# Measures Of Growth In Focus



2011

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

SEVENTEENTH REPORT OF THE MAINE ECONOMIC GROWTH COUNCIL

Prepared by the

Maine Development Foundation

# VISION

# A high quality of life for all Maine people.

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



Prepared for the Maine Economic Growth Council *by the* 

Maine Development Foundation

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# **2011 Performance Measures of the Maine Economic Growth Council**

#### **ECONOMY**

## **Prosperity**

- 1. Per Capita Personal Income
- 2. Gross Domestic Product
- → 3. Employment
- 4. Multiple Job Holding

#### **Business Innovation**

- **5.** Research and Development Expenditures
- ⊕ ★ 6. International Exports
- 7. High Speed Internet Subscribers
- 8. New Business Starts
- 9. Manufacturing Productivity

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- 10. Higher Degree Attainment
- **11. Fourth Grade Reading Scores**

#### **Business Climate**

- 13. Cost of Health Care
- 14. Cost of Energy

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### ENVIRONMENT

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(+) 24. Sustainable Forest Lands

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25. Population of Service Center Communities

#### **KEY TO SYMBOLS**

#### GOLD STARS & RED FLAGS

Determining which performance measures receive Gold Stars and Red Flags are judgments made by members of the Maine Economic Growth Council. These determinations reflect consensus of the group and are based on consideration of the best data available and the experienced perspective of Growth Council members. Generally, criteria are as follows:

#### **Exceptional performance.**

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

#### Needs attention.

Very low national standing and/or established trend towards significant decline. In some cases, there is improvement, but it is still viewed as needing attention.

#### **PROGRESS SYMBOLS**

The progress symbols reflect movement toward or away from the benchmarks. The benchmarks are established by the Growth Council progress is determined objectively each year by reviewing the most recent trend. The Growth Council does not use a uniform methodology in creating benchmarks. Criteria for applying the progress symbols are as follows:

- ( We have moved toward the benchmark since last available data.
- We have moved away from the benchmark since last available data.
- No significant movement either way since last available data.

#### FINDING THE WAY TO MOVE MAINE'S ECONOMY FORWARD

While the largest recession in recent memory has created a number of challenges that demand our immediate attention, it is also important to keep our focus on the long term. Investment in the drivers of our economy is now more critical than ever, and can lay the groundwork for our future economic prosperity.

Maine's current economic conditions provide reasons for optimism. Private sector jobs and hours worked have increased, consumer spending has improved, and corporate profits are at record high levels. There are causes of concern as well: economic recovery has been very slow, the federal stimulus funding and resulting inventory increases are waning, businesses and consumers remain anxious and cautious, and the job and housing markets remain weak.

Maine's economy has undergone profound changes in recent years and is continuing to do so. Service-providing employment has increased and goods-producing jobs have declined, creating both new challenges and new opportunities. Low costs and traditional economic factors are of less importance than in the past as technology and innovation, new products and markets, and an intelligent workforce take on more significance. In the increasingly knowledge-based global economy, human capital and innovation are the keys to economic success.

Education is a key determinant of individual earning potential and overall economic prosperity. An educated, skilled workforce is a key to increasing personal incomes, attracting employers and better-paying jobs, and lowering spending on social services. Maine's level of higher degree attainment remains equal to that of the United States as a whole and well below that of our New England neighbors. Below the statewide numbers lies another challenge - the discrepancy in higher degree attainment among Maine counties. Higher education provides an equal opportunity for prosperity that is essential to achieving our vision of a high quality of life for ALL Maine people.

Maine's demographics create additional economic difficulties. Maine has a population growth rate that is half of the U.S. average, the highest median age of any state in the nation, and the third lowest percentage of the population under the age of 18. If current trends continue, a much smaller percentage of the state's population will be participating in the workforce and a much higher percentage will be retirees. Providing more services for this aging population will be a significant challenge.

Based on U.S. Census numbers for 2009, Maine's population is 96.1% white, well above the U.S. average of 79.6%. This combination of an aging, slow-growing, and homogenous population makes economic growth difficult. An infusion of new people, ideas, and talents can help grow Maine's economy. As a state, we should be looking to capitalize on this opportunity.

#### BENCHMARKS AND INDICATORS

In its ongoing effort to provide timely, relevant information about Maine's economy, the Council has added two new indicators for this edition of the report: Wellness and Prevention and Fourth Grade Reading Scores. Wellness and Prevention replaces the deaths from chronic disease measure with the percentage of overweight and obese adults measure. Being overweight and obese are leading factors in the incidence of chronic disease and are keys to the overall wellness of Maine's people. This, in turn, has dramatic implications on the overall health of Maine's economy and on many other economic indicators. We should not be satisfied that Maine's struggles on this issue are shared by the nation as a whole.

Fourth grade reading scores are both a reflection of early childhood development and a predictor of future success. This is the foundation on which future learning occurs. Given the importance of an educated workforce to the state's economic prosperity, the Council believes it appropriate to include this outcome indicator. While Maine's Reading Scores exceed the national average, clearly improvement needs to be made.

Maine made significant progress on some indicators:

- **International Exports** Improvement is encouraging given the importance of identifying and capitalizing on new market opportunities.
- **Conservation Lands** Maine has achieved the acreage benchmark with the inclusion of conservation easements. Future efforts should focus on the strategic conservation of working waterfronts, farmland, wildlife habitat, and forests, and should be coordinated with well-planned development.

Unfortunately, other indicators highlight areas of concern in Maine's economy:

- **Research and Development** Maine's investment remains well below the 3% of gross domestic product the Council considers necessary to expand Maine's innovation-driven economy and improve competitiveness.
- Cost of Doing Business After progress in recent years, Maine lost some ground in 2008.
- Cost of Health Care Rising costs continue to impose a disproportionate burden in Maine.

#### THE NATURE OF DATA

As always, the Council strives to provide the most accurate and timely data in a fashion that is useful for policymakers and opinion leaders. Great care is taken to ensure that the information in the report supports good decision making. Nevertheless, the type of data we are dealing with by nature comes with a level of uncertainty. The best data has been collected in a way that manages this uncertainty. The data is regularly revised as more information and better methodologies are made available. As a result, the data in this edition may be slightly different from previous reports and, more importantly, will be more accurate. Despite any changes in the data, the trends and policy implications remain the same.

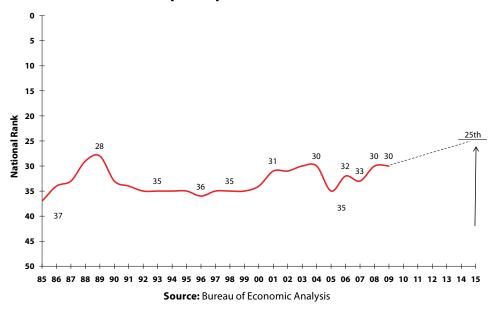




## 1. Per Capita Personal Income

**Benchmark:** Maine's national rank among the 50 states on per capita personal income will reach 25th by 2015.

#### National Rank on per Capita Personal Income 1985 - 2009



#### Maine Moves to 92.1% of National Average

Maine's per capita personal income experienced virtually no growth (\$36,457 to \$36,479) from 2008 to 2009 ranking 30th nationwide. The national average declined by -1.4%, and as a result, Maine continued to close the gap on the national average. In 2009, Maine's per capita personal income was 92.1% of the U.S. average of \$39,626.

New England's 2009 per capita personal income of \$48,049 remained above the national average and Maine. The other five New England states continue to rank higher than Maine.

Per capita personal income is the income received from all sources (wages, salary, supplements, rents, dividends, interest, and transfer payments), divided by the state's population. Maine receives a greater share of its income (20.4% in 2008) from transfer payments than the nation (15.3% in 2008). Transfer payments are payments to persons for which no current services are performed. Examples include Social Security, unemployment, and welfare assistance. A positive outcome for Maine families will require increasing the non-transfer payment component of this indicator.

Per capita personal income is a reflection of economic prosperity. Higher incomes stimulate the economy by enabling greater consumer spending and savings and lowering tax burdens. Higher incomes allow Maine people to enjoy a higher quality of life, as items such as housing, health insurance, and education, become more affordable. Incomes that fail to keep pace with rising prices can make it increasingly difficult to obtain even essential items such as food, medicine, and fuel.

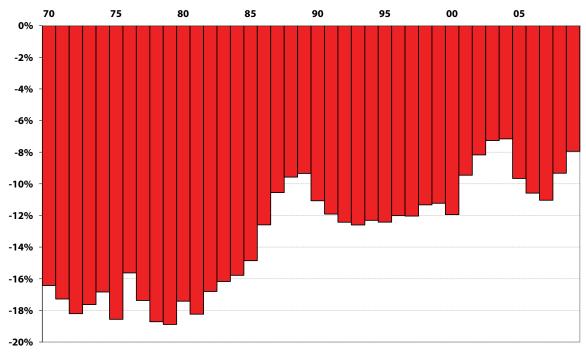
The Growth Council has set the benchmark of Maine ranking 25th in per capita personal income by 2015. Although Maine continues to trail the U.S. average, the last two years have seen the state make progress in the right direction. Personal income is tied to every other indicator in this report. Positive movement toward the benchmark will require positive movement on many other indicators.

# 1. Per Capita Personal Income (continued)

2009 Personal Income and National Rank New England States						
Income Rank						
United States	\$39,626					
New England	\$48,049					
Connecticut	\$55,063	1				
Massachusetts	\$49,643	3				
New Hampshire	\$42,585	10				
Rhode Island	\$41,324	16				
Vermont	\$39,021	22				
Maine	\$36,479	30				

**Source:** Bureau of Economic Analysis

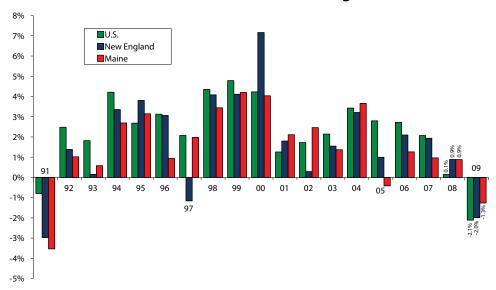
The graph below shows Maine's progress in closing the income gap with the nation. The 2009 gap of -7.9% is the smallest since 2003.



**Source:** Bureau of Economic Analysis

Benchmark: Maine's GDP growth will outpace New England and the U.S.

#### Real Gross Domestic Product Growth Rate, U.S., New England and Maine 1991 - 2009



Source: Bureau of Economic Analysis

#### Maine's GDP Declines in Recession - Region and Nation Dip as Well

Gross Domestic Product (GDP) is a measure of economic health and a primary determinant of a growing or receding economy. GDP is the value added in production by labor and property located within a state summed across all industry sectors.

With the onset of the recession, GDP declined nationwide from 2008 to 2009. It declined at a lower rate in Maine (-1.3%) than in New England (-2.0%) and the nation (-2.1%). Looking further back, GDP has grown slower in Maine (1.4%), than in New England (3.9%) and the nation (5.7%) between 2004 and 2009.

The table shows the relative contribution of major industry sectors to Maine's GDP in 2009. Real Estate, Government, Health Care and Social Assistance, and Manufacturing account for half of Maine's economic output. Real Estate, Government, and Health Care and Social Assistance saw modest growth from 2008 to 2009. Manufacturing decreased in terms of output (-7.4%) and overall share. Management (-11.0%) and Construction (-8.3%) also saw significant declines in output from 2008 levels. Finance and Insurance had the largest growth (3.6%), and increased from 6% of total GDP in 2008 to 8% in 2009. Overall, from 2008 to 2009, seven sectors experienced growth and eleven sectors declined. GDP is affected by other indicators. Improvements in educational attainment of the workforce can drive up productivity and controlling costs like energy and health care frees up money for business investment. All can lead to greater economic output.

Real Gross Domestic Product in Maine by Major Industry Sector 2009						
Industry Sector	GDP Millions of Dollars	% of Total	% Change 08-09			
Real Estate	\$6,438	14%	0.4%			
Government	\$6,355	14%	0.5%			
Health Care and Social Assistance	\$5,234	11%	1.0%			
Manufacturing	\$5,105	11%	-7.4%			
Retail Trade	\$4,054	9%	-1.9%			
Finance and Insurance	\$3,588	8%	3.6%			
Wholesale Trade	\$2,387	5%	1.3%			
Professional & Technical Services	\$2,321	5%	-1.6%			
Construction	\$1,694	4%	-8.3%			
Accommodation & Food Services	\$1,519	3%	-1.4%			
Information	\$1,327	3%	0.2%			
Trans. and Warehousing	\$1,177	3%	0.3%			
Administrative & Waste Services	\$1,168	3%	-1.8%			
Other Services	\$1,130	2%	-3.5%			
Utilities	\$775	2%	-1.1%			
Management	\$580	1%	-11.0%			
Educational Services	\$498	1%	-1.6%			
Arts, Entertainment, Recreation	\$446	1%	-2.6%			

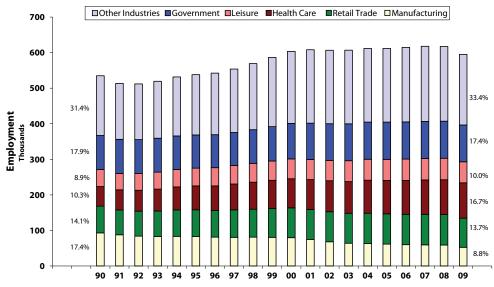
Source: Bureau of Economic Analysis

# 3. Employment

**Benchmark:** Employment measured by the total number of jobs will increase each year.



#### Maine's Average Annual Nonfarm Wage and Salary Employment\* by Industry Sector 1990 - 2009



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

Significant Job Loss during the Recession – A Skilled Workforce Key to Recovery Maine lost 22,500 jobs from 2008 to 2009, a decrease of 3.6%. The total of 595,000 jobs is the lowest level since 1999, when the state had 586,300 jobs.

As the chart indicates, the makeup of Maine's economy also continues to change. One major trend is the continued loss of jobs in the manufacturing industry. Manufacturing lost 6,400 jobs from 2008 to 2009, a decline of 10.9%. Overall, Manufacturing has declined from 17.4% of Maine's workforce in 1990 to 8.8% in 2009. These job losses are consistent with national trends, as structural factors, such as the outsourcing to other regions of the world and improvements in productivity, have decreased quality employment opportunities in this critical industry sector. This decline in manufacturing jobs was aggravated during the recent recession as demand for manufactured products decreased significantly.

Overall, 12 industry sectors experienced declines from 2008 to 2009. The Construction (loss of 4,400 jobs, down 15.0% from 2008) and Information industries (loss of 1,300 jobs, down 12.4% from 2008) saw the most significant drop offs. The trend of expanding employment in Health Care and Social Services continued from 2008 to 2009, as the industry added 1,300 jobs, a growth rate of 1.3%.

It is clear from the data that Maine faces a number of significant challenges. As a result of the largest economic downturn in decades, Maine can expect slow job growth and higher unemployment for the next few years. Like the nation, we should not expect a return of all the jobs we lost. Providing workers with the skills and education to participate in growth industries is, and will continue to be, essential to our economic prosperity as we look to develop new employment opportunities.

<sup>\*</sup>Nonfarm employment figures relate to full and part-time wage and salary workers in pay periods including the 12th of the month.

# 3. Employment (continued)

Employment Growth in Maine by Sector 2008-2009					
Sector	Jobs Gained/Lost	Growth			
Manufacturing	-6,400	-10.9%			
Retail Trade	-3,800	-4.4%			
Health Care and Social Assistance	1,300	1.3%			
Leisure and Hospitality	-900	-1.5%			
Government	-1,000	-1.0%			
Natural Resource and Mining	-200	-7.7%			
Construction	-4,400	-15.0%			
Transportation, Warehousing, and Utilities	-1,400	-7.6%			
Wholesale Trade	-1,300	-6.3%			
Information	-1,300	-12.4%			
Financial	-1,100	-3.4%			
Professional and Business Services	-1,700	-3.0%			
Educational Services	100	0.5%			
Other Services	-400	-2.0%			

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

As the data indicates, Maine's economy, like the nation's, is in transition. Some of Maine's investments intended to grow the economy and create good jobs, such as job training, education, and research and development (R&D) are paying dividends – particularly in high tech and emerging specialized manufacturing industries. For example, some of the state's investments in R&D have led to the emergence of industry clusters in some of Maine's traditional industries like boat building and fabrication. More than ever, these emerging industries demand highly skilled and highly educated workers. Continued investment in education at all levels and in all forms is necessary to prepare Maine's workforce for the economy of both today and tomorrow.

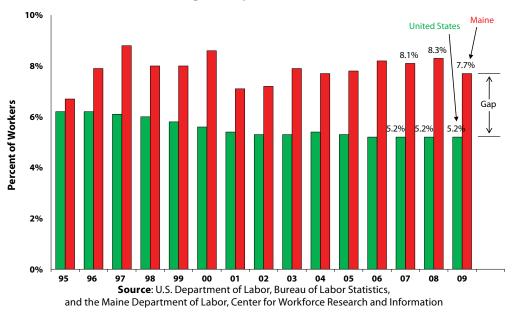
Even as we look to create new employment opportunities, the state must also grapple with the imminent retirement of a large number of older workers, who will take with them experience and institutional knowledge from industry sectors across the Maine economy. Training the existing workforce while attracting new workers from outside of Maine will be critical to replacing these skills and knowledge and moving the economy forward.

# 4. Multiple Job Holding

**Benchmark:** Maine's multiple job holding rate will decline to the U.S. rate.



#### Percent of Workers Holding Multiple Jobs, U.S. and Maine, 1995 - 2009



#### Job Quality in Maine Remains a Concern

The Growth Council views this indicator, in part, as a measure of job quality. Maine's multiple job rate dropped somewhat in 2009. People often work more than one job because one job does not provide adequate compensation. It is important to note, however, that this is not the only reason to work multiple jobs. Some individuals in Maine opt for a second job to earn extra money, for a different work experience, or for the enjoyment of the experience. The Maine Department of Labor offers another explanation as to why Maine's rate is higher than the national average: a higher degree of seasonal work and growth in retail trade and other services in which part-time work is prevalent. A higher rate of multiple job holding, therefore, is due in part to quality and the structure of the economy.

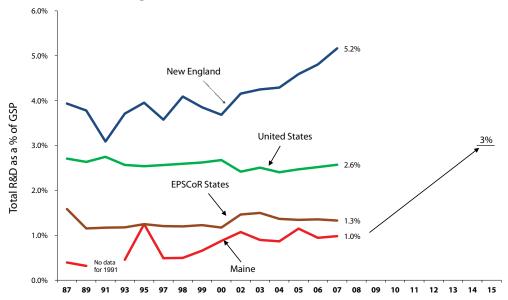
There are other data that speak to quality, mainly wages. According to the Bureau of Labor Statistics, Maine's average wage (\$36,617), across all sectors, is approximately 80% of the national (\$45,559) and New England (\$46,301) averages. This can be difficult for Maine families buying goods and services like health care, energy, and food that don't have the same cost differential. The health insurance indicator in this report has shown a decline in employer-provided health insurance over time, also supporting an assertion of declining job quality.

These factors affect Maine's social fabric, as parents spend more time at work and less at home and in their communities. Raising the skills of our current and future workforce will help lift existing businesses and will serve to attract high-growth industries both offering Maine workers quality employment opportunities.



# 5. Research and Development Expenditures Benchmark: Total R&D spending as a percent of GDP in Maine will increase to 3% by 2015.

# Total R&D Spending as a Percent of Gross Domestic Product, U.S., New England, Maine, and EPSCoR States, 1997 - 2007



Note: From 1997-2000 & 2002-2005 chart portrays one-year increments; all other years are in two-year increments. Please note there is no Maine data available for 1991.

Source: PolicyOne Research

### Maine R&D Investment Remains Steady - More is Needed to Drive Innovation and Growth

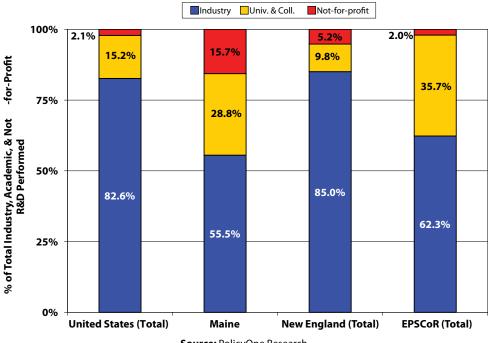
Maine's total research and development (R&D) investment was 1.0% of GDP in 2007, essentially the same in as 2006. Overall, Maine's R&D spending as a percent of GDP has been slowly growing since 1987, albeit with some peaks and valleys. Maine's rank in R&D spending as a percent of GDP has improved from 45th in 1999 and 2003 to 40th in 2007. Total R&D investment grew from \$450 million in 2006 to \$485 million in 2007, representing a \$35 million increase.

This indicator compares Maine with other EPSCoR states (Experimental Program to Stimulate Competitive Research – a joint program of the National Science Foundation and 22 states, including Maine), the United States as a whole, and New England. For the last 20 years, Maine has remained below the nation, the region, and EPSCoR states on this measure. In recent years, Maine has essentially kept pace with EPSCoR states and the nation as a whole, but has lost considerable ground relative to New England.

The Growth Council considers the 3% benchmark to be the investment necessary to expand Maine's innovation-driven economy and improve the state's competitiveness. This is also the goal set by the Maine Innovation Economy Advisory Board in the state's 2010 Science and Technology Action Plan. An additional investment of almost \$1 billion would have been required to reach the 3% benchmark in 2007. Achieving the goal will require more investment in R&D, particularly from Maine's private industry.

# 5. Research and Development Expenditures (continued)

#### **R&D by Performance Sector - 2007**



Source: PolicyOne Research

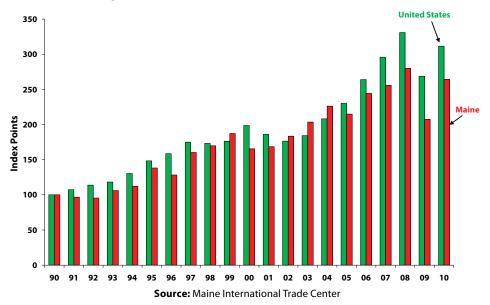
R&D performance is a key measure for gauging Maine's competitiveness in the knowledge-based economy. R&D is a driving force in economic growth. It fuels innovation that leads to new products, processes, technologies, and services. These innovations spawn new industries, new jobs, and, ultimately, an improved quality of life. Nobel Prize Winner, Robert Solow, showed that 80% of GDP growth comes from innovation. R&D activity also attracts and supports a highly educated and skilled workforce which, in turn, continues to build a cycle of innovation. All of this leads to better jobs and increased government revenues.



# 6. International Exports

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

#### International Exports, U.S. and Maine (indexed from 1990), 1990 - 2010



#### **Exports on the Rise – Forest Products Leading the Way**

Maine exported \$2.84 billion of commodities in 2010, up 27% from \$2.23 billion in 2009. National exports increased by 16% during this time. These are large improvements from declines experienced during the recession. Identifying and capitalizing on new markets remains essential to growing the Maine economy and supporting Maine manufacturers and industry. International markets represent real growth opportunities and Maine businesses must have access to, and the ability to meet demand in, these markets. The State of Maine must continue building relationships worldwide to identify market opportunities for our businesses.

Most of Maine's major commodity groups grew since 2009. Forest products increased from \$681 million to \$904

million in 2010 and continues to lead in total export dollars, as Maine moves to overtake Wisconsin as the number one state in terms of production in this sector. Electric machinery, which had seen a dramatic decline, grew from \$398 million in 2009 to \$745 million in 2010. In all, five of Maine's six top commodity groups saw growth over previous year's levels.

Canada remains Maine's top trading partner with 35% of total Maine exports, followed by Malaysia (24%), China (11%), the Netherlands (3%), and the Republic of Korea (3%). The remaining 24% of exports are purchased by over 170 countries worldwide.

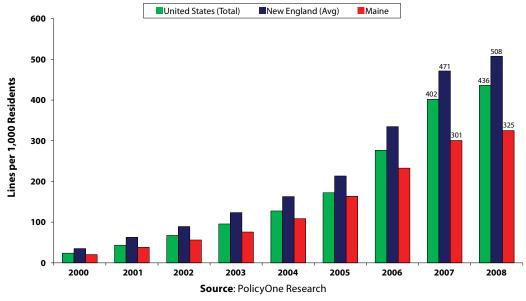
Maine's Major Exported Commodities, 2010 In Millions of Dollars					
Commodity 2010 2010 % of To					
Forest Products Sub-Total	904	31.8%			
Paper & Paperboard	398	14.0%			
Pulp Of Wood Etc.	295	10.4%			
Wood And Articles Of Wood	211	7.4%			
Electric Machinery; Sound Equip; TV Equip; Pts	745	26.2%			
Vehicles, Except Railway Or Tramway, And Parts Etc	74	2.6%			
Fish, Crustaceans & Aquatic Invertebrates	252	8.9%			
Industrial Machinery, Including Computers	158	5.6%			
Ships, Boats And Floating Structures	18	0.6%			
Other	692	24.3%			
Total Exports	2,843	100.0%			

# 7. High Speed Internet Subscribers

**Benchmark:** Maine will reach the New England level of high speed internet subscribers by 2015.



#### High Speed Internet Lines (Subscribers) per 1,000 Residents, 2000 - 2008



#### Maine Trails New England and Nation in Connectivity

In 2008, Maine had 325 high speed internet subscribers per 1,000 residents, compared to 301 in 2007. Maine's subscriber rate continues to trail both New England and the nation. In 2008, New England states averaged 508, and the nation 436, internet subscribers per 1,000 residents. Subscribership growth rates between 2007 and 2008 for Maine, New England and the nation were 8.0%, 7.7%, and 8.6% respectively. New England continues to be considerably more connected than the nation as a whole, meaning that achieving the Growth Council's goal of reaching the New England level by 2015 is likely to be difficult.

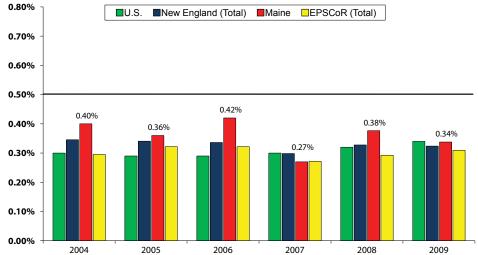
Internet access is particularly difficult for states like Maine with a low population density. The challenge is connecting both rural areas and pockets all over the state that lie just beyond internet and cable service areas. Population density drives private investment decisions, as service providers require a minimum density level to expand service. With existing technology, customers must live within a certain distance of this infrastructure. Those beyond that distance are excluded from the service. This applies to both wire and wireless service. Other options, such as satellite service, may be available, but often require the user to make a substantial upfront investment and the technology is not always reliable with changing weather patterns.

Despite these challenges, expansion of internet and telecommunication technology is essential for Maine's economic growth and quality of life. Internet access connects businesses, organizations, and individuals to the world at large. Internet connectivity makes it possible for companies to compete in the greater global economy and is especially important to the state's small businesses. Access also enables entrepreneurs to live and work in communities across the state, expands educational opportunities, and improves the accessibility, quality, and efficiency of health care. It is important to support connectivity efforts in Maine like the ConnectME Authority, the Three Ring Binder project, and FairPoint Communication's Northern New England work.



# B. New Business Starts Benchmark: The entrepreneurial index in Maine will reach 0.50% by 2015.

#### Index of Entrepreneurial Activity\*, U.S., New England, Maine, and EPSCoR States, 2004 - 2009



<sup>\*</sup>Measures the percent of individuals from ages 20 to 64 who do not own a business in the first survey month that start a business in the following month (15+ hours per week)

Source: PolicyOne Research

#### **New Business Activity in Maine Declines During Recession**

The entrepreneurial activity index is the percent of individuals from ages 20 to 64 who do not own a business in the first survey month that start a business in the following month, with 15 or more hours worked per week. The index is a statement of business health and vitality. With the exception of 2007, Maine's rate of entrepreneurial activity exceeded that of New England, EPSCoR states, and the nation from 2004 to 2008. In 2009, both Maine and the U.S. rate were .34%. This marked a decline in entrepreneurial activity for Maine from the previous year.

Start up activity is only part of the story. It is important to know if new businesses are surviving and the type of employment they offer. The Maine Department of Labor tracks the survival rate of new businesses, the jobs they create, and the wages those jobs pay. From the fourth quarter of 2008 to the fourth quarter of 2009, of 2,271 new business starts in Maine, 1,993 survived – a survival rate of 88%. Surviving businesses created 7,049 jobs and the average quarterly wages for those jobs remained lower than the average quarterly wage for the total private sector.

An important subset of new business activity is microbusiness, defined as businesses with five or fewer employees. Data provided by the University of Maine's School of Economics shows that, since 2001, microbusinesses have accounted for a larger percentage of total annual employment in Maine than in any other New England state except Vermont. In 2008, microbusinesses in Maine accounted for 21.3% of the state's total employment, second only to Vermont (22.2%) in New England and above the New England (17.9%) and national (18.1%) averages. Maine (-3.9%), New England (-2.4%), and the United States (-1.7%) all experienced declines in their number of microbusinesses from 2007 to 2008 after each had seen positive growth the previous year.

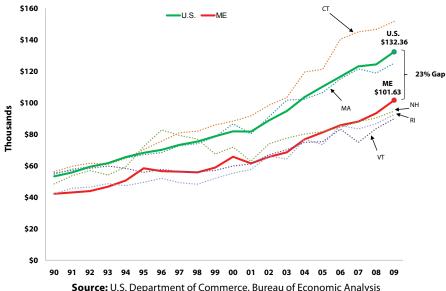
New business activity and the jobs those businesses create are essential for the future of Maine's economy. It is important to understand the types of businesses being created and the supports they need, as well as the number and quality of jobs they provide. Efforts like the Maine Technology Institute and the University of Maine's Innovation Engineering program are giving Maine entrepreneurs the resources they need to build businesses, create jobs, and succeed. Continued support of these and similar efforts will help Maine realize this critical benchmark.

# 9. Manufacturing Productivity

**Benchmark:** The value added per manufacturing worker in Maine will increase to within 15% of the value added per manufacturing worker in the U.S. by 2015.



#### Value Added per Manufacturing Worker, U.S. and New England States, 1990 - 2009



#### Maine Improves in Manufacturing Productivity but Gap Remains

In 2009, the average manufacturing sector worker in Maine produced \$101,634 of product, an 8.9% increase from 2008. Manufacturing productivity\* for the nation increased by 6.5% during this time, to \$132,359 per worker.

Maine and the United States have each experienced consistent increases in worker productivity over time. However, the productivity gap in 2009 was 23%, the same as the 1997 level. Despite a small improvement from 2008 to 2009, Maine has failed to make significant progress toward the benchmark for this indicator.

Maine ranked third among the six New England states in manufacturing productivity in 2009. Connecticut ranked highest, followed in order by Massachusetts, Maine, New Hampshire, Rhode Island, and Vermont.

Some of the gap with the nation is attributable to Maine's mix of manufacturing industries and manufacturing structure. Maine does not have some of the high economies of scale industries, such as the automotive, that are helping to drive some of the productivity gains seen in other parts of the nation. Nevertheless, in order for Maine manufacturers to remain competitive, they must improve their productivity relative to the rest of the nation, and to the world at large. Those companies that do not will find it difficult to maintain and expand their markets.

The success of Maine's manufacturing industry has important implications for Maine's economy. While manufacturing employment in Maine continues to decline (due in part to increasing productivity), the sector still contributes \$5.1 billion to the state's total GDP, accounting for 11% of Maine's economic output. The capital investments and improvements in worker education and training that drive productivity improvements must be expanded if Maine manufacturers are to remain competitive. Improvements in educational attainment, R&D investment, and cost structures can move this indicator in a positive direction.

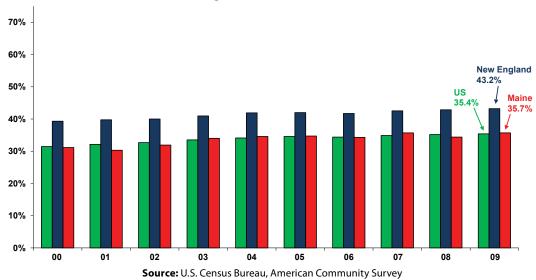
<sup>\*</sup>Productivity is calculated by dividing the total number of manufacturing employees into value added by the manufacturing sector in Maine. Value added is defined as the amount contributed by the sector to the state's Gross Domestic Product. Employment figures do not reflect all manufacturing employees, as some types of manufacturing activities are increasingly outsourced to companies in the "service sector" such as employment contractors.



## 10. Higher Degree Attainment

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

# Higher Degree Attainment Among Residents Aged 25 and Over U.S., New England and Maine 2000 - 2009



### Maine Economy Needs More Workers with Higher Education Degrees

In 2009, 35.7% of people in Maine age 25 and older held an Associate's, Bachelor's, or advanced degree. This is essentially the same as the national average of 35.4% and below the New England average of 43.2%.

In 2009, Associate's degrees continued to make up a larger share of the higher degree total in Maine (8.8%) than in New England (8.0%) or the nation as a whole (7.5%). Bachelor's degrees account for approximately half of all higher degrees in all three areas. Maine (9.6%) trails both the nation (10.3%) and New England (14.6%) in the share of degree holders with graduate and professional degrees.

While Maine's improvements since 2000 have essentially kept pace with national numbers, the state has failed to make any significant progress toward the benchmark. The benchmark for this measure is set to the goal of the Maine Compact for Higher Education, which is to match New England's higher education attainment levels by 2020. This would mean 40,000 additional degree holders above and beyond current projections.

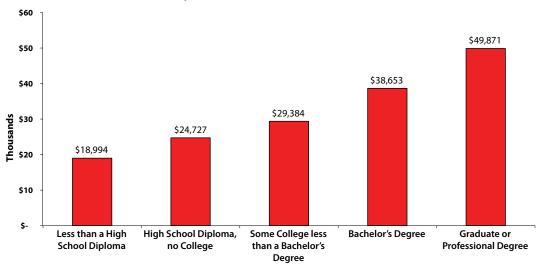
Today's knowledge-based economy requires a highly educated workforce, making the level of higher degree attainment critical to Maine's economy. Education provides workers with the skills and training that enable Maine businesses to be competitive in the new economy. An educated workforce is a critical consideration for businesses looking to locate and expand in Maine.

Educational attainment is also important to quality of life in Maine. Investment in education helps every Mainer reach his or her highest potential. As the graph indicates, education is closely connected with an individual's earning potential (see the Per Capita Income indicator). Increased earnings move Maine's economy forward and enable individuals to enjoy a higher quality of life.

Any opportunity to improve education and skills has value to employers and employees. Traditional degree tracks are not always the best option, and access, affordability, and availability vary. Therefore, it is important

# 10. Higher Degree Attainment (continued)

# 2009 Maine Median Earnings for Populations Age 25 and Over by Educational Attainment



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

to make opportunities for higher education available to traditional students and to non-traditional students already in the workforce. Higher education should be aligned properly with market needs, ensuring that students are provided the skills needed in today's economy.

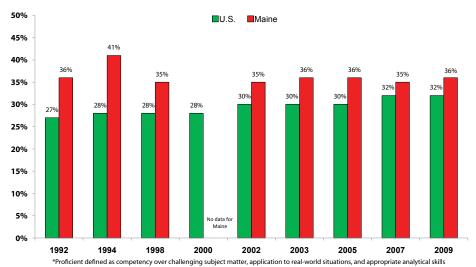
Maine's public higher education system must be flexible and responsive to the needs of the population and the workforce. Participants must complete their chosen program in order to fully realize the benefits of higher education. There are a number of efforts in Maine working to make this happen, including the Maine Employers' Initiative, which works with the state's employers to identify resources to help employees get additional education. Employers have invested more time and money to get their people the training they need to keep them competitive and growing. This public-private approach is necessary to provide more of the workforce the advancement opportunities they need. Other programs like the MELMAC Education Foundation and Jobs for Maine's Graduates are working to ensure that high school graduates who want to continue their education follow through with their plans.



# 11. Fourth Grade Reading Scores

**Benchmark:** Maine's share of students scoring proficient and above will reach 50% by 2015.

# NAEP Fourth Grade Reading Scores, Share Scoring Proficient\* and Above, Maine and U.S. 1992 - 2009



**Source:** National Center for Education Statistics

#### A Strong Educational Foundation Essential to Future Success

The National Assessment of Educational Progress (NAEP) is: "the largest nationally representative and continuing assessment of what America's students know and can do in various subject areas." Reading is one of those areas. NAEP assessments are administered uniformly nationwide, allowing for state-to-state comparisons and for analysis of long-term trends. The NAEP assesses students at critical periods of development and learning: grades 4, 8, and 12.

Reading was chosen for this new indicator because it is the indispensable key to future success in school, in the workforce, and in life. The 4th grade scores were chosen because it is the place where reading should be established as a skill, so that students are transitioning from skill-building to skill-using or from "learning to read" to "reading to learn." This is a predictor of future student success and public costs (special education, productivity, criminal justice, etc.) as well as a measure of the effectiveness of previous investments (early childhood development, pre-K, Head Start, etc.).

The results show that Maine is holding its own relative to its own prior achievements and doing slightly better than the national outcomes. Other data in this report suggests that this is maintenance rather than progress. Indicators like personal incomes, productivity, employment, and health are closely tied to educational success. Ultimately, positive movement on these other economic indicators starts with children having the tools to become productive members of society.

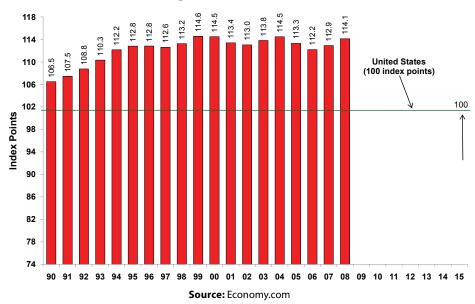
While school cannot compensate for all societal factors, it is definitely one of the main places where skills like reading are honed and enhanced. It is one of the largest components of the state budget and the largest for municipal budgets. Data repeatedly show that investment in early childhood education (like Educare) is the best place to put public money to reap long-term benefits. These include improved K-12 performance and lower remediation costs, higher college attendance and completion resulting in higher productivity and better incomes and avoided social costs through lower incarceration rates and lower health care costs.

# 12. Cost of Doing Business

**Benchmark:** The cost of doing business in Maine will decrease to the U.S. average by 2015.







#### Maine Loses Ground in Cost of Doing Business Index

After making progress on this indicator in recent years, Maine lost some ground in 2008. The cost of doing business in Maine was 14.1% higher than the nation, which ranked the state 3<sup>rd</sup> highest in the Economy.com index. Massachusetts ranked 2<sup>nd</sup>, Connecticut 6<sup>th</sup>, New Hampshire 7<sup>th</sup>, Vermont 10<sup>th</sup>, and Rhode Island 13<sup>th</sup>.

The index is a weighted scale of labor costs (wages and productivity), energy costs (industrial and commercial electricity), and tax burden (state and local). For Maine, labor costs are weighted at 73%, energy costs at 17%, and taxes at 10%.

Several factors affect Maine's ranking. A high reliance on oil as an energy source leaves us particularly vulnerable to price spikes in this market (see the Cost of Energy indicator). Maine's tax burden also remains above the national average but as the tax burden indicator shows in this report, Maine has made progress in lowering the burden from highs in the 1990s.

The relative cost of doing business is important to a region's economy. Cost of doing business impacts the ability of companies to make a profit, and is an important consideration for businesses looking to locate or expand in the state. It is important to get cost structures in line. It is also important to invest in the workforce and infrastructure that will allow businesses to do well in the larger economy.

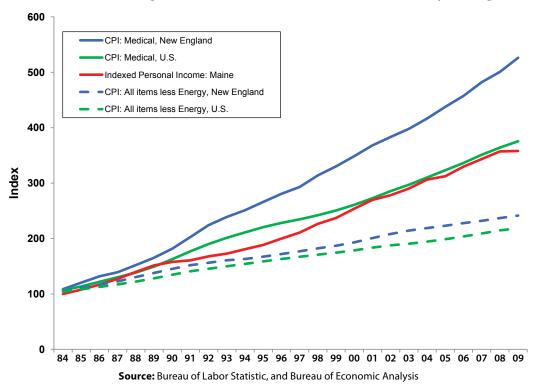
Cost of Doing Business National Rankings: Maine 1995-2008														
95 96 97 98 99 00 01 02 03 04 05 06 07 08								08						
Economy.com	5	4	3	3	2	2	3	4	4	4	5	5	4	3



#### 13. Cost of Health Care

**Benchmark:** The growth in the price of medical care in New England will be equal to or less than the growth in personal income in Maine.

#### Price of Health Care in New England and the U.S., Consumer Price Index, City Average 1984 - 2009



#### Rising Cost of Health Care is a Burden on Maine Incomes

The graph depicts the relative increases over time in the price of medical care, other consumer items excluding energy, and Maine personal income. From 1984 to 2009, New England's CPI for medical care increased by 385%, compared to growth of 252% nationally and 258% of growth in Maine personal income.

Expenditure data supports the difference in health care prices between New England and the nation and identifies Maine as having high health care costs within the region. In 2004 (last available state-level data), Maine health care expenditures represented 19.4% of GDP compared to 13.3% for the nation. Maine's 2004 per capita expenditures were \$6,540, compared to the national average of \$5,283 (Kaiser State Health Facts www. statehealthfacts.org). This ranked Maine 2<sup>nd</sup>, just behind Massachusetts, for highest per capita expenditures. With the exception of New Hampshire, all other New England states fell within the top 10 on this measure.

Although state-level expenditure data is not available past 2004, national expenditure data shows a steady increase through 2008. National expenditures in 2008 represented 16.2% of GDP and per capita expenditures increased to \$7,681. Based on trends and the national data, it is reasonable to assume that Maine expenditures remained high through 2008.

This assumption is supported in part by paid medical claim data from the Maine Health Data Organization. The number of paid private insurance claims by or for Maine residents increased by 6.8% from 2003 to 2008 and the

### 13. Cost of Health Care (continued)

Claim Type	Total Claims 2008	Total \$ Value of Claims 2008	Change in Total Number of Claims 03-08	Change in Total \$ Value of Claims 03-08
<b>Private Claims</b>	8,529,078	\$2,200,252,417	6.8%	35.9%
<b>Medicaid Claims</b>	6,883,662	\$2,149,432,382	26.4%	42.3%

total dollar value increased by 35.9%. For that same time, the number of Medicaid claims increased by 26.4% and the total dollar value increased by 42.3%.

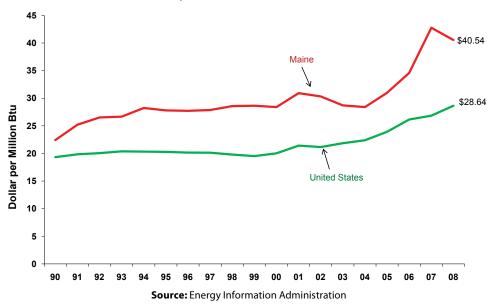
Rising health care costs create a sizeable burden for Maine's people, businesses, and government. Maine businesses identified it as the top obstacle to investment in a 2010 survey (www.mdf.org). The cost of medical care is driven upward in part by costly treatments, inefficiencies in the delivery of health care services, an aging rural population, and poor overall health status (see the Wellness and Prevention indicator). Identical procedures and services may vary in cost by over 200% depending on the provider (www.healthweb.maine.gov). High costs make accessing care difficult and poor health is disruptive to families and communities, interrupts education, lowers economic productivity, and detracts from quality of life.



### 14. Cost of Energy

**Benchmark:** The cost of electricity in Maine will decrease to the U.S. average by 2015.

#### Retail Electricity Price, Maine and U.S. 1990 - 2008



#### Maine Must Become More Efficient and Less Dependent on Oil

The cost of energy remains an area of concern for Maine and New England. Maine is highly dependent on petroleum products for heating, transportation, and electric generation, making the costs of energy very high. While the costs of oil and oil products do not vary greatly across the nation, Maine's usage is high. The U.S. Census reports that 71% of Maine homes heat with oil (national average 6.7%). The Maine DOT reports that 95% of passenger movement in Maine happens by road (national average 80%). TRIP reports that 80% of freight in Maine travels by road.

The New England region's electricity supply is also greatly influenced by the cost of oil and natural gas making Maine's electricity prices much higher than the U.S. average (Massachusetts and Connecticut are highest in the region). The chart shows that the gap between Maine prices and the nation has widened over the last 20 years, from 16% in 1990 to 42% in 2008. Moreover, Maine's prices are 25% to 65% higher than Canadian electricity prices that benefit from the Hydro-Quebec large scale hydroelectric generation facility, coal, and nuclear generation.

Businesses, particularly manufacturers, weigh the cost of energy heavily when making location and expansion decisions. Because of Maine's dependence upon oil and natural gas for electricity production, heating, and transportation, the state is vulnerable to petroleum price volatility and changing world politics. There is little that Maine can do to affect those prices. To gain more control and have more predictable pricing, Maine must become less dependent upon petroleum. This can be done by reducing energy use through increased efficiency and lowering the overall need for energy, and by diversifying the mix of energy sources making Maine less reliant on any one source.

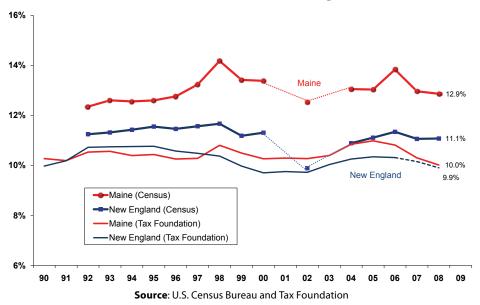
There are some promising developments in the energy markets in the state. The Efficiency Maine Trust has had success helping businesses reduce their energy use through efficiency measures. In addition, recent growth in the pellet, wind, tidal, and bio-fuel industries in Maine are promising options to diversify the energy mix.

#### 15. State and Local Tax Burden

**Benchmark:** Maine's tax burden will decline and move to the New England average each year through 2015.



#### State and Local Taxes as a Percent of Income, New England and Maine 1990 - 2008



#### Maine's State and Local Tax Burden Remains the Same

Tax burden measures the amount of state and local taxes a taxpayer pays for every \$100 of income, reported as a percent. According to U.S. Census data for 2008, Maine's total state and local tax burden dropped from 13.0% in 2007 to 12.9% in 2008. Tax Foundation estimates show that Maine's state and local tax burden was 10.3% in 2007 and 10.0% in 2008. Both sources show that Maine's tax burden has been higher than the New England average since 1992 (differences in calculations are a result of different calculation methodologies).

Taxes and the tax structure are a cost factor for businesses, yet also pay for some services, such as education and transportation, that are valued by businesses and residents alike. A tax rate and structure that enable Maine to compete economically is critical to Maine's economic growth. According to the U.S. Census, Maine's 2008 tax burden was the 6<sup>th</sup> highest in the nation, followed by Vermont (8<sup>th</sup>), Connecticut (10<sup>th</sup>), Rhode Island (16<sup>th</sup>), Massachusetts (31<sup>st</sup>), and New Hampshire (49<sup>th</sup>). Based on Tax Foundation estimates for 2008, Vermont, Rhode Island, and Connecticut had higher tax burdens than Maine.

The tax burden can be lowered by reducing spending, increasing incomes, or a combination of the two; these are tied to other factors in the economy and indicators in this report.

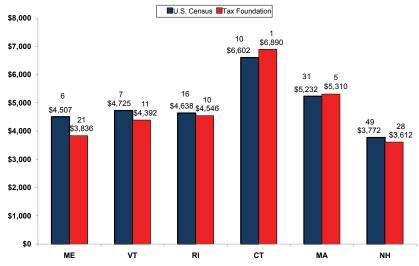
Tax burden measures the amount of taxes and the ability to pay, meaning that incomes play a key role in this measure. According to census data for 2008, Maine ranked 6<sup>th</sup> in tax burden and 14<sup>th</sup> in taxes per capita. This is lower than every New England state except New Hampshire, which ranked 30<sup>th</sup>. Based on census data, in 2008, the average Maine taxpayer was paying approximately \$2,095 less than a Connecticut taxpayer and \$735 more than a taxpayer in New Hampshire.

Government spending is another important factor in the tax burden equation. The ability of the government to provide services is complicated by the fact that the cost of health care, energy, and education (see these

# 15. State and Local Tax Burden (continued)

#### Per Capita State and Local Taxes and National Ranking 2008

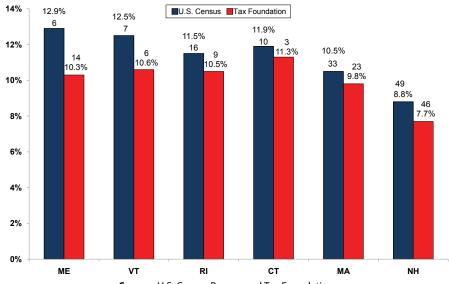
Per Capita State & Local Taxes and National Ranking 2008



Source: U.S. Census Bureau and Tax Foundation

indicators in this report) continue to rise faster than incomes and, in turn, tax revenue. Efforts to streamline service delivery are one strategy to address a growing structural budget gap. Maine's recent progress toward the benchmark is due in part to policymakers not raising taxes to address recent budget shortfalls. Continuing efforts to reform the tax structure can also impact this indicator.

#### Per Capita State and Local Tax Burden and National Ranking 2008



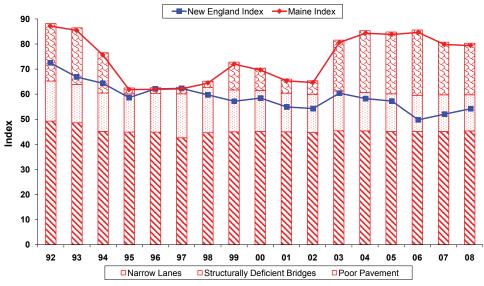
Source: U.S. Census Bureau and Tax Foundation

# 16. Transportation Infrastructure

**Benchmark:** Maine's roadway deficiency index will decline each year to the New England index.







Source: Maine Better Transportation Association

#### Road and Bridge Repairs Pose Unfunded Liability

The Roadway Deficiency Index above is a composite measure of the percentages of pavement in poor condition, bridges that are structurally deficient, and road mileage with lanes narrower than 11 feet, an indicator of a substandard road. Current data was not available at time of publication to update the graph from last year. Maine's roadway deficiencies lead to higher accident rates, higher vehicle operating costs, and reliability concerns, all imposing economic costs that detract from Maine's quality of life. Maine ranks consistently lower than our New England neighbors.

Maine has in place a four-year bridge improvement program that is addressing bridge repair needs at a prudent rate. To continue the pace, reauthorization of funding is required. The 124th Legislature funded the recommended level of maintenance paving at 600 miles per year for the 2010 and 2011 construction seasons. If sustained in concert with a steady pavement preservation program, Maine's pavement condition ratings will improve over time. The major capital investment deficiency today is highway reconstruction. At current repair rates, roads under MaineDOT jurisdiction will be reconstructed roughly once every 250 years. Maine DOT's mission far exceeds the resources available.

Historically, Maine has relied on the gasoline tax to fund its road and bridge maintenance needs. Improvements in vehicle fuel efficiency are expected to lead to dramatic declines in revenue for the per gallon motor fuel tax. Furthermore, according to the Maine Better Transportation Association, due to the ravages of inflation particularly in the 1980s, today's highway users pay, after adjustment for inflation, roughly half what their parents and grandparents paid per mile to use our roads. During this same period, vehicle miles traveled increased from 6.15 billion in 1970 to 14.5 billion in 2008 which helped keep revenues stable. With growth in travel stagnating, the substantial gap between the level of need and the funds available is being further exacerbated.

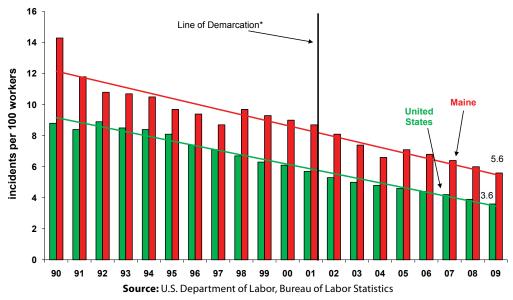
A modern transportation network that is safe, reliable, and efficient is essential to the well-being of Maine's citizens and to our economic growth. Investment in other modes of transportation, such as aviation, marine, rail and transit, can help balance the burden on Maine's road network. Policymakers will have to reconcile the shortcomings of the current funding regime to keep pace with the rising costs of maintenance and construction.



# 17. On-the-Job Injuries and Illnesses (Reported)

**Benchmark:** Maine's reported on-the-job injury and illness rate will get closer to the U.S. rate each year through 2015.

#### On-the-Job Injuries and Illnesses (Reported), U.S. and Maine, 1990 - 2009



#### Gap Remains Same Between U.S. and Maine

In 2009, there were 5.6 reported injuries and illnesses for every 100 full-time industrial workers in Maine, down from 6.0 per 100 workers in 2008. The U.S. rate dropped from 3.9 to 3.6 incidents per 100 over the same time period. Maine has made progress in closing the gap with U.S. incidence rates. The incident gap was 5.5 per 100 workers in 1990 and 2.0 per 100 workers in 2009.

There is a correlation between Maine's industry mix and on-the-job injuries and illnesses. Historically, the hazardous working environments found in many manufacturing industries contributed to Maine's higher-than-average incidence rate, and the declining rate is due in part to the shrinking of manufacturing sectors over time. The institution of workplace safety programs throughout Maine has also helped to reduce injury and illness rates.

On-the-job injuries and illnesses negatively affect the vitality of the workplace and the larger community, making workplace safety an important component of long-term economic growth. Injuries and illnesses result in higher health costs, lower productivity, and diminished quality of life for individuals and their families.

The data used for this indicator includes all types of work-related injuries and illnesses required to be recorded by OSHA, which defines an injury or an illness as an abnormal condition or disorder. Injuries include, but are not limited to, cuts, fractures, sprains, or amputations. Illnesses are both acute and chronic illnesses, including, but not limited to, skin disease, respiratory disorder, or poisoning. While workplace injuries and illnesses may still go unreported, many Maine manufacturers have taken steps that emphasize safety and the reporting of injuries.

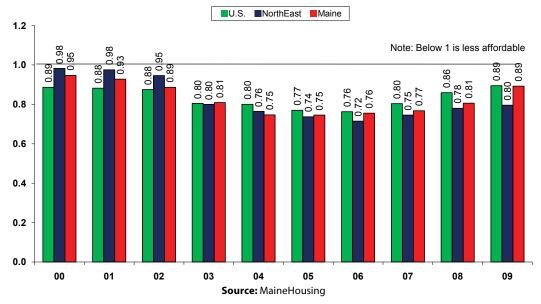
<sup>\*</sup>Effective January 1, 2002, OSHA revised its requirements for recording occupational injuries and illnesses. Details about the revised requirements, including a summary of the revisions and a comparison between the old and new requirements, are available from the OSHA web site at http://www.osha-slc.gov/recordkeeping/index.html.

# 18. Affordable Housing

**Benchmark:** The housing affordability index in Maine will reach 1 by 2015.



#### Maine's Housing Affordability Index by Year (weighted owner/renter) 2000 - 2009



#### Maine Housing Becomes a Little More Affordable

The index used here is the weighted average of MaineHousing's homeownership affordability index\* and rental affordability index\*\*, with the weighting based on the relative numbers of homeowner and rental households. In the graph above, a higher index means that housing is more affordable, and a lower index means that housing is less affordable.

Mirroring regional and national trends, housing affordability in Maine has improved in the last two years. In all three areas, the indicator dipped in 2003, and essentially leveled out between 2003 and 2007. While housing affordability in the United States as a whole has returned to 2000 levels, housing in Maine, and especially the Northeast U.S., remains less affordable than in 2000.

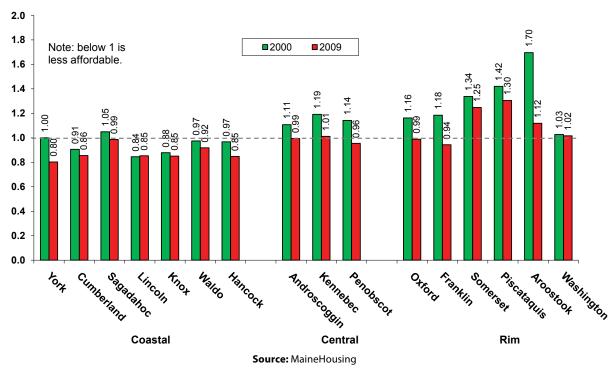
The affordability of housing has a number of significant societal impacts. High housing costs require people to devote a higher percentage of their incomes to rent or mortgage payments, leaving less money to spend on other goods and services. Housing affordability also affects development patterns. In most of Maine's employment centers, high housing costs make it difficult for people to afford to live in the same communities in which they work. The resulting long commutes and sprawling development impose additional costs on the individual and society, including greater traffic problems, highway maintenance costs, and reliance on fossil fuels.

<sup>\*</sup>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. A home price is considered to be affordable if no more than 28% of monthly gross income is needed to cover payment on a 30-year mortgage with a 5% down payment (including taxes, homeowners insurance, and private mortgage insurance).

<sup>\*\*</sup>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. A rental is considered to be affordable if no more than 30% of gross monthly income is needed to cover the rent. In this index, median rental household income is used rather than median household income generally, because typically the median income of renter households is 25 to 35% less than households overall.

# 18. Affordable Housing (continued)

#### Maine's Housing Affordability Index by County (weighted average) 2000 vs. 2009



The most recent recession has affected both housing prices and incomes, further influencing the housing situation. Home values fell along with incomes. As a result, Maine foreclosure rates climbed during this period, although they remained below national levels.

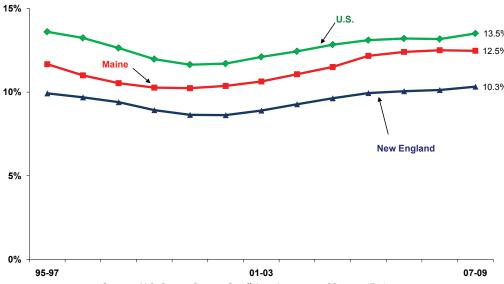
The graph above, which compares homeowner/renter affordability for each of Maine's counties in 2000 and 2009, provides additional insights into the housing situation. In every county except Lincoln, which showed minimal improvement, housing is less affordable in 2009 than it was in 2000. In 2000, 11 counties were considered to have affordable housing, defined as an index at or above 1.0. Lincoln, Knox, Cumberland, Hancock, and Waldo counties, all of which are in southern or coastal Maine, were considered less affordable. This trend continued in 2009, as York, Lincoln, Knox, Hancock, and Cumberland counties were the least affordable. In 2000 and again in 2009, the most affordable housing tended to be found in the Central and Rim counties.

### 19. Poverty

**Benchmark:** Maine's poverty rate will decline and remain below the U.S. through 2015.



#### Poverty Rates, U.S., New England and Maine 1997 - 2009, 3-Year Moving Average



Source: U.S. Census Bureau Small Area Income and Poverty Estimates

#### Poverty Rates Vary Greatly by County and for Children

In 2009, Maine's three-year moving average poverty rate was 12.5%. From 1995 to 2009, Maine's poverty rate has remained below the national rate and above the New England rate. Maine's poverty rate has leveled out and remained steady over recent years.

The data indicates that, while Maine's poverty remains below the national average, the issue of poverty in Maine is very real and, in light of the most recent recession, will remain a concern for years ahead. It is widely believed that the traditional 100% poverty rate underestimates the total number of people having trouble making ends meet. According to the U.S. Department of Health and Human Services, in 2009, a person in Maine living in poverty earned less than \$10,830. More often, policymakers and program administrators are using 200% of poverty to measure the number of people in need and to determine eligibility for aid. In 2009, the 200% poverty rate in both Maine (31.7%) and the nation (32.7%) approached one out of every three people.

Poverty within Maine varies widely from county to county. Poverty rates are higher in the rural counties in the west, north, and east than in Maine's southern and service center counties. For example, the poverty rate in Washington County in 2009 was almost twice the state rate.

Another issue of concern is the poverty rate for Maine children. The poverty rate for children under the age of five in Maine grew from 17.5% in 2000 to 21.4% in 2009. From 2000 to 2009, the poverty rate for children in Maine under the age of 18 grew from 12.9% to 17.5%. National rates in both categories have seen similar increases and remain higher than Maine's rates.

Poor economic conditions can negatively impact a child's development during crucial development years (birth to 5). The Growth Council believes that investments in children and their families are critical, particularly during early childhood before the age of five. These formative years are crucial to a person's ability to succeed as an

# 19. Poverty (continued)

Poverty Rate, Children Under Age 5					
	Maine	U.S.			
2000	17.5%	18.7%			
2001	16.2%	18.6%			
2002	18.2%	19.0%			
2003	18.8%	20.3%			
2004	18.4%	20.5%			
2005	20.0%	21.3%			
2006	21.4%	21.0%			
2007	19.4%	20.8%			
2008	21.8%	21.2%			
2009	21.4%	23.2%			

Poverty Rate, Children Under Age 18					
	Maine	U.S.			
2000	12.9%	16.2%			
2001	12.8%	16.3%			
2002	14.2%	16.7%			
2003	14.3%	17.6%			
2004	14.3%	17.8%			
2005	16.7%	18.5%			
2006	16.9%	18.3%			
2007	15.7%	18.0%			
2008	16.5%	18.2%			
2009	17.5%	20.0%			

2009 Poverty Rate by Maine County					
County	Poverty Rate				
Coastal Counties					
York	8.4%				
Cumberland	9.3%				
Sagadahoc	9.5%				
Lincoln	12.4%				
Knox	13.6%				
Waldo	14.7%				
Hancock	11.9%				
Central (	Counties				
Androscoggin	15.0%				
Kennebec	12.9%				
Penobscot	15.3%				
Rim Co	ounties				
Oxford	13.9%				
Franklin	16.2%				
Somerset	19.3%				
Piscataquis	16.1%				
Aroostook	16.4%				
Washington	20.6%				
State	12.6%				

Source: U.S. Census Bureau Small Area Income and Poverty Estimates

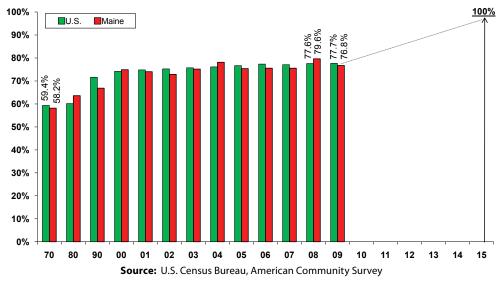
adult, and in turn, are critical to Maine's future prosperity. Early investment saves taxpayers much more down the road in foregone public expenses, with the additional benefit of adding more productive adults to the workforce. The high poverty rates for children are particularly troubling and should continue to be kept in mind by policymakers in all future investment decisions.

# 20. Gender Income Disparity

**Benchmark:** The median annual income of women working full-time will improve to 100 percent of the median annual income of men working full-time by 2015.



#### Women's Income as a Percent of Men's for Full-Time, Full-Year Work in Maine and the U.S. 1970 - 2009



#### Gender Income Gap Grows in Maine during Recession

Maine lost ground on this indicator in 2009. In 2009, female employees in Maine earned \$0.76 for every \$1.00 earned by men, down from \$0.79 for every \$1.00 the previous year. The median income of all women in Maine who worked full-time, full-year declined from \$32,651 in 2008 to \$32,395 in 2009. During the same time frame, the median income for comparable male employees grew from \$41,008 to \$42,205.

Nationally, the picture was largely unchanged. In 2008 and 2009, women earned approximately \$0.77 for every \$1.00 earned by men. The median incomes of full-time, full-year male and female employees both increased slightly during this time (women \$35,529 to \$35,633 and men \$45,798 to \$45,872).

The table shows that gender income disparities vary by occupation. This data set is a variation of the data used to create the graph, so as to address confidence issues associated with these small sample sizes. Both data sets support the same trends and relationships.

Gender income disparities create disincentives for women to contribute fully to the labor force, impairing economic growth and putting families at risk. The Heinz Family Philanthropy and Mellon Financial Corporation reported that, in 2000, a typical 25-year-old female college graduate earning \$0.73 for every \$1.00 earned by a man in the U.S. would earn \$523,000 less over her lifetime than a male counterpart.

The prosperity of women has wide-reaching effects on Maine's economy and communities. Because women are much more likely than men to be single heads of households, bringing women's earnings more in line with men's can help decrease poverty among children. Investing to create a positive environment for children, particularly during early childhood, is critical to ensuring their future success, which in turn is critical to the viability of the communities in which they will live and the industries in which they will be employed. Higher

# 20. Gender Income Disparity (continued)

2009 Median Earnings							
Full-Time, Year-Round, Civilian Employed Population 16 Years and Over							
Occupation	Male	Margin of Error (+/-)	Female	Margin of Error (+/-)	Women's Earnings as % of Men's		
Management, professional, and related occupations	\$57,479	\$2,032	\$42,862	\$1,777	74.6%		
Management, business, and financial	\$61,169	\$4,290	\$42,450	\$2,651	69.4%		
Professional and related occupations	\$54,749	\$3,736	\$43,136	\$2,350	78.8%		
Service	\$30,420	\$1,593	\$23,015	\$804	75.7%		
Healthcare support	\$28,249	\$4,543	\$24,956	\$1,128	88.3%		
Protective service	\$45,357	\$4,534	\$33,640	\$4,888	74.2%		
Food preparation and serving related occupations	\$21,771	\$2,446	\$19,676	\$1,706	90.4%		
Building and grounds cleaning and maintenance	\$28,629	\$1,914	\$21,144	\$2,602	73.9%		
Personal care and service	\$28,391	\$6,080	\$21,747	\$2,374	76.6%		
Sales and office	\$40,086	\$2,086	\$28,920	\$833	72.1%		
Sales and related	\$42,140	\$2,661	\$25,144	\$1,981	59.7%		
Office and administrative support	\$37,955	\$2,681	\$29,852	\$899	78.7%		
Farming, fishing, and forestry	\$28,079	\$5,529	\$12,579	\$6,185	44.8%		
Construction, extraction, maintenance, and repair	\$38,513	\$1,024	\$30,647	\$7,659	79.6%		
Production, transportation, and material moving	\$36,358	\$1,828	\$25,752	\$2,209	70.8%		
Production	\$39,270	\$2,107	\$25,268	\$2,620	64.3%		
Transportation and material moving	\$32,320	\$1,945	\$26,993	\$6,355	83.5%		

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

earnings among younger women will also provide them with greater economic security later in life, an important consideration given the longer life expectancy of women.

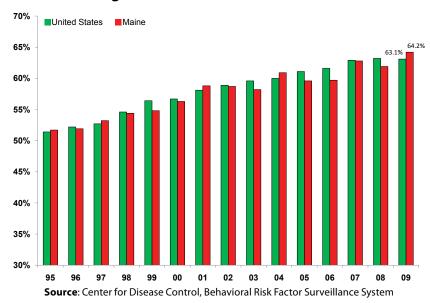
Both the state and federal governments have passed legislation and provided models through which businesses can voluntarily self-audit to investigate their own potential gender income disparities.

#### 21. Wellness and Prevention

**Benchmark:** The percent of overweight and obese adults in Maine will decrease to 50% by 2015.



#### Percent of Overweight and Obese Adults, Maine and U.S. 1995 - 2009



#### Weight a Leading Cause of Preventable Chronic Disease in Maine

The Growth Council will start tracking adult overweight and obesity rates for the first time this year. Maine's adult overweight (Body Mass Index of 25.0 to 29.9) and obesity rate (Body Mass Index  $\geq$  30) increased from just over half (51.7%) in 1995 to almost two-thirds (64.2%) of the population in 2008. This followed national trends.

Being overweight or obese is the third leading cause of preventable deaths in both Maine and the United States. Obesity impacts health several ways. Obese adults are five times more likely to have diabetes, have a greater risk of heart disease, stroke, high cholesterol, asthma, arthritis, and some cancers, and their children are more likely to become obese.

There are economic costs. A 2004 study\* found that being overweight or obese in Maine drives \$357 million in medical expenses annually. A 2006\*\* study found that the combined effects of overweight and obesity result in productivity losses of over \$2 billion.

Chronic diseases are preventable with appropriate policies, public education, and better access to healthier choices. Reducing the prevalence of chronic diseases by lowering obesity in Maine is an important step in bringing health care costs under control (see the Cost of Health Care indicator) and improving productivity.

Reducing weight and associated chronic diseases is critical to the lives of Maine citizens and our economy. The Council has set an aggressive goal. There are a number of valuable efforts being made statewide, particularly for kids, such as, Let's Go! 5-2-1-0, Farms to Schools and Maine-ly Nutrition, but more needs to be done if we are to reach the benchmark.

<sup>\*</sup> Finkelstein EA, Fiebelkorn IC, Wang G. "State-level estimates of annual medical expenditures attributable to obesity." Obesity Research, 2004; 12:18-24.

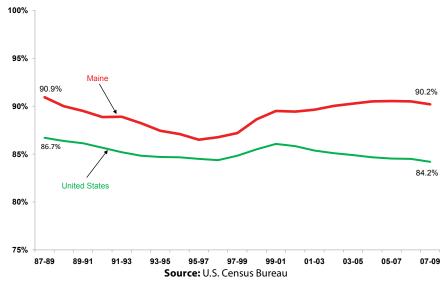
<sup>\*\*</sup> Chenowith & Associates, Inc. A Topline Report. Summary of the study, "An Economic Cost Appraisal of Physical Inactivity, Overweight, and Obesity Among Maine Adults." Conducted for Anthem-Maine and MaineHealth. March, 2006.



## 22. Health Insurance Coverage

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

# Percent of Population with Health Insurance Coverage, U.S. and Maine 3-Year Moving Average 1989 - 2009



#### Vast Majority of Maine People Have Health Insurance

2009 data shows that Maine remains well ahead of the nation in the proportion of the population covered by insurance. Both Maine and the nation have remained stable on this measure in recent years. Since 2002-04, Maine's three-year moving average has been approximately 90% and the U.S. average has been in the 85% range.

People with health insurance are much more likely to seek timely medical help for themselves and their children. Providing widespread health insurance can help avoid higher medical costs and allow people to live healthier, more productive lives.

Data from the Kaiser Foundation on health insurance coverage remains unchanged from 2008. In 2009, half of all Mainers were covered by an employer, 4% purchased

insurance directly, 20% were enrolled in MaineCare (the state's Medicaid program), and 14% were enrolled in Medicare. With the exception of Medicaid, national numbers were very similar. The difference between Maine's Medicaid coverage (20%) and the nation's (14%) accounts for Maine's higher proportion of insured.

In both Maine and the nation, rising insurance and health care costs (see the Cost of Health Care indicator) have made it increasingly difficult for employers to offer affordable health insurance benefits and for individuals to purchase on the open market. This prompted Maine to expand MaineCare coverage and to begin a subsidized insurance product called DirigoChoice in 2005. However, as health care costs rise, financing public and private insurance programs will continue to be a challenge.

Looking to the future, Maine currently has the highest median age in the nation. As the population continues to age, an increased share of the state's population will be enrolled in the federal Medicare program. Low-income people 65 and older and some younger individuals with disabilities are eligible for both MaineCare and Medicare. Because MaineCare, not Medicare, pays for most long-term care, MaineCare may see additional cost increases.

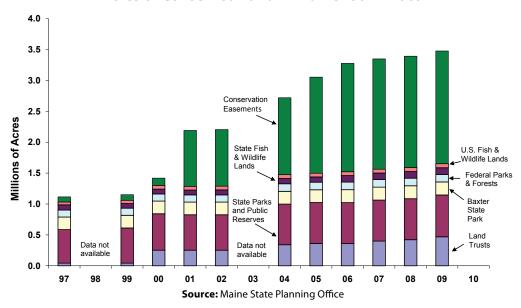
Health Insurance Coverage Total Populations 2009					
United States Maine					
Employer	52%	50%			
Individual	5%	4%			
Medicaid	14%	20%			
Medicare	12%	14%			
Other Public	1%	2%			
Uninsured	15%	10%			

# 23. Conservation Lands

**Benchmark:** The amount of Maine conservation land intended for public use will increase from 1.3 million acres in 2000 to 1.8 million acres by 2010.



#### Acres of Conserved Land in Maine 1997 - 2009



#### Maine Reaches Land Conservation Benchmark

The Maine Economic Growth Council is pleased to report that with the incorporation of conservation easement lands on which public use is currently allowed, Maine has achieved the benchmark set for this indicator —1.8 million by 2010. However, the opportunity and need for conservation is by no means finished. Future Council focus on Conservation Lands within the list of Environment measures will focus on strategic conservation efforts intended to conserve natural and working lands including working waterfronts, farmlands, wildlife habitat, and forests that also provide public access. That strategic focus will also consider habitat connectivity and other priorities of the Lands for Maine's Future Board and the Departments of Agriculture, Conservation, and Inland Fisheries & Wildlife.

In addition to natural and working lands, strategic conservation of all kinds of undeveloped lands in and around Maine's residential communities helps ensure the quality of place when these efforts are coordinated with well-planned development. Strategic land conservation also helps address the issues presented in our Service Center Communities benchmark.

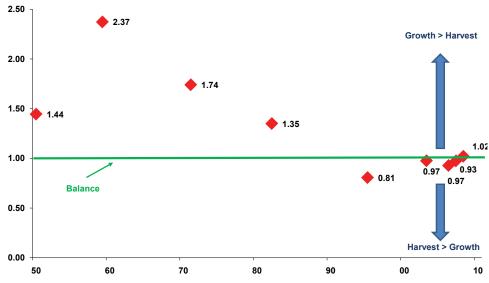
The Council will continue to monitor land conservation in Maine and update the acres of conserved land chart above as a means of measuring efforts undertaken to keep working farms, forests, and waterfronts as part of our landscape and our economy. Tracking land conservation efforts focused on wildlife habitat and unusual populations of plants will help us keep tabs on the ecosystems that serve all Maine residents. Although this measure will no longer have a benchmark, reporting on efforts will complement our look at the quality of life triangle in the middle of our Economy, Community, and Environment concentric circles at the front of this report.



#### 24. Sustainable Forest Lands

**Benchmark:** The balance of net growth to removals will be maintained over time near a 1:1 net growth to removals ratio.

#### Historic Trend in Maine's Net Growth to Removals Ratio 1950 - 2008



Source: Department of Conservation, Maine Forest Service

#### Continued Sustainable Management of Maine's Forest Lands

The chart above represents the first update to this data since the 2008 Measures of Growth report. For this indicator, a ratio value greater than one indicates that growth is greater than harvest, while a ratio value less than one indicates that harvest exceeds growth. Minor fluctuations around the ideal ratio of 1:1 are acceptable, provided that wide variations in either direction are avoided and the long-term trend is neutral. The 2008 net growth to removals ratio of 1.02:1 means that the indicator is performing well and meeting the benchmark.

During the 1950s and 1960s, growth far exceeded long-term carrying capacity. The spruce budworm epidemic and subsequent salvage harvesting in the 1970s and 1980s brought growth-to-harvest levels back to the desired 1:1 ratio. Sawmills and pulp mills today are sustainably processing historically high volumes even while the total in-forest volume increases (up 50% since 1950).

Sustainable forestry is essential to Maine's economy, identity, and quality of life, particularly with the mounting concern over the future of Maine's forest lands. Maine's forests cover nearly 90% of the state's land area, with most of this acreage actively managed by private landowners. Maine's forests support healthy wildlife populations, provide clean water, supply raw materials used to create products ranging from newspaper to alternative fuels, and offer a wide variety of recreational opportunities. Maintaining the long-term balance between growth and removals is a key component in sustaining Maine's forests.

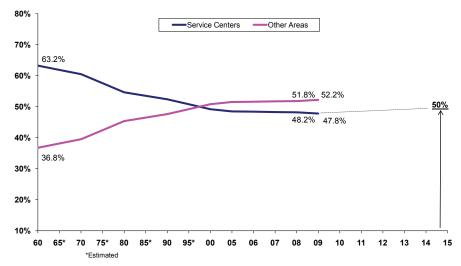
Together, sustainable forest lands, conservation lands, and population of service center communities (see Conservation Lands and Population of Service Center Communities indicators) are important indicators of how well the state is combating sprawl and supporting our natural resource-based economy.

# 25. Population of Service Center Communities

**Benchmark:** The percentage of Maine people who reside in service center municipalities will reach 50% by 2015.



# Percent of Maine's Population Living in Regional Service Centers (Compared to Other Municipalities) 1960 - 2009



Source: Maine State Planning Office

#### Sprawl Drives Costs and Diminishes Quality of Life

In 1960, 63.2% of Mainers lived in regional Service Center Communities,\*\* while 36.8% lived in other areas. After 1960, the percentage of people living in Service Center Communities began a steady decline. By 2000, the percentage of Mainers living in other areas surpassed the percentage living in Service Centers. The trend of people moving out of urban centers into the more rural parts of the state reached a plateau in 2005 and the relative percentages have remained steady through 2009.

This indicator measures the degree of urban sprawl in Maine, which brings with it a host of societal problems. Sprawl leads to redundant and costly infrastructure such as roads, schools, and waste systems, the upkeep of which costs state and local governments millions every year. For example, even as school enrollment statewide declined, the state was compelled to invest nearly a billion dollars in school construction to accommodate population shifts. Meanwhile, Service Center Communities are struggling to fund their own now-underutilized infrastructure. Attempts to remedy this situation, such as regionalization and consolidation of municipal services, have met with varying success.

Another result of sprawl is that more people are commuting from homes in rural areas to jobs in service centers, increasing household transportation costs and leaving less time for family activities and civic participation. The increasing loss of undeveloped land to sprawling development also erodes Maine's natural environment, a central part of our celebrated quality of life and a necessity for our natural resource-based industries.

<sup>\*\*</sup> Maine State Planning Office criteria to be a service center: level of retail sales, jobs-to-workers ratio, the amount of federally assisted housing, and the volume of service sector jobs. Regional service centers include communities that meet basic criteria and portions of adjacent municipalities that meet certain criteria. For a complete list: http://www.maine.gov/spo/landuse/index.htm.

# 25. Population of Service Center Communities (continued)

Service Center Communities are essential to the state's economy and the fabric of life in Maine. In general, Service Centers are the places where Maine people work, shop, and visit for a wide range of services. Almost three-quarters of all Maine jobs, services (hospitals, social services, educational institutions, cultural activities, and government services), and consumer retail sales are located in 63 specifically identified regional Service Center Communities. This concentration of services reduces energy costs and allows services to be delivered more efficiently, improving economic prosperity. Additionally, vibrant Service Center Communities can attract young people, creative economic ventures, retirees, and diverse populations, which can help to move Maine's economy forward.

#### CITING INFORMATION IN THIS REPORT

Reproduction of the information contained in *Measures of Growth* is encouraged with proper citation. Wherever data or text is reproduced, please reference the source in the following manner: "Data source: Maine Economic Growth Council and Maine Development Foundation, *Measures of Growth in Focus 2010.*"

#### ABOUT THE DATA AND ITS TIMELINESS

The data in this report came from a wide variety of sources, primarily state and federal agencies. Some agencies are able to provide data that is immediately up-to-date, while others experience a lag in up-to-date reporting. Where possible, estimates were given by agencies in order to compensate for lags in confirmed data.

#### ON THE WEB

Measures of Growth in Focus 2011 is available on the website of the Maine Development Foundation in Adobe® portable document format (.pdf) for easy download and printing. Visit the Maine Economic Growth Council through the homepage of the Maine Development Foundation at <a href="https://www.mdf.org">www.mdf.org</a>.

#### BACKGROUND AND ACKNOWLEDGMENTS

The Growth Council is co-chaired by the President and CEO of Hussey Seating Company, Tim Hussey, and State Senator Seth Goodall. The Growth Council was established in statute by the Legislature and the Governor in 1993 to develop a vision and goals for the state's long-term economic growth. It is comprised of 19 members: 14 representing the private, public, education, labor, and nonprofit sectors; four legislators; and the Commissioner of the Department of Economic and Community Development. Membership to the Council requires a three-way appointment from the Governor, Senate President, and Speaker of the House.

Since its inception, the Council has published 17 annual editions of *Measures of Growth*. Several state agencies have formally incorporated the report's goals and benchmarks into their own strategic plans. Nonprofit organizations have initiated programs aimed directly at accomplishing specific benchmarks. Government officials have used *Measures of Growth* to justify programs to achieve the goals. Teachers have incorporated the substance of the reports into their curriculum. Policy development forums have used the benchmarks as springboards.

Measures of Growth has been constantly revised over the years in order to provide our readership with the most up-to-date overview of Maine's progress towards long-term, sustainable economic growth, and a high quality of life for all its people. For the past five years, the Council has opted to include what it deems are only the most critical factors that play into the vision of this report. The result is a leaner, more focused edition of Measures of Growth, compared to editions prior to 2005.

The Maine Economic Growth Council is administered by the Maine Development Foundation (MDF). MDF was created by the Legislature and Governor in 1978 as a private, nonprofit corporation with a broad mandate to promote Maine's economy. MDF empowers leaders, strengthens Maine communities and guides public policy. Today, MDF is financed primarily with private resources.

Laurie Lachance, President and CEO of MDF, directed the development of this report and the proceedings of the Growth Council. Edmund Cervone, Senior Program Director and Ryan Neale, Program Officer, administered Growth Council meetings and authored the report. Lauren Mier was the graphic designer. J.S. McCarthy Printers printed the report.

The work of the Growth Council is financed by a state appropriation through the Maine Department of Economic and Community Development, and supplemented by private contributions from the membership of MDF.

The Maine Development Foundation and the Maine Economic Growth Council extend sincere appreciation to the organizations and people who generously provided data and guidance.

# Maine Economic Growth Council Members, 2010 - 2011

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State Senator
Senate District #19

Tim Hussey, Co-Chair

President and CEO
Hussey Seating Company

#### **John Dorrer**

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