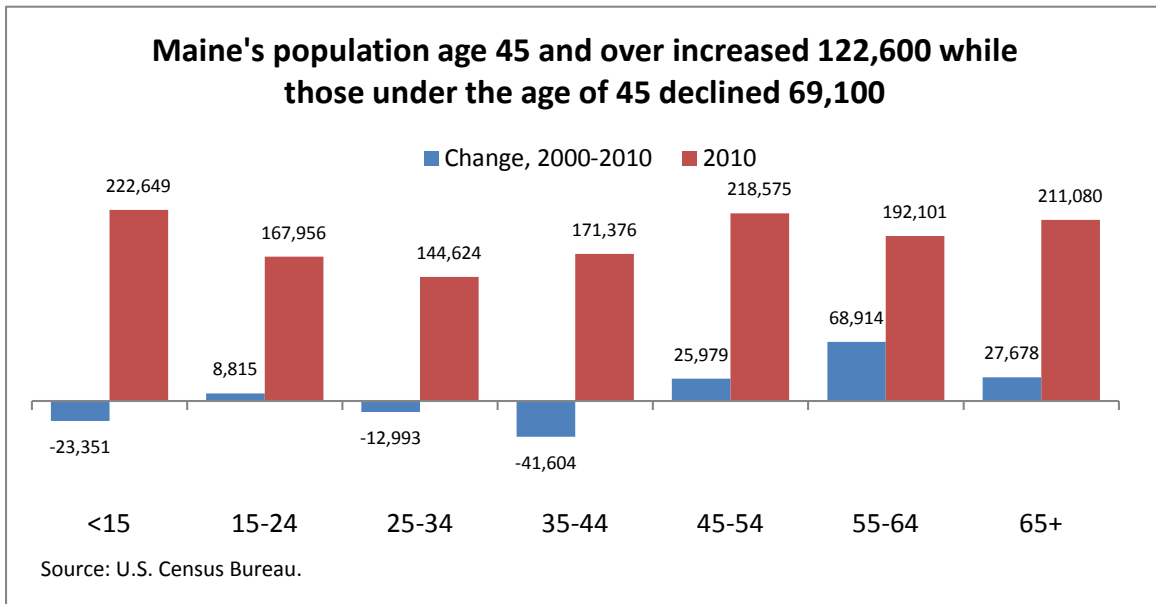


## The Maine Labor Force—Aging and Slowly Growing

The leading edge of the Baby Boomer segment of the labor force reached the traditional retirement age of 65 in 2011; the youngest Baby Boomers will reach 65 in 2029. This holds significant implications for the workforce as workers born between 1946 and 1964 retire over the next twenty years. An aging, slowly growing population and the declining rate of residents participating in the labor force will result in slow labor force growth during the coming years.

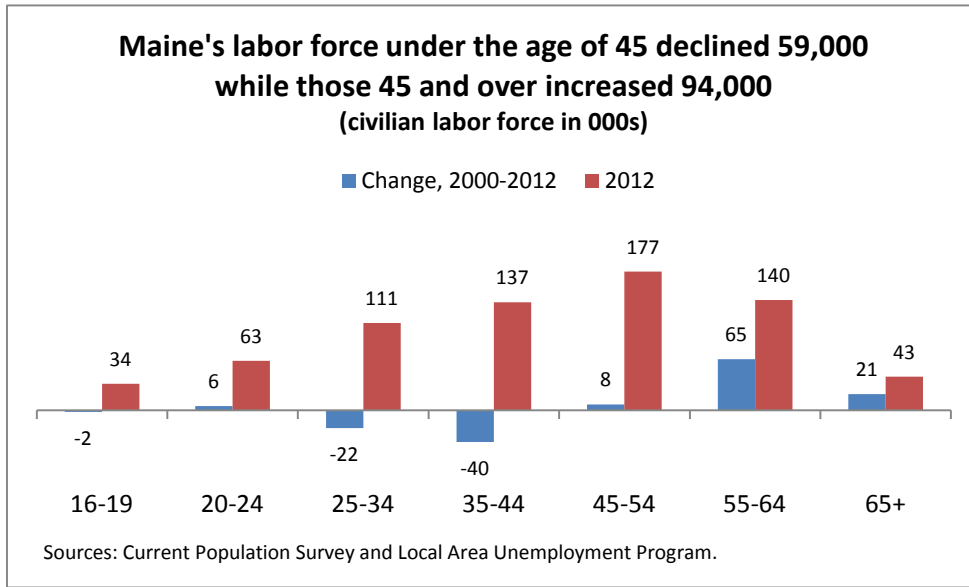
### The changing demographic landscape

The movement of the Baby Boomers through the population has changed the demographic landscape. The number of Maine residents over the age of 44 increased 122,600 between 2000 and 2010 (Baby Boomers were aged 46 to 64 years of age in 2010); the number under the age of 45 fell 69,100.

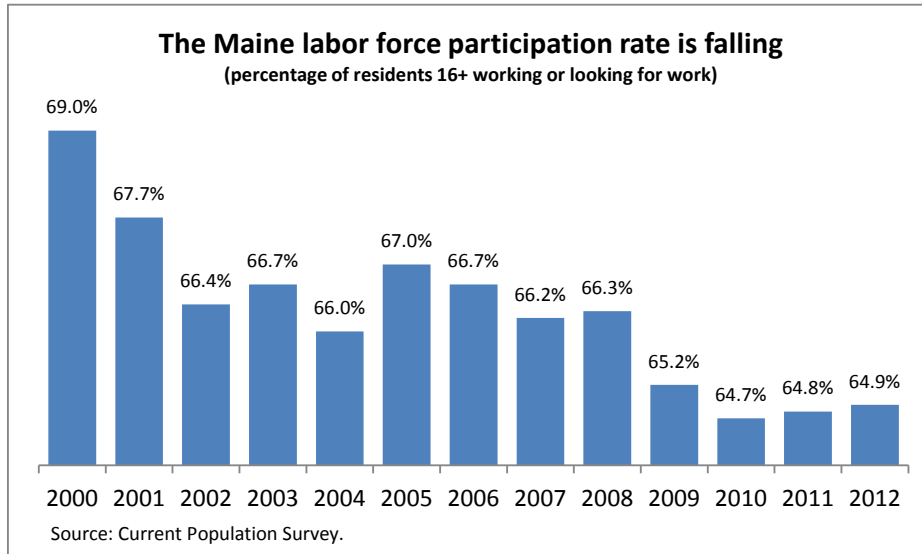


### The aging Maine labor force

The labor force grew older as the population aged and participation rates for younger workers declined between 2000 and 2012. Labor force participants under the age of 45 fell 59,000 while those 45 and over increased 94,000.



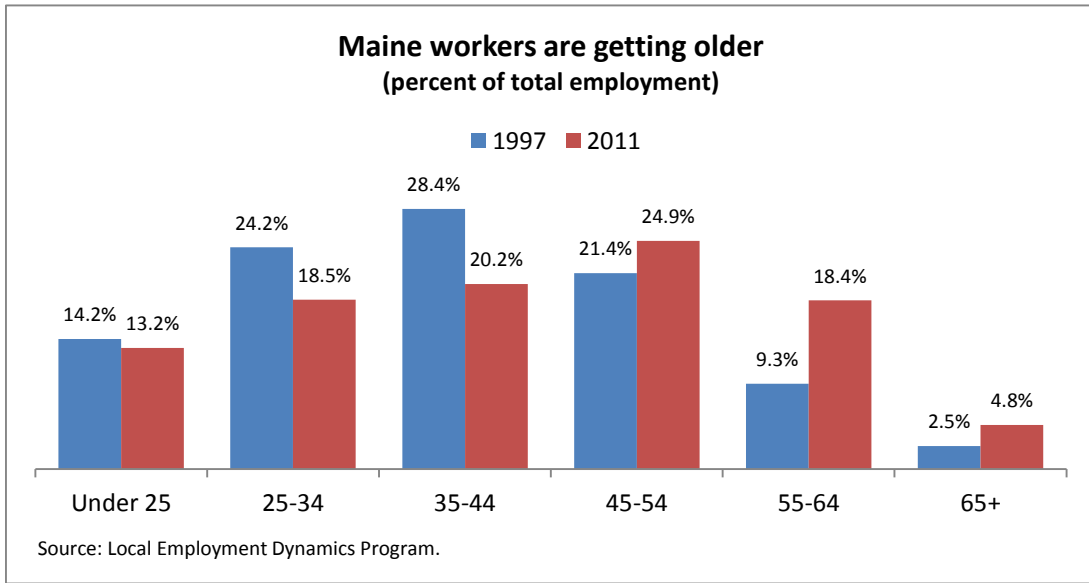
In the last twelve years, despite an increase of more than 80,000 in the civilian noninstitutional population 16 years of age and older, the labor force increased by only 34,000—a result of a drop in the percentage of residents working or looking for work. Two forces were at play: the total participation rate fell as the population aged (after the prime working years of 25 to 54, the participation rate starts to decline) and younger worker participation rates dropped due to poor economic conditions and other factors.



**The age of the workforce varies by industry and county**

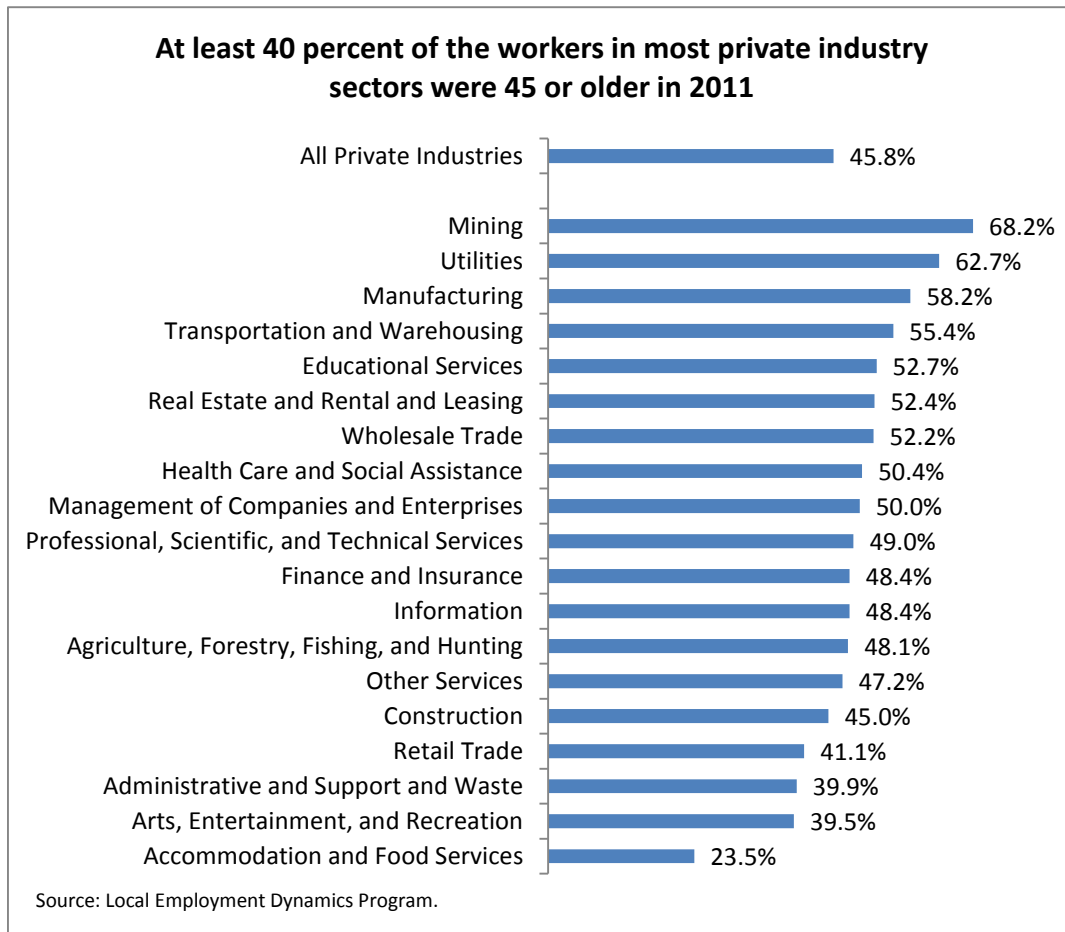
Employment data used in the following analysis of the age profile of Maine workers by industry comes from the Local Employment Dynamics Program (LED) unless otherwise noted. LED defines employment as workers who were employed by the same employer in both the current and previous quarter.

Between 1997 (the first year employment data by age from the LED was available) and 2011, employment increased 37,000. However, the workforce aged considerably. The number of workers under the age of 45 declined 59,000, while those over the age of 44 increased 96,000, led by a gain of 83,000 Baby Boomer workers (45 to 64). During the next ten years 18 percent of current Maine workers will reach the age of 65; during the next twenty years that percentage will rise to 43 percent.



**Almost half of all private industry workers are over 44 years old**

Currently, 46 percent of private industry workers are at least 45 years old. Within the next twenty years, at least 40 percent of the current workforce for most sectors will be 65 or older.



Of immediate concern are those Baby Boomers who will be eligible to retire during the next ten years, currently age 55 to 64, and workers 65 and over—workers that age are most likely to leave the labor force or

reduce their work hours. Workers age 55 or over accounted for 22 percent of the workforce in 2011; by industry sector the percentage ranged from 10 percent (accommodation and food services) to 30 percent (mining).

Employment in 2011 by Private Industry Sector in Maine (sorted by percent aged 55 and older)		
Industry Sector	Employment	
	Total*	Percent 55+**
Mining	203	30.2%
Real Estate and Rental and Leasing	6,265	28.0%
Educational Services	11,496	27.7%
Transportation and Warehousing	15,007	26.2%
Utilities	1,609	25.9%
Manufacturing	50,768	25.4%
Health Care and Social Assistance	99,451	24.5%
Professional, Scientific, and Technical Services	23,444	23.4%
Other Services	16,384	23.3%
Agriculture, Forestry, Fishing, and Hunting	5,903	22.9%
Wholesale Trade	19,054	22.4%
Management of Companies and Enterprises	7,139	22.4%
Information	8,260	22.4%
Arts, Entertainment, and Recreation	8,030	21.1%
Retail Trade	81,127	20.8%
Finance and Insurance	23,958	19.9%
Administrative and Support and Waste	26,766	18.4%
Construction	25,202	18.3%
Accommodation and Food Services	52,127	10.1%
All Private Industries	482,311	21.5%

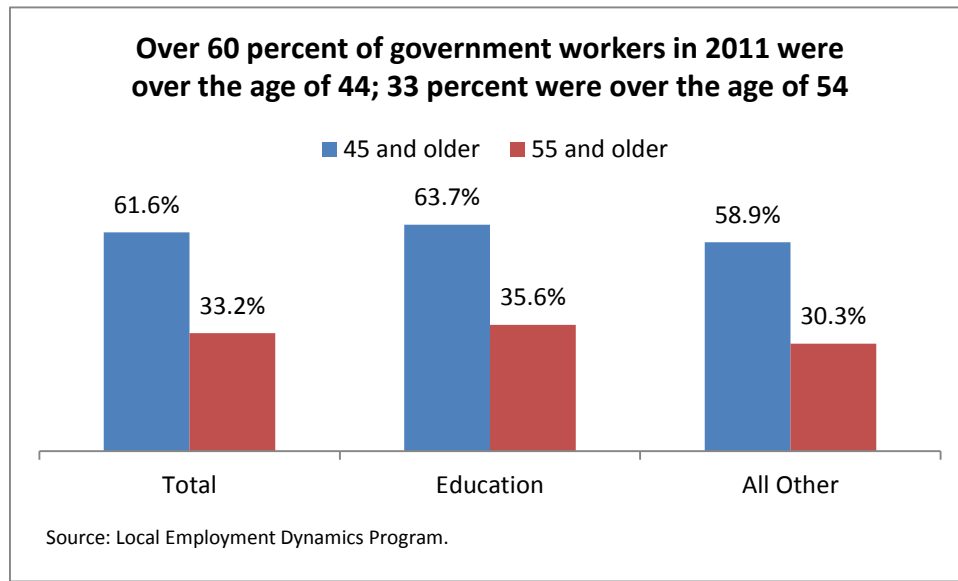
\*Quarterly Census of Employment and Wages.

\*\*Local Employment Dynamics Program.

### ***Government workers are older, on average, than private sector workers***

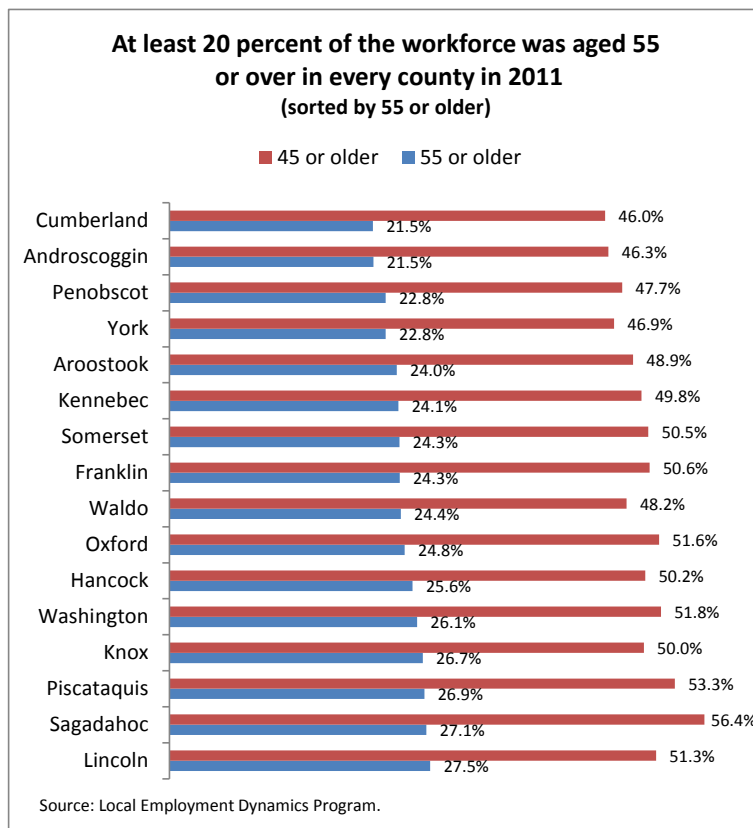
On average, government workers are older than workers in the private sector. Almost 62 percent of government workers are currently over the age of 44 compared to 46 percent of private sector workers; 33 percent of government workers are over the age of 54 compared to 22 percent of private sector workers.

There were 97,400 government employees (federal, state, and local) in 2011. Public schools, the University of Maine system, the Maine Community College system, and other government-operated educational institutions accounted for 56 percent of state and local government workers. Nearly 64 percent of all educational services workers were over the age of 44 and 36 percent over the age of 54.



### Rural Counties Have Older Workforces

No county will escape the demographic challenge posed by the aging workforce. Even in Cumberland County, which has the youngest workforce, 22 percent are 55 years of age or older and 46 percent are 45 or older. The urban, more populous counties (Cumberland, Androscoggin, Penobscot, and York) were the only counties with the average age of the workforce below the statewide average in 2011. These counties have younger populations and are centers of commerce with a concentration of industries that employ, on average, younger workers.



## Aging workforce is expected to result in many job openings between 2010 and 2020

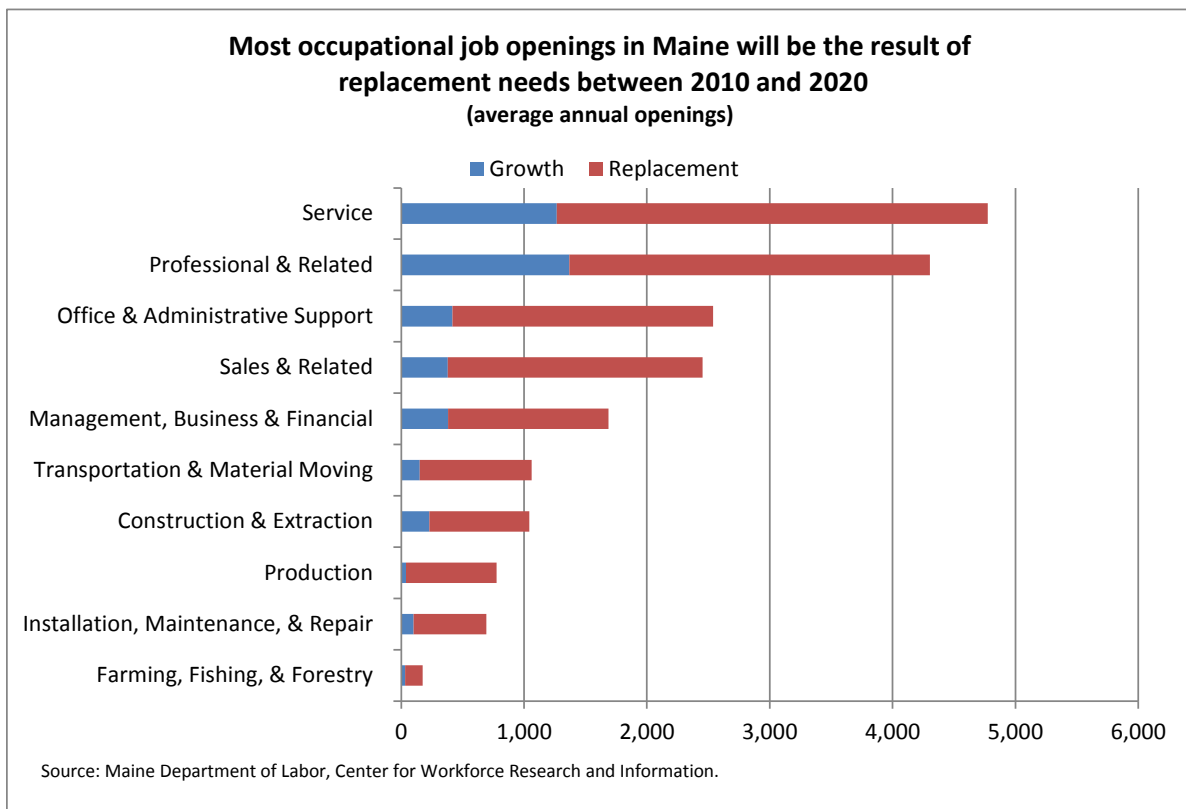
The impact of near-term replacement needs, measured by the number and percent of workers age 55 and over, depends on the industry. Some sectors have a large percentage of workers over the age of 54, but employ a relatively small number of older workers and will need relatively few replacement workers—mining; real estate, rental, and leasing; and utilities are examples.

Manufacturing has a high share of workers over the age of 54. This sector will need to replace experienced workers, with the demand for workers tempered somewhat by expected job losses. However, according to an article from the Journal of the American Enterprise Institute published January 28, 2013, “... there is general consensus by both the Boston Consulting Group and the manufacturing industry that any skilled worker shortages today will be eclipsed by much larger challenges in the coming decade because of the pending wave of retirements.”

Two industry sectors stand out due to the large share of workers 55 and over; the health care and social assistance sector and education sector (public and private). In addition to high replacement needs, jobs in both of these sectors are expected to increase faster than average between 2010 and 2020.

Individual industries are listed in Appendix A at the end of this brief. The percentage of workers over the age of 54 ranged from 8 percent in eating and drinking places to 44 percent in transit and ground passenger transportation.

Within each industry, workers are employed in a wide variety of occupations. Projections developed by the Maine Department of Labor indicate an expected 19,500 job openings annually between 2010 and 2020, with 4,400 due to job growth and 15,100 due to replacement needs. The replacement needs stem from workers permanently leaving their occupation, primarily due to retirements. For projections of job openings by individual occupation, go to <http://www.maine.gov/labor/cwri/outlook.html>.



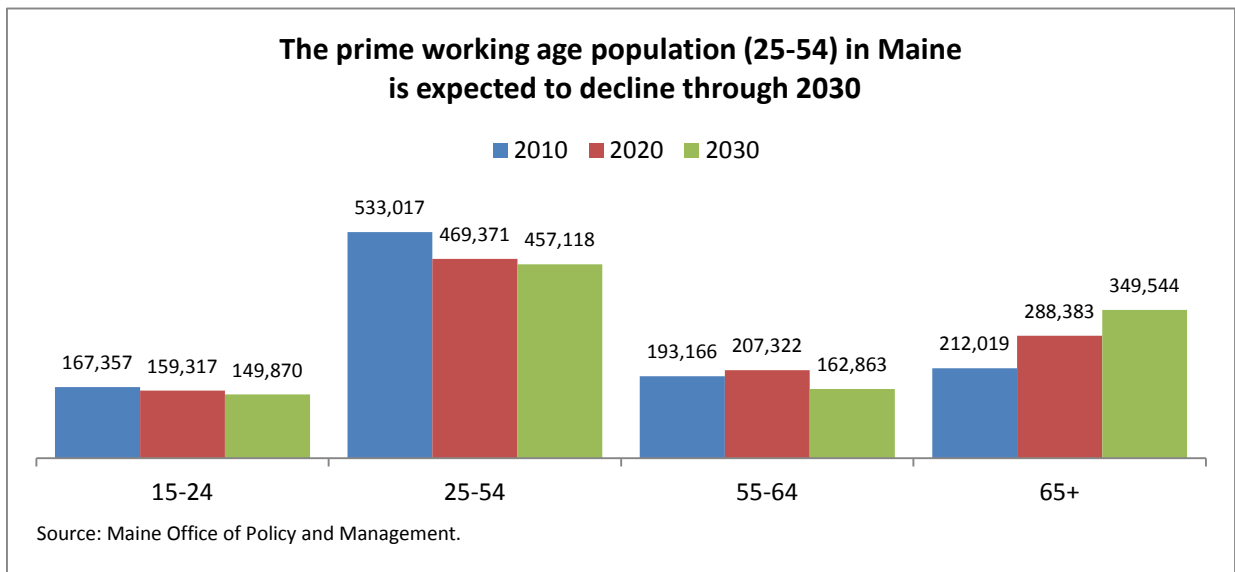
**Where will the future labor supply come from?**

The extent to which labor force growth materializes depends on population changes and within-age-group changes in labor force participation.

***The population is expected to grow slowly and older***

Between 2010 and 2012, there was little population gain (+830) in Maine according to U.S. Census Bureau estimates. Slow population growth is expected through 2030 (latest projections from the Maine Office of Policy and Management) with little, if any, natural increase (births less deaths) and substantial net in-migration unlikely.

Not only is the total population expected to increase minimally over the next two decades, net gains are anticipated only by the population 65 years of age or older; this will result in a downward pressure on the percentage of the total population participating in the labor force. Population projections through 2030 also indicate there will be a significant decline in the prime working age population (25 to 54).



***Future labor force growth will likely depend on rising participation by older workers***

Without positive changes in labor force participation rates within age groups, the changing age distribution of the population, combined with slow population growth, will lead to a reduction in the size of the labor force. The share of the total population working or looking for work (labor force participation rate) slows significantly after age 50. Thus, as aging baby boomers move into their 60s, the rising share of older Mainers is playing a significant and growing role in slowing labor force growth. However, the participation rate of older workers has been rising and, though still much lower than prime age worker rates, has provided some additional labor force growth.

The participation rates for age groups younger than 55 dropped during the 2000s due to poor economic conditions and other factors. As a result, there were 29,000 fewer labor force participants aged 16 to 54 than there would have been had participation rates remained at 2000 levels. Conversely, participation rates rose for workers over the age of 54, accounting for an additional 28,000 labor force participants.

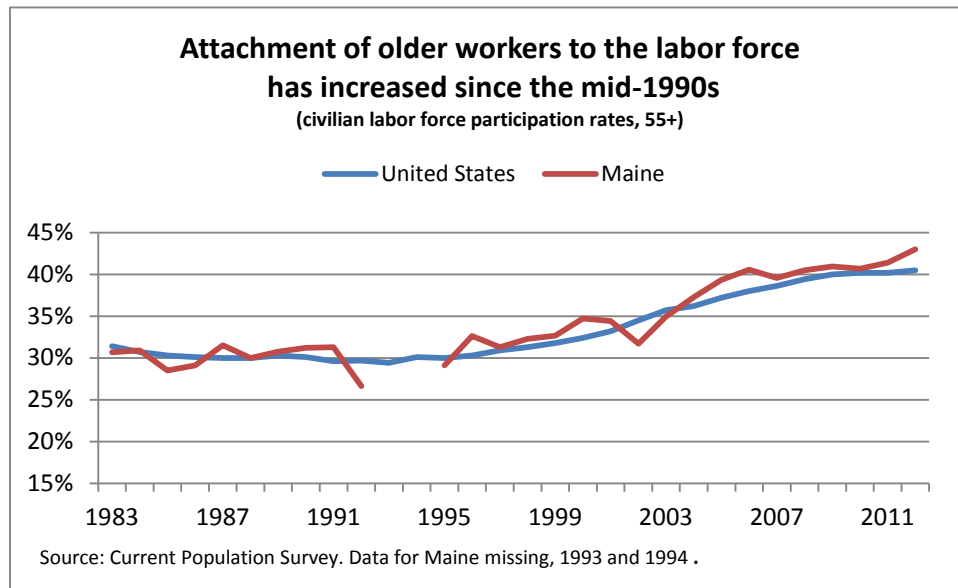
Labor Market Indicators by Age in Maine						
Age	Civilian Labor Force Participation Rate		Population*	Civilian Labor Force, 2012		
	2000	2012		2012	Actual	Adjusted**
16-24	69.1%	62.7%	155	97	107	-10
25-54	86.0%	82.3%	515	424	443	-19
55-64	61.6%	68.6%	204	140	126	+14
65 and over	13.9%	20.3%	210	43	29	+14

Source: Current Population Survey.

\*Civilian noninstitutional population in thousands.

\*\*2000 participation rates applied to 2011 population.

Data collected by the Bureau of Labor Statistics since 1948 indicates that attachment to the labor force of older workers dropped steadily nationally until the mid-1990s, after which it began to increase. This trend also is evidenced in Maine data collected since 1983. Reasons cited for the increasing participation rate include improving health and lifespans, pension plan changes or losses, a chronic low savings rate resulting in a lack of adequate resources for retirement, rising health care costs, and, more recently, the downturn in the housing market.



Over the past 12 years, the labor force participation rate of workers age 55 and over continued to increase while other age groups withdrew from the labor market. Perhaps even more significant, the percentage of the population employed (employment to population ratio) increased for older workers while it declined for other age groups. Even with the onset of the Great Recession at the end of 2007, older workers, on average, had positive outcomes in labor force attachment and employment.

The population age 55 and over was more likely to be in the labor force and more likely to be employed as evidenced by rising employment levels and lower unemployment rates. Possible reasons for the apparent advantage older workers had in the labor market include seniority which allowed those with jobs to keep them, and the ability to take a part-time or lower-wage job to supplement retirement income, which made it easier to find and take available jobs.



Labor Market Indicators by Age in Maine						
Indicators	2000	2007	2012	Change		
				2000-2007	2007-2012	2000-2012
<b>Labor Force Participation Rate</b>						
16-24	69.1%	64.5%	62.7%	-4.6%	-1.8%	-6.4%
25-54	86.0%	84.3%	82.3%	-1.7%	-2.0%	-3.7%
55 and over	34.7%	39.6%	44.1%	4.9%	4.5%	9.4%
<b>Unemployment Rate</b>						
16-24	8.3%	11.2%	16.7%	2.9%	5.5%	8.4%
25-54	2.6%	3.9%	6.6%	1.3%	2.7%	4.0%
55 and over	3.0%	2.8%	5.5%	-0.2%	2.7%	2.5%
<b>Employment to Population Ratio</b>						
16-24	63.3%	56.6%	52.4%	-6.7%	-4.2%	-10.9%
25-54	83.9%	81.1%	76.8%	-2.8%	-4.3%	-7.1%
55 and over	33.7%	38.5%	41.7%	4.8%	3.2%	8.0%

Source: Current Population Survey.

Many forecasters expect older Americans to work longer due better health, increased life expectancies, changing preferences, or changing inducements provided by government and business. In addition, a report by The Conference Board, published January 2013, finds that "... in 2012 a much larger share of the 45—60 population plans to delay retirement: from 42 percent in 2010 to 62 percent in 2012, triggered by continued depletion of savings and decline in home values, as well as pay and benefit stagnation and job losses." The report also finds that the trend of delaying retirement has accelerated faster than expected and is likely to continue in coming years as more baby boomers reach their 60s and continue working. While some of the factors the Conference Board cited as promoting increased participation in the labor force by older workers may be mitigated and partially offset the upward trend, it is expected that the participation rate of those age 55 and over will continue to rise. The rising participation rate, combined with the increase in the population of this age group, is expected to lead to labor force gains in this age group through 2020 and beyond.

Both nationally and in Maine, labor force participation rates for the population under the age of 55 dropped between 2000 and 2012. Maine projections developed by the Maine Department of Labor indicate little change for these age groups between 2010 and 2020. The combination of falling population and minimal change in labor force participation rates in Maine is expected to result in a declining labor force between 2010 and 2020 for age groups under the age of 55.

As a result of the projected trends by age group, the participation rate for all workers is expected to decline from 64.3 percent to 63.2 percent. The net result of expected changes in the population and within-group labor force participation rates is a slowly growing labor force between 2010 and 2020, with the net gain of about 19,000 accounted for by an increase in the labor force 55 years of age or older.

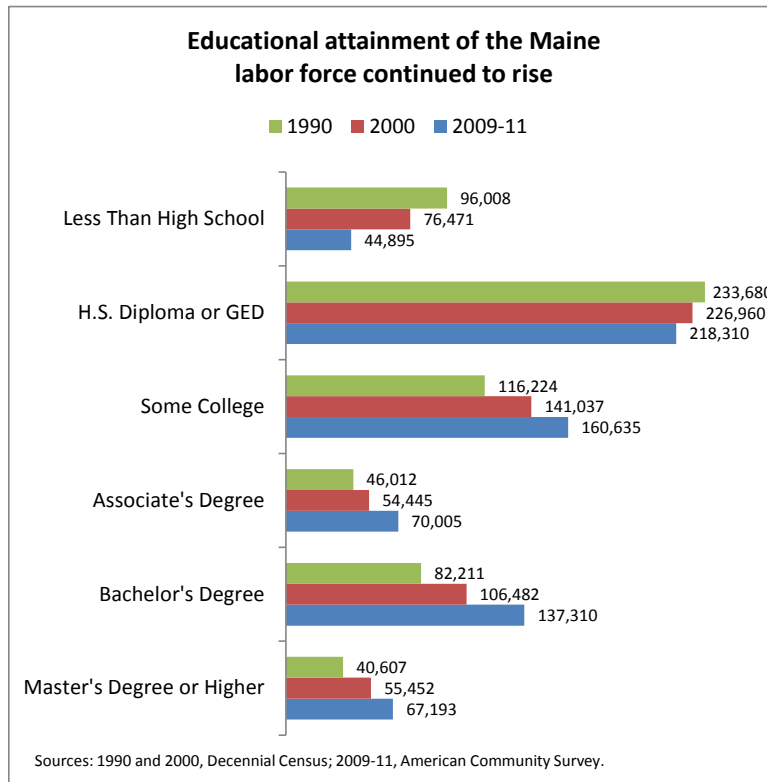
Labor Market Indicators by Age in Maine, 2010 Estimates and 2020 Projections							
Age	Population*		Participation Rate		Civilian Labor Force		
	2010	2020	2010	2020	2010	2020	Change
16-24	151,500	123,100	63.2%	62.6%	95,800	77,000	-18,800
25-54	534,600	506,800	83.2%	83.1%	444,900	421,100	-23,800
55-64	192,100	214,600	64.2%	69.9%	123,300	150,000	26,700
65+	211,100	292,300	17.2%	24.3%	36,300	71,000	34,700
Total	1,089,300	1,136,800	64.3%	63.2%	700,300	719,100	18,800

Source: 2010, Current Population Survey; 2020, Center for Workforce Research and Information.

\*Civilian noninstitutional.

### Labor quality is improving

While labor force gains resulting from the growing attachment of older workers to the labor force are anticipated to more than offset losses stemming from other demographic changes, the slowly growing and aging workforce will be a problem as employers seek to replace experienced workers and expand their businesses. One means of accommodating reduced quantity is to improve the quality of the workforce (current and future) through education. The Maine workforce is considerably more educated than it was twenty years ago, in response to not only the ongoing shift in demand toward occupations in the high end of the skill distribution, but also the higher level of skills needed in most occupations. Continued improvements in skill and education will enhance the productivity of the workforce and could offset, to some degree, the slow growth in the quantity of the workforce.



## Summary

The growth of the Maine economy during the next two decades will rely in large part on the quantity and quality of the workforce. Unless there are dramatic changes in immigration patterns, increasing the quantity will be restricted by a slowly growing, aging population. Enhancing worker productivity through increasing skills and education will help a slowly growing labor force meet the employer needs that arise in the next twenty years.

## Appendix A

Private Industry Employment in Maine, 2011 Annual Averages (sorted by age 55 or over)		
Industry	Percent	
	45 or over	55 or over
Total, All Private Industries	45.8%	21.5%
Transit & Ground Passenger Transportation	70.0%	43.9%
Museums, Historical Sites, & Similar Institutions	59.9%	42.4%
Private Households	62.7%	36.8%
Other Information Services	60.4%	36.6%
Water Transportation	54.7%	35.0%
Primary Metal Manufacturing	75.2%	34.2%
Funds, Trusts, & Other Financial Vehicles	71.8%	33.5%
Apparel Manufacturing	65.5%	33.4%
Real Estate	60.9%	33.0%
Paper Manufacturing	72.6%	32.7%
Textile Mills	65.0%	31.1%
Electrical Equipment, Appliance, & Component Manufacturing	64.8%	31.1%
Transportation Equipment Manufacturing	69.2%	30.6%
Support Activities for Agriculture & Forestry	53.6%	30.3%
Mining	66.5%	30.2%
Publishing Industries (except Internet)	57.7%	29.5%
Postal Service	55.2%	29.1%
Nonstore Retailers	58.6%	27.7%
Educational Services	52.7%	27.7%
Furniture & Home Furnishings Stores	51.4%	27.6%
Truck Transportation	58.3%	27.0%
Miscellaneous Manufacturing	55.4%	26.8%
Scenic & Sightseeing Transportation	41.8%	26.8%
Miscellaneous Store Retailers	45.6%	26.4%
Religious, Civic, Professional, & Similar Organizations	49.7%	26.0%
Utilities	62.7%	25.9%
Hospitals	54.5%	25.9%
Building Material & Garden Equipment & Supplies Dealers	49.5%	25.9%
Ambulatory Health Care Services	52.7%	25.7%

<b>Private Industry Employment in Maine, 2011 Annual Averages</b>		
<b>(sorted by age 55 or over)</b>		
<b>Industry</b>	<b>Percent</b>	
	<b>45 or over</b>	<b>55 or over</b>
Wholesale Electronic Markets & Agents & Brokers	56.4%	25.7%
Electronics & Appliance Stores	44.3%	25.3%
Warehousing & Storage	52.6%	24.9%
Machinery Manufacturing	56.9%	24.9%
Motor Vehicle & Parts Dealers	46.6%	24.7%
Computer & Electronic Product Manufacturing	57.7%	24.6%
Petroleum & Coal Products Manufacturing	54.5%	24.4%
Merchant Wholesalers, Durable Goods	55.8%	24.3%
Pipeline Transportation	53.2%	24.1%
Performing Arts, Spectator Sports, & Related Industries	42.2%	23.8%
Leather & Allied Product Manufacturing	55.3%	23.5%
Professional, Scientific, & Technical Services	49.0%	23.4%
Fabricated Metal Product Manufacturing	51.4%	23.4%
Crop Production	45.9%	23.3%
Social Assistance	45.5%	23.1%
Support Activities for Transportation	47.6%	22.9%
Forestry & Logging	50.8%	22.8%
Nursing & Residential Care Facilities	46.1%	22.6%
Plastics & Rubber Products Manufacturing	55.0%	22.6%
Data Processing, Hosting & Related Services	49.0%	22.6%
Securities, Commodity Contracts, & Related Activities	50.6%	22.4%
Management of Companies & Enterprises	50.0%	22.4%
Fishing, Hunting & Trapping	47.0%	22.4%
Nonmetallic Mineral Product Manufacturing	49.2%	22.4%
Printing & Related Support Activities	52.7%	22.2%
Insurance Carriers & Related Activities	54.1%	22.0%
Food Manufacturing	48.3%	21.4%
General Merchandise Stores	40.2%	20.6%
Textile Product Mills	48.3%	20.4%
Personal & Laundry Services	38.4%	20.2%
Accommodation	39.6%	20.0%
Waste Management & Remediation Services	47.3%	19.8%
Wood Product Manufacturing	49.1%	19.8%
Heavy & Civil Engineering Construction	47.0%	19.8%
Animal Production	43.8%	19.7%
Health & Personal Care Stores	37.9%	19.7%
Construction of Buildings	47.9%	19.5%
Furniture & Related Product Manufacturing	51.8%	19.3%
Amusement, Gambling, & Recreation Industries	37.3%	18.9%

<b>Private Industry Employment in Maine, 2011 Annual Averages</b>		
<b>(sorted by age 55 or over)</b>		
<b>Industry</b>	<b>Percent</b>	
	<b>45 or over</b>	<b>55 or over</b>
Merchant Wholesalers, Nondurable Goods	46.3%	18.8%
Rental & Leasing Services	36.0%	18.5%
Administrative & Support Services	39.3%	18.3%
Repair & Maintenance	46.5%	18.2%
Chemical Manufacturing	45.2%	18.0%
Credit Intermediation & Related Activities	43.1%	17.6%
Broadcasting (except Internet)	44.0%	17.6%
Specialty Trade Contractors	43.5%	17.5%
Gasoline Stations	38.2%	17.2%
Air Transportation	37.1%	17.0%
Food & Beverage Stores	35.3%	16.8%
Sporting Goods, Hobby, Book, & Music Stores	32.2%	16.6%
Couriers & Messengers	51.5%	16.2%
Beverage & Tobacco Product Manufacturing	43.4%	14.8%
Telecommunications	43.3%	14.4%
Clothing & Clothing Accessories Stores	25.8%	14.3%
Motion Picture & Sound Recording Industries	22.6%	12.4%
Food Services & Drinking Places	19.2%	7.5%

Source: LED Program.