2018 Regional Indicators Summary

Overview

Regional indicators are a specific set of data points that help gauge the relative health of the region in a number of areas. These include economy, environment, social, infrastructure, health, and mobility, among other topics.

At the end of 2018, Berkshire County has seen measurable improvements in numerous regional indicators (See sidebar “Where have we improved”).

In this report, indicators related to the Economy as well as Housing and Neighborhoods are included. Future releases will include additional topics. The full range of topics that will eventually be covered include:

- Climate and Energy
- Conservation and Recreation
- Economy
- Food and Agriculture
- Historic Preservation
- Housing and Neighborhoods
- Infrastructure and Services
- Land Use

In future years, indicators will be updated when relevant data is updated by the original source.

Where have we improved?

Berkshire County has made measurable improvements in the below areas.

Economy

- Decrease in Children in Poverty
- Increase in Educational Attainment
- Increase in Employment
- Decreased Unemployment
- Increased Industrial Diversification
- Increase in Per Capita Income
- Increase in Median Household Income
- Decrease in Income Inequality
- Decrease in People in Poverty
- Decrease in Households making less than $75,000/year

Housing and Neighborhoods

- Decrease in Housing Burden
- Increase in Assessed value
- Increase in Housing Units
- Decrease in Housing Costs as a Percentage of Income
- Increase in First Time Home Buyers Affordability Index
- Decrease in Teen pregnancy

Where have we not improved?

While Berkshire County has made measurable improvements in many areas, there are some areas where we have not improved.

Economy

- Held steady in 3rd Grade Literacy
- Held steady in High School Graduation Rate
- Held steady in Labor Force Participation Rate
- Held steady in Commuting Time
- Held steady in Occupational Diversification

Housing and Neighborhoods

- Increased Tax Burden
- Decreased Homeownership Rate
- Decrease in ratio of Births and Deaths
- Decreased In-Migration
- Decline in Total Population
Where do we stand in 2018

At A Glance:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Comparison to State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd Grade Literacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduation Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children in Poverty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Attainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Force Participation Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Diversification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Diversification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per Capita Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income Inequality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People in Poverty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household make less than $75,000/year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To Note:

In 2018, there were a number of economic indicators where the Berkshire’s performed well and a number where the region did not perform as well as compared to the state and nation.

The region saw improvements in educational attainment and also saw decreases in children in poverty. The region held steady in 3rd grade literacy, which may be due to the second year of the new MCAS tests, and graduation rate.

The region saw improvements in total employment, unemployment and industrial diversification and held steady in labor force participation, commuting and occupational diversification.

The region saw increases in incomes and a decrease in poverty for the first time in years. There was also an improvement in income inequality.

Key:

<table>
<thead>
<tr>
<th>Trend</th>
<th>Compared to State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing</td>
<td>Higher than State</td>
</tr>
<tr>
<td>No Change</td>
<td>Same as State</td>
</tr>
<tr>
<td>Decreasing</td>
<td>Lower than State</td>
</tr>
</tbody>
</table>

Positive                  Neutral                  Negative
Economy—Education

Indicator: 3rd Grade Literacy

Overview
The ability of students to read at grade level in grade 3 is imperative for the future learning abilities of the student. Prior to grade 3 they learn to read while after grade 3 they read to learn. Over the last decade, the Massachusetts Comprehensive Assessment System (MCAS) has been utilized to measure student’s ability in English, math and science. In 2015 and 2016 the Partnership for Assessment of Readiness for College and Careers (PARCC) was utilized by half of the school districts in the county instead of the MCAS. In 2017, the NextGen MCAS was used by all students, which replaces the older MCAS and PARCC.

What is the Trend?
The county has been relatively consistent with the state average for the MCAS, however it has been slightly lower over the last few years and dropped the last two years. The county did significantly worse than the state on the PARCC test in 2015, the first year offered, however it mostly closed the gap with the state in 2016. For the NextGen MCAS in 2017 the county was close to, but below the state.

Indicator: Graduation Rate

Overview
Graduation rate is the 4-year graduation rate for public schools in Berkshire County. Students who graduate from high school show increased economic opportunities in terms of earning potential.

What is the Trend?
Berkshire County has continued to increase, consistently with Massachusetts, however the last two years have been level to decreasing, so this indicator will need to be watched over the coming years.
Indicator: Children in Poverty

Overview
The percent of children in poverty measures the number of children under 18 who are in households that qualify for being below the federal poverty level. When children are below poverty, they tend not to do as well in school, which gives them a lower chance of succeeding later in life economically.

What is the Trend?
The Berkshire County percentage had been increasing steadily for a number of years, but has now seen a significant decrease over the last two years. The county is slightly higher than the state percentage, but is lower than the US percentage.

Indicator: Educational Attainment

Overview
Educational attainment has a direct correlation with the wages that are paid. Those with an Associate’s degree or higher show a distinct increase in earning potential over those without a degree.

What is the Trend?
The percentage of adults over 25 that have an Associate’s degree or higher is relatively stable in Berkshire county. The county is below the state average, but is slowly closing the gap. The county is slightly above the US average, and appears to be widening the gap with the US.
Economy—Employment

Indicator: Labor Force Participation Rate

Overview
Labor force participation rate is the percentage of adults who are in the labor force. The labor force is comprised of those who are employed as well as those who are looking for work. The labor force participation rate is important as a higher rate tends to indicate a healthier economy.

What is the Trend?
Berkshire County’s trend is relatively stable with a slight uptrend, yet significantly below the state rate. This may largely be due to the older population that resides in the region. The county has a median age of 46.1, while the state is at 39.4 and the US is at 37.7.

Indicator: Employment

Overview
Employment is the number of people who have a job, regardless of the job being full- or part-time. In a healthy economy, the employment would be increasing.

What is the Trend?
After several years of increase, the employment in Berkshire County has been decreasing. Over the last five years, Berkshire County has experienced a -0.15% decrease in employment, while the state has experienced a 6.81% increase in employment.
Economy—Employment

Indicator: Unemployment

Overview
Unemployment measures the number of people who are currently looking for work. The measure is a percentage of those who are in the labor force, which is those who are employed as well as those looking for work.

What is the Trend?
Unemployment in Berkshire County has been going down since its recent peak in 2010. The rate is just above the Massachusetts rate. The county rate has historically been lower than the US rate, however the US has recently come down and is approaching the county rate.

Indicator: Commuting

Overview
The percentage of workers commuting via walking, biking, transit or rideshare is useful in determining the mobility of a population. This does not include carpooling or taking one’s own vehicle. When a community provides multiple ways of commuting to work, employees tend to do better financially as they can adjust their schedule as needed, especially for those without their own vehicle.

What is the Trend?
The trend in Berkshire County is relatively stable, but is significantly less than the Massachusetts average. This is mostly due to the lack of mass transit options and the rural nature of the region. The county also has a lower percentage than the US.
Indicator: Industrial Diversification

Overview
Industrial Diversification is a measure of how closely the industrial sectors in a region compare to another region. Having a diverse industrial makeup helps to ensure the growth of a region and limits loss during hard times.

What is the Trend?
Compared to Massachusetts, Berkshire County is less diverse industrially, however it is steadily improving, except for a slight decline last year. A value of 1 would mean that the region is as diverse as the state, while a value of 0 means the region has a totally different industrial structure.

Indicator: Occupational Diversification

Overview
Occupational Diversification is a measure of how closely occupations in a region compare to another region. Having a diverse set of occupations can help ensure employment opportunities for a variety of residents.

What is the Trend?
Compared to Massachusetts, Berkshire County is less diverse in occupations, however it is slowly improving. A value of 1 would mean that the region is as diverse as the state, while a value of 0 means the region has a totally different industrial structure.
Economy—Income

Indicator: Per Capita Income

Overview
Per capita income or average income, measures the average income earned per person in a given area (city, region, country, etc.) in a specified year. It is calculated by dividing the area's total income by its total population. Per Capita Income is a useful measure for comparing wealth in one geography to another geography. It is often used to measure an area’s standard of living.

What is the Trend?
The trend for Per Capita Income has been an increasing trend, however the county remains well behind the state’s per capita income. The gap between the county and the state is relatively stable. Compared to the US, Berkshire County is slightly above US and is increasing at about the same rate.

Indicator: Median Household Income

Overview
A household’s income is measured by combining the income of every resident over the age of 15, including wages and salaries, unemployment insurance, disability payments, child support payments received, regular rental receipts, as well as any personal business, investment, or other kinds of income received routinely. Median household income calculates the point where half of households have income above that level and half below. Median household income is useful for comparing standard of living and distribution of income and wealth.

What is the Trend?
After several years of decline, median household income has been increasing. Median household income for Berkshire County is substantially lower than the Massachusetts median and slightly below the US median.
Economy—Income

Indicator: Income Inequality

Overview
Income inequality is measured using the GINI index of inequality. The GINI is a measurement of the income distribution of a region’s residents. This number, which ranges between 0 and 1 and is based on residents' net income, helps define the gap between the rich and the poor, with 0 representing perfect equality and 1 representing perfect inequality. Income inequality is of concern because it can lead to social problems, and hinder long term growth. Too much equality may also be a problem as it decreases the incentive for productivity and the desire to take-on risks and create wealth.

What is the Trend?
The trend for Berkshire County is decreasing, or higher equality. The inequality is not as stark as Massachusetts or the United States.

Indicator: People in Poverty

Overview
The percent of people in poverty is an attempt to measure the number of people who live paycheck to paycheck and have trouble affording basics such as food and housing. Poverty negatively impacts ones access to food, housing, and education. Being in poverty prevents one from planning ahead and trying to better themselves economically.

What is the Trend?
The trend for poverty in Berkshire County is decreasing. The percent of people in poverty has consistently been above the Massachusetts poverty rate, but is now approaching it. The count rate is significantly below the US rate. All three geographies saw a slight decline in the last two year.
Economy—Income

Indicator: Households making less than $75,000/year

Overview
Households in Massachusetts have a median household income of just under $75,000. If the county wants to be competitive with the state in attracting employees, it must have incomes comparable or higher than the state.

What is the Trend?
Over the last several years, the percent of households making less than $75,000 has slightly decreased and is now below the US rate, however it is still significantly higher than the state.

Indicator: Households with Broadband

Overview
Broadband internet connection is now considered an essential part of life. Having access to broadband is critical for businesses, education and leisure. Broadband in this context is defined as cable, fiber optic or DSL. While there is debate as to if DSL and even cable are true broadband, the data from the Census groups them together.

What is the Trend?
Over the last year Berkshire County has seen a decrease in the percent of households with access to broadband, and it lags behind the state. While the region has significant gaps in its broadband coverage, most of the areas are rural and do not have many households. The decline over the last year is most likely due to sampling issues.
Housing & Neighborhoods— Trends

Where do we stand in 2018

At A Glance:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Comparison to State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing Burden</td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>Tax Burden</td>
<td>↑</td>
<td>↓</td>
</tr>
<tr>
<td>Assessed Value</td>
<td>↑</td>
<td>↓</td>
</tr>
<tr>
<td>Housing Units</td>
<td>↑</td>
<td>↓</td>
</tr>
<tr>
<td>Housing Cost as a Percentage of Income</td>
<td>↓</td>
<td>NA</td>
</tr>
<tr>
<td>First Time Home Buyers Affordability Index</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeownership Rate</td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>Teen Pregnancy</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Births and Deaths</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Migration</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Population Change</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Age Distribution</td>
<td>↓</td>
<td></td>
</tr>
</tbody>
</table>

To Note:

In 2018, there were a number of Housing & Neighborhood indicators where the Berkshire’s performed well and a number where the region did not perform as well.

The region saw improvements in assessed value, housing units, and first time home buyers affordability index, but also saw increases in the tax burden.

Meanwhile, the region saw decreases in housing burden, housing cost as a percentage of income and teen pregnancy, but also decreases in the homeownership rate, birth to death ratio, migration and population change.

Key:

- **Positive**
- **Neutral**
- **Negative**

- **Increasing**: Higher than State
- **No Change**: Same as State
- **Decreasing**: Lower than State
**Indicator: Housing Burden**

**Overview**
Housing burden is defined by the ratio of home value to income. The higher the value indicates that a household will be paying more for homes than their income supports. A rate of 100% means that a household income is the same as the home value.

**What is the Trend?**
Berkshire County saw a decrease the last several years due to an increase in income and stable housing value. The county is now below the state and closer to the US, which is more affordable.

---

**Indicator: Tax Burden**

**Overview**
The tax burden is defined as the ratio of local property tax to household income. Tax burden can show an imbalance between what people make and what they pay between different geographies.

**What is the Trend?**
The tax burden in Berkshire County is lower than the state tax burden, however both have been increasing.
Indicator: Assessed Value

Overview
Assessed value is the median value of a home in the region. Change in assessed value can indicate the health of a region. A region that is growing and has demands for new housing will likely see an increase in assessed value, while a region that is not growing will tend to see a stagnant or declining value.

What is the Trend?
The trend for Berkshire County has been slightly increasing with a significant increase last year, but not nearly as rapidly as Massachusetts. This indicates that Berkshire County has lower demand for housing than the state, thus the assessed values are not growing as rapidly.

Indicator: Housing Units

Overview
The number of housing units is the total housing units in the region, including owner, rental, vacant and seasonal. The change in the number of housing units indicates how much a community is growing. An increasing number of housing units indicates a higher demand for housing units and a growing community.

What is the Trend?
The change in the number of housing units for the county had been relatively stable at 0, meaning no change, however the county saw a significant increase last year. Both Massachusetts and the US have shown an increase in the number of housing units.
## Housing & Neighborhoods—Financial

### Indicator: Housing Cost as a Percentage of Income

**Overview**
The amount a household pays for housing has an impact on their financial well-being. Households should not be paying more than 35% of their income to housing, otherwise they will be struggling to pay other bills.

**What is the Trend?**
The percent of renters who pay more than 35% has been relatively stable to decreasing, but is the highest among the three residency options. Those who own a home and have a mortgage have seen a decline over the last few years. Those without a mortgage, which is the smallest group, has been relatively stable.

### Indicator: First Time Home Buyers Affordability Index

**Overview**
The First-Time HAI measures the ability of a typical family, as measured by household income at 70% of the median, to purchase their first home. The home price is assumed to be 85% of the area’s median price. Transaction assumptions of the First-Time Buyers HAI are: 10% down payment, a 30-year fixed mortgage, and mortgage costs that are less than 25% of household income.

A central assumption of the Index is that the household not spend more than 25% of its income on principal and interest payments. When the index lies at 100, the household pays exactly this share of its income to principal and interest. When the index lies above 100 it pays less, and when it is below 100, the household pays more.

**What is the Trend?**
The first-time home buyers affordability index shows that Berkshire County is approaching similar affordability as the US and is more affordable than Massachusetts. The county saw an increase the last two years over 100, indicating that first time home buyers are now paying less than 25% of their income to housing.
**Indicator: Homeownership Rate**

**Overview**
The percentage of units that are owner occupied indicates the health of a neighborhood. A higher percentage tends to indicate a more stable neighborhood with less turnover of residents. It also indicates a better financial situation for its residents as they are able to afford home ownership.

**What is the Trend?**
The county as well as Massachusetts and the US have all been experiencing a decline in home ownership, however the county average has seen a slower decline and is more stable. Overall, Berkshire County has the lower percentage of units that are owner occupied than the state, but higher that the US.

---

**Indicator: Teen Pregnancy**

**Overview**
Teen pregnancy is measured by the number of teen births per 1,000 teen females (age 15-19). When teens have children, it often leads to a life in poverty due to the lack of financial stability of the parents. The parents also tend not to get a college degree, due to the cost and time commitment, which can lead to diminished wages.

**What is the Trend?**
The trend for Berkshire County, along with Massachusetts and the US, has been one of significant decline. Berkshire County is just above Massachusetts, but is significantly below the US rate.
Housing & Neighborhoods—Demographics

Indicator: Births and Deaths

Overview
The ability for a community to grow is based on several factors, of which one is the number of births and deaths. A healthy region has a diversity of ages and is growing, which means that the region should have more births than deaths.

What is the Trend?
The percentage of births as compared to deaths in the county is well below 100%, which means there are more deaths than births. The trend for the county is relatively stable to declining. The state and US are significantly above the county. Both the state and US have been seeing declines over the last few years, but are still significantly above the county and above 100%.

Indicator: Migration

Overview
Another factor impacting the health of a region is migration. A region should aim to have more in-migration than out-migration. This would indicate that the area is a good place to live as people don’t want to leave and outsiders want to move in.

What is the Trend?
The county and the state have been seeing decreasing percentages of in-migration compared to out-migration. This means we are seeing less people moving in than those moving out.
Housing & Neighborhoods—Demographics

Indicator: Population Change

Overview
One of the leading indicators of a region’s health is its population change. A region that is growing tends to have more opportunities, both economic and housing. Population change occurs due to births, deaths, in-migration and out-migration.

What is the Trend?
The trend for Berkshire County is one of continued loss, however the county was close to 0% loss in 2018. The state and US show increases in population, however the state is at a slower rate than it was a few years earlier.

Indicator: Age Distribution

Overview
Age distribution compares the ages of one region to that of another. A healthy region would have a balanced age distribution, ensuring that each age cohort had a equal percentages.

What is the Trend?
The county’s age distribution is slightly imbalanced as compared to the state, however it is significantly imbalanced when compared to the US. The county has an older population and a lack of young adults and children, which results in the imbalance.