Vital Signs 2020

Economic & Social Indicators for New Hampshire

# 2014-2018



State of New Hampshire Christopher T. Sununu, Governor

New Hampshire Employment Security George N. Copadis, Commissioner

Economic and Labor Market Information Bureau Brian J. Gottlob, Director

## August 2020

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This annual review of the economic and social conditions of New Hampshire highlights fifteen different indicators that describe the state's economic, social, environmental, and cultural character. Each chapter of Vital Signs compiles five years of available data, analyzing emerging trends at the local, regional, and national levels where appropriate. Whenever possible, 2018 updates have been included in the summary analysis.

Attention should be paid to notations within the tables that describe data details such as sample size, time intervals, or rank order. Additionally, readers should note that throughout the text, proper titles of specific data elements (i.e. industry sectors such as Retail trade and publication titles) are italicized to distinguish them from recurring ordinary usage. Readers are also encouraged to review the glossary and index on page 83 to become familiar with the different terminology used throughout the report.

The information presented in Vital Signs has been drawn from print and internet-based media reports, trade publications, academic journals, and the records of a wide variety of state and federal agencies and private organizations. Sources used in the text are identified with footnotes, and sources used in the tables are noted with abbreviations in the right hand column of each table. All abbreviations are "spelled out" in the source appendix beginning on page 82. While all sources are believed to be reliable, no guarantee is made as to the correctness, sufficiency, or completeness of their information.

Some of the data tables are available by substate areas. If you seek additional information, please contact the Economic and Labor Market Information Bureau at elmi@nhes.nh.gov or (603) 228-4124.

We are indebted to the numerous individuals who contributed special information or provided advice on evaluating reported data. The observations expressed in this report do not necessarily reflect those of New Hampshire Employment Security, and no official endorsement should be inferred.

#### Note on Coronavirus:

The articles in this publication are primarily focused on the years 2014-2018. They were also written prior to the coronavirus pandemic, and before the impact that the pandemic and measures to contain it had on New Hampshire's workforce and economy. The conditions of the New Hampshire, U.S. and world economies have changed significantly since then.

As a result, some data and analysis in this publication may not be as relevant to current economic conditions as they were when the articles were written. Articles that include speculation about economic trends in 2020 could not anticipate coronavirus and its impact on the New Hampshire economy.

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	2016-	2017	2017-	2018	
CHANGE IN KEY ECONOMIC INDICATORS	NET CHANGE	PERCENT CHANGE	NET CHANGE	PERCENT CHANGE	CHAPTER
Population	7,400	0.6%	6,700	0.5%	1
Income, per capita personal (not adjusted for inflation)	\$2,560	4.5%	\$2,045	3.4%	2
Wages, average weekly (private)	\$31	3.0%	\$32	3.0%	2
Labor force	3,150	0.4%	7,290	1.0%	3
Employment	4,090	0.6%	8,530	1.2%	3
Unemployment	-940	-4.4%	-1,240	-6.1%	3
Nonfarm jobs - total all industries	7,300	1.1%	5,300	0.8%	4
Non-current loans and leases (\$ millions)	-\$3.9	-34.2%	\$4.9	65.4%	6
Retail sales of electricity (million KWH)	-94	-0.9%	235	2.2%	8
Gross domestic product by state (current dollars-millions)	\$2,777	3.5%	\$3,533	4.4%	9
Gross domestic product by state (chained 2012 dollars-millions)	\$1,437	2.0%	\$1,634	2.2%	9
Export sales to the world (\$ millions)	\$1,004	24.2%	\$158	3.1%	9
Accomodations Rentals (Includes Motor Vehicle Rentals) (\$ millions)	\$38	6.3%	\$59	9.3%	10
School enrollment, public and private (includes preschool)	-1,916	-1.0%	-1,151	-0.6%	12
Violent crime index (Rate per 100,000 population)	-4.1	-2.1%	-22.5	-11.5%	14
Property crime index (Rate per 100,000 population)	-148.0	-9.7%	-125.8	-9.2%	14
Traffic crashes	6,819	22.8%	-2,507	-6.8%	14

#### POPULATION

#### **Overview of Population Change**

New Hampshire's population was estimated to be 1,356,458 in 2018.<sup>1</sup> This was an increase of approximately 6,700 residents over the previous year, an increase of 0.5 percent. This growth rate ranked 23rd among U.S. states (including Washington D.C.). From 2010 through 2018, New Hampshire has grown by almost 40,000 residents, just over 3 percent. This ranked 31st among U.S. states.

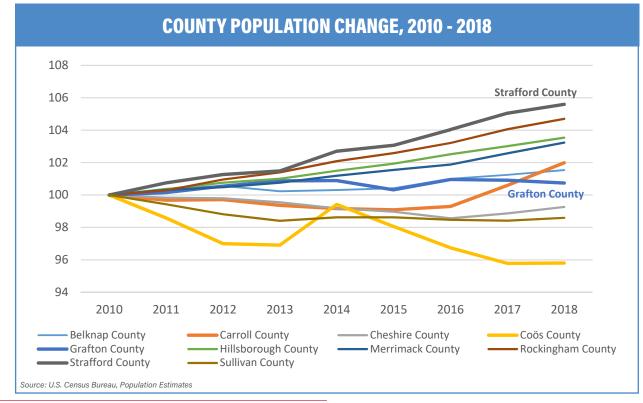
From 2010 to 2018, Strafford County had the fastest growth rate of any county in the state, with a population increase of 5.6 percent.<sup>2</sup> The population of Hillsborough County increased the most over that time, increasing by 14,200 residents. Rockingham County was a close second, with a population increase of 13,900 residents.

The population of Coös County decreased by almost 1,400 individuals, a decline of 4.2 percent. Sullivan County and Cheshire County also had population decreases from 2010 to 2018, losing 610 and 560 residents, respectively.

Carroll County lost 440 residents from 2010 through 2015, but since then has gained nearly 1,400 residents. Conway (308), Wolfeboro (167), Tamworth (132) and Moultonborough (128) saw the largest increase in population over those three years.

After gaining 850 residents from 2010 through 2016, Grafton County lost 200 residents over the next two years. Hanover (-65), Littleton (-41) and Haverhill (-40) saw the largest population declines in 2017 and 2018.

The fastest growing town in New Hampshire from 2010-2018 was Greenland, whose population increased by 16.2 percent.<sup>3</sup> The total population change in Greenland was 574 residents. Durham, Auburn, Freemont and Chester all saw their populations increase by more than ten percent as well. Manchester had the largest population increase, 2,910 residents, followed by Nashua (2,680) Londonderry (2,290), Durham (1,930) and Dover (1,740).



1 U.S. Census Bureau, Population Estimates, https://www.census.gov/data/tables.html

<sup>2</sup> Ibid 3 Ibid

Keene (-461), Claremont (-380), Lancaster (-249) and Gorham (-235) had the largest population declines from 2010 to 2018. Cambridge had the largest percentage of population decline, 12.5 percent. The township's population declined from eight residents to seven.

#### **Factors Affecting Population Growth**

The natural increase (number of births minus number of deaths) from 2010 to 2018 was 9,080 residents.<sup>4</sup> Six New Hampshire counties had more deaths than births over that time: Belknap, Carroll, Cheshire, Coös, Grafton and Sullivan counties. The number of births in the state decreased in recent years, from 12,314 in 2014 to 11,977 in 2018. At the same time, the number of deaths increased from 11,515 in 2014 to 12,589 in 2018. As a result of these trends, the natural increase from 2017 to 2018 was only 214 residents.

With the number of births barely higher than the number of deaths, New Hampshire has relied on migration to increase its population. Since 2010, net migration (the difference between those who move into New Hampshire and those who move out of New Hampshire) has increased the state's population by 31,700 residents. Net migration from other states in the U.S. has increased New Hampshire's population by 6,800 since 2010, but international migration has had a much larger impact, adding nearly 25,000 residents to New Hampshire's population.

#### Foreign-Born Residents of New Hampshire

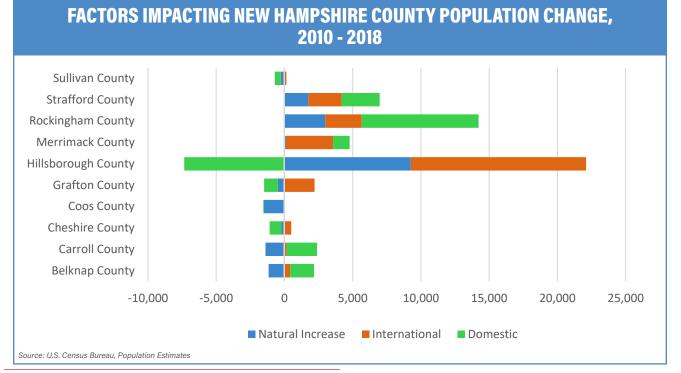
In 2017, 83,000 residents of

New Hampshire were foreign-born.<sup>5</sup> That was an increase of 14,000 residents since 2010. The foreign-born residents who moved to New Hampshire since 2010 came primarily from two regions, Asia and Latin America.

From 2010 to 2017, the number of Asia-born residents of

New Hampshire increased from 21,650 to 33,100. The number of Latin America-born residents increased from 14,000 to 16,100.

The number of North America-born residents (primarily Canadians) decreased from 9,800 to 8,700. Despite this decline, there are more residents of New Hampshire who were born in Canada than were born in any other country



U.S. Census Bureau, Population Estimates, https://www.census.gov/data/tables.html
 U.S. Census Bureau, American Community Survey (ACS), https://www.census.gov/data/tables

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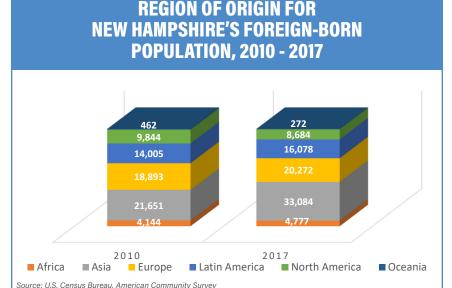
except India. Large numbers of New Hampshire residents were also born in China, the United Kingdom and Mexico.

### New Hampshire's Aging Population

After years of increasing, the median age in New Hampshire decreased slightly from 43.1 in 2017 to 43.0 in 2018.<sup>6</sup> The demographics of those moving into and out of the state contributed to this decline. Although those moving into and out of the New Hampshire tended to be young (the median age for both groups was under 30), the net effect

of migration was an increase in individuals 39 and under, and a decrease in individuals 65 and older.

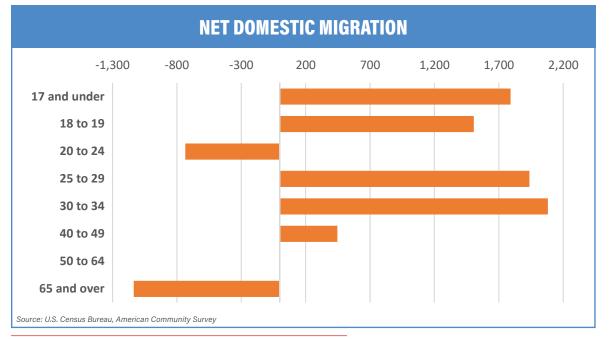
The percent of the population that is 65 and older increased from 15.9 in 2014 to 18.1 in 2018.<sup>7</sup> 245,000 New Hampshire residents are now age 65 or older. The largest population cohorts in New Hampshire are those people aged 50-54, 55-59 and 60-64; combined, nearly 313,000 people fell into these age ranges in 2018. Over the next 15 years, the number of New Hampshire



Without continued in-migration of working-age residents and their children, the size of the labor force will decrease as the size of the non-working population increases significantly. This would have a large negative effect on New Hampshire's economy, and would cause a financial burden for the state, which would need to provide services for the large elderly population.

residents that are over 65 will increase drastically.

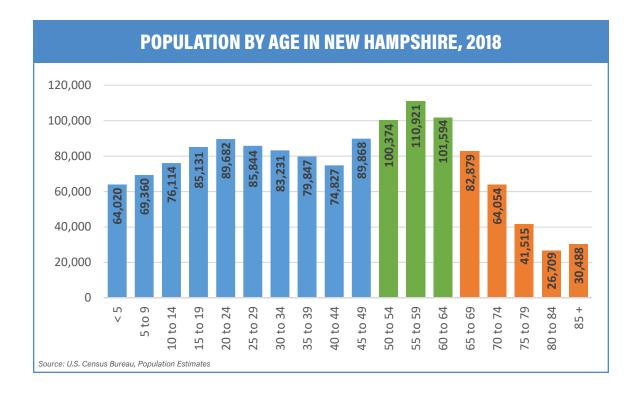
- Greg David



6 U.S. Census Bureau, *Population Estimates*, https://www.census.gov/data/tables.html 7 Ibid

Resident Population	2014	2015	2016	2017	2018	Source
Population, July 1st	1,333,223	1,336,294	1,342,373	1,349,767	1,356,458	СВ
Annual percent change	0.5%	0.2%	0.5%	0.6%	0.5%	CB/NHES
"United States rank of annual percent change (including District of Columbia)"	41	39	27	21	23	CB/NHES
Population by Gender			· · · · · · · · · · · · · · · · · · ·			
Population, Males	659,171	661,414	664,614	668,358	672,266	СВ
Population, Females	674,052	674,880	677,659	681,409	684,192	СВ

Distribution by Age	2014	2015	2016	2017	2018	Source
Under 5 years	4.9%	4.8%	4.8%	4.8%	4.7%	CB/NHES
5 to 17 years	15.3%	15.0%	14.7%	14.5%	14.3%	CB/NHES
18 to 24 years	9.7%	9.7%	9.6%	9.5%	9.3%	CB/NHES
25 to 44 years	23.5%	23.4%	23.4%	23.6%	23.9%	CB/NHES
45 to 64 years	30.7%	30.6%	30.5%	30.1%	29.7%	CB/NHES
65 years and over	15.9%	16.5%	17.0%	17.5%	18.1%	CB/NHES



Vital Statistics	2014	2015	2016	2017	2018	Source
Marriages	9,540	9,234	9,319	9,445	9,404	DVRA
Marriage rate (per 1,000 population)	7.2	6.9	6.9	7.0	6.9	DVRA/NHES
Divorces	4,793	4,470	4,591	4,247	4,190	DVRA
Divorce rate (per 1,000 population)	3.6	3.3	3.4	3.1	3.1	DVRA/NHES
Live births	12,314	12,495	12,350	12,064	11,977	DVRA
Birth rate (per 1,000 population)	9.2	9.4	9.2	8.9	8.8	DVRA
Births to teenage mothers (less than 20 years old)	514	475	409	370	346	DVRA
Percent of total live births	4.2%	3.8%	3.3%	3.1%	2.9%	DVRA/NHES
Non-marital births (percent of live births)	34.3%	34.6%	34.5%	33.3%	33.5%	DVRA/NHES
Resident deaths	11,515	11,987	12,182	12,480	12,589	DVRA
Crude death rate (per 1,000 population)	8.7	9.1	9.2			DVRA
Infant death rate (per 1,000 live births)	4.1	4.5	2.8	3.3	3.3	DVRA/NHES

Median Age	2014	2015	2016	2017	2018	Source
United States	37.7	37.8	37.9	38.0	38.2	СВ
New Hampshire	42.6	42.8	43.0	43.1	43.0	СВ
Connecticut	40.7	40.8	40.9	40.9	41.0	СВ
Maine	44.1	44.4	44.6	44.8	44.9	СВ
Massachusetts	39.3	39.4	39.4	39.5	39.4	СВ
Rhode Island	39.9	39.9	39.9	40.0	40.1	СВ
Vermont	42.6	42.7	42.8	42.8	42.8	СВ

Components of Population Change (annual)	2014	2015	2016	2017	2018	Source
Natural increase rate (per 1,000 population)	0.8	0.3	0.4	0.1	0.2	СВ
Net migration rate (per 1,000 population)	4.3	2.1	4.2	5.4	4.8	СВ

#### **INCOME & WAGES**

#### **Personal Income**

Total personal income in New Hampshire was \$83.1 billion in 2018, a 5.5 percent increase from 2017, when total personal income was \$78.8 billion. Compiled by the U.S. Bureau of Economic Analysis (BEA), personal income is the sum of income from all sources received by or on behalf of residents of a location. In New Hampshire, personal income is primarily comprised of three income sources: earnings by place of work; dividends, interest, and rent; and personal transfer receipts, which are payments for which no current services are performed plus net insurance settlements. Personal income data are not adjusted for inflation.

Net earnings are by far the largest portion of personal income. About two-thirds of total state personal income was from net earnings by place of residence.<sup>1</sup> New Hampshire residents earned \$55.9 billion in 2018, a 3.9 percent increase over 2017. Dividends, interest, and rent provided New Hampshire residents with \$14.9 billion in personal income, an 8.7 percent increase over 2017, and personal transfer receipts, which includes retirement income, totaled \$12.4 billion, 5.4 percent higher than 2017. Dividends, interest and rent represented 18 percent of total personal income for New Hampshire, and personal transfer receipts represented 15 percent.

In 2017, the primary job for 19.4 percent of working New Hampshire residents was located in another state, and 13.8 of persons whose primary job was located in New Hampshire resided in some other state.<sup>2</sup> To account for net inflow or outflow of earnings for interarea commuters, personal income is adjusted for residence. New Hampshire had a net inflow of earnings in 2018 totaling \$6.7 billion, an increase of 9.5 percent over 2017. In 2018, New Hampshire ranked seventh highest among the 50 states in dollar value of adjustment for residence. BEA defines this adjustment as components of earnings and employee contributions to social insurance programs (income subject to adjustment) that are reported on a place-of-work basis converted to a place-of-residence basis reflecting the net flow of income of interarea commuters. Income earned by workers living outside the area are treated as outflow, while income earned by residents received from establishments outside the area are treated as inflow. The adjustment for residence is the net of inflows and outflows for the area.<sup>3</sup>

#### **Per Capita Income**

Per capita personal income in 2018 for New Hampshire was \$61,294, 5.0 percent higher than the 2017 per capita income of \$58,397 (not adjusted for inflation). New Hampshire has ranked in the top ten among all states and third among New England states for per capita personal income since 1995, while Connecticut and Massachusetts have ranked first and second, respectively, since 2009. The U.S. Bureau of Economic Analysis compiles per capita personal income, defined as total personal

PER CAPITA PERSONAL INCOME AND PER CAPITA DISPOSABLE PERSONAL INCOME, 2018											
2018	PCPI	US Rank	PCDPI	US Rank	PCDPI Share of PCPI						
United States	\$54,446		\$48,101		88.3%						
Connecticut	\$76,456	1	\$65,063	1	85.1%						
Massachusetts	\$71,683	2	\$61,147	2	85.3%						
New Hampshire	\$61,294	8	\$54,991	7	89.7%						
Vermont	\$54,173	19	\$48,742	18	90.0%						
Rhode Island	\$54,850	18	\$48,620	19	88.6%						
Maine	\$48,905	30	\$43,909	30	89.8%						

Source: U.S. Bureau of Economic Analysis, Disposable Personal Income

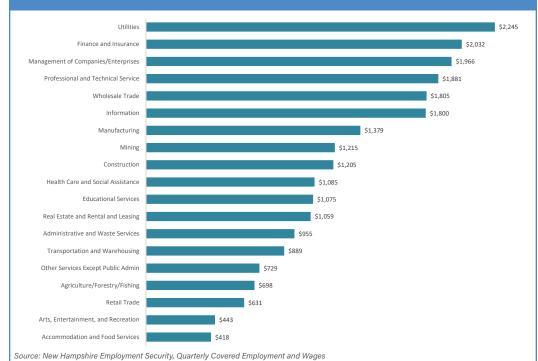
1 Net earnings by place of residence are total earnings (wages and salaries, other income, and proprietors' income) by place of work, less personal social insurance by place of work, adjusted for place of residence

2 U.S. Census Bureau, OnTheMap, Local Employment Dynamics Program, https://onthemap.ces.census.gov/

3 U.S. Bureau of Economic Analysis, "Regional Definitions," https://apps.bea.gov/regional/definitions/

income divided by total midyear population, including residents of all ages.

New Hampshire's per capita disposable personal income in 2018 was \$54,991, which ranked seventh among the 50 states. Disposable income represented 89.7 percent of per capita personal income in New Hampshire, compared to the U.S., where disposable income was 88.3 percent of per capita personal



#### 2018 AVERAGE WEEKLY WAGE BY INDUSTRY SECTOR FOR WORKERS COVERED BY UNEMPLOYMENT INSURANCE

income. Disposable personal income is defined as personal income less current personal taxes, and per capita disposable personal income is total disposable personal income divided by total midyear population.

#### **Average Weekly Wage**

In New Hampshire, the 2018 average weekly wage for all privately owned establishments was \$1,106, a 3.0 percent increase over 2017. Average weekly wages in 2018 for total private goods-producing industries — *Agriculture, forestry, fishing, and hunting; Mining; Construction; and Manufacturing* — were \$1,294, a 1.8 percent gain over 2017, while 2018 average weekly wages for total private serviceproviding industries were \$1,028, a 3.3 percent increase over 2017.

The industry sector averaging the highest weekly wages was *Utilities*, with \$2,245, followed by the *Finance and insurance* sector, with \$2,032. Average weekly wages for these two sectors and seven others were above the private establishment average for the state. Industry sectors with the lowest average weekly wages were *Accommodation and food services*, with \$418; *Arts, entertainment, and recreation*, with \$443; and *Retail trade*, with \$631. Lower averages in these industries are impacted by several factors, including hours worked, the proportion of parttime workers, and seasonal employment patterns. Employment in the *Retail trade* sector spikes in both the June-August and November-December periods; the other two sectors see employment spikes in June through August annually.

Average weekly wages are calculated from a monthly count of New Hampshire workers covered by unemployment insurance, and the wages those workers are paid in a calendar quarter, including bonuses, stock options, severance, profit distributions, and the cash value of meals and lodging, tips, and other gratuities. Data are classified by the industries in which workers are employed. Wages are not adjusted for inflation.

- Katrina Evans

Total Personal Income	2014	2015	2016	2017	2018	Source			
New Hampshire (\$ millions)	\$70,225	\$73,212	\$75,817	\$78,822	\$83,143	BEA			
Components:									
Net Earnings <sup>a</sup>	67.8%	67.5%	67.5%	67.7%	67.2%	BEA			
Dividends, interest, rent	17.9%	17.8%	17.5%	17.4%	17.9%	BEA			
Transfer payments	14.2%	14.7%	15.0%	14.9%	14.9%	BEA			
<sup>a</sup> Earnings (wages and salaries, other income, and proprietors	<sup>a</sup> Earnings (wages and salaries, other income, and proprietors' income) by place of work, less personal social insurance by place of work, adjusted for place of residence.								

Per Capita Personal Income	2014	2015	2016	2017	2018	Source
New Hampshire	\$52,673	\$54,788	\$56,480	\$58,397	\$61,294	BEA
United States rank (excluding D.C.)	9	9	7	8	8	BEA
Annual percent change	3.8%	4.0%	3.1%	3.4%	5.0%	BEA/NHES
Percent change after adjusting for inflation using CPI	2.2%	5.2%	4.0%	3.7%	2.5%	BEA/NHES

Per Capita Disposable Income	2014	2015	2016	2017	2018	Source
New Hampshire	\$47,369	\$48,987	\$50,333	\$52,026	\$54,991	BEA
United States rank (excluding D.C.)	9	8	7	7	7	BEA
Annual percent change	3.4%	3.4%	2.7%	3.4%	5.7%	BEA/NHES
Percent change after adjusting for inflation using CPI	1.9%	4.6%	3.6%	3.7%	3.2%	BEA/NHES

Median Household Income (in current dollars)	2014	2015	2016	2017	2018	Source
New Hampshire	\$73,397	\$75,675	\$76,260	\$75,630	\$81,346	СВ
Connecticut	\$70,161	\$72,889	\$75,923	\$74,304	\$72,812	СВ
Maine	\$51,710	\$50,756	\$50,856	\$53,316	\$58,663	СВ
Massachusetts	\$63,151	\$67,861	\$72,266	\$76,243	\$86,345	СВ
Rhode Island	\$58,633	\$55,701	\$61,528	\$65,401	\$62,266	СВ
Vermont	\$60,708	\$59,494	\$60,837	\$63,682	\$70,066	СВ

Average Weekly Earnings of All Employees, In Dollars	2014	2015	2016	2017	2018	Source
Earnings of Production Workers in Manufacturing	\$767.28	\$821.18	\$866.07	\$914.57	\$937.01	BLS
Average Weekly Earnings of All Employees	\$812.62	\$836.64	\$869.34	\$891.57	\$888.11	BLS

U.S. Price Indices	2014	2015	2016	2017	2018	Source
CONSUMER PRICE INDEX, All Urban Consumers	, Year End (No	t-seasonally A	djusted)			
Annual Average (U.S., 1982-1984 = 100)	236.736	237.017	240.007	245.120	251.107	BLS
Over-the-Year Change in Annual Average	1.6%	0.1%	1.3%	2.1%	2.4%	BLS
Northeast Urban Region CPI-U, Year End (Not-se	asonally Adjus	sted)				
Annual Average (U.S., 1982-1984 = 100)	252.463	252.179	254.850	259.538	265.139	BLS
Over-the-Year Change in Annual Average	1.4%	-0.1%	1.1%	1.8%	2.2%	BLS

Wages	2014	2015	2016	2017	2018	Source
TOTAL WAGES, workers covered by unemploym	ent compensati	on (millions)				
Private and public employers	\$32,058	\$33,466	\$34,675	\$36,032	\$37,409	NHES
Annual percent change	5.8%	4.4%	3.6%	3.9%	3.8%	NHES
AVERAGE WEEKLY WAGE in employment cover	ed by unemploy	ment compen	sation			
All Private industries (annual average)	\$996	\$1,011	\$1,043	\$1,074	\$1,106	NHES
Annual percent change	5.8%	1.4%	3.2%	3.0%	3.0%	NHES
Agriculture, Forestry, Fishing, and Hunting	\$655	\$681	\$678	\$697	\$698	NHES
Mining	\$1,042	\$1,113	\$1,125	\$1,214	\$1,215	NHES
Utilities	\$1,042	\$1,101	\$1,981	\$2,140	\$2,245	NHES
Construction	\$1,274	\$1,286	\$1,132	\$1,183	\$1,205	NHES
Manufacturing	\$1,632	\$1,742	\$1,313	\$1,355	\$1,379	NHES
Wholesale Trade	\$1,632	\$1,742	\$1,729	\$1,762	\$1,805	NHES
Retail Trade	\$570	\$591	\$596	\$608	\$631	NHES
Transportation and Warehousing	\$771	\$811	\$819	\$846	\$889	NHES
Information	\$1,274	\$1,591	\$1,641	\$1,695	\$1,800	NHES
Finance and Insurance	\$1,632	\$1,830	\$1,941	\$1,943	\$2,032	NHES
Real Estate and Rental and Leasing	\$570	\$978	\$1,002	\$1,023	\$1,059	NHES
Professional and Technical Services	\$771	\$1,674	\$1,707	\$1,807	\$1,881	NHES
Management of Companies and Enterprises	\$2,047	\$2,049	\$1,993	\$2,103	\$1,966	NHES
Administrative and Waste Services	\$836	\$869	\$888	\$914	\$955	NHES
Educational Services	\$1,006	\$1,029	\$1,040	\$1,041	\$1,075	NHES
Health Care and Social Assistance	\$972	\$1,000	\$1,022	\$1,052	\$1,085	NHES
Arts, Entertainment, and Recreation	\$417	\$417	\$413	\$426	\$443	NHES
Accommodation and Food Services	\$355	\$373	\$387	\$401	\$418	NHES
Other Services, except Public Admin	\$648	\$680	\$691	\$705	\$729	NHES
Total Government	\$905	\$937	\$946	\$968	\$994	NHES

#### **LABOR FORCE & UNEMPLOYMENT**

### New Hampshire's Expanding Labor Force

During the period from 2008 through 2011, New Hampshire's labor force<sup>1</sup> was deeply affected by the "Great Recession." The labor force continued to grow until June 2009 while employment had been decreasing since July 2008. By the summer of 2011, the labor force reached its lowest point and employment began to grow again after two years of stagnation. In the end, New Hampshire lost approximately 11,500 labor force participants and 21,400 fewer residents had jobs. The road was long, but employment losses were finally recovered in December 2014. Labor force losses required another year for recovery.

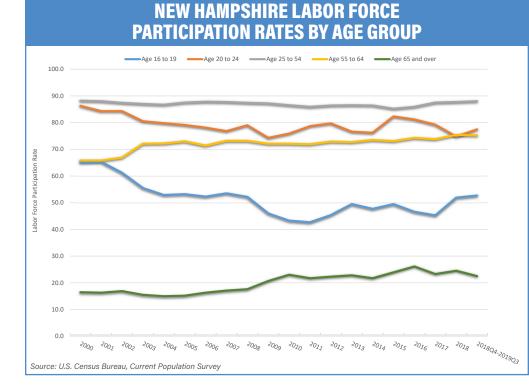
Resident employment expanded by about 38,700 persons from December 2014 to October 2019. During this period of recovery, over-the-month employment losses have been few in number and of insignificant levels. The New Hampshire labor force has expanded by approximately 27,000 residents between December 2015 and October 2019. These gains are predominantly due to increases in New Hampshire's population, as the labor force participation rate has been essentially unchanged throughout the expansion.

#### **Labor Force Participation**

The labor force participation rate is a measure that represents the number of persons in the labor force, either employed or unemployed, for every 100 residents in the civilian noninstitutionalized population age sixteen and older. New Hampshire's highest seasonally adjusted labor force participation rate was 73.7 in January 1990, while the lowest rate was 65.7 in March and April of 1976. In November 2019, for every 100 New Hampshire residents in the population, 68.9 participated in the labor force.

The labor force participation rate can be an indicator of the health of the economy; however the





The labor force includes all people age 16 and older who are classified as either employed or unemployed

seasonal adjustment to allow for month-to-month comparisons. Although demographic data are incorporated into the model, estimates cannot be produced for demographic groups. The Current Population Survey (CPS), which is the main source of data for the labor force estimates model, can be used as a proxy for estimates of demographic groups.<sup>2</sup> CPS estimates are presented in the form of a twelve-month average to improve accuracy and remove the effect of seasonality.<sup>3</sup>

The CPS labor force participation rate for all New Hampshire residents was 73.0 in the year 2000 and declined steadily through 2017, to a rate of 67.6.<sup>4</sup> The rate has increased since then to 68.8 for the twelve-month period October 2018 through September 2019. However, this pattern is not reflected in specific age groups. Young persons in the age 16 to 19 and age 20 to 24 groups experienced more rapid declines, but increases have been underway since 2012. Older workers, those in the age 55 to 64 and age 65 and over groups have not experienced these decreases and have had participation rate increases since 2000.

The CPS labor force participation rate not only reflects the participation of the various age groups, but also their share of the population.

NEW HAMPSHIRE CIVILIAN NONINSTITUTIONALIZED POPULATION BY AGE GROUP								
SHARE OF THE POPULATION								
RANGE OF AGE	2014 AVERAGE	2018 Q4 - 2019 Q3	CHANGE					
Age 16 to 19	5.8%	6.2%	+0.4%					
Age 20 to 24	8.6%	7.6%	-1.0%					
Age 25 to 34	14.6%	14.7%	+0.1%					
Age 35 to 44	14.5%	14.2%	-0.3%					
Age 45 to 54	18.9%	16.6%	-2.3%					
Age 55 to 64	18.3%	19.7%	+1.4%					
Age 65 to 74	11.9%	12.4%	+0.5%					
Age 75 and over	7.3%	8.5%	+1.2%					

Source: US Census Bureau, Current Population Survey

During the current expansion, older residents have increased their share of the available population while younger workers and those in their prime working years have generally decreased their share of the available population. New Hampshire's labor force participation rate has remained relatively stable predominantly due to the increased labor force participation among older workers. However, younger workers must eventually replace these older workers or the labor force participation rate will decline as the oldest workers exit the labor force.

#### **Persons Not in the Labor Force**

Although participation data by age group provides some insight on makeup of the labor force, there must be some strategy beyond simply enticing a younger population to move to or remain living in New Hampshire. CPS data also provide information as to why individuals choose not to participate in the labor force. The challenge to policy makers is to reduce these barriers to labor force participation.

There is no surprise regarding the top reason why New Hampshire residents have not participated in the labor force: Retirement. What may be surprising is that, during the period from October 2018 to September 2019, there were more than 29,700 residents who were under the age of sixtyfive and retired from the labor force.<sup>5</sup> The Current Population Survey provides a snapshot in time, so some of these individuals may have been in a state of temporary retirement, but it does indicate that there may be an opportunity to expand the labor force further with experienced workers.

A second source of additional workers is in the form of workers with disabilities or with disabling conditions. From December 2007 to December 2014, the number of disabled workers in New Hampshire receiving Old Age, Survivors and Disability Insurance (OASDI) benefits increased by 32 percent, but the level has remained unchanged through the current labor force expansion.<sup>6</sup> It

Annual average Current Population Survey estimates represent a twelve-month average of estimates beginning with January and ending with December of the referenced year
 Current Population Survey estimates may not match officially released rates. Official labor force participation rates are model based and include several data sources in addition to Current
 Population Survey data, but cannot be disaggregated by demographic category

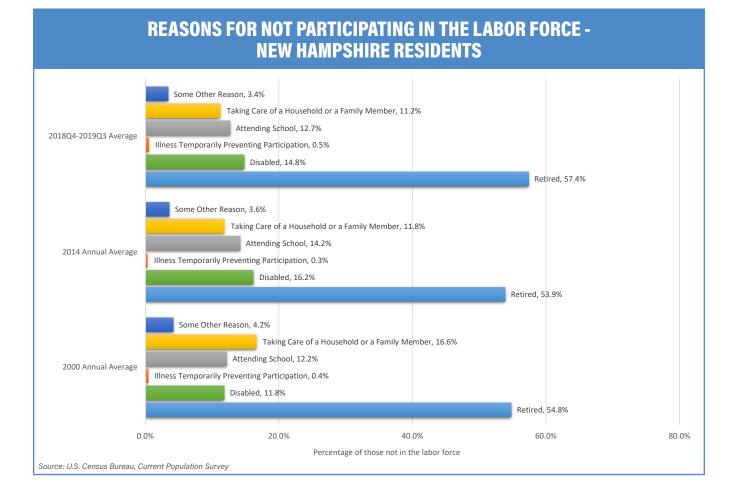
<sup>2</sup> The Current Population Survey is the source of information on work status of individuals 16 years of age and older. It is a household survey conducted by the U.S. Census Bureau that gathers data on labor force status and many demographic and labor force characteristics. As a household survey, the data represent residents of a specific state. This monthly household survey is conducted for a specific survey reference week, usually the week including the 12th of each month. The Current Population Survey is jointly sponsored by the Census Bureau and the Bureau of Labor Statistics

<sup>5</sup> U.S. Census Bureau, unpublished Current Population Survey data, extracted and prepared by New Hampshire Employment Security, Economic and Labor Market Information Bureau, December 2, 2019

is likely that difficulties finding employment during the recession coupled with disabling conditions led to this rapid increase. In an expanding economy, these potential workers may fill employers' staffing vacancies when allowed reasonable accommodations.

Potential labor force participants in the youngest age groups typically balance work opportunities with the responsibilities of school attendance. Homework and extracurricular activities can limit or even prohibit participation in the labor force. Internships may provide the opportunity for young workers to receive both an education and work experience. Another major reason why some people have not participated in the labor force is that they were taking care of a household or a family member. Caregivers may have been responsible for their own children, parents or grandparents, or managing their family home. Many of these individuals may have chosen to provide this care over employment, while others did not have a choice. Flexible work hour policies, low or no cost childcare or senior care benefits and other accommodations may help to provide work options to these individuals and further expand the labor force.

- Robert Cote



#### 6 U.S. Social Security Administration, Office of Retirement and Disability Policy, Office of Research, Evaluation and Statistics, "Congressional Statistics" years 2007 through 2018, https://www.ssa.gov/policy/docs/factsheets/cong\_stats/2018/

C

Mass Layoff Statistics	2014	2015	2016	2017	2018	Source
Total number of mass layoff events	37	24	23	18	18	NHES
Total number of initial claims from mass layoff events	6,586	3,835	3,248	2,206	1,965	NHES
Total number of extended mass layoff events	12	8	9	9	8	NHES
Total number of initial claims from extended layoffs	1,646	1,232	1,232	917	786	NHES
Total number of separations from extended layoffs	2,332	1,250	1,330	1,117	1,261	NHES

Unemployment Insurance	2014	2015	2016	2017	2018	Source
Weeks compensated for unemployment (UI)	297,637	230,528	192,427	166,663	148,512	USDOL-ETA
Benefits paid, unemployment insurance (thousands)	\$82,894	\$67,344	\$57,923	\$52,695	\$47,797	USDOL-ETA
Annual percent change	-19.3%	-18.8%	-14.0%	-9.0%	-9.3%	USDOL-ETA/ NHES
Average duration, benefit payments (weeks)	14.1	13.2	12.8	12.6	12.5	USDOL-ETA
United States average	16.4	15.5	15.5	15.4	15.4	USDOL-ETA
United States rank <sup>a</sup> (1=longest duration)	42	40	43	41	41	USDOL-ETA
Average weekly benefit amount						
New Hampshire	\$290.54	\$305.82	\$313.57	\$328.39	\$335.16	USDOL-ETA
United States	\$314.54	\$328.85	\$344.34	\$350.95	\$355.91	USDOL-ETA
<sup>a</sup> Ranks include D.C., Virgin Islands, and Puerto Rico						

Alternative Measures of Labor Underutilization	2014	2015	2016	2017	2018	Source
U-1: persons unemployed 15 weeks or longer, as a	percent of the	e civilian labor	force			
New Hampshire	1.9%	1.3%	1.0%	0.9%	0.9%	BLS
United States	3.0%	2.3%	2.0%	1.7%	1.4%	BLS
U-2: job losers and persons who completed temp	orary jobs, as a	a percent of th	e civilian labor	force		
New Hampshire	2.4%	1.9%	1.5%	1.5%	1.2%	BLS
United States	3.1%	2.6%	2.3%	2.1%	1.8%	BLS
U-3: total unemployed, as a percent of the civilian	labor force (th	nis is the defini	tion used for t	he official uner	nployment rate	e)
New Hampshire	4.2%	3.4%	2.8%	2.8%	2.6%	BLS
United States	6.2%	5.3%	4.9%	4.4%	3.9%	BLS
U-4: total unemployed plus discouraged workers,	as a percent o	f the civilian la	bor force plus	discouraged v	vorkers	
New Hampshire	4.5%	3.7%	3.0%	2.9%	2.7%	BLS
United States	6.6%	5.7%	5.2%	4.6%	4.1%	BLS
U-5: total unemployed, plus discouraged workers, marginally attached workers	, plus all other	marginally atta	ched workers	, as a percent	of the civilian l	abor force plus all
New Hampshire	5.2%	4.2%	3.6%	3.5%	3.0%	BLS
United States	7.5%	6.4%	5.9%	5.3%	4.8%	BLS
U-6: total unemployed, plus all marginally attache labor force plus all marginally attached workers	d workers, plu	s total employ	ed part time fo	r economic rea	asons, as a per	cent of the civilian
New Hampshire	9.7%	8.0%	6.4%	6.2%	5.6%	BLS
United States	12.0%	10.4%	9.6%	8.5%	7.7%	BLS

Labor Force and Unemployment Civilian Labor Force (Residents)	2014	2015	2016	2017	2018	Source
Civilian Labor Force (annual average)	743,320	745,461	751,315	754,465	761,752	BLS
Annual percent change	0.3%	0.3%	0.8%	0.4%	1.0%	BLS/NHES
Labor force participation rate	68.7%	68.5%	68.5%	68.3%	68.4%	BLS
United States rank	7	6	tie 7	8	tie 6	BLS
Male participation rate	72.6%	73.2%	74.1%	72.1%	74.1%	BLS
United States rank	14	10	8	tie 11	5	BLS
Female participation rate	64.5%	63.7%	63.9%	63.4%	61.9%	BLS
United States rank	tie 6	tie 8	7	6	tie 5	BLS
Employment (Residents)						
Employed (annual average)	711,551	720,362	729,892	733,985	742,512	BLS
Annual percent change	1.1%	1.2%	1.3%	0.6%	1.2%	BLS/NHES
Unemployment (Residents)						
Unemployed (annual average)	31,769	25,099	21,423	20,480	19,240	BLS
Annual percent change	-15.8%	-21.0%	-14.6%	-4.4%	-6.1%	BLS/NHES
Unemployment rate (annual average)						
New Hampshire	4.3%	3.4%	2.9%	2.7%	2.5%	BLS
United States rank (1=lowest)	7	4	1	2	2	BLS
New England	5.9%	4.9%	4.1%	3.9%	3.5%	BLS
United States	6.2%	5.3%	4.9%	4.4%	3.9%	BLS
Men						
New Hampshire	4.4%	3.6%	3.1%	2.7%	2.6%	BLS
United States	6.3%	5.4%	4.9%	4.4%	3.9%	BLS
Women						
New Hampshire	4.0%	3.3%	2.5%	2.9%	2.6%	BLS
United States	6.1%	5.2%	4.8%	4.3%	3.8%	BLS
Teens (16-19)						
New Hampshire	13.3%	8.5%	10.5%	10.9%	8.8%	BLS
United States	19.6%	16.9%	15.7%	14.0%	12.9%	BLS

### **EMPLOYMENT BY INDUSTRY**

## Jobs in New Hampshire After the Great Recession

New Hampshire employers slashed 30,400 jobs due to the "Great Recession." Although the job market seemed to crash so quickly at the time, it was a two-year journey from the January 2008 high of 651,900 jobs to the February 2010 low of 621,500. It would take more than five years for these lost jobs to be replaced. Between March 2015 and November 2019, New Hampshire's economy has expanded by 35,500 jobs.<sup>1</sup>

#### **New Hampshire Job Growth**

The New Hampshire over-the-year growth rate for *Total Non-Farm Employment* ranged from 0.6 percent to 2.3 percent since March 2015. This is based on a three-month moving average of the seasonally adjusted estimates. The growth rate peaked in April 2016 while the lowest rates were experienced in the fall of 2018. Growth rates during 2019 were greater than the rates for 2018; however both years are subject to benchmark revision in 2020.

Employment growth was not equal among all

industries. Employment in *Education* and *Health Services* grew at a faster rate historically than *Total Non-Farm Employment* in

New Hampshire. Since March 2015, over-the-year growth rates for Education and Health Services ranged from 0.9 percent to 3.6 percent, with the higher rates occurring in 2016 and 2019. The Construction industry exhibits cyclical behavior as demand for residential and commercial development waxes and wanes. During the expansion of 2015 through 2019, Construction had a growth rate of only 0.9 percent in April 2015, but had the highest growth rate of all industry sectors, over 8.0 percent, in April 2016 and November 2019. The average annual

1 U.S. Bureau of Labor Statistics, "State and Metro Area Employment, Hours, & Earnings!

March 2015 and November 2019 was 3.9 percent compared with 1.3 percent for *Total Non-Farm Employment*. Employment in *Manufacturing* and *Retail Trade* 

growth rate of Construction employment between

industries have not recovered from the recession. In January 2008, there were 77,400 manufacturing jobs and 98,000 retail trade jobs in New Hampshire. Both of these industries reached their employment lows in December 2009. By that point, Manufacturing had lost 12,200 jobs and Retail Trade had shed 6,100 positions. While Total Non-Farm Employment reached pre-recession levels and began expanding in March 2015, Manufacturing remained 10,400 jobs short of a recovery and Retail Trade lagged by 3,200 jobs. Since March 2015, the Manufacturing growth rate has been in a range of -1.7 percent to 2.8 percent and was contracting during the latter half of 2019. Similarly, Retail Trade has ranged from -1.6 percent to 2.6 percent, with an average growth rate of only 0.1 percent.

#### NEW HAMPSHIRE 3-MONTH AVERAGE OVER-THE-YEAR CHANGE IN EMPLOYMENT



New Hampshire Employment Security Economic & Labor Market Information Bureau

#### **EMPLOYMENT BY INDUSTRY** | 15

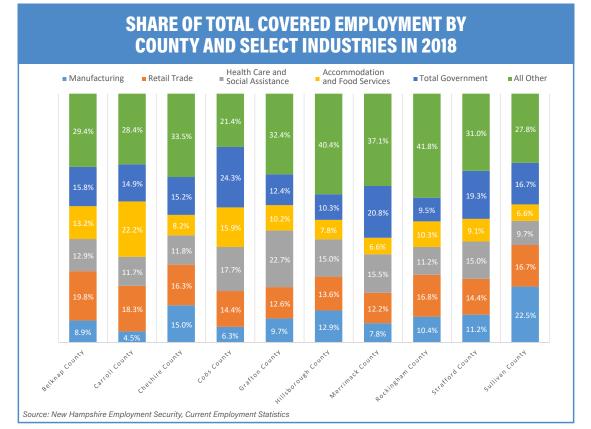
#### **The Industry Landscape**

New Hampshire's industry landscape has been changing over the course of many years. In 2001, *Trade, Transportation and Utilities* represented the largest share of New Hampshire jobs at 22.5 percent of *Total Covered Employment*.<sup>2</sup> The majority of that share was in the *Retail Trade* subsector, with 15.6 percent. Data for 2018 indicate that *Trade, Transportation and Utilities* remained the largest share at 21.1 percent, with the *Retail Trade* share declining by 1.3 percent.

The largest share increase was in *Education and Health Services*, which increased from 13.5 percent of *Total Covered Employment* in 2001 to 17.1 percent in 2018. The *Health Care and Social Assistance* subsector accounted for a 3.0 percent share increase while *Educational Services* provided the remaining 0.6 percent share increase. *Educational Services* includes private industry services only, and does not include those provided by state and local government. *Professional and Business Services*  also experienced a significant share increase, from 9.4 percent to 12.6 percent over the time period. The largest share decrease was suffered in the *Manufacturing* sector, a loss of 5.3 percent. *Manufacturing* represented 16.0 percent of *Total Covered Employment* in 2001, but had declined to only 10.7 percent by 2018. The majority of this decrease occurred prior to 2009.

In 2018, a large percentage of employment in every county in New Hampshire consisted of jobs in the *Manufacturing*, *Retail Trade*, *Health Care and Social Assistance* and *Accommodation and Food Services* industries.<sup>3</sup> Other industries, such as *Construction*, *Finance and Insurance*, *Professional and Technical Services* and *Administrative and Waste Services*, were not distributed as evenly in every county. These industries had a significant presence in individual counties, but a comparably small presence in other counties.

- Robert Cote



U.S. Bureau of Labor Statistics, "Quarterly Census of Employment and Wages," https://www.bls.gov/cew/

3 Economic and Labor Market Information Bureau, "Covered Employment & Wages (QCEW)," New Hampshire Employment Security, https://www.nhes.nh.gov/elmi/statistics/qcew-data.htm

Annual Average Employment	2014	2015	2016	2017	2018	Source
ōtal Nonfarm	645,700	656,200	668,400	675,700	681,000	NHES
Total Private	555,000	565,800	577,900	585,500	591,000	NHES
Goods Producing	90,600	92,500	94,600	96,400	98,300	NHES
Mining & Logging	1,000	1,000	1,000	1,000	1,000	NHES
Construction	23,200	24,200	25,500	26,500	26,900	NHES
Manufacturing	66,400	67,300	68,200	69,000	70,500	NHES
Durable Goods	49,900	50,200	50,700	51,400	52,500	NHES
Computer & Electronic Product	14,500	14,800	14,900	15,200	16,100	NHES
Nondurable Goods	16,500	17,100	17,400	17,600	18,000	NHES
Service Providing	555,100	563,700	573,800	579,300	582,600	NHES
Trade, Transportation, & Utilities	136,700	137,900	140,000	139,800	139,300	NHES
Wholesale Trade	27,200	27,500	27,800	27,700	28,200	NHES
Retail Trade	94,400	95,000	96,000	95,600	94,500	NHES
Food & Beverage Stores	20,900	21,700	22,100	22,100	21,800	NHES
Transportation, Warehousing, and Utilities	15,100	15,400	16,300	16,500	16,700	NHES
Information	12,100	12,500	12,500	12,600	12,400	NHES
Financial Activities	33,700	33,800	34,700	34,900	34,400	NHES
Professional & Business Services	75,400	78,700	80,200	82,200	83,200	NHES
Educational & Health Services	115,900	118,100	121,700	124,100	125,800	NHES
Educational Services	28,900	30,100	31,800	32,900	33,300	NHES
Health Care & Social Assistance	86,900	88,000	89,900	91,200	92,500	NHES
Hospitals	27,800	28,300	28,800	29,100	29,300	NHES
Leisure & Hospitality	67,100	68,500	69,800	70,900	72,100	NHES
Accommodation & Food Services	56,000	57,200	58,200	59,100	59,900	NHES
Food Services & Drinking Places	46,800	47,700	48,700	47,000	50,500	NHES
Other Services	23,600	23,900	24,300	24,600	25,400	NHES
Total Government	90,700	90,300	90,600	90,200	90,000	NHES

Annual Employment Percent Changes	2014	2015	2016	2017	2018	Source
TOTAL NONFARM						
New Hampshire	1.1%	1.6%	1.9%	1.1%	0.8%	NHES
New England	1.4%	1.5%	1.4%	0.9%	0.6%	NHES/BLS
United States	1.9%	2.1%	1.8%	1.6%	1.7%	NHES/BLS
Private						
New Hampshire	1.2%	1.9%	2.1%	1.3%	0.9%	NHES
New England	1.5%	1.8%	1.5%	1.1%	0.7%	NHES/BLS
United States	2.2%	2.3%	1.9%	1.8%	1.9%	NHES/BLS
Government						
New Hampshire	0.3%	-0.4%	0.3%	-0.4%	-0.2%	NHES
New England	0.9%	-0.3%	0.6%	-0.3%	0.0%	NHES/BLS
United States	0.1%	0.7%	0.9%	0.6%	0.4%	NHES/BLS

ual Employment Percent nges (Service Producing)	2014	2015	2016	2017	2018	Source
Service Providing	1					
New Hampshire	1.1%	1.5%	1.8%	1.0%	0.6%	NHES
New England	1.5%	1.4%	1.4%	0.9%	0.5%	NHES/BL
United States	1.8%	2.1%	1.9%	1.6%	1.4%	NHES/BL
Trade, Transportation, & Utilities	I					
New Hampshire	0.1%	0.9%	1.5%	-0.1%	-0.4%	NHES
New England	0.9%	0.9%	0.6%	0.4%	-0.2%	NHES/BL
United States	2.0%	1.9%	1.4%	0.8%	0.9%	NHES/BL
Wholesale trade	I				ı	
New Hampshire	1.9%	1.1%	1.1%	-0.4%	1.8%	NHES
New England	0.5%	0.2%	0.4%	0.2%	-0.2%	NHES/BL
United States	1.4%	0.7%	0.1%	0.5%	0.7%	NHES/BL
Retail trade						
New Hampshire	-0.3%	0.6%	1.1%	-0.4%	-1.2%	NHES
New England	0.6%	0.7%	0.5%	-0.3%	-0.8%	NHES/BL
United States	1.8%	1.6%	1.4%	0.1%	-0.1%	NHES/BL
Transportation, Warehousing, and Ut	ilities					
New Hampshire	0.7%	2.0%	5.8%	1.2%	1.2%	NHES
New England	2.9%	2.5%	2.5%	3.4%	2.4%	NHES/BL
United States	3.2%	4.1%	2.6%	3.1%	3.9%	NHES/BL
Information						
New Hampshire	1.7%	3.3%	0.0%	0.8%	-1.6%	NHES
New England	0.2%	1.5%	0.5%	0.7%	-0.6%	NHES/BL
United States	0.7%	0.9%	1.6%	0.7%	0.5%	NHES/BL
Financial Activities				I		
New Hampshire	-0.9%	0.3%	2.7%	0.6%	-1.4%	NHES
New England	-0.2%	1.1%	1.1%	0.1%	-0.5%	NHES/BL
United States	1.2%	1.8%	2.0%	2.0%	1.4%	NHES/BL
Professional & Business Services				I		
New Hampshire	5.0%	4.4%	1.9%	2.5%	1.2%	NHES
New England	2.7%	3.0%	3.0%	1.8%	1.6%	NHES/BL
United States	3.0%	3.0%	2.1%	2.0%	2.4%	NHES/BL
Educational & Health Services						
New Hampshire	0.5%	1.9%	3.0%	2.0%	1.4%	NHES
New England	1.6%	2.0%	1.6%	1.5%	0.8%	NHES/BL
United States	1.7%	2.8%	2.8%	2.4%	2.1%	NHES/BL
Leisure & Hospitality				I	I	
New Hampshire	1.4%	2.1%	1.9%	1.6%	1.7%	NHES
New England	2.2%	1.7%	2.5%	2.0%	0.9%	NHES/BL
United States	3.1%	3.2%	3.3%	2.5%	1.9%	NHES/BL
Other Services	I	1			I	
New Hampshire	2.2%	1.3%	1.7%	1.2%	3.3%	NHES
New England	2.9%	1.1%	1.3%	0.4%	1.2%	NHES/BL
United States	1.5%	1.0%	1.2%	1.4%	1.3%	NHES/BL

nual Employment Percent anges (Goods Producing)	2014	2015	2016	2017	2018	Source
Goods Producing						
New Hampshire	1.2%	2.1%	2.3%	1.9%	2.0%	NHES
New England	0.9%	1.8%	0.9%	0.9%	1.2%	NHES/BLS
United States	2.6%	2.0%	0.7%	1.7%	3.1%	NHES/BLS
Mining & Logging						
New Hampshire	11.1%	0.0%	0.0%	0.0%	0.0%	NHES
New England	3.4%	0.0%	-1.6%	-1.7%	-1.7%	NHES/BLS
United States	3.2%	-8.8%	-17.8%	1.2%	8.3%	NHES/BLS
Construction						
New Hampshire	3.1%	4.3%	5.4%	3.9%	1.5%	NHES
New England	4.3%	5.6%	4.4%	2.3%	2.3%	NHES/BLS
United States	5.0%	5.0%	4.1%	3.6%	4.6%	NHES/BLS
Manufacturing						
New Hampshire	0.6%	1.4%	1.3%	1.2%	2.2%	NHES
New England	-0.5%	0.1%	-0.7%	0.3%	0.7%	NHES/BLS
United States	1.4%	1.2%	0.1%	0.7%	2.0%	NHES/BLS
Durable goods						
New Hampshire	0.0%	0.6%	1.0%	1.4%	2.1%	NHES
New England	-1.1%	-0.4%	-1.0%	0.2%	1.0%	NHES/BLS
United States	1.7%	1.2%	-0.7%	0.4%	2.6%	NHES/BLS
Nondurable goods	,					
New Hampshire	1.9%	3.6%	1.8%	1.1%	2.3%	NHES
New England	0.7%	1.1%	-0.1%	0.5%	-0.1%	NHES/BLS
United States	0.9%	1.3%	1.5%	1.3%	0.9%	NHES/BLS

#### **OCCUPATIONAL TRENDS**

### **Employment Projections,** 2018 to 2028

From 2018 to 2028, employment in New Hampshire is projected to grow by 5.3 percent, adding 37,264 new jobs. In addition to new job growth, which is driven by industrial job gains, there will be job openings created from two other sources. *Labor force exits* are projected to produce 31,750 job openings annually. These openings occur when a worker leaves the labor force altogether, for reasons including retirement, attending school full-time, or family care responsibilities. *Occupational transfers* are projected to create 50,876 job openings annually. These open positions are created when a worker leaves a job in one occupational group to take a job in another occupational group, such as a supervisor promoted to manager (part of *Management Occupations*), or someone changing careers.

#### **New Job Gains**

New job gains are the difference between estimated 2018 employment and projected 2028 employment. The largest numeric change among the 22 occupational groups is projected for *Food preparation* 

New Hampshire Occupational Er	nployment	Projection	s 2018 - 202	28	An	nual Avera	ge
SOC Title	Estimated 2018 Employment	Projected 2028 Employment	Numeric Change	Percent Change	Labor Force Exits	Occupational Transfers	Total Job Openings
Total, All Occupations	704,622	741,886	37,264	5.3%	31,750	50,876	86,352
Management Occupations	46,359	50,052	3,693	8.0%	1,253	2,799	4,421
Business and Financial Operations Occupations	30,830	33,254	2,424	7.9%	889	2,144	3,275
Computer and Mathematical Occupations	22,313	25,590	3,277	14.7%	388	1,351	2,067
Architecture and Engineering Occupations	14,584	15,948	1,364	9.4%	363	833	1,332
Life, Physical, and Social Science Occupations	4,412	4,929	517	11.7%	88	362	502
Community and Social Service Occupations	10,453	12,019	1,566	15.0%	402	805	1,364
Legal Occupations	3,993	4,294	301	7.5%	107	174	311
Education, Training, and Library Occupations	43,828	45,243	1,415	3.2%	1,878	2,186	4,206
Arts, Design, Entertainment, Sports, and Media Occupations	9,651	10,000	349	3.6%	389	705	1,129
Healthcare Practitioners and Technical Occupations	40,589	45,642	5,053	12.5%	1,103	1,278	2,886
Healthcare Support Occupations	17,514	19,743	2,229	12.7%	939	1,179	2,341
Protective Service Occupations	11,972	12,362	390	3.3%	455	674	1,168
Food Preparation and Serving Related Occupations	60,151	65,548	5,397	9.0%	4,266	6,535	11,341
Building and Grounds Cleaning and Maintenance Occupations	25,871	27,641	1,770	6.8%	1,452	2,018	3,647
Personal Care and Service Occupations	29,866	34,696	4,830	16.2%	2,222	2,527	5,232
Sales and Related Occupations	82,601	82,736	135	0.2%	4,650	7,114	11,778
Office and Administrative Support Occupations	111,142	109,841	-1,301	-1.2%	5,461	7,626	12,957
Farming, Fishing, and Forestry Occupations	1,850	1,851	1	0.1%	73	227	300
Construction and Extraction Occupations	25,621	27,892	2,271	8.9%	868	2,064	3,159
Installation, Maintenance, and Repair Occupations	26,223	27,689	1,466	5.6%	833	1,810	2,790
Production Occupations	46,975	45,275	-1,700	-3.6%	1,838	3,508	5,176
Transportation and Material Moving Occupations	37,824	39,641	1,817	4.8%	1,832	2,959	4,973

Source: New Hampshire Employment Security, Occupational Employment Projections 2018-2028

and serving related occupations, with a gain of 5,397 new jobs. Strong growth is expected for *Combined food preparation and serving workers, including fast food,* projected to add 2,054 jobs, a 13.4 percent change, and *Cooks, restaurant,* projected to add 1,361, a 20.3 percent change.

Healthcare practitioners and technical occupations are expected to gain 5,053 new jobs through 2028. About a third of new jobs, 1,752, will be for *Registered nurses*, which continues to have the largest number of workers in this occupational group and projected to have the third largest numeric change among all occupations.

#### **Fast Growing**

Although projections are best understood when reviewing all the change factors together, those with a large percent change over the ten-year period are expected to add workers at the fastest rate. *Personal care and service occupations*, growing by 16.2 percent, are led by *Personal care aides*, projected to grow by

31.1 percent and add 2,800 new jobs. Workers in this occupation assist the elderly, convalescents, or persons with disabilities with daily living activities at the person's home or in a care facility.

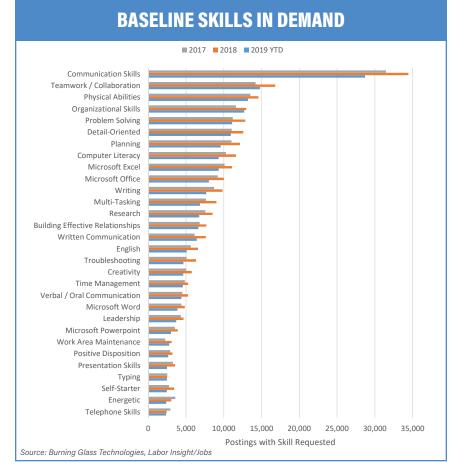
*Community and social service occupations*, growing by 15.0 percent, are led by *Substance abuse*, *behavioral disorder*, *and mental health counselors*, projected to grow by 27.2 percent and add nearly 700 new jobs. Workers in this occupation counsel and advise individuals with alcohol, tobacco, drug, or other problems or counsel with emphasis on prevention, working with individuals and groups to promote optimum mental and emotional health.

Computer and mathematical occupations are projected to grow by 14.7 percent through 2028. Several occupations in this group have high growth rates: Computer information and research scientists (22.6 percent); Information security analysts (34.3 percent); Software developers, applications (25.6 percent); Operations research analysts (29.6 percent); and Statisticians (32.3 percent).

#### **Mixed Expectations**

*Office and administrative support occupations* have both the largest number of workers and the largest number of total annual job openings, with 2018 employment of 111,142 and 13,000 projected annual openings. Yet this group is expected have 1,300 fewer jobs by 2028. This contradictory employment outlook is the result of automation and changing business practices eroding new job growth, while at the same time, demand for workers to replace those who leave the labor force or change occupations will be strong.

*Office and administrative support occupations* expected to gain jobs include *Stock clerks and order fillers*, 537 new jobs, and *Medical secretaries*, 520 new jobs. The largest



drop in employment is expected for Secretaries and administrative assistants, except legal, medical, and executive, 992 fewer jobs, and Office clerks, general, with 316 fewer jobs.

Employers may struggle to fill openings for *Production occupations* as well. This group is projected to have 1,700 fewer jobs by 2028. Even with a lack of new jobs, *Manufacturing* employers will be looking to replace 1,838 workers exiting the labor force and another 3,500 workers who are expected to transfer out of this occupational group.

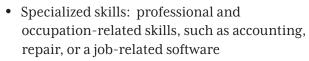
Sales and related occupations also have a mixed outlook. This group had the second largest number of workers in 2018, 82,600, and the second largest total number of projected annual openings, 11,778. However, there is little new growth expected, with just 135 new jobs and 0.2 percent change from 2018 to 2028.

#### **Skills in Demand**

Employers looking to hire workers usually prefer applicants to have some relevant skills before they are hired. To date in 2019, over 80 percent of online job ads included a request for applicants with some skill, whether a soft skill, such as an ability to provide customer service, a specialized skill, such as cardiopulmonary resuscitation (CPR), or a software skill, such as Microsoft Office.

Burning Glass Technologies' Labor Insight/Jobs® compiles information on skills requested by employers in online job ads. Three types of skills are identified:

• Baseline skills: those defined as crosscutting or foundational skills found in job ads regardless of industry or occupation



Postings with Skill Requested

10.000

15.000

20.000

25.000

**SPECIALIZED SKILLS IN DEMAND** 

2017 2018 2019 YTD

Customer Service Sales Scheduling

Customer Contact

Repair Patient Care

Cleaning

Teaching

Merchandising Budgeting

Retail Industry Knowledge

Quality Assurance and Control

Cardiopulmonary Resuscitation (CPR)

Project Management Product Sales

Staff Management

Product Knowledge

Store Management Administrative Support

Customer Billing

Accounting

0

5.000

Basic Mathematics Retail Sales

Treatment Planning

Quality Management

Description and Demonstration of Products

Advanced Cardiac Life Support (ACLS)

Source: Burning Glass Technologies, Labor Insight/Jobs

Lifting Ability

Data Entry Sales Goals

• Software or programming skills: specific computer programs requested in job postings as well as programming skills (including languages like Java and Perl).

There were fewer employer ads for applicants with skills in a specific software package than ads requesting baseline or specialized skills. Between January and October 2019, over 28,700 jobs ads requested an ability in communication, the top baseline skill, and over 15,000 job ads specified customer service, the top specialized (occupationspecific) skill. During the same period, 6,700 job ads specified skill in Microsoft Excel, the most requested software/programming skill.

Over the last three years,<sup>1</sup> the skills most frequently requested by employers in online job ads have changed little. There were few differences in either baseline or specialized skills requested by employers in the largest number of job ads for 2017, 2018, and 2019 year-to-date.

The baseline skills requested in the largest number of job ads specified communication skills, teamwork and collaboration, physical abilities, organizational skills, and problem solving. In each year, there were twice as many postings requesting applicants with communication skills than those requesting teamwork and collaboration, which was requested in the next largest number of postings. Communication skills – defined as the ability to

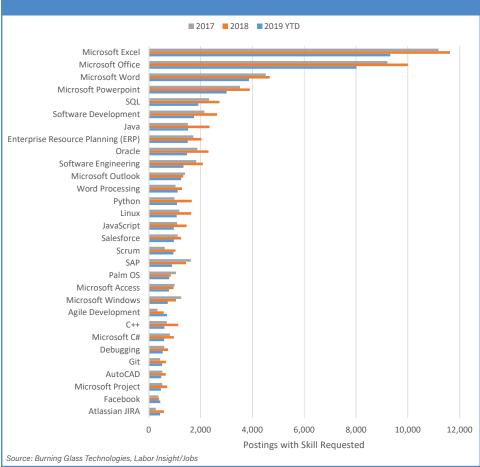
convey information to another effectively and efficiently<sup>2</sup> — were specified in job ads for all industries. The largest number of ads requesting communication skills were for Retail sales associates, *Retail store manager/supervisor, customer service representative,* and *Sales representative.* 

Job ads requesting applicants with specialized, job-related skills have also changed little over recent years. The largest number of job ads requested applicants with skills in customer service, sales, scheduling, retail industry knowledge, and customer contact.

The largest number of job ads requesting customer service skills, defined as experience working with customers to ensure their satisfaction with a product or service, were for *retail sales associates*, customer service representatives, and *retail store managers/supervisors*. As with communication skills, employers in *Retail trade* posted the largest number job ads requesting customer services skills.

The third category of skills identified in Labor Insight/Jobs is software and programming skills. Skill using Microsoft software products, including Excel, Office, Word, and PowerPoint, were consistently requested in the largest number of job ads over the last three years.

The largest number of job ads requesting skills in Microsoft Office software, including Excel, Word, and PowerPoint, were for *office and administrative assistants, software developers and engineers, customer service representatives,* and *sales representatives.* 



#### SOFTWARE SKILLS IN DEMAND

1 2019 data are year-to-date, representing job postings from January 1, 2019 through October 31, 2019

2 Burning Glass Technologies, Labor Insight/Jobs.

#### A Glimpse into the Future

While employment projections provide a guide to future employment for existing occupations, there will be demand for workers in occupations that do not exist in the present workforce. Technology creates change quickly, and demand for some occupations will decline due to automation. According to Burning Glass Technologies analysis, to date in 2019, 21 percent of online ads were for jobs in occupations at high risk for automation, which are those likely to be computerized within the next 20 years.

Job automation does not necessarily mean eliminated jobs, but workers may have to shift skills and abilities to stay viable in the job market. Just as people learned to build, pilot, and repair aircraft following invention of the airplane, there will be demand for workers to design, build, sell, repair, and improve products newly or not yet invented. For many workers, adding skills to their existing abilities will keep them in demand as employees. Those willing to continue attaining skills will be valued workers.

What will the world of work look like in the future? Bruce Anderson, lead writer for the Talent Blog at LinkedIn,<sup>3</sup> reviewed some of the jobs employers will be trying to fill in 2030.

- **Organ Creator** Advances in stem-cell research and 3D printing will make up for inadequate supplies of transplant organs.
- Augmented-reality journey builder Design interfaces allowing customers to experience virtually anything.
- **Biofilm installer** Biofilm, a collection of microbial cells attached to wet surfaces, used for sewage treatment, oil spill cleanup, power generation, and home cleaning.

- **Earthquake forecaster** Though scientists have been trying for over 40 years, they may soon be able to predict earthquakes.
- **Makeshift structure engineer** Design 3D printed parts of small housing units that can be quickly assembled when needed.
- **Rewilder** Blighted landscapes and abandoned buildings will be replaced with forests and native species.
- **Human-machine teaming manager** A background in psychology will be needed to manage relationships between human and robots.
- **Digital currency advisor** Cryptocurrency specialists providing wealth management advice.
- **Drone traffic optimizer** Air traffic control for drones.
- **Self-driving car mechanic** Cars that drive themselves will not repair themselves.
- **Agile supply chain worker** Global and online economies will require expert knowledge of conducting business transactions in countries around the world.
- **Trash engineer, aka Garbage designer** Reuse and transformation of trash on a large scale will be needed to manage increasing waste as world population grows.

- Katrina Evans

<sup>3</sup> Anderson, Bruce, 12 Jobs You Will Be Recruiting for in 2030, https://business.linkedin.com/talent-solutions/blog/future-of-recruiting/2018/12-jobs-you-will-be-recruiting-for-in-2030

New Ha	ampshire Occupational Emp	loyment F	Projection	ıs 2018 - 2	2028		Average Annual Openings			
SOC Code	Occupational Group	2018 Base	2028 Projected	Numeric Change	Percent Change	Annual Growth	Exits	Transfers	Total	
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21-0000	Community and Social Services Occupations	10,453	12,019	1,566	15.0%	1.4%	402	805	1,364	
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33-0000	Protective Service Occupations	11,972	12,362	390	3.3%	0.3%	455	674	1,168	
35-0000	Food Preparation and Serving Related Occupations	60,151	65,548	5,397	9.0%	0.9%	4,266	6,535	11,341	
37-0000	Building and Grounds Cleaning and Maintenance Occupations	25,871	27,641	1,770	6.8%	0.7%	1,452	2,018	3,647	
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45-0000	Farming, Fishing, and Forestry Occupations	1,850	1,851	1	0.1%	0.0%	73	227	300	
47-0000	Construction and Extraction Occupations	25,621	27,892	2,271	8.9%	0.9%	868	2,064	3,159	
49-0000	Installation, Maintenance, and Repair Occupations	26,223	27,689	1,466	5.6%	0.5%	833	1,810	2,790	
51-0000	Production Occupations	46,975	45,275	-1,700	-3.6%	-0.4%	1,838	3,508	5,176	
53-0000	Transportation and Material Moving Occupations	37,824	39,641	1,817	4.8%	0.5%	1,832	2,959	4,973	

	nployment Prosp avorable with most o		018 to 2	028				ige An pening		Training Categories
SOC Code	Occupational Group	2018 Base	2028 Projected	Numeric Change	Percent Change	Annual Growth	Exits	Transfers	Total	Education   Experience   On-the-Job Training
11-1021	General and Operations Managers	13,272	14,326	1,054	7.9%	0.8%	289	909	1,303	Bachelor's   5+ yrs   none
13-2011	Accountants and Auditors	5,892	6,368	476	8.1%	0.8%	173	398	619	Bachelor's   none   none
15-1132	Software Developers, Applications	6,663	8,366	1,703	25.6%	2.3%	104	425	699	Bachelor's   none   none
29-1141	Registered Nurses	13,830	15,582	1,752	12.7%	1.2%	408	377	960	Associate's   none   none
31-1014	Nursing Assistants	8,207	8,856	649	7.9%	0.8%	459	498	1,022	Postsecondary   none   none
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	4,028	4,383	355	8.8%	0.9%	183	459	678	High School   < 5 yrs   none
35-2014	Cooks, Restaurant	6,703	8,064	1,361	20.3%	1.9%	392	653	1,181	none   < 5 yrs   Moderate OJ1
35-2021	Food Preparation Workers	2,815	3,046	231	8.2%	0.8%	215	292	530	none   none   Short OJT
35-3011	Bartenders	4,300	4,601	301	7.0%	0.7%	208	575	813	none   none   Short OJT
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	15,013	17,067	2,054	13.7%	1.3%	1,279	1,577	3,061	none   none   Short OJT
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	1,815	1,985	170	9.4%	0.9%	212	223	452	none   none   Short OJT
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	10,129	10,791	662	6.5%	0.6%	640	738	1,444	none   none   Short OJT
37-3011	Landscaping and Groundskeeping Workers	6,781	7,436	655	9.7%	0.9%	291	629	986	none   none   Short OJT
39-3091	Amusement and Recreation Attendants	1,853	2,019	166	9.0%	0.9%	206	240	463	none   none   Short OJT
39-5012	Hairdressers, Hairstylists, and Cosmetologists	4,702	5,143	441	9.4%	0.9%	299	314	657	Postsecondary   none   none
39-9021	Personal Care Aides	9,001	11,805	2,804	31.2%	2.8%	769	681	1,730	High School   none   Short OJ
39-9031	Fitness Trainers and Aerobics Instructors	2,227	2,573	346	15.5%	1.5%	143	256	434	High School   none   Short OJ
39-9032	Recreation Workers	2,390	2,608	218	9.1%	0.9%	149	266	437	High School   none   Short OJ
41-3099	Sales Representatives, Services, All Other	3,836	4,223	387	10.1%	1.0%	119	391	549	High School   none   Moderat OJT
43-6013	Medical Secretaries	3,089	3,609	520	16.8%	1.6%	172	203	427	High School   none   Moderat OJT
47-2031	Carpenters	4,732	5,039	307	6.5%	0.6%	153	353	537	High School   none   Apprenticeship
47-2061	Construction Laborers	4,000	4,399	399	10.0%	1.0%	140	327	507	none   none   Short OJT
49-9071	Maintenance and Repair Workers, General	4,832	5,191	359	7.4%	0.7%	176	310	522	High School   none   Moderat OJT
51-9198	HelpersProduction Workers	2,487	2,831	344	13.8%	1.3%	141	250	425	High School   none   Short OJ
53-3032	Heavy and Tractor- Trailer Truck Drivers	7,333	7,790	457	6.2%	0.6%	311	548	905	Postsecondary   none   Shor OJT

	ations with the highest number of av 2028, by entry-level education	erage ani	nual open	ings,		Average Annual Openings			
SOC Code	Occupational Group	2018 Base	2028 Projected	Numeric Change	Percent Change	Exits	Transfers	Total	
Entry-leve	el education: no formal educational credential								
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	15,013	17,067	2,054	13.7%	1,279	1,577	3,061	
35-3031	Waiters and Waitresses	12,923	13,628	705	5.5%	921	1,627	2,618	
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	10,129	10,791	662	6.5%	640	738	1,444	
41-2011	Cashiers	22,543	21,688	-855	-3.8%	1,974	2,198	4,086	
41-2031	Retail Salespersons	24,912	24,632	-280	-1.1%	1,424	2,195	3,591	
Entry-leve	el education: High School Diploma or Equivaler	nt							
39-9021	Personal Care Aides	9,001	11,805	2,804	31.2%	769	681	1,730	
43-4051	Customer Service Representatives	11,299	11,044	-255	-2.3%	536	952	1,462	
43-5081	Stock Clerks and Order Fillers	14,031	14,568	537	3.8%	724	1,180	1,958	
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	12,130	11,138	-992	-8.2%	596	706	1,203	
43-9061	Office Clerks, General	16,109	15,793	-316	-2.0%	892	1,018	1,878	
Entry-leve	el education: Some College, No Degree	· · · · · · · · · · · · · · · · · · ·							
15-1151	Computer User Support Specialists	3,266	3,610	344	10.5%	63	219	316	
25-9041	Teacher Assistants	9,324	9,453	129	1.4%	498	491	1,002	
43-3031	Bookkeeping, Accounting, and Auditing Clerks	8,636	8,437	-199	-2.3%	519	475	974	
43-4151	Order Clerks	536	528	-8	-1.5%	22	39	60	
49-2011	Computer, Automated Teller, and Office Machine Repairers	642	646	4	0.6%	18	50	68	
Entry-leve	el education: Postsecondary Non-Degree Awar	d							
31-1014	Nursing Assistants	8,207	8,856	649	7.9%	459	498	1,022	
31-9092	Medical Assistants	2,577	3,128	551	21.4%	111	203	369	
39-5012	Hairdressers, Hairstylists, and Cosmetologists	4,702	5,143	441	9.4%	299	314	657	
49-3023	Automotive Service Technicians and Mechanics	4,092	4,178	86	2.1%	112	290	411	
53-3032	Heavy and Tractor-Trailer Truck Drivers	7,333	7,790	457	6.2%	311	548	905	
Entry-leve	el education: Associate's Degree								
23-2011	Paralegals and Legal Assistants	1,181	1,326	145	12.3%	42	91	147	
25-2011	Preschool Teachers, Except Special Education	3,218	3,453	235	7.3%	132	203	359	
29-1141	Registered Nurses	13,830	15,582	1,752	12.7%	408	377	960	
29-2021	Dental Hygienists	1,380	1,520	140	10.1%	60	37	111	
29-2056	Veterinary Technologists and Technicians	865	1,048	183	21.2%	28	50	96	
Entry-leve	el education: Bachelor's Degree								
11-1021	General and Operations Managers	13,272	14,326	1,054	7.9%	289	909	1,303	
11-3031	Financial Managers	3,698	4,331	633	17.1%	87	223	373	
13-2011	Accountants and Auditors	5,892	6,368	476	8.1%	173	398	619	
15-1132	Software Developers, Applications	6,663	8,366	1,703	25.6%	104	425	699	
25-2021	Elementary School Teachers, Except Special Education	5,577	5,608	31	0.6%	174	238	415	

-	ations with the highest number of av 2028, by entry-level education (cont		nual open	ings,		Average Annual Openings			
SOC Code	Occupational Group	2018 Base	2028 Projected	Numeric Change	Percent Change	Exits	Transfers	Total	
Entry-lev	el education: Master's Degree								
11-9032	Education Administrators, Elementary and Secondary School	1,458	1,479	21	1.4%	38	76	116	
21-1012	Educational, Guidance, School, and Vocational Counselors	1,829	1,966	137	7.5%	62	133	209	
25-4021	Librarians	963	1,006	43	4.5%	53	45	102	
25-9031	Instructional Coordinators	967	1,029	62	6.4%	42	51	99	
29-1171	Nurse Practitioners	1,170	1,520	350	29.9%	26	45	106	
Entry-lev	el education: Doctorate or Professional Degree						,		
23-1011	Lawyers	2,304	2,459	155	6.7%	51	63	130	
25-1011	Business Teachers, Postsecondary	568	657	89	15.7%	22	28	59	
25-1071	Health Specialties Teachers, Postsecondary	742	896	154	20.8%	30	38	83	
29-1069	Physicians and Surgeons, All Other	1,446	1,578	132	9.1%	25	19	57	
29-1123	Physical Therapists	1,437	1,727	290	20.2%	29	37	95	

#### **PRIVATE ENTERPRISE**

#### **Firms by Size**

The New Hampshire Economic and Labor Market Information reports Firms by Size, a measure of the number of firms with employees in New Hampshire and the number of workers employed, grouped into size ranges. These data are based on the number of employees reported by business establishments for March of each year. The most recent data, from March 2019, indicated that there were 612 more firms and 5,789 more workers in New Hampshire in 2019 than in the previous year.

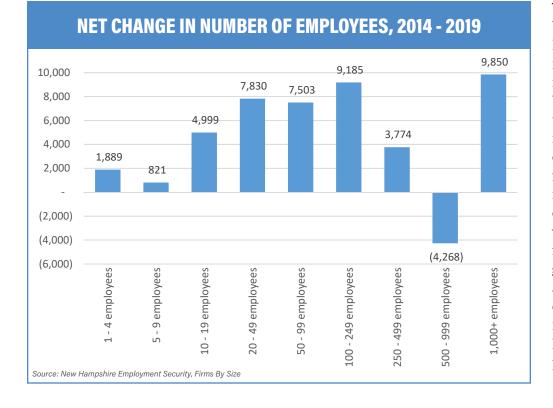
The largest share of employment, 15.4 percent, was by firms that employed 20-49 workers. This was closely followed by firms that employed 100-249 employees, and firms that employed 1,000+ employees. Each of these groups employed 14.5 percent of workers.

From 2014 to 2019, employment by private employers in New Hampshire grew by 41,583 workers. Most of this growth came from businesses employing 20-49 workers, 50-99 workers, 100-249 workers, and more than 1,000 workers. Approximately 83 percent of employment growth came from firms of these sizes.

Employment in firms with 500-999 workers declined from 2014 to 2019, the only category to decline over that five year period. The number of firms that employed 500-999 workers declined as well. Some of this decline may have been due to companies increasing their workforce so they employed more than 999 employees; the number of firms employing 1,000 or more employees increased by four from 2015 to 2019, while the number of firms employing 500-999 workers decreased by the same amount.

#### GDP, Interest Rates, and Other Business Conditions in New Hampshire

As 2019 comes to an end, conditions for New Hampshire's private businesses are mostly favorable, but there is a lot of uncertainty about how long these favorable conditions will last.



The number of businesses in New Hampshire increased in 2019, meaning more businesses are starting than failing. The number of employees employed by private firms (this does not include selfemployed workers or workers employed by federal, state or local government) grew as well, although the employment increases in 2018 and 2019 were lower than in the previous five years.

As a gauge of business profitability, New Hampshire's **Business Profit Taxes** collected year-to-date for fiscal year 2020 (New Hampshire's fiscal year 2020 runs July 1, 2019 - June 30, 2020) have been lower than the amounts forecasted by the 2020 state plan, and lower than revenue collected over the same time frame during the previous fiscal year.<sup>1</sup>



#### Nationwide, the "Great

Recession" officially<sup>2</sup> ended in June 2009, and the U.S. economy has been expanding for more than ten years. However, there are signs that economic growth has been slowing down throughout 2019, increasing concern that the U.S. will enter a recession in the near future.

National gross domestic product (GDP) increased at an annual rate of 2.1 percent in the third quarter of 2019, according to the U.S. Bureau of Economic Analysis.<sup>3</sup> The U.S. economy is on pace for lower GDP growth in 2019 than in the previous two years.

To encourage U.S. economic growth, the Federal Reserve cut the federal funds rate three times during the second half of 2019, the first rate cut since December 2008.<sup>4</sup> Cutting the federal funds rate makes borrowing money cheaper, which makes business owners more likely to borrow, and to invest in growing their businesses.

The Federal Reserve felt the U.S. economy was performing well overall, but expressed concern about a number of global issues,<sup>5</sup> such as U.S.-China trade disputes, uncertainty surrounding Brexit,

and a number of struggling economies around the world, including Germany, Italy, Brazil and Mexico.<sup>6</sup>

In addition to the uncertainty surrounding these international issues, the Federal Reserve's Industrial Production Index indicates that manufacturing, mining, electric and gas utilities output declined 1.7 percent over the first three quarters of 2019.<sup>7</sup>

This decline seems to be impacting New Hampshire as well. New Hampshire's Manufacturing sector employed 1,000 fewer worker in October 2019 than it did the year before, a decline of 1.4 percent.8 Employment in the Mining and Utilities sectors were at the same levels in October 2019 as they were in October 2018.

In terms of employment, Manufacturing is the third largest sector in the New Hampshire workforce; a decline in the Manufacturing industry could have a substantial negative impact on the rest of New Hampshire's economy.

- Greg David

New Hampshire Department of Administrative Services, "Monthly Revenue Focus, October FY 2020"

The most commonly used definition of a recession is two consecutive quarters of negative GDP growth. The recession ends when GDP growth become positive again. However, the impacts of the recession on business conditions and unemployment can continue for years after the end of the contraction

U.S. Bureau of Economic Analysis, "Gross Domestic Product, Third Quarter 2019," https://www.bea.gov/news/2019/gross-domestic-product-third-quarter-2019-second-estimate-corporate-3 profits-third-quarter

Federal Reserve System, Policy Tools, https://www.federalreserve.gov/monetarypolicy/openmarket.htm

Jeff Cox, "Fed cuts interest rates, but indicates a pause is ahead," CNBC, October 30, 2019, https://www.cnbc.com/2019/10/30/fed-decision-interest-rates-cut.html

Sergei Klebnikov, "Here Are The Countries On The Brink Of Recession Going Into 2020," Forbes, October 28, 2019, https://www.forbes.com/sites/sergeiklebnikov/2019/10/28/here-are-the-6 countries-on-the-brink-of-recession-going-into-2020/

Federal Reserve Bank of St. Louis, Industrial Production Index, https://fred.stlouisfed.org/series/INDPRO

<sup>8</sup> Economic And Labor Market Information Bureau, New Hampshire Employment Security, Current Employment Statistics, https://www.nhes.nh.gov/elmi/statistics/documents/ces-nsa.pdf

Firms by Size*	2015	2016	2017	2018	2019	Source
Total Number of Firms with employment	35,567	36,218	36,617	37,092	37,704	NHES
1 - 4 employees	20,890	21,276	21,539	21,921	22,270	NHES
5 - 9 employees	6,318	6,342	6,373	6,318	6,445	NHES
10 - 19 employees	3,971	4,063	4,101	4,159	4,271	NHES
20 - 49 employees	2,704	2,791	2,833	2,910	2,891	NHES
50 - 99 employees	927	979	976	979	1,019	NHES
100 - 249 employees	495	506	528	537	540	NHES
250 - 499 employees	162	161	164	171	168	NHES
500 - 999 employees	72	71	72	67	68	NHES
1,000 & over employees	28	29	31	30	32	NHES
Over-the-year Change in Number of Firms	277	651	399	475	612	NHES
Net Annual Change in Number of Employees	11,115	11,455	8,350	4,874	5,789	NHES
1 - 4 employees	237	528	210	774	140	NHES
5 - 9 employees	329	121	196	-270	445	NHES
10 - 19 employees	1,563	1,286	435	722	993	NHES
20 - 49 employees	2,745	2,128	1,000	2,728	-771	NHES
50 - 99 employees	1,778	3,708	-511	12	2,516	NHES
100 - 249 employees	1,411	2,424	2,955	1,066	1,329	NHES
250 - 499 employees	2,652	-527	391	3,104	-1,846	NHES
500 - 999 employees	-2,099	-1,169	888	-1,957	69	NHES
1,000 & over employees	2,499	2,956	2,786	-1,305	2,914	NHES
Percent of Total Employment						
1 - 4 employees	7.4%	7.3%	7.3%	7.3%	7.3%	NHES
5 - 9 employees	7.8%	7.7%	7.6%	7.5%	7.5%	NHES
10 - 19 employees	10.1%	10.1%	10.0%	10.0%	10.1%	NHES
20 - 49 employees	15.3%	15.4%	15.3%	15.7%	15.4%	NHES
50 - 99 employees	12.0%	12.4%	12.1%	12.0%	12.3%	NHES
100 - 249 employees	13.9%	14.0%	14.3%	14.4%	14.5%	NHES
250 - 499 employees	10.7%	10.3%	10.3%	10.7%	10.3%	NHES
500 - 999 employees	9.0%	8.6%	8.6%	8.2%	8.1%	NHES
1,000 & over employees	13.8%	13.9%	14.2%	14.5%	14.1%	NHES

\* Firms by size numbers are based on March covered employment data, in each calendar year.

Firms Subject to Unemployment Compensation	2014	2015	2016	2017	2018	Source
Total Firms	41,372	42,020	42,478	43,118	43,720	NHES
New firms	5,194	5,436	5,509	5,687	6,060	NHES
Terminated firms	4,951	4,744	4,943	4,941	5,319	NHES

Percent of Establishments with 100+ Workers (Ranked from highest among 50 states and D.C.)	2014	2015	2016	2017	2018	Source
New Hampshire	2.2%	2.3%	2.4%			CB/NHES
United States rank	28	27	26			CB/NHES
Connecticut	2.6%	2.6%	2.7%			CB/NHES
United States rank	10	12	11			CB/NHES
Maine	1.7%	1.8%	1.8%			CB/NHES
United States rank	46	46	45			CB/NHES
Massachusetts	2.8%	2.8%	2.9%			CB/NHES
United States rank	6	5	5			CB/NHES
Rhode Island	2.2%	2.3%	2.3%			CB/NHES
United States rank	31	29	27			CB/NHES
Vermont	1.6%	1.7%	1.7%			CB/NHES
United States rank	47	47	47			CB/NHES

High Tech by NAICS	2014	2015	2016	2017	2018	Source
Total Units	5,423	5,606	5,705	5,819		NHES
Level I Units	3,157	3,282	3,368	3,441		NHES
Level II Units	1,385	1,386	1,398	1,442		NHES
Level III Units	881	939	939	936		NHES
Total Annual Average Employment	64,672	66,422	67,154	71,114		NHES
Level I Annual Average Employment	37,188	38,391	39,061	42,751		NHES
Level II Annual Average Employment	12,324	12,162	12,026	12,069		NHES
Level III Annual Average Employment	15,160	15,869	16,067	16,294		NHES
Total Wages (in millions)	\$6,233.7	\$6,342.9	\$6,487.1	\$7,159.3		NHES
Level I Wages	\$3,718.6	\$3,766.6	\$3,895.9	\$4,465.7		NHES
Level II Wages	\$1,160.9	\$1,144.7	\$1,150.0	\$1,179.5		NHES
Level III Wages	\$1,354.3	\$1,431.7	\$1,441.3	\$1,514.1		NHES
Average Weekly Wage	\$1,854	\$1,836	\$1,858	\$1,936		NHES
Level I Average Weekly Wage	\$1,923	\$1,887	\$1,918	\$2,009		NHES
Level II Average Weekly Wage	\$1,812	\$1,810	\$1,839	\$1,879		NHES
Level III Average Weekly Wage	\$1,718	\$1,735	\$1,725	\$1,787		NHES
Definitions of High Tech Level I, Level II, and Level III of	an be found at: http	://www.nhes.nh.	aov/elmi/produc	ts/documents/e	c-hiah-tech-10.p	df

Definitions of High Tech Level I, Level II, and Level III can be found at: http://www.nhes.nh.gov/elmi/products/documents/ec-high-tech-10.pdf

Non-Current Loans and Leases (\$ Millions)	2014	2015	2016	2017	2018	Source
FDIC commercial banks, Dec. 31st totals (Millions)	\$19	\$17	\$11	\$8	\$13	FDIC
Percent change from previous year	-38.1%	-14.0%	-30.9%	-34.2%	65.4%	FDIC/NHES

## **TRANSPORTATION AND TRAFFIC**

#### **Motor Vehicle Registrations**

Overall, the number of vehicles registered in New Hampshire has decreased since 2013. 1,409,000 vehicles were registered in 2013, and 1,319,000 were registered in 2018. The mix of vehicles on the road is changing as well. The number of automobiles registered in New Hampshire declined by 120,000 over that time, while the number of trucks, buses and motorcycles have all increased.

This follows an overall national trend of "light trucks" becoming a larger share of vehicles sold, at the expense of automobiles.<sup>1</sup> The light trucks category includes minivans and SUVs, in addition to pickup trucks. Ford, Chevrolet, and Fiat-Chrysler all announced in 2018 that they would reduce the number of car models they offer in the U.S., focusing instead on crossovers and SUVs.<sup>2</sup>

### **Air Travel and Transportation**

Since 2005, when 4.5 million passengers flew into or out of Manchester-Boston Regional Airport (MHT), the number of passengers using MHT has gradually declined.<sup>3</sup> The 1,971,000 passengers who airlines to access larger airports, such as Logan International Airport in Boston. The number of airlines with regular flights out of Manchester declined from seven in 2005 to four in 2018.

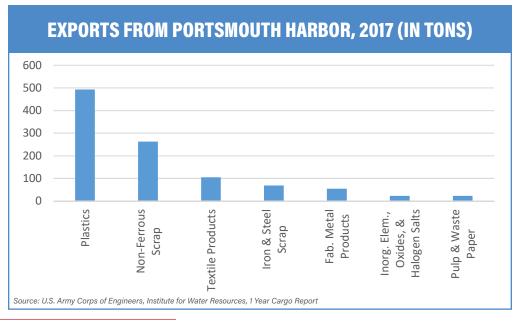
Fortunately, Manchester-Boston Regional Airport relies on more than passenger traffic. The amount of air cargo moving through MHT has increased significantly since 2015. In 2018, almost 93,000 tons of cargo went in and out of Manchester, a nine percent increase over 2017, and more cargo than any previous year except 2007.<sup>4</sup>

#### **Portsmouth Harbor Freight Traffic**

Total freight traffic at Portsmouth Harbor was relatively consistent from 2013-2017, although the mix of foreign and domestic shipments changed over that time. Shipments to and from domestic ports fell from 517,000 tons in 2013 to 386,000 in 2017. Foreign imports increased from 2 million tons to 2.2 million tons. Exports fell from 158,000 tons in 2013 to just 1,000 in 2017. The primary cause of this decline was exports of iron and steel scrap, which fell from 131,000 tons in 2013 to 69 tons in 2017.<sup>5</sup>

travelled through MHT in 2017 were 2.5 percent fewer than the previous year, and 19 percent fewer than 2013.

According to airport director Ted Kitchens, mergers between airlines over the past two decades have caused many regional airports to lose passengers, as consolidation makes it easier for low-cost



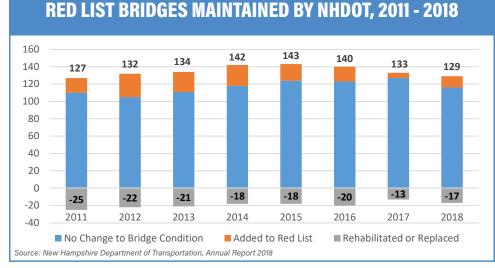
U.S. Bureau of Economic Analysis, Auto and Truck Seasonal Adjustment, https://www.bea.gov/docs/gdp/auto-and-truck-seasonal-adjustment

2 Patrick Olsen, "GM Becomes Latest Car Company to Drop Some Sedans," Consumer Reports, November 26, 2018. https://www.consumerreports.org/general-motors/gm-to-drop-some-sedans/

3 David Brooks, "Half-empty Manchester airport is trying to rebound - but at least the cargo business is robust," Concord Monitor, May 9, 2019. https://www.concordmonitor.com/airportmanchester-boston-director-25368330

4 Manchester-Boston Regional Airport, "Activity Report December, 2018," https://mk0flymanchestevtsp6.kinstacdn.com/wp-content/uploads/2019/01/Dec-2018.pdf

5 U.S. Army Corps of Engineers, Institute for Water Resources. 1 Year Cargo Report, http://cwbi-ndc-nav.s3-website-us-east-1.amazonaws.com/files/wcsc/webpub/#/report-landing/ year/2017/region/1/location/135



anticipates that the number of state-owned Red List bridges will increase slightly by 2020, estimating the number will increase to 136.<sup>8</sup> However, the bridge deck area of Red List bridges will decline, as several large Red List bridges are rehabilitated or replaced.

The number of state Yellow List bridges, as well as the bridge deck area of yellow list

By weight, the largest amount of goods received at Portsmouth Harbor were Petroleum and Petroleum Products. Nearly one million tons were imported from overseas, while 300,000 tons arrived from domestic sources. Not far behind were Crude Materials, primarily Gypsum and Salt. In total, 1.2 million tons of Crude Materials were imported, all from overseas.

Plastics and scrap metal were the largest exports leaving the U.S. through Portsmouth.

#### Infrastructure Projects Throughout New Hampshire

At the end of 2018, a total of 129 state-owned bridges in New Hampshire were on the New Hampshire Department of Transportation's "Red List," indicating that at least one structural element of the bridge was in poor condition.<sup>6</sup> An additional 241 municipally-owned bridges were on the Red List as well.<sup>7</sup> Between state and municipal bridges, just under ten percent of bridges in New Hampshire were structurally deficient.

Seventeen bridges were removed from the stateowned Red List in 2018, but an additional 13 were added to the list. The Department of Transportation bridges, is expected to increase by 2020.<sup>9</sup> Yellow List bridges have at least one structural element in fair or satisfactory condition. The number of Green List bridges has been declining since 2012, and is expected to continue this decline through 2020. The Department of Transportation has been more focused on replacing or rehabilitating several large Red List bridges, and has devoted less resources to rehabilitation and preservation of Green and Yellow List bridges.

As of August 2019, the Department of Transportation had 104 active construction projects throughout the state, with a total project cost of \$600 million.<sup>10</sup> Many of these are multi-year projects. The largest active projects were:

- Six projects related to the I-93 expansion from Salem to Manchester. Combined, these active projects have a cost of \$212.9 million. Construction is expected to be completed in September 2020.
- The Spaulding Turnpike expansion and improvement in Newington and Dover. This project has a cost of \$67.2 million, and is expected to be completed in October 2020.

<sup>6</sup> New Hampshire Department of Transportation, "2018 State-Owned Red List Bridges," https://www.nh.gov/dot/ org/ projectdevelopment/bridgedesign/documents/2019-02-25bridge\_state\_ red\_list.pdf

<sup>7</sup> New Hampshire Department of Transportation, "Municipally-Owned Red List Bridges," https://www.nh.gov/dot/ org/projectdevelopment/bridgedesign/documents/2019-03-11municipal\_ red list.pdf

New Hampshire Department of Transportation, "Annual Report 2018," https://www.nh.gov/dot/org/ projectdevelopment/bridgedesign/documents/2018-annualreportbridgeconditionandbridgeprogram.pdf

 <sup>9</sup> Ibid
 10 New Hampshire Department of Transportation, "Active Construction Projects," "https://www.nh.gov/dot/org/ projectdevelopment/construction/projects/documents/ ActiveConstructionProjects.pdf

- Replacing a series of three bridges on NH 16/ NH 25 in Ossipee. This project has a cost of \$17.0 million, and is expected to be completed in June 2021.
- Widening a two mile section of NH 101 in Bedford. This project has a cost of \$15.8 million, and is expected to be completed in early 2020.
- Repaving a 5 mile stretch of I-89 in Lebanon. This project has a cost of \$15.0 million, and was completed in late 2019.

#### **Electric Vehicle Infrastructure**

The number of electric vehicles sold in New Hampshire increased significantly from 2015 through 2018.<sup>11</sup> Although many electric vehicle owners charge their batteries either at home or at work, as the number of electric cars on the road increases, more charging stations will be required to support this growing population.

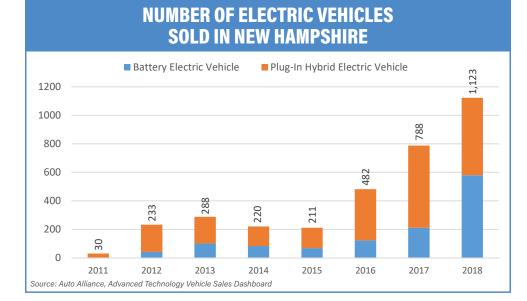
As of October 2019, the U.S. Department of Energy's Alternative Fuels Data Center reports that there were 115 charging stations located in New Hampshire, with a total of 217 outlets.<sup>12</sup> However, use of some of these charging stations was somewhat restricted. Some charging stations are only compatible with cars made by a particular manufacturer, and others are owned by businesses who make them available only to customers or guests.

More than forty percent of public charging stations in New Hampshire are located at hotels and ski mountains, indicating that access to charging stations is an amenity that tourists will look for when choosing accommodations. Investing in the infrastructure to support electric cars will be important for the long-term success of New Hampshire's tourism industry.

The State of New Hampshire received \$30.9 million as part of the United States' settlement with Volkswagen over the car manufacturer's diesel emissions testing scandal. New Hampshire is planning to use \$4.6 million from this settlement to improve electric vehicle infrastructure throughout the state. The first grant awards using these funds will be approved in 2020, with 50 new chargers expected to be operational by the summer of 2020.<sup>13</sup>

#### **Commuter Rail Study Project**

In July 2019, Senate Bill 241 became law, allowing the New Hampshire Department of Transportation to use federal funds for the development stage of the NH Capitol Corridor Rail Expansion Project.<sup>14</sup>



This law allowed the Department of Transportation to access the funds to develop a detailed analysis of engineering, environmental. geotechnical and financial aspects of the project. The analysis is expected to take around 18 months, and will allow New Hampshire state government to decide whether or not to proceed with the rail expansion

11 Auto Alliance, Advanced Technology Vehicle Sales Dashboard, https://autoalliance.org/energy-environment/ advanced-technology-vehicle-sales-dashboard/

12 U.S. Department of Energy, Alternative Fueling Station Locator, https://afdc.energy.gov/stations/#/find/nearest

New Hampshire Office of Strategic Initiatives, NH EV DCFC Proposal Overview, https://www.des.nh.gov/organization/divisions/air/tsb/tps/msp/documents/20190628-osi-presentation.pdf
 Jordyn Haime, "N.H. Capitol Rail Project Advances to Next Stage," New Hampshire Public Radio, July 22, 2019. https://www.nhpr.org/post/nh-capitol-rail-project-advances-next-stage#stream/0

project. If the project moves ahead, the results of the analysis would also be used to apply for federal grant money to fund the actual construction.

The Capitol Corridor Rail Expansion Project will extend the MBTA regional commuter rail lines, connecting Nashua and Manchester to Boston by commuter rail. If the rail line is built, commuter rail access to Boston would significantly expand public transportation options for some of the 97,000 residents<sup>15</sup> of New Hampshire who commute to Massachusetts. Since commuters who take the train will no longer drive, this project would also help ease congestion on Route 3, I-93, I-95 and I-495 for commuters who continue to drive to Massachusetts.<sup>16</sup> Supporters of the plan estimate that there will be 668,000 weekday riders annually, roughly 2,700 riders per weekday.<sup>17</sup>

- Greg David

<sup>15</sup> U.S. Census Bureau, On The Map, https://onthemap.ces.census.gov/

<sup>16</sup> New Hampshire Department of Transportation, "New Hampshire Capital Corridor Rail & Transit Alternatives Analysis," https://www.nh.gov/dot/org/aerorailtransit/railandtransit/documents/ fr-summary.pdf

<sup>17</sup> NH Business for Rail Expansion, "The Case for Rail," https://www.nhbiz4rail.com/the-case-for-rail/

Highway Traffic - Annual Totals	2013	2014	2015	2016	2017	Source
Interstates, NH - Mass. State line						
(thousands, from traffic counters, Salem & Seabrook)	70,363	69,292	71,831			DT
Annual percent change	2.3%	-1.5%	3.7%			DT/NHES
Rural traffic, annual percent change	0.5%	1.3%	2.7%			DT

Licenses Issued & Registrations	2013	2014	2015	2016	2017	Source
Motor-Vehicle Registrations						
All Motor Vehicles	1,408,936	1,310,191	1,296,137	1,322,682	1,319,117	FHWA
Automobiles	625,391	559,174	535,188	529,491	505,381	FHWA
Buses	2,524	2,818	2,822	2,798	2,871	FHWA
Trucks	707,409	672,105	684,136	712,175	732,067	FHWA
Motorcycles	73,612	76,093	73,991	78,218	78,798	FHWA
Drivers Licenses Issued	1,061,433	1,071,963	1,074,766	1,096,234	1,103,624	FHWA
Male	532,504	537,483	539,007	549,729	553,759	FHWA
Female	528,929	534,480	535,759	546,505	549,865	FHWA
Age 19 and under	48,687	47,605	46,354	45,954	45,748	FHWA
Age 65 and over	184,973	194,005	200,128	196,094	224,681	FHWA

Aircraft Travel	2013	2014	2015	2016	2017	Source
Manchester-Boston Regional Airport						
Total Passengers, Domestic and International Carriers	2,422,102	2,095,674	2,073,071	2,021,279	1,970,688	MA
Annual Percent Change	-1.2%	-13.5%	-1.1%	-2.5%	-2.5%	MA/NHES
Enplanements	1,214,126	1,048,128	1,038,454	1,010,408	966,554	MA
Annual Percent Change	-1.1%	-13.7%	-0.9%	-2.7%	-4.3%	MA/NHES
Deplanements	1,207,976	1,047,546	1,034,617	1,010,871	984,137	MA
Annual Percent Change	-1.3%	-13.3%	-1.2%	-2.3%	-2.6%	MA/NHES
Air Cargo, Domestic and International Carriers (Tons) <sup>a</sup>	83,646	79,686	79,513	86,128	85,466	MA
Annual Percent Change	-5.2%	-4.7%	-0.2%	8.3%	-0.8%	MA/NHES

Portsmouth Harbor Freight Traffic	2013	2014	2015	2016	2017	Source
Total (thousands of short tons)	2,679	2,803	2,788	2,353	2,627	USACE
Annual Percent Change	10.7%	4.6%	-0.5%	-15.6%	11.6%	USACE/NHES
Domestic	517	488	475	365	386	USACE
Annual Percent Change	3.2%	-5.7%	-2.6%	-23.2%	5.7%	USACE/NHES
Foreign Imports	2,004	2,144	2,306	1,959	2,240	USACE
Annual Percent Change	21.1%	7.0%	7.5%	-15.1%	14.4%	USACE/NHES
Foreign Exports	158	171	7	29	1	USACE
Annual Percent Change	-40.1%	8.4%	-96.1%	344.1%	-96.6%	USACE/NHES

## **ENERGY**

Thirty years ago, nobody knew what a smart phone was, the New England Patriots® had never won a Super Bowl®, and nearly half of the electricity produced in the state was from coal or petroleum. The Seabrook Nuclear Power Plant had just come on line, adding to the generation mix, and most large utilities owned their generation facilities. Changes were on the way.

#### **Electric Generation**

In the early 1990s, most of the fossil fuel-derived electricity generated in New Hampshire came from three power plants: Merrimack Station in Bow and Schiller and Newington Stations on the seacoast. These plants had a total generating capacity of over 1,000 megawatts (MW) as 'baseload' plants, intended to run continuously to meet the basic level of demand from consumers. Several hydroelectric plants throughout the state contributed to the power mix. Natural gas and renewable sources, such as wind and solar, were too small to measure.

As 2020 begins, the mix of power production has changed. Seabrook Station went online in 1990 and immediately took up a third of total generation. Today, nuclear accounts for nearly 60 percent of electricity generated. Coal accounted for nearly a quarter of generation in 1990 but barely registers four percent in the current mix. Natural gas for electrical generation was limited to less than one percent but accounts for nearly 18 percent now.

There are several reasons for the change. Utilities need to plan for the long term, sometimes 10 to 20 years into the future, taking into account cost, efficiency, and environmental impact in using cleaner, more flexible resources.

Coal has been a fuel source since the early days of power generation and at one time, Merrimack Station was a baseload generating plant. Today, it is the last coal-fired plant in New England.<sup>1</sup> The plant runs on high demand days at peak times, especially during the winter when natural gas prices increase, making coal more cost-effective.<sup>2</sup>

Natural gas is bridging the gap between coal and renewables. While combustion of natural gas produces fewer emissions (sulfur dioxide, CO) than a typical coal-burning plant, the drilling and extraction of natural gas produces methane, a greenhouse gas that contributes to global warming.<sup>3</sup>

The percentage of electricity generated from hydroelectric sources has declined from fifteen percent in 1990 to only eight percent in 2018. Some of the plants are relics from bygone days, when towns located on a river had a dam or a mill building near the center of town. The two largest hydroelectric plants in New England, S.C. Moore and Comerford, are located in New Hampshire, along the Vermont border.<sup>4</sup>

New Hampshire has been a net exporter of electricity since Seabrook came on line in 1990.<sup>5</sup> With more electricity generated than consumed, the excess goes to other states and Canada over high-voltage transmission lines in a network operated by Independent System Operator-New England (ISO-NE).

#### **Cost of Energy in the Region**

Some things do not change. New Hampshire and New England have some of the highest energy costs in the nation. In July 2019, a monthly report by the U.S. Energy Information Agency ranked New Hampshire as the sixth most expensive state for residential electric customers at 19.40 cents per kilowatt/hour.<sup>6</sup> Similarly, costs in New England are also relatively high for gasoline, natural gas, and other energy sources.

<sup>1</sup> Bill Opalka, "New England's last coal-fired power plants face uncertain futures," *Energy News Network*, https://energynews.us/2018/08/16/northeast/new-englands-last-coal-fired-power-plants-face-uncertain-futures/

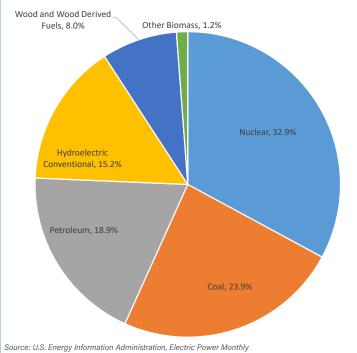
U.S. Energy Information Administration, "New Hampshire State Profile and Energy Estimates," https://www.eia.gov/state/analysis.php?sid=NH
 Union of Concerned Scientists, "Environmental Impacts of Natural Gas," https://www.ucsusa.org/resources/environmental-impacts-natural-gas

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 U.S. Energy Information Administration, "New Hampshire State Profile and Energy Estimates," https://www.eia.gov/state/analysis.php?sid=NH

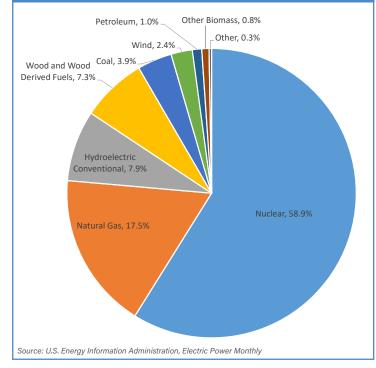
<sup>5</sup> U.S. Energy Information Administration, State Electricity Profiles, New Hampshire Electricity Profile 2017, Table 10, Supply and disposition of Electricity, 1990 through 2017, https://www.eia.gov/

electricity/state/newhampshire/
 U.S. Energy Information Administration, Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, https://www.eia.gov/electricity/monthly/epm\_table\_grapher.php?t=epmt\_5\_6\_a

## IN 1990, COAL ACCOUNTED FOR NEARLY A QUARTER OF ELECTRIC GENERATION IN NEW HAMPSHIRE



## MORE THAN HALF OF ELECTRICITY PRODUCED IN NEW HAMPSHIRE (2018) IS FROM NUCLEAR POWER



Geography plays a big part in energy costs. The entire state experiences cold weather and is situated long distances from cheap fuel sources, so higher prices are a certainty. New Hampshire does not have crude oil reserves and has only limited capacity for storing refined petroleum products so demand is filled from producers in the Gulf of Mexico, Canada and other foreign countries.<sup>7</sup> New Hampshire also has a large percentage of households that use relatively expensive fuel oil as the primary heating source, nearly 43 percent in 2017, but considerably lower than the 56 percent in 2005.<sup>8</sup>

In New Hampshire, four companies are responsible for the distribution and transmission of electricity: Eversource Energy, Liberty Utilities, Unitil Energy Systems, and the New Hampshire Electric Cooperative. These companies charge customers rates regulated by the New Hampshire Public Utilities Commission and the Federal Energy Regulatory Commission. Electricity, wherever produced, moves at high voltages over transmission lines. In recent years, the cost to a residential ratepayer for transmission has increased from \$0.00413 per kilowatt- hour to \$.02039 per kilowatt-hour, a nearly fivefold increase.<sup>9</sup>

Decisions made long ago continue to impact electric bills in New Hampshire. Customers of the state's largest electric utility, Eversource, pay a stranded cost charge of approximately 1.8 cents per kilowatt-hour to recover costs associated with the Regional Greenhouse Gas Initiative (RGGI) to install the \$400M scrubber at Merrimack Station. The charge also recovers subsidies to wood-burning, independent power producers as mandated by the New Hampshire Legislature and approved by the New Hampshire Public Utilities Commission.

<sup>7</sup> U.S. Energy Information Administration, https://www.eia.gov/beta/states/NH/ analysis

<sup>8</sup> U.S. Census Bureau, House Heating Fuel, https://factfinder.census.gov/ faces/tableservices/jsf/pages/ productview.xhtml?pid=ACS\_17\_5YR\_ B25040&prodType=table

New Hampshire Public Utilities Commission, Historical Electric Rate Information, https://www.puc.nh.gov/Sustainable%20Energy/Solar/Historic%20Electric%20 Rate%20Info.html

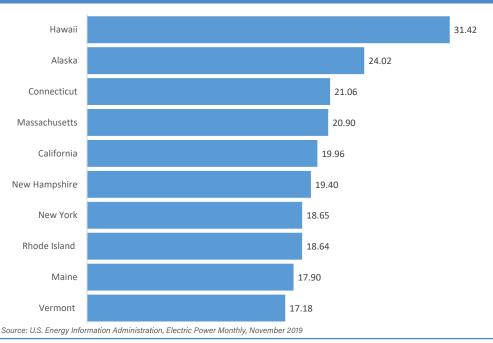
It costs a lot to heat a home in New Hampshire. In 2017, more that 40 percent of New Hampshire households used fuel oil as the primary heating

source according to U.S. Census Bureau data,<sup>10</sup> making the state vulnerable to price increases, especially during winter months. The trend is

277,528

227.681

## **NEW ENGLAND STATES ARE AMONG THE MOST EXPENSIVE** FOR RESIDENTIAL ELECTRIC PRICES, AUGUST 2019 (cents/kWh)



shifting slowly, however. In 2005, nearly 56 percent of households in the state used fuel oil as the primary heating source. Newly constructed houses tend to use more bottled. tank, or liquid propane than in the past, while renewables such as wood or solar still account for less than ten percent of total units.

Filling up a vehicle's gas tank is also expensive in New Hampshire, but not as expensive as the rest of New England. In November 2019, the price of regular unleaded (tax included) ranged from an average statewide price of \$2.66 per gallon in Connecticut to \$2.465 in New Hampshire.<sup>11</sup>

#### **Efficiency, Net** Metering, and the **Energy Future**

Another trend that would have been only a dream thirty years ago is the ability of a consumer of electricity to select their own provider and, in some cases, become a power producer themselves. Customers of New Hampshire

#### Electricity 47,927 18,985 Wood 37,912

**MOST NEW HAMPSHIRE HOUSEHOLDS HEAT WITH FUEL OIL** 

111,070

94.714

90,341

62,973

38.310

2,411 2005 Other 8.850 2017 1,181 Coal or coke 693 909 No fuel 3.651 43 Solar 575 Source: U.S. Census Bureau, American Community Survey

10 U.S. Census Bureau, House Heating Fuel, https://factfinder.census.gov/faces/tableservices/jsf/pages/ productview.xhtml?pid=ACS\_17\_5YR\_B25040&prodType=table 11 AAA, State Gas Price Averages, https://gasprices.aaa.com/state-gas-price-averages/

#### ENERGY 40

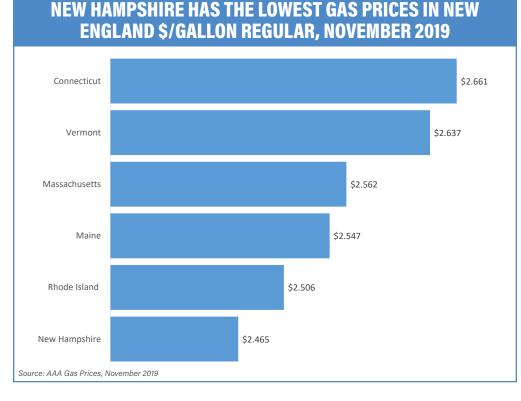
Fuel oil. kerosene

Bottled, tank, or LP gas

Utility Gas

electric utilities with an on-site renewable energy source—solar, wind, or hydroelectric—can receive a credit on their electric bill if they produce more than they consume. Such an arrangement requires a special "net meter" that measures the flow of electricity in both directions and adjusts the monthly bill accordingly.<sup>12</sup> Currently, there is a cap on the size of renewable energy systems that are eligible for net metering. Only systems that produce less than one MW can be credited for the energy they provide back to the regional electric grid. Proposals to increase the cap to five MW were vetoed by Governor Sununu in 2018 and 2019. Multiple bills seeking to increase net metering capacity are on the legislature's agenda in 2020.

- Michael Argiropolis



Energy Expenditures and Prices	2014	2015	2016	2017	2018	Source
Energy Expenditures Per Capita	4,796	3,938	3,504	3,847		EIA
United States rank (including DC)	32	34	32	33		EIA/NHES
						· 
Energy Prices (\$ per million BTU)	\$27.85	\$22.97	\$21.25	\$22.28		EIA
United States rank (including DC) (1 = lowest)	48	48	48	47		EIA/NHES
Petroleum prices (\$ per million BTU)	\$27.45	\$19.75	\$17.70	\$19.50		EIA
United States rank (including DC) (1 = lowest)	39	39	44	39		EIA/NHES
Electric prices (\$ per million BTU)	\$44.61	\$46.95	\$45.88	\$47.39		EIA
United States rank (including DC) (1 = lowest)	44	45	45	46		EIA/NHES

12 New Hampshire Public Utilities Commission, "Net Metering," https://www.puc.nh.gov/Sustainable%20Energy/Net%20Metering/Net\_Metering.html

Retail Sales of Electricity	2014	2015	2016	2017	2018	Source
Sales to Ultimate Customers (million kWh)						
New Hampshire:						
Total	10,944	10,999	10,881	10,787	11,022	EIA
Percent change	-0.9%	0.5%	-1.1%	-0.9%	2.2%	EIA/NHES
Residential	4,522	4,527	4,432	4,441	4,634	EIA
Percent change	-0.7%	0.1%	-2.1%	0.2%	4.3%	EIA/NHES
Commercial	4,465	4,491	4,462	4,390	4,436	EIA
Percent change	-1.2%	0.6%	-0.6%	-1.6%	1.0%	EIA/NHES
Industrial	1,969	1,987	1,981	1,956	1,952	EIA
Percent change	-0.2%	0.9%	-0.3%	-1.3%	-0.2%	EIA/NHES
New England:		·				
Total	119,983	120,170	116,431	115,458	116,705	EIA
Percent change	-1.1%	0.2%	-3.1%	-0.8%	1.1%	EIA/NHES
Residential	47,212	47,482	46,463	45,849	47,837	EIA
Percent change	-2.4%	0.6%	-2.1%	-1.3%	4.3%	EIA/NHES
Commercial	53,107	53,383	52,346	52,190	52,250	EIA
Percent change	18.2%	0.5%	-1.9%	-0.3%	0.1%	EIA/NHES
Industrial	19,107	18,733	17,066	16,867	16,047	EIA
Percent change	-30.4%	-2.0%	-8.9%	-1.2%	-4.9%	EIA/NHES

Electricity Generated	2014	2015	2016	2017	2018	Source
Net Electrical Energy Generated, New Hampshire (million kWh)	19,538	20,016	19,249	17,447	17,582	EIA
As percentage of energy purchased	178.5%	182.0%	176.9%	161.7%	159.5%	EIA/NHES
Energy by type (million kWh)						
Coal	1,311	937	422	287	666	EIA
Hydro	1,381	1,270	1,121	1,413	1,641	EIA
Natural Gas	4,388	6,050	4,739	3,580	2,992	EIA
Nuclear	10,168	9,484	10,761	9,991	10,062	EIA
Petroleum	287	176	30	105	182	EIA
Renewables	1,952	2,048	2,122	2,022	1,992	EIA
As percentage of total generated by type: $\ensuremath{^\circ}$						
Coal	6.7%	4.7%	2.2%	1.6%	3.8%	EIA/NHES
Hydro	7.1%	6.3%	5.8%	8.1%	9.3%	EIA/NHES
Natural Gas	22.5%	30.2%	24.6%	20.5%	17.0%	EIA/NHES
Nuclear	52.0%	47.4%	55.9%	57.3%	57.2%	EIA/NHES
Petroleum	1.5%	0.9%	0.2%	0.6%	1.0%	EIA/NHES
Renewables	10.0%	10.2%	11.0%	11.6%	11.3%	EIA/NHES

Energy and Fuel Consumption	2014	2015	2016	2017	2018	Source
Energy Consumption						
Total consumption (trillion BTU)	310.1	305.2	300.9	317.5		EIA
Annual percent change	2.4%	-1.6%	-1.4%	5.5%		EIA/NHES
United States rank	46	46	46	46		EIA/NHES
Types of energy consumption (percent of tota	l)			·		
Residential	31.3%	30.7%	29.8%	31.4%		EIA/NHES
Commercial	22.8%	23.2%	23.3%	22.1%		EIA/NHES
Industrial	13.5%	13.3%	13.6%	14.5%		EIA/NHES
Transportation	32.4%	32.7%	33.3%	32.0%		EIA/NHES
Fuel Consumed to Generate Electricity (In equ	ivalent barrels of	oil )				
New Hampshire total (thousand barrels)	23,507,017	24,305,406	25,123,903	22,314,807		EIA/NHES
Oil	454	291	67	162		EIA
Coal	1,777	1,314	631	432		EIA/NHES
Gas	5,498,163	7,535,640	5,998,430	4,591,033		EIA/NHES
Nuclear	18,006,622	16,768,161	19,124,775	17,723,180		EIA/NHES

These data are made available every two years

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## PRODUCTION

#### **GDP Growth**

Gross Domestic Product is a measure of value of the goods and services produced in an area.<sup>1</sup> The growth or contraction of GDP is an indicator of the health of the economy in that area. New Hampshire's GDP growth, while positive, was lower than U.S. GDP growth in four of the last five years.

The industries that contributed most to GDP in New Hampshire in 2018 were *Professional and business services, Finance, insurance, real estate, rental, and leasing, Durable goods manufacturing and Educational services, health care, and social assistance.*<sup>2</sup> *Finance, insurance, real estate, rental, and leasing* contributed the most to GDP, accounting for 23 percent of total New Hampshire GDP. of goods exported, accounting for more than a quarter of all New Hampshire exports.

Much of the increase in exports from New Hampshire has come from two industries: *Transportation Equipment* and *Chemicals*.<sup>3</sup> The value of *Transportation Equipment* exported from New Hampshire increased nearly 600 percent from 2014 to 2018, increasing from \$166 million to \$983 million. This increase was attributable to the increase in exports of *Aerospace Products & Parts*, which increased in value from \$80 million in 2014 to \$915 million in 2018. *Chemicals* export value increased from \$183 million in 2014 to \$538 million in 2018. Most of this increase was in *Pharmaceuticals & Medicines*, which increased from \$84 million in

3.5% 2.9% 3.0% 2.9% 2.5% 2.2% 2.5% 1.9% 2.4% 2.0% 2.2% 2.0% 1.5% 1.6% 1.0% 1.0% 0.5% 0.0% 2014 2015 2016 2017 2018 New Hampshire United States Source: U.S. Bureau of Economic Analysis, Gross Domestic Product

## NEW HAMPSHIRE AND U.S. GDP GROWTH 2014 - 2018

#### Where Do New Hampshire Exports Go?

export to \$443 million.

The countries that purchased the most goods from New Hampshire were Germany, Canada, Ireland, Mexico and China.<sup>4</sup> Canada was the largest buyer of New Hampshire exports in 2014 through 2017, receiving over \$500 million of goods from New Hampshire firms

### **Exports**

Companies based in New Hampshire exported goods valued at \$5.3 billion in 2018, an increase of 25 percent over 2014, when \$4.2 billion worth of goods were exported. These values are adjusted for inflation and are expressed in terms of 2005 dollars. *Computer & Electronic Products* was the largest category in each of those years. Canadian companies purchased a diverse group of goods from New Hampshire firms in 2018, with no industry accounting for more than 15 percent of goods purchased. The industries to export the most goods to Canadian companies was *Machinery*, *Except Electrical* and *Transportation Equipment*, with \$94.4 million.

<sup>1</sup> U.S. Bureau of Economic Analysis, "Gross Domestic Product," https://www.bea.gov/resources/learning-center/what-to-know-gdp

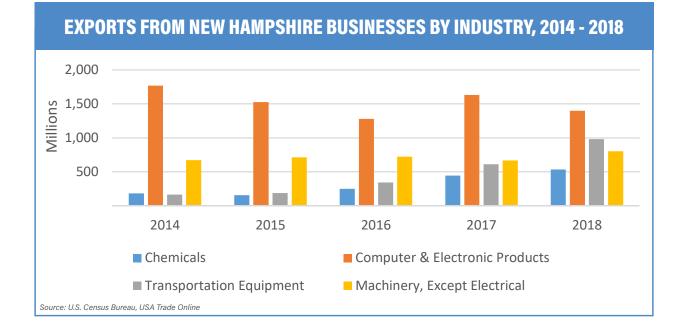
<sup>2</sup> U.S. Bureau of Economic Analysis, *GDP for New Hampshire*, https://apps.bea.gov/regional/bearfacts/action.cfm

<sup>3</sup> U.S. Census Bureau, USA Trade Online, https://usatrade.census.gov/data/Perspective60/Dim/dimension.aspx 4 Ibid

In 2018, Germany surpassed Canada to become the largest buyer of New Hampshire goods. The amount exported to Germany doubled from \$325 million in 2017 to \$692 million in 2018. Nearly two thirds of goods exported to Germany in 2018, \$442 million, were *Transportation Equipment*.

Exports to Ireland also increased substantially from \$50 million in 2014 to \$433 million in 2018. Nearly 90 percent of goods exported to Ireland were *Chemicals*. The largest exports to Canada and Mexico were *Computer & Electronic Products*.

- Greg David





Gross Domestic Product by State - New Hampshire	2014	2015	2016	2017	2018	Source
Current Dollars (\$ millions)	\$72,369	\$75,877	\$78,402	\$81,179	\$84,712	BEA
Annual percent change	3.1%	4.8%	3.3%	3.5%	4.4%	BEA/NHES
Real chained 2012 dollars (\$ millions)	\$69,474	\$71,175	\$72,544	\$73,981	\$75,615	BEA
Annual percent change	1.0%	2.4%	1.9%	2.0%	2.2%	BEA/NHES
Gross Domestic Product by State - United States						
Current Dollars (\$ millions)	\$17,521,747	\$18,219,297	\$18,707,189	\$19,485,394	\$20,494,079	BEA
Annual percent change	4.4%	4.0%	2.7%	4.2%	5.2%	BEA/NHES
Real chained 2012 dollars (\$ millions)	\$16,899,831	\$17,386,700	\$17,659,187	\$18,050,693	\$18,566,442	BEA
Annual percent change	2.5%	2.9%	1.6%	2.2%	2.9%	BEA/NHES
Total Capital Expenditures (new and used)	2014	2015	2016	2017	2018	Source
Total (\$ millions)	\$542	\$569	\$570			СВ
As a Percent of Payroll						
United States	27.6%	27.8%	26.2%			CB/NHES
New Hampshire	13.5%	14.0%	13.8%			CB/NHES
Connecticut	14.1%	13.7%	13.2%			CB/NHES
Maine	18.2%	20.8%	16.5%			CB/NHES
Massachusetts	16.6%	16.8%	15.4%			CB/NHES

Value Added	2014	2015	2016	2017	2018	Source
Value Added by Manufacture						
Total (\$ millions)	\$10,307.8	\$10,996.1	\$11,562.4			СВ
Value Added per Payroll Dollar						
United States	\$3.87	\$3.78	\$3.74			CB/NHES
New Hampshire	\$2.56	\$2.71	\$2.79			CB/NHES
United States rank <sup>a</sup>	49	50	48			CB/NHES
Connecticut	\$3.12	\$3.23	\$2.98			CB/NHES
United States rank <sup>a</sup>	45	41	45			CB/NHES
Maine	\$3.28	\$3.00	\$3.05			CB/NHES
United States rank <sup>a</sup>	42	43	43			CB/NHES
Massachusetts	\$3.06	\$3.06	\$3.03			CB/NHES
United States rank <sup>a</sup>	47	42	44			CB/NHES
Rhode Island	\$2.76	\$2.72	\$2.61			CB/NHES
United States rank <sup>a</sup>	48	46	50			CB/NHES
Vermont	\$2.49	\$2.71	\$2.73			CB/NHES
United States rank <sup>a</sup>	50	49	49			CB/NHES

15.2%

20.4%

16.1%

18.7%

13.5%

19.5%

Source: Annual Survey of Manufactures, US Census Bureau. ELMI Analysis. Last Update 6/18/2018

6

Rhode Island

Vermont

CB/NHES

**CB/NHES** 

Export Sales to the World	2014	2015	2016	2017	2018	Source
Total (\$ millions)	\$4,233	\$4,001	\$4,143	\$5,148	\$5,306	ITA
Annual percent change	20.6%	-5.5%	3.6%	24.2%	3.1%	ITA/NHES
Industry Share of Total Exports <sup>b</sup>						
Computer and Electronic Products	41.8%	38.1%	30.9%	31.7%	26.4%	ITA/NHES
Transportation Equipment	3.9%	4.7%	8.3%	11.9%	18.5%	ITA/NHES
Machinery, Except Electrical	15.9%	17.8%	17.4%	13.0%	15.2%	ITA/NHES
Chemicals	4.3%	4.0%	6.1%	8.7%	10.1%	ITA/NHES
Fabricated Metal Products, NESOI	3.7%	4.6%	6.1%	5.0%	6.5%	ITA/NHES
Electrical Equipment, Appliances & Components	6.4%	9.5%	9.4%	11.5%	5.4%	ITA/NHES
Miscellaneous Manufactured Commodities	3.5%	3.6%	3.8%	3.1%	3.2%	ITA/NHES
Plastics & Rubber Products	3.2%	3.7%	3.8%	2.4%	2.5%	ITA/NHES
Waste and Scrap	4.0%	2.1%	2.2%	1.8%	1.9%	ITA/NHES
Printed Matter and Related Products, NESOI	1.5%	1.9%	1.5%	1.5%	1.4%	ITA/NHES
Food Manufactures	0.8%	1.0%	1.2%	2.0%	1.4%	ITA/NHES
<sup>b</sup> International Trade Administration, U.S. Department of C	ommerce, Trade S	tats Express™ Ho	ome, National Tra	de Data Home		

Defense Contracts (\$ millions)	2014	2015	2016	2017	2018	Source
Total - Federal Fiscal (October 1 - September 30)	\$1,175.3	\$1,137.4	\$1,208.7	\$1,802.5	\$2,127.4	USAS
Source: USAspending.gov. Last Update 8/20/2019						

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## **TRADE & TOURISM**

#### **Retail Trade Sector**

Retail trade is the largest industry sector in New Hampshire, employing 94,410 workers in 2018. Recent technology-driven trends have had an impact on this sector, and retail is likely to continue to go through significant changes in the future. The growth of e-commerce in particular has had a large impact on retail trade. E-commerce increased from six percent of all retail sales in 2010 to 16 percent in 2019.<sup>1</sup> Many retailers have struggled as consumers bypass physical retail stores entirely, shipping goods directly to their homes. Nationwide, an estimated 9,300 retail stores closed in 2019, topping the previous high of 8,000 closed stores in 2017.<sup>2</sup> Laborsaving technologies, such as self-checkout and curbside delivery have also had an impact, not only on Retail trade employment, but on the type of work that Retail trade workers are expected to perform.

Retail trade in New Hampshire employed 95,919 workers in 2016, but employment decreased in 2017 and 2018 by a total of 1,509 jobs. The number of Retail trade establishments has also declined; after reaching a high of 5,868 establishments in 2013, the number of Retail trade establishments decreased every year since, falling to 5,732 establishments in 2018.

Not every sector of *Retail trade* has been struggling. Employment in *Nonstore retailers*,<sup>3</sup> who sell goods online, as well as through catalogs, infomercials, and other methods that don't require a permanent store grew from 2014 to 2018, adding 28 establishments and 655 workers. Employment in Furniture and Home Furnishings Stores increased by 310 jobs, although the number of stores remained essentially the same. Food and Beverage Stores, the largest subsector of retail trade, increased employment by 1,152 jobs from 2014 to 2017, although it decreased by 306 jobs from 2017 to 2018. The Retail trade subsectors that lost the most jobs from 2014 to 2018 include Clothing and Clothing Accessories Stores, which lost 61 establishments and 835 workers, and General Merchandise Stores, which added 26 establishments, but lost 698 workers.

In addition to establishments that employ workers, Retail trade also includes sole proprietorships and partnerships that don't employ anyone other than the owner(s). These businesses are known as "nonemployer" establishments. The number of nonemployer Retail trade establishments increased from 8,379 establishments in 2013 to

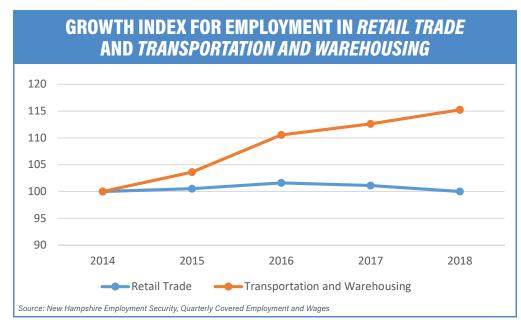


**EMPLOYMENT CHANGES IN SELECT NEW HAMPSHIRE RETAIL TRADE SUBSECTORS** 

9.118 establishments in 2017. Like Retail trade employment, different subsectors experienced varying levels of nonemployer establishment growth. The number of nonemployer Health and personal care stores grew 41 percent, from 390 establishments in 2013 to 538 establishments in 2017. Nonstore retailers added 704 establishments from 2013 to 2017, an 18 percent increase. Nonstore retailers

Jessica Young, "US ecommerce sales grow 14.9% in 2019," Digital Commerce 360, February 19, 2020. https://www. digitalcommerce360.com/article/us-ecommerce-sales/ Lauren Thomas, "Retailers announced record store closures in 2019. Here's a list," CNBC, December 21, 2019. https://www.cnbc.com/2019/12/20/sears-walgreens-among-retailers-that-2 closed-stores-in-2019.html

3 Nonstore retailers include 3 industry groups, Electronic shopping and mail-order houses, Vending machine operators, and Direct selling establishments, such as home fuel delivery services Electronic shopping and mail-order houses account for a little over half of all employment in the subsector, but account for the majority of employment growth from 2014 to 2018



is the largest subsector of *Retail trade*, accounting for more than 50 percent of all nonemployer *Retail trade* establishments. *Motor vehicle and parts dealers* saw the largest decline in nonemployer establishments, decreasing by 66 establishments, a little over nine percent.

While the increase in online retail has negatively impacted employment in *Retail trade*, the *Transportation and Warehousing* industry sector has benefited from these changes. As goods are increasingly shipped directly from a warehouse to customers, this sector, which includes both the distributions centers that store and ship retail goods and the delivery services that deliver them to customers' homes, has grown substantially. Employment in *Transportation and Warehousing* grew from 12,689 jobs in 2014 to 14,622 in 2018, an increase of 1,933 jobs.

#### **Meals and Rooms Tax Revenue**

New Hampshire's Meals and Rooms (M&R) tax is a good indicator of the state of the state's tourism industry. These taxes are generated by meals in restaurants, rentals of hotel rooms, other overnight lodging such as short-term rental homes, and rentals of motor vehicles, factors closely tied to the tourism industry. In state Fiscal Year 2019 (July 2018- June 2019), the state collected \$335.6 million from meals and rentals. This was actually a decrease from the previous year, when M&R collections were \$350.3 million. Revenue from both Meals and Rooms decreased from 2018 to 2019.

The Meals and Rooms tax did not decrease during the Great Recession, although this was primarily because of a change in tax rate, from 8 percent to 9 percent, starting in FY 2010. The total that customers spent on meals and rooms declined from 2008 through 2010.

#### **Outdoor Recreation**

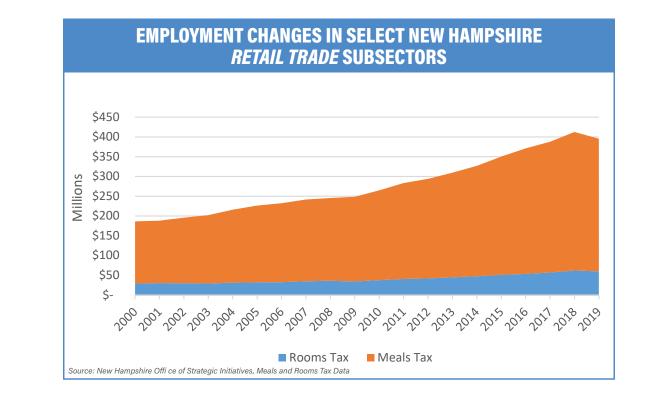
The U.S. Bureau of Economic Analysis (BEA) recently released data on the impact of outdoor recreation activities<sup>4</sup> on the Gross Domestic Product (GDP) of every state in the U.S. According to BEA's data, outdoor recreation contributed \$2.7 billion to New Hampshire's GDP in 2017, 3.3 percent of the state's total GDP. Outdoor recreation also provided employment for 37,800 New Hampshire workers, accounting for 5.5 percent of total employment.

New Hampshire was among the states that receive the greatest economic benefit from outdoor

<sup>4</sup> U.S. Bureau of Economic Analysis defined outdoor recreation as "all recreational activities undertaken for pleasure that occur outdoors." This includes activities that are traditionally considered outdoor recreation, such as hiking, camping, skiing, biking, fishing and hunting. It also includes many other outdoor activities, such as gardening, bekeeping, outdoor festivals, amusement parks, hot air balloons, and drone-flying. The economic impact of these activities includes the value of goods and services directly related to outdoor recreation ("core" goods and services), as well as the value of goods and services that support access to outdoor recreation ("supporting" goods and services). Core outdoor recreation goods and services include gear, equipment, fuel, concessions, maintenance, repair, and fees related to outdoor recreation activities. Supporting goods and services includes travel and tourism defined as trips more than 50 miles from home, as well as local trips (less than 50 miles from home), construction, and government expenditures.

recreation. The Granite State had the eighth highest share of GDP generated from outdoor recreational activities, tied with Colorado and Utah. It also ranked 7th in share of employment from outdoor recreation, and 11th in total worker compensation. Over the five-year period from 2012 to 2017, outdoor recreation's contributions to GDP grew by 17.8 percent, outpacing New Hampshire's total GDP of 9.5 percent. Outdoor recreation-related employment increased by over 1,500 jobs from 2012 to 2017, although that growth was not as steady as GDP growth. The total number of jobs declined from 2012 to 2013, and from 2016 to 2017.

- Greg David



Hospitality: Estimated Sales (\$ millions)	2014	2015	2016	2017	2018	Source
Meals	\$2,617.7	\$2,798.8	\$2,982.8	\$3,093.9	\$3,256.7	OSI
Annual percent change	5.4%	6.9%	6.6%	3.7%	5.3%	OSI/NHES
Rentals (Includes Motor Vehicle Rentals)	\$532.8	\$574.4	\$598.4	\$636.0	\$695.3	OSI
Annual percent change	6.2%	7.8%	4.2%	6.3%	9.3%	OSI/NHES

Liquor Sales (State Fiscal Year – July 1 to June 30)	2013-14	2014-15	2015-16	2016-17	2017-18	Source
Retail & Wholesale Gross Sales (\$ millions)	\$626.9	\$646.9	\$682.4	\$702.7	\$712.4	LC
Fiscal year percent change	3.9%	3.2%	5.5%	3.0%	1.4%	LC/NHES
Retail & Wholesale Net Sales <sup>a</sup> (\$ millions)	\$611.2	\$631.1	\$665.7	\$684.8	\$691.9	LC
Fiscal year percent change	3.9%	3.2%	5.5%	3.0%	1.4%	LC/NHES
Gross Profit From Sales (\$ millions)	\$177.4	\$185.4	\$195.0	\$200.0	\$200.8	LC
Fiscal year percent change	4.1%	4.5%	5.2%	2.6%	0.4%	LC/NHES
<sup>a</sup> Total sales less discounts and fees						

Retail Employment	2014	2015	2016	2017	2018	Source
Food and beverage stores	20,884	21,715	22,023	22,037	21,729	NHES
Annual percent change	-4.5%	4.0%	1.4%	0.1%	-1.4%	NHES
General merchandise stores	15,389	15,113	15,283	15,151	14,691	NHES
Annual percent change	-0.3%	-1.8%	1.1%	-0.9%	-3.0%	NHES
Furniture and home furnishings stores	2,364	2,465	2,551	2,574	2,673	NHES
Annual percent change	-0.6%	4.3%	3.5%	0.9%	3.8%	NHES
Electronics and appliance stores	3,415	3,447	3,425	3,265	3,064	NHES
Annual percent change	-0.9%	0.9%	-0.6%	-4.7%	-6.2%	NHES
Building material & garden supply stores	9,292	9,104	9,389	9,430	9,673	NHES
Annual percent change	2.2%	-2.0%	3.1%	0.4%	2.6%	NHES
Health and personal care stores	4,434	4,411	4,367	4,301	4,242	NHES
Annual percent change	1.3%	-0.5%	-1.0%	-1.5%	-1.4%	NHES
Motor vehicle & parts dealers	12,250	12,355	12,544	12,456	12,590	NHES
Annual percent change	3.9%	0.9%	1.5%	-0.7%	1.1%	NHES
Gasoline stations	4,521	4,478	4,438	4,465	4,442	NHES
Annual percent change	0.5%	-1.0%	-0.9%	0.6%	-0.5%	NHES
Clothing and clothing accessories stores	6,938	6,657	6,550	6,419	6,115	NHES
Annual percent change	-4.1%	-4.1%	-1.6%	-2.0%	-4.7%	NHES
Nonstore retailers	4,930	5,094	5,337	5,512	5,584	NHES
Annual percent change	0.4%	3.3%	4.8%	3.3%	1.3%	NHES
Sporting Goods, Hobby, Book, and Music Stores	4,599	4,581	4,454	4,387	4,173	NHES
Annual percent change	6.3%	-0.4%	-2.8%	-1.5%	-4.9%	NHES
Miscellaneous Store Retailers	5,394	5,497	5,557	5,491	5,463	NHES
Annual percent change	0.4%	1.9%	1.1%	-1.2%	-0.5%	NHES
New Hampshire total	94,410	94,914	95,917	95,487	94,457	NHES
Annual percent change	-0.3%	0.5%	1.1%	-0.4%	-1.1%	NHES
New England total	795,822	800,451	804,198	801,938	795,960	BLS/NHES
Annual percent change	0.6%	0.6%	0.5%	-0.3%	-0.7%	BLS/NHES
United States total	15,343,711	15,642,116	15,824,396	15,854,454	15,787,512	BLS
Annual percent change	1.8%	1.9%	1.2%	0.2%	-0.4%	BLS/NHES

Accommodation and Food Services Employment	2014	2015	2016	2017	2018	Source
Accommodation	9,193	9,441	9,478	9,537	9,527	NHES
Annual percent change	2.1%	2.7%	0.4%	0.6%	-0.1%	NHES
Food Services and Drinking Places	46,764	47,709	48,664	49,416	50,162	NHES
Annual percent change	1.8%	2.0%	2.0%	1.5%	1.5%	NHES
New Hampshire total	55,958	57,150	58,142	58,952	59,689	NHES
Annual percent change	1.9%	2.1%	1.7%	1.4%	1.3%	NHES
New England	600,488	610,445	624,405	635,732	642,893	BLS/NHES
Annual percent change	2.1%	1.7%	2.3%	1.8%	1.1%	BLS/NHES
United States total	12,531,941	12,939,965	13,318,703	13,606,761	13,831,140	BLS
Annual percent change	3.0%	3.3%	2.9%	2.2%	1.6%	BLS/NHES

Hunting and Fishing	2014	2015	2016	2017	2018	Source
Hunting Licenses, Tags, Permits and Stamps						
Resident	48,789	47,599	47,073	45,893	45,590	F&G
Non-resident	10,529	10,500	10,599	10,108	9,972	F&G
Moose Hunt Lottery						
Applications	11,986	11,056	9,590	8,261	6,142	F&G
Permits Drawn	124	105	71	51	51	F&G
Fishing Licenses, Tags, Permits and Stamps						
Resident	111,871	111,013	106,910	105,872	106,242	F&G
Non-resident	48,661	49,566	49,657	50,128	50,239	F&G

Outdoor Recreation Value Added (\$ thousands)	2014	2015	2016	2017	2018	Source
Total Outdoor Recreation Value Added	\$2,362,697	\$2,585,105	\$2,600,766	\$2,710,336		BEA
Total Core Outdoor Recreation	\$1,227,090	\$1,325,496	\$1,294,978	\$1,390,525		BEA
Multi-use Apparel and Accessories <sup>b</sup>	\$251,107	\$262,243	\$260,797	\$263,815		BEA
Hunting/Shooting/Trapping	\$141,460	\$154,187	\$160,172	\$225,844		BEA
Snow Activities	\$157,928	\$179,420	\$153,628	\$151,646		BEA
Supporting Outdoor Recreation	\$1,135,606	\$1,259,610	\$1,305,789	\$1,319,811		BEA
Travel and Tourism <sup>c</sup>	\$860,410	\$958,704	\$995,650	\$1,000,120		BEA

<sup>b</sup> Consists of backpacks, bug spray, coolers, general outdoor clothing, GPS equipment, hydration equipment, lighting, sports racks, sunscreen, watches, and other miscellaneous gear and equipment.

° Travel and tourism expenses includes only expenses for travel at least 50 miles away from home.

Travel and Tourism <sup>d</sup>	2014	2015	2016	2017	2018	Source
All Visitor Spending (\$ billions)	\$5.0	\$5.1	\$5.1	\$5.2	\$5.6	DTTD
Annual percent change	2.0%	0.7%	-0.3%	3.7%	6.6%	DTTD
Overnight Visitor Volume (Millions of Person Trips)	10.4	10.6	10.6	10.9	11.3	DTTD
Annual percent change	1.2%	2.5%	0.2%	2.4%	4.1%	DTTD
Average Overnight Spending: Per Person Night	\$527.0	\$519.8	\$518.4	\$528.5	\$546.4	DTTD
Annual percent change	0.8%	-1.4%	-0.3%	2.0%	3.4%	DTTD

 $^{\rm d}$  Includes both resident and non-resident spending and volume

Visitor Spending by Type of Accomodation (\$ millions)	2014	2015	2016	2017	2018	Source
Hotel, Motel	\$2,910.7	\$2,977.0	\$2,970.6	\$3,100.3	\$3,337.9	DTTD
Day Travel	\$850.2	\$849.9	\$845.7	\$861.9	\$903.8	DTTD
Private Home	\$836.3	\$798.7	\$781.4	\$803.2	\$830.4	DTTD
Vacation Home	\$266.6	\$258.6	\$256.4	\$259.7	\$264.0	DTTD
Campground	\$167.1	\$181.8	\$197.8	\$211.9	\$246.0	DTTD

# **CONSTRUCTION & HOUSING**

Ten years after the meltdown of the housing market, the number of foreclosures is no longer a major concern. Instead, the low inventory of homes for sale and the low vacancy rate for rental properties has reached a level of crisis. The good news seems to have turned bad in terms of access to and affordability of housing.

In terms of most of the economic indicators, New Hampshire's real estate market has recovered from the Great Recession and has even exceeded the pre-recession housing market peak.

The median price in New Hampshire for singlefamily residential homes was \$282,500 in 2018 in comparison to \$270,000 in 2005. The number of units sold was 17,525 in 2018 in comparison to 17,050 in 2004. Finally, the number of days on the market was 61 in 2018, in comparison to 73 in 2003. Number of days on the market (DOM) is at its lowest point since at least 1998. The limited period of time that homes are on the market is an indicator of the short supply of houses available for sale at any given time.

Although the real estate market has recovered in New Hampshire, the number of residential building permits is still significantly below the pre-recession level. According to the U.S. Census Bureau, the number of new residential permits issued annually peaked at 8,708 in 2002, hit bottom in 2012 at 2,296 and reached 4,445 in 2018. This combination of higher housing prices and low inventory, including a low level of new housing developments, has culminated in the current situation of low housing availability. The rental vacancy rate, statewide, for a two-bedroom unit was 0.8 percent in the summer of 2019. These statistics beg the question: why are more housing units not being built?

#### New Hampshire's Housing Shortage

Several Housing Summits were held in New Hampshire during the fall of 2019, as the issue of housing affordability and availability seems to be high priority. In addition, the Governor announced the recommendations from a task force that had been charged with finding solutions to address New Hampshire's housing crisis.<sup>1</sup>

The recommendations tried to address some of the underlying issues limiting housing development in New Hampshire. The suggested recommendations are in three areas:

- Enhancing the capacity of local land use boards in order to better plan for growth and expansion of the housing stock;
- Ensure predictability in the permitting process by streamlining and transparency; and
- Improve investment in housing development through expansion of TIF (Tax Increment Financing) district rules and strengthen usage of other tax relief programs.

This task force was engaged in a bipartisan dialogue to draft legislation based on these recommendations.

#### Housing Affordability and Preference - a Generational Gordian Knot

"Encouraging developers to construct smaller, affordable single-family homes in New Hampshire during a strong market where larger homes yield greater profits is a challenge. Providing additional incentives through innovative land use controls under RSA 674:21, and including: timing, intensity, and use incentives, inclusionary zoning, and impact fee waivers, would increase low-end market favorability. Additionally, public land grants and subsidized construction loans would keep development costs down and allow for profits that could spur the development of smaller units."<sup>2</sup> *New Hampshire Housing Finance Authority, "Affordable Single-Family Housing Study."* 

The objective of the *"Affordable Single-Family Housing Study"* was to showcase how it would be possible to build affordable single-family homes in

Michael Kitch, "Taking on NH's housing 'crisis", NH Business Review. November 22, 2019. Accessed on December 2, 2019 at https://www.nhbr.com/taking-on-nhs-housing-crisis/
 New Hampshire Housing Finance Authority, "Affordable Single-Family Housing Study," page 24, https://www.nhhfa.org/wp-content/uploads/2019/06/Presentation\_Affordable\_SF\_08-2018. pdf

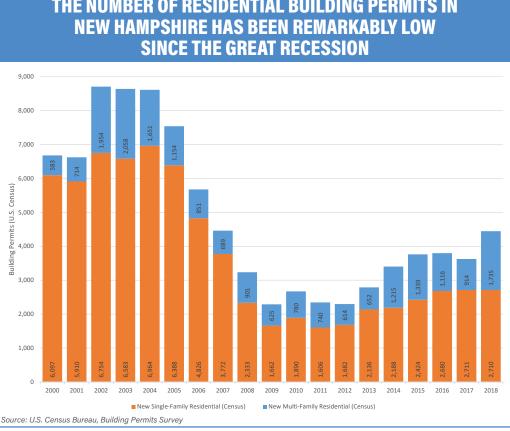
New Hampshire. However, the current preference for new housing development is for it to be generated in more urban cores where the limited availability of land as well as local zoning codes put larger restrictions on higher density developments as opposed to open land.<sup>3</sup> Currently, most Millennials seem to prefer living in a more urban environment. As there is little availability of such housing, this new housing tends to be limited in scale and expensive.

Housing preference is changing, and the traditional generational shift of the older generation vacating single-family homes as the younger generation settles down in more family friendly housing is not having its usual impact on house pricing and availability. Currently, this generational shift might even further create a bottleneck. The older and younger age groups seem to be competing

not have the means (and maybe not the interest) in purchasing the single-family housing stock being vacated by baby boomers.

Older householders might have equity in their current homes but might not feel enticed to move, as the availability of smaller units is limited. But these older occupants will eventually move. Several studies have indicated that over the next ten years, one in eight of today's owner-occupied homes in the U.S. will be released to the market by senior citizens exiting homeownership.<sup>5</sup> The question is, who will have the interest and/or capability for buying these homes. In addition, nationwide, the bulk of these homes vacated by seniors are located in traditional retirement communities in Arizona and Florida. There seems to be a geographic disconnect between where housing will be available and where younger persons want to live.

for the same type of housing. The older population are looking for places to downsize, whereas the younger population are looking for beginner homes (which also tend to be smaller) or might opt for apartments. Whereas the older people may have equity in their current homes and/or other accumulated wealth, many young professionals still have to pay back student loans.4 So the younger generations might



# THE NUMBER OF RESIDENTIAL BUILDING PERMITS IN

3 'Big ask' Islington Street housing plan rejected in Portsmouth. Elizabeth Dinan. https://www.seacoastonline.com/news/20191120/big-ask-islington-street-housing-plan-rejected-inportsmouth

"In the short term, it [Forgiving student debt] would be very positive for the housing market," says Lawrence Yun, the National Association of Realtors chief economist. He says his group's surveys show that student debt has people delaying homeownership by five to seven years." Chris Arnold, "Forgiving Student Debt Would Boost Economy, Economists Say," NPR, https:// www.npr.org/2019/11/25/782070151/forgiving-student-debt-would-boost-economy

Laura Kusisto, "OK Boomer, Who's Going to Buy Your 21 Million Homes?" Wall Street Journal, https://www.wsj.com/articles/ok-boomer-whos-going-to-buy-your-21-millionhomes-11574485201

#### Short Term Rentals Versus Permanent Living Space

The increasingly common usage of Airbnb and other short-term rental platforms has created a potential conflict between those using properties for permanent housing versus a temporary vacation home. Airbnb has facilitated the ease of converting a residential space to temporary living space.

In several of New Hampshire's cities and towns, the question of how to deal with short-term rentals has been the topic of discussion. In Portsmouth and Laconia, some residents feel that the use of properties for weekend rentals has destroyed neighborhood identity. In Laconia, a complaint that arose from a "party house" issue turned into a larger debate of short-term rentals. Conway selectmen have also voted to form a committee to examine the issue of short-term rentals. Opponents to short-term rentals believe that short-term rentals can disrupt the dynamic of the neighborhood. On the other hand, some businesses believe that the availability of short-term rentals increases the number of overnight tourists, which helps the local economy. In late fall of 2019, a new ordinance allowing short-term rentals only in owner-occupied residences received initial approval from the Laconia city council.<sup>6</sup>

These local discussions about housing ownership and rental opportunities illustrate the complexities of housing in terms of living space, community, property as investments and economic opportunities.

- Annette Nielsen

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6 Alex McOwen, "Laconia City Council Narrowly Passes Ordinance Banning Short-Term Rentals," NHPR, https://www.nhpr.org/post/laconia-city-council-narrowly-passes-ordinance-
banning-short-term-rentals
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Contract Value Indices (base = 1980) December (not seasonally adjusted)	2014	2015	2016	2017	2018	Source
Total construction						
New Hampshire	496.0	263.6	253.0	348.7	352.3	FR/NHES
New England	520.1	342.6	427.5	423.9	454.5	FR/NHES
United States	357.6	388.6	387.4	445.4	407.8	FR/NHES
Nonbuilding construction		·		·		
New Hampshire	1,256.8	291.8	74.1	450.1	207.3	FR/NHES
New England	544.5	256.4	362.9	536.4	426.2	FR/NHES
United States	331.6	408.9	239.8	554.4	429.5	FR/NHES
Nonresidential construction		· · · ·				
New Hampshire	319.5	246.0	319.7	531.6	805.0	FR/NHES
New England	509.2	424.4	390.1	453.8	606.6	FR/NHES
United States	360.6	355.1	430.6	415.5	416.0	FR/NHES
Residential construction		· · · ·				
New Hampshire	265.7	261.4	292.9	201.3	159.2	FR/NHES
New England	516.5	319.1	493.2	339.2	341.0	FR/NHES
United States	368.2	406.0	426.2	414.9	390.0	FR/NHES
Residential construction (seasonally adjusted)		· · · ·				
New Hampshire	301.3	306.8	360.4	257.7	209.2	FR/NHES
New England	573.2	361.1	558.6	385.3	382.1	FR/NHES
United States	409.6	454.4	481.3	473.0	447.9	FR/NHES

Housing Permits Authorized (not seasonally adjusted)	2014	2015	2016	2017	2018	Source
Total New Hampshire	3,403	3,606	3,796	3,625	4,445	СВ
Annual percent change	22.1%	6.0%	5.3%	-4.5%	22.6%	CB/NHES
Total New England	28,958	33,109	32,595	33,160	34,375	СВ
Annual percent change	1.1%	14.3%	-1.6%	1.7%	3.7%	CB/NHES
Total United States	1,046,363	1,178,138	1,206,642	1,281,977	1,328,827	СВ
Annual percent change	5.6%	12.6%	2.4%	6.2%	3.7%	CB/NHES
Single Family Units, New Hampshire	2,188	2,200	2,680	2,711	2,710	СВ
Annual percent change	2.4%	0.5%	21.8%	1.2%	0.0%	CB/NHES
Single Family Units, New England	16,765	16,323	17,935	18,016	18,159	СВ
Annual percent change	0.6%	-2.6%	9.9%	0.5%	0.8%	CB/NHES
Single Family Units, United States	634,597	690,084	750,796	819,976	855,332	СВ
Annual percent change	5.6%	12.6%	2.4%	6.2%	3.7%	CB/NHES

Home Sales	2014	2015	2016	2017	2018	Source
Freddie Mac House Price Index (December 2000	= 100), NSA					
New Hampshire	134.89	140.73	146.79	156.45	165.89	FM
United States	146.56	154.65	164.36	175.64	187.03	FM
Mortgage Rates and Housing Rentals 30-Year Fixed Mortgage Rates (Annual average)	4.17%	3.85%	3.65%	3.99%	4.54%	FM

Units in Structure	2014	2015	2016	2017	2018	Source
Total housing units	619,865	622,604	625,337	634,689	638,112	СВ
1-unit, detached	388,574	393,169	399,831	407,329	403,645	СВ
1-unit, attached	31,611	34,560	34,548	35,476	33,543	СВ
2 units	36,866	35,601	33,346	33,034	34,508	СВ
3 or 4 units	36,903	34,727	34,866	36,650	35,243	СВ
5 to 9 units	28,855	31,809	29,595	28,110	29,293	СВ
10 to 19 units	21,704	19,681	19,012	17,695	18,634	СВ
20 or more units	38,117	38,128	38,848	44,853	44,019	СВ
Mobile home	37,116	34,670	34,897	31,123	39,053	СВ
Boat, RV, van, etc.	119	259	394	419	174	СВ

Source: 1-year American Community Survey, US Census Bureau. Last Update 10/8/2019

Homes Financed by NH Housing Finance Authority	2014	2015	2016	2017	2018	Source
Total	942	1,301	1,421	1,418		HFA
Percent new	1.9%	0.5%	0.7%	0.6%		HFA
Percent condo	11.6%	13.5%	13.5%	13.5%		
NHHFA Bond Issues (\$ millions)	0.0	0.0	0.0	15.6		HFA
Assisted Rental Housing Funded						
Total units (NHHFA only)	219	182	174	215		HFA
For elderly and special needs tenants	94	111	49	106		HFA
Housing Unit Rentals						
Median gross monthly rent, (including utilities), all units	\$1,037	\$1,069	\$1,113	\$1,143	\$1,177	HFA
Annual percent change	1.9%	3.1%	4.1%	2.7%	3.0%	HFA
Rental Unit Vacancy Rate, all units	2.7%	2.8%	1.8%	1.7%	2.1%	HFA

New Hampshire Multiple Listing Service Data on Sales of Existing Homes <sup>a</sup>	2014	2015	2016	2017	2018	Source
Regional Sales and Price Activity - December to	December					
Median sale price						
Single Family - residential	\$227,500	\$241,500	\$249,800	\$266,000	\$282,500	NNEREN
Condominium	\$168,000	\$173,450	\$185,000	\$192,000	\$205,000	NNEREN
Percent change in Price from Prior Year						
Single Family - residential	3.4%	5.5%	3.3%	6.5%	6.2%	NNEREN
Condominium	4.3%	2.7%	6.7%	3.8%	6.8%	NNEREN
Total Units Sold - 12-Month Average	÷		·			
Single Family - residential	1,104	1,324	1,464	1,482	1,460	NNEREN
Condominium	295	343	369	405	404	NNEREN

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## **EDUCATION**

#### **The State of Granite State Colleges** *The Cost, and Benefit, of Postsecondary Education in New Hampshire*

The fact that a postsecondary education can lead to better employment and higher income is not a secret. However, higher education comes with a higher price tag. Just under 150,000 students enrolled in a postsecondary institution in New Hampshire for the 2018 academic year. Of those enrolled, an estimated<sup>1</sup> 29,000 will graduate. These graduates will then face the reality of the cost of their education and determine if it was really worth it.

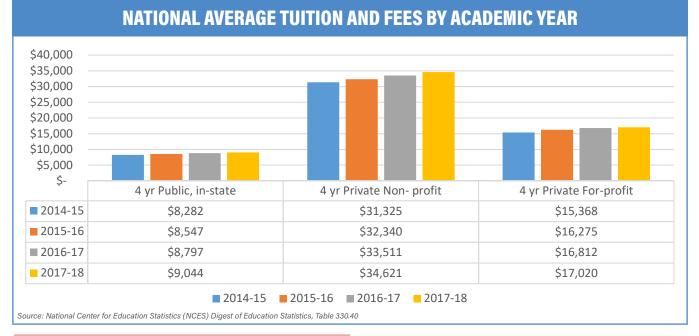
#### What Does a College Education Cost?<sup>2</sup>

Annual data provided by the National Center for Education Statistics (NCES), displayed in Figure 1, shows the national average for tuition and fees increased over the last four years. There was also a significant difference between the cost of public, private non-profit, and private for-profit schools. These costs do not include books, supplies, room, and board, although those costs are also increasing.<sup>3</sup> While the amount and trend of costs matter, how students pay for a college education matters more.

#### How Do Students Pay for Postsecondary Education?

Student loans are almost as common as going to college. Nationwide, just under 70 percent of graduates had student debt in 2017 and the average debt amount was \$29,800. The actual amount of debt will vary depending on the type of school. On a national average, public school graduates had a median debt of \$28,650, private nonprofit school graduates had a median debt of \$32,300, and private for-profit school graduates had a median debt of \$39,950.<sup>4</sup> That is a significant sum to a young adult just starting their career path.

Of course, the dollar amount of debt is only half of the equation, as interest rates are a significant determinant in the total cost of debt. Federal loans



1 Estimate is determined by taking the number of degrees conferred divided by the number of fall enrollments for the prior four years, summing the results and dividing by four to determine average percentage graduation and multiplying by 2017-2018 fall enrollments

2 The quality of the education cannot be discussed in such broad terms as each school is unique and often changes regularly, thus it will not be included in the discussion

3 National Center for Education Statistics (NCES) Digest of Education Statistics, "Table 330.40: Average total cost of attendance for first-time, full-time undergraduate students in degreegranting postsecondary institutions, by control and level of institution, living arrangement, and component of student costs: Selected years, 2010-11 through 2017-18". National Center for Education Statistics (NCES), https://nces.ed.gov/programs/digest/d18/tables/dt18\_330.40.asp

4 Student Loan Hero, "A look at the shocking student loan debt statistics for 2019". Student Loan Hero, https://studentloanhero.com/student-loan-debt-statistics/

**2017 - 2018 AVERAGE COLLEGE TUITION AND FEES IN CURRENT DOLLARS** \$50,000 \$45,000 \$40,000 Dollars \$35,000 \$30,000 2019 \$25,000 \$20,000 \$15,000 \$10,000 \$5,000 \$0 2 yr Public In-4 yr Public In-4 vr Public Out-of-2 yr Public Out-of 4 yr Private State State State State Conneticut \$12,355 \$33,741 \$40,410 \$4,312 \$12,879 Maine \$9,664 \$26,939 \$37,043 \$3,698 \$6,498 Massachusetts \$12,778 \$29,774 \$44,384 \$4,991 \$10,006 New Hampshire \$15,949 \$33,322 \$15,907 \$28,130 \$7,337 Rhode Island \$12,239 \$39,013 \$40,361 \$4,564 \$12,156 Vermont \$16,103 \$38,968 \$42,637 \$6,414 \$12,678 \$30,731 National Average \$9,037 \$25,657 \$3,243 \$7,971

Source: National Center for Education Statistics (NCES) Digest of Education Statistics, Table 330.20

are the primary source for most students funding their education. During the 2017 to 2018 academic year, the interest rate for Direct Subsidized and Unsubsidized loans for undergraduate students was 4.45 percent, while the rate for graduate students was 6.00 percent.<sup>5,6</sup> Another option available to students are the Direct PLUS loans, which require a parent as a cosigner, which had a rate of 6.31 percent.<sup>7</sup> It is worth noting that of the 2018 graduates with student debt, just under 15 percent had parents who took out Direct PLUS loans. Those parents had an average debt of \$35,600 when their student graduated.<sup>8</sup> Even with all federal money available, there are limits to loan amounts and as costs continue to rise, students may find shortfalls.

Student loans from private sources are also available. These loans typically have higher interest rates than federal loans, with some interest rates over ten percent.<sup>9</sup> With rates like that, it is not surprising that student debt can be onerous.

With that much debt at those rates, what can students expect for repayment? A student with an average amount of debt at a 4.45 percent interest rate would pay \$313.07 every month for ten years for a grand total of \$37,568.40. Student loan debt can have a negative impact on a recent graduate's finances, preventing them from achieving other financial goals, such as saving for a down payment on a house.<sup>10</sup>

These are national considerations. The more important question is: how does student loan debt in New Hampshire compare to the rest of the nation?

#### **How New Hampshire Compares**

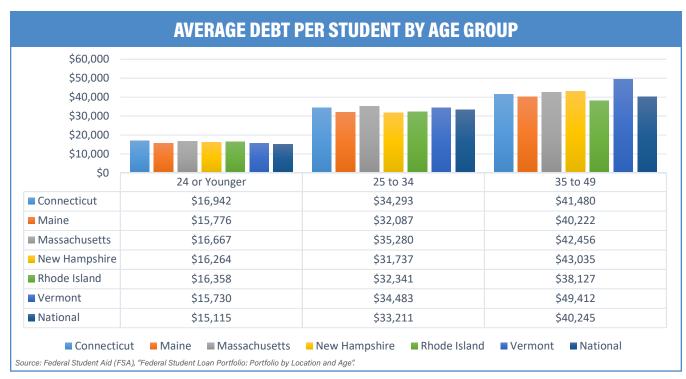
According to data for 2017-2018 academic year, provided by the NCES, New Hampshire schools are expensive compared to the rest of the nation. As show in Figure 2, New Hampshire, as does most of New England, sits above the national average in every aspect. New Hampshire's four-year public schools are pricey even by New England standards, less expensive than only Vermont and not by much. In fact, New Hampshire is the second most expensive state for four-year and first for two-year

Only unsubsidized loans are available for graduate level students

Fay, Max, "Interest Rates on Student Loans", Debt.org, https://www.debt.org/students/financial-aid-process/interest-rates/ Federal Student Aid (FSA), "Understand how interest is calculated and what fees are associated with your federal student loan", Federal Student Aid and Office of the US Department of 7 Education, https://studentaid.ed.gov/sa/types/loans/interest-rates

Student Loan Hero, "A look at the shocking student loan debt statistics for 2019". Student Loan Hero, https://studentloanhero.com/student-loan-debt-statistics/

 <sup>9</sup> Fay, Max, "Interest Rates on Student Loans", Debt.org, https://www.debt.org/students/financial-aid-process/interest-rates/
 10 Federal Student Aid (FSA), "The Standard Repayment Plan is the basic repayment plan for Ioans from William D. Ford Federal Direct Loan (Direct Loan) Program and Federal Family Education Loan (FFEL) Program". Federal Student Aid and Office of the US Department of Education, https://studentaid.ed.gov/sa/repay-loans/understand/plans/standard



average in-state public school tuition and fees in the nation.<sup>11</sup> A most inauspicious title to be sure.

In terms of the amount of student debt for borrowers residing in the state, New Hampshire ranks high as well. New Hampshire borrowers 24 and younger had an average debt of approximately \$16,300, tenth in the nation. It gets better in the 25 to 34 years age bracket, ranking thirty-sixth in the nation, then worse for those ages 35 to 49 where New Hampshire is twenty-eighth. The '2017-2018 Average College Tuition and Fees in Current Dollars' graph displays further details comparing NH to its neighbors and the nation.<sup>12</sup>

There are several reasons for the increasing amounts of debt by age group. First, the number of those who still owe money decreases in each age group, i.e. through pay offs, faster than the amount outstanding. Second, continued interest accumulation adds to the outstanding debt. Third, students who attend graduate school, or other postbaccalaureate college education, will be older when they complete their schooling. Fourth, there are a significant number of non-traditional students, such as adults seeking to further their education later in life, who are not included in the younger age brackets. Fifth, students over the age of 25 have a greater propensity to select private for-profit schools than public or non-profit schools, which tends to be the more expensive option.<sup>13</sup>

To put some perspective on average debt, based upon national averages, 18,377 of New Hampshire's 2017 graduates had student loans with an average loan amount around \$30,000.<sup>14</sup> That is an estimated \$547.6 million in student loans for New Hampshire graduates that academic year. A staggering number to be sure. However, as those numbers are based upon national averages and New Hampshire sits above the average, it is likely that estimate is low. Given the costs of New Hampshire postsecondary education, there is only one question to ask.

#### Is It Worth It?

According to a study published in 2015 called "Education and Lifetime Earnings in the United States," it is. In comparing lifetime earnings of high school graduates to bachelor's degree graduates, the

11 National Center for Education Statistics (NCES) Digest of Education Statistics, "Table 330.20: Average undergraduate tuition and fees and room and board rates charged for full-time students in degree-granting postsecondary institutions, by control and level of institution and state or jurisdiction: 2016-17 and 2017-18". National Center for Education Statistics (NCES), https://nces.ed.gov/programs/digest/d18/tables/dt18\_330.20.asp

12 Federal Student Aid (FSA), "Federal Student Loan Portfolio: Portfolio by Location and Age". Federal Student Aid and Office of the US Department of Education, https://studentaid.ed.gov/ sa/about/data-center/student/portfolio

<sup>13</sup> NCES, "Characteristics of Postsecondary Students". NCES, https://nces.ed.gov/programs/coe/indicator\_csb.asp

<sup>14</sup> Student Loan Hero, "A look at the shocking student loan debt statistics for 2019" Student Loan Hero, https://studentloanhero.com/student-loan-debt-statistics/

numbers are significant. The results of the analysis showed that, accounting for socio-demographic variables, men will earn approximately \$655,000 more in lifetime earnings with a bachelor's degree, while women will earn approximately \$445,000 more. To put the money in more usable terms, a net present value calculation shows the value of receiving a bachelor's education the day a student graduates at \$259,000 for men and \$180,000 for women.<sup>15,16</sup> U.S. Census Bureau data shows a more concentrated view for New Hampshire. The 2017 estimated earnings per year for men age 25 years and older, with a Bachelor's degree is \$28,617 more than men age 25 and older with a high school diploma. The same 2017 statistic for women, 25 years and older, shows a \$20,024 difference between educational attainment levels.<sup>17</sup> A significant sum of money given the average debt that students take on.

As much as the degree level can affect a student's annual income, different fields of study also provide different income levels. PayScale provides a ranking for majors, and schools, with the best earning potential. The top five 4-year degrees with the highest early career pay,<sup>18</sup> as of 2019, are Petroleum Engineering (\$94,500), Physician Assistant Studies (\$91,100), Electrical Engineering & Computer Science (EECS) (\$88,000), Pharmacy (\$79,600), and Metallurgical Engineering (\$78,100).<sup>19</sup> There is some shift when considering mid-career pay. For workers with at least ten years of work experience, the five highest paying occupations for 2019 are Petroleum Engineering (\$176,900), Electrical Engineering & Computer Sciences (EECS) (\$142,200), Applied Economics and Management (\$140,000), Operations Research (\$137,100), and Political Economy (\$136,200).<sup>20</sup>

These estimates provide a comfort that the average college graduate is making a sound investment but lifetime earnings is only part of the equation. For many people, the purpose behind postsecondary education is to get a job. Looking at national percentages of employment by education level, in 2017, 78 percent of young adults (25 to 34) who had attained a bachelor's degree worked fulltime, year round. That is seven percent higher than young adults with only a high school education. In fact, since 2000, young adults with a bachelor's degree had the highest percentage of year-round full-time employment by education level.<sup>21</sup>

Ultimately, an education's purpose is to improve an individual's quality of life. Increased wages and job security will partly address this. However, there are many other factors to consider. According to "Education and Quality of Life" by Jason D. Edgerton, Lance W. Roberts, and Susanne von Below, there are three main areas where education improves quality of life: 1. Enhancing Knowledge and Cognitive Development, 2. Changing Preferences, and 3. Lessening Constraints and Increasing Opportunities. The first factor addresses how knowledge affects the ability to understand and an individual's awareness of their environment. This increased level of understanding and access to information helps with maintaining health, greater understanding of "expert" recommendations, and fostering a general appreciation of learning. The second factor addresses how personal traits, habits, ethics, and other lifestyle choices change as people gain more knowledge. Perhaps of greatest importance in this factor is the fostering and development of personal agency that teaches individuals to be responsible and self-reliant in their lives. The third factor address the more typical expectations of higher education such as better jobs, higher earnings, and more fulfilling living situations.<sup>22</sup> In short, each area expresses reasons why people get a formal education in the first place: to better their knowledge, better themselves, and better their future.

<sup>15</sup> Based on a 20 year-old with 50 years lifetime earnings at a 4 percent (equivalent to inflation) discount rate

<sup>16</sup> Tamborini, Christopher R., ChangHwan Kim, and Arthur Sakamoto. 2015. "Education and Lifetime Earnings in the United States.

<sup>17</sup> U.S. Census Bureau, Educational Attainment, https://factfinder.census.gov/faces/tableservices/jsf/pages/ productview.xhtml?pid=ACS\_17\_5YR\_S1501&prodType=table

<sup>18</sup> Representing median salary of alumni with degrees in this subject with 0-5 years of work experience

<sup>19</sup> PayScale, 2019 College Salary Report: Highest Paying Jobs with a Bachelor's Degree, https://www.payscale.com/ college-salary-report/majors-that-pay-you-back/ bachelors?orderBy=EarlyCareerPay&ascending=false

<sup>20</sup> PayScale, 2019 College Salary Report: Highest Paying Jobs with a Bachelor's Degree, https://www.payscale.com/ college-salary-report/majors-that-pay-you-back/ bachelors?orderBy=MidCareerPay&ascending=false

<sup>21</sup> National Center for Education Statistics (NCES) Fast Facts, "Fast Facts: Income of Young Adults". National Center for Education Statistics (NCES), https://nces.ed.gov/fastfacts/display. asp?id=77

<sup>22</sup> Edgerton, Jason D., Roberts, Lance W., Susanne von Below, (Jan 2012) "Education and Quality of Life" Handbook of Social Indicators and Quality of Life Research (pp. 265-296), https:// www.researchgate.net/publication/259486414\_Education\_and\_Quality\_of\_Life

#### The State of the Granite State

Since the 2015 academic year, more than 70 percent of New Hampshire's high school graduates intended to go onto some form of college after graduation. New Hampshire has five public universities, seven technical community colleges, and eleven private institutions, an impressive number for its size. However, the data shows residents pay a premium for their use. Forbes provided a list of the top<sup>23</sup> 650 colleges in the nation for 2019. Among the colleges on this list, ten were in Connecticut, six in Maine, 31 in Massachusetts, three in New Hampshire, seven in Rhode Island, and five in Vermont. The three schools from New Hampshire were Dartmouth College (#10), University of New Hampshire (UNH) (#246), and Saint Anselm College (#319).<sup>24</sup> U.S. News has their own 2020 list of the top<sup>25</sup> 399 schools across the nation. That list includes seven schools

in Connecticut, three in Maine, 16 in Massachusetts, two in New Hampshire, two in Rhode Island, and one in Vermont. The two New Hampshire schools are Dartmouth College, ranked #12, and UNH, ranked #125.<sup>26</sup> While simply getting a school on these lists is a feat in and of itself, given the number of schools, and the average cost of schools in New Hampshire, perhaps it is a sign. Getting a degree is valuable and over time will pay for itself in quality of life, job security, and through higher earnings. However, with the cost in New Hampshire above the national average and the substantial debt of its graduates, New Hampshire may soon face the question: who can *afford* to attend New Hampshire colleges?

- Marek Rivero

26 U.S. News Education (2019) "National University Rankings 2020", U.S. News, https://www.usnews.com/best-colleges/rankings/national-universities

These rankings were based upon Alumni Salary (20%), Student Satisfaction (20%), Debt (20%), American Leaders (15%), On-Time Graduation Rate (12.5%), and Academic success (12.5%)
 Maria Clara Cobo, Julie Coleman, Madison Fernandez, Grace Kay, and Derek Saul, "America's Top Colleges 2019", Forbes, August 15, 2019, https://www.forbes.com/top-colleges/#679161a41987

<sup>25</sup> These rankings were based upon graduation and retention (22%), graduate rate performance (8%), social mobility (5%), Class size (8%), faculty salary (7%), proportion of full-time faculty with the highest degree in their fields (3%), student0faculty ratio (1%), proportion of faculty who are full time (1%), Expert Opinion (20%), Financial Resources (10%). Student Excellence (10%) and Alumni Giving (5%)- Morse, Robert; Brooks, Eric; Mason, Matt "How U.S. News Calculated the 2020 Best Colleges Rankings", U.S. News, Sept 8, 2019, https://www.usnews.com/education/best-colleges/articles/how-us-news-calculated-the-rankings

Fall Enrollments, New Hampshire Public and Private Schools	2014-15	2015-16	2016-17	2017-18	2018-19	Source
Total public school enrollments (includes preschool)	183,604	181,339	179,734	178,328	177,365	DE
Total nonpublic school enrollments	17,518	17,042	16,852	16,342	16,154	DE
Total, all elementary and secondary enrollments	201,122	198,381	196,586	194,670	193,519	DE/NHES
Annual percent change, all enrollments	-1.1%	-1.4%	-0.9%	-1.0%	-0.6%	DE/NHES
First grade enrollments, total public	13,157	12,898	12,377	12,678	12,351	DE
First grade nonpublic enrollments	832	773	762	758	699	DE
Total first grade enrollments	13,989	13,671	13,139	13,436	13,050	DE/NHES
Annual percent change, first grade all enrollments	-2.5%	-2.3%	-3.9%	2.3%	-2.9%	DE/NHES
Twelfth grade enrollments, total public	13,671	13,752	13,338	13,235	13,073	DE
Twelfth grade nonpublic enrollments	1,999	1,995	2,096	1,984	1,931	DE
Total twelfth grade enrollments	15,670	15,747	15,434	15,219	15,004	DE/NHES
Annual percent change, twelfth grade all enrollments	-1.8%	0.5%	-2.0%	-1.4%	-1.4%	DE/NHES

Scholastic Assessment Test	2014-15	2015-16	2016-17	2017-18	2018-19	Source
SAT Scores of College-Bound Seniors <sup>a</sup>						
Evidence-Based Reading and Writing (formerly Critical Reading)						
New Hampshire	525	527	532	535	533	ТСВ
United States	495	494	533	536	531	ТСВ
Math						
New Hampshire	530	531	520	528	526	ТСВ
United States	511	508	527	531	528	ТСВ
Writing (Optional after 2016)						
New Hampshire	511	510	-	-	-	ТСВ
United States	497	482	-	-	-	ТСВ
Percent of high school graduates taking the SAT						
New Hampshire	70.0%	*	96.0%	96.0%	95.0%	NCES
United States	49.0%	*	48.0%	58.0%		NCES
* statistics not released due to change in SAT test format						

<sup>a</sup> Reflects mean score for all graduates from an academic year who took the SAT at any point during high school. If a student took the SAT more than once, only the most recent result is included in mean score.

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Graduates, New Hampshire Public Schools and Public Academies	2013-14	2014-15	2015-16	2016-17	2017-18	Source
Total number of graduates (standard and non- standard diplomas, and GED)	14,250	13,813	13,847	13,511	13,301	DE
Annual percent change	-2.9%	-3.1%	0.2%	-2.4%	-1.6%	DE/NHES
Postsecondary Intentions of Graduates						
Entering a four-year college or university	48.4%	49.5%	50.2%	50.0%	52.3%	DE
Entering a postsecondary instruction other than four-year	24.6%	23.4%	22.8%	22.3%	20.2%	DE
Not entering a postsecondary institution:						
Enlisting in the Armed Forces	3.8%	3.2%	3.2%	3.1%	3.3%	DE
Employment	17.0%	17.0%	17.1%	17.5%	17.8%	DE
All other	6.1%	6.9%	6.7%	7.1%	6.4%	DE

New Hampshire School District Expenditures and Revenue	2013-14	2014-15	2015-16	2016-17	2017-18	Source
Current operating expenses, elementary and secondary schoolsb (\$ millions of current dollars)	\$2,679.9	\$2,723.2	\$2,793.1	\$2,845.3	\$2,934.5	DE
Annual percent change	2.5%	1.6%	2.6%	1.9%	3.1%	DE/NHES
Average daily membership, public elementary and secondary schools	173,355	171,412	169,158	167,394	166,321	DE
Annual percent change	-1.4%	-1.1%	-1.3%	-1.0%	-0.6%	DE/NHES
Cost per pupil, current operating expenses <sup>b</sup> (current dollars)	\$15,459.00	\$15,887.17	\$16,511.56	\$16,997.50	\$17,643.33	DE
Annual percent change	4.0%	2.8%	3.9%	2.9%	3.8%	DE/NHES
Average salary of teachers, public elementary and secondary schools (in current dollars)	\$54,712	\$55,986	\$56,616	\$57,522	\$58,278	DE
Total net revenue (\$ millions of current dollars)	\$2,929.2	\$2,964.7	\$3,040.7	\$3,096.4	\$3,166.1	DE
Annual percent change	3.1%	1.2%	2.6%	1.8%	2.3%	DE/NHES
Percent of total school district revenues from:						
State funds	34.3%	33.8%	33.1%	32.5%	31.6%	DE
Local and other funds	60.0%	60.6%	61.2%	61.9%	63.1%	DE
Federal funds	5.5%	5.6%	5.7%	5.6%	5.3%	DE
<sup>b</sup> Includes tuition and transportation					I	

New Hampshire Postsecondary Institutions	2013-14	2014-15	2015-16	2016-17	2017-18	Source
Fall enrollments, public and private degree- granting institutions (students age 18 years and over)	92,440	106,984	123,508	133,159	149,184	NCES
By attendance status:					·	
Full-time students	60,037	64,814	69,034	70,777	68,251	NCES
Part-time students	32,403	42,170	54,474	62,382	80,933	NCES
By gender:						
Male	38,975	44,645	49,994	52,338	57,797	NCES
Female	53,465	62,339	73,514	80,821	91,387	NCES
Degrees conferred by public and private degree-granting institutions in NH	17,734	21,138	23,166	26,634	31,389	NCES
Degree Awarded: °				· · · · · · · · · · · · · · · · · · ·		
Associate's degrees	2,988	3,034	3,079	3,699	4,190	NCES
Bachelor's degrees	9,960	11,832	12,629	14,869	17,198	NCES
Graduate degrees, including doctorates	4,786	6,272	7,458	8,066	10,001	NCES
By selected academic majors, Associate's and I	niaher dearees:	c				
Biological and Biomedical Sciences	604	664	614	633	630	NCES
Business, Management, Marketing, and Support	4,224	5,327	6,116	7,071	8,979	NCES
Communication and Journalism	439	533	648	766	926	NCES
Computer and Information Sciences and Support Services	593	957	1,418	1,823	2,053	NCES
Education	1,565	1,558	1,370	1,436	1,505	NCES
Engineering and Engineering Technologies	894	836	819	963	975	NCES
English Language and Literature	607	921	1,101	1,231	1,397	NCES
Health Professions and Clinical Sciences	2,275	2,531	3,013	3,537	4,253	NCES
Liberal Arts and Sciences, General Studies and Humanities	716	1,109	1,385	1,909	2,023	NCES
Natural Resources and Conservation	371	345	310	385	444	NCES
Parks, Recreation, Leisure and Fitness Studies	456	471	535	529	630	NCES
Psychology	898	1,143	1,385	1,665	2,107	NCES
Security and Protective Services	362	485	615	808	1,053	NCES
Social Sciences	948	1,004	988	1,041	1,118	NCES
	+					

° Includes first majors only; post-baccalaureate and post-masters certificate program completers were excluded

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## HEALTH

#### **Health Rankings**

The United Health Foundation (UHF) ranked New Hampshire as the 6th healthiest state in the U.S. in 2018.<sup>1</sup> New Hampshire was ranked 8<sup>th</sup> in 2017, but had been ranked 6<sup>th</sup> or higher in 18 of the last 20 years, including second in 2011. New England as a whole performed well in UHF's rankings; Massachusetts, Connecticut and Vermont were all ranked ahead of New Hampshire in 2018, at 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup>, respectively.

New Hampshire performed the best overall in UHF's series of "Community and Environment" measures, which included the lowest percentage of children who live in households below the poverty threshold, the second lowest exposure to air pollution, and third lowest rate of violent crime. New Hampshire also scored well in a number of measures related to immunization rates and in infant mortality rates.

In other areas, New Hampshire did not perform as well compared to other states. It had the second highest number of deaths due to drug injury, with 31.9 deaths per 100,000 people. Other areas where New Hampshire performed poorly were significantly since then, and New Hampshire has fallen to the 49th in this category.

Opioids are the primary cause of this increase, particularly synthetic opioids such as fentanyl. The number of deaths attributed to synthetic opioids in New Hampshire increased 500 percent from 2013 to 2014, from 30 deaths to 151 deaths.<sup>2</sup> Deaths attributed to synthetic opioids have increased every year since 2013, reaching 374 in 2017.

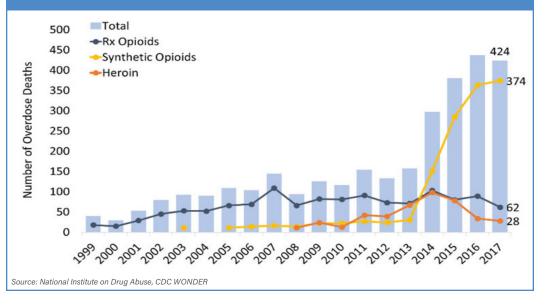
Decreases in the number of deaths caused by heroin and prescription opioids caused the total number of opioid-related deaths in New Hampshire to decline slightly from 2016 to 2017, declining from 437 to 424.

As part of New Hampshire's response to the opioid crisis, the Department of Health and Human Services established a new model for organizing all the resources available to assist New Hampshire residents suffering from substance use disorders. The new "hub-and-spoke" system took effect in January 2019. It established nine locations, known as Doorways, across the state, located so that all residents of New Hampshire can travel less than

excessive drinking  $(40^{\text{th}})$  and public health funding per capita  $(34^{\text{th}})$ .

### **Opioid Crisis**

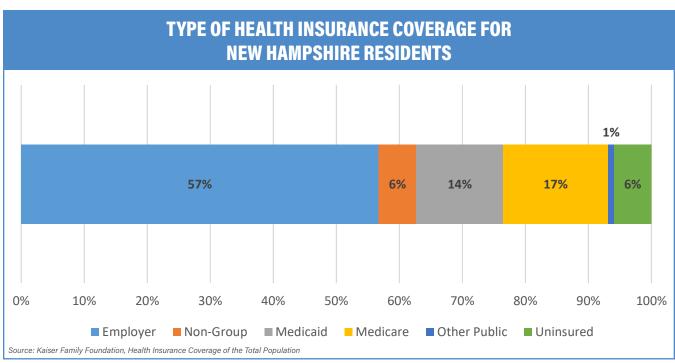
As recently as 2014, New Hampshire was roughly average in the United Health Foundation's rankings for the number of drug deaths per 100,000 residents. The number of drug deaths per 100,000 residents has increased



#### **OVERDOSE DEATHS INVOLVING OPIOIDS IN NEW HAMPSHIRE**

America's Health Rankings, New Hampshire Summary 2018, https://www.americashealthrankings.org/explore/annual/state/NH

2 National Institute on Drug Abuse, "New Hampshire Opioid Summary," https://www.drugabuse.gov/opioid-summaries-by-state/new-hampshire-opioid-summary



an hour to get to a Doorway. Doorways are a single point of entry for residents with opioid use disorder or other substance use disorders.<sup>3</sup> Individuals who visit Doorway "hubs" are referred to "spokes", the treatment, support, or resources that they need.

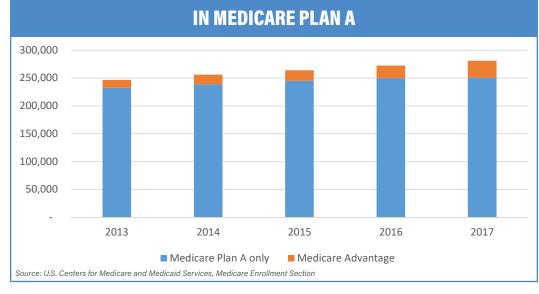
#### **Health Insurance Coverage**

According to the Kaiser Family Foundation's analysis, in 2017, 57 percent of New Hampshire

from an insurance company (this includes plans purchased through an Affordable Care Act marketplace). Just under six percent of New Hampshire residents had no health insurance.

The percentage of New Hampshire residents without health insurance did not change significantly from 2017 to 2018, declining from 5.8 percent to 5.7 percent.<sup>5</sup>

residents obtained health insurance coverage from a current or former employer or union.<sup>4</sup> An additional 32 percent had coverage through the federal government, via either Medicare, Medicaid, military or Veterans Administration plans. Only six percent were covered by a plan purchased directly



NUMBER OF NEW HAMPSHIRE RESIDENTS ENROLLED

3 New Hampshire Department of Health and Human Services, "The Doorway," https://www.thedoorway.nh.gov/about

Kaiser Family Foundation, *Health Insurance Coverage of the Total Population*, https://www.kff.org/other/state-indicator/total-population
 U.S. Census Bureau, "Health Insurance Coverage in the United States: 2018," https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-267.pdf

#### **Medicare Enrollees**

The number of New Hampshire residents enrolling in Medicare Hospital Insurance plans has increased steadily, growing by more than three percent annually from 2013 through 2017. This growth is a result of the increasing number of New Hampshire residents who are age 65 or older. Age 65 is when most people are eligible to start receiving Medicare benefits.

The number of New Hampshire residents who enrolled in a Medicare Advantage plan increased 110 percent from 2013 to 2017, while enrollment in traditional Medicare Part A plans increased by just 7.8 percent. Medicare Advantage plans bundle Medicare Parts A (hospital insurance), B (medical insurance), and sometimes D (prescription drug coverage) plans into one plan, and are administered by a private company instead of directly through Medicare.<sup>6</sup>

#### **Association Health Plans**

Another health plan option may be available in New Hampshire in the near future. The New Hampshire State Senate passed a bill in early 2019 that would legalize Association Health Plans (AHP) in New Hampshire.<sup>7</sup>

Association Health Plans are a health insurance option that is targeted at small businesses, including the self-employed. AHPs allow these businesses and individuals to create a larger group, based on a common geography or industry. The larger group is able to negotiate health insurance coverage and pricing with insurance companies more effectively than individual members would, making these plans a more affordable option for many small businesses.

- Greg David



<sup>6</sup> U.S. Centers for Medicare & Medicaid Services, "How do Medicare Advantage Plans work?" https://www.medicare.gov/sign-up-change-plans/types-of-medicare-health-plans/medicareadvantage-plans/how-do-medicare-advantage-plans-work

<sup>7</sup> Bob Sanders, "Senate passes bill legalizing Association Health Plans," NH Business Review, March 14, 2019, https://www.nhbr.com/senate-passes-bill-legalizing-association-health-plans/

Hospital Insurance	2013	2014	2015	2016	2017	Source
HOSPITAL INSURANCE						
Original Medicare	232,342	238,438	244,829	249,623	250,636	CMS
Medicare Advantage & Other Health Plans	14,270	17,456	18,832	22,752	30,354	CMS
PRESCRIPTION DRUG (Medicare Part D)						
Prescription Drug Plans	125,329	133,737	148,836	157,561	160,943	CMS
Medicare Advantage Prescription Drug	10,681	13,332	14,395	18,299	23,910	CMS
Yearly Aged and Disabled Enrollment						
Aged Total	202,218	210,254	217,110	225,360	233,852	CMS
Disabled Total	44,395	45,641	46,552	47,015	47,138	CMS
SKILLED NURSING FACILITIES (Medicare)						
Total Persons With Utilization*						
New Hampshire	11,064	11,184	11,190	10,812	10,745	CMS
United States	1,841,752	1,831,387	1,844,209	1,802,182	1,763,018	CMS
Covered Admissions Per 1,000 Original Medicare	Part A Enrollee	S			I	
New Hampshire	64	63	62	59	58	CMS
United States	69	68	68	66	65	CMS
Covered Days of Care Per 1,000 Original Medica	re Part A Enrolle	es				
New Hampshire	1,678	1,609	1,566	1,436	1,392	CMS
United States	1,872	1,843	1,812	1,693	1,623	CMS
Program Payments Per Covered Day						
New Hampshire	463	473	472	481	486	CMS
United States	411	422	434	446	459	CMS
*Utilization expresses the number of services use	d per year or per	number of per	rsons eligible fo	or the services	· · · · · · · · · · · · · · · · · · ·	
SHORT STAY HOSPITALS (Medicare)						
Total Persons With Utilization*						
New Hampshire	31,515	31,925	33,151	33,631	34,043	CMS
United States	6,371,229	6,213,560	6,221,077	6,219,873	6,217,622	CMS
Discharges Per 1,000 Original Medicare Part A	Enrollees					
New Hampshire	203	201	203	204	206	CMS
United States	273	264	264	258	258	CMS
Covered Days of Care Per 1,000 Original Medic	are Part A Enroll	ees		,		
New Hampshire	963	974	985	950	975	CMS
United States	1,335	1,297	1,291	1,242	1,225	CMS
Program Payments Per Covered Day	·			· · · ·		
New Hampshire	2,416	2,405	2,406	2,561	2,624	CMS
United States	2,240	2,285	2,320	2,433	2,507	CMS

Related Services	2013	2014	2015	2016	2017	Source
HOSPICES (Medicare)						
Total Persons With Utilization*						
New Hampshire	5,278	5,553	5,838	6,029	6,397	CMS
United States	1,307,288	1,322,244	1,384,179	1,429,862	1,495,384	CMS
Covered Days of Care Per 1,000 Original	Medicare Part A Enrol	llees				
New Hampshire	1,232	1,300	1,313	1,346	1,454	CMS
United States	1,793	1,733	1,759	1,810	1,858	CMS
Program Payments Per Covered Day	·					
New Hampshire	\$171	\$169	\$171	\$175	\$176	CMS
United States	\$164	\$164	\$166	\$167	\$169	CMS
HOME HEALTH AGENCIES (Medicare) Total Persons With Utilization						
New Hampshire	21,280	21,196	22,164	22,355	22,155	CMS
United States	3,443,498	3,408,818	3,446,696	3,444,206	3,385,968	CMS
Service Visits Per 1,000 Original Medicar	e Enrollees	I			LL	
New Hampshire	2,293	2,227	2,266	2,260	2,259	CMS
United States	3,022	2,935	2,921	2,849	2,754	CMS
Total Service Visits	I					
New Hampshire	532,829	531,012	554,854	564,158	566,260	CMS
United States	111,782,568	109,064,541	109,219,359	108,148,530	104,648,562	CMS
Program Payments Per Service Visit					·	
New Hampshire	\$167	\$169	\$175	\$176	\$179	CMS
United States	\$160	\$162	\$166	\$167	\$170	CMS

Medicaid Insurance (Medicaid Per Enrollee by State of Residence)	2013	2014	2015	2016	2017	Source
New Hampshire	\$8,714	\$9,129				CMS
United States	\$6,892	\$6,815				CMS

Other Health Measures	2014	2015	2016	2017	2018	Source
Obesity (Percent of adult population)	26.7	27.4	26.3	26.6	28.1	UHF
Physical Inactivity (Percent of adult population)	20.5	19.3	22.6	19.3	23.9	UHF
Diabetes (Percent of adult population)	9.2	9.1	8.1	9	8.4	UHF
Poor Mental Health Days (Days in previous 30 days)	3.5	3.5	10.9	12.7	12	UHF
Poor Physical Health Days (Days in previous 30 days)	3.6	3.3	10.6	11.9	11.9	UHF

# **CRIME & CRASHES**

## Crime

New Hampshire was safer than any other state in the nation. The Granite State's total crime index – the number of criminal offenses per 100,000 population – was lower than any other state in the U.S. in both 2017 and 2018.

The crime index includes two main categories: violent crime and property crime. The violent crime index measures murder and non-negligent manslaughter, rape, robbery, and aggravated assault. The property crime index measures burglary, larceny-theft, and motor vehicle theft. New Hampshire's total violent crime index was third lowest of any state from 2017 to 2018. The Granite State's total property crime index again was lower than any other state during the same period.

The total rate of crime declined steadily in New Hampshire from 2014 to 2018, mirroring a trend in both New England and the nation. A notable exception to the trend occurred from 2017 to 2018, when the number of Granite State murder and nonnegligent manslaughter offenses jumped from 13 to 21.

### **Juvenile Arrests**

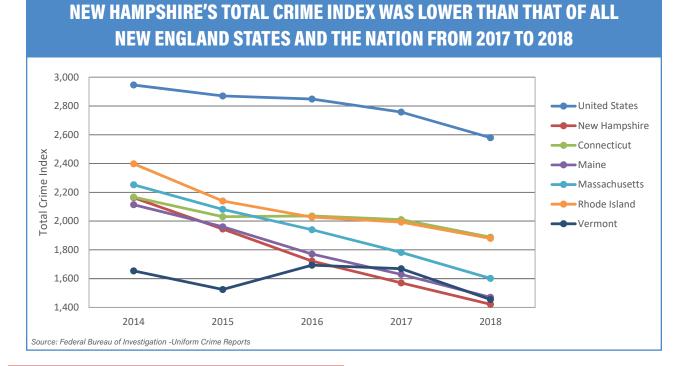
The number of juvenile arrests in New Hampshire decreased substantially over the last five years, going from 4,199 in 2014 to 3,283 in 2018. Likewise, adolescent drug abuse violations declined significantly from 607 to 344.

The difference between the juvenile and total arrest trends during this time was striking. While the number of *juvenile* arrests decreased, the *total* number of arrests – of persons of all ages – in the Granite State slightly *increased*, from 46,180 to 46,413.

The decrease in juvenile arrests followed a longterm nationwide trend. The reason for the reduction was a topic of continued study, both locally and nationally.<sup>1</sup>

## **State Prison Population**

The number of prisoners in New Hampshire state and federal prisons declined steadily from 2014 to 2017. The decrease coincided with a trend nationwide.



1 Matt Smith, "NCJJ Report Shows Juvenile Crime Keeps Falling, But Reasons Elusive," Juvenile Justice Information Exchange, February 26, 2015. https://jjie.org/2015/02/26/ncjj-reportshows-juvenile-crime-keeps-falling-but-reasons-elusive/ Within the Granite State, the decrease also corresponded with three events that occurred from 2014 to 2016: The number of sentenced prisoners admitted decreased, the number of prisoners released increased, and the number of adults on probation and parole increased. The trend suggests a movement from prison to probation and parole.

#### **Traffic Crashes**

The number of total crashes reported in New Hampshire soared 26.9% from 2016 to 2017. During that same period, the number of fatal motor vehicle crashes fell substantially, from 130 to 98. The number of fatal motor vehicle crashes as a share of the total fell accordingly from 0.44% to 0.27%. The number of total crashes fell again in 2018, but was still well above the number in 2016. Fatal motor vehicle crashes in the Granite State soared from 103 in 2015 to 130 in 2016. In more than half of the crashes, excessive speed was a factor.<sup>2</sup>

In response, the State of New Hampshire Office of Highway Safety's Highway Safety Plan for FY 2017 included focusing "enforcement efforts... in the two counties that represent the highest speed-related fatalities."<sup>3</sup> The effort seemed to help. From 2016 to 2017, the number of fatal motor vehicle crashes dropped to 98, consistent with 2014 and 2015 levels. However, the number of fatal crashes increased again in 2018, to 134 crashes. The number of crashes caused by speed and/or alcohol impairment increased significantly over 2017.

#### **Randolph, New Hampshire Crash**

Although New Hampshire is overall "safe", a crash killed seven motorcyclists in Randolph on June 21, 2019. On October 21, 2019, the New Hampshire Attorney General's Office announced an indictment of a motorist on charges relating to the crash. Five separate indictments included seven counts of manslaughter, seven counts of negligent homicide -DUI, seven counts of negligent homicide, one count of aggravated driving while intoxicated, and one count of reckless conduct.<sup>4</sup> The motorist had been arrested for allegedly operating under the influence in Connecticut in May 2019. His commercial driver's license was not suspended in Massachusetts immediately after the incident, contrary to state policy. The failure of this suspension to happen in a timely manner led to a review of procedures for processing out-of-state traffic violations in both Massachusetts and in New Hampshire.

- Bruce Olinsky

2 State of New Hampshire Office of Highway Safety, "Highway Safety Plan 2018," https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/new\_hampshire\_fy2018\_hsp.pdf 3 Ibid

<sup>4</sup> New Hampshire Department of Justice, Office of the Attorney General, "Volodymyr Zhukovskyy Indicted on Charges Related to the June 21, 2019 Crash in Randolph, New Hampshire," October 21, 2019, https://www.doj.nh.gov/news/2019/20191021-zhukovskyy-indicted.htm

Crime Offenses	2014	2015	2016	2017	2018	Source
Total crime offenses	28,723	25,881	22,991	21,192	19,284	UCR
Annual percent change	-10.9%	-9.9%	-11.2%	-7.8%	-9.0%	UCR/NHES
Violent crime offenses	2,625	2,652	2,668	2,642	2,349	UCR
Annual percent change	-11.1%	1.0%	0.6%	-1.0%	-11.1%	UCR/NHES
Property crime offenses	26,098	23,229	20,323	18,550	16,935	UCR
Annual percent change	-10.9%	-11.0%	-12.5%	-8.7%	-8.7%	UCR/NHES
Total Crime Index (Rate per 100,000 population)						
United States	2,946.1	2,870.2	2,849.1	2,757.8	2,580.1	UCR
New Hampshire	2,162.9	1,945.0	1,722.1	1,570.0	1,421.7	UCR
Connecticut	2,167.0	2,030.5	2,036.0	2,010.1	1,888.4	UCR
Maine	2,114.2	1,960.1	1,770.9	1,629.3	1,469.9	UCR
Massachusetts	2,252.7	2,081.6	1,940.4	1,781.9	1,601.4	UCR
Rhode Island	2,398.5	2,140.0	2,027.2	1,993.3	1,880.0	UCR
Vermont	1,653.6	1,524.6	1,693.4	1,668.7	1,455.1	UCR
Violent Crime Index (Rate per 100,000 population)	)					
United States	372.0	383.2	397.5	394.9	380.6	UCR
New Hampshire	197.7	199.3	199.8	195.7	173.2	UCR
Connecticut	238.5	218.5	227.7	229.2	207.4	UCR
Maine	127.6	130.1	124.0	120.6	112.1	UCR
Massachusetts	395.1	390.9	380.7	354.3	338.1	UCR
Rhode Island	219.9	242.5	239.1	234.2	219.1	UCR
Vermont	102.6	118.0	136.5	173.3	172.0	UCR
Property Crime Index (Rate per 100,000 populatio	n)					
United States	2,574.1	2,487.0	2,451.6	2,362.9	2,199.5	UCR
New Hampshire	1,965.2	1,745.7	1,522.3	1,374.3	1,248.5	UCR
Connecticut	1,928.5	1,812.0	1,808.3	1,780.9	1,681.0	UCR
Maine	1,986.6	1,830.0	1,646.9	1,508.7	1,357.8	UCR
Massachusetts	1,857.6	1,690.7	1,559.7	1,427.6	1,263.3	UCR
Rhode Island	2,178.6	1,897.5	1,788.1	1,759.1	1,660.9	UCR
Vermont	1,551.0	1,406.6	1,556.9	1,495.4	1,283.1	UCR
Auto Insurance Claims Loss - Personal and Commercial	2014	2015	2016	2017	2018	Source
Total Claims (\$ millions)	\$506.1	\$519.4	\$547.6	\$595.0	\$593.9	ID
Annual percent change	6.0%	2.6%	5.4%	8.7%	0.0%	ID/NHES
Personal Claims (\$ millions)	\$447.6	\$447.4	\$481.2	\$505.6	\$518.4	ID
Annual percent change	5.3%	-0.1%	7.5%	5.1%	2.5%	ID/NHES
	<u> </u>					

88.4%

\$58.4

10.6%

86.1%

\$72.0

12.3%

87.9%

\$66.4

-0.7%

85.0%

\$89.4

34.8%

87.3%

\$75.6

-15.5%

Percent Personal

Commercial Claims (\$ millions)

Annual percent change

**ID/NHES** 

ID

ID/NHES

Criminal Arrests	2014	2015	2016	2017	2018	Source
Total Arrest	46,180	44,368	47,282	47,516	46,413	UCR
Annual percent change	3.6%	-3.9%	6.6%	0.5%	-2.3%	UCR/NHES
Total Drug Abuse Violations	6,224	7,371	8,346	7,656	6,522	UCR
Annual percent change	45.8%	18.4%	13.2%	-8.3%	-14.8%	UCR/NHES
Total DUI Offenses	4,528	4,746	4,874	4,805	5,053	UCR
Annual percent change	22.4%	4.8%	2.7%	-1.4%	5.2%	UCR/NHES
Juvenile Total	4,199	3,421	3,564	3,529	3,283	UCR
Annual percent change	-11.3%	-18.5%	4.2%	-1.0%	-7.0%	UCR/NHES
Total Drug Abuse Violations	607	579	637	507	344	UCR
Annual percent change	8.8%	-4.6%	10.0%	-20.4%	-32.1%	UCR/NHES
Total DUI Offenses	44	36	42	36	29	UCR
Annual percent change	22.2%	-18.2%	16.7%	-14.3%	-19.4%	UCR/NHES

State Prison Population	2014	2015	2016	2017	2018	Source
Number of sentenced prisoners in state and federal prisons <sup>a</sup>	2,963	2,897	2,818	2,750		USDJ
New Hampshire's incarceration rate	219	218	210	204		USDJ
Number of sentenced male prisoners	2,671	2,661	2,591	2,524		USDJ
Number of sentenced female prisoners	244	236	227	226		USDJ
Sentenced prisoners admitted	1,611	1,578	1,538	1,338		USDJ
Sentenced prisoners released	1,562	1,660	1,601	1,409		USDJ
Adults on Probation	3,920	3,861	3,939			USDJ
Adults on Parole	2,385	2,451	2,436			USDJ
U.S. incarceration rate (federal and state jurisdiction)	471	458	450	440		USDJ
State jurisdiction incarceration rate	411	402	397	390		USDJ
Federal jurisdiction incarceration rate	60	55	53	51		USDJ

<sup>a</sup> Sentenced prisoners are the number of inmates on Dec	cember 31st sentenced for more than one year.
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Traffic Crashes	2014	2015	2016	2017	2018	Source
Total crashes reported <sup>b</sup>	28,395	29,605	29,862	36,681	34,174	DS
Annual percent change	-5.3%	4.3%	0.9%	22.8%	-6.8%	DS/NHES
Seat belt use	70.4%	69.5%	70.2%	67.6%	76.4%	NHTSA
Fatal motor vehicle crashes	89	103	130	98	134	NHTSA
Fatal motor crashes as a share of total	0.31%	0.35%	0.44%	0.27%	0.39%	NHTSA/NHES
Number of fatalities	95	114	136	102	147	NHTSA
Number of alcohol-impaired driving fatalities <sup>c</sup>	29	32	40	27	48	NHTSA
Percent of alcohol-impaired driving fatalities <sup>c</sup>	31%	28%	29%	27%	33%	NHTSA/NHES
Fatalities per 100 million vehicle miles	0.73	0.87	1.01	0.75		NHTSA

<sup>b</sup> Reported crashes and injuries involving \$1,000 or more in property or injury damages.

° Based on a highest driver Blood Alcohol Concentration (BAC) of 0.8 g/dL (grams per deciliter) or higher.

# **ENVIRONMENT**

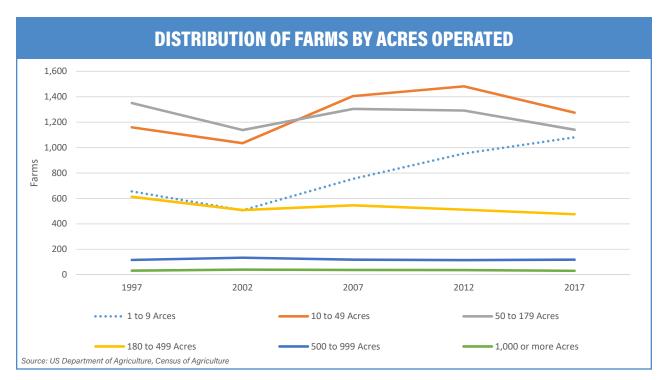
New Hampshire agriculture plays an important role in the state's economy. The state's farmers provide fresh nutritious food to the 1.3 million residents. Milk, fruit, vegetables, berries, meats, eggs and maple syrup are just some of the commodities produced and sold by New Hampshire farmers. In addition, as stewards of the land, these same farmers preserve open spaces and keep the rich New England agricultural heritage alive. One of the biggest changes in the last hundred years has been the number of individuals raising crops and livestock. Another way to view this change is in terms of the number of farms.

In April 2019, the United States Department of Agriculture (USDA) published their 2017 Census of Agriculture [hereafter referred to as Census]. The Census provided a wealth of agricultural information at national, state and county levels. Unlike the Population Census, which is conduct every 10 years, the USDA performs a Census of Agriculture every five years. While New Hampshire is not considered a large agricultural state, its farmers produced agricultural products with an estimated market value of nearly 190 million dollars during 2017.<sup>1</sup>

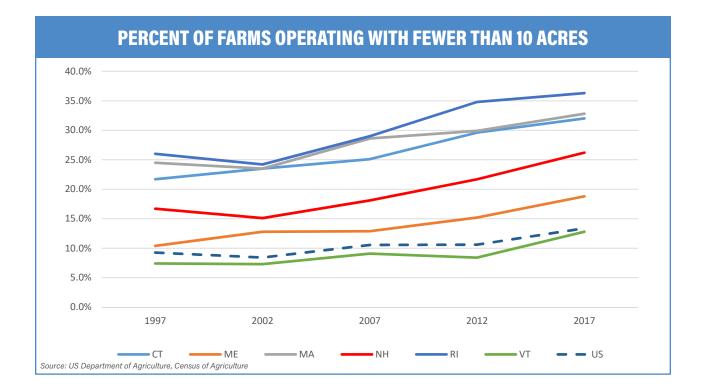
#### **Farm Numbers**

According to the United States Census of Agriculture in 1920, there were an estimated 20,523 farms in New Hampshire. Nearly a century later in 2017, there were 4,123 farms in the state, a nearly 80 percent decline. During this same period, the state's population rose from about 443,000 to over 1,300,000, an increase greater than 200 percent. These two trends — farm numbers and population are moving in opposite directions. If they continue, will future New Hampshire residents be able to purchase locally grown crops? Will open spaces continue to be preserved?

The USDA defines a farm as any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the year. Government payments are included in this definition. The 4,123 New Hampshire



1 Unless otherwise stated, data referenced in this article was taken from the 2017 USDA Census of Agriculture Publications, which can be found online at: https://www.nass.usda.gov/ Publications/AgCensus/2017/index.php



farms counted during the Census was a decrease of 268 farms from the previous Census in 2012. The majority of the state's farms were less than 50 acres in size. The chart below provides a comparison of the number of New Hampshire farms by acres operated for the last twenty years. The number of farms operating with fewer than 10 acres has increased since 2002. The number of farms between 50 and 499 acres decreased during this same twenty-year period. Larger farms (500+ acres) remained nearly constant over the same period.

The increasing number of farms operating with fewer than 10 acres is not unique to New Hampshire. The same trend is occurring in the other five New England States. At the national level, there was only a moderate percentage increase in farms operating with less than 10 acres.

An alternative way to view the changing farm environment is by value of sales. For the past five Census periods, the percentage of New Hampshire farms making less than \$25,000 per year exceeded 80percent. Because of the small value of sales, many of these farmers must have additional sources of income to make a living.

NUMBER OF NEW HAMPSHIRE FARMS BY VALUE OF SALES									
Value of Sales	2017	2012	2007	2002	1997				
less than \$2,500	1,856	2,115	2,068	1,757	1,789				
\$2,500 to \$4,999	524	593	466	382	613				
\$5,000 to \$9,999	528	516	469	344	447				
\$10,000 to \$24,999	502	494	466	303	420				
\$25,000 to \$49,999	287	253	263	194	218				
\$50,000 to \$99,999	160	156	148	130	156				
\$100,000 to \$499,999	197	204	221	205	240				
\$500,000 or more	69	60	65	48	45				
Market value of all Agricultural Products Sold									
Total (\$1,000)	\$187,794	\$190,907	\$199,051	\$144,835	\$155,698				
Average per Farm	\$45,548	\$43,477	\$47,780	\$43,067	\$39,638				

### **Demographics**

Along with farm numbers, the demographics of the individuals operating New Hampshire farms is changing. For the 2017 Census, USDA revised its demographic questions concerning farm producers. In previous Censuses, the questionnaire focused on the primary operator of a farm. In 2017, the modified questionnaire collected data on additional people who worked on the farm. The Census made a distinction between the types of producers on individual farms. The primary producer is the individual making the majority of the decisions for the farm, with each farm having only one primary producer. USDA designated individuals as principal producers if they made decisions concerning the farming operations. The primary producer was also a principal producer; however, not all principal producers were primary producers. Individuals were designated nonprincipal producers if they worked on the farm but did not make decisions concerning farming operations. The Census collected information on up to four producers per farm.<sup>2</sup>

The average age of New Hampshire farmers (primary producer) has continued to increase. In 2017, the average age of New Hampshire farmers was 59.3 years, nearly a decade older than the 1982 average age of 50.9 years. In the past two Census periods (2012 and 2017), the New Hampshire farmer average age exceeded the average age of farmers in New England. The table below displays average ages for primary producers in New Hampshire, New England and at the national level.

AVERAGE AGE (PRIMARY PRODUCER)									
	New Hampshire	New England	U.S.						
2017	59.3	59.0	59.4						
2012	57.8	57.6	58.3						
2007	56.2	56.5	57.1						
2002	54.1	54.3	55.3						
1997	53.6	53.8	54.0						

Policy makers and farming advocates are concerned about the increasing age of farmers. In order to gain insight into this issue, USDA provided additional data summaries in the 2017 Census results. The first new summary was a category designated as "new and beginning producers," defined as *farmers operating on any operation for 10 years or less*. The second category is "young producers." USDA defined young producers as *farmers of age 35 years or less*. The 2017 Census was the first time these two categories were summarized; therefore, no comparisons with previous Census periods were available.

#### New and Beginning Producers -Farmers Operating on Any Operation for 10 Years or Less

At the US level, new and beginning producers accounted for 27 percent of all producers. In New Hampshire, new and beginning producers accounted for 31 percent of all producers. New Hampshire tied for the fifth highest percentage of new and beginning producers with respect to all producers during 2017. Alaska ranked number one, with 46 percent of their producers classified as new and beginning producers. Maine ranked third in percentage of new and beginning producers.

Another way to view the new and beginning farmer category is to calculate the percentage of farms that had at least one principal producer that was also a new and beginning farmer. The table below provides the percentage of farms where any principal producer is a new and beginning producer. New England states are faring better than the U.S. as a whole. In New Hampshire, 29.5 percent of the farms had at least one principal producer meet the criteria of a new and beginning producer.

State	Farms where any Principal Producer is a New and Beginning Producer	vhere any Principal roducer is Farms New and beginning	
СТ	1,570	5,521	28.4%
ME	2,401	7,600	31.6%
MA	1,907	7,241	26.3%
NH	1,218	4,123	29.5%
RI	287	1,043	27.5%
VT	2,008	6,808	29.5%
U.S.	516,235	2,042,220	25.3%

The next table summarizes New Hampshire new and beginning farmers by size of the farm. As one might expect, farms with less than ten acres were operated by a higher percentage of new and beginning farmers. This emphasizes the fact that small farms are growing in number within the state of

2 For further clarification on producer designations, see 2017 Census of Agriculture Appendix B, available at https://www.nass.usda.gov/Publications/AgCensus/2017/Full\_Report/Volume\_1,\_ Chapter\_1\_US/usappxb.pdf New Hampshire. The larger the farm in terms of acreage, the fewer number of new and beginning farmers. The fact that fewer new and beginning farmers work on larger farms may influence how many of these farms remain in business going forward.

	NEW HAI	MPSHIRE	
State	Farms where any Principal Producer is a New and Beginning Producer	Farms	Percentage of Farms where any Principal Producer is a New and Beginning Producer
1 to 9 acres	493	1,081	45.6%
10 to 49 acres	343	1,275	26.9%
50 to 179 acres	266	1,141	23.3%
180 to 499 acres	94	476	19.7%
500 acres or more	22	150	14.7%

# Young Producers - A Producer of Age 35 Years or Less

Today's younger farmers are the future. Will there be enough farmers in the future to produce the crops and raise livestock necessary to feed the population? In an attempt to determine how many young producers currently work on American farms, the 2017 Census added this category to the questionnaire. The table below summarizes the percentage of farms that have at least one young producer designated as a principal producer. Just under eight percent of New Hampshire farms reported at least one principal producer under the age of 35 working on the farm.

The next table displays the 317 New Hampshire farms with young producers broken out by size of farm. Similar to the new and beginning producer results, the majority of young farmers who are principal producers were on operations under 10 acres in size. Unless one has a family connection to a farm, it is difficult to become a young producer. Cost of production and availability of land are factors that may limit the number of individuals from becoming a farmer. Even with a family connection to a farm, there are many challenges for younger family members to continue the farming tradition.

State	Number of Farms where Any Principal Producer is a Young Producer	Total Farms	Percent of Farms where Any Principal Producer is a Young Producer
СТ	457	5,521	8.3%
ME	750	7,600	9.9%
MA	609	7,241	8.4%
NH	317	4,123	7.7%
RI	79	1,043	7.6%
VT	680	6,808	10.0%
U.S.	174,944	2,042,220	8.6%

Size of Farm	Number of Farms where Any Principal Producer is a Young Producer	Farms	Percent of Farms where Any Principal Producer is a Young Producer
1 to 9 acres	119	1,081	11.0%
10 to 49 acres	83	1,275	6.5%
50 to 179 acres	61	1,141	5.3%
180 to 499 acres	45	476	9.5%
500 acres or more	9	150	6.0%

#### Gender

Although females have always contributed to American farmsteads, the most recent Census results indicated the percentage of female primary producers has been increasing. Females accounted for nearly 41 percent of the primary producers in New Hampshire. This was the highest percentage of the six New England States and larger than the U.S. female percentage.

The Census did not provide a breakout of primary producers by gender and size of farm. However, it did break out the distribution of principal producers by gender and size of farm. The percentages clearly indicate female principal producers were more concentrated on smaller farms compared to male principal producers.

Farming in New Hampshire is a challenging endeavor. Overall, the number of small farms has increased while the number of large farms (500+ acres) has held nearly constant. For the past twenty years in New Hampshire, most of the decline in farm numbers has been farms between 50 to 500 acres in size. The primary producers who work the land and tend to the livestock are aging. The market value of sales for most farms indicate that many farmers require non-farm income to support themselves.

Over time, the next generation of farmers will take over from the aging population of current farmers. How successful will they be? It is difficult to tell. Compared to previous generations, today fewer people work on farms. If this trend continues, the general population will continue to have fewer connections to farming than the current population. It is important that the population in this country understand the source of the food on their plates is not the grocery store but rather the American farmer. As the often-observed bumper sticker succinctly states, "No Farms No Food."

- David Mikelson

PRIMARY PRODUCER - GENDER						
	20	02	2017			
	Male	Female	Male	Female		
СТ	79.3%	20.7%	64.7%	35.3%		
ME	78.3%	21.7%	62.8%	37.2%		
MA	78.5%	21.5%	61.5%	38.5%		
NH	75.1%	24.9%	59.2%	40.8%		
RI	83.4%	16.6%	66.7%	33.3%		
VT	85.3%	14.7%	66.1%	33.9%		
US	88.8%	11.2%	76.1%	23.9%		

NH FEMALE PRINCIPAL PRODUCERS					
Size of Farm	Number of Farms where any Principal Producer is Female	Farms	Percent of Farms where any Principal Producer is Female		
1 to 9 acres	755	1,081	69.8%		
10 to 49 acres	790	1,275	62.0%		
50 to 179 acres	646	1,141	56.6%		
180 to 499 acres	195	476	41.0%		
500 acres or more	58	150	38.7%		

NH MALE PRINCIPAL PRODUCERS					
Size of Farm	Number of Farms where any Principal Producer is Male	Farms	Percent of Farms where any Principal Producer is Male		
1 to 9 acres	722	1,081	66.8%		
10 to 49 acres	902	1,275	70.7%		
50 to 179 acres	910	1,141	79.8%		
180 to 499 acres	431	476	90.5%		
500 acres or more	131	150	87.3%		

Toxic Release Inventory	2014	2015	2016	2017	2018	Source
On-site Disposal or Other Releases (Po	unds)					
New Hampshire	457,322	327,413	171,314	144,256	200,843	EPA
Annual percent change	-24.8%	-28.4%	-47.7%	-15.8%	39.2%	EPA/NHES
New England	11,058,379	9,987,493	8,785,784	12,440,981	11,516,752	EPA
Annual percent change	-13.5%	-9.7%	-12.0%	41.6%	-7.4%	EPA/NHES
U.S. (1,000 pounds)	3,537,257	2,967,684	3,128,757	3,536,129	3,369,250	EPA
Annual percent change	-5.0%	-16.1%	5.4%	13.0%	-4.7%	EPA/NHES
Off-site Disposal or Other Releases (Po	unds)					
New Hampshire	308,623	218,649	142,931	180,842	224,058	EPA
Annual percent change	98.1%	-29.2%	-34.6%	26.5%	23.9%	EPA/NHES
New England	10,767,390	6,962,710	7,486,317	6,228,889	7,304,041	EPA
Annual percent change	62.5%	-35.3%	7.5%	-16.8%	17.3%	EPA/NHES
U.S. (1,000 pounds)	454,301	472,532	400,098	384,849	431,339	EPA
Annual percent change	5.0%	4.0%	-15.3%	-3.8%	12.1%	EPA/NHES
Total On-site and Off-site Disposal or O	ther Releases (Pounds)					
New Hampshire	765,945	546,061	314,245	325,099	424,901	EPA
Annual percent change	0.3%	-28.7%	-42.5%	3.5%	30.7%	EPA/NHES
New England	21,825,769	16,950,203	16,272,100	18,669,873	18,820,793	EPA
Annual percent change	12.4%	-22.3%	-4.0%	14.7%	0.8%	EPA/NHES
U.S. (1,000 pounds)	3,991,558	3,440,216	3,528,855	3,920,978	3,800,588	EPA
Annual percent change	-3.9%	-13.8%	2.6%	11.1%	-3.1%	EPA/NHES

Forest Inventory Data	2014	2015	2016	2017	2018	Source
Number of all live trees on forest land by Species group and Tree class code (in number)						
Growing stock	3,693,515,628	3,747,855,943	3,769,424,988	3,747,237,184	3,735,483,767	USFS
Rough cull	505,881,373	506,155,055	502,748,347	504,200,124	500,825,911	USFS
Rotten cull	22,645,538	23,462,913	23,063,794	23,082,695	22,536,693	USFS
Total	4,222,042,539	4,277,473,911	4,295,237,129	4,274,520,003	4,258,846,371	USFS

Maple Syrup Production	2014	2015	2016	2017	2018	Source
New Hampshire (1,000 gallons)	112	154	176	160	163	USDA
United States (1,000 gallons)	3,211	3,434	4,184	4,385	4,199	USDA

Fruit and Vegetable Crops	2014	2015	2016	2017	2018	Source
Apples <sup>1</sup> Yield per Acre <sup>2</sup> (Bushels)						
New Hampshire	310	369	255	469	314	USDA
New England	328	361	264	367	NA	USDA
Strawberries Yield per Acre <sup>3</sup>						
New Hampshire	5,100	6,000	5,950	6,800	5,900	USDA
New England	4,300	4,600	5,150	5,900	4,700	USDA
Pumpkins Yield per Acre⁴						
New Hampshire	12,000	10,300	8,700	14,300	12,500	USDA
New England	8,100	12,500	10,400	11,900	8,900	USDA
Tomatoes Yield per Acre⁴						
New Hampshire	11,400	12,000	11,100	13,000	13,700	USDA
New England	9,400	11,500	10,900	13,000	10,600	USDA
Sweet Corn Yield per Acre (Dozen⁵)						
New Hampshire	765	800	741	906	800	USDA
New England	765	749	718	718	800	USDA
<sup>1</sup> Apple production from commercial orchards with	100 or more trees.			·		
<sup>2</sup> Yield based on total production, which includes u	inharvested production a	nd fruit producti	on but not sold c	lue to market con	ditions	
<sup>3</sup> Total tabulated pounds produced per bearing ac	re harvested.					
<sup>4</sup> Total tabulated pounds produced per acre harves	sted.					

<sup>5</sup> Standard weight used for a dozen ears is 8.5 pounds

# SOURCES

<b>BEA</b>	. Bureau of Economic Analysis, United States Department of Commerce
BLS	. Bureau of Labor Statistics, United States Department of Labor
СВ	. Bureau of the Census, United States Department of Commerce
CMS	. Centers for Medicare and Medicaid Services
<b>DE</b>	. New Hampshire Department of Education
<b>DS</b>	. New Hampshire Department of Safety
<b>DT</b>	. New Hampshire Department of Transportation
DTTD	. Division of Travel and Tourism Development, New Hampshire Department of Business and Economic Affairs
<b>DVRA</b>	. Division of Vital Records Administration, New Hampshire Department of State
<b>EIA</b>	. Energy Information Administration, United States Department of Energy
<b>EPA</b>	. United States Environmental Protection Agency
<b>ETA</b>	. Education and Training Administration, United States Department of Labor
F&G	. New Hampshire Department of Fish and Game
FDIC	. Federal Deposit Insurance Corporation
<b>FHWA</b>	. Federal Highway Administration, United States Department of Transportation
<b>FM</b>	. Freddie Mac
<b>FR</b>	. Federal Reserve Bank of Boston
HFA	. New Hampshire Housing Finance Authority (NHHFA)
ID	. New Hampshire Insurance Department
<b>ITA</b>	. International Trade Administration, United States Department of Commerce
LC	. New Hampshire Liquor Commission
MA	. Manchester-Boston Regional Airport
NCES	. National Center for Education Statistics, United States Department of Education
NHES	. New Hampshire Employment Security
NHTSA	. National Highway Traffic Safety Administration
NNEREN	. Northern New England Real Estate Network
	. New Hampshire Office of Strategic Initiatives
TCB	. The College Board
UCR	. Uniform Crime Report, Federal Bureau of Investigation, United States Department of Justice
UHF	. United Health Foundation
<b>USACE</b>	. United States Army Corps of Engineers
<b>USAS</b>	. USASpending.gov
<b>USDA</b>	. United States Department of Agriculture
<b>USDJ</b>	. United States Department of Justice
<b>USFS</b>	. United States Forestry Service, United States Department of Agriculture

# **GLOSSARY & INDEX**

Air Quality Standards
Average Weekly Wage
<b>Benefits Paid, Unemployment Insurance</b>
Birth Rate
<b>British Thermal Units (BTUs)</b>
Capital Expenditures
<b>Chained Dollars</b>
<b>Civilian Labor Force</b>
<b>Construction Contract Value Index</b>
<b>Consumer Price Index for Urban Consumers (CPI-U)</b>
<b>Covered Employment</b>

<b>Crime Index</b>
<b>Current Dollars</b>
Death Rate
Defense Contracts
<b>Degree-granting Institutions</b>
<b>Divorce Rate</b>
<b>Durable Goods</b>
<b>Duration of Benefit Payments</b>
<b>Electric Utility</b>
<b>Energy Consumption</b>
Energy Generated, Net

<b>Federal Home Loan Mortgage Corporation (Freddie Mac)</b> (Section 11) A shareholder-owned corporation that invests in home mortgages, ultimately providing lower housing costs and access to home financing.
<b>Fuel Consumed to Generate Electricity</b>
<b>Gross Domestic Product (GDP)</b> (Section 9) The market value of all final goods and services produced by resources located in the United States, regardless of ownership.
<b>Gross Domestic Product by State (GDP)</b>
<b>Home Health Agency</b>
<b>Home Sales (existing homes)</b>
<b>Hospice</b>
<b>Household</b>
Housing Permits
Incarceration Rate
<b>In-migration</b>

Labor Force Participation Rate
Marriage Rate
<b>Meals and Rentals Tax Receipts</b>
Median
Medicaid
<b>Medicare</b>
Multiple Listing Service (MLS)
Natural Increase Rate       (Section 1)         The number of resident births minus deaths per 1,000 total resident population.
<b>New Hampshire Housing Finance Authority (NHHFA)</b>
<b>Nonfarm Employment</b>
Nondurable Goods
Non-current Loans

<b>Outdoor Recreation Value Added</b>
<b>Outdoor Recreation, Core and Supporting</b>
Parole
Per Capita Disposable Income
Per Capita Personal Income
<b>Personal Income</b>
<b>Probation</b>
A suspended sentence for a convicted offender giving the offer of freedom during good behavior under supervision of a probation officer.
A suspended sentence for a convicted offender giving the offer of freedom during good behavior
A suspended sentence for a convicted offender giving the offer of freedom during good behavior under supervision of a probation officer. <b>Real Gross Domestic Product</b>
<ul> <li>A suspended sentence for a convicted offender giving the offer of freedom during good behavior under supervision of a probation officer.</li> <li><b>Real Gross Domestic Product</b></li></ul>

Short Tons (S/T) (Section 7) A unit of mass equal to 2,000 lb (exactly 907.18474 kg).
<b>Skilled Nursing Facility</b>
<b>Toxic Release Inventory</b>
<b>Unemployed</b>
Value Added by Manufacture
<b>Vehicle Registration</b>
Weekly Benefit Amount, Average
<b>Weeks Compensated for Unemployment</b>