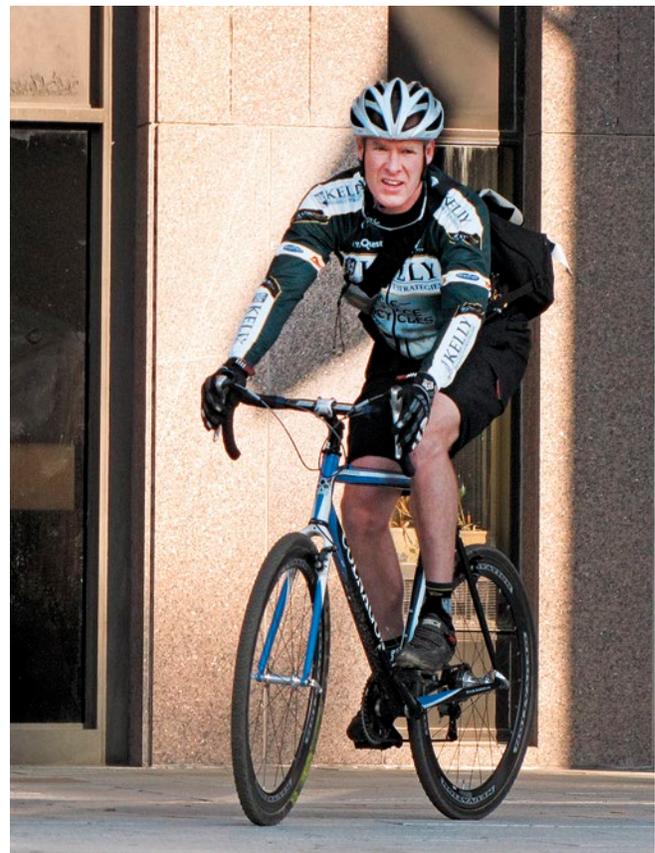
Region	Rank	Raw Number
Boston	1	81
Philadelphia	2	79
Washington, DC	3	77
Seattle	4	73
Baltimore	5	69
Minneapolis	6	69
Portland	7	65
St. Louis	8	65
Pittsburgh	9	62
Denver	10	61
Cleveland	11	60
Richmond	12	51
San Diego	13	51
Tampa	14	50
Atlanta	15	49
Dallas	16	46
Austin	17	40
Indianapolis	18	30
Raleigh	19	30
Charlotte	20	26

Data for cities only.
Source: walkscore.com.

Downtown Bikeability 2017

Region	Rank	Raw Number
Minneapolis	1	81
Portland	2	72
Denver	3	71
Boston	4	70
Washington, DC	5	69
Philadelphia	6	68
Seattle	7	63
St. Louis	8	57
Baltimore	9	56
Tampa	10	53
Austin	11	52
Cleveland	12	51
Atlanta	13	50
San Diego	14	46
Dallas	15	44
Indianapolis	16	41
Raleigh	17	41
Pittsburgh	18	40
Charlotte	19	36
Richmond	na	na

Data for cities only.
Source: walkscore.com.

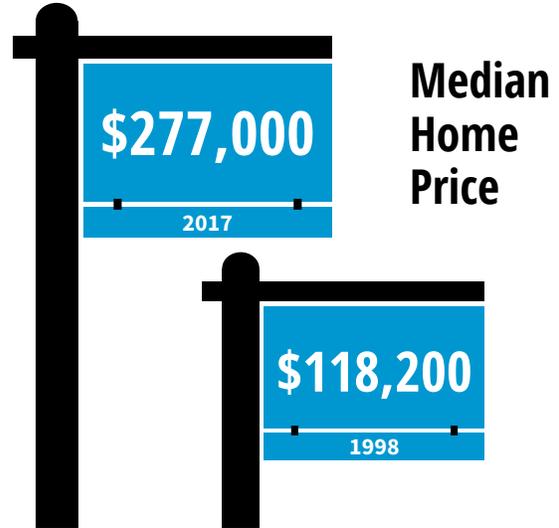


Quality of Life

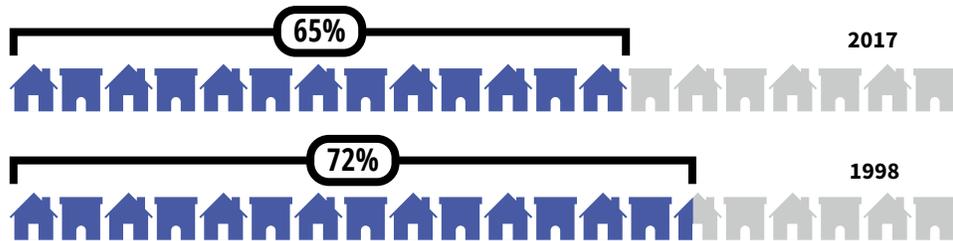


BALTIMORE

Cost of Living



Home Ownership Rate



Unhealthy Air Days



PEERS

Median Home Price

LOWEST 5—2017

Cleveland	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$144,800
St. Louis	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$174,000
Indianapolis	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$176,200
Atlanta	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$204,900
Tampa	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$220,200

LOWEST 5—1998

Tampa	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$83,900
St. Louis	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$96,900
Indianapolis	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$103,700
Austin	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$108,100
Atlanta	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$108,400



Quality of Life

Spurred by a growing economy, the Baltimore MSA has become an expensive place to live and work. However, the quality of life for those who call the Baltimore region home has also improved along multiple measures.

In 1998 the Baltimore MSA was the 2nd most affordable region to live and work with a cost of living index of 98.2, meaning that a resident in the region paid 98 cents for every dollar the average American paid for goods and services. Today, that index has risen to 117.0, making the Baltimore MSA the 7th most expensive region relative to its peer MSAs. The St. Louis region is the most affordable peer region with an index of 90.6, while the Washington, DC region is the most expensive with an index of 155.7.

The last two decades also witnessed a dramatic decline in homeownership as households in Baltimore and across the nation suffered a significant loss of wealth during the recession of the late 2000s. In the Baltimore region, homeownership fell from 71.6 percent in 1998 to 65.3 percent in 2017, dropping the region's ranking from 5th to 8th.

Over the last 20 years, the proliferation of personal computers and high-speed Internet have transformed the way we live, learn, and play. Today, more than 90 percent of households in the Baltimore MSA own a personal computer and nearly 85 percent have a broadband connection. While this percentage is high, Baltimore ranks in the bottom half of peer regions by the same measures. The Austin region boasts the highest

percentage of households that own a computer while the Seattle region has the highest percentage of households connected to broadband.

Despite challenges in Baltimore City, the Baltimore region, as a whole, has seen some reductions in crime, including in property crime per capita. The Indianapolis and Denver regions have dropped in the rankings for this category to 16th and 14th, respectively.

The Baltimore region is also home to many philanthropic boosters. According to the Chronicle of Philanthropy, residents of the Baltimore region contribute 3.2 percent of their income to charity, earning the 6th place position among the 20 MSAs. Atlanta topped the list with 4.06 percent.





Cost of Living 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
St. Louis	1	90.6%	1	98.1%
Indianapolis	2	92.6%	5	98.5%
Tampa	3	94.8%	6	98.6%
Richmond	4	96.1%	11	103.9%
Charlotte	5	96.2%	9	100.5%
Raleigh	6	96.4%	12	100.4%
Austin	7	97.5%	8	99.6%
Atlanta	8	99.0%	7	99.4%
Pittsburgh	9	99.6%	na	na
Cleveland	10	101.2%	na	na
Dallas	11	102.1%	3	98.2%
Minneapolis	12	104.9%	10	102.6%
Denver	13	112.0%	13	105.9%
Baltimore	14	117.0%	2	98.2%
Philadelphia	15	117.2%	16	123.6%
Portland	16	129.3%	14	107.3%
San Diego	17	146.1%	na	na
Boston	18	148.2%	17	138.1%
Seattle	19	149.0%	na	na
Washington, DC	20	155.7%	15	121.7%

Sources: 2017: Council for Community and Economic Research Cost of Living Index. 1998: ACCRA Cost of Living Index, Fourth Quarter, 1997.

Median Home Price 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Cleveland	1	\$144,800	9	\$116,800
St. Louis	2	\$174,000	2	\$96,900
Indianapolis	3	\$176,200	3	\$103,700
Atlanta	4	\$204,900	5	\$108,400
Tampa	5	\$220,200	1	\$83,900
Charlotte	6	\$234,300	12	\$124,200
Philadelphia	7	\$239,100	na	na
Richmond	8	\$254,000	8	\$114,200
Dallas	9	\$255,200	6	\$112,000
Minneapolis	10	\$259,000	11	\$118,400
Baltimore	11	\$277,000	10	\$118,200
Raleigh	12	\$278,300	15	\$152,800
Austin	13	\$308,000	5	\$108,100
Portland	14	\$389,100	14	\$152,400
Denver	15	\$424,500	13	\$140,600
Washington, DC	16	\$428,700	16	\$166,300
Boston	17	\$464,900	19	\$196,200
Seattle	18	\$475,400	17	\$171,300
San Diego	19	\$605,000	18	\$185,200
Pittsburgh	na	na	na	na

Source: National Association of Realtors.

Home Ownership Rates 2017 vs. 1998

Region	2017 Rank	2017 Raw Percentage	1998 Rank	1998 Raw Percentage
Pittsburgh	1	71.0%	na	na
St. Louis	2	68.7%	10	68.0%
Cleveland	3	68.4%	3	72.6%
Minneapolis	4	67.9%	4	71.9%
Raleigh	5	67.4%	12	66.7%
Richmond	6	67.4%	15	62.1%
Philadelphia	7	67.0%	6	71.4%
Baltimore	8	65.3%	5	71.6%
Tampa	9	64.9%	9	68.7%
Indianapolis	10	64.6%	7	71.0%
Washington, DC	11	64.6%	13	64.6%
Charlotte	12	62.3%	1	74.5%
Atlanta	13	61.7%	8	69.4%
Denver	14	61.6%	11	67.5%
Seattle	15	59.5%	14	63.1%
Boston	16	59.3%	17	59.5%
Portland	17	58.9%	16	61.1%
Dallas	18	57.8%	18	59.0%
Austin	19	57.5%	20	52.3%
San Diego	20	51.8%	19	55.2%

Source: Bureau of the Census, Housing Vacancy Survey—Annual 1997; Annual 2015.

Cancer Hospitals in Top 40 2017 vs. 1998

Region	2017 Rank	# of Hospitals in Top 40	1998 Rank	# of Hospitals in Top 40
Minneapolis	3, 37	2	5, 30	2
Boston	4, 12	2	4, 11, 24	3
Seattle	5	1	8	1
Baltimore	6	1	3	1
Philadelphia	7, 20, 28	3	20, 21	2
Cleveland	7, 34	2	27, 39	2
Tampa	9	1	na	0
St. Louis	19	1	18	1
Raleigh	24, 38	2	6, 31	2
Portland	26	1	na	0
Pittsburgh	35	1	na	na
San Diego	40	1	na	0
Atlanta	na	0	na	na
Austin	na	0	na	0
Charlotte	na	0	na	0
Dallas	na	0	33	1
Denver	na	0	na	0
Indianapolis	na	0	12	1
Richmond	na	0	na	0
Washington, DC	na	0	23	1

Sources: 2017: US News. 1998: US News and World Report, Best Hospitals 1997.



Violent Crime (per 100,000) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Boston	1	115.4	7	580.9
St. Louis	2	219.7	17	1,003.4
Portland	3	276.1	9	644.5
Minneapolis	4	287.7	2	468.5
Pittsburgh	5	289.0	na	na
Washington, DC	6	301.3	10	679.7
Austin	7	316.9	3	520.9
San Diego	8	330.4	11	710.0
Tampa	9	340.8	19	1,120.4
Seattle	10	353.2	6	575.7
Dallas	11	359.7	15	784.4
Denver	12	389.0	1	460.4
Atlanta	13	403.2	14	781.6
Cleveland	14	445.5	4	551.4
Philadelphia	15	446.5	13	733.2
Baltimore	16	710.3	20	1,237.3
Indianapolis	17	713.4	12	726.5
Charlotte	na	na	16	979.2
Raleigh	na	na	5	570.9
Richmond	na	na	8	596.6

Sources: 2017: Federal Bureau of Investigation 2016 Uniform Crime Reports. 1998: Federal Bureau of Investigation, 1996 Uniform Crime Reports.

Property Crime (per 100,000) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Tampa	1	228.7	18	6,007.4
Boston	2	1,399.4	1	3,187.3
Pittsburgh	3	1,746.5	na	na
Washington, DC	4	1,842.9	6	4,771.0
San Diego	5	1,850.1	4	3,913.8
Philadelphia	6	2,172.1	3	3,897.5
Minneapolis	7	2,315.6	8	4,877.6
Cleveland	8	2,383.8	2	3,778.7
Dallas	9	2,476.2	15	5,565.8
St. Louis	10	2,490.2	9	4,904.6
Austin	11	2,555.2	12	5,439.4
Baltimore	12	2,790.4	16	5,789.6
Portland	13	2,794.2	14	5,510.2
Denver	14	2,954.0	10	4,955.5
Atlanta	15	2,998.3	20	6,866.4
Indianapolis	16	3,206.9	5	4,673.6
Seattle	17	3,890.0	19	6,214.6
Charlotte	na	na	17	5,861.8
Raleigh	na	na	13	5,505.6
Richmond	na	na	7	4,858.6

Sources: 2017: Federal Bureau of Investigation, 2016 Uniform Crime Reports. 1998: Federal Bureau of Investigation, 1996 Uniform Crime Reports.

Unhealthy Air Days 2017* vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Austin	1	1	4	25
Portland	2	2	1	9
Raleigh	3	3	11	93
Seattle	4	3	3	16
Richmond	5	4	7	80
Minneapolis	6	5	2	12
Tampa	7	6	18	188
Boston	8	7	6	50
Charlotte	9	9	12	97
Indianapolis	10	12	15	117
Washington, DC	11	16	10	92
Dallas	12	18	13	105
St. Louis	13	19	20	210
Philadelphia	14	20	17	126
Baltimore	15	24	9	90
Cleveland	16	24	16	119
Denver	17	26	5	47
Pittsburgh	18	30	19	204
Atlanta	19	32	14	114
San Diego	20	42	8	88

Source: Environmental Protection Agency. *Data from 2016

Reduction in Unhealthy Air Days 1998–2017*

Region	Rank	Raw Percentage
Tampa	1	96.81%
Raleigh	2	96.77%
Austin	3	96.00%
Richmond	4	95.00%
St. Louis	5	90.95%
Charlotte	6	90.72%
Indianapolis	7	89.74%
Boston	8	86.00%
Pittsburgh	9	85.29%
Philadelphia	10	84.13%
Dallas	11	82.86%
Washington, DC	12	82.61%
Seattle	13	81.25%
Cleveland	14	79.83%
Portland	15	77.78%
Baltimore	16	73.33%
Atlanta	17	71.93%
Minneapolis	18	58.33%
San Diego	19	52.27%
Denver	20	44.68%

Source: Environmental Protection Agency. *Data from 2016



Charitable Giving 2017

Region	Rank	Percent of Income
Atlanta	1	4.06%
Dallas	2	3.77%
Charlotte	3	3.41%
Raleigh	4	3.40%
Indianapolis	5	3.26%
Baltimore	6	3.15%
St. Louis	7	3.10%
Seattle	8	3.09%
Richmond	9	3.06%
Tampa	10	3.02%
Washington, DC	11	2.89%
Cleveland	12	2.78%
Portland	13	2.74%
Austin	14	2.71%
Denver	15	2.71%
San Diego	16	2.68%
Minneapolis	17	2.63%
Philadelphia	18	2.59%
Boston	19	2.54%
Pittsburgh	20	2.46%

Source: 2018: Chronicle of Philanthropy, 2012.

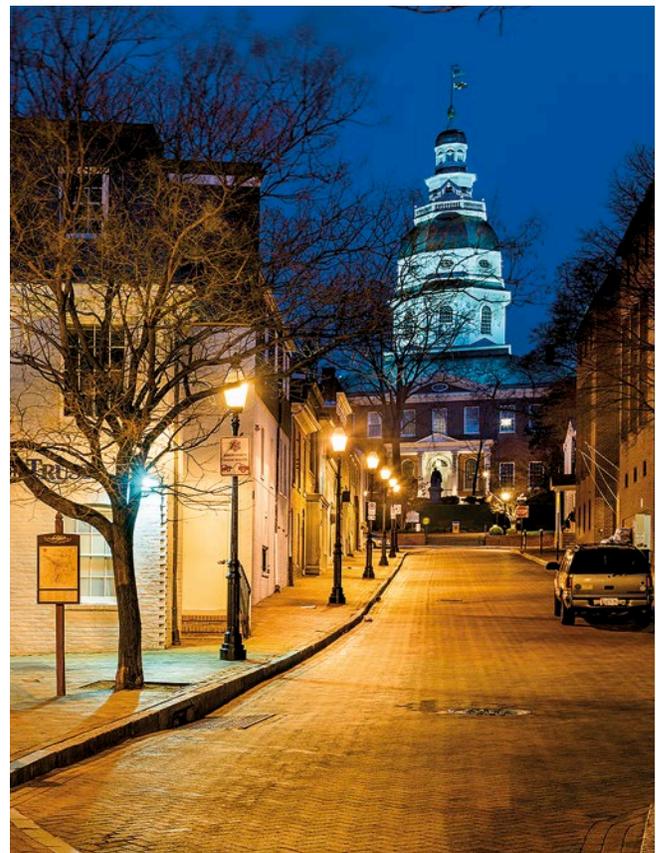
Total Government Units (per 100,000) 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Baltimore	1	2.0	1	2.8
Washington, DC	2	2.6	3	3.7
Raleigh	3	3.9	7	7.2
Richmond	4	3.9	2	3.6
San Diego	5	5.1	5	6.8
Charlotte	6	5.3	6	7.0
Atlanta	7	6.8	8	7.9
Tampa	8	7.1	4	3.9
Dallas	9	7.8	9	11.8
Seattle	10	9.4	12	13.2
Boston	11	10.0	11	13.1
Portland	12	12.6	15	18.7
Philadelphia	13	14.0	14	17.8
Austin	14	14.0	17	20.0
Cleveland	15	15.1	13	15.3
Minneapolis	16	18.4	16	19.7
Indianapolis	17	19.6	19	27.4
St. Louis	18	27.6	20	30.6
Pittsburgh	19	37.4	10	12.6
Denver	20	38.6	18	23.6

Total Government Units 2017 vs. 1998

Region	2017 Rank	2017 Raw Number	1998 Rank	1998 Raw Number
Raleigh	1	47	3	66
Richmond	2	49	1	32
Baltimore	3	55	4	68
Charlotte	4	124	6	85
Washington, DC	5	154	7	159
San Diego	6	163	8	177
Tampa	7	204	5	83
Austin	8	264	9	181
Portland	9	293	12	300
Cleveland	10	311	14	339
Seattle	11	341	11	281
Atlanta	12	377	10	248
Indianapolis	13	382	15	390
Boston	14	468	18	745
Dallas	15	533	13	331
Minneapolis	16	637	17	516
St. Louis	17	772	19	771
Philadelphia	18	843	20	877
Pittsburgh	19	882	2	58
Denver	20	1,043	16	405

Source: US Census Bureau *Census of Governments*, 1997, 2012.





Percentage of Households That Own a Computer 2017

Region	Rank	Raw Percentage
Austin	1	95.25%
Denver	2	94.64%
Seattle	3	94.51%
San Diego	4	94.49%
Washington, DC	5	94.47%
Raleigh	6	94.08%
Portland	7	93.87%
Atlanta	8	93.41%
Dallas	9	92.65%
Minneapolis	10	92.08%
Boston	11	91.94%
Charlotte	12	91.42%
Baltimore	13	90.90%
Tampa	14	90.73%
Richmond	15	90.64%
St. Louis	16	89.77%
Indianapolis	17	89.77%
Philadelphia	18	89.70%
Cleveland	19	87.78%
Pittsburgh	20	87.12%

Source: 2017: American Community Survey 1 Year Estimate, 2016.

Percentage of Households with Broadband 2017

Region	Rank	Raw Percentage
Seattle	1	89.34%
Washington, DC	2	88.74%
San Diego	3	88.16%
Denver	4	88.02%
Portland	5	87.79%
Raleigh	6	87.66%
Austin	7	86.57%
Boston	8	86.47%
Minneapolis	9	85.72%
Atlanta	10	84.92%
Dallas	11	84.51%
Baltimore	12	84.35%
Charlotte	13	84.11%
Philadelphia	14	82.62%
Tampa	15	82.43%
Indianapolis	16	81.85%
St. Louis	17	81.79%
Richmond	18	80.84%
Pittsburgh	19	80.83%
Cleveland	20	79.48%

Source: 2017: American Community Survey 1 Year Estimate, 2016.



Methodology

In 1998, 20 metropolitan regions including Baltimore were selected from across the country in order to compare a wide variety of factors that relate to the economy and quality of life. The metropolitan areas studied include some of the fastest growing, most dynamic regions in the nation, along with some older metropolitan areas that are going through economic transition. This list was determined to be a representative and diverse national sample. The largest U.S. metropolitan areas, such as New York, Chicago, and Los Angeles, were not included because their size would dramatically skew the comparison.

Metro areas studied in the 2018 State of the Region Report:

Atlanta, GA	Philadelphia, PA
Austin, TX	Pittsburgh, PA*
Baltimore, MD	Portland, OR
Boston, MA	Raleigh, NC
Charlotte, NC	Richmond, VA
Cleveland, OH	San Diego, CA
Dallas–Ft. Worth, TX	St. Louis, MO
Denver, CO	Seattle, WA
Indianapolis, IN	Tampa, FL
Minneapolis–St. Paul, MN	Washington, D.C.

This report presents a set of indicators published by credible third parties that are important to gauge the health and performance of urban regions. The indicators do not tell us why something is the way it is, nor do they provide a detailed explanation of the conditions we are examining.

The *Greater Baltimore State of the Region* project brings together the goals and interests of the Greater Baltimore Committee and the Baltimore Metropolitan Council. The two organizations share the belief that strengthening regional ties and collaboration will benefit the entire region.

*Added in 2005. Pittsburg, PA replaced Greenville-Spartanburg, SC in order to reflect respective changes in growth between the two cities and Baltimore.





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