

Maine's Changing Labor Market

Introduction

Maine's economy and labor market have undergone substantial change over many decades. Population and labor force growth have varied; companies and entire industries have gone through lifecycle stages from inception to maturity, and some through decline and demise; and the types of occupations individuals hold, reflecting the functions they perform at work, have shifted. Underlying these changes are the vast changes in technology and the competitive landscape that have occurred.

The following is a high-level description of statewide change. The first section describes population trends that have impacted the size and rate of change in the labor force. This data is available back to 1950. The second describes job trends among industries. Comparable data is available back to 1990, with some exceptions. The third describes job trends among occupations. Comparable data is available back the early 2000s.

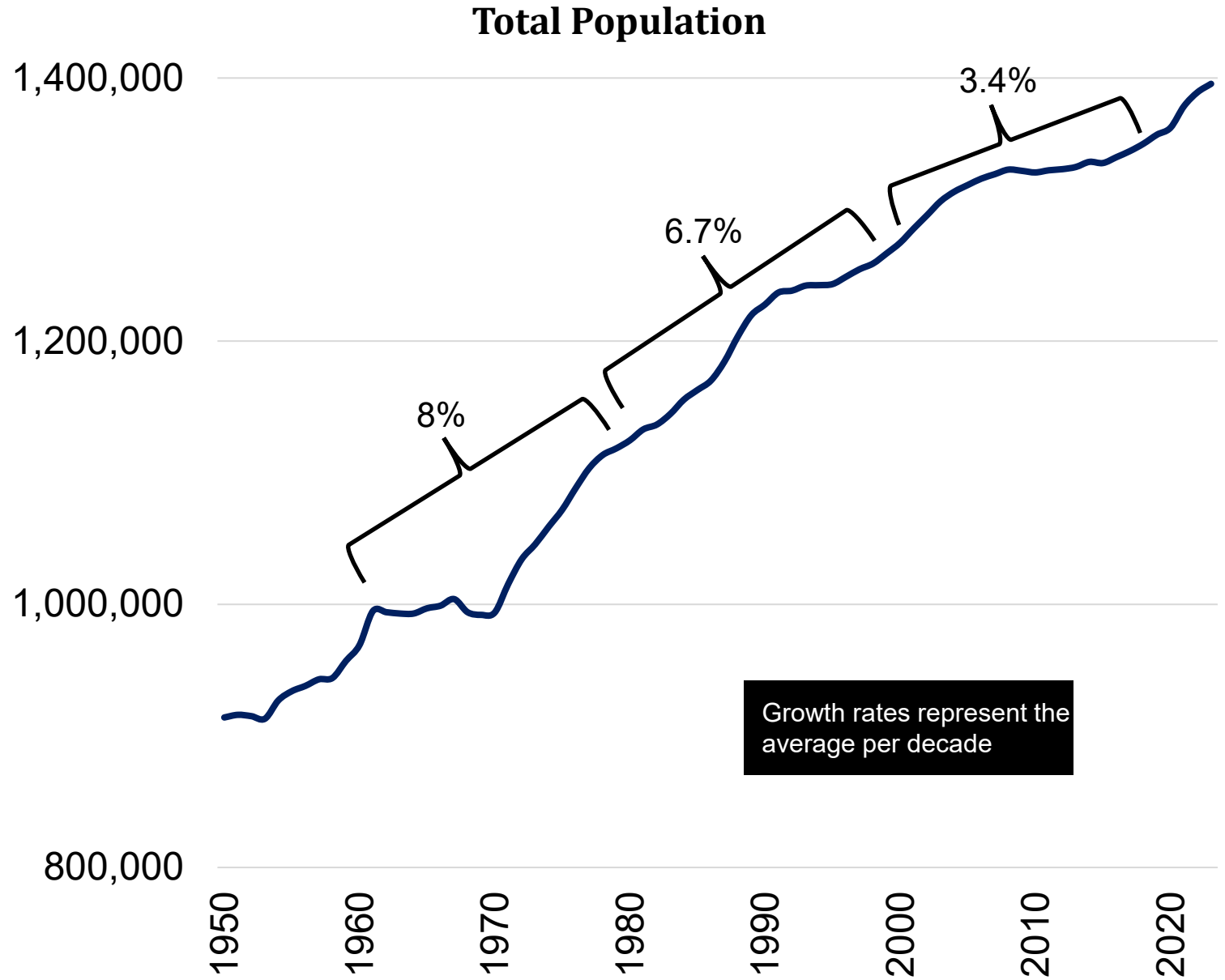
There has been much change over many years. Some of these patterns will continue and new patterns will emerge in the ever-changing labor market.

(Industries relate to the products or services of employers; occupations relate to the functions individuals perform for their employer.)

Population Trends Shaping Rates of Job Change

Population growth is slowing

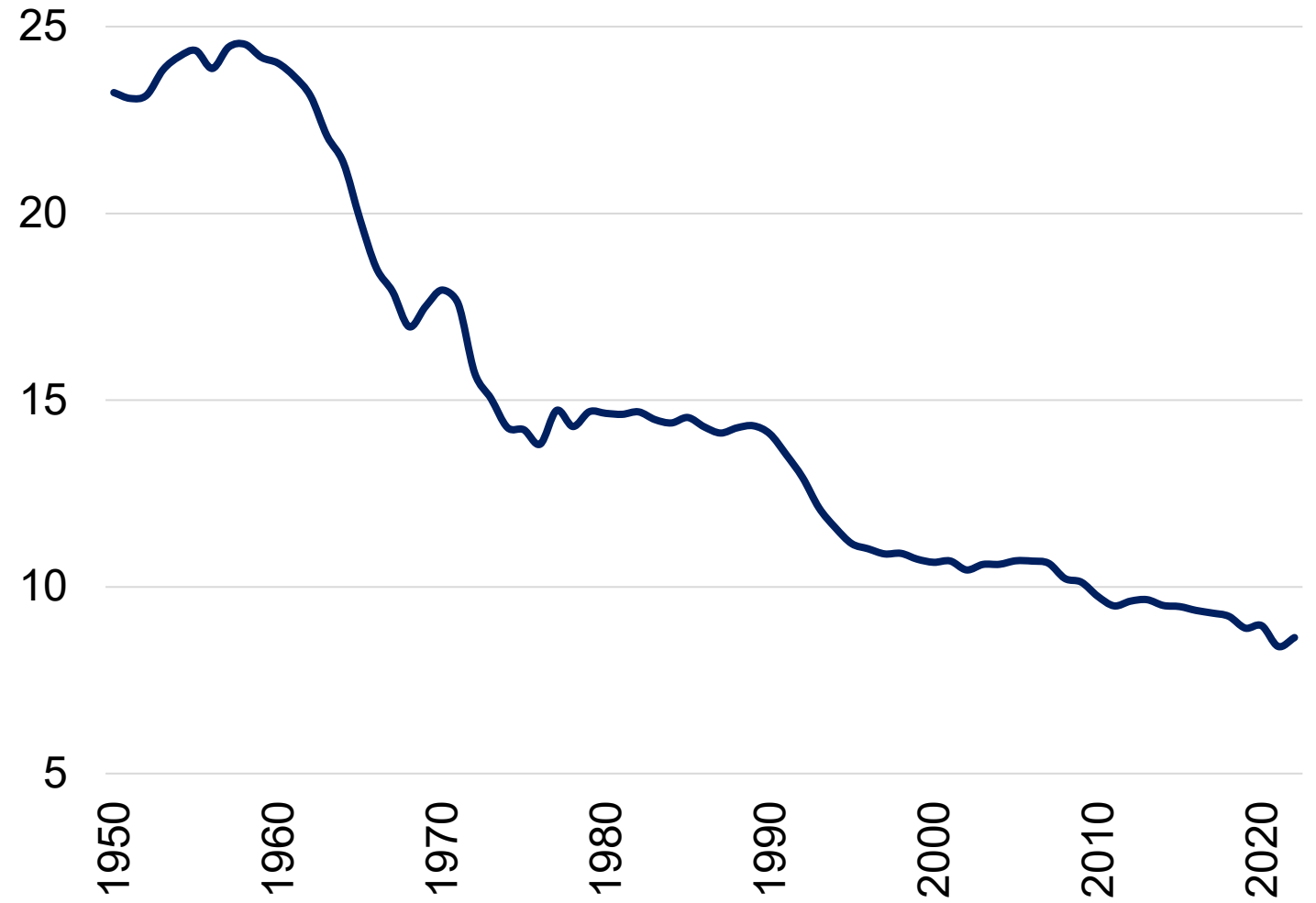
The rate of population growth in the 2000s is less than half that of the 1970s.



Birth rates have steadily decreased

Birth rates today are one-third those of the 1950s – at the height of the baby boom. This is the primary reason for slower population growth.

Births Per Thousand Residents

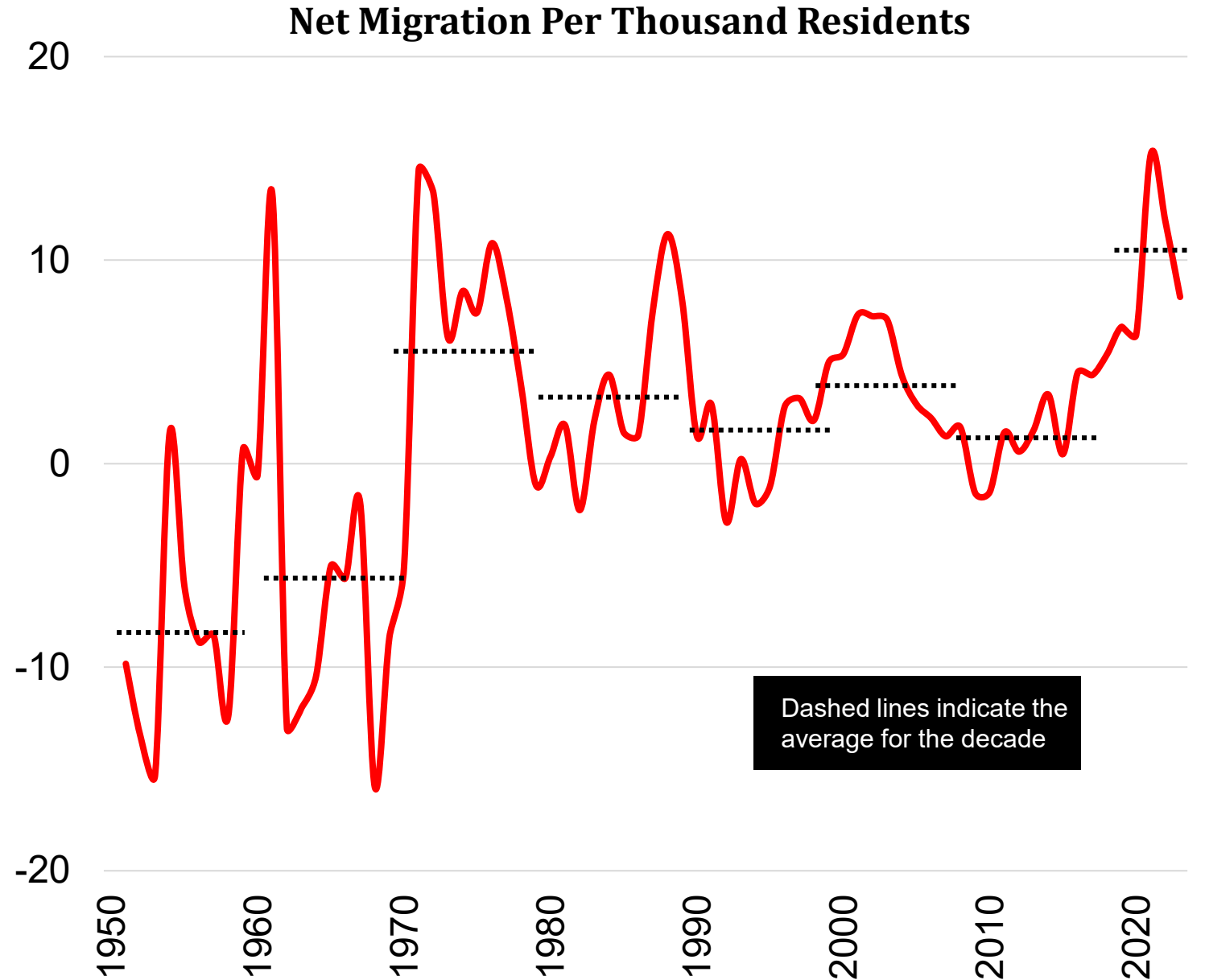


Net migration to the state has increased recently

The difference between the number of people moving into and out of the state is known as net migration. This has been quite variable over the years.

In the decade after 2010 it trended higher, and then spiked to 50-year highs after the onset of the pandemic. This occurred as many people chose to move to less densely populated areas, some with the newfound freedom to live where they choose working remotely.

Positive net migration partly offsets decreasing births to maintain the size of the population.

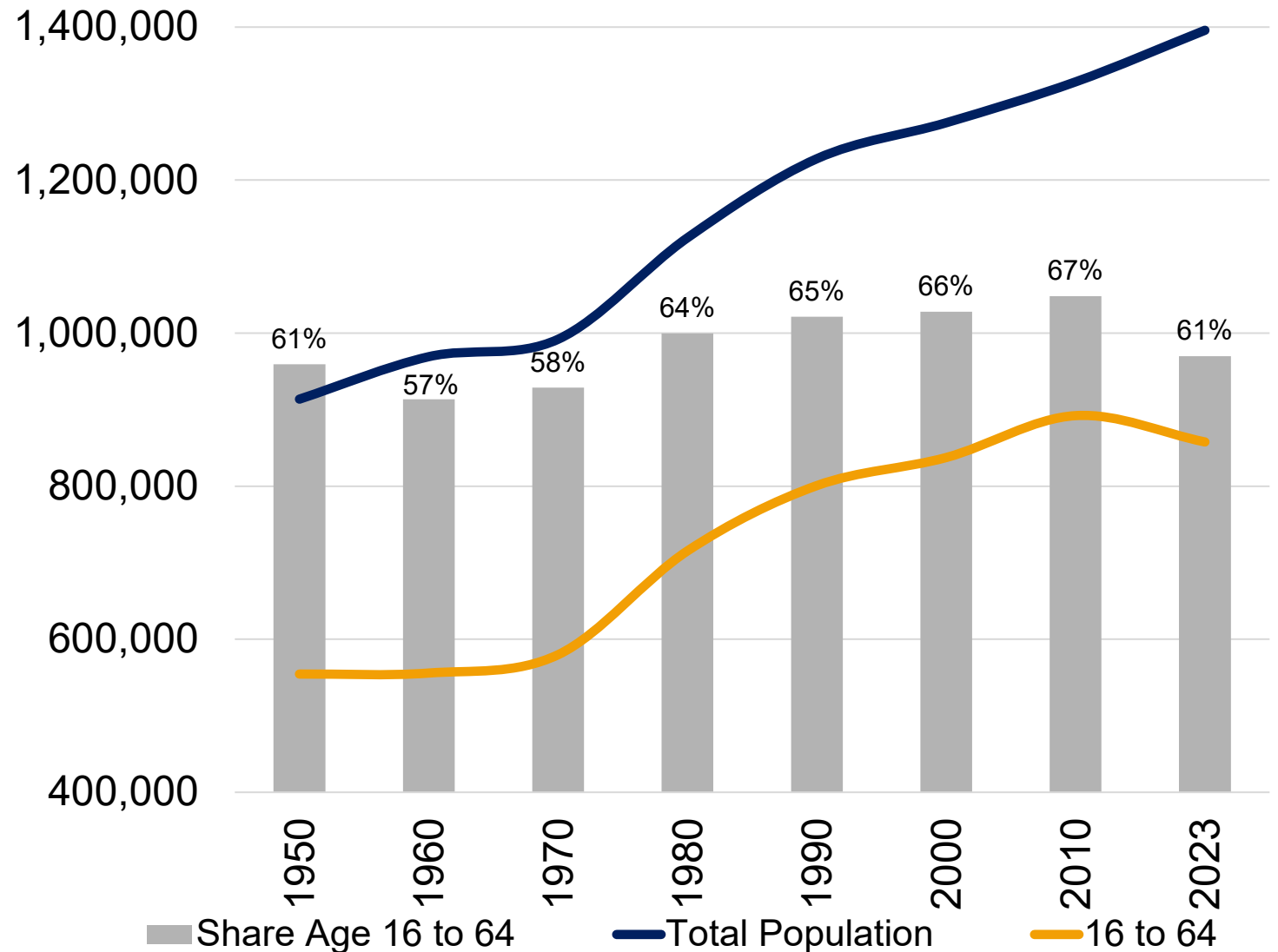


The working-age population peaked a decade ago

The 16 to 64 working-age population increased more rapidly than the total in the 50 years through 2010. Since then, it has decreased as a share of the total population, but also in size – even as the total continued to increase. The 61 percent working-age share today is the lowest since the 1970s.

There is a stark difference between the situation today and prior to 1980. Then the working-age share was lower because there were many under age 16. Now it is lower because so many are over age 64.

Total and Age 16 to 64 Population

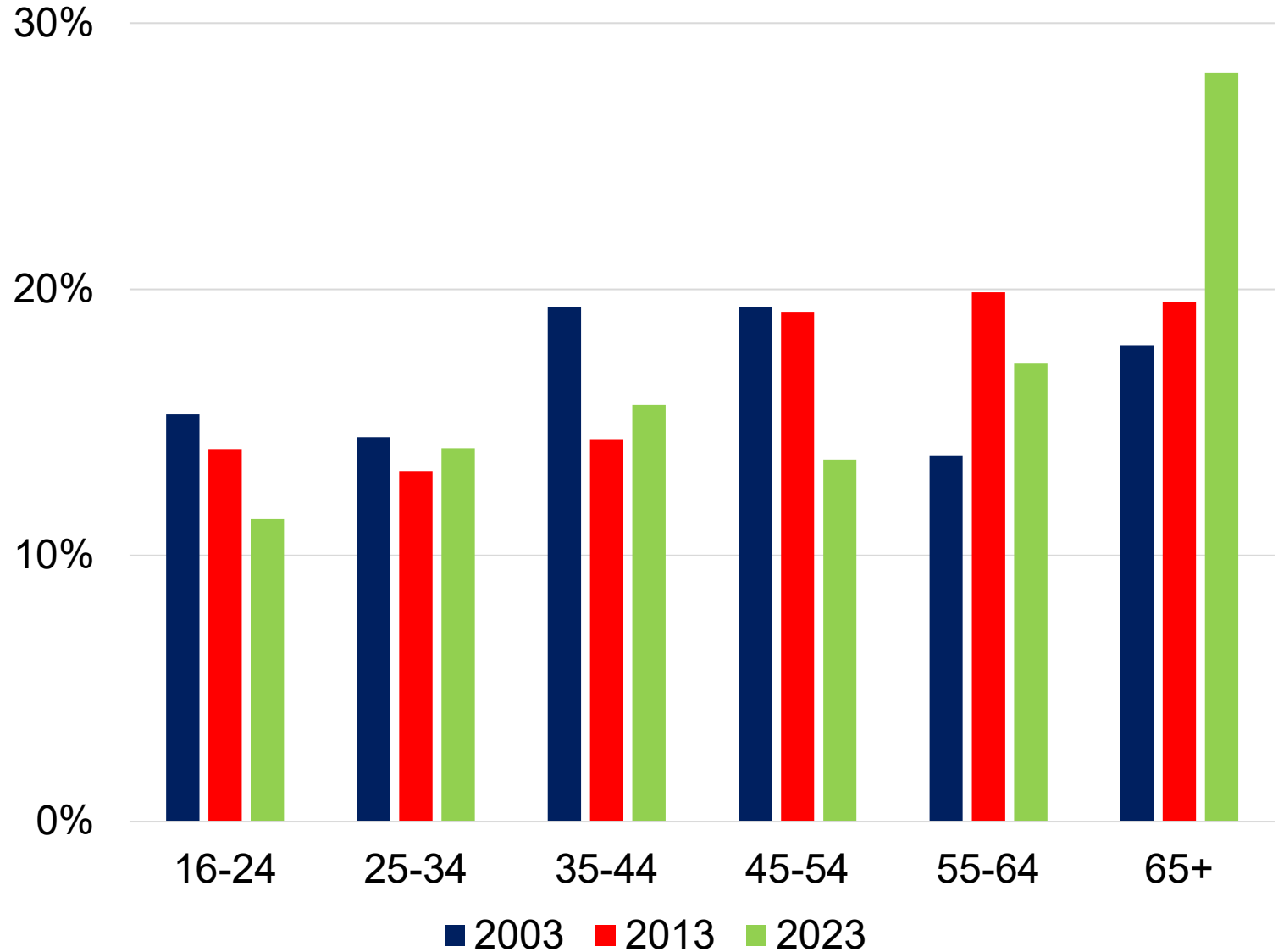


The population is getting older

Today, those 65 and over – most retired – outnumber those in each ten-year working-age cohort. Those 55 to 64 – most approaching retirement – are the second largest in number.

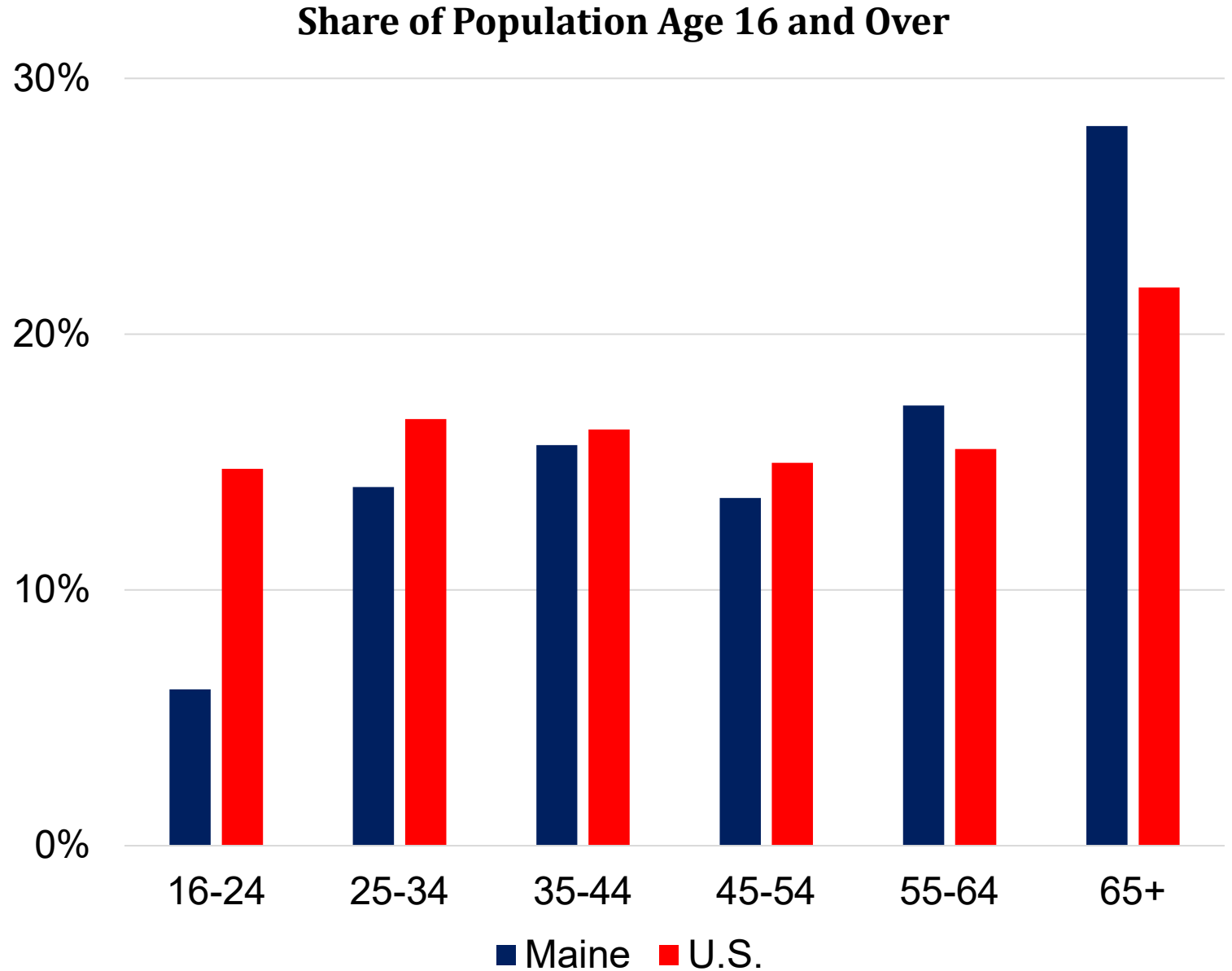
The age structure now is very different from anytime previously.

Share of Population Age 16 and Over



The population structure is older than the nation

Birth rates here decreased earlier and more sharply than most states. The result is a lower share of people under 35 and a higher share of people 55 and over relative to the nation. The state is the oldest by median age.

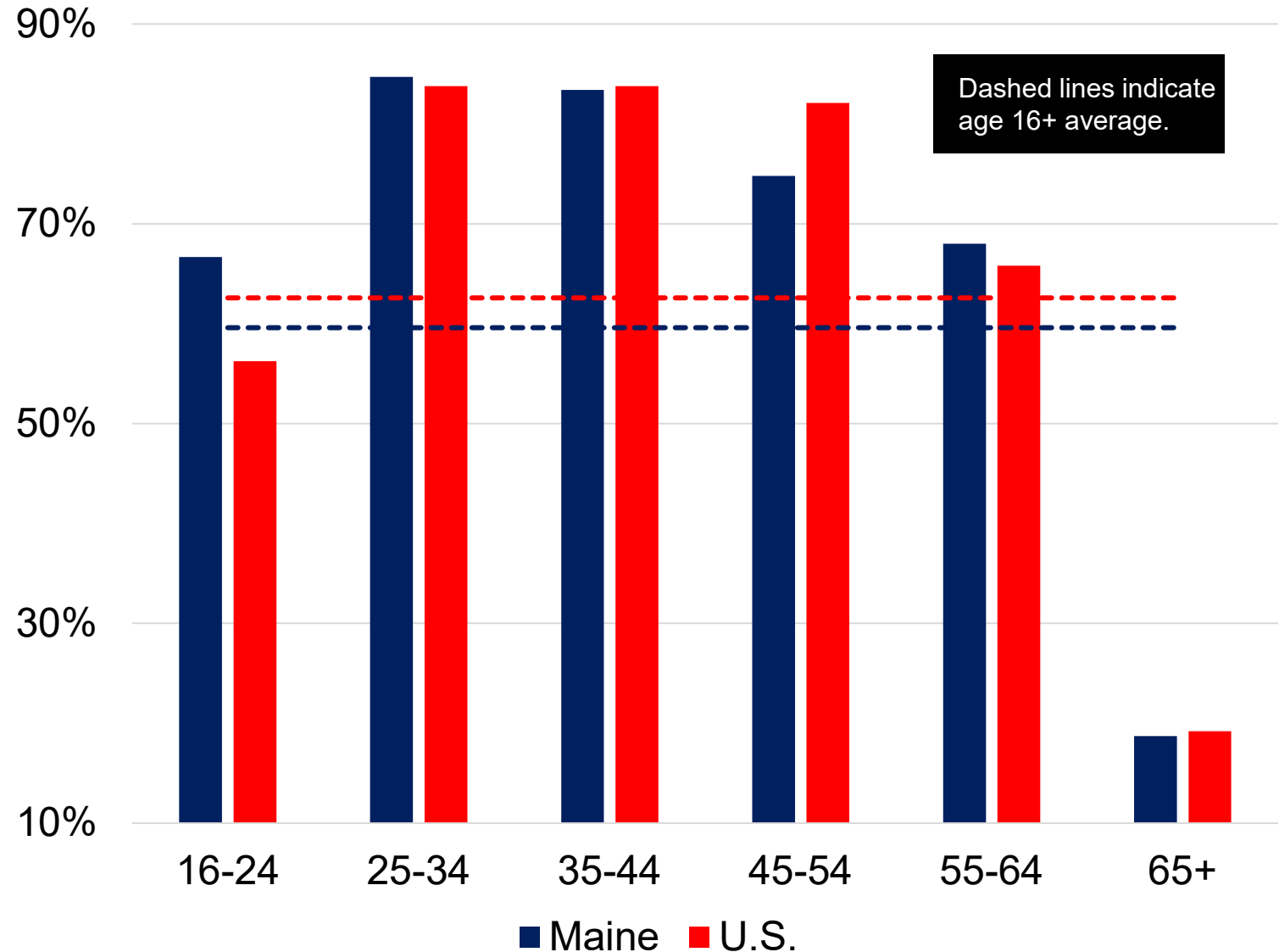


Labor force participation is close to national averages in all age groups

Labor force participation rates are similar to the nation for groups age 25 and over. Like the nation, participation is highest among those 25 to 54. The total rate (age 16+) is lower because of the state's higher than average share that are retirement age.

The most notable difference between Maine and the nation is among young people. Participation of those 16 to 24 is both higher than for the nation and it is higher than the average for all age groups combined.

Labor Force Participation Rate by Age Group

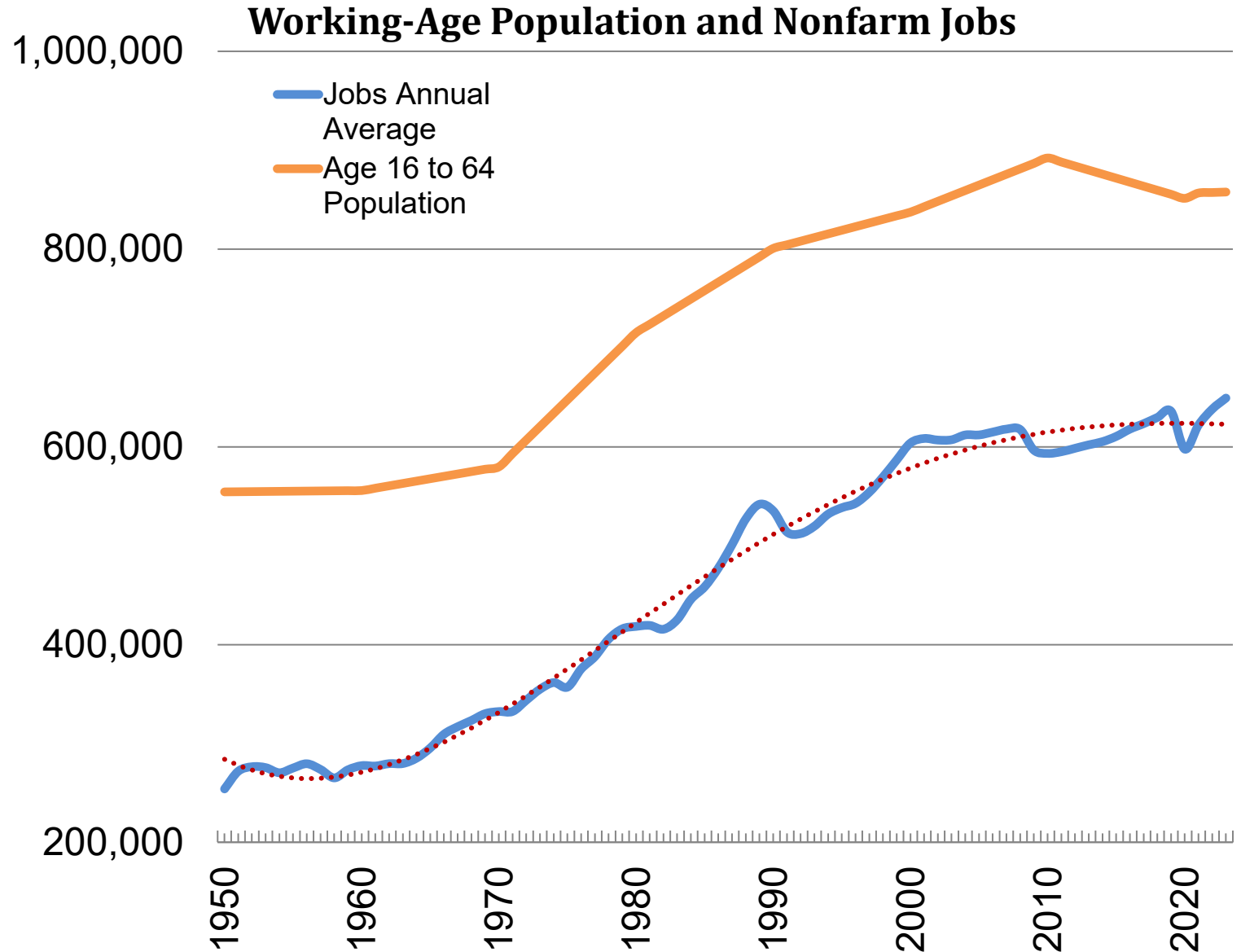


Changing Job Composition: Industries

Job growth has slowed

Job growth has progressively slowed since the 1980s, generally parallel to the working-age population. Except for recessions (beginning in 2008 and in 2020) and the following recoveries, net job growth in the 21st century has been quite modest.

Though the 16 to 64 population peaked a decade ago, it is notable that nonfarm jobs increased somewhat since then. The ratio of nonfarm jobs to working-age population was the highest on record in 2023, matching the level previously achieved in 2019.

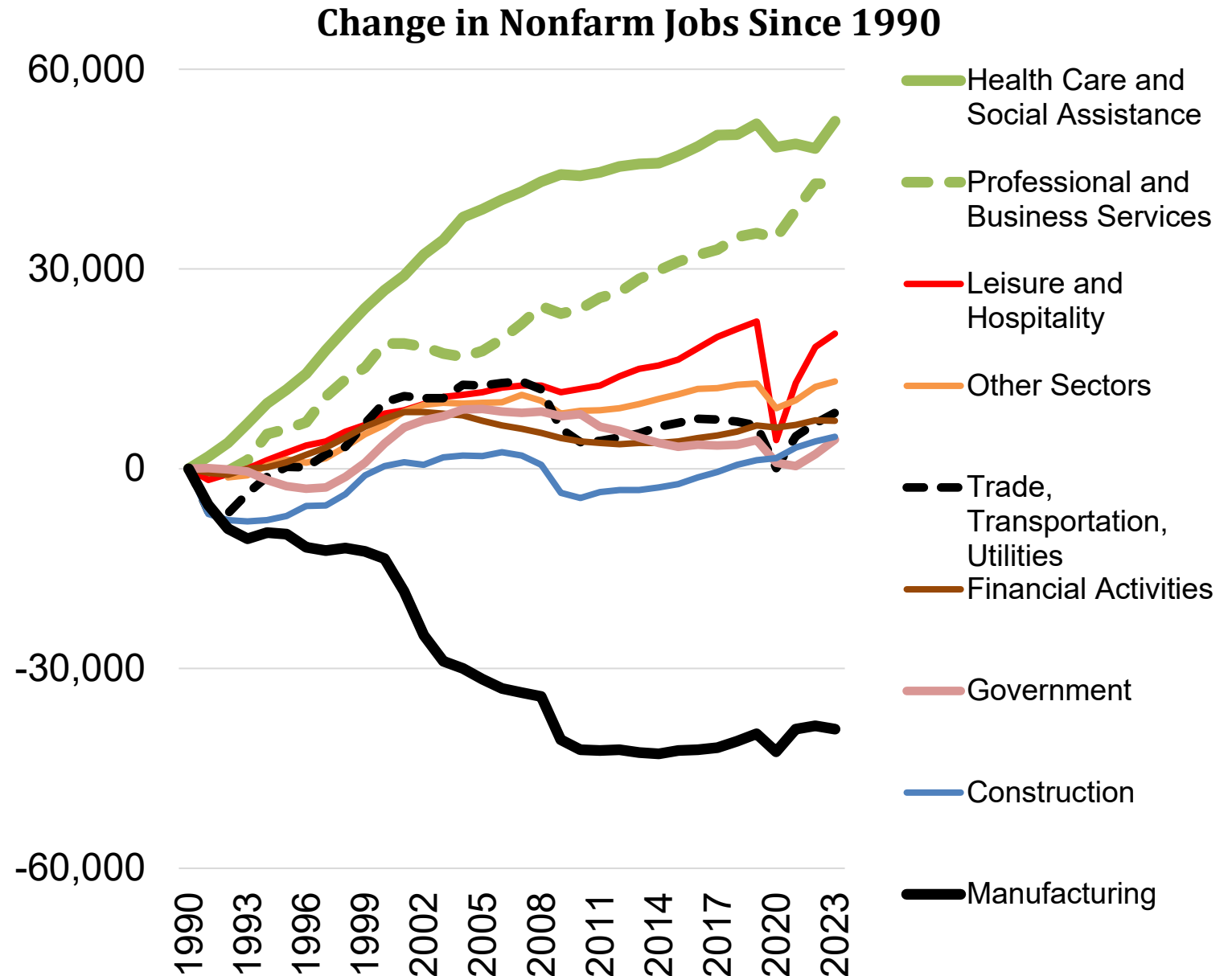


Job change has been concentrated in three sectors

Job gains in the last three decades were primarily in healthcare and social assistance and in professional and business services. Each of those sectors added more than 40,000 jobs. Gains in most other sectors were under 10,000.

Manufacturing jobs decreased more than 40,000 through 2010 and then stabilized thereafter.

(This level of industry detail is not available for years prior to 1990.)

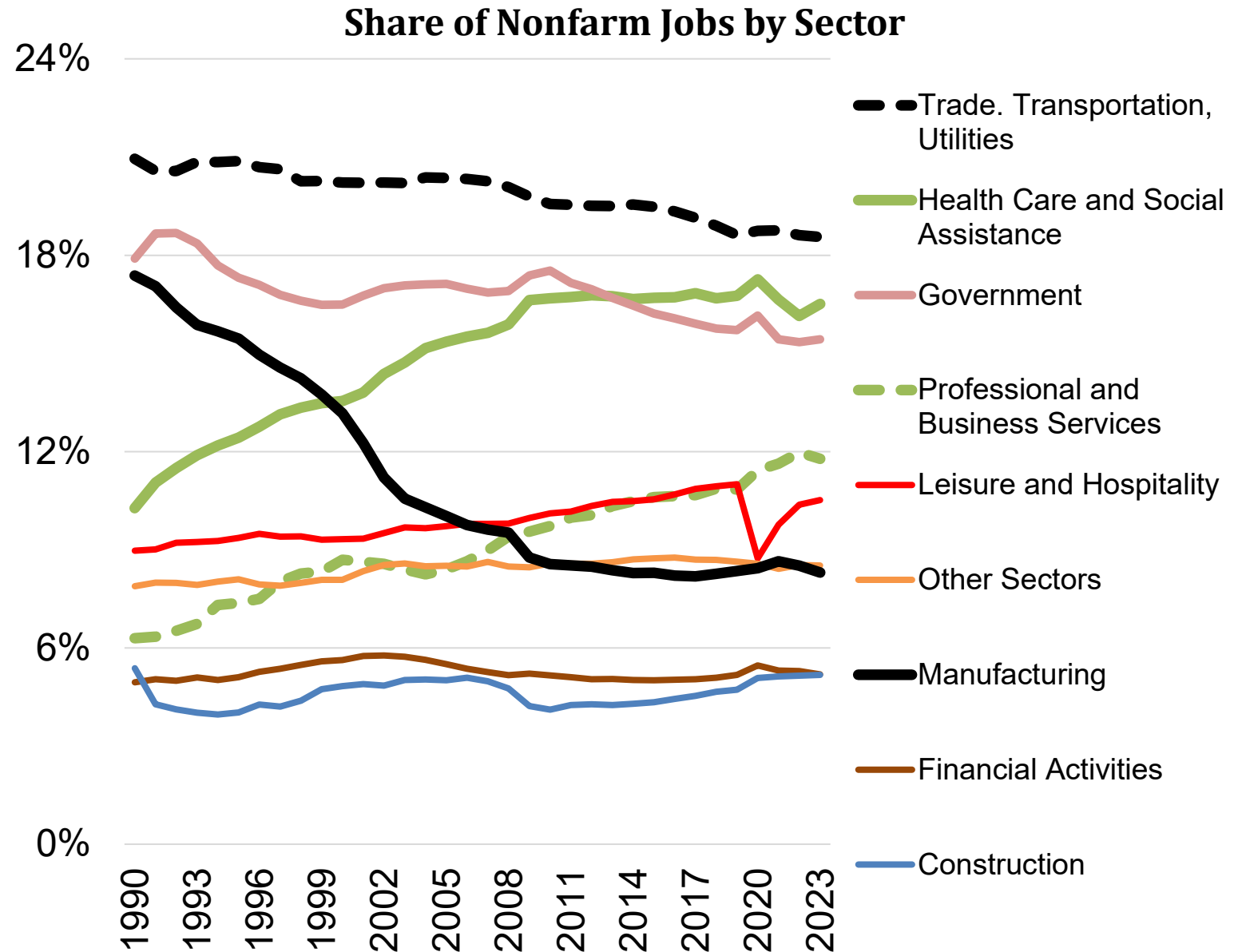


Most sectors maintained a similar share of jobs over three decades

Though degrees of change varied, the share of jobs for most sectors has not changed much from three decades ago. Exceptions are the five-point increases in healthcare and social assistance and in professional and business services, and the eight- and three-point decreases in manufacturing and government.

The following eight pages highlight job trends in the three sectors with the most change since 1990.

(This level of industry detail is not available for years prior to 1990.)



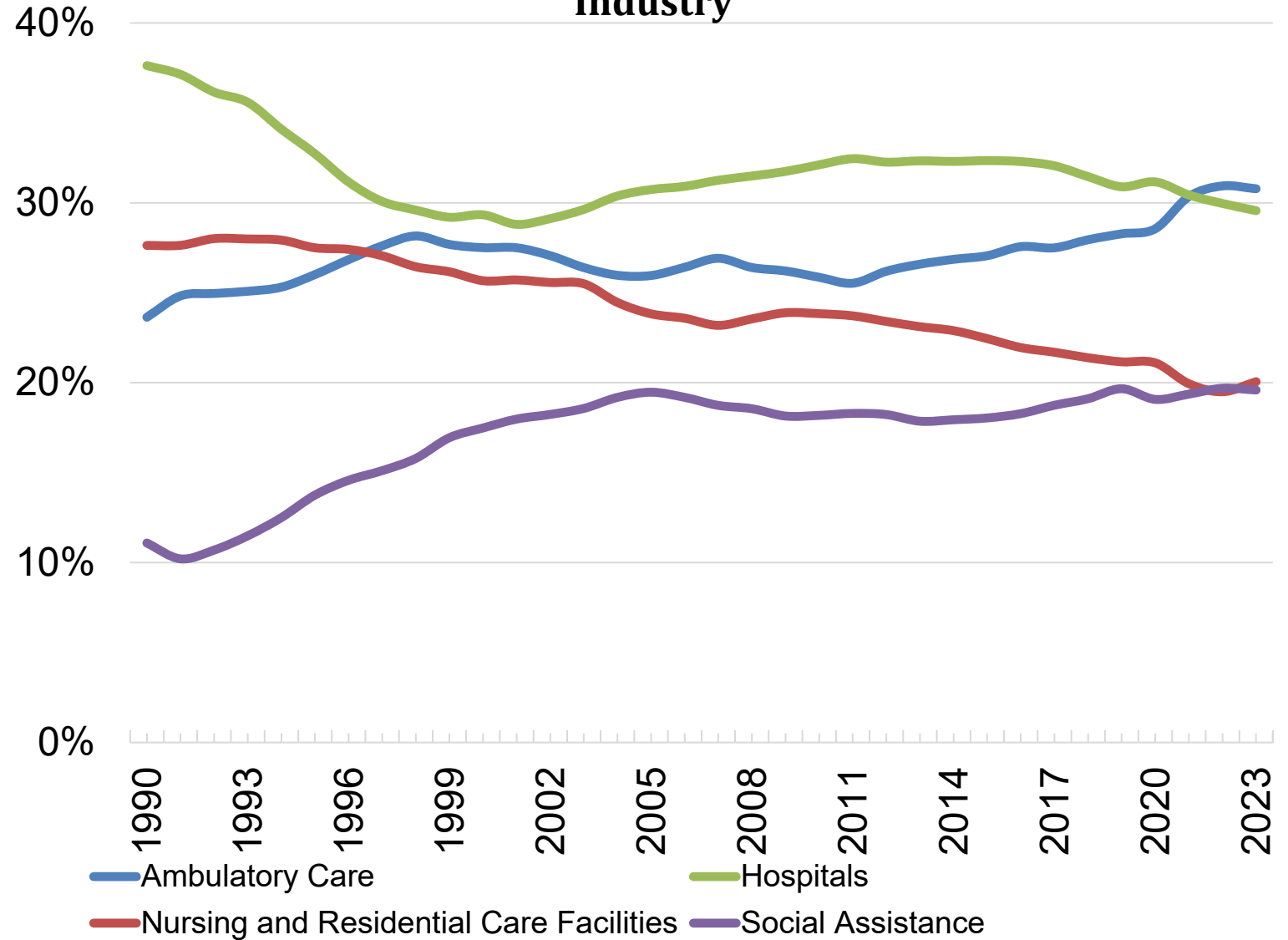
Focus on healthcare and social assistance

There has been a gradual reallocation of jobs among industries in this sector. The 20 percent share of jobs in social assistance is double that of three decades ago; the 30 percent in ambulatory care is seven points higher.

Those gains were partly from efforts to shift care from higher cost settings, including hospitals and nursing care facilities. In combination, the share of jobs in hospitals and nursing care decreased from about two-thirds to half of this sector.

(This level of industry detail is not available for years prior to 1990.)

Share of Healthcare & Social Assistance Jobs by Industry



Healthcare and social assistance in detail

Ambulatory healthcare jobs are distributed among practitioner offices, labs, home health, and outpatient care. Offices of physicians are the largest, comprising one-third of these jobs. Offices of “other healthcare practitioners,” which includes chiropractic, physical, mental, and other therapy services, and in outpatient care centers, increased at the fastest rate over the last two decades.

Jobs in **nursing and residential care facilities** also are distributed among various types, with developmental, mental health & substance abuse facilities the largest. Jobs in nursing care facilities for the aged decreased sharply over the 20 years, partly from cost containment efforts.

Two-thirds of **social assistance** jobs are in individual and family services and one-quarter are in childcare, each of which added jobs in the last two decades.

(The level of industry detail in the table is not available for years prior to 2001.)

Industry	Jobs in 2023	Change Since 2003	
		Net	Percent
Health Care & Social Assistance	106,500	17,500	20%
Healthcare	85,300	12,700	18%
Ambulatory Healthcare Services	33,300	9,700	41%
Offices of Physicians	12,000	2,400	25%
Offices of Other Health Practitioners	5,300	2,500	92%
Outpatient Care Centers	4,800	2,400	100%
Offices of Dentists	4,200	900	26%
Home Healthcare Services	4,200	800	23%
Other Ambulatory Healthcare Services	1,200	100	8%
Medical & Diagnostic Laboratories	1,600	600	64%
Hospitals	31,100	4,800	18%
General Medical & Surgical Hospitals	29,400	4,400	18%
Other Hospitals	700	-600	-45%
Nursing & Residential Care Facilities	20,900	-1,800	-8%
Developmental, Mental Health & Substance Abuse Facilities	8,100	2,400	43%
Nursing Care Facilities	6,900	-4,200	-38%
Assisted Living & Continuing Care Facilities	5,600	800	16%
Other Functions (1 Industry)	600	-500	-44%
Social Assistance	20,900	5,100	32%
Individual & Family Services	14,400	4,400	44%
Child Care Services	5,100	1,500	43%
Other Functions (2 Industries)	1,400	-1,500	-52%

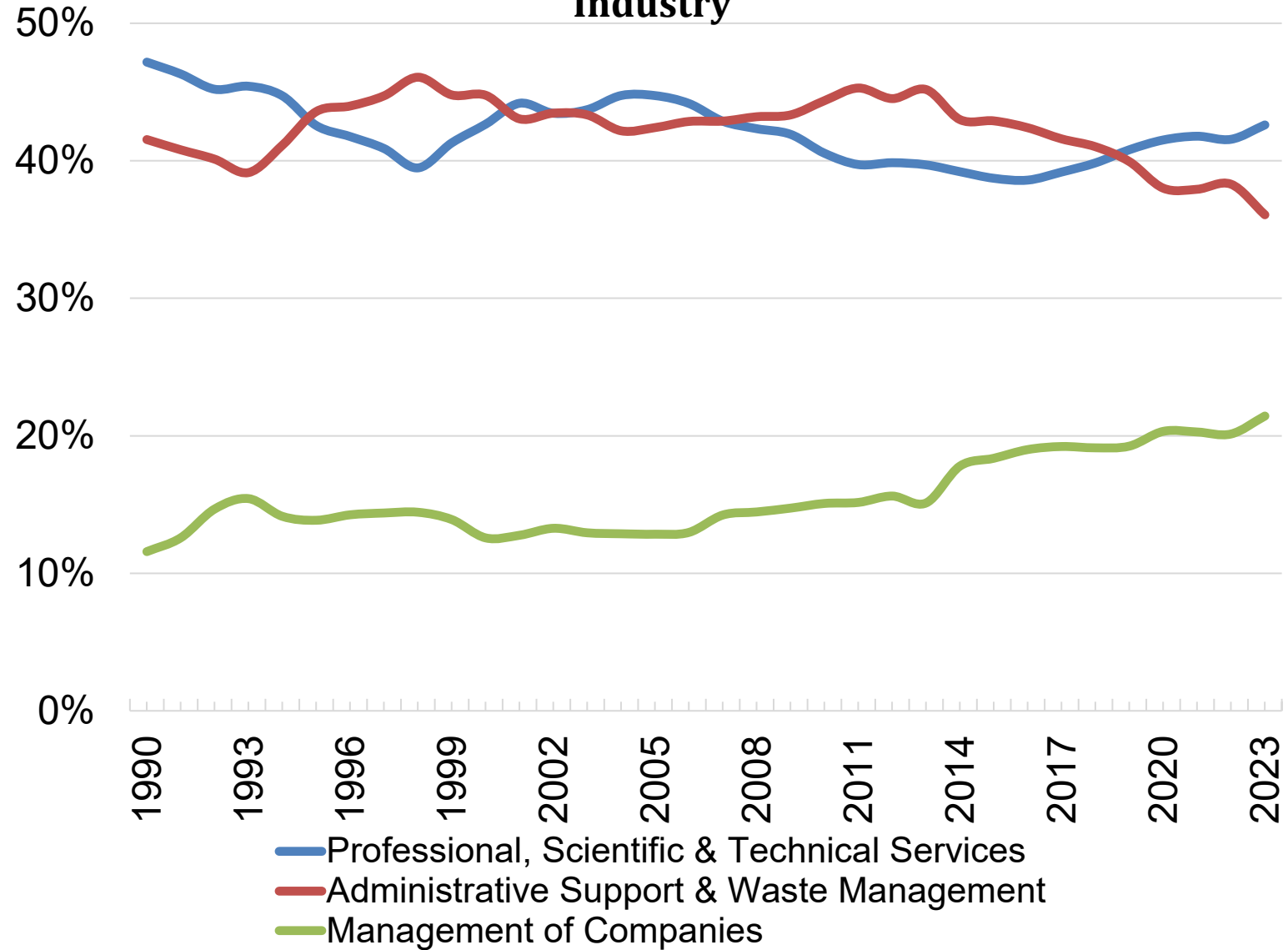
Numbers rounded to nearest 100. Percent change based on underlying, unrounded figures. Industries with fewer than 1,000 jobs were combined.

Focus on professional and business services

Jobs in professional, scientific, and technical services combined with those in administrative, support and waste management comprise 80 percent of this sector. The most notable change over the last three decades is the increased share in an industry known as management of companies.

(This level of industry detail is not available for years prior to 1990.)

Share of Professional & Business Services Jobs by Industry



Professional and business services in detail

Professional, scientific, and technical services is primarily comprised of jobs in computer, architecture & engineering, consulting, legal, and accounting functions.

Administrative, support, and waste management is primarily comprised of employment services, including temporary help agencies, and building services.

One-fifth of these jobs are in **management of companies**, which has been among the fastest growing industries in Maine over the last 20 years. This pattern primarily represents an administrative data classification issue, rather than an actual economic pattern. (Modernization of the industry classification system caused the headquarters operations of many firms to be broken out from their other establishments that perform the core functions for the company. Those establishments that perform the core functions remain classified in the industry of the primary product or service).

(The level of industry detail in the table is not available for years prior to 2001.)

Industry	Jobs in 2023	Change Since 2003	
		Net	Percent
Professional & Business Services	77,200	25,800	51%
Professional, Scientific, & Technical Services	33,000	10,800	49%
Computer Systems Design & Related Services	6,900	4,300	164%
Architectural, Engineering, & Related Services	6,200	1,900	44%
Management, Scientific & Technical Consulting Services	5,400	3,200	151%
Legal Services	3,800	-500	-11%
Accounting, Tax, Bookkeeping & Payroll Services	3,200	100	2%
Other Professional, Scientific, & Technical Services	3,100	1,000	49%
Scientific Research & Development Services	2,700	800	43%
Advertising, Public Relations, & Related Services	1,300	-300	-17%
Other Functions (1 Industry)	400	200	71%
Management of Companies & Enterprises	16,500	10,600	179%
Administrative, Support & Waste Management	27,700	5,300	24%
Employment Services	9,400	3,400	58%
Services to Buildings & Dwellings	8,800	3,400	63%
Business Support Services	2,400	-1,200	-33%
Investigation & Security Services	1,600	0	3%
Other Support Services	1,500	0	-1%
Waste Collection	1,300	400	51%
Other Functions (5 Industries)	2,700	-900	-24%

Numbers rounded to nearest 100. Percent change based on underlying, unrounded figures. Industries with fewer than 1,000 jobs were combined.

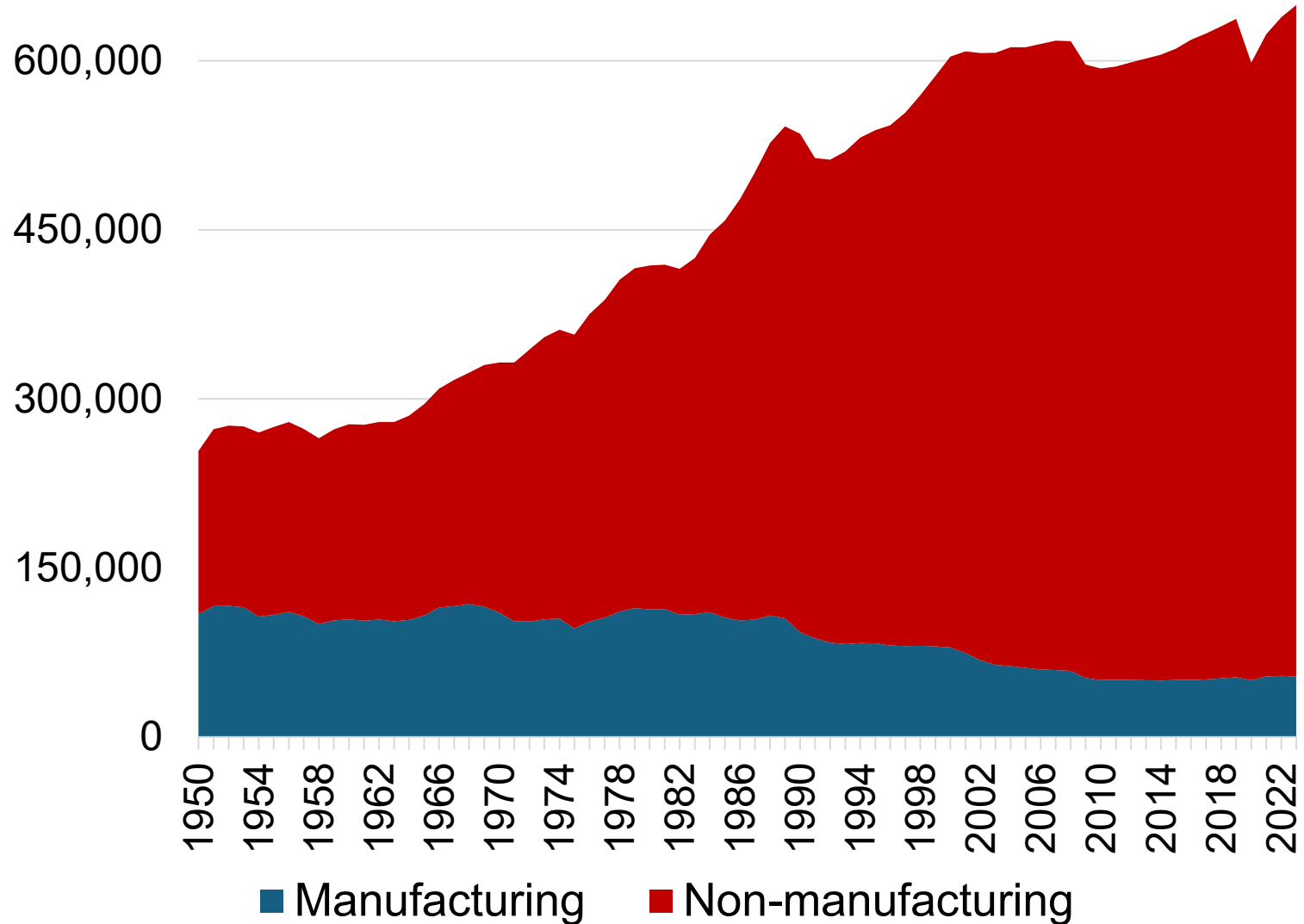
Focus on manufacturing

The number of manufacturing jobs was relatively stable through 1968, with most net job growth in non-manufacturing industries. The sector comprised more than 40 percent of nonfarm jobs through 1953, 30 percent through 1971, and 20 percent through 1988. Today it comprises eight percent.

The decrease in manufacturing impacted the entire state, especially certain “mill towns” that experienced major business closures and prolonged periods of upheaval as a result of losing what, in many cases, was the largest employer in the area.

(This level of industry detail is available back to 1947.)

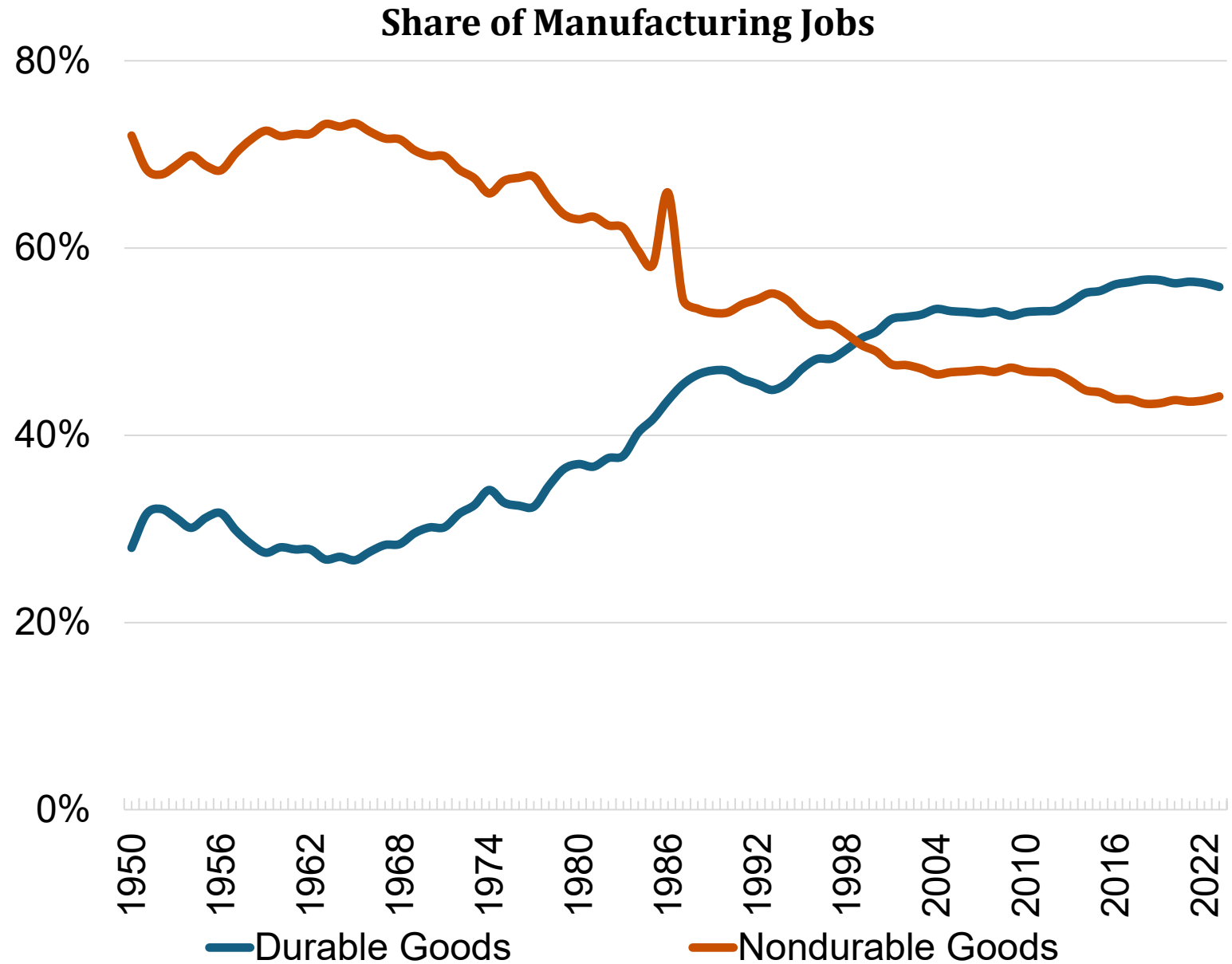
Manufacturing & Non-Manufacturing Jobs



Durable and nondurable goods manufacturing

Jobs in the production of nondurable goods – those expected to last less than three years – comprised close to three-quarters of manufacturing jobs 70 years ago. Today they comprise 44 percent. The number of jobs in the production of durable goods was little changed, but their share increased as a result of sliding numbers of nondurable goods jobs.

(This level of industry detail is available back to 1947.)



Nondurable goods manufacturing in more detail

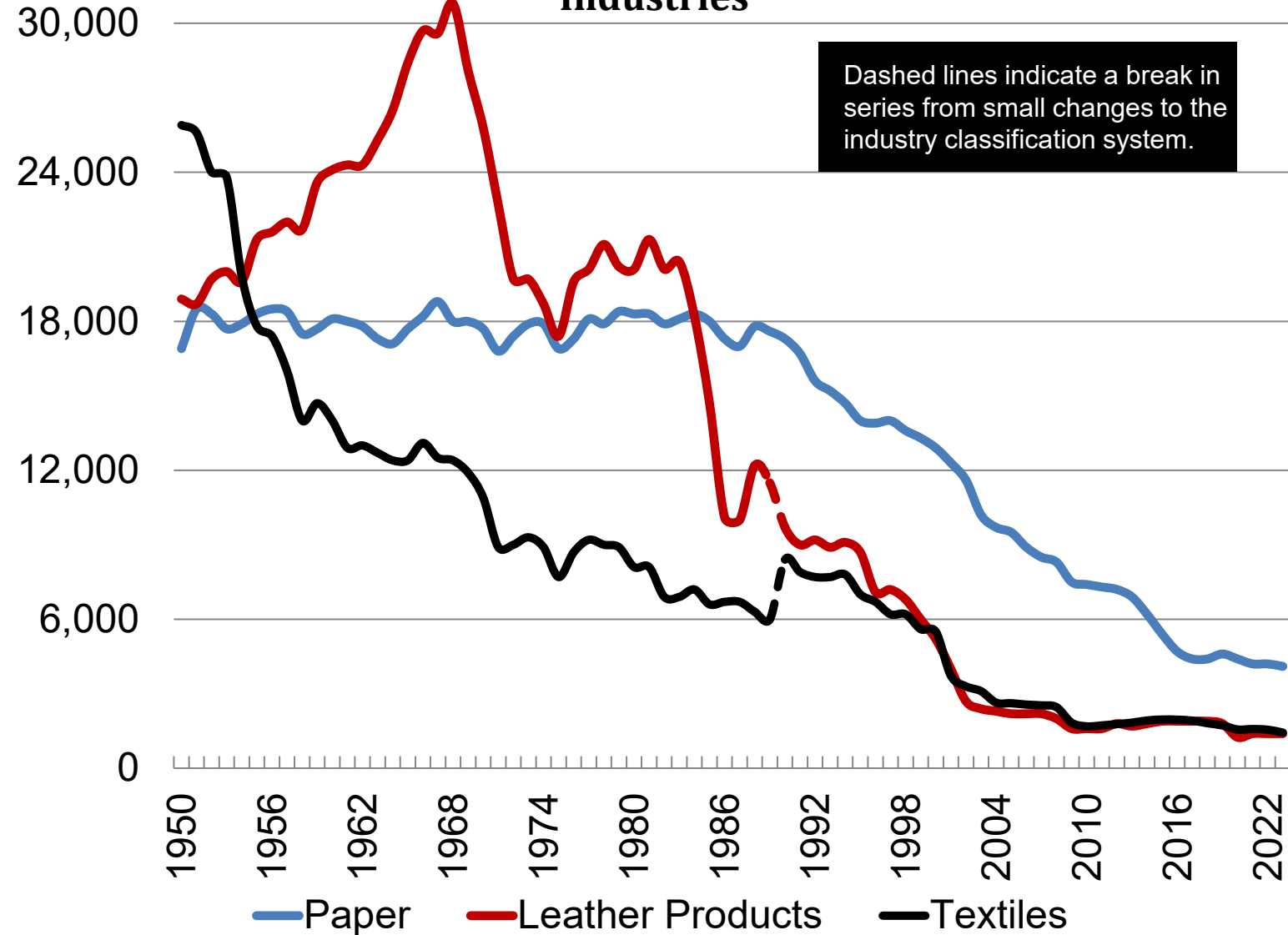
Shoe shops and textile mills attracted people to cities throughout the state. Paper and other forest products jobs attracted others to rural areas, mostly in the north of the state. Offshoring of production and automation and other productivity enhancements contributed to steady job loss over multiple decades.

Textile mill jobs peaked more than 70 years ago. Leather products (primarily shoe shops, but also tanneries) peaked more than 50 years ago. Downsizing and the eventual closure of those businesses removed the economic center of many cities.

Paper and sawmill closures, combined with mechanization of timber harvesting, depleted a major source of labor demand in much of the north, mostly over the last 30 years.

(This level of industry detail is available back to 1947.)

Jobs in Three Nondurable Good Manufacturing Industries



Manufacturing in detail

Transportation equipment (mostly shipbuilding and aircraft parts) is the largest manufacturing industry, comprising one-fifth of jobs in the sector. The combination of food, fabricated metals, paper and wood products comprise another 40 percent.

In the last 20 years the fastest rates of job growth were in beverages (mostly breweries), and chemicals (mostly pharmaceuticals and diagnostics).

There has been a notable shift in pattern in the last decade. In the ten years since 2013, 12 of the 21 manufacturing industries added jobs and the total for the sector increased. In the ten years before 2013, 18 of those industries had net job decreases and the total for the sector contracted, as it had in each of the prior three decades.

(The level of industry detail in the table is not available for years prior to 2001.)

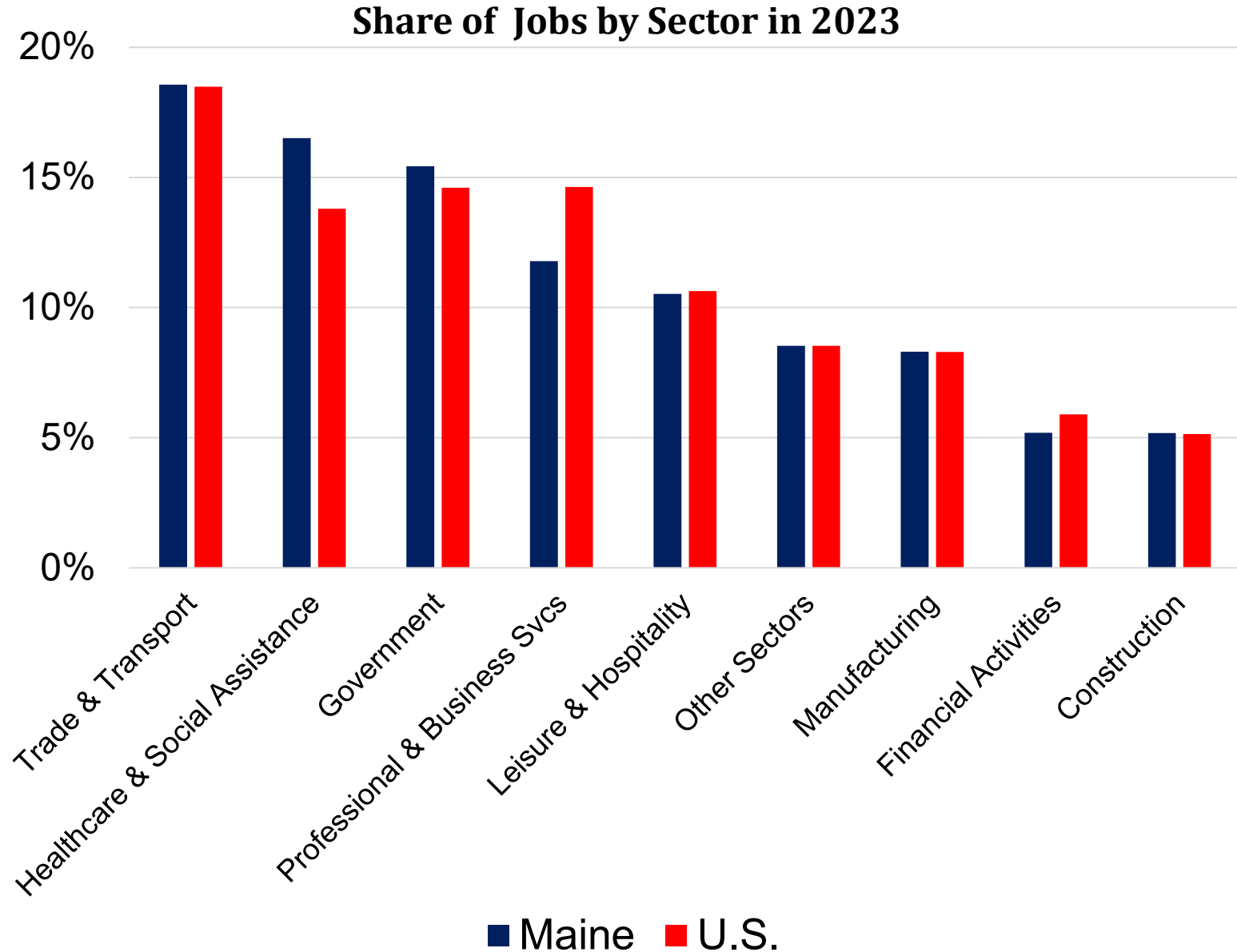
Industry	Jobs in 2023	Change Since 2003	
		Net	Percent
Manufacturing	53,200	-10,800	-17%
Durable Goods	29,900	-3,900	-11%
Transportation Equipment	11,200	1,200	12%
Fabricated Metal Products	5,000	400	9%
Wood Products	4,600	-1,900	-29%
Computer & Electronic Products	2,100	-1,900	-47%
Miscellaneous	1,900	100	7%
Machinery	1,800	-500	-21%
Nonmetallic Mineral Products	1,400	-200	-12%
Furniture & Related Products	1,200	-500	-30%
Other Functions (2 Industries)	700	-700	-48%
Nondurable Goods	23,300	-6,900	-23%
Food	5,800	-1,000	-15%
Paper	4,100	-6,100	-60%
Chemicals	3,800	2,400	174%
Beverage & Tobacco Products	2,700	2,300	512%
Plastics & Rubber Products	2,100	0	0%
Printing & Related Support Activities	1,400	-1,200	-47%
Leather & Allied Products	1,400	-1,000	-42%
Textiles	1,400	-1,700	-54%
Other Functions (2 Industries)	600	-500	-47%

Numbers rounded to nearest 100. Percent change based on underlying, unrounded figures. Industries with fewer than 1,000 jobs were combined.

Maine compared to the nation

The share of jobs by sector is similar to that of the nation. The state has relatively more jobs in healthcare and social assistance, partly because our population is older, and in government, mainly because the federal Portsmouth Naval Shipyard in Kittery is so large, employing more than 6,000.

The state has relatively fewer jobs in professional and business services and in financial activities.



Changing Job Composition: Occupations

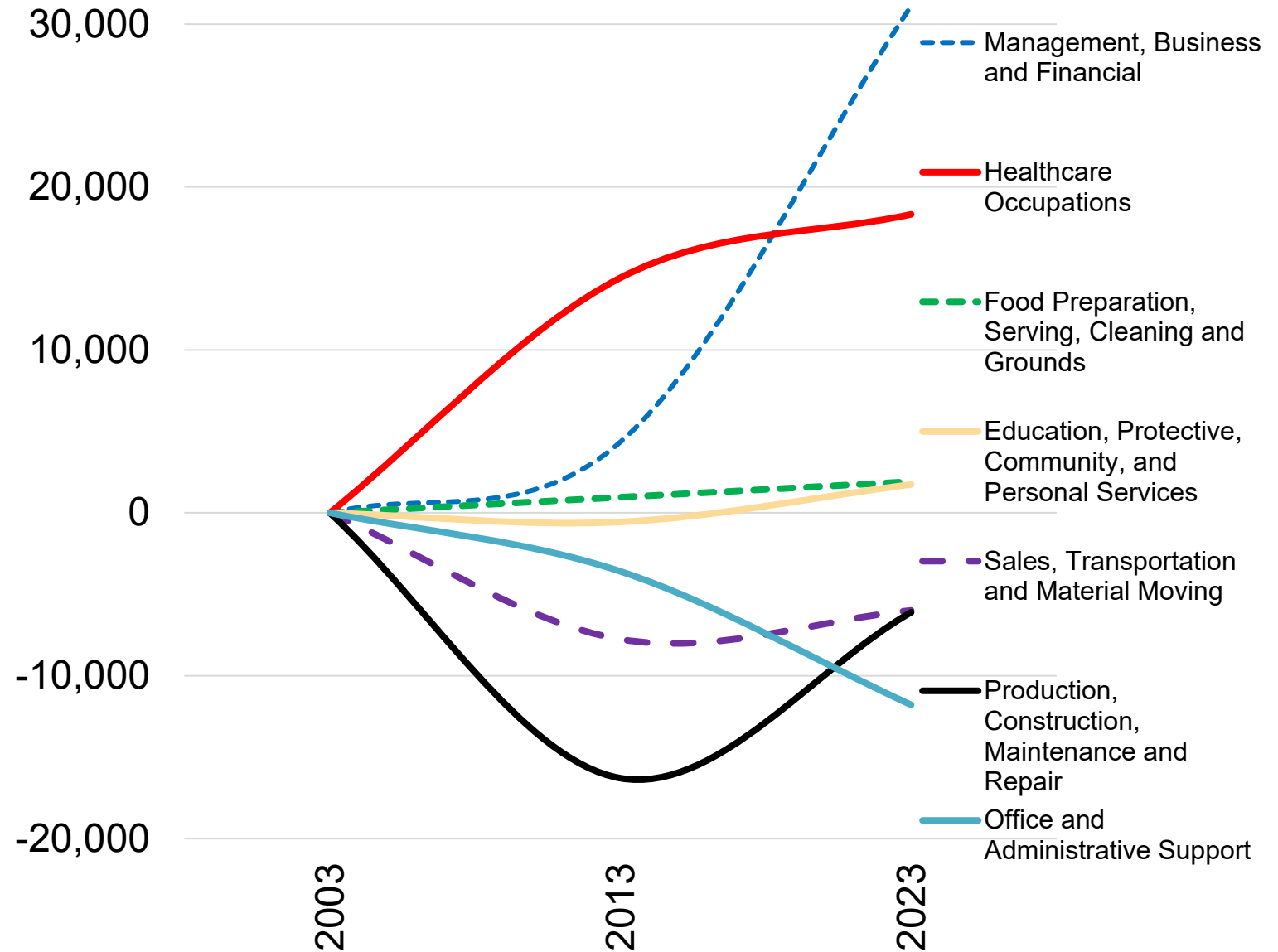
Job change has been concentrated in three occupational groups

Areas of industry growth led to job increases in management, business and finance and healthcare occupational groups.

The decline in manufacturing is reflected in fewer jobs in production, construction, maintenance and repair occupations. New technologies changing the work environment of many industries have resulted in fewer jobs among office and administrative support, sales and transportation occupational groups.

(Jobs in Legal, Life, Physical, and Social Science and Arts, Design, Entertainment, and Media occupational groups increased by 1,700 each on average in the two decades. Combined these groups represent less than 3 percent of total jobs and are not included in this chart.)

Change in Jobs by Occupational Group

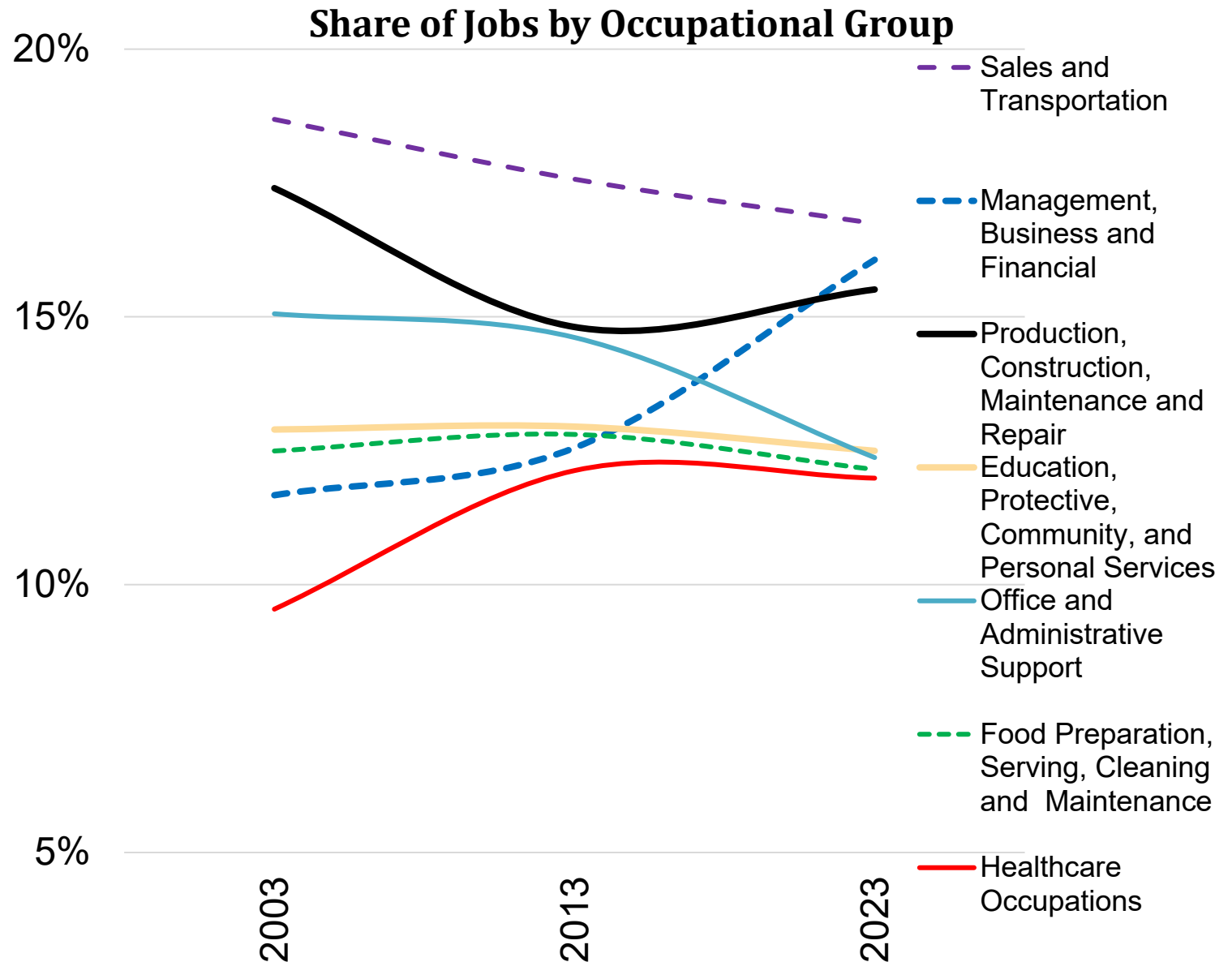


Most occupational groups represent a similar share of jobs over two decades

Management, business and financial related occupations now are the second largest group, the share of jobs in this group grew by four percentage points over the last two decades. The share of jobs in healthcare occupations increased by two percentage points in this time.

Production, construction, maintenance and repair occupations represent a lower share but remain the third largest occupational group. While the overall occupational composition shifted away from sales and transportation, it remains the largest group.

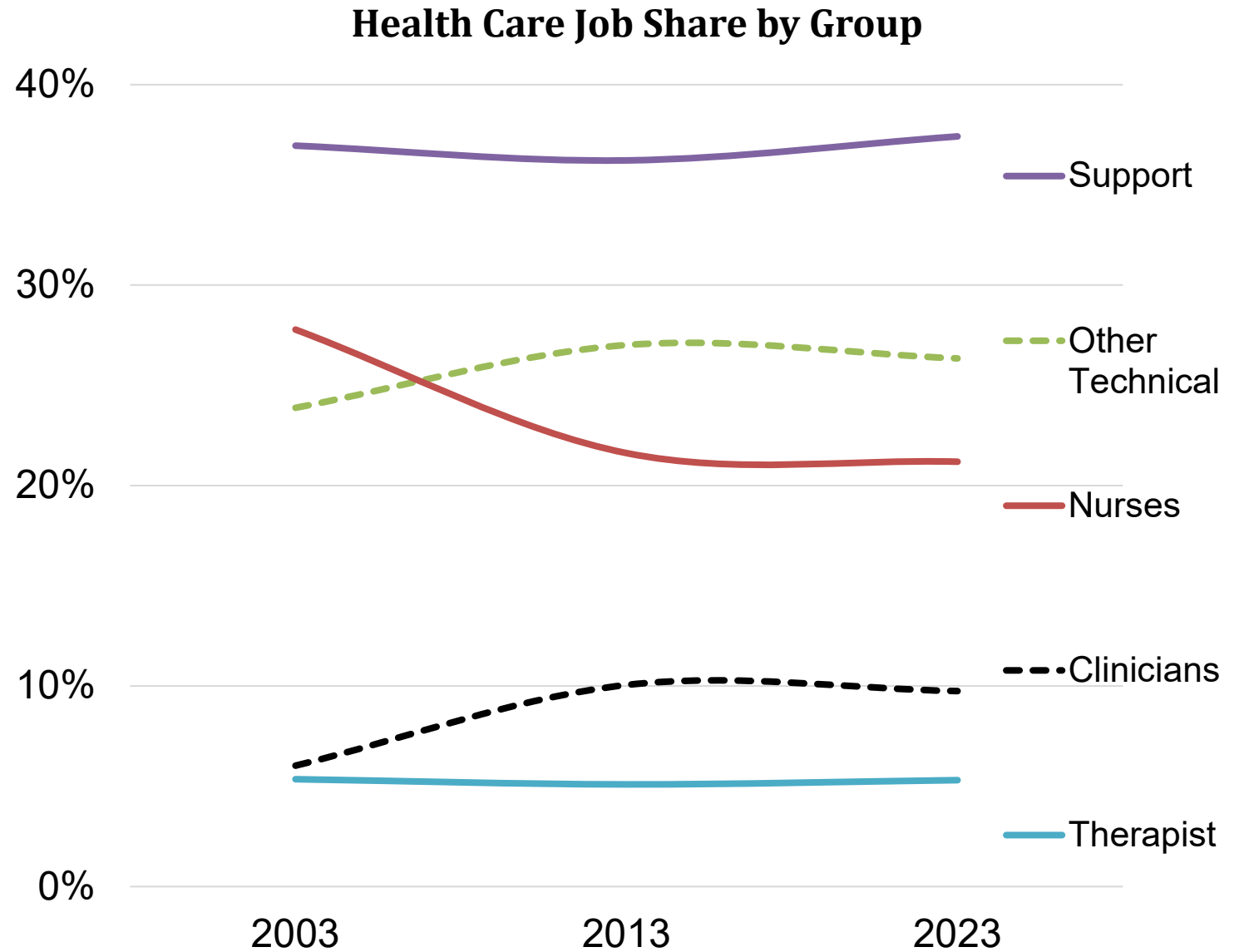
(Legal, Life, Physical, and Social Science and Arts, Design, Entertainment, and Media occupational groups contain approximately one percent of occupational employment each and are not included in this chart)



Focus on healthcare occupations

In the last 20 years, the composition of health care jobs shifted toward roles for **technicians** and **clinicians**. Combined, these two groups now make up 36 percent of all health care occupations. The largest group (37 percent) has remained in **support** occupations.

In the last two decades, jobs in healthcare occupations have increased by 18,300 (33 percent).



Healthcare occupations in detail

58 percent of all healthcare jobs are within four occupations: home health and personal care aids, registered nurses, nursing assistants and medical assistants.

Healthcare occupations vary widely in terms of the typical education required and compensation. Many support occupations have relatively low educational and training requirements. Many roles for nurses, clinicians, therapists and some technical occupations require a two or four year degree and often require a master's, doctoral or professional degree.

Occupation	Jobs in 2023	Median Wage in 2023	Typical Education Required
Support			
Home Health and Personal Care Aides	17,200	\$17.39	High school diploma or equivalent
Nursing Assistants	7,600	\$20.73	Postsecondary nondegree award
Dental Assistants	1,400	\$22.62	Postsecondary nondegree award
Other Technical			
Medical Assistants	4,000	\$21.45	Postsecondary nondegree award
Pharmacy Technicians	2,200	\$18.05	High school diploma or equivalent
Pharmacists	1,400	\$65.11	Doctoral or professional degree
Nurses			
Registered Nurses	14,800	\$39.24	Bachelor's degree
Clinicians			
Nurse Practitioners	1,400	\$59.20	Master's degree
Physicians, All Other	1,300	\$123.72*	Doctoral or professional degree
Therapist			
Physical Therapists	1,500	\$43.55	Doctoral or professional degree
Occupational Therapists	1,100	\$38.32	Master's degree

Jobs figures rounded to nearest 100.

**mean wage is displayed as no median wage is available for this occupation*

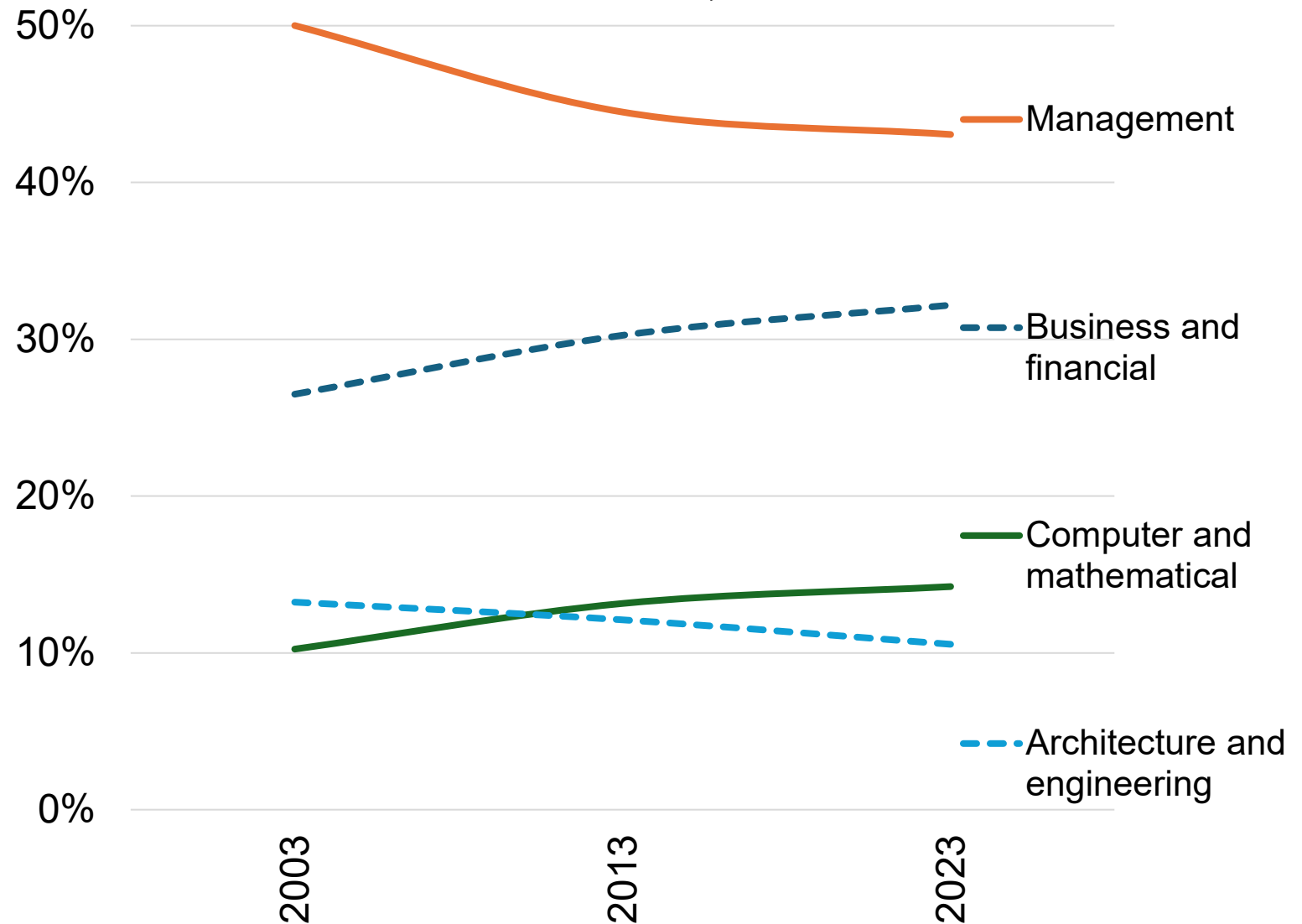
Focus on management, business, financial and technical occupations

The share of jobs has increased among **business and financial** (six percentage points) and **computer and mathematical** (four percentage points) occupations since 2003.

While the total number of jobs in **management** and **architecture and engineering** occupations has also grown, these groups have not grown as quickly and now represent a somewhat smaller share of employment in the management business, financial and technical occupations group.

Specialization and technological improvements have contributed to these trends. While some of these occupations are found in many industries, the job increases and shifting composition of employers in the professional and business services sector has also been a factor (see slide 16).

Share of Management, Business, Financial and Technical Jobs



Management, business, financial and technical occupations in detail

Technology and specialization have driven increases in demand for workers within management, business, financial, and technical occupations. In the last two decades, jobs have increased by 31,000 (45 percent).

Management occupations make up the largest group within management, business, financial, and technical occupations, representing 43 percent of the total. **Business and financial operations** added the most net jobs (14,000) accounting for 45 percent of the net growth since 2003. **Computer and mathematical** occupations increased at the greatest rate, more than doubling in that time.

Occupation	Jobs in 2023	Median Wage in 2023	Typical Education Required
Management	43,000		
General and Operations Managers	14,700	\$44.90	Bachelor's degree
Financial Managers	2,700	\$62.32	Bachelor's degree
Medical and Health Service Managers	2,100	\$50.61	Bachelor's degree
Business and financial operations	32,100		
Accountants and Auditors	4,900	\$36.85	Bachelor's degree
Business Operations Specialists	4,800	\$33.79	
Human Resources Specialists	2,600	\$33.22	Bachelor's degree
Computer and mathematical	14,200		
Software Developers	3,200	\$54.42	Bachelor's degree
Computer User Support Specialists	2,800	\$26.71	Some college, no degree
Computer Systems Analysts	2,400	\$39.33	Bachelor's degree

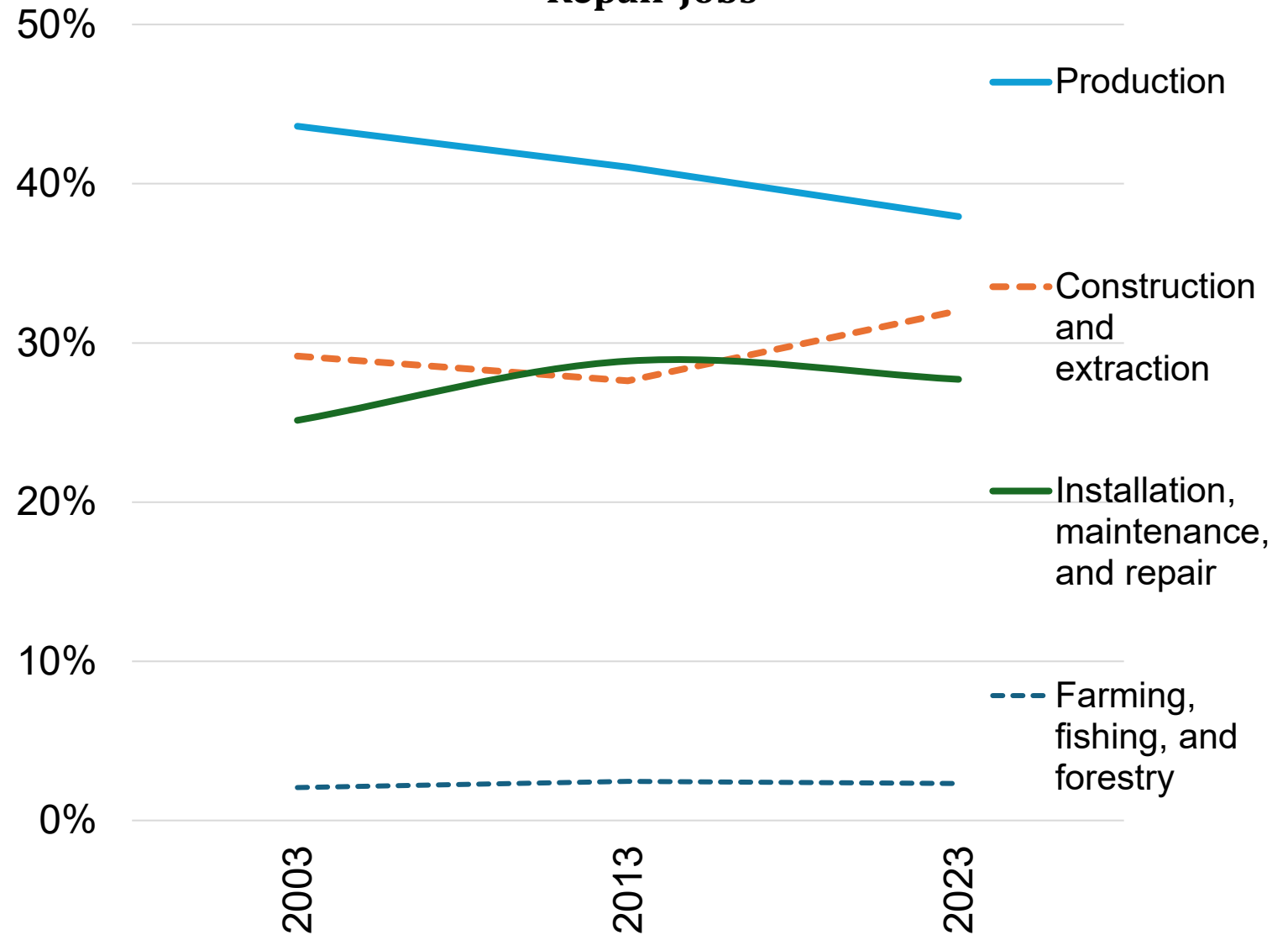
Jobs figures rounded to nearest 100.

Focus on production, construction, maintenance and repair occupations

As a share of total jobs, **installation, maintenance, and repair** and **construction and extraction** occupations increased by 3 percentage points each. In the ten years through 2013, construction and extraction declined alongside the housing market crash. A strong housing market recovery has results in 7,000 jobs added in the ten years through 2023.

The share of employment in this group within **production** occupations, predominantly found within the manufacturing sector, decreased by 6 percentage points. Despite this, production occupations remain the largest group.

Share of Production, Construction, Maintenance and Repair Jobs



Production, construction, maintenance and repair occupations in detail

The decline in manufacturing has resulted in lower demand for workers in **production** occupations. There are 8,100 fewer (18 percent) jobs today than twenty years before.

There are modestly more jobs in **construction and extraction** (3 percent) and **installation, maintenance and repair** (4 percent) occupations.

The largest occupations in this group are for skilled trades including carpenters, electricians and automotive technicians. Most occupations do not typically require a post-secondary degree for entry. Technical education, apprenticeship and on the job training and more common paths toward many of these occupations.

Occupation	Jobs in 2023	Median Wage in 2023	Typical Education or Training Required
Construction and Extraction	30,900		
Carpenters	5,100	\$26.41	Apprenticeship
Electricians	3,400	\$29.79	Apprenticeship
Construction Laborers	3,100	\$20.81	No formal requirement
Installation, Maintenance, and Repair	26,700		
Maintenance and Repair Workers	5,000	\$21.79	High school diploma or equivalent
Automotive Service Technicians and Mechanics	3,200	\$23.12	Postsecondary certificate
First-Line Supervisors of Mechanics, Installers, and Repairers	2,600	\$34.26	High school diploma or equivalent
Production	36,600		
Assemblers and Fabricators	3,200	\$19.64	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	2,900	\$35.98	High school diploma or equivalent
Packaging and Filling Machine Operators and Tenders	1,900	\$18.94	High school diploma or equivalent

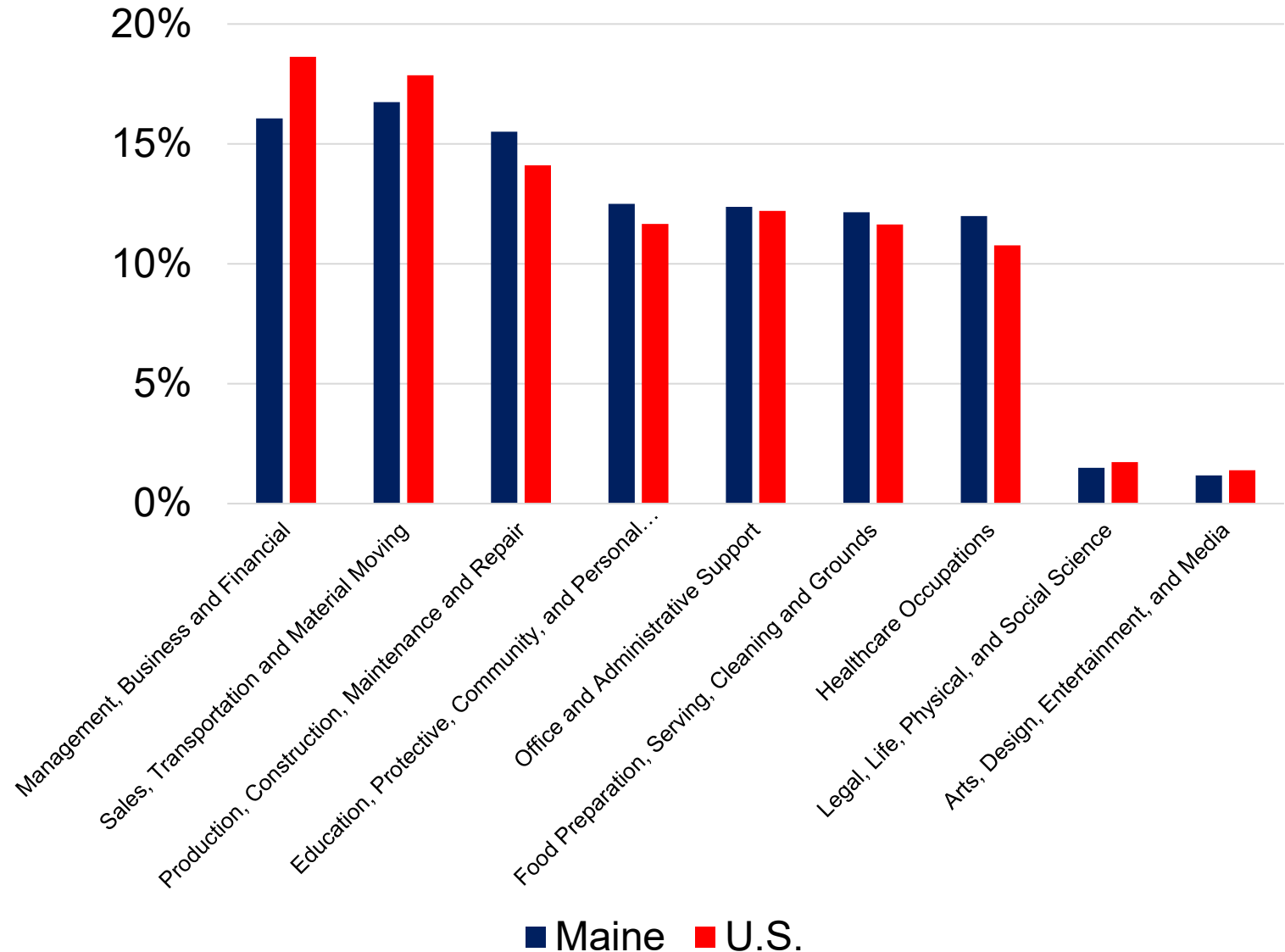
Jobs figures rounded to nearest 100.

Maine compared to the nation

The share of jobs by occupational group is similar to that of the nation. Health and production, construction, and maintenance occupations are somewhat more prominent in Maine, similar to their related sectors (see slide 23).

Management, business, and financial occupations make up a three-percentage point higher share of jobs in the nation.

Share of Jobs by Occupational Group 2023



Summary

Overarching changes in Maine's labor market can be better understood through the interconnections between population and jobs and that of industries and occupations.

The most notable changes have been a shift from manufacturing to nonmanufacturing sectors and the increasing prominence of health care and a variety of professional services in the economy. The changing industry mix observed since the 1990s has occurred during a somewhat slower period of population and job growth relative to the three decades that preceded.

Integration of new technologies and the shifting industry base have resulted in an occupational makeup of somewhat more workers in management, business, financial, technical and healthcare occupations and somewhat fewer workers in office and administrative support and sales and transportation occupations.

Appendix

About Occupational Data

Data in the occupations section of this report are from the [Occupational Employment and Wage Statistics \(OEWS\)](#) program. Charts and tables contain comparisons of three, one-year snapshots of this data from 2003, 2013 and 2023. Data in the OEWS program are collected using bi-annual survey panels of employers and uses a total of three years (or six survey panels) of collected data to develop annual estimates. OEWS program data is not intended as a time-series, rather, it should be viewed as a *point-in-time*.

The OEWS program uses the Standard Occupational Classification (SOC) system for classifying all jobs by occupation. Jobs are classified into one of about 860 detailed occupations. Workers with similar job duties, and in some cases skills, education, and/or training, are grouped together for classification purposes. Revisions are made to the SOC classifications over time due to the changing nature of the economy and roles of workers. Analysis in this report has accounted for changes in classification overtime. Classification revisions are one factor that limit the use of OEWS as a time-series. Additional factors include changes to the industrial classification system, changes in the way data are collected, changes to the survey scope and methodology, and more. Employment and wage estimates vary, up or down, from year to year depending on which businesses are included in the survey sample, the response rates, the quality of data that is provided, etc. See [frequently asked questions](#) about OEWS for additional details.

About Occupational Groupings

In this report, occupations have been combined into nine total groups using the [Standard Occupational Classification](#) (SOC) system as follows:

Sales and Transportation includes all occupations within the Sales and Related (SOC 41) and Transportation and Material Moving Occupations (SOC 53) major groups.

Management, Business and Financial includes all occupations within the Management (SOC 11), Business and Financial Operations (SOC 13), Computer and Mathematical (SOC 15) and Architecture and Engineering (SOC 17) major groups.

Production, Construction, Maintenance and Repair includes all occupations within the Farming, Fishing and Forestry (SOC 45), Construction and Extraction (SOC 47), Installation, Maintenance and Repair (SOC 49) and Production (SOC 51) major groups.

Education, Protective, Community, and Personal Services includes all occupations within the Community and Social Service (SOC 21), Educational Instruction and Library (SOC 25), Protective Service (SOC 33) and Personal Care and Services (SOC 39) major groups.

Office and Administrative Support includes all occupations within the Office and Administrative Support (SOC 43) major group.

Food Preparation, Serving, Cleaning and Grounds includes all occupations within the Building and Grounds Cleaning and Maintenance (SOC 37) and Food Perpetration and Service Related (SOC 35) major groups.

Healthcare Occupations includes all occupations within the Healthcare Practitioners and Technical (SOC 29) and Healthcare Support (SOC 31) major groups. Detailed healthcare occupations were further classified into 5 large categories: support, other technical, nurses, clinicians, and therapists.

Legal, Life, Physical, and Social Science includes all occupations within the Life, Physical and Social Science (SOC 19) and Legal (SOC 23) major groups.

Arts, Design, Entertainment, and Media includes all occupations within the Arts, Design, Entertainment, Sports and Media Occupations (SOC 27) major group.