

Regional Vocational Technical High School and Northern Essex Community College (NECC). The model has met with success elsewhere in the country and would enhance both vocational education and academic advancement, alongside workforce skill training. This type of partnership creates opportunities for new pathway programs to support the region's priority industries and expands the training capacity of the workforce training in the region.

9. Capitalize on UMass Lowell's LINC (Lowell Innovation Network Corridor) project for workforce opportunities. LINC is a transformative project that will be a catalyst for innovation, growth, and increased competitiveness for the Northeast Massachusetts region. Cambridge-based Draper is already planning to locate its microelectronics practice in LINC, bringing hundreds of jobs into the area. Following closely, Mass General Brigham will expand into LINC to collaborate with UMass Lowell on human performance (both cognitive and physical) research. These successes have transpired quickly even though the LINC initiative is still in its infancy. As the project gains momentum and recognition, LINC is expected to attract the attention of other employers and be a seedbed for startups. LINC also includes strengthening neighborhoods and the urban revitalization of a large swath of the city, which will generate jobs in other areas beyond tech, including in hospitality.
 - a. Workforce agencies, training providers, and educational institutions should coordinate with the LINC initiative to match workers with available jobs, develop curriculum reflective of LINC employer needs, and ensure structures are in place for immigrant and other communities to access and grow from the opportunities at LINC.

Methodology Notes

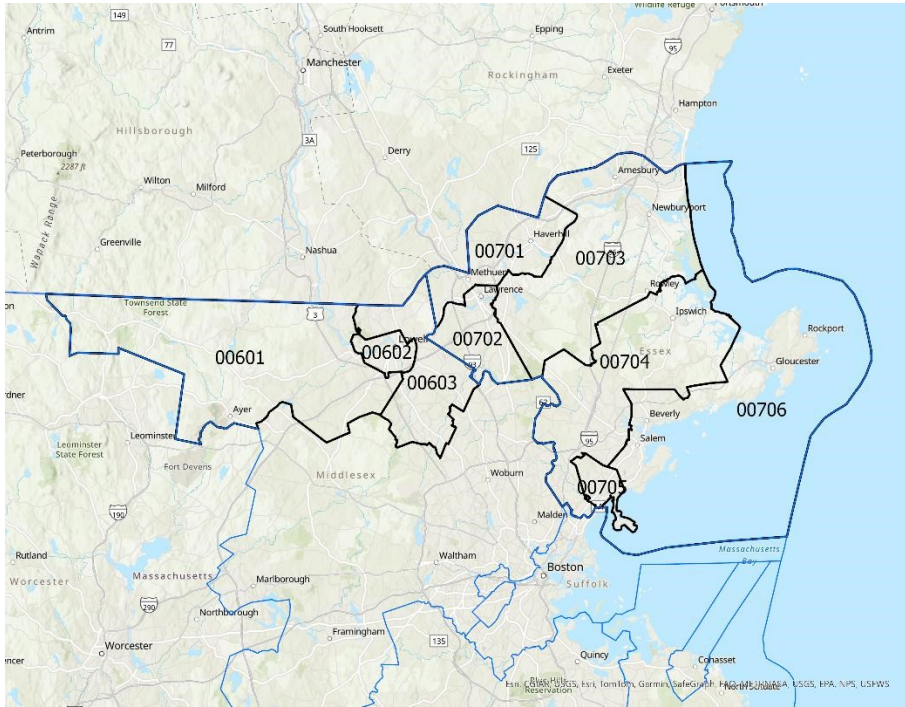
IPUMS USA

IPUMS USA (originally, the "Integrated Public Use Microdata Series") is a website and database providing access to over sixty integrated, high-precision samples of the American population drawn from sixteen federal censuses, from the American Community Surveys of 2000-present.

IPUMS USA supplies microdata, which means that it provides information about individual persons and households. This makes it possible for researchers to create tabulations tailored to their particular questions.

IPUMS data was used for some of the data in this report using Public Use Microdata Areas (PUMAs). The PUMAs in Northeast Massachusetts do not perfectly align with the 42 towns in the three workforce development areas, which was the region used for the majority of the report.

The IPUMS USA data used the PUMAs in the map below:



IPUMS citation:

Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rodgers, and Megan Schouweiler. IPUMS USA: Version 15.0 [2022 ACS 5yr]. Minneapolis, MN: IPUMS, 2024. <https://doi.org/10.18128/D010.V15.0>

Lightcast

Much of the analysis on jobs uses data from Lightcast, which is a merger of Emsi and Burning Glass Technologies. Lightcast gathers and integrates economic, labor market, demographic, education, profile, and job posting data from dozens of government and private-sector sources, creating a comprehensive and current dataset that includes both published data and detailed estimates.

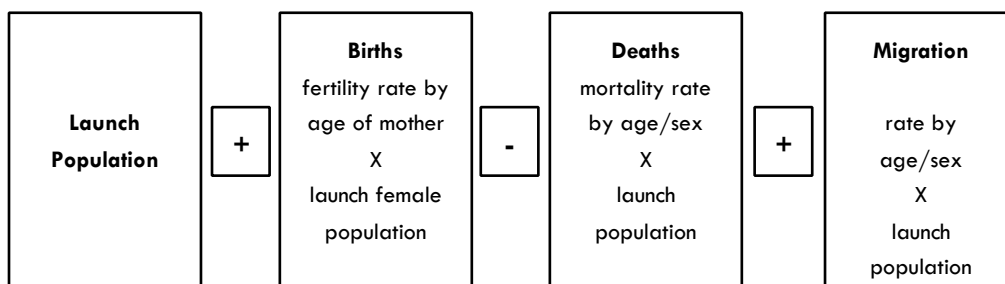
Some of the tables include projections from Lightcast. For projections, Lightcast uses a combination of Bureau of Labor Statistics (BLS) data, state data sets, and internal projection methods.

In the industry data, Lightcast separates out government jobs, using 90 as the industry code. This differs from the traditional NAICS code which includes government jobs in the relevant NAICS code. For example, a local Community College, classified in NAICS 611210 in standard NAICS, would be found in NAICS 903612, "Colleges, Universities, and Professional Schools (Local Government)". Therefore, in Lightcast data, all establishments in the main NAICS hierarchy (all sectors other than 90) are privately owned only, including 611 (Educational Services) and 62 (Health Care and Social Assistance). Additionally, all establishments in NAICS 92 are reclassified under NAICS 90. Lightcast follows the conventions of Current Employment Statistics (CES), Occupational Employment Statistics (OES), and BEA data sources, and re-classifies all government-run establishments into the appropriate Government NAICS.

UMDI Population Projections

The UMDI Vintage 2024 (V2024) population projections are based on a demographic accounting framework for modeling population change, commonly referred to as a *cohort-component* model. The cohort-component method recognizes that there are only four ways that a region's population can change from one time-period to the next. It can add residents through either births or in-migration, or it can lose residents through deaths or out-migration. Figure 1 below displays the basic concept of a cohort-component model.

Figure 24. Cohort-Component Model Overview



The cohort-component approach also accounts for population change associated with the aging of the population. The current age profile is a strong predictor of future population levels, and growth and decline can differ greatly from one region to another based on their profiles, as the likelihood of birth, death, and in- and out-migration all vary by age. For example, because fertility rates are highest

among women in their twenties and thirties, a place that is anticipating a large number of women

coming into their twenties and thirties in the next decade will likely experience more births. Similarly, mortality rates are notably higher for persons 70-years and older, such that an area with a large concentration of elderly residents will experience more deaths in decades to come.

The V2024 projections methodology may also be described as a “*status-quo*” projections model; it assumes that recent trends in the demographic components of population change, such as fertility, mortality, and migration by age, will persist in future periods. While it is reasonable to expect that these rates will change in future years, predicting the directionality of these trends invites additional assumptions into the model and, with them, additional uncertainty. The recent COVID-19 pandemic is an example of how an unexpected event can reverse an apparently steady component trend, with mortality rates increasing after a long period of gradual decrease in most age groups. Likewise, fertility rates have been slowing over a long period, but economic or social influences could just as readily disrupt that trend, as happened with the unforeseen “baby boom” that kicked off in the late 1940s. Fluctuations in immigration and migration are even less predictable. For example, there was a steep drop off in net immigration to Massachusetts following the 2016 elections. This trend was further exacerbated by a global pandemic in 2020, but substantially reversed again by 2023 under a new administration. For these reasons, the UMDI V2024 series may be defined strictly as “projections” and not as “scenarios” or “forecasts.”

In the V2024 population projections series, UMDI uses a cohort-component model based on a combination of trends in fertility, mortality, and migration from 2010 through 2020 and decennial Census data from 2000, 2010, and 2020. The method produces population projections for three different geographic levels: municipalities, counties, and sub-state “migration” regions defined by the Census 2010 migration-PUMA (MIGPUMA) boundaries. These regional levels are controlled to one another using a “top-down” approach by which age/sex projections for smaller geographies are controlled “up” to the larger geography age/sex projections.

The “MIGPUMA” regional-level method makes use of American Community Survey sample data on migration rates by age and uses a gross, multi-regional approach in forecasting future levels of migration.¹⁰ The county and municipal-level estimates both rely on residual net migration rates computed from vital statistics and decennial Census data. Municipal age/sex projections are controlled to the regional or county age/sex projections -- or both, depending on the region.

¹⁰ PUMAs are the smallest geographic units used by the U.S. Census Bureau for reporting data taken from the detailed (micro) records of the American Community Survey (ACS) – our primary source of migration data. PUMA boundaries are defined so that they include no fewer than 100,000 persons, while Migration PUMAs (MIGPUMAs) must also incorporate the entirety of any county within their borders, leading to the aggregation of PUMAs into much larger MIGPUMAs in some areas of Massachusetts.

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Appendix A: Greater Lowell Industry and Occupation Data

Table 10: Job Growth by Industry, Greater Lowell, 2013 to 2033

NAICS	Industry	2013 Jobs	2023 Jobs	2033 Jobs	Net new jobs (2013 - 2023)	2013 - 2023 % Change	Projected net new jobs (2023 - 2033)	2023 - 2033 % Change	2023 Employment Concentration
54	Professional, Scientific, and Technical Services	17,519	21,518	25,163	3,999	23%	3,645	17%	1.60
62	Health Care and Social Assistance	17,540	20,534	24,751	2,994	17%	4,216	21%	1.03
31	Manufacturing	18,140	19,566	20,274	1,426	8%	1,892	18%	1.74
90	Government	18,749	18,731	22,249	(17)	(0%)	72	23%	0.93
44	Retail Trade	13,204	13,848	14,751	645	5%	1,392	15%	0.86
23	Construction	8,566	10,701	11,863	2,135	25%	1,162	11%	1.08
72	Accommodation and Food Services	10,207	10,578	12,469	371	4%	1,701	25%	0.85
56	Administrative and Support and Waste Management and Remediation Services	7,632	10,056	11,223	2,424	32%	3,517	19%	0.94
81	Other Services (except Public Administration)	8,928	9,121	10,512	193	2%	85	2%	0.92
48	Transportation and Warehousing	5,773	8,036	9,574	2,263	39%	903	7%	0.82
53	Real Estate and Rental and Leasing	4,908	7,562	9,465	2,654	54%	707	4%	0.74
61	Educational Services	6,795	6,818	8,519	23	0%	458	14%	1.66
42	Wholesale Trade	5,895	5,332	5,417	(563)	(10%)	37	16%	0.94
52	Finance and Insurance	4,498	5,330	6,550	832	18%	1,166	12%	0.48
71	Arts, Entertainment, and Recreation	3,412	3,934	4,307	523	15%	1,903	25%	1.04

51	Information	4,108	3,328	3,786	(780)	(19%)	8	8%	1.02
55	Management of Companies and Enterprises	2,713	3,299	4,097	585	22%	1,538	19%	1.33
11	Agriculture, Forestry, Fishing and Hunting	171	321	394	150	87%	1,220	23%	0.11
22	Utilities	213	232	269	18	9%	798	24%	0.46
21	Mining, Quarrying, and Oil and Gas Extraction	48	92	100	44	92%	373	9%	0.10
	Total	159,020	178,937	205,730	19,917	13%	26,793	15%	

Source: Lightcast

Note: Industries listed in order of the most jobs in 2023

Table 11: Historical Job Growth by Occupation Group, Greater Lowell, 2013 to 2023

SOC	Description	2013 Jobs	2023 Jobs	Net new jobs (2013 – 2023)	% change (2013 – 2023)
11-0000	Management Occupations	12,726	18,764	6,039	47%
13-0000	Business and Financial Operations Occupations	10,190	14,030	3,840	38%
53-0000	Transportation and Material Moving Occupations	9,932	11,358	1,426	14%
31-0000	Healthcare Support Occupations	4,700	5,883	1,183	25%
51-0000	Production Occupations	7,522	8,564	1,043	14%
29-0000	Healthcare Practitioners and Technical Occupations	7,833	8,845	1,012	13%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	6,392	7,337	945	15%
47-0000	Construction and Extraction Occupations	7,292	8,154	863	12%
19-0000	Life, Physical, and Social Science Occupations	2,763	3,582	818	30%
41-0000	Sales and Related Occupations	16,445	17,199	754	5%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	6,175	6,929	754	12%
39-0000	Personal Care and Service Occupations	4,855	5,388	532	11%
33-0000	Protective Service Occupations	3,210	3,735	526	16%
21-0000	Community and Social Service Occupations	2,988	3,477	489	16%
35-0000	Food Preparation and Serving Related Occupations	9,777	10,114	338	3%
25-0000	Educational Instruction and Library Occupations	9,543	9,702	159	2%
45-0000	Farming, Fishing, and Forestry Occupations	152	285	132	87%
49-0000	Installation, Maintenance, and Repair Occupations	5,001	5,108	107	2%
23-0000	Legal Occupations	958	1,017	59	6%
55-0000	Military-only occupations	260	225	(36)	(14%)
17-0000	Architecture and Engineering Occupations	5,067	4,804	(263)	(5%)

43-0000	Office and Administrative Support Occupations	16,940	16,502	(439)	(3%)
15-0000	Computer and Mathematical Occupations	8,240	7,796	(444)	(5%)
	Total	159,020	178,937	19,917	13%

Table 12: Projected Job Growth by Occupation Group, Greater Lowell, 2023 to 2033

SOC	Description	2023 Jobs	2033 Jobs	Projected net new jobs (2023 – 2033)	Projected % change (2023 – 2033)
11-0000	Management Occupations	18,764	21,699	2,934	16%
13-0000	Business and Financial Operations Occupations	14,030	16,613	2,583	18%
25-0000	Educational Instruction and Library Occupations	9,702	11,753	2,051	21%
41-0000	Sales and Related Occupations	17,199	19,141	1,942	11%
35-0000	Food Preparation and Serving Related Occupations	10,114	11,815	1,701	17%
29-0000	Healthcare Practitioners and Technical Occupations	8,845	10,523	1,678	19%
31-0000	Healthcare Support Occupations	5,883	7,452	1,569	27%
43-0000	Office and Administrative Support Occupations	16,502	18,037	1,535	9%
53-0000	Transportation and Material Moving Occupations	11,358	12,708	1,350	12%
15-0000	Computer and Mathematical Occupations	7,796	8,940	1,145	15%
39-0000	Personal Care and Service Occupations	5,388	6,437	1,049	19%
47-0000	Construction and Extraction Occupations	8,154	9,072	918	11%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	6,929	7,789	861	12%
17-0000	Architecture and Engineering Occupations	4,804	5,635	831	17%
19-0000	Life, Physical, and Social Science Occupations	3,582	4,411	829	23%
33-0000	Protective Service Occupations	3,735	4,552	817	22%
21-0000	Community and Social Service Occupations	3,477	4,266	789	23%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	7,337	8,077	740	10%
49-0000	Installation, Maintenance, and Repair Occupations	5,108	5,843	735	14%

51-0000	Production Occupations	8,564	9,058	494	6%
23-0000	Legal Occupations	1,017	1,140	123	12%
45-0000	Farming, Fishing, and Forestry Occupations	285	342	58	20%
55-0000	Military-only occupations	225	255	30	13%
	Total	178,937	205,730	26,793	15%

Source: Lightcast

Appendix B: Merrimack Valley Industry and Occupation Data

Table 13: Job Growth by Industry, Merrimack Valley, 2013 to 2033

NAICS	Industry	2013 Jobs	2023 Jobs	2033 Jobs	Net new jobs (2013 - 2023)	2013 - 2023 % Change	Projected net new jobs (2023-2033)	2023-2033 % Change	2023 Employment Concentration
62	Health Care and Social Assistance	26,437	29,819	34,520	3,382	13%	4,701	16%	1.26
31	Manufacturing	25,194	23,829	26,007	(1,365)	(5%)	2,178	9%	1.77
90	Government	21,022	20,001	22,361	(1,020)	(5%)	2,360	12%	0.83
54	Professional, Scientific, and Technical Services	16,308	18,051	20,055	1,743	11%	2,004	11%	1.13
44	Retail Trade	15,077	16,657	18,313	1,581	10%	1,656	10%	0.87
23	Construction	9,956	13,771	15,647	3,815	38%	1,876	14%	1.16
56	Administrative and Support and Waste Management and Remediation Services	12,423	12,822	14,603	399	3%	1,781	14%	1.00
81	Other Services (except Public Administration)	11,742	12,573	14,262	831	7%	1,688	13%	1.07
72	Accommodation and Food Services	11,407	11,987	13,342	580	5%	1,355	11%	0.81
53	Real Estate and Rental and Leasing	6,966	11,055	13,804	4,089	59%	2,749	25%	0.90
52	Finance and Insurance	7,552	10,117	12,328	2,565	34%	2,210	22%	0.76

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48	Transportation and Warehousing	2,905	9,592	13,223	6,687	230%	3,631	38%	0.81
42	Wholesale Trade	5,488	7,055	8,115	1,567	29%	1,060	15%	1.04
61	Educational Services	5,402	5,528	6,332	125	2%	804	15%	1.13
71	Arts, Entertainment, and Recreation	4,482	4,155	4,570	(327)	(7%)	415	10%	0.92
55	Management of Companies and Enterprises	3,559	3,256	3,258	(303)	(9%)	2	0%	1.09
51	Information	3,198	2,572	2,904	(626)	(20%)	332	13%	0.66
22	Utilities	378	691	829	313	83%	139	20%	1.14
11	Agriculture, Forestry, Fishing and Hunting	444	425	549	(19)	(4%)	123	29%	0.12
21	Mining, Quarrying, and Oil and Gas Extraction	52	27	32	(24)	(47%)	5	18%	0.03
	Total	189,992	213,985	245,055	23,993	13%	31,069	15%	

Source: Lightcast

Note: Industries listed in order of the most jobs in 2023

Table 14: Historical Job Growth by Occupation Group, Merrimack Valley, 2013 to 2023

SOC	Description	2013 Jobs	2023 Jobs	Net new jobs (2013 – 2023)	% Change (2013 – 2023)
11-0000	Management Occupations	14,645	21,047	6,402	44%
13-0000	Business and Financial Operations Occupations	11,920	16,668	4,748	40%
53-0000	Transportation and Material Moving Occupations	9,707	14,138	4,431	46%
41-0000	Sales and Related Occupations	19,892	22,770	2,878	14%
31-0000	Healthcare Support Occupations	8,470	10,971	2,501	30%
47-0000	Construction and Extraction Occupations	9,068	10,487	1,419	16%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	6,713	7,658	945	14%
39-0000	Personal Care and Service Occupations	7,442	8,103	661	9%
35-0000	Food Preparation and Serving Related Occupations	11,638	12,243	605	5%
29-0000	Healthcare Practitioners and Technical Occupations	9,687	10,001	314	3%
19-0000	Life, Physical, and Social Science Occupations	1,994	2,294	300	15%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	6,644	6,875	231	3%
21-0000	Community and Social Service Occupations	3,833	4,059	226	6%
49-0000	Installation, Maintenance, and Repair Occupations	5,540	5,766	226	4%
23-0000	Legal Occupations	1,979	2,078	99	5%
45-0000	Farming, Fishing, and Forestry Occupations	231	292	61	27%
55-0000	Military-only occupations	424	365	(59)	(14%)
51-0000	Production Occupations	12,828	12,754	(74)	(1%)
33-0000	Protective Service Occupations	2,812	2,610	(202)	(7%)
25-0000	Educational Instruction and Library Occupations	12,484	12,276	(208)	(2%)
15-0000	Computer and Mathematical Occupations	6,170	5,900	(270)	(4%)
43-0000	Office and Administrative Support Occupations	20,252	19,779	(472)	(2%)

17-0000	Architecture and Engineering Occupations	5,561	4,726	(835)	(15%)
	Total	189,992	213,985	23,993	13%

Source: Lightcast

Table 15: Projected Job Growth by Occupation Group, Merrimack Valley, 2023 to 2033

SOC	Description	2023 Jobs	2033 Jobs	Projected net new jobs (2023 – 2033)	Projected % Change (2023 – 2033)
41-0000	Sales and Related Occupations	22,770	26,308	3,538	16%
53-0000	Transportation and Material Moving Occupations	14,138	17,195	3,057	22%
11-0000	Management Occupations	21,047	24,100	3,052	15%
13-0000	Business and Financial Operations Occupations	16,668	19,499	2,831	17%
31-0000	Healthcare Support Occupations	10,971	13,496	2,525	23%
43-0000	Office and Administrative Support Occupations	19,779	21,837	2,057	10%
25-0000	Educational Instruction and Library Occupations	12,276	14,287	2,011	16%
35-0000	Food Preparation and Serving Related Occupations	12,243	13,745	1,502	12%
51-0000	Production Occupations	12,754	14,159	1,405	11%
47-0000	Construction and Extraction Occupations	10,487	11,765	1,278	12%
39-0000	Personal Care and Service Occupations	8,103	9,156	1,053	13%
29-0000	Healthcare Practitioners and Technical Occupations	10,001	11,044	1,043	10%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	6,875	7,878	1,002	15%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	7,658	8,490	832	11%
49-0000	Installation, Maintenance, and Repair Occupations	5,766	6,596	830	14%
15-0000	Computer and Mathematical Occupations	5,900	6,727	827	14%
21-0000	Community and Social Service Occupations	4,059	4,806	748	18%
17-0000	Architecture and Engineering Occupations	4,726	5,203	477	10%

19-0000	Life, Physical, and Social Science Occupations	2,294	2,642	347	15%
33-0000	Protective Service Occupations	2,610	2,887	277	11%
23-0000	Legal Occupations	2,078	2,294	216	10%
45-0000	Farming, Fishing, and Forestry Occupations	292	374	82	28%
55-0000	Military-only occupations	365	416	51	14%
	Total	213,985	245,055	31,069	15%

Source: Lightcast

Appendix C: North Shore Industry and Occupation Data

Table 16: Job Growth by Industry, North Shore, 2013 to 2033

NAICS	Industry	2013 Jobs	2023 Jobs	2033 Jobs	New Jobs (2013 - 2023)	2013 - 2023 % Change	Projected New Jobs (2023 - 2033)	2023 - 2033 % Change	2023 Employment Concentration
62	Health Care and Social Assistance	38,996	40,831	47,171	1,835	5%	6,340	16%	1.35
44	Retail Trade	29,098	31,105	33,836	2,007	7%	2,731	9%	1.27
90	Government	21,974	22,868	26,597	894	4%	3,729	16%	0.75
54	Professional, Scientific, and Technical Services	16,544	19,951	22,336	3,407	21%	2,384	12%	0.98
72	Accommodation and Food Services	17,815	18,890	21,029	1,075	6%	2,140	11%	1.00
52	Finance and Insurance	12,598	17,516	21,541	4,918	39%	4,024	23%	1.03
31	Manufacturing	17,935	17,476	19,181	(459)	(3%)	1,705	10%	1.02
53	Real Estate and Rental and Leasing	11,073	17,143	21,519	6,070	55%	4,376	26%	1.10
23	Construction	12,270	15,637	17,979	3,366	27%	2,343	15%	1.04
81	Other Services (except Public Administration)	13,267	14,710	16,934	1,443	11%	2,224	15%	0.98

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56	Administrative and Support and Waste Management and Remediation Services	11,291	12,888	14,806	1,597	14%	1,918	15%	0.79
48	Transportation and Warehousing	4,059	11,582	15,629	7,523	185%	4,048	35%	0.77
61	Educational Services	7,614	8,785	10,139	1,171	15%	1,354	15%	1.41
71	Arts, Entertainment, and Recreation	6,911	8,204	8,998	1,293	19%	794	10%	1.43
42	Wholesale Trade	5,747	6,175	7,243	428	7%	1,068	17%	0.72
51	Information	4,489	4,199	4,370	(290)	(6%)	171	4%	0.85
11	Agriculture, Forestry, Fishing and Hunting	1,839	2,067	2,394	228	12%	327	16%	0.45
55	Management of Companies and Enterprises	1,554	1,186	1,194	(368)	(24%)	8	1%	0.31
22	Utilities	465	1,095	1,241	630	135%	145	13%	1.42
21	Mining, Quarrying, and Oil and Gas Extraction	176	112	146	(64)	(36%)	34	30%	0.08
	Total	235,717	272,419	314,285	36,702	16%	41,866	15%	

Source: Lightcast

Note: Industries listed in order of the most jobs in 2023

Table 17: Historical Job Growth by Occupation Group, North Shore, 2013 to 2023

SOC	Description	2013 Jobs	2023 Jobs	Net new jobs (2013 – 2023)	% Change (2013 – 2023)
11-0000	Management Occupations	17,245	26,382	9,137	53%
13-0000	Business and Financial Operations Occupations	14,215	21,662	7,447	52%
53-0000	Transportation and Material Moving Occupations	12,749	17,685	4,936	39%
41-0000	Sales and Related Occupations	31,628	34,899	3,270	10%
31-0000	Healthcare Support Occupations	11,327	14,546	3,219	28%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	8,894	10,625	1,731	19%
35-0000	Food Preparation and Serving Related Occupations	17,228	18,665	1,438	8%
47-0000	Construction and Extraction Occupations	10,370	11,770	1,399	13%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	8,330	9,560	1,230	15%
39-0000	Personal Care and Service Occupations	9,584	10,691	1,107	12%
25-0000	Educational Instruction and Library Occupations	13,856	14,515	659	5%
49-0000	Installation, Maintenance, and Repair Occupations	6,547	7,132	585	9%
15-0000	Computer and Mathematical Occupations	4,685	5,016	331	7%
23-0000	Legal Occupations	1,886	2,204	318	17%
51-0000	Production Occupations	10,415	10,718	303	3%
33-0000	Protective Service Occupations	3,334	3,632	298	9%
19-0000	Life, Physical, and Social Science Occupations	3,123	3,267	144	5%
21-0000	Community and Social Service Occupations	5,110	5,252	143	3%
45-0000	Farming, Fishing, and Forestry Occupations	1,271	1,404	133	10%
43-0000	Office and Administrative Support Occupations	24,440	24,435	(5)	(0%)
55-0000	Military-only occupations	653	562	(91)	(14%)
17-0000	Architecture and Engineering Occupations	3,922	3,437	(485)	(12%)

29-0000	Healthcare Practitioners and Technical Occupations	14,845	14,236	(610)	(4%)
	Total	235,717	272,419	36,702	16%

Source: Lightcast

Table 18: Projected Job Growth by Occupation Group, North Shore, 2023 to 2033

SOC	Description	2023 Jobs	2033 Jobs	Projected net new jobs (2023 – 2033)	Projected % Change (2023 – 2033)
41-0000	Sales and Related Occupations	34,899	39,984	5,085	15%
13-0000	Business and Financial Operations Occupations	21,662	26,260	4,597	21%
11-0000	Management Occupations	26,382	30,766	4,384	17%
31-0000	Healthcare Support Occupations	14,546	18,077	3,531	24%
53-0000	Transportation and Material Moving Occupations	17,685	21,197	3,513	20%
25-0000	Educational Instruction and Library Occupations	14,515	17,244	2,729	19%
43-0000	Office and Administrative Support Occupations	24,435	26,983	2,548	10%
35-0000	Food Preparation and Serving Related Occupations	18,665	21,032	2,367	13%
47-0000	Construction and Extraction Occupations	11,770	13,507	1,738	15%
29-0000	Healthcare Practitioners and Technical Occupations	14,236	15,779	1,544	11%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	9,560	10,999	1,439	15%
39-0000	Personal Care and Service Occupations	10,691	12,046	1,355	13%
51-0000	Production Occupations	10,718	11,966	1,248	12%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	10,625	11,764	1,139	11%
49-0000	Installation, Maintenance, and Repair Occupations	7,132	8,204	1,073	15%
21-0000	Community and Social Service Occupations	5,252	6,160	908	17%
15-0000	Computer and Mathematical Occupations	5,016	5,786	770	15%
33-0000	Protective Service Occupations	3,632	4,187	555	15%
17-0000	Architecture and Engineering Occupations	3,437	3,871	433	13%

19-0000	Life, Physical, and Social Science Occupations	3,267	3,646	379	12%
23-0000	Legal Occupations	2,204	2,485	281	13%
45-0000	Farming, Fishing, and Forestry Occupations	1,404	1,545	140	10%
55-0000	Military-only occupations	562	641	79	14%
	Total	272,419	314,285	41,866	15%

Source: Lightcast