

PRODUCTION

Gross Domestic Product

2020 saw the United States' first recession since the Great Recession, as the coronavirus pandemic caused U.S. economic activity to decline. While the decline was brief, with economic activity contracting for just two months, March and April 2020, the recovery from this recession is ongoing.

Gross Domestic Product (GDP) measures the value of all goods and services produced in an area. In New Hampshire, GDP fell from \$78.4 billion in the first quarter of 2020 to \$70.1 billion in the second quarter of 2020, a 10.6 percent decline.¹ GDP increased again after the second quarter, and surpassed its pre-recession peak in the second quarter of 2021, reaching \$78.8 billion.

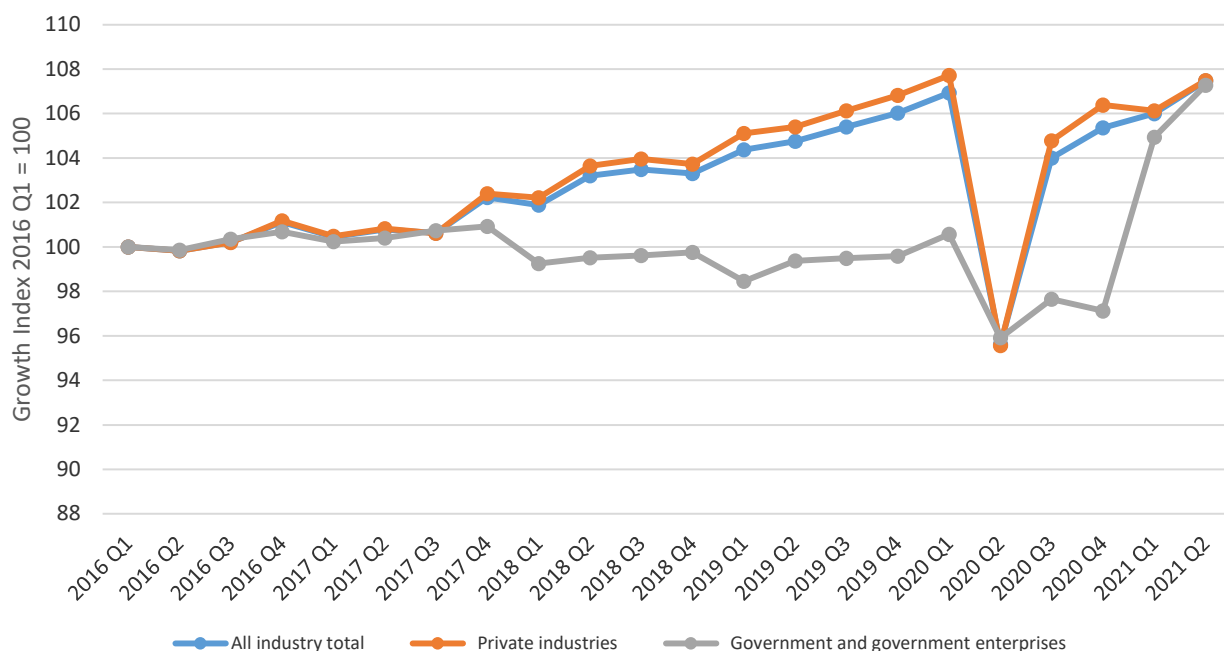
From the first quarter of 2016 through the first quarter of 2020, GDP growth in New Hampshire was almost entirely driven by private sector output. Private sector output increased from \$65.7 billion to \$70.8 billion over that time, a

7.8 percent increase. Government output was essentially unchanged, increasing 0.6 percent, approximately \$44 million, over that four year period.

Both government and private sector output fell in the second quarter of 2020, although the decline in private sector output was larger. Private sector GDP fell 11.3 percent, from \$70.8 billion to \$62.8 billion. Government GDP fell 4.6 percent, from \$7.7 billion to \$7.4 billion.

Since the recession ended in the second quarter of 2020, government GDP growth has been faster than private sector growth, particularly in the first two quarters of 2021. Government GDP increased slowly over the second half of 2020, then increased by nearly \$800 million over the first two quarters of 2021, surpassing pre-pandemic government GDP by \$500 million, or 6.7 percent. By the second quarter of 2021, private sector GDP

GROWTH INDEX FOR PRIVATE AND GOVERNMENT GDP



Source: US Bureau of Economic Analysis

¹ GDP is in millions of chained 2012 dollars, to account for inflation.

was \$150 million, approximately 0.2 percent, below its pre-pandemic high.

State-level GDP data does not break down government GDP into output from state, local and federal governments. However, in press releases, the U.S. Bureau of Economic Analysis attributed government GDP growth in the first two quarters of 2021 to increased state and local spending.² This is likely the case in New Hampshire as well, although it should be noted that, between the Coronavirus Aid, Relief and Economic Security (CARES) Act and American Rescue Plan Act (ARPA), the federal government provided \$500 billion in funding to state and local governments.³ This federal funding is likely the reason why state and local governments were able to increase spending, and government spending is unlikely to remain at this level in the long-term. As pandemic relief funding winds down, government output will likely return to pre-pandemic levels.

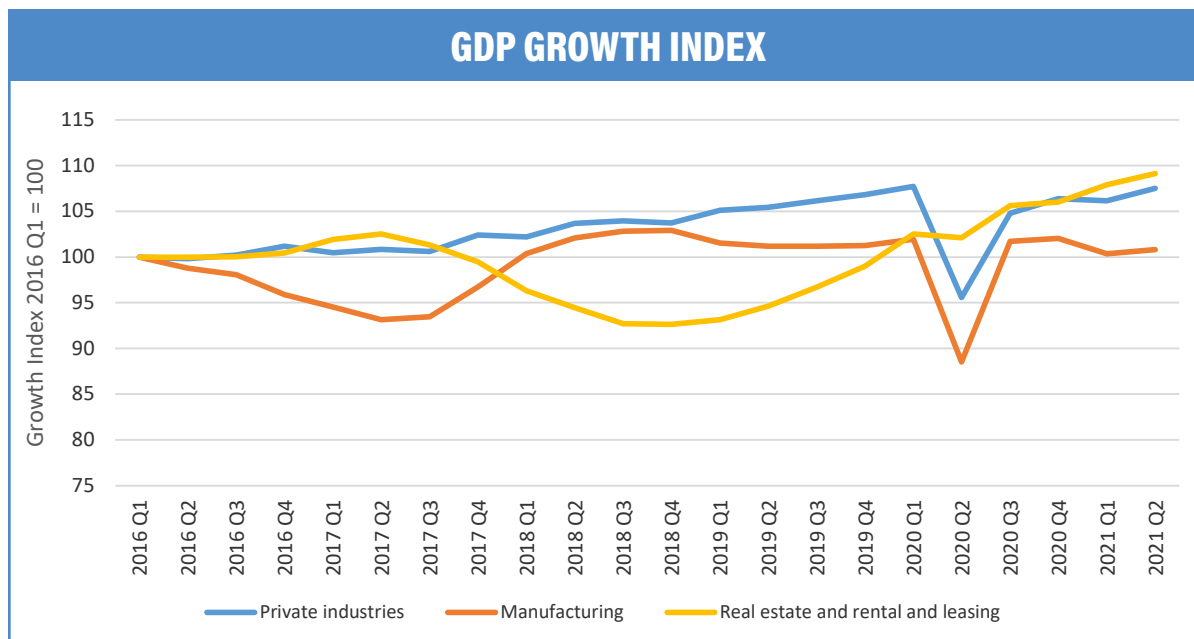
GDP by Industry

The largest industries in New Hampshire, as measured by GDP, were real estate and rental and

leasing and manufacturing. The annual output for real estate and rental and leasing was \$11.1 billion in 2020, while manufacturing output was \$8.6 billion. While total GDP for private industries grew steadily between 2016 and 2019, these industries experienced slow or negative GDP growth.

Output for the real estate and rental and leasing sector decreased from the second quarter of 2017 through the fourth quarter of 2018, declining nearly ten percent. Output increased again beginning in 2019, and real estate and rental and leasing was one of the sectors least affected by the pandemic. From 2020 Q1 to 2020 Q2, GDP for the real estate and rental and leasing sector declined by just 0.4 percent. Since the second quarter of 2020, real estate output continued to increase, growing to 6.4 percent above its pre-pandemic high by the second quarter of 2021.

Manufacturing output fell for five quarters between 2016 Q1 and 2017 Q2, with GDP declining by 6.9 percent. Manufacturing output fell in the first three quarters of 2019 as well, declining 1.7 percent. At the beginning of the pandemic, manufacturing



² U.S. Bureau of Economic Analysis, Archive. https://www.bea.gov/news/archive?field_related_product_target_id=451&created_1=All&title=.

³ U.S. Department of the Treasury, Coronavirus Relief Fund, Assistance for State, Local, and Tribal Governments, <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/coronavirus-relief-fund>, <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments>.

output fell 13.1 percent, but recovered quickly; output returned to pre-pandemic levels by the third quarter of 2020, before declining slightly in the first half of 2021.

Exports

Prior to 2020, exports by New Hampshire-based businesses had increased annually. Exports grew from \$4.0 billion in 2015 to \$5.8 billion in 2019, an 36 percent increase.⁴ In 2020, the value of exports fell six percent, to \$5.5 billion, although this still exceeded the value of exports in every year prior to 2019. Exports rebounded in 2021, and as of September, were on pace to exceed the value of goods exported in 2019. The total value of exports through September 2021 was \$4.6 billion, above the \$4.3 billion exported through the first nine months of 2019.

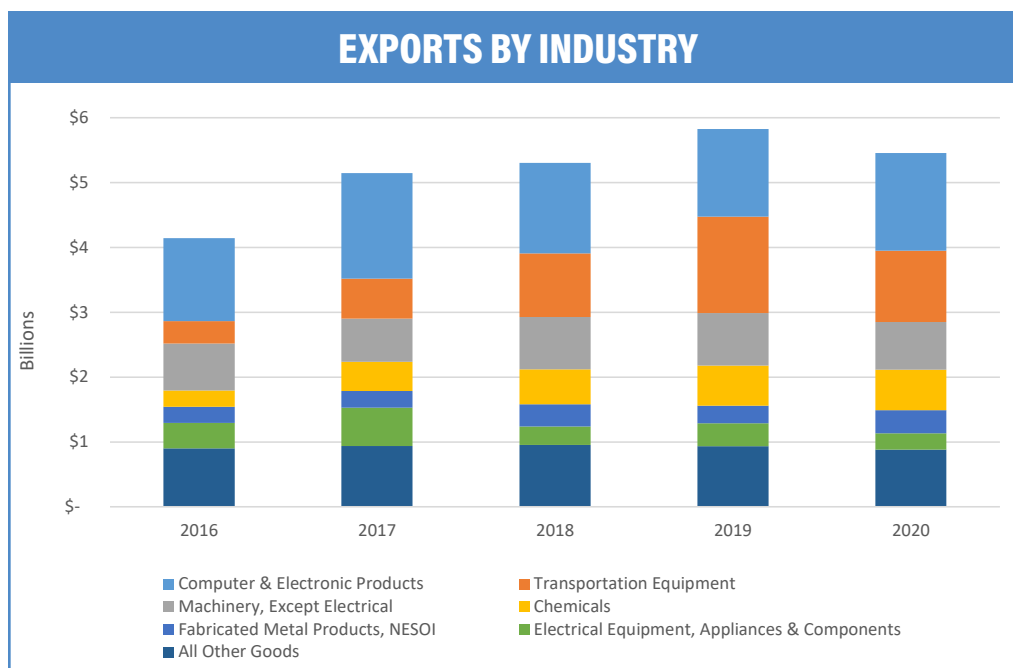
With \$1.5 billion in goods exported in 2020, the largest category of exports was computer and electronic products. Computer and electronic products have been New Hampshire's top export in four of the last five years, with well over \$1 billion exported each year. Transportation equipment has been one of the fastest growing categories of exports. Transportation

equipment exports increased from \$345 million in 2016 to \$1.5 billion in 2019, and were New Hampshire's largest export that year. Exports of transportation equipment fell 26 percent from 2019 to 2020. Through September 2021, exports of transportation equipment were valued at just over \$1 billion, around \$100 million less than was exported in the first nine months of 2019, but more than any previous year.

Although overall exports fell in 2020, exports increased in two of New Hampshire's top exporting industries: chemicals and fabricated metal products not elsewhere specified. Prior to 2020, chemicals had been a rapidly growing export, increasing from \$251 million in 2016 to \$618 million in 2019. Although the rate of growth slowed, chemical exports still increased to \$623 million in 2020. Exports of fabricated metal products have fluctuated, but exports in 2020 were the highest ever for this industry, at \$358 million, just above the \$343 million exported in 2018.

Germany was the top destination for New Hampshire business exports in 2020, with \$751 million in goods exported to Germany.

Between 2016 and 2019, exports to Germany increased more than 400 percent, from \$236 million to \$992 million. Exports of transportation equipment were largely responsible for this increase, growing from \$37 million in 2018 to \$748 million in 2019. In 2020, transportation equipment accounted for \$544 million in exports to Germany,



Source: U.S. Department of Commerce, International Trade Administration

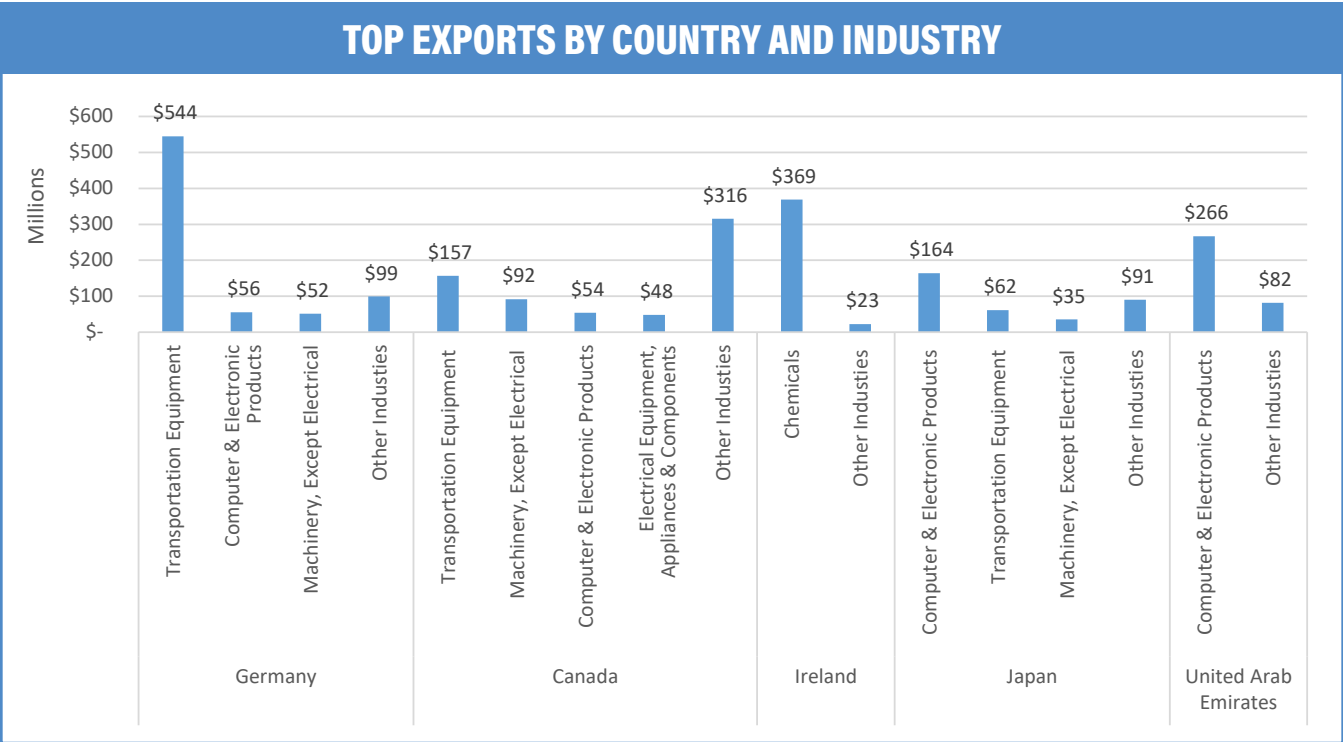
⁴ Value of exports are in current dollars, and are not adjusted for inflation.

approximately 70 percent of all goods exported to Germany.

New Hampshire businesses exported \$667 million of goods to Canada in 2020. Prior to 2018, Canada had been the top destination for New Hampshire exports, but Canada was the second largest export market in 2019 and 2020. Transportation equipment was also New Hampshire’s top export to Canada, although it accounted for less than a quarter of all goods exported to Canada in 2020.

New Hampshire’s third largest export market in 2020 was Ireland, with \$392 million in exports, followed by Japan, with \$352 million, and the United Arab Emirates, with \$348 million. Chemicals accounted for 94 percent of goods, \$369 million, exported to Ireland in 2020. Computer and electronic products were the top exports to Japan and the United Arab Emirates.

– Greg David



Source: U.S. Department of Commerce, International Trade Administration

GROSS DOMESTIC PRODUCT BY STATE - NEW HAMPSHIRE	2016	2017	2018	2019	2020
Current Dollars (\$ millions)	\$79,090	\$80,666	\$83,844	\$87,508	\$87,621
Annual percent change	3.4%	2.0%	3.9%	4.4%	0.1%
Real chained 2012 dollars (\$ millions)	\$73,572	\$74,107	\$75,535	\$77,127	\$75,543
Annual percent change	2.1%	0.7%	1.9%	2.1%	-2.1%

Gross Domestic Product by State - United States					
Current Dollars (\$ millions)	\$18,695,106	\$19,479,623	\$20,527,159	\$21,372,582	\$20,893,746
Annual percent change	2.7%	4.2%	5.4%	4.1%	-2.2%
Real chained 2012 dollars (\$ millions)	\$17,680,274	\$18,079,084	\$18,606,787	\$19,032,672	\$18,384,687
Annual percent change	1.7%	2.3%	2.9%	2.3%	-3.4%

Source: Bureau of Economic Analysis, ELMI Analysis. Last Update 12/14/2021

TOTAL CAPITAL EXPENDITURES (new and used)	2016	2017	2018	2019	2020
Total (\$ millions)	\$570	\$565	\$570	\$522	
As a Percent of Payroll					
United States	26.2%	25.1%	25.9%	25.4%	
New Hampshire	13.8%	14.6%	14.0%	12.7%	
Connecticut	13.2%	14.2%	12.4%	13.1%	
Maine	16.5%	20.5%	24.7%	23.6%	
Massachusetts	15.4%	13.6%	14.6%	14.3%	
Rhode Island	16.1%	14.2%	19.7%	16.7%	
Vermont	18.7%	14.8%	17.9%	17.8%	

Source: Annual Survey of Manufactures & Economic Census, US Census Bureau. ELMI Analysis. Last Update 9/16/2021

Value Added	2016	2017	2018	2019	2020
Value Added by Manufacture					
Total (\$ millions)	\$11,562.4	\$10,046.0	\$10,683.0	\$10,815.2	

Value Added per Payroll Dollar					
United States	\$3.74	\$3.67	\$3.76	\$3.69	
New Hampshire	\$2.79	\$2.59	\$2.63	\$2.63	
United States rank ^a	48	49	50	49	
Connecticut	\$2.98	\$2.82	\$3.16	\$3.27	
United States rank ^a	45	47	42	37	
Maine	\$3.05	\$3.10	\$3.14	\$3.09	
United States rank ^a	43	43	44	41	
Massachusetts	\$3.03	\$2.88	\$2.97	\$2.99	
United States rank ^a	44	46	47	46	
Rhode Island	\$2.61	\$2.72	\$2.85	\$2.58	
United States rank ^a	50	48	49	51	
Vermont	\$2.73	\$2.55	\$3.12	\$3.03	
United States rank ^a	49	50	45	42	

^a Including D.C.

Source: Annual Survey of Manufactures & Economic Census, US Census Bureau. ELMI Analysis. Last Update 9/16/2021

EXPORT SALES TO THE WORLD	2016	2017	2018	2019	2020
Total (\$ millions)	\$4,143	\$5,148	\$5,306	\$5,827	\$5,457
Annual percent change	3.6%	24.2%	3.1%	9.8%	-6.4%

Industry Share of Total Exports ^b					
Transportation Equipment	30.9%	31.7%	26.4%	23.2%	27.6%
Computer and Electronic Products	8.3%	11.9%	18.5%	25.5%	20.2%
Machinery, Except Electrical	17.4%	13.0%	15.2%	13.9%	13.4%
Chemicals	6.1%	8.7%	10.1%	10.6%	11.4%
Electrical Equipment, Appliances & Components	6.1%	5.0%	6.5%	4.6%	6.6%
Fabricated Metal Products, NESOI	9.4%	11.5%	5.4%	6.1%	4.6%
Miscellaneous Manufactured Commodities	3.8%	3.1%	3.2%	3.0%	3.2%
Plastics & Rubber Products	3.8%	2.4%	2.5%	2.2%	2.5%
Waste and Scrap	2.2%	1.8%	1.9%	1.8%	2.3%
Printed Matter and Related Products, NESOI	1.5%	1.5%	1.4%	1.0%	1.1%
Agriculture and Livestock Products	1.2%	2.0%	1.4%	1.3%	1.1%
Food Manufactures	1.0%	1.0%	0.9%	0.8%	0.9%

^b International Trade Administration, U.S. Department of Commerce, Trade Stats Express™ Home, National Trade Data Home

Source: International Trade Administration, U.S. Department of Commerce, ELMI Analysis. Last Update 9/16/2021

DEFENSE CONTRACTS (\$ millions)	2016	2017	2018	2019	2020
Total - Federal Fiscal (October 1 - September 30)	\$1,207.7	\$1,802.6	\$2,127.8	\$2,226.5	\$1,725.7

Source: USAspending.gov. Last Update 12/14/2021

Prepared by: New Hampshire Employment Security, Economic and Labor Market Information Bureau

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