

MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from scanned originals with text recognition applied
(searchable text may contain some errors and/or omissions)

MEASURES OF GROWTH



2001

*Performance Measures and Benchmarks
to Achieve Sustainable Long-Term Economic Growth for Maine*

HC
107
.M2
M3871 SEVENTH REPORT OF THE MAINE ECONOMIC GROWTH COUNCIL
2001

Prepared by the
MAINE DEVELOPMENT FOUNDATION

MAINE ECONOMIC GROWTH COUNCIL, 2000

Chellie Pingree, Co-Chair

Majority Leader, Maine State Senate

Kevin Gildart, Co-Chair

Vice President, Bath Iron Works

Leroy Barry

President and CEO, Madison Paper Industries

Ed Dinan

President and CEO, Bell Atlantic

David Flanagan

President and CEO, CMP Group, Inc.

Philip Harriman

Senator, Maine State Senate

Idella Harter

President, Maine Education Association

Joyce Hedlund

President, Eastern Maine Technical College

Ted Koffman

Director of Government Affairs,
College of the Atlantic

Laurie Lachance

State Economist, Maine State Planning Office

Elizabeth Levenson

Executive Director, Training Resource Center

Steve Levesque

Commissioner, Maine Department of
Economic and Community Development

Terrence MacTaggart

Chancellor, University of Maine System

Thomas Murphy

Minority Leader, Maine House of
Representatives

Robert Piccone

President and Business Agent,
Teamsters Local 340

Carol DiBacco Rea

Partner, SMRT/Rea Architects

G. Steven Rowe

Speaker of the House,
Maine House of Representatives

Dianne Tilton

Executive Director, Sunrise County
Economic Council

Eloise Vitelli

Associate Director, Maine Centers for
Women, Work, & Community

KEY TO SYMBOLS AND GRAPH COLORS

GOLD STARS & RED FLAGS

Determining which performance measures receive **gold stars** and **red flags** are judgement 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:



GOLD STAR - Exceptional performance.

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



RED FLAG - Needs attention.

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

ON THE GRAPHS

Except where otherwise stated, all data presented are for Maine.

The vertical line separating the two background colors represents the year we started benchmarking. It is the baseline year referred to in the benchmark

ARROWS

Determining the direction of the arrow for each performance measure is done by objectively reviewing the data. The arrow directions simply reflect movement towards or away from a benchmark since the last time new data were available. Criteria are as follows:



UP ARROW - We have moved toward the benchmark since last available data.



DOWN ARROW - We have moved away from the benchmark since last available data.



HORIZONTAL ARROW - No significant movement either way since last available data (in instances of survey data, "significant" is defined as at least three percentage points).



NO ARROW - Either a new measure or no new data available since *Measures of Growth, 2000*.

statement. Where we have no data prior to the baseline year, graphs have just one background color.

Maine data is always shown in this color

New England data is always shown in this color

United States data is always shown in this color

2001 PERFORMANCE MEASURES OF THE MAINE ECONOMIC GROWTH COUNCIL

FUNDAMENTAL PERFORMANCE MEASURES p.6

- ⬆ 1 Gross State Product
- ⬇ 2 Personal Income
- ⬆ 3 Employment

INNOVATIVE BUSINESSES p.7

- ⬇ 4 New Business Starts
- ⬇ 5 Job Growth Among New Businesses
- ➡ 6 New Products or Services
- ⬆ 7 International Exports
- ⬇ 8 Innovation Assets
- ⊖ 9 Cost of Doing Business
- ⬆ 10 Manufacturing Productivity
- ⬇ 11 On-the-Job Injuries

SKILLED AND EDUCATED WORKERS p.9

- ⬆ 12 High School Diplomas
- ⊖ 13 Associate's Degree Awards
- ⬆ 14 Bachelor's Degree Attainment
- ⊖ 15 Graduate Degree Awards
- ➡ 16 Lifelong Learning
- ➡ 17 Citizen Opinion of Educational Opportunities
- ⬇ 18 Employer-Sponsored Training
- ➡ 19 Business Opinion of Universities and Colleges

VITAL COMMUNITIES p.12

- ⬇ 20 Population of Service Center Communities
- ⬆ 21 Family Income Disparity
- ⬆ 22 Gender Income Disparity
- ⬆ 23 County Income Disparity
- ⬆ 24 County Employment Disparity
- ⊖ 25 Employment of the Disabled
- ➡ 26 Discrimination in the Workplace
- ⬇ 27 Jobs that Pay a Liveable Wage
- ⊖ 28 Multiple Job Holding
- ⬆ 29 Voter Turnout
- ➡ 30 Citizen Participation in Community Activities
- ⬆ 31 Business Involvement in Communities and Schools
- ⬇ 32 Arts and Cultural Expenditures
- ⊖ 33 Low Birth Weight Infants
- ⬇ 34 Cigarette Smoking

- ⊖ 35 Overweight Adults
- ⬆ 36 Crime
- ⊖ 37 Reported Domestic Assaults

EFFICIENT GOVERNMENT p.18

- ⬆ 38 Citizen Satisfaction with State Government
- ⬆ 39 Business Satisfaction with State Government
- ⊖ 40 Fiscal Stability
- ⬇ 41 Local and State Tax Burden
- ⊖ 42 Tax Fairness

STATE-OF-THE-ART INFRASTRUCTURE p.20

- ⬆ 43 Condition of Roads
- ➡ 44 Condition of Bridges
- ⬆ 45 Modes of Freight Transport
- ⊖ 46 Telecommunications
- ⬇ 47 Cost of Electricity

HEALTHY NATURAL RESOURCES p.21

- ⬆ 48 Industrial Use of Toxic Chemicals
- ⬆ 49 Air Quality
- ⬆ 50 Water Quality of Lakes
- ➡ 51 Water Quality of Rivers
- ➡ 52 Water Quality of Marine Areas
- ⬆ 53 Conservation Lands
- ⊖ 54 Sustainable Forest Lands
- ⬆ 55 Paper and Lumber Value Added
- ⬆ 56 Agriculture Value Added
- ⬇ 57 Commercial Fishing
- ⊖ 58 Tourism

RESERVED MEASURES p.26

- ⊖ Associate's Degree Attainment
- ⊖ Graduate Degree Attainment
- ⊖ Racial Income Disparity
- ⊖ Volume of Large Sawtimber Trees

VISION

Our vision is a high quality of life for Maine citizens.

Central to this vision is a sustainable economy that offers an opportunity for everyone to have rewarding employment and for businesses to prosper, now and in the future.

The people of Maine bring this vision into reality by working together and building on our tradition of hard work, dedication, and Yankee ingenuity.

GOALS

and Maine's Recent Progress Toward Achieving Them

To achieve our vision of long-term economic growth, we work toward 13 goals in 6 areas. To measure our progress, we monitor 58 performance measures and set a benchmark for each. Here is a brief overview of Maine's recent progress.

Overall, Maine made positive progress on 19 of the 58 performance measures and held steady on 9 others. This year the Growth Council awarded 3 Gold Stars to performance measures on which we are doing exceptionally well. One benchmark was achieved: 53 - *Conservation Lands*.

On the other hand, Maine's standing worsened on 16 of the 58 performance measures. The Growth Council assigned 10 Red Flags to performance measures that particularly need attention.

FUNDAMENTAL PERFORMANCE MEASURES

In addition to measuring progress in six specific areas, the Council also tracks three fundamental performance measures of long-term economic growth. *Gross State Product (GSP)*, the most widely accepted indicator of general economic activity, increased about 6.4% during 1999 (the most recent year for which we have complete data) outpacing New England GSP, which grew by 5.6%. In *Employment*, Maine continues to outpace New England. Overall, Maine ranked 7th in the nation in employment growth in 1999. However, Maine's national rank on per capita *Personal Income* is somewhat distressing because we are not gaining wealth relative to other states, even in light of solid job growth. By this measure, Maine remains among the poorest third of the 50 states and thus the *Personal Income* measure earns another Red Flag this year.

INNOVATIVE BUSINESSES

Maine businesses will be world leaders in innovating new products, new markets, new companies; and will use innovative approaches for workplace health and safety.

The performance measures send mixed messages this year regarding the extent to which we are achieving the stated goal.

Maine had been doing very well in starting new businesses, but in 1999 the number of businesses started dropped 2.5%. This decline reflects a regional trend - New England's new business growth slowed by 1.2% in 1999. The Corporation for Enterprise Development still gives Maine low marks for our ability to actually innovate new products and services and the rate at which we are launching new products and services is not increasing as the Growth Council had hoped. And for the first time in several years, Maine's on-the-job injuries increased.

On the other hand, Maine's international exports are exceeding expectations and continue to grow at a very respectable pace, earning another Gold Star this year. Also, manufacturing productivity continues to increase. The Council's new performance measure, *Cost of Doing Business*, shows that Maine is competitive with New England but more expensive than the rest of the nation.

SKILLED AND EDUCATED WORKERS

Maine workers will be among the highest skilled in the U.S., with the best capacity to use existing and emerging technologies and respond to rapidly changing workplaces and markets.

Maine workers will be lifelong learners, with access to integrated education and training opportunities in the public and private sectors.

Many more people have a high school education in Maine than in most other states. However, it is believed that higher degrees will be required for jobs of the future and less than a third of Maine's population has attained a Bachelor's Degree. Employer-sponsored training is also down this year and business opinion of Maine's colleges and universities is not improving. Low participation in lifelong learning is particularly troubling.

New data show that the number of Graduate degrees awarded

by Maine institutions has increased over the past five years while the number of Associate's degrees awarded in Maine has declined slightly in that time. This data should be taken in context, however, as many of these degrees are not held by current or future Maine residents.

Since education levels are considered a key factor in driving a sustainable, healthy economy, the performance measures in this area tell us that Maine needs to focus on increasing the education levels of its citizens.

VITAL COMMUNITIES

Among Maine families and regions, disparities in income and opportunity will be continually reduced.

Maine's civic infrastructure will be continually enhanced by increasing participation in and cooperation among governments, voluntary organizations, and neighborhood groups.

Maine citizens will have ever-increasing and equal opportunity for employment, advancement, and an adequate standard of living.

Maine will be nationally recognized as a place that is healthy, safe, and rich in arts and culture.

There are a number of troubling disparities among Maine people that adversely affect the vitality of Maine communities and the extent to which people contribute to economic growth. The divide between Maine's wealthiest and poorest counties still has not declined, and this year only three of Maine's poorest counties registered better than average employment growth. The gap between Maine's wealthiest and poorest families also grew this year. Survey data suggest that we are not making any real progress on decreasing workplace discrimination. However, gender income disparity recently decreased.

Other community vitality trouble spots include the number of jobs that pay a liveable wage and the multiple job holding rate in Maine—two important indicators of the quality of Maine jobs. A new data source shows that while Maine exceeds the national rate, we still only employ only about one third of disabled people in the state. Troubling as well are survey results showing that fewer Maine businesses are involved with their communities and schools this year.

Mainers continue to take pride in exceptionally good voter turnout and continued lowering of an already low crime rate. *Reported Domestic Assaults*, a new performance measure, shows signs of improvement. Maine also fares better than the nation on the incidence of low-birth-weight infants. Furthermore, citizen involvement in community activities is up to 60%. These are all indicators of Maine's continuing high quality of life.

EFFICIENT GOVERNMENT

Maine state and local government services will be known for their high quality and reasonable cost. Where regulation is necessary, Maine will be known for the timeliness with which regulatory decisions are made, and the flexibility in achieving public purposes.

Maine's state and local tax systems will be broad-based,

generate stable and predictable revenues, yet not impose burdens that place Maine at a competitive disadvantage.

Positive signs include recent considerable improvement in business opinion of the value of state government services for the amount of taxes paid and continuing improvement in citizen opinion as well. Maine also has one of the fairest tax systems in the nation, placing burden on those most able to pay.

Troubling among the measures of government efficiency is the increase in Maine's tax burden per \$1,000 of income relative to other New England states. In 1997 (the most recent year for which have complete data on this issue) Maine people were paying considerably more of their income in taxes than residents of nearby states. *Fiscal Stability*, a new performance measure, may also indicate troubled waters.

STATE-OF-THE-ART INFRASTRUCTURE

Maine's transportation and telecommunications infrastructure will support economic growth by being modern and continually improved.

All Maine consumers will have access to a wide range of energy sources at prices competitive nationally and regionally.

There are some positive trends reflected in the performance measures this year. Roads are improving and the amount of freight transportation using alternative means (rail, air or water) has increased relative to that shipped via truck for the first time in three years. Also, the new *Telecommunications* performance measure suggests continuing, dramatic improvement in Maine's telecommunications infrastructure. Not so positive is Maine's rising electricity costs relative to the rest of the country.

HEALTHY NATURAL RESOURCES

Maine will continue to improve the quality and optimize the use of its renewable natural resources to promote sustainable economic development.

Maine will increase niche marketing, recreational opportunities, and value-added approaches for better utilization and conservation of natural resources.

The benchmark set for *Conservation Lands* was achieved this year. By the Growth Council's performance measures, Maine's air quality is improving as well as the quality of Maine's marine waters and lakes. There is also continuous improvement in the *Industrial Use of Toxic Chemicals*. A new measure, *Sustainable Forest Lands*, reflects recent increases in the amount of lands certified as sustainable.

Looking at Maine's natural resource-based industries, tourism continues to make healthy contributions to the economy and Maine's paper and lumber industries are still growing faster, although barely, than the U.S. rate. However, the commercial fishing industry continues to be seriously challenged.

BACKGROUND

The Maine Economic Growth Council began its work in 1993, established in statute by the governor and legislature, by setting forth a vision and goals for the state's long-term economic growth. Hundreds of people were involved from government, education, business, labor, the environment and economic development. From a vast array of recommendations, the Council chose 13 goals and about 50 performance measures by which to continually assess the state's progress towards achieving those goals. The Council has held workshops, focus groups, and has solicited advice from experts and the state's leaders from all sectors.

Since then the Council has published 7 annual reports. Several state agencies have formally incorporated goals and benchmarks of the Maine Economic Growth Council into their own strategic plans. Nonprofits 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 for meaningful discussion. Businesses have pledged financial resources and other forms of support to the effort. Furthermore, the Council's work is receiving increasing recognition from community groups and other states as a model for establishing a vision, goals, and measurable objectives.

The Maine Economic Growth Council strives to be accurate, non-partisan, and objective, with a healthy dose of straightforward common sense. The Growth Council does not advocate specific strategies to accomplish the benchmarks. Its mission all along has been to identify what's important to Maine and to say how Maine is performing.

The result is a framework of generally accepted goals and benchmarks which collectively form a blueprint for action, statements of where Maine stands on those issues that are most crucial to our future economic prosperity, and an accurate look at 58 trends that tell us about where Maine is heading.

CHARACTERISTICS OF THE WORK

BASIC TERMS The **vision** statement is the focus of all the work. Achieving the vision is the reason for economic growth and development. In order to give the vision meaning, **goals** have been developed for six key areas of the economy. One or more **performance measures** has been developed for each goal. These measures are specifically defined data sets that are used to measure progress towards achieving the goals. They are not perfect measures, but they are indicators of progress. We can look at them and see where Maine is today relative to the goals. For each performance measure, there are **benchmarks**: targets of where we would like to be on each measure at a specific time in the future.

LONG VIEW - BROAD DEFINITION OF THE ECONOMY In keeping with its legislative mandate, the report takes the long view, 8-15 years, and defines the economy broadly: *Innovative Business, Skilled and Educated Workers, Vital Communities, Efficient Government, State-of-the-Art Infrastructure, and Healthy Natural Resources.*

MULTI-STAKEHOLDER APPROACH This report is not just a business agenda, an environmental agenda, or a state government agenda. Rather, it is a broad-based agenda for economic growth. The Growth Council has tried hard to reach out to numerous organizations that have a stake in Maine's economic future; their opinions are reflected in this work.

ALL GOALS AND BENCHMARKS INTER-RELATED Individual performance measures do not stand alone. It is erroneous to judge progress toward a goal based on any single performance measure in isolation, or progress toward the vision based on any one goal. The Maine economy is incredibly complex: no single indicator can adequately measure its entirety. One needs to step back and make a summary judgment viewing the big picture of ALL goals and measures.

USING THE REPORT State legislators may use the report to guide their policy decisions; economic development leaders may use this report to focus special attention on local priorities; business leaders may use this report to set priorities. All Maine people may look to the benchmarks as a way to evaluate how we are doing as a whole at improving the economy and moving towards our long-term vision.

CHANGES FROM LAST YEAR

We strive to keep changes to a minimum, but this needs to be balanced with (1) our desire to stay current with emerging issues, (2) our desire to continuously improve the accuracy and timeliness of our reporting, and (3) our desire to make the data ever more accessible and easy to understand. Changes are always made sparingly and only for the purpose of improving the integrity of our work.

In this year's report, there are several significant changes.

NEW TOPICS COVERED

This year the Growth Council has added several new performance measures. These additions reflect the Council's desire to have *Measures of Growth* be a current document that reflects the issues facing Maine today.

Measures of Growth 2001 includes five new measures that provide insight into new areas that affect the health of Maine's economy:

- 9 - *Cost of Doing Business*
- 28 - *Multiple Job Holding*
- 35 - *Overweight Adults*
- 37 - *Reported Domestic Assaults*
- 54 - *Sustainable Forest Lands*

TRADITIONAL TOPICS COVERED IN NEW WAYS

Several of the performance measures in previous editions have been revised to reflect data from new sources and/or to provide a better indicator of progress being made in specific areas. The revised indicators provide essentially the same information that was found in previous *Measures of Growth* reports, but in new ways.

- 13 - *Associate's Degree Awards* (previous measure was attainment level)
- 15 - *Graduate Degree Awards* (previous measure was attainment level)
- 33 - *Low Birth Weight Infants* (previous measure was infant mortality)
- 40 - *Fiscal Stability* (previous measure, now unavailable, tracked multiple components representing fiscal stability and balanced revenue)
- 46 - *Telecommunications* (previous measure tracked business use of the Internet) New measure represents the number of competitive inter-exchange carriers or local long distance companies
- 58 - *Tourism* (previous measure was hotel and lodging employment) New measure tracks dollars spent on food, lodging, and leisure activities

SOME MEASURES RESERVED; ONE MEASURE DROPPED

The Growth Council decided to drop indicator *Paper and Lumber Employment* this year because it was deemed unnecessary with the existence of *Employment* and *Paper and Lumber Value Added*. Furthermore, given the strong growth economy of the past few years, this issue is less relevant now than it was when the Council first established the measure in 1995.

Performance measures that were contingent on outdated data have been moved to the back of the report this year. They are "reserved" until the time when new data become available. These are:

- *Associate's Degree Attainment*
- *Graduate Degree Attainment*
- *Racial Income Disparity*
- *Volume of Large Sawtimber Trees*

BENCHMARKS REVISED

Periodically, the Growth Council reviews and revises the targets, or benchmarks, set for each indicator in the report. In *Measures of Growth 2001*, the Growth Council has revised a significant number of benchmarks for one of the following reasons:

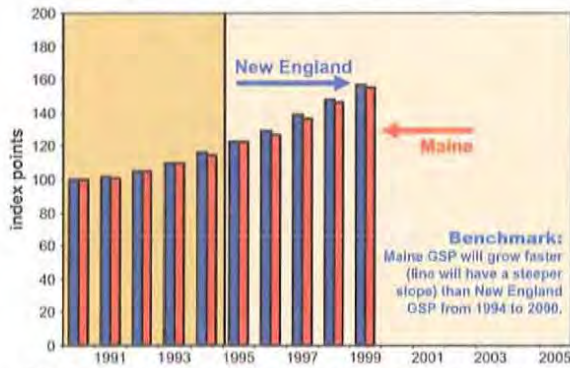
- The benchmark achievement date is upon us
- Some benchmarks calling for continuous improvement were revised to reflect a quantitative, time-specific target

MINOR CHANGES IN METHODOLOGY

Three indicators have minor methodological revisions.

- 10 - *Manufacturing Productivity* - new data source required an adjustment to the variable measured. Previously, this measure tracked product value per manufacturing worker. New data represents value added per manufacturing worker.
- 25 - *Employment of the Disabled* - the new data source defines potential workforce differently than the earlier source for this measure, resulting in a larger population surveyed.
- 49 - *Air Quality* - A stricter, new standard is used.

Gross State Product, Maine & New England (Indexed from 1990), 1990-1999



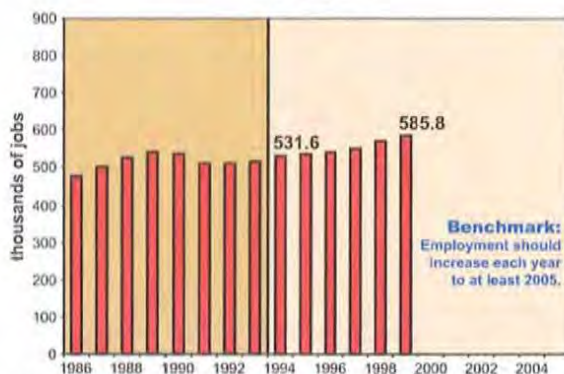
Data Source: US Bureau of Economic Analysis, September 2000 and Maine State Planning Office estimate, September 2000.

National Rank on Per Capita Personal Income, 1980-1999



Data Source: US Bureau of Economic Analysis, October, 2000.

Employment (non-farm wage and salary), 1986-1999



Data Source: Maine Department of Labor, Division of Labor Market Information Services in cooperation with the US Bureau of Labor Statistics, November, 2000.

1 GROSS STATE PRODUCT



Benchmark: Maine's gross state product will grow faster than New England's, on average, between 1994 and 2000.

Maine Economic Growth Outpaces New England in 1999 In 1999, Maine's gross state product was estimated to be \$34 billion, up 6.35% from 1998. During the same time period, the New England economy grew at a slower pace of 5.52%. The Maine economy accounts for about 6.4% of New England's economy.

Since the Maine Economic Growth Council began tracking this performance measure in 1994, the New England economy has grown 35.4% whereas the Maine economy has grown at a slightly slower pace of 27.9%.

Gross state product 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, whereby 1990 values were equalized to 100. Previous editions of *Measures of Growth* reports had indexed that data to 1977.

2 PERSONAL INCOME



Benchmark: Maine's national rank among the 50 states on per capita income will improve from 37th in 1994 to 25th by at least 2005.

Personal Income Ranking Still Low Maine ranks 37th in the nation for the second year in a row on personal income standings. This performance measure gets a Red Flag once again this year because of Maine's failure to make progress increasing the personal income of its inhabitants relative to other states in the union.

This stasis is best explained in relation to larger gains experienced in per capita income in the region and nation. In 1999, Maine's income per capita (total income earned in the state divided by the state's population) was \$24,603 compared to the New England average of \$34,173 and the United States average of \$28,542. From 1998 to 1999, per capita income in Maine grew by just over 4.6% while per capita income for the US as a whole grew 4.5% and per capita income across New England grew 5.6%. (Income is derived from wages and salaries but it comes from other sources as well, such as returns on investments and transfer payments from government.)

As an indicator of fundamental performance, personal income should also be viewed with cost of living differences between states and regions in mind. While Maine's personal income is lower than other states, the overall cost of living in Maine is also relatively low.

In May 2000, the U.S. Bureau of Economic Analysis executed a periodic 5-year revision of all existing data. During these periodic revisions, the BEA adjusts methodology, source data and other input factors as deemed necessary in order to provide a more accurate picture of the state of the economy. These adjustments account for the shifts of Maine's historical ranking in personal income among the fifty states.

3 EMPLOYMENT



Benchmark: The number of jobs held by Maine people will increase, from 531,600 in 1994, each year to at least 2005.

Employment Growth Continues to Outpace New England For each of the past five years, the number of jobs in Maine has increased, growing an average of 1.9% per year. From 1998 to 1999, employment in Maine grew 2.9% while employment in New England as a whole grew 1.9%. Maine's job growth from 1998 to 1999 ranked 7th in the nation.

From October 1999 to October 2000, Maine's construction industry added 2,000 jobs, a 6.4% increase. Maine's service industries added 4,800 jobs, registering a 2.7% increase. The social, educational, and health services industries were the greatest contributors to job growth. During the same time period, the number of manufacturing jobs decreased by 6.6%.

These figures represent full and part-time annual average employment, but do not include farm workers or self-employed people. This is an indicator of the number of jobs in Maine, unlike the unemployment rate that is an indicator of how many people are seeking employment. This performance measure should be viewed with *28 - Multiple Job Holdings* and *27 - Jobs that Pay a Liveable Wage*.

This year, the Growth Council revised the benchmark for this indicator, extending it from 2000 to 2005.

4 NEW BUSINESS STARTS

Benchmark: Maine's rate of annual growth in number of new businesses started will outpace the New England rate from 1994 to 2000.

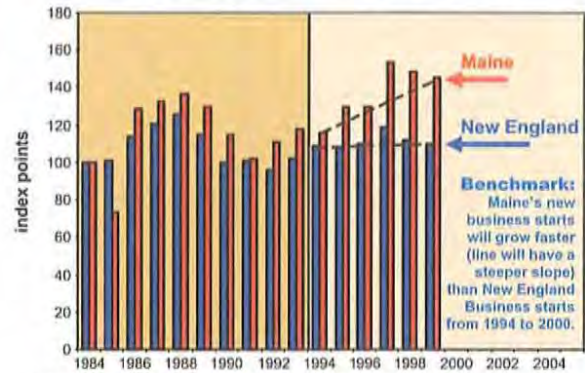
New Business Starts Down This Year In 1999, 5,007 new businesses started in Maine, 2.5% fewer than in 1998. The rate of new business starts across New England also dropped 1.2% this year. For the second year in a row, both Maine and New England registered negative growth in new business starts.

This performance measure is an indicator of the availability of investment capital and the extent to which people perceive economic opportunities.

The measure itself does not consider 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 reflects only new businesses started that have at least one employee, other than the owner.

For ease of comparison, the graph shows Maine and New England data indexed to 1990, whereby 1990 values were equalized to 100. Previous editions of Measures of Growth had indexed the data to 1984.

New Business Starts, Maine & New England (Indexed from 1984), 1984-1999



Data Source: US Small Business Administration, Office of Advocacy, September 2000.

5 JOB GROWTH AMONG NEW BUSINESSES

Benchmark: Maine's national rank among the 50 states on job growth among new businesses will improve from 49th in 1993 to 31st by at least 2000.

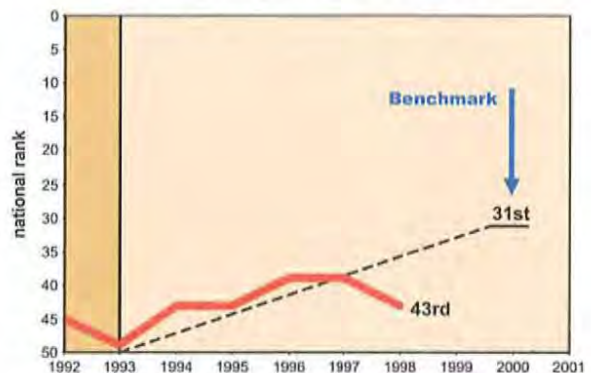
National Standing Decreases For the first time since 1992, Maine's national standing on job growth among new businesses dropped. After two years in a row at 39th, Maine now stands at 43rd in the nation. The measure looks at number of new jobs created in firms less than five years old.

Because of Maine's failure to improve its national standing the Growth Council has awarded this measure a Red Flag.

This measure is a good indicator of the extent to which new businesses are sustaining themselves, growing, and contributing positively to the economy. It is also an indicator of financing available from banks and public lenders.

A long-term growth economy requires not only that an increasing number of new businesses get started each year but that they stay in business and actually add jobs.

National Rank on Job Growth Among New Businesses, 1992-1998



Data Source: Corporation for Enterprise Development, *Development Report Card for the States*, 2000.

6 NEW PRODUCTS OR SERVICES

Benchmark: The percentage of Maine for-profit businesses that develop new products or services each year will improve from 44% in 1995 to 70% by at least 2005.

No Improvement Reported In 2000, 52% of Maine businesses reported that they developed new products or services, about the same as in 1999. This is a relatively direct measure of business innovation and is an important indicator of how well existing Maine businesses are competing and adapting to new customer needs and managing economic pressures.

The Council gave this measure a Red Flag this year because despite a period of economic growth, for the past three years Maine businesses have been producing fewer new products and services. It is critical to Maine's economy that businesses develop new products and services.

Maine leaders of for-profit businesses were asked: "Over the past 12 months, did your company develop new products or services that are consistent with your core business?" The data reflect the percentage that responded "yes." The 2% point change from 1999 to 2000 is not significant given the survey sample.

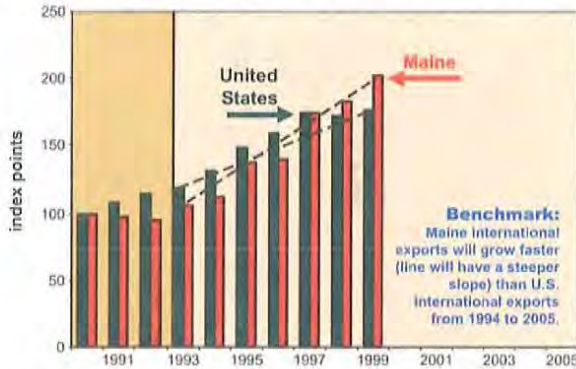
This year the Growth Council revised the benchmark for this indicator. The previous benchmark, called for 70% of Maine businesses to develop new product or services by 2000. The revised benchmark calls for achievement of that percentage by at least 2005.

Percent of Businesses with New Products or Services, 1995-2000



Data Source: Maine Development Foundation Annual Survey of Maine Businesses, 1995-2000.

International Exports, Maine & United States (indexed from 1990), 1990-1999



Data Source: Maine International Trade Center, September 2000.

7 INTERNATIONAL EXPORTS



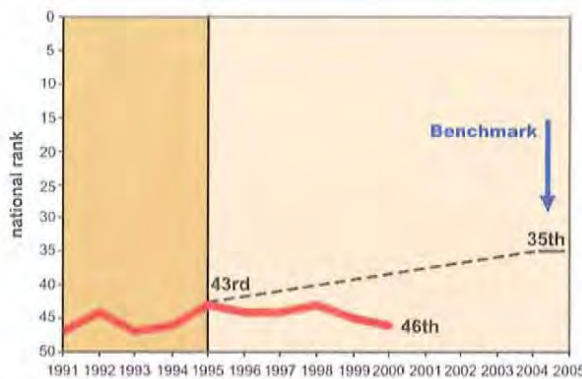
Benchmark: The value of Maine's international exports will grow faster, on average, than the growth in value of US international exports from 1994 to 2005.

Dramatic, Steady Increases Earn Another Gold Star From 1998 to 1999, Maine exports grew 10.2% while US exports only grew 1.8%. For the second year in a row, the Growth Council awards this measure a Gold Star.

In 1999, Maine companies exported \$2.16 billion worth of products. Maine companies exported \$769 million worth of product to Canada, \$408 million worth of product to Singapore, and \$168 million worth of product to Malaysia. Sixty-one percent of all Maine exports in 1999 were in the following three industries: semiconductors, paper products, and lumber and wood products.

The data represent the value of products exported to other countries, but excludes services. For ease of comparison, the graph shows Maine and United States data indexed to 1990, whereby 1990 values were equalized to 100.

National Rank on Innovation Assets Index, 1991-2000



Data Source: Corporation for Enterprise Development (CED), Development Report Card for the States, 2000.

8 INNOVATION ASSETS



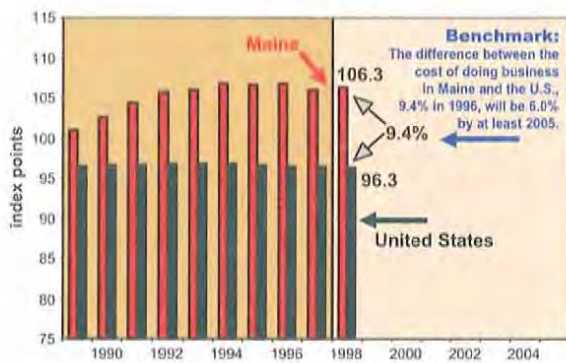
Benchmark: Maine's rank among the 50 states on technology resources will improve from 43rd in 1995 to 35th by at least 2005.

Maine's National Rank Slips Another Notch From 1999 to 2000, Maine's national rank on Innovation Assets slipped from 45th to 46th, an indicator that Maine's ability to foster technological innovation is challenged.

This is the fifth year in a row that the Growth Council has pinned a Red Flag on this performance measure. This is an indicator of Maine's ability to create and capitalize on high-tech opportunities.

The measure reflects Maine's national rank on a composite index of 10 technology-related indicators which includes: number of scientists in the state, number of patents issued, amount of financial resources put towards research and development, percent of households with a computer, university spin-outs, royalties, licences, and private R&D investment.

Cost of Doing Business, Maine and the U.S., 1989-1998



Data Source: Regional Financial Associates, Cost of Doing Business Index, 1989-2000.

9 COST OF DOING BUSINESS



Benchmark: The difference between the cost of doing business in Maine and the U.S., 9.4% in 1998, will decrease to 6% by at least 2005.

Cost of Doing Business High in Maine Relative to U.S. Maine's cost of doing business index for 1998, the last year the index was created, was 4% lower than New England's and 9.4% higher than the nation as a whole. This represents a serious deficit that Maine needs to overcome. This performance measure is an important indicator of the costs of operating a business in the state of Maine relative to other states and an important consideration of businesses looking to relocate, expand, or leave the state.

The index includes the unit cost of labor, energy costs, and tax burden in each state. Unit labor costs comprise 75% of the index, energy costs comprise 15% and the tax burden within a state is 10% 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.

According to the index, Maine's labor costs were .6% higher than New England and 4.2% higher than the nation. Maine's tax burden was 12% higher than New England and 10% higher than the nation; and Maine's energy costs were 10% lower than New England but 27% higher than the rest of the nation.

10 MANUFACTURING PRODUCTIVITY

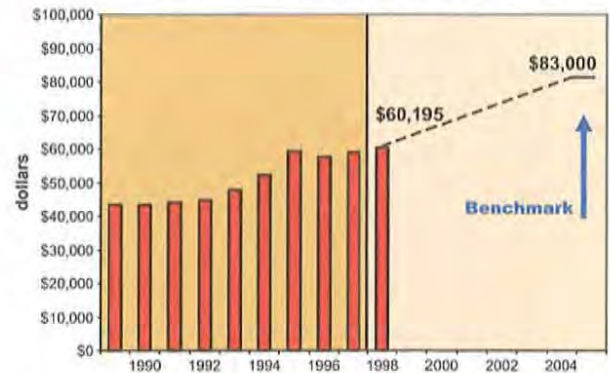
Benchmark: The value added per manufacturing worker in Maine, \$60,195 dollars in 1998, will increase to \$83,000 dollars per worker by at least 2005.

Productivity Steadily Increasing In 1998, about \$60,000 worth of product was produced on average by each manufacturing worker, an increase of 2.1% over the average value of product produced per manufacturing worker in 1997.

Productivity is calculated in this performance measure 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 as measured in this way does not strictly reflect worker productivity because capital improvements also increase value of product.

Due to a loss of the previous data source, the Growth Council has chosen new and comparable methodology to measure manufacturing productivity in Maine. This year, the data reflect the amount of value added per manufacturing worker as opposed to the product value per manufacturing worker. The difference in the numbers reported from last year's report is a result of this new data source.

Manufacturing Value Added per Maine Manufacturing Worker, 1989-1998



Data Source: Bureau of Economic Analysis, September 2000 and the Maine Department of Labor, Division of Labor Market information, November 2000.

11 ON-THE-JOB INJURIES

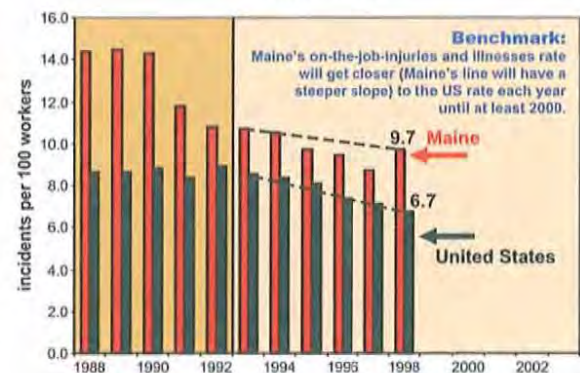
Benchmark: Maine's rate of on-the-job injuries per 100 full-time workers, 10.7 in 1993, will get closer to the US rate each year from now until at least 2000.

Maine Rate Deteriorates In 1998, there were 9.7 injuries and illnesses for every 100 full-time Maine workers, an 11.4% increase in the amount of incidents from 1997. In contrast, the national improvement rate was 5.6%, with the number of incidents nationally dropping from 7.1 in 1997 to 6.7 in 1998.

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).

Injuries and Illnesses, Maine & United States, 1988-1998



Data Source: Maine Department of Labor, Bureau of Labor Standards, Occupational Injuries & Illnesses in Maine, 1998.

12 HIGH SCHOOL DIPLOMAS

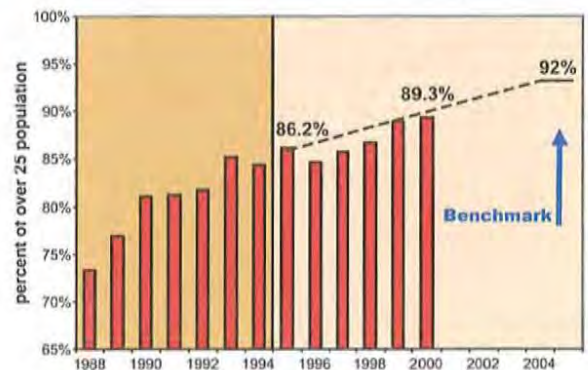
Benchmark: The percentage of Maine people 25 years and older who have attained a High School diploma or beyond will improve from 86.2% in 1995 to 92% by at least 2005.

Slow Improvement Registered In 2000, 89.3% of Maine people over the age of 25 had completed high school, either receiving a diploma or high school equivalency. Nationally in 2000, the percent of people over 25 years old with a high school diploma or equivalency was 84%, and the New England percentage was 86%. In the five other New England states only Vermont had a higher educational attainment level (90%) than Maine.

An educated workforce is fundamental to long-term economic growth, and a high school diploma is considered a basic credential for obtaining meaningful employment.

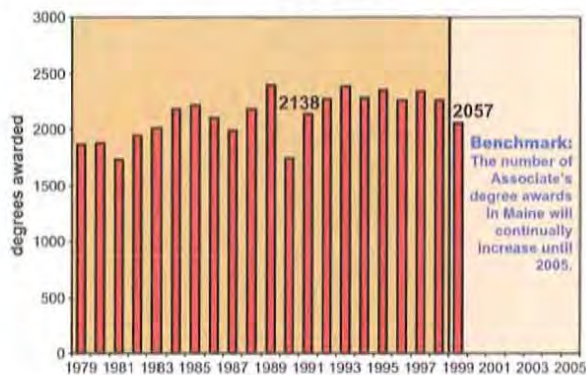
2000 data comes from the US Census Bureau's March Current Population Survey. The confidence level reported for these figures overall is 90%, with a confidence interval of +/-1.7.

Percent of Population over 25 with a High School Diploma, 1988-2000



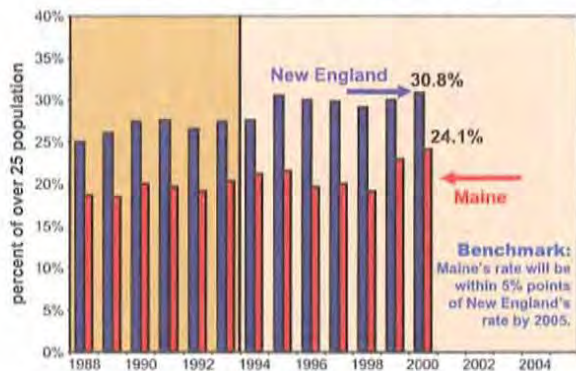
Data Source: US Census Current Population Survey, December 2000.

Associate's Degree Awards in Maine, 1979-1999



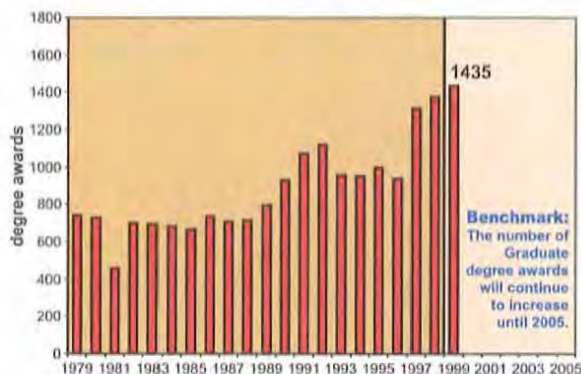
Data Source: Maine State Department of Education, IPED Survey, 1979-1999.

Percent of Population over 25 with at least a Bachelor's Degree, 1988-2000



Data Source: US Census Current Population Survey, September 2000.

Graduate Degree Awards in Maine, 1979-1999



Data Source: Maine State Department of Education, IPED Survey, 1979-1999.

13 ASSOCIATE'S DEGREE AWARDS



Benchmark: The number of Associate's degree awards, 2057 in 1999, will increase continually until 2005.

Number of Degrees Awarded Declining In 1999, the number of Associate's degrees awarded by Maine institutions was 2,057, a 9% drop from 1998, when 2,263 Associate's degrees were awarded.

In order to compete for skilled work, Maine workers require an educational attainment level beyond high school. The labor market must have a well-trained and educated workforce that is flexible, adaptable, and poised for the world of global competition and product and service innovations.

Previous *Measures of Growth* reports had used *educational attainment* levels as opposed to *degrees awarded*. Educational attainment refers to the education level of the current Maine population, as determined by the US Decennial Census. Degrees awarded does not tell the whole story because many Maine students go out of state after completing their degrees, but was chosen as a replacement measure because educational attainment level data are only available every ten years. The old measure representing educational attainment of Associate's degrees has been placed at the back of the report in the Reserved Measures section.

14 BACHELOR'S DEGREE ATTAINMENT



Benchmark: The percentage of Maine people 25 years and older who have attained at least a Bachelor's degree will improve from 21.5% in 1995 to within 5 percentage points of the New England percentage by at least 2005.

Maine Improves, but still is Behind New England and the Nation In 2000, 24.1% of Maine people over the age of 25 had at least a Bachelor's Degree, compared with a national rate of 26%. For the New England states as a whole, the 2000 rate was 30.8%, with Maine's attainment levels below that of all five other New England states.

The level of educational attainment of Maine citizens is critically important to quality of life and economic well-being. The long-term economic competitiveness of Maine is directly linked to the skill and education level of its workforce.

2000 data is provided by the US Census Bureau's March Current Population Survey. The level of confidence reported by the Bureau for these figures is 90% and the confidence interval for the survey in Maine is +/- 2.3.

15 GRADUATE DEGREE AWARDS



Benchmark: The number of Graduate degree awards in Maine will continue to increase until 2005.

Increased Number of Degrees Awarded In 1999, 1,435 Graduate degrees were awarded by Maine institutions, a 4.3% increase from 1998, and the third year in a row registering a dramatic increase.

Graduate degree attainment is important to many high-tech areas of the economy and is fundamental to business innovation. Reasons provided for the large increase between 1996 and 1997 (a 39% jump) may be connected to the strength of the economy and the fact that many employers are demanding higher education levels of their employees. Some employers are also assisting with Graduate school expenses, another factor promoting a greater number of Graduate degree awards.

Previous *Measures of Growth* reports had reported *educational attainment* levels as opposed to *degrees awarded*. Educational attainment refers to the education level of the current Maine population, as determined by the US Decennial Census. Degrees awarded does not tell the whole story because many Maine students go out of state after completing their degrees, but was chosen as a replacement measure because data for educational attainment levels are only available every ten years. The old measure representing educational attainment of Graduate degrees has been placed at the back of the report in the Reserved Measures section.

16 LIFELONG LEARNING



Benchmark: The percentage of Maine people who attended an educational seminar, program, or course in the past year will improve from 54% in 1995 to 70% by at least 2005.

Lifelong Learning Participation Shows No Improvement In 1999, just 51% of Maine citizens said that they participated in some form of educational seminar, program, or course.

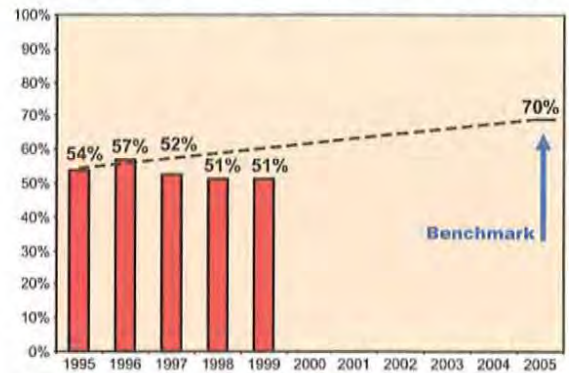
This year the Growth Council awards this measure a Red Flag because of the lack of improvement over the 5-year period measured. Lifelong learning and education is a critical component of growing a healthy economy; the workforce must continue to expand its skills and knowledge in order for Maine businesses to be competitive. 2000 survey data are not presented in this report because of the lack of confidence in their statistical integrity.

Maine citizens were asked: "In the past 12 months, have you personally attended an educational seminar, program, or course?" The data reflects the percentage of those who said "yes." This percentage includes people enrolled in for-credit courses, adult education courses (primarily high school level courses), continuing education courses (primarily post-secondary level), courses through their workplaces, and all other types of educational seminars and programs.

This is essentially a measure of lifelong learning, which is essential for workers who increasingly find themselves having to change jobs and even careers in order to keep pace. Even with the same employer, the job that a worker is expected to perform is increasingly changing and demands ever-new skills.

This year the Growth Council revised the benchmark for this performance measure. The previous benchmark had called for 70% of Maine citizens to be engaged in lifelong learning by 2000. The revised benchmark calls for that percentage to be engaged by at least 2005.

Percent of Citizens Attending Educational Seminars, Programs, Courses, 1995-1999



Data Source: Maine Development Foundation Annual Survey of Maine Citizens, 1995-1999.

17 CITIZEN OPINION OF EDUCATIONAL OPPORTUNITIES



Benchmark: The number of citizens who agree that there are adequate public and private programs available to Maine people who want to train for new jobs or acquire new skills will improve from 34%, the 1995 figure, to 75% by at least 2005.

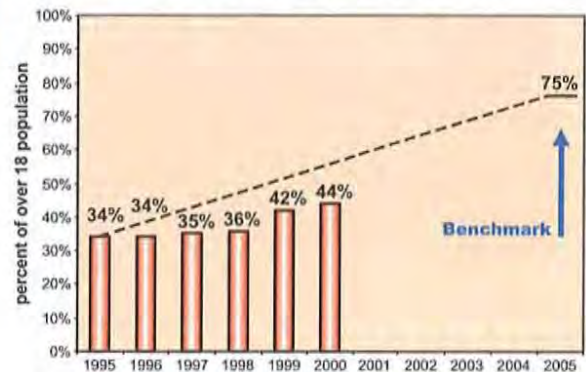
Training Availability Remains Consistent In 2000, 44% of Maine people agreed that there are adequate public and private programs available to Maine people who want to train for new jobs or acquire new skills, about the same as last year.

Maine people need adequate training and education to prepare them for the jobs that they desire. This performance measure reflects the perceived availability and adequacy of such programs.

Participants were asked "What is your level of agreement with the statement "There are adequate public and private programs available to Maine people who want to train for new jobs or acquire new skills?" The data is based on those who "agreed" or "strongly agreed".

This year the Growth Council revised the benchmark for this performance measure. The previous benchmark called for 50% of Maine citizens feel that adequate training opportunities were available to them by 2000. The revised benchmark calls for 75% to be met by 2005.

Percent of Citizens Saying Adequate Education & Training is Available, 1995-2000



Data Source: Maine Development Foundation Annual Survey of Maine Citizens, 1995-2000.

18 EMPLOYER-SPONSORED TRAINING



Benchmark: The percentage of front-line Maine employees who attended an educational seminar, program, or course through their place of work, 21% in 1995, will improve to 50% by at least 2005.

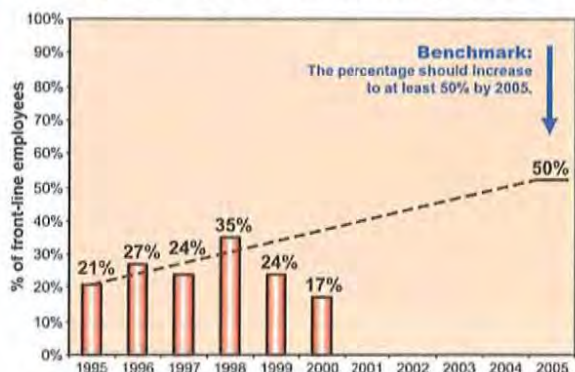
Participation Down Again This Year In 2000, only 17% of Maine workers earning less than \$35,000 reported that they participated in training that was paid for by their employers, a significantly smaller percentage than last year. Because employee training and education is critical to the growth of Maine economy, the Growth Council has given this indicator a Red Flag this year.

Maine workers must engage in lifelong learning to respond to the evolving needs of business. A related concern is that training should be provided to front-line workers (roughly defined as those earning less than \$35,000 per year), not just managers and other salaried employees.

Maine citizens who reported that they earn \$35,000 per year or less were asked, "In the past 12 months have you personally attended an educational seminar, program, or course through your place of work?" The data is based on those who responded "yes."

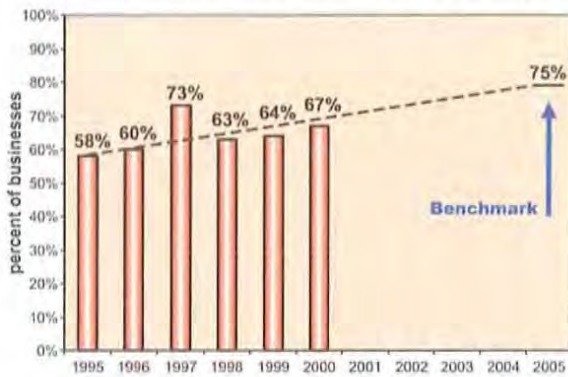
This year the Growth Council revised the benchmark for this performance measure. The previous benchmark had called for continuous improvement in the percentage of Maine citizens engaged in training through their place of employment. The revised benchmark calls for 50% of the population to be engaged in such training by at least 2005.

Percent of Front-Line Employees Who Attend Employer-Sponsored Training, 1995-2000



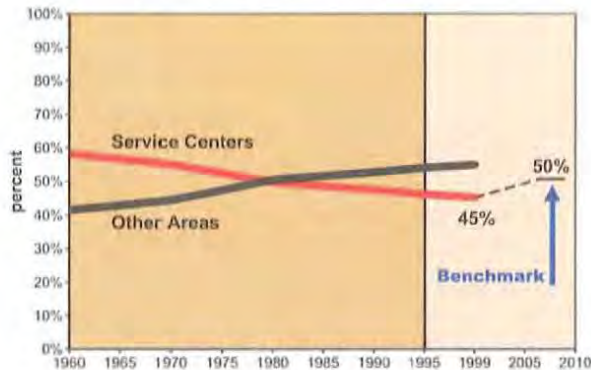
Data Source: Maine Development Foundation Annual Survey of Maine Citizens, 1995-2000.

Favorable Rating by Businesses of Universities and Colleges, 1995-2000



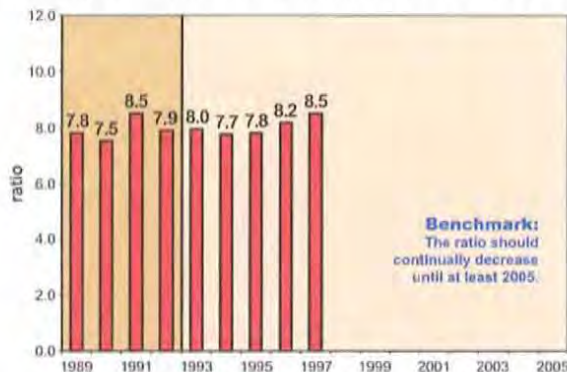
Data Source: Maine Development Foundation Annual Survey of Maine Businesses, 1995-2000.

Percent of Population in Regional Service Centers (Compared to Other Municipalities) 1960-1999



Data Source: Maine State Planning Office, December 2000.

Income of Wealthiest 20% of Maine Families as a Multiple of Income of Poorest 20%, 1989-1997



Data Source: Corporation for Enterprise Development (CED), Development Report Card for the States, 1991-2000; and Jon Haveman, Purdue University. Data is based on 3-year analyses of US Census Current Population Surveys with data points in the graph referring to the middle year.

19 BUSINESS OPINION OF UNIVERSITIES AND COLLEGES



Benchmark: The percentage of Maine for-profit businesses that think the state's universities and colleges are doing a good job at meeting the continuous education needs of their employees, 58% in 1995, will be at least 75% by 2005.

Business Opinion Not Substantially Improving In 2000, 67% of Maine businesses rated Maine's colleges and universities as good, very good, or excellent at meeting the continuous education needs of their employees. This rate appears to be up slightly from last year's response, which was 64% favorable, but the increase is not statistically significant.

There is a concern that many good quality jobs are being filled by people recruited from out-of-state colleges and universities, which is expensive for employers. Long-term economic growth will be facilitated by having responsive, effective colleges and universities in Maine.

Maine leaders of for-profit businesses were asked: "How would you rate Maine's universities and colleges for meeting the continuous education needs of your employees?" The data above reflects the percentage that responded "good", "very good", or "excellent".

This year the Growth Council revised the benchmark for this performance measure. The previous benchmark had called for continuous improvement in the percentage of favorable responses. The revised benchmark calls for 75% of Maine businesses to answer favorably by 2005.

20 POPULATION OF SERVICE CENTER COMMUNITIES



Benchmark: The percentage of Maine people who reside in service center municipalities will improve from 46% in 1995 to 50% by 2010.

Residential Choices Reflect Increasing Sprawl In 1999, just 45.1% of Maine people lived in "service center" communities, whereas 40 years ago, 60% lived in these communities. The continuing trend of people moving out of urban centers into the more rural parts of the state increases public costs. This is the same percentage that was reported in 1998.

Within the boundaries of 69 specifically identified service center municipalities are 71% of all Maine jobs, 74% of all services (hospitals, social services, education institutions, cultural activities, and government services), and 77% of the state's consumer retail sales. For the most part, these are the places in which Maine people work, shop, and visit for a wide variety of services. To the extent that people live closer to, or actually within these service centers, economic growth is enhanced because services are delivered more efficiently, people are not traveling as far to work and to shop, and environmental impacts of residential development are lessened in rural areas.

The Maine State Planning Office identified specific service centers according to the following criteria: level of retail sales, jobs to workers ratio, amount of federally assisted housing, and volume of service center jobs. By this criteria, the following are Maine's service center municipalities. Primary Centers: Auburn, Augusta, Bangor, Bar Harbor, Belfast, Blue Hill, Boothbay Harbor, Brunswick, Calais, Camden, Caribou, Damariscotta, Dover-Foxcroft, Ellsworth, Farmington, Fort Kent, Gardiner, Greenville, Houlton, Lewiston, Lincoln, Machias, Milbridge, Paris, Portland, Presque Isle, Rockland, Skowhegan, Waterville. Secondary Centers: Bath, Biddeford, Bingham, Dexter, Falmouth, Jackman, Lubec, Madawaska, Mars Hill, Newport, Norway, Orono, Pittsfield, Rangeley, Sanford, South Portland, Thomaston, Unity, Van Buren, Westbrook, Wiscasset. Small Centers: Ashland, Bethel, Brewer, Bridgton, Bucksport, Eastport, Freeport, Guilford, Hallowell, Island Falls, Kennebunk, Kingfield, Kittery, Millinocket, Milo, Princeton, Rumford, Saco, Winthrop.

21 FAMILY INCOME DISPARITY



Benchmark: The ratio of the average annual income of the wealthiest 20% of families to the average annual income of the poorest 20% of families, 8 in 1993, will decrease each year until at least 2005.

Disparity Continues to Increase In 1997, the most recent year for which we have data, the wealthiest fifth of Maine families earned, on average, 8.5 times as much income as the poorest fifth. This ratio has hovered around 8 since 1989 but increased by 4% from 1996 to 1997. The increasing disparity between wealthy and poor families indicates a decline in the middle class and has the potential to impact community stability.

Income disparity will only be reduced if incomes of the poorest rise faster than incomes of the wealthiest. This measure is not intended to suggest that Maine would benefit from fewer wealthy people.

In Maine, 29% of the general population make an income that is less than 200% of the federal poverty level, according to the Population Reference Bureau's analysis of Current Population Survey data. This suggests that a large number of Maine people are not earning a liveable wage (see measure 27 - Jobs that Pay a Liveable Wage).

Wealthy people help communities via philanthropy, taxes, business investment, and other means. However, growing income disparity threatens long term community stability and gives rise to such problems as gentrification and lack of affordable housing.

22 GENDER INCOME DISPARITY

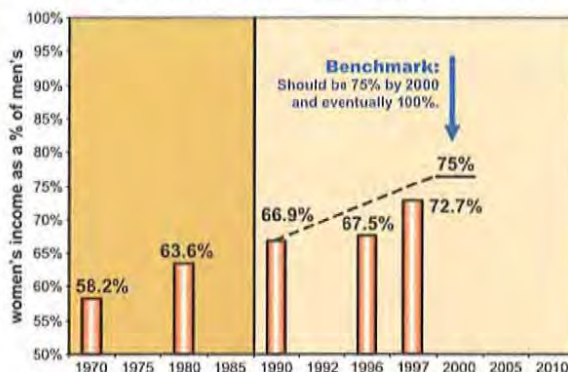
Benchmark: The median annual income of full-time, full-year working women will improve from 67% of the median annual income of full-time, full-year working men in 1990 to 75% by 2000, and eventually to 100%.

Women's Income Improving Relative to Men's In 1997, the median annual income of all women in Maine who worked full-time for the entire year was estimated to be \$22,177, compared to a median income of \$30,505 earned by men who worked full-time, full-year. This translates to an earnings ratio of 72.7%, placing Maine 21st among all states, a significant improvement from 1996 data when Maine ranked 41st. Nationally, the earnings ratio was 73.5%.

This is not a job for job comparison but does compare wages earned based on equal time worked (on average, women work fewer hours per week and fewer weeks per year resulting in an even greater disparity in the total amount of annual income earned by men and women).

Disparities in the amount of money that women make compared to men provide disincentives for women to contribute to the labor force and impair economic growth by not fully realizing the benefit of having productive, economic contributions from all people.

Women's Income as Percent of Men's for Full-Time, Full-Year Work, 1970-1997



Data Source: US Census, 1970, 1980, 1990. 1996 figures are estimates from the Institute for Women's Policy Research (IWPR). 1997 data are from IWPR's *Status of Women in the States* report, November 2000.

23 COUNTY INCOME DISPARITY

Benchmark: Average per capita income in Maine's poorest counties will improve from 66% in 1993 to 75% of per capita income of the wealthiest counties by at least 2005.

Gap Continues to Grow Between Wealthy and Poor Counties

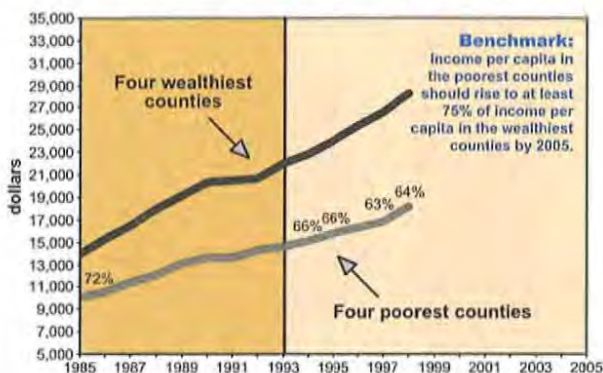
The income gap between Maine's wealthiest and poorest counties remains wide again this year. Geographic disparities in the income of Maine people are detrimental to the economy. To minimize the disparity, per capita income in the poorest counties should be raised.

In 1998, the per capita income in Maine's four poorest counties (Piscataquis, Somerset, Washington, and Aroostook) was \$18,103, about 64% of what it was in the four wealthiest counties (Cumberland, Lincoln, Knox, and Hancock) where income per capita was \$28,282. Statewide per capita income was \$24,603. For the last four years, the income disparity between Maine's counties has not significantly improved.

It is important to note that county-wide averages mask the fact that even though the percent of poor people who may be low in more populous counties, actual numbers of poor people are much greater than in smaller counties.

That there is regional disparity in income per capita does not imply that Maine people receive different pay for the same type of job depending on which county they live in. Recognizing that there is also disparity among counties with regard to cost of living, the benchmark has been established at 75% rather than 100%. Income per capita is calculated by adding up all income earned in a given year by a group of people (in this case all those residing in the four wealthiest and four poorest counties) and then dividing that number by the number of people in the group. Income disparity is related to quality jobs (see 27 - *Jobs that Pay a Liveable Wage*)

Income Per Capita of Maine Counties Poorest vs. Wealthiest, 1985-1998



Data Source: US Bureau of Economic Analysis and the Maine Department of Labor, Division of Labor Market Information, November, 2000.

24 COUNTY EMPLOYMENT DISPARITY

Benchmark: Maine counties that had higher-than-average unemployment rates in 1994, will have better-than-average employment growth from 1994 to 2000.

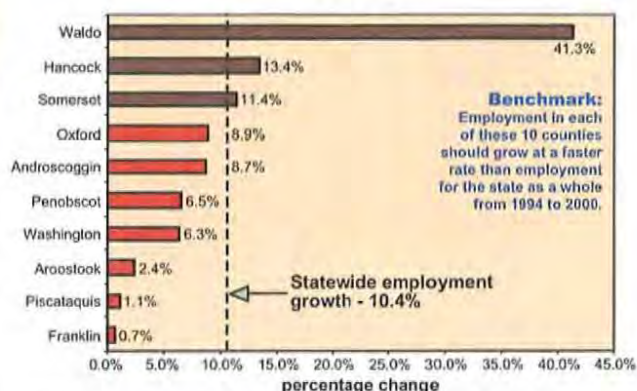
Number of Counties Succeeding Drops

Measures of Growth, 1996 began tracking the following counties that had 1994 unemployment rates higher than the state average: Washington, Aroostook, Somerset, Piscataquis, Oxford, Waldo, Franklin, Hancock, Penobscot, and Androscoggin. The benchmark calls for employment in these specific counties to increase at rates higher than statewide employment growth during the period 1994 to 2000.

Among these 10 counties, just 3 of them (Waldo, Hancock, and Somerset) experienced job growth from 1994 to 1999 at a better rate than the state average (which was 10.4%). This is decreased from last year when four counties experienced better than average job growth.

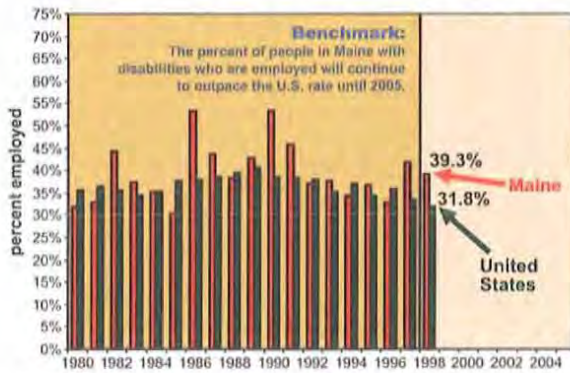
To reduce disparities among counties, we must increase employment in those counties where it's most difficult to get a job. This data represents the number of jobs covered by the Maine Employment Security Law.

Employment Growth in At-Risk Counties, 1994-1999



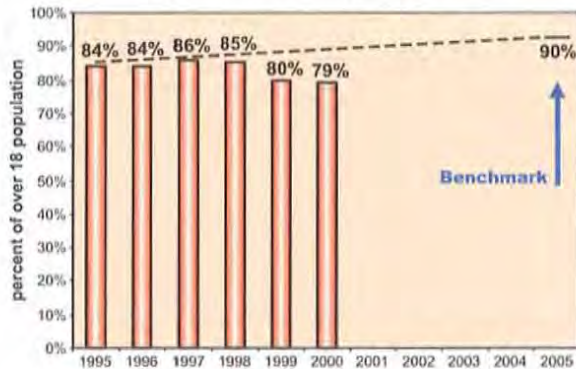
Data Source: Maine Department of Labor, Division of Labor Market Information, *Maine Employment Statistical Handbook*, 1999.

Employment Rate of Non-Institutionalized, Working Age People with Disabilities, Maine and the United States, 1980-1998



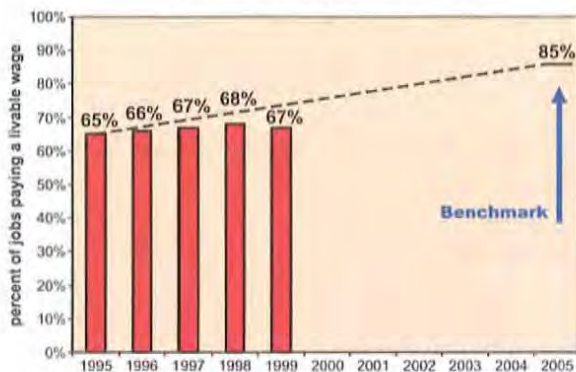
Data Source: US Census Bureau's March Current Population Survey, 1981-1999. Data Analysis provided by the Maine Development Foundation, based on a report by Cornell University's Rehabilitation Research and Training Center for Economic Research on Employment Policy for People with Disabilities, data, 2000.

Percent of Citizens who Perceive Workplace Equal Opportunity, 1995-2000



Data Source: Maine Development Foundation Annual Survey of Maine Citizens, 1995-2000.

Percent of Jobs that Pay a Liveable Wage, 1995-1999



Data Source: Maine Development Foundation analysis based on Maine Department of Labor, Division of Labor Market Information Services, ES-202, Covered Employment and Wages Program, November 2000.

25 EMPLOYMENT OF THE DISABLED

Benchmark: The percentage of Maine disabled people who are work-force-age and not institutionalized that are employed will continually outpace the U.S. rate until 2005.

Under Half of Maine's Disabled Population Employed In 1998, among non-institutionalized people with disabilities in Maine, 39.3% were employed, were as in the United States, only 31.8% were employed.

This is a performance measure because a strong economy requires the contributions that we ALL have to offer. If a class of people are under-represented in the labor force, the economy is missing out on valuable skills, abilities, and assets of some of our people.

This year this performance measure utilizes data collected by the US Census Bureau's Current Population Survey. Previously, this indicator used data provided by the Decennial Census, which was available only every ten years. Decennial Census data represented the percent of disabled people employed who are considered part of the work force, where the work force is defined as those employed or actively looking for work in the last 4 weeks. The new indicator includes both the work force and those not currently looking for a job, primarily because disabled people who have not looked for a job in past 4 weeks might go back to work if given access to reasonable accommodations and/or services. Many disabled people have dropped out of the labor force because of the difficulties they face in gaining meaningful and rewarding employment, even though they may be capable.

26 DISCRIMINATION IN THE WORKPLACE

Benchmark: The percentage of Maine people who believe that their employers maintain an equal opportunity environment where traits such as gender, race, or ethnicity do not impact their ability to grow and succeed, will improve from 84% in 1995 to 90% by 2005, and eventually to 100%.

Discrimination Increases Slightly as per Citizen Perceptions In 2000, 79% of Maine citizens agreed or strongly agreed that: "traits such as a person's gender, race, and ethnicity have no impact on a person's ability to grow and succeed." This is not a significant decrease from the percent of people who agreed with the statement in 1999, given the sample size of the survey.

Fundamental to long-term economic growth are work environments that afford equal opportunity for employment and advancement.

This year the Growth Council revised the benchmark for this indicator. The previous benchmark called for 90% achievement by 2000. The revised benchmark calls for attainment of that percentage by at least 2005.

27 JOBS THAT PAY A LIVEABLE WAGE

Benchmark: The percentage of jobs that pay a liveable wage will improve from 65% in 1995 to 85% by 2005.

Number of Liveable Wage Jobs gets Red Flag In 1999, about 67% of all jobs in Maine paid what the Growth Council considers to be an annual liveable wage for that year: \$20,107.65 for a family of two. This is a slight decrease from the 1998 figure of 68%.

Because Maine has made little progress in increasing the number of people that make a liveable wage, the Growth Council has decided to award this measure a Red Flag.

If people are not earning a high enough wage to support themselves and their non-income earning dependents (such as children, spouses, or elders), they are forced either to live without some basic necessities or they must depend on some type of public assistance. Each has a negative impact on individual health and moral, and on the economy. Jobs that pay below a liveable wage, on balance, are not likely contributing to economic growth and ultimately result in higher taxes for Maine businesses and citizens.

This performance measure considers a liveable wage to be 85% above the poverty line (established by the U.S. Department of Labor) wage for a family of two. In this way, it is directly related to the number of Maine people living in poverty. The family size of two was chosen because roughly half of all Maine people are employed (each job in Maine supports roughly two people).

The number of liveable wage jobs is calculated by looking at the average annual wages paid in each Maine industry (451 of them defined by 3-digit Standard Industrial Code) and simply adding up the number of jobs in those industries that pay above the liveable wage. This number is then divided into the total number of jobs to arrive at *percent of jobs that pay a liveable wage*.

28 MULTIPLE JOB HOLDING

Benchmark: The rate of Maine people holding multiple jobs, 5.8 in 1999, will decrease to at least the national rate by 2005.

Many People Hold Multiple Jobs In 1999, 8 people out of every 1,000 in Maine held multiple jobs, higher than the national rate of 5.8 per 1,000. The national multiple job holding rate has declined 2% on average since 1995, while Maine's rate has actually increased 5% on average since that time.

This is a new performance measure because of its importance to the social and economic health of the state. People who have to hold multiple jobs in order to make a living have less time for families, community involvement, and education. The high rate of people in Maine holding multiple jobs reflects negatively on the quality of jobs within the state. Low quality, low-paying jobs can not sustain a healthy economy.

According to the US Department of Labor, Bureau of Labor Statistics, multiple jobs holders are employed persons who, during the reference week, had either two or more jobs as a wage and salary worker, were self-employed and also held a wage and salary job, or worked as an unpaid family worker and also held a wage and salary job. A person employed only in private households (cleaner, gardener, babysitter, etc.) who worked for two or more employers during the week is not counted as a multiple jobholder, since working for several employers is considered an inherent characteristic of private household work. Also excluded are self-employed persons with multiple businesses and persons with multiple jobs as unpaid family workers.

NOTE: There is an error in the above graph and text. 8 percent of employed Maine people held multiple jobs in 1999, rather than 8 per 1,000 people as reported above. Similarly, the 1999 US rate was 5.8 percent. For a correct version of the graph and text, please view performance measure 28 at www.mdf.org/megc/growth01

29 VOTER TURNOUT

Benchmark: The Maine voter turnout rate in the presidential election will improve from 64% in 1996 to 75% in 2004.

Maine Rates Consistently High In the 2000 election, an estimated 68% of Maine people over age 18 actually voted for the office of President of the United States. Maine's rate was 18 percentage points above the national rate of 51%. The Washington DC based Committee for the Study of the American Electorate estimates that in 2000, Maine had the second best voter turnout in the nation.

Voter turn-out is a fairly good indicator of participation in democracy and has been very slowly, but steadily, rising for the past few decades. The percentage provided for the 2000 elections is a preliminary estimate that will be finalized in early 2001. If the percentage changes, future reports will reflect this change.

The benchmark has been reset in this *Measures of Growth* report to obtain the 75% voter turnout for the next Presidential election, which will be held in 2004.

30 CITIZEN PARTICIPATION IN COMMUNITY ACTIVITIES

Benchmark: The percentage of Maine people who devoted time outside regular family and work activities to community organizations in the past year will improve from 56% in 1995 to 70% by at least 2005.

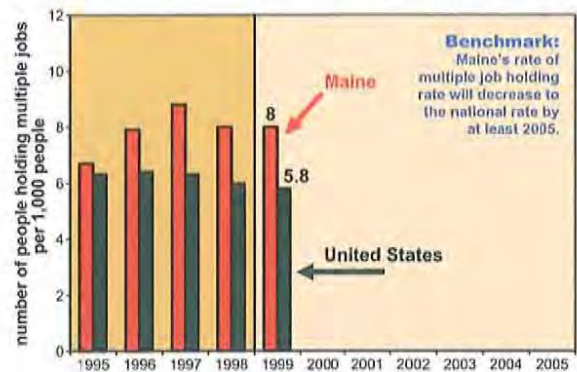
Over Half of Citizens Consistently Involved in Community Organizations In 2000, 60% of Maine citizens devoted time to community organizations. This is not a significant increase from the 1999 rate of 59% given the size of the survey sample.

Participation in community projects is an excellent indicator of community vitality and it bodes well for long-term, economic growth.

Citizens were asked if, in the previous 12 months, they had devoted time out of their regular family and work schedule to: helping out in the public schools with academic or other related school activities (24% said yes); community organizations which help young people such as Little League, Big Brothers and Sisters, and Scouting (23% said yes); organizations which assist the needy or under-privileged (31% said yes); organizations which assist the elderly, homebound, and people in poor health such as Meals on Wheels and home health/hospital volunteers (24% said yes); and/or activities sponsored by an environmental organization (14% said yes). The graph reflects the percentage of people each year who reported devoting time to at least one of these types of organizations or activities.

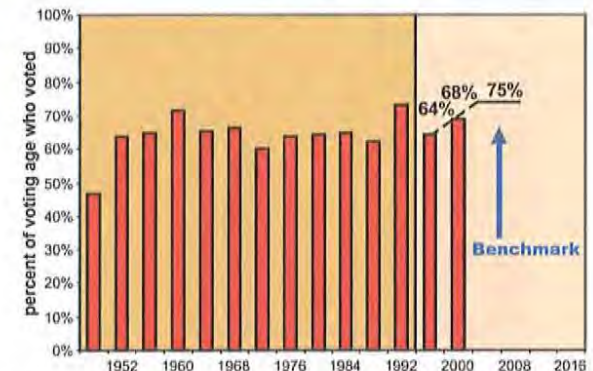
This year the Growth Council revised the benchmark for this indicator. The previous benchmark called for 70% of citizens in Maine to be involved in their community by 2000. The revised benchmark seeks that percentage to be involved by at least 2005.

Multiple Job Holding Rate in Maine and the United States, 1995-1999



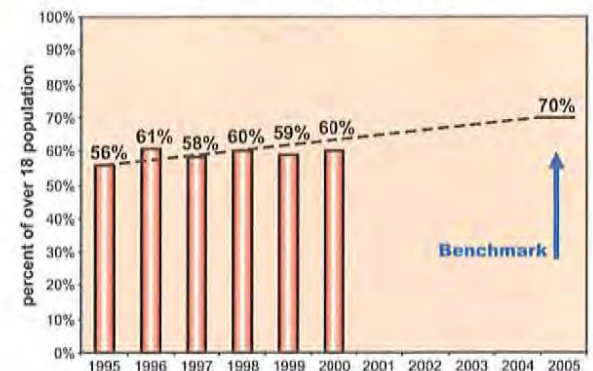
Data Source: Maine Department of Labor, Bureau of Labor Information Services, November 2000.

Voter Turnout in Presidential Elections, 1948-2000



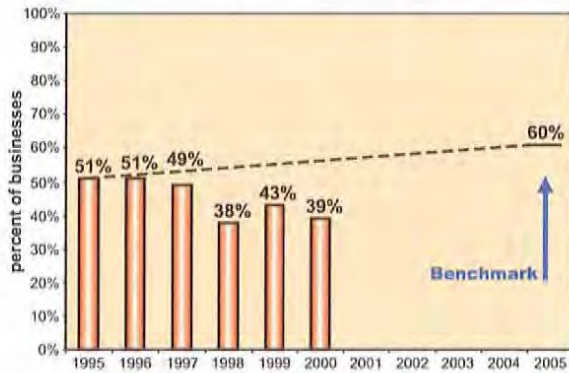
Data Source: Maine Office of Secretary of State, December 2000 estimate.

Citizen Participation in Community Activities, 1995-2000



Data Source: Maine Development Foundation Annual Survey of Maine Citizens, 1995-2000.

Business Interest and Involvement in Schools & Civic Events, 1995-2000



Data Source: Maine Development Foundation Annual Survey of Maine Businesses, 1995-2000.

31 BUSINESS INVOLVEMENT IN COMMUNITIES AND SCHOOLS



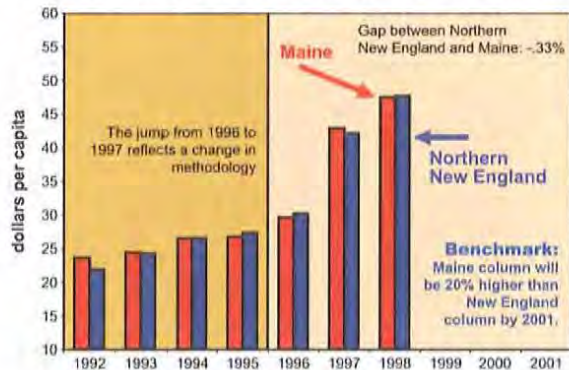
Benchmark: The percentage of Maine for-profit businesses that took an interest and got involved in school and civic events in the past year will improve from 51% in 1995 to 60% by at least 2005.

Business Involvement Not Consistent In 2000, 39% of Maine businesses took an interest and got involved in local school and civic events. This is a statistically significant decrease from the 43% percent of businesses who reported civic involvement in 1999.

Partnerships between businesses and schools or other community groups often result in benefits for the community and the business. It is a sound avenue towards long-term economic growth. Maine for-profit businesses were asked the extent to which they do well at "taking an interest and getting involved in local school and civic events." The data for this performance measure represents those businesses that responded very well or well.

This year the Growth Council revised the benchmark for this indicator. The previous benchmark called for 60% of businesses in Maine to be involved in their community by 2000. The revised benchmark seeks achievement of that percentage by 2005.

Arts & Cultural Expenditures per Capita, Maine & Northern New England, 1992-1998



Data Source: Urban Institute, National Center for Charitable Statistics, based on data from the Internal Revenue Service, October 2000.

32 ARTS AND CULTURAL EXPENDITURES



Benchmark: Maine Arts and Culture Expenditures per Capita will Improve Relative to Northern New England Expenditures per Capita from 2% Less in 1996 to 20% more by at least 2001.

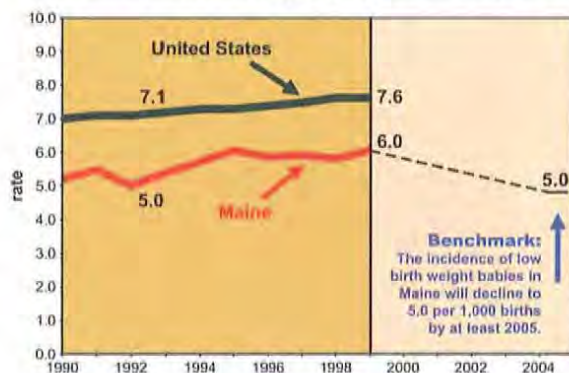
Maine Arts and Culture Expenditures Not Improving Relative to Northern New England

In 1998, Maine arts and culture organizations (performing arts organizations, museums, historical societies, festivals, and others) spent over \$59 million; \$47.59 per resident. Across Northern New England (Maine, New Hampshire and Vermont), similar organizations spent \$47.74 per resident. Last year Maine outspent Northern New England by 1.7%.

Per capita expenditures by arts and culture organizations is a general indicator of all arts and cultural activity and is comparable across jurisdictions. Beyond its direct economic contribution via spending and wages, arts and cultural activity is important to long term economic growth because it influences business location decisions, attracts tourists, and generally improves community vitality.

This data reflect the spending of nonprofit organizations with annual gross receipts over \$25,000 who are required to file form 990 with the Internal Revenue Service. From 1996 to 1997 there was a change in reporting methodology which accounts for the jump in spending reflected in the graph.

Maine and U.S. Incidence of Low Birth Weight Infants, 1990-1999



Data Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics. *Maine Vital Statistic Files, 1980-1999*. 1998 and 1999 data are approximations. Maine Pregnancy Risk Assessment System (PRAMS)

33 LOW-BIRTH WEIGHT INFANTS



Benchmark: The incidence of low-birth weight infants in Maine, 6.0 per 1,000 births in 1999, will decline to 5.0 per 1,000 births by at least 2005.

Maine Doing Better Than U.S. In 1999, the incidence of low-birth-weight births per 1,000 births was 6.0. In 1999, the national incidence of low-birth weight births was 7.6. Low birth weight is defined as less than 2,500 grams, or 5 lb. 8 oz.

The percentage of babies born with low birth weight is a good indicator of adverse social conditions such as poverty and an unhealthy environment. The health and habits of the mother also affects the incidence of low-birth-weight-babies. Women who smoke during their pregnancy are more likely to have low-birth weight babies. The percent of women in Maine who smoke during the final trimester of their pregnancy, 18.3% in 1999, has declined from 24.3% in 1990. Despite this progress Maine still remains significantly higher than the national percentage, which was 12.9% in 1999.

Incidence of low-birth weight also reflects the extent to which pregnant women have access to prenatal care, specifically during their first trimester of pregnancy which is critical to the development of the infant. Women who receive prenatal care for their child have a higher chance of having a healthy pregnancy than those who cannot afford or access such care. Prenatal care facilitates early detection of problems, can facilitate behavioral changes in the mother that benefit her unborn child, and provides a baseline of health by which to monitor both the child and the mother's health. In 1999 88.7% of women in Maine received prenatal care during the first trimester of their pregnancy, as compared to 83.2% of women nationwide.

34 CIGARETTE SMOKING



Benchmark: The number of Maine people aged 18-34 who smoke cigarettes will decline from 31.6% in 1995 to less than 25% by at least 2000.

Increase Continues In 1999, an estimated 31.5% of Maine people aged 18-34 smoked cigarettes, the third year in a row that this measure has registered an increase.

Recently there has been a lot of press about the significant decrease in the number of Maine high school students who smoke. The increase in the percent of smokers in the 18-34 age group illustrates that Maine still has work to do in reducing the number of smokers in the state. For this reason, the Growth Council has given this performance measure a Red Flag.

This is a performance measure because cigarette smoking is the leading cause of preventable death in Maine. Smoking is known to cause heart disease, emphysema, and several types of cancer. Smoking among 18-34 year-olds is particularly relevant because people of this age are most likely to be passing detrimental effects of smoking onto children. This age group will also be part of the labor force for years to come, and it has been shown that workers who smoke are more costly to employers than non-smoking employees.

Cigarette Smoking Among 18-34 Year Olds, 1992-1999



Data Source: Maine Department of Human Services, Bureau of Health, based on behavioral risk surveys, September 2000.

35 OVERWEIGHT ADULTS



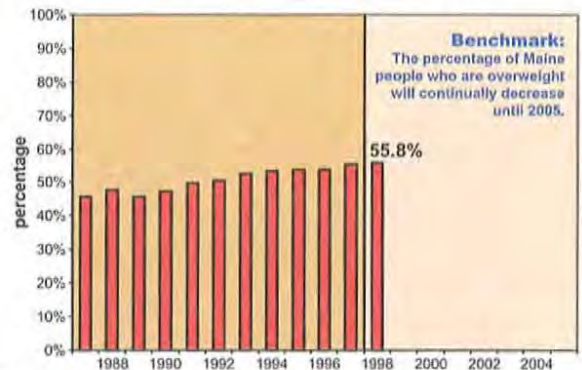
Benchmark: The percentage of Maine adults who are overweight, 55.8% in 1998, will continually decrease to 2005.

Proportion of Overweight Adults Steadily Increasing In 1998 over 55.8% of Maine adults were considered to be an unhealthy weight, defined as 30 lbs overweight.

The Growth Council chose to include this measure this year as an indicator of how well Maine people are doing in taking steps to minimize chances of contracting preventable diseases.

Overweight, which can be prevented by increased physical activity and nutrition, increases a person's chances of multiple diseases, including high blood pressure, sleep disorders, stroke, and some cancers. Maine has also had an increased prevalence in diabetes, largely attributed to an increasingly overweight population. The steady increase in overweight in Maine is consistent with national trends and has the potential to create alarming increases in largely preventable diseases.

Percent of Maine Adults who are Overweight, 1987-1998



Data Source: Maine Department of Human Services, Bureau of Health, Offices of Health Data and Program Management, Behavior Risk Factor Surveillance System, 1987-1998.

36 CRIME



Benchmark: Maine's crime rate, 32.7 incidents per 1000 people per year in 1994, will improve each year while outpacing the U.S. rate until at least 2005.

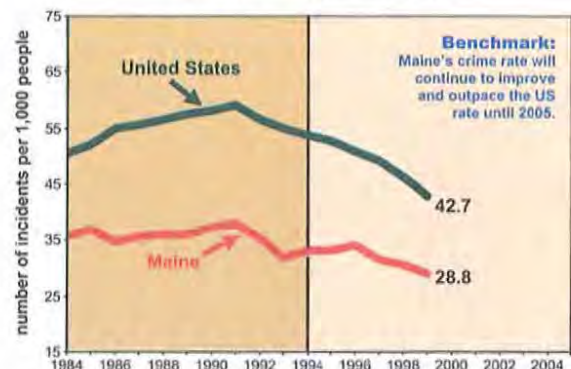
Crime Rate Continues Downward In 1999, there were 28.8 incidents of crime in Maine per 1,000 people, a 5.8% improvement over the 1998 rate. The national rate in 1999 was 42.7 incidents per 1,000 people, an 8.3% decrease in the number of incidents from 1998.

Experts point out that young males are declining as a percent of our overall population nationally and this changing demographic contributes to the lowering of the crime rate. In Maine, an aging population also contributes to the state's declining crime rate.

Crime is an important performance measure because it adds to the cost of conducting business and to the tax burden for prosecution and incarceration of criminals. In addition, lower crime rates mean Maine offers individuals and businesses a safe environment in which to live, raise children, and do business.

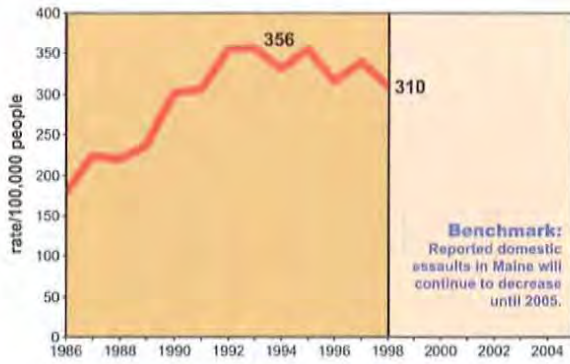
This year the Growth Council revised the previous benchmark. The new benchmark calls for Maine rates to improve each year and to remain beneath the national crime rate until 2005.

Crime Rate, 1984-1999



Data Source: Federal Bureau of Investigation, *Crime in the United States*, 2000.

Reported Domestic Assaults in Maine, 1986-1998



Data Source: Maine Department of Public Safety, Uniform Crime Reports, 1986-1998.

37 REPORTED DOMESTIC ASSAULTS

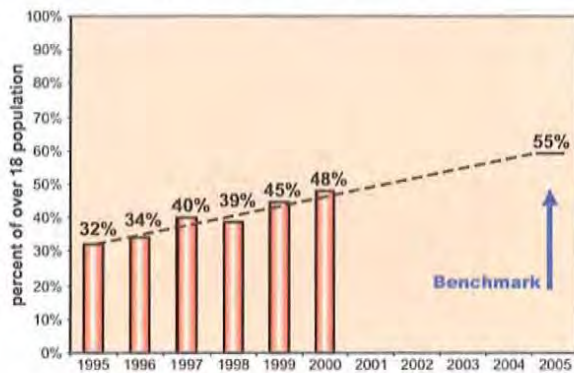
Benchmark: The number of domestic assaults reported in Maine, 310 in 1998, will decline through at least 2005.

Reported Domestic Assaults Tentatively Declining Since 1993, the number of reported domestic assaults in Maine has been generally declining. In 1998, the latest year for which we have data, 310 cases of domestic assaults were reported in Maine, an 8.7% drop from 1997 when 340 cases were reported to the police.

Reported Domestic Assaults is defined by assaults reported to the police that were perpetrated by family or household members who are, or were, married or living together in a romantic relationship, natural parents of the same child or other adult family members related by blood or marriage. These are not unduplicated accounts, as they may include numerous assaults affecting the same individuals. While domestic assault is perpetrated against men, women are by far the primary targets.

It is important to note that the data in the graph reflect reported domestic assaults, not the number of actual domestic assaults or convicted domestic abusers. Decreases and increases in reported domestic abuse in Maine could be the result of either, or both, of two factors: (1) More women calling due to greater awareness or ability; or, (2) more actual abuse being reported.

Citizen Opinion of Value of State Services for Taxes Paid, 1995-2000



Data Source: Maine Development Foundation Annual Survey of Maine Citizens, 1995-2000.

38 CITIZEN SATISFACTION WITH STATE GOVERNMENT

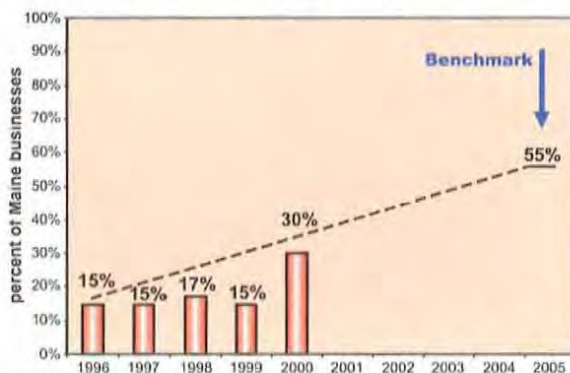
Benchmark: The percentage of Maine people who regard the value of state services as good or excellent for the taxes they pay, 32% in 1995, will improve to 55% by 2005.

Value of State Services Increases, According to Perceptions Maine citizens were asked "How would you rate the value of state services that you get for the taxes you pay to the state?" In 2000, 48% of those surveyed rated state services as good or excellent. This is an improvement over 1999 rate of 45% and continues a two-year trend of growth in citizen satisfaction with state government.

Value of services for amount of money paid (in this case taxes) is a good measure of efficiency. People's perception of the efficiency of state government is an important component of their satisfaction with government, and satisfaction with government is important to foster economic growth.

This year the Growth Council revised the benchmark for this indicator, making the new goal 55% citizen satisfaction by 2005. The previous benchmark had called for continuous improvement.

Business Opinion of Value of State Services for Taxes Paid, 1996-2000



Data Source: Maine Development Foundation Annual Survey of Maine Businesses, 1996-2000.

39 BUSINESS SATISFACTION WITH STATE GOVERNMENT

Benchmark: The percentage of Maine for-profit businesses who regard the value of state services that they receive for the taxes they pay to the state as good or excellent will improve from 15% in 1996 to 55% by at least 2005.

Businesses Opinion of State Government Increases Dramatically In 2000, 30% of businesses surveyed responded good or excellent to this question: "How would you rate the value of state services that you receive for the taxes you pay to the state?" This year's response is significantly better from last year's percentage of 15%.

This is a measure of perceived government efficiency because it asks about value in light of amount of taxes paid. The survey data illustrated that Maine companies, regardless of size or focus, were pleased by the services provided by the state government for their tax dollars. Businesses in the central region of Maine were especially appreciative, well over half (63%) of businesses in that region responded favorably.

This year the Growth Council revised the benchmark for this indicator from 25% to 55%.

40 FISCAL STABILITY

Benchmark: State tax revenues as a percentage personal income will not fluctuate more than .02 percentage points above or below the historical average (1.09%) between 1998 and 2005.

Fiscal Volatility Appears to be on the Increase In 1998, the most recent year for which we have data, Maine's state tax revenues declined disproportionately relative to changes in the state's personal income.

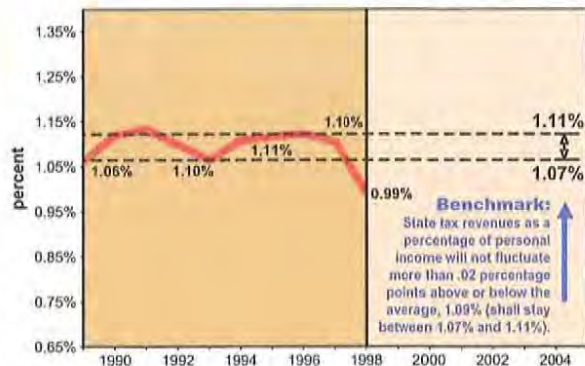
Fiscal stability is important to Maine's economic health because businesses are better able and more willing to make sound investments in a stable fiscal environment.

Comparing state taxes as a percentage of personal income over time provides a proxy for the stability of fiscal policy in the state of Maine. In a fiscally stable environment, we might expect state tax revenues to increase and decrease relative to changes in personal income. The graph depicts this relationship. A perfect correlation between taxes and personal income would be reflected in a line with zero change.

This methodology replaces a data source that is no longer published. The Corporation for Enterprise Development (CFED) formerly reported on *Fiscal Stability and Balanced Revenue*, but no longer runs the complex analysis necessary.

This indicator should be considered along side the other measures of Government Efficiency contained in this section, #41 - *Tax Burden* and #42 - *Tax Fairness*.

Maine State Tax Revenues as Percent of Personal Income in Maine, 1989-1997



Data Source: US Census Bureau, State Government Finances, 1989-1998. Maine State Planning Office and the Bureau of Economic Analysis, 2000.

41 LOCAL AND STATE TAX BURDEN

Benchmark: The gap between Maine and New England in state and local tax burden per \$1,000 of income generated will improve from \$8.70 in 1992 to less than \$7.00 by at least 2005.

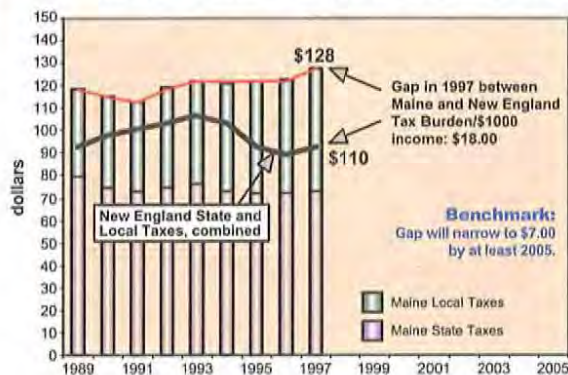
Gap Widens Even Further In 1997, Maine people earned about \$27 billion of income and paid a total of \$3.5 billion in state and local taxes. For every \$1,000 earned as income in Maine, about \$128 was paid in state and local taxes. The average tax burden per \$1,000 of income for New England for the same year was about \$110. The gap between Maine's tax burden and New England's tax burden has widened significantly to \$18. The Growth Council has chosen to give this measure a Red Flag this year.

People and businesses making decisions about where to locate look at the amount of taxes they will have to pay as part of that decision. Given that Maine competes with other New England states to attract people and businesses, we are concerned with our comparative tax burden.

There are several ways to measure tax burden. This measure was chosen because it considers ALL taxes paid to state and local governments, not just income taxes or any other specific type of taxes. Also, unlike per capita measures, this measure relates taxes to the state's relative wealth, not size of population. It is calculated by adding the total amount of income, sales, property, corporate income, and other taxes collected (does not include transfers from the federal government or other revenue sources such as liquor or lottery sales) and dividing that by the total amount of income earned by individuals (as a proxy for wealth of the state). The same calculation is made for Maine and for New England as a whole.

1997 is the most recent year for which we have data that are comparable with all other states. This performance measure must be looked at in conjunction with 40 - *Fiscal Stability* and 42 - *Tax Fairness*.

Individual Tax Burden/\$1,000 Income All Taxes Maine and New England, 1989-1997



Data Source: US Census, State and Local Government Finance Estimates, 1989-1997.

42 TAX FAIRNESS

Benchmark: Maine's national rank among the 50 states on tax fairness will remain at least 5th or better each year from 1996 to 2000.

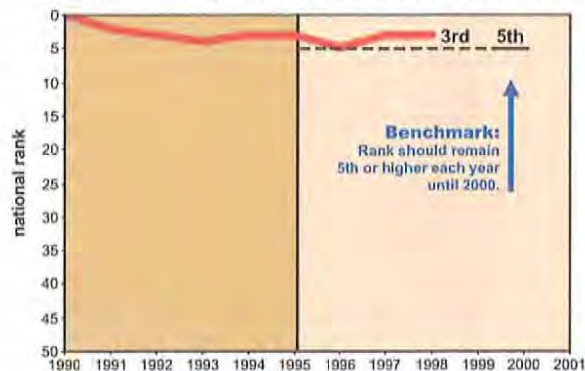
Maine Excellent Relative to Other States Maine had the 3rd most fair state tax system in the nation in 1998, according to this particular method of assessment. Maine's overall rank in tax fairness remains unchanged from the previous year.

This performance measure is a composite index based on sales and excise tax burden on poor families, progressivity of the income tax, the income level at which people begin paying income taxes, the property tax circuit breaker (which provides property tax relief in instances where an individual's property tax burden is unreasonable relative to earned income), extent to which corporate reporting is shared with other states, and accuracy of revenue reporting.

Maine's high ranking is due in large part to the fact Maine has a property tax circuit breaker program, combined reporting (shared with other states), and openly reports lost revenue due to tax incentive programs. Also, Maine's income tax threshold, the level of income at which a family of three begins to pay income taxes (\$12,300), is relatively high. Maine gets penalized primarily because of the regressivity of the sales tax (poorer people pay a higher percentage of their income in sales tax than do wealthier people).

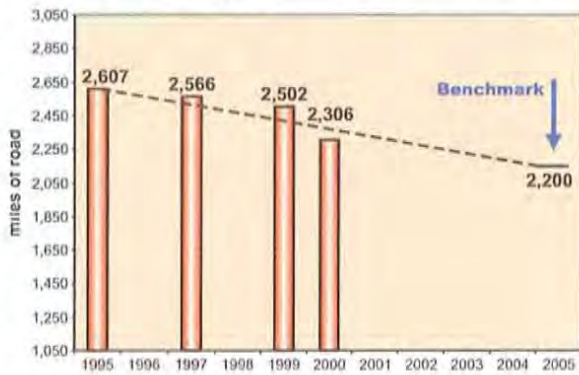
This performance measure must be looked at in conjunction with 40 - *Fiscal Stability* and 41 - *State and Local Tax Burden*. 1998 is the most recent year for which we have data because CFED has discontinued this index. An acceptable alternative measure was not found this year, but one is expected to be published in 2001 and be available for future reports.

National Rank on Tax Fairness, 1990-1998



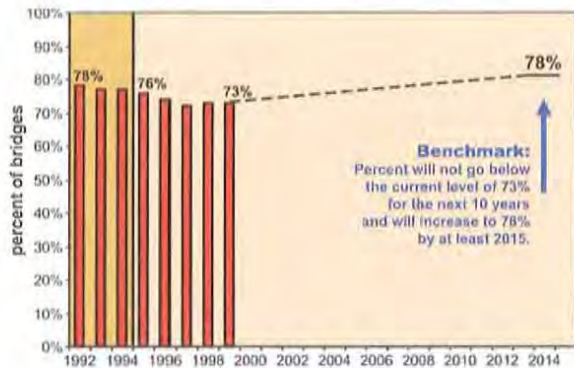
Data Source: Corporation for Enterprise Development, *Development Report Card for the States, 1998*. No new data available since the Growth Council's previous *Measures of Growth* report.

Backlogged Miles: Principle Arterials, Minor Arterials & Major Collector Roads, 1995-2000



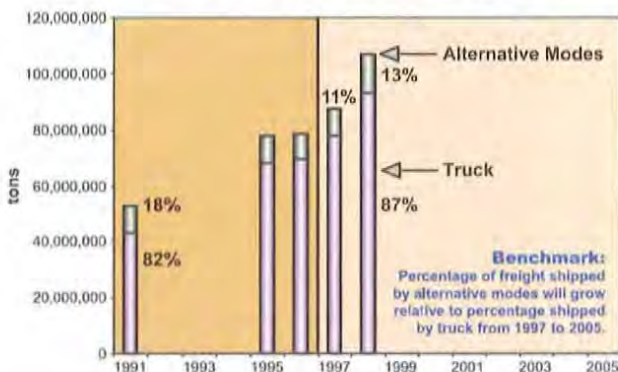
Data Source: Maine Department of Transportation; Bureau of Planning, Research and Community Service, September 2000.

Percent of Bridges Structurally Sufficient (improvements not needed for 10 years), 1992-1999



Data Source: Maine Department of Transportation; Bureau of Planning, Bridge Management Systems, September 2000. Bridge Design Division, Annual Report, Fiscal Year 1999.

Manufacturing Freight by Truck & Alternative Modes, 1991-1998



Data Source: Maine Department of Transportation, bureau of Planning, November 2000.

43 CONDITION OF ROADS



Benchmark: Number of miles of backlogged roads, 2,607 miles in 1995, will be improved to less than 2,200 miles by at least 2005.

Roads Improving - Evidenced by Decreasing Backlog Maine's principal arterials, minor arterials and major collector roads carry 90% of the state's motor vehicle traffic. These roads provide vital links to destinations and other modes of travel throughout Maine. In 2000, 2,306 miles of these types of roads were classified as backlogged; that is, in need of rebuilding up to standard.

Roads 'built' to modern standards (not backlogged) are safe, smooth highways with gradual curves and slopes, good sight distances, an adequate structural base, adequate shoulders and drainage to move water away from the highway. By contrast 'unbuilt' roads, represented in the graph, could have abrupt curves, sudden dips and rises, trees and bushes could be closing in around the edge of pavement causing poor sight distances, and little or no shoulders or ditching for drainage. These roads can be easily damaged by heavy loads and quite often have to be posted (signs put up restricting use by heavy trucks) in the spring due to the lack of a good structural base.

Adverse economic impacts of a poor highway infrastructure include: delays from inadequate traffic capacity and increased highway maintenance activities, decreased fuel economy, reduced air quality, and lost productivity.

44 CONDITION OF BRIDGES



Benchmark: The percent of Maine's public bridges that are structurally "sufficient", 76% in 1995, will not go below the current level of 73% for the next 10 years and will increase to 78% by at least 2015.

Bridges Remain at 73% Structurally Sufficient There are 3565 bridges in Maine that are the responsibility of tax payers. These bridges include all those with spans greater than 10 feet on state highways and public roads, including town ways. Using federal sufficiency rating procedures, it is estimated that 73% of these bridges are structurally and functionally sufficient such that they are not likely to need capital improvements for at least 10 years.

The percent of "sufficient" bridges, as defined in this performance measure, steadily decreased from 1992 to 1997. Bridges are absolutely critical to the highway system. If a bridge fails, the road that travels over it fails. At a minimum, bridges need to be able to safely carry legal truck loads. More accidents occur on bridges that are not structurally sufficient. Furthermore, bridges represent a very sizable infrastructure investment on behalf of the government. In 1999, MDOT invested over \$34 million in bridge replacement and major rehabilitation, as well as \$12 million in bridge maintenance and repair. Maintaining that investment and facilitating the flow of commerce has a large impact on the state and local economies, it is nearly impossible to imagine a functioning economy without them.

A sufficiency rating of greater than 60 indicates capital improvement is not likely for at least 10 years, except for the possibility of paint or wearing surface work. Tracking the percentage of bridges with a sufficiency rating of greater than 60 is a good proxy for overall condition of Maine's bridges.

45 MODES OF FREIGHT TRANSPORT



Benchmark: The percent of all manufacturing freight shipped in Maine that goes by rail, water, or air, 11% in 1997, will improve relative to the percent shipped by truck, from 1997 to 2005.

Alternative Modes Slightly on the Increase In 1998, approximately 87% of all manufacturing freight tonnage transported in Maine was done via truck, while 13% was shipped by rail, water, and air. This is an improvement from 1997, when 89% of shipping was done by truck and only 11% by other means.

Overall, the amount of manufacturing freight shipped in Maine increased 22% from 1997 to 1998, and 102% from 1991 to 1998. In total, an estimated 107 million tons of freight were shipped in Maine in 1998. Over that time period, trucking has remained the preferred method of transport.

Overall increases in the amount of freight shipped bodes well for the economy, although the increased reliance on trucking relative to other modes raises some economic concerns. For instance, an increase in heavy truck traffic on our highways and bridges has necessarily increased the rate of pavement consumption and bridge stress, particularly on older local and secondary highway systems. This translates to increased highway and bridge funding needs. It also has an impact on the increasing traffic congestion of our major highway corridors such as the Maine Turnpike, and impacts highway safety in terms of large vehicle interaction with automobiles.

Improving the balance among transport modes will result in increased modal choice. Maine has a number of underutilized transport modes, other than roads, in the form of railroads, airports, and seaports. Greater utilization of rail in particular, as well as air and seaports, would relieve the dependency on the traditional collector-road system and result in greater efficiencies and economies of scale.

46 TELECOMMUNICATIONS

Benchmark: The number of telecommunications carriers in Maine, 305 in 2000, will continue to increase until 2005.

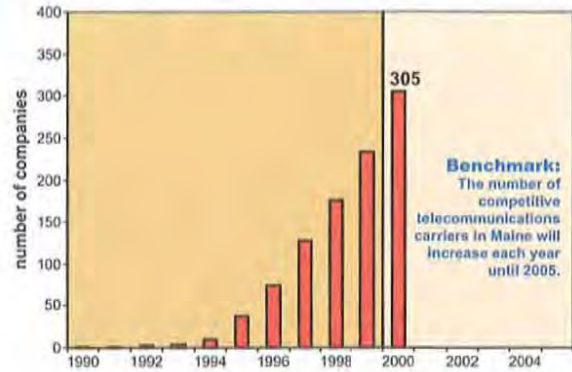
Number of Competitive Long Distance Carriers Steadily Rising

In 2000, Maine had 305 telecommunications carriers that are authorized by the Maine Public Utilities Commission (PUC) to provide in-state, long distance service to business and residential customers. As the chart shows, the number of carriers providing these services has grown steadily each year since 1994.

Additionally, there are now 31 companies in Maine that are authorized by the PUC to provide local exchange service. These companies compete directly with the 24 local exchange carriers that have traditionally existed in Maine, such as Verizon, Somerset Telephone Company and Saco River Telegraph and Telephone Company.

This new measure replaces the Council's former measure, Internet Use by Maine Businesses, which has been deemed less meaningful since Internet access is now widespread and used by the majority of Maine businesses. By monitoring business growth within the telecommunications industry - as measured by the number of providers of services - this new measure can be used as an indicator of the strength and breadth of the telecommunications infrastructure. It also provides an indication of the overall health of the economy since increased use of telecommunications services reduces the geographic barriers to economic development that Maine has traditionally experienced. Viable economic growth depends in part on our ability to transition to a more global marketplace, linked by an advanced telecommunications network of providers.

Competitive Telecommunications Carriers in Maine, 1990-2000



Data Source: Maine Public Utilities Commission, 1990-2000.

47 COST OF ELECTRICITY

Benchmark: The cost of electricity in Maine will decrease to less than 130% of the average US cost of electricity by at least 2000.

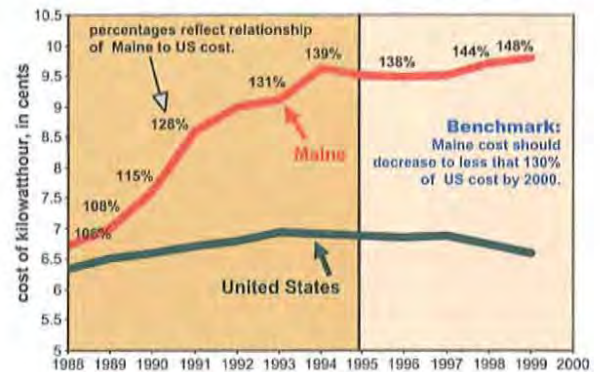
Maine Costs Increase Relative to National Average In 1999, electricity in Maine cost an average of 9.8 cents per kilowatt-hour. Across New England, electricity averaged 9.6 cents per kilowatt-hour and across the nation as a whole, it averaged 6.6 cents per kilowatt-hour. The graph shows that in 1998, Maine electric consumers paid almost one and a half times (148%) as the national average. This is perhaps an indicator that industry re-structuring is not yet resulting in cost-containment as hoped.

This performance measure reflects an aggregate of all revenue generated by electric utility companies from residential, commercial, industrial and other sectors divided by total number of kilowatt-hours produced.

The cost of electricity is a fundamental cost of doing business, so it is important that it be competitively low in order to attract and retain businesses.

Electricity costs are beginning to be reported disaggregated, with the production costs separated from the transfer and delivery costs. Preliminary estimates suggest that 54% of the total, bundled cost of electricity is attributed to production while 46% is attributed to transfer and delivery costs.

Cost of Electricity, Maine and US, 1988-1999



Data Source: US Department of Energy, Energy Information Administration, Annual Electric Utility Reports, 1988-1999.

48 INDUSTRIAL USE OF TOXIC CHEMICALS

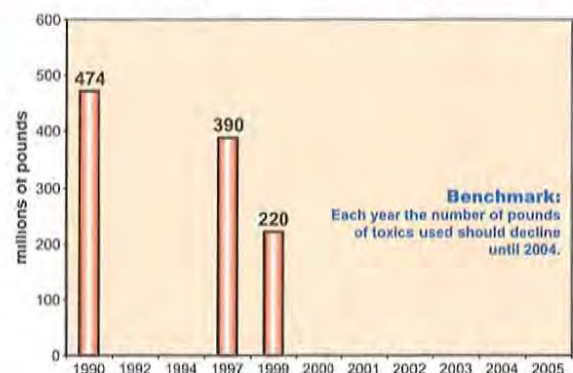
Benchmark: The number of pounds of toxics used by businesses, 474 million in 1990, will decrease each year until at least 2004.

Significant Reduction In 1999, Maine businesses used about 220 million pounds of toxic materials, mostly in manufacturing. This represents a 44% decrease from the amount of toxic materials used in 1997. The Council has awarded this measure a Gold Star this year for exemplary performance.

Toxic substances or toxics (also known as extremely hazardous substances) are defined by the federal government and include such things as chlorine, sulfuric acid, and ammonia. There are currently 227 companies or facilities in Maine that use such chemicals in amounts that require reporting, an increase from last year due to inclusion of 130 facilities previously not on the list. Toxics are typically found in paper mills, metal production facilities, energy producers and food processors, among others.

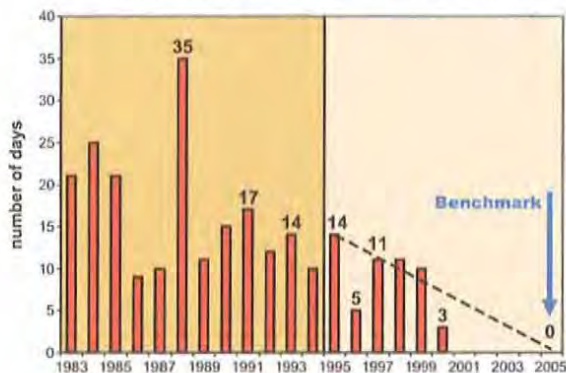
The data reflect total reduction in toxic use and are different than data reported for purposes of the Toxics Use and Toxic Release and Hazardous Waste Reduction Act which reflects only those companies required to report in 1990 and 1997.

Toxics Used in Manufacturing, 1990-1999



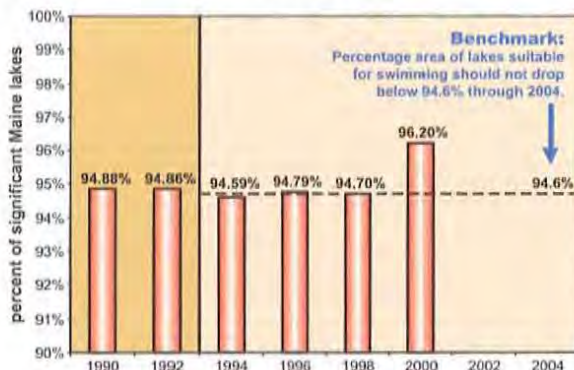
Data Source: Maine Department of Environmental Protection, Office of Innovation and Assistance, December 2000.

Annual Number of Days in Maine with Unhealthy Air Quality, US EPA 8-hour Average Ground-Level Ozone Standard, 1983-2000



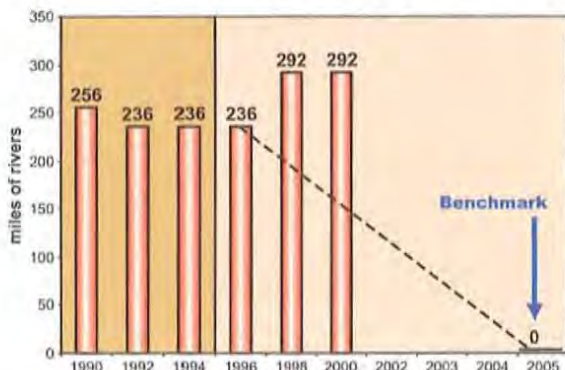
Data Source: US Environmental Protection Agency, Air Quality Division, October 2000.

Percent of Lakes Suitable for Swimming, 1990-2000



Data Source: Maine Department of Environmental Protection, State of Maine Water Quality Assessment, 2000.

Miles of River Unsuitable for Fish Consumption due to Dioxin, 1990-2000



Data Source: Maine Department of Environmental Protection, State of Maine Water Quality Assessment, 2000.

49 AIR QUALITY



Benchmark: The number of days that Maine experiences unhealthy air quality due to ground-level ozone will improve from 14 days in 1995 to a consistent standard of zero through 2005.

Maine's Air Quality Improving In 2000 there were three days that Maine's ground-level ozone was high enough to be deemed unhealthy. This is an improvement over the summer of 1999 that had 10 such days. Strong scientific evidence indicates that Maine's ozone (and other) pollution comes from other, upwind states; as well as being generated here in Maine.

Air quality is important to long-term economic growth for three reasons. First, high levels of ground-level ozone are unhealthy for Maine people, causing lost work days and other costs associated with ill health. Second, clean air is more valuable than dirty air because the dirtier the air is, the more we must reduce allowable additional pollution, and pollution reduction is costly. Third, Maine benefits economically from its reputation for being pristine. Gaining a reputation for poor air quality, whatever the cause, would work against economic growth.

This year the Growth Council has adopted a new standard with which to measure Maine's Air Quality. Previous *Measures of Growth* reports had measured the number of days with unhealthy air quality by the number of days posting .12 parts per million (ppm) of ground level ozone over a one hour period. The new EPA standard is more stringent. It measures days during which .08 ppm of ground level ozone, averaged over an 8-hour period, are reported. This new standard better reflects the health risks of accumulated exposure to low levels of ozone.

50 WATER QUALITY OF LAKES



Benchmark: The percentage area of significant Maine lakes that are fully suitable for swimming will be at least 94.6% from 1994 through 2004.

Quality of Lakes Improving Of Maine's 5,788 lakes, 2,314 are deemed significant. These lakes make up 97% of the state's total lake area and amount to 959,193 acres. Approximately one-third of these lakes are monitored by the Maine Department of Environmental Protection and the Maine Volunteer Lakes Monitoring Program in any 5-year span.

Of these 2,314 significant lakes, 38 were considered not fully suitable for swimming in 2000 (36,864 acres), a decrease of 15 lakes since 1998. Examination of data collected on these lakes during the 1990s indicates that these lakes no longer support regular algal blooms. Thus, the percentage of significant lake acres that fully support swimming has increased to 96.2% since the 1998 evaluation.

The primary determinant of a lake's suitability for swimming is the extent to which it has algal blooms. When a lake experiences a "bloom," it appears green and is quite unattractive and unsuitable for swimming. The most common cause of algal blooms is storm water run-off entering the lake directly, carrying non-point source pollution, particularly the nutrient phosphorus. Lake water quality is affected by land use development decisions.

Clean lakes provide recreational opportunities such as swimming, boating and fishing, and are directly linked to Maine's Tourism industry. It is estimated that economic activity related to lakes leads to over \$1.2 billion in annual income for Maine residents and supports 50,000 jobs. Near-shore property values and many small businesses are often dependent on the water quality of local lakes. Lakes also provide drinking water and habitat for diverse plant and animal communities. Maine is one of a handful of states endowed with an abundance of natural inland waters.

51 WATER QUALITY OF RIVERS



Benchmark: The number of miles of Maine rivers not suitable for fish consumption due to dioxin will improve from 236 miles in 1996 to 0 miles by at least 2005.

292 Miles Still Contain Unedible Fish Due to Dioxin Due wholly or in part to unsafe levels of dioxin, people are advised not to eat unlimited quantities of fish caught from the Penobscot below Lincoln, the Salmon Falls river below Berwick, the East Branch of the Sebasticook below Corinna, the West Branch of the Sebasticook below Hartland and main stem to Winslow, the Kennebec below Skowhegan, and the entire Maine length of the Androscoggin. These stretches of river total 292 linear miles. Other stretches of Maine rivers are unsuitable for fish consumption for other reasons.

The Growth Council has awarded this measure a Red Flag this year because it has failed to register any improvement. The health of Maine rivers is critical to the state's economy, ecosystems and communities and improvement of this measure is imperative for a healthy future.

Dioxin is a by-product of the bleaching process used in the making of kraft paper. The effects of dioxin include cancer, chloracne, and immunotoxic, reproductive, and developmental disorders.

In March of 1997, the Bureau of Health staff examined Maine rivers for presence of dioxins, furans, and dioxin-like coplanar PCB's more closely than ever before and expanded the scope of the advisories based on their findings. Thus, the increase of number of unsuitable miles from 1996 to 1997 does not necessarily mean that dioxin in rivers has increased.

This year the Growth Council revised the benchmark, extending the date by which zero miles of Maine's rivers would be deemed unsuitable for fish consumption due to dioxin to 2005.

52 WATER QUALITY OF MARINE AREAS



Benchmark: The number of acres of estuarine areas not suitable for shellfish harvesting, 257,908 acres in 1995, will decrease to below 100,000 by at least 2005.

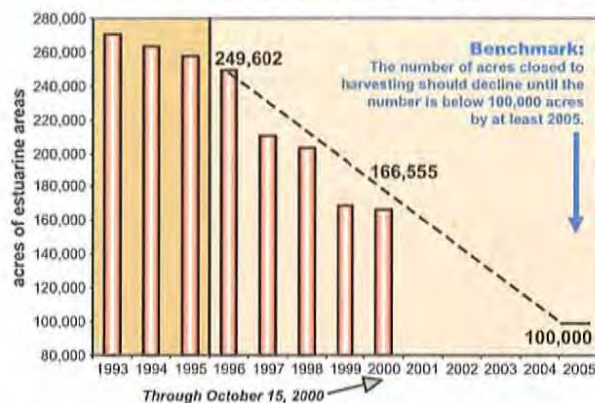
Continued Improvement In October 2000, the amount of area closed to shellfish harvesting along the Maine coast was 166,555 acres, representing 9.1% of all acreage of general flats and waters available for shellfish growing.

Area of shellfish beds open to harvesting is important not only because it has a direct effect on the shellfishing industry (over 18 million gross sales in 1998), but also because it is an indicator of overall marine and estuarine water quality which is important to commercial fishing activity and the ecological integrity of the marine environment. Shellfish beds are typically closed off to harvesting due to sewage discharge, non-point source pollution, and marine biotoxin.

Closure of shellfish beds can be a result of many factors. A major factor impacting Maine's shellfish beds is unplanned development and sprawl. The increased load of pollutant from non-point sources that accompanies development threatens many ecological zones, including marine areas.

This year the Growth Council revised the benchmark to reflect the trend of the recent data for this measure. The revised benchmark calls for a decline in the number of flats closed to below 100,000 acres by at least 2005.

Acres of Flats and Waters Closed to Shellfish Harvesting, 1993-2000



Data Source: Maine Department of Marine Resources, October 2000.

53 CONSERVATION LANDS



Benchmark: The amount of Maine conservation land intended for public use will improve by 10%, from 957,622 acres in 1993 to 1,280,000 acres by at least 2005.

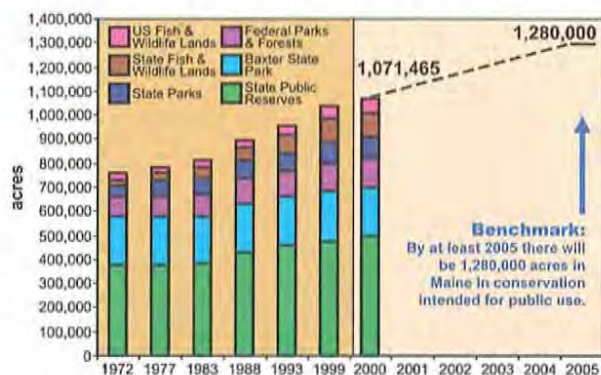
Benchmark Achieved In 2000, Maine had 1,071,465 acres of publicly-owned conservation land where use is encouraged, a 2.7% increase over last year. The Growth Council has awarded this measure a Gold Star this year because the previous benchmark of conserving 1,053,400 acres by 2000 was achieved.

Given that Maine has so few acres of land in public ownership compared to other states, vast areas of land conservation have always been a challenge. However, land in conservation where use is encouraged is very important to long-term economic growth because so many people visit and live in Maine because of the availability of these lands.

The amount of land reflected in the graph is an indicator of land conservation trends but does not accurately reflect the magnitude of all lands in the state which are actually in conservation (for instance, data excludes all land in conservation easements held in private trust, and municipal parks). Federal parks and forests include Acadia National Park, the White Mountain National Forest, and the Appalachian Trail Corridor.

Since the previous benchmark, set in 1998, has been achieved, the Growth Council set a new benchmark.

Land in Conservation for Public Use, 1972-2000



Data Sources: 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 2000 data.

54 SUSTAINABLE FOREST LANDS



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

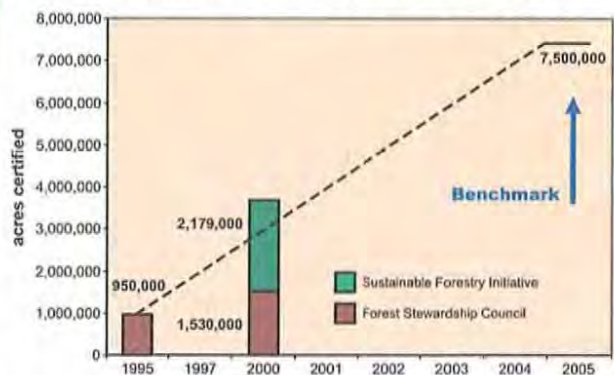
Acreage Certified Increasing, More Projected As of 2000, a total of 3,700,000 acres of Maine forest are certified as sustainable. Certification of sustainability requires successful passage of an audit conducted under specific certification programs designed to measure the sustainability of the practices employed on acreage being reviewed.

In 1995 only one certification program - the Forest Stewardship Council (FSC) - was operating in the Northeast. In 2000 the Sustainable Forestry Initiative (SFI)'s certification program was also underway.

These two certification programs differ somewhat in their process and goals. FSC's 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 has 10 principles and criteria for certification that apply to forests worldwide and emphasize performance-based audits.

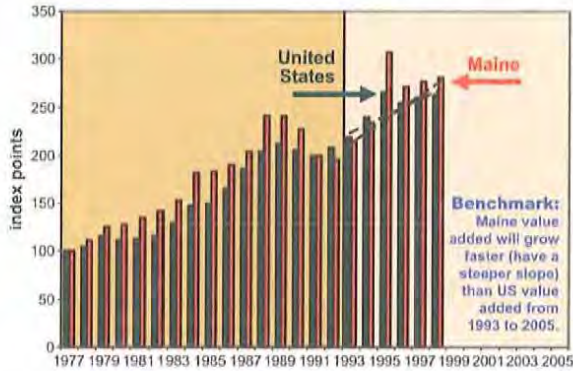
SFI's guidelines were developed by the American Forestry and Paper Association (AFPA) in 1994. SFI responds to a public demands to move towards more comprehensive sustainable practices in forestry. The main goal of SFI is to promote continuous improvement of forest management, and is more focused on the overall process of forest management than a specific product.

Acres of Maine Working Forest Certified, Forest Stewardship Council and Sustainable Forestry Initiative, 1995-2000



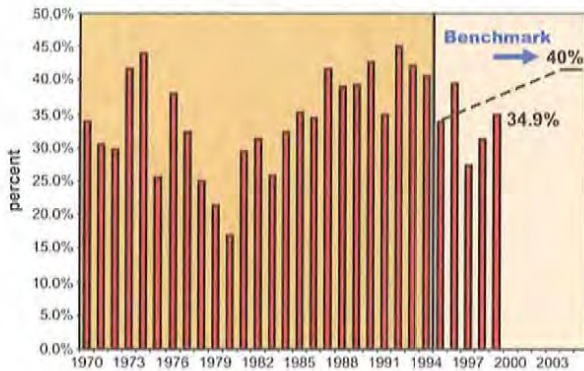
Data Source: Data from the Maine Forest Service and the Sustainable Forestry Initiative, as of October 2000.

Paper and Lumber Value Added (indexed from 1977) Maine and United States, 1977-1998



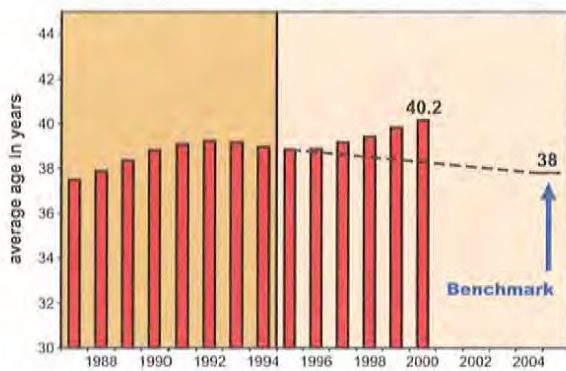
Data Source: US Bureau of Economic Analysis, September, 2000.

Agricultural Net Value Added as a Percentage of Total Output, 1970-1999



Data Source: US Department of Agriculture, Economic Research Service, July 2000.

Average Age of Commercial Fishers, 3-Year Moving Average, 1987-2000



Data Source: Maine Department of Marine Resources, October, 2000.

55 PAPER AND LUMBER VALUE ADDED



Benchmark: Maine's growth in value added in the forest products industries will be better than US growth rates, on average, from 1993 to 2005.

Maine Continues to Outpace the Nation Over the past five years, value added in Maine's paper and lumber industries grew 20.3%, compared with national growth in these industries of 10.1%. In 1998, paper and lumber value added totaled just over \$2 billion, about 6.5% of the Maine economy.

From 1998 to 1997, the most recent year for which we have data, the Maine growth rate of 1.65% outpaced US's growth rate of 1.13%.

Given that Maine forest products account for a sizeable portion of the US market, it's not surprising to see similarities in the two growth rates, although Maine's growth has been more volatile and more robust recently.

For the purposes of this performance measure, forest products include all establishments that manufacture paper, lumber, and other wood products.

For ease of comparison, the graph shows Maine and United States data indexed to 1977, whereby 1977 values were equalized to 100.

56 AGRICULTURE VALUE ADDED



Benchmark: Agriculture value added as a percent of gross sales will improve from 42% in 1995 to an average of 40% by at least 2005.

Agriculture Value Added Improves In 1999, gross sales of Maine agricultural products totaled \$568.2 million, and 35% of this (\$198.5 million) is characterized as net value added. In 1998, net value added amounted to 31% of total output.

Value added reflects agriculture's contribution to the Maine and national economy and is the sum of the income from production earned by all factors-of-production. It includes the sum of all net income to farmers and all wages paid to farm workers.

Even though gross sales from Maine agricultural products are not expected to substantially increase over the next few years, direct economic benefits to Maine from agricultural activity can be increased by adding value. Total output of the Maine agriculture industry has been steadily increasing over the past twenty years, while total amount of land in farms has been slowly decreasing.

57 COMMERCIAL FISHING



Benchmark: The average age of Maine's commercial fishers, examined over a three-year period, will decrease from 38.8 years in 1995 to 38 by at least 2005.

Average Age Continues to Increase For the three years of 1998, 1999 and 2000, the average age of Maine fishers was 40.2, a slight increase over the average age of the previous three years, which was 39.8.

This measure is a proxy for "perceived opportunities" in the fishing industry. If there is a belief among fishers that the industry holds promise, young people will enter its workforce and drive the average age down. Otherwise, or if there are regulations prohibiting entry into the workforce, the average age of fishers will rise. By either account, a rise in average age is not a good sign for the industry. This performance measure does not suggest that more people should enter the fishing industry, only that if the average age of people in the industry went down, that would be a good sign.

The average age is determined by looking at ages reported on all applications for Maine commercial fishing licenses. The 2000 average age is based on all applications issued through October 16, 2000 which totaled 18,006 licenses issued to 12,142 fishers. Each column in the graph reflects the average age over the previous three years.

58 TOURISM



Benchmark: Tourism spending in Maine, 5.2 billion dollars in 1999, will increase to 6.05 billion dollars by at least 2005.

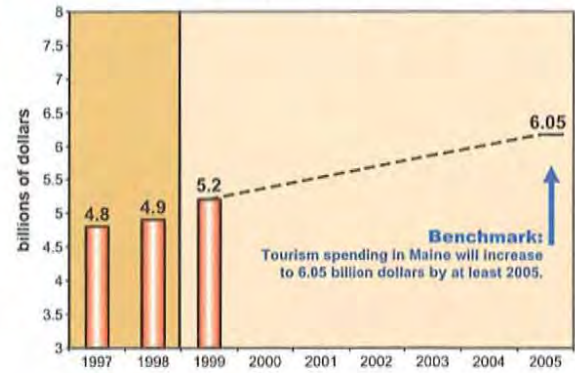
Spending on the Increase In 1999, tourists spent an estimated 5.2 billion dollars on food, lodging and leisure in the state of Maine, a 6% increase from 1998.

Increases in tourism spending are related to factors such as the health of the national economy and the weather. These increases are also directly connected to promotional activities undertaken by the state to entice people to visit Maine.

It is estimated that tourist activity generates over 100,000 jobs. In 1999, hotels and lodging alone employed over 12,000 people in Maine. Tourism activity is important to the health of the state economy because it positively affects so many other industries and because it is a net importer of revenue into our economy.

This way of reflecting tourist activity replaces the methodology used in previous editions of *Measures of Growth* which examined employment in hotels and lodging establishments.

Dollars Spent by Tourists on Food, Lodging and Leisure Activities in Maine, 1997-1999



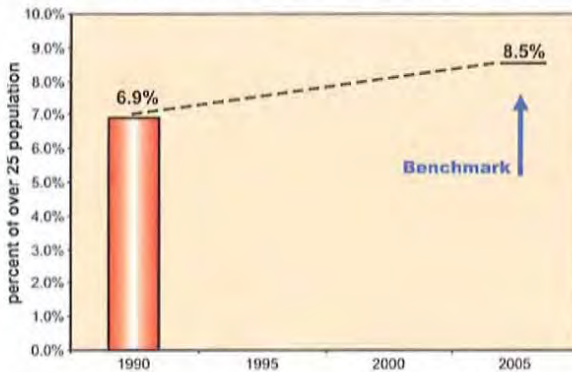
Data Source: Maine Department of Economic and Community Development, December 2000. Longwoods International, [TravelUSA Monitor](#).

RESERVED MEASURES

Several performance measures that have been traditionally included in previous editions of *Measures of Growth* now have unreasonably outdated data. However, the importance of

these measures warrants reserving them until a time when new data becomes available.

Percent of Population over 25 with an Associate's Degree, 1990



Data Source: US Census, 1990.

ASSOCIATE'S DEGREE ATTAINMENT

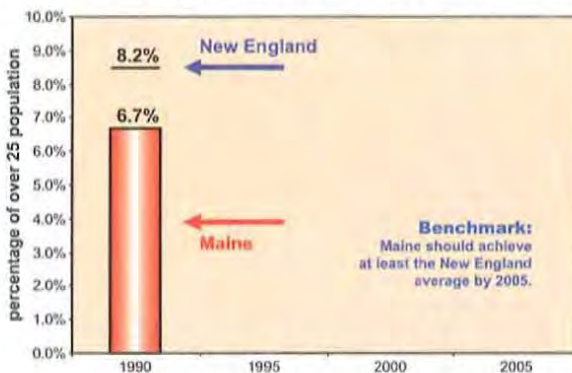
Benchmark: The percentage of Maine people 25 years and older who have attained an Associate's degree will improve from 6.9% in 1990 to 8.5% by at least 2005.

Maine Rates Relatively Good, But Need Improving In 1990 6.9% of Maine people over age 25 had an Associate's degree, compared with 7.04% of New England people and 6.2% of the nation as a whole. This data include both academic and occupational disciplines.

In order to compete for skilled work, Maine workers require an educational attainment level beyond high school. The labor market must have a well-trained and educated workforce that is flexible, adaptable, and poised for the world of global competition, and product and service innovations.

A new study by the Maine Department of Economic and Community Development is looking at the percent of the workforce that has achieved an Associate's degree. That study found that for 2000, 10% of Maine's workforce had Associate's degrees.

Percent of Population over 25 with a Graduate Degree, 1990



Data Source: US Census, 1990.

GRADUATE DEGREE ATTAINMENT

Benchmark: The percentage of Maine people 25 years and older who have attained a Graduate degree will improve from 6.7% in 1990 to the New England percentage by at least 2005.

Maine is Lagging Behind the Nation and New England In 1990, 6.7% of Maine people over the age of 25 had either a master's degree, professional degree or Ph.D. (known collectively as graduate degrees). This amounted to 53,306 people. Throughout New England, the rate was 8.2%. Nationally in 1990, 7.2% of the population over age 25 had graduate degrees.

Graduate degree attainment is important to many high-tech areas of the economy and is fundamental to business innovation.

A new study by the Maine Department of Economic and Community Development is looking at the percentage of the workforce that has achieved various levels of education. That study found that for 2000, 7% of Maine's workforce had Graduate degrees.

RACIAL INCOME DISPARITY

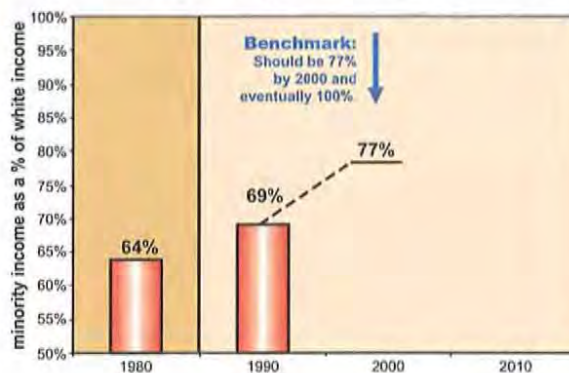
Benchmark: The income per capita of minorities will improve from 69% of per capita income of Whites in 1990 to 77% by 2000 and eventually to 100%.

Minority Incomes Lagging On average in 1990, the most recent data available, Minorities in Maine (including Blacks, American Indians, Eskimos, Aluets, Asians, Pacific Islanders, and Others) received about two-thirds (67%) the amount of income that White people received. We calculate this by looking at all income received by minority people in Maine age 15 and over and dividing that by the number of minority people, and comparing that to all income received by White people age 15 and over and dividing that by the number of Whites. By this calculation, 1990 per capita income of Whites was \$13,019 and per capita income of minorities was \$8,997. In Maine, racial income disparity is not as large as it is for the nation as a whole where minority people received, on average, about 61% of what White people received in 1990.

In Maine in 1990, 98.6% of the 15 and over population were White; four-tenths of one percent were Black; about half of one percent were American Indian, Eskimo, or Aluet; about half of one percent were Asian or Pacific Islander; and one-tenth of one percent were other races.

Disparities in amount of income received by various races of people is detrimental to long-term economic growth because it acts as a disincentive for all races of people to participate in the labor force to their full potential.

Minority Per Capita Income as a Percent of White Per Capita Income, 1980-1990



Data Source: US Census, 1980, 1990.

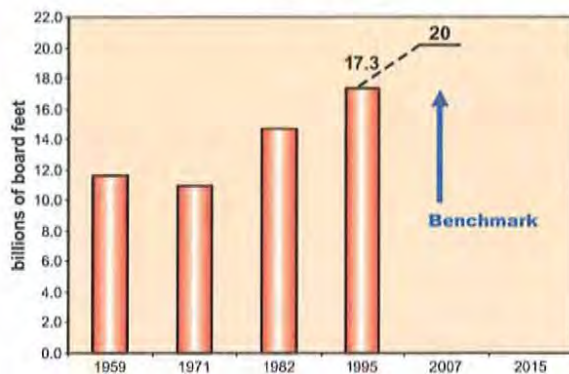
VOLUME OF LARGE SAWTIMBER TREES

Benchmark: The volume of large sawtimber trees in Maine will improve from 17.3 billion board feet in 1995 to at least 20 billion board feet by at least 2007.

Volume of Large Trees Increasing In 1995, there were 17.3 billion board feet (a measure of volume) of standing timber in Maine's forests of sawtimber quality over 15 inches in diameter. Although steadily increasing, the benchmark of increasing the volume to 20 billion board feet of standing large sawtimber trees is ambitious.

To maintain a large volume of this size of tree over time requires that we have a good balance among age classes in the forest. Having a good balance of age classes addresses many other issues of sustainability and biodiversity. Also, forests of mature trees are more appealing to people for recreation. Sawtimber trees represent a wider variety of sales options for the landowner. They can be used for sawtimber, veneer, pulp, and other products.

Volume of Large Sawtimber Trees, 1959-1995



Date Source: Maine Department of Conservation.

ABOUT THE DATA

The data in this report come from a wide variety of sources; primarily (1) federal agencies (see the Maine Development Foundation website for Internet links), (2) state agencies, and (3) our own surveys. The timeliness of the data varies considerably, but in each case we present the most recent data available.

Eleven of the performance measures rely entirely on data generated by the Maine Development Foundation Annual Surveys of Maine Businesses and Citizens. These surveys are

statewide and were conducted in September and October, 1995, 1996, 1997, 1998, 1999 and 2000 and the methodologies from year to year were very similar. In 2000, the citizen survey was done via telephone interviews with 601 randomly selected citizens and has a sampling error of +/- 4 percentage points with 95% confidence. The business survey was a written instrument sent to a stratified random sample of Maine businesses, completed by 568 of them, and has a sampling error of +/-7.7%. A detailed write-up of the methodology is available at the website.

ACKNOWLEDGMENTS

In 2000, the Maine Economic Growth Council was co-chaired by Senate Majority Leader Chellie Pingree and Bath Iron Works Vice President Kevin Gildart. The Council is administered by the Maine Development Foundation.

The Maine Development Foundation champions 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 over twenty years ago as a private, non-profit corporation with a broad mandate to promote Maine's economy. Today, the Foundation is financed primarily with private resources.

The Foundation's president Henry Bourgeois facilitated meetings of the Council. Craig Freshley, program director, and Darcy Rollins, research assistant, researched and authored this report. Market Decisions, Inc. performed the statewide surveys of citizens and businesses. Spectrum Printing and Graphics formatted and printed the report.

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.

ON THE WEB

This report is available on the World Wide Web in HTML for easy viewing, and in PDF for easy download and printing. There are useful links to up-to-date tables of data, related reports, and 6 years of survey data reflecting opinions of Maine citizens and businesses on over a hundred issues.

Visit the Maine Economic Growth Council via the homepage of the Maine Development Foundation at <http://www.mdf.org>.

Measures of Growth 2001
(to view all 58 performance measures or, download in PDF format)

Annual Survey Data

Maine Businesses	Maine Citizens
1995 1996 1997 1998 1999 2000	1995 1996 1997 1998 1999 2000

Vision for the Maine Economy

Our vision for Maine is a high quality of life for all citizens. Central to this vision is a sustainable economy that offers an opportunity for everyone to have rewarding employment and for business to prosper, now and in the future. The people of Maine bring this vision into reality by working together and building on our tradition of hard work, dedication, and Yankee ingenuity.

Adopt-A-Benchmark

The Maine Economic Growth Council has established a list of key issues (the performance measures) and has established a target for each one (the benchmarks), but the Council does not actually do the work required to achieve the benchmarks. That work is best left to specific organizations whose missions are aligned with specific issues. Actually achieving the benchmarks is a shared responsibility among government, businesses, non-profits, and educational institutions.

The Growth Council encourages organizations to adopt the benchmarks it has established. When an organization adopts a benchmark, it is making a public statement of intent to work on achieving a particular benchmark. Organizations that have adopted benchmarks have publicly accepted some responsibility for Maine's long-term economic growth.

Benchmarks Adopted to Date

03 – Employment	Maine Department of Labor
04 – New Business Starts	City of Portland's Economic Development Center Pierce Atwood
05 – Job Growth Among New Business	City of Portland's Economic Development Center
07 – International Exports	Maine International Trade Center
08 – Innovation Assets	Maine Science & Technology Foundation
11 – On-the-Job Injuries	Maine Department of Labor Maine Employers' Mutual Insurance Company
12 – High School Diplomas	Guilford of Maine
14 – Bachelor's Degree Attainment	The University of Maine System Guilford of Maine
16 – Lifelong Learning	Cumberland County Private Industry Council Guilford of Maine
17 – Citizen Opinion of Educational Opportunities	Eastern Maine Technical College
18 – Employer-Sponsored Training	Guilford of Maine
19 – Business Opinion of Universities and Colleges	USM Corporate Partners
20 – Population of Service Center Communities	Maine State Planning Office
21 – Family Income Disparity	Maine Center for Economic Policy
22 – Gender Income Disparity	Maine Centers for Women, Work, and Community Women's Studies Program at USM
23 – County Income Disparity	Maine Center for Economic Policy Penquis Cap Sunrise County Economic Council Western Mountains Alliance
24 – County Employment Disparity	Penquis Cap Sunrise County Economic Council Western Mountains Alliance
25 – Employment of the Disabled	Maine Businesses for Social Responsibility
27 – Jobs that Pay a Liveable Wage	Cumberland County Private Industry Council Lewiston-Auburn Economic Growth Council Maine Center for Economic Policy Maine Centers for Women, Work, and Community
30 – Citizen Participation in Community Activities	Maine Centers for Women, Work, and Community
31 – Business Involvement in Communities and Schools	Maine Coalition for Excellence in Education
32 – Arts and Culture Expenditures	Maine Arts Commission
42 – Tax Fairness	Maine Center for Economic Policy
47 – Cost of Electricity	Central Maine Power
53 – Conservation Lands	The Nature Conservancy Northern Forest Alliance
55 – Paper and Lumber Value Added	Maine Wood Products Association
56 – Agriculture Value Added	Borealis Breads
Reserved	
Associate's Degree Attainment	The University of Maine System Guilford of Maine
Graduate Degree Attainment	Guilford of Maine
Volume of Large Sawtimber Trees	Maine Forest Service Northern Forest Alliance

To inquire about adopting a benchmark, please contact the Maine Development Foundation.

MAINE DEVELOPMENT FOUNDATION
