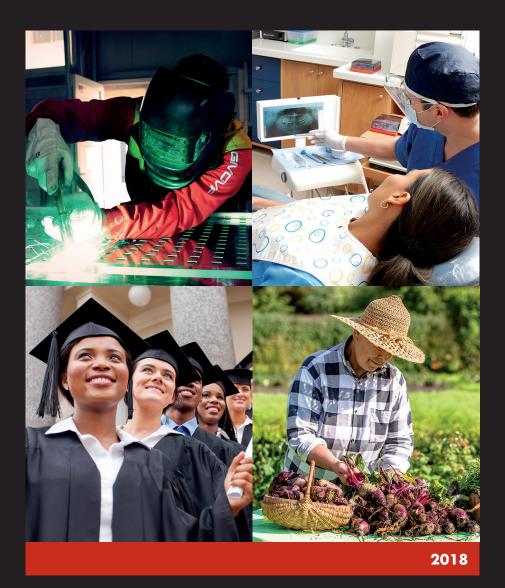
MAKING MAINE

Critical Investments for the Maine Economy





Dana Connors Maine State Chamber of Commerce



Yellow Light Breen Maine Development Foundation



Ed Cervone Educate Maine

TO THE READER:

This Making Maine Work report is a collaboration of the Maine State Chamber of Commerce, the Maine Development Foundation, and Educate Maine. All three organizations are engaged in public-private collaborations to improve the economic health and quality of life for residents of Maine. This report is modeled on a similar Making Maine Work report from 2010, which was done in anticipation of a new administration in Augusta, as is the case again now.

The economic world that Maine inhabits in 2018 is far different than that of 2010. Then, we were in the depths of a recession, and jobs were hard to come by. Now, we are in the midst of an extended expansion, and skilled workers are in demand. Then, taxes and regulatory requirements were seen as impeding business investment. Now, changing technologies and markets are viewed as the major challenges.

Responding to the new economic world, the recommendations in this report are different. They include bold ideas about broadband expansion, growing a skilled workforce, and controlling health care/ insurance costs. They are not the final say about these issues; rather, we hope that they stimulate discussion, and possibly other bold ideas for consideration. But most of all, they are a call to action. We believe strongly that Maine cannot make continued economic progress without forceful action on workforce development, broadband, and health care/insurance costs. After reading this, we hope you agree.

We are upbeat about Maine. Few places in the world have our combination of talent, resources, and natural beauty. If we can trust each other, if we can work together, there is no limit to Maine's future.

We want to thank everyone who helped in this report – the 1,000-plus who responded to our survey and the hundreds who gave us advice and help. In particular, we thank the nine advisory committee members who attended meetings, read materials, and gave us wise counsel – LuAnn Ballesteros of The Jackson Laboratory; Paul Bolin of Eastern Maine Healthcare Systems; Dan Bookham of Allen Insurance and Financial; Chris Condon of United Insurance; Ken Grady of IDEXX; Charles "Wick" Johnson of Kennebec Technologies; Laurie Lachance of Thomas College; D'arcy Main-Boyington of the City of Brewer; and, Mark St.Germain of St.Germain Collins.



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Edmund Cervone Executive Director Educate Maine

INTRODUCTION

Eight years ago, the Maine State Chamber of Commerce and Maine Development Foundation collaborated to produce *Making Maine Work: Critical Investments for the Maine Economy.* That report contained 12 recommendations for action for consideration by the candidates for state office. The recommendations were designed to respond to the concerns voiced in a broad survey of business leaders. They were researched through a review of state reports and interviews with experts, and reviewed by a select committee of both boards.

That report was a success. Many of the recommendations with regard to improving the regulatory climate, keeping Maine competitive with regard to taxation, and diversifying the energy base, were acted upon, and the state is better off today as a result. During the intervening years, additional *Making Maine Work* reports¹ were produced to address other critical issues such as preschool education, the role of the University System, workforce growth, workforce skills, and immigration.

This year, in anticipation of a new executive administration in state government, the Maine State Chamber of Commerce, Maine Development Foundation, and a new partner, Educate Maine, have repeated the process of 2010 to produce this new report. The three organizations engaged a professional research firm, Market Decisions Research of Portland, to survey more than 1,000 Maine business and professional leaders and learn of their concerns. The staff at the three organizations then reviewed dozens of studies and interviewed dozens of experts to find the best thinking on how to address these concerns. Possible recommendations were reviewed by a nine-person advisory committee, and pared down to the five goals and 16 recommendations contained in this report.

The report does not purport to be a comprehensive economic plan. It is a summary of the available best thinking about how to address several of the state's high-priority economic challenges. The last recommendation, in fact, is that the state should prepare a comprehensive economic development strategy that responds to the changing external environment and has a broad base of support.

We hope this work stimulates thought and debate in the years to come.







EXECUTIVE SUMMARY

More than 1,000 Maine business and professional leaders responded in a survey last winter saying that Maine's quality of life, quality of workforce, and natural resources were the most important factors supporting business retention and expansion. They also said that the next governor and legislature should concentrate on increasing the size and skills of the workforce; controlling health insurance costs; and, expanding broadband. This was a change from eight years ago, when the high cost of doing business – taxes, energy, health insurance, and regulations – was seen as the major challenge.

In part, this is due to accomplishments in the past eight years in reducing the burden of regulations and taxes; in part, it is due to the changing economy – from recession in 2010 to full employment in 2018; and in part, it is due to demography, the aging of Maine's population and workforce.

The demographic challenge looms large in 2018. The working age population has already begun to shrink, due to high numbers of retiring baby boomers, and low numbers of young people entering the job market. Fewer workers mean fewer jobs, less income tax revenue, lower incomes, poorer schools, and less private support for arts and philanthropy. It is a spiral towards mediocrity – or worse.

Therefore, the first goal in this plan is to grow the workforce through in-migration and expanded participation by the existing population. We are proposing a marketing effort for people to *live* in Maine at the same scale as the tourism marketing effort to get people to *visit* Maine. We are also proposing efforts in preschool, in elementary and secondary schools, in our public and private colleges and universities, and in adult education, to raise the skill levels of our population – with a specific targeting toward adult learners and children from low-income backgrounds (almost half of Maine school children are eligible for free and reduced cost lunches), where the greatest progress can be made.

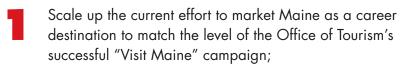
Broadband is the interstate highway system of the 21st century. Maine does as well as other states in connecting its people to broadband, but the speeds generally available in Maine are lower than elsewhere. We need a major state investment to stimulate private activity to expand and upgrade broadband service in all of Maine.

Maine's health care and insurance costs remain persistently higher than the nation and even New England. We recommend strategies to reduce "cost-shifting" – the shifting of the expense of free care for the poor into private insurance rates – by expanding Medicaid coverage and reviewing its reimbursement rates. There needs to be more transparency and competitiveness in health care markets. And finally, we need to aggressively promote healthier lifestyles in Maine.

Finally, in light of the new economic era ahead, Maine needs a new public-private statewide economic strategy that is comprehensive and enjoys wide support. A complete set of recommendations begins on the following page.

GOALS AND RECOMMENDATIONS

GOAL A: Grow the size of Maine's workforce.



- Provide college tuition incentives and debt-forgiveness programs that encourage young people to learn, live, and work in Maine, and are easy for students and employers to access;
- 3

Increase participation in the workforce by groups that have historically been difficult to engage;

4

Attract Maine's fair share of foreign immigrants, and help municipalities integrate them into communities; and,

Support workforce expansion goals at a high level in state government.

See detailed discussion beginning on page 16

GOAL B:

Grow the skills of Maine's workforce so that 60% of Maine workers have a credential of value by 2025.

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Take a "whole person" approach to helping adults who are already in the workforce achieve a credential;

- Take a "whole child" approach towards helping students succeed in school;
- Strengthen diverse educational pathways that lead to career success; and,
- Increase funding for targeted education strategies to achieve desired outcomes.

See detailed discussion beginning on page 20





GOAL C:

Make Maine a leader in affordable high-speed broadband access for communities and businesses.

- 10
- Commit to a \$100 million annual program of state investment and incentives for broadband expansion for the next five years;
 - Maximize private and federal investment in the structure of the state broadband program; and,
- 12

Increase digital literacy and digital equity at the business and household level.

See detailed discussion beginning on page 25

GOAL D:

Make Maine a leader in health care cost containment, health insurance coverage, and public health.



Reduce cost-shifting to private health insurance payers;

14

Create more transparency about the costs and quality of health services in Maine; and,

Institute major public health marketing and programmatic campaigns to encourage healthy behaviors and reduce preventable disease and death. See detailed discussion beginning on page 29

GOAL E:

Develop a Comprehensive State Economic Strategy in 2019



Lead a public-private effort to create a new, consensus-based, State Economic Development Strategy.

See detailed discussion beginning on page 31

WHAT MAINE'S BUSINESS LEADERS ARE SAYING

As was done in 2010, the Maine State Chamber of Commerce, Maine Development Foundation, and Educate Maine engaged the professional survey firm Market Decisions Research, Inc., to survey key Maine business and professional leaders about their views on state priorities for the coming years. More than 1,000 individuals responded in 2018, similar to the response of 2010.

These leaders responded in a much different economic climate than in 2010. Eight years ago, Maine was in the depths of the recession, with declining employment and incomes. Now, the state has experienced nearly a decade of growth, with gross domestic product up a billion dollars, 30,000 new jobs, 20% higher per capita incomes, and unemployment down more than half.²

The optimism is reflected in the business leaders' views. They see Maine's quality of life and quality of people as key assets that support business growth. The natural environment – natural resources such as forests, farmland and fisheries – as well as proximity to Boston and larger markets, are also part of Maine's competitive advantage.

CHART 1: What do you think are the key factors that support business retention and expansion in Maine? source: Survey of Maine Business and Education Leaders by Market Decisions Research; March 2018

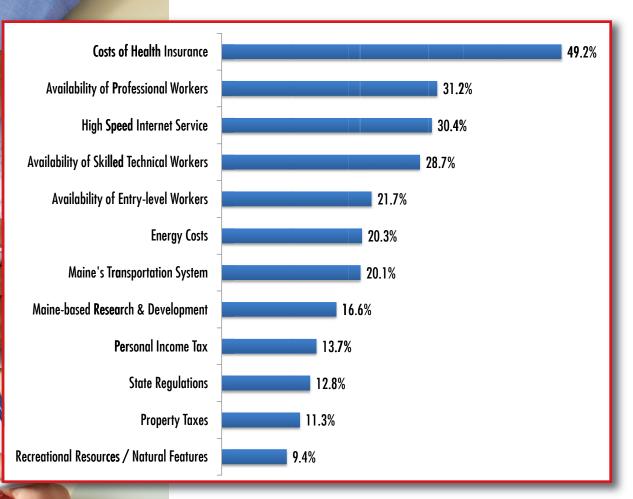
KEY FACTOR PERCENTAGE
Quality of Life
Quality of Workforce
Natural Resources, Climate and Environment 25%
Business Economy
Education and Educational Resources 15%
Space for Growing Population
Favorable Tax Policies (General)
Government and Policies (General)
Supportive and Engaged Community
Funding and Capital7%
Location/Access to Larger Markets (Boston/Canada) 6%
Multiple responses accepted; only categories with ${>}5\%$ shown (n=777)

2 U.S. Department of Commerce's Bureau of Economic Analysis and Maine Department of Labor



When asked, "What are the top three issues that Maine's governor and legislature should address?" the leading issue in 2018 is the cost of health care and insurance. After that, workforce issues came to the fore -31% cited the availability of professional workers; 29% the availability of technical workers; and, 22% the availability of entry-level workers. The need for better high-speed internet service was identified by 1 in 3 respondents. Energy costs and the poor state of Maine's transportation system were cited by 1 in 5 respondents.

CHART 2: Top 12 Issues for Maine's Next Governor



source: Survey of Maine Business and Education Leaders by Market Decisions Research; March 2018

These results are generally consistent with the objective findings of the *Measures of Growth 2018 Update* from the Maine Economic Growth Council and Maine Development Foundation. That report highlights workforce issues in particular as "needing attention."³

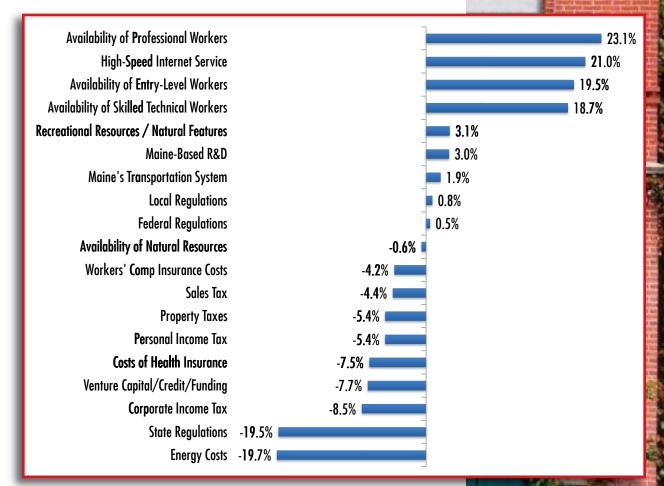
But, they are different priorities from the 2010 survey, reflecting our different economic times. Then, with unemployment high, workforce issues were in the bottom half of concerns. Today, three of the top five issues are workforce-related. Then also, in a tougher economy, business leaders

³ Measures of Growth 2018 Update, Maine Development Foundation, www.mdf.org/MOG2018.php

²⁰¹⁸ Making Maine Work: Critical Investments for the Maine Economy

listed cost and regulatory issues among the top four facing the state. The one constant is the cost of health insurance – it was the first priority in 2010, and remains the first priority in 2018.

CHART 3: Changes in Top Priorities from 2010 Survey to 2018 Survey source: Survey of Maine Business and Education Leaders by Market Decisions Research; March 2018



As the economy is changing, and future challenges are looking different, almost all respondents agreed that this is a good time for the State of Maine to reassess its economic path and create a new economic development strategy, with 91% responding that it is either extremely or very important to create such a plan.

In short, the world has changed. It is due in part to public policy changes enacted by the governor and legislature – policies that our 2010 Making Maine Work report urged. The tax burden in Maine has held steady (at 12.8% in 2007 and 12.4% in 2015), and is now closer to the New England average (10.9% in both 2007 and 2015).⁴ Our state pension system is more securely funded. Relationships among businesses and regulators are more cooperative.

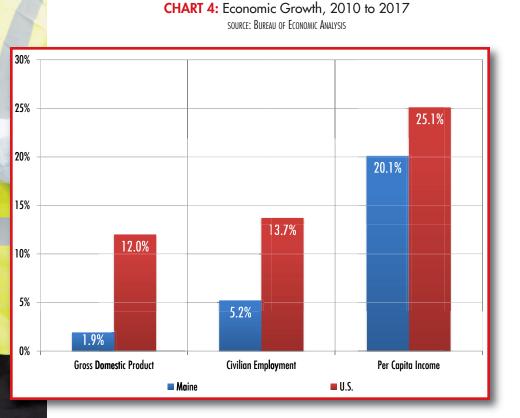
Now, it is time to turn to the new challenges facing Maine's economy.



⁴ Measures of Growth 2018 Update, Maine Development Foundation, www.mdf.org/MOG2018.php

THE DEMOGRAPHIC CHALLENGE

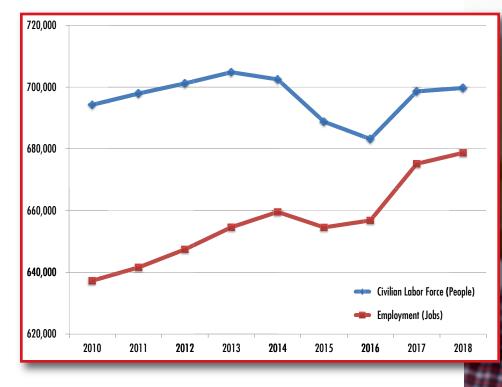
Maine's economy grew between 2010 and 2018, but not as fast as the nation's. Why not? One clear reason is demography. Maine's labor force shortage is putting a lid on our potential job, income, and economic growth.



From March 2013 to March 2018, Maine added 25,000 new jobs, yet its workforce was unchanged.⁵ The Maine Department of Labor reports that unemployment has reached decades-low levels in recent months, and stood at 2.8% in May 2018. Continued job growth in this situation is unsustainable.

5 Maine Department of Labor





Maine is hitting the demographic wall. Maine is one of only two states in the country in 2016-2017 that had more deaths than births (the other being West Virginia).⁶

Another way of phrasing the challenge is that in 2017, we had 3.2 people of working age for every senior; on the present course, the number is projected to be 2.1 working age adults for every senior in 2032.⁷ Our imbalanced population structure means that we have many more people approaching retirement than we do young people approaching the age to enter the workforce. This challenge will become more significant over time.

The demographic challenge is particularly pronounced in central and northern Maine. Cumberland and York counties had a modest natural increase and slightly greater in-migration from 2010 to 2017. But, the northern 14 counties had large population losses from both natural declines (more deaths than births) and negative net migration.

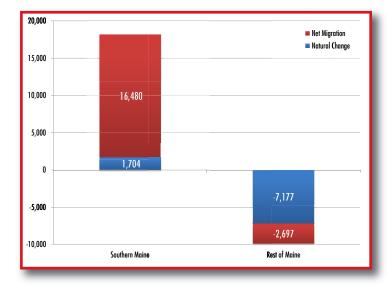
⁶ U.S. Census Bureau

⁷ Making Maine Work: New Mainers and Diversity, 2017, www.mainechamber.org/makingmainework.php and www.mdf.org/mainesworkforce.php



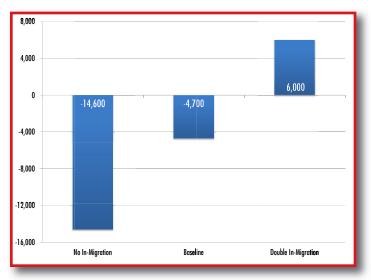
CHART 6: Net Population Change, 2010 to 2017





But even this level of in-migration is not enough for southern Maine to thrive. Former Maine State Economists Michael LeVert and Catherine Reilly deLutio estimate that Cumberland County, at the current level of in-migration, by 2034 will have 4,700 fewer jobs than today, \$231 million less in earnings, and \$18 million less in tax revenues. These numbers only turn positive when net in-migration doubles.⁸

CHART 7: Projected Employment in Cumberland County in 2034 at Different Levels of In-Migration



SOURCE: GREATER PORTLAND TOMORROW: CHOICES FOR SUSTAINED PROSPERITY; SEPTEMBER 2017

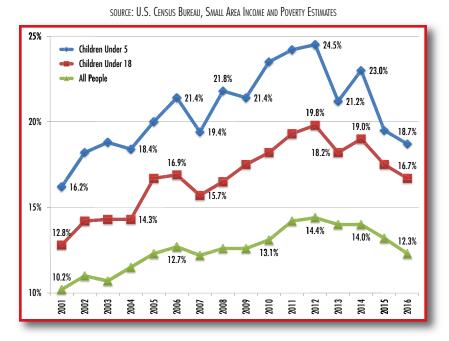
And, this is in the county where 40% of Maine's job growth is happening. Think about what this means for the rest of Maine. This is Maine's biggest economic challenge. It is also a challenge to maintaining quality schools, civic life, and essential services.

8 Greater Portland Tomorrow: Choices for Sustained Prosperity

THE SKILLS CHALLENGE

Along with the simple issue of the numbers in the workforce, there is also an issue with skills. Even many years into the economic recovery, 1 in 6 children under age 18 are growing up in poverty. During the 2017-2018 school year, 46.5 percent of school children are eligible for free or reduced school lunches.⁹

CHART 8: Maine's Poverty Trends, 2001 to 2016



These children are less likely to thrive in school, less likely to graduate from high school, and more likely to be out of the workforce when adults.¹⁰

These children are an important part of Maine's future workforce. They need special attention today.

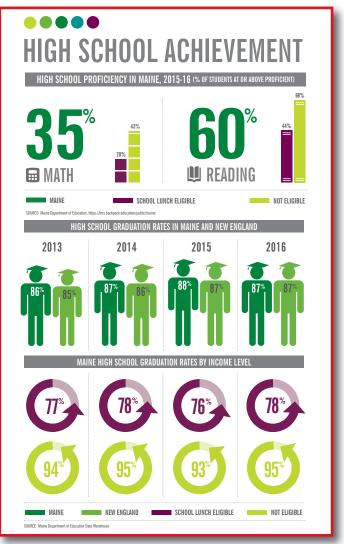
9 Annie E. Casey Foundation's KIDS COUNT Data Center 10 College and Career Readiness for Maine, Educate Maine, 2017, www.educatemaine.org/research-reports





CHART 9: High School Achievement Data, 2013 to 2016

SOURCE: EDUCATION INDICATORS FOR MAINE 2017, EDUCATE MAINE



The existing workforce also needs attention. According to MaineSpark, at present, 43% of Maine adults have a credential for work beyond a high school degree. This might be a two-year degree, a trade certification, or a four-year college degree. In New England as a whole, 51% of adults hold such a credential. This is a contributing factor to Maine's low ranking in value added per worker (next to last among the 50 states and D.C. in 2016¹¹), which in turn affects our wage rates.

Many workers lacking credentials are older, have children, sometimes are holding two low-paying jobs, and are burdened by college debts incurred in past unsuccessful efforts to get a degree. These are all obstacles to getting additional education and training.

In sum, Maine has a demographic challenge to grow the size of its workforce. It also has a challenge to support all Mainers in realizing their human potential, and by doing so, dramatically upgrode the skills of its workforce.

¹¹ Measures of Growth 2018 Update, Maine Development Foundation, www.mdf.org/MOG2018.php

A LINGERING CHALLENGE: HEALTH CARE COSTS

The cost of health care was the major priority identified by business leaders in 2010. It is still the top problem in 2018. Maine's health care delivery and insurance costs are higher than the U.S. and New England averages, and the disparity has grown in recent years.¹²

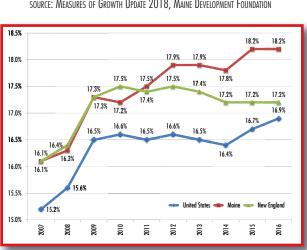


CHART 10: Health Care Expenditures as Percentage of Total Personal Expenditures, 2007 to 2016 source: Measures of Growth Update 2018, Maine Development Foundation

In 2008, 90% of Maine's population had health insurance coverage, compared to 85% in the nation. In 2016, Maine had improved to 92%, but the U.S. rate grew faster and stood at 91%.¹³

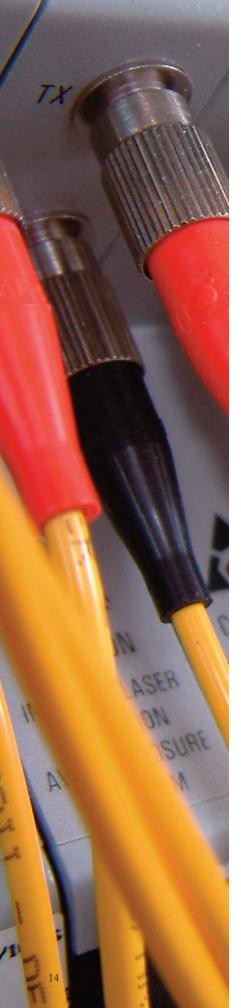
Health insurance coverage is a competitive business advantage. Health insurance encourages patients to utilize preventive care and can improve their overall health status. Further, the free care provided to the uninsured by hospitals ultimately is paid for by increases in insurance rates for the rest of us. The competitive advantage Maine once had in health insurance coverage is now largely gone.

Health and wellness also affects health care costs. Twenty percent of Maine adults smoke, compared to 16% for the nation¹⁴ (a new 2017 Maine law increasing the legal age to purchase cigarettes to 21 may help reduce future rates). Inhaling and exhaling the vapor from an electronic cigarette, known as vaping, is increasing tobacco use and addiction among youths. Maine saw 418 deaths from opioid overdoses in 2017, and our opioid overdose death rate is almost twice that of the nation.¹⁵ Almost two in three Maine adults are overweight or obese.¹⁶ Finally, our population is aging, and older people have more health problems. For all of these reasons (and more), Maine's overall health ranking dropped from 13th in 2010 to 23rd in 2017.¹⁷

- 14 Kaiser State Health Facts, www.kff.org/other/state-indicator/smoking-adults
- 15 Kaiser State Health Facts, www.kff.org/other/state-indicator/opioid-overdose-death-rates
- 17 www.americashealthrankings.org/explore/annual/state/ME



^{12, 13, 16} Measures of Growth 2018 Update, Maine Development Foundation, www.mdf.org/MOG2018.php



A HEIGHTENED CHALLENGE: BROADBAND

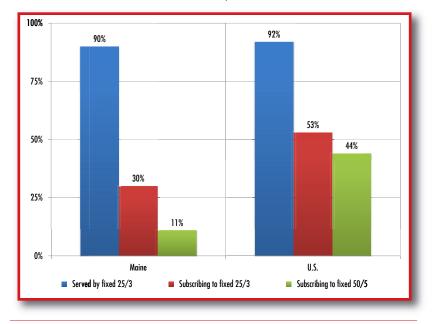
The internet has become **an indispensable tool** in connecting to the global economy and modern society. It connects businesses to customers and suppliers, patients to health care providers, and students to educational opportunities. Adequate broadband access is particularly important and challenging in large, rural states like Maine.

Affordable broadband access is as critical to attracting new people, businesses, and opportunities that will keep Maine communities vibrant, as it is to sustaining the businesses and residents here today.

Maine ranks slightly higher than the nation in the proportion of households with some kind of internet connection, but ranks lower than the nation in the percent of homes with access to broadband at higher speeds.¹⁸

As seen in Chart 19, Federal Communications Commission (FCC) data from 2016¹⁹ shows that Maine has 90% of its population served by a basic level of broadband service (25 Mbps down, 3 Mbps up), roughly the same as the nation; has a lower proportion of its population actually subscribing to that service – 30% compared to 50%; and, at higher levels of speed (50 Mbps up, 5 Mbps down), has only a quarter of the subscriber rate as the nation (11 to 44%). Of note, there is no FCC data available on the proportion of the population with access to 50/5 service.

CHART 11: Broadband Availability and Usage Rates by Percent of Population, 2016 source: 2018 Broadband Deployment Report, Federal Communications Commission



18 Measures of Growth 2018 Update, Maine Development Foundation, www.mdf.org/MOG2018.php 19 2018 Broadband Deployment Report, Federal Communications Commission

Detailed data on broadband availability is often fragmentary and outdated, but by one recent estimate about half of Maine's physical roadways – 17,660 miles – are unserved²⁰ by adequate broadband.²¹ As computers gain in power and applications in complexity, the standards for "adequate" broadband service are constantly evolving. What is considered adequate today will not be adequate five years from now.

During the past decade, hundreds of millions of private and public dollars have been invested in Maine, extending broadband access in many areas and with many different technologies and speeds. That progress should be acknowledged and celebrated, but we still have a ways to go. Technology, and business and community expectations, have also transformed rapidly, and the gaps are urgently felt.

As our survey results show, the debate about the economic importance and urgency of adequate broadband infrastructure is over. The debate now centers on how best to define and tackle solutions strategically and smartly. This requires moving past political rhetoric and assumptions to engage with the best available data and a collaborative spirit of key state, industry, and community players working hard together.

20 The State of Maine Broadband Action Plan, consistent with the Federal Communications Commission, defines an area as being unserved if it does not have maximum available speed of 25 megabits per second (Mbps) for download and 3 Mbps for upload (or 25Mbps/3Mbps). It defines an area as being underserved if it has speeds between 25Mbps/3Mbps and 99Mbps/10 Mbps. 21 State of Maine Broadband Action Plan, March 2018

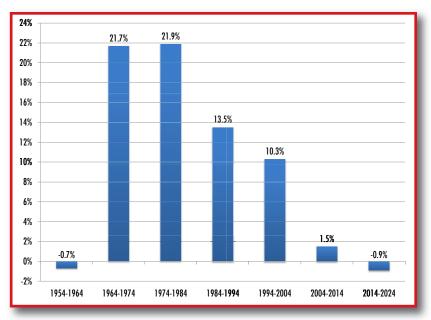




Maine's workforce grew by more than 20% per decade in the 1960s and 1970s; around 10% per decade during the 1980s and 1990s; around 1-2% in the current decade; and, is projected to be essentially flat in the decade to come.²² The size of our workforce is directly related to our future prosperity, income growth, and quality of life.²³ The first priority for Maine's economic future must be to turn this trend around.

CHART 12: Maine Labor Force Growth by Decade

SOURCE: THE OUTLOOK FOR WORKFORCE GROWTH TO 2024, MAINE DEPARTMENT OF LABOR, CENTER FOR WORKFORCE RESEARCH AND INFORMATION



Scale up the current effort to market Maine as a career destination to match the level of the Office of Tourism's successful "Visit Maine" campaign.

The award-winning Maine Office of Tourism campaign has:

• Around \$8 million a year in state funding from a dedicated tax;

²² The Outlook for Workforce Growth to 2024, Maine Department of Labor, July 2016, www.maine.gov/labor/cwri/pubs.html

²³ Making Maine Work: Growing Maine's Workforce (2013), www.mainechamber.org/makingmainework.php and www.mdf.org/mainesworkforce.php

- A consistent branding theme across all media, all regions, and multiple years;
- A website connecting visitors to activities, lodging, restaurants, etc.;
- Partnerships with private businesses, like the Maine Tourism Association, local chambers of commerce, and individual companies like L.L Bean;
- Support from the governor and legislature; and,
- Regular evaluations and tracking of progress.

Unlike the tourism sector, the state invests very little in marketing Maine as a career destination. We are recommending a major state investment, at a scale comparable to tourism marketing, in this effort to attract people to move to Maine.

Currently, with minimal funding, the private sector initiative called live and Work in Maine has succeeded in building partnerships with 500-plus Maine employers, community organizations, and government entities to create an ongoing marketing campaign to attract and connect talented people to jobs in Maine. Another private sector effort, Focus Maine, provides an enriched summer internship program to several hundred students with high-quality companies. Outside of Maine, The Right Place, a public-private live-work attraction effort in Western Michigan, provides a model for a comprehensive program.

Career destination marketing should coordinate its branding with the existing tourism effort. One possibility would be to rename the Office of Tourism as the Office of Maine Marketing, to include live/work attraction as part of its charge, and give it the level of resources needed for both tourism and live/work marketing. Marketing Maine as a postsecondary education destination could be a part of these efforts.

Provide college tuition incentives and debt-forgiveness programs that encourage young people to learn, live, and work in Maine, and are easy for students and employers to access.

Colleges are great recruiters. The great majority of Maine Community College System students end up working in a local community, and *Making Maine Work: Growing Maine's Workforce* found that approximately 60% of University of Maine System graduates stay and work in Maine. As Maine's student-age population shrinks, the University System is attracting record numbers of out-of-state students.²⁴ Likewise, Maine's private colleges attract talent from across the nation and around the world. More needs to be done to help institutions of higher education

24 www.pressherald.com/2017/10/30/out-of-state-enrollment-in-umaine-system-soars/





market their programs to out-of-state students, and to market careers in Maine to those students while they are here.

One strategy used by Utah is to provide in-state tuition rates to any out-of-state public university student who stays and works within the state over the summer.

Maine has several efforts already underway that provide debt forgiveness to college students who graduate and go to work in Maine, including Opportunity Maine²⁵ and the Alfond Leaders program at the Finance Authority of Maine (FAME) for workers in selected science and technology industries.²⁶ Proposals have been made for a large bond issue that would provide zero-interest college loans for those who choose to live and work in Maine after graduation.²⁷ These college debt forgiveness programs need to be coordinated, expanded, and simplified so that employers can use them easily for recruitment purposes.



Increase participation in the workforce by groups that have historically been difficult to engage.

Making Maine Work: Growing Maine's Workforce discussed how we can improve workforce participation among certain segments of our population, including people with disabilities, veterans, seniors, and "disengaged youth" who are between the ages of 18 and 24 and have a high school diploma or less, are not working, and are not in school. Displaced workers and the long-term unemployed are increasingly important target groups. Engaging more of these people can both improve their lives and improve Maine's economy. This will require state government to establish targets, measure performance, engage the private sector, and move its appropriate state agencies and nonprofits to work on job readiness and placement.



Attract Maine's fair share of foreign immigrants and help municipalities integrate them into communities.

As noted in *Making Maine Work: Growing Maine's Workforce*, Maine attracts immigrants from foreign countries at a rate about a half of New Hampshire, a third of Idaho, and a tenth of Minnesota – all of which are predominantly rural, northern states.²⁸ Foreign immigrants should be targeted in the marketing program proposed in Recommendation 1.

In addition, municipalities should be helped to integrate new immigrants into Maine. Like the French-Canadians and Irish in the past, Maine's new immigrants face language, cultural, and educational

²⁵ www.liveandworkinmaine.com/opportunity-maine/

²⁶ www.famemaine.com/education/topics/managing-student-loans/alfond-leaders/

²⁷ www.mainebiz.biz/article/20180316/NEWS01/180319959/lepage-and-grohman-team-up-on-\$50m-bond-to-lower-student-debt

²⁸ Making Maine Work: Growing Maine's Workforce, 2013, www.mainechamber.org/makingmainework.php

and www.mdf.org/mainesworkforce.php

challenges. The cities of Portland and Lewiston both incurred significant costs in helping immigrants through English Language Learner courses, General Assistance for housing, and in specialized school programming. However, the long-term benefits to both communities and the state's economy as New Mainers help fill vacant jobs, buy homes and cars, and start small businesses is more than worth the upfront investment. State government should provide temporary (3-5 years) expanded adult education, General Assistance, and General Purpose school funding to communities absorbing new immigrants; and support welcome centers, modeled on the New Mainers Resource Center, to help immigrants learn English, qualify for employment, gain credit for foreign credentials and licensures, start new businesses, and become involved in community life.

5

Support workforce expansion goals at a high level in state government.

The Province of New Brunswick has set up a Population Growth Secretariat to set goals, coordinate policies, and monitor annual performance. Maine state government should do the same.





GOAL B:

Grow the skills of Maine's workforce so that 60% of Maine workers have a credential of value by 2025.

According to MaineSpark, as of 2016, 43% of Maine adults had a "credential of value" to an employer - a two-year community college degree, a four-year college degree, or a trade certification. The average in neighboring New England states is 51%.

MaineSpark, a coalition of schools, businesses, foundations, government agencies, and nonprofits, is committed to working together to reach the goal of 60% by 2025. This goal was adopted into state law in 2017.



Take a "whole person" approach to helping adults already in the workforce achieve a credential.

Most of the Maine 2025 workforce is already working, or of working age, today. To reach the 60% goal, existing workers must be helped to get training and education.

This is a challenge. For example, according to MaineSpark, 190,000 adults in Maine have begun - but not completed - a post-secondary program of study. This means that they may have relatively low incomes (because they lack a credential) but still have college debts to pay (because they've attended some post-secondary school). A fifth of Maine college students over age 25 have children. Many are single parents. Most work - some at two jobs. So, they have trouble finding the time and money for tuition, child care, and transportation.

We support MaineSpark's recommendations to:

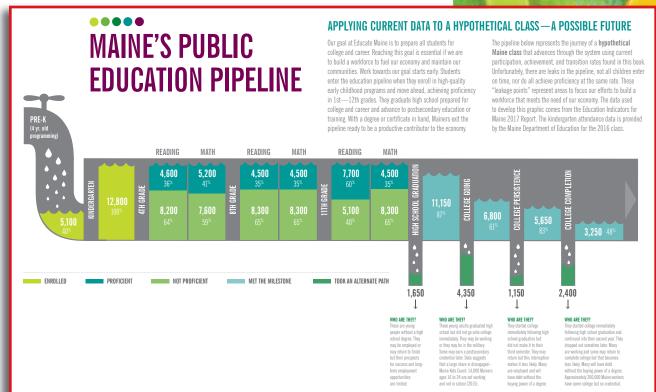
- Increase local, state, and federal funding for adult learning programs that offer 1 both financial and non-financial support programs and services (many already exist in Maine);
- 2 Provide creative financing help to adult learners such as micro-grants, debt-forgiveness, and flexible emergency aid;
- 3 Make it quicker for adult learners to achieve credentials by offering more flexible and convenient class delivery formats and by recognizing the value of their past courses and current competencies; and,
- Promote incentives for employers to invest in employee training, as was done in the Governor's Training Initiative (GTI) in the past, a program that should be reinstituted and expanded.

Take a "whole child" approach towards helping students succeed in school.

According to the chart below, about 1 in 4 Maine children entering kindergarten can expect to get a two- or four-year college degree. Children are lost at every stage of the "pipeline." Less than half of Maine children receive any kind of pre-kindergarten schooling, which means that many begin their formal education behind their peers. A third more fall behind reading and math standards by 4th grade; 40% by 11th grade. Some do not graduate; some do not enroll in higher education; and, some enroll in higher education then drop out. Ultimately, only 1 in 4 makes it to the finish line and attains a two- or four-year college degree within 150% of time.

CHART 13: Maine's Public Education Pipeline

SOURCE: EDUCATE MAINE'S EDUCATION INDICATORS FOR MAINE 2017



In light of these trends, it is crucial that Maine remain fully committed to rigorous, relevant standards and an educational system that is studentcentered with a focus on student proficiency. This will lead to greater equity and greater opportunities for all students regardless of where they attend school.

21

29 www.cdc.gov/violenceprevention/acestudy/about.html

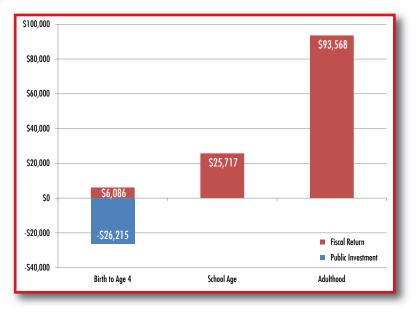


Social and economic issues play a part. Nationally, 1 in 5 children experiences three or more "Adverse Childhood Experiences," such as abuse, domestic violence, neglect, mental illness in the household, or substance abuse in the household.²⁹ The number of adverse childhood experiences is directly correlated with depression, addiction, crime, and poor school and work performance later in life.

Poverty is also a problem. The high school graduation rate in Maine for children from poor families is 17 percentage points lower than for other students.³⁰

The most effective time to intervene to enhance the chances of a child's success is in the early years. Professor Philip Trostel of the University of Maine calculated for the Maine Early Learning Investment Group that a \$26,200 public investment in the average child from birth to kindergarten entry pays itself back and saves \$25,000 more by the end of that child's high school (in reduced special education, juvenile crime, etc.), and returns to the taxpayers an additional \$93,000 in the child's adult years from higher income through higher tax payments and lower public assistance costs.³¹ In sum, a \$26,200 investment produces a lifetime benefit of \$125,400, or a 5-to-1 return.

CHART 14: Estimated Fiscal Effects of High-Quality Early Education in Maine



source: Path to a Better Future: The Fiscal Payoff of Investment in Early Childhood Development in Maine, Professor Philip Trostel, 2013

Focusing on the whole child also means involving the parent, providing access to healthy food and physical activity, and staying engaged with students over the summer. To meet our state goals, public policy and investment must focus on children from low-income families, where there is the opportunity for the most dramatic progress.

³⁰ College and Career Readiness for Maine, Educate Maine

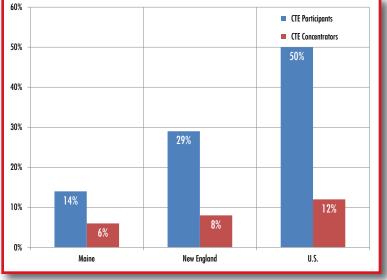
³¹ Path to a Better Future: The Fiscal Payoff of Investment in Early Childhood Development in Maine, Professor Philip Trostel, 2013, melig.org/pdfs/Path_to_a_Better_Future_Full_Report.pdf

Strengthen diverse educational pathways that lead to career success.

There are many kinds of jobs in Maine, and many pathways to become qualified in each. Not all pathways head through a four-year college, or even through a community college. Apprenticeships, certifications, trade licenses, association programs, can all lead to career success.

Maine's high schools have not done enough to inform students about alternative career pathways, and to make such alternatives easily accessible. For example, last year, only 8,500 Maine high school students were enrolled in career technical education (CTE), or 14% of the total. Only 6% had a concentration in CTE. Contrast this to Germany, where 2 out of 3 students take a vocational pathway instead of going to a traditional college. Maine has only half the level of participation of New England, and about a third of the national average.³²

CHART 15: CTE Participation as a Proportion of Public High School Students, 2014-2015 Academic Year source: Career Technical Education: Increasing Student Success by 100% for Maine, 2017, Educate Maine



Meanwhile, many good-paying technical jobs in Maine go unfilled because there are no qualified applicants. And, many Maine students who would enjoy such work do not know about all of the opportunities, and in some cases go on to college and end up dropping out.

There are three strategies to achieve this goal:

 First, double Career Technical Education enrollment by 2020. This is the goal of the Maine Department of Education, the Maine State Chamber of Commerce, and Educate Maine.³³

³³ Career Technical Education: Increasing Student Success by 100% for Maine, 2017, Educate Maine, www.educatemaine.org/ research-reports



ON

³² Career Technical Education: Increasing Student Success by 100% for Maine, 2017, Educate Maine, www.educatemaine.org/ research-reports

²⁰¹⁸ Making Maine Work: Critical Investments for the Maine Economy



- 2 To get there, students, parents, and teachers must become aware of the wide diversity of career, training, and educational opportunities that exist. A key avenue for increasing awareness is the high school guidance counselor. However, guidance counselors in Maine are overwhelmed by large caseloads, and some are unfamiliar with the range of non-traditional post-secondary options. We recommend that the caseloads of school guidance counselors be reduced, and that the counselors receive training in multiple career pathways. The MELMAC Education Foundation, GEAR UP Maine, Upward Bound and JMG programs provide excellent training, mentoring, and counseling.
- 3 An additional essential element for success is that local businesses must get involved in local schools. Mentorships, summer jobs, job shadowing, Junior Achievement, JMG programs these all happen at the local level, with one business person connecting to one school teacher or staff. There are many such success stories around the state. Our next step is to make these the rule, rather than the exception to the rule. We encourage local school boards to create advisory committees of local businesses for this purpose, like the Gorham School and Business Roundtable.

Increase funding for targeted education strategies to achieve desired outcomes.

This report has identified important areas where public education needs higher levels of funding: in pre-kindergarten education, in closing achievement gaps for K-12 students, in career guidance, in career technical education, in adult education, and in attracting out-of-state students to Maine's higher education institutions. The next governor and legislature need to identify how much of these new initiatives can be paid for by increasing efficiency within the existing system, and how much will require additional funding. Maine will need to do both.

One area that needs special attention is public higher education funding and student-based aid portable to any institution. Twenty years ago, the student's family paid around a quarter of the cost of public university education, and state government covered the rest. Today, the student's family pays over half.³⁴ The public university and community college systems have traditionally been an avenue for economic advancement for students from poorer families – this opportunity should be preserved and the state must play that role.

34 College Affordability for Maine, 2016, Educate Maine, www.educatemaine.org/research-reports

GOAL C:

Make Maine a leader in affordable high-speed broadband access for communities and businesses.

This means:

- 1 All Mainers should have access to affordable broadband that enables full participation in economic and civic life; and,
- 2 Maine businesses, both rural and urban, should have broadband speeds and costs that are comparable or superior to their competitors in cities and towns across the country.

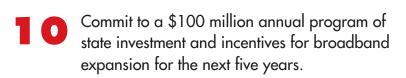
Our goals and investments in broadband access must be aspirational and equitable; must be smart and strategic – based in sound data and understanding of market forces, customer behavior, and provider business models; must work adaptably in an era of rapid technological and economic change; and, must leverage public-private partnerships effectively.

From an economic opportunity perspective, it is critical that current and future industry, small businesses, and citizens who may work or learn from home in the digital economy have equitable access across the state and are not left off the digital highway's map. Therefore, equity of meaningful broadband access across unserved and underserved rural Maine is important to attracting and keeping jobs and sustaining the vitality of communities and rural places. Pursued aggressively, Maine can become a magnet for "work at home" professionals and entrepreneurs.

At the same time, the largest numbers of businesses are and will be concentrated in or near Maine's service center communities, both urban and rural. And, we need to be competitive for information-intensive businesses that need super-fast speeds and big data pipes. Therefore, the greatest return on investment in job creation, for Maine as a whole and even in rural areas, may include upgrading bandwidth rather than simply extending service lines where there are none.

Broadband service is typically provided by private companies. With long distances and low customer density, it is simply not profitable to expand and upgrade service in all rural areas. Leveraging private sector investment and operational know-how is crucial, but broadband is too important for economic development, education, health care, and civic participation to wait for the day when broadband is economical for private companies to provide on their own in rural Maine. State government must step in as a partner to incentivize the private sector to speed up the process.





A major investment in this critical infrastructure is paramount. And, with this magnitude of investment, a major focus at the highest levels of government, commitment of leadership and technical resources, and attention to smart, strategic data collection, program design, and accountability measures are necessary along with the dollars.

We expect that such state incentives can leverage a total investment of approximately a billion dollars from all the key participants, public and private.

This overall cost estimate is a blend of recent estimates for extending existing cable television hybrid fiber and coax infrastructure across the state, as well as for providing additional middle-mile and fiber-to-thepremises. It is also the case that some currently-served urban and suburban areas still do not have the affordable, high-speed bandwidth that businesses and home-based workers need to compete and thrive. Our approach is open to a variety of technologies and solutions, as is appropriate to such a dynamic and changing sector.³⁵

We take the position that both widespread equity in the state and faster maximum speeds in some business and service centers are equally necessary. And in turn, we "split the difference" between the needed build-out of telecom and cable speeds at moderate levels and the higher-end fiber bandwidth. State government, in its program design, should take into account economic development as a priority in its targeting of public broadband investments.

While these public investment numbers are high, they are not unrealistic. Maine spends in the area of \$500 million annually on roads. Broadband is a form of access to world markets every bit as important as roads and ports in the 21st century.

³⁵ State of Maine's Broadband Action Plan; www.maine.gov/connectme/sites/maine.gov.connectme/files/inline-files/State%20of%20Maine%20Broadband%20Action%20Plan%20-%20March%202018.pdf | Although the new State of Maine Broadband Action Plan prioritizes all investment in unserved areas, and builds its funding goal entirely around a \$600 million cost estimate to expand cable TV hybrid fiber-coax (although not imposing it as a technology requirement), with a 25% state share of total investment — these recommendations build on the core principles in the Plan while being both more ambitious about the overall needs and more conservative about the federal and local funding that can be counted on in the Plan.

Maximize private and federal investment in the structure of the state broadband program.

Public-private partnerships are critical. It is important to incentivize and leverage private sector investments in continued broadband expansion. Leaning on private investment and operational know-how makes for both more affordable and more sustainable solutions. Recent experience in New York state suggests that even in heavily subsidized expansions, nearly 25% of the investment may come from the private companies involved.

For larger scale build-outs, a "reverse auction" method of awarding state funds is a promising funding mechanism that encourages private participation, utilized in other states and recommended by the **State Broadband Action Plan**. Bidders can be selected based on maximum service expansion for the least subsidy. Not every approach works in every situation. Sometimes, it may be best to have multiple providers involved in upgrades in an area to increase bandwidth while preserving competition. Or, a negotiation model where informed tradeoffs can arrive at the best solution both technically and for creative revenue-sharing. Finally, there may be scenarios where direct public investment or ownership is still an essential gap-filler.

Whether the bidding processes and collaborative negotiations are conducted by the state or by local and regional groups – clearly a resource center with a high degree of technical and business savvy is required for the public to get the most impact from the incentives and to assure that the public that put up the subsidy shares reasonably in some of the financial upside.

In addition, there are a number of existing and prospective federal funding commitments for broadband. For example, the FCC is about to spend \$2 billion during the next 10 years in helping communities connect to broadband through the Connect America Fund II. The proposed Farm Bill would add funding for U.S. Department of Agriculture broadband programs. Maine must be organized and aggressive in getting its fair share of these existing and future funds.



Increase digital literacy and digital equity at the business and household levels.

As the FCC data shows, Maine's problem is not just infrastructure. It is also use. About 90% of Maine's and the nation's population is served by 25 Mbps/3 Mbps service. Yet only 1 in 3 Maine people subscribe compared to more than half for the nation.

Part of the problem is cost. But, part is also that many people do not see the educational, business, cultural, health, and civic benefits of having a full-capability broadband connection. In some cases, households simply lack the means for the equipment to gain access.

More utilization means more economic, educational, and civic value is achieved from the technology. The low utilization rate – or "take" rate, as it is called in the industry – is a further impediment to private investment in service expansions and upgrades. A high take rate means that private investments can be paid back more quickly, and the need for public subsidy is minimized. A low take rate means that the private investment can only be paid back slowly, if at all.³⁶

We support and must expand upon the efforts of countless private companies, business counselors, public libraries, and adult education programs to provide equipment and digital literacy education to the public and small businesses on the use of computers, the internet, and social media to advance business and personal goals.

³⁶ For an extended discussion of the importance of demand and take rates, see The Broadband Capacity Building Task Force Report, 2013, ConnectME Authority, www.maine.gov/connectme/home

GOAL D:

Make Maine a leader in health care cost containment, health insurance coverage, and public health.

The cost of health care and insurance was the number one issue for Maine's business leaders in 2010. It holds the same ranking eight years later. Maine needs to act upon and reverse current health trends – or else eight years from now, in the next iteration of this report, business will continue to be overwhelmed by health care costs.

13 Reduce cost-shifting to private health insurance payers.

Maine hospitals provide more than \$200 million of unreimbursed care to patients without health insurance.³⁷ The costs of that care are shifted to those who do have insurance, and as a result, private insurance costs rise. Other costs that get shifted to private insurance payers come from unrealistically low reimbursement levels for services from Medicaid and Medicare.

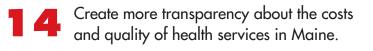
Last year, Maine voters passed a referendum that called for state government to participate in the expanded Medicaid program made possible under the Affordable Care Act. The expanded Medicaid program would cover an estimated 80,000 Mainers who are not currently covered. Ninety percent of the cost would be borne by the federal government. State government should proceed and implement Medicaid expansion and help not just the uninsured, but also help those with private insurance to save money from cost shifts.

In addition, state government should review Medicaid program design in the effort to make it more efficient. Ideas to explore include using a managed care approach; revisiting areas of the program with the highest escalation of costs (such as dual eligible and developmentally disabled); expanding community-based behavioral health residential services (less expensive than hospitalization); and, addressing underpayment issues.



37 Maine Health Data Organization, mhdo.maine.gov/_pdf/Report%201_2016.pdf





The Maine Health Data Organization collects and aggregates data on every hospital activity in the state. Its partner organization, the Maine Quality Forum, analyzes this data and organizes improvement efforts. Their website, Compare Maine, provides detailed cost and quality data for all hospitals in Maine.³⁸ There are considerable variations across the state, and more needs to be done to make this data visible and useful to the Maine business community, particularly small employers.

Employers will utilize this data more if they introduce value-based health plan designs that reward enrollees for healthy lifestyles and share risks with providers and third-party administrators.

 Institute major public health marketing and programmatic campaigns to encourage healthy behaviors and reduce preventable disease and death.

In the end, the most efficient insurance markets and health care delivery will still cost a lot of money until Maine citizens adopt healthier living habits. Aggressively educating citizens about the benefits of exercise, healthy eating, and smoking cessation — and providing the supports and access needed for Mainers of all walks of life to adopt these healthier habits — will pay off in lower health care costs in the long run. Education and promotion has to be accompanied by investments in strong programming, such as public health screenings and vaccinations that are also important to the population's health.

38 www.comparemaine.org/?page=home

GOAL E:

Develop a Comprehensive State Economic Strategy in 2019

There are a number of public and private efforts underway in Maine that provide outstanding leadership in identifying ways to grow key sectors. For example, Focus Maine targets agriculture, aquaculture, and biopharmaceuticals; the Maine Forest Opportunity Roadmap initiative (FOR/Maine) targets wood products; the Maine Food Strategy focuses on agriculture and fishing.

What is missing is a comprehensive view – one that looks at all sectors in their interactions and builds on Maine's competitive advantages, which include:

- Access to population centers in the northeastern United States and Europe;
- Seaports connecting to the Atlantic Ocean;
- Fishing and aquaculture;
- Alternative energy potential from the wind, sun, tides, and earth depths (geothermal);
- Quality of place natural beauty, history, charm as an asset for tourism and for attracting new residents and businesses;
- A low crime rate;
- Quality schools;
- A major eastern forest and a skilled wood products sector; and,
- A biopharmaceutical cluster of innovative research and development organizations.

The comprehensive view also needs to address additional issues only touched upon in this short report. They include the fact that:

- Maine's industrial electricity prices are high relative to national and global competition, posing a particular problem for Maine's manufacturing businesses;³⁹
- Maine's road infrastructure gets a D rating for its condition,⁴⁰ and the annual highway fund budget has chronic shortfalls;
- Maine's tox burden is getting closer to the national average, but it is still high, and repeated referenda that make ad hoc tax policy are not helping;
- Maine has a very low rate of investment in research and development compared to New England and the nation.⁴¹

40 2017 Infrastructure Report Card, American Society of Civil Engineers, www.infrastructurereportcard.org/state-item/maine/



³⁹ Measures of Growth 2018 Update, Maine Development Foundation, www.mdf.org/MOG2018.php

⁴¹ Measures of Growth 2018 Update, Maine Development Foundation, www.mdf.org/MOG2018.php



Some of these issues – like energy, transportation, and R&D – deserve independent study. For all, including those addressed in this report, there needs to be a holistic analysis, looking at the problems and opportunities in all sectors side by side.



Lead a public-private effort to create a new, consensus-based, State Economic Development Strategy.

Consensus is important. This strategy should be seen as a good-faith effort that engages the public, that is nonpartisan, and that is achievable.

The Maine Economic Growth Council's *Measures of Growth* report series tells us where we stand relative to the world. Now the state needs to discuss prescriptions for how to improve. That is the purpose of the proposed strategy. The Maine Economic Growth Council and Maine Development Foundation have the reputation and credibility to convene the process, working with stakeholders across the state.

The goals and recommendations in this report respond to the new challenges of the Maine economy. They include bold ideas about broadband expansion, growing a skilled workforce, and controlling health care / insurance costs. They are not the final say about these issues. Rather, we hope that they stimulate discussion, and possibly other bold ideas for consideration. Most of all, they are a call to action. Maine cannot make continued economic progress without forceful action on workforce development, broadband, and health care/insurance costs. After reading this, we hope you agree.

As we said at the beginning, we are upbeat about Maine. Few places in the world have our combination of talent, resources, and natural beauty. If we can trust each other, if we can work together, there is no limit to Maine's future. Join us in making Maine work for prosperity for all.

It's time, once again, to make Maine work.

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The views expressed in this document, and any errors, are those of the partnering organizations.

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Maine Forest Products Council Maine Hospital Association Maine Innkeepers Association Maine Medical Association Maine MEP Maine Municipal Association Maine Real Estate & Development Association Maine Renewable Energy Association Maine Tourism Association Manufacturers Association of Maine **NFIB** Maine **Professional Logging Contractors** of Maine **Retail Association of Maine** Society for Human Resource

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You matter more.





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