Maine’s Investment Imperative II: Unleashing the Potential

Prepared for:

MAINE STATE CHAMBER OF COMMERCE
About the Authors

**Laurie G. Lachance** – President and CEO, Maine Development Foundation
Laurie served as the Corporate Economist for Central Maine Power Company and later as the Maine State Economist for 11 years. She has a bachelor’s degree from Bowdoin College and an MBA from Thomas College.

**Edmund J. Cervone** - Senior Program Director, Maine Development Foundation
Ed has worked in the private sector for sales and manufacturing companies and later as a policy analyst for the Maine Center for Economic Policy. He has a bachelor’s degree from Princeton University and a master’s degree from University of Maine.

**Patricia H. Hart** – Senior Program Director, Maine Development Foundation
Pat operated her own consulting practice for 10 years providing economic analysis, program evaluation and research to clients. She has a bachelor’s degree from the College of William and Mary and a master’s degree from the University of Massachusetts.

**Ryan K. Neale** – Program Officer, Maine Development Foundation
Ryan worked in the Washington, D.C. office of Senator Snowe, and in the private sector as a Human Resources assistant. Ryan has a bachelor’s degree from the University of Maine and a master’s degree from the Muskie School at the University of Southern Maine.

**Research Assistant**

**Courtney L. Phillips** – Intern, Maine Development Foundation
Courtney has her bachelor’s degree from the Honors College of the University of Maine where she is currently pursuing her master’s degree in Communications Sciences and Disorders.

**About the Maine Development Foundation**

Maine Development Foundation supports a high quality of life for all Maine people. As a private non-profit membership organization, we do this by empowering leaders, strengthening communities, and guiding public policy.

Our flagship programs include Leadership Maine, Policy Leaders Academy, Maine Downtown Center, Maine Employers Initiative, and Maine Economic Growth Council (*Measures of Growth*).

Through these programs we stimulate new ideas, develop Maine’s leaders, and provide a common ground for solving problems and advancing important issues.
Acknowledgments

We would like to express our heartfelt thanks to the many individuals who gave their time and expertise to make this work possible. Your contribution is greatly appreciated. We would also like to thank those groups and associations that helped administer the survey of business decision makers to their members. The feedback shaped this work and added tremendous value.

Individuals:
- Michael Allen, Maine Revenue Services
- Henry Bourgeois, Maine Compact for Higher Education
- James Breece, University of Maine System
- Yellow Light Breen, Bangor Savings Bank
- James Clair, Goold Health Systems
- David Clark, Bath Iron Works
- Kathy Colfer, Kennebec Valley Community Action Program
- Daniel Corcoran, Anthem Blue Cross and Blue Shield
- Steve Culver, Hannaford Supermarkets
- Sara Devlin, Maine Turnpike Authority
- Rich Donaldson, L.L. Bean
- Maria Fuentes, Maine Better Transportation Association
- Kevin Gildart, Bath Iron Works
- Tim Glidden, Land for Maine’s Future
- Jody Harris, Maine State Planning Office
- Michelle Hood, Eastern Maine Health Care Systems
- Robert Kautz, Maine Coalition for Excellence in Education
- Phillip Lindley, ConnectME Authority
- Frank McGinty, MaineHealth
- John Melrose, Maine Tomorrow
- Jeffrey Nevins, FairPoint Communications
- Frank O’Hara, Planning Decisions, Inc.
- Christopher Pinkham, Maine Bankers Association
- Steven Pound, Cianbro
- Michael Reed, FairPoint Communications
- Catherine Renault, Maine Office of Innovation
- John Rohman, WBRC Architects - Engineers
- Steve Schley, Pingree Associates, Inc.
- Joan Smith, Baker, Newman & Noyes
- Jerome Stahno, Maine Revenue Services
- Peter Triandafillou, Huber Resources Corporation
- Conrad Welzel, Maine Turnpike Authority
- Wendy Wolf, Maine Health Access Foundation

Groups and Associations:
- Gulf of Maine Research Institute Board of Directors
- Maine Association of Chamber of Commerce Executives (MACCE)
- Portland Regional Chamber of Commerce
- Bangor Region Chamber of Commerce
- Androscoggin County Chamber of Commerce
- Mid-Maine Chamber of Commerce
- Katahdin Area Chamber of Commerce
- Kennebec Valley Chamber of Commerce
- Presque Isle Area Chamber of Commerce
- Maine Better Transportation Association
- Maine Farmland Trust
- Maine Forest Products Council
- Maine Higher Education Council
- Maine Hospital Association
- Maine Pulp and Paper Association
- Maine Renewable Energy Association
- Maine State Chamber of Commerce
- Maine Tourism Association
- Manufacturers Association of Maine
Maine’s Investment Imperative II: Unleashing the Potential

Executive Summary

“The ultimate source of growth is economic risk-taking in the private sector, that is, investing and entrepreneurship. These crucial activities drive innovation, invention, efficiency, and productivity in our economy. While consumers ultimately decide what flies and what does not, the entrepreneurs, innovators and investors will invest the capital – including sweat equity – and offer ideas that launch and build businesses, create new jobs, and grow the economy.”

Small Business and Entrepreneurship Council, Small Business Survival Index 2008: Ranking the Policy Environment for Entrepreneurship Across the Nation

Unleashing the Human and Economic Potential

Maine faces demographic and economic challenges. Maine's population is growing older, slowly, unevenly, and at a high cost. Maine’s economy, despite improvements over the last few decades, still lags the nation in productivity and wages. Collectively, Maine workers have fewer quality job opportunities and in many cases must make do on less.

It is essential that we address these challenges and turn this situation around. The following are a number of demographic and economic imperatives which we must commit to achieving in order for Maine to succeed.

Demographic Imperatives:
1. Bring every Maine person to their highest potential
2. Improve the health of every Maine person
3. Fully engage older experienced Mainers in the workforce
4. Provide young people with a meaningful economic and community experience so that they choose to live, work and play in Maine
5. Welcome and embrace all newcomers from other states and countries and fully integrate them into the rich fabric of Maine
6. Preserve and use Maine’s many natural and built assets to attract people to the state

Economic Imperatives:
1. Increase productivity across all economic sectors
2. Strengthen Maine’s manufacturing base
3. Align higher education and training with job needs
4. Embrace innovation and entrepreneurship as an economic growth strategy
Ultimately, we must improve our “productivity” both in terms of human capital and in terms of economic output. Productive people can achieve their highest educational potential and are engaged in the economy and their communities. Improved economic productivity makes us more competitive in the market and leads to wealth creation, job creation and better earnings for Maine workers. When this happens, we will realize the vision that we seek, “a high quality of life for all Maine people.”

The strategy to make this happen is investment. The private sector must invest in Maine to grow business, jobs and opportunities. In order for that to happen, the public sector must help create an environment conducive to investment and focus its limited resources on strategically investing in firming up our economic foundation.

**Unleashing the Investment Potential**

Hundreds of experts and over 1,000 Maine business leaders have identified the following economic issue areas as key to creating an environment where Maine businesses will invest and, in turn, improve productivity. The nine economic issue areas are listed in order of priority based upon survey results. Each section includes detailed recommendations designed to improve the investment environment in Maine:

**Health Care**
1. *Fund improvements to the current health care system that lead to cost reduction*
2. *Invest in preventive care and promotion of healthy behaviors to improve the health and productivity of Maine children and adults while lowering costs*
3. *Provide affordable insurance options for individuals and businesses*

**Energy**
1. *Lower the burden of high energy costs in the near term*
2. *Develop new sources of energy to lower reliance on oil, to protect against price volatility, and to provide new jobs*
3. *Invest in technology and infrastructure upgrades*

**Tax and Fiscal**
1. *Reduce tax rates and adjust structures that are disincentives to investment or residency*
2. *Reform tax system to protect against volatility in the larger economy*
3. *Lower the property tax burden*

**Regulatory**
1. *Provide more information and assistance to businesses navigating the regulatory environment*
2. Improve the often contentious relationship between regulatory bodies and businesses
3. Establish the regulatory climate as a priority issue with Executive and Legislative leadership and hold all parties accountable for improvement
4. Streamline the regulatory framework to ensure expedience, clarity, and consistency

Education
1. Create an overarching vision for education and set specific outcome goals
2. Develop Executive and Legislative Branch structures that work together to hold all accountable for successfully meeting the goals and moving towards the vision
3. Ensure successful, seamless transition across the individual educational systems to move all Maine people along the continuum of educational offerings

Innovation
1. Commit to necessary funding levels for innovation statewide
2. Provide support for entrepreneurs and small businesses
3. Teach innovation and entrepreneurship statewide

Transportation
1. Increase funding and identify new funding sources
2. Improve existing infrastructure
3. Invest in and expand multi-modal

Broadband
1. Fill broadband gaps to allow for greater business activity statewide
2. Strengthen connections between institutions and within economic sectors
3. Anticipate and identify the next wave of technology
4. Explore opportunities to lower costs and increase the subscribership rate

Quality of Place
1. Continue and expand upon regional, asset-based economic development initiatives
2. Preserve open space, natural amenities, and working landscapes
3. Limit sprawl and invest in existing downtowns and business districts

Conclusion

We can realize the vision of “a high quality of life for all Maine people.” Increasing productivity is the key and investment is the means of getting there. We need to invest in people, capital and ideas. These investments must happen in the private sector. The public sector needs to make sure that the foundation is set and that the environment is conducive to these investments. This is achievable. Maine must chart a course, make the commitment, lead the way, and stick to our plan.
Introduction

“It is simply not acceptable to turn our backs on the progress we have made and assume Maine’s unique quality of place is enough to sustain and grow our economy. It is simply not acceptable to be anything less than bold.”


In the winter of 2001 – 2002, then State Economist Laurie Lachance researched and wrote “Maine’s Investment Imperative.” This analysis of Maine’s economy was one of the four background papers used by the Institute for a Strong Maine Economy (under the auspices of the Maine State Chamber of Commerce) in preparing its report “No Place to Hide – Confronting Maine’s Economic Future.” The Institute’s report became the basis of discussion at many of the gubernatorial forums and debates and truly set the agenda for economic development.

In the run up to Maine’s 2010 gubernatorial election, the Maine State Chamber and the Maine Development Foundation (MDF) have partnered again to produce a set of economic research pieces and a summary report titled: “Making Maine Work: Critical Investments for the Maine Economy.” The purpose of the report is to once again frame the agenda and debate among the candidates on issues affecting the economy and Maine’s long-term development and prosperity.

The Maine Development Foundation created the two research pieces that serve as the background for “Making Maine Work”:

- Maine’s Investment Imperative II: Unleashing the Potential
- Maine’s Investment Imperative II: A Survey of Maine Business Leaders

This work is the research report entitled “Maine’s Investment Imperative II: Unleashing the Potential.” Both reports, the survey, and related research can be found online at www.mdf.org.

About this Report

Over 200 reports on issues in the Maine economy were identified, and from those, over 100 were reviewed and summarized to help make the case for investment and formulate the recommendations found in this report. Additionally, this report reflects the voice and priorities of over 1,000 Maine business leaders who responded to a Maine Development Foundation survey on the factors that affect their investment decisions in Maine.
This report is a valuable tool for a number of reasons:

- It does not try to reinvent the wheel, rather it pools from hundreds of experts, years of experience, and the best new ideas to find good ideas for Maine
- It reflects the voice of over 1,000 Maine business leaders and aligns recommendations with their priorities
- It provides specific recommendations that leadership can act upon to promote investment in Maine
- It is comprehensive and looks at the whole picture in Maine rather than the individual pieces of the puzzle

As “No Place to Hide” was able to set the stage for lowering Maine’s tax burden, this effort is designed to deliver results by focusing on the pertinent issues today and spelling out actions that will improve our economy and life in Maine.

**Report Organization**

This report is organized in three chapters:

1. Unleashing the Human Potential (demographic challenges and imperatives)
2. Unleashing the Economic Potential (economic challenges and imperatives)
3. Unleashing the Investment Potential (building a foundation for investment)

The first two chapters present the demographic and economic challenges that Maine faces and ideas on how to address them. The third chapter presents the economic issue areas that affect the business community’s ability and willingness to invest in the state, presented in priority order as determined by the survey. Specific recommendations are provided, by issue area, which will create an environment conducive to investment. Each of the issue area sections is organized as follows:

- Facts and findings
- Relative importance of issue according to the 1,039 survey respondents
- Recommendations from experts over time
- Investment imperatives and specific recommendations

These are big issues and there are many moving parts, but it is both necessary and possible, with a plan, leadership and will, to move Maine forward.
Chapter 1 - Unleashing the Human Potential

“No one can call our people lazy. They have been industrious; nay, hard workers. But they have acted as if the only law of labor was hard work. They have been slow to see that true labor seeks not simply where it can find obstacles to overcome, but how it can work most advantageously.”

Joshua Chamberlain, Maine: Her Place in History, 1876 speech (p. 97)

There are many ways that Maine people have been described over the years, but as Civil War hero and former Governor, Joshua Chamberlain, declares in the above quote from an 1876 speech – the description virtually always includes our unparalleled work ethic. Practical, down-to-earth, fair-minded, independent in thought, and trustworthy are also apt descriptors. And all of these qualities are appreciated by employers who view Maine workers as some of the most loyal and hard working available. In fact, the MDF survey that 1,039 Maine business leaders answered found that our workers are one of our greatest assets for growth.

Clearly articulated in Making Maine Work: Critical Investments for the Maine Economy, “Maine people are entrepreneurial – Maine had 19% more entrepreneurs per thousand people than the national average in 2008; civic-minded – Maine ranked 5th among all states in voter turnout in 2008; and caring – Maine averages 45 hours of volunteer time per resident per year, seventh highest in the country. Entrepreneurship, civic-mindedness, and caring are not just characteristics of good citizens. They are also the characteristics of good workers.”

However, the report also points out that we do not have the healthiest of lifestyles – with 18% of our adults and 28% of our young adults using tobacco products, and more than 60% of our adults and an alarming 28% of our children being obese or overweight. In addition, our college graduation rate is below the nation’s and the region’s. Our productivity (which is largely influenced by the industry mix and the relative age of the machinery, equipment and technology of our businesses) and thus our wages both rank 45th in the nation. These factors raise a red flag of concern with our ability, as a people, to fully participate in the new, knowledge-based economy and to increase the relative prosperity of all Maine people.

Further, the population forecasts for Maine present significant challenges that will need to be addressed in order to secure a better future for our state. The extent to which we understand, plan for, and take action to deal with these challenges will determine our success in unleashing the human potential so critical to our future.
The Demographic Trends

Maine has a number of powerful demographic forces bearing down upon us, and our economic fate is dependent on our ability to recognize the implications of these trends, accept and, indeed, embrace the changes, and take serious action to plan for the future that is fast approaching. Like the little man atop the elephant, while we cannot quickly reverse the direction of our population growth, we can slowly but surely work to alter the path ever so slightly - as even the slightest of changes could have dramatically positive outcomes for Maine.

The demographic trends and conditions that challenge Maine’s ability to grow and prosper are fourfold:

1. Maine’s population is growing slowly
2. Maine’s population is growing older
3. Maine’s population is growing unevenly and spreading out
4. Maine’s population is highly homogeneous

It is absolutely essential that we work to address each and every one of these in order to achieve the vision of “a high quality of life for all Maine people.”

The Demographic Imperatives

If we are to attain the vision we seek, we must commit to the following course of action – not stopping until we have fully unleashed the potential of all Maine people. We must:

- Bring every Maine person to their highest potential
- Improve the health of every Maine person
- Fully engage older, experienced Mainers in the workforce
- Provide young people with a meaningful economic and community experience so that they choose to live, work and play in Maine
- Welcome and embrace all newcomers from other states and countries and fully integrate them into the rich fabric of Maine
- Preserve and use Maine’s many natural and built assets to attract people to the state
Strategies to Address Demographic Trends

As the graph below illustrates, Maine’s population has always grown more slowly than that of the nation’s, with the exception of the 1970s, when Maine benefited from a “back to the land” movement, and in the 1980s when Maine rode the coattails of an unprecedented New England expansion. Since the 80s, however, Maine’s population growth has slowed to a rate that is half that of the U.S., and the forecast is for the pace to slow even more over the next 20 years.

![Actual and Projected Decennial Population Increases](image)

Slow population growth means that the majority of today’s workforce will be the workforce next year and 5 and 10 years out. If the workforce “team” we’re fielding today puts us in 45th place in terms of wages and productivity and we’re not expecting many new players, then we must fundamentally upgrade the skill level and educational attainment of every workforce “team” member. Our challenge is to bring every Maine worker to his or her highest educational and earning potential. Education, Pre-K through 20 and beyond, is the key.

In fact, national data show clearly that with every additional increment of formal education, unemployment declines and earnings rise. As you move from a high school diploma to a bachelor’s degree, the average unemployment is cut in half and average income rises 50%. Clearly, if we want to raise incomes, we must move people along the educational continuum.
Productivity is another key driver of income levels. And, productivity is directly impacted by health. Maine’s people have relatively high rates of chronic disease such as heart conditions, cancer, and diabetes. Not only do these take a toll on a person’s ability to work productively, they also significantly drive health care costs up – taking a further toll on overall economic performance.

Maine’s population is now the oldest in the nation, with a median age of 43.4 in 2009, and is growing older. The chart below shows the number of babies born in Maine each year from 1900 to 2008. The crest in the chart below, known as the Baby Boom generation, shows a surge in births between 1946 and 1964. Those babies are now preparing to retire.

![Maine Live Births, 1900-2008](image)

Source: Maine Department of Health and Human Services

Another even more striking illustration is the projected change by age cohort. From 2010 – 2030, the school age population is forecasted to decline 6%; the college age and young working age adults cohort will decline even more dramatically – dropping 28%; and the bulk of the traditional working age adults (30-64 year olds) cohort will be stagnant or see small declines through the period. Meanwhile, the next 20 years are projected to experience an explosion in the traditional retiree-age groups, with the number of 65-74 year olds increasing 73%, and the number of 75-84 year olds nearly doubling over the period (+90%).
The implications of the above chart alone are phenomenal. An aging population places extraordinary pressure on the transportation system, the health care system, housing, labor supply, and buying patterns. How do we reshape and restructure our institutions and companies to serve an older population?

The chart above shows that in 2010, 16% of the population is over 65. By 2030, 27% will be over 65. At the same time, school age children will drop from being 22% of the
population to 20%. How do school systems prepare for the likely budget priority shift that will accompany the population shift when 1 in 4 Mainers is a senior citizen? This is a huge issue for schools to consider now rather than later.

While we can’t stop time nor alter the natural aging process of Maine’s people, there are a number of steps that Maine’s business and political leaders can take to prepare for the inevitable changes and to soften the effects of the economic disruption that could occur absent action on our part. There is no reason to simply accept or, worse still, force retirement at the traditional age of 65. Life-expectancies have increased and this generation of older adults is living longer than prior generations.

- First and foremost, it is important that all Maine employers find a way to keep Maine’s aging Baby Boomers in the workforce for as long as possible – providing flexible work hours and work location, access to insurances and other benefits for part-time workers, and accommodations for any special needs (like being allowed to drive to and from work in daylight hours, or granting leave time to visit grandchildren at certain times of the year).
- Secondly, it is in the best interests of Maine’s policy makers and employers to provide educational and re-training opportunities to the incumbent workers that broaden their skill base, expand the innovative capacity of the workplace, and enrich the work experience for aging workers – enhancing both the productivity of the workers and their potential earnings for retirement.
- Finally, many states are proactive in trying to reverse, or at least mitigate, the so-called "brain drain" – the out-migration of the young working age cohort. In Maine, the REALIZE!Maine network includes about a dozen regional young people’s organizations with upwards of 2,000 – 3,000 members in the 20-40 age cohort. Strengthening and expanding these networks is one strategy for attracting and retaining young, working age adults.

Over the past few decades, Maine’s population has grown very unevenly and has moved out of the so-called “service center” communities, which serve as the regional centers of commerce, jobs and civic assets, and has spread out into the more suburban communities.

The next chart shows that from 2000-2008, the population changes in Maine counties ranged from an increase of over 7% in York County to a 4% decline in Washington County. These varying rates of population growth across Maine – highest in the south and mid-coast, stagnant in central areas, and declining in the north and east – have been evident for the past three decades and are projected to continue.
The very different demographic experiences across Maine’s counties creates tremendous challenges for policy makers in Augusta as they strive to create policies and programming that are fair and best fit the underlying economic growth. Unfortunately, the economic vitality of a region experiencing a 7% increase is much different from a region witnessing a 4% decline.

Maine’s population is spreading out and that is an extremely costly trend. As seen on the next chart, the percent of population living in more suburban and rural areas has grown from 37% in 1960 to 52% in 2008. This type of growth – better known as sprawl – has cost Maine greatly.

The fact that Maine is one of the most rural states in the nation makes the delivery of government services a challenge and an expense to begin with. When that rural population spreads out even further, the challenges are exacerbated.

Nowhere has the cost of sprawl been more evident than in our school systems. From 1970-2002, enrollment in our service center communities dropped 31%. At the same time, enrollment in our suburban and rural communities rose 8%.

From 1970-1995, there was a statewide decrease in school age population, yet three-quarters of a billion dollars were spent on new school construction. As of the late 1990s, research shows that the construction of new and often redundant infrastructure added an
estimated $50-$75 million annually to the General Fund expenditures to support our sprawling K-12 system.

![Percent of Maine's Population Living in Regional Service Centers (Compared to Other Municipalities) 1960-2008](chart)

Source: Maine State Planning Office

Even more dramatic is to look town by town. For example, in the Lewiston area from 1970-2002, Lewiston and Auburn saw 25% - 35% drops in K-12 enrollment, while the surrounding suburban and rural towns of Sabattus, Greene, Durham, and New Gloucester saw increases in enrollment of 80% - 115%.

Similar patterns can be seen in other service center communities around the state. So while our service center communities try to cover the fixed costs of an older school infrastructure with declining enrollment and tax base, the outlying communities are forced to build schools to meet rapidly increasing demand.

While it is likely impossible to completely stop the sprawling pattern of development that has been underway for the past half-century, there are certainly steps that Maine can take to mitigate the costs that have been imposed on our systems and to make our communities more economically viable. Many of the strategies for slowing this pattern of development are discussed in the Quality of Place section of Chapter 3. It is critical that Maine’s government put in place policies and programming that strengthen and enhance our service center communities, and the historic downtowns and business districts across Maine. Strengthening Maine’s “urban hubs” can make these communities more attractive
to businesses and entrepreneurs seeking affordable work spaces and available workers, and young people and retirees seeking cultural and social amenities. In addition, stronger urban areas are more attractive to immigrant populations who are needed to expand our workforce and overall population.

**Maine and Vermont swap the title, from year to year, as the most racially homogeneous state in the nation** – this is not a coveted title. As the chart below highlights, our degree of racial homogeneity has decreased somewhat as new populations have settled in Maine, but we still remain an almost entirely white population. At 96.1% in 2009, Maine’s share of white population far exceeded the national average of 79.6%.

Being the whitest population in the nation creates challenges for the Pine Tree State. First off, Caucasians have one of the very lowest birth rates, further slowing Maine’s potential for population growth. Secondly, young people and minority populations are more attracted to areas where there is a rich diversity of races, religions, and cultures. Because Maine has distinguished itself as the oldest and the most racially homogeneous state in the nation, we must actively seek, welcome and embrace all new Mainers – whether from other states or other nations – embrace their culture and fully integrate them into the rich fabric of Maine. Maine’s early growth was driven by immigration from a variety of areas – Canada, Ireland, Sweden, and Russia.

A recent article, authored by University of Southern California Professor Dowell Myers, for the Federal Reserve Bank of Boston article titled ‘Immigrants’ Contributions in an Aging
America,” noted that the ratio of senior citizens to working aged adults in Maine will increase 93% over the next two decades, far surpassing the U.S. increase of 67%. The article states that "The future of America will be formed at the intersection of two great demographic forces. With the inexorable aging into senior status of the giant baby boom generation, immigration may be the best way to get needed workers, taxpayers, and home buyers."

It is time for Maine to understand that actively seeking and integrating immigrant populations into our state is a strategy that offers real opportunity for enhancing economic vitality in Maine.
Chapter 2 – Unleashing the Economic Potential

“Productivity isn’t everything, but in the long run it is almost everything. A country’s ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.”

Paul Krugman, The Age of Diminished Expectations, 1994

Maine’s quality of life makes it an attractive place to live for many people. However, many Mainers find it difficult to make a decent living. Too frequently, there is a trade-off between our quality of life and economic well-being. Our natural amenities and way of life by themselves are not enough to move Maine forward economically. While Maine’s economy has grown over the past few decades, there are a number of factors that are preventing us from reaching our potential and that need our immediate and sustained attention if we hope to thrive rather than survive.

Productivity

At the heart of our economic challenge is productivity. According to the Maine Department of Labor, “The way for Maine to close the income gap with the nation is to close the productivity gap. To close the productivity gap our economic and workforce development efforts must foster growth in highly productive industries, especially those in which we are at a comparative disadvantage.”

![Value Added per Worker, All Industries](chart.png)

**Value Added per Worker, All Industries**

**U.S. and Maine, 1970-2008**

<table>
<thead>
<tr>
<th>Year</th>
<th>US Value Added</th>
<th>Maine Value Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>$20</td>
<td>$0</td>
</tr>
<tr>
<td>72</td>
<td>$30</td>
<td>$0</td>
</tr>
<tr>
<td>74</td>
<td>$40</td>
<td>$0</td>
</tr>
<tr>
<td>76</td>
<td>$50</td>
<td>$0</td>
</tr>
<tr>
<td>78</td>
<td>$60</td>
<td>$0</td>
</tr>
<tr>
<td>80</td>
<td>$70</td>
<td>$0</td>
</tr>
<tr>
<td>82</td>
<td>$80</td>
<td>$0</td>
</tr>
<tr>
<td>84</td>
<td>$90</td>
<td>$0</td>
</tr>
<tr>
<td>86</td>
<td>$100</td>
<td>$0</td>
</tr>
<tr>
<td>88</td>
<td>$110</td>
<td>$0</td>
</tr>
<tr>
<td>90</td>
<td>$120</td>
<td>$0</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis
As the previous chart illustrates, Maine's productivity has increased seven-fold over the past 40 years. However, Maine's productivity growth has not kept pace with the nation. As of 2008, Maine was only 79% as productive as the U.S. The correlation between productivity and wages explains in large part why Maine wages are lower than the nation's. Closing this productivity gap is absolutely essential if Maine hopes to grow and prosper.

Our relatively low level of productivity is not a commentary on the work ethic of our workforce; rather, it is an indication of the failure of both the private and public sectors to invest sufficiently in capital, technology, and human resources and to employ innovative new processes to a degree that enables Maine to compete in the global economy.

### Productivity in Maine and the U.S., 2008

<table>
<thead>
<tr>
<th>Industry</th>
<th>GDP per Job</th>
<th>Share of Total GDP</th>
<th>Share of Total Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maine to U.S. Ratio</td>
<td>Maine</td>
<td>U.S.</td>
</tr>
<tr>
<td>All Industry</td>
<td>75.8%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>87.0%</td>
<td>10.5%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Government</td>
<td>89.2%</td>
<td>12.5%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>86.8%</td>
<td>11.5%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Construction</td>
<td>69.9%</td>
<td>3.5%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>72.3%</td>
<td>13.0%</td>
<td>14.1%</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>87.4%</td>
<td>3.1%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Other Services, Except Government</td>
<td>82.2%</td>
<td>2.0%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Professional and Technical Services</td>
<td>64.4%</td>
<td>5.1%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Administrative and Waste Services</td>
<td>85.0%</td>
<td>2.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>71.8%</td>
<td>6.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>102.0%</td>
<td>13.2%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>87.1%</td>
<td>5.5%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Transportation and Wareshousing, excluding Postal Service</td>
<td>75.2%</td>
<td>2.4%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Arts, Entertainment and Related Activities</td>
<td>70.4%</td>
<td>0.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Educational Services</td>
<td>87.7%</td>
<td>0.9%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Forestry, Fishing, and Related Activities</td>
<td>91.7%</td>
<td>1.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Information</td>
<td>57.5%</td>
<td>3.7%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>70.9%</td>
<td>1.1%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Utilities</td>
<td>107.7%</td>
<td>2.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Mining</td>
<td>19.1%</td>
<td>0.0%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

**Source:** Maine Department of Labor

As the Maine Department of Labor chart above indicates, Maine has a higher share of employment in sectors where our productivity trails the national average. Conversely, in our ten most productive sectors, Maine has a smaller share of employment than the nation as a whole. In other words, we are comparatively productive in the industries that comprise only a small part of our economy and comparatively unproductive in those that make up the bulk of our economy. This is not a formula for success, and clearly, things have to change.
Changing Economic Mix

Another challenge is that Maine’s economic base has changed and continues to change. As a nation, we have transitioned away from manufacturing, as a provider of jobs, towards a service-based and knowledge-based economy. This change has been more extreme in Maine. Over the past 40-50 years, U.S. manufacturing employment has dropped by 25% while Maine’s manufacturing employment has fallen by close to 50%.

During the first half of the 20th century, Maine’s economic base was predominantly in the traditional, labor-intensive, and, to a large extent, natural resource-based, manufacturing sectors. In the 1940s, one out of two employees worked in manufacturing. As the following graph shows, by 1990, only 17% of the job base was in manufacturing, and by 2008, just over 9%. The erosion of manufacturing as a provider of jobs has been almost entirely offset by the employment growth in the health care sector, which has grown from 10% to over 15% of our job base. By 2008, the majority of Maine jobs existed in service and government sectors.

This transition has important implications. Historically, manufacturing employees received higher wages and, more importantly, better benefits than a service sector employee. This shift away from manufacturing jobs to service jobs has often meant lower wages and fewer benefits for Maine workers. The transition away from traditional manufacturing industries has also hit rural Maine harder than our urban areas. Energy-
intensive paper and shoe manufacturing originally located on Maine’s waterways to take advantage of cheap hydro power. Many have since shut down completely or moved out of the countryside. New businesses are not relocating in these rural areas.

Despite the declines in manufacturing employment, it remains an important sector of our economy. According to the Bureau of Economic Analysis, in 2008, Maine manufacturers accounted for $5.1 billion, or 13% of Maine’s gross domestic product. Some sectors are doing well. For example, according to the Federal Reserve Bank of Boston, in 2008, Maine’s paper exports increased by $60 million (10.8%), and transportation equipment exports by $232 million (123.4%) over their 2007 levels.

And the future has some exciting prospects. Cutting-edge Maine-based research in composites has taken our heritage in wood fiber and revolutionized the way we build boats. These advancements have also given rise to whole new opportunities in marine equipment manufacturing, bridge construction, and industrial windmill blades manufacturing.

**Per Capita Personal Income**

The lag in productivity and a changing economy have affected people’s wallets. As the chart below shows, Maine trails behind the nation in per capita personal income – approximately 10% less in 2008.

![Per Capita Personal Income Gap 1970-2008](chart.png)

*Source: Bureau of Economic Analysis*
Throughout the 1970s and the early 1980s, our per capita personal income trailed the rest of the country by 16%-19%. Per capita personal income is defined as the income received from all sources, divided by the state’s population. Sources of income include wages, salary, supplements, rents, dividends, interest, and transfer payments.

Following growth during the mid- to late-1980s, Maine’s income gap had closed to 10%-12% below the national average. It is important to note, however, that the wage component of personal income has not grown much for the average worker. This is a concern for most Maine workers that depend on wages and not investments or other transfer payments for income. In order to close that gap, Maine must make the necessary investments that will help our industries become more productive and the jobs they provide more lucrative.

**Employment**

To add to these challenges, Maine and the nation, have experienced substantial job losses during the most recent recession and a slow recovery is expected. The sharp decline in wage and salary employment levels since January 2008 has brought employment back to 1999 levels, erasing much of the economic gain of the past decade. Although they have not yet reached as large a level of decline, these losses are reminiscent of the dramatic drop-off of the recession in the early 1990s.
In simple terms, fewer jobs mean fewer opportunities for Maine workers. Some have been unemployed for extended periods of time. This is both a hardship to the worker and the public at large.

**Opportunities**

The outlook is not all bleak. There are opportunities for improvement. As previously stated, advancements in composites, boat building, marine research, and international trade have successfully built on the foundation of our traditional economic pillars. Innovations in renewable energy offer the opportunity to diversify our own energy portfolio and position ourselves to be key players in the global economy.

Like the rest of the nation, Maine's economy has been hampered by forces beyond our control. The recent financial meltdown triggered tighter restrictions in the financial lending industry that have limited Maine businesses' access to capital, adding another hurdle to investment. Unfortunately, we cannot control all of the factors that influence our economy. What we can do is pinpoint a number of specific areas that demand our attention.

In the effort to unleash our economic potential, four key investment imperatives emerge:

1. Increase productivity across all economic sectors
2. Strengthen Maine's manufacturing base
3. Align higher education and training with job needs
4. Embrace innovation and entrepreneurism as an economic growth strategy

These imperatives are aimed at increasing productivity, which in turn generates income and improves our quality of life. In the sections that follow, we explore nine economic development policy areas in detail, examining how government policy and resources can be put to work to create a climate that encourages private sector investment.
Chapter 3 – Unleashing the Investment Potential

“Nations or regions compete in offering the most productive environment for business. Productivity sets a nation’s or region’s standard of living (wages, returns on capital, returns on natural resources).”

Professor Michael E. Porter, Harvard Business School, Maine Competitiveness Moving to a New Economic Development Model, 2006

Chapter 1 discussed the challenges that an aging, racially homogeneous, slow and sprawling growth population creates and the need to keep older workers healthy and engaged in the workforce of raising the educational attainment of every single Maine person to their highest educational potential, and of attracting and embracing young and diverse populations to our state as strategies to unleash the human potential.

Chapter 2 covered the economic challenges that Maine faces in trying to compete in the rapidly evolving, knowledge-based and technology-driven, global economy and the importance of taking steps to increase our productivity and competitive standing – unleashing our economic potential.

In this chapter, we examine the 9 key policy areas that affect investment decisions in Maine. We asked thousands of Maine leaders what factors most affected their ability and willingness to invest in their Maine-based businesses. Each policy area is listed in priority order as determined by the 1,039 Maine leaders who responded to MDF’s survey.

If Maine is to grow and prosper, we must create an environment in which businesses will invest in equipment, technology and their workers. As the MDF survey highlighted, the greatest impediments to investment in Maine right now are cost factors – the cost of health insurance, the cost of energy, Maine’s taxes (income tax followed closely by property tax), and the regulatory environment. It is clear that these additional costs of doing business in Maine are greatly hindering private-sector investment, and if Maine is to grow, it is essential that we take action as a state to bring these costs more closely in line with regional and national levels.

The other key is for Maine’s state government to focus its limited public-sector investments to the greatest result for enhancing private sector investment and growth – providing an educated and innovative workforce, a state-of-the-art infrastructure that connects Maine to national and international markets and enhances productivity, and protecting our quality of place, one of our greatest economic development assets.
Health Care

“Although it is difficult to quantify the full economic toll, poor health can limit a person’s – and a family’s – educational, career and financial opportunities, creating a cycle of disadvantage that extends across lifetimes, generations and racial lines.”


The cost of health care is a problem throughout the country; however, costs that are rising faster than the national average are an excessive burden on Maine’s people and businesses. Factors driving these costs include expensive new treatments, inefficiencies in health care delivery, an aging rural population, and overall health status. High costs are an obstacle to accessing care and as a result can lead to poor health. As the chart below clearly illustrates, over the past 25 years, New England consumer prices for medical services have outstripped both the U.S. prices and Maine’s ability to pay for those services.

Poor health adversely affects families and communities, interrupts education, and lowers business productivity. Access to affordable and quality health care is necessary for economic development and a must for everyone in Maine and the nation.
Facts and Findings

The rising cost of health care and health insurance in Maine has outpaced income growth and consumes an increasing share of individual, family, business, and government budgets.

According to the Governor’s Office of Health Policy and Finance, Maine 2008-2009 State Health Plan:
- Maine’s per capita health care spending is 2nd highest in the U.S.

According to the Maine Economic Growth Council, Measures of Growth in Focus, 2010:
- From 1984 to 2008, the price of health care in New England increased over 400%, far outpacing the U.S. prices which increased 260% over the period and Maine’s personal income growth of 257%
- From 1991 to 2004, health care expenditures in the U.S. rose from representing 11.4% of GDP to 13.4% of GDP
- During this same period, health care expenditures in Maine rose from 13.0% of GDP to almost 20% of GDP

According to Families USA, Costly Coverage: Premiums Outpace Paychecks in Maine, 2009 and Too Great a Burden, 2009:
- From 2000 to 2009, family health insurance premiums for Maine workers more than doubled, increasing 101.4% while Maine median family earnings rose only 22.1%

“Maine’s cost crisis mirrors the national crisis” but “...high per capita health care spending here (in Maine) is largely due, not to an older or sicker population, but to how we use care and how much we use care.” (Advisory Council on Health Systems Development Report to the Legislature April 2009)

- Most of the difference in costs (between U.S. and Maine) is not explained by age or demographics
- Two-thirds of health care spending is driven by how much we use, one-third by the price of each service
  - Disease burden is a major driver of utilization and, therefore, spending – chronic illness accounts for about 30% of private premium costs
  - Much of the care provided to those with poor health does nothing to improve their health – nationwide, roughly 33% of spending is on unnecessary or ineffective care
  - Maine uses 30% more emergency services than the national average; reducing avoidable use could save $115 million annually
Despite state efforts to fund public health prevention-oriented programs, Maine’s population continues to engage in behaviors that are risk factors for chronic diseases such as cancer, diabetes, and heart disease.

According to the National Center for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2009:
- Over 64% of Maine adults are either overweight or obese
- Over 17% of Maine adults are smokers

The State’s use of public health insurance dollars has resulted in higher coverage rates in Maine than the nation, but the cost of that coverage is a concern when considering a limited state budget and many other competing needs.

According to the Maine Economic Growth Council, Measures of Growth in Focus, 2010:
- In Maine (2008), just over 90% of the population had health insurance, higher than the nation at just under 85%
- The difference is due to a greater share of Mainers on public health insurance (Medicare 14%, Medicaid 20%) than in the nation (Medicare 12%, Medicaid 14%)

According to the Maine Department of Health and Human Services:
- Medicaid expenditures have quadrupled in Maine since the early 1990s
Over 90% of Maine businesses are small and many find the cost of health insurance coverage to be prohibitive.

According to the Small Business Majority, Maine Small Business Healthcare Survey, July 2009:

- Only 42% of Maine's small businesses (100 or fewer employees) contribute something to employees' coverage (58% don't pay any part of the cost of health insurance for employees)
- 89% of those small businesses who do not offer health insurance say they can't afford to
- 81% of those small businesses who do offer health insurance say they are really struggling to do so

Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning the cost of health care.

The cost of health insurance was reported as the strongest negative impact on businesses and organizations and is seen as a major barrier to growth:

- More than 85% of the 1,039 respondents said that it has a negative impact
- Respondents ranked the cost of health insurance as the number one priority for the next Governor and Legislature to address

When asked in an open-ended question what they thought were the top three supports and barriers to economic growth in Maine:

- Health insurance/health care costs were mentioned by 32% of the respondents (272 people) as a major barrier to growth

Experts Recommend

The following is a summary of key recommendations from various reports, committees, and efforts to deliver quality affordable health care.

The Advisory Council on Health Systems Development, Report to the Legislature, April 2009:

- Support evidence-based health policies that prevent disease and promote health
- Support interconnected electronic medical record system in Maine through HealthInfoNet
• Develop efficiency measures that can be used to offer incentives for patients to choose efficient, high quality providers
• Support fundamental payment reform to bring about a more efficient system of health care delivery, starting with a Patient Centered Medical Home pilot
• Identify and implement strategies to reduce emergency department use
• Develop a consumer checklist for health insurance so consumers may better understand what they are purchasing

The Governor’s Office of Health Policy and Finance, Advisory Council on Health Systems Development, Maine 2008-2009 State Health Plan:
• Improve overall health by:
  o Coordinating statewide public health infrastructure, insuring the uninsured and underinsured, providing trained health care workers in rural areas, assuring access to oral health services, supporting telemedicine infrastructure, and by providing employers the tools to implement worksite wellness programs
• Assure best practices in care delivery by:
  o Addressing overutilization of emergency rooms, providing data on health care practice and utilization, and using tested practice standards
• Increase efficiency and effectiveness by:
  o Increasing Maine’s Medicare reimbursement and expanding use of those funds, supporting creation and use of an electronic health information system and a statewide health information exchange system, and refining the Certificate of Need criteria to encourage efficiencies and coordinated use of services

Joint Select Committee on Future Maine Prosperity, Time for Change, 2008:
• Embrace the goal of becoming the healthiest state in the nation – make Maine a laboratory and a center of excellence in health care
• Restructure guaranteed issue and community rating, and explore options for reinsurance and high-risk pools, to reduce premiums and protect consumers
• Explore use of health excellence rewards as incentives for good health and lower costs
• Find efficiencies in MaineCare and address income cliff (when a marginal increase in income leads to termination of benefits) that discourages people from going back to work

Maine Health Access Foundation, Improving the Health of Maine People: Getting Down to Basics, 2010:
• Provide access to health care providers at convenient times and locations
• Expand access to preventive care and prevention and wellness opportunities (MaineCare coverage for adult oral health services, access and incentives for healthy foods, and increased physical activity opportunities)
• Provide simple supports and tools to help people get and stay healthy (stress management, simpler MaineCare paperwork, network of technical and administrative assistance, transportation options)
• Improve access to good health information
• Analysis and quality improvement opportunities (data inventories, analysis, and best practices)
• Implement policy changes that fill gaps in MaineCare best practice coverage, set aside resources to respond to emerging health trends, and amend fiscal note format to look at longer term returns

Investment Imperatives

The high cost of health care was identified as the top concern and a major obstacle to investment by the over 1,000 business survey respondents of this project. Containing these costs must be the top priority of policy leaders or the data shows that the situation will only get worse and further inhibit investment of any kind in Maine.

Recommendations

Fund improvements to the current health care system that lead to cost reduction
• Governor should immediately convene major health care providers and stakeholders for purpose of outlining a strategy to slow health care cost inflation
• Identify and implement strategies to reduce emergency department use
• Use State’s buying power to drive providers and consumers toward data-supported best practice treatments and procedures
• Increase the Medicaid reimbursement to providers with the purpose of reducing the amount of cost shifting to private payers
• Complete HealthInfoNet project and invest in the expansion of telemedicine efforts statewide

Invest in preventive care and promotion of healthy behaviors to improve the health and productivity of Maine children and adults while lowering costs
• Leadership should set a goal of reducing obesity (childhood and adult) statewide and implement strategies in the state workforce and in all government-funded programming to achieve this goal
• Provide incentives to employers to promote preventive care and healthy lifestyles to their employees
• Promote preventive care and healthy lifestyles within Maine schools
• Coordinate with hospitals and philanthropy to work throughout communities to educate families about healthy lifestyles
• Offer incentives for MaineCare clients to pursue healthy lifestyle options and preventive care (physical, oral, and mental)
Provide affordable insurance options for individuals and businesses

- Increase affordable quality health insurance options to individuals and businesses
- Work collaboratively with private and non-profit partners to ensure that the requirements are met and benefits maximized in new federal health bill
Energy

“In comparison to other metropolitan areas in the U.S., energy costs were found to be the most significant difference in cost of doing business, a far larger factor than taxes.”


Affordable energy remains an area of great concern for Maine and the New England region. Because of a disproportionate dependence upon oil and natural gas for electricity production, home heating, and transportation, we are particularly vulnerable to petroleum price fluctuations and changing world politics. The high costs of energy not only burden Maine’s residents, but put our businesses at a severe disadvantage when competing with regions that use lower cost fuels such as coal, nuclear, and large-scale hydro-power. As the graph illustrates, retail electricity prices in Maine have separated from U.S. prices in recent years, rising to a level 60% above the national average.

![Retail Electricity Price Maine and U.S.: 1990-2007](image)

Source: Energy Information Administration
Facts and Findings

High dependence on petroleum products for electricity generation, heating, and transportation makes Maine vulnerable to price volatility and geo-political forces.

According to Charles Colgan, Sam Merrill and Jonathan Rubin, Energy Efficiency, Business Competitiveness, and Untapped Economic Potential in Maine, 2008:

- Fossil fuels (all imported) accounted for nearly three-quarters of all energy use in Maine in 2005
- Businesses account for half of state’s energy use in their buildings alone, well over half if transportation is included

According to the U.S. Energy Information Administration:

- Approximately 80% of Maine residents heat their homes with fuel oil

According to the Maine Development Foundation, The Difference is Night and Day – Why Investing in Highways and Bridges is an Investment in Prosperity, 2009:

- 85% of freight and 95% of all passenger movement happens via trucks and cars on Maine roads

High energy prices in Maine have risen sharply and are much higher than the national average and neighboring provinces putting us at a competitive disadvantage.

According to the Maine Economic Growth Council, Measures of Growth in Focus, 2010:

- Maine’s 2007 average electricity prices were 60% higher than the U.S.
- Maine utility prices range from 25% to 65% higher than neighboring Canadian firms, Hydro Quebec and New Brunswick Power

Energy policy and programming responsibilities in Maine have historically been dispersed across many state agencies due to a lack of a coordinated state effort.

According to Energy Advisors, LLC, Maine Energy Policy: Overview and Opportunities for Improvement, 2003:

- Maine’s energy policy is comprised of components found in nearly 100 statutes, regulations, executive orders, and department and agency initiatives

According to Mainewatch Institute, Energy for Maine’s Future: A Call for Leadership, 2002:

- Maine had no serious energy planning for more than a decade, and no recognized authority to coordinate energy policy
Maine is already advancing areas of conservation and renewable energy development, identified as critical to our nation’s energy future and is putting the public sector pieces together to lead the state’s energy policy and programming.

According to Popular Science, *The Future of Energy: A Realist’s Roadmap to 2050, July 2009*, the following are critical to solving our energy problems:

- Developing bio-fuels from organic materials
- Installing deepwater wind turbines
- Investing in new high-voltage power lines to link renewable energy sources to population centers and provide consistent, reliable power from renewable sources

Activity in Maine...

- The Governor and Legislature tasked special study groups to look into the energy and business potential for:
  - Tidal power
  - Wind power (on- and off-shore)
  - Bio-fuels (farm products and wood)
  - Establishing an energy corridor to increase the high-voltage transmission capacity in the State and linking to Canada
- The State began participation in the Regional Greenhouse Gas Initiative (RGGI) and directs the proceeds to fund conservation programming for electricity and heating
- Central Maine Power Company was recently awarded federal stimulus money to upgrade the electric grid to accommodate smart meters to control energy use based on price and other market signals
- The Governor established the Efficiency Maine Trust (as of July 1, 2010) to:
  - Administer alternative energy and efficiency programs in Maine
  - Weatherize 100% of residences and 50% of businesses by 2030
  - Achieve 30% electric energy and natural gas savings and 20% heating fuels savings by 2020
  - Capture all cost-effective energy efficiency resources available for electric and natural gas ratepayers
  - Reduce greenhouse gas emissions from heating and cooling loads in Maine to at least 10% below 1990 levels by 2020, and then 75-85% below 2003 levels

Maine will need adequate transmission infrastructure to move the power from the generators to the population centers.


- Maine is a member of a non-profit regional transmission organization called ISO New England, responsible for ensuring the reliability of the regional transmission system for the New England states
- Maine accounts for 9% of the regional population and 9% of energy consumption
• Renewable energy projects (primarily wind) will require transmission expansions to bring power to market
• Projected increases in demand (southern Maine primarily) will require transmission upgrades

According to Peter Mills, *Megawatts from Mountain Tops: Parts 1 and 2, 2008*:
• True costs and benefits are unknown regarding proposed grid expansions by Central Maine Power and Maine Public Service
• Construction costs would be spread out over all ISO NE members and customers but Maine customers may not need the power

**Survey Says**

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning energy.

**Energy Costs are one of the most pressing issues for Maine's businesses and organizations:**
• 78% of respondents identified the cost of energy as the second strongest negative impact on businesses and organizations
• Cost of energy ranked as the second most important issue for the next Governor and Legislature

**Follow-up interviews reveal deeper-seated concerns regarding energy:**
• Dependent on petroleum products for transportation, heating, and electricity, businesses feel the effects of oil price volatility and are looking for alternatives
• Many, if not most, are skeptical that the rush to implement conservation efforts, build wind turbines, and transmission wires will yield any cost savings
• Many remember the promises of reduced prices when the electric markets were deregulated and are worried the trends of increased prices will continue

**Experts Recommend**

The following is a summary of key recommendations from various reports, committees, and efforts around energy over the past few years.
Charles Colgan, Sam Merrill and Jonathan Rubin, *Energy Efficiency, Business Competitiveness, and Untapped Economic Potential in Maine*, 2008:

“Perhaps the single most effective action to enhance Maine’s business climate and economic competitiveness is to aggressively increase the energy efficiency of Maine’s economy.”

- Incorporate enforceable energy efficiency standards into new or modified building codes and expand funds to assist businesses with efficiency investments
- Fund weatherization and other non-electric efficiency measures in low and moderate-income houses with a system benefits charge and a weatherization bond
- Establish a program through Finance Authority of Maine to finance commercial and industrial energy efficiency projects
- Research and provide better information for consumers
- Encourage institutions of higher education to offer instruction in energy efficient technologies
- Better align incentives to ensure that parties bearing the costs of energy use are the ones who benefit from reducing use
- Adopt a statewide energy code for new single-family residential construction
- Support alternative passenger and freight transportation

Joint Select Committee on Future Maine Prosperity, *Time for Change*, 2008:

- Governor should develop a comprehensive energy policy and recognize energy production as an economic development opportunity
- Encourage cap and trade policies
- Focus energy policies on conservation, renewable, and streamlining permitting process for renewable development


- Support Efficiency Maine Trust long-term targets and triennial plan (see specific benchmarks listed in previous facts and findings section)


- Aggressively provide opportunities for state and local governments, families, business, and industry to invest in energy efficiency, conservation, and weatherization through federal and state programs, grants, loans, etc.
- Support and implement energy audits for businesses and state facilities
- Work with state government to set overall energy reduction and renewable power generation goals at state facilities
- Maine should install at least 2,000 MW of wind power by 2015 and 3,000 MW by 2020 - at least 300 MW of the 2020 goal being off-shore wind
- Develop corporate wind, community wind, and offshore wind development through investment and financial incentives
Promote tidal power in Maine
Support University of Maine work on wood-based ethanol development, expand bio-fuel research and implementation, advance co-generation statewide
Support development of electrical transmission projects to increase reliability and accommodate new wind power projects, and energy from Northern Maine and Canada
Expand natural gas infrastructure statewide
Promote awareness of alternative transportation options, including passenger and freight rail, and promote low-carbon fuel standard and fuel efficient vehicles

Central Maine Power, On-going Economic Benefits of the Maine Power Reliability Program (MPRP), 2009:
- Support the MPRP transmission upgrade and expansion to provide a reliable transmission grid necessary for planned and future renewable energy projects

Governor’s Task Force on Wind Power Development, Finding Common Ground For a Common Purpose Report, 2008:
- Continue to assess transmission network and needed improvements

**Investment Imperatives**

Both the Governor and Maine State Legislature must make reducing the cost of energy a top economic development priority. Current trends will make energy, in all its forms, more expensive for individuals and business alike. Energy dependent industries such as manufacturing and the natural resource-based entities particularly feel the pressure as they try to compete with businesses that have access to cheaper energy.

**Recommendations**

*Lower the burden of high energy costs in the near term*
- Fund and complete weatherization targets for housing stock and industrial/commercial plants
- Support the Efficiency Maine Trust and leverage additional dollars from entities like utilities and fuel suppliers to reach the Trust targets
- Use efficiency funds to upgrade Maine manufacturing and natural resource industry infrastructure (ex: replace boilers, generators, etc.) through financing tools like low to no-interest loans or competitive grants
- Incorporate enforceable efficiency standards into building codes
- Enter into agreements to purchase less expensive Canadian power

*Develop new sources of energy to lower reliance on oil, to protect against price volatility, and to provide new jobs*
- Approve and build liquefied natural gas (LNG) depot on Maine coast
• Invest in and expand development of renewable energy: bio fuels (agriculture products and wood), tidal power (R&D, commercialization and implementation), and on- and off-shore wind power
• Investigate nuclear power as a long-term development option – meets the need for cheaper energy and clean emissions as well as job creation and economic development

Invest in technology and infrastructure upgrades
• Set a short-term goal of getting smart meters installed and operational. This would include consumer education as to how to use the technology to control cost.
• Build necessary transmission infrastructure to enable expansion, hookups for new energy development (ex: wind projects) and to open up our ability to better export and import energy (ex: cheaper Canadian electricity)
• Expand natural gas lines to and throughout service center communities
Tax and Fiscal Policy

“And among citizens generally, tax reform is viewed widely as a building block of long-term economic growth, and a more stable and sustainable approach to financing state and local government. The current tax system has been described as antiquated, imbalanced, burdensome, unfair, uncompetitive, archaic, and volatile.”


Taxes are a means of collecting the revenue needed to pay for public services desired by Maine people. Because the money comes primarily from Maine people and Maine businesses, taxes are a cost and consideration for our residents and businesses alike. We want working roads, good schools and emergency services; but, we also expect quality for a reasonable price. As a result, tax and fiscal policy requires a balancing of public need and public means. Additionally, Maine would like to remain competitive with other states for new residents and businesses. Our tax and fiscal policies must not make us outliers, acting as disincentives for investing in Maine. As the graph below illustrates, in 2007, Maine’s tax burden fell from 14% to 12.7%, but remained above the New England average.

*Source: U.S. Census Bureau and Tax Foundation*
Facts and Findings

Maine’s State and Local Tax Burden decreased in recent years but remains high relative to the region and the nation.

According to the Maine Economic Growth Council, Measures of Growth in Focus, 2010:
- State and local taxes were 12.7% (U.S. Census) of income in 2007, down from 14% in 2006
- State and local taxes were projected to decrease to 10% (Tax Foundation) of income by 2008
- Maine ranked 6th highest for tax burden in the U.S. in 2007 and had a higher burden than every New England state except Vermont which ranked 5th

Maine’s State and Local Taxes Per Capita (without regard to income levels) also fell in 2007 in both national rank and in absolute dollars per capita.

According to the Maine Economic Growth Council, Measures of Growth in Focus, 2010:
- Per capita state and local taxes fell from $4,393 in 2006 to $4,280 in 2007 – this corresponds to a decrease in national rank from 11th to 14th
- In 2007, tax collections per capita were lower than all other New England states except New Hampshire

Maine’s Tax Mix puts a heavy burden on property and income taxes, which influence business and individual investment decisions.

According to Richard Woodbury, The Struggle for Tax Reform in Maine, 2003-2009:
- Maine’s top income tax rate of 8.5% is the 7th highest top marginal income tax rate in the nation – the national median top marginal income tax rate is 6%
- The top rate in Maine is paid by people of incomes as low as $20,150
- Property taxes accounted for 38% of total state and local tax revenues in FY2006, the 6th highest in the nation
- Property taxes as a percent of income were 5.3% in FY2006, making Maine’s property tax burden the 3rd highest in the U.S.
- Maine has the largest percentage of second homes in the nation (15.6% - 5 times the U.S. rate) and can export some of the burden out of state
Maine’s estate tax can be a disincentive for retirees and higher income households establishing primary residence in Maine.

According to Richard Woodbury, The Struggle for Tax Reform in Maine, 2003-2009:

- Maine’s income level of exemption for estate taxes ($1 million since 2006) is below the federal level ($3.5 million in 2009) which results in Maine imposing a tax on households that are not subject to the federal tax

Maine’s tax structure is volatile and revenues decline when government supports are needed most.

According to Michael Allen, Director, Research/Econometrics Division, Maine Revenue Services:

- Maine’s top 2% of tax filers (10,000 filers) paid a third of Maine income taxes prior to the recession and by 2008 that decreased to 26% - a large drop in revenue
- Income tax revenue in 2009 accounted for almost half of the General Fund
- Income tax revenue fluctuates greatly with the economy

As the chart below shows:

- Modest upticks in income are followed by significantly large jumps in General Fund revenue
- Modest declines in income are followed by significantly large reductions in General Fund revenue

![Maine Personal Income & General Fund Revenue Chart](chart.png)

Source: Bureau of Economic Analysis and Maine State Legislature Office of Fiscal and Program Review
According to the Maine Office of Fiscal and Program Review:
  • In a typical year about 40% of sales tax revenue comes from the sales of autos, auto parts and building construction materials
  • Sales of these items fluctuate greatly with rises and falls in the economy
  • Sales tax revenue in 2009 accounted for a third of the General Fund

Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning tax and fiscal policy.

Overall, respondents believe that reducing Personal Income Taxes and Property Taxes should be a high priority for the next Governor and Legislature:
  • When asked to select the top 3 priorities, from a list of 19, for the next Governor and Legislature, personal income tax ranked 4th highest in overall rankings and property taxes ranked 6th in overall rankings
  • For larger businesses and organizations (more than 50 employees), the corporate income tax was seen as a priority (5th)
  • Sales taxes are seen as less of an issue ranking 12th overall, 9th for small businesses and 14th for larger businesses

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts around tax and fiscal policy over the past few years.

Joint Select Committee on Future Maine Prosperity, Time for Change, 2008:
  • Use the Measures of Growth indicators and benchmarks in assessing all legislation
  • Use dynamic fiscal notes
  • Create an economic development reinvestment fund
  • Lower income tax and set spending cap mechanism at all levels
  • Create a Blue Ribbon Commission to streamline/restructure government – to lower tax burden
  • Alter taxes to encourage Maine residency
  • Ensure $500,000 invested annually in Fund for the Efficient Delivery of Local and Regional Services
  • Long range plan should be part of each budget

- Trim government by $60-$100 million to invest and to finance tax reform
- Increase Maine’s Lodging Tax by 3% (from 7% to 10%) to fund Quality of Place Fund
- Fully fund the Efficient Delivery of Local and Regional Services, $2 million annually, from Municipal Revenue Sharing

Speaker’s Advisory Committee on Tax Reform, 2003:

- Reduce property taxes by increasing the circuit breaker program, and providing targeted municipal revenue sharing to highest property tax mil rates
- Lower income taxes by reducing the highest marginal rate to 8%, raising the personal exemption to the federal rate, increasing the Earned Income Tax Credit
- Expand the sales tax by raising the lodging tax from 7% to 10%, increasing the sales tax on prepared meals from 7% to 8%, and expanding the sales tax base to include recreational services, personal services and a number of other services

Investment Imperatives

Taxes remain an issue of concern for residents and businesses. Maine is faced with several challenges. The overall system should be adjusted (or reformed) in ways that control for volatility during economic cycles. Individual taxes should not be over-burdensome and act as deterrents to investment. And, fiscal policy should account for the needs of Maine people and be sustainable over time.

Recommendations

Reduce tax rates and adjust structures that are disincentives to investment or residency

- Income Taxes
  - Lower top marginal income tax rate (note: reducing from 8.5 to 6.5 would cost $200-$300 million in income tax revenue)
  - Adjust income brackets up so that top rate kicks in at a higher income (in 2010, the top rate was paid by single filers earning $19,750 and joint filers earning $39,550)
  - Index the income brackets so that they adjust with inflation over time

- Estate Taxes
  - Conform Maine’s estate tax with federal estate tax by 2011 (note: conformity will cost Maine $10-$15 million a year in lost revenue)

Reform the tax system to protect against volatility in the larger economy

- Sales Taxes
  - Broaden the sales tax base to remove all existing exemptions except those on education, health care, manufacturing, and food
With the inclusion of more goods and services, look at lowering the overall rate

- Income Tax
  - Lower top marginal rate, adjust brackets and index (see above)
- Utilize a true budget stabilization fund with strict spending limits in peak economic years and defined uses to help during economic downturns

**Lower the property tax burden**

- Fully fund the Fund for the Efficient Delivery of Educational Services by setting aside the 2% of Municipal Revenue Sharing annually as originally envisioned in the Maine Municipal Association initiative that was passed
- Fully fund the Fund for the Efficient Delivery of Municipal and Regional Services by setting aside the 2% of Municipal Revenue Sharing annually as originally envisioned in the Maine Municipal Association initiative that was passed
Regulatory Policy

“...for Maine to move forward on the road to prosperity, Maine’s regulatory agencies must reinvent themselves and how they interact with Maine businesses. Regulatory agencies and their employees must strive to provide a consistent, efficient and effective regulatory environment for businesses.” ... “It is not a matter of choosing between regulation and promotion. Regulations should be enacted, written, and enforced in a manner that achieves their intended goals while minimizing unnecessary and unproductive conflicts and redundancies for those impacted.”

Joint Select Committee on Future Maine Prosperity, Time for Change, 2008

Most businesses agree that regulations are a necessary cost of doing business. Regulations help maintain our quality of life and a healthy economy. Regulations span a myriad of issues from labor practices to environmental quality. They exist at the local level, all the way up to the federal level. Because of the number of regulations, the range of issues and the layers of oversight, they pose a hurdle for businesses, particularly smaller ones with limited resources and professional staff.

MDF and Maine State Chamber Survey of Business Leaders, 2010
Top Priorities for Next Governor

Source: Maine Development Foundation/Maine State Chamber of Commerce Web Survey with Business Leaders February 2010, n=1,039.
As the chart on the previous page shows, the respondents to the Maine Development Foundation survey rated state regulations in the top three priorities for the next Governor. Much of the criticism regarding regulations does not originate from the content of the regulation but from the uncertainty and quickly changing regulatory landscape. It is not a simple task for anyone to learn all the regulations they must follow when considering investment.

It is made all the more difficult when information is not readily available, when that information changes, or when walking individuals and businesses through the process is beyond the scope and training of the regulators. This drives up costs, sometimes to a point where they outweigh the benefit of investment. Regulations serve a real purpose but cannot be an insurmountable hurdle to investment in Maine. Unfortunately, in this instance, perception is reality. If businesses believe that regulations are too burdensome or the process is too cumbersome, that belief itself may derail the investment process before it starts. An appropriate balance is needed for everyone’s best interests.

**Facts and Findings**

**In recent surveys of Maine businesses, regulatory burdens have been cited as being one of the greatest barriers to business investment and growth.**

According to Critical Insights, *The Mindset of Mainers: Highlights from Recent Polling Efforts, February 2010:*

- Survey results show that government regulations have always been cited as being one of Maine’s “Greatest Liabilities for Business” and the degree of liability has increased dramatically from 2003 – 2009

According to the Maine State Chamber’s *Impact, February 2010:*

- Maine business leaders attending the Chamber’s 2010 Leadership Summit listed regulations among their top issues of concern

According to the Governor’s *Jobs Summit, February 2010:*

- Regulation was one of four major topic areas on which comment was received

**Maine is predominantly a state of small businesses, which are more adversely affected by burdensome regulatory policies that apply to them.**

According to the U.S. Small Business Administration Office of Advocacy’s *Small Business Profile, October 2009:*

- In 2006, 97.4% of Maine’s businesses were small (fewer than 500 employees), employing 60.6% of the private workforce in Maine
According to W. Mark Crain, *The Impact of Regulatory Costs on Small Firms (SBA Report)*, September 2005:

- Small firms (< 20 employees) spend an average of $7,647 per employee to comply with federal regulations while large firms (> 500 employees) spend an average of $5,282 per employee.

According to the Management Research and Planning Corporation U.S. Small Business Administration Office of Advocacy, *Analysis of State Efforts to Mitigate Regulatory Burdens on Small Business*, June 2002:

- Few states actively implement protections for small businesses against regulations and even fewer have meaningful programs genuinely benefitting the small business community.
- Those states that are successful typically have independent bodies which review agency regulations to ensure agencies review impacts on small business and assess whether regulations impose an undue burden on small business.

**Without some degree of regulatory flexibility, policies and processes that are burdensome, lengthy, inconsistent, and frequently changing can undermine desirable growth and investment in the economy.**


- Successful state regulatory flexibility is marked by 5 characteristics:
  - Defines small business in manner that is consistent with state practices and permitting authorities
  - Requires state agencies to conduct impact analyses before issuing regulations
  - Requires state agencies to examine less burdensome alternatives
  - Ensures judicial review of compliance with rulemaking procedures
  - Requires periodic review of existing regulations
- Since 2002, 19 states have implemented regulatory flexibility via Executive Order or legislation.

According to the Management Research and Planning Corporation U.S. Small Business Administration Office of Advocacy, *Analysis of State Efforts to Mitigate Regulatory Burdens on Small Business*, June 2002:

- Maine’s statutory framework for addressing regulatory burdens on small business is unenforced and ineffective.
However, Maine has taken steps to improve the regulatory process.

- The Maine Regulatory Fairness Board was created by the Legislature in 2005 to investigate regulatory and statutory changes to enhance Maine’s business climate.
- LD 905, Maine Law to Reduce Small Business Regulatory Burden, amended the Administrative Procedure Act in 2007 to strengthen safeguards for small business by:
  - Directing regulating agencies to examine the impact of proposed regulations on small businesses and to examine less burdensome alternatives
  - Requiring agencies to make information public before hearing

According to the state ranking of regulatory environment, a component of Forbes Magazine’s The Best States for Business, September 2009 (chart below):

- Maine has improved from 49th in 2006, to 46th in 2007, to 32nd in both 2008 and 2009, with 1 being the least burdensome

### National Regulatory Rankings, Maine and New England Average, 2006-2009

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine</td>
<td>49</td>
<td>46</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>New England Average</td>
<td>44</td>
<td>39</td>
<td>38</td>
<td>39</td>
</tr>
</tbody>
</table>

Source: Forbes.com
Note: 1 is least burdensome

Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning regulatory policy and process.
Regulatory policy and process are one of the most pressing issues for Maine businesses and organizations. Survey respondents ranked state regulations among the top three priorities for the next Governor and Legislature, following the Cost of Health Insurance and Energy Costs.

- Respondents ranked state regulations as having the third most negative influence on their investment decisions
- Out of 19 issues, state regulations ranked as the third most important issue facing the next Governor and Legislature

Follow-up interviews revealed more about Maine businesses’ view of the state’s regulatory and business climate.

- There is a real divide between the business community and political bodies. Advocates and politicians paint businesses as “bad” and ill-intended. Businesses consider politicians and government officials as naïve or ill-informed. The tension has grown to the point where it is negatively impacting business investment and economic growth
- There is a perception among businesses that regulatory bodies have an anti-business bias, and regulations and the regulatory process are the tools they use to constrain business activity
- Businesses and political powers need to push through these issues to establish a more collaborative approach or economic growth will continue to stall in the state

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts concerning regulatory policy and process.

Joint Select Committee on Future Maine Prosperity, *Time for Change*, 2008:
- The Governor should direct all state regulatory agencies to reinvent themselves and how they work with Maine businesses
- Regulatory agencies must strive to be efficient, consistent and effective and improve relationships with the business community
- Regulations should be administered in a manner that achieves intended goals while minimizing costs and conflicts
- The Maine Legislature’s Business, Research and Economic Development (BRED) Committee should regularly share findings of the Maine Regulatory Fairness Board with the Governor

Maine Regulatory Fairness Board, *2009 Annual Report*:
- Create an Office of Regulatory Streamlining providing new businesses with a single point of contact and serving as an information clearinghouse for regulatory issues
- Pass LD 1608 – which establishes an Independent Office of Administrative Law Judges autonomous from licensing boards to decide agency enforcement actions
• Create efficiencies in the siting approval processes, both state and local, making the process clearer (more consistency in regulations) and shorter

Management Research and Planning Corporation U.S. Small Business Administration Office of Advocacy, *Analysis of State Efforts to Mitigate Regulatory Burdens on Small Business*, June 2002:
  • Independent review bodies are essential to limiting regulatory impact on small business
  • Actual institutional processes established through legislation and/or executive order are needed to make reform last
  • Governors and agencies need to make consistent enforcement of laws a high priority

Proceedings of the Governor’s Jobs Summit, February 2010:
  • Review use of Department of Environmental Protection permit by rule with the goal of expanding it to additional, appropriate business activities
  • Department of Economic and Community Development (DECD) should designate a point person to facilitate business interactions with state agencies

**Investment Imperatives**

Regulations serve a real and valuable purpose in our lives and our economy, but they were never intended to discourage good investment and development that benefits Maine. Addressing the regulatory environment has been a promise of multiple Governors and Legislatures but little has changed in recent years. The next Governor and Legislature need to not only make this a priority but also to lead by example, set expectations and follow through on the implementation.

**Recommendations**

*Provide more information and assistance to businesses navigating the regulatory environment*
  • Continue and expand DECD’s mission and capacity in facilitating business interactions with state agencies on regulatory matters, actively walking the business through the process
  • DECD should be a liaison to the Maine Municipal Association and businesses on issues of local regulations

*Improve the often contentious relationship between regulatory bodies and business*
  • The attitude of regulatory bodies should be one of helping business to meet appropriate requirements so they can succeed and continue to make positive contributions to Maine, rather than utilizing regulation to stymie business activity
Establish the regulatory environment as a priority issue with Executive and Legislative leadership and hold all parties accountable for improvement

- Establish, make public, and consistently enforce timelines for decision making
- Strengthen the authority of the Regulatory Fairness Board and expand its role to include data collection and analysis
- Create positions for small business advocate and regulatory ombudsman in the Public Advocate Office or at DECD

Streamline the regulatory framework to ensure expedience, clarity, and consistency

- Use the Maine DEP’s permit by rule model for other regulatory processes
- Identify and explore ways to reduce redundancies and inconsistencies between different levels of government while maintaining strength of overall regulations
Education is the single most important investment that can be made to ensure successful participation in the new, knowledge-based economy, earnings growth, and improved health status. Post-secondary education/training is critical to increasing productivity, income, and career advancement. Moving each and every Mainer along the educational continuum to their highest educational potential is imperative. As the chart below illustrates, there is a strong correlation between a state’s educational attainment levels and its per capita income.

Unfortunately, Maine’s educational system is not a true, coordinated “system”. Early childhood (birth to age 5) care and education, when 85% - 90% of brain development occurs, receives minimal funding and is not integrated or well coordinated with other
components of the overall education system. The K-12 system receives the lion’s share of public monies, both at the state and municipal levels, even as enrollment declines. The higher education “system,” while more coordinated than ever before, is actually two totally independent systems – the Community College System and the University System, along with Maine Maritime Academy.

Education is a critical investment in Maine people and in our economy and must be treated as such, through a coordinated approach from start to finish, or it will continue to be a series of competing and ballooning costs that fall short of delivering the desired outcomes.

Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses connected to education.

Respondents did not comment specifically on how education affects their investment decisions. They did comment on an outcome of the education system, the workforce.

Maine’s workforce ranked as a net positive issue when making investment decisions:

- Availability of professional workers ranked 6th of 19
- Availability of entry-level workers ranked 7th of 19
- Availability of skilled technical workers ranked 8th of 19

When asked about potential barriers to moving the economy forward:
- Lack of a skilled workforce was identified by 12% of all responses provided

Investment Imperatives

Recommendations (System-Wide)

Create an overarching vision for education and set specific outcome goals

- Set a goal of every Mainer achieving their greatest potential in the education system
- Create a “Blueprint for Independence” that addresses student needs throughout their educational career

Develop Executive and Legislative Branch structures that work together to hold all accountable for successfully meeting the goals and moving towards the vision

- Coordinate, prioritize and align the investment of all public monies across the birth to college spectrum
- The Governor should create an Education Sub-Cabinet Committee to coordinate and prioritize all education investments across the entire spectrum
• Legislative Leadership should empower the Joint Standing Committee on Education to participate more fully with Pre-K to 20 and treat it as an entire system

*Ensure successful, seamless transition across the individual educational systems to move all Maine people along the continuum of educational offerings*

• Put in place resources to ensure that the transition through the education system is smooth and welcoming
• Focus on the adult learner is a critical part of increasing post-secondary attainment

**Early Childhood**

> “America’s future rests on the shoulders of today’s youngest children. Their early experiences will shape the architecture of their brains in enduring ways and build the foundation – whether strong or weak – for their own development and that of our nation.”

Zero to Three and Pre(K)now, Common Vision, Different Paths, December 2007

Ninety percent of a child’s brain development occurs before they enter kindergarten and once this time has passed, it becomes increasingly difficult to “alter” or “undo.” Brains are built from the bottom up. Early experiences literally shape how the brain gets built. Like the construction of a house, weak foundations significantly increase the odds of later difficulties that often last throughout a lifetime. We must acknowledge the critical social trends that affect our children and families. Stable, nurturing environments help create strong foundations for achievement in school, employability and responsible citizenship.

**Facts and Findings**

**The experiences a child has from birth to the age of five are critical to setting the stage for development throughout life.**

According to Dr. Jack Shonkoff of Harvard University’s Center on the Developing Child (following chart):

• The synapse formation of sensory pathways (vision and hearing) and language are largely determined within the first year of life and begin a natural pruning process that is completed by the first year or two of school
• The synapse formation of the higher cognitive functions peaks by the age of 3 and begins the natural pruning process through the age of 15
• Adverse childhood experiences such as violence in the home, bad nutrition, infrequent adult attention or conversation, neglect, or a lack of positive, consistent adult interactions and care can permanently harm brain development

• A national research project (ACES) indicates that these adverse experiences are major risk factors for illness and low work productivity, as well as poor quality of life

Many of Maine's youngest children are at risk

According to the Maine Task Force on Early Childhood, Invest Early in Maine, November 2008:

• 21.8% of Maine’s children under the age of 5 are living in poverty
• 28% of Maine children live in a single-parent household
• 65% of Maine children under the age of 6 have working parents
• 12%-16% of Maine children have developmental problems and only one-third of them are identified before entering kindergarten
Maine under-invests in quality, early childhood education. Seventy percent of our young children have both parents, or in single-parent households, one parent, working outside the home.

According to Governor Baldacci’s Business Roundtable on Early Childhood Investment, Report of Priority Recommendations for Early Childhood Investments in Maine, December 2008:

- Less than 4% of Maine’s public investment is put towards education and development for children before the age of 3
- Maine’s public investment in education and development during school-age years is seven times more ($5,410 per child) than during early learning years ($740 per child)
- For every dollar invested in school-age education, only 13.7 cents is invested in early childhood
- Maine’s early childhood workforce is poorly paid (ranking 596th out of 647 detailed occupations), has few benefits, and is often under-educated

Investing early (before the age of 6) could help avoid costly remediation later in a child’s education.

According to the Maine Department of Education:

- Special Education costs in Maine’s K-12 system have grown from 5% of total expenditures in 1979 to 14% in 2006
- Special Education expenditures over the past 12 years alone have doubled to $290 million dollars by the 2006-2007 school year

The return on investment (avoided educational costs, avoided criminal system costs, greater earnings over a lifetime) in early childhood education is substantial and well documented.

According to Albert Wat, Dollars and Sense: A Review of Economic Analyses of Pre-K, 2007:

- Two of the best known longitudinal studies on the effects of early childhood investment show a significant return on investment in early childhood programs
  - Abecedarian Project (through age 21) - $4.10 total return for $1 invested
  - Perry Preschool Project (through age 40) - $16.14 return for $1 invested

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts around early childhood education over the past few years.
Governor Baldacci’s Business Roundtable on Early Childhood Investment, Report of
Priority Recommendations for Early Childhood Investments in Maine, December 2008:
- Develop and educate a network of public, private and non-profit entities to advocate
  for early childhood investments
- Develop a statewide, non-profit entity to catalyze early childhood investment
- Develop both public and parent education – a statewide “Invest Early” campaign
- Promote early childhood workforce development:
  - Increase the number of early childhood professionals
  - Improve the quality, training and education of the early childhood profession
    with quality improvement grants and incentives to those self-employed,
    affordable health-care benefits for workers, scholarships for training and
    higher education and loan forgiveness for those entering the field

Zero to Three and Pre(K)now, Common Vision, Different Paths, December 2007:
- States need to build a system of programs, policies, and infrastructure to support
  early childhood, not just individual programs

Maine Taskforce on Early Childhood, Invest Early in Maine, November 2008:
- Investments for Maine Families and Income Security: home visitation programs,
  family literacy programs, family networks, parenting education, strengthening
  Maine family, friend, and neighbor care, TANF child care benefits, paid family leave
  for working parents, funding mechanism to address family stress and impact of
  child development, livable wage
- Investments for Early Childhood Health and Family Health: address developmental
  screening, early identification, and referral, nutritional needs, lead exposure,
  immunizations, and oral health care, address infant mental health training, domestic
  violence, substance abuse, improve family health literacy, and improve family access
  to insurance
- Investments for Consumers, Workforce, and Children with Special Needs: increase
  capacity/access; affordability, and quality; workforce development and professional
  development; and administration and funding requirements
- Investments for Municipal Planning and Partnerships: training and technical
  assistance for Comprehensive Municipal Plans, and developing local Invest Early
  Plans, community hubs or co-located programs, individual, community, business,
  and municipal contributions to early childhood, Family Resource Centers, C4CY
  VISTA project, and provide community collaboratives
- Investments in Public Awareness and Marketing, Data/Evaluation, and Financing:
  develop marketing strategy, marketing materials, and marketing personnel and
  support, create statewide needs assessment, and evaluation methods and
  accountability mechanisms, endowment fund for workforce, and public private
  partnership to promote quality and provide quality incentives
Early Childhood Investment Imperatives

Recommendations (Early Childhood)

Integrate early childhood into Maine’s educational system

- Bring all children ages 3 and 4 into the public schools for pre-Kindergarten screenings to ensure early identification of any health or development issues
- Require communication, collaboration and coordination of systems and services across system components, including the Department of Health and Human Services, the Department of Education, and the higher education community
- Coordinate service so that children and families receive a continuum of supportive, unduplicated services through grade 3. Early Childhood systems encompass an array of separate systems which have common goals that encompass better outcomes for children, youth and families. However, these systems are comprised of multiple programs and policies that often have non-congruent purposes that result in a siloed versus coordinated system

Improve Quality of Care

- Invest fully in the success of the Educare model for workforce training and quality education results. Use the model’s policy research and evaluation components to inform policy and quality decisions
- Require and support consistent standards of quality across all systems of early care that is linked to Maine’s Quality Initiatives
- Increase the overall investment in an early childhood system to support livable wages for early education providers and facility improvement grants
- Invest fully in the quality training and education of early childhood providers. Create incentives to increase the number of professionals and to reach higher levels of education and training:
  - Provide scholarships for training and higher education
  - Create loan forgiveness for those entering the field
  - Develop meaningful tax credits for providers
  - Provide quality improvement grants and incentives
- Expand access to child and family focused, preventive and comprehensive systems of service that incorporate all the components of Early/Head Start; such as child and parent education, health (mental, dental and physical), parent involvement and social service components

Create a means for the public sector to work with the private sector on Early Childhood Investment in Maine

- Support the work of the Maine Children’s Growth Council and use them as a means of reaching out to the private and philanthropic sectors
Maine’s K-12 system is a critical and foundational element in the overall education of Maine’s people. Over the past several decades, however, K-12 spending has grown and currently represents one of the largest shares of our state budget and the single largest expenditure for local government. While costs have gone up, enrollment has declined (see chart below), particularly in more rural parts of the state. This has lead to consolidation efforts and cost containment measures that have had mixed results. Current spending trends are unsustainable, and they are not necessarily delivering students who are adequately prepared for higher education and the workforce.

“All of this suggests that we have an enormously cumbersome and inefficient system, the product of historical circumstance and geographic limitations of an earlier time... There is an enormous cost to taxpayers that drains resources from the classrooms where they could positively impact student learning.”

**K-12 education is the single largest state and local government expenditure.**

According to the Maine Municipal Association, *2008 Fiscal Survey and Analysis*:
- An average of 59% of municipal government expenditures are for K-12 Education
- School expenditures represent about 53% of total expenditures in larger municipalities (over 10,000 residents) and up to 66% - 68% in smaller municipalities (1,000 – 3,499 residents)

According to the Office of Fiscal and Program Review:
- 39% of the Maine State General Fund is spent on the K-12 system (2008)

**K-12 expenditures have risen dramatically while enrollment has declined.**

According to the Maine Department of Education:
- Over the 27-year period from 1978 to 2006, K-12 expenditures grew by over 450% while enrollment declined 16% (see chart on previous page)
- Public school enrollment in recent years has fallen in virtually every county and the projection through 2016 is that all 16 counties will experience declines (see chart below)

*Source: Maine Department of Education*
Sprawling development over the past five decades has been a big cost driver.

- Over the past 50 years, the percentage of people living outside of service center communities has increased from about a third to over half

- Of Maine’s 42 new schools built from 1995 to 2005, 13 were built in direct response to population dispersal in four labor market areas (Augusta, Bangor, Lewiston-Auburn, and Portland), at a cost of $200 million

Special education is a growing cost for K-12.

According to the Maine Department of Education:
- Special Education costs in Maine’s K-12 system have grown from 5% of total expenditures in 1979 to 14% in 2006
- Special Education expenditures were $290 million dollars in school year 2006-2007

Administrative structures are driving costs upward.

- Maine’s K-12 system has 1 administrator for every 127 students, fourth highest in the nation and well above the U.S. average of 1 for every 212
- Maine has one administrator per 11.1 teachers, 9th highest in U.S.

Student outcomes are good in some areas and need improvement in others.

According to David Silvernail and Christine Donis-Keller, Maine Education Policy Research Institute, *The Condition of K-12 Public Education in Maine, 2009:*
- Maine's performance on National Assessment of Educational Progress (NAEP) improved in 2007
  - In Math, Maine’s 4th and 8th graders scored above national average scores, ranking 19th and 12th respectively
  - In Reading, Maine’s 4th graders scored 8th in nation, but behind all New England states except Rhode Island; 8th graders ranked 4th
- Maine’s graduation rate in 2007 (81.64%) was the lowest it had been in years
- Educational aspirations of Mainers taking SATs are lower than New England and nation
Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts around K-12 education over the past few years.

- Use a wide range of incentives instead of penalties to encourage cooperation in the consolidation process
- Encourage magnet schools model
- Revise school construction policies to require regional planning and restructuring of financing options both from a state and local level

- Fully fund and enlarge the Fund for the Efficient Delivery of Education Services
- Reduce K-12 administrative spending to the national average by lowering the State’s Essential Programming and Services allowance to districts above the national average
- Dramatically reduce the number of school administrative units from 286 to approximately 64 (to approach the national average district size of 3,100 students)
- Develop a statewide K-12 capital plan with a regional perspective to maximize the use of existing facilities across regions
  - Inventory the size, location, condition and maintenance needs of all facilities
  - Set priorities for construction and maintenance across the region

K-12 Investment Imperatives

Recommendations (K-12)

*Develop a more cost-effective system of delivering critical K-12 services*
- Fully fund the 2% set-aside of State General Fund Appropriations to the Fund for the Efficient Delivery of Educational Services as envisioned in the Maine Municipal Association’s citizen’s initiative that was passed
- Achieve savings by setting a goal of reducing administrative costs to the national average and shift that money to the classroom
- Offer more assistance, flexibility and incentives for the purpose of school district consolidation and cost savings

*Develop high standards and specific outcomes for K-12 education in Maine and hold all accountable*
- Strengthen the Magnet School and make a major stated commitment to its success
- Engage the public in debate about the viability and role of charter schools
- Reward teachers and schools, through incentives, for good student outcomes
Ensure successful, seamless transition into, through and out of the K-12 system providing students with the opportunity to participate in post-secondary training and education

- Apply recommendations put forth by Children’s Economic Growth Council to prepare young children for a smooth transition to Kindergarten
- Support and fund efforts, like the MELMAC Foundation’s (www.melmacfoundation.org), to encourage high school seniors to aspire to post-secondary education and put in place the resources and assistance needed to help them make the transition and follow through on a plan

**Higher Education**

“The days when a high school diploma was the key to successful employment with a reasonable income are long past.”


Higher education is a critical piece of Maine’s economic development strategy. An educated workforce allows Maine to be competitive in the new economy. An educated workforce is needed by existing businesses looking to expand as well as businesses looking to locate in Maine. Any higher education, whether it is traditional 4-year degrees or professional training, raises the earning potential of the worker which benefits the economy as a whole. It is important to make higher education opportunities available to high school students as well as to older non-traditional students in the workforce. Higher education needs to be affordable and aligned to provide the skills needed in today’s economy. This requires cooperation and planning from both the public and private sectors.

**Facts and Findings**

Higher degree attainment in Maine continues to lag the U.S. and New England (see chart on following page).

According to the Maine Economic Growth Council, Measures of Growth in Focus, 2010:

- In 2008, 34.4%, of Maine people age 25 and over held an associate’s, Bachelor’s, or advanced degree - national average (35.2%), New England average (42.9%)
- Of the types of higher degrees, associate’s degrees make up a larger share in Maine than in the U.S. or region, Bachelor’s degrees make up half of all degrees in Maine, and advanced degree are much lower when compared to the region and nation
Maine’s performance in higher education is, for the most part, average but improving in all areas except affordability, which is a great barrier to reaching the state’s goals.


- **Preparation (B-)** “Maine performs fairly well in preparing its young people for college”
  - Eighth graders perform well on national assessments in math, science, reading and writing; however, small proportions of high school students score well on Advanced Placement tests and college entrance exams

- **Participation (C-)** “College opportunities for Maine residents are only fair”
  - The likelihood of enrolling in college by age 19 is high - and has increased by 23% since the early 1990s; however, a very low percentage of working-age adults (4 in 100) are enrolled in higher education

- **Affordability (F)** “Higher education has become less affordable for students and their parents”
  - Poor and working-class families must devote 47% of their income, even after aid, to pay for costs at public 4-year colleges in Maine and financial aid to low-income students is low compared to the nation

- **Completion (C+)** “Maine performs fairly well in awarding certificates and degrees relative to the number of students enrolled”
  - 58% of college students complete a bachelor’s degree within 6 years
  - Maine has increased the proportion of students completing certificates and degrees but its rate of improvement lags behind other states
• **Benefits (C)** “Only a fair proportion of residents have a bachelor's degree, and this weakens the state economy”

Despite the critical importance of higher education in economic development, the State’s General Fund budget priorities have shifted away from investment in Higher Education and towards K-12 Education and Health and Human Services.

According to the University of Maine System and the Office of Fiscal Program and Review:

- From 1968 to 2008, the percentage of Maine’s General Fund Expenditures on Higher Education has dropped from 18% to 9%
- In 2008, 39% of the State’s General Fund was spent on K-12 Education and a total of 32% was spent on Mental Health and Human Services

With each and every increment of education, unemployment declines and an individual's earnings potential increases (see chart below).

### With Additional Education (2008)

<table>
<thead>
<tr>
<th>Level</th>
<th>Unemployment (%)</th>
<th>Weekly Earnings ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some H.S.</td>
<td>9.0%</td>
<td>$426</td>
</tr>
<tr>
<td>H.S. Grad.</td>
<td>5.7%</td>
<td>$591</td>
</tr>
<tr>
<td>Some College</td>
<td>5.1%</td>
<td>$645</td>
</tr>
<tr>
<td>Assoc.</td>
<td>3.7%</td>
<td>$736</td>
</tr>
<tr>
<td>B.A.</td>
<td>2.8%</td>
<td>$978</td>
</tr>
<tr>
<td>Masters</td>
<td>2.4%</td>
<td>$1,228</td>
</tr>
<tr>
<td>Prof. Deg.</td>
<td>1.7%</td>
<td>$1,522</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>2.0%</td>
<td>$1,555</td>
</tr>
</tbody>
</table>

**Source:** Bureau of Labor Statistics
Because State funding has not kept pace with rising costs, affordability at both Maine’s two-year and four-year public colleges has diminished and is more of an issue in Maine than in the U.S. as a whole.

According to the National Center for Public Policy and Higher Education (see chart below):

- The percentage of income needed to pay for a public 2-year college in Maine is 33% compared to 24% nationally (2007/2008)
- The percentage of income needed to pay for a public 4-year college in Maine is 36% in Maine and only 28% nationally (2007/2008)

![Percentage of Income Needed to Pay for Public Two- and Four-Year Colleges](chart)

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts around higher education over the past few years.


- University of Maine System (UMS) must resolve financial issues and improve performance to continue adding value to Maine in the future
- UMS needs to play the important role of serving more students more efficiently, helping to strengthen the state economy (which is becoming more based on knowledge, research, and skills), and supporting society (which depends on engaged and informed citizens)
- UMS campuses must work together, rather than as seven separate universities
• UMS must address individual growth and opportunity – outcomes will include simplifying the transfer process, increasing undergraduate and graduate programs in essential fields, keeping college affordable, increasing financial aid, investing in student support programs and academic services, and recruiting students that would otherwise not attend college in Maine

• UMS must address economic competitiveness - outcomes will include adding undergraduate and graduate programs that support living in diverse societies, increasing learning opportunities for adults who work, increasing universities’ role as partner in economic development, increasing and expanding distance education, strengthening research related to Maine’s future, and emphasizing land grant role of the University of Maine

Maine Compact for Higher Education, Indicators of Higher Degree Attainment in Maine, August 2008:

• Create a scholarship program to ensure that no Maine student is denied college for financial reasons
• Invest in Early College efforts to encourage students to continue their education beyond high school
• Support the College Transition program to help adults earn degrees
• Support the Maine Employers’ Initiative to help employers support the education of their workforce
• Campaign to change the values and behaviors of Maine people regarding higher education

Joint Select Committee on Future Maine Prosperity, Time for Change, 2008:

• Continue support for Opportunity Maine Tax Credit to keep young people in Maine
• Joint standing Committees on Education, Labor and Business, Research and Economic Development should meet with University leaders to discuss:
  o How higher education is working with business to address workforce needs
  o How greater collaboration could be fostered
• Increase access to higher education and lower tuition costs

Higher Education Investment Imperatives

Recommendations (Higher Education)

Make public higher education affordable for Maine students

• Increase student financial access to college by significantly increasing the amount of need-based scholarship aid available to students and their families through the expansion of programs like the Maine State Grant Program
• Achieve cost-savings to lower tuition costs through one comprehensive plan and financing mechanism for the maintenance, replacement and expansion of the physical plants of all the public higher education institutions
• Treat the University of Maine System as a true system and achieve cost savings through curriculum efficiencies by having campuses specialize in areas rather than under-funding a full mix at every location
• Achieve cost-savings through use of technology and support more distance and online learning

**Align educational curriculums and training opportunities with industry needs and trends**

• Support and expand partnerships between employers and public higher education institutions
• Create science and engineering campus at Brunswick Naval Air Station to help serve and build the needs of Maine’s manufacturing and knowledge-based industries near the Portland-Boston-Portsmouth-Manchester market

**Commit to raising the educational attainment of all Maine people – traditional students and non-traditional students that comprise the incumbent workforce**

• Adopt the Compact for Higher Education’s goal of reaching the New England average for higher degree or certificate attainment in the working-age population by 2020
• Continue to support programs like the Early College Initiative, the College Transitions Program and the Harold Alfond College Challenge
• Invest in the Maine Employers’ Initiative to create and support regional collaborations of adult education, community college, university, regional businesses, and the location association human resource professionals to engage the adult learner in post-secondary training and education opportunities
Innovation

“Innovation is essentially our ability to develop and implement new and better ideas. In the context of the economy, these new ideas help new and existing businesses grow and create new ventures. This allows Maine businesses to be competitive nationally and globally, to generate greater wealth, and to create good sustainable jobs. Investment in innovation entails supporting the entire process from idea to market and, when done correctly, generates a great return on investment for Maine.”

Policy One Research, Inc., for Maine Office of Innovation, Maine Innovation Index

Innovation is essentially our ability to develop and implement new and better ideas. In the context of the economy, these new ideas help new and existing businesses grow and create new ventures. This allows Maine businesses to be competitive nationally and globally, to generate greater wealth, and to create good sustainable jobs. Investment in innovation entails supporting the entire process from idea to market and, when done correctly, generates a great return on investment for Maine.

Facts and Findings

Maine lags many states in the nation in terms of total R&D investment.

According to the Maine Economic Growth Council, Measures of Growth in Focus, 2010 (see chart above):

- Total R&D investment in Maine is 1% of GDP – this is less than half the national average and less than a quarter of the New England average.
- Maine’s national rank in total R&D investment is 38th

**Jobs in an innovation economy have growth potential and tend to pay better.**

- Average wages in STEM (Science, Technology, Engineering, and Mathematics) occupations in Maine are $55,690 – 48% above other occupations
- In Maine, STEM employment through 2014 is projected to grow 7.5% (vs. 7.2% for other occupations)
- Mean earnings of engineers in Maine is $70,840 – 101% above other occupations

**Maine receives mixed ratings in terms of educating people for the innovation economy.**

According to the Maine Office of Innovation, *Maine Innovation Index, 2009*:
- Nationally, Maine 8th graders’ math and science skills rank 12th and 9th, higher education enrollment among young people ranks 13th, science and engineering graduate enrollments rank 51st, science and engineering degrees awarded rank 38th

- Maine adults have a higher degree attainment rate of 34.4% in 2008 – which is lower than national and regional rates

![INDEX OF ENTREPRENEURIAL ACTIVITY 2004 - 2008](Source: PolicyOne Research)
Relative to the nation, Maine currently ranks low in innovation capacity.

According to the Maine Office of Innovation, Maine Innovation Index, 2009:

- Maine ranks 38th in venture capital investments
- Maine ranks 43rd in patents issued
- Maine ranks 31st in entrepreneurial activity
- Maine ranks 35th in high tech employment growth
- Maine ranks 44th in high tech business growth
- Maine ranks 44th in scientists and engineers in workforce

Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning innovation.

When asked to report the influence of 19 public policy issues on their businesses and organizations:

- Respondents cited Maine-based research and development among the top three most positive factors

When asked to choose the top 3 priorities for Maine’s next Governor and Legislature to tackle to help grow the economy:

- After overwhelmingly selecting the issues that were negatively impacting their businesses, respondents selected Maine-based research and development as the 8th most popular priority

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts on the topic of innovation.

Maine Economic Growth Council, Measures of Growth in Focus, 2010:

- Maine must sustain and increase R&D investments to close the gap separating Maine from the nation in this critical indicator and move toward the benchmark of 3% of GDP


- Maine must invest at least $32 million annually to increase innovation and entrepreneurship
- Increase R&D by academic, non-profit, and private sector:
  - Provide incentives to companies and broaden R&D tax credit
  - Help companies pursue grants and Small Business Innovation Research and Small Business Technology Transfer funding
- Build and maintain research facilities
- Attract and keep high quality researchers and students
- Provide competitive matching funds
- Deepen relationships between research institutions and Maine companies

- Increase employment by building innovative capacity:
  - Increase incentives for investors
  - Improve commercialization capacity
  - Support emerging and established innovation-intensive clusters
  - Build supportive environment for high-growth, high-potential, innovation-based enterprises

- Increase per capita income by increasing the skills of Maine workers:
  - Increase supply of knowledgeable entrepreneurs
  - Align K-20 education and workforce training to skills required and targeted by sectors
  - Increase graduates in STEM disciplines at all levels
  - Recruit high-skilled workers to Maine

**Joint Select Committee on Future Maine Prosperity, Time for Change, 2008:**
- Support sustained investment in innovation through competitive and collaborative processes
- Use state's comprehensive R&D evaluation in all funding decisions for innovation
- Continue support of Maine Technology Institute (MTI)
- Continue support of MTI Cluster program
- Continue support of Maine Innovation Economy Advisory Board
- Continue support of the Maine Economic Growth Council making recommendations on R&D investments
- Create a Fund of Funds for innovation investments
- Focus work of Department of Economic and Community Development (DECD) to support clusters
- Government, higher education and research institutions work together to create internet and information technology capacity that is second to none

- Feed the R&D Pipeline – invest in R&D
- Catalyze clusters and continue to fund innovation that contributes to clusters
- Increase higher educational attainment in STEM and in graduate and PhD degrees

**Maine Council on Jobs, Innovation and the Economy, Final Report, 2007:**
- Recommends $150 million bond – allocated $50 million per year for 3 years
  - Funding is for capital and infrastructure, open to public, non-profit and private sector applicants to promote innovation-based economy
  - Funding available for:
University of Maine System: $15 million annually
Biomedical: $7 million annually
Marine: $5 million annually
All technology sectors: $23 million annually

Investment Imperatives

As Maine’s 2010 Science and Technology Plan so clearly articulates, “We need to compete through innovation.” Maine businesses need to innovate to create jobs and new opportunities. This is where the growth will occur in the economy. Funding R&D is part of this but there is more. We need to support ideas as they go to market. We need to support small businesses and entrepreneurs in their ventures. And, we need to teach and promote innovation statewide in all things that we do.

Recommendations

Commit to necessary funding levels for innovation statewide

- Increase Maine’s total R&D investment to 3% of GDP by 2015 (same benchmark as 2010 Maine Science and Technology Plan)
- Increase R&D tax incentives to encourage a greater share of private industry investment in R&D
- Support and increase MTI funding to help entrepreneurs leverage additional public and private financing
- Properly capitalize organizations like the Finance Authority of Maine to enable entrepreneurs to have access to affordable capital

Provide support for entrepreneurs and small businesses

- Support Maine’s Technology Centers and their work to support the business efforts of Maine inventors and entrepreneurs
- Support Maine’s Small Business incubator system
- Support groups like Maine International Trade Center and Maine & Company to connect entrepreneurs with partners across the country and around the world

Teach innovation and entrepreneurship statewide

- Work with regional small business counseling and economic development organizations to provide innovation training to 10,000 small Maine businesses in the next eight years
- Support a plan to recruit top-level science and engineering professors to Maine
- Include entrepreneurship in K-12 curricula statewide
Transportation

“Transportation is the key to unlocking Maine’s potential. It is what connects us as people, as communities, and to the bigger world. As such, it drives economic vitality and quality of life.”

Maine Department of Transportation Commissioner David Cole, Connecting Maine Through Transportation: What Maine Businesses Have to Say, 2009

Quality transportation is critical for economic growth. Improvements in all modes – roads, rail, air, and ports – make Maine more attractive to those interested in living here and doing business here. It connects us to one another, to the region, to the rest of the country and the world. Transportation improvements involve large capital investments that must be maintained over time. Even though the upfront investment can be daunting, the return on investment over the longer-term is a great benefit in terms of productivity enhancements and, ultimately, growth in the economy.

![Roadway Deficiency Index 1992-2008](source: Maine Tomorrow)
Facts and Findings

Maine’s economy and people are highly dependent on Maine roads and bridges.

According to the Maine Department of Transportation:
- 95% of all passenger movement takes place over Maine roads compared to the U.S. average of 78%-80%

According to TRIP, Falling Behind: The Condition and Funding of Maine’s Roads, Highways & Bridges, October 2009:
- 78% of the goods shipped from Maine ($32 billion) and 80% of the goods shipped to Maine ($29 billion) are carried by truck

Maine’s transportation system is in disrepair and continues to deteriorate.

According the Maine Economic Growth Council (above chart), Measures of Growth in Focus 2010:
- Maine’s roadways are significantly (43%) more deficient than New England’s
- In recent years, the miles of poor pavement have grown to be a larger issue

According to TRIP, Falling Behind: The Condition and Funding of Maine’s Roads, Highways & Bridges, October 2009:
- 25% of Maine’s roads were rated in poor (13%) or mediocre (12%) condition in 2008 as compared to 20% just 3 years earlier - adding costly repairs and increasing commutes and safety concerns
- 33% of Maine’s bridges are structurally deficient (14%) or functionally obsolete (19%) - impacting both safety and mobility
- 1,646 miles (18%) of state roads and highways need significant repair and by 2014, that number will grow to an estimated 2,100 miles (24%)
- 2,212 miles of road were posted (weight restricted during the spring thaw) in 2008 and, without further investment, that number will grow to 2,400 miles by 2011

According to the Maine Section of the American Society of Civil Engineers, Report Card for Maine’s Infrastructure, December 2008:
- Maine received a D for roads:
  - Poor pavement increased from 2% in 1996 to 26% in 2006
  - Roads rated good and fair decreased from 81% in 2005 to 73% in 2006
  - Maine motorists spend an average of $285 annually in additional vehicle operating costs due to the conditions of our roadways
- Maine received a D+ for bridges:
  - 34% of Maine’s bridges are deficient (U.S. average is 25%)
- Maine received a C for railroads:
Maine ranks 48th in the U.S. in tonnage shipped by rail with only 1,162 miles of active railroad

- Maine received a B- for airports:
  - Conditions in Maine airports are good overall
  - Airports face funding challenges for development needs
- Maine received a C- for ports:
  - Maine’s industrial ports are in fair to good condition

**The Maine Turnpike is a key component of Maine’s transportation infrastructure.**

According to the Maine Turnpike Authority (MTA):

- The Maine Turnpike runs 109 miles from Kittery to Augusta, maintains 523 paved lane miles, 176 bridges, 19 interchanges, and 5 service plazas
- 90% of all goods and services entering and leaving Maine travel over the turnpike and in the next decade, 1.1 billion vehicles are expected to travel the turnpike
- The MTA does not receive state or federal funding and is completely funded by user fees and is one of five toll agencies in the nation with the highest credit rating
- The turnpike carries 8.6% of the total traffic in Maine but represents only 1.1% of the total lane-miles
- The turnpike is in the top 25% of the nation’s toll agencies for lowest tolls (less than 5 cents per mile)
- Over the next decade, MTA will make capital investments of $617 million, supporting more than 9,000 private-sector, construction-related jobs in the local economy
- MTA pays for and houses its own State Police force to monitor safety

**Maine under-invests in transportation infrastructure, and current funding streams are inadequate to keep up with even basic maintenance.**


- Maine DOT is currently only able to fund 50% of pavement preservation projects (pavement preservation is different from maintenance paving which is typically used as a holding action on poor quality roads)
- Pavement preservation projects are an investment in maintaining road quality to avoid the need for reconstruction (reconstructing roads costs four times as much as timely resurfacing)
- Maine DOT estimates that $6.5 billion of necessary transportation system improvements will be needed for 2009-2018, but only $3.2 billion will be available
- Of the $3.3 billion funding gap, $2.8 billion of the gap is in highways and bridges and $500 million is in all other modes of transport
- A safe, efficient, and well-maintained system of roads, highways, bridges and public transit, requires an increase in funding from local, state, and federal governments, further modernization, and further state and federal surface transportation funding
According to John Melrose, President of Maine Tomorrow and former MDOT Commissioner:

- The average fuel efficiency of the entire fleet of vehicles in Maine is 17-18 miles per gallon of gas/diesel
- To reduce carbon emissions, President Obama is seeking a 35.5 miles per gallon efficiency rating for all vehicles by 2016
- Given that Maine’s fuel efficiency is roughly half of the proposed efficiency standards, Maine’s current gas tax structure (a tax per gallon), if unchanged, would produce dramatically less revenue for funding necessary road maintenance

According to the Maine Section of the American Society of Civil Engineers, Report Card for Maine’s Infrastructure, December 2008:

- Airports: Maine received federal funding of over $25 million in 2007, and expects a $100 million shortfall over next 20 years
- Bridges: Maine DOT needs $1.3 billion over 10 years, resulting in a $440 million budget gap
- Passenger Transportation: Passenger rail is expanding, but has no sustainable funding, ferry services serve as primary transportation for island communities. Increase in funding is needed to meet demands.
- Ports: Industrial Ports require $12 million in short-term funding and require long-term funding due to projected increase in cargo traffic
- Railroads: State funding has improved efficiency and productivity, but further funding is needed to facilitate greater consumer choice and competition
- Roads: Insufficient road funding – pavement preservation program only addresses half its needs

**Investment in transportation infrastructure provides good returns and avoids much greater costs down the road.**

According to the Federal Highway Administration:

- Return on investment – there is a 5 to 1 return on every dollar invested – every $100 million spent on improvements results in $540 million in benefits from improved traffic safety, reduced travel delays and reduced vehicle operating costs
- Job creation – every $100 million invested in highway construction supports 2,780 construction jobs
- Lives saved – every $100 million invested in roadway improvements saves an average of 145 lives over 10 years
  - An average of 178 people were killed on Maine roads from 2004-2008
  - The traffic fatality rate of 1.57 per 100 for Maine’s non-interstate roads is more than triple the rate of all other roads
Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning transportation.

When asked to choose the top three priorities for Maine’s next Governor and Legislature to tackle to help grow the economy, Maine’s transportation system ranked relatively high, particularly for small businesses:

• Investment in Maine’s Transportation System ranked 5th of 19 categories
• For small businesses (fewer than 50 employees), investment in Maine’s transportation system ranked 4th highest
• For larger businesses (50 or more employees), investment in Maine’s transportation system ranked 9th of 19

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts around transportation over the past few years.

Maine Section of the American Society of Civil Engineers, Report Card for Maine’s Infrastructure, December 2008:

• Maximize existing funding sources for road investments including state’s general fund, bonds, impact fees, tolls, car registration fees
• Fully fund the Pavement Preservation Program ($181 million per biennium)
• Fully fund Maine DOT’s bridge program (Keeping Maine’s Bridges Safe report)
• Decrease the percentage of Maine’s structurally deficient bridges to 10% or more below U.S. average
• Upgrade containerized cargo capacity
• Make improvements to ports to facilitate intermodal connections
• Continue funding of Industrial Rail Access Program

Maine Department of Transportation, Moving People and Goods: The Governor’s Rail and Port Investment Plan, 2009:

• Improve connections between the rail system and the state’s marine and inland ports
• Continue marketing, investment and expansion of ports at Sears Island, International Mariner Terminal (Portland), and Eastport
• Build connection between Sears Island and potential new inland port at Bangor
• Improvements and expansions to the Amtrak Downeaster
• Invest in rail connections between Portland and western mountains
• Targeted investment in the triangle between Portland, Brunswick and Lewiston-Auburn (rail and intermodal facilities)
• Invest in the Bangor to Aroostook rail corridor
• Use east-west rail corridor (Bangor to Montreal) as an energy corridor

Joint Select Committee on Future Maine Prosperity, *Time for Change, 2008*:
• Support multi-modal for businesses and passenger movement
• Create strategies and policies to discourage sprawl and encourage trade opportunities
• Create and support east-west and north-south connections

**Investment Imperatives**

A modern, robust, state-of-the-art transportation infrastructure is critical to increasing productivity and, ultimately, the economic development of Maine. We must address both the infrastructure needs and the funding mechanisms that pay for those needs. Just talking about roads and bridges will miss the target.

**Recommendations**

*Increase funding and identify new funding sources*
• Increase gas tax to offset declining revenues due to improved fuel efficiency in vehicles
• Rely on user fees that target users and cover true costs across all modes of transit
• Provide tax credits for people who live within a certain distance of their employment

*Improve existing infrastructure*
• Meet industry’s need for an east-west corridor through a public and private hybrid financing and management model that uses the network of existing privately owned timber roads allowing for heavier loads and charges users directly
• Support ongoing efforts to review jurisdictional responsibility and cost sharing for the public road network needs to improve performance, accountability and economies
• Expand the miles of roadway for which MTA has responsibility (example: the 295 corridor from Portland to Gardiner), making these miles toll roads

*Invest in and expand multi-modal*
• Fully integrate all modes of transportation to meet passenger and freight needs
• Finish investment plan outlined in the 3-Port strategy
• Upgrade containerized port facilities at Sears Island in order to connect freight to rail and road that reach national and international markets
• Governor should convene rail owners, rail freight carriers and industry users to reach agreement on strategy to meet Maine’s rail freight needs for coming decades
• Develop and improve regional air transport around the state with an emphasis on better connects to Boston and the Mid Atlantic
Broadband Connectivity

“The overwhelming consensus is that access to broadband services is a significant economic development tool for small businesses and home-based businesses, and enables telecommuting, rural education, and telemedicine.”

ConnectME Authority, 2010 Annual Report

Technological connectivity is essential for economic growth and the well being of Maine’s residents. This technology allows companies to compete in the greater global economy and enables entrepreneurs to live and work in communities across the state. It also expands our educational opportunities and improves the quality and efficiency of health care delivery. Just like our transportation network, our communications infrastructure links us to each other and the rest of the world. And, just like our transportation network, investment in Maine’s broadband infrastructure is an absolute necessity in the global economy.

As the above chart highlights, Maine has made great strides in connecting Maine people to high speed internet services. However, our subscribership rates remain well below national and regional rates, leaving us at a competitive disadvantage. This is a disadvantage both in attracting business investment and people to Maine.
In the modern economy, the ability to transmit large amounts of data quickly may be the difference between success and failure. Investing to create a top-notch communications infrastructure can open new markets and create efficiencies for Maine companies. On the other hand, a failure to invest will leave Maine fighting an uphill battle against other regions, both national and international, that have committed to investment in this area.

**Facts and Findings**

**Broadband access and availability of high capacity broadband are key to economic development in the modern economy.**

- Expanded use of internet in the late 1990's and early 2000's coincided with increased productivity
- Business use of the internet greatly reduces transaction costs among businesses, households, government, and investors
- Lower transaction costs enhance productivity by expanding markets, prompting greater competition and specialization, and improving risk management and sharing
- Internet expands domestic and foreign markets, reduces barriers to industry entry, and reduces impacts of trade barriers across nations

**Most of Maine has a robust fiber optic infrastructure in place; however, there are gaps, and the rate of adoption remains low due to high costs.**

According to the ConnectME Authority, *Annual Report on the Activities of the ConnectME Authority, 2010*:
- In 2008, 55% of all U.S. adults had broadband access at home; however, when only rural adults were considered, the number dropped to 41%
- In 2008, 86% of Maine had access to high speed internet access with an adoption rate of approximately 40%

- In 2007, there were 301 high speed internet subscribers per 1,000 residents in Maine whereas the U.S. had 402 per 1,000 residents (34% higher than Maine) and New England had 473 per 1,000 (57% higher than Maine)

According to the Federal Communications Commission, *High-Speed Services for Internet Access: Status as of December 31, 2008*:
- Maine’s residential high-speed connectivity is mostly concentrated in southern and coastal regions with much more limited access in inland, northern and eastern Maine
- The highest density (7 or more) of providers of fixed high-speed connections are predominantly along the coastline
The provider count is moderate (4 to 6) in most interior sections of the state and sparse (1 to 3) in the northeastern, largely unsettled regions.

According to Melinda Poore, Vice President of Governmental Relations & Communications, Time Warner Cable of New England:
- One mile of fiber optic cable costs approximately $25,000, meaning that 20 to 25 houses per mile are necessary to financially justify building the line
- Internet service is available to most people, but service may be costly

According to Eric Russell, reporter, Bangor Daily News:
- Private entities have been willing to connect customers to the fiber-optic network that carries broadband internet, but building a network between communities has been cost-prohibitive to the private sector

Through the efforts of the ConnectME Authority, the Broadband Strategy Council (BSC), other agencies, and service providers, progress is being made.

- The Legislature established ConnectME in 2006, and the BSC in 2009, to develop and implement a broadband strategy for Maine
- ConnectME reports that over the past three years, access has expanded from 86% to 90% and the adoption rate has grown from 40% to 60% (compared to 75% nationally)
- ConnectME is undertaking a comprehensive broadband mapping project to fill in gaps and help direct funding, resources and incentives
- A $25.4 million grant has been awarded under the American Reinvestment and Recovery Act for a BSC-recommended middle-mile fiber ring project, known as the Three Ring Binder project, that is expected to assist providers in offering service to excluded communities
- The Three Ring Binder Project is expected to:
  - Create a 1,100 mile network passing through over 100 communities to make broadband more available to 110,000 households, 600 community anchor institutions, and a number of last mile service providers
  - Provide 100 Mbps broadband capabilities for University of Maine system campuses, Maine community colleges, government facilities, public safety facilities, Maine Research and Education Network, and rural health care facilities

According to Jeffrey Nevins, Manager of Public Relations, FairPoint Communications:
- FairPoint has completed the first phase of a new high-speed, high-capacity fiber-based network to bring broadband to northern New England
Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning broadband and connectivity.

Of the 19 public policy issues examined in this survey, high speed internet service was seen as having the most positive influence on the respondents’ businesses or organizations:
  - Over 50% said it has a positive impact

When asked which of the 19 factors should be the priorities of the next Governor and Legislature:
  - Respondents ranked high speed internet service as the 13th most important issue
  - Smaller businesses rated it as the 10th highest priority
  - For some, likely those with limited service options, the issue is a strong negative

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts around broadband and connectivity.

Joint Select Committee on Future Maine Prosperity, Time for Change, 2008:
  - Support ConnectME in using transportation corridors for information technology corridors
  - Government, higher education and research institutions should work together to create internet and information technology capacity that is second to none

ConnectME Authority, Annual Report on the Activities of the ConnectME Authority, 2010:
  - Continue to work towards goal of universal broadband availability
  - Continue to support small public-private initiatives to expand broadband services
  - Coordinate state and federal activities to capitalize on all opportunities for funding and collaboration
  - Continue assistance and support of the Three Ring Binder Project, ensuring that the benefits of the federal investment are maximized for Maine residents and businesses
  - Continue and explore further development of telemedicine opportunities
  - Explore opportunities to expand broadband and cell phone access through private use of public facilities and right-of-ways
  - Continue to work to improve the “take rate” of broadband services by providing training and low or no-cost computers to individuals, families and non-profits
Jeffrey Nevins, Manager of Public Relations, FairPoint Communications:

- State officials should work with Maine’s congressional delegation to update federal telecommunications laws in a manner that recognizes and keeps pace with the rapidly changing communications marketplace

**Investment Imperatives**

Connectivity is critical in today’s economy. Maine people and businesses need to be able to share ideas and information in real time with the global market. The broadband providers in Maine have made significant strides in expanding availability to more rural areas in the state and are continuing to invest in their infrastructures to meet community and business needs. Maine now has a good network infrastructure with, for the most part, sufficient bandwidth set up around the state. Broadband services are available to the majority of the state but there is a cost to deliver these services and to build infrastructure, which is the biggest challenge.

Lowering costs and filling holes in coverage in rural regions where business development is possible and in gaps just outside of population areas are both challenges and priorities. At the same time, a long-term goal must be to anticipate the next generation of connectivity technology and begin to make the appropriate investments. With the advancement of handheld wireless technology, different communications platforms seem likely for the future.

**Recommendations**

*Fill broadband gaps to allow for greater business activity statewide*

- Support the creation of middle-mile fiber networks working with government and private industry to connect more small businesses across rural Maine
- Support ConnectME mission and funding of projects to expand access and take rates
- Work with and provide financial support to communities to solve local broadband problems and create community networks
- Review the regulatory regime to determine if regulations impose undue burdens on activity in this sector
- Maintain upkeep and maintenance of underlying existing infrastructure

*Strengthen connections between institutions and within economic sectors*

- Invest to strengthen connections between public schools (Pre K-12), the public University System, and the Community College System
- Support the completion of the HealthInfoNet network of health care providers and hospitals
Anticipate and identify the next wave of technology

- Identify the next generation of connectivity technology and position Maine to take advantage of it by creating a statewide investment and implementation plan
- Explore wireless technology for “last mile” customers in rural areas where fiber optic networks are not financially viable

Explore opportunities to lower costs and increase the subscribership rate

- Encourage federal government to set up a program providing tax credits to providers and/or subscribers in high-cost areas
- Evaluate the costs and benefits of a similar tax program at the state level
- Work to support ongoing private investment in telecommunications infrastructure
Quality of Place

“Maine’s principal advantage in today’s global competition is our Quality of Place. We have majestic mountains, unbroken forests, open fields, wild rivers, pristine lakes, a widely celebrated coast, picturesque downtowns, lively arts and culture, and authentic historic buildings. We must learn to think of them as the basic infrastructure of Maine’s future prosperity.”

Governor’s Council on Maine’s Quality of Place, Quality of Place and Job Growth: A New and Needed Maine Investment Strategy, 2008

Quality of Place encompasses a wide range of unique and desired assets. These include natural assets, such as mountains, open space, forests, coastline, and lakes. Quality of Place also includes our built environment: civic and cultural assets such as historic downtowns, theaters, churches, community schools, libraries, and museums. There is a cultural and arts component which includes festivals, artisans, fairs and a wide range of cultural events. Although the phrase may mean different things to different people, Maine’s unique combination of desired assets, its Quality of Place, makes the state a desirable place to live, work, and play.

![Graph showing Acres of Conserved Land 1997-2009](image)

Maine’s natural assets have played a key role in our state’s culture, helping to shape our identity, offering recreational enjoyment, and providing raw material for our industries. As
the chart on the previous page shows, Maine has made a considerable investment in conserving land for public use. Maine’s tradition of sustainable resource management has enabled our working forests, farmland, and fisheries to be a mainstay of our economy for generations. The continued sustainable management of these working landscapes continues to be essential to our economic prosperity.

Map of Maine Development Foundation’s Downtown Center Communities

Ten years ago, Maine established the Downtown Center to preserve the cultural, civic, and historic assets of our Main Street business districts. As the map above shows, the Downtown Center, run by the Maine Development Foundation, is working with communities in every county across this state to help preserve and develop their Quality of Place.

In this day and age, with workers and capital more mobile than ever before, these natural, civic, and cultural Quality of Place assets give Maine a competitive advantage in retaining and attracting people and businesses. This asset-based approach to development, which
builds on existing strengths and advantages, is already under way in Maine, and should be expanded upon.

Facts and Findings

Maine’s Quality of Place assets include both the natural and built environment.

- Public access to lakes, ocean, rivers and mountains
- Forests, farmlands, and working waterfronts
- Historic downtowns and authentic communities
- Cultural and civic assets including libraries, churches and theaters

In a knowledge-based, technology-driven economy, workers are more mobile, and Quality of Place is seen as a major attractant to young people, retirees, entrepreneurs, and creative people.

According to the Governor’s Council on Maine’s Quality of Place, People, Place and Prosperity, June 2007:

- Today, the economic playing field favors professional services and high value-added manufacturing over traditional manufacturing and resource extraction
- Today’s growth industries are based on knowledge, skills, and innovation, rather than low cost, low skill manufacturing
- Research shows that Quality of Place amenities such as Maine’s natural environment, historic downtowns, and livable communities help to attract economic activity
- As an economic development strategy, Quality of Place entails a comprehensive effort to protect, enhance, and market the characteristics that make a region distinct and attractive as a place to live, work, and recreate


- For sustainable prosperity, Maine must invest in its two most promising assets: Quality of Place and research ideas and clusters

Maine’s working landscapes, which are a key component of Quality of Place, are threatened.

According to the New England Environmental Finance Center and the Margaret Chase Smith Center for Public Policy, The Land for Maine’s Future Program: Increasing the Return on a Sound Public Investment, 2004:

- From 1999 to 2004, over one quarter of Maine’s total land area changed ownership, with much of it subdivided into smaller parcels with multiple owners
- Land values in southern and coastal Maine are increasing rapidly, making development of working landscapes more likely
According to Mike LeVert, Charles Colgan, and Charles Lawton, *Are the Economics of a Sustainable Maine Forest Sustainable?, 2007:*

- The high prices landowners have paid for timberland in recent years indicate that buyers are pursuing short-term profit rather than long-term sustainable forest management

Perhaps the greatest threat to Maine’s Quality of Place is the quiet, piecemeal pattern of sprawling development over the past several decades. This pattern of development imposes a number of costs (see chart below).


- Fiscal costs – as service center communities experience an erosion of their residential and commercial tax base and new, redundant public infrastructure such as schools and roads must be built in outlying communities
- Environmental costs – as land is consumed at a much higher rate and people are living further away from their jobs and services, the natural environment is altered, run-off and non point source pollution grows, and increased commutes add to air pollution
- Civic costs – as people live farther from their work and services, commuting time takes a toll on family, community and civic participation
Maine has initiated many successful programs and policies over the years to protect and enhance its Quality of Place assets.

According to Laurie Lachance, Maine Development Foundation, *In Search of Silver Buckshot*, 2006:

- Progressive environmental policies such as the nation’s first billboard legislation, the bottle bill, and waste management and recycling policies have made Maine one of the top recyclers in the nation
- Land for Maine’s Future Program
- Maine Downtown Center
- Maine’s historic tax credit
- Uniform, statewide building codes

According to the Maine State Planning Office:

- Mobilize Maine, a collaborative, bottom-up approach to community and economic development

Survey Says

MDF worked in partnership with several Maine trade and professional associations to distribute a survey to their members to understand their experiences with investment and policy issues in the state. 1,039 business leaders responded to the survey. The following is a summary of responses concerning Quality of Place.

When asked to rate the influence of 19 public policy issues on their businesses or organizations:

- Respondents rated Recreational Resources and Natural Features as the 2nd most positive influence and Availability of Natural Resources as the 4th most positive.

In the open-ended comment section at the end of the survey that asked about the supports and barriers to economic growth in Maine:

- Close to half of the respondents cited Quality of Life as a positive factor
- Natural beauty and natural resources were also mentioned frequently as positive factors.

Experts Recommend

The following is a summary of key recommendations from various reports, committees and efforts around Quality of Place over the past few years.

Joint Select Committee on Future Maine Prosperity, *Time for Change*, 2008:

- Policy makers should support preserving open space, investing in and protecting downtowns, and fighting sprawl through land use policies
• Revamp policies to enhance Quality of Place:
  o Build on special assets of the Tribes
  o Expand comprehensive planning capacity
  o Develop statewide building code
  o Make permitting for land more effective and efficient
  o Tax credits for historic rehabilitation

• Invest in building a place-based, innovation-focused economy
  o Create a Maine Quality Places Fund ($190 million, 10-year revenue bond) to fund:
    ▪ Community revitalization
    ▪ Land and farm conservation
    ▪ Access to forests and lakes
    ▪ Tourism promotion
• Support the revitalization of Maine’s towns and cities while channeling growth
  o Create the Maine Community Enhancement Fund
    ▪ Change the deed transaction fee to collect $20 million
    ▪ Fund the Maine Downtown Center, the Municipal Investment Trust Fund and historic tax credit
    ▪ Fully implement building code reform
    ▪ Provide better visioning assistance and tools for towns
    ▪ Provide incentives for multi-municipal and region-scale planning

The Governor’s Council on Maine’s Quality of Place, Quality of Place and Job Growth: A New and Needed Maine Investment Strategy, 2008:
• Develop and implement a Maine Quality of Place investment strategy that will protect, strengthen and build economic opportunity upon natural and built Quality of Place assets
• Organize state programs and agencies to create incentives and to support bottom-up, asset-based development efforts
• Align Maine’s workforce development system and programs with Quality of Place opportunities
• Strengthen and resource Maine’s tourism workforce and product development strategies
• Develop and provide historic and neighborhood preservation training for local planning boards and state agency staff working with the built environment
• Support regional landscape conservation
• Recognize and support private landowners’ crucial role in protecting Maine’s Quality of Place
• Adopt a clear and unequivocal policy statement in support of Maine community and downtown revitalization
• Provide communities with development assistance
Investment Imperatives

Maine’s Quality of Place has long been appreciated by those of us who live or have spent time here. In addition to enriching our own lives, our unique Quality of Place assets are a key to our economic future. Maine has already institutionalized some of the policies and programs that are necessary to protect, and build an economic development strategy upon, these assets. The following recommendations will help to ensure that we fully capitalize on this potential.

Recommendations

Continue and expand upon regional, asset-based economic development initiatives

- Continue to support the Mobilize Maine approach and other such models
- Work directly with the philanthropic community to jointly prepare and execute a long-term Quality of Place investment strategy that considers both our natural and built environment assets
- Promote Maine’s Quality of Life aggressively nationwide with a message that Maine is the best place to live, work and play

Preserve open space, natural amenities, and working landscapes

- Support open space protection, investment in and protection of downtowns, and land use and financial policies that prevent sprawl
- Create a Maine Quality of Places Fund through bonding to fund:
  - Community revitalization
  - Land and farm conservation
  - Access to forests and lakes
  - Tourism promotion
- Recognize and support the crucial role of private landowners in protecting Maine’s Quality of Place
  - Work with Maine’s farmers on business development and marketing
  - Support existing property tax exemptions for farmland, open space, tree growth, and working waterfronts
- Support regional landscape conservation and provide incentives for regional planning
- Provide bond funds for Land for Maine’s Future including:
  - Working waterfront
  - Farmland
  - Working forest lands
- Direct natural resource and economic development agencies to analyze the land needs of Maine’s natural resource industries in 50 years, and compare to what is projected to be available based on status quo policies
• Support the implementation of a comprehensive land use plan for lands under the jurisdiction of the Land Use Regulatory Commission (revision approved in March of 2010)

Limit sprawl and invest in existing downtowns and working landscapes

• Fully Fund the Maine Downtown Center with the long-term goal of bringing all service center communities into the Maine Downtown Network and at least half of them into the Main Street Maine program
• Provide incentives for historic preservation
• Invest in waste management and recycling
• Invest in alternative means of transportation
  o Public transit where appropriate
  o Passenger rail
  o Walking, biking trails
Conclusions and Charge

“Failure to invest means failure. Period.”

Laurie G. Lachance, President & CEO, Maine Development Foundation,
Maine’s Investment Imperative, 2002

According to Lewis Carroll, "If you don't know where you’re going, any path will get you there." This has too often characterized Maine's approach to economic development. Our efforts, while well-intentioned, have spread our limited resources too thin and have lacked the coherence and follow-through to achieve meaningful results.

While Maine's economic challenges are real and significant, they are by no means insurmountable. Overcoming them, however, will take more than the status quo. What we now require is a coherent, consistent, and comprehensive strategy that addresses Maine's weaknesses and builds on our strengths. To achieve lasting results, we must build on and strengthen our economic foundations: our educational system, tax structure and fiscal policy, our energy portfolio, our health care network, our infrastructure, our natural resource base.

This report creates a vision of a state in which private investment, supplemented and guided by public funds and public policy, is allowed to flourish, improving our economic well-being and quality of life. We envision a state where:

- Entrepreneurs and innovation drive economic expansion
- People, young and old, find both quality of place and economic well-being
- The population is healthy and health care is efficient and affordable
- Our energy portfolio is diversified and costs are kept in check
- The regulatory system protects our quality of life and invites positive growth
- Infrastructure provides an affordable link to the rest of the world
- The educational system efficiently brings everyone to their own highest potential
- Working landscapes provide sustainable resources and recreational opportunities

We have the vision of where we want to go. With the will and leadership we can get there. These recommendations will start us down that path.
Conclusions and Charge

According to Lewis Carroll, “If you don’t know where you’re going, any path will get you there.” This has too often characterized Maine’s approach to economic development. Our efforts, while well-intentioned, have spread our limited resources too thin and have lacked the coherence and follow-through to achieve meaningful results.

While Maine’s economic challenges are real and significant, they are by no means insurmountable. Overcoming them, however, will take more than the status quo. What we now require is a coherent, consistent, and comprehensive strategy that addresses Maine’s weaknesses and builds on our strengths. To achieve lasting results, we must build on and strengthen our economic foundations: our educational system, tax structure and fiscal policy, our energy portfolio, our health care network, our infrastructure, our natural resource base.

This report creates a vision of a state in which private investment, supplemented and guided by public funds and public policy, is allowed to flourish, improving our economic well-being and quality of life. We envision a state where:

• Entrepreneurs and innovation drive economic expansion
• People, young and old, find both quality of place and economic well-being
• The population is healthy and health care is efficient and affordable
• Our energy portfolio is diversified and costs are kept in check
• The regulatory system protects our quality of life and invites positive growth
• Infrastructure provides an affordable link to the rest of the world
• The educational system efficiently brings everyone to their own highest potential
• Working landscapes provide sustainable resources and recreational opportunities

We have the vision of where we want to go. With the will and leadership we can get there. These recommendations will start us down that path.

“Failure to invest means failure. Period.”

Laurie G. Lachance, President & CEO, Maine Development Foundation, Maine’s Investment Imperative, 2002

Works Cited

Health Care


Families USA, “Costly Coverage: Premiums Outpace Paychecks in Maine,” August 2009

Families USA, “Too Great a Burden,” December 2007


Maine Health Access Foundation, “Improving the Health of Maine People: Getting Down to Basics,” January 2010


National Center for Disease Control and Prevention, “Behavioral Risk Factor Surveillance System,” 2009


Energy


Colgan, Charles, Sam Merrill, and Jonathan Rubin, “Energy Efficiency, Business Competitiveness, and Untapped Economic Potential in Maine,” Muskie School of Public Service and Margaret Chase Smith Policy Center, April 2008


Maine Development Foundation, “The Difference is Night and Day – Why Investing in Highways and Bridges is an Investment in Prosperity,” 2009


Mainewatch Institute, “Energy for Maine’s Future: A Call for Leadership,” 2002

Mills, Peter, “Megawatts from Mountain Tops,” Maine Center for Economic Policy, 2008


**Taxation and Fiscal Policy**


Speaker’s Advisory Committee on Tax Reform, “Final Report,” 2003

**Regulatory Practices**


Connors, Dana, “Regulatory concerns growing among Maine’s business community...” *Impact: Maine State Chamber of Commerce Newsletter*, February 2010

Crain, W. Mark, “The Impact of Regulatory Costs on Small Firms,” September 2005

Critical Insights, “The Mindset of Mainers: Highlights from Recent Polling Efforts,” February 2010

Governor’s Jobs Summit, February 2010


Management Research and Planning Corporation, “Analysis of State Efforts to Mitigate Regulatory Burdens on Small Businesses,” June 2002


**Early Childhood Education**


Shonkoff, Dr. Jack, Harvard University Center on the Developing Child, Presentation at 2008 MDF Annual Meeting

K-12 Education


Higher Education


Innovation


Maine Technology Institute, “Maine’s Technology Sectors and Clusters: Status and Strategy,” March 2008


**Transportation**

Connecting Maine, “Moving People and Goods: The Governor’s Rail and Port Investment Plan to Transform Transportation in Maine,” July 2009


Maine Section of the American Society of Civil Engineers, “Report Card for Maine’s Infrastructure,” December 2008

TRIP, “Falling Behind: The Condition and Funding of Maine’s Roads, Highways, and Bridges,” October 2009

**Broadband Connectivity**

ConnectME Authority, “Annual Report on the Activities of the ConnectME Authority,” January 2010


Quality of Place


Governor’s Council on Maine’s Quality of Place, “People, Place, and Prosperity,” December 2007

Governor’s Council on Maine’s Quality of Place, “Quality of Place and Job Growth: A New and Needed Maine Investment Strategy,” May 2008

Lachance, Laurie, “In Search of Silver Buckshot: 30-years of Economic Development in Maine,” Maine Development Foundation, October 2006


Chapter Quotes

Carnevale, Anthony, Nicole Smith, and Jeff Strohl, “Help Wanted – Projections of Jobs and Education Requirements through 2018,” Georgetown University Center on Education and the Workforce, June 2010

Chamberlain, Joshua, Maine: Her Place in History, 1876 speech


Colgan, Charles, Sam Merrill, and Jonathan Rubin, “Energy Efficiency, Business Competitiveness, and Untapped Economic Potential in Maine,” Muskie School of Public Service and Margaret Chase Smith Policy Center, April 2008

ConnectME Authority, “Annual Report on the Activities of the ConnectME Authority,” January 2010

Governor’s Council on Maine’s Quality of Place, “Quality of Place and Job Growth: A New and Needed Maine Investment Strategy,” May 2008


Lachance, Laurie G., “Maine’s Investment Imperative,” Maine Development Foundation, 2002


