MEASURES OF GROWTH

2000

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

SIXTH REPORT OF THE MAINE ECONOMIC GROWTH COUNCIL

Prepared by the
MAINE DEVELOPMENT FOUNDATION

Maine Economic Growth Council, 1999

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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.

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 the benchmark since the last time new data was 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 – No new data available since Measures of Growth, 1999.

ON THE GRAPHS

Except where otherwise stated, all data presented is 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 statement. Where we have no data prior to the baseline year, those 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

2000 Performance Measures of the Maine Economic Growth Council

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 56 performance measures and set a benchmark for each. Here is a brief overview of Maine's recent progress.

Overall, Maine made positive progress on 18 of the 56 performance measures and held steady on 8 others. And this year the Growth Council awarded 4 Gold Stars to performance measures on which we are doing exceptionally well. One benchmark was achieved in 1999: *34 - Crime.*

On the other hand, Maine's standing worsened on 12 of the 56 performance measures. The Growth Council assigned 8 Red Flags to performance measures that particularly need attention.

FUNDAMENTAL PERFORMANCE MEASURES

In addition to measuring progress in six specific areas, the Growth 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 5% during 1998 (the most recent year for which we have complete data) but Maine's GSP didn't quite keep pace with New England GSP which grew 5.5%. The job growth picture, as tracked by the *Employment* performance measure, is a bright spot in the Maine economy. Our 1997 to 1998 rate of job growth outpaced job growth across New England and ranked 16th best among all 50 states. However, Maine's national rank on per capita *Personal Income* is 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 a 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.

Our performance measures send us mixed messages this year regarding the extent to which we are achieving the goal. Maine is doing an exceptionally good job of starting new businesses and we continue to experience employment gains in new businesses relative to other states. However, Maine ranks low 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. On the other hand, Maine's international exports are exceeding expectations and continue to grow at a very respectable pace. And Maine companies continue to improve workplace safety.

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 Maine's population is seriously lacking in attainment of Bachelor's, and Graduate degrees. Furthermore, survey data shows that Maine adults are not increasing their participation in lifelong learning which is troubling in an economy which increasingly requires workers to have ever new and changing skills. Employer-sponsored training is also down this year and business opinion of Maine's

colleges and universities is not improving. A bright spark is that citizen opinion of education and training opportunities has improved.

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 which adversely affect the vitality of Maine communities and the extent to which people contribute to economic growth. Particularly troubling is the growing divide between Maine's wealthiest and poorest counties which widened again this year. Similarly, the gap between Maine's wealthiest and poorest families also widened and we see no evidence of progress towards better incomes for women relative to men. Furthermore, survey data suggest that we lost ground this year on workplace discrimination.

Other trouble spots include the number of jobs that pay a liveable wage. The number is not increasing as the Growth Council would like. On the sprawl front, we are still seeing people move out of service center communities into rural areas even though we are increasingly aware of the government service delivery and environmental costs associated with this trend.

In spite of some of these Red Flag issues, Mainers continue to take pride in exceptionally good voter turnout, exceptionally low infant mortality, and continued lowering of an already low crime rate. These are meaningful indicators of Maine's 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.

Most troubling among the measures of government efficiency is the dramatic recent increase in Maine's tax burden per $1,000 of income relative to other New England states. Although increased income in other states is largely responsible for this dramatic trend, rather than increased taxes in Maine, the fact remains that in 1996 Maine people were paying considerably more of their income in taxes than residents of nearby states. Also troubling in this cluster is Maine's relatively low national standing on fiscal stability and balanced revenue and a generally low opinion of state government held by business leaders.

Positive signs include Maine's relatively high national standing on tax fairness and recent considerable improvement in citizen opinion of the value of state government services for the amount of taxes paid.

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 very positive aspects of state-of-the-art infrastructure reflected in the performance measures this year. Both roads and bridges are improving and the telecommunications infrastructure is increasingly being used by Maine businesses.

Not so positive is the fact that we are failing to make progress toward the benchmark of increased use of alternative modes of freight transport. Also troubling 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.

By the Growth Council's performance measures, Maine's air quality is improving as is the quality of Maine's marine waters. There is also solid improvement in the amount of land in conservation and it appears that achieving that particular benchmark may be within reach.

Looking at Maine's natural resource-based industries, tourism continues to make healthy contributions and most recently, agriculture appears to be on the rebound. Maine's paper and lumber industries continue to be plagued by stiff competition. The commercial fishing industry continues to be seriously challenged.

BACKGROUND

The 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.

Since then the Council has published six annual reports. Several state agencies have formally incorporated goals and benchmarks of the Growth Council into their own strategic plans. Nonprofits have initiated programs directly aimed at accomplishing specific benchmarks. Government officials have waved *Measures of Growth* while speaking of the need 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 Growth Council strives to be accurate, non-partisan, and objective, with a healthy dose of common sense. The Growth Council does not advocate specific strategies to accomplish the benchmarks. It's 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 56 trends that tell us 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** have 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, and 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 entire health. One needs to step back and make a summary judgment viewing the big picture of all goals and measures.

ONE OF SEVERAL MAINE INITIATIVES There are other significant Maine initiatives to guide economic growth, although *Measures of Growth, 2000* is one of the most comprehensive and tends to serve as a touchstone for all others. Related reports published in 1999 include the *Maine Science and Technology Report Card*, the *Kids Count Data Book*, the state of Maine's *Economic Development Strategy*, the Manufacturing Extension Partnership's *Manufacturing in Maine*, Maine Center for Economic Policy's *Getting By in 1999 - Basic Needs and Liveable Wages in Maine*, the Department of Labor's *Gaining Good Jobs - Trends and Prospects for Maine*, the Department of Transportation's *Maine's Transportation System - Status and Trend Indicators of Economic Growth* and *Quality of Life*, and *An Assessment of the Quality of Maine's Environment* prepared by the Maine Environmental Priorities Council.

USING THE REPORT State legislators may use the report to guide their policy decisions; economic development leaders may use the report to focus special attention on local priorities; business leaders may use the 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.

THE DATA

The data in this report comes from a wide variety of sources; primarily (1) federal agencies (a fair amount via the world wide web - see the Maine Development Foundation website for 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, and 1999 and the methodologies from year to year were very similar. In 1999, the citizen survey was done via telephone interviews with 603 randomly selected citizens and has a sampling error of +/- 4% with 95% confidence. The business survey was a written instrument sent to a stratified random sample of Maine businesses, completed by 593 of them, and has a sampling error of +/-8%.

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 seven changes from how data was assembled and presented last year. The changes are generally slight and none of them are at odds with last year's benchmarks.

What used to be called *Technology Resources* is this year called *Innovation Assets* reflecting a change made by the Corporation for Enterprise Development, from whom we get the data for this one. *Technology Resources* was a composite index combining six different issues; *Innovation Assets* combines ten issues. We analyzed Maine's standing this year on each index, old and new, and found it to be the same.

What used to be called *Household Income Disparity* relied on census data available every ten years. This year the measure is called *Family Income Disparity* and uses a much more current data source. The new measure looks at essentially the same thing as the old measure and the benchmark is conceptually identical.

The *Arts and Culture Expenditures* performance measure has changed only in that an expanded number of organizations are included in the analysis.

Condition of Roads has moved from looking at pavement condition of national highway system roads to looking at the extent to which all of Maine's key roads are built to standard. *Condition of Bridges* has also moved from looking at just national highway system bridges to all public bridges. Both of these changes came about as a result of developing a sister report to *Measures of Growth* called *Maine's Transportation System - Status and Trend Indicators of Economic Growth and Quality of Life*.

Agriculture Value Added has undergone a minor change this year from looking at net value added instead of gross value added as in years past. The gross value added data series was discontinued.

We changed the *Commercial Fishing* measure this year to a three-year moving average in order to minimize year-to-year fluctuations which tended to get unfair attention when looked at year-by-year. In actuality, trends in this industry are not so volatile.

Lastly, we changed the names of *Income Disparity by County* and *Employment Disparity by County* to *County Income Disparity* and *County Employment Disparity*. No other changes were made to these indicators.

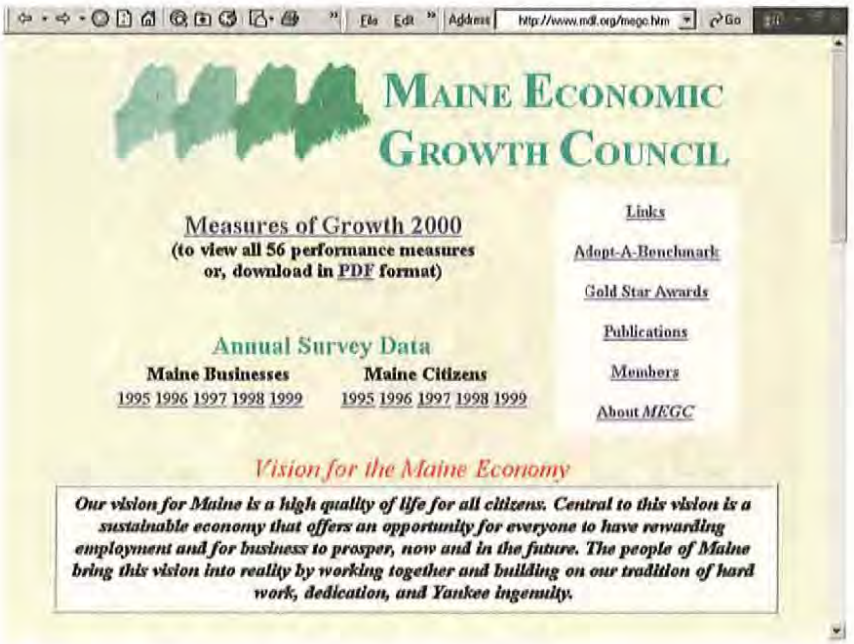
A PERFORMANCE MEASURE TO WATCH

There is one performance measure that the Growth Council wishes to call special attention to this year, but is uneasy about giving it a Red Flag.

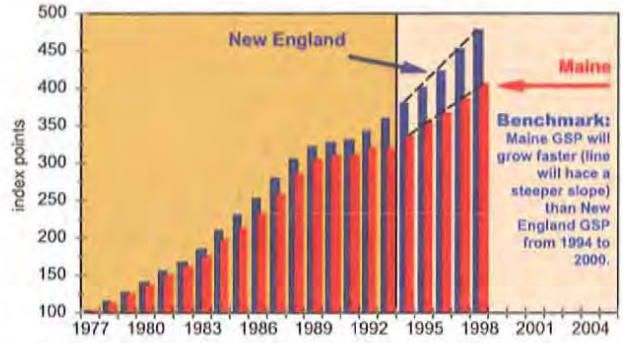
The data reflected in *15 - Lifelong Learning* is distressing not because it demonstrates an established downward trend, or because it suggests low national standing, but because Maine is not making significant progress on this issue and we should be. Our economy, like that of the nation, is in transition to a knowledge-based economy where the most valuable asset is the skill and education level of workers. In order to keep pace and ensure continued long-term economic growth, Maine workers need to internalize a commitment to lifelong learning and Maine employers need to be much more aggressive about providing ongoing learning opportunities.

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 5 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.



Gross State Product, Maine & New England (indexed from 1977), 1977-1998



Data Source: US Bureau of Economic Analysis, September 1998 and Maine State Planning Office estimate, October, 1999.

1 GROSS STATE PRODUCT

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

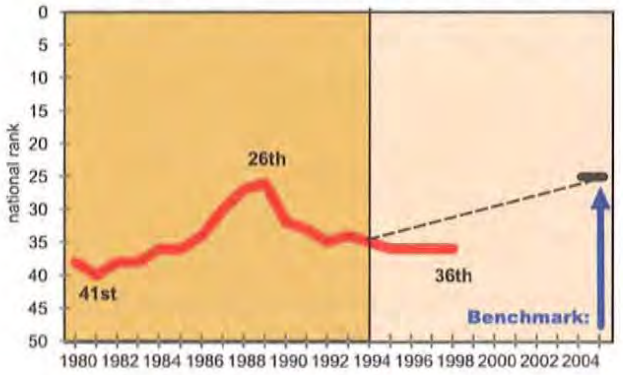
Maine Economic Growth Slightly Behind New England In 1998, Maine's gross state product was estimated to be $31.7 billion, up 5.16% from 1997. During the same time period, the New England economy grew 5.52%. The Maine economy accounts for about 6.4% of New England's economy.

Since the Growth Council began tracking this performance measure in 1994, the New England economy has grown 25.8% whereas the Maine economy has grown at a slightly slower pace of 20.9%.

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.

The 1998 data for Maine and New England are estimates. For ease of comparison, the graph shows Maine and New England data indexed to 1977, whereby 1977 values were equalized to 100.

National Rank on Per Capita Personal Income, 1980-1998



Data Source: US Bureau of Economic Analysis, July, 1999.

2 PERSONAL INCOME

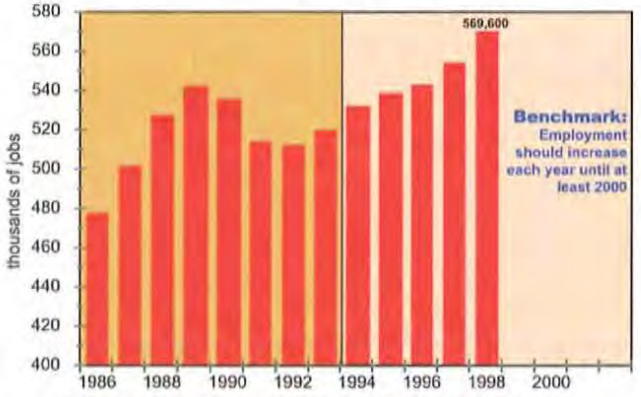
Benchmark: Maine's national rank among the 50 states on per capita income will improve from 36th in 1994 to 25th by at least 2005.

Income Growing Slightly - National Rank Holds Steady Although Maine's per capita income increased in 1998, its national rank relative to other states held steady at 36th. This performance measure gets a Red Flag this year because recent job gains and other positive economic activities are not translating into relative income increases for average Maine people. This is a time that we would expect to see Maine's national rank on per capita income improve, yet it is not improving.

In 1998, Maine's income per capita (total income earned in the state divided by the state's population) was $23,002 compared to the New England average of $32,007 and the United States average of $26,482. From 1997 to 1998, per capita income in Maine grew by just over 4.85% while per capita income for the US as a whole grew 4.72% and per capita income across New England grew 5.19%. 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.

In 1999, the US Bureau of Economic Analysis revised data for previous years.

Employment (non-farm wage and salary) 1986-1998



Data Source: Maine Department of Labor, Division of Labor Market Information Services in cooperation with the US Bureau of Labor Statistics, November, 1999.

3 EMPLOYMENT

Benchmark: The number of jobs held by Maine people will increase from 531,600 in 1994, each year until at least 2000.

Employment Growth Continues For each of the past five years, the number of jobs in Maine has increased, growing an average of 1.8% per year. From 1997 to 1998, employment in Maine grew 2.9% while employment in New England as a whole grew 2.1%. Maine's job growth from 1997 to 1998 ranked 16th best among the 50 states.

From August, 1998 to August, 1999, Maine's construction industry added 1,800 jobs, a 7.2% increase. Maine's service industries added 7,900 jobs, a 4.7% increase, the fifth best service sector jobs growth rate in the nation. The social services, business services, and health services industries were the greatest contributors to job growth. During the same time period, the number of manufacturing jobs decreased by 1.7%.

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 which is an indicator of how many people are seeking employment.

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.

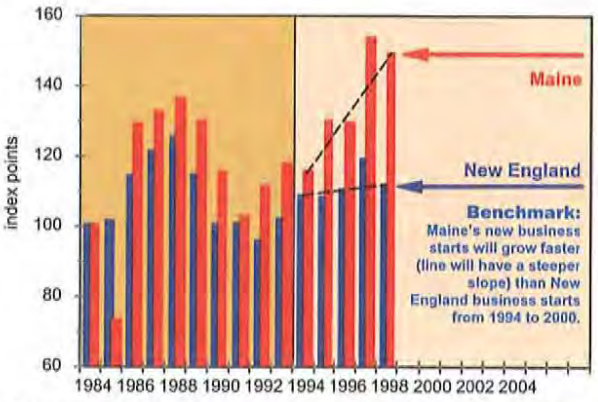
Maine New Business Starts Continue to Outpace New England In 1998, 5,136 new businesses started in Maine, 3% fewer than started in 1997 but widely outpacing the rate of new business starts across New England. For three out of the last four years, Maine has outpaced New England in annual growth in number of 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 1984, whereby 1984 values were equalized to 100.

New Business Starts, Maine & New England (indexed from 1984), 1984-1998



Data Source: US Small Business Administration, Office of Advocacy, November, 1999.

5 JOB GROWTH AMONG NEW BUSINESSES

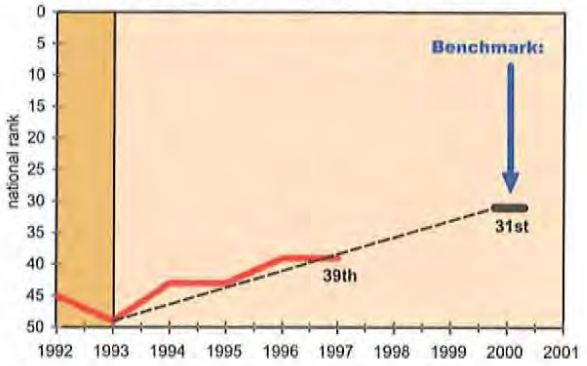
Benchmark: Maine's national rank among the 50 states on job growth among new businesses will improve from 49th in 1993 to 31st by at least 2000.

National Standing Holds Steady For two years in a row, Maine's national standing has remained at 39th. The measure looks at number of new jobs created in firms less than five years old.

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 increased 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 they stay in business and actually add jobs.

National Rank on Job Growth Among New Businesses, 1992 - 1997



Data Source: Corporation for Enterprise Development, Development Report Card for the States, 1992-1999.

6 NEW PRODUCTS OR SERVICES

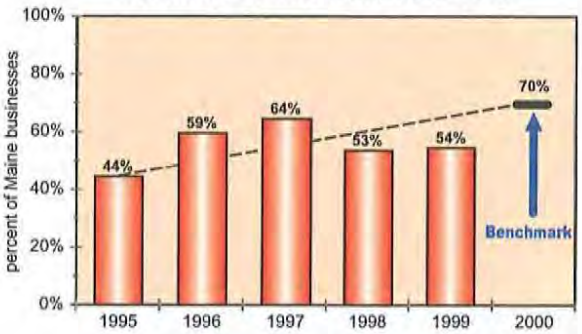
Benchmark: The percentage of Maine for-profit businesses that develop new products or services each year will improve from 44% in 1995 to 70% by at least 2000.

Previous Positive Trend Reverses In 1999, 54% of Maine businesses reported that they developed new products or services, about the same as last year. However, the Growth Council has given this performance measure a Red Flag because this direct measure of business innovation needs to grow more quickly in order to bolster Maine's long term economic growth.

This measure is an important indicator of how well existing Maine businesses are competing and adapting to new customer needs and managing economic pressures.

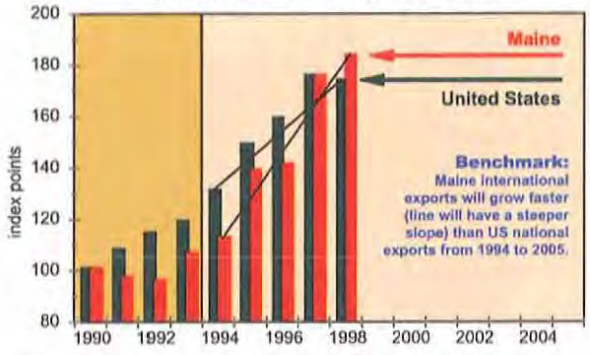
Maine leaders of for-profit businesses were asked: "Over the past 12 months, did your company develop new products or services that are consistent with your core business?" The data above reflects the percentage that responded "yes." The 1% point change from 1998 to 1999 is not significant given the survey sample.

Percent of Businesses With New Products or Services, 1995-1999



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

International Exports, Maine & United States (indexed from 1990), 1990-1998



Data Source: Maine International Trade Center, 1999.

7 INTERNATIONAL EXPORTS

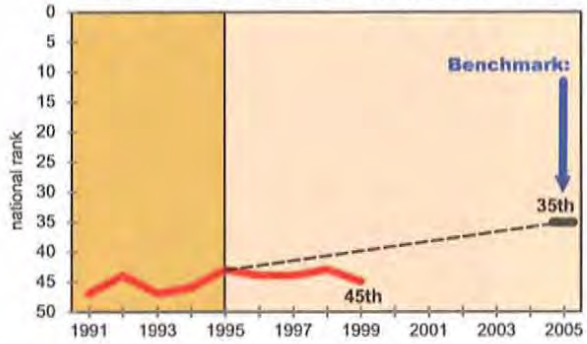
Benchmark: The value of Maine's international exports will grow faster, on average, than the growth in value of US international exports from 1994 to 2005.

Dramatic, Steady Increases Earn Gold Star From 1990 to 1998, Maine growth in Export's has outpaced New England. From 1997 to 1998, Maine exports grew 4.5% while New England exports actually declined. This year, the Growth Council gives International Exports a Gold Star.

In 1998, Maine companies exported $1.97 billion worth of products. Maine companies exported $639 million worth of product to Canada, $309 million worth of product to Singapore, and $286 million worth of product to Malaysia. Sixty-four percent of all Maine exports in 1998 were in the following three industries: semiconductors, paper products, lumber and wood products.

This data represents 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, 1991-1999



Data Source: Corporation for Enterprise Development (CfED), Development Report Card for the States, 1991-1999.

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.

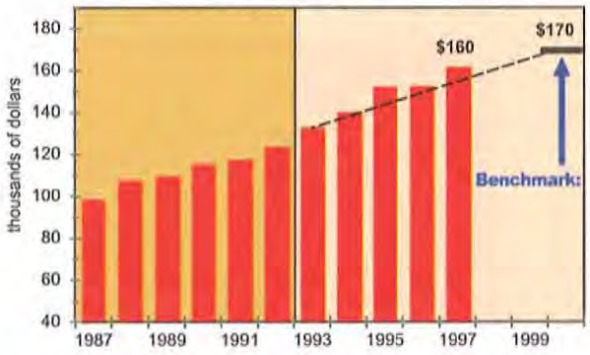
Maine's National Rank Slips Two Places From 1998 to 1999, Maine's national rank slipped from 43rd to 45th, an indicator that Maine's ability to foster technological innovation is seriously challenged.

This is the fourth year in a row that the Growth Council has pinned a Red Flag on this performance measure, which has been previously known as Technology Resources. This is an indicator of Maine's ability to create and capitalize on high-tech opportunities.

The measure reflect's Maine's national rank on a composite index of 10 technology-related indicators. Six of the ten used to make up the technology Resources indicator; they included number of scientists in the state, number of patents issued, and amount of financial resources put towards research and development. This year, CfED added to the index: percent of households with a computer, university spin-outs, royalties, licences, and private R&D. The revised indicator is called Innovation Assets and the Growth Council intends to track it from here on.

A special analysis was done to see what Maine would have ranked this year on the old Technology Resources Index and found that on that index also, Maine would have slipped to 45th.

Product Value per Manufacturing Worker 1987-1997



Data Source: Maine Department of Labor, Census of Maine Manufacturers, 1987-1997. No new data available since the Growth Council's previous *Measures of Growth* report.

9 MANUFACTURING PRODUCTIVITY

Benchmark: The average value of manufacturing products produced by Maine workers will improve from $132,000 per year in 1993 to $170,000 per year by at least 2000.

Productivity Has a Good Track Record of Steady Increases In 1997, about $160,000 worth of product was produced on average by each manufacturing worker; an increase of 6% over the average value of product produced per manufacturing worker in 1996.

Productivity is calculated in this performance measure by dividing the total number of manufacturing employees into the total value of manufacturing product produced. Productivity as measured in this way does not strictly reflect worker productivity because capital improvements also increase value of product.

10 ON-THE-JOB INJURIES

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

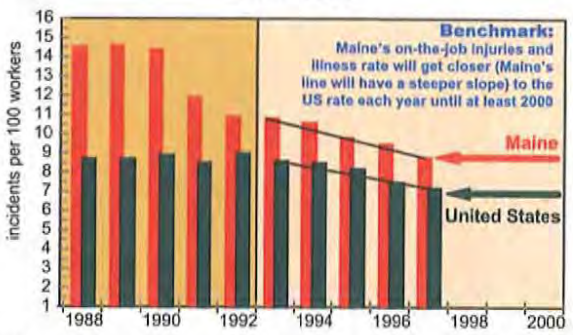
Maine Rate Continues to Improve In 1997, there were 8.7 injuries and illnesses for every 100 full-time Maine workers, a 7% improvement over 1996. The national improvement rate was 4%.

This benchmark calls for continuous improvement of the Maine rate relative to the US rate. Actually achieving the US rate will be difficult given that the particular mix of industries in Maine is quite different and slightly more dangerous than it is for the nation as a whole.

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 and United States 1988-1997



Data Source: Maine Department of Labor, Bureau of Labor Standards, Occupational Injuries & Illnesses in Maine, 1997.

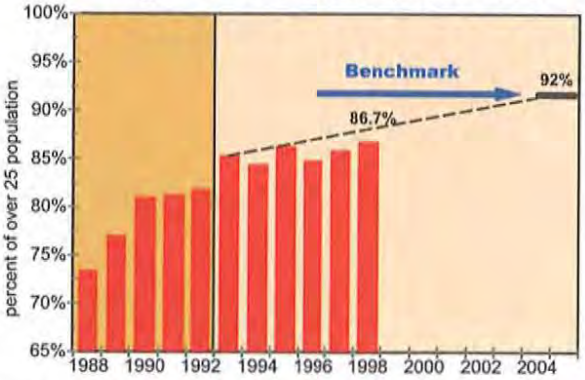
11 HIGH SCHOOL DIPLOMAS

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 and High National Standing In 1998, 86.7% of Maine people over the age of 25 had completed high school, either via receiving a diploma or high school equivalency. Among the fifty states, this placed Maine 13th. Nationally in 1998, the percent of people over 25 years old with a high school diploma or equivalency was 82.8%, and the New England average rate was 84.8%.

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

Percent of Population over 25 with a High School Diploma, 1988-1998



Data Source: US Census Current Population Survey. No new data available since the Growth Council's previous *Measures of Growth* report.

12 ASSOCIATE'S DEGREES

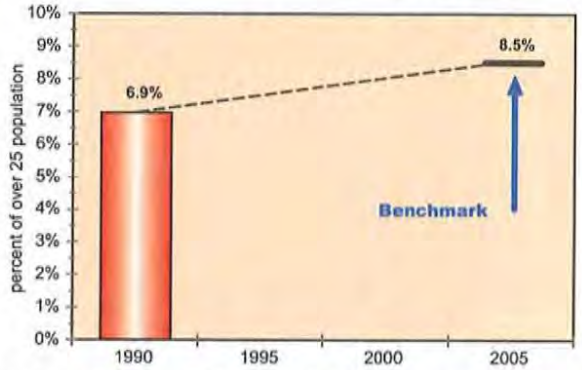
Benchmark: The percentage of Maine people 25 years and older who have attained an Associate's Degree will improve from 6.9% in 1990 to 8.5% by at least 2005.

Maine Rates Relatively Good, but Need Improving In 1990, the most recent year for which we have data, 6.9% of Maine people over age 25 had an Associate's Degree, compared with 7% of New England people and 6.2 % of the nation as a whole. This data includes 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.

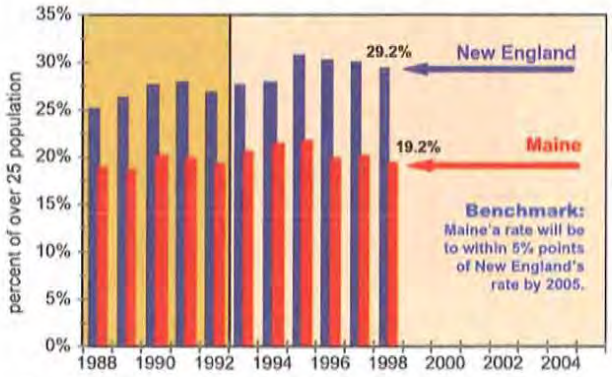
We don't have historic data because the US Census used a different methodology prior to 1980 and this particular data set is reported for Maine only every 10 years.

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



Data Source: US Census, 1990. No new data available since the Growth Council's previous *Measures of Growth* report.

Percent of Population over 25 with at least a Bachelor's Degree, 1988-1998



Data Source: US Census Current Population Survey. No new data available since the Growth Council's previous *Measures of Growth* report.

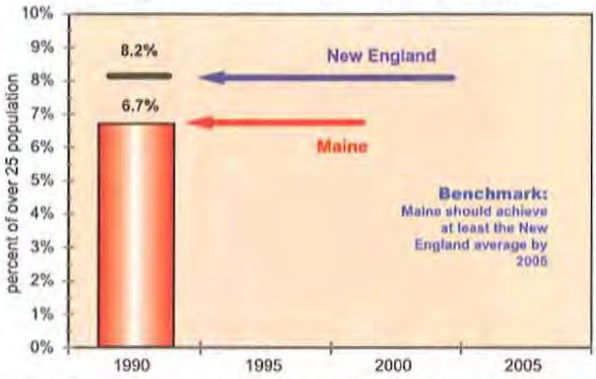
13 BACHELOR'S DEGREES

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 Lags Behind New England and the Nation In 1998, 19.2% of Maine people over the age of 25 had at least a Bachelor's Degree, compared with a national rate of 24.4%. For the New England states as a whole, the 1998 rate was 29.2% reflecting this region's reputation for leading the nation in higher learning.

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.

Percent of Population over 25 with a Graduate Degree, 1990



Data Source: US Census, 1990. No new data available since the Growth Council's previous *Measures of Growth* report.

14 GRADUATE DEGREES

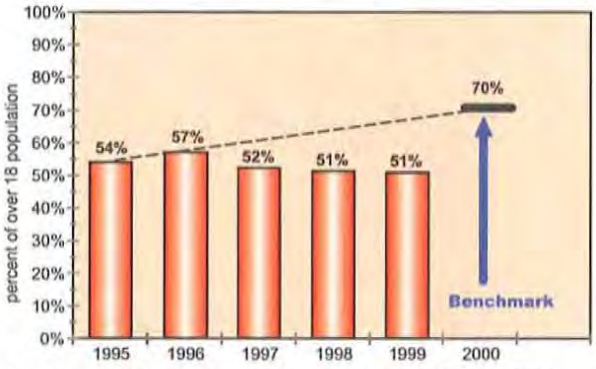
Benchmark: The percentage of Maine people 25 years and older who have attained a Graduate Degree will improve from 6.7% in 1990 to the New England percentage by at least 2005.

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.

We don't have historic data because the US Census used a different methodology prior to 1980 and this particular data set is reported for Maine only every 10 years.

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



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

15 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 2000.

Lifelong Learning Participation Not Improving In 1999, 51% of Maine citizens said that they participated in some form of educational seminar, program, or course; the same participation rate as last year.

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. Particularly in this time of transition from a manufacturing based economy to a service based economy, lifelong learning 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 demends ever-new skills.

16 CITIZEN OPINION OF EDUCATIONAL OPPORTUNITIES

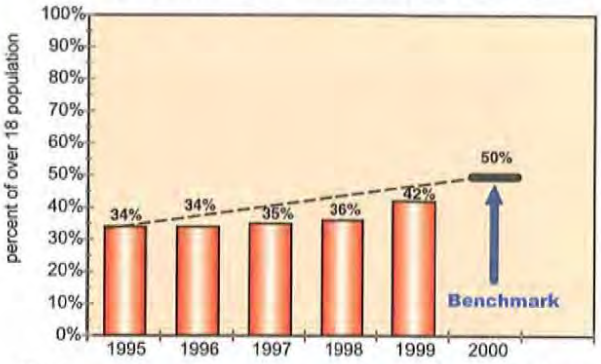
Benchmark: The number of citizens who agree that there are adequate public and private programs available to Maine people who want to train for new jobs or acquire new skills will improve from 34%, the 1995 figure, to 50% by at least 2000.

Training Availability Seen as Improving In 1999, 42% 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. This is a significant improvement over 1998 perceptions.

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".

Percent of Citizens Saying Adequate Education & Training is Available, 1995-1999



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

17 EMPLOYER-SPONSORED TRAINING

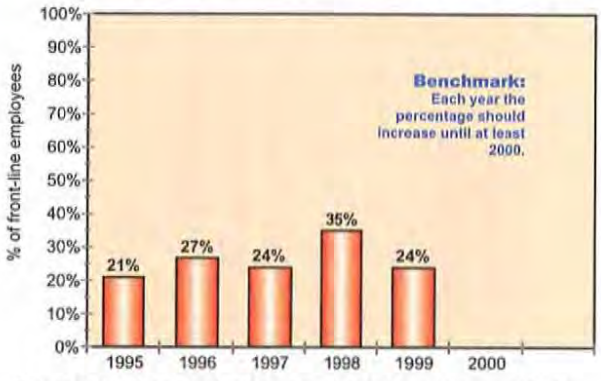
Benchmark: The percentage of front-line Maine employees who attended an educational seminar, program, or course through their place of work, 21% in 1995, will improve each year until at least 2000.

Participation Varies - Down This Year In 1999, 24% 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. This performance measure earns a Red Flag this year because we are not makingsignificant progress on this issue of increasing importance.

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 your personally attended and educational seminar, program, or course through your place of work?" The data is based on those who responded "yes."

Percent of Front Line Employees Who Attended Employer Sponsored Training, 1995-1999



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

18 BUSINESS OPINION OF UNIVERSITIES AND COLLEGES

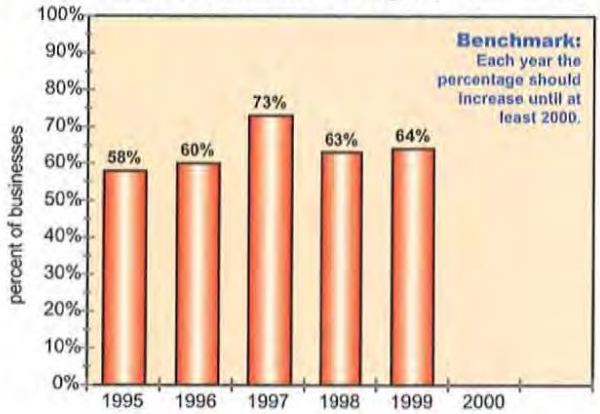
Benchmark: The percentage of Maine for-profit businesses who think the universities and colleges are doing a good job at meeting the continuous education needs of their employees, 58% in 1995, will improve each year until at least 2000.

Business Opinion Not Improving In 1999, 64% 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 is not significantly different from the 1998 rate, given the survey sample.

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 and sometimes impractical for employers. Long term economic growth will be facilitated by having responsive, effective colleges and universities in Maine.

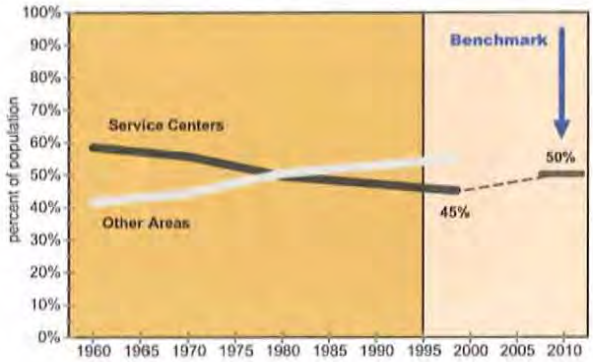
Maine leaders of for-profit businesses were asked: "How would you rate Maine's universities and colleges for meeting the continuous education needs of your employees?" The data above reflects the percentage that responded "good", "very good", or "excellent".

Favorable Rating by Businesses of Universities and Colleges, 1995-1999



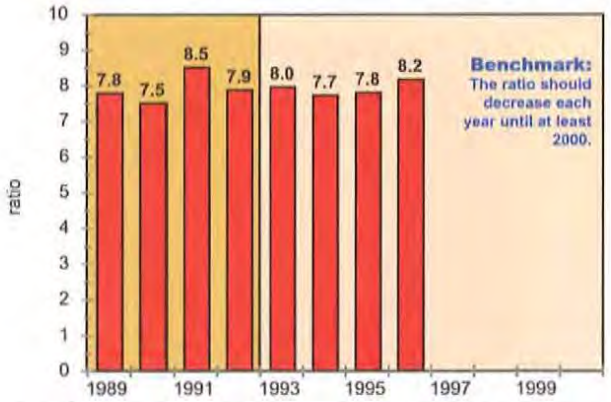
Data Source: Maine Development Foundation Annual Survey of Maine Businesses, 1995-1999.

Percent of Population in Service Centers and Other Areas, 1950-1998



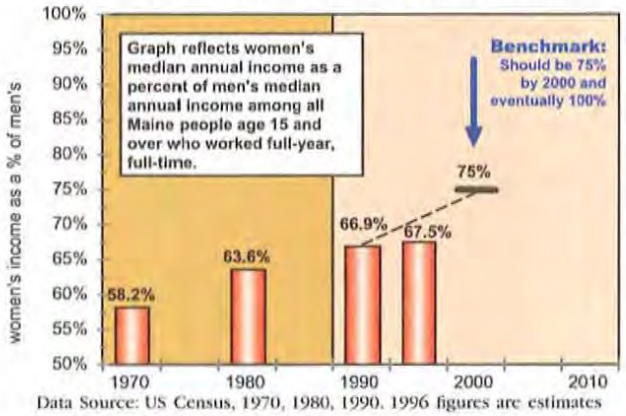
Data Source: Maine State Planning Office, October, 1999.

Income of Wealthiest 20% of Families as a Multiple of Income of Poorest 20%



Data Source: Corporation for Enterprise Development (CfED), Development Report Card for the States, 1991-1999; 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.

Women's Income as Percent of Men's for Full-Year, Full-Time Work, 1970-1996



Data Source: US Census, 1970, 1980, 1990. 1996 figures are estimates from the Institute for Women's Policy Research based on analysis of data from the US Census Current Population Survey, 1995, 1996, and 1997. No new data available since the Growth Council's previous *Measures of Growth* report.

19 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 1998, just 45% of Maine people lived in "service center" communities, whereas 40 years ago, 60% lived in these communities. Because of the continuing trend of people moving out of urban centers into the more rural parts of the state, and the increased public costs associated with the trend, this performance measure gets a Red Flag this year.

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.

20 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 2000.

Income Gap Remains Considerable In 1996, the wealthiest fifth of Maine families earned, on average, 8.2 times as much income as the poorest fifth. This ratio has hovered around 8 since 1989 but increased by 5% from 1995 to 1996.

From 1990 to 1996, income growth for all Maine families except the wealthiest 20% did not even keep pace with inflation, which was about 20% for the time period. Income for the poorest fifth of families grew by 16%; income for the next wealthiest fifth grew by 18%; income for the middle fifth grew by 12%; and income for the second wealthiest fifth grew by just 10% from 1990 to 1996. Income for the wealthiest fifth of Maine families grew by 26%.

The disparity between wealthy and poor families will only be reduced if incomes of the bottom fifth rise faster than incomes of the top fifth. Disparities in income and opportunity threaten the long-term stability of the economy.

In previous Measures of Growth reports, this performance measure relied on census data available only every ten years. The Growth Council changed methodology this year so as to be able to show more current data.

21 GENDER INCOME DISPARITY

Benchmark: The median annual income of full-time, full-year working women will improve from 64% of the median annual income of full-time, full-year working men in 1980 to 75% by 2000, and eventually to 100%.

Women Continue to Earn Far Less Relative to Men In 1996, the median annual income of all women in Maine who worked full-time for the entire year was estimated to be $21,906, compared to a median income of $32,453 earned by men who worked full-time, full-year. This translates to an earnings ratio of 67.5%, placing Maine 41st among all states, which is why the Growth Council has given this performance measure a Red Flag. Nationally, the earnings ratio was 72.3%. These earnings ratios and Maine's national rank are estimates. 1996 is the most recent year for which we have data.

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. Gender disparities are even greater in some particular occupations than for the state as a whole.

22 RACIAL INCOME DISPARITY

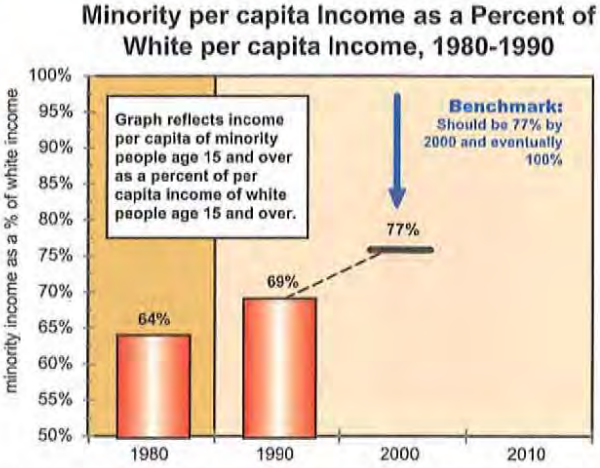
Benchmark: The income per capita of minorities will improve from 69% of per capita income of Whites in 1990 to 77% by 2000 and eventually to 100%.

Minority Incomes Lagging, Based on Last Look at Census Data

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.



Data Source: US Census, 1980, 1990. No new data available since the Growth Council's previous *Measures of Growth* report.

23 COUNTY INCOME DISPARITY

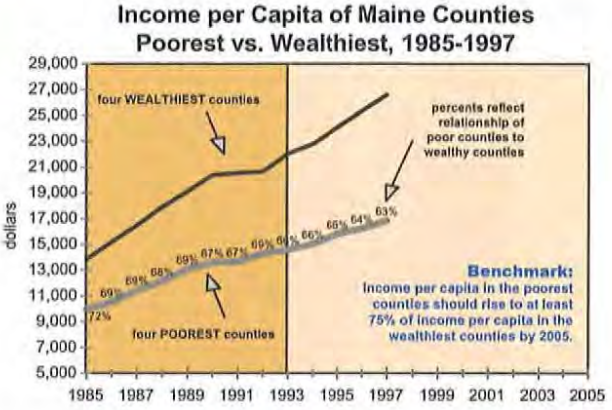
Benchmark: Average per capita income in Maine's poorest counties will improve from 66% in 1993 to 75% of per capita income of the wealthiest counties by at least 2005.

Gap Continues to Grow Between Wealthy and Poor Counties

This performance measure receives a Red Flag again this year because the income gap between Maine's wealthiest and poorest counties continues to widen. Geographic disparities in the wealth of Maine people are detrimental to the economy. To minimize the disparity, per capita income in the poorest counties should be raised.

In 1997, the average per capita income in Maine's four poorest counties (Piscataquis, Somerset, Washington, and Aroostook) was $16,838, about 63% of what it was in the four wealthiest counties (Cumberland, Lincoln, Knox, and Hancock) where income per capita was $26,609. Statewide per capita income was $21,937.

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.



Data Source: US Bureau of Economic Analysis and the Maine Department of Labor, Division of Labor Market Information, November, 1999.

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.

Job Growth Lacking Where it's Needed Most

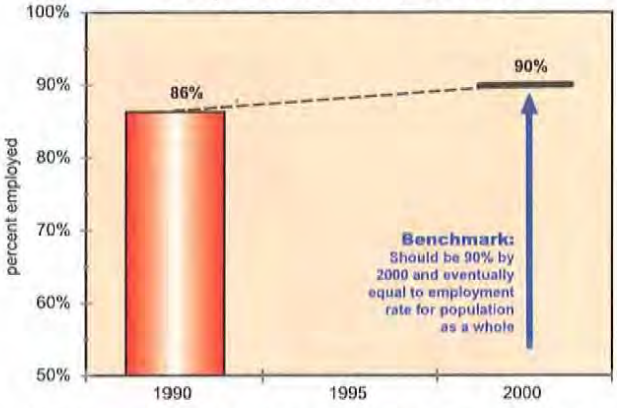
Measures of Growth, 1996 began tracking the following counties that had 1994 unemployment rates higher than the state average: Washington, Aroostook, Somerset, Piscataquis, Oxford, Waldo, Franklin, Hancock, Penobscot, and Androscoggin. The benchmark calls for employment in these specific counties to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

Among these 10 counties, four of them (Waldo, Hancock, Oxford, and Somerset) experienced job growth from 1994 to 1998 at a better rate than the state average (which was 6.7%). This is an improvement over last year (up arrow) when just three counties had 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 people employed who are covered by the Maine Employment Security Law.

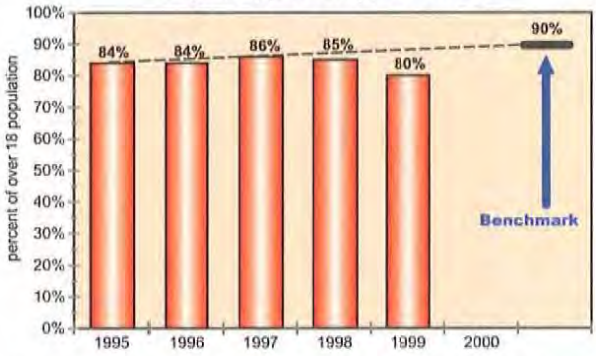
Data Source: Maine Department of Labor, Division of Labor Market Information, Maine Employment Statistical Handbook, 1998.

Employment Rate Among People With Disabilities, 1990



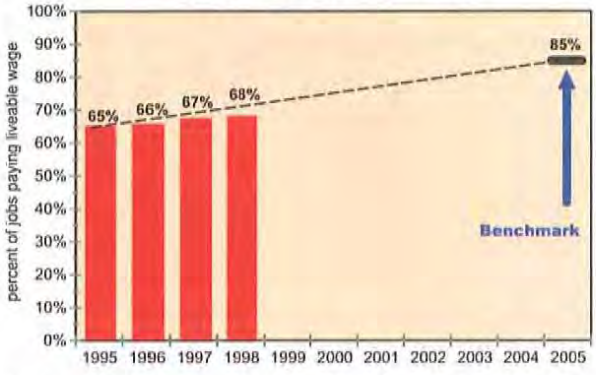
Data Source: US Census, 1990. No new data available since the Growth Council's previous *Measures of Growth* report.

Percent of Citizens who Perceive Workplace Equal Opportunity, 1995-1999



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

Percent of Jobs that Pay a Liveable Wage, 1995-1998



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.

25 EMPLOYMENT OF THE DISABLED

Benchmark: Among Maine people with disabilities, the percent employed will improve from 86% in 1990 to 90% by 2000, and eventually to the same employment rate as the population as a whole.

Employment Lagging Among People with Disabilities Among people with disabilities in the labor force in 1990, the most recent data available, 86% were actually employed whereas among people in the labor force with no disabilities, 94% 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 performance measure does not consider people whose disabilities actually prevent them from being able to work, but only those who are in the labor force, and thus willing and able to work. For these purposes, someone with a disability is defined as having a work limitation of some sort, including having been out of work for six of the previous twelve months due to disability.

Although this performance measure focuses on people with disabilities who are in the labor force, there is a significant number of people with disabilities who are not in the labor force, and many who 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.

We don't have historic data because the US Census used a different methodology prior to 1980 and this particular data set is reported for Maine only every 10 years.

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 2000, and eventually to 100%.

Discrimination Increases Slightly as per Citizen Perceptions In 1999, 80% 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 a significant decrease from the percent of people who agreed with the statement in 1998.

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

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 Increasing Slowly In 1998, about 67.7% of all jobs in Maine paid what the Growth Council considers to be an annual liveable wage for that year; $19,673 for a family of two. This is a slight increase from the 1997 figure of 67.2%. This performance measure receives a Red Flag this year because wage increases are not nearly keeping pace with increases in gross state product.

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 the economy. Jobs that pay below a liveable wage, on balance, are not likely contributing to economic growth and they 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.*

In last year's *Measures of Growth*, the 1995 percent of liveable wage jobs reported was incorrect. The error was discovered during this year's analysis.

28 VOTER TURNOUT

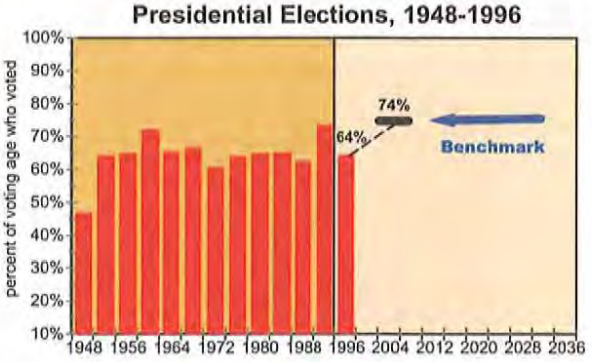
Benchmark: The Maine voter turnout rate in the presidential election will improve from 64% in 1996 to 74% in 2000.

Maine Rates Consistently High In the 1996 election, an estimated 64% of Maine people over age 18 actually voted for the office of President of the United States. Maine's rate was 15 percentage points above the national rate of 49%. The Washington DC based Center for Voting and Democracy estimates that in 1996, Maine had the best voter turnout of every state in the nation.

In the 1992 presidential election, Maine voter turnout was 73%. In the 1998 congressional election, Maine voter turnout was 44.65%, although this performance measure tracks voter turnout in Presidential elections only, as reflected in the graph.

Voter turnout is a fairly good indicator of participation in democracy and has been very slowly, but steadily rising for the past few decades.

Voter Turnout in Presidential Elections, 1948-1996



Data Source: Maine Office of Secretary of State. No new data available since the Growth Council's previous *Measures of Growth* report.

29 CITIZEN PARTICIPATION IN COMMUNITY ACTIVITIES

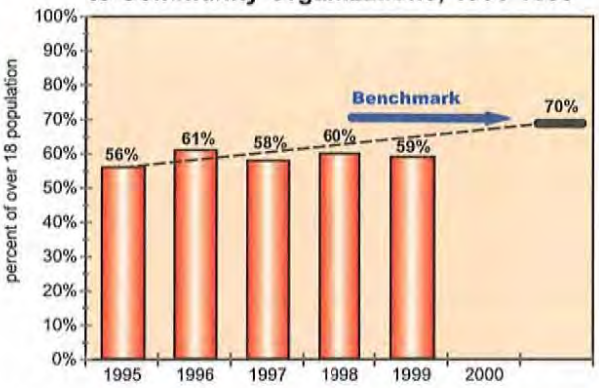
Benchmark: The percentage of Maine people who devoted time outside regular family and work activities to community organizations in the past year will improve from 56% in 1995 to 70% by at least 2000.

Over Half of Citizens Consistently Involved in Community Organizations In 1999, 59% of Maine citizens devoted time to community organizations. This is not a significant decrease from the 1998 rate of 60% given 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 (25% said yes); organizations which assist the needy or under-privileged (29% said yes); organizations which assist the elderly, homebound, and people in poor health such as Meals on Wheels and home health/hospital volunteers (20% said yes); and/or activities sponsored by an environmental organization (17% 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.

Percent of Citizens who have Devoted Time to Community Organizations, 1995-1999



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

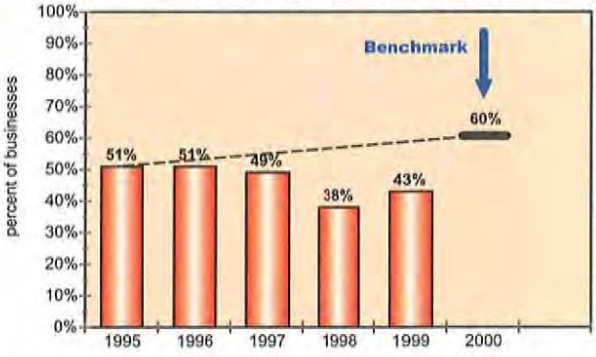
30 BUSINESS INVOLVEMENT IN COMMUNITIES AND SCHOOLS

Benchmark: The percentage of Maine for-profit businesses who 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 2000.

Business Involvement Not Consistent In 1999, 43% of Maine businesses took an interest and got involved in local school and civic events. This is a statistically significant increase from the 38% percent of businesses who reported civic involvement in 1998.

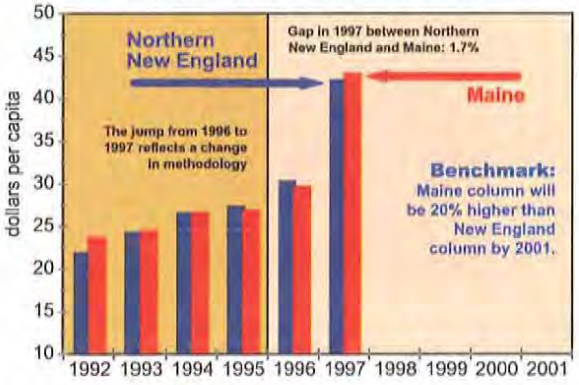
Partnerships between businesses and schools or other community groups often result in benefits for the community and the business. It is a sound avenue towards long-term economic growth. Maine for-profit businesses were asked the extent to which they do well at "taking an interest and getting involved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

Business Interest and Involvement In School & Civic Events, 1995-1999



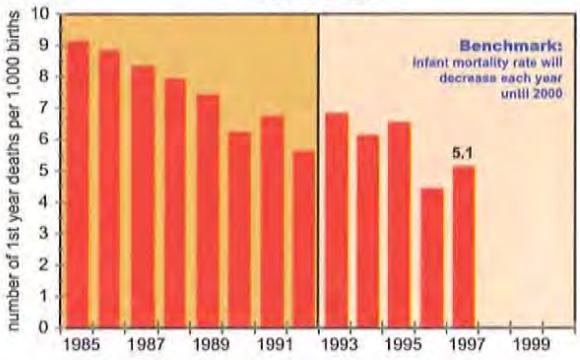
Data Source: Maine Development Foundation Annual Survey of Maine Businesses, 1995-1999.

Arts & Culture Expenditures per Capita Maine & Northern New England, 1992-1997



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

Infant Mortality 1985-1997



Data Source: US Department of Health and Human Services, Center for Disease Control, National Center for Health Statistics, Monthly Vital Statistics Reports. No new data available since the Growth Council's previous *Measures of Growth* report.

Cigarette Smoking Among 18-34 Year Olds, 1992 - 1998

Data Source: Maine Department of Human Services, Bureau of Health, based on behavioral risk surveys, April, 1999.

31 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 Increasing Relative to Northern New England In 1997, Maine arts and culture organizations (performing arts organizations, museums, historical societies, festivals, and others) spent over $39 million; about $43 per resident. Across Northern New England (Maine, New Hampshire and Vermont), similar organizations spent about $42 per resident.

The large increase in expenditures from 1996 to 1997 shown in the graph is almost entirely attributable to a change in the way expenditures are measured, although real spending did increase. For 1997, the Urban Institute's National Center for Charitable Statistics included some categories of arts and culture organizations that were previously excluded from the analysis. However, even among just those organizations included in the 1996 figures, expenditures in Maine increased by 8% whereas across Northern New England expenditures increased by just 5.7%. The up arrow rightly indicates that Maine expenditures increased relative to Northern New England expenditures, whether measured the old or the new way.

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 reflects the spending of nonprofit organizations with annual gross receipts over $25,000 who are required to file form 990 with the Internal Revenue Service.

32 INFANT MORTALITY

Benchmark: Maine's infant mortality rate, 6.8 per 1,000 births in 1993, will decrease each year until at least 2000.

General Trend is Positive - Exceptional National Standing In 1997, Maine's infant mortality rate was 5.1, meaning that 5.1 out of every 1,000 infants died before their first birthday, for various reasons. This was the second best rate in the country among all 50 states. Maine's 1996 rate of 4.4 was the best in the country that year.

Infant mortality is a good indicator of adverse social conditions such as poverty and an unhealthy environment. The rate taken for the state as a whole is a reflection of the extent to which pregnant women and babies under a year old are subjected to negative conditions. These are two of our most vulnerable populations. The social conditions impacting a human at this early stage of life are a good indicator of expected social conditions throughout the individual's life.

Infant mortality is most meaningful when looked at over decades. Over time it is a good but rough measure of a state's or a nation's health but experts caution against drawing conclusions from year to year fluctuations.

33 CIGARETTE SMOKING

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

Almost One Third of Young Adults Smoke Cigarettes In 1998, an estimated 30.3% of Maine people aged 18-34 smoked cigarettes. The percentage change from the 1997 rate, shown on the graph, is not significant given the survey sample.

This is a performance measure because cigarette smoking is the leading cause of preventable death in Maine. 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. Smoking is known to cause heart disease, emphysema, and several types of cancer.

34 CRIME

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

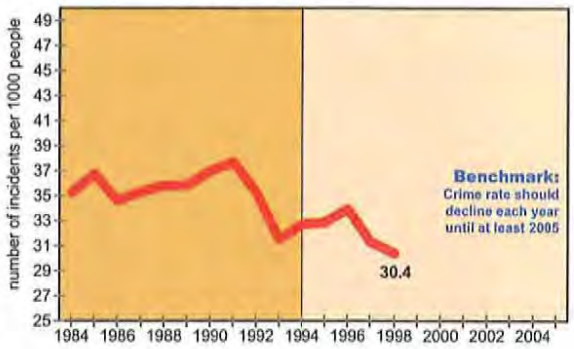
Benchmark Achieved - Crime Rate Continues Downward In 1998, there were 30.4 incidents of crime in Maine per 1,000 people, a 3% improvement over the 1997 rate. Maine's 1998 crime rate is lower than the benchmark which was established in 1994 at 31. Having been achieved, the benchmark has been changed to call for continuous improvement.

The Growth Council this year recognizes the positive trend of crime reduction with a Gold Star.

Nationally, the crime rate improved by about 6% from 1997 to 1998, from 49.2 to 46.2 incidents per 1,000 people. Experts point out that young males are declining as a percent of our overall population and this changing demographic contributes to the lowering of the 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.

Crime Rate, 1983-1998



Data Source: Federal Bureau of Investigation, Crime in the United States, 1999.

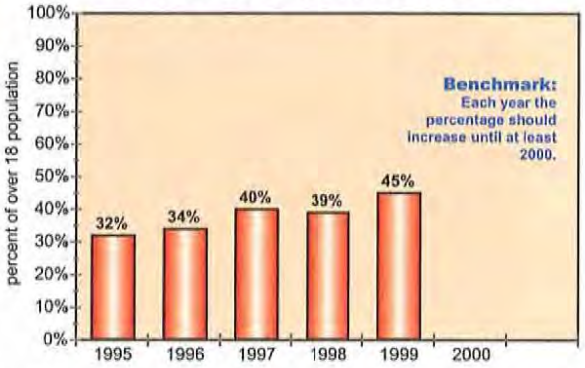
35 CITIZEN SATISFACTION WITH STATE GOVERNMENT

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 each year until at least 2000.

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 1999, 45% of those surveyed rated state services as good or excellent. This is a significant improvement over the 1998 rate of 39%.

The value of services for the 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.

Citizen Opinion of Value of State Services for Taxes Paid, 1995-1999



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

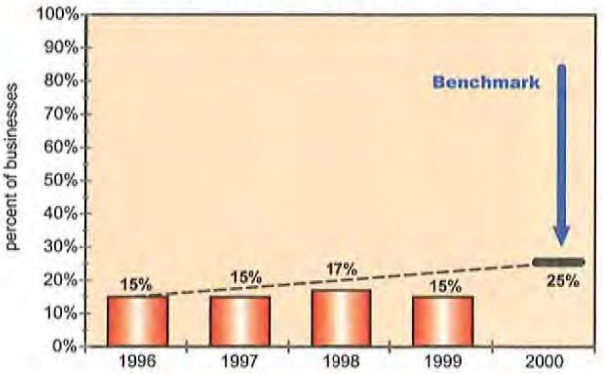
36 BUSINESS SATISFACTION WITH STATE GOVERNMENT

Benchmark: The percentage of Maine for-profit businesses that 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 25% by at least 2000.

Businesses Opinion of State Government Remains Low In 1999, 15% of businesses surveyed responded good or excellent to this question: "How would you rate the value of state services that you get for the taxes you pay to the state?" This year's response is not significantly different from last year's rate of 17%, given the survey sample.

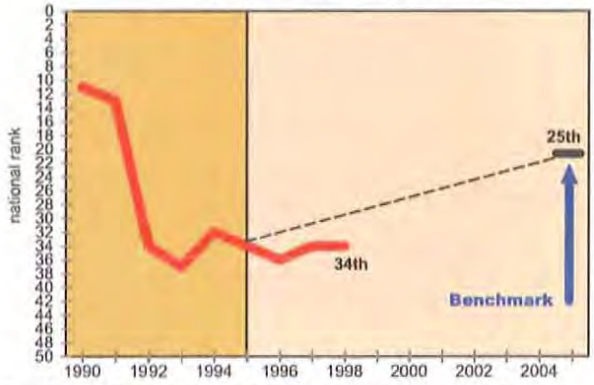
This is a measure of perceived government efficiency because it asks about value in light of amount of taxes paid.

Business Opinion of Value of State Services for Taxes Paid, 1996-1999



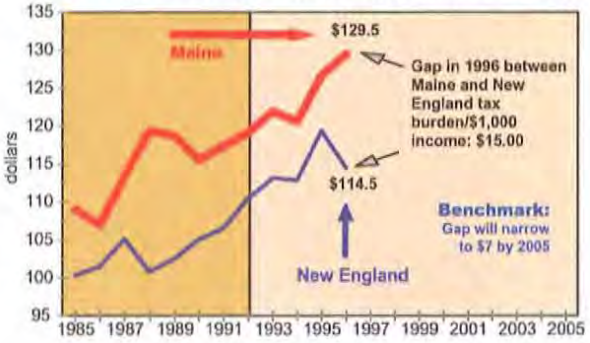
Data Source: Maine Development Foundation Annual Survey of Maine Businesses, 1996-1999.

Fiscal Stability & Balanced Revenue National Rank, 1990-1998



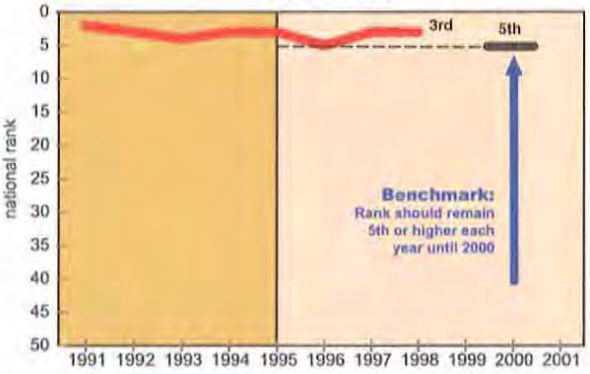
Data Source: Corporation for Enterprise Development, Development Report Card for the States, 1990-1998. No new data available since the Growth Council's previous *Measures of Growth* report.

Individual Tax Burden/$1,000 Income All Taxes - Maine & New England, 1985-1996



Data Source: US Census, State and Local Government Finance Estimates, November, 1999.

National Rank on Tax Fairness 1991-1998



Data Source: Corporation for Enterprise Development, Development Report Card for the States, 1991-1998. No new data available since the Growth Council's previous *Measures of Growth* report.

37 FISCAL STABILITY AND BALANCED REVENUE

Benchmark: Maine's rank among the 50 states on fiscal stability and balanced revenue will improve from 34th in 1995 to 25th by at least 2005.

Relative Standing Unchanged In 1998, Maine ranked 34th in the nation on a national index of fiscal stability and balanced revenue, the same rank as in 1997.

This composite index examines *balance* among the four major taxes (corporate, income, property, sales) and *fiscal stability* by the size of the state's rainy day fund, whether it allows net operating carrybacks in the corporate income tax, and the breadth of its sales tax. Maine scores well with regard to the *balance* of state tax collections. The primary reason for Maine's low standing nationally has to do with lack of *stability* of the taxation system. In particular, Maine is penalized for allowing operating loss carrybacks.

This index is important for businesses and others who are concerned with the predictability of taxes and stability of the state economy. This performance measure must be looked at in conjunction with *38 - State and Local Tax Burden*, and *39 - Tax Fairness*.

1998 is the most recent year for which we have data because CfED is considering discontinuing this index and has not updated it for 1999. If CfED discontinues the index, the Growth Council will consider a replacement measure.

38 STATE AND LOCAL 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 In 1996, Maine people earned a about $25 billion of income and paid a total of $3.2 billion in state and local taxes. For every $1,000 earned as income in Maine, about $130 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 $115. The gap between Maine's tax burden and New England's tax burden widened significantly from 1995 to 1996 earning this performance measure a Red Flag.

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.

From 1995 to 1996, income across New England grew by 9% whereas Maine income grew by just 3%, partially accounting for the widening gap between New England.

1996 is the most recent year for which we have data that is comparable with all other states. This performance measure must be looked at in conjunction with *37 - Fiscal Stability* and *Balanced Revenue and 39 - Tax Fairness*.

39 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 *37 - Fiscal Stability and Balanced Revenue* and 38 - State and Local Tax Burden. 1998 is the most recent year for which we have data because CfED is considering discontinuing this index and has not updated it for 1999. If CfED discontinues the index, the Growth Council will consider a replacement measure.

40 CONDITION OF ROADS

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

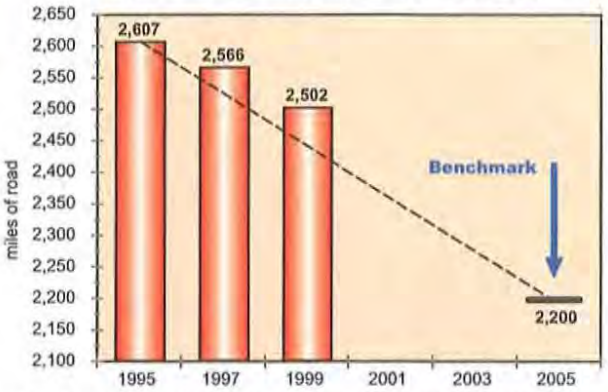
Roads Improving - Evidenced by Decreasing Backlog Maine's principle arterials, major collector, and minor collector roads carry 90% of the state's motor vehicle traffic. These roads provide vital links to destinations and other modes of travel throughout Maine. In 1999, 2,502 miles of these types of 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.

In previous *Measures of Growth*, this performance measure relied on pavement condition of national highway system roads. The Growth Council has changed the methodology believing that miles of backlogged roads is a technically superior indicator.

Backlogged Miles: Principle Arterials Minor Arterials, Major Collector Roads



Data Source: Maine Department of Transportation; Bureau of Planning, Research and Community Service, October, 1999.

41 CONDITION OF BRIDGES

Benchmark: The percent of Maine's public bridges that are structurally sufficient, 76% in 1995, will increase to 78% by at least 2005.

Bridges Improving There are 3,565 bridges in Maine that are the responsibility of the public. These bridges include all those with spans greater than 10 feet on state highways, and public roads including town ways. Using the federal *Sufficiency Rating*, 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.

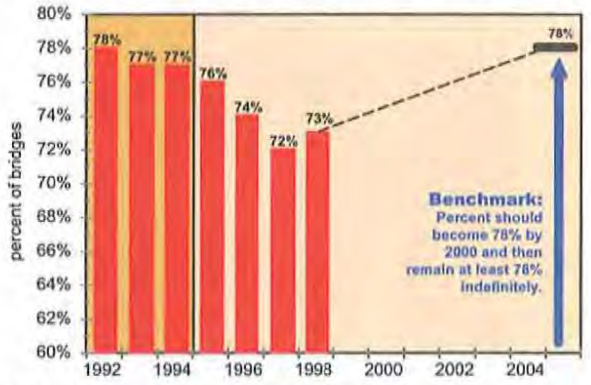
The percent of "sufficient" bridges, as defined in this performance measure, steadily decreased from 1992 to 1997 but appears to be on the incline in 1998.

A sufficiency rating of greater than 60 correlates to 10 years without capital improvement needs, 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.

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. Furthermore, bridges represent a very sizable infrastructure investment on behalf of the government. 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.

In previous *Measures of Growth*, this performance measure looked at percent national highway system bridges classified as deficient. The Growth Council has changed the methodology this year believing that this new indicator, recently developed by Maine Development Foundation staff and DOT, is more comprehensive.

Percent of Bridges Structurally Sufficient (improvements not needed for 10 Years)



Data Source: Maine Department of Transportation; Bureau of Planning, Research and Community Service, Bridge Management Systems, October, 1999

42 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.

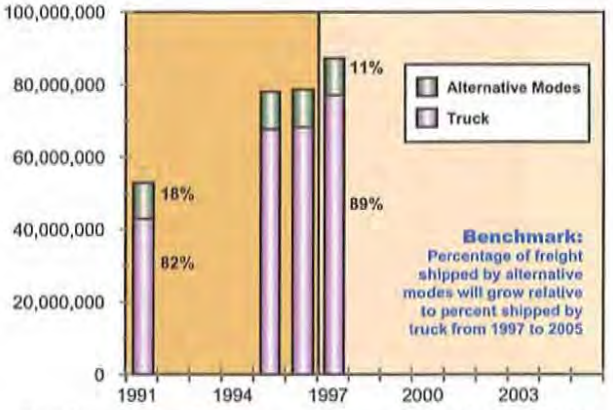
Trucking on the Increase In 1997, approximately 89% of all manufacturing freight tonnage transported in Maine was done via truck, while just 11% was shipped by rail, water, and air. Overall, the amount of manufacturing freight shipped in Maine increased 65% from 1991 to 1997, and trucks are increasingly the preferred mode. In total, an estimated 87.2 million tons of freight were shipped in Maine in 1997.

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 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 air, rail, and seaports would relieve the dependency on the traditional collector-road system and result in greater efficiencies and economies of scale.

The Growth Council revised the benchmark this year to bring it in line with recent trends.

Manufacturing Freight by Truck & Alternative Modes, 1991-1997



Data Source: Maine Department of Transportation, Office of Freight Transportation, October, 1999.

43 TELECOMMUNICATIONS

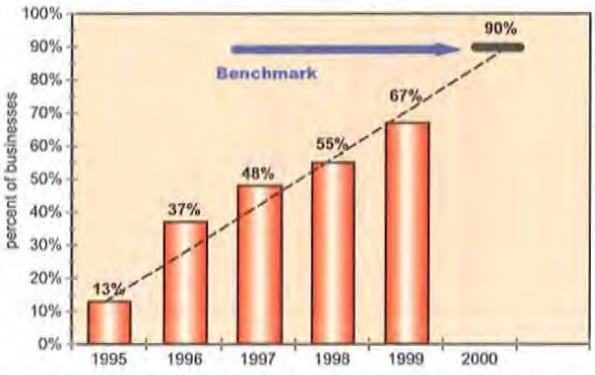
Benchmark: The percentage of Maine for-profit businesses using the Internet will improve from 13% in 1995 to 90% by at least 2000.

Internet Use Increasing Dramatically In 1999, 67% of Maine businesses surveyed reported that they used the Internet. Over the past five years, the percent of Maine businesses using the Internet has steadily increased earning a Gold Star.

Use of telecommunications reduces the geographic barriers to economic development that Maine has traditionally experienced. Economic growth depends on our transition to a more global marketplace, linked by advanced telecommunications. Although numerous other communications technologies could be measured, e.g. data transmission capability and video conferencing, Internet use is representative of an advanced technology most useful to most Maine businesses, large and small.

For-profit businesses were asked, "What telecommunications systems and services are currently used by your company?" The graph reflects the percent of those who said they used "Internet (E-mail, www, etc.)" among other choices, such as fax, 800 number, and others.

Business Use of Internet 1995-1999



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

44 COST OF ELECTRICITY

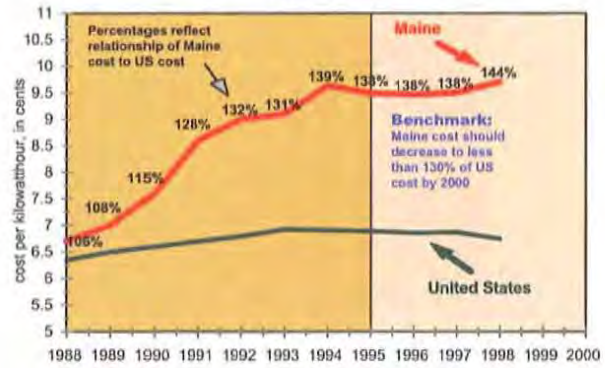
Benchmark: The cost of electricity in Maine will decrease to less than 130% of the average US cost of electricity by at least 2000.

Maine Costs Increase Relative to National Average In 1998, electricity in Maine cost an average of 9.7 cents per killowatthour. Across New England, electricity averaged 10 cents per killowatthour and across the nation as a whole, it averaged 6.75 cents per killowatthour. The graph shows that in 1998, Maine electric consumers paid almost one and a half times (144%) as the national average rate.

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 killowatthours produced.

The cost of electricity is a fundamental cost of doing business and so it is important that it be competitively low in order to attract and retain businesses. Three recent developments will likely affect the cost of electricity in Maine: deregulation of the electric utility industry, the closing of Maine Yankee Atomic Power Plant, and a new natural gas pipeline through Maine.

Cost of Electricity, Maine and US 1988-1998



Data Source: US Department of Energy, Energy Information Administration, Annual Electric Utility Reports, 1988 - 1998.

45 AIR QUALITY

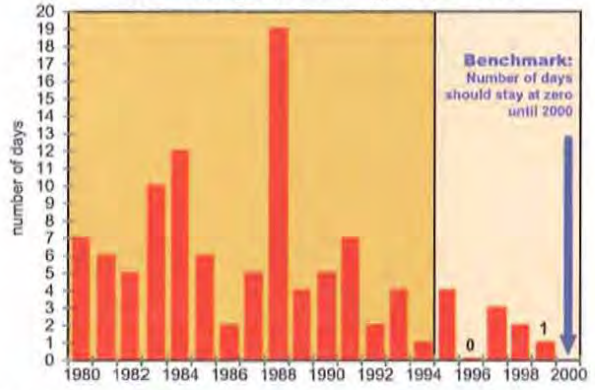
Benchmark: The number of days that Maine experiences unhealthy air quality due to ground-level ozone will improve from 4 days in 1995 to a consistent standard of zero through 2000.

Maine's Air Quality Improving In 1999 there was 1 day that Maine's ground-level ozone was high enough to be deemed unhealthy, by this particular measure. This is slight improvement over the summer of 1998 that had 2 such days.

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. Strong scientific evidence indicates that Maine's ozone (and other) pollution comes from other, upwind states; as well as being generated here in Maine. Gaining a reputation for poor air quality, whatever the cause, would work against economic growth.

Up until 1998, the federal air quality standard was that the air should not contain more than .12 parts per million of ground-level ozone as measured by looking at maximum hourly concentrations. Although the federal standard recently changed to become more strict, the Growth Council continues to use the old standard so as to maintain the integrity of the trend that this performance measure tracks.

Annual Number of Days with Unhealthy Air Quality, 1980-1999



Data Source: Maine Department of Environmental Protection, Bureau of Air Quality Control. November, 1999

46 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.

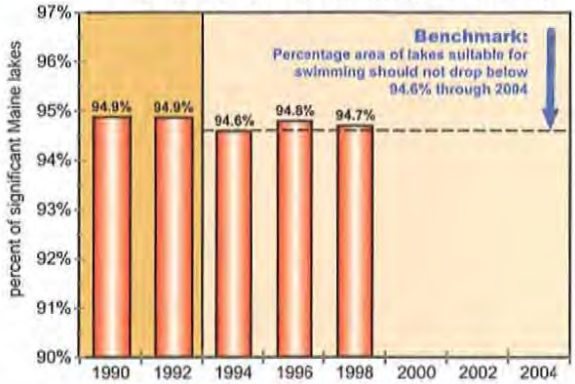
Quality of Lakes Stable Of Maine's 5,788 lakes, 2,315 are deemed significant. These lakes make up 97% of the state's total lake area and amount to 959,195 acres. They are regularly evaluated by the Maine Department of Environmental Protection.

Of these 2,315 significant lakes, 53 were considered not fully suitable for swimming in 1998 totaling 50,859 acres. The 1998 percentage of significant lake acres that fully support swimming remains stable at 94.7%. The graph shows a slight decrease from 1996 to 1998 because a small lake unsuitable for swimming was added to the "significant" category, not because any lakes actually became unsuitable.

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 assemblages of plant and animal communities. Maine is one of a handful of states endowed with an abundance of natural inland waters.

Percent of Significant Lakes Suitable for Swimming, 1990-1998



Data Source: Maine Department of Environmental Protection, State of Maine Water Quality Assessment, 1998. No new data available since the Growth Council's previous *Measures of Growth report.*

47 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 2000.

292 Miles Unsuitable for Eating Fish Due to Dioxin Due 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, 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.

Although the number of unsuitable miles has increased, this does not necessarily mean that dioxin in rivers has increased, but rather reflects the fact that in March, 1997, 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.

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.

Miles of Rivers Unsuitable for Fish Consumption Due to Dioxin, 1992-1998

Data Source: Maine Department of Environmental Protection, State of Maine Water Quality Assessment, 1998. No new data available since the Growth Council's previous *Measures of Growth* report.

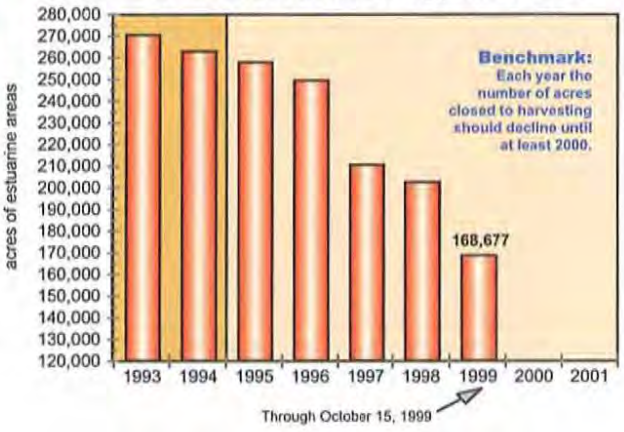
48 WATER QUALITY OF MARINE AREAS

Benchmark: The number of acres of estuarine areas not suitable for shellfish harvesting, 257,908 acres in 1995, will decrease each year until at least 2000.

Continued Dramatic Improvement In October, 1999, the amount of area closed to shellfish harvesting along the Maine coast was 168,677 acres, representing 9.6% of all shellfish beds. This performance measure receives a gold star because each year since 1993, additional areas of shellfish beds have been opened representing an improvement in marine water quality. This year the improvement is particularly dramatic.

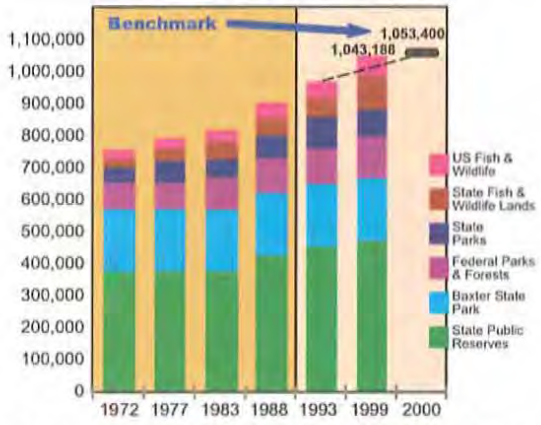
Area of shellfish beds open to harvesting is important not only because it has a direct effect on the shellfishing industry (over $18 million gross sales in 1998), but also because it is an indicator of overall marine and estuarine water quality which is important to commercial fishing activity and the 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.

Acres of Flats and Waters Closed to Shellfish Harvesting, 1993-1999



Data Source: Maine Department of Marine Resources.

Land in Conservation for Public Use, 1972-1999



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 1999 data.

49 CONSERVATION LANDS

Benchmark: The amount of Maine conservation land intended for public use will improve by 10%, from 957,622 acres in 1993 to 1,053,400 acres by at least 2000.

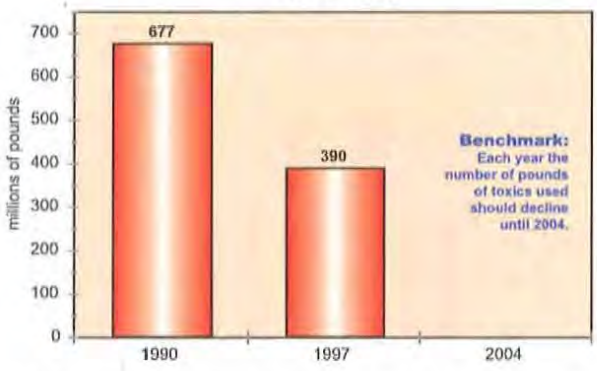
Good Progress Continues In 1999, Maine had 1,043,188 acres of publicly-owned conservation land where use is encouraged, a 1.5% increase over last year.

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 Maine 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, this 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.

Previous Measures of Growth reports showed an additional 20,247 acres of state public reserved land than is reflected in the graph above. This is because previous figures included submerged lands and relied on less accurate surveys than are currently available. Thus the benchmark has been revised down proportionally.

Toxics Used in Manufacturing 1990-1997



Data Source: Maine Department of Environmental Protection, Office of Innovation and Assistance. No new data available since the Growth Council's previous *Measures of Growth* report.

50 INDUSTRIAL USE OF TOXIC CHEMICALS

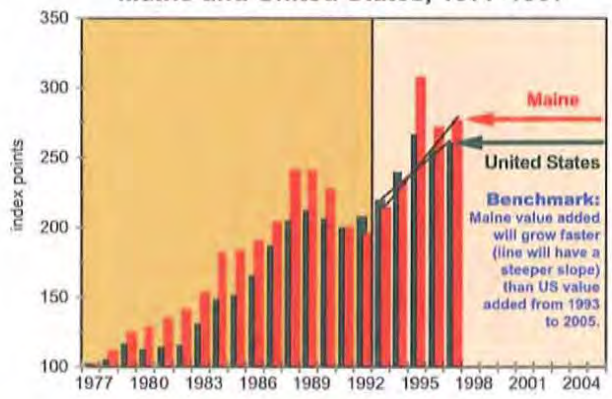
Benchmark: The number of pounds of toxics used by businesses, 677 million in 1990, will decrease each year until at least 2000.

Significant Reduction In 1997, Maine businesses used about 390 million pounds of toxic materials, mostly in manufacturing. This represents a 43% decrease from the amount of toxic materials used in 1990 and marks achievement of the initial benchmark established at 474 million pounds.

Toxic substances or toxics (also known as extremely hazardous substances) are defined by the federal government and include such things as phenol, chlorine, propylene oxide, and hydrogen chloride. There are currently 129 companies or facilities in Maine that use such chemicals in amounts that require reporting. Toxics are typically found in textile mills, tanners, electronic plants, and metal finishing plants, among others.

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

Paper and Lumber Value Added (indexed from 1977) Maine and United States, 1977-1997



Data Source: US Bureau of Economic Analysis, June, 1999.

51 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 Outpacing the Nation Over Last Five Years Over the past five years, value added in Maine's paper and lumber industries grew 18.4%, compared with national growth in these industries of 8.9%. In 1997, paper and lumber value added totaled just over $2 billion, about 6.8% of the Maine economy.

From 1996 to 1997, the most recent years for which we have data, the U.S. growth rate just barely outpaced Maine's growth rate of 1.7%.

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.

52 PAPER AND LUMBER EMPLOYMENT

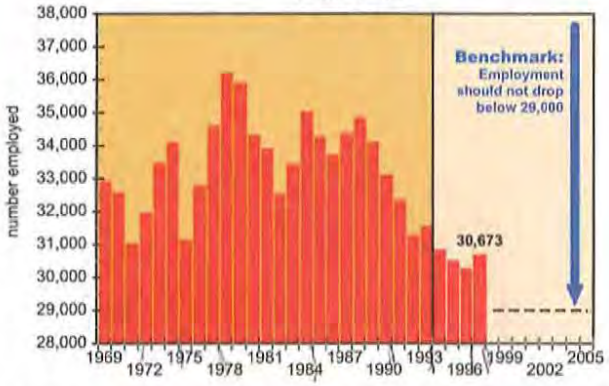
Benchmark: Employment in Maine's forest products industry will not drop below 29,000, a 6% decrease from the 1994 level of 30,813, between now and the year 2000.

Employment Increases at Last Look at the Data In 1997, the most recent year for which we have data, 30,673 people were employed in paper and lumber manufacturing, a 1.4% increase from 1996 employment. This is the first year-to-year increase in employment in the forest products industry since 1993.

Technology investments and stiff global competition have caused a long term decline in employment in these industries. The benchmark is set at a level above which we would like to see employment stabalize. The benchmark of holding overall industry employment at 29,000 jobs may be accomplished by adding jobs in those 'sub-industries' that manufacture products made out of wood, such as flooring and cabinets.

This data represents all workers who are employed by a business whose primary activities include making paper, lumber, and other wood products. In 1998, the Bureau of Economic Analysis revised the data for previous years.

Paper and Lumber Employment 1969-1997



Data Source: US Bureau of Economic Analysis, September 1998. No new data available since the Growth Council's previous *Measures of Growth* report.

53 VOLUME OF LARGE SAWTIMBER TREES

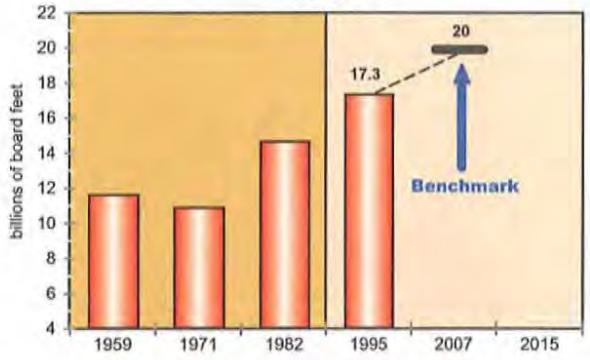
Benchmark: The volume of large sawtimber trees in Maine will improve from 17.3 billion board feet in 1995 to at least 20 billion board feet by at least 2007.

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. And sawtimber trees represent a wider variety of sales options for the landowner. They can be used for sawtimber, veneer, pulp, and other products.

Although this data has typically been generated from the National Forest Service survey conducted every 12 years, in future years the Maine Forest Service will be doing surveys which will generate annual updates.

Volume of Large Sawtimber Trees 1959-1995



Date Source: Maine Department of Conservation. No new data available since the Growth Council's previous *Measures of Growth* report.

54 AGRICULTURE VALUE ADDED

Benchmark: Agriculture net value added as a percent of total output will improve from 42% in 1995 to an average of 50% by at least 2000.

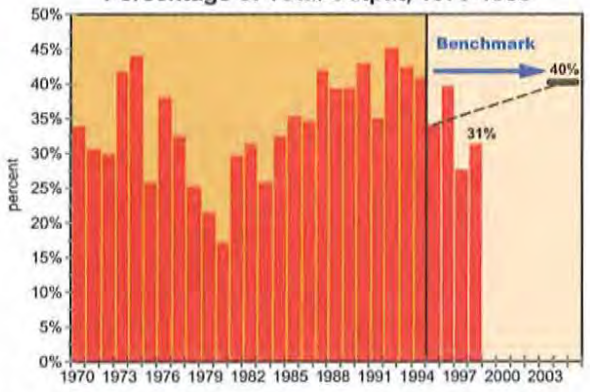
Agriculture Value Added Improves This Year In 1998, gross sales (total output) of Maine agricultural products totaled $557.5 million, and 31% of this ($173.7 million) is characterized as net value added. In 1997, net value added amounted to just 27.4% of total output.

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.

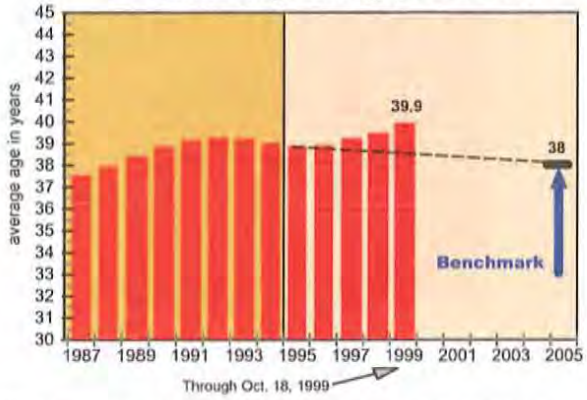
Previous editions of *Measures of Growth* have tracked *gross* value added as a percent of total output. This year, *net* value added is used because the USDA Economic Research Service discontinued reporting gross value added by state. Gross value added figures included capital investment in agriculture operations which the net value added figures do not include. The benchmark has been revised down proportionally.

Agriculture Net Value Added as a Percentage of Total Output, 1970-1998



Data Source: US Department of Agriculture, Economic Research Service, July 1999.

Average Age of Commercial Fishers 3-Year Moving Average, 1985-1999



Data Source: Maine Department of Marine Resources, October, 1999.

55 COMMERCIAL FISHING

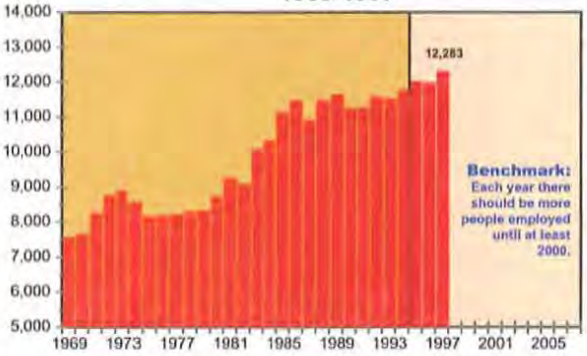
Benchmark: The average age of Maine's commercial fishers, examined over a three-year period, will decrease from 38.8 years old in 1995 to 38 by at least 2005.

Average Age Continues to Increase For the three years 1997, 1998, and 1999, the average age of Maine fishers was 39.9, a slight increase over the average age of the previous three years.

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. 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 1999 average age is based on all applications issued through October 18, 1999 which totaled 16,970 licenses issued to 11,628 fishers. Each column in the graph reflects the average age over the previous three years. The three-year moving average is a change in methodology from previous editions of *Measures of Growth* and was implemented to create a smoother, more realistic trend line. The benchmark has been revised accordingly.

Hotels & Lodging Employment 1969-1997



Data Source: US Bureau of Economic Analysis, September 1998. No new data available since the Growth Council's previous *Measures of Growth* report.

56 TOURISM EMPLOYMENT

Benchmark: Employment in Maine's hotel and lodging industry, 11,481 jobs in 1993, will improve each year until at least 2000.

Employment Steadily Increasing, at last Look at the Data In 1997, the most recent year for which we have data, 12,283 people were employed in Maine businesses principally engaged in the hotel and lodging industry, a 2.8% increase over 1996 levels.

Employment trends in this industry is an indicator of tourist activity, given that hotels and other lodging establishments are used almost exclusively by tourists. In reality, many more people are working in businesses that cater to tourists than these numbers reflect; however, this measure serves as a proxy for employment trends in the tourism industry overall.

It is estimated that in 1998, tourists spent $4.9 billion in Maine generating state and local tax revenues of about $300 million. It is also estimated that tourist activity generates over 100,000 jobs. Tourism activity is very 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.

ACKNOWLEDGMENTS

The Maine Economic Growth Council is co-chaired by Senate Majority Leader Chellie Pingree and Bath Iron Works Vice President Kevin Gildart. The Growth Council is administered by the Maine Development Foundation. Growth Council members are appointed jointly by the Governor, President of the Senate, and Speaker of the House. The work of the Growth Council is financed with a State appropriation matched by the Maine Development Foundation's private sector resources.

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 and advised the content of the report. Craig Freshley, program director, researched and authored the report. Market Decisions, Inc. performed the statewide surveys of citizens and businesses. Working Words and Graphics, Inc. formatted the report, and it was printed by Penmor Lithographers on 100% recycled paper (not less than 50% post-consumer waste) manufactured in Maine.

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.

Adopt-A-Benchmark

The Growth Council has established a list of 56 performance measures and a target for each one (the benchmarks), but the Council does not 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 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
10 - On-the-Job Injuries	Maine Department of Labor
	Maine Employers' Mutual Insurance Company
11 - High School Diplomas	Guilford of Maine
12 - Associate's Degrees	The University of Maine System
	Guilford of Maine
13 - Bachelor's Degrees	The University of Maine System
	Guilford of Maine
14 - Graduate Degrees	Guilford of Maine
15 - Lifelong Learning	Cumberland County Private Industry Council
	Guilford of Maine
16 - Citizen Opinion of Educational Opportunities	Eastern Maine Technical College
17 - Employer-Sponsored Training	Guilford of Maine
18 - Business Opinion of Universities and Colleges	USM Corporate Partners
19 - Population of Service Center Communities	Maine State Planning Office
20 - Family Income Disparity	Maine Center for Economic Policy
21 - 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
	Western Mountains Alliance
24 - County Employment Disparity	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
29 - Citizen Participation in Community Activities	Maine Centers for Women, Work, and Community
30 - Business Involvement in Communities and Schools	Maine Coalition for Excellence in Education
31 - Arts and Culture Expenditures	Maine Arts Commission
39 - Tax Fairness	Maine Center for Economic Policy
44 - Cost of Electricity	Central Maine Power
49 - Conservation Lands	The Nature Conservancy
51 - Paper and Lumber Value Added	Maine Wood Products Association
52 - Paper and Lumber Employment	Maine Wood Products Association
53 - Volume of Large Sawtimber Trees	Maine Forest Service
54 - Agriculture Value Added	Borealis Breads

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

MAINE DEVELOPMENT FOUNDATION

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