

MAINE STATE LEGISLATURE

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Trends and Implications for the **MAINE WORKFORCE**



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2005

The Division of Labor Market Information Services

LMIS is responsible for gauging the conditions of Maine's labor market, assessing workforce developments, and communicating the resulting analysis to support decisions and plans of workers, employers, policymakers, economic developers, education and training planners, and career guidance and employment service specialists.

The Division is made up of a staff of 30 economists, statistical analysts, and labor market information specialists.

In addition to expert staff, LMIS makes extensive use of Web-based communications technologies and systems. LMIS also fields three regional economists who track local and regional labor market developments. Our annual budget is approximately \$3 million and our financial support comes primarily from the U.S. Department of Labor, Bureau of Labor Statistics (BLS) and the Employment and Training Administration (ETA).

About the Cover

The cover provides a picture of the Cabot Mill building in Brunswick, Maine. Constructed in the late 1800s, this former textile mill, located on the banks of the Androscoggin River, once housed water-powered machinery and hundreds of manufacturing workers.

This was once the backbone of Maine's economy.

The mill has been restored and now houses a mix of tenants who reflect how the Maine economy has been transformed. What remains constant, however, are the Maine people who are doing the work and the entrepreneurs creating new jobs.

Trends and Implications for the Maine Workforce

*A report to the
Governor's Workforce Cabinet
2005*

*Prepared by
The Maine Department of Labor
Labor Market Information Services*

March 2005

Preface

Recognizing that Maine's workforce is the key to economic growth, Governor Baldacci has made it a top priority to ensure that Maine workers and employers have access to a world-class workforce development system. To shape such a system, the Governor has established a Workforce Cabinet.

The Cabinet has commissioned this report as an initial step towards formulating a more comprehensive and integrated workforce development strategy for Maine. Chaired by the Commissioner of Labor, the Cabinet includes the Commissioners of Education and Economic and Community Development along with the Chancellor of the University of Maine System, the President of the Maine Community College System, the Chief Executive Officer of the Finance Authority of Maine and the Director of the Maine State Housing Authority.

In shaping responsive policies and appropriate strategies, policymakers are seeking to develop a deeper understanding of the large-scale demographic, economic, and technological changes that are impacting workplaces and workers in Maine. Key trends will accelerate in the years ahead: The baby boom generation moves into retirement, globalization continues, and transformative technology innovation defines new industries and jobs. The consequences are far reaching and we are compelled to act if we are to ensure continued economic growth and advancement of living standards.

Both employers and workers can be better equipped if they understand the forces that will impact their future. Educators and those charged with workforce development have the important responsibility of anticipating the job performance requirements and future needs of Maine workplaces. Leaders at all levels must craft forward-looking policies and strategies that influence the direction of the economy to achieve a shared prosperity.

This report provides a synthesis of data and information related to Maine's workforce. It is intended to guide readers through a broad overview of workforce development issues and challenges. The Maine Department of Labor, in cooperation with the U.S Department of Labor, collects extensive information about Maine workers and employers. We encourage all those involved in making workforce development decisions, plans, and investments to draw on the information offered in this report.

Contents

	<i>Page</i>
Introduction	1
Why This Report	1
Framing Workforce Development	3
Maine Demographics and Workforce Challenges	6
Labor Force Defined	6
Population Dynamics	6
Labor Force Participation	7
The Impact of Aging on the Labor Force	8
Population Characteristics	8
Labor Force Outlook.....	8
Labor Force Participation and Special Populations	10
The Changing Profile of Employment and the Outlook to 2012.....	11
Demographic Trends.....	11
Technology	12
International Trade.....	12
Industry Employment Outlook to 2012	13
The Shifting Composition of Employment and Maine Industries	13
Goods-Producing Industries.....	13
Service-Providing Industries.....	14
Assessment of Governor’s Economic Development Strategy/Sectors.....	16
Business Startups	18
Small Businesses in Maine.....	19
Occupational Employment Outlook to 2012	20
Change in Jobs by Occupational Group	21
Change in Jobs by Education/Training Requirement.....	23
Change in Jobs by Average Earnings	24
Regional Economies and Workforce Change	25
Initiatives to Promote Growth in Economically Distressed Areas	26
What Happens to the Workers When the Factory Closes Its Doors: The Case of a Mid-Maine Shoe Company..	27
Summary	29
Key Workforce Challenges and Policy Emphasis.....	30
Appendix.....	33

Introduction

Why this Report

A qualified workforce remains one of the most fundamental drivers of economic growth in Maine. The Governor has charged his Workforce Cabinet to shape forward looking policies and strategies that ensure Maine's workers are equipped with the skills that employers need now and in the future. This report is the result of an examination of demographic, economic, and labor market developments unfolding in Maine. They will have significant consequences and must be understood by policymakers, economic developers, educators, employers, workers, and Maine citizens.

The baby boom generation born between 1946 and 1964 provided a key ingredient that helped to shape the Maine economy and its labor markets. This generation produced Maine's largest and most educated workforce. Never before has the Maine labor force included so many workers with a college education and women at work. As they entered their peak earning years, baby boomers created demands for new products and services including retail, health care, and financial services. Growth of the consumer society also created significant employment gains.

Today, pronounced demographic shifts and intense economic restructuring are underway with significant implications for Maine's future. Maine's population is aging, growing slowly, and lacking in diversity. Low birth rates and out-migration of young people have shaped Maine's population dynamics. Unlike many other parts of the U.S., Maine has not attracted new waves of immigrants including significant numbers of Hispanics or foreign born residents that are contributing to labor force growth. Between 2011 and 2030, retirements of baby boomers will create significant demands for large numbers of replacement workers across the spectrum of industries and occupations.

Labor market analysts project the creation of 68,000 new jobs in Maine between 2002 and 2012. The impact of job creation and industry restructuring will be uneven across the state. The more densely populated southern and coastal counties will continue to see population and employment growth, while some interior and northern regions of the state will struggle with population loss and employment declines in traditional industries. The Governor's Economic Development Strategy is targeting mature industry clusters such as forest products, marine-related activities, niche manufacturing, and tourism for expansion. Significant emphasis is also being placed on emerging industries including biotechnology, biomedical research, financial services, and radio frequency identification. Additional strategies include the designation of Pine Tree Zones offering incentives for new and expanding business in targeted regions. A new Commission has also been established to focus on the growth of the "creative economy," an eclectic collection of sectors including the arts, culture, and technology.

***"People
are the
wealth
of nations."
-Adam Smith-***

Maine's economic fortunes will be determined by how successfully we replace retiring workers and meet the demands for new workers. At the same time, the nature of work in the 21st century increasingly demands higher levels of literacy, more sophisticated technology competencies and growing expectations of self-management across all occupations. One thing is certain: Maine will prosper only if it is able to supply a workforce with requisite education, training, advanced knowledge, and skills, along with a top-rated work ethic. The recent creation of a new community college system and adoption of strategies to increase the number of young people attending college are designed to provide for a skilled workforce to meet future needs.

This report has been prepared to improve personal, institutional, and policy decisions in a rapidly changing environment.

This report has been prepared to improve personal, institutional, and policy decisions in a rapidly changing environment. It is not intended as an exhaustive compilation of tables and charts through which researchers examine details and nuances of economic and demographic change. Instead, the report assembles a pertinent array of demographic, labor market, and workforce information and forecasts to draw the attention of:

Citizens and Workers. For Maine workers to remain highly productive and equipped with the education and skills needed to compete in the emerging economy, they must first understand where and what employment and career opportunities will be available, the forces creating changes in the employment and opportunity landscape, and what it takes to effectively perform in new labor market context and employment environments.

Employers. The combined forces of globalization, demographics, technology innovation, market competition, and management restructuring present a set of intense challenges for Maine employers. Employers, large and small, continue to rely on the availability and quality of the workforce as a fundamental driver of productivity and competitiveness. Mastering the cross currents of economic and demographic change related to workforce development will profoundly determine the future success of Maine employers, large and small.

Educators. Preparing Maine's young people to lead productive lives is one of the most challenging undertakings for our communities. Adults as well are increasingly confronted with the need to find new jobs, develop new careers, and learn more advanced skills as economic dynamism continues to transform the landscape of employment and career opportunities and set increasingly higher standards for job performance. To ensure that our schools and job training programs provide relevant education and training, they must understand the needs of Maine businesses.

Economic Development Specialists. Maine's workforce continues to be the primary asset that drives economic development and shape future prosperity. The availability and quality of the workforce, more than any other single factor, will determine where a company chooses to locate or expand.

Policymakers. The executive and legislative branches of Maine government are being called on to make critical choices for investing in the future. Key among

these are the investments we make in Maine people. Choosing the right strategies and investments for education, training, and workforce development will, in large measure, determine our economic prospects for years to come.

Framing Workforce Development

Enormous challenges are before us to ensure that Maine is able to compete in a global economy driven by demographics, technology, capital availability, and strategic policies. Workforce development remains one of the most formidable competitive strategies to position economies for growth and prosperity. There are four dimensions for developing Maine's workforce in the years ahead. These include:

Focus on the Emerging Workforce-The single largest source of Maine's future supply of labor will come from among Maine youth who are enrolled in K-16 education and training. This group must acquire the academic and occupational skills and credentials that Maine employers need as workplaces continue to transform and new industries and occupations emerge. The adoption of Maine Learning Results, the laptop initiative, emphasis to increase the number of Maine high school graduates going on to post-secondary education, the creation of a community college system, and the strengthening of vocational and technical education, are all intended to better prepare and ensure a high quality labor force.

There are also significant numbers of young people who drop out of school and others who simply are not at work or in school. We cannot afford this growing pool of "disaffected" youth.

The emerging workforce also includes newly arriving in-migrants who possess a diverse array of education and skills. In many instances, this group requires language training, employability skills, and academic and occupational skills development to satisfy employer needs.

The disabled, who traditionally have had low rates of labor force participation, also represent an emerging workforce that has been denied access to employment opportunities in the past. This group is willing to work, but unable to access employment opportunities because of physical barriers and/or skills and education deficits. A new employment-focused rehabilitation system must become an essential part of a long term workforce strategy.

During the last 50 years of the 20th century, Maine and the nation experienced significant growth in its labor force, as women dramatically increased their rates of labor force participation. Based on more recent evidence, female labor force participation is not likely to increase significantly.

Support the Established Workforce-Nearly 700,000 people participate in the Maine labor force today. It is a workforce that is better educated and more highly skilled over its predecessors. This workforce, however, has had to confront significant demands for change during its tenure in the labor market. The forces of globalization, technological change, and management restructuring have

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combined to destroy and create jobs, often at an intense pace leaving communities, families, and individuals to make major transitions. The effects of these changes have been most severely felt by workers in Maine's traditional industries (pulp and paper, wood products, shoe and textile manufacturing, fishing and agriculture) where major job loss has occurred.

Maine has transitioned into a significant service economy including major employment growth in retail and wholesale trade, business and professional services, leisure and hospitality services, health care, education, and government. This economic transformation has often meant that the skills of workers located in heritage industries do not match up with those of emerging job opportunities.

There is a spatial mismatch as workers located in isolated, rural mill towns are not easily able to commute to regional employment centers where job opportunities exist. The shift from manufacturing and natural resource-based employment to a service economy has created new work environments reshaped by technology innovation, setting new employment and skill standards requiring higher levels of education and training.

The resiliency and adaptability of the established workforce needs to be encouraged and supported. Systems and financing mechanisms that encourage and support lifelong learning and repositioning in the labor market must become an essential feature of Maine's economic development strategy.

Adapt the Senior Workforce-Maine's workforce is aging. The maturing of the post-war baby boomers means that a significant segment of the labor force is approaching the typical retirement age. By 2011, the first wave of baby boomers will be eligible for retirement. Baby boomers will exit the labor force until 2030. This highly-educated and skilled group will vacate key management, technical, professional jobs along with many others jobs that are essential to make the Maine economy run. It remains unclear, however, if this group will follow typical retirement patterns.

A combination of longer life spans and desire to stay engaged with meaningful and productive activities may cause this group to extend their participation in the labor market seeking out part-time employment arrangements and more volunteer opportunities. A recent survey of 1,000 workers and retirees aged 50 to 70, conducted by Watson Wyatt Worldwide reported significant percentages of these individuals hoped to work part-time in retirement (63 percent). Others (48 percent) hoped to work more flexible hours, while a sizeable number (63 percent) want to pursue a new career in retirement.

Characteristics of recent in-migrants to Maine indicate that a significant portion is made up of highly-educated and skilled retirees who offer more potential by adding to the senior workforce. Maine's senior workforce, often held up as an emerging liability for economic development, may actually offer significant potential as a talent bank and mentor pool.

Systems and financing mechanisms that encourage and support lifelong learning and repositioning in the labor market must become an essential feature of Maine's economic development strategy.

Reach for the Prospective Workforce-Maine also needs to better cultivate its prospective workforce. There is a fairly significant reservoir of individuals and families who would choose to reside in Maine if the right kinds of employment opportunities were offered. Among this group are expatriate Maine citizens who are seeking to come back home. This group would include a significant number of young people who left to pursue education, but seek to move back for the quality of life. There are also significant numbers of Maine people who have been away from the state for some time. They have often attained professional standing, are part of elaborate networks, and have accumulated sizeable financial assets. Another prospective group of workers is made up of visitors and seasonal residents who are familiar with what Maine offers and would commit to live here if they could secure a livelihood.

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Maine Demographics and Workforce Challenges

Maine's labor force, following national trends, has undergone significant change in the last 50 years. Major demographic shifts in the population, along with social trends and other factors have caused vast fluctuations in the size, rate of growth, and composition of the labor force. Over 70 million baby boomers entered the U.S. labor force during 1960s, '70s, and '80s, creating unprecedented growth and transformation of the labor market. In the same way that baby boomers created formidable challenges as they entered the labor market, we can expect equally bold impacts upon their leaving the workforce over the next 30 years. Demographic shifts and labor force dynamics will assert considerable demands on employers as the availability and composition of Maine's workforce undergoes profound change.

Labor force growth was reduced substantially in the 1990s following these significant increases, raising important questions about the availability of labor in years to come. Because labor force and economic growth are inextricably linked, it is important to understand an array of factors impacting Maine's labor force. This section reviews past trends in the labor force including drivers of its growth. We examine the 2002 to 2012 outlook for the labor force including key population characteristics that will influence the shape of Maine's future workforce.

Labor Force Defined

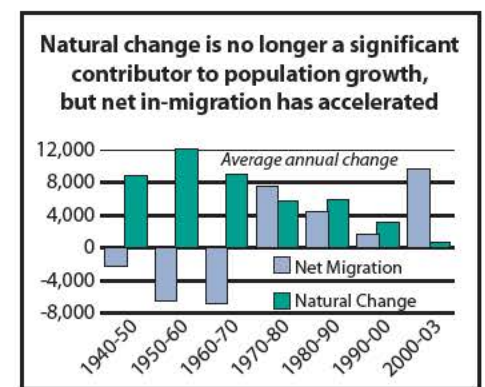
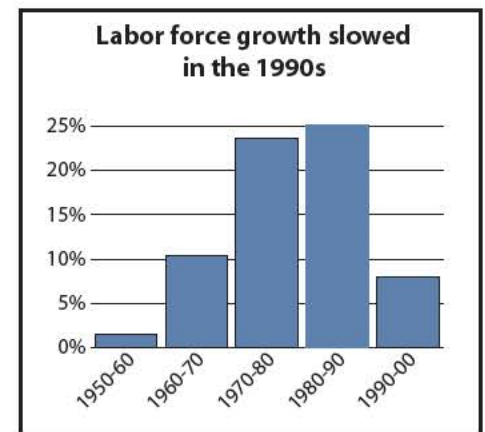
The civilian labor force is the supply of workers available to fill job openings. It includes individuals age 16 and over who are working or actively seeking work. Retirees, students, homemakers, and others not working or actively seeking work are not counted as part of the labor force. Many factors affect labor force growth, including total population growth, shifts in the age profile of the population, net migration into or out of the state, and shifting rates of labor force participation.

Population Dynamics

Population growth is the largest factor impacting labor force growth. There are two major sources of population growth: natural change (the difference between the number of births and deaths) and net migration (the difference between the number of people moving into and out of the state).

Natural Change. Birth patterns in the U.S. have generally dropped since the end of the 1946 to 1964 baby boom. The boom gave way to the 1965 to 1976 "baby bust" when the number of births plunged. Between 1977 and 1991, births bumped up when the bulk of the boomers were in their peak child-bearing years. Demographers have dubbed this the "baby boom echo." In 1992 births began to drop again as much of the baby boom generation was past the age of peak fertility.

Demographic shifts and labor force dynamics will assert considerable demands on employers as the availability and composition of Maine's workforce undergoes profound change.



At the height of the baby boom, the number of births per year exceeded the number of deaths by 124 percent. While births dropped after the baby boom, deaths trended upward slightly, despite advances in health care that lengthened the average life expectancy. Today, the number of births per year exceeds the number of deaths by only five percent.

Net Migration. From the 1940s through the 1960s the number of people moving out of Maine exceeded the number moving in by a large margin. In the 1970s and 1980s the trend reversed itself as many more people moved into than out of the state. The net in-migration continued in the 1990s, but by a much smaller margin than in the prior two decades.

Within the state, migration patterns have varied significantly. In each of the three decades since 1970 there was a net out-migration from Aroostook County. In other northern and rim counties there was either a net out-migration or very small in-migration during that same period. The vast majority of the net in-migration in the last three decades was in York and Cumberland counties, and the smaller mid-coast counties (Sagadahoc, Lincoln, Knox, Waldo, and Hancock).

Recent Census data highlights the north/south migration divide. Statewide between 1995 and 2000, there was a net in-migration of nearly 3,300 people age five and over to Maine (110,700 in-migrants, 107,400 out-migrants). But in northern Maine, there was a net out-migration of 59,100 (24,600 in-migrants and 83,700 out-migrants), while in southern Maine there was a net in-migration of 62,400 (86,200 in-migrants and 23,700 out-migrants). Among those age 18 to 24 the divide was even greater. Nearly 16,000 more young adults moved out of than into northern Maine (3,900 in-migrants, 19,900 out-migrants), while nearly 7,100 more moved into than out of southern Maine (12,900 in-migrants, 5,900 out-migrants). Many of the young people who moved out went off to college. It is not clear how many returned to reside in Maine following completion of their studies.

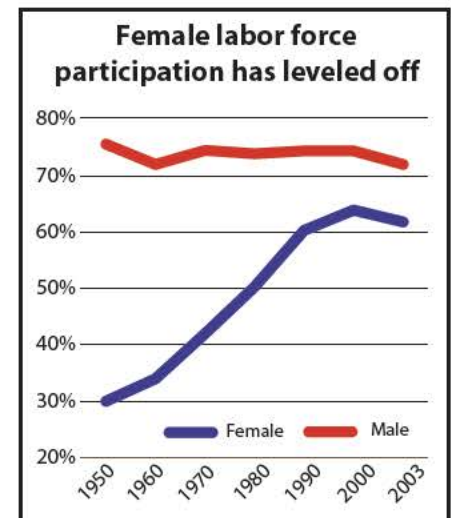
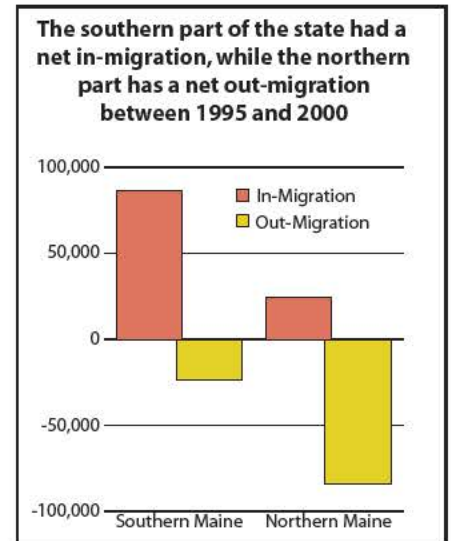
Statewide, the net in-migration of population combined with the large numbers of boomers reaching adulthood were major contributors to the rapid labor force growth of the 1970s and 1980s.

Labor Force Participation

The other major factor impacting labor force growth is changes in the labor force participation rate—the share of the population in the labor force. In the last 50+ years rising labor force participation rates have been a major contributor to growth. In 1950, about 53 percent of the age 16+ population were in the labor force; in 2002, 66 percent were in the labor force. If the labor force participation rate had not increased, the labor force in 2002 would have been smaller by 132,000.

The differing lifestyle choices baby boomers made from prior generations have been well documented over the years. They waited longer to marry and have children and they had fewer children. Perhaps the biggest difference, though, was the attachment of baby boom women to the paid labor force. In 1950 only about

Between 1995 and 2000, there was a net out-migration of 59,100 in northern Maine, while in southern Maine there was a net in-migration of 62,400.



In 1950 only 30 percent of women participated in the labor force. In 2002, 62 percent of women were in the labor force.

30 percent of women participated in the labor force and women accounted for only 28 percent of the total labor force. In 2002, 62 percent of women were in the labor force and they accounted for 48 percent of the total labor force. During the same period the male labor force participation rate was basically unchanged, hovering around the 72 percent recorded in 2002.

The Impact of Aging on the Labor Force

Population growth and increased female labor force participation were the major factors driving labor force growth over the last 50 years, but aging also had an impact. Labor force participation rates vary by age group. Among men, labor force participation is highest among those age 25 to 34, dropping slightly with age through age 54, and then dropping sharply with age after that. The rate of labor force participation is lower among women in all age groups and peaks later in life as many younger women take time out of the labor force for family considerations.

In 2002, boomers ranged in age between 38 and 56. With such a large share of the population at their peak age of labor force attachment, the labor force participation rate reached 66 percent. Two-thirds of the labor force was over the age of 35. Because of declining numbers of births following the baby boom, the labor force under age 35 has been shrinking. Between 1980 and 2002, the number of labor force participants under age 35 declined by 12 percent, while the number 35 and over swelled by 67 percent.

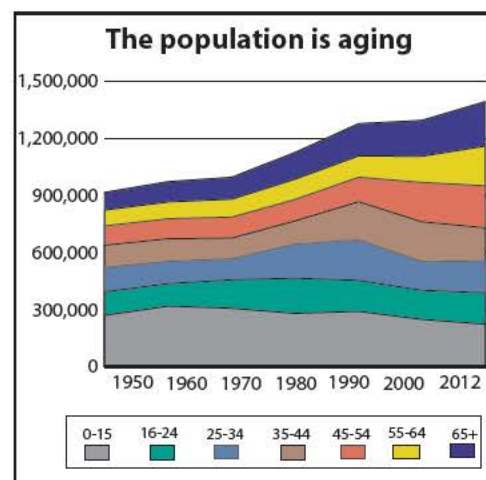
Population Characteristics

Maine has experienced relatively little change in the racial and ethnic mix of its population. Whites constituted 97 percent of the population in 2002 and racial/ethnic minorities made up a relatively small share of the total population (African-Americans, 0.5 percent; Hispanics, 0.7 percent; and Asians, 0.5 percent). Foreign born residents have contributed to significant population and labor force growth for the U.S. overall, but represented only 2.9 percent of Maine's population in 2002 compared to 11 percent nationally. The lack of diversity in Maine's population has contributed to slow population growth and an aging workforce. While the U.S. population grew by 13 percent between 1990 and 2000, Maine's population increased 3.8 percent during the same period.

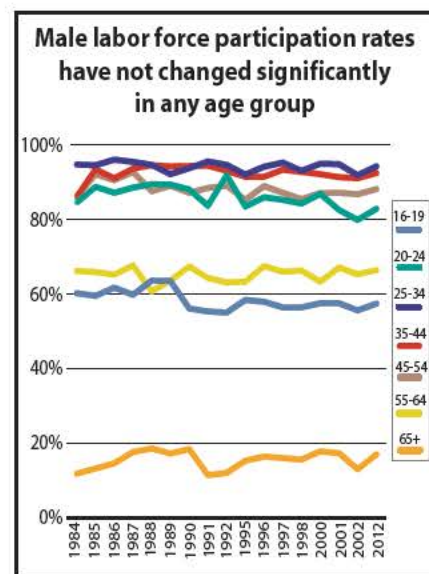
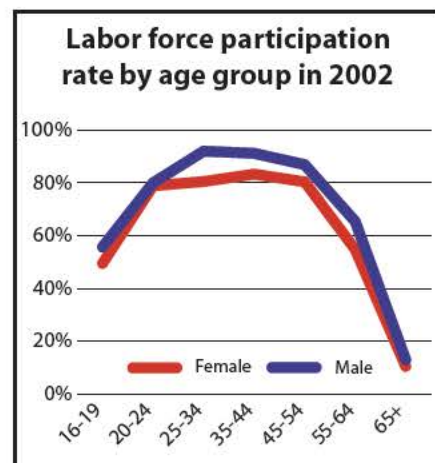
Labor Force Outlook

Since the size and rate of growth of the labor force is a function of changes in the total population, age group population shifts, and shifting labor force participation rates by age and gender, developing a labor force forecast begins with a detailed population forecast and an understanding of demographic, social, and other factors impacting labor force participation by age and gender.

Population Outlook. According to population forecasts developed by the State Planning Office (SPO), population growth between 2002 and 2012 is expected to accelerate from the 1990s rate of growth. The early 1990s recession was much



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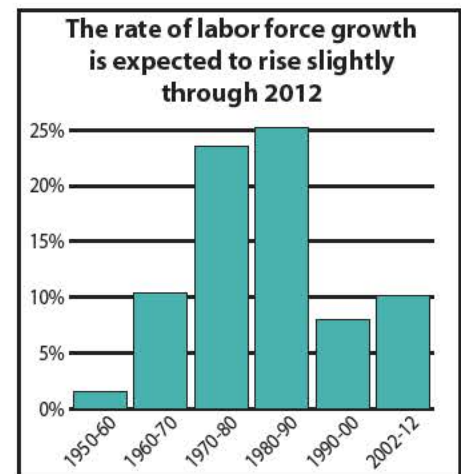
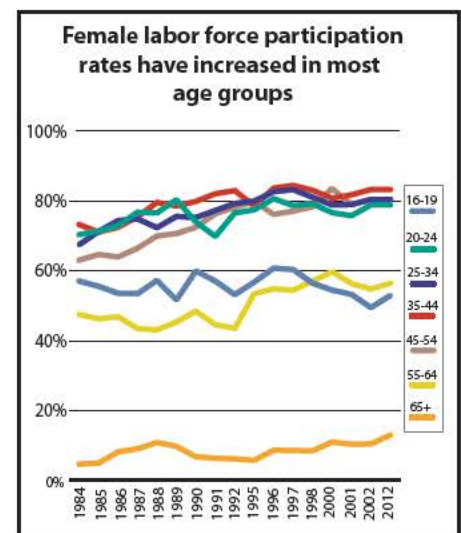
deeper and longer in Maine and other northeastern states than the nation as whole. The loss of 30,000 jobs between 1989 and 1992 caused a net out-migration in the first half of the 1990s as thousands moved elsewhere in search of better job prospects. The strong job growth of the second half of the 1990s turned the situation around and many more people moved into than out of Maine. According to recent estimates by the U.S. Census Bureau, the strong net in-migration continued between 2000 and 2004, with nearly 39,000 more people moving in than out. SPO projections assume the strong in-migration will continue through 2012.

Labor Force Participation Outlook. The overall labor force participation rate has increased substantially over the years, partly driven by the rise of working women, and partly by the aging of the population into their peak working years. As the nearby graphs indicate, male participation rates have been basically unchanged in all age groups since 1983. Female labor force participation has increased slightly among most age groups, with the largest increase among women age 55 to 64. The forecast calls for only small changes in labor force participation among age groups, with a slight decline among younger workers and a slight rise among older workers. Despite the small changes, the total labor force participation rate is expected to decline from 66.4 to 65.5. The reason is not a lower attachment of the population to the labor force, but the aging of the baby boom generation beyond their peak working years. In 2012 the boomers will range in age between 48 and 66, driving the average age of the labor force to a record high. Combined with the smaller population in their peak years of labor force attachment (age 25 to 44), the share of the population in high participation age groups will decline (Table 1*).

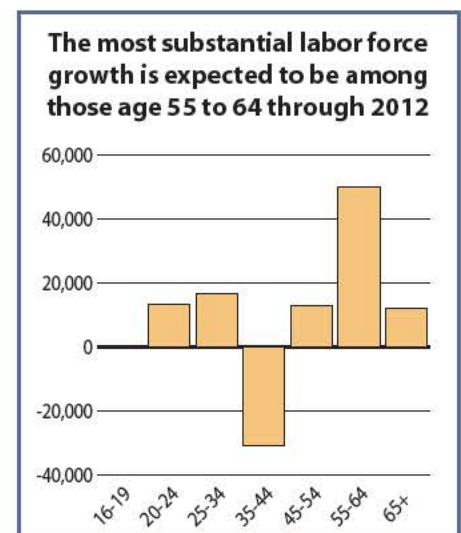
Despite the decline in the participation rate, labor force growth is expected to accelerate slightly from the rate of growth recorded in the 1990s due to faster population growth. Between 2002 and 2012 the labor force is expected to grow to 755,900, an increase of 69,900 or nearly ten percent. The most substantial growth is expected to be among those age 55 to 64. The 35 to 44 year-old labor force is expected to decline significantly (Table 2).

This forecast is limited to the 2002 to 2012 time period. Given the population dynamics, however, the prospects for labor force growth beyond 2012 are not good. By 2020, nearly half of the boomers will be 65 years of age or older, and by 2030 the youngest of the boomers will be 66. With a declining share of the population in their peak years of fertility, a sharp upturn in births is unlikely. The most recent SPO population forecast goes out to 2017. Between 2012 and 2017, the population age 16 to 24 is expected to decline by nearly 18,000, and the population age 35 to 54 is expected to decline by nearly 21,000, while the number age 55 and over is expected to rise by nearly 55,000. Without a strong net in-migration of people in their prime working years, labor force growth after 2012 will be slight. If there is no change in labor force participation rates among age groups between 2012 (forecast) and 2017, the labor force would rise by only 9,000 or 1.2 percent. Given the age profile of the population, in years following 2017 it seems likely the size of the labor force will decline.

*Tables referred to throughout this report are found in the appendix.



Given the age profile of the population in years following 2017, it seems likely the size of the labor force will decline.



Labor Force Participation and Special Populations

With an aging population and labor force, Maine faces formidable challenges to ensure that a qualified workforce is available to support a growing economy. There are a number of groups who have not enjoyed full participation in the labor market. For example, of all the persons between the ages of 21 and 64 with a disability, only 42 percent were employed in 2002. Significant numbers of individuals with disabilities are enrolled in job training and are looking to enter the labor force. Furthermore, findings reported in the *2004 Kids Count* indicate that 18 percent of young adults between the ages of 18 and 24 were not in school, were not working, and had no degree beyond a high school diploma in 2002. Eight percent of teens between the ages of 16 and 19 reported that they were not in school and not working and 12 percent in this age group indicate they were high school dropouts. Lack of education and employment experience will limit the future prospects of these young people and deny Maine employers access to a needed labor pool.

There is also some speculation about how baby boomers will approach retirement. Surveys conducted by AARP indicate that boomers plan to make work part of their retirement. For some, retirement will present an opportunity to explore new careers while others foresee a necessity for part-time work to ensure adequate income. Forecasts indicate Maine's senior labor force age 55+ will grow from 103,000 in 2002 to 165,000 by 2012. There is also some indication that senior workers may alter their pattern of labor force participation (Tables 1 and 2). The growth of Maine's senior workforce presents employers with an expanding pool of experienced workers. This segment of the workforce will likely seek alternative work arrangements and flexibility requiring employers to adjust their policies and practices accordingly.

Growth of Maine's senior workforce presents employers with an expanding pool of experienced workers. This segment of the workforce will likely seek alternative work arrangements and flexibility requiring employers to adjust their policies and practices accordingly.

The Changing Profile of Employment and the Outlook to 2012

There has been profound change in the mix of jobs by industry and occupation over the last 50 years. In 1950, businesses in goods-producing industries (manufacturing; construction; and natural resources and mining) accounted for nearly half of wage and salary jobs in Maine. In 2002, goods-producing industries employed fewer workers and accounted for less than one-fifth of wage and salary jobs. During the same period the number of jobs in service-providing industries increased nearly 200 percent. Among occupations, the trend was similar as managerial, professional, and technical jobs increased rapidly and the number of blue-collar jobs stagnated. In 1950, blue-collar employment accounted for about 60 percent of all jobs; in 2002, they accounted for about one-quarter of jobs. The trend was similar throughout the nation. Change has been a constant in the labor market. Distinctions between industries and occupations, once clear, are becoming more ambiguous.

A wide range of factors contributed to the massive changes in the profile of employment. In some cases, the factors causing growth or decline were unique to individual industries and occupations; in other cases, broader trends were at work. Three of the primary factors contributing to the shifting the mix of jobs are demographic trends in the population, technological innovation, and rising international trade.

Demographic Trends

The demographic trends that have been reshaping the composition of the labor force and causing large fluctuations in its rate of growth are also impacting the type of jobs available. The rise of women in the labor force and the number of households with two-wage earners contributed to increases in the total output of the economy, but also caused a shift in demand for certain products and services. As households substituted wage and salary work away from domestic responsibilities including cooking and maintenance, entire new industries have been created generating significant economic growth. The two-car family is the norm today, compared to one car 40 years ago. The day care industry, which was virtually non-existent 30 years ago, is vitally important today. Women's specialty clothing and accessory stores sprang up as demand for professional and work-related clothing increased, as did pre-packaged and prepared foods, and many other items.

The aging of the population is having a similar impact on the mix of jobs. As people move through the life cycle, their spending priorities shift. Younger adults typically put a large share of their resources into buying and furnishing a home and providing for children. Middle-aged adults typically transition their resources

The share of jobs in goods-producing industries has steadily declined in the last five decades



The aging of the population is impacting the mix of jobs because as people move through the life cycle, their spending priorities shift.

The share of jobs in blue-collar occupations has steadily declined in the last five decades



toward things like putting kids through college, saving for retirement, and caring for their own rising health care needs. Seniors typically put an even larger share of their resources toward health care needs, and into leisure activities such as travel. The rapidly rising middle-aged and senior population has been a primary factor driving job growth in health care, which created more jobs than any other industry over the last decade. That trend is expected to continue as the median age of Maine's population rises from 40 to 43 between 2002 and 2012.

Technology

Technology has had many impacts on the way in which products and services are produced and delivered, making many existing processes more efficient, sometimes completely altering the functions of a job. Computers, automation, and other technologies are pervading all aspects of our lives, making office work and manufacturing processes more productive, allowing us to pay bills and transfer funds electronically from home, to find information on nearly any subject online, and giving health professionals new tools to diagnose and treat patients. Technology has allowed some industries to increase output without increasing the number of jobs, and spawned entirely new industries and fields of work.

International Trade

Freer trade among nations has given consumers more product choices, often at lower expense, but it has also had an adverse impact on some of Maine's traditional industries, especially those that involve labor intensive functions with relatively low skill or knowledge requirements. The shoe industry has been more adversely impacted than any other industry in Maine, dropping from 26,000 jobs in the late 1960s to fewer than 2,000 today as production has moved to low-wage nations including China.

Industry Employment Outlook to 2012

The Shifting Composition of Employment and Maine Industries

The Maine economy has undergone significant shifts in the composition of employment and industries over the last 50 years. An examination of recent trends along with forecasts of what is to come suggests that change will continue to transform the Maine economic landscape. The intensification of global competition and technology innovation will assure swift and certain change in employment and industry composition. To some degree, these changes can be anticipated by examining the locus of competition including comparative labor and capital costs, and productivity gains. Along with risks, there are also extraordinary opportunities for developing Maine's economy of the future. In the digital economy where telecommunications capability is often the basis for moving products and services, producer locations are much more flexible. Factors such as workforce availability, affordable housing, low crime rates, and high quality life become import ingredients for economic development and job creation.

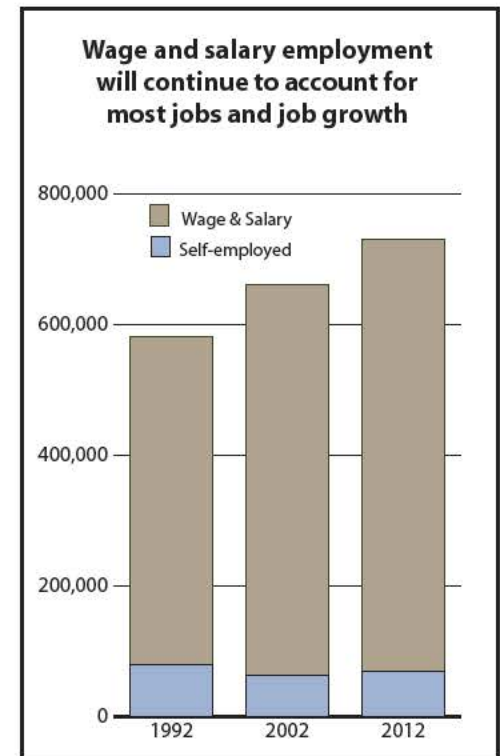
The outlook for the 2002 to 2012 period is largely for a continuation of trends that have been on-going for some time. Employment is expected to increase by about 68,100 or 10 percent, down from growth of 74,700 between 1992 and 2002. Wage and salary employment is expected to increase 10 percent, while self-employment is forecast to increase nine percent (Table 3).

Among wage and salary jobs, net growth is expected to continue to be almost exclusively among service-providing industries, with goods-producing employment continuing to decline.

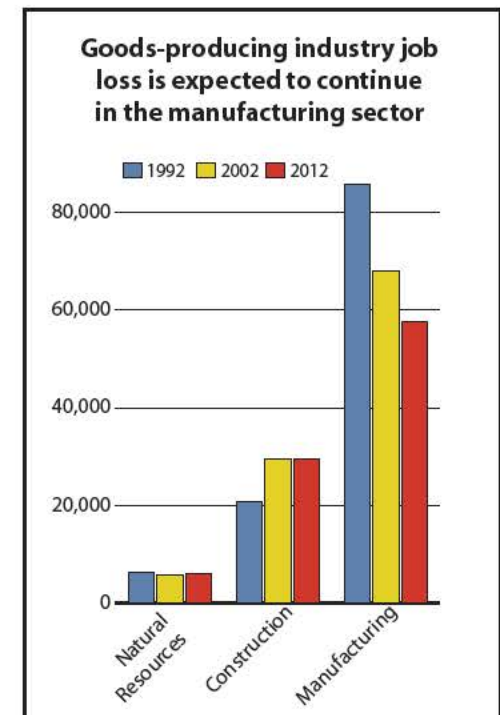
Goods-Producing Industries

The number of goods-producing jobs is expected to decline by about 8,700, or eight percent between 2002 and 2012, a slower rate of decline than in the prior ten years. Most of the job loss is expected in the manufacturing sector.

For the last two decades the *manufacturing* sector has been under assault from a range of challenges. Leather products and textile mills, both relatively low-wage, low-skill industries, have been hard hit by rising competition from lower wage nations; modern mills built in countries with less stringent environmental regulations and lower labor costs forced some Maine paper mills to close and others to scale back production; and declining demand for destroyers by the U.S. Navy hit the transportation equipment industry hard. Those four industries accounted for close to 95 percent of the manufacturing job losses in Maine between 1992 and 2002. Looking out to 2012, those same four industries are expected to continue to shed jobs, and, along with wood products, account for 79 percent of the expected loss of nearly 9,200 manufacturing jobs.



For the last two decades the manufacturing sector has been under assault from a range of challenges.

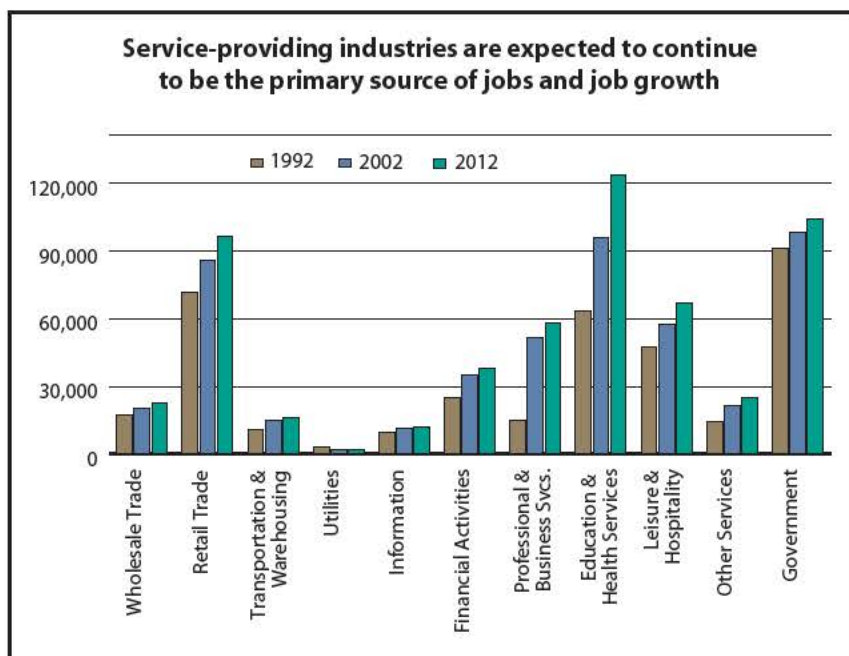


Construction employment, which tends to move up and down along with the business cycle, interest rate trends, and population growth, was at a relatively high point in 2002 and will likely continue to fluctuate through 2012. Employment in the small *natural resources and mining* sector is expected to rise slightly.

Service-Providing Industries

The number of jobs in service-providing industries is expected to increase by nearly 71,000 or 14 percent between 2002 and 2012, down from the 91,200 net job growth of the prior ten years. Health care and social assistance; retail trade; leisure and hospitality; professional and business services; and government account for 82 percent of the expected job growth.

The *health care and social assistance* sector is expected to add about 25,700 jobs, accounting for 41 percent of wage and salary job growth. An aging population, a proliferation of new diagnostic and treatment methods, rising demand for preventive medical services, and public policy initiatives are among the factors driving health care job growth. Rising demand for individual and family social services, vocational training and rehabilitation services, and child day care are driving rapid social assistance job growth. Medicare and Medicaid continue to provide a significant share of revenues for health care and social assistance programs. Strained state budgets and current efforts in the Congress to contain costs and cap reimbursements made by these programs could have an impact on job creation.



Retail trade is expected to add about 10,200 jobs. Projected growth is down from the prior ten years as the shakeout following the arrival of many of the national “big box” chains continues. Much of the retail job growth is expected in food and beverage stores, motor vehicle and parts dealers, and nonstore retailers, which include online and catalog merchants.

The *leisure and hospitality* sector is expected to be the third largest creator of jobs, adding about 9,700 jobs. Rising tourism and a rising share of “empty nest” families in their peak years of earnings are expected to continue to propel strong growth in accommodation and food services and drinking places.

Professional and business services firms are expected to create about 6,700 jobs between 2002 and 2012. Most of the growth is expected in the administrative and support services and professional, scientific, and technical services industries.

The *financial activities* sector is expected to add about 2,800 jobs, a significant drop from the 9,500 net new jobs created between 1992 and 2002. The primary reason

The health care and social assistance sector is expected to add about 25,700 jobs, accounting for 41 percent of wage and salary job growth.

for the decline in growth is that credit card-related call centers, which grew rapidly in the 1990s, are not expected to continue to create jobs at such a rapid rate.

The number of jobs in *government* is expected to rise by about 6,100. Local government is expected to continue to be the primary source of government job growth adding about 5,000 jobs. That's about half the number local governments added in the prior ten years. The expected slowing is related to the declining population of children public schools will serve. State government employment is expected to continue to rise at a slow rate, adding about 600 jobs. The expected addition of 500 federal government jobs reverses the trend of the prior decade when federal employment plunged by 3,400, mainly due to downsizing at the Portsmouth Naval Shipyard in Kittery. Rising federal budget deficits and fiscal challenges faced by state and local governments will seriously challenge prospects for employment growth across levels of government.

More detailed tables highlighting industry employment projections are available in *Maine Employment Outlook 2012*, which can be downloaded at www.maine.gov/labor/lmis/pubs.html.

Assessment of Governor's Economic Development Strategy/Sectors

The Governor's top priority is increasing economic opportunity for the people of Maine. One of the fundamental drivers of his economic strategy is a clear focus on key sectors of the state's economy. These sectors were defined as those where the state has a competitive advantage and are broken into two groups: emerging industry clusters and mature industry clusters. In addition, a significant effort is underway to nurture the cluster of industries in the creative economy. The lists of industries included in these clusters are not necessarily inclusive, but do provide a basis for measurement.

An on-going assessment of the status of these industry clusters is possible using employment and wage data collected by the Maine Department of Labor. This assessment provides a report card of sorts for the current status of these clusters and will help focus future priorities.

The mature industry clusters include forest products, marine-related activities, precision and niche manufacturing, and tourism. The emerging industry clusters include: biotech and biomedical research, financial services, and radio frequency identification. Following is a summary of data for each cluster.

Within the forest products cluster are the following industries: forestry and logging; wood product manufacturing; paper manufacturing; upholstered household furniture manufacturing; nonupholstered wood household furniture manufacturing; and showcases, partitions, shelving, and lockers. Total employment in this cluster was 20,354 in 2003, a decline of 4,498 from 2000. The national economic slowdown and foreign competition have adversely affected industries in this cluster. Wages paid in this cluster averaged \$43,739, well above the statewide all-industry average of \$30,750.

Industries in the marine-related cluster include fishing, hunting, and trapping; ship building and repairing; boat building; and boat dealers. Total employment in this cluster was 8,650 in 2003, up by 295 from 2000. Wages paid in this cluster averaged \$43,083 in 2003, also well above the statewide average for all industries.

The precision and niche manufacturing cluster includes commercial lithograph printing; commercial screen printing; glass product manufacturing made of purchased glass; mineral wool manufacturing; hand and edge tool manufacturing; fabricated structural metal manufacturing; sheetmetal work manufacturing; other fabricated wire product manufacturing; precision turned product manufacturing; industrial pattern manufacturing; turbine and turbine generator set units manufacturing; and jewelry, except costume, manufacturing. Total employment in this cluster was 4,108 in 2003, a decline of 464 from 2000. Average wages paid in this cluster for 2003 were \$34,835, above the all-industry average.

Industries in the tourism cluster include boat dealers; scheduled passenger air transportation; nonscheduled air passenger chartering; deep sea passenger transportation; coastal and great lakes passenger transportation; inland water passenger

An on-going assessment of the status of these industry clusters is possible using employment and wage data collected by the Maine Department of Labor. This assessment provides a report card of sorts for the current status of these clusters and will help focus future priorities.

transportation; bus and other motor vehicle transit systems; other airport operations; recreational goods rental; convention and visitors bureaus; all other travel arrangements services; sports teams and clubs; racetracks; other spectator sports; bed-and-breakfast inns; all other traveler accommodation; RV parks and campgrounds; recreational and vacation camps; and snack and nonalcoholic beverage bars. Employment in this cluster rose from 6,696 in 2000 to 7,146 in 2003. Wages paid for 2003 averaged \$16,527. The high share of seasonal and part-time jobs, as well as occupations which rely on tips and gratuities contribute to the low average earnings.

The biotech and biomedical research cluster includes pharmaceutical preparation manufacturing; in-vitro diagnostic substance manufacturing; other biological product manufacturing; medical laboratories; and diagnostic imaging centers. Cluster employment in 2003 was 1,748, largely unchanged from 2000. Annual average wages paid in 2003 were \$57,925, well above the all-industry average.

Industries in the financial services cluster include credit intermediation and related activities; securities, commodity contracts, investments; insurance carriers and related activities; and funds, trusts, and other financial vehicles. Employment in 2003 averaged 26,898, up 945 from 2000. In 2003, industries in this cluster paid an average of \$45,423, well above the all-industry average wage.

Radio frequency identification, or RFID, is a generic term for technologies that use radio waves to automatically identify objects to, for example, track goods within a supply chain. While thousands of companies around the world use RFID today to improve internal efficiencies, the technology is relatively small in Maine, but has enormous potential. The primary industries of Maine employers engaged in RFID activities are miscellaneous electrical equipment, miscellaneous manufacturing, and electronic parts wholesalers. These industries employed 870 in 2003 with annual wages of \$35,150, above the all-industry wage. However, the opportunity for growth is great, given the 40,000+ employment base Maine has in industries that have RFID potential such as, computer and electronic manufacturing, machinery manufacturing, fabricated metal product manufacturing, paper manufacturing, printing, and chemical manufacturing. A number of initiatives are underway to grow from startups and business expansion.

The creative economy cluster includes commercial screen printing; jewelry, except costume, manufacturing; gift novelty, and souvenir stores; book publishers; all other publishers; motion picture and video production; photography studios, portrait; and independent artists, writers, and performers. Employment in 2003 averaged 2,774, down slightly from 2,880 in 2000. In 2003, industries in this cluster paid an average of \$19,906. A recent report commissioned by the New England Foundation for the Arts and the Maine Arts Commission titled *The Creative Economy in Maine* concluded that the economic role of arts and culture industries extend beyond the direct and indirect employment and wages those activities create. The report recommended that Maine enhance the role of the arts and culture in tourism, strengthen the creative cluster, and improve and expand educational programs in areas such as industrial design and the arts. The report found that Maine's creative workforce was better educated, less likely to be unemployed, and more likely to be self-employed.

While some of these industry clusters have felt the effects of the national economic slowdown and foreign competition, many of them have recently experienced growth as the economy improves and various efforts, such as the Pine Tree Zone initiative to provide tax advantages to eligible companies, enhance economic development efforts.

Business Startups

Entrepreneurship, or the creation of a new business or enterprise, is an integral and significant activity in the job market. Maine's job market is growing and changing, with world-wide competition and new technologies resulting in the birth of new and innovative employers.

Employment and wage data reported by employers to the Maine Department of Labor provides a means of identifying new firms in emerging and traditional industries, and measuring their success in growing and developing. This data will be utilized on an ongoing basis to develop a database which will provide important information to economic development and employment and training interests.

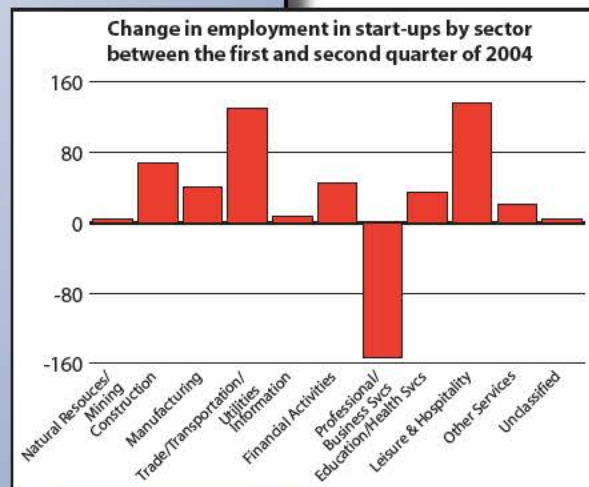
An initial effort looked at the 723 new business startups in Maine for the first quarter of 2004. These establishments provided 1,568 new jobs with an average weekly wage of \$460 and a total payroll of \$9.4 million.

Of the 723 new firms in the first quarter of 2004, 146 were in the industry clusters identified as either those where Maine has a competitive advantage or the creative economy cluster, and on which economic development efforts should be focused. These establishments provided 371 new jobs with an average weekly wage of \$926 and a total payroll of \$2.9 million.

Between the first and second quarters of 2004, jobs in all the first quarter 2004 new startups increased by 334. Of that job gain, nearly half (165) were accounted for by startups in the industry clusters identified in the Governor's Economic Development strategy. Startups in the following clusters all recorded job gains between the first and second quarters: financial services, forest products, marine-related activities, precision and niche manufacturing, tourism, and the creative economy.

The identification of business startups, the industries within which they occur, and change in jobs and wages are all measures that will be tracked. This information provides a measurement of new industry developments and how efforts are paying off for the State's economic development strategy. Valuable information is also provided to the education and employment and training communities concerning the emerging needs of Maine employers.

Of the 723 new firms in the first quarter of 2004, 146 were in the industry clusters identified as either those where Maine has a competitive advantage or the creative economy cluster.



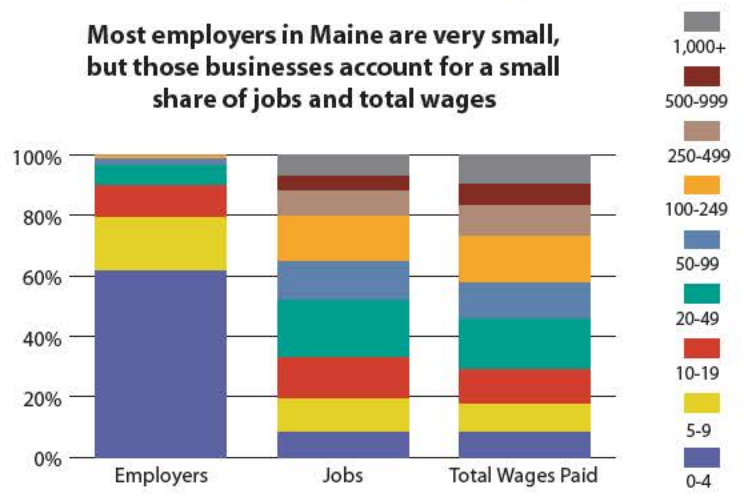
Small Businesses in Maine

It is often said the small employers are the backbone of the economy. In some ways that is true. About 79 percent of the 44,700 private business establishments in Maine employed fewer than ten workers, and 99 percent employed fewer than 50 in March 2004. But those small employers accounted for a relatively small share of jobs and total wages paid. Business establishments employing fewer than ten workers accounted for just 19 percent of jobs and 17 percent of total wages paid, while those employing fewer than 50 accounted for 52 percent of jobs and 46 percent of total wages paid.

Average wages fell within a small range for each of the size classes below 250 workers, but increased appreciably in each range above 250. The primary reason for the wage differential is that large employers tend to be in relatively high paying industries, including paper mills, hospitals, financial institutions, insurance carriers, and semiconductor and transportation equipment manufacturing.

Over the last ten years, the number of employers with 500 or more workers declined by 6 to 50, and the number of jobs declined by 3,400 to 56,400, partly due to some paper mill closures and staff cuts. Going forward, it is likely that employer growth will continue to be mainly among small businesses. There are not likely to be any new large paper mills or large hospitals established, and banking in Maine is increasingly being reduced to branch operations with central operations located out of state.

Most employers in Maine are very small, but those businesses account for a small share of jobs and total wages

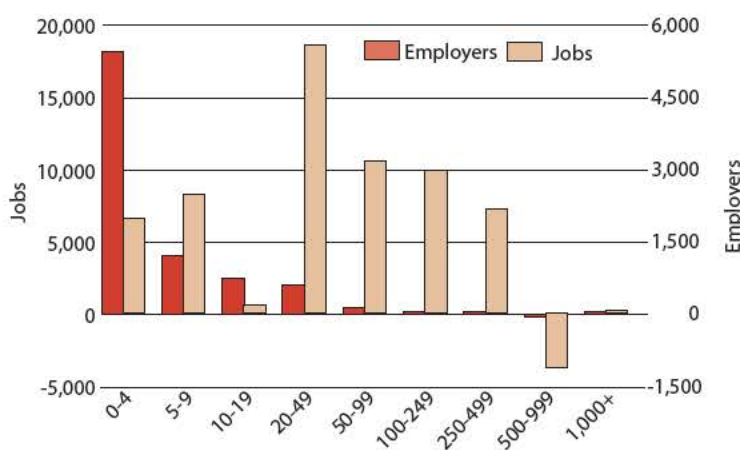


About 79 percent of private business establishments employed fewer than 10, but those businesses accounted for only 19 percent of jobs and 17 percent of total wages paid.

Federal and state resources are available to assist small businesses. The U.S. Small Business Administration (SBA) and the state Finance Administration of Maine (FAME) have a number of capital funding programs designed to assist small businesses. The SBA's criteria for what is a small business varies by industry. For most industries it is based on revenue, from as low as \$0.75 million in agriculture to as high as \$28.5 million in construction. For companies in manufacturing (up to 500) and wholesale trade (up to 100) the criteria is based on employment. FAME assists businesses with up to 50 employees or \$5 million in revenue. Information related to their programs can be found at www.sba.gov and www.famemaine.com

In the last ten years, the number of very small businesses has increased rapidly; most job growth has been in mid-size businesses

(change in jobs and employers between March 1994 and 2004)



Occupational Employment Outlook to 2012

Maine workplaces and the job performance requirements for Maine workers are changing. The rapid proliferation of computers and telecommunications technologies demands that all workers have the requisite knowledge and skills to use them on the job, as consumers, and citizens. Maine has experienced a decline of large workplaces with vertically integrated production methods requiring high degrees of specialization. This trend means that more Maine workers find themselves working in smaller establishments demanding a range of skill sets, including more self-management. The changing nature of work requires deeper knowledge and more advanced skills even for workers employed in lower wage jobs.

The shifting mix of jobs by occupation is largely due to two factors: differing rates of growth and decline among industries and shifting occupational staffing patterns within each industry. Occupational staffing varies greatly from industry to industry. Loan officers and tellers are mostly found in banks, nurses and CNAs mostly in hospitals and other types of health care providers, and carpenters and plumbers mostly in construction. So jobs in occupations common to growing industries generally are growing and jobs in occupations common to declining industries generally are declining. The relationship is not one for one, though, because occupational staffing within each industry also shifts over time. Rising use of ATM machines and online banking to process transactions, for example, has caused the share of jobs in computer-related occupations in banks to rise and the share of teller jobs to fall in the last two decades.

Not only is the mix of jobs by occupation constantly shifting, the knowledge and skill requirements of individual occupations also are gradually shifting. New technologies, changing work practices, and other factors impact how functions are performed. The functions of some occupations have changed significantly over the years. Typesetters commonly do their work on computers today, rather than with the formed steel plates of years past, and bookkeepers record and store transactions on computers rather than filling filing cabinets with ledger sheets as they once did.

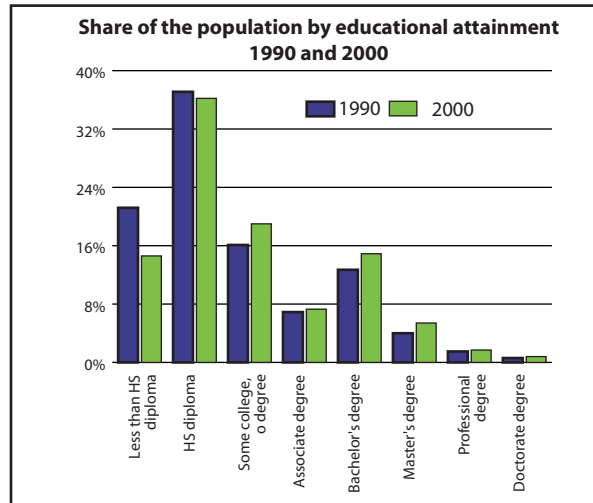
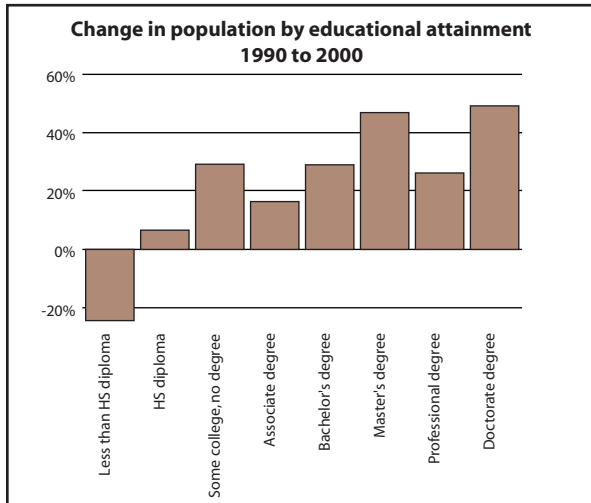
The ongoing shifts in the knowledge and skill requirements of most occupations, along with faster-than-average growth in jobs requiring post-secondary education has prompted thousands of Maine citizens to complete high school and pursue some form of post-secondary education. Between 1950 and 2000, the share of the population age 25 and over with at least a high school diploma more than doubled from 38 to 85 percent, while the share with a bachelor's degree or higher increased nearly fivefold from 5 to 23 percent.

The more recent quickening in the pace of labor market change prompted an acceleration in the rise in attainment. As the nearby graphs indicate, the number

The knowledge and skill requirements of individual occupations also are gradually shifting as new technologies, changing work practices, and other factors impact how functions are performed.

Educational attainment has been rising rapidly in Maine, but the majority of the population has less than a Bachelor's degree

(Population age 25 and over)



of people with some form of post-secondary education increased rapidly between 1990 and 2000, though only 49 percent have some college background and only 30 percent have achieved an associate degree or higher. Compared to the nation, Maine had a higher share of high school graduates (85.4 vs. 80.4 percent) in 2000, but a lower share with a bachelor's degree or higher (22.9 vs. 24.4 percent).

Change in Jobs by Occupational Group

Managerial, Professional, and Technical Occupations: Faster-than-average job growth is expected in *professional and related occupations*, which are expected to rise by about 18 percent or 22,900 net new jobs. About 39 percent of the growth is expected in healthcare practitioner and technical occupations, 22 percent in community and social service occupations, and 21 percent in education, training, and library occupations (Table 4).

The number of jobs in *management, business, and financial occupations* are also expected to increase faster than average, rising by 14 percent or 8,400 jobs. About 63 percent of that growth is expected in management occupations and 37 percent in business and financial operations occupations.

Office, Sales and Service Occupations: The fastest rate of job growth among the occupational groups is expected among *service occupations*, up 19 percent, adding about 25,400 net new jobs between 2002 and 2012. About 29 percent of that growth is expected in food preparation and serving-related occupations, 24 percent in personal care and service occupations, and 22 percent in healthcare support occupations.

Growth in the number of jobs in *sales and related occupations* is expected to be close to the average among all occupations. About 8,200 net new jobs are expected, 29 percent of which are expected among cashiers, 17 percent among retail salespersons, and 17 percent among retail first-line supervisors.

Employment in *office and administrative support occupations* is not expected to change significantly, rising by one percent or 1,200 net new jobs. Customer service representatives and reception and information clerks account for most of the expected growth.

Blue-Collar Occupations: The fastest job growth among blue-collar occupations is expected among *installation, maintenance, and repair occupations*, projected to rise by 11 percent, or 3,200 net new jobs. Much of the growth is expected among various types of mechanics and technicians, including automotive, bus, truck, and boat mechanics; heating and refrigeration mechanics and installers; and auto body repairers.

Expected slow growth in construction activity is expected to limit growth in *construction and extraction occupations* to about three percent or 1,000 net new jobs.

The number of jobs in *transportation and material moving occupations* is expected to rise by about five percent or 2,300 net new jobs. About three-quarters of that growth is expected among truck drivers.

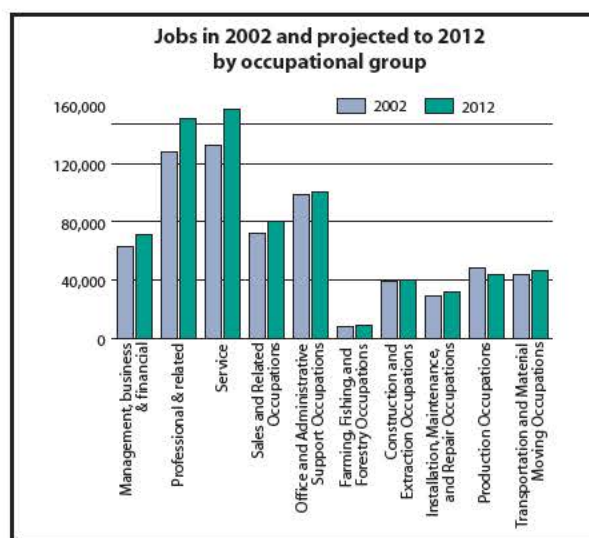
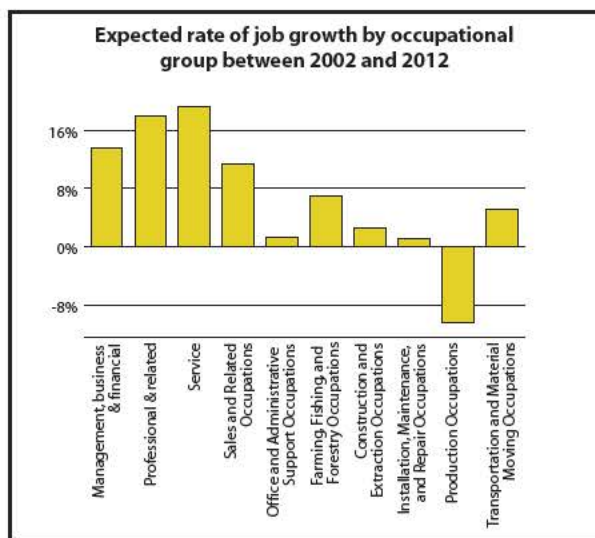
Employment in *farming, fishing, and forestry occupations* is expected to remain relatively low and rise more slowly than the average (seven percent), adding nearly 600 jobs.

Expected job losses in most manufacturing industries will cause about 5,000 workers to be displaced from *production occupations*. The largest losses are expected in wood, shoe, and textile-related production occupations.

Focusing on occupational job growth or decline is important because it reveals the broader trend of how the mix of jobs is gradually shifting away from blue-collar toward managerial, professional, and technical occupations. But about two-thirds of job openings arise due to the need to replace those who retire or otherwise leave the labor force, or who change jobs to a different occupation. Replacement job

Two-thirds of job openings arise due to the need to replace those who retire or otherwise leave the labor force, or who change jobs to a different occupation.

The fastest job growth is expected to continue to be in managerial, professional, and technical; and service occupations



openings even occur among many occupations expected to post job losses. As the baby boomers begin to retire, the need to replace experienced workers will become an even more important aspect of staffing operations for many businesses.

Furthermore, it is important to note that in very small businesses—90 percent of businesses in Maine employed fewer than 20 workers in 2004—it is common for people to perform a wide range of tasks that do not neatly fall into a single occupational title. The same individual may perform accounting, human resources, customer service, and marketing functions, while another performs secretarial, bookkeeping, reception, packing, and other tasks.

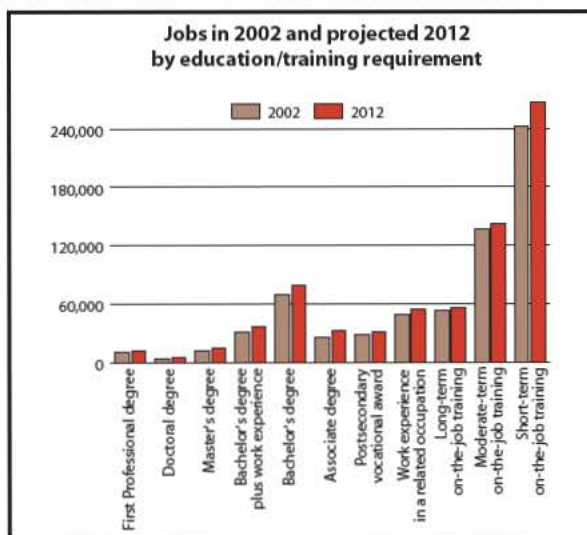
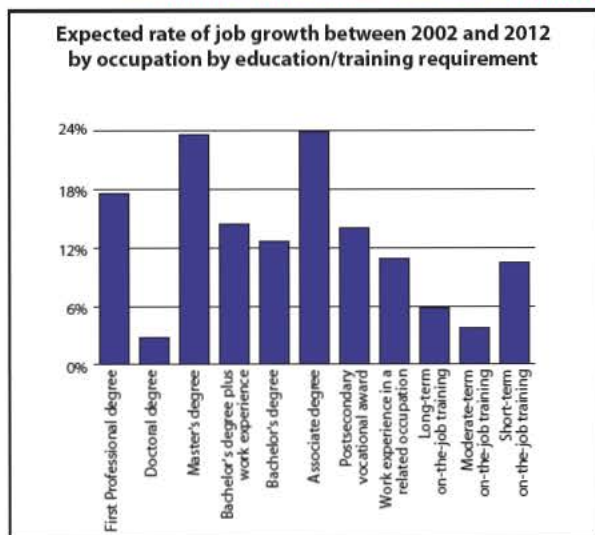
Tables 5 through 9 highlight the “top 40” occupations by annual openings, net job growth and decline, and rate of growth and decline.

Change in Jobs by Education/Training Requirement

As the mix of jobs increasingly shifts toward managerial, professional, and technical work, the education and training requirements of the labor force are rising, because those occupations generally require some form of post-secondary education or training. The number of jobs in occupations requiring post-secondary education or training is expected to rise by 16 percent, while the number not requiring education beyond high school is expected to rise by eight percent. Despite the slower-than-average growth in occupations at the lower end of the education/training spectrum, there will still be many more jobs that do not require post-secondary education than those that do. In 2002, 73 percent of jobs were in occupations that generally do not require post-secondary education. In 2012, jobs in those occupations are expected to make up 71 percent of the total (Table 10).

The number of jobs in occupations requiring post-secondary education or training is expected to rise by 16 percent, while the number not requiring education beyond high school is expected to rise by eight percent.

The fastest job growth is expected in occupations at the upper end of the education/training spectrum, but there will continue to be many more jobs in occupations at the lower end of the spectrum



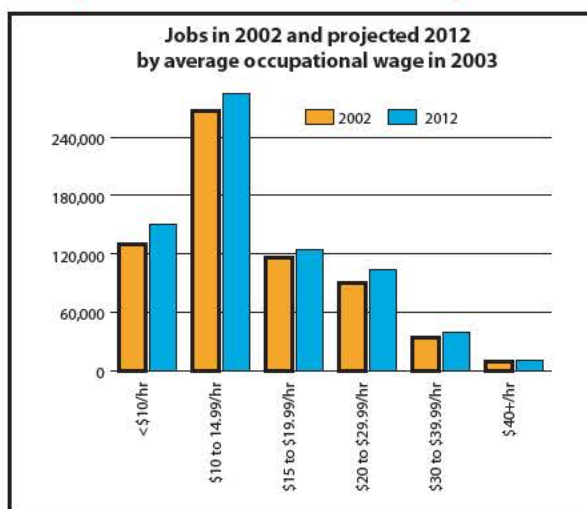
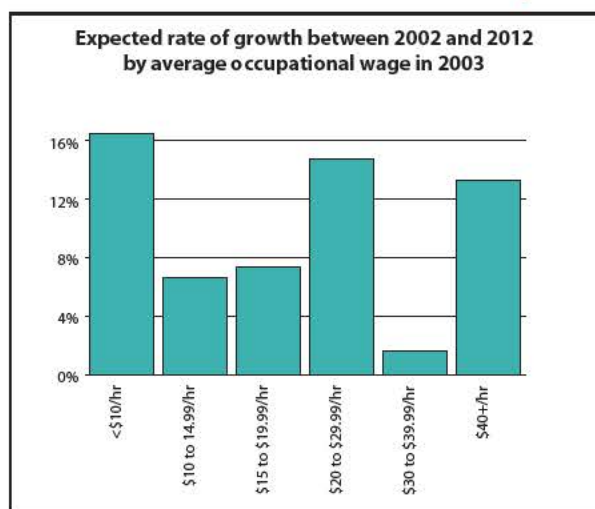
Change in Jobs by Average Earnings

Jobs in managerial, professional, and technical occupations at the upper end of the education/training spectrum generally offer higher-than-average wages. With those jobs expected to continue to grow more rapidly than the average, faster-than-average job growth is expected in occupations at the upper end of the education/training spectrum. Jobs in occupations paying an average of \$20 per hour or more in 2003 are expected to rise by 15 percent between 2002 and 2012, compared to nine percent job growth in occupations that paid less.

Faster-than-average job growth is expected in occupations at the upper end of the earnings spectrum.

More detailed tables highlighting occupational employment projections are available in *Maine Employment Outlook 2012*, which can be downloaded at www.maine.gov/labor/lmis/pubs.html.

The fastest growth is expected in occupations at the upper and lower ends of the earnings spectrum, but there will continue to be many more jobs in occupations at the lower end of the spectrum



Regional Economies and Workforce Change

Growth in Maine has been uneven across the various regions for many years. Population and job growth has generally been fastest in the southern and coastal regions, moderate in the western, central, and northeastern regions, and slow or declining in the northern region.* A range of factors contributed to the unevenness of growth, but the primary factor has been the differing structure of employment among the regions (Table 11).

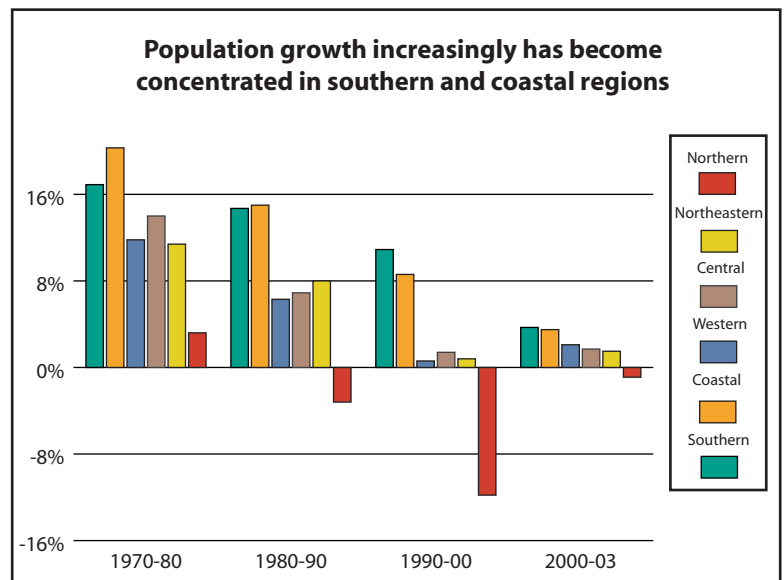
The northern region, which has experienced declining population and employment for two decades, has long been heavily dependent on declining natural resource - based industries, particularly fishing, farming, and forest products. Employment in those industries was relatively stable prior to the 1980s, but the rise of labor-saving mechanized potato and timber harvesting, increased competition from subsidized Canadian wood products mills, declining fish stocks, the closure of Loring Air Force Base in Limestone, and other factors sent the region into a downward spiral.

The middle part of the state (the western, central, and northeastern regions) has long been the manufacturing hub of the state, with particularly high concentrations of jobs in some of the fastest declining industries, including shoe shops, textile mills, and more recently, paper mills. Communities such as Millinocket, Skowhegan, Waterville, and Dexter, among others, have been hard hit by the impact of plant closures and downsizing. Many of those communities are in the midst of a prolonged process of diversifying their economic base.

The economy of the coastal region has benefited from strong tourism growth, the desirability of the area to affluent retirees, and the rise of call centers in the region.

The southern region, anchored by the vibrancy and diversity of Portland, has long been the hub of high-paying and growing industries such as financial services, insurance, construction, and semi-conductor manufacturing. The region, especially southern York County, has increasingly become tied to the economic backbone of the greater Boston area.

A range of factors contributed to the unevenness of growth, but the primary factor has been the differing structure of employment among the regions.



* Southern region: York and Cumberland counties; Coastal region: Sagadahoc, Lincoln, Knox, and Waldo counties; Western region: Androscoggin, Oxford, and Franklin counties; Central region: Kennebec and Somerset counties; Northeastern region: Hancock, Penobscot, and Piscataquis counties; Northern region: Washington and Aroostook counties.

An assessment of labor market areas in the state has been developed based on the following criteria: unemployment rate, poverty rate, average wage, and change in employment; which are grouped into a composite index (Table 12). This index generally reflects the changes cited above. The areas that rise to the top of the index (indicating relatively healthy labor markets) are the larger urban centers where there is more access to opportunities in growing service-providing industries and less reliance on traditional manufacturing industries. The areas that fall to the bottom of the index (indicating a level of economic distress) tend to be from the more rural areas of the state and, in many cases, are/were reliant on a traditional manufacturing firm.

The outlook for growth among the regions is generally for more of the same. Recently developed employment projections to 2012 call for faster-than-average growth in the southern and coastal regions, slightly slower-than-average growth in the western, central, and northeastern regions, and slow growth in the northern region.

Initiatives to Promote Growth in Economically Distressed Areas

State government has several initiatives designed to promote job growth in economically distressed areas. Prominent among those are the Pine Tree Development Zones and Governor's Training Initiative (GTI).

The Pine Tree Zones, which began in 2004, use a combination of tax incentives to spur economic development in targeted areas of the state where unemployment is relatively high, and wages relatively low. Eligible businesses include firms engaged in manufacturing, financial services, and Maine's seven targeted technology sectors: biotechnology, aquaculture and marine technology, composite materials technology, environmental technology, advanced technologies for forestry and agriculture, information technology, and precision manufacturing technology. Eight zones have been designated.

The GTI program offers partial reimbursement of training costs to employers who are hiring new employees, and/or retraining or upgrading their existing work force. Training services eligible for reimbursement include: recruitment, assessment, job task analysis, workplace literacy, high performance skills, technical training, on-the-job training, workplace safety, and competitive retooling.

Under GTI, labor market areas (LMAs) are ranked highest to lowest by unemployment rate, poverty rate, average wages, and job growth/decline. Employers located in the LMAs with the highest composite score are given a preference in funding. The Assessment of Economically Distressed Labor Market Areas (Table 12) includes the rankings effective for the period from January through March 2005.

Projections to 2012 call for faster-than-average growth in the southern and coastal regions, slightly slower-than-average growth in the western, central, and northeastern regions, and slow growth in the northern region.

What Happens to the Workers When the Factory Closes its Doors: The Case of a Mid-Maine Shoe Company

The announcements of plant closings and workforce reductions seem to be a constant as the economy continues to transform. Thousands of workers throughout the state have lost their jobs and entire communities have been challenged to reinvent themselves as long standing industries have disappeared or left the state. The steady march of technology innovation, globalization, and management restructuring has altered Maine's employment landscape dramatically. What happens to the workers impacted by plant closings and workforce reductions? Where do they find the next job? What is the impact on their earnings? For workforce planners charged with assisting dislocated workers, there are information gaps. How long did it take most of the workers to find a new job? For re-employed workers, what was the differential in earnings from their prior job? How did older workers fare compared to younger workers? Did those with higher levels of educational attainment find jobs more quickly than those with less education? Was there a difference in re-employment between men and women? Did those who participated in training programs find better jobs than those that did not?

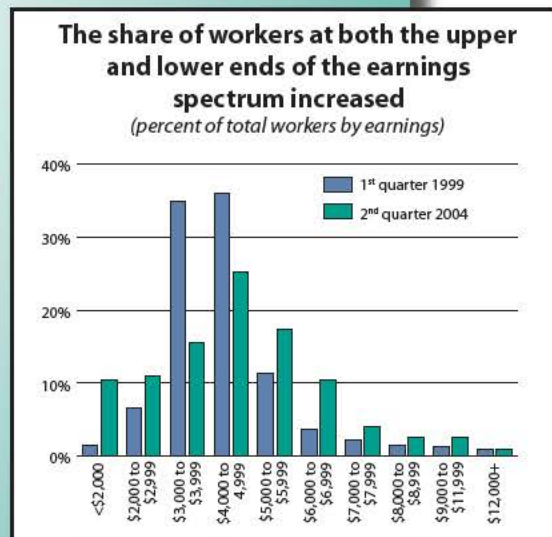
These are just some of the questions for which policymakers, workforce planners, education training experts, employers, and Maine workers themselves need better answers.

The Maine Department of Labor has launched a new research program to study workers and firms in transition. Using wage records of individual workers submitted by employers to the Department of Labor under Maine's Employment Security Law, we are able to track individuals' employment and earnings subsequent to layoff. An initial pilot project tracking laid-off workers from a shoe manufacturing company in central Maine is under way. Like many other traditional industries, the employment decline at the company occurred over an extended period of time. The analysis tracks the workers displaced through layoffs and the eventual closure of four of the company's plants between April 1999 and December 2002. The layoffs and closures took place in stages, and some workers were laid off, recalled, and laid off again.

During the nearly four-year period there were 1,137 job separations impacting 823 workers. About 95 percent of those separations resulted in a claim for unemployment compensation benefits. Those filings provide key demographic information, including the gender, age, and educational attainment of the individuals, as well as the occupation from which they were displaced and their social security number.

Wage record data, which covers only those employed in Maine, indicates that by the second quarter of 2004, a year and a half after the final layoff event, 74 percent of the former shoe workers were re-employed in Maine. It is not clear how many of those who were not re-employed chose to retire or otherwise leave the labor force, were working in another state, were self-employed, or were continuing to search for a suitable job locally.

The steady march of technology innovation, globalization, and management restructuring has altered Maine's employment landscape dramatically.



Of the 823 displaced workers, 786 were employed in Maine in the first quarter of 1999 — prior to the first layoff event. Two-thirds of those workers earned between \$3,000 and \$4,999 that quarter, and 89 percent earned between \$2,000 and \$5,999. The average wage was \$4,483. In the second quarter of 2004, the most recent available figures, 608 of the former shoe workers were re-employed. Nearly 41 percent earned between \$3,000 and \$4,999 that quarter and 69 percent earned between \$2,000 and \$5,999. The average wage was up five percent to \$4,705. The share of the workers who earned less than \$2,000 increased from two to ten percent, and the share earning more than \$6,000 increased from six to ten percent. It is not clear if the increase in the number of people earning less than \$2,000 is due to a cut in hours worked or to lower hourly earnings, or both.

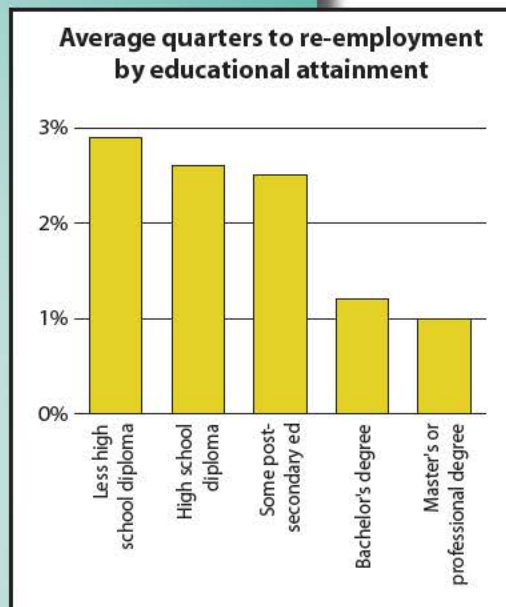
Average time to re-employment increased with age. Those under 45 years of age averaged 2.2 quarters to re-employment, while those 45 to 55 years of age averaged 2.7 quarters, and those 55 and over averaged 3.7 quarters.

Those with the least education took the most time to re-employment; those with the most education took the least time. The majority of the least well-educated worked in occupations related to production or shipping, while the majority of the more well-educated worked in occupations related to management. In light of the on-going labor market transition from jobs in production-related occupations to jobs in managerial, professional, and technical occupations, the difference in time to re-employment is not surprising.

About 56 percent of the displaced workers were women. Their average time to re-employment was 2.6 quarters, virtually the same as the 2.7 quarter average for men.

Nearly 63 percent of the displaced workers participated in some form of training program. Training programs included basic skills training intended to increase the educational skills of participants, including reading comprehension, math, writing, speaking and listening, problem solving, and reasoning. Occupational skills training and on-the-job training were also offered. Many individuals participated in more than one type of training.

Outcome analysis of those who participated in training programs is underway. We expect that data from this and other wage records analysis projects will be valuable in directing state and federal resources designed to assist displaced workers. Furthermore, we expect the information to provide important feedback for assessing the effectiveness of training programs.



Those with the least education took the most time to re-employment; those with the most education took the least time.

Summary

Technology innovation, globalization, management restructuring and changing demographics have altered the Maine economic landscape over the last 50 years. Once primarily known for its natural resource-based industries and labor intensive manufacturing, the Maine economy of today is made up of a diverse array of industries and jobs. The relentless pace of change has caused significant adjustments for many communities and regions across the state. Maine's workers have often borne a considerable brunt as economic adjustments have led to job and income loss. Through it all, the Maine economy has continued to grow and the workforce has become better educated and more highly skilled. However, more formidable challenges for workforce development lie ahead.

One of the most serious challenges is the changing composition of the Maine workforce. Slow population growth and an aging population are rapidly shaping the workforce of tomorrow. Baby boomers, born between 1946 and 1964, not only entered the workforce in record numbers but also with the most education and training. This age group is now approaching retirement and expected to vacate large numbers of jobs including thousands of jobs offering high pay and requiring advanced skills. Ensuring a steady supply of qualified workers remains fundamental to economic growth and sustained prosperity.

Enrollments in Maine schools have shown a steady downward trend reflecting persistent low birth rates. In-migration also has not added appreciable population with the exception of new residents moving to southern and coastal counties. Unlike many other parts of the U.S. where population and labor force growth is more robust, Maine has not attracted large numbers of foreign born residents or ethnically and racially diverse populations. While labor force growth is being challenged, there are opportunities within reach. Significant numbers of young people are out of school and out of work. More individuals with disabilities could add to Maine's labor force. A growing pool of senior workers may be seeking some form of labor force attachment in their traditional retirement years.

In the years ahead, the Maine economy will continue to create and destroy jobs at an accelerated pace. While it is difficult to predict precisely what jobs will be created and lost, we can be certain that these dynamics will remain a significant force in the labor market. The size and composition of firms in Maine is changing as well. Jobs lost in Maine's natural resource-based and manufacturing sectors with large plants are being replaced by new jobs in the health care, business and professional services, and retail sectors and an assortment of emerging industries typically in smaller establishments.

Across the spectrum of jobs, the knowledge, skills, and abilities needed to perform them is going up. More workers must demonstrate higher levels of literacy, technology proficiency, and self management to function successfully in the workplace. The transformation of Maine workplaces has deep implications for Maine schools as students must become better equipped with solid academic skills to support their challenge as lifelong learners.

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Some regions of the State will be at greater risk than others as those industries most susceptible to globalization, technology innovation, and management restructuring are most likely to suffer shut downs or employment dislocations. Past experience has demonstrated that Maine communities and workers can be remarkably resilient. Stories abound about how Maine workers have moved successfully from shoe factories and paper mills to hospitals and laboratories. These challenges will continue as employment forecasts call for more economic dislocation and regional adjustments.

Key Workforce Challenges and Policy Emphasis

Powerful demographic and economic forces are converging with profound implications for Maine labor markets and the workforce. These impacts will become more pronounced in years ahead as the effects of slow population growth, an aging workforce and anticipated retirements of baby boomers begin to occur. Policymakers must align a comprehensive workforce development strategy with economic development aspirations to ensure continued growth of the Maine economy.

The Governor has put forth an economic development strategy that includes significant emphasis on mature industry clusters including forest products, marine-related activities, niche manufacturing and tourism. Intensive attention is also being placed on emerging industries including biotechnology, biomedical research, financial services, and radio frequency identification. Recognizing the extraordinary role of the workforce in driving the growth of Maine's economy, the Governor has organized a Workforce Cabinet to focus on the integration of human capital investments and workforce development. This Cabinet includes the Commissioners of Education, Economic and Community Development, the President of the Community College System, the Chancellor of the University of Maine System and is Chaired by the Commissioner of Labor.

The Workforce Cabinet along with Maine employers, economic development officials, education and training leaders and all those charged with shaping Maine's future must focus their attention on the following key issues:

Slow Population Growth and the Aging Workforce. We must ensure that all Maine people who wish to be employed are prepared with the education and skills that permit them to work, earn a good living, and advance their careers. Slow population growth, the aging of the workforce, and the out-migration of young people have prompted policymakers to place greater emphasis on retaining and attracting youth and skilled workers to support future economic development. At the same time, solid prospects for economic development in Maine and the increasing need to fill jobs vacated by retiring baby boomers will create more opportunities for skilled employment and rewarding careers over the next 10 years. For Maine's economy to grow and living standards to rise, we must be able to provide a workforce including a variety of previously disenfranchised groups with the needed talents and skills that permit them to compete in more demanding labor markets.

Changing Composition of Business and Industry. We must strive to effectively reposition Maine workers and communities from maturing industries that are losing

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employment to emerging ones that are adding jobs. We have witnessed profound shifts in the composition of business and industry over the last twenty years. The fast pace of technological change and the forces of global competition will continue to impact the composition of business and industry and types of employment generated by the Maine economy. Most pronounced is the decline in the number of firms and the loss of jobs in traditional manufacturing. Shoe shops, textile mills, wood products companies and paper mills once dominated regional economies. While some industries such as shoes and textiles have nearly disappeared from the State, others such as the paper industry have been transformed, producing significant output but with substantially fewer employees. At the same time, new jobs are being created as business expansion takes place and new sectors emerge including what has been termed the “creative economy.” Health care, business services, and tourism are adding jobs. Stepped up investments in research and development will also impact future job creation.

Occupational Shifts and New Skill Requirements. Increasingly, occupational qualifications are short lived. Therefore, we must assist Maine workers to adapt more rapidly to changing work requirements so they remain highly qualified. Along with the changing composition of employment have come vast changes in the kinds of occupations and careers available to Maine workers. We have witnessed the introduction of new occupational titles and profound transformation in the skills requirements for occupations still described in traditional ways. Furthermore, traditional employment practices and career paths have been altered dramatically. The bold changes taking place require that we better guide young people emerging to join the workforce as well as thousands of established workers who must move from one job to the next. The articulation of relevant education and skills standards remains our most potent force for economic development.

Regional Disparities. We must assist regions where economic activities are stagnant or declining to gain new vitality and economic competitiveness. In other regions where economic growth is rapid and jobs are abundant, we must ensure that disenfranchised populations are provided with opportunities to participate and improve their living standards.

The impact of economic restructuring continues to be felt unevenly across the State of Maine. In certain regions, where one employer or industry has been historically dominant, the closing of the plant or significant workforce reductions in the industry have created severe worker dislocations and formidable economic challenges. We have now witnessed repeatedly that Maine communities and workers are resilient, managing to make adjustments when given the tools.

Since closing in 1994, Loring Air Force Base has been transformed, spawning new industries and replacing the number of civilian jobs lost. As the data shows, thousands of other Maine workers hit with plant closing and workforce reductions have been able to make adjustments to new jobs and careers. The adjustments are sometimes painful, demanding sacrifice and creating setbacks for workers. Still, there are important signs pointing to the resiliency and the adaptability of the Maine workforce.

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Appendix

Tables

Page

1. Civilian Noninstitutional Population and Labor Force in Maine, 1992, 2002 and Projected 2012.....	35
2. Change in Civilian Noninstitutional Population and Labor Force in Maine, 1992, 2002, and Projected 2012	36
3. Employment by Industry in Maine, 2002 and Projected 2012	37
4. Employment by Occupational Group in Maine in 2002 and Projected 2012	40
5. Forty Occupations with the Largest Projected Number of Annual Openings in Maine Between 2002 and 2012...	41
6. Forty Occupations with the Largest Net Job Growth in Maine Between 2002 and 2012	42
7. Forty Occupations with the Fastest Projected Rate of Job Growth in Maine Between 2002 and 2012	43
8. Forty Occupations with the Largest Projected Net Job Loss in Maine Between 2002 and 2012	44
9. Forty Occupations wit the Fastest Projected Rate of Job Loss in Maine Between 2002 and 2012	45
10. Occupational Employment by Education/Training Requirement in Maine in 2002 and Projected 2012	46
11. Population by County and Region in Maine, 1970 and 2003.....	47
12. Assessment of Economically Distressed Labor Market Areas.....	48
13. Change in Jobs by Industry in Maine Between 2001 and 2003.....	49

Table 1

Civilian Noninstitutional Population and Labor Force in Maine, 1992, 2002, and Projected 2012									
Age Group	1992			2002			2012 Forecast		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Civilian Noninstitutional Population (in thousands)									
16+	471	495	966	496	538	1,034	554	601	1,155
16-19	38	33	71	35	35	69	33	33	65
20-24	39	46	85	39	38	77	47	45	92
25-34	96	97	193	70	76	147	78	85	165
35-44	109	107	216	105	108	213	87	90	177
45-54	76	66	142	100	102	202	107	109	216
55-64	50	58	109	70	72	142	106	109	215
65+	63	88	150	77	106	183	95	131	225
Civilian Labor Force (in thousands)									
16+	357	305	662	355	332	686	393	363	756
16-19	21	17	38	19	17	36	9	17	36
20-24	36	35	71	31	30	61	39	36	75
25-34	91	77	168	65	62	126	74	69	143
35-44	102	89	191	96	90	186	81	75	155
45-54	68	52	120	87	82	169	94	88	182
55-64	32	25	57	46	40	82	70	62	132
65+	7	10	17	10	11	21	16	17	33
Labor Force Participation Rate									
16+	75.8%	61.7%	68.6%	71.5%	61.6%	66.4%	71.0%	60.3%	65.5%
16-19	55.1	53.2	54.2	55.7	49.5	52.6	57.5	53.0	56.1
20-24	92.0	76.6	83.7	80.0	78.9	79.5	83.0	78.9	81.0
25-34	94.8	79.3	87.0	92.0	80.5	86.0	94.4	80.5	86.6
35-44	93.2	83.0	88.2	91.2	83.3	87.2	92.6	83.3	87.9
45-54	89.2	78.2	84.1	86.9	80.4	83.7	88.3	80.4	84.3
55-64	63.2	43.6	52.7	65.4	54.8	60.0	66.5	56.5	61.4
65+	11.1	11.4	11.5	13.0	10.5	12.0	17.0	13.0	14.7
Percent of Total Labor Force									
16+	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
16-19	5.9	5.6	5.7	5.4	5.1	5.2	2.3	4.7	4.8
20-24	10.1	11.5	10.7	8.7	9.0	8.9	9.9	9.9	9.9
25-34	25.5	25.2	25.4	18.3	18.7	18.4	18.8	19.0	18.9
35-44	28.6	29.2	28.9	27.0	27.1	27.1	20.6	20.7	20.5
45-54	19.0	17.0	18.1	24.5	24.7	24.6	23.9	24.2	24.1
55-64	9.0	8.2	8.6	13.0	12.0	12.0	17.8	17.1	17.5
65+	2.0	3.3	2.6	2.8	3.3	3.1	4.1	4.7	4.4

Sources: U.S. Bureau of Labor Statistics and Maine Department of Labor.

Numbers may not add due to rounding.

Table 2

Change in Civilian Noninstitutional Population and Labor Force in Maine, 1992, 2002, and Projected 2012										
Age Group	Number			Net Change		Percent Change		Percent of Total		
	1992	2002	2012	1992-2002	2002-2012	1992-2002	2002-2012	1992	2002	2012
Civilian Noninstitutional Population (in thousands)										
16+	966	1,034	1,155	68	121	7.0%	11.7%	100.0%	100.0%	100.0%
16-19	71	69	65	-2	-4	-2.8	-5.9	7.3	6.7	5.6
20-24	85	77	92	-8	15	-9.4	19.6	8.8	7.4	8.0
25-34	193	147	165	-46	18	-23.8	12.1	20.0	14.2	14.3
35-44	216	213	177	-3	-36	-1.4	-17.0	22.4	20.6	15.3
45-54	142	202	216	60	14	42.3	6.8	14.7	19.5	18.7
55-64	109	142	215	33	73	30.3	51.3	11.3	13.7	18.6
65+	150	183	225	33	42	22.0	23.2	15.5	17.7	19.5
Civilian Labor Force (in thousands)										
16+	662	686	756	24	70	3.6%	10.2%	100.0%	100.0%	100.0%
16-19	38	36	36	-2	0	-5.3	0.0	5.7	5.2	4.8
20-24	71	61	75	-10	14	-14.1	23.0	10.7	8.9	9.9
25-34	168	126	143	-42	17	-25.0	13.5	25.4	18.4	18.9
35-44	191	186	155	-5	-31	-2.6	-16.7	28.9	27.1	20.5
45-54	120	169	182	49	13	40.8	7.7	18.1	24.6	24.1
55-64	57	82	132	25	50	43.9	61.0	8.6	12.0	17.5
65+	17	21	33	4	12	23.5	57.1	2.6	3.1	4.4

Sources: U.S. Bureau of Labor Statistics and Maine Department of Labor.

Numbers may not add due to rounding.

Table 3

Employment by Industry in Maine, 2002 and Projected 2012				
Industry	Average Employment		Employment Change	
	2002	2012	Net	Percent
Total Employment	661,107	729,245	68,138	10.3%
Self-Employed, Private Household, and Unpaid Family Workers	63,100	69,000	5,900	9.4
Wage and Salary Jobs	598,007	660,245	62,238	10.4
Total Private	499,662	555,774	56,112	11.2
Goods-Producing Industries	103,101	94,412	-8,689	-8.4
Natural Resources and Mining	5,702	6,077	375	6.6
Agriculture, Forestry, Fishing and Hunting	5,579	5,960	381	6.8
Crop production	1,469	1,628	159	10.8
Animal production	695	832	137	19.7
Forestry and logging	2,622	2,621	-1	0.0
Fishing, hunting and trapping	302	441	139	46.0
Agriculture and forestry support activities	491	438	-53	-10.8
Mining	123	117	-6	-4.9
Mining, except oil and gas	123	117	-6	-4.9
Construction	29,410	29,506	96	0.3
Construction of buildings	7,592	7,592	0	0.0
Heavy and civil engineering construction	3,866	3,962	96	2.5
Specialty trade contractors	17,952	17,952	0	0.0
Manufacturing	67,989	58,829	-9,160	-13.5
Durable Goods	35,670	32,384	-3,286	-9.2
Wood product manufacturing	6,731	5,639	-1,092	-16.2
Nonmetallic mineral product manufacturing	1,570	1,595	25	1.6
Primary metal manufacturing	382	339	-43	-11.3
Fabricated metal product manufacturing	4,781	4,477	-304	-6.4
Machinery manufacturing	2,502	2,395	-107	-4.3
Computer and electronic product manufacturing	4,729	4,556	-173	-3.7
Electrical equipment and appliance mfg.	1,004	979	-25	-2.5
Transportation equipment manufacturing	10,208	9,064	-1,144	-11.2
Furniture and related product manufacturing	1,956	1,673	-283	-14.5
Miscellaneous manufacturing	1,807	1,667	-140	-7.7
Nondurable Goods	32,319	26,445	-5,874	-18.2
Food manufacturing	6,586	6,700	114	1.7
Beverage and tobacco product manufacturing	414	451	37	8.9
Textile mills	2,142	1,377	-765	-35.7
Textile product mills	1,154	1,000	-154	-13.3
Apparel manufacturing	985	637	-348	-35.3
Leather and allied product manufacturing	2,689	1,336	-1,353	-50.3
Paper manufacturing	11,655	8,765	-2,890	-24.8
Printing and related support activities	2,635	2,546	-89	-3.4
Petroleum and coal products manufacturing	395	432	37	9.4
Chemical manufacturing	1,361	1,329	-32	-2.4

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Table 3-cont. from page 37

Employment by Industry in Maine, 2002 and Projected 2012				
Industry	Average Employment		Employment Change	
	2002	2012	Net	Percent
Plastics and rubber products manufacturing	2,303	1,872	-431	-18.7%
Service-Providing Industries	494,906	565,833	70,927	14.3
Trade, Transportation, and Utilities	123,260	137,224	13,964	11.3
Wholesale Trade	20,082	22,811	2,729	13.6
Merchant wholesalers, durable goods	9,348	11,140	1,792	19.2
Merchant wholesalers, nondurable goods	8,032	8,328	296	3.7
Electronic markets and agents and brokers	2,702	3,343	641	23.7
Retail Trade	86,156	96,349	10,193	11.8
Motor vehicle and parts dealers	10,397	12,279	1,882	18.1
Furniture and home furnishings stores	2,577	2,944	367	14.2
Electronics and appliance stores	1,914	2,333	419	21.9
Building material and garden supply stores	6,786	7,872	1,086	16.0
Food and beverage stores	19,249	21,748	2,499	13.0
Health and personal care stores	3,507	3,684	177	5.0
Gasoline stations	7,591	8,383	792	10.4
Clothing and clothing accessories stores	4,976	4,681	-295	-5.9
Sporting goods, hobby, book and music stores	3,969	4,357	388	9.8
General merchandise stores	11,698	12,424	726	6.2
Miscellaneous store retailers	5,659	6,595	936	16.5
Nonstore retailers	7,833	9,049	1,216	15.5
Transportation and Warehousing	14,797	16,061	1,264	8.5
Air transportation	486	466	-20	-4.1
Rail transportation	800	800	0	0.0
Water transportation	146	180	34	23.3
Truck transportation	6,039	6,192	153	2.5
Transit and ground passenger transportation	1,463	1,797	334	22.8
Pipeline transportation	55	73	18	32.7
Scenic and sightseeing transportation	240	320	80	33.3
Support activities for transportation	1,313	1,562	249	19.0
Couriers and messengers	1,942	2,158	216	11.1
Warehousing and storage	2,313	2,513	200	8.6
Utilities	2,225	2,003	-222	-10.0
Information	11,546	12,170	624	5.4
Publishing industries, except Internet	3,411	3,856	445	13.0
Motion picture and sound recording industries	726	1,013	287	39.5
Broadcasting, except Internet	1,757	1,757	0	0.0
Internet publishing and broadcasting	37	46	9	24.3
Telecommunications	3,361	3,083	-278	-8.3
ISPs, search portals, and data processing	1,309	1,300	-9	-0.7
Other Information Services	945	1,115	170	18.0
Financial Activities	35,202	38,044	2,842	8.1%

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Table 3-cont. from page 38

Employment by Industry in Maine, 2002 and Projected 2012				
Industry	Average Employment		Employment Change	
	2002	2012	Net	Percent
Finance and Insurance	28,511	30,197	1,686	5.9%
Credit intermediation and related activities	13,926	14,630	704	5.1
Securities, commodity contracts, investments	1,697	2,344	647	38.1
Insurance carriers and related activities	12,849	13,177	328	2.6
Funds, trusts, and other financial vehicles	39	46	7	17.9
Real Estate and Rental and Leasing	6,691	7,847	1,156	17.3
Real estate	3,838	4,427	589	15.3
Rental and leasing services	2,853	3,420	567	19.9
Professional and Business Services	51,404	58,101	6,697	13.0
Professional, Scientific and Tech Services	22,658	25,440	2,782	12.3
Management of companies and enterprises	6,252	6,203	-49	-0.8
Administrative and support services	20,913	24,810	3,897	18.6
Waste management and remediation services	1,581	1,648	67	4.2
Education and Health Services	96,116	123,817	27,701	28.8
Educational services	8,872	10,883	2,011	22.7
Health Care and Social Assistance	87,244	112,934	25,690	29.4
Ambulatory health care services	23,753	31,295	7,542	31.8
Hospitals	25,434	30,793	5,359	21.1
Nursing and residential care facilities	22,236	28,663	6,427	28.9
Social assistance	15,821	22,183	6,362	40.2
Leisure and Hospitality	57,312	66,993	9,681	16.9
Arts, Entertainment, and Recreation	7,883	10,578	2,695	34.2
Performing arts and spectator sports	1,097	1,296	199	18.1
Museums, historical sites, zoos, and parks	439	439	0	0.0
Amusements, gambling, and recreation	6,347	8,843	2,496	39.3
Accommodation and Food Services	49,429	56,415	6,986	14.1
Accommodation	10,897	12,478	1,581	14.5
Food services and drinking places	38,532	43,937	5,405	14.0
Other Services	21,721	25,013	3,292	15.2
Repair and maintenance	5,065	5,958	893	17.6
Personal and laundry services	4,203	4,595	392	9.3
Membership associations and organizations	10,411	12,418	2,007	19.3
Private households	2,042	2,042	0	0.0
Government	98,345	104,471	6,126	6.2
Federal	13,943	14,471	528	3.8
State	24,382	25,000	618	2.5
Local	60,020	65,000	4,980	8.3

Table 4

Employment by Occupational Group in Maine in 2002 and Projected 2012							
Occupational Group	Average Employment		Change in Employment		Average Annual Openings		2003 Average Wage
	2002	2012	Net	Percent	Growth	Replacement	
Total	661,107	729,245	68,138	10.3%	7,979	15,688	\$15.51
Management, Business and Financial Occupations	62,729	71,172	8,443	13.5	858	1,128	28.10
Management Occupations	41,992	47,286	5,294	12.6	542	756	31.79
Business and Financial Operations Occupations	20,737	23,886	3,149	15.2	316	372	22.66
Professional and Related Occupations	127,470	150,334	22,864	17.9	2,355	2,498	21.01
Computer and Mathematical Occupations	7,553	8,718	1,165	15.4	121	99	24.92
Architecture and Engineering Occupations	9,858	9,943	85	0.9	41	226	25.97
Life, Physical, and Social Science Occupations	4,769	5,678	909	19.1	92	111	22.24
Community and Social Services Occupations	15,246	20,223	4,977	32.6	496	294	15.34
Legal Occupations	4,391	4,875	484	11.0	50	51	32.39
Education, Training, and Library Occupations	42,277	47,055	4,778	11.3	500	902	16.63
Arts, Design, Entertainment, Sports, and Media Occupations	9,234	10,721	1,487	16.1	156	177	16.06
Healthcare Practitioners and Technical Occupations	34,142	43,121	8,979	26.3	899	638	26.25
Service Occupations	132,049	157,433	25,384	19.2	2,552	3,739	9.91
Healthcare Support Occupations	20,002	25,826	5,824	29.1	582	301	10.58
Protective Service Occupations	10,763	12,933	2,170	20.2	217	305	13.78
Food Preparation and Serving Related Occupations	53,541	60,861	7,320	13.7	739	2,108	8.70
Building and Grounds Cleaning and Maintenance Occupations	26,320	30,189	3,869	14.7	389	530	10.19
Personal Care and Service Occupations	21,423	27,624	6,201	28.9	625	495	9.81
Sales and Related Occupations	71,678	79,860	8,182	11.4	844	2,317	12.98
Office and Administrative Support Occupations	98,976	100,225	1,249	1.3	477	2,292	12.70
Farming, Fishing, and Forestry Occupations	8,027	8,585	558	7.0	70	198	11.95
Construction and Extraction Occupations	38,946	39,958	1,012	2.6	130	744	15.36
Installation, Maintenance, and Repair Occupations	28,753	31,938	3,185	11.1	353	664	16.44
Production Occupations	48,435	43,389	-5,046	-10.4	46	1,147	13.86
Transportation and Material Moving Occupations	44,044	46,351	2,307	5.2	294	961	12.23

Average wages are for wage and salary workers and do not include the self-employed. The average by occupational group is an estimate calculated using 2003 wages and 2002 employment.

Table 5

Forty Occupations with the Largest Projected Number of Annual Openings in Maine Between 2002 and 2012							
SOC Code	Occupation	Average Employment		Average Annual Openings			Education/Training Requirement
		2002	2012	Growth	Replacement	Total	
41-2011	Cashiers	17,616	20,017	240	857	1,097	Short-term on-the-job training
41-2031	Retail Salespersons	19,240	20,669	143	699	842	Short-term on-the-job training
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	10,726	13,000	227	465	692	Short-term on-the-job training
35-3031	Waiters and Waitresses	10,121	11,707	159	521	680	Short-term on-the-job training
29-1111	Registered Nurses	13,000	16,469	347	272	619	Associate degree
11-1021	General and Operations Managers	11,288	12,918	163	213	376	Bachelor's degree plus work experience
39-9021	Personal and Home Care Aides	4,853	7,502	265	78	343	Short-term on-the-job training
35-2021	Food Preparation Workers	6,228	7,357	113	220	333	Short-term on-the-job training
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	10,582	11,821	124	201	325	Short-term on-the-job training
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	9,519	10,950	143	171	314	Work experience in a related occupation
39-9011	Child Care Workers	6,689	7,877	119	182	301	Short-term on-the-job training
43-9061	Office Clerks, General	11,981	12,323	34	265	299	Short-term on-the-job training
53-3032	Truck Drivers, Heavy and Tractor-Trailer	11,195	12,256	106	183	289	Moderate-term on-the-job training
37-2012	Maids and Housekeeping Cleaners	8,128	9,205	108	171	279	Short-term on-the-job training
31-1011	Home Health Aides	4,991	7,018	203	65	268	Short-term on-the-job training
21-1093	Social and Human Service Assistants	3,249	5,295	205	57	262	Moderate-term on-the-job training
31-1012	Nursing Aides, Orderlies, and Attendants	9,061	10,482	142	119	261	Short-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	7,942	7,596	0	260	260	Short-term on-the-job training
43-5081	Stock Clerks and Order Fillers	6,840	6,404	0	253	253	Short-term on-the-job training
37-3011	Landscaping and Groundskeeping Workers	5,198	6,423	123	113	236	Short-term on-the-job training
41-4012	Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	5,352	6,204	85	141	226	Moderate-term on-the-job training
25-9041	Teacher Assistants	8,065	8,751	69	156	225	Short-term on-the-job training
47-2031	Carpenters	10,233	10,604	37	167	204	Long-term on-the-job training
49-3023	Automotive Service Technicians and Mechanics	4,840	5,578	74	129	203	Postsecondary vocational award
43-4051	Customer Service Representatives	7,173	8,133	96	107	203	Moderate-term on-the-job training
25-2031	Secondary School Teachers, Except Special and Vocational Education	6,211	6,440	23	175	198	Bachelor's degree
43-4171	Receptionists and Information Clerks	3,901	4,813	91	96	187	Short-term on-the-job training
43-3031	Bookkeeping, Accounting, and Auditing Clerks	9,530	9,581	5	179	184	Moderate-term on-the-job training
43-6014	Secretaries, Except Legal, Medical, and Executive	9,420	8,848	0	180	180	Moderate-term on-the-job training
35-2014	Cooks, Restaurant	3,864	4,389	53	120	173	Long-term on-the-job training
49-9042	Maintenance and Repair Workers, General	5,426	6,080	65	104	169	Moderate-term on-the-job training
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,983	2,330	35	129	164	Short-term on-the-job training
43-3071	Tellers	2,825	3,027	20	139	159	Short-term on-the-job training
25-2021	Elementary School Teachers, Except Special Education	6,444	6,499	6	142	148	Bachelor's degree
43-1011	First-Line Supervisors/Managers of Office and Administrative Support Workers	5,749	5,932	18	123	141	Work experience in a related occupation
31-9092	Medical Assistants	1,572	2,583	101	29	130	Moderate-term on-the-job training
35-9021	Dishwashers	3,360	3,504	14	113	127	Short-term on-the-job training
33-3051	Police and Sheriff's Patrol Officers	2,060	2,743	68	53	121	Long-term on-the-job training
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	3,324	3,716	39	79	118	Work experience in a related occupation
35-3011	Bartenders	2,577	2,682	11	102	113	Short-term on-the-job training

Table 6

Forty Occupations with the Largest Projected Net Job Growth in Maine Between 2002 and 2012					
SOC Code	Occupation	Average Employment		Net Growth	Education/Training Requirement
		2002	2012		
29-1111	Registered Nurses	13,000	16,469	3,469	Associate degree
39-9021	Personal and Home Care Aides	4,853	7,502	2,649	Short-term on-the-job training
41-2011	Cashiers	17,616	20,017	2,401	Short-term on-the-job training
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	10,726	13,000	2,274	Short-term on-the-job training
21-1093	Social and Human Service Assistants	3,249	5,295	2,046	Moderate-term on-the-job training
31-1011	Home Health Aides	4,991	7,018	2,027	Short-term on-the-job training
11-1021	General and Operations Managers	11,288	12,918	1,630	Bachelor's degree plus work experience
35-3031	Waiters and Waitresses	10,121	11,707	1,586	Short-term on-the-job training
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	9,519	10,950	1,431	Work experience in a related occupation
41-2031	Retail Salespersons	19,240	20,669	1,429	Short-term on-the-job training
31-1012	Nursing Aides, Orderlies, and Attendants	9,061	10,482	1,421	Short-term on-the-job training
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	10,582	11,821	1,239	Short-term on-the-job training
37-3011	Landscaping and Groundskeeping Workers	5,198	6,423	1,225	Short-term on-the-job training
39-9011	Child Care Workers	6,689	7,877	1,188	Short-term on-the-job training
35-2021	Food Preparation Workers	6,228	7,357	1,129	Short-term on-the-job training
37-2012	Maids and Housekeeping Cleaners	8,128	9,205	1,077	Short-term on-the-job training
53-3032	Truck Drivers, Heavy and Tractor-Trailer	11,195	12,256	1,061	Moderate-term on-the-job training
31-9092	Medical Assistants	1,572	2,583	1,011	Moderate-term on-the-job training
43-4051	Customer Service Representatives	7,173	8,133	960	Moderate-term on-the-job training
43-4171	Receptionists and Information Clerks	3,901	4,813	912	Short-term on-the-job training
41-4012	Sales Reps Wholesale & Manufacturing, Except Technical & Scientific Products	5,352	6,204	852	Moderate-term on-the-job training
49-3023	Automotive Service Technicians and Mechanics	4,840	5,578	738	Postsecondary vocational award
25-9041	Teacher Assistants	8,065	8,751	686	Short-term on-the-job training
53-3033	Truck Drivers, Light or Delivery Services	4,707	5,392	685	Short-term on-the-job training
33-3051	Police and Sheriff's Patrol Officers	2,060	2,743	683	Long-term on-the-job training
49-9042	Maintenance and Repair Workers, General	5,426	6,080	654	Moderate-term on-the-job training
25-3021	Self-Enrichment Education Teachers	960	1,539	579	Work experience in a related occupation
21-1023	Mental Health and Substance Abuse Social Workers	1,375	1,918	543	Master's degree
35-2014	Cooks, Restaurant	3,864	4,389	525	Long-term on-the-job training
33-2011	Fire Fighters	1,770	2,294	524	Long-term on-the-job training
21-1021	Child, Family, and School Social Workers	2,089	2,582	493	Bachelor's degree
29-2071	Medical Records and Health Information Technicians	886	1,370	484	Associate degree
11-9111	Medical and Health Services Managers	1,440	1,878	438	Bachelor's degree plus work experience
21-1015	Rehabilitation Counselors	1,200	1,629	429	Master's degree
39-5012	Hairdressers, Hairstylists, and Cosmetologists	3,037	3,466	429	Postsecondary vocational award
13-2011	Accountants and Auditors	3,659	4,080	421	Bachelor's degree
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,080	2,478	398	Long-term on-the-job training
11-9151	Social and Community Service Managers	1,211	1,603	392	Bachelor's degree
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	3,324	3,716	392	Work experience in a related occupation
47-2031	Carpenters	10,233	10,604	371	Long-term on-the-job training

Table 7

Forty Occupations with the Fastest Projected Rate of Job Growth in Maine Between 2002 and 2012					
SOC Code	Occupation	Average Employment		Growth Rate	Education/Training Requirement
		2002	2012		
31-9092	Medical Assistants	1,572	2,583	64.3%	Moderate-term on-the-job training
21-1093	Social and Human Service Assistants	3,249	5,295	63.0	Moderate-term on-the-job training
25-3021	Self-Enrichment Education Teachers	960	1,539	60.3	Work experience in a related occupation
29-1071	Physician Assistants	624	967	55.0	Bachelor's degree
29-2071	Medical Records and Health Information Technicians	886	1,370	54.6	Associate degree
39-9021	Personal and Home Care Aides	4,853	7,502	54.6	Short-term on-the-job training
13-2052	Personal Financial Advisors	607	925	52.4	Bachelor's degree
31-2021	Physical Therapist Assistants	317	480	51.4	Associate degree
31-9011	Massage Therapists	403	596	47.9	Postsecondary vocational award
29-2056	Veterinary Technologists and Technicians	378	541	43.1	Associate degree
31-1011	Home Health Aides	4,991	7,018	40.6	Short-term on-the-job training
29-1126	Respiratory Therapists	421	591	40.4	Associate degree
29-2031	Cardiovascular Technologists and Technicians	213	299	40.4	Associate degree
31-2022	Physical Therapist Aides	135	189	40.0	Short-term on-the-job training
49-9095	Manufactured Building and Mobile Home Installers	184	257	39.7	Moderate-term on-the-job training
21-1023	Mental Health and Substance Abuse Social Workers	1,375	1,918	39.5	Master's degree
39-9031	Fitness Trainers and Aerobics Instructors	861	1,197	39.0	Postsecondary vocational award
39-1021	First-Line Supervisors/Managers of Personal Service Workers	745	1,020	36.9	Work experience in a related occupation
27-1026	Merchandise Displayers and Window Trimmers	334	457	36.8	Moderate-term on-the-job training
21-1022	Medical and Public Health Social Workers	671	911	35.8	Bachelor's degree
21-1015	Rehabilitation Counselors	1,200	1,629	35.8	Master's degree
25-1126	Philosophy and Religion Teachers, Postsecondary	143	193	35.0	Doctoral degree
39-9041	Residential Advisors	530	715	34.9	Moderate-term on-the-job training
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	530	712	34.3	Short-term on-the-job training
27-3091	Interpreters and Translators	178	239	34.3	Long-term on-the-job training
39-3091	Amusement and Recreation Attendants	853	1,144	34.1	Short-term on-the-job training
15-1061	Database Administrators	268	358	33.6	Bachelor's degree
33-3051	Police and Sheriff's Patrol Officers	2,060	2,743	33.2	Long-term on-the-job training
25-9031	Instructional Coordinators	308	410	33.1	Master's degree
29-1123	Physical Therapists	1,047	1,392	33.0	Master's degree
27-2021	Athletes and Sports Competitors	147	195	32.7	Long-term on-the-job training
15-1081	Network Systems and Data Communications Analysts	371	492	32.6	Bachelor's degree
25-1121	Art, Drama, and Music Teachers, Postsecondary	197	261	32.5	Master's degree
49-3051	Motorboat Mechanics	528	699	32.4	Long-term on-the-job training
11-9151	Social and Community Service Managers	1,211	1,603	32.4	Bachelor's degree
43-4111	Interviewers, Except Eligibility and Loan	573	756	31.9	Short-term on-the-job training
41-9011	Demonstrators and Product Promoters	594	782	31.6	Moderate-term on-the-job training
29-1131	Veterinarians	358	471	31.6	First Professional degree
19-3031	Clinical, Counseling, and School Psychologists	808	1,063	31.6	Doctoral degree
19-4021	Biological Technicians	485	638	31.5	Associate degree

Occupations with fewer than 100 jobs in 2002 were excluded from this list.

Table 8

Forty Occupations with the Largest Projected Net Job Loss in Maine Between 2002 and 2012					
SOC Code	Occupation	Average Employment		Net Decline	Education/Training Requirement
		2002	2012		
43-9022	Word Processors and Typists	1,540	839	-701	Moderate-term on-the-job training
43-6014	Secretaries, Except Legal, Medical, and Executive	9,420	8,848	-572	Moderate-term on-the-job training
51-2092	Team Assemblers	3,346	2,777	-569	Moderate-term on-the-job training
43-5081	Stock Clerks and Order Fillers	6,840	6,404	-436	Short-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	7,942	7,596	-346	Short-term on-the-job training
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	1,266	962	-304	Moderate-term on-the-job training
51-6031	Sewing Machine Operators	1,447	1,186	-261	Moderate-term on-the-job training
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	1,273	1,039	-234	Short-term on-the-job training
51-6042	Shoe Machine Operators and Tenders	374	145	-229	Moderate-term on-the-job training
43-2021	Telephone Operators	360	149	-211	Short-term on-the-job training
43-9021	Data Entry Keyers	1,306	1,100	-206	Moderate-term on-the-job training
41-9041	Telemarketers	3,670	3,473	-197	Short-term on-the-job training
53-7063	Machine Feeders and Offbearers	1,219	1,023	-196	Short-term on-the-job training
51-9198	Helpers--Production Workers	1,616	1,421	-195	Short-term on-the-job training
51-9196	Paper Goods Machine Setters, Operators, and Tenders	1,013	822	-191	Moderate-term on-the-job training
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	824	646	-178	Moderate-term on-the-job training
43-9011	Computer Operators	746	577	-169	Moderate-term on-the-job training
51-6051	Sewers, Hand	391	224	-167	Short-term on-the-job training
25-2022	Middle School Teachers, Except Special and Vocational Education	3,672	3,508	-164	Bachelor's degree
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	3,534	3,377	-157	Work experience in a related occupation
43-5052	Postal Service Mail Carriers	1,668	1,512	-156	Short-term on-the-job training
51-4041	Machinists	2,371	2,217	-154	Long-term on-the-job training
49-9044	Millwrights	749	597	-152	Long-term on-the-job training
17-3013	Mechanical Drafters	799	654	-145	Postsecondary vocational award
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	703	562	-141	Moderate-term on-the-job training
51-6041	Shoe and Leather Workers and Repairers	289	150	-139	Long-term on-the-job training
43-4131	Loan Interviewers and Clerks	648	518	-130	Short-term on-the-job training
51-7011	Cabinetmakers and Bench Carpenters	830	713	-117	Long-term on-the-job training
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	880	768	-112	Moderate-term on-the-job training
51-2041	Structural Metal Fabricators and Fitters	703	597	-106	Moderate-term on-the-job training
51-2022	Electrical and Electronic Equipment Assemblers	727	628	-99	Short-term on-the-job training
43-5071	Shipping, Receiving, and Traffic Clerks	3,457	3,360	-97	Short-term on-the-job training
51-4031	Cutting, Punching & Press Machine Setters, Operators & Tenders, Metal & Plastic	856	761	-95	Moderate-term on-the-job training
43-4061	Eligibility Interviewers, Government Programs	622	529	-93	Moderate-term on-the-job training
51-2091	Fiberglass Laminators and Fabricators	539	450	-89	Moderate-term on-the-job training
51-6064	Textile Winding, Twisting & Drawing Out Machine Setters, Operators & Tenders	316	228	-88	Moderate-term on-the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,781	1,694	-87	Moderate-term on-the-job training
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	415	329	-86	Moderate-term on-the-job training
51-8021	Stationary Engineers and Boiler Operators	430	355	-75	Long-term on-the-job training
47-2152	Plumbers, Pipefitters, and Steamfitters	2,459	2,386	-73	Long-term on-the-job training

Table 9

Forty Occupations with the Fastest Projected Rate of Job Loss in Maine Between 2002 and 2012					
SOC Code	Occupation	Average Employment		Rate of Decline	Education/Training Requirement
		2002	2012		
51-6042	Shoe Machine Operators and Tenders	374	145	-61.2%	Moderate-term on-the-job training
43-2021	Telephone Operators	360	149	-58.6	Short-term on-the-job training
51-6041	Shoe and Leather Workers and Repairers	289	150	-48.1	Long-term on-the-job training
43-9022	Word Processors and Typists	1,540	839	-45.5	Moderate-term on-the-job training
51-6051	Sewers, Hand	391	224	-42.7	Short-term on-the-job training
51-6064	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	316	228	-27.8	Moderate-term on-the-job training
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	1,266	962	-24.0	Moderate-term on-the-job training
41-3041	Travel Agents	288	221	-23.3	Postsecondary vocational award
43-9011	Computer Operators	746	577	-22.7	Moderate-term on-the-job training
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	309	242	-21.7	Long-term on-the-job training
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	824	646	-21.6	Moderate-term on-the-job training
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	415	329	-20.7	Moderate-term on-the-job training
51-4072	Molding, Coremaking & Casting Machine Setters, Operators & Tenders, Metal & Plastic	312	248	-20.5	Moderate-term on-the-job training
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	210	167	-20.5	Moderate-term on-the-job training
49-9044	Millwrights	749	597	-20.3	Long-term on-the-job training
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	237	189	-20.3	Moderate-term on-the-job training
43-4131	Loan Interviewers and Clerks	648	518	-20.1	Short-term on-the-job training
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	703	562	-20.1	Moderate-term on-the-job training
51-9011	Chemical Equipment Operators and Tenders	280	224	-20.0	Moderate-term on-the-job training
51-8091	Chemical Plant and System Operators	131	105	-19.8	Long-term on-the-job training
51-4194	Tool Grinders, Filers, and Sharpeners	131	106	-19.1	Moderate-term on-the-job training
51-9196	Paper Goods Machine Setters, Operators, and Tenders	1,013	822	-18.9	Moderate-term on-the-job training
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	1,273	1,039	-18.4	Short-term on-the-job training
17-3013	Mechanical Drafters	799	654	-18.1	Postsecondary vocational award
51-6031	Sewing Machine Operators	1,447	1,186	-18.0	Moderate-term on-the-job training
51-8021	Stationary Engineers and Boiler Operators	430	355	-17.4	Long-term on-the-job training
51-2092	Team Assemblers	3,346	2,777	-17.0	Moderate-term on-the-job training
51-2091	Fiberglass Laminators and Fabricators	539	450	-16.5	Moderate-term on-the-job training
53-7063	Machine Feeders and Offbearers	1,219	1,023	-16.1	Short-term on-the-job training
43-9021	Data Entry Keyers	1,306	1,100	-15.8	Moderate-term on-the-job training
47-2011	Boilermakers	121	102	-15.7	Long-term on-the-job training
51-2041	Structural Metal Fabricators and Fitters	703	597	-15.1	Moderate-term on-the-job training
43-4061	Eligibility Interviewers, Government Programs	622	529	-15.0	Moderate-term on-the-job training
51-5011	Bindery Workers	462	396	-14.3	Short-term on-the-job training
51-7011	Cabinetmakers and Bench Carpenters	830	713	-14.1	Long-term on-the-job training
51-2021	Coil Winders, Tapers, and Finishers	142	122	-14.1	Short-term on-the-job training
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	449	386	-14.0	Moderate-term on-the-job training
51-5022	Prepress Technicians and Workers	360	310	-13.9	Long-term on-the-job training
27-3010	Announcers	379	327	-13.7	Long-term on-the-job training
51-9012	Separating, Filtering, Clarifying, Precipitating & Still Machine Setters, Operators & Tenders	226	195	-13.7	Moderate-term on-the-job training

Occupations with fewer than 100 jobs in 2002 were excluded from this list.

Table 10

Occupational Employment by Education/Training Requirement in Maine in 2002 and Projected 2012									
Education/Training Requirement	Average Employment		Percent of Total Employment		Change in Employment		Average Annual Openings		
	2002	2012	2002	2012	Net	Percent	Growth	Replacement	Total
Total	661,107	729,245	100.0%	100.0%	68,138	10.3%	7,979	15,688	23,667
First Professional degree	10,605	12,468	1.6	1.7	1,863	17.6	186	175	361
Doctoral degree	3,624	4,639	0.5	0.6	1,015	28.0	103	83	186
Master's degree	11,884	14,690	1.8	2.0	2,806	23.6	283	247	530
Bachelor's degree plus work experience	31,381	35,938	4.7	4.9	4,557	14.5	459	590	1,049
Bachelor's degree	69,919	78,769	10.6	10.8	8,850	12.7	931	1,378	2,309
Associate degree	25,625	31,743	3.9	4.4	6,118	23.9	613	498	1,111
Postsecondary vocational award	27,775	31,686	4.2	4.3	3,911	14.1	423	589	1,012
Work experience in a related occupation	49,167	54,518	7.4	7.5	5,351	10.9	555	1,023	1,578
Long-term on-the-job training	52,645	55,712	8.0	7.6	3,067	5.8	422	1,102	1,524
Moderate-term on-the-job training	136,413	141,656	20.6	19.4	5,243	3.8	1,134	2,818	3,952
Short-term on-the-job training	242,069	267,426	36.6	36.7	25,357	10.5	2,870	7,185	10,055

verage ages are for age and salary orkers and do not include the self-employed. The average by education/training requirement is an estimate calculated using 2003 ages and 2002 employment.

Table 11

Population by County and Region in Maine, 1970 to 2003													
County/Region	Population					Change							
	1970	1980	1990	2000	2003	1970-1980		1980-1990		1990-2000		2000-2003	
						Net	Percent	Net	Percent	Net	Percent	Net	Percent
Maine	992,048	1,124,660	1,227,928	1,274,923	1,305,728	132,612	13.4%	103,268	9.2%	46,995	3.8%	30,805	2.4%
York	111,576	139,666	164,587	186,742	198,026	28,090	25.2	24,921	17.8	22,155	13.5	11,284	6.0
Cumberland	192,528	215,789	243,135	265,612	270,923	23,261	12.1	27,346	12.7	22,477	9.2	5,311	2.0
Southern Region	304,104	355,455	407,722	452,354	468,949	51,351	16.9	52,267	14.7	44,632	10.9	16,595	3.7
Sagadahoc	23,452	28,795	33,535	35,214	36,455	5,343	22.8	4,740	16.5	1,679	5.0	1,241	3.5
Lincoln	20,537	25,691	30,357	33,616	34,729	5,154	25.1	4,666	18.2	3,259	10.7	1,113	3.3
Androscoggin	29,013	32,941	36,310	39,618	40,406	3,928	13.5	3,369	10.2	3,308	9.1	788	2.0
Waldo	23,328	28,414	33,018	36,280	38,248	5,086	21.8	4,604	16.2	3,262	9.9	1,968	5.4
Coastal Region	96,330	115,841	133,220	144,728	149,838	19,511	20.3	17,379	15.0	11,508	8.6	5,110	3.5
Androscoggin	91,279	99,657	105,259	103,793	106,115	8,378	9.2	5,602	5.6	-1,466	-1.4	2,322	2.2
Franklin	43,457	48,968	52,602	54,755	56,151	5,511	12.7	3,634	7.4	2,153	4.1	1,396	2.5
Western Region	22,444	27,098	29,008	29,467	29,763	4,654	20.7	1,910	7.0	459	1.6	296	1.0
Kennebec	157,180	175,723	186,869	188,015	192,029	18,543	11.8	11,146	6.3	1,146	0.6	4,014	2.1
Somerset	95,247	109,889	115,904	117,114	119,683	14,642	15.4	6,015	5.5	1,210	1.0	2,569	2.2
Central Region	40,597	45,028	49,767	50,888	51,154	4,431	10.9	4,739	10.5	1,121	2.3	266	0.5
Hancock	135,844	154,917	165,671	168,002	170,837	19,073	14.0	10,754	6.9	2,331	1.4	2,835	1.7
Penobscot	34,590	41,781	46,948	51,791	52,792	7,191	20.8	5,167	12.4	4,843	10.3	1,001	1.9
Piscataquis	125,393	137,015	146,601	144,919	146,982	11,622	9.3	9,586	7.0	-1,682	-1.1	2,063	1.4
Northeast Region	16,285	17,634	18,653	17,235	17,394	1,349	8.3	1,019	5.8	-1,418	-7.6	159	0.9
Aroostook	176,268	196,430	212,202	213,945	217,168	20,162	11.4	15,772	8.0	1,743	0.8	3,223	1.5
Washington	92,463	91,331	86,936	73,938	73,428	-1,132	-1.2	-4,395	-4.8	-12,998	-15.0	-510	-0.7
Northern Region	29,859	34,963	35,308	33,941	33,479	5,104	17.1	345	1.0	-1,367	-3.9	-462	-1.4
	122,322	126,294	122,244	107,879	106,907	3,972	3.2	-4,050	-3.2	-14,365	-11.8	-972	-0.9

Source: U.S. Census Bureau.

Table 12

Assessment of Economically Distressed Labor Market Areas Effective January 1 to March 31, 2005										
Labor Market Area	Unemployment Rate	Rank	Poverty Rate	Rank	Average Wage	Rank	Change in Employment	Rank	Composite Rank	GTI Score
Bath-Brunswick	3.4%	6	8.3%	4	\$39,965	5	3.0%	5	20	0
Portland MSA	2.7	2	7.9	1	43,861	3	0.5	15	21	0
Kittery-York	3.3	4	8.2	2	47,128	2	-1.8	21	29	0
Bangor MSA	3.4	6	13.7	9	37,533	7	2.0	9	31	0
Augusta	4.6	11	11.1	7	39,912	6	-0.5	17	41	0
Sanford	6.1	21	8.2	2	37,067	9	1.8	10	42	0
Lewiston-Auburn MSA	4.1	10	11.1	7	37,448	8	-0.5	17	42	0
Biddeford	3.5	8	8.2	2	34,965	13	-2.2	22	45	0
Rockland	3.3	4	10.1	5	34,762	14	-2.2	22	45	0
Presque Isle-Caribou	5.2	13	14.3	11	32,355	21	2.9	6	51	0
Waterville	5.7	16	11.1	7	33,796	16	0.9	13	52	0
Farmington	6.2	22	14.6	12	34,741	15	3.7	4	53	0
Rumford	7.3	26	11.8	8	35,197	11	1.7	12	57	0
Belfast	4.0	9	13.9	10	33,211	18	-1.5	20	57	0
Madawaska	5.2	13	14.3	11	40,619	4	-8.4	29	57	0
Houlton	5.5	15	14.3	11	28,989	30	4.3	2	58	0
Bucksport	6.0	20	10.2	6	47,814	1	-8.9	31	58	0
Outer Bangor	5.8	18	13.7	9	27,728	31	18.6	1	59	0
Norway-Paris	6.5	23	11.8	8	31,384	23	2.6	7	61	0
Boothbay Harbor	2.6	1	10.1	5	31,004	25	-8.5	30	61	0
Sebago Lakes Region	4.8	12	7.9	1	29,358	28	-4.7	26	67	1
Dover-Foxcroft	6.7	24	14.8	13	29,664	26	2.1	8	71	1
Van Buren	5.7	16	14.3	11	26,123	34	1.8	10	71	1
Machias-Eastport	7.7	27	19.0	15	29,635	27	4.2	3	72	1
Skowhegan	8.5	29	14.9	14	35,222	10	-0.8	19	72	1
Stonington	3.1	3	19.0	15	29,136	29	-4.2	25	72	1
Calais	10.7	33	19.0	15	35,036	12	-0.2	16	76	2
Ellsworth-Bar Harbor	5.9	19	10.2	6	33,071	20	-12.2	32	77	2
Dexter-Pittsfield	9.2	31	14.8	13	33,274	17	-3.7	24	85	3
Patten-Island Falls	9.4	32	14.3	11	26,160	33	0.6	14	90	3
Fort Kent	9.1	30	14.3	11	31,227	24	-5.8	28	93	3
Lincoln-Howland	11.3	34	14.8	13	31,886	22	-4.7	26	95	3
Millinocket-East Millinocket	16.7	35	13.7	9	33,119	19	-24.4	34	97	3
Greenville	6.7	24	14.8	13	26,193	32	-14.0	33	102	3
Jonesport-Milbridge	7.8	28	19.0	15	24,472	35	-24.8	35	113	3

Unemployment rates are averages for the December 2003 through November 2004 period.

Poverty rates are based on 2000 estimates by county from the U.S. Census Bureau.

Average wages for workers covered by Maine Employment Security Law and Unemployment Compensation for Federal Employees are for the period from the third quarter of 2003 through the second quarter of 2004.

Employment growth is based on the change in covered employment for the period from the second quarter of 2003 to the second quarter of 2004.

Composite rank is the sum of rankings of the four selected variables.

GTI score: 0 = up to 100% of average composite score; 1 = 101% to 114%; 2 = 115% to 129%; and 3 = 130% or more.

Table 13

Table 15

Change in Jobs by Industry in Maine Between 2001 and 2003 (Sorted by 2003 Average Annual Wage)					
Job Gains*			Job Losses		
Industry	Change in Jobs	Average Annual Wage	Industry	Change in Jobs	Average Annual Wage
Lessors of nonfinancial intangible assets	3	\$62,413	Securities and commodity contracts brokerage	-20	\$86,251
Electronic markets and agents and brokers	273	60,653	Pharmaceutical and medicine manufacturing	-39	76,768
Chemical merchant wholesalers	4	55,153	Pulp, paper, and paperboard mills	-1,915	62,436
Electric goods merchant wholesalers	45	52,922	Other financial investment activities	-46	61,709
Federal Government	168	52,150	Wired telecommunications carriers	-238	59,318
Management and technical consulting services	74	48,713	Offices of physicians	-87	58,294
Legal services	252	48,103	Semiconductor and electronic component mfg.	-1,419	58,285
Apparel and piece goods merchant wholesalers	199	47,796	Telecommunications resellers	-158	57,251
Basic chemical manufacturing	0	47,196	Natural gas distribution	-12	55,016
Waste treatment and disposal	29	45,925	Power generation and supply	-65	54,909
Soap, cleaning compound, and toiletry mfg.	18	45,403	Internet publishing and broadcasting	-25	53,883
Office administrative services	224	45,313	Management of companies and enterprises	-131	52,410
Facilities support services	12	44,666	Commercial equip. merchant wholesalers	-13	51,446
Highway, street, and bridge construction	33	44,087	Insurance carriers	-203	49,683
Insurance agencies, brokerages, and related	286	43,662	Data processing and related services	-82	49,277
Independent artists, writers, and performers	5	43,054	Architectural and engineering services	-261	48,559
Electronic equipment repair and maintenance	89	43,013	Computer systems design and related services	-1,038	47,917
Scientific research and development services	208	41,826	Paper and paper product merchant wholesalers	-85	46,488
Fishing	57	41,593	Timber tract operations	-6	46,363
Iron and steel mills and ferroalloy mfg.	3	41,550	Communications equipment manufacturing	-227	46,198
Dairy product manufacturing	42	41,389	Industrial machinery manufacturing	-50	46,151
Ag., construction, and mining machinery mfg.	34	41,301	Metal and mineral merchant wholesalers	-13	45,984
Wireless telecommunications carriers	34	40,947	Activities related to credit intermediation	-40	45,553
Medical and diagnostic laboratories	33	40,903	Electrical equipment manufacturing	-127	44,827
Offices of dentists	219	40,817	Land subdivision	-24	44,807
Petroleum and coal products manufacturing	50	40,532	Other heavy construction	-104	43,805
Nonresidential building construction	40	40,279	Machinery and equipment rental and leasing	-19	43,234
Other telecommunications	26	40,219	ISPs and web search portals	-106	42,410
Utility system construction	97	39,686	Druggists' goods merchant wholesalers	-90	41,812
Agents and managers for public figures	8	39,583	Commercial machinery repair and maintenance	-55	41,811
Lumber and const. supply merchant wholesalers	119	39,507	Hardware and plumbing merchant wholesalers	-13	41,781
Cable and other subscription programming	220	39,059	Other fabricated metal product manufacturing	-3	41,480
Unclassified	59	38,711	Support activities for water transportation	-30	41,406
Automobile dealers	129	38,408	Beverage manufacturing	-11	41,385
General medical and surgical hospitals	1,939	38,234	Petroleum merchant wholesalers	-138	40,914
Software publishers	83	37,465	Machinery and supply merchant wholesalers	-110	40,807
Other chemical product and preparation mfg.	57	37,380	Metalworking machinery manufacturing	-237	40,782
Colleges and universities	125	37,119	Other general purpose machinery manufacturing	-206	40,548
Insurance and employee benefit funds	5	37,025	Water, sewage and other systems	-162	40,477
Grantmaking and giving services	16	36,773	Converted paper product manufacturing	-131	39,613
Motor vehicle parts manufacturing	15	36,478	Machine shops and threaded product mfg.	-295	38,684
Alcoholic beverage merchant wholesalers	11	36,202	Rubber product manufacturing	-81	38,347
State Government	487	36,094	Accounting and bookkeeping services	-51	38,250
Building equipment contractors	52	35,781	Electronic instrument manufacturing	-73	37,578
Offices of real estate agents and brokers	131	35,375	Architectural and structural metals mfg.	-280	36,602

cont. on page 50

Table 13-cont. from page 49

Change in Jobs by Industry in Maine Between 2001 and 2003 (Sorted by 2003 Average Annual Wage)					
Job Gains*			Job Losses		
Industry	Change in Jobs	Average Annual Wage	Industry	Change in Jobs	Average Annual Wage
Educational support services	70	\$35,161	Grain and oilseed milling	-2	\$36,329
Nonscheduled air transportation	0	34,765	Boiler, tank, and shipping container mfg.	-10	36,250
Motor vehicle body and trailer manufacturing	13	34,531	Plastics product manufacturing	-252	36,002
Depository credit intermediation	185	34,051	Grocery and Related Product Wholesalers	-72	35,935
Furniture and furnishing merchant wholesalers	329	33,980	Cement and concrete product manufacturing	-226	35,176
Other nonmetallic mineral products	13	32,619	Couriers	-7	35,113
Agricultural chemical manufacturing	7	32,265	Support activities for forestry	-41	34,524
Other investment pools and funds	2	32,181	General freight trucking	-456	34,421
Remediation and other waste services	44	32,113	Fabric mills	-266	34,042
Motor vehicle and parts merchant wholesalers	100	31,921	Plywood and engineered wood product mfg.	-13	34,004
Other specialty trade contractors	294	31,505	Radio and television broadcasting	-58	33,931
Misc. durable goods merchant wholesalers	27	31,095	Glass and glass product manufacturing	-15	33,911
Activities related to real estate	125	31,090	Animal slaughtering and processing	-51	33,478
Offices of other health practitioners	317	30,736	Other electrical equipment and component mfg.	-112	33,347
Misc. nondurable goods merchant wholesalers	102	30,577	Advertising and related services	-132	33,203
Other hospitals	36	29,256	Coating, engraving, and heat treating metals	-61	32,940
Specialized freight trucking	143	29,171	Animal food manufacturing	-3	32,903
Other motor vehicle dealers	79	28,498	Leather and hide tanning and finishing	-111	32,480
Residential building construction	510	28,112	Newspaper, book, and directory publishers	-223	32,368
Building foundation and exterior contractors	21	28,023	Freight transportation arrangement	-24	32,072
Bakeries and tortilla manufacturing	81	28,011	Warehousing and storage	-221	31,972
Support activities for air transportation	20	27,951	Commercial and service industry machinery	-2	31,964
Local Government	1,652	27,871	Medical equipment and supplies manufacturing	-11	31,590
Elementary and secondary schools	297	27,468	Sawmills and wood preservation	-77	31,233
Furniture stores	89	27,350	Printing and related support activities	-219	31,135
Professional and similar organizations	25	27,103	Direct selling establishments	-17	29,822
Building material and supplies dealers	187	26,570	Other textile product mills	-603	29,793
Other professional and technical services	81	26,346	Magnetic media manufacturing and reproducing	-28	29,751
Health and personal care stores	17	26,328	Household and institutional furniture mfg.	-154	29,746
Textile furnishings mills	277	26,230	Sea, coastal, and Great Lakes transportation	-2	29,714
Social advocacy organizations	182	26,174	Animal aquaculture	-86	29,504
Other support activities for transportation	34	26,093	Nonmetallic mineral mining and quarrying	-3	29,431
Death care services	5	26,017	Outpatient care centers	-42	29,373
Other food manufacturing	11	25,836	Automotive equipment rental and leasing	-161	29,049
Automotive repair and maintenance	107	25,180	Logging	-125	29,000
Other support services	165	24,899	Specialized design services	-30	28,861
Other residential care facilities	165	24,858	Footwear manufacturing	-1,475	28,714
Other ambulatory health care services	49	24,056	General rental centers	-3	28,647
Lessors of real estate	124	23,229	Building finishing contractors	-147	28,374
Residential mental health facilities	401	23,111	Specialty food stores	-82	28,238
Other miscellaneous store retailers	154	23,060	Business, computer and management training	-68	28,037
Other transportation equipment manufacturing	2	22,934	HVAC and commercial refrigeration equipment	-133	27,997
Technical and trade schools	29	22,878	Other wood product manufacturing	-556	27,832
Postal service	1	22,686	Foundries	-24	27,769
Religious organizations	11	22,642	Scheduled air transportation	-38	27,684

cont. on page 51

Table 13-cont. from page 50

Change in Jobs by Industry in Maine Between 2001 and 2003 (Sorted by 2003 Average Annual Wage)					
Job Gains*			Job Losses		
Industry	Change in Jobs	Average Annual Wage	Industry	Change in Jobs	Average Annual Wage
Jewelry, luggage, and leather goods stores	66	\$22,272	Waste collection	-52	\$27,266
Business support services	249	21,994	Beer, wine, and liquor stores	-67	27,266
Investigation and security services	69	21,746	Electronics and appliance stores	-57	26,921
Nursing care facilities	270	21,113	Household goods repair and maintenance	-11	26,608
Interurban and rural bus transportation	21	20,536	Office furniture and fixtures manufacturing	-152	25,790
Vocational rehabilitation services	142	20,125	Travel arrangement and reservation services	-160	25,689
Farm product raw material merch. whls.	5	20,069	Cutlery and handtool manufacturing	-9	25,680
Individual and family services	1,179	19,644	Inland water transportation	-1	24,661
Cattle ranching and farming	77	19,415	Fruit and vegetable preserving and specialty	-37	24,600
Greenhouse and nursery production	45	19,341	Auto parts, accessories, and tire stores	-61	24,540
Other schools and instruction	215	19,229	Fiber, yarn, and thread mills	-31	24,325
Support activities for road transportation	34	18,847	Home health care services	-59	22,832
Community care facilities for the elderly	297	18,210	Other miscellaneous manufacturing	-172	22,706
Other general merchandise stores	1,759	17,216	Emergency and other relief services	-74	22,457
Vegetable and melon farming	37	17,113	Vending machine operators	-60	22,403
Scenic and sightseeing transportation, water	10	17,055	Promoters of performing arts and sports	-5	22,393
Other amusement and recreation industries	684	16,568	Cut and sew apparel manufacturing	-708	22,349
Consumer goods rental	111	15,869	Clay product and refractory manufacturing	-29	22,219
School and employee bus transportation	67	15,671	Spring and wire product manufacturing	-5	21,671
Grocery stores	263	15,568	Lawn and garden equipment and supplies stores	-30	21,585
Child day care services	86	15,370	Seafood product preparation and packaging	-190	21,537
Personal care services	211	14,695	Museums, historical sites, zoos, and parks	-10	21,071
Gasoline stations	460	14,197	Home furnishings stores	-200	20,851
Special food services	62	13,647	Charter bus industry	-15	20,580
Sugar and confectionery product manufacturing	21	13,499	Shoe stores	-65	19,970
Spectator sports	21	13,084	Other information services	-103	19,880
Full-service restaurants	971	13,036	Employment services	-737	19,749
Civic and social organizations	82	12,231	Poultry and egg production	-8	19,731
Other crop farming	27	12,175	Other leather product manufacturing	-10	19,722
Scenic and sightseeing transportation, land	7	11,297	RV parks and recreational camps	-12	19,614
Limited-service eating places	644	10,867	Junior colleges	-21	19,295
Taxi and limousine service	33	10,390	Other personal services	-13	18,982
*Also includes industries with no change in jobs.			Sporting goods and musical instrument stores	-72	18,941
			Support activities for animal production	-3	18,736
Industries Not Discloseable			Private households	-117	18,670
Accessories and other apparel manufacturing	ND	ND	Fruit and tree nut farming	-89	18,465
Aerospace product and parts manufacturing	ND	ND	Other ground passenger transportation	-19	18,395
Alumina and aluminum production	ND	ND	Support activities for crop production	-45	18,208
Apparel knitting mills	ND	ND	Services to buildings and dwellings	-98	18,055
Audio and video equipment manufacturing	ND	ND	Office supplies, stationery, and gift stores	-49	17,297
Cable and other program distribution	ND	ND	Drycleaning and laundry services	-68	17,104
Computer and peripheral equipment mfg.	ND	ND	Department stores	-1,933	17,053
Electric lighting equipment manufacturing	ND	ND	Performing arts companies	-49	16,594
Electronic shopping and mail-order houses	ND	ND	Gambling industries	-27	15,922
Forest nursery and gathering forest products	ND	ND	Traveler accommodation	-113	15,768
Forging and stamping	ND	ND			

cont. on page 52

Table 13-cont. from page 51

Change in Jobs by Industry in Maine Between 2001 and 2003 (Sorted by 2003 Average Annual Wage)					
Industries Not Discloseable			Job Losses		
Industry	Change in Jobs	Average Annual Wage	Industry	Change in Jobs	Average Annual Wage
Hardware manufacturing	ND	ND	Used merchandise stores	-51	\$15,711
Local messengers and local delivery	ND	ND	Motion picture and video industries	-186	14,881
Nondepository credit intermediation	ND	ND	Other animal production	-9	14,690
Oilseed and grain farming	ND	ND	Clothing stores	-94	14,268
Other furniture related product manufacturing	ND	ND	Amusement parks and arcades	-14	14,066
Other nonferrous metal production	ND	ND	Book, periodical, and music stores	-110	13,073
Other pipeline transportation	ND	ND	Florists	-30	13,026
Paint, coating, and adhesive manufacturing	ND	ND	Rooming and boarding houses	-5	12,699
Pipeline transportation of crude oil	ND	ND	Drinking places, alcoholic beverages	-156	11,780
Pipeline transportation of natural gas	ND	ND			
Psychiatric and substance abuse hospitals	ND	ND			
Railroad rolling stock manufacturing	ND	ND			
Resin, rubber, and artificial fibers mfg.	ND	ND			
Scenic and sightseeing transportation, other	ND	ND			
Sheep and goat farming	ND	ND			
Ship and boat building	ND	ND			
Sound recording industries	ND	ND			
Steel product mfg. from purchased steel	ND	ND			
Support activities for mining	ND	ND			
Support activities for rail transportation	ND	ND			
Textile and fabric finishing mills	ND	ND			
Turbine and power transmission equipment mfg.	ND	ND			
Urban transit systems	ND	ND			



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