

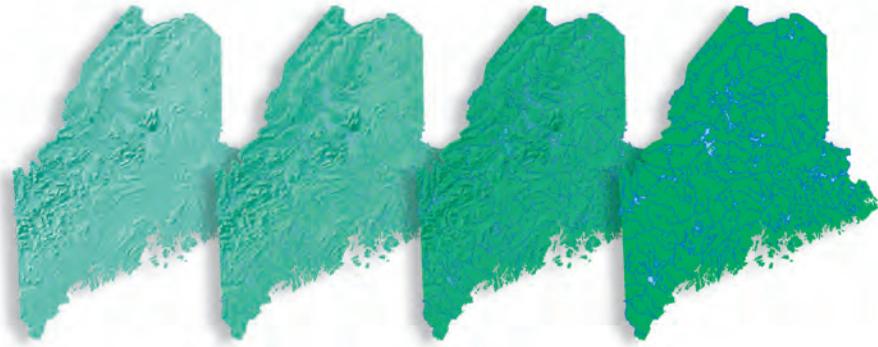
# MAINE STATE LEGISLATURE

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# MEASURES OF GROWTH IN FOCUS



2005

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

ELEVENTH REPORT OF THE MAINE ECONOMIC GROWTH COUNCIL

PREPARED BY THE  
MAINE DEVELOPMENT FOUNDATION

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# V I S I O N

**A high quality of life for all Maine citizens.**

*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

# 2005 Performance Measures of the Maine Economic Growth Council

## ECONOMY

### Prosperity

- + 1 Personal Income
- + 2 Gross State Product
- 3 Employment

### Business Innovation

- + 4 Research and Development Investment
- + ☆ 5 International Exports
- 6 New Business Starts
- 7 Manufacturing Productivity

### Business Climate

- 🚩 8 Cost of Doing Business
- + 🚩 9 Local and State Tax Burden
- 🚩 10 Cost of Health Care
- + 11 On the job Injuries

### Skilled and Educated Workers

- + 12 Higher Degree Attainment

## COMMUNITY

### Civic Assets

- 🚩 13 Affordable Housing

### Disparities

- + 14 Poverty

### Health and Safety

- 15 Chronic Disease
- + 16 Health Insurance Coverage

## ENVIRONMENT

### Preservation

- + ☆ 17 Conservation Lands

### Stewardship

- + ☆ 18 Sustainable Forest Lands

### Key to Symbols

#### GOLD STARS & RED FLAGS

Determining which performance measures receive Gold Stars and Red Flags are judgment decisions 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 perspectives of Growth Council members. Generally, criteria are as follows:

- ☆ Exceptional performance. Very high national standing and/or established trend towards dramatic improvement.
- 🚩 Needs attention. Very low national standing and/or established trend towards dramatic 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 and determining progress is done objectively each year by reviewing the most recent trend. 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.

## Recent Progress Toward Achieving Our Goals

### Summary

*Measures of Growth In Focus 2005* contains 18 performance measures, about one third the number of measures in previous reports. We believe these are the most significant measures of Maine's prospects for long-term economic growth.

Since the last time data was available for these 18 performance measures, Maine has made positive progress on 11 of them and has lost ground on 7 of them. The Growth Council awarded 3 Gold Stars to performance measures signifying exceptional performance. The Growth Council assigned 4 Red Flags to performance measures that particularly need attention.

As we assess Maine's performance via these measures, it is important to keep in mind that they are long term in nature. They do not reflect results of any single policy or program. Also, no one indicator tells the whole story; but taken together, these indicators show the general health of our economy, our communities, and our environment and the general direction we are headed.

Generally, the 2005 performance measures tell us that we are making progress toward the goals but that we need to continue making strategic investments in our people and we need to lower the cost of doing business.

Perhaps the greatest threat to Maine's long term economic growth is the cost of doing business. One of our performance measures specifically charts Maine's performance on a national index of labor costs, tax burden, and energy costs and shows that the costs have been steadily increasing in recent history. Further, the tax burden measure shows that the burden on Maine people and businesses is far higher than most states. Relatively high health care costs also contribute.

In The Competitive Advantage of Nations, Michael Porter recently wrote that one of the most important determinants of a region's

prospects for prosperity is its capacity for innovation. In Maine, innovation capacity has been threatened by lack of research and development investment and lack of higher education among Maine workers. However, Maine has made recent positive progress on each of these. Continued investment should continue to lead us on the path toward our goals.

Apart from our people, another very valuable competitive advantage is Maine's natural resources. This year the Council recognizes recent significant progress in land conservation and sustainable forest management by awarding two gold stars in the Environment category.

In the Community category, the Council gives a red flag this year to the affordable housing measure because in some cases, lack of affordable housing is a barrier to working people living near their jobs or even in the communities in which they were raised and is making it difficult for employers to attract and retain workers.

### Economy

#### Goals

- The wealth of all Maine people will steadily increase.
- Innovation will be a hallmark of Maine businesses.
- Maine will have a consistently positive business climate.
- Maine workers will be among the highest skilled and best educated in New England.

A high quality of life in Maine depends on a vibrant and sustainable economy. Sustained economic growth provides income and opportunities for Maine people and businesses now and for future generations.

On each of the fundamental performance measures of Personal Income, Gross State Product, and Employment, Maine's progress has outpaced New England and U.S. averages over the past few years. Clearly, Maine is making progress toward these goals. Recent efforts appear to be moving Maine forward and continued

work will bring us to our benchmarks.

Although Personal Income growth in Maine has outpaced U.S. growth in recent years, Maine income levels remain approximately 8% below the U.S. average. Maine's Gross State Product continues to grow slightly faster than the New England economy. Employment increased overall from 2003 to 2004. The number of manufacturing jobs decreased, while employment in government and non-manufacturing jobs increased.

In terms of Research and Development Investment, the gap is closing between Maine the rest of the states involved in the Experimental Program to Stimulate Competitive Research (EPSCoR), although Maine still lags behind other states in University R&D.

For a second year in a row, International Exports receives a Gold Star for excellent performance. The number of New Business Starts, however, dropped by almost 10 percent recently. Although Manufacturing Productivity per worker increased, it did not keep pace with the U.S. and thus fell farther away from the U.S. average.

The Cost of Doing Business is relatively high in Maine, in part because of Maine's very high Local and State Tax Burden. Also contributing to high business costs is the Cost of Health Care which increased in 2003. The rate of On the Job Injuries, on the other hand, decreased which should help to contain costs.

Maine's workforce continues to have increased rates of Higher Degree Attainment, although Maine is still not on the par with New England averages.

## Community

### Goals

- The vitality of Maine communities will be enhanced by increasing citizen participation and leadership.
- Economic disparity will be continually reduced.
- Maine people will be healthy, and will live and work in safe communities.

Vital communities support the achievement of a high quality of life for Maine citizens. Vital communities are safe, attractive places to live, and serve as a supportive environment for children and families. Such communities also attract new residents and new businesses to the state, both of which are important for a sustainable and vibrant economy.

Lack of Affordable Housing is troubling although it is much more of an issue in some parts of the state than in others. Maine's overall Poverty Rate is declining and remains below the U.S. rate. Death rates from Chronic Disease are declining for Cardiovascular disease, but increasing for Diabetes and Cancer. Health Insurance Coverage increased slightly among Maine people between 2002 and 2003.

## Environment

### Goals

- Maine will be characterized worldwide as a place of extraordinary natural beauty.
- Access to Maine's natural resources will be sustained for responsible productive and nonproductive purposes.

One of Maine's greatest competitive advantages is its natural environment. The environment's health is supported through preservation and stewardship. Maine's natural environment is also important to the economy, which has traditionally been based on natural resource industries such as timber harvesting and agriculture. Increasingly, the Maine economy is becoming dependent on tourism which relies, in large part, on a healthy environment. Tourism spending supports about 9% of all Maine jobs.

The amount of Conservation Lands continues to increase as land trusts and the state continue to protect lands for public use. Maine continues to see an increase in Sustainable Forest Lands as more and more acres get certified through one or more of the programs operating in Maine.

# This Year's Approach and Plans for the Future

## Changing Times Require Changing Analysis

Although not always immediately or obviously apparent, we believe that Maine is in the midst of a tidal wave of change. While we can't say for sure, we suspect that historians will look back and characterize 2005 as being between two eras. When we look at the long term trends that define our demographics and our economy, it's logical to conclude that we're in a major transition.

For this reason among others, *Measures of Growth* is in transition also. When the original measures were developed to look at the most important issues related to long-term economic growth, the economy was growing in different ways than it is now. Also, the players have simply changed. *Measures of Growth* has been published under three Governors and the leadership of five different Council co-chairs. And the president of the Maine Development Foundation, the steadfast administrator of the Growth Council, recently changed from Henry Bourgeois to former State Economist Laurie Lachance.

For all these reasons, this year's *Measures of Growth* is different in format and content. It is focused on those measures that matter most. It anticipates more changes in content and format in the years to come.

### Economy in Transition

At the root of Maine's economy are Maine people. While the number

of Maine residents is growing slightly at a rate of about half a percent per year, Maine residents are also aging. In the recent past (and projected into the recent future), economic growth has been driven in large part by baby boomers pro-

Over the next two decades, Maine's overall population is expected to grow 10-15% while Maine's senior population may grow as much as 50%.

gressing through life stages. But over the next two decades baby boomers will become elderly with profound implications for economic growth. Over the next two decades, Maine's overall population is expected to grow 10-15% while

Today, well over a half of our residents live outside of our cities and service centers.

Maine's senior population may grow as much as 50%.

Not only are we getting older, but we're spreading out. In 1960, about a third of Maine people lived in rural and suburban areas. Today, well over a half of our residents live outside of our cities and service centers. This has put an enormous strain on government services and has contributed to Maine's escalating tax burden. Meanwhile, the historic character and cultural significance of many of Maine's downtowns and village centers are in jeopardy.

Today, just one in nine jobs is in manufacturing.

The types of jobs being done by Maine people has changed dramatically. In 1950, one out of every two Maine jobs had to do with making something – manufacturing a product. Today, just one in nine jobs is in manufacturing and a dramati-

The Maine economy is becoming "globalized." This presents both threats and opportunities for Maine people.

ically larger number of people work in health care,

finance, tourism, and other service industries.

One last mega-trend worth discussing: Maine people today buy products and services from all over the world and we sell products and services to others all over the world. In addition, a number of Maine's large companies and a sizable portion of Maine's land base is now owned by foreign interests. This is vastly different from the market we operated in just 20 years ago. The Maine economy is becoming "globalized." This presents both threats and opportunities for Maine people. The challenge will be to understand both the threats and opportunities and make the most of them.

## Future plans

This year's *Measures of Growth In Focus* is a bridge to the future. In light of the mega-trends noted above, we anticipate future changes in the content and format of *Measures of Growth*. We want the revised format to be thoughtful, deliberate, and reflective of the emerging trends and emerging needs of policy makers and business leaders.

Anticipating future changes, this year we offer a shorter, focused report containing only those indicators that we expect to endure future changes. We believe that the Measures contained herein are the most fundamental to consider as we strive for long-term economic growth.

As Laurie Lachance has begun her new tenure as President of the Maine Development Foundation, she has asked hundreds of state leaders about their views of MDF and how the organization can most effectively help Maine's future. Consistently, people have said that *Measures of Growth* is critical.....but that it needs to keep up with changing times. Members of the Growth Council agree.

Overall, it is our intent to make future editions of *Measures of Growth* more relevant, more current, and more focused. Here are some of the ideas we're discussing so far:

### 1. Primary and secondary indicators

The great thing about an "indicators" approach is that indicators offer a simple, overall view of what's happening in a hugely complex system known as the Maine economy. The problem with indicators is that the view they offer is often too simple. There is too much of the story left untold. We are considering confronting this challenge by offering two levels of indicators in future reports. Perhaps there will be a relatively short number of primary indicators but related to each one, more detailed secondary indicators that tell more of the story.

### 2. Major Trends and "Right Now"

*Measures of Growth* has historically reported on major trends that have long-term historical

significance, but people have asked in a critical way: "What about right now? What are the very latest programs and policies? What does the new emerging research say even if a trend isn't established?" We are considering addressing these types of questions in a separate section of future reports that would depart from the traditional standards of having an established trend and valid reference for every piece of data published.

### 3. Regional Differences

*Measures of Growth* has traditionally been a statewide report reflecting statewide data and issues. But clearly, there are vast regional differences in Maine and sometimes people from diverse areas have criticized *Measures of Growth* for not being directly relevant to them. On some issues, it can seem out of sync with actual experience. Perhaps in future reports we will pay more attention to regional distinctions.

The bottom line is this: in this time of transition, we are committed to building on the good reputation of *Measures of Growth* and improving its relevance and currency as best we can.

The challenge to policy makers and business leaders is great in this time of demographic and economic transition. The need for current, relevant, and meaningful data is heightened. It is our hope that this and future *Measures of Growth* reports will offer valuable guidance on the journey to long-term economic growth.

## Origins and Methods

### On a Strong Foundation

Since its inception, the Maine Economic Growth Council has published ten well-received 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 directly aimed 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 curricula. Policy development forums have used the benchmarks as springboards.

Established in statute by the governor and legislature, the Maine Economic Growth Council began its work in 1993 by setting forth a vision and goals for the state's long-term economic growth. Hundreds of people from government, education, business, labor, environment, and economic development were involved. From a vast array of recommendations, the Council chose more than a dozen goals and about 50 performance measures by which to continually assess the state's progress towards achieving those goals.

Over the ten year period since the initial goals and measures were established, some indicators have been dropped, new ones added, and methodologies revised to keep up with advances in data availability.

## About the Data and its Timeliness

The data in this report come from a wide variety of sources: primarily federal agencies and state agencies. In past editions of *Measures of Growth*, the Council has held fast to the ethic of publishing only historic data; that is, numbers that reflect what has actually happened. The result for many measures has been that the data here appeared to be a couple years behind and not "current."

In response to criticism about lack of current data, this year's report contains not only historic data but in some cases "forecasts." For instance, at the time of publication, data on *State and Local Tax Burden* are published by the US Census Bureau up through fiscal year 2001/2002. The Tax Foundation publishes similar data up through 2004 but their numbers for 2003 and 2004 are actually forecasts based on the historic data published by the Census. This year's *Measures of Growth* includes that forecasted 2003 and 2004 data. Similarly, data for recent years published in this report on *Cost of Health Care* and *Affordable Housing* is also forecasted.

In some cases historical data published in this year's report is slightly different from historical data published in previous reports because many of the federal data sources such as the Bureau of the Census and the Bureau of Economic Analysis revise historical data to make it more accurate. For this reason, we encourage the reader to resist comparisons between this edition and previous editions. This edition contains the most accurate and current data available.

## Goals and Measures Inter-related

While progress is reported on individual measures in specific goal areas, it is important to consider that their performance is related to the success or failure of other issues measured in the report. All of the goal areas and performance measures are part of a larger system that is interrelated and interdependent (see diagram on inside front cover).

For example, it has been documented that a person's income is related to his or her level of educational attainment. Protecting Maine's claim of being "vacationland", which contributes billions of tourist dollars to the Maine economy each year, is largely dependent on the health and beauty of our natural environment. And the number of people with chronic diseases is important to economic and community vitality because of its impact on employee productivity, health care expenditures, and family health.

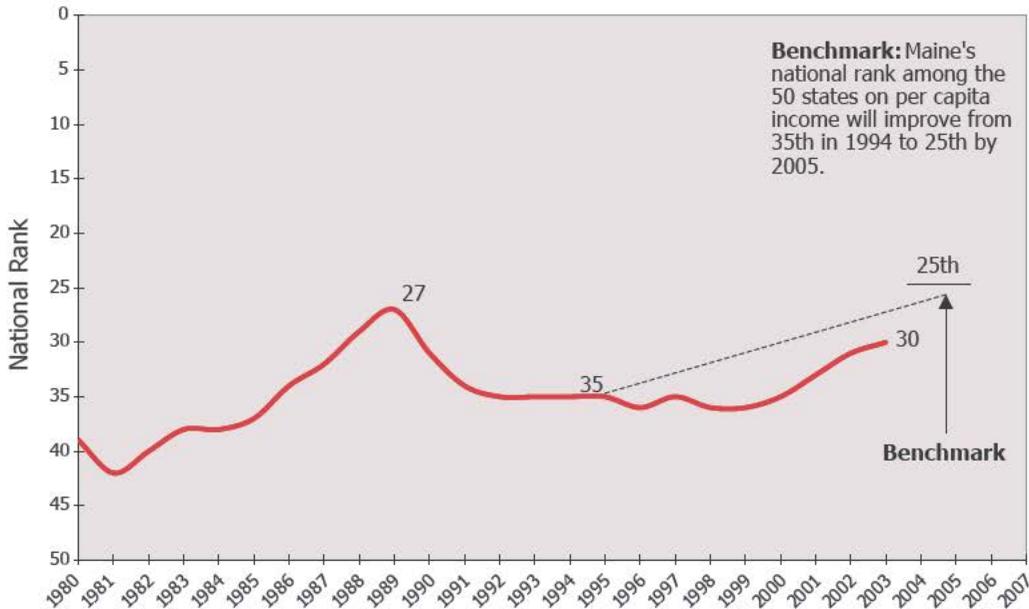
Further, the Growth Council cautions against singling out just one or two measures as "all important." Many measures are in direct tension with each other. For example, we want *Personal Income* to rise but we simultaneously want to keep *Cost of Doing Business* low, of which wages and salaries are a large component. Similarly, we want *Poverty* rates to improve but if that means increased subsidies and/or social services, it is in direct tension with *State and Local Tax Burden* which we want to lower.

The Growth Council does not take a position on which policies and programs should be implemented or cut in light of these performance measures, but rather seeks simply to educate policy makers and business leaders about where things stand and where we appear to be headed.

# 1. Personal Income

⊕ **Benchmark: Maine's national rank among the 50 states on per capita income will improve from 35th in 1994 to 25th by 2005.**

**National Rank on Per Capita Income 1980-2003**



Data Source: U.S. Bureau of Economic Analysis, September 2004

## Personal Income Slowly Improving

In 2003, Maine ranked 30th in the nation on per capita personal income, a slight improvement from the national rank of 31<sup>st</sup> in 2002. Per capita personal income in Maine grew slightly faster than the national average from 2002 to 2003.

In 2003, Maine's income per capita (total income earned in the state divided by the state's population) was \$28,935, about 8 percent less than the United States' average of \$31,459. From 2002 to 2003, per capita income in Maine grew by 3.2 percent while per capita income for the U.S. grew by 2.2 percent. During that same time period, per capita income in New England grew by just 1.6 percent.

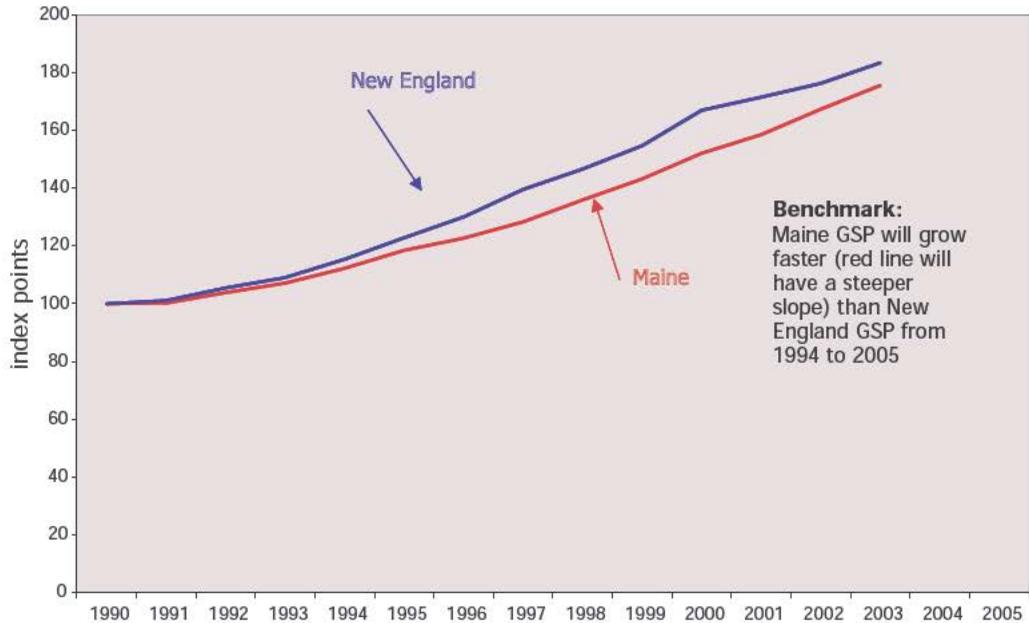
Increasing personal income is fundamental to achieving a high quality of life for Maine citizens. Higher incomes ease problems such as tax burden and household debt, and support increased spending on community and environmental issues. Higher incomes also allow people to secure a foundation, whether that is housing, health insurance, or a car to drive to work. High personal income is a direct reflection of economic prosperity, and helps to support other economic activity.

Income is derived from wages and salaries, but it also comes from other sources such as returns on investments and transfer payments from government. Personal income differences between states and regions should be viewed with cost-of-living differences in mind.

## 2. Gross State Product

⊕ **Benchmark: Maine's Gross State Product will grow faster than New England's, on average, between 1994 and 2005.**

**Gross State Product, Maine & New England (Indexed from 1990) 1990-2003**



Data Source: U.S. Bureau of Economic Analysis, December 2004

### Maine's Economy Grows Slightly Faster than New England's

In 2003, Maine's Gross State Product (GSP) was estimated to be \$40.9 billion, up about 5 percent from 2002. During the same time period, the New England economy grew at a slightly slower pace of 4 percent. Since 1994, the New England economy has grown 58.8 percent while the Maine economy has grown 56.3 percent.

GSP is the value added in production by labor and property located in a state. It is a fundamental measure of economic health, and the primary determinant of the extent to which an economy is growing or in recession. The sum of value added in all industry sectors totals Gross State Product.

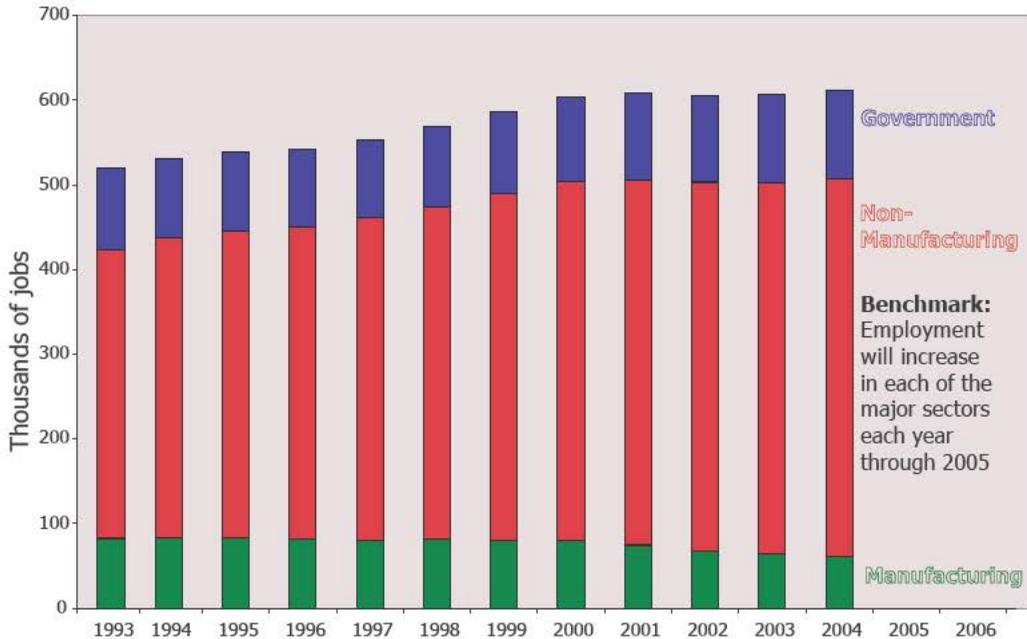
For ease of comparison, the graph shows Maine and New England data indexed to 1990; that is, 1990 values are set to 100. The table shows GSP by sector according to the NAICS (North American Industrial Classification System) codes, for the most recent year for which data is available.

Gross State Product by Major Industry Sector, 2002	
Industry Sector	GSP Millions of Dollars
Government	\$5,586
Real Estate, rental, and leasing	\$5,410
Manufacturing	\$4,671
Health care and social assistance	\$3,939
Retail trade	\$3,784
Finance and insurance	\$2,661
Wholesale trade	\$1,978
Professional and technical services	\$1,802
Construction	\$1,716
Accommodation and food service	\$1,176
Information	\$1,082
Transportation and warehousing, excluding Postal Service	\$860
Administrative/Support and Waste Services	\$848
Utilities	\$748
Agriculture, forestry fishing, and hunting	\$639
Management of companies and enterprises	\$555
Educational Services	\$375
Arts, entertainment, and recreation	\$319
Mining	\$5

### 3. Employment

- ➖ **Benchmark: The number of jobs held by Maine people in each of the major industry groups, 531,500 in 1994, will increase each year through 2005.**

**Non-Farm Wage and Salary Employment  
by Major Industry Groupings, 1993-2004**



Data Source: Maine Department of Labor, Division of Labor Market Information Services in cooperation with the U.S. Bureau of Labor Statistics, February 2005.

#### Employment Up Overall, Despite Manufacturing Decline

From 2003 to 2004, Maine’s overall employment grew 0.8 percent, from 606,100, to 610,800 jobs. In that time period, manufacturing jobs decreased by 4.2 percent; government jobs increased by 0.7 percent; and non-manufacturing jobs increased by 1.6 percent.

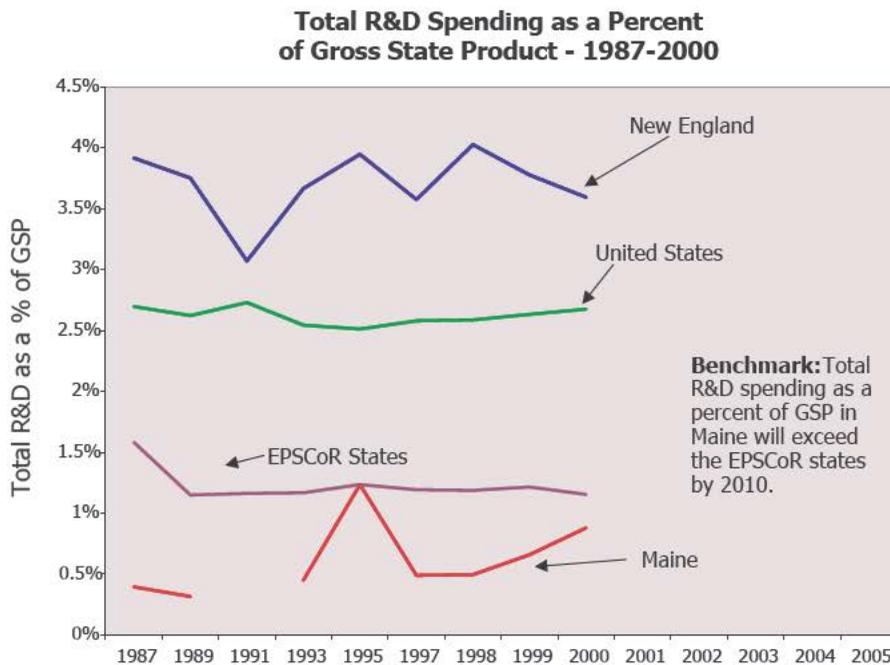
For each of the last 7 years, the pace of job growth in Maine has exceeded New England and U.S. averages. For each of the years between 1997 and 2003, the number of jobs in Maine and the United States has increased an average of 1.4 and 1.2 percent per year respectively.

The performance measure breaks employment figures into three major industry groups – Manufacturing, Non-Manufacturing (which includes: Mining; Wholesale Trade; Retail Trade; Construction; Services; Finance; Insurance and Real Estate; Transportation; and Communications and Public Utilities), and Government. This is done to provide a closer look at the composition of employment in Maine.

While overall employment increased slightly, increases were not achieved in each of the three sectors, which is why the measure gets a “minus”. The graph shows that the non-manufacturing sectors have increased over the years while manufacturing jobs in Maine have been declining for more than a decade. These figures represent full-time and part-time annual average employment, but do not include farm workers or self-employed people.

## 4. Research and Development Expenditures

⊕ **Benchmark: Total research and development spending as a percent of GSP in Maine will exceed the EPSCoR states by 2010.**



Data Source: National Science Foundation, Division of Science Resources Statistics, National Patterns of R&D Resources, 2002, and the U.S. Bureau of Economic Analysis, May 2003.

### Research and Development Spending On the Rise

In 2000, total R&D performance in Maine was 0.9 percent of Gross State Product, an increase of 33 percent from 1999, and about a 120 percent increase from 1987. Total R&D performance in Maine has experienced a general upward trend since 1987. An increase in industry R&D (a major defence-related investment) caused the spike in 1995.

This measure looks at total R&D spending in Maine as a percent of Gross State Product compared with other EPSCoR states. EPSCoR is the Experimental Program to Stimulate Competitive Research, a joint program of the National Science Foundation and several states and territories. EPSCoR fosters partnerships between industry, academia, and government within a state, and Federal R&D resources, to help develop a state's science and technology resources. By helping to secure Federal R&D funding for a state's research infrastructure, EPSCoR works to stimulate economic growth and development.

While this performance measure considers all types of R&D in aggregate as a percent of GSP, the Development Report Card for the State, published each year by the Corporation for Enterprise Development, distinguishes three types of R&D, and reports that in 2004, Maine ranked 50th among the other states in University R&D; 10th in Federal R&D; and 31st in Private R&D.

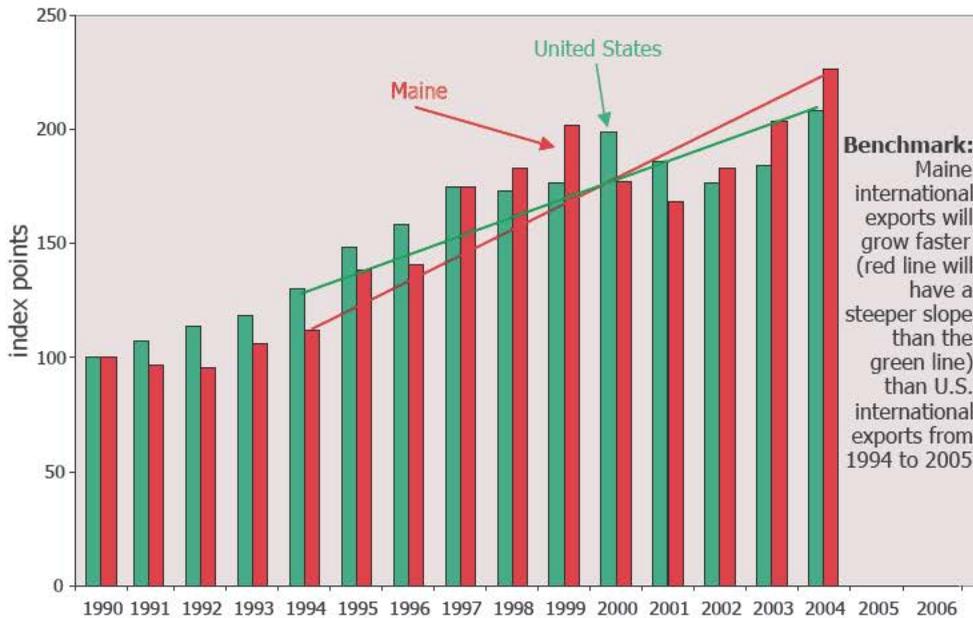
From 1997 on, the chart portrays one-year increments; prior to 1997 data are in two-year increments. 1991 data are not available for Maine because industry R&D data are non-disclosable as reported by the National Science Foundation for that year.

## 5. International Exports



**Benchmark:** The value of Maine's international exports will grow faster, on average, than the growth in value of US international exports from 1994 to 2005.

**International Exports, Maine & U.S. (Indexed from 1990), 1990-2004**



Data Source: Maine International Trade Center, February, 2005

### Maine's International Exports Continue to Rise

The Growth Council awards this measure a Gold Star this year for exceptional performance. From 2003 to 2004, the value of Maine exports increased 11 percent. During the same time period, U.S. exports increased by 13 percent. Maine achieved the stated benchmark for this performance measure for the second year in a row.

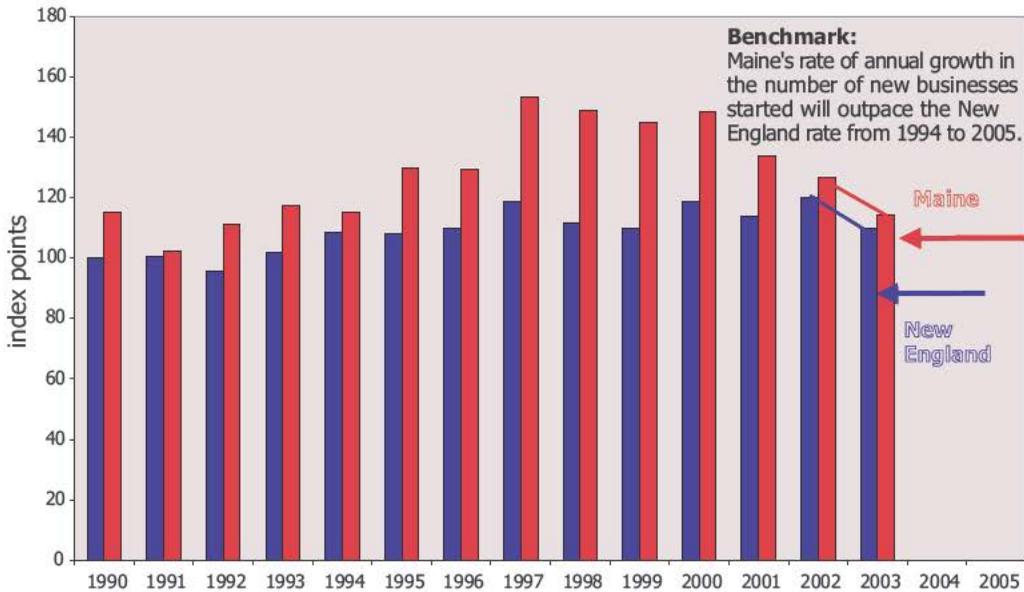
The top five commodity exports in 2004 include electrical machinery (including semiconductors); wood and articles of wood; paper and paperboard; ships, boats, and floating structures; and seafood. Maine's top five trading partners include Canada, Malaysia, Brazil, Singapore, and China. Boosting export sales in 2004 were some manufactured oil well drilling platforms shipped to Brazil.

These data represent the value of products exported to other countries, but exclude services. For ease of comparison, the graph shows Maine and United States data indexed to 1990; that is, 1990 values were set to 100.

## 6. New Business Starts

- ➊ **Benchmark: Maine's rate of annual growth in the number of new businesses started will outpace the New England rate from 1994 to 2005.**

**New Business Starts, Maine & New England  
(indexed from 1984), 1990-2003**



Data Source: U.S. Small Business Administration, Office of Advocacy, February 2005

### New Business Starts in Maine Decline

In 2003, 4,033 new businesses started in Maine, 395 fewer businesses than were started in 2002, a drop of nearly 10 percent (red line on graph). New business starts across New England decreased by 8.7 percent over the same time period (blue line on graph). While both Maine and New England experienced a decline in new business starts, Maine's annual growth rate lagged behind New England's annual growth rate, causing this measure to move away from the benchmark and receive a "minus" this year.

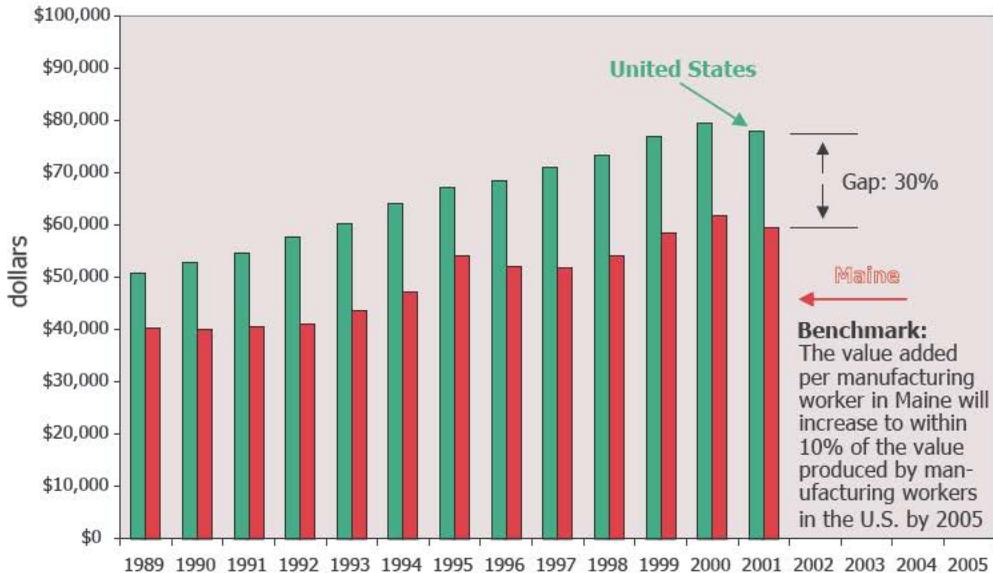
New business starts across New England have generally increased since 1990. In Maine, however, new business starts generally increased until 1997, and then began to decline. The 2003 data reflects a continuation of this downward trend.

For ease of comparison, the graph shows Maine and New England data indexed to 1984, whereby 1984 values were equalized to 100. The measure itself does not consider the number of business failures, acquisitions or mergers. It is the number of businesses each year that are "a new registration" with the state, or an applicant for a new account number with the state's Department of Employment Security. Also, the data presented here reflect only new businesses that have at least one employee other than the owner.

## 7. Manufacturing Productivity

- **Benchmark:** The value added per manufacturing worker in Maine will increase to within 10% of the value added per manufacturing worker in the U.S. by 2005

**Manufacturing Value Added per Manufacturing Worker, Maine and U.S., 1989-2001**



Data Source: U.S. Bureau of Economic Analysis, December 2004.

### Gap Widens Between Maine and US Productivity Growth

In 2002, each manufacturing sector worker in Maine produced about \$64,142 worth of product on average, an increase of about 6.7 percent from 2001. During the same time period, U.S. manufacturing productivity increased by 7.8 percent.

While both Maine and the United States experienced an increase in worker productivity, the gap in worker productivity between the United States and Maine increased from nearly 32 percent in 2001 to 33 percent in 2002. This measure moved away from the benchmark.

Productivity is calculated here 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 State Product. Productivity measured in this way primarily reflects capital improvements and investments in worker training and education that increase the value of the 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.

The North American Industry Classification System (NAICS) recently replaced the U.S. Standard Industrial Classification System (SIC). Gross state product data in this performance measure are based on SIC codes for years prior to 1998, and NAICS codes from 1998 on, and manufacturing worker data are based on SIC codes for years prior to 2001, and NAICS codes from 2001 on.

## 8. Cost of Doing Business



**Benchmark:** The cost of doing business in Maine, 106 index points in 1998, will decrease to less than 103 index points by 2005.

Cost of Doing Business, Maine, 1989-2002



Data Source: Economy.com, United States Business Cost Review, 2003.

### Cost of Doing Business High in Maine Relative to U.S.

According to this index, Maine's cost of doing business in 2002 was 10.1 points higher than the national average cost of doing business, and has increased nearly 4 percent over the past 5 years. Given that cost of doing business in Maine has steadily increased over the past several years according to this index, the Growth Council considers this a Red Flag issue.

This performance measure is an important indicator of the costs of operating a business in Maine relative to other states, and an important consideration for businesses looking to relocate to Maine, expand, or leave the state. A high cost of doing business rating for Maine represents a competitive disadvantage for Maine-based businesses.

This index reflects a composite of the cost of labor, energy costs, and tax burden in each state. While there is no new data available on this measure since Measures of Growth, 2004, other measures reflect more current data on aspects of the cost of doing business such as Local and State Tax Burden and Cost of Health Care.

Labor costs in Maine tend to be lower than labor costs across New England, and the United States as a whole. While difficult to accurately assess since electric utility deregulation in 2000, it appears that electricity rates for industrial customers in Maine are high relative to other states, but declining. Tax burden in Maine, as shown in another performance measure, is high in Maine.

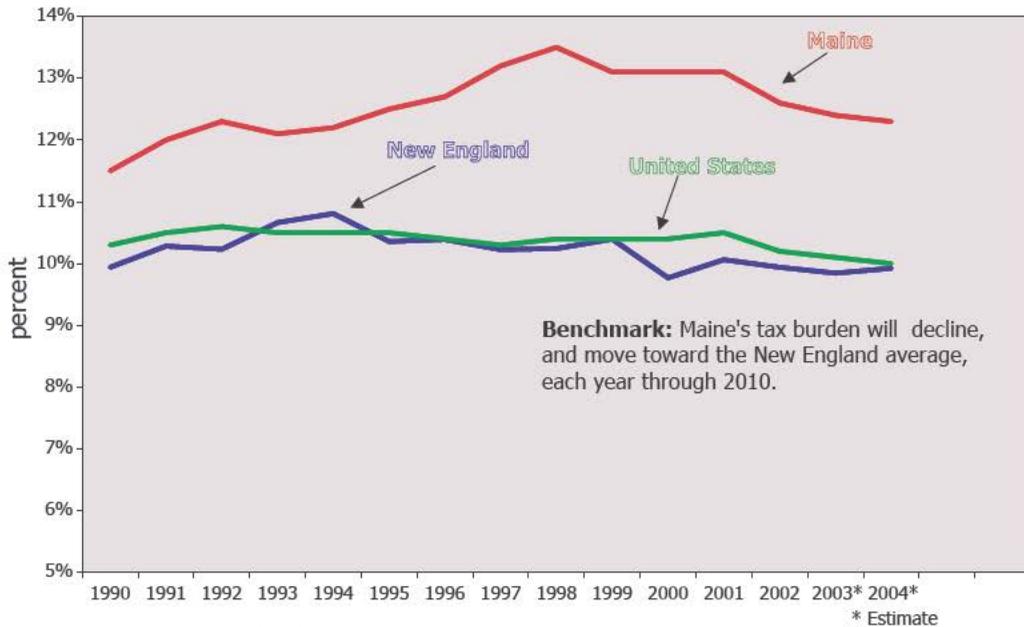
The index includes the unit cost of labor, the energy costs, and the tax burden in each state. Unit labor costs comprise 75 percent of the index, energy costs comprise 15 percent, and the tax burden is 10 percent of the total index. Unit labor costs are defined as the average wages and salaries earned per dollar of output created. The energy cost component of the index compares the average commercial and industrial electricity costs, in cents per kilowatt-hour, to the U.S. average. The tax burden is the total tax burden as a percent of total personal income indexed to the national effective tax rate, which is calculated in the same manner.

## 9. Local and State Tax Burden



**Benchmark: Maine's tax burden will decline, and move toward the New England average, each year through 2010.**

**Tax Burden of State and Local Taxes as a Percent of Income:  
Maine, New England, and United States, 1989 - 2004**



Data Source: Tax Foundation, April 2004

### Maine's Tax Burden High but Declining

Since 1991, Maine has typically had one of the nation's highest tax burdens. Maine's state and local taxes are estimated at 12.3 percent of income in 2004, a decrease from 12.4 percent in 2003. This is estimated to be the second highest burden in the nation, and is well above New England's estimated burden of 9.9 percent, and the national average of 10 percent. Among the 50 states, Maine has ranked third highest or above each year since 1994.

From 2003 to 2004, Maine's estimated tax burden decreased by 0.8 percent whereas New England's tax burden increased 0.8 percent. This signifies positive progress ("plus") toward the benchmark. However, given Maine's consistently high tax burden relative to other states, the Growth Council awards this measure a Red Flag this year.

Reducing Maine's tax burden is critically important to achieving sustainable economic growth and development. Maine competes with other New England states to attract people and businesses, and is concerned with its comparative tax burden.

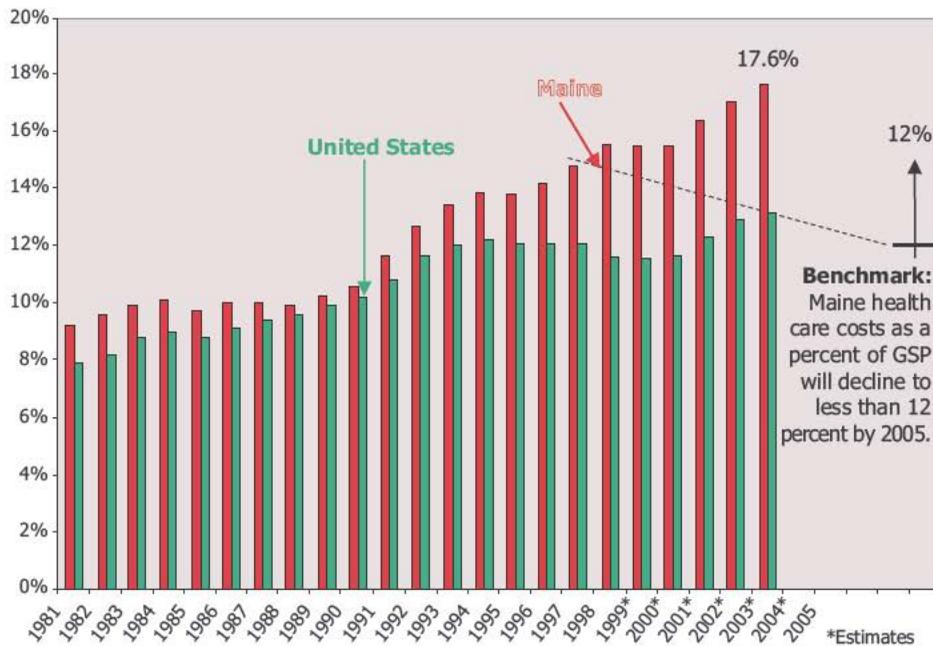
Figures for 2003 and 2004 are estimates from the Tax Foundation.

## 10. Cost of Health Care



**Benchmark: Health care costs as a percent of GDP, 15.5% in 1998, will decrease to less than 12 percent by 2005.**

**Health Care Cost as a Percent of GDP, Maine and U.S., 1981-2003**



Data Source: Governor's Office of Health Policy and Finance, July 2004

### Health Care Costs Continue Dramatic Rise

In 2003, personal health care costs for Maine's people and businesses amounted to an estimated 17.6 percent of Maine's Gross State Product, up from 17 percent in 2002. For the United States as a whole in 2003, health care costs amounted to an estimated 13.2 percent of gross national product, up from 12.9 percent in 2002.

Maine's health care costs continue to rise each year, and are moving away from the benchmark. Because health care costs are a major concern for Maine's people and businesses, and continue to rise, this measure again earns a Red Flag this year.

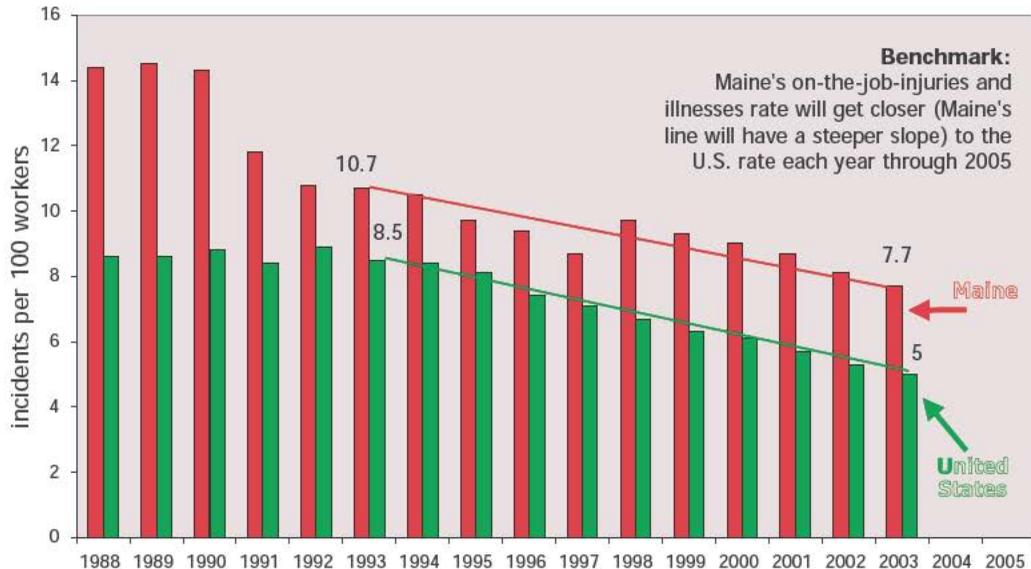
The cost of health care in Maine is an important consideration for businesses considering moving to or expanding in Maine. Rising costs represent increasing health insurance premiums for businesses and increasing deductibles and out-of-pocket expenses for employees. Rising health care costs are also consuming a large portion of state and local government expenditures, placing added pressure on tax burden.

Estimate for 1998 is from the Centers for Medicare and Medicaid Services (CMMS). Maine figures from 1999 - 2003 are projections using national rates of growth applied to the 1998 figure from the CMMS.

## 11. On-the-Job Injuries

⊕ **Benchmark: Maine's rate of reported on-the-job injuries per 100 full-time workers, 10.7 in 1993, will get closer to the U.S. rate each year from now through 2005.**

**On-the-Job Injuries and Illnesses  
Maine & U.S., 1988-2003**



Data Source: U.S. Bureau of Labor Statistics, December 2004

### Maine Rate Improves, but Lags Behind U.S.

In 2003, there were 7.7 reported injuries and illnesses reported for every 100 full-time Maine industrial workers, a decrease of almost 5 percent in the rate of injuries from 2002. During that same time period, the number of incidents in the United States dropped by 5.7 percent.

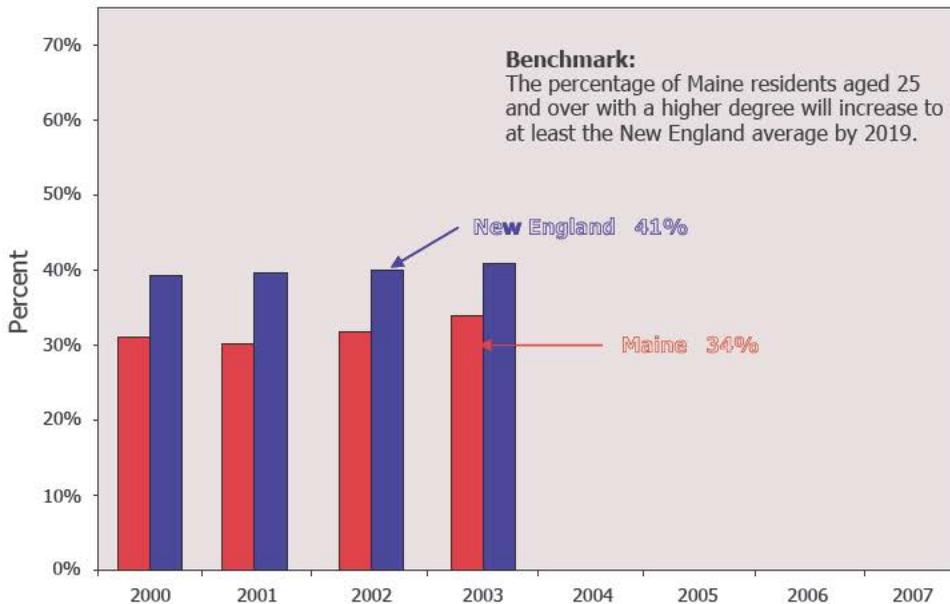
The vitality of the workplace community and larger community is negatively affected by injuries that occur on the job. Workplace safety is an important component of long-term economic growth because injuries translate directly into increased costs.

The data upon which this measure is based includes all types of work-related injuries and illnesses required to be recorded by the Occupational Safety and Health Administration (OSHA).

## 12. Higher Degree Attainment

- ⊕ **Benchmark:** The percentage of Maine residents age 25 and over with a higher education degree, 32 percent in 2002, will increase to at least the New England average by 2019.

**Higher Degree Attainment Among Residents Aged 25 and Over, Maine and New England, 2000 - 2003**



Data Source: U.S. Census Bureau, American Community Survey, August 2004.

### More Maine People Have Higher Degrees

In 2003, 34 percent of people in Maine aged 25 and over had higher degrees, an increase from the 2002 figure of 32 percent. New England also saw a slight increase in higher degree attainment, from 40 percent of residents aged 25 and over in 2002, to 41 percent in 2003.

In 2003, about 13.4 percent of New Englanders had graduate or professional degrees, while that percent in Maine was only about 8.5. In 2003, about 8.2 percent of Maine residents had Associate's degrees, whereas across New England the percent was 7.5.

Higher education is increasingly important for Maine's economic development given today's "knowledge economy". Each of the attainment levels needs to continue to grow in Maine.

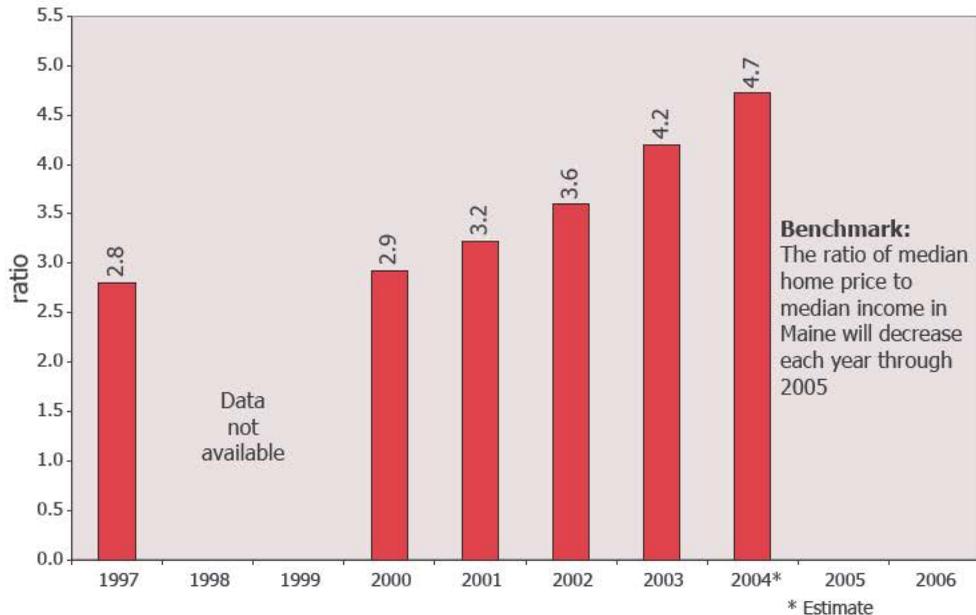
In the past, this performance measure was calculated using data from the U.S. Census Bureau's Current Population Survey. The U.S. Census is transitioning to the American Community Survey (ACS), a nationwide survey that will replace the long form in future decennial censuses. Because the American Community Survey is to become the leading source of socio-economic, demographic, and housing data for communities, we have decided to make the transition also, and use the ACS data to assess higher degree attainment. The ACS is still very new. As a result, the Census Bureau is actively making improvements and adjustments, decreasing the margin of error each year.

## 13. Affordable Housing



**Benchmark:** The ratio of median home price to median household income in Maine, 2.92 in 2000, will decrease each year through 2005.

**Ratio of Median Home Price to Median Income, 1997-2004**



Data Source: Maine State Housing Authority and the Maine Real Estate Information System, 2004. Median household income data from the U.S. Census Current Population Survey.

### Home Prices in Maine Increasing Relative to Income

From 1997 to 2004, Maine has experienced a 68% percent increase in the ratio of the median home price to median household income across the state as a whole. The 2004 ratio of 4.7 means that, on average, house prices in 2004 were almost five times annual household incomes.

From 2003 to 2004, the median sales price of Maine homes increased by about 12% whereas nationally, home values increased by about 9%. The Growth Council awards this measure a Red Flag because it is an increasingly significant issue for Maine people and businesses. In many places, high housing costs are forcing people to commute long distances because they can't afford to live in the same communities in which they work.

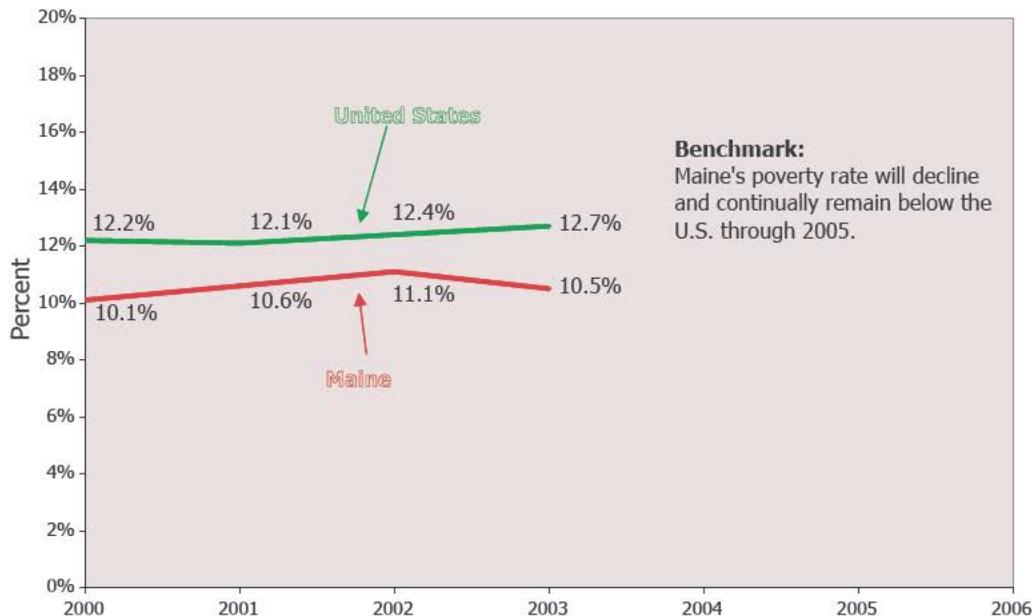
This is a rough measure of the affordability of homes in Maine. The larger the number, the less affordable the homes. The ratio does not consider all costs of purchasing a home such as taxes, interest and insurance rates, down payment, and length of mortgage. Also, this measure masks regional differences. According to recent analysis by the Maine State Housing Authority, homes are generally less affordable in coastal and southern areas of the state, and more affordable elsewhere. The data shown for 2004 is estimated based on a forecast of median household income for 2004.

The Washington-based Corporation for Enterprise Development (CFED) recently gave Maine an "A" grade for what they call "asset outcomes," and ranked Maine 4th best in the nation on this index. The index measures the wealth of each state's residents and how wealth is distributed, the extent to which residents can access opportunities to save money, and how well assets are protected. The index is comprised of 30 socioeconomic measures. One of the reasons Maine ranks so high on this index is because Maine has one of the highest home ownership rates in the country.

## 14. Poverty

- ⊕ **Benchmark: The percentage of Maine people living in poverty, 10.1 percent in 2000, will continually decline and remain below the U.S. rate through 2005.**

Percent of People in Poverty, Maine and U.S., 2000 - 2003



Data Source: U.S. Census Bureau, American Community Survey, September 2004

### Maine's Poverty Rate Drops

In 2003, 10.5 percent of Maine people were living in poverty (as defined by the federal government: annual income of \$12,015 for a 2-person household). The poverty rate in the United States in that same year was 12.7 percent. Maine's poverty rate decreased by more than 5 percent from 2002 to 2003. During that same time period, the poverty rate increased by 2.4 percent across the nation.

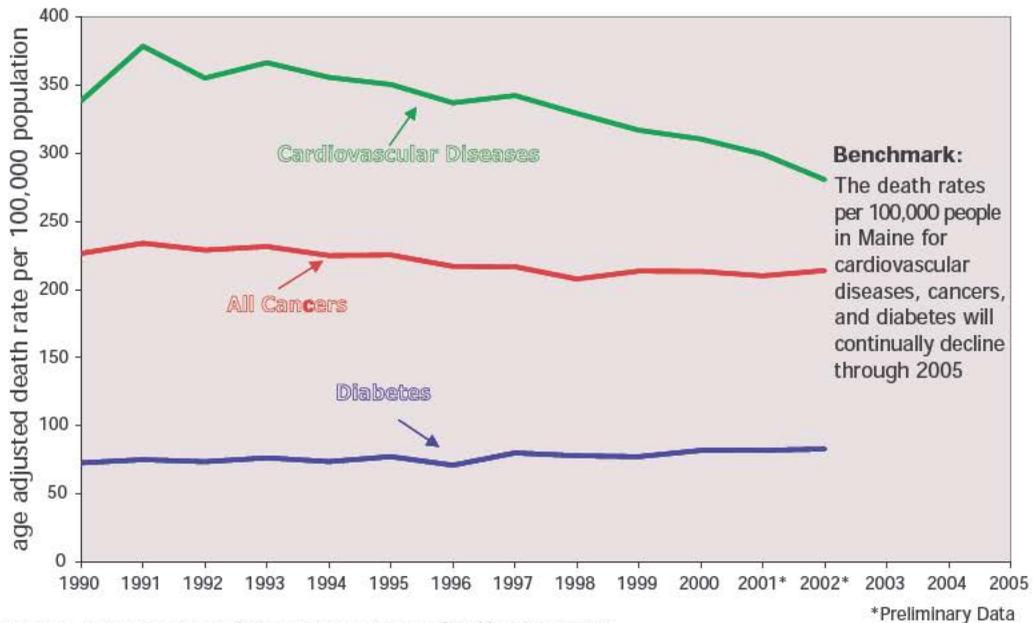
The costs of poverty to Maine's quality of life, its people, their communities, and the economy are large. Children growing up in poverty are more likely to experience lags in physical and mental development. The long-term costs to society include ill health, reduced work performance, increased financial dependency on the public, and costly antisocial behavior.

In the past, this performance measure was calculated using data from the U.S. Census Bureau's Current Population Survey. The U.S. Census is transitioning to the American Community Survey (ACS), a nationwide survey that will replace the long form in future decennial censuses. Because the American Community Survey is to become the leading source of socio-economic, demographic, and housing data for communities, we have decided to make the transition also, and use the ACS data to assess poverty. The ACS is still very new. As a result, the Census Bureau is actively making improvements and adjustments, decreasing the margin of error each year.

## 15. Chronic Disease

- ➊ **Benchmark: The death rates per 100,000 people in Maine attributed to cardiovascular diseases, cancers, and diabetes will each continually decline through 2005.**

Death Rates from Select Chronic Diseases Maine, 1990-2002



Data Source: Maine Department of Human Services, Bureau of Health, February, 2005.

### Death Rates from Cardiovascular Disease Continues to Fall

The term “chronic disease” refers to a wide variety of health conditions that are not contagious and that can rarely be completely cured. Death rates in Maine attributed to any of three major chronic diseases – cardiovascular diseases, cancers, and diabetes – are to some extent attributed to lifestyle choices such as smoking, diet, and exercise.

In 2002, the cancer death rate was up 1.9 percent from 2001. The diabetes death rate also increased in that time by 1.1 percent, while the death rate from cardiovascular disease decreased by 6.3 percent.

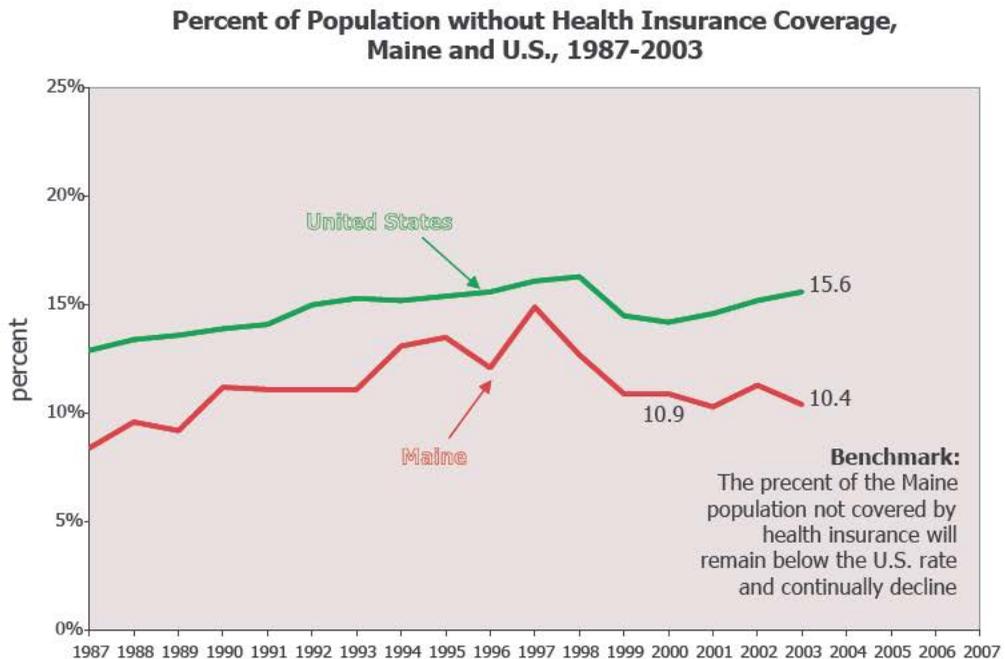
Since 1990, death rates from cancer have decreased by 5.6 percent, and those from cardiovascular disease have decreased by over 17 percent. Death rates attributed to diabetes have increased by nearly 14 percent.

Chronic diseases have a negative impact on the quality of individual lives and on their larger community. Costs associated with lost work time, hospitalization, and treatment of these often -fatal diseases also affect our economy. Death rates serve as a proxy for the incidence of chronic disease in Maine, or the number of people living with these chronic diseases. Caring for people living with chronic diseases comprises a large part of Maine’s health care costs.

Data for 2001 and 2002 are preliminary. Data on chronic diseases were age adjusted to the year 2000 standard population. Age-adjusted rates are useful for comparison purposes only, not to measure absolute magnitude.

## 16. Health Insurance Coverage

- ⊕ **Benchmark: The percentage of Maine's population without health insurance coverage, 10.9 percent in 2000, will continually decline and remain below the U.S. rate through 2005.**



Data Source: U.S. Census Bureau, March, 2004.

### Health Coverage in Maine Increasing

In 2003, 10.4 percent of people in Maine were not covered by health insurance, whereas 15.6 percent of the U.S. population did not have coverage. More Maine people had health insurance coverage in 2003 than in 2002. From 1999 to 2003, those not covered by health insurance coverage decreased by 4.6 percent in Maine and increased by 7.6 percent in the U.S.

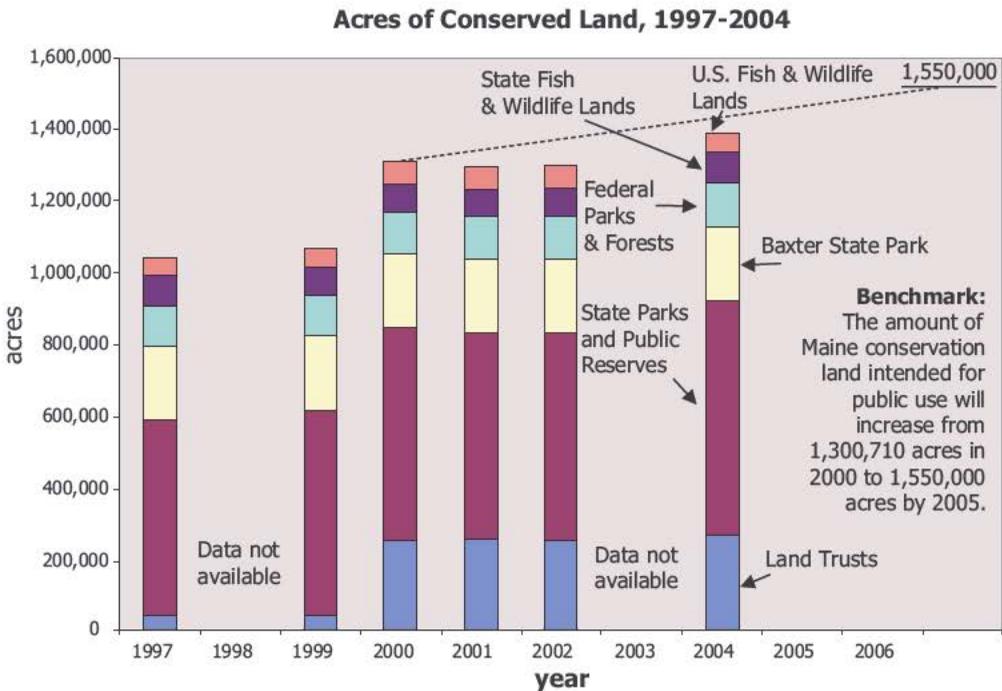
Health insurance coverage is imperative to helping people access appropriate health care services and staying healthy. Healthy people are more apt to be engaged in their communities and be productive in the workplace.

Many Maine citizens have some of their personal health expenditures covered under an employer-based health insurance program. This coverage is jeopardized by rising insurance costs that make it increasingly difficult for small and large employers to offer affordable health insurance benefits to employees.

## 17. Conservation Lands



**Benchmark: The amount of Maine conservation land intended for public use will increase from 1,300,710 acres in 2000 to 1,550,000 acres by 2005.**



Data Sources: Maine Coast Heritage Trust; Maine Department of Conservation, Bureau of Parks and Lands; Maine Department of Inland Fisheries and Wildlife; Baxter State Park Authority; Acadia National Park; White Mountain National Forest; Appalachian Trail Commission; US Fish and Wildlife Service; all 2004 data

### Land in Conservation Continues to Increase

In 2004, Maine had 1,382,887 acres of publicly accessible conservation land. This is an increase of over 90,000 acres since 2002. Unlike past editions of Measures of Growth, this year's data represents the addition of lands owned by land trusts throughout the state. Including land trust lands resulted in an overall increase in the number of acres considered by the measure, causing us to revise the benchmark proportionally. The data does not include lands under easements held by land trusts.

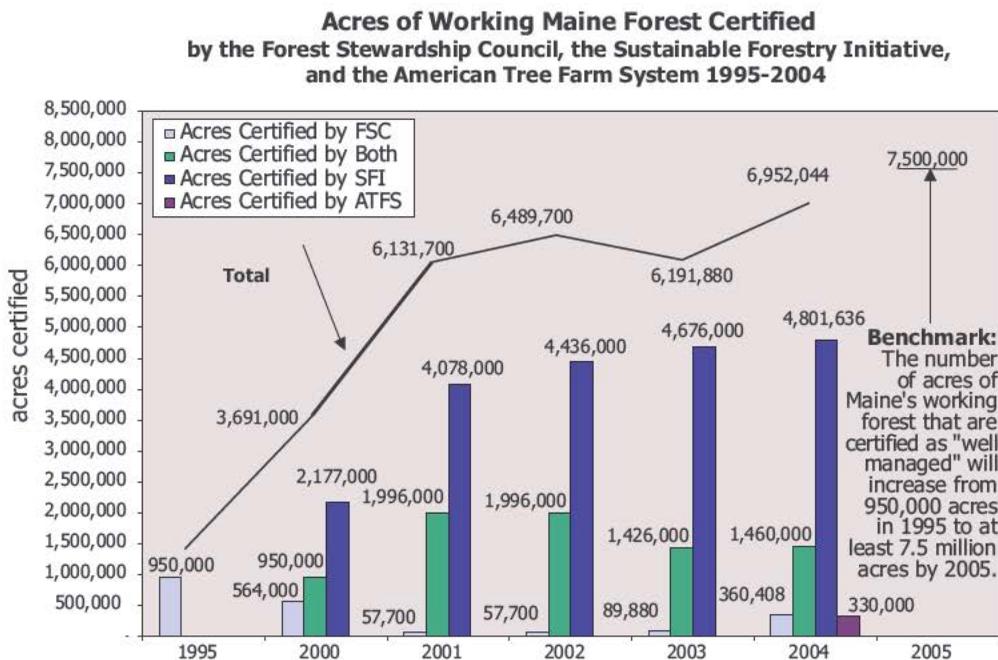
Given the small percentage of Maine land that is in public ownership compared to other states, conserving vast areas of land is challenging. Access to public and private lands contributes to the high quality of life enjoyed by Maine people. Residents use these lands for all types of recreational activities, which provide jobs and draw tourists. In addition, conserved lands support diverse plant and wildlife species, and maintain the natural aesthetic quality of the landscape.

Because Land Conservation continues to rise and it is so important to long-term economic growth, the Growth Council has awarded Gold Star to this performance measure.

## 18. Sustainable Forest Lands



**Benchmark:** The number of acres of Maine's working forest that are certified as "well managed" will increase from 950,000 acres in 1995 to at least 7.5 million acres by 2005.



Data Source: Maine Forest Service, January, 2005

### Acres of Forest Land Certified as "Well Managed" Increasing

A total of 6,952,044 acres of Maine forest is certified as "well managed" as of January 2005, an increase of 12.3 percent from 2003. Given the importance of well managed forest lands to long-term economic growth, and that the total number of acres is higher than it has ever been, the Growth Council awards a Gold Star to this performance measure.

This measure represents certification by one or more of three primary certification programs operating in Maine. Forest certification requires successful passage of an audit conducted by, or through, specific certification programs designed to assess the quality of land management policies and/or practices on the acreage under review.

Maine currently has three primary certification programs that differ somewhat in their processes and goals. The Forest Stewardship Council's (FSC) goal is to provide market-based incentives for sustainable forestry, specifically the "green labeling" of forest products. FSC is an international, nonprofit organization, comprising a wide array of stakeholders, including environmental groups, timber trade, forestry professionals, forest certification organizations, and indigenous peoples. FSC emphasizes performance-based audits. The second program is the Sustainable Forestry Initiative (SFI). SFI's guidelines were developed by the American Forestry and Paper Association (AFPA) in 1994. The main goal of SFI is to promote continuous improvement of forest management and is more focused on the overall process of forest management than on a specific product. Thirdly, there is the American Tree Farm Standard (ATFS). This program uses the American Forest Foundation's Standards of Sustainability as the foundation for their certification process. These standards promote growing renewable resources, protecting the environment, and increasing public awareness of the benefits of managing forests for production. In the past, this performance measure only included data from FSC and SFI. ATFS data are now included for a more complete and accurate picture of forest certification.

## Citing Information in This Report

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## On The Web

*Measures of Growth In Focus*, 2005 is available at the website of the Maine Development Foundation in Portable Document Format (PDF) for easy download and printing. Visit the Maine Economic Growth Council through the homepage of the Maine Development Foundation at <http://www.mdf.org>.

## Acknowledgments

The Maine Economic Growth Council is co-chaired by retired President and CEO of Madison Paper Industries, Roy Barry; and State Senator Lynn Bromley. The Council is administered by

the Maine Development Foundation.

"The Maine Development Foundation drives sustainable, long-term economic growth for Maine. The foundation is a catalyst for new ideas and provides common ground for solving problems and advancing issues. The foundation was created by the legislature and governor more than twenty-five years ago as a private, nonprofit corporation with a broad mandate to promote Maine's economy. Today, the foundation is financed primarily with private resources.

The Foundation's president, Laurie Lachance, guided the content of this report. Craig Freshley and Amy Scott of Policy Development, Inc. researched and authored the report. J.S. McCarthy Letter Systems printed the report.

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

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

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Madison Paper Industries

**Lynn Bromley**, Co-Chair  
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# MAINE DEVELOPMENT FOUNDATION



45 MEMORIAL CIRCLE, AUGUSTA, ME 04330 • TEL: (207) 622-6345 • FAX: (207) 622-6346 • Web: [www.mdf.org](http://www.mdf.org)