

## 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 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

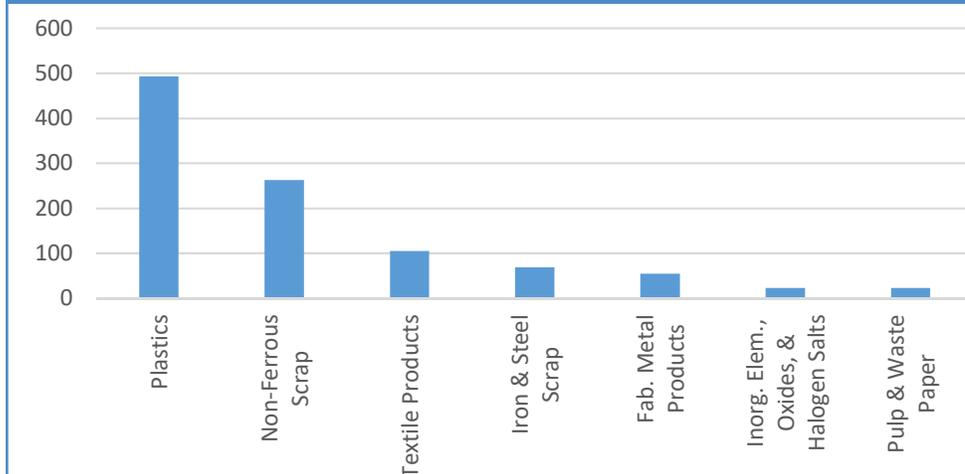
airlines to access larger airports, such as Logan International Airport in Boston. The number of airlines with regular flights out of Manchester declined from seven in 2005 to four in 2018.

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>

#### EXPORTS FROM PORTSMOUTH HARBOR, 2017 (IN TONS)



Source: U.S. Army Corps of Engineers, Institute for Water Resources, 1 Year Cargo Report

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

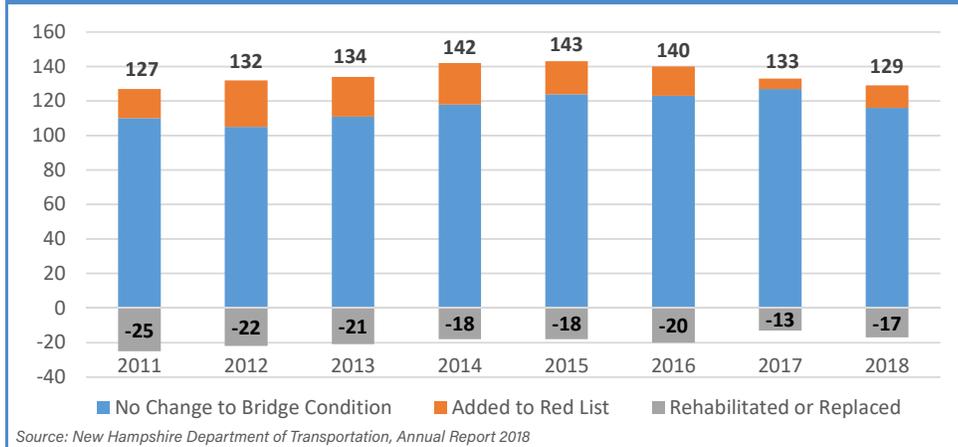
2 Patrick Olsen, “GM Becomes Latest Car Company to Drop Some Sedans,” *Consumer Reports*, November 26, 2018. <https://www.consumerreports.org/general-motors/gm-to-drop-some-sedans/>

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/airport-manchester-boston-director-25368330>

4 Manchester-Boston Regional Airport, “Activity Report December, 2018,” <https://mk0flymanchestertsp6.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>

## RED LIST BRIDGES MAINTAINED BY NHDOT, 2011 - 2018



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 state-owned Red List in 2018, but an additional 13 were added to the list. The Department of Transportation

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

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.

6 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](https://www.nh.gov/dot/org/projectdevelopment/bridgedesign/documents/2019-02-25bridge_state_red_list.pdf)

7 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](https://www.nh.gov/dot/org/projectdevelopment/bridgedesign/documents/2019-03-11municipal_red_list.pdf)

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

9 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.

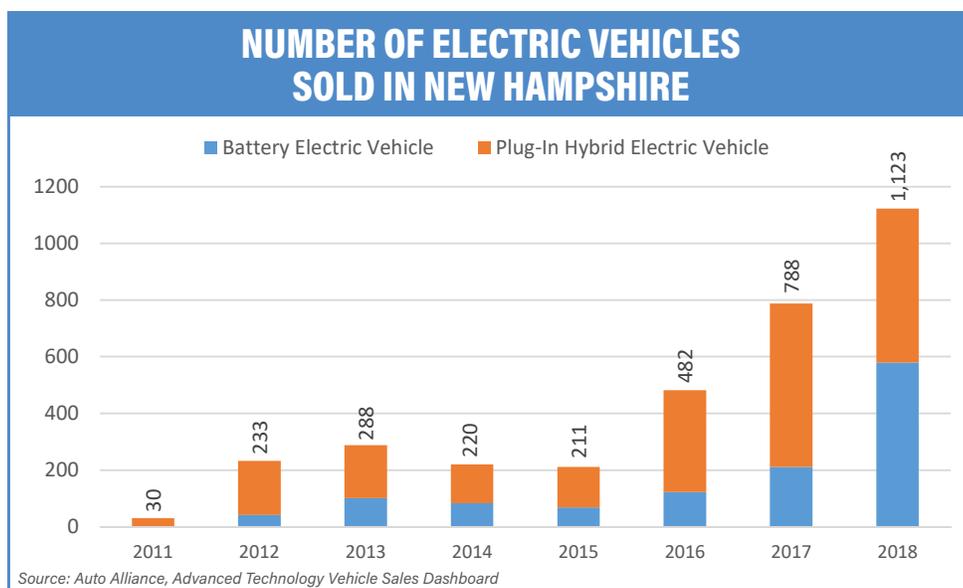
More than forty percent of public charging stations in New Hampshire are located at hotels and ski mountains, indicating that access to charging stations is an amenity that tourists will look for when choosing accommodations. Investing in the infrastructure to support electric cars will be important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



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

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

<sup>13</sup> 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>

<sup>14</sup> 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

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<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						
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

<sup>a</sup> Does not include air mail

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