Tech and Logistics Projections



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Introduction

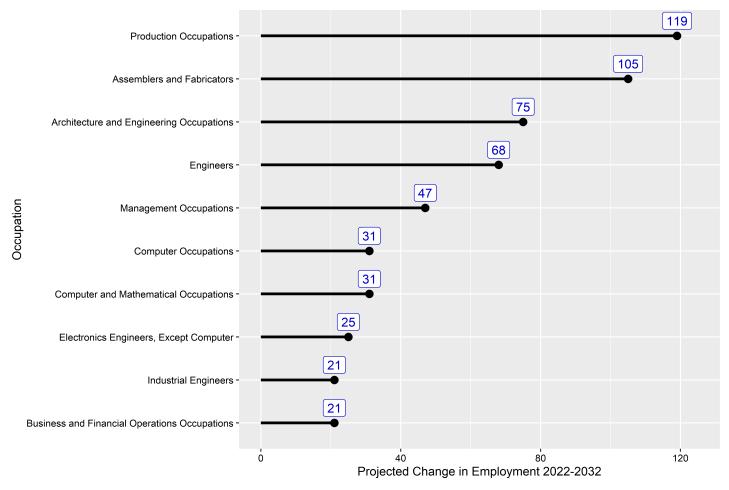
This report seeks to shine some light on the recent projections for employment growth in Nevada over the next decade (2022-2032), specifically in the sectors of tech and logistics. Projections within this report were evaluated on both an industry and an occupational level for the logistics sector, but only on the occupational level for the tech portion. These evaluations will typically contain a chart that shows projected growth by number of jobs as well as one that shows the projected percentage change in employment. These projections help us to target which areas of our labor market we expect to see the most growth in, as well as the areas where we expect to see a decline in employment.



Projections by Sector

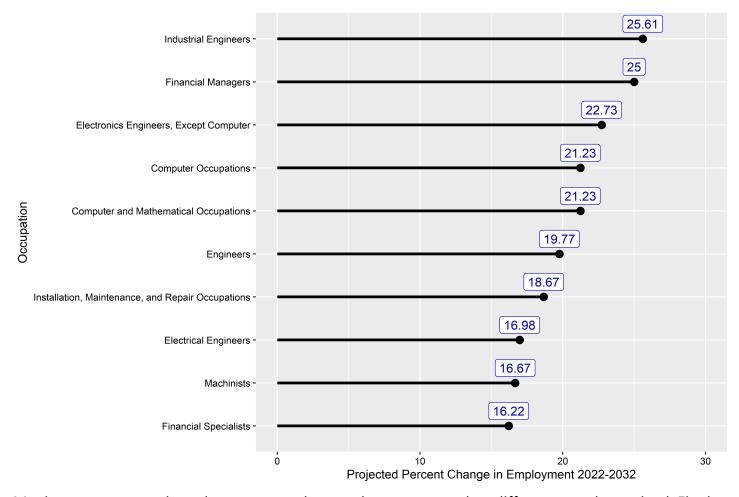
Tech

As previously noted, for the tech sector our evaluations will strictly be on the occupational level. This is due to the lack of distinct classifications of tech industries in Nevada. Evaluating this wouldn't be very useful. However, at the occupational level we can gain some insight on what growth in this sector may look like in Nevada over the next decade. In the charts below, we observe the top 10 occupations with the most projected growth in tech. One is for the occupations with the highest raw projected growth (# of jobs) and the other is a reflection of those with the highest projected percentage of growth.



Looking at these job growth projections, we observe that production occupations, assemblers and fabricators, and architecture and engineering occupations are projected to add the most jobs between the period of 2022-2032. The former two are the only occupations in the tech industry with a projection of adding 100+ jobs in Nevada over this time period, which would seem to indicate that occupations within this industry that are involved with production specifically may see the highest growth during this time.





Moving on to our projected percentage change, there are some key differences to be noticed. Firstly, half of the top 6 and 4 out of the total 10 occupations are some form of engineer. This makes sense, as engineering is a field that typically requires a post-secondary degree, and one that is quite difficult to get at that. This would seem to indicate that the job market in Nevada will continue to show a degree of favoritism for educated, specialized, individuals. This is especially noticeable when comparing these figures to those of the previous graph where production related occupations were significantly more prevalent, as these types of jobs tend to have a lower barrier for entry than something like engineering.



Included below are tables with a more detailed breakdown of these projections.

Occupation	Estimated Employment	Projected Employment	Projected Employment Change	Projected % Change	Projected Yearly % Growth Rate
Industrial Engineers	82	103	21	25.61%	2.31%
Financial Managers	20	25	5	25.00%	2.26%
Electronics Engineers, Except Computer	110	135	25	22.73%	2.07%
Computer and Mathematical Occupations	146	177	31	21.23%	1.94%
Computer Occupations	146	177	31	21.23%	1.94%
Engineers	344	412	68	19.77%	1.82%
Installation, Maintenance, and Repair Occupations	75	89	14	18.67%	1.73%
Electrical Engineers	53	62	9	16.98%	1.58%
Machinists	12	14	2	16.67%	1.55%
Financial Specialists	37	43	6	16.22%	1.51%

The above contains values for the ten tech occupations with the highest projected percentage growth in employment.

Occupation	Estimated Employment	Projected Employment	Projected Employment Change	Projected % Change	Projected Yearly % Growth Rate
Production Occupations	1514	1633	119	7.86%	0.76%
Assemblers and Fabricators	1192	1297	105	8.81%	0.85%
Architecture and Engineering Occupations	496	571	75	15.12%	1.42%
Engineers	344	412	68	19.77%	1.82%
Management Occupations	314	361	47	14.97%	1.40%
Computer and Mathematical Occupations	146	177	31	21.23%	1.94%
Computer Occupations	146	177	31	21.23%	1.94%
Electronics Engineers, Except Computer	110	135	25	22.73%	2.07%
Business and Financial Operations Occupations	155	176	21	13.55%	1.28%
Industrial Engineers	82	103	21	25.61%	2.31%

The previous table contains values for the ten tech occupations with the highest projected raw growth in employment.

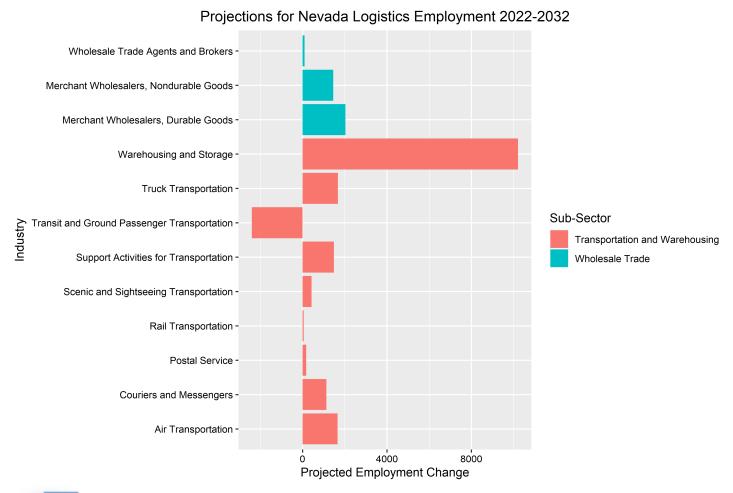
Logistics

Introduction

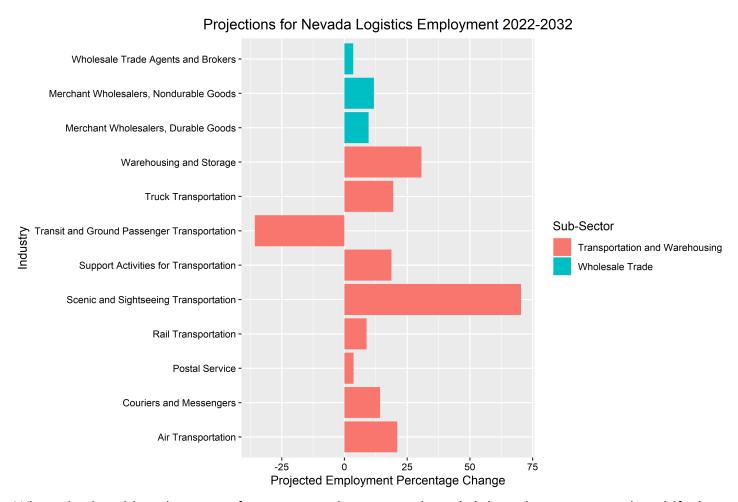
The occupations and industries that comprise logistics are largely those that involve the coordination of large-scale operations that deal with the systems that move goods and people around, as well as those that involve the storage of goods. For the state of Nevada there are two sub-sectors of logistics, transportation and warehousing and wholesale trade. Transportation and warehousing is, as the name would suggest, the transport and storage of goods that are moving their way along the supply chain. Wholesale refers to the sale of goods in large quantities to be sold by retailers, the middleman between production and store shelves.

Industry

For the industry level of logistics, we will once again be looking at things both in terms of projected raw numeric growth as well as in terms of percentage growth. These figures are for the industries in their entirety and are not broken down by occupation. The charts can be observed below.



In terms of raw growth, the logistics industry with the most growth projected is warehousing and storage by a considerable margin. This industry is projected to see over 10,000 jobs added over the next decade. With the state's labor market trying to accommodate a growing population, large amounts of growth in these industries seems intuitive. This goes hand in hand with the growth projected in wholesale, specifically that of durable goods (goods that are meant to last a significant amount of time). Perhaps the most noteworthy thing is the projected loss of approximately 2,500 jobs in transit and ground passenger transportation.



When viewing things in terms of percentage change, scenic and sightseeing transportation shifts into the top spot for projected growth at almost 70 percent over the next 10 years, or a rate of around 5.5 percent growth per year. This may indicate an emergence in tourism in the state as the population grows. The projected growth in warehousing and storage also remains high by this measure, with its labor force being projected to grow by around 31 percent. On the flip side, transit and ground passenger transportation projects to show losses of about 36 percent.



The table below provides a more detailed look at the figures from these projections.

Sub-Sector	Industry	Estimated Employment	Projected Employment	Projected Employment Change	Projected % Change	Projected Yearly % Growth Rate
Wholesale Trade	Merchant Wholesalers, Durable Goods	21085	23118	2033	9.64%	0.92%
Wholesale Trade	Merchant Wholesalers, Nondurable Goods	12398	13856	1458	11.76%	1.12%
Wholesale Trade	Wholesale Trade Agents and Brokers	2651	2744	93	3.51%	0.35%
Transportation and Warehousing	Air Transportation	7861	9518	1657	21.08%	1.93%
Transportation and Warehousing	Rail Transportation	587	639	52	8.86%	0.85%
Transportation and Warehousing	Truck Transportation	8609	10284	1675	19.46%	1.79%
Transportation and Warehousing	Transit and Ground Passenger Transportation	6742	4337	-2405	-35.67%	-4.32%
Transportation and Warehousing	Scenic and Sightseeing Transportation	605	1031	426	70.41%	5.48%
Transportation and Warehousing	Support Activities for Transportation	7918	9405	1487	18.78%	1.74%
Transportation and Warehousing	Postal Service	4666	4837	171	3.66%	0.36%
Transportation and Warehousing	Couriers and Messengers	7975	9109	1134	14.22%	1.34%
Transportation and Warehousing	Warehousing and Storage	33293	43513	10220	30.70%	2.71%

Occupations

For the sake of brevity, the occupational analysis for logistics will be limited to the occupations with the highest projected growth within each industry that comprises the logistics sector, meaning there will only be one single occupation (the occupation with the highest projected growth) from each industry. This is reflected in the tables below.

Industry	Top Growing Occupation (by Projected % Growth)	Estimated Employment	Projected Employment	Projected Employment Change	Projected % Change	Projected Yearly Growth Rate
Merchant Wholesalers, Durable Goods	Logisticians	20	28	8	40.00%	3.42%
Merchant Wholesalers, Nondurable Goods	Financial Managers	72	89	17	23.61%	2.14%
Wholesale Trade Agents and Brokers	Business and Financial Operations Occupations	48	53	5	10.42%	1.00%
Air Transportation	Flight Attendants	3116	4128	1012	32.48%	2.85%
Rail Transportation	Transportation and Material Moving Occupations	419	451	32	7.64%	0.74%
Truck Transportation	Bus and Truck Mechanics and Diesel Engine Specialists	160	193	33	20.62%	1.89%
Transit and Ground Passenger Transportation	Human Resources Specialists	15	10	-5	-33.33%	-3.97%
Scenic and Sightseeing Transportation	Personal Care and Service Occupations	25	46	21	84.00%	6.29%
Support Activities for Transportation	Aircraft Mechanics and Service Technicians	777	997	220	28.31%	2.52%
Postal Service	Statisticians	3	4	1	33.33%	2.92%
Couriers and Messengers	Light Truck Drivers	2996	3585	589	19.66%	1.81%
Warehousing and Storage	Business and Financial Operations Occupations	835	1193	358	42.87%	3.63%

In the above table, there are a few notable things about the projected top growing occupation for each industry. Firstly, in the industry of air transportation we see that the field of flight attendants is projected to grow by around 1,000 jobs, or around 32 percent. This is a substantial increase that could indicate that Nevada's growing population will need to accommodate an increase in flights to and from the state. Similarly, we see a projected increase of around 360 jobs, or around 43 percent, in business and financial operations occupations. If there is growth in population and in the economy, it would only make sense that there would need to be more individuals working in business or financial operations.



Industry	Top Growing Occupation (by Projected Jobs Added)	Estimated Employment	Projected Employment	Projected Employment Change	Projected % Change	Projected Yearly Growth Rate
Merchant Wholesalers, Durable Goods	Transportation and Material Moving Occupations	4270	4810	540	12.65%	1.20%
Merchant Wholesalers, Nondurable Goods	Transportation and Material Moving Occupations	4127	4670	543	13.16%	1.24%
Wholesale Trade Agents and Brokers	Sales and Related Occupations	1265	1334	69	5.45%	0.53%
Air Transportation	Transportation and Material Moving Occupations	6035	7497	1462	24.23%	2.19%
Rail Transportation	Transportation and Material Moving Occupations	419	451	32	7.64%	0.74%
Truck Transportation	Transportation and Material Moving Occupations	6328	7608	1280	20.23%	1.86%
Transit and Ground Passenger Transportation	Computer and Mathematical Occupations	11	7	-4	-36.36%	-4.42%
Scenic and Sightseeing Transportation	Transportation and Material Moving Occupations	227	398	171	75.33%	5.78%
Support Activities for Transportation	Office and Administrative Support Occupations	2409	2777	368	15.28%	1.43%
Postal Service	Office and Administrative Support Occupations	4070	4218	148	3.64%	0.36%
Couriers and Messengers	Transportation and Material Moving Occupations	6312	7364	1052	16.67%	1.55%
Warehousing and Storage	Transportation and Material Moving Occupations	25304	33090	7786	30.77%	2.72%

The table above details raw job growth projections, which are dominated by transportation and material moving occupations. 8 out of the 12 industries within logistics have this as the occupation within said industry with the highest projected number of jobs to be added between 2022 and 2032. This includes conveyor belt operators, industrial truck and tractor operators, and other individuals who aid in moving stock or freight. Obviously, these jobs are highly important to supply chains and the movement of goods and materials, so them being in high demand is not surprising.



Conclusion

In summation, most Nevada industries within tech and logistics have an outlook of decent to strong growth projected in the next decade. The Nevada tech industry is relatively small, and the projections indicate that it is likely to stay that way. However, the growth it may see is still significant, especially on the level of percentage changes in employment. Production occupations and engineering occupations in particular project to see growth within this time period.

Logistics has many industries and occupations that project to have considerable growth, both in terms of percentage growth and in terms of the number of jobs they project to add. Fields such as transportation and material moving are projected to have strong gains across an array of industries. Likewise, the warehousing and storage industry as a whole is anticipated to add around 10,000 jobs in the next 10 years. Nevada is a state that is growing fairly rapidly, and that is reflected within the projections for these sectors.

Acknowledgements

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Data Sources

These projections would not be possible without the participation of Nevada's employers in BLS surveys. Accurate employer information is essential to determining current economic conditions, employee pay, occupational staffing patterns, and much more. Thank you to all the employers who provide critical workforce information by responding to these surveys! If you have been asked to participate in a BLS survey, more information is available at https://www.bls.gov/respondents/.

Employment Projections are calculated internally by the Research & Analysis Bureau. Projections data for all states is published at http://www.projectionscentral.com/.

Data Manipulation and Visualization

This report was prepared with the use of R, RStudio, and RMarkdown. Specific packages used include the following:

tidyverse¹, data.table², scales³, RODBC⁴, RODBCDBI⁵, gt⁶, rmarkdown⁷, knitr⁸, pagedown⁹



Footnotes:

- 1. https://www.tidyverse.org/
- 2. $\underline{\text{https://cran.r-project.org/web/packages/data.table/data.table.pdf} \leftarrow$
- 3. https://cran.r-project.org/web/packages/scales/scales.pdf. https://cran.r-project.org/web/packages/scales/scales.pdf.
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