# Maine Economic Indicators

## January 2020

**Maine Department of Administrative and Financial Services**

**Office of the State Economist**

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Maine Economic Indicators is a monthly report assembled by the Office of the State Economist that provides a synopsis of current economic trends and indicators for the state in comparison to New England and the United States. The intent of this report is to provide the public with a single document containing data aggregated from different sources typically used to track current economic and demographic conditions in the state.

This report includes monthly, quarterly, and annual data released at varying points throughout the year. The appendix provides comprehensive information related to the data presented herein. Data included in this report are assembled from various sources, subject to frequent revision, and provided in this report "as is" at the time of publication. Therefore, data presented in this report are subject to change over time.

# 1 Snapshot

Indicators in this section provide a summary of Maine's current economic status. Figures for Maine are compared to New England and the United States. Sources are given in the appendix.

| Reference Period | | Maine | New England | United States |
|---|---|---|---|---|
| 2019 | Total population | 1,344,212 | 14,845,063 | 328,239,523 |
| 2018-2019 | Annual population percent change | 0.4% | 0.1% | 0.5% |
| 2010-2019 | Cumulative population percent change | 1.2% | 2.8% | 6.3% |
| 2018 | Average earnings per job | $50,247 | $69,987 | $62,321 |
| 2017-2018 | Average earnings per job percent change | 2.9% | 2.8% | 2.9% |
| December 2019 | Unemployment rate | 2.9% | 3.0% | 3.5% |
| December 2019 | Total private nonfarm employment | 535,100 | 6,542,300 | 129,737,000 |

**Annualized Percent Change from the previous quarter and Compound Annual Growth Rate (CAGR)**

| Real GDP | 2018:Q3 | 2018:Q4 | 2019:Q1 | 2019:Q2 | 2019:Q3 | CAGR 2018:Q3-2019:Q3 |
|---|---|---|---|---|---|---|
| Maine | 2.8 | -1.8 | 4.8 | 0.6 | 2.1 | 1.4 |
| New England | 2.4 | 0.1 | 4.8 | 1.3 | 2.1 | 2.1 |
| United States | 2.9 | 1.1 | 3.1 | 2.0 | 2.1 | 2.1 |
| **Total Personal Income** | 2018:Q3 | 2018:Q4 | 2019:Q1 | 2019:Q2 | 2019:Q3 | CAGR 2018:Q3-2019:Q3 |
| Maine | 4.3 | 1.7 | 8.7 | 3.7 | 3.4 | 4.3 |
| New England | 4.5 | 2.7 | 8.5 | 2.3 | 2.9 | 4.1 |
| United States | 4.6 | 3.6 | 6.2 | 4.4 | 3.8 | 4.5 |
| **Per Capita Personal Income** | 2018:Q3 | 2018:Q4 | 2019:Q1 | 2019:Q2 | 2019:Q3 | CAGR 2018:Q3-2019:Q3 |
| Maine | 4.0 | 1.4 | 8.5 | 3.5 | 3.1 | 4.1 |
| New England | 4.1 | 2.3 | 8.3 | 2.0 | 2.5 | 3.7 |
| United States | 3.9 | 2.9 | 5.6 | 3.8 | 3.1 | 3.9 |
| **Wages & Salaries** | 2018:Q3 | 2018:Q4 | 2019:Q1 | 2019:Q2 | 2019:Q3 | CAGR 2018:Q3-2019:Q3 |
| Maine | 3.8 | -1.0 | 13.2 | 0.5 | 4.0 | 4.1 |
| New England | 3.6 | 1.6 | 14.8 | -1.1 | 3.3 | 4.5 |
| United States | 4.5 | 2.1 | 10.2 | 2.7 | 3.5 | 4.6 |

# 2 Annual Indicators

Indicators summarized below are updated annually on various release dates and provide a general summary of Maine's demographic and economic status.

| Reference Period | | Maine | New England | United States |
|---|---|---|---|---|
| 2019 | Total population | 1,344,212 | 14,845,063 | 328,239,523 |
| 2018-2019 | Annual population percent change | 0.4% | 0.1% | 0.5% |
| 2010-2019 | Cumulative population percent change | 1.2% | 2.8% | 6.3% |
| 2019 | Births | 12,073 | 145,125 | 3,791,712 |
| 2019 | Deaths | 14,335 | 131,609 | 2,835,038 |
| 2019 | Net migration | 5,039 | 2,428 | 595,348 |
| 2018-2019 | Annual rate of total net migration (Maine ranks 16th in the U.S.) | 5.6% | 0.00% | 1.8% |
| 2018 | Median age, years (American Community Survey) | 45.1 | 40.8 | 38.2 |
| 2018 | Associate's degree: percent of population age 25 and above | 9.7% | 8.2% | 8.6% |
| 2018 | Bachelor's degree: percent of population age 25 and above | 20.1% | 22.8% | 20.0% |
| 2018 | Graduate or professional degree: percent of population age 25 and above | 11.4% | 17.6% | 12.6% |
| 2018 | Percent of population below poverty level | 11.6% | 10.3% | 13.1% |
| 2018 | Median family income | $72,390 | $93,690 | $76,401 |
| 2018 | Median household income | $55,602 | $73,199 | $61,937 |
| 2018 | Per capita personal consumption expenditures | $45,497 | $52,515 | $42,757 |
| 2018 | Per capita disposable personal income | $43,909 | $58,562 | $48,101 |

# 3 Monthly and Quarterly Indicators

## 3.1 Gross Domestic Product (GDP)

Real GDP in Maine increased by 2.1 percent from the preceding quarter (2019:Q2 to 2019:Q3), equal (after rounding) to New England's and the United States' rates and 24th in the country. In 2019:Q3, the industries that contributed the most to GDP growth were Retail Trade (0.72 points) and Accommodation and Food Services (0.33 points). These gains were partially offset by losses in Finance and Insurance (-0.43 points) and Utilities (-0.22 points)

| Reference Period | | Maine | United States |
|---|---|---|---|
| 2019:Q3 | Total GDP (current dollars) | $67.91 billion | $21.54 trillion |



Real GDP (billions of chained 2012 dollars) - Maine
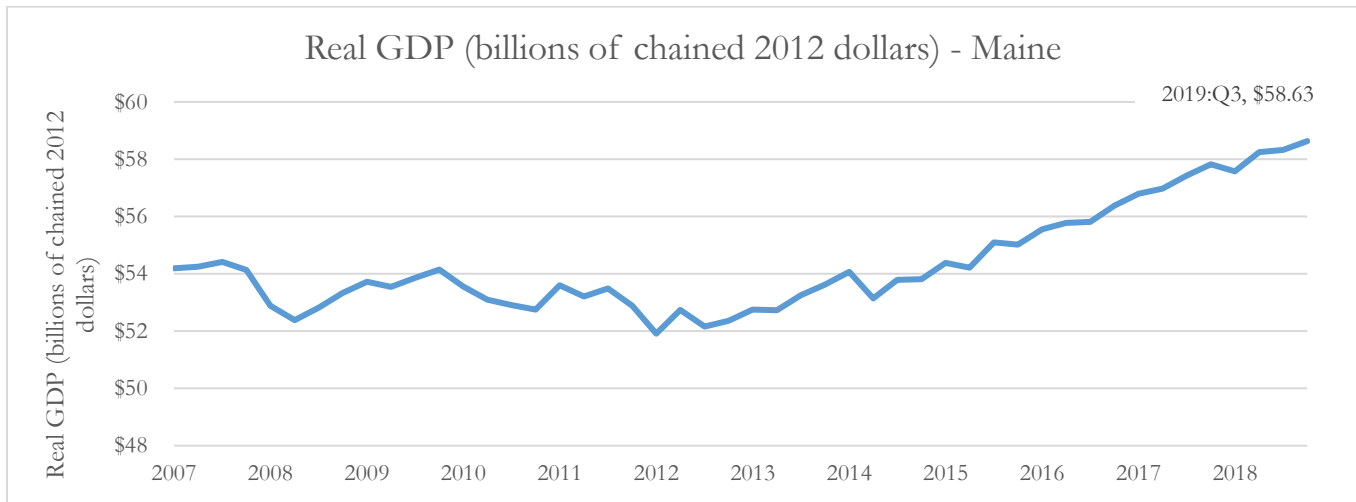
### 3.1.1 GDPNow

GDPNow, which is reported by the Atlanta Fed, is "a running estimate of real GDP growth based on available data for the current quarter." This model uses a similar methodology to the one used by Bureau of Economic Analysis in their official GDP estimates and is revised each time the monthly source data is updated. The latest forecast (January 17, 2020) estimates that real GDP growth for the fourth quarter of 2019 is 1.8 percent.



Evolution of Atlanta Fed GDPNow real GDP estimate for 2019: Q4
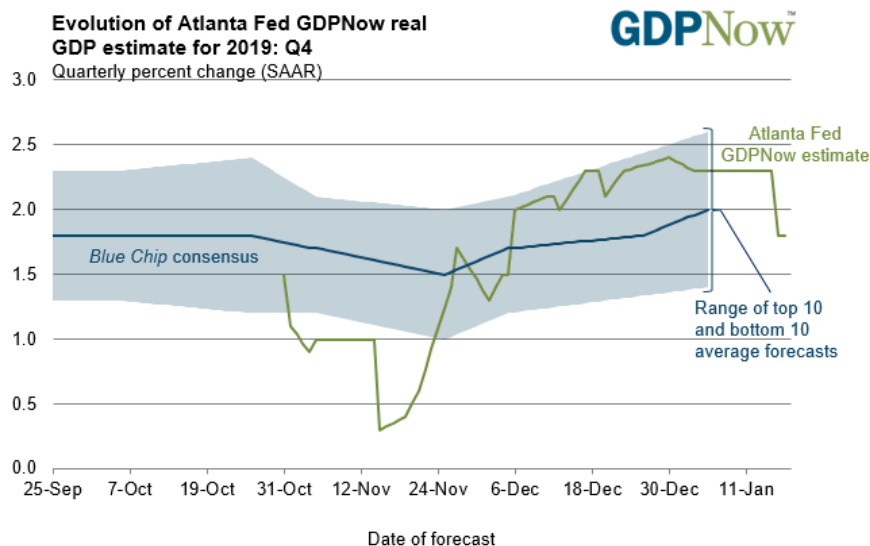
Sources: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*

### 3.1.2    Recession Indicators

The GDP-Based Recession Indicator Index is 3.9 percentage points (2019:Q3). This indicates that the national economy remains in an expansionary phase, the longest expansion in US economic history (previously 1991:Q2 – 2001:Q1)

The index ranges from 0 to 100, and values above 67 provide a historically reliable indicator that the economy is in recession[1]. Compared to National Bureau of Economics Research (NBER)'s subjective method of announcing recessionary periods, this method is purely mathematical. In addition, this index is calculated with a one quarter lag, which allows for extra insight and accounts for data revisions to make dependable inference. Therefore, the index does not get revised once it is published.
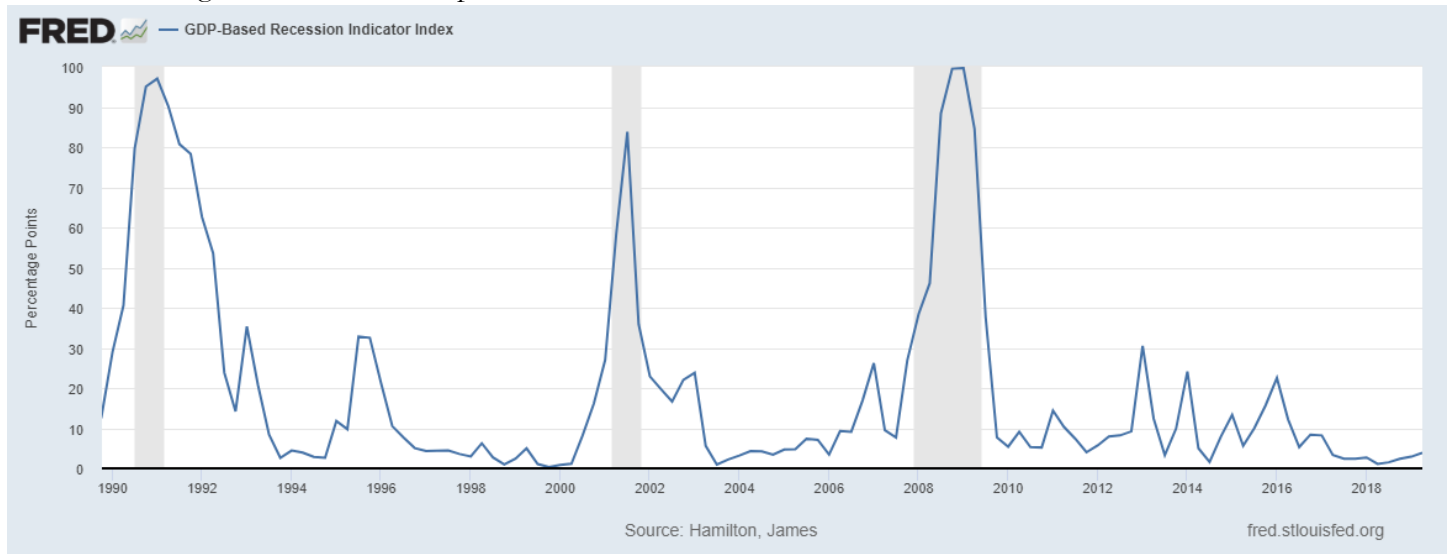


Additionally, the Real-time Sahm Rule Recession Indicator[2] signals a recession when the 3-month moving average of the national unemployment rate (U3) rises by at least 0.5 percentage points relative to its low in the previous 12 months. This is revised each year at the beginning of January, when the BLS revises its unemployment rate each year. In December 2019, this indicator showed that the three-month average of national U3 grew by 0.0 percentage points compared to its 12-month low.



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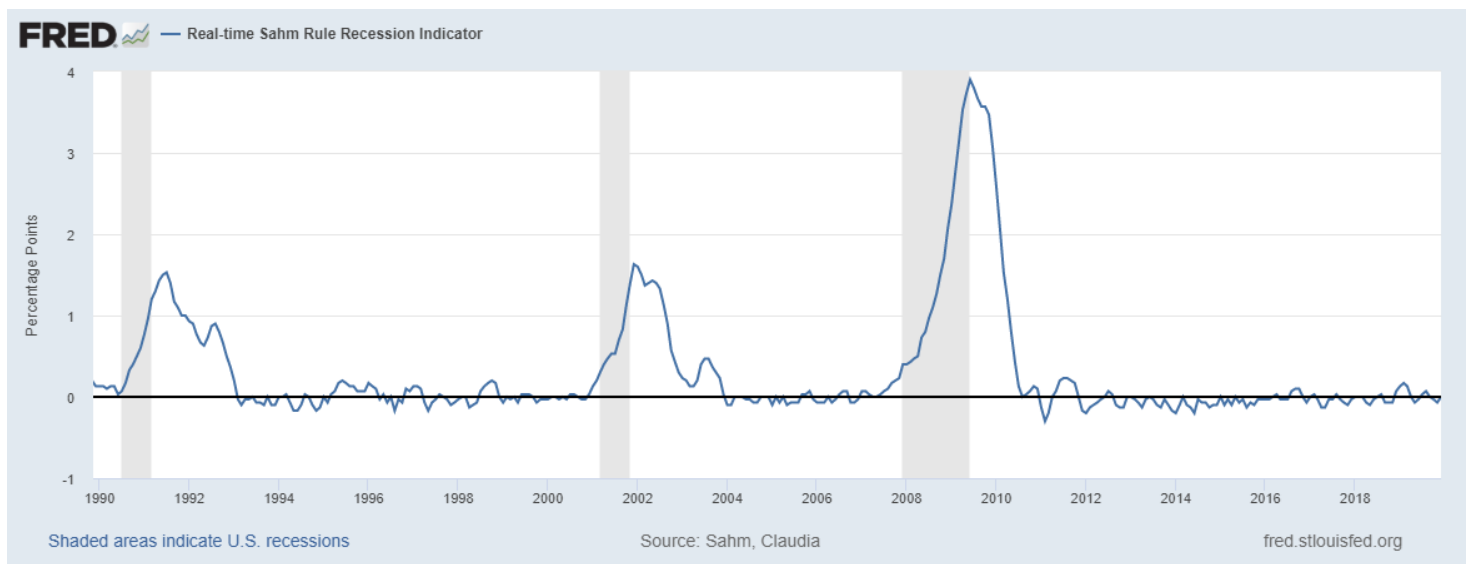
[1] Created by Dr. James Hamilton, University of California San Diego
[2] Created by Dr. Claudia Sahm, Federal Reserve Board of Governors

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## 3.2    Personal Income: Total and Per Capita

State total personal income in Maine increased by 3.4 percent from the preceding quarter (2019:Q2 to 2019:Q3) and grew by 4.3% on an annualized basis. The annualized growth rate ranks 31st nationally and is the highest in New England, tied with New Hampshire. Maine's total personal income ranks 42nd nationally. In terms of per capita income, Maine ranks 30th in the United States.

| Reference Period | | Maine | New England | United States |
|---|---|---|---|---|
| 2019:Q3 | Total personal income | $68.77 billion | $1055.72 billion | $18,723.38 billion |
| 2019:Q3 | Per capita personal income | $51,242 | $70,823 | $56,832 |

## 3.3    Labor Markets and Employment

The data for unemployment rates and labor force are derived from the Local Area Unemployment Statistics (LAUS) program and data for nonfarm payroll jobs are derived from the Current Employment Statistics (CES) program. The numbers presented below are estimates, vary month to month in either direction, and are subject to substantial revision. The Maine Department of Labor cautions users to analyze general trends over several months as opposed to making conclusions based on changes month to month.

### 3.3.1    Unemployment Rate: December 2019 = 2.9%

Preliminary estimates for December show the unemployment rate in Maine is 2.9%. The rates for both Maine and New England (3.0%) are lower than the national unemployment rate of 3.5 percent. Compared to last year (December 2018), the unemployment rate in Maine is 0.6 percentage points lower. Maine is tied with Idaho for the 7th lowest unemployment rate in the US.
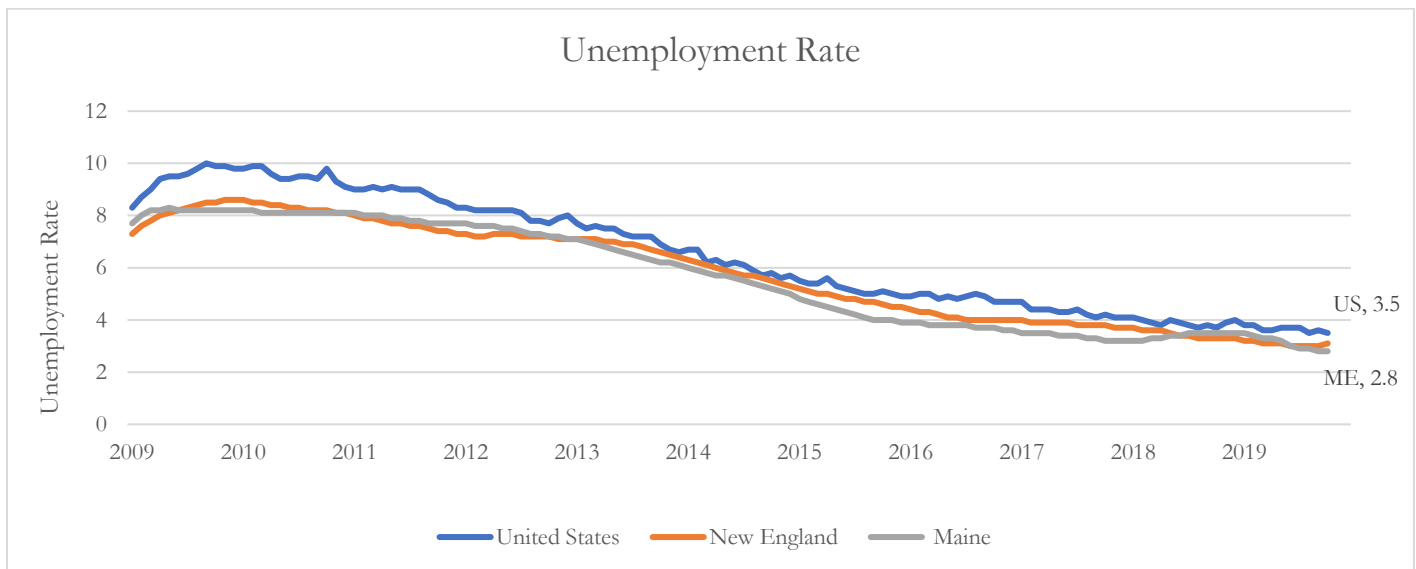


### 3.3.2    Labor Force Participation Rate: December 2019 = 62.3%

Labor force participation has seen a steady decline since early 2018. Compared to the United States, Maine has a diverging downward trend. The December 2019 estimate amounts to a 0.8 percentage point decline compared to December 2018.

## Labor force participation rate
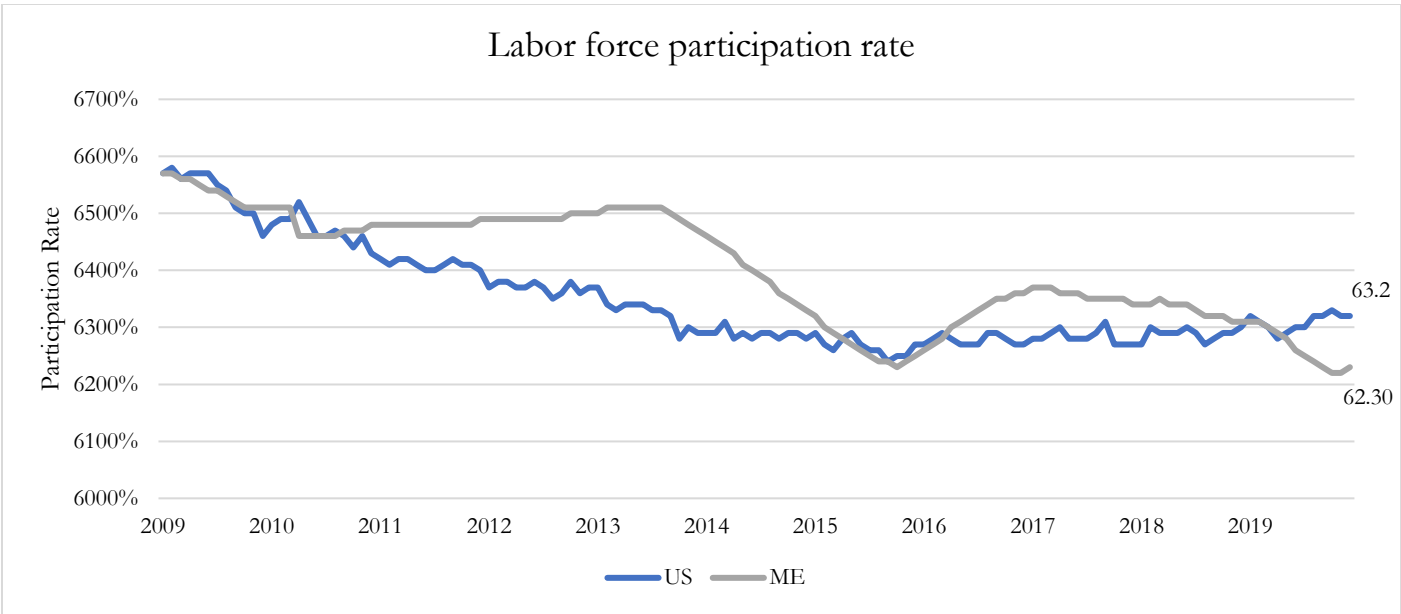


### 3.3.3 Total Nonfarm Payroll Job Estimates: December 2019 = 635,300

Preliminary estimates show that compared to December 2018, Maine's growth in total employment leads New England and lags the US slightly, at 1.2% compared to 0.8% and 1.4%, respectively.

**Percent change, year-over-year in Total Nonfarm Employment**
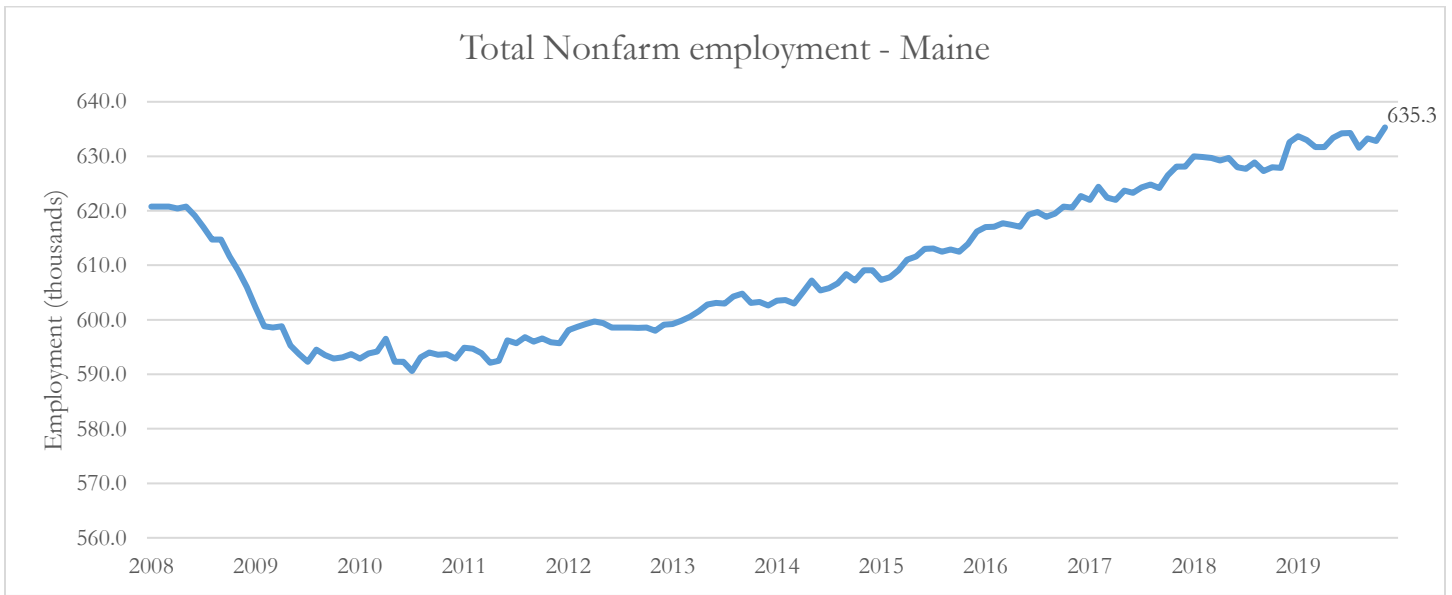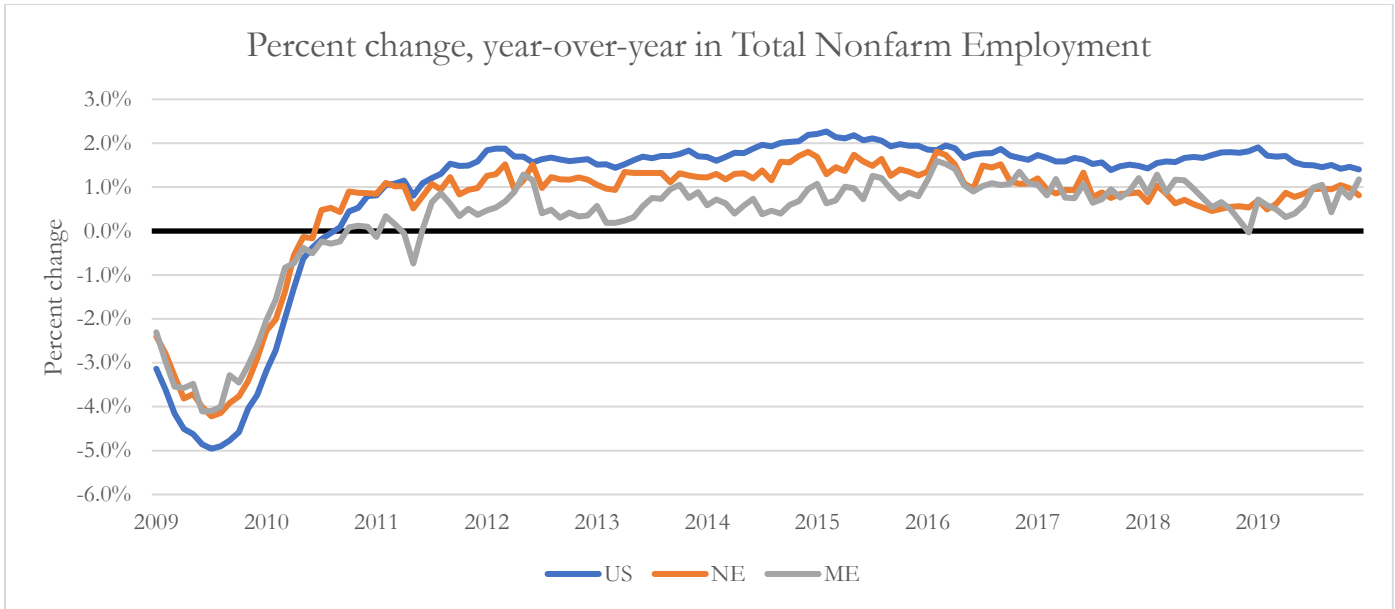


## 3.4 Housing Prices

In the third quarter of 2019, the housing price index (HPI) in Maine, New England, and the U.S. continued to rise. According to the Federal Housing Finance Agency (FHFA), the HPI "measures average price changes in repeat sales or refinancing on the same properties." Maine's HPI increased by 2.8 percent from the previous quarter (2019:Q2 to 2019:Q3). Maine's year-over-year HPI growth rate was significantly higher than both the regional growth rate and the national growth rate at 7.9%. The median price of homes sold in Maine in December was $234,000 – 7.8% higher than December 2018. The number of homes sold was 23.2% higher than December 2018.

| Reference Period | | Maine | New England | United States |
|---|---|---|---|---|
| 2019:Q2 - 2019:Q3 | HPI percent change from previous quarter | 2.8% | 1.4% | 1.1% |

**Percent Changes, Year-over-year in FHFA House Price Index (Seasonally Adjusted)**
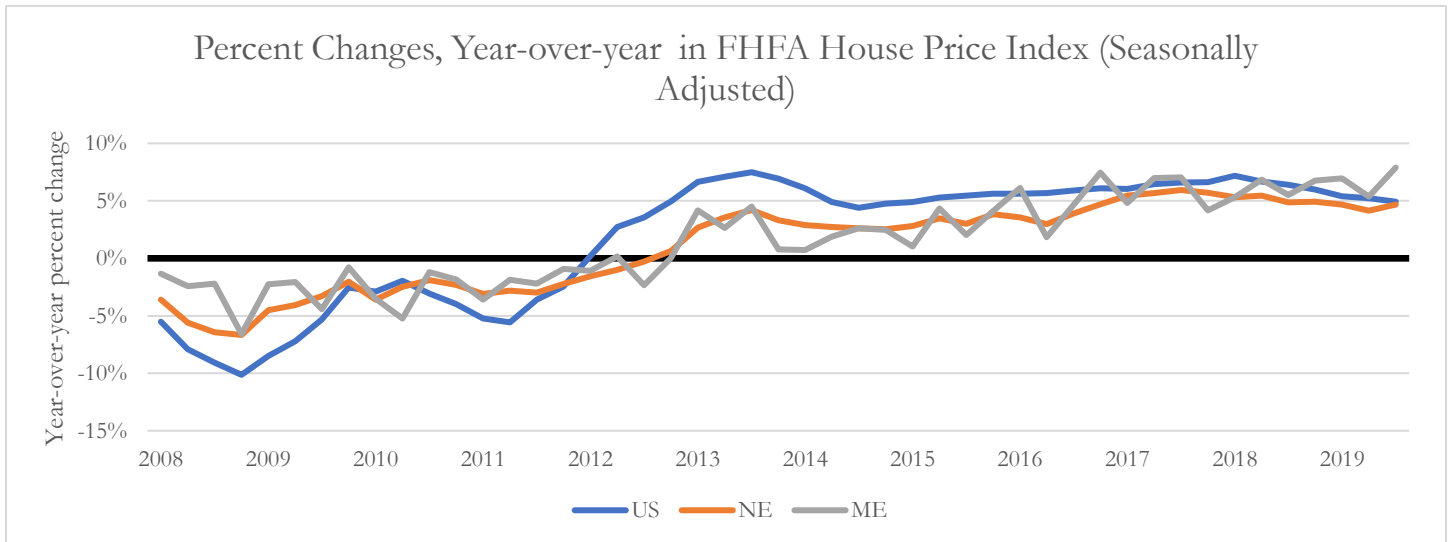
### 3.4.1 Median Housing Prices and Units Sold – County (December 2019)

| Geography | No. of Units Sold | One Year Change | Median Sale Price | One Year Change (Price) | One Month Change (Price) |
|---|---|---|---|---|---|
| Androscoggin | 92 | 12.2% | $167,500 | 6.5% | -5.9% |
| Aroostook | 43 | 10.3% | $63,000 | -21.4% | -35.9% |
| Cumberland | 346 | 27.7% | $314,975 | 6.1% | -4.4% |
| Franklin | 52 | 52.9% | $160,000 | 10.3% | 18.5% |
| Hancock | 80 | 23.1% | $222,250 | 17.6% | 4.5% |
| Kennebec | 109 | 9.0% | $170,000 | 6.4% | -1.4% |
| Knox | 48 | 14.3% | $245,700 | -2.7% | -1.7% |
| Lincoln | 55 | 61.8% | $219,000 | -7.4% | -8.7% |
| Oxford | 83 | 29.7% | $176,000 | 10.5% | 0.3% |
| Penobscot | 147 | 25.6% | $159,500 | 18.2% | 10.4% |
| Piscataquis | 22 | 37.5% | $90,500 | -13.6% | -21.3% |
| Sagadahoc | 50 | 42.9% | $245,750 | 0.3% | 5.7% |
| Somerset | 41 | 0.0% | $125,000 | 35.9% | -6.7% |
| Waldo | 38 | 11.8% | $174,000 | -16.1% | -7.1% |
| Washington | 34 | 25.9% | $136,000 | 15.7% | -9.3% |
| York | 257 | 20.1% | $300,000 | 10.9% | 3.8% |
| **Maine** | 1,497 | 23.2% | $234,000 | 7.8% | 4.0% |

## 3.5 Heating Oil Prices: January 20, 2020 = $2.64 per gallon

The first half of the winter heating season has shown significantly lower prices compared to last year, though higher than the 2016-17 and 2017-18 seasons. The current price is substantially lower than the US average of $3.07 per gallon and is the lowest price on the East Coast. The numbers represented below are statewide averages and prices vary across geographic regions. Heating oil releases are regularly updated between October and March as well as occasionally during the summer months.



Maine No. 2 Heating Oil Residential Price
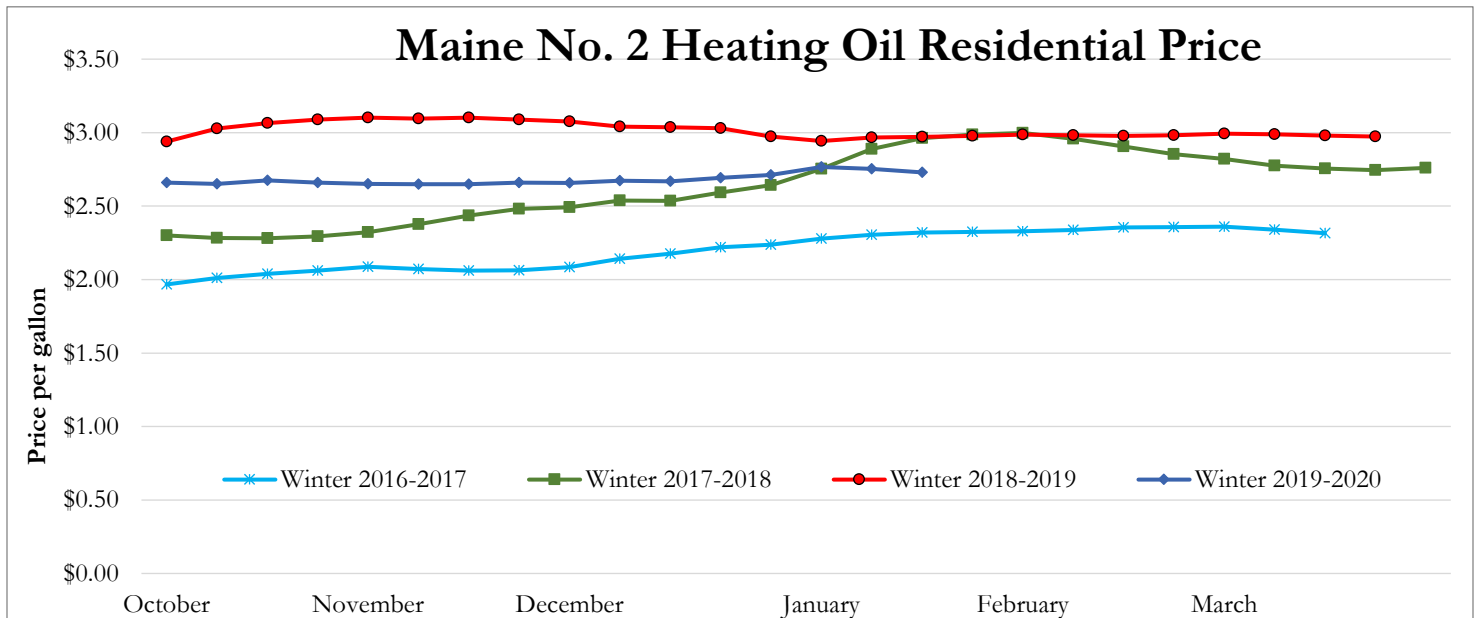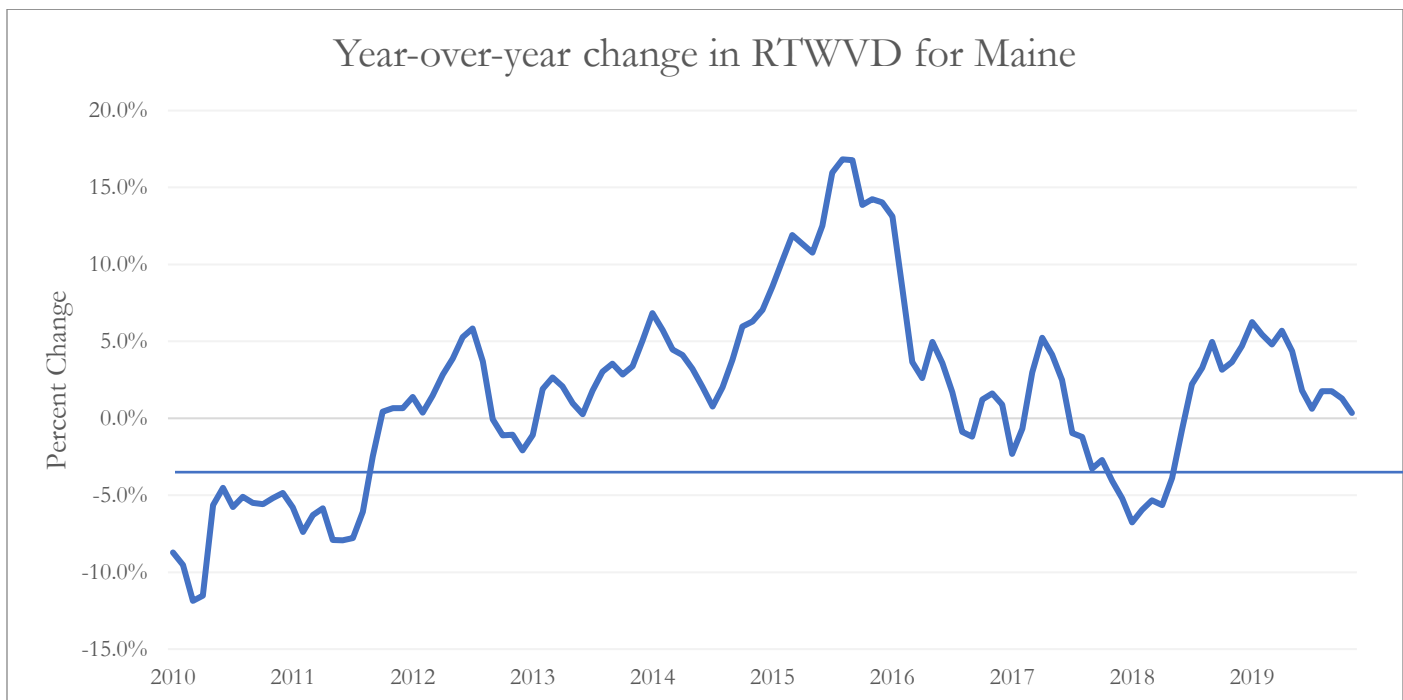
## 3.6    Trade Outlook

### 3.6.1    Exports

Year-over-year comparisons show that compared to November 2018, total exports for November 2019 in Maine rose by 2.0 percent. Year-over-year comparisons show that total exports decreased by 1.8 percent nationally and by 0.7 percent across New England in November 2019. During this period, Canada (62.4%), Malaysia (3.1%) and the United Kingdom (2.8%) are the top three export destinations, while Maine's top three import partners were Canada (70.2%), Germany (3.2%) and China (2.7%).



Percent Changes, Year-over-year in Total Exports
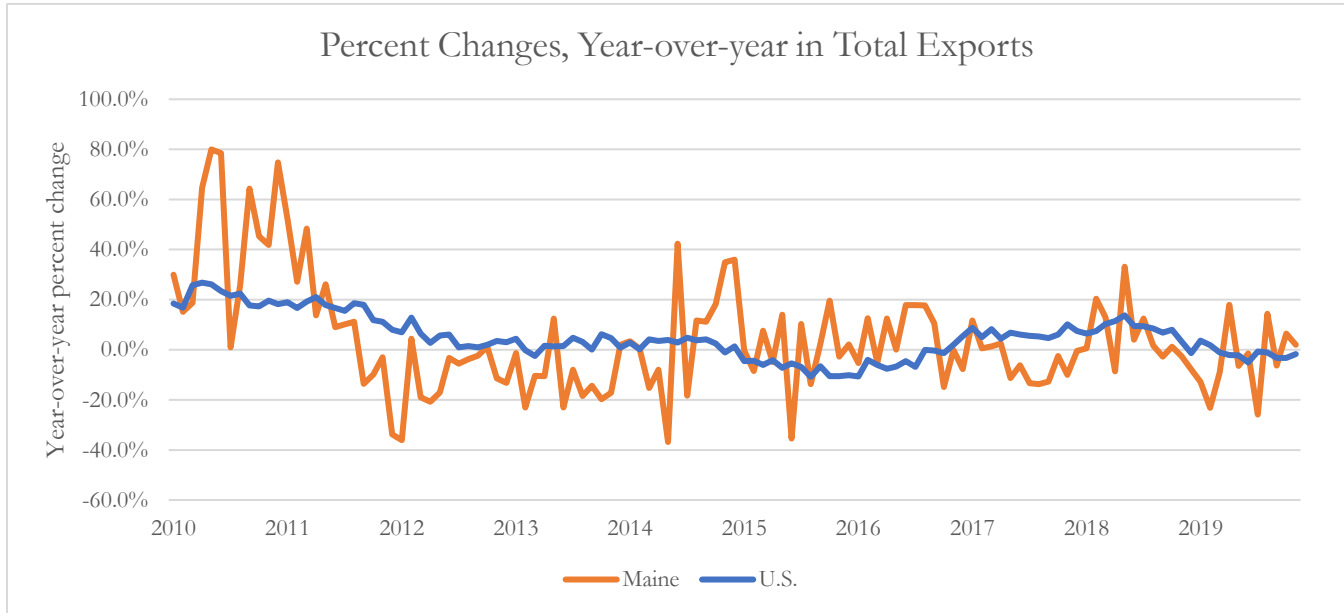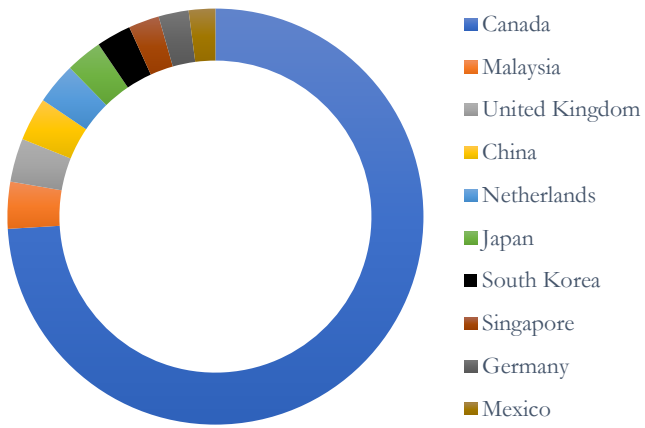
### 3.6.2    Real Trade Weighted Value of the Dollar (RTWVD)

This index compares the value of the dollar against the currencies of the countries with which Maine trades. RTWVD represents the dollar's purchasing power relative to the foreign currencies mentioned above. When the value of the dollar increases in relation to export partners' currencies, exports becomes more expensive to partner countries. Compared to November 2018, Maine's RTWVD in November 2019 has increased by 0.3%.



Year-over-year change in RTWVD for Maine

## Top 10 export partners



- Canada
- Malaysia
- United Kingdom
- China
- Netherlands
- Japan
- South Korea
- Singapore
- Germany
- Mexico

## Top 10 import parters



- Canada
- Germany
- China
- Colombia
- United Kingdom
- Russia
- Mexico
- France
- Japan
- Burma
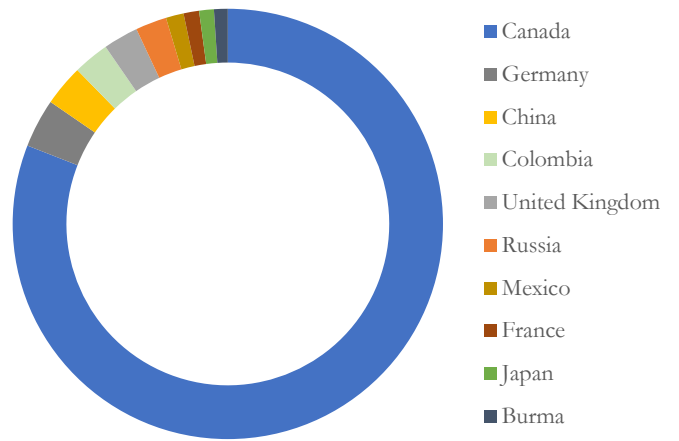
# 4    Appendix

## 4.1    Data Sources

| Indicator | Source | Reference Period | Release Date |
|---|---|---|---|
| Population: estimates and percent change | Census Bureau – Pop. Ests. | 2019 | December 30, 2019 |
| Net migration: total and percent change | Census Bureau – Pop. Ests. | 2019 | December 30, 2019 |
| Median age | American Community Survey 1 year | 2018 | September 26, 2019 |
| Educational attainment | Census Bureau – ACS 1-year | 2018 | September 26, 2019 |
| Poverty level | Census Bureau – ACS 1-year | 2018 | September 26, 2019 |
| Income | Census Bureau – ACS 1-year | 2018 | September 26, 2019 |
| Per capita personal consumption expenditure | U.S. Bureau of Economic Analysis | 2018 | October 3, 2019 |
| Per capita personal income | U.S. Bureau of Economic Analysis | 2019:Q3 | December 18,2019 |
| Average earnings per job | U.S. Bureau of Economic Analysis | 2018 | September 24, 2019 |
| Gross domestic product | U.S. Bureau of Economic Analysis | 2019:Q3 | January 10, 2020 |
| GDPNow | Atlanta Fed | 2019:Q4 | December 29, 2019 |
| GDP-Based Recession Indicator Index | Hamilton, James/FRED | 2019:Q2 | November 9, 2019 |
| Real-time Sahm Rule Recession Indicator | Sahm, Claudia/FRED | December 2019 | January 10, 2020 |
| Personal income: total, per capita, and wages and salaries | U.S. Bureau of Economic Analysis | 2019:Q3 | December 18, 2019 |
| Unemployment rate | U.S. Bureau of Labor Statistics | December 2019 | January 24, 2020 |
| Labor force participation | U.S. Bureau of Labor Statistics | December 2019 | January 24, 2020 |
| Nonfarm payroll job estimates | U.S. Bureau of Labor Statistics | December 2019 | January 24, 2020 |
| Housing price index | Federal Housing Finance Agency | 2019:Q3 | November 26, 2019 |
| MEREDA Index | Maine Real Estate & Development Association | 2019:Q1 | May 8, 2019 |
| Housing: Units and Median Sale Price | Maine Association of REALTORS® | November 2019 | December 22, 2019 |
| Energy prices | Energy Information Administration | January 20, 2020 | January 20, 2020 |
| Exports | Census Bureau – USA Trade Online | November 2019 | January 7, 2020 |
| Real trade weighted value of the dollar | Federal Reserve Bank of Dallas | November 2019 | January 7, 2020 |
| Export and Import Partners | Census Bureau – USA Trade Online | November 2019 | January 7, 2020 |
| | | | |

## 4.2    Glossary

<u>Average earnings per job:</u> Total earnings, which is the sum of wages and salaries, supplements to wages and salaries, and proprietors' income, divided by total full-time and part-time employment.

**Compound Annual Growth Rate:** $= \left(\frac{Final\ Value}{Initial\ Value}\right)^{\frac{1}{No.\ of\ Periods}} - 1$

<u>Gross Domestic Product</u>**:** The measure of the market value of all final goods and services produced within a state in a particular period of time. GDP by state differs from national GDP for the following reasons: GDP by state excludes and national GDP includes the compensation of federal civilian and military personnel stationed abroad and government consumption of fixed capital for military structures located abroad and for military equipment, except office equipment. ***Real GDP***: Real GDP by state is an inflation-adjusted measure of each state's gross product that is based on national prices for the goods and services produced within the state. The real estimates of gross domestic product (GDP) by state are measured in chained (2012) dollars.

<u>Housing Price Index</u>**:** A weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or refinancing on the same properties.

<u>Labor Force Participation Rate</u>**:** The labor force as a percent of the civilian noninstitutional population ages 16 years and older.

<u>Net Migration Rate</u>**:** The U.S. Census Bureau defines the net migration rate as **t**he difference between the number of migrants entering and those leaving an area in a year, per 1,000 midyear population. May also be expressed in percent. A positive figure is known as a net immigration rate and a negative figure as a net emigration rate.

<u>Personal Consumption Expenditures by State</u>**:** A measure of spending on goods and services purchased by, and on behalf of, households based on households' state of residence divided by the resident population of the area.

<u>Personal Income</u>**:** Income that persons residing in the area receive in return for their provision of labor, land, and capital used in current production as well as other income, such as personal current transfer receipts. *Per capita personal income:* The personal income of a given area divided by the resident population of the area. *Per capita disposable personal income:* The income available to persons for spending or saving (personal income less personal current taxes) of a given area divided by the resident population of the area.

<u>Poverty Level</u>**:** The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty.

<u>Real Trade Weighted Value of the Dollar</u>**:** An index that calculates the inflation-adjusted value of the U.S. dollar against the currencies of countries with which the state trades.

<u>Total merchandise exports</u>**:** Total exports are calculated by adding domestic exports (goods that are grown, produced, or manufactured in the United States) to foreign exports (foreign-origin goods that have previously entered the United States, Puerto Rico, or the U.S. Virgin Islands for consumption, entry into a CBP bonded warehouse, or a U.S. <u>Foreign Trade Zone (FTZ),</u> and at the time of exportation, have undergone no change in form or condition or enhancement in value by further manufacturing).

Total Private nonfarm employment: Each month Current Employment Statistics (CES) surveys a sample of about 2,700 nonfarm private employers (plus federal, state, and local government employers) in Maine asking them to report the number of jobs, hours, and earnings of workers on their payroll during the week including the 12th day of each month. The sample accounts for just 7% of employers, but 34% of nonfarm jobs in the state because a high share of large employers are surveyed.

Unemployment Rate: Number of unemployed as a percent of the labor force. To be classified as unemployed, persons must be aged 16 years and older with no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the 4-week period ending with the reference week.

Wages and Salaries: Remuneration receivable by employees (including corporate officers) from employers for the provision of labor services, measured before deductions such as social security contributions, union dues, and voluntary employee contributions to defined contribution pension plans.