

# MEASURES OF GROWTH

Performance Measures and Benchmarks to Achieve  
a Vibrant and Sustainable Economy for Maine

2016



MAINE  
DEVELOPMENT  
FOUNDATION

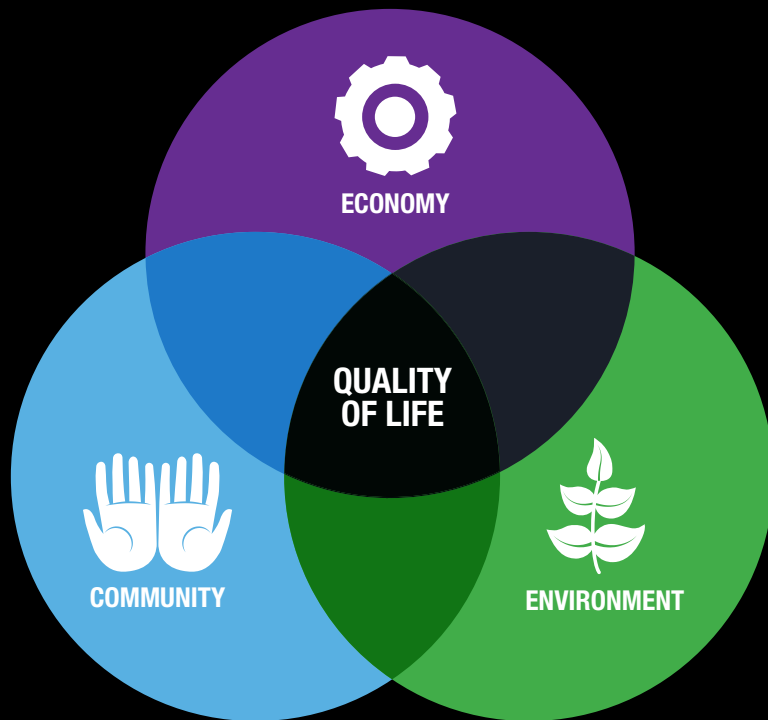


**MEGC**  
Maine Economic  
Growth Council

**22<sup>ND</sup>**  
REPORT OF  
THE MEGC

# VISION

A HIGH QUALITY OF LIFE  
FOR ALL MAINE PEOPLE





## AT THE HEART OF IT ALL, IT'S ABOUT OUR PEOPLE.

Achieving our vision requires a vibrant and sustainable economy supported by vital communities and a healthy environment.



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## MOVING TOWARD A HIGH QUALITY OF LIFE FOR ALL MAINE PEOPLE

**T**he Maine Economic Growth Council's vision is a high quality of life for all Maine people. The Council believes that this vision can be achieved through a vibrant and sustainable economy, thriving communities, and a healthy environment. In practice, we need to grow Maine's economy in a way that honors and builds upon what is special about our state. The indicators in this report, and other potential indicators, are carefully reviewed for their relevance and importance in achieving our vision. While the indicators focus on the state level, statewide data can mask what are sometimes considerable discrepancies within Maine. We need to be aware and mindful of the unique circumstances throughout Maine as we look to move forward.

Several major themes emerge in this report. Human capital is a critical factor in economic growth and is central to the Council's work. Addressing foundational issues such as poverty, food insecurity, and health and wellness can lay the groundwork for improved outcomes. Investing in education – from early childhood through adulthood – is essential to an educated, skilled, and entrepreneurial workforce that can meet the needs of businesses and create opportunities for themselves and others. Investment in our infrastructure, innovation, and connectivity is a key to success in the global economy. Finally, controlling costs makes it easier to live and do business in Maine and makes us a more attractive destination for others.

In 2014, Maine ranked last among the 50 states and the District of Columbia in economic output per worker, which is both an indication of current circumstances and a key to economic growth and competitiveness. Compared to other areas, Maine's economy is heavily reliant on relatively low productivity industries. Additionally, from 2009 to 2014, Maine saw minimal growth in gross domestic product from some of the industry sectors

that showed significant gains in the rest of New England and the U.S. Utilizing our assets and resources and addressing our challenges in ways that maximize our growth potential will be vital in the years ahead.

The indicators in this report represent the areas which, in the Council's view, are most relevant to Maine's long-term economic growth and quality of life. By determination of the Council, Maine may be compared to its own prior performance, or to averages for the U.S., New England, and/or Experimental Program to Stimulate Competitive Research (EPSCoR) states. The EPSCoR program includes 28 mostly large and rural states, of which Maine is one, and offers a helpful comparison in assessing Maine's performance.





As in past reports, each indicator is assigned a benchmark that is both aspirational and potentially attainable and against which Maine's progress is measured and grades are assigned. In the current report, three indicators were assigned a plus, eight were assigned a minus, nine were determined to be equal, and five were not assigned grades. According to the latest data, Maine and U.S. on-the-job injury and illness rates continued to decline, and Maine continued its trend of sustainable forest harvesting. While the Growth Council monitors these trends annually, they are no longer included as separate indicators in this year's report.

Gold Stars signifying exceptional performance were assigned to Cost of Doing Business, Air Quality, and Water Quality. Red Flags highlighting areas in need of particular attention were assigned to Research and Development Expenditures, Postsecondary Educational Attainment, Fourth Grade Reading Scores, Eighth Grade Math Scores, and Transportation Infrastructure.




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# Key to Symbols

## GOLD STARS & RED FLAGS

Gold Stars and Red Flags are determined by consensus of the Growth Council based on consideration of the data and the experienced perspective of Council members. The general criteria are:



### EXCEPTIONAL PERFORMANCE

Very high national standing and/or established trend toward significant improvement.

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### NEEDS ATTENTION

Very low national standing and/or established trend toward significant decline. The indicator may show improvement but is still viewed as needing attention.

## PROGRESS SYMBOLS

Progress Symbols reflect movement from year to year and/or recent trends toward or away from the benchmarks established by the Council. No grade may be assigned to new indicators, indicators with a new data set, or indicators for which updated data is not available. The general criteria for grades are:



Movement toward the benchmark since the last available data.

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No significant movement relative to the benchmark since the last available data.

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Movement away from the benchmark since the last available data.

# FUNDAMENTAL PERFORMANCE INDICATORS

This report is about the status of Maine’s economy and how it impacts the lives and livelihood of Maine’s people. Each indicator represents a key area the Growth Council believes influences our economy, environment, and community. These are the leverage points which will help determine the direction of our economy and, ultimately, our quality of life in the years ahead.

There are also a few fundamental performance indicators that speak to the overall health of Maine’s economy as seen from the 30,000 foot level. They are, in a sense, the culmination of what we collectively do in many areas and are often influenced by forces beyond our borders.

These high-level indicators include: Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Employment, and Poverty.

## 1 - Gross Domestic Product

**Benchmark:** The growth of Maine’s gross domestic product will outpace that of New England and the U.S.

Our total economic output offers a good sense of how Maine’s economy is faring overall. Like the other fundamental performance indicators, our overall economic output is dependent upon the other indicators included in this report.

Maine’s gross domestic product was essentially even from 2013 to 2014, at \$49,700 and \$49,655, respectively. The New England economy grew by 1.6%, and the U.S. economy by 2.2%, over the same time. From 2009 to 2014, the U.S. economy grew by 9.4% and the New England economy grew by almost 6%, while Maine’s economy declined by -1.2%.

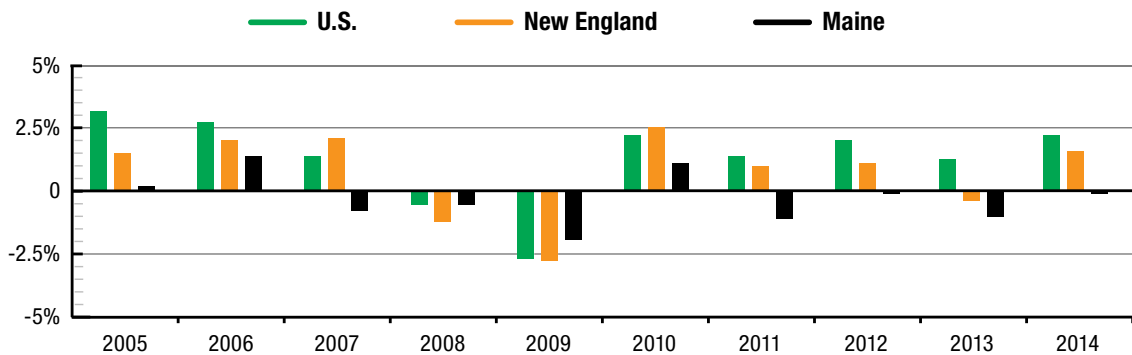
Real Estate, Government, Health Care and Social Assistance, Manufacturing, and Retail Trade accounted for almost 60% of Maine’s gross domestic product in 2014.

**Fig 1a: Maine’s Real Gross Domestic Product By Major Industry Sector 2014**

Industry Sector	GDP Millions of Dollars	% of Total	%Change 2013-14
Real Estate	\$7,510	15%	-1.5%
Government	\$6,948	14%	0.2%
Health Care and Social Assistance	\$5,947	12%	0.2%
Manufacturing	\$4,684	9%	-2.4%
Retail Trade	\$4,258	9%	0.2%
Finance and Insurance	\$2,653	5%	-5.3%
Prof., Scientific & Technical Services	\$2,528	5%	1.6%
Wholesale Trade	\$2,744	6%	2.7%
Construction	\$2,044	4%	-4.5%
Accommodation & Food Services	\$1,833	4%	2.1%

Source: Bureau of Economic Analysis

**Fig 1b: Real Gross Domestic Product Growth Rate 2005-2014**



Source: Bureau of Economic Analysis



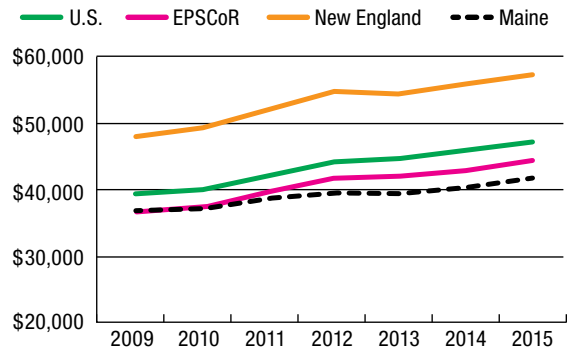
## 2 - Per Capita Personal Income

**Benchmark: Maine's per capita personal income will exceed the EPSCoR state average by 2020**

While Maine's per capita personal income increased by over \$1,300 from 2014 to 2015, we continued to trail the U.S., New England, and EPSCoR averages, by approximately \$5,600, \$16,800, and \$2,150, respectively. From 2010 to 2015, per capita personal income grew by 13% in Maine, and by 18% in New England, the EPSCoR States, and the U.S.

Per capita personal income speaks to Maine's level of economic prosperity, productivity, and quality of life. Maine has historically derived a larger percentage of its total personal income from transfer payments, which are payments for which no current services are performed, such as Social Security, unemployment, welfare, and veteran's benefits, which do not contribute as much to Maine's economy. To learn more on this topic, see the October 2013 Economic Newsletter *Personal Income in Maine* at [www.mdf.org](http://www.mdf.org).

**Fig 2a: Per Capita Personal Income 2009-2015**



Source: Bureau of Economic Analysis

**Fig 2b: 2015 Personal Income and National Rank, New England States**

	Income	Rank	Change 2014-15	%Change 2014-15
United States	\$47,669	N/A	\$1,620	3.5%
New England	\$58,863	N/A	\$2,065	3.6%
EPSCoR	\$44,219	N/A	\$1,091	2.5%
Connecticut	\$66,972	2	\$2,108	3.2%
Massachusetts	\$61,032	3	\$2,295	3.9%
New Hampshire	\$54,817	9	\$2,044	3.9%
Rhode Island	\$50,800	16	\$1,721	3.6%
Vermont	\$47,864	20	\$1,436	3.1%
<b>Maine</b>	<b>\$42,077</b>	<b>36</b>	<b>\$1,332</b>	<b>3.3%</b>

Source: Bureau of Economic Analysis



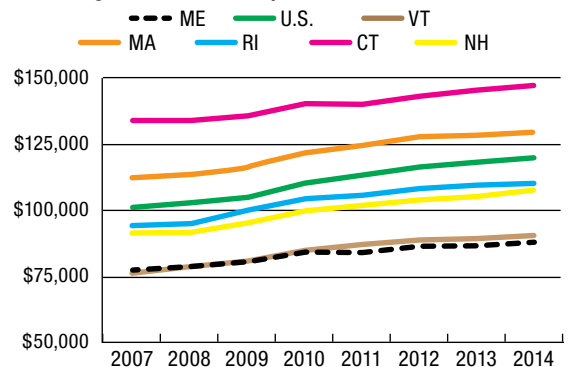
## 3 - Value Added per Worker

**Benchmark: Maine's value added per worker will improve to within 15% of the U.S. average by 2020**

This indicator speaks to the productivity of Maine workers. There is no single action we can take, no single lever we can pull, that will improve the value added of Maine workers; rather, this indicator depends on many factors, including the quality of our workforce, the costs of doing business, and the infrastructure that supports our economy. It also speaks to the makeup of our economy; comparatively low productivity industries make up a larger proportion of Maine's economy than in some other areas, while high productivity sectors account for a relatively smaller percentage of our economy.

Maine's economic output per worker grew by 7.3%, from an average of \$81,639 to \$87,586, from 2009 to 2014. Over the same timeframe, the U.S. average increased by 13.7%, the New England average by 10.4%, and the EPSCoR state average by 14.3%. In 2014, Maine's output per worker ranked last among the 50 states and the District of Columbia and trailed the U.S. average of \$118,935 by 26%, the New England average of \$124,125 by 29%, and the EPSCoR average of \$106,475 by 18%.

**Fig 3: Value Added per Worker 2007-2014**



Source: U.S. Department of Commerce and Bureau of Economic Analysis



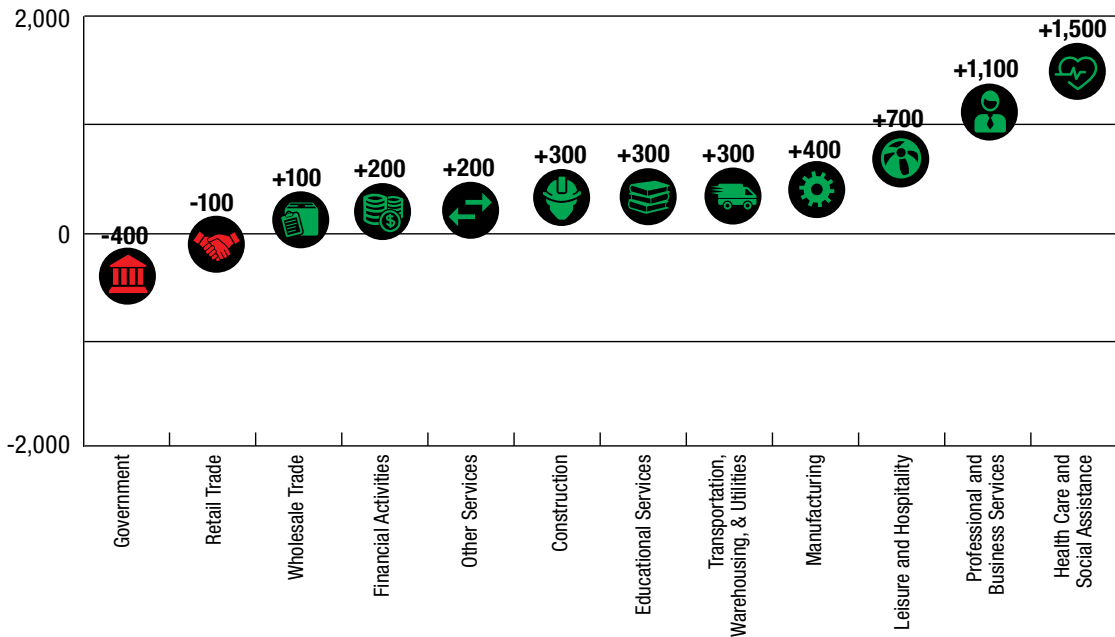
## 4 - Employment

**Benchmark:** The total number of jobs in Maine will increase each year

Maine's nonfarm payroll jobs grew from 605,200 in 2014 to 609,800 in 2015. Nonfarm jobs have grown by 16,800 jobs since a low of 593,000 in 2010, but are down by -7,900 from the high of 617,700 in 2007, due primarily to the decline in our working age population since the 2007 peak resulting from a lower birth rate after the 1980s. Maine added jobs while our workforce continues to decline, putting pressure on the labor market. If current trends continue, our gross domestic product and per capita income growth are also likely to be slower than the nation because a rising share of our population will not be working. Addressing this situation will need to be a high priority in the years ahead.

Combined, the Government, Health Care and Social Assistance, Retail Trade, Leisure and Hospitality, and Manufacturing sectors continue to make up almost two-thirds of Maine's total employment. Within the aggregate numbers, Maine's employment continues to shift, with the Health Care and Social Assistance sector continuing to add jobs and Manufacturing jobs continuing to decline. Despite job losses, Manufacturing continues to account for a substantial share of our economic output, due to gains in productivity and the changing nature of manufacturing in Maine. Maine policymakers, service providers, students, and workers need to understand the changes in Maine's economy if we are to have an adequate supply of skilled workers.

**Fig 4: Employment in Maine By Selected Sectors 2015**



Source: Maine Department of Labor, Center for Workforce Research and Information

## 5 - Poverty

**Benchmark: Maine's poverty rate will decline and remain below the U.S. rate through 2020**

Maine's poverty rate has consistently been below the U.S. average and above the New England average. Poverty rates rose fairly steadily in all three areas from the early 2000s through 2011, have leveled out in recent years, and were essentially unchanged from 2013 to 2014.

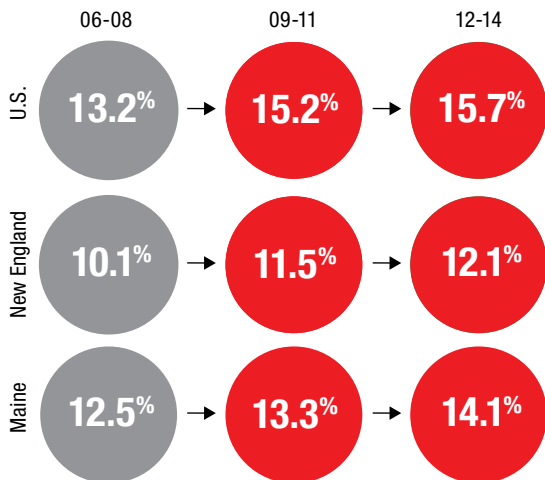
Poverty rates vary widely by region in Maine, with the rates being higher in the central and rim counties and lower in the southern and coastal counties. Overall, from 2013 to 2014, rates declined in seven counties (Cumberland, Sagadahoc, Lincoln, Waldo, Hancock, Androscoggin, and Kennebec), were essentially even in five counties (York, Knox, Franklin, Somerset, and Washington), and increased in four counties (Penobscot, Oxford, Piscataquis, and Aroostook).

The poverty rates for Maine children under five and under 18 both rose from 2013 to 2014 (from 21.2% to 23% and from 18.2% to 19%, respectively), but remained below U.S. averages (23.9% for children under five and

21.7% for children under 18 in 2014). County poverty rates for children under 18 mirrored the trends seen in overall poverty rates, with the highest rates in the central and rim counties. For more information about childhood poverty in Maine, see the Maine Children's Alliance's Kids Count Project at [www.mekids.org/kidscount](http://www.mekids.org/kidscount).

Poverty rates are both a reflection of Maine's overall economic performance and a key to improving our economy and quality of life. Improving our economy should bring poverty rates down, which in turn can help create a solid foundation to improve other outcomes like educational performance and attainment, employment, food insecurity, and health status. As with the other fundamental performance indicators, reducing Maine's poverty levels will require improvement in a number of other areas addressed in this report.

**Fig 5a: Poverty Rates 2006-2014  
(3-year Moving Average)**



Source: U.S. Census Small Area Income & Poverty Estimates

**Fig 5b: Poverty Rate By Maine County 2014**

County	Poverty Rate
York	11.2%
Cumberland	10.8%
Sagadahoc	10.5%
Lincoln	11.7%
Knox	13.9%
Waldo	15.0%
Hancock	12.9%
Androscoggin	15.4%
Kennebec	13.8%
Penobscot	18.0%
Oxford	16.1%
Franklin	15.8%
Somerset	17.3%
Piscataquis	20.3%
Aroostook	20.1%
Washington	18.5%

Source: U.S. Census Small Area Income & Poverty Estimates



# ECONOMY

IN KEEPING WITH THE  
ENTREPRENEURIAL SPIRIT.



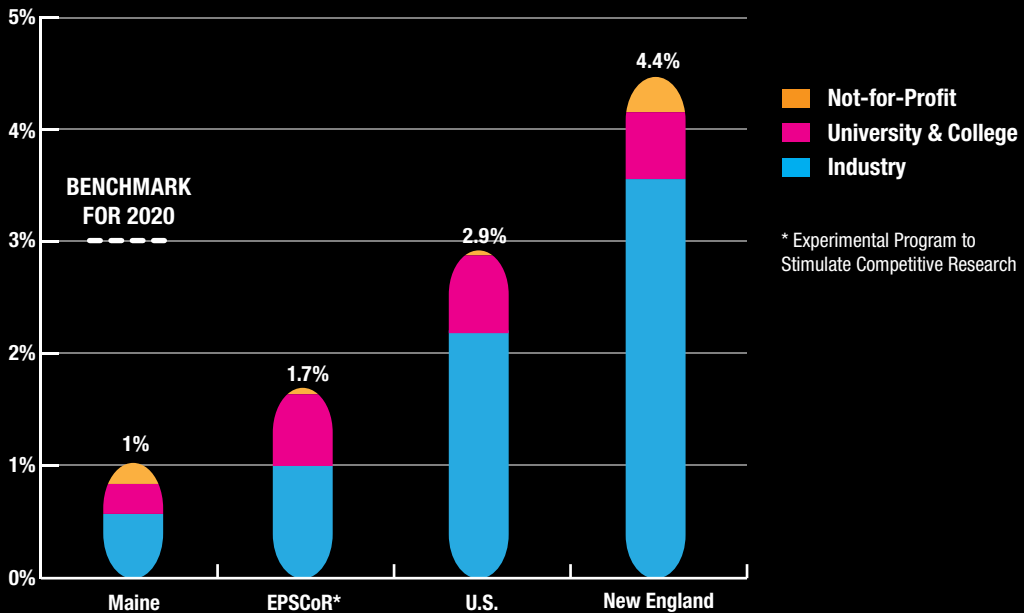


## 6 - Research and Development Expenditures



More Support of Maine's Innovation Economy Needed

### TOTAL PERCENTAGE OF GDP SPENT TOWARD R&D IN 2011



**Benchmark:** Maine's total spending on research and development will reach 3% of the state's total GDP by 2020.

**Source:** Camoin Associates

**Background:** This indicator compares total R&D spending as a percentage of a region's total gross domestic product (GDP), and compares the percentage of total spending from three primary sources—not-for-profit, university and college, and private industry. While an update is not available, the 2011 National Science Foundation data remains the most reliable and complete data available.

#### What the Data Shows:

- Maine's 2011 total R&D investment from all three sources of \$535 million represented approximately 1% of the state's total GDP and was approximately \$1 billion short of the 3% benchmark
- Maine's 2011 rate ranked 41<sup>st</sup> in the nation and was below the EPSCoR average (1.7%), approximately one-third of the U.S. average (2.9%), and less than a quarter of the New England average (4.4%)
- In 2011, Maine's percentage of total R&D from the private sector (58%) trailed the U.S. (81%), New England (80%), and EPSCoR (68%) averages, while Maine's percent from the non-profit sector (15%) was well above the New England (5%), U.S. (2%), and EPSCoR (2%) averages
- National Science Foundation data shows that R&D spending at the University of Maine was \$77.6 million in 2013 and \$101.2 million in 2014

**Why It Matters:** The benchmark is consistent with the state's *Science and Technology Action Plan* and is viewed by the Council as necessary to expand Maine's innovation economy and improve competitiveness. Investment in R&D supports innovation, which has been shown to generate approximately 80% of all economic growth. Maine's spending on R&D also yields a high return on investment. It is important that we find an appropriate mechanism to provide sufficient funds for research and development, and equally important that our R&D activities generate meaningful economic activity for the state. Concentrating on Maine business and industry and the growth and expansion of R&D and innovation-oriented private sector companies is imperative.

The 2014 *Comprehensive Evaluation of Maine's R&D Incentive Programs* by Investment Consulting Associates examined Maine's public incentive programs and is available at [www.maine.gov/decd/reports-pubs/](http://www.maine.gov/decd/reports-pubs/).

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Startup Activity, Postsecondary Educational Attainment, Fourth Grade Reading Scores, Eighth Grade Math Scores

## 7 - International Exports



Capitalizing on International Opportunities Important to Growing Maine's Economy



### INTERNATIONAL EXPORTS 1996-2015



**Benchmark:** Maine's international exports will grow at a faster pace than U.S. international exports.

**Source:** Maine International Trade Center

**Background:** In the previous two reports, the Growth Council had opted to exclude both Maine and U.S. semiconductor numbers due to concerns about the validity of the related data. The current chart compares the growth in total Maine and U.S. exports, including semiconductors, indexed to 1996.

#### What the Data Shows:

- From 2014 to 2015, Maine's international sales improved by 0.5%, while the U.S. average declined by -7.2%
- Maine's growth was driven by continued strength in the lobster and seafood industry and a rebound in reported semiconductor exports
- In total, Maine sold \$2.7 billion to 187 international markets in 2015
- Canada remained Maine's largest trading partner, with the remaining top markets a mix of the major Asian destinations (China, Korea, Japan) and the European Union
- Seafood, led by Maine's lobster shippers and processors, continued to be the state's largest export commodity at \$444 million, down slightly from 2014's record performance
- Forest products remained Maine's largest export industry, with sales of wood, pulp, paper, and lumber totaling an aggregated \$740 million
- With aircraft parts and defense articles leading the way, exports of technology-intensive manufactured items remained strong, though experiencing broad, but generally modest, declines

**Why It Matters:** International trade supports approximately 180,500 Maine workers. In the global economy, new markets for Maine products can help us grow our economy. International markets offer opportunities for Maine businesses to add additional customers and revenue and enable us to expand and diversify our markets. Keeping our costs of doing business competitive, improving the quantity and quality of our workforce, and building the Maine brand can help Maine businesses succeed in international markets.

Beyond the statewide numbers, Maine's international engagement has increased significantly with the continued development of the International Marine Terminal in Portland. Trade in containerized freight through the Port of Portland has increased from just 6,672 metric tons in 2009 to 105,523 metric tons in 2015. Exports through the Port of Portland are coming from 45 states, up from just 12 in 2009. Improved infrastructure at the port, including on-site rail access and the planned cold storage facility, is expected to continue to increase the attractiveness of the port to both importers and exporters, opening new opportunities for the state's manufacturers and shippers.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Employment, Broadband Connectivity, Startup Activity, Postsecondary Educational Attainment, Cost of Doing Business



## 8 - Broadband Connectivity

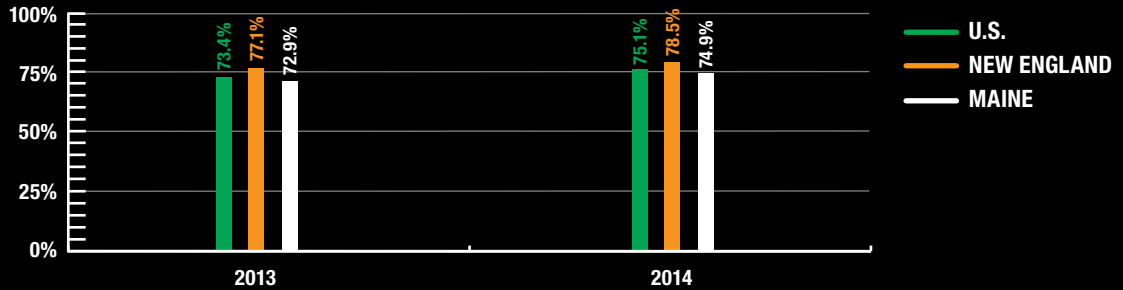
NO GRADE

Improving Broadband Connectivity Important to Economic Growth and Quality of Life

**Benchmark:** Maine will meet or exceed the U.S. percentage of households with a broadband internet subscription by 2020.

**Source:** American Community Survey

### PERCENTAGE OF HOUSEHOLDS WITH A BROADBAND INTERNET SUBSCRIPTION 2013-2014



**Background:** This new data set tracks the percentage of households with a broadband internet connection in Maine and the U.S. This data is both reflective of our current status and an important measure of progress in the years ahead and replaces the high speed internet subscribers per 1,000 residents data used in past reports. A broadband subscription is defined as a DSL, cable, fiber optic, mobile broadband, satellite, or fixed broadband subscription.

#### What the Data Shows:

- Maine's percentage is essentially on par with the U.S. average, and both trail the New England rate
- Maine is roughly on par with the U.S. average in the percentage of homes and businesses with access to the lower tiers of upload and download speeds, but falls well short in the higher tiers

**Why It Matters:** Adequate internet access is important to our state's economic development and quality of life, connecting residents and businesses throughout the state to each other and the world beyond. Broadband access is becoming increasingly vital to participation in modern society. Access enables businesses to connect to customers worldwide and gives people access to a plethora of products and services. Broadband access also greatly expands access to educational opportunities and health care, which can help improve quality and control costs.

Expanding access can be a challenge for large, rural states like Maine. Even Maine's southern and coastal areas may have inadequate bandwidth or lack access altogether, and private providers may not find it cost effective to offer services in low density areas. Approximately 55% of Maine businesses do not have a website (the U.S. average is 53%). Educating Maine people and businesses about the benefits of broadband access and the options available to them is an important factor in improving Maine's numbers.

Meaningful improvement may require a significant policy change or public sector investment. Some Maine municipalities have developed their own broadband networks, and others are considering doing so. Additionally, technology and speed requirements and standards are changing rapidly. Maine policymakers will need to be mindful of these factors to address this issue efficiently and effectively.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Employment, Research and Development Expenditures, International Exports, Startup Activity, Cost of Doing Business, Cost of Health Care

#### Broadband Access, New England States, 2014

	Percent	National Rank
New Hampshire	82.1%	1
Connecticut	80.5%	8
Massachusetts	80.5%	8
Rhode Island	76.5%	15
Vermont	76.3%	17
<b>Maine</b>	<b>74.9%</b>	<b>25</b>

Source: American Community Survey



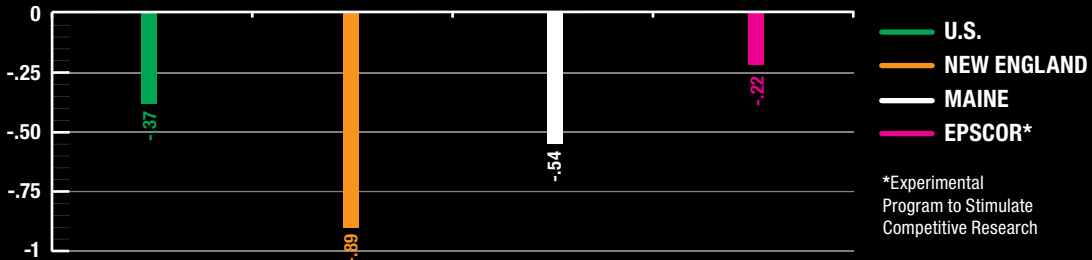
## 9 - Startup Activity

NO  
GRADE

### Maine in Middle of the Pack on Entrepreneurial Ecosystem



#### STARTUP ACTIVITY INDEX 2015



**Benchmark:** Maine will meet or exceed the U.S. startup activity rate by 2020.

**Source:** Camoin Associates, Kauffman Foundation

\*Experimental Program to Stimulate Competitive Research

**Background:** The Startup Activity Index was developed by the Kauffman Foundation in 2014. The index is an equally weighted index of three component measures of startup activity: the opportunity share of new entrepreneurs, calculated as the percentage of new entrepreneurs driven primarily by opportunity versus necessity (those who may be inclined to start businesses because they are unemployed); startup density, measured as the number of employers by population; and, the rate of new entrepreneurs, calculated as the percentage of adults becoming entrepreneurs in a given month. This last component comprised the Index of Entrepreneurial Activity data that has previously been used in this report. The Startup Activity Index replaces the previous data set as it gives a more complete picture of entrepreneurial activity in the economy. A higher number on the scale represents better performance.

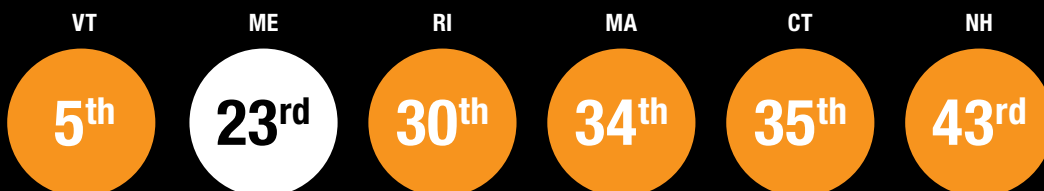
**Why It Matters:** The creation of new businesses is a vital activity in today's economy. Entrepreneurship provides new and expanded opportunities for Mainers and is critical to creating jobs and growing the state's economy. Identifying and providing appropriate resources to small businesses with high potential for growth is particularly important. It is important that Maine continue to encourage and support potential entrepreneurs and new businesses throughout the state through programs such as the Maine Technology Institute; the Maine International Trade Center; the University of Maine Innovation Engineering Program; the University of Maine System's Cooperative Extension; New Ventures Maine; Maine Accelerates Growth; the Maine Center for Entrepreneurial Development; and Maine Startup and Create Week.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Employment, Research and Development Expenditures, Postsecondary Educational Attainment, Fourth Grade Reading Scores, Eighth Grade Math Scores, Workforce

#### What the Data Shows:

- The 2015 composite index ranged from a high of 4.77 for Montana to a low of -3.92 for Wisconsin
- Maine exceeded the New England average in 2015, while both were below the U.S. and EPSCoR averages
- In 2015, Maine ranked 23<sup>rd</sup> nationally in the Startup Activity Index, 23<sup>rd</sup> on the rate of new entrepreneurs, 24<sup>th</sup> on the opportunity share of new entrepreneurs, and 18<sup>th</sup> on startup density

#### NEW ENGLAND STATES 2015



#1 rank denotes highest startup activity

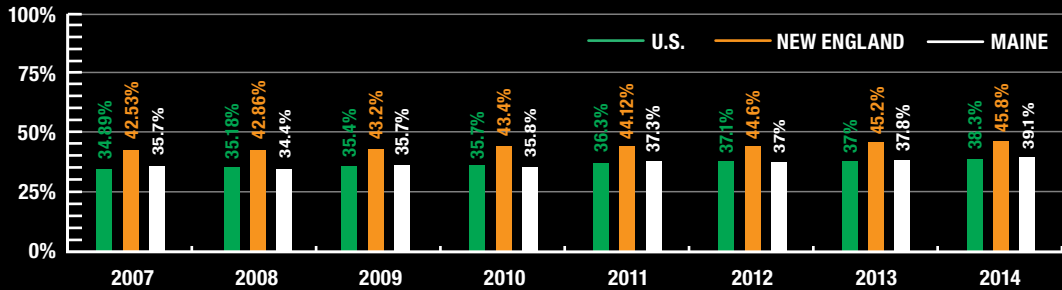


# 10 - Postsecondary Educational Attainment



## Improving Postsecondary Educational Attainment Critical to Improving Maine's Economy

### POSTSECONDARY DEGREE ATTAINMENT AMONG RESIDENTS 25 AND OVER 2007-2014



**Benchmark:** The percentage of Maine residents 25 and over with a postsecondary degree will improve to at least the New England average by 2020.

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

**Background:** While postsecondary educational attainment comes in a variety of forms, reliable time series data that allows comparisons across geographies is currently only available for degrees. The indicator compares the percentage of residents 25 and over who have attained a postsecondary degree (associate's, bachelor's, or advanced) in Maine, the U.S., and New England.

#### What the Data Shows:

- Maine has generally been on par with the U.S. average while both have trailed the New England rate
- From 2013 to 2014, the percentage of Mainers with a bachelor's degree improved from 18% to 19%, increasing Maine's overall degree attainment from 38% to 39%
- From 2009 to 2014, Maine's associate's degree attainment increased from 8.8% to 9.7% and bachelor's degree attainment from 17.3% to 19.4%; graduate and professional degree attainment has been approximately 10% over the same timeframe
- Maine outperforms the U.S. and New England in associate's degree attainment but trails both in bachelor's degree and graduate and professional degree attainment
- On average, additional education translates to higher earnings. In 2014, median earnings for Mainers with graduate and professional degrees were \$54,404; with bachelor's degrees, \$40,695; with some college or associate's degrees, \$31,134; with high school diplomas, \$26,240; and with less than high school diplomas, \$19,375
- According to Educate Maine's *Education Indicators for Maine 2015*, of 100 Maine students entering ninth grade, 87 will graduate from high school, 54 will enroll in a two or four-year college, and 30 will graduate from a two or four-year college. Helping young students make successful transitions to each successive educational level is a key to improving educational outcomes.

**Why It Matters:** Improving our educational attainment is vital to growing Maine's economy and improving the lives of Maine people. An educated workforce helps businesses thrive and helps attract other companies. Jobs throughout the economy are requiring workers with higher levels of skill and education, which Maine workers will need to meet the needs of employers and create opportunities for themselves and others. Higher levels of education are associated with reduced unemployment and social spending, as well as increased productivity, earnings, workforce participation, and state and local tax revenue. According to the May 2014 Economic Newsletter *The Fiscal Return on Higher Education In Maine* (available at [www.mdf.org](http://www.mdf.org)), by conservative estimates, each bachelor's degree in Maine creates a benefit to Maine taxpayers of approximately \$74,000 in present value over an average lifetime.

With our aging population, fully engaging Maine adults, particularly the estimated 200,000-plus Mainers with some amount of postsecondary education who have not completed a degree, is essential. Another important piece is alternative educational options, such as professional certifications, licensures, workplace competencies, and digital badging which demonstrate particular skills or knowledge. Educate Maine estimates that approximately 10% of Maine adults who do not have college degrees have a professional credential or certificate.

Apprenticeships are another means of providing valuable training and skill development. Apprentices are full-time employees engaged in a combination of structured on-the-job and classroom learning developed specifically to meet the individual employer's workforce development and training needs. While apprenticeships are most common in the construction trades, Maine programs are evolving to include opportunities in high-growth industries such as advanced manufacturing and health care.

**Related Indicators:** Per Capita Personal Income, Gross Domestic Product, Value Added per Worker, Employment, Poverty, Research and Development Expenditures, Startup Activity, Fourth Grade Reading Scores, Eighth Grade Math Scores, Workforce, State and Local Tax Burden, Food Insecurity



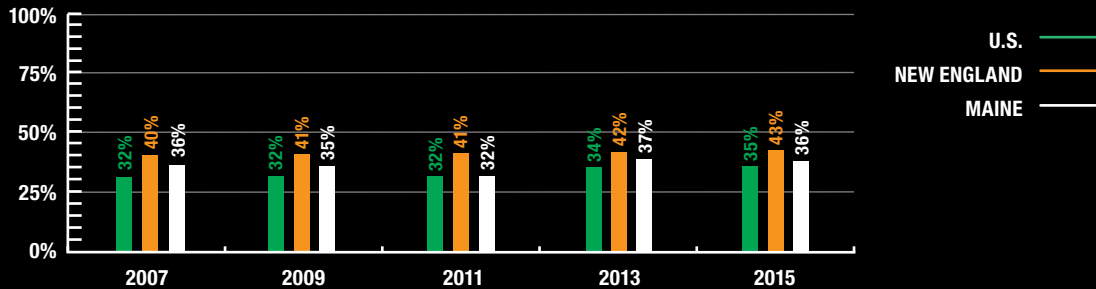
# 11 - Fourth Grade Reading Scores



Investment in Early Childhood Key to Improving Individual Outcomes and Maine Economy



## 4<sup>th</sup> GRADERS READING PROFICIENT OR ABOVE 2007-2015



**Benchmark:** The percentage of Maine students scoring proficient and above on the National Assessment of Educational Progress (NAEP) will reach 50% by 2020.

**Background:** The National Assessment of Educational Progress (NAEP) is the largest nationally representative and continuing assessment of America’s students in various subjects, including reading. NAEP assessments are administered uniformly nationwide, allowing for state-to-state comparisons and analysis of long-term trends. The NAEP assesses students at critical periods of development and learning (grades 4, 8, and 12). The indicator compares the percentage of Maine, New England, and U.S. fourth graders scoring proficient or better. Proficient is defined as competency over challenging subject matter, application to real-world problems, and appropriate analytical skills.

**Why It Matters:** As the time at which reading should be established as a skill and students should transition from “learning to read” to “reading to learn”, fourth grade is a critical juncture in a child’s development. If students are struggling with reading in fourth grade, they are likely to struggle with learning and other challenges in the years ahead. Fourth grade reading scores reflect early childhood development and are an indicator of future outcomes, both positive and negative.

**Source:** National Center for Education Statistics, NAEP

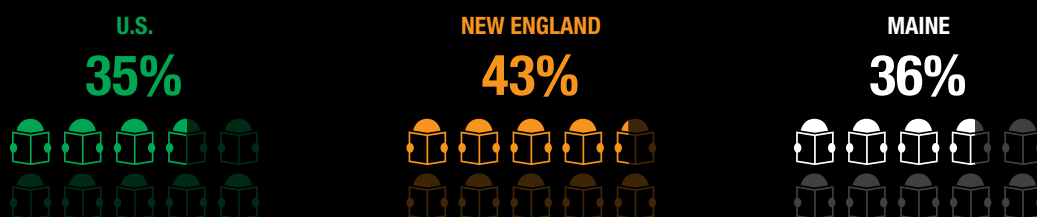
### What the Data Shows:

- Maine fourth graders have generally outperformed the U.S. as a whole, while both have consistently fallen short of the New England average
- With the exception of 2011, Maine’s scores have essentially been even since 2007
- Maine’s percentage of students scoring proficient and above ranked last among the New England states in 2015, trailing Massachusetts at 49%, New Hampshire at 46%, Connecticut and Vermont at 44%, and Rhode Island at 40%
- In general, girls have scored higher than boys, white students have scored higher than non-white students, and students eligible for school lunches have scored lower than other students

Maine is consistently falling short of the benchmark despite declining K-12 enrollment and increased expenditures in recent years. Education is a major part of state and municipal budgets, and it is important that we maximize our return on this investment. Investment in early childhood education has been shown to have a comparatively high return on investment over the long term, leading to improved elementary and secondary performance, higher college attendance and completion, higher productivity and incomes, and reduced social costs such as remediation, criminal justice, health care, and welfare. The importance of early childhood education is explored more fully in *Making Maine Work: Investment In Early Childhood = Real Economic Development* (available at [www.mdf.org](http://www.mdf.org)) and the Maine Children’s Alliance’s Kids Count Project at: [www.mekids.org/kidscount](http://www.mekids.org/kidscount).

**Related Indicators:** Per Capita Personal Income, Gross Domestic Product, Value Added per Worker, Employment, Postsecondary Educational Attainment, Eighth Grade Math Scores, Workforce, Wellness and Prevention, Food Insecurity

## 4<sup>th</sup> GRADERS READING PROFICIENT OR ABOVE IN 2015





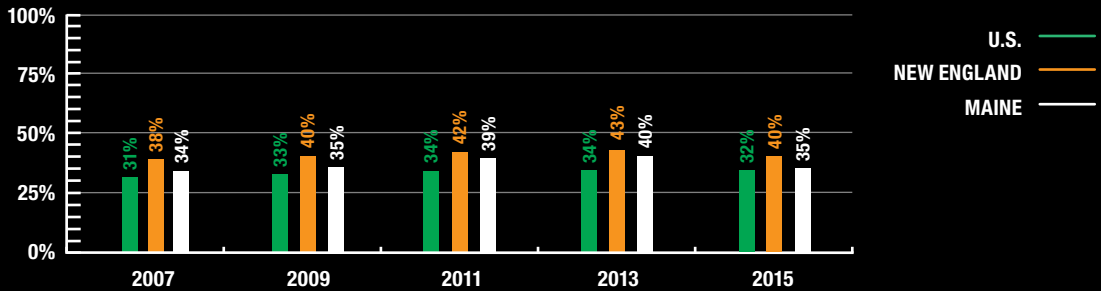
## 12 - Eighth Grade Math Scores



### Maine, U.S., and New England Averages Fall After Seeing Steady Improvement

**Benchmark:** The percentage of Maine students scoring proficient and above on the National Assessment of Educational Progress (NAEP) will reach 50% by 2020.

### 8<sup>th</sup> GRADERS SCORING PROFICIENT OR ABOVE 2007-2015



**Source:** National Center for Education Statistics, NAEP

**Background:** The National Assessment of Educational Progress (NAEP) is the largest nationally representative and continuing assessment of America’s students in various subjects, including math. NAEP assessments are administered uniformly nationwide, allowing for state-to-state comparisons and analysis of long-term trends. The NAEP assesses students at grades 4, 8, and 12, which are critical periods of development and learning. The indicator compares the percentage of Maine, New England, and U.S. eighth graders scoring proficient or better. Proficient is defined as competency over challenging subject matter, application to real-world problems, and appropriate analytical skills.

#### What the Data Shows:

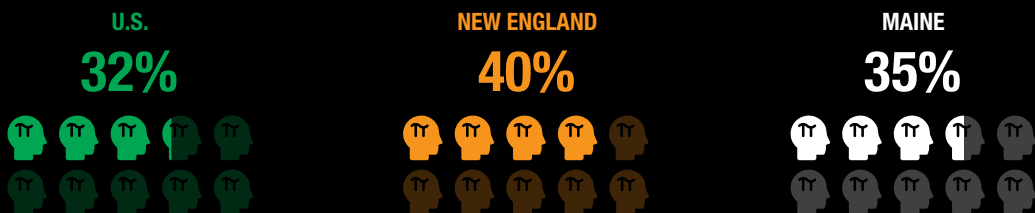
- The percentage of eighth graders scoring proficient and above declined in 2015 in Maine, the U.S., and New England after all had seen steady improvement in recent years
- Maine has consistently exceeded the U.S. average and trailed the New England average
- Among the New England states in 2015, Massachusetts had the highest percentage of students scoring proficient and above with 51%, followed by New Hampshire at 46%, Vermont at 42%, Connecticut at 36%, Maine at 35%, and Rhode Island at 32%

- In general, average scores have varied little by gender, but white students have scored higher than non-white students, students eligible for school lunches have scored lower than other students, and students with higher levels of parental education have scored higher than others

**Why It Matters:** Math skills are vital in today’s society and work environment, particularly in STEM (science, technology, engineering, and math) industries, which are expected to continue to grow in the years ahead. Eighth grade math scores reflect skills in algebra, a foundational skill. Students who are proficient in math tend to be better prepared for college and require fewer remedial math classes. *The Maine Comprehensive Research and Development Evaluation, Maine Innovation Index 2012, and Statewide Strategic Plan for Science, Technology, Engineering, and Mathematics* cite eighth grade math scores as an indicator of Maine’s future success in these areas. Alleviating foundational issues such as poverty and food insecurity, and continued investment and improvement in early childhood and K-12 education, can help improve Maine’s performance and prepare our young people for success.

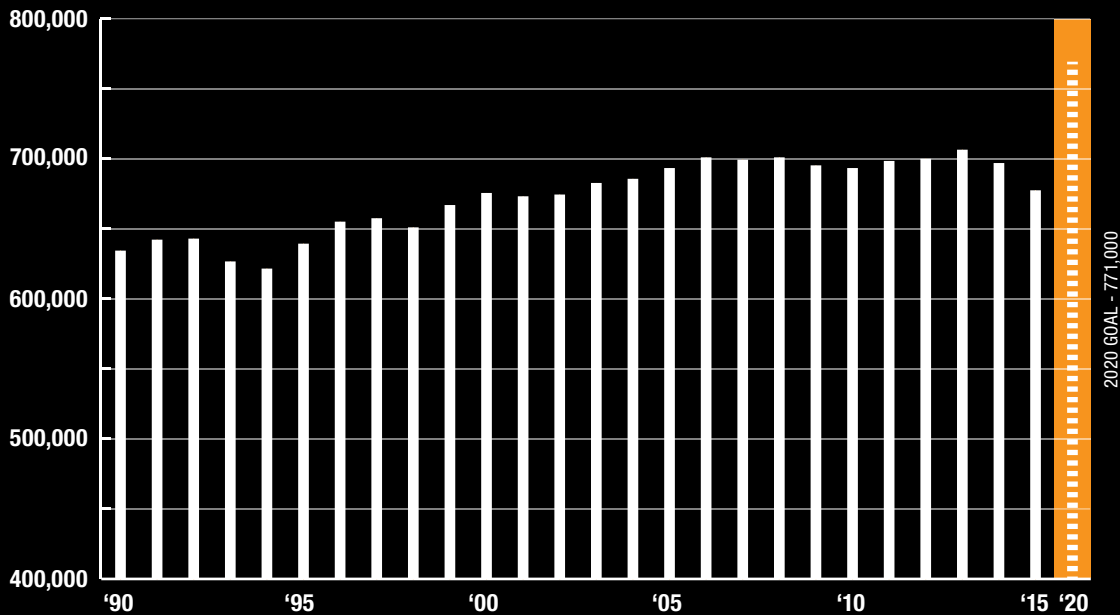
**Related Indicators:** Per Capita Personal Income, Gross Domestic Product, Value Added per Worker, Employment, Poverty, Postsecondary Educational Attainment, Fourth Grade Reading Scores, Wellness and Prevention, Food Insecurity

### 8<sup>th</sup> GRADERS SCORING PROFICIENT OR ABOVE IN 2015





### MAINE'S WORKFORCE 1990-2015



**Benchmark:** Maine's workforce will grow to 771,000 by 2020.

**Source:** Maine Department of Labor, Center for Workforce Research and Information

**Background:** This indicator tracks Maine's civilian workforce over time using the Maine Department of Labor's labor force estimates. Employed workers and people who are actively looking for work are considered part of the workforce.

**What the Data Shows:**

- Maine's civilian workforce reached a high of 707,600 in 2013 before declining to 679,800 in 2015
- Maine's 2015 civilian workforce was the smallest since 2002 and represented a loss of -15,400 workers since 2010

**Why It Matters:** The impacts of Maine's demographic challenges are being felt in a number of areas, including the quantity of our workforce. An adequate supply of skilled and educated workers is critical to meeting the needs of Maine employers and is an important factor in the relocation and expansion decisions of businesses. Although the challenges are more acute in certain regions and industries, employers across the state and throughout the economy are struggling to find qualified workers. Approximately 200,000 workers will reach traditional retirement age in the near future; replacing their numbers, talent, and experience will be a significant challenge. If current trends continue, Maine's workforce has been projected to decline by approximately 20,000 by 2020.

Engaging more Maine people in the workforce can help to grow our economy and improve the lives of more Mainers. Improving participation rates among current Mainers, particularly disengaged youth, veterans, the

disabled population, and those over 50, can help bolster our workforce. A number of organizations and programs are currently working in these areas; ensuring that these efforts continue, are properly coordinated, and are taken to scale is essential to improving our economy.

Improving our net migration, particularly among the working age population, is also critical to growing our workforce and economy. Improving retention is important, but is only part of the equation. We also need to attract considerably more people from beyond our borders to live and work here. *Making Maine Work: Growing Maine's Workforce*, released in October 2013 by the Maine Development Foundation and Maine State Chamber of Commerce, explores these issues in greater detail and outlines a number of strategies to grow our workforce in the years ahead. The report is available at [www.mdf.org](http://www.mdf.org).

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Employment, Poverty, Postsecondary Educational Attainment, Fourth Grade Reading Scores, Eighth Grade Math Scores



## 14 - Cost of Doing Business

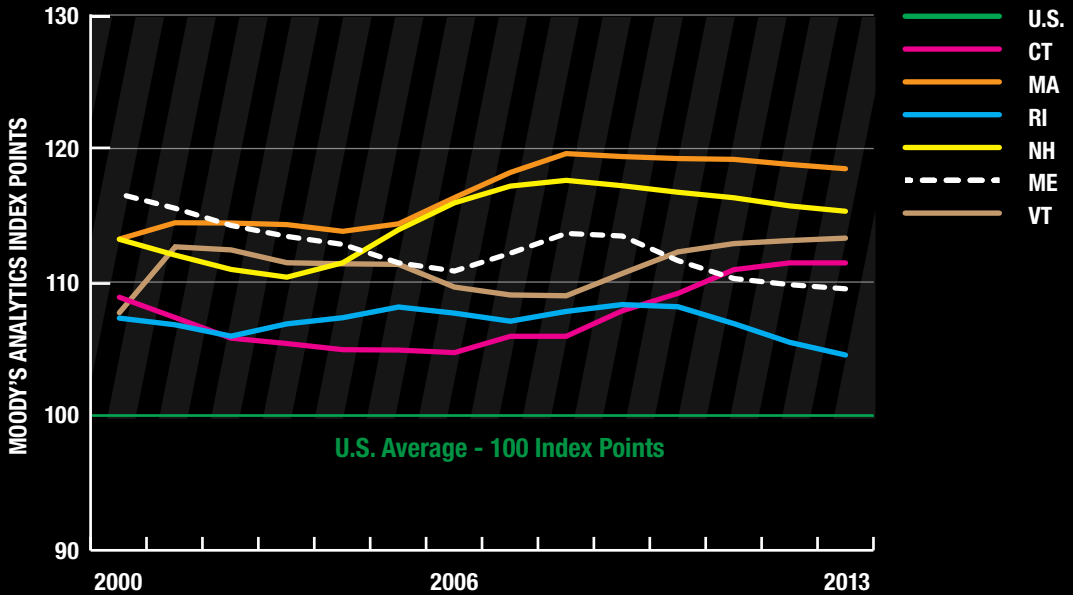


Maine Making Progress but Remains Above National Average

**Benchmark:** Maine's cost of doing business will decline to the U.S. average by 2020.

**Source:** Moody's Analytics

### COST OF DOING BUSINESS 2000-2013



**Background:** The Moody's Analytics Cost of Doing Business index is a weighted scale of labor costs (wages, benefits, and productivity), industrial and commercial electricity costs, and state and local tax burden. Maine's labor costs are weighted at 73%, energy costs at 17%, and taxes at 10%.

#### What the Data Shows:

- Maine's cost of doing business declined to 109.5 in 2013, driven largely by Maine's energy cost index declining from 145.9 in 2009 to 120.5 in 2013
- Maine's labor cost and tax burden indexes have been fairly stable in recent years and stood at 106.3 and 114.1, respectively, in 2013
- Maine's overall cost of doing business has declined from 2<sup>nd</sup> highest nationally in 2000 to 9<sup>th</sup> in 2013
- Maine's overall cost of doing business in 2013 was the second lowest among the New England states, above Rhode Island (104.6) but below Massachusetts (118.5), New Hampshire (115.3), Vermont (113.3), and Connecticut (110.8)

**Why It Matters:** This indicator speaks to some of the key challenges in Maine's economy. While Maine compares favorably to many of our New England neighbors, New England as a region remains a comparatively expensive place to do business. Managing our energy and labor costs and tax burden can help Maine businesses succeed

and encourage other businesses to locate or expand here. Other factors not directly measured in the index, such as a region's regulatory environment, also come into play. A clear and consistent regulatory environment can make it easier for businesses, particularly small businesses, to get started and operate in the state.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Employment, Poverty, Cost of Energy, Cost of Health Care, State and Local Tax Burden

#### New England Ranks by Indexes, 2013 (1 is highest cost)

	Overall Rank	Unit Labor Rank	Cost of Energy Rank	Tax Burden Rank
MA	2	2	4	26
NH	3	1	5	50
VT	5	12	6	6
CT	8	28	3	11
<b>ME</b>	<b>9</b>	<b>8</b>	<b>11</b>	<b>5</b>
RI	13	29	10	14

Source: Moody's Analytics

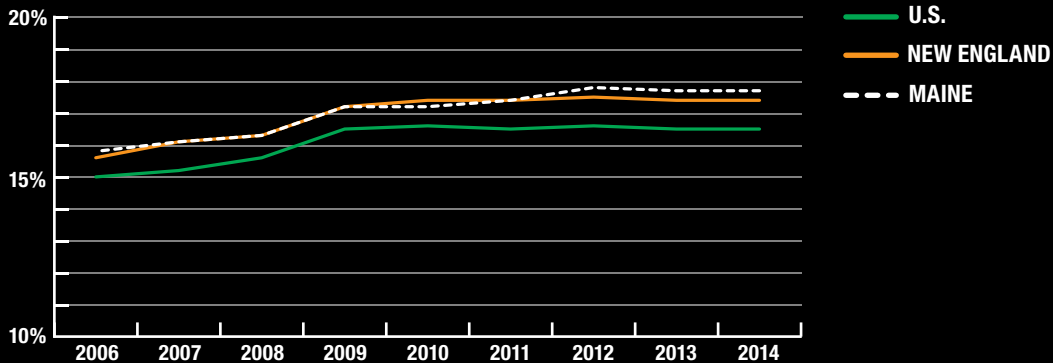
# 15 - Cost of Health Care



## Health Care Costs a Major Concern for Maine People and Businesses



### HEALTH CARE EXPENDITURES AS PERCENTAGE OF TOTAL PERSONAL EXPENDITURES 2006-2014



**Benchmark:** Maine's health care spending as a percentage of total personal expenditures will decline to the New England average by 2020.

**Source:** Bureau of Economic Analysis

**Background:** The Bureau of Economic Analysis' Personal Consumption by State divides total personal expenditures by region into a number of major categories, including health care. The chart shows the aggregate percentage of Maine's total personal expenditures devoted to health care and the corresponding U.S. and New England averages.

**What the Data Shows:**

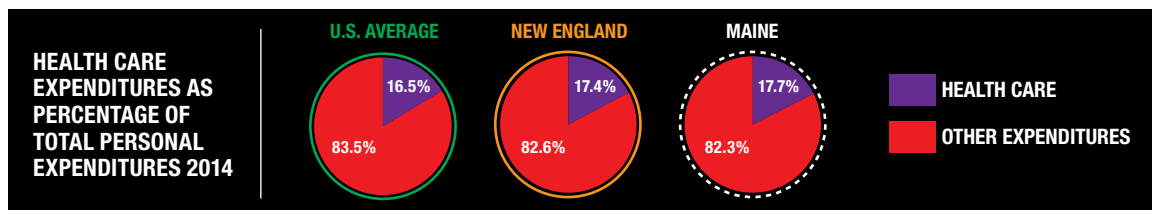
- Maine's percentage of total personal expenditures devoted to health care has increased from just under 16% in 2006 to just under 18% in 2014
- Maine's percentage has been approximately equal to the New England average, which rose from 15.6% in 2006 to 17.4% in 2014
- Expenditures in Maine and New England have been consistently higher than the U.S. average, which increased from 15% in 2006 to 16.5% in 2014

**Why It Matters:** Maine businesses and Maine people have consistently identified the high cost of health care as a significant concern. Managing our health care costs is also a key factor in attracting individuals and businesses to the state. High health care costs may discourage people from seeking needed preventive care, ultimately driving up health care spending and affecting the health and productivity of Mainers. The increasing number of high-deductible plans for employer-based insurance and new out-of-pocket costs for those previously uninsured or covered by MaineCare gaining

insurance on the Health Insurance Marketplace have important effects for Maine people.

High costs for government-sponsored insurance programs can also crowd out funding for other needed services and investments. Additionally, although high health care costs are a concern throughout the state, the cost of health services varies widely by region. Maine can help control the rising cost of health care by improving cost transparency; helping consumers make informed decisions about their care and associated costs; improving access to preventive care; improving the quality and delivery of services; and encouraging healthy behaviors to improve the overall health and wellness of Maine's people, such as lowering overweight and obesity rates.

**Related Indicators:** Gross Domestic Product, Employment, Poverty, Cost of Doing Business, Wellness and Prevention, Health Insurance Coverage, Food Insecurity





## 16 - Cost of Energy

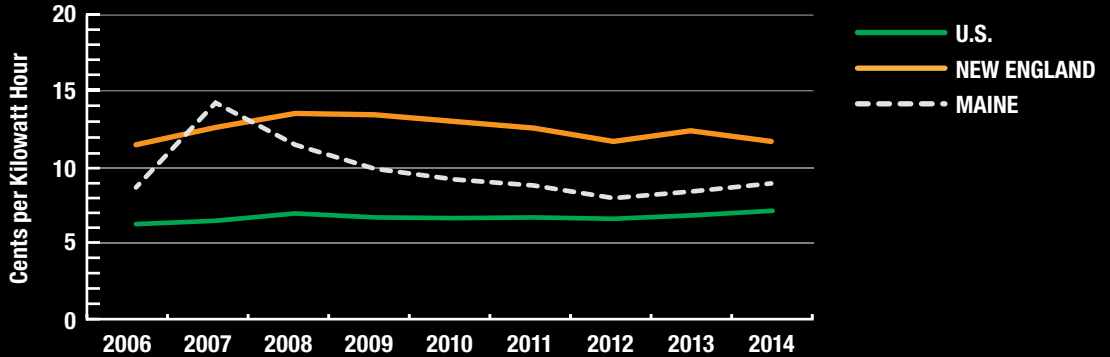
NO  
GRADE

### Maine's Electricity Prices Lowest in New England but Still Above National Averages

**Benchmark:**  
The cost of electricity in Maine will decline to the U.S. average through 2020.

**Source:**  
Energy Information Administration

### INDUSTRIAL RETAIL ELECTRICITY PRICE 2006-2014



**Background:** The chart compares Maine, U.S., and New England industrial retail electricity prices, which is the average price of delivered electricity, measured in price per kilowatt hour. This replaces the previous measurement of retail and industrial price per BTU.

**What the Data Shows:**

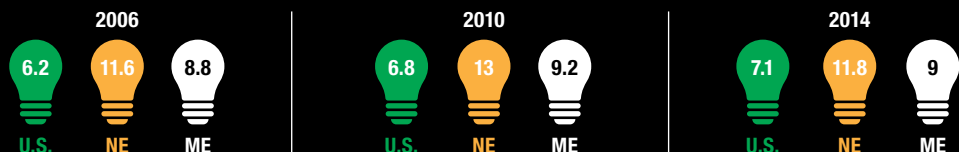
- Maine's electricity prices rose from 2012 to 2014 after having declined from 2007 to 2012
- New England's prices have fallen in recent years and are essentially on par with 2006
- U.S. prices have risen since 2006 but remain well below Maine and New England rates

**Why It Matters:** Electricity is one of the largest operating costs for businesses, especially manufacturing. High energy costs affect the cost of living and doing business in Maine. Businesses weigh the cost of energy heavily in their location and expansion decisions. Although the indicator compares Maine to U.S. rates, some Canadian provinces, particularly Quebec, have more competitive pricing than Maine.

Maine, like the rest of New England, is heavily reliant on natural gas for the production of electricity. Natural gas accounted for 49% of all electricity generation in New England in 2015 versus 15% in 2000. Continued diversification of our energy supply and efficiency improvements can make us more resilient against price spikes and help reduce costs for businesses and individuals. *Energy in Maine*, the fifth Quarterly Economic Report by the Maine Development Foundation and the University of Maine School of Economics, explores these issues in greater detail and is available at [www.mdf.org](http://www.mdf.org).

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Cost of Doing Business

### INDUSTRIAL RETAIL ELECTRICITY PRICE TREND 2006-2014



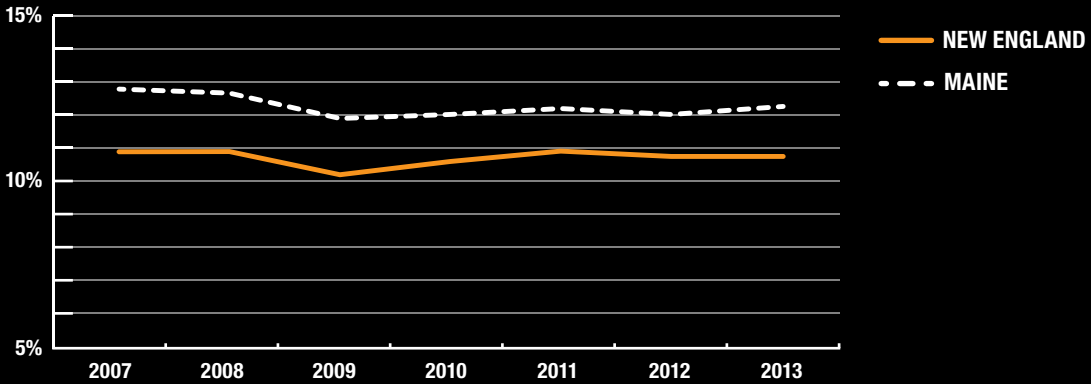
# 17 - State and Local Tax Burden



## Maine's Tax Burden Holds Steady, Remains Above New England Average



### STATE AND LOCAL TAXES AS A PERCENT OF INCOME 2007-2013



**Benchmark:** Maine's tax burden will decline and move toward the New England average each year through 2020.

**Source:** U.S. Census Bureau and Bureau of Economic Analysis

**Background:** The chart measures the percentage of every \$100 of income paid in state and local taxes (property, income, sales, and other sources) by taxpayers in Maine and New England. This data reflects both the amount of taxes and the ability to pay. Per capita taxes compare the actual dollar amount of taxes paid across geographies.

#### What the Data Shows:

- Maine's tax burden declined from approximately 13% in the mid-2000s to around 12% in recent years
- New England's tax burden has generally been between 10.5% and 11% during this time
- Maine performs better relative to the nation and New England on per capita taxes than on tax burden, which measures the ability to pay taxes

**Why It Matters:** Taxes impose costs on businesses and individuals and generate revenue for public services such as education, health care, and infrastructure that affect our quality of life and economy. Growing Maine's economy and raising incomes, along with controlling government spending, can reduce our tax burden. Having a tax structure which provides stable revenues, encourages economic growth and job creation,

supports needed investments, balances state and municipal contributions, and enables Maine to compete economically is critical to moving Maine forward. The impact of the changes to Maine's income, sales, and estate taxes that took effect in January 2016 will be seen in the years ahead.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Postsecondary Educational Attainment, Fourth Grade Reading Scores, Eighth Grade Math Scores, Cost of Doing Business

#### New England State and Local Taxes 2013 (1 is highest amount)

	Tax Burden	Tax Burden Rank	Per Capita	Per Capita Rank
U.S.	10.5%	N/A	\$4,599	N/A
CT	11.6%	9	\$7,258	3
<b>ME</b>	<b>12.2%</b>	<b>6</b>	<b>\$4,819</b>	<b>15</b>
MA	10.2%	24	\$5,723	7
NH	8.3%	45	\$4,197	26
RI	11.1%	14	\$5,129	14
VT	12.3%	5	\$5,423	11

Source: U.S. Census Bureau and Bureau of Economic Analysis

### STATE AND LOCAL TAXES AS A PERCENT OF INCOME IN 2013

#### NEW ENGLAND

10.7%



#### MAINE

12.2%





## 18 - Transportation Infrastructure

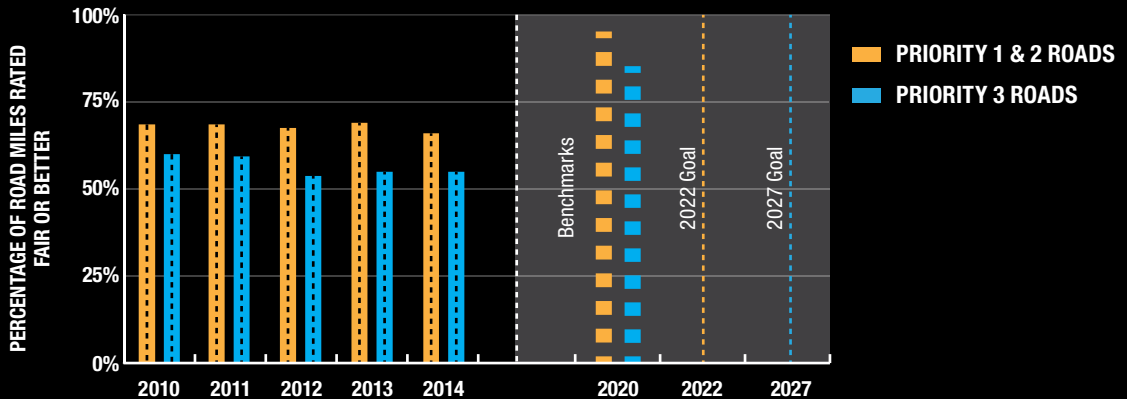


Significant Investment Needed to Meet Roadway Improvement Goals

**Benchmark:** 95% of priority one and two roads and 85% of priority three roads will meet a rating of fair or better by 2020.

**Source:** Maine Department of Transportation

### PRIORITY ROAD PERFORMANCE 2010-2027



**Background:** Maine's roadways are ranked as priorities 1 through 6 based on functional classification, regional economic significance, truck use, and relative traffic volumes. Priority 1, 2, and 3 roadways include the interstate, arterials, and major collector roads. These roadways make up 19% of Maine's public roads but carry 70% of the state's passenger and freight traffic. Roadways are also graded as excellent, good, fair, poor, or unacceptable based on road and bridge safety, condition, and service factors. The state's statutory goals are for all priority 1 and 2 roadways to be rated fair or better by 2022 and for all priority 3 roads to be rated fair or better by 2027. The Council's benchmarks for 2020 are consistent with these goals. In 2014, approximately 110 miles were reclassified from Highway Corridor Priority 3 to Highway Corridor Priority 4. Such changes are applied to all years' data to allow for year-to-year comparisons.

#### What the Data Shows:

- The percentage of priority 1 and 2 roads rated fair or better dropped from 69% in 2013 to 66% in 2014 (the Growth Council's target for 2014 was 78%)
- In 2013 and 2014, 55% of priority 3 roads were rated fair or better (the Growth Council's 2014 target was 72%)
- Transportation spending accounted for 26% of total state revenues in the 1970s, and less than 10% currently

**Why It Matters:** Maine's infrastructure connects us to each other and the world beyond. The Growth Council tracks the condition of Maine's roadways because they carry the vast majority of our passengers and freight. Poor roads can lead to unsafe conditions and personal injury and property damage. They also reduce productivity and cause more traffic delays and vehicle repairs. In 2013, the American Society of Civil Engineers reported that driving on roads in need of repair costs Maine motorists \$454.6 million, or \$450.86 per motorist, in extra vehicle repairs and operating costs.

Funding for road maintenance and improvement is a challenge as costs have increased and revenues from fuel taxes, a major funding source, have declined with improved vehicle fuel efficiency. The Maine Department of Transportation reported an annual funding deficit of \$68 million in core highway and bridge programs in its 2016-2018 work plan, down from \$119 million in the 2015-2017 work plan, a calculation made possible largely by doubling assumed state bonding levels, and by modest increases in federal funding. Over the long term, Maine will have to identify new revenue streams to provide the funding needed to maintain an effective, efficient, and safe roadway network.

Investment in alternate modes of transportation like ports and rail can open Maine's economy to new regional and world markets and provide options to Maine's highway system. For example, investments in the International Marine Terminal in Portland have allowed better connections to Europe and attracted regular cargo ship service to and from Iceland. With ridership exceeding 435,000 in 2015, the Amtrak Downeaster has transported 5.8 million passengers the equivalent of 474 million passenger miles since 2001.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Broadband Connectivity, Cost of Doing Business, Cost of Energy, State and Local Tax Burden

#### Road Miles and Targets, 2010-2027

	2010	2011	2012	2013	2014	2020	2022	2027
Priority 1 & 2 Actual	1601	1606	1577	1632	1563	N/A	N/A	N/A
Priority 1 & 2 Projected	1601	1665	1729	1794	1858	2243	2371	N/A
Priority 3 Actual	1187	1116	1012	1027	1043	N/A	N/A	N/A
Priority 3 Projected	1187	1228	1269	1310	1351	1596	1678	1882

Source: Maine Department of Transportation





# COMMUNITY

LIVING, WORKING AND MOVING FORWARD, TOGETHER.





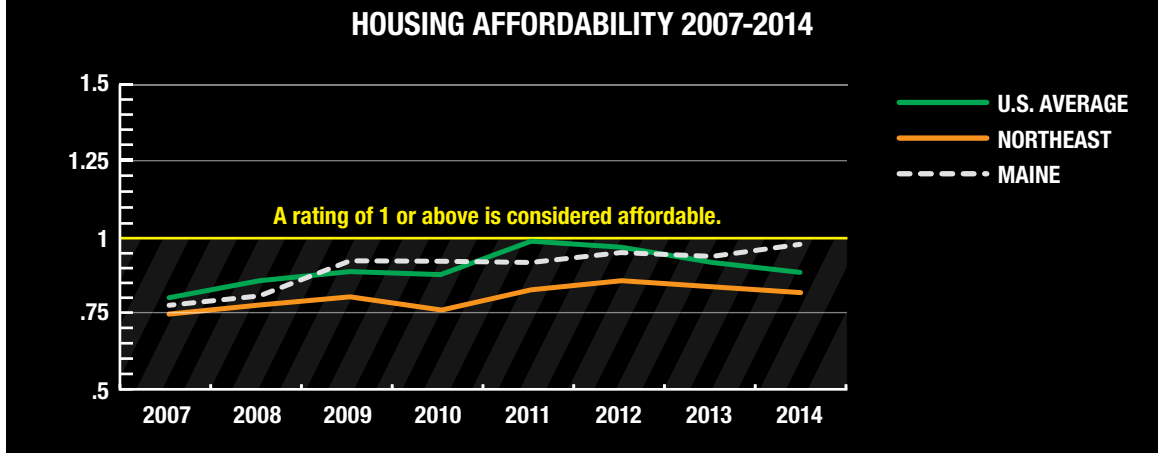
## 19 - Housing Affordability



### Maine's Housing Affordability Improves and Remains a Competitive Advantage

**Benchmark:** Maine's housing affordability index will reach and maintain a level around 1 by 2020.

**Source:** MaineHousing



**Background:** The index is the weighted average of MaineHousing's homeownership affordability\* and rental affordability indexes\*\*. The weighting is based on the relative numbers of homeowner and rental households. A higher index means that housing is more affordable.

**What the Data Shows:**

- Housing affordability in Maine has improved fairly steadily from 2007 through 2014
- Maine's housing affordability has consistently exceeded the Northeast average, with the gap expanding in recent years
- Homeownership has become more affordable in Maine while tightening rental markets have made renting less affordable

**Why It Matters:** Housing affordability is an important factor in Maine's economy, as our lower housing costs provide a competitive advantage over other Northeastern states in attracting and retaining people. Housing affordability also affects our quality of life; when housing is readily affordable, people have more money to spend on other necessities and amenities.

Over the years, housing has consistently been more affordable in Maine's central and rim counties and less affordable in southern and coastal Maine. High housing costs in many of Maine's job centers make it difficult for people to live in the communities where they work, adding to transportation costs and environmental impacts and taking a toll on family and civic life and our transportation infrastructure.

\*The homeownership affordability index is the ratio of the home price that a Maine household at median income can afford to the actual median home price.

\*\*The rental affordability index is the ratio of the rent that a Maine renter household with median renter household income can afford to the actual average rent for a two-bedroom apartment, including utilities.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Employment, Transportation Infrastructure

AVERAGES FOR 2014	HOUSE COST AVERAGE	HOMEOWNER INCOME	RENT AVERAGE	RENTER'S INCOME	
	U.S.	\$220,300	\$53,567	\$934	\$34,937
	Northeast	\$269,400	\$60,805	\$1,061	\$36,474
	Maine	\$170,000	\$49,747	\$776	\$26,926

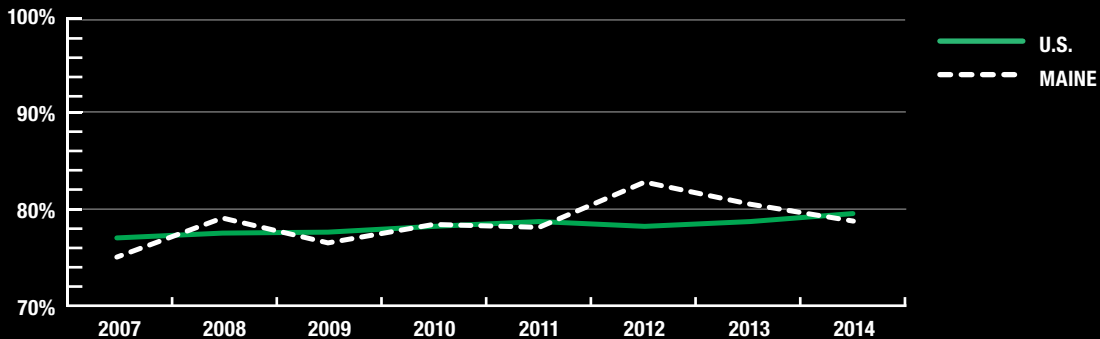
## 20 - Gender Income Disparity



Maine Women's Earnings Increase but Fail to Keep Pace with Men's Earnings



### WOMEN'S INCOME AS A PERCENTAGE OF MEN'S 2007-2014



**Benchmark:** Maine's median annual income for women working full-time will improve to 100% of the median annual income for men working full-time by 2020.

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

**Background:** This indicator compares the median annual incomes for women and men working full-time, full-year in Maine and the nation.

#### What the Data Shows:

- In Maine, women's earnings for every dollar earned by men peaked at \$0.83 in 2012 and dropped to \$0.81 in 2013 and \$0.79 in 2014
- The median annual income for women in Maine rose from \$35,426 in 2013 to \$36,153 in 2014 (+\$727), while men's earnings improved from \$43,927 in 2013 to \$45,856 in 2014 (+\$1,929)
- The gap between men's and women's earnings in Maine was essentially the same in 2014 (\$9,703) as it was in 2009 (\$9,810)
- Nationally, for every dollar earned by men, women earned \$0.79 in 2013 and \$0.80 in 2014

**Why It Matters:** While the earnings gap varies by age, race, education level, marital status, and occupation, the overall pattern of women earning less than men persists throughout the labor market, resulting in significantly lower lifetime earnings for women and limiting women's contributions to our economy. At the national level, it has been estimated that the earnings gap means women earn approximately \$431,000 less than men over a 40-year career.

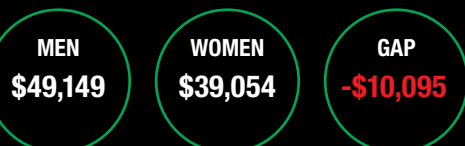
Women's choices of occupation and labor force participation account for some of the earnings gap, but much is also due to wage discrimination. The gap tends to be smaller at higher levels of education and in certain occupations, yet varies significantly across occupations with a high percentage of female employees or with comparatively high median earnings for women.

Reducing the earnings gap requires a multi-faceted approach that limits occupational segregation, expands career choices for women, enforces equal employment laws, and eliminates workplace harassment and discrimination. Maximizing the contributions of women is an important part of improving the lives of Maine people and growing our economy.

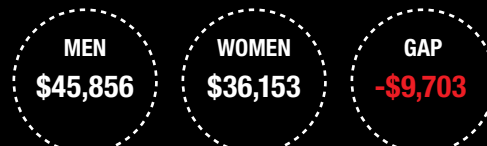
**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Employment, Poverty, Postsecondary Educational Attainment, Wellness and Prevention, Food Insecurity

#### AVERAGE INCOME GAP IN 2014

##### U.S. AVERAGE



##### MAINE





## 21 - Wellness and Prevention

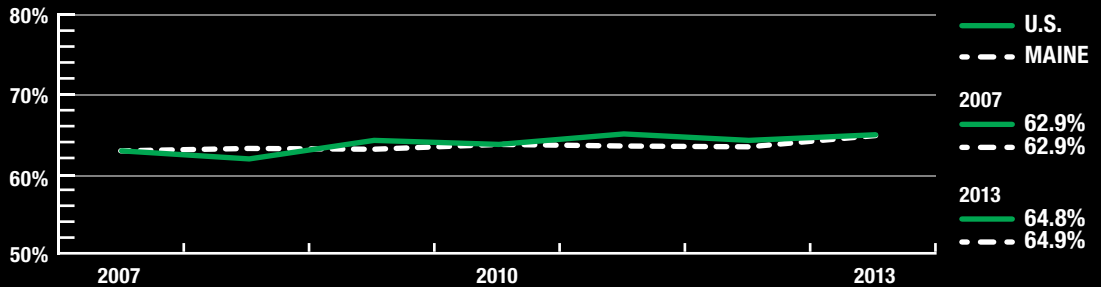


Improving Maine's Health Status an Important Factor in Economy

**Benchmark:**  
The combined percentage of overweight and obese adults in Maine will decline to 50% by 2020.

**Source:**  
Center for Disease Control, Behavioral Risk Factor Surveillance System

### PERCENTAGE OF OVERWEIGHT AND OBESE ADULTS 2007-2013



**Background:** The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collects state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. The Survey includes the percentage of adults classified as overweight (Body Mass Index of 25.0 to 29.9) and obese (Body Mass Index greater than or equal to 30).

#### What the Data Shows:

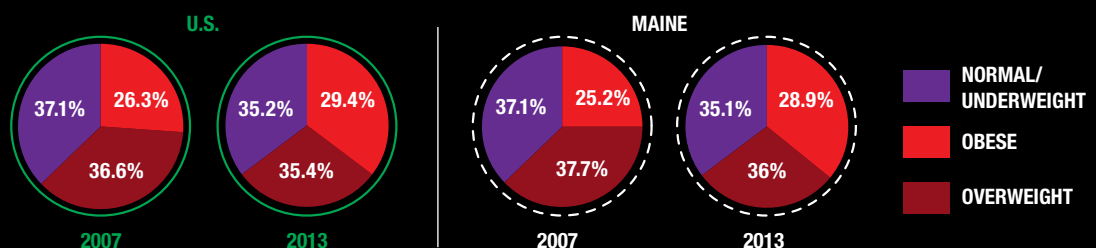
- While 2014 adult overweight rates for Maine and the U.S. are not available, these rates have been fairly stable in recent years
- The increase in the combined rates in both areas has been driven by a rise in obesity rates, which were 28.2% in Maine and 28.9% in the U.S. in 2014
- Approximately two-thirds of Maine and U.S. adults have been classified as overweight or obese in recent years
- Approximately one-third of Maine children are overweight or obese and more likely to have weight and associated health issues as adults

**Why It Matters:** Being overweight or obese is the third leading cause of preventable deaths in Maine and the nation. Adults with weight issues are at risk for chronic diseases such as diabetes, heart disease, stroke, high cholesterol, asthma, arthritis, and some cancers. The risk increases with weight. Obesity is highly correlated with cardiovascular disease, asthma, hypertension, diabetes, and joint degeneration, which are being found in younger ages, particularly among those with low incomes.

These health effects have important economic implications. Studies have shown that Maine's high overweight and obesity rates lead to an additional \$767 million annually in medical expenses and \$2 billion annually in lost productivity. Reducing our overweight and obesity rates can help improve our overall health status and in turn help to control health care costs and improve productivity. Many employers are now using wellness and insurance programs to encourage healthy behaviors among their employees to increase productivity and bring down health care costs.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Poverty, Cost of Doing Business, Cost of Health Care, Health Insurance Coverage, Food Insecurity

### TREND OF PEOPLE OVERWEIGHT OR OBESE IN 2007-2013





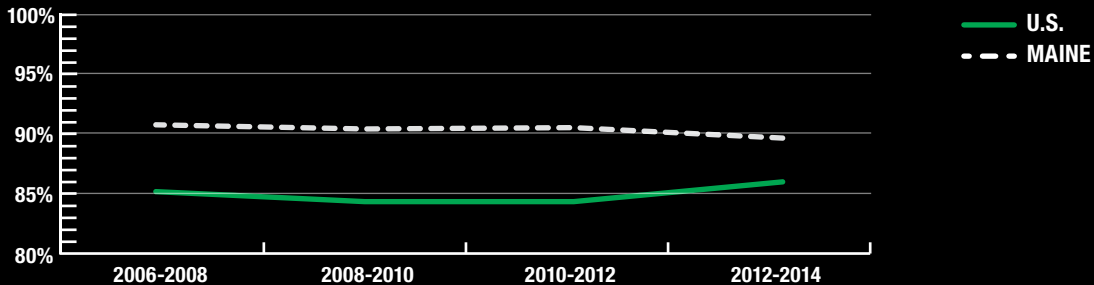
## 22 - Health Insurance Coverage



Maine's Health Insurance Coverage Remains Steady and Above U.S. Average



### POPULATION WITH HEALTH INSURANCE COVERAGE (3-YEAR MOVING AVERAGE 2006-2014)



**Benchmark:** The percentage of Maine's population with health insurance coverage will continually rise and remain above the U.S. rate.

**Source:** U.S. Census Bureau

**Background:** This indicator compares the three-year average of the percentage of the total population in Maine and the U.S. with health insurance coverage.

#### What the Data Shows:

- After peaking at 91% in the mid-2000s, Maine's three-year moving average of health insurance coverage has been approximately 90% since 2007
- The U.S.'s three-year moving average has risen from 85% in 2006 to 86% in 2014
- According to the Kaiser Foundation, the distribution of health care coverage in Maine changed little from 2013 to 2014, with employer-provided coverage increasing from 46% to 47%, Medicare coverage declining from 17% to 16%, and the uninsured population declining from 10% to 9%
- From 2013 to 2014, the U.S. percentage of individuals covered by employer-provided health insurance rose from 48% to 49%, the percentage covered by Medicaid rose from 16% to 19%, the percentage covered by Medicare declined from 15% to 13%, and the uninsured population declined from 13% to 10%

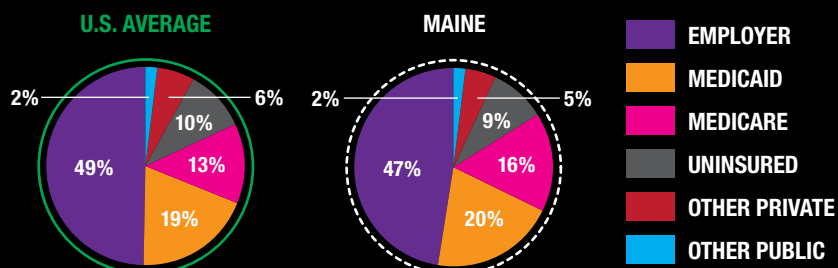
**Why It Matters:** Making health insurance coverage available to a large number of people provides greater access to health care services. Health insurance helps people establish a relationship with a provider and access preventive care that can help avoid more costly and disruptive procedures down the road, helping people live healthier, more productive lives. As Maine's population ages and with health care costs rising once again, financing both private and public insurance programs is likely to present an even greater challenge in the years ahead. Adding more quality jobs that offer health insurance to employees can help alleviate the burden on public insurance programs.

The federal Affordable Care Act's Health Insurance Marketplace has significantly improved affordability and coverage for individuals and sole proprietors. Maine also gained a new nonprofit insurer which has become the leading plan provider in the state for enrollees in the Health Insurance Marketplace. As of the end of the 2015 open enrollment period, nearly 84,000 Mainers had selected a health plan through the Marketplace, with about 90% of enrollees qualifying for subsidized coverage.

**Related Indicators:** Value Added per Worker, Employment, Cost of Doing Business, Cost of Health Care, Wellness and Prevention, Food Insecurity

#### HEALTH INSURANCE COVERAGE IN 2014

Source: Kaiser State Health Facts





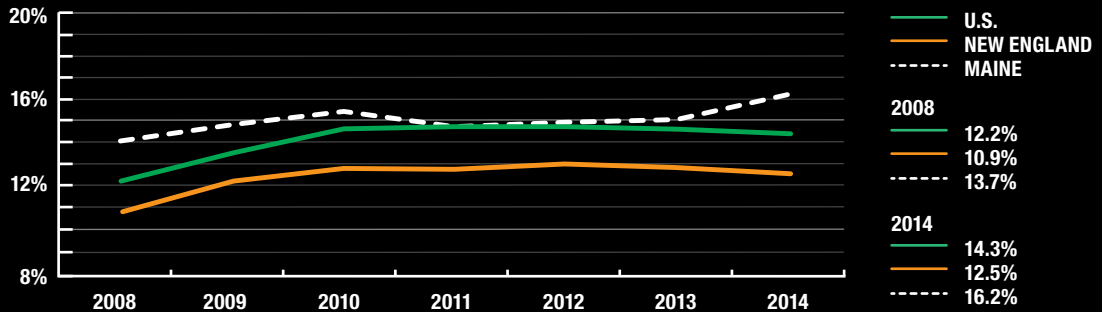
## 23 - Food Insecurity

— Reducing Maine's Food Insecurity Key to Other Improvements

**Benchmark:** Maine's percentage of food insecure households will decline to the U.S. average by 2020.

**Source:** U.S. Department of Agriculture Economic Research Service

### FOOD INSECURE HOUSEHOLDS 2008-2014 (3-YEAR MOVING AVERAGE)



**Background:** Food insecurity is measured annually by the U.S. Department of Agriculture Economic Research Service using U.S. Census data. Households with dependable access to enough food for active, healthy living are considered food secure, while those experiencing disrupted eating patterns, reduced food intake, and reduced quality or variety of diet are considered to be food insecure.

#### What the Data Shows:

- Maine's percentage of food insecure households has risen from 13.7% in 2008 to 16.2% in 2014 and remains above the New England and U.S. averages
- According to Feeding America, approximately 206,000 Mainers, including nearly one in four Maine children, are facing hunger

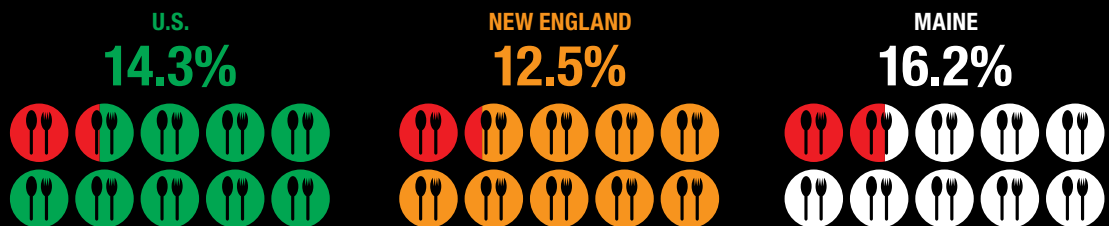
**Why It Matters:** Food insecurity is a foundational indicator with long-term effects on Maine people and Maine's economy. Hunger is often associated with poverty but is not limited to those living below the poverty line, and nationally is more strongly connected with unemployment. Among adults, food insecurity is associated with poor overall health status, obesity and weight gain, chronic disease, and mental health issues which can contribute to workforce challenges such as absenteeism and reduced productivity. The mental and physical problems associated with food insecurity are exacerbated among the older population.

Proper nutrition is critical to early childhood development, while a lack of access to nutritious food can have serious effects on the physical and mental health, academic achievement, and future economic prosperity of young children. Nationally, food insecurity has been estimated to cost \$167.5 billion annually in lost productivity, diminished educational outcomes and increased educational spending, avoidable health care costs, and the value of charity efforts. The total cost for Maine has been estimated to be \$787 million.

Eliminating "food deserts" where affordable and healthy food is difficult to obtain, supporting hunger prevention programs like Good Shepherd Food Bank, and increasing participation among eligible students in federal child nutrition programs are important to reducing food insecurity. The 126<sup>th</sup> Maine Legislature created The Task Force to End Student Hunger in Maine and the 127<sup>th</sup> Maine Legislature created the Commission to End Student Hunger to help address food insecurity among Maine children.

**Related Indicators:** Gross Domestic Product, Per Capita Personal Income, Value Added per Worker, Employment, Postsecondary Educational Attainment, Fourth Grade Reading Scores, Eighth Grade Math Scores, Cost of Health Care, Wellness and Prevention

### FOOD INSECURE HOUSEHOLDS IN 2014





# ENVIRONMENT BY LAND, LAKE, SEA AND STREAM.





## 24 - Air Quality

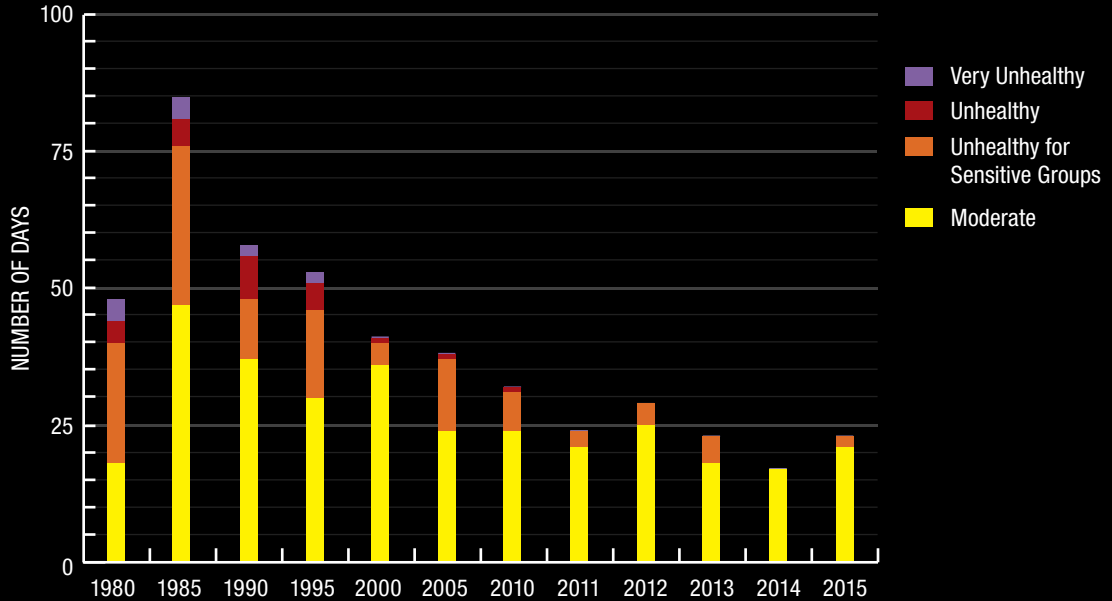


Air Quality an Asset to Maine's Economy and Quality of Life

**Benchmark:** Maine's overall number of listed days and the severity of the health categories for listed days will continue to decline through 2020.

**Source:** Maine Department of Environmental Protection

### MAINE AIR QUALITY INDEX 1980-2015



**Background:** The air quality indicator is based on ozone levels averaged over an eight-hour period in parts per billion, as measured by a network of monitors recording concentrations of major pollutants throughout the state. The data is based on the number of times the maximum value in the state for each day falls into each air quality index category.

A separate comparison is of Maine's statewide maximum eight-hour ozone design value to the national standard. The maximum eight-hour ozone design value measures the fourth highest daily maximum concentration averaged over three years. Maine's values were above 100 for much of the 1980s but have been at or below the national ambient air quality standard of 75 since 2010.

#### What the Data Shows:

- The number of days falling into one of the designated health risk categories peaked in 1985 at 85, including four days classified as very unhealthy
- Both the number and severity of unhealthy air quality days have declined in recent years, to a low of 17 days of moderate risk in 2014, the first year without a day above that risk category
- In 2015, 21 days were classified as moderate and two were classified as unhealthy for sensitive groups

**Why It Matters:** Maine is recognized both within the state and beyond for our environmental quality, which helps make the state an attractive place to live and visit. Air quality is an important indicator of Maine's overall environmental quality. While Maine's location means our air quality is subject to actions outside of our state, both state and federal policy have a role to play. On average, Maine's air is cleaner than the other Northeastern states and offers an advantage in attracting people and businesses, and affects our overall health status and our cost of health care.

**Related Indicators:** Gross Domestic Product, International Exports, Workforce, Cost of Health Care, Wellness and Prevention, Water Quality



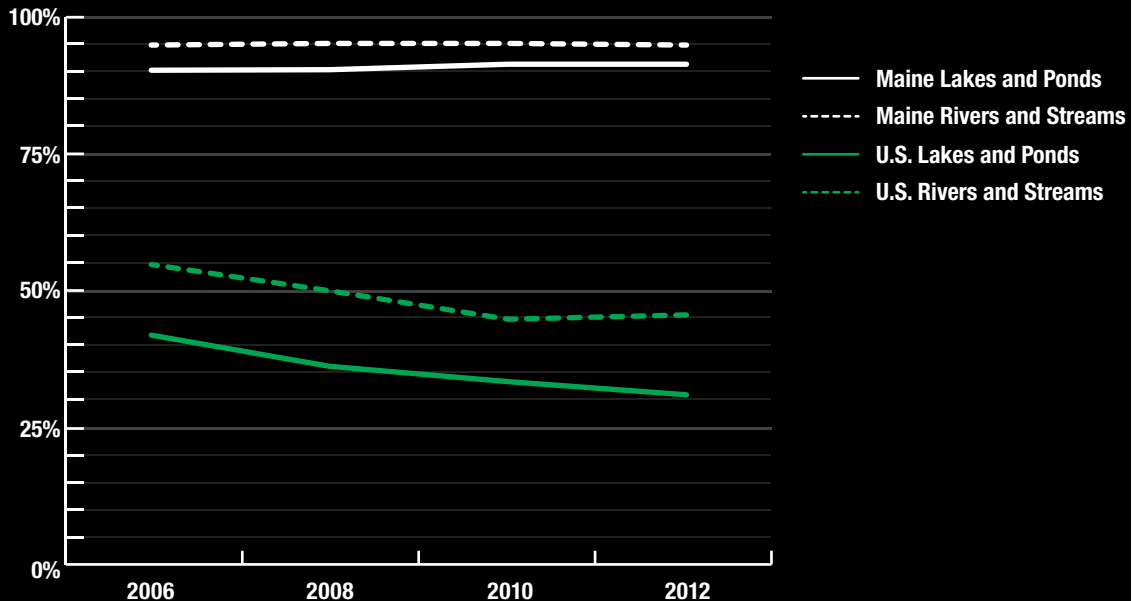
## 25 - Water Quality



Maine's Water Quality Far Exceeds U.S. Average



### PERCENT OF CATEGORY 1 OR 2 WATER BODIES 2006-2012



**Benchmark:** The percentage of Maine's assessed water bodies classified as Categories 1 and 2 will be maintained over time.

**Source:** Department of Environmental Protection, Bureau of Water Quality, and U.S. Environmental Protection Agency

**Background:** The chart compares water quality in Maine and the U.S. The Maine Department of Environmental Protection reports the water quality for Maine's rivers and streams and lakes and ponds to the U.S. Environmental Protection Agency every two years. Maine's assessed waters are classified into five categories, with Category 1 waters attaining all designated uses and water quality standards, and Category 2 waters presumed to attain all uses and standards. Categories 1 and 2 are approximately equivalent to the EPA's "good" classification.

#### What the Data Shows:

- While 2014 data is not yet available, Maine's water quality has consistently been well above the U.S. average
- Since 2006, approximately 95% of Maine's assessed rivers and streams and approximately 90% of Maine's assessed lake and pond acreage met the Category 1 and 2 standards
- From 2006 to 2012, the percentage of U.S. rivers and streams meeting the "good" standard dropped from 55% to 46%, and the percentage of U.S. lakes dropped from 42% to 31%

**Why It Matters:** Maine's rivers, lakes, and streams provide drinking water for Maine's people and support our diverse ecosystems. The overall quality of Maine's natural environment is a key part of our state's identity, image, and brand. Maine's natural environment, and in particular our water resources, helps to support a vibrant tourism economy and is frequently cited as a main reason that people and businesses stay in or relocate to our state. While many of the indicators in this report address Maine's challenges, the environmental indicators speak to one of Maine's key assets and the benefits and opportunities it presents for Maine's people and economy.

**Related Indicators:** Gross Domestic Product, Value Added per Worker, International Exports, Cost of Health Care, Wellness and Prevention, Air Quality

## BACKGROUND

The Maine Economic Growth Council was established by statute in 1993 to develop, maintain, and evaluate a long-term economic plan for Maine. Its members represent a broad and diverse cross-section of Maine's key constituencies. Members are jointly appointed by the Governor, Senate President, and Speaker of the House. The Council is chaired by Steve Von Vogt, President and CEO of Maine Marine Composites, and Senator Andre Cushing.

The annual *Measures of Growth* report is a widely used and respected report on Maine's economy. The report has been revised from time to time to provide the most current and meaningful assessment of Maine's progress toward long-term economic growth and a high quality of life for all Maine people.

The Maine Economic Growth Council is administered by the Maine Development Foundation (MDF), a private, non-partisan membership organization created in statute in 1978 that drives sustainable, long-term economic growth for Maine. MDF Program Director Ryan Neale administers Council meetings and researches and writes the report. The work of the Growth Council is financed by a state appropriation through the Maine Department of Economic and Community Development, with additional support provided by the membership of MDF.

## ACKNOWLEDGEMENTS

The Maine Economic Growth Council and Maine Development Foundation extend their sincere appreciation to the individuals and organizations that generously provided data and guidance in the development of this report. The report is designed by Pica and printed by J.S. McCarthy.

## THE NATURE OF DATA

The Growth Council strives to provide the most accurate, timely, and consistent data available. Source data is regularly revised as methodologies improve and more information becomes available. As a result, the data presented here may differ slightly from that of past reports. Despite these limitations, the overall trends and policy implications are unchanged.

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Prepared by the Maine Development Foundation  
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