



Delaware Department of Education
Appendix: Labor Market Information (LMI) Review
 Delaware CTE Program of Study Application

Table 1: LEA Information

(see instructions on page 2, LMI Instructions & Guidance Document)

Career Cluster:	Information Technology
Career Pathway:	Network Systems
CTE Program of Study:	Cisco Certified Network Assistant
High School and LEA Name:	
County:	

Table 2: Labor Market Information (LMI) Benchmarks by Geographic Region

(see instructions on page 3, LMI Instructions & Guidance Document)

Region	Employment 2014	Employment Change 2012-22	Employment Growth 2012-22	Avg. Wage 2014
United States	132,588,810	15,628,000	10.8%	\$46,440
Delaware	412,140	40,900	9.4%	\$49,254
District of Columbia	674,650	57,930	7.7%	\$78,580
Maryland	2,557,510	189,370	6.1%	\$53,470
New Jersey	3,869,260	313,190	7.5%	\$53,920
Pennsylvania	5,653,840	467,940	7.7%	\$45,750
Virginia	3,648,490	534,210	13.5%	\$50,750

Table 3: LMI by Career Cluster & Pathway

(see instructions on page 4, LMI Instructions & Guidance Document)

					2012-2022			
Cluster Code	Cluster/Pathway Title	High Skill	High Wage	High Demand	Employment 2014	Employment Change 2012-2022	Employment Growth 2012-2022	Average Wage 2014
11	Information Technology Career Cluster	•	•	•	13,262	2,073	15.5%	\$86,953
	Rank Select Career Cluster by the Following Categories ->				(12 of 16)	(8 of 16)	(3 of 16)	(2 of 16)
11.1	Network Systems Pathway—Delaware	•	•	•	2,942	386	12.8%	\$82,613
	Rank Select Career Pathway by the Following Categories ->				(1 of 4)	(1 of 4)	(3 of 4)	(1 of 4)
	Network Systems Pathway - Mid-Atlantic States	•	•	•	149,380	26,256	17.0%	\$90,723
	Network Systems Pathway - United States	•	•	•	872,350	121,400	13.8%	\$81,816
11.2	Information Support and Services	•	•	•	1,481	344	17.0%	\$57,206
11.3	Web and Digital Communications	•	•	•	508	64	18.2%	\$81,440

Questions: LMI by Career Cluster & Pathway Analysis

(see instructions on page 4, LMI Instructions & Guidance Document)

1. How does the employment, the employment change, the employment growth rate, and the average wage for the identified career cluster compare to LMI for other clusters in the State of Delaware? Is the career cluster rated as high wage and high demand?

The Information Technology Career Clusters ranks in the top twelve (12) for employment, employment change, employment growth rate and average wage when compared to other clusters and is ranked second for average wage and third for employment growth compared to all other clusters. The career cluster rating is high skill, high wage and high demand.

2. How does the employment, the employment change, the employment growth rate, and the average wage for the identified career pathway compare to LMI at the cluster level? How does the identified pathway level LMI in Delaware compare to the pathway level LMI in the Mid-Atlantic and/or the United States? How does the identified pathway level LMI in Delaware compare to the other pathway level LMI in Delaware?

For the Mid-Atlantic States, average wage is approximately \$10,000 higher than in the state of Delaware for Network Systems workers, while employment growth, change and general employment numbers are also higher than the state average. The national numbers for salary are about the same as Delaware as is growth rate with exceptional change and general employment numbers in the industry.

Related pathways have similar growth, change and employment opportunity numbers with variations in wage earnings from less than \$60,000/year to over \$80,000/year.

Table 4: LMI by Standard Occupation Code (SOC)

(see instructions on page 6, LMI Instructions & Guidance Document)

					2012-2022			
SOC Code	Occupation Title	High Skill	High Wage	High Demand	Employment 2014	Employment Change 2012-2022	Employment Growth 2012-2022	Average Wage 2014
15-1143	Computer Network Architects	•	•	•	604	53	10.4 %	\$107,690
15-1152	Computer Network Support Specialists	•	•	•	493	70	12.3 %	\$62,610
15-1141	Database Administrators	•	•	•	466	40	8.9%	\$88,210
15-1122	Information Security Analysts	•	•	•	250	122	25.7 %	\$99,200
15-1142	Network and Computer Systems Administrators	•	•	•	1,129	101	10.1 %	\$71,950

Questions: LMI by Standard Occupation Code (SOC)

(see instructions on page 7, LMI Instructions & Guidance Document)

3. How closely related to the program of study are the identified occupations (SOCs)?

According to the Cisco Academy website, students obtaining a CCNA Certification are qualified for all identified occupations (SOCs).

“Cisco Certified Network Associate (CCNA) Routing and Switching is a certification program for entry-level network engineers that helps maximize your investment in foundational networking knowledge and increase the value of your employer’s network. CCNA Routing and Switching is for Network Specialists, Network Administrators, and Network Support Engineers with 1-3 years of experience. The CCNA Routing and Switching

validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks.” (<http://www.cisco.com/web/learning/certifications/associate/ccna/index.html>)

4. Are there adequate state-level projected job openings or employment growth projections at the occupation level to justify starting a new program? Do the occupations related to the program of study rank as high skill, high wage and/or high demand?

The number of job openings projected for the cluster and pathway as well as the related SOCs will support a Cisco Certified Network Assistant (CCNA) program of study. All related SOCs and the cluster and pathway are rated as high skill, high wage, and high demand jobs.

Table 5: LMI Supply Indicators by Secondary & Post-Secondary Levels
(see instructions on page 7, LMI Instructions & Guidance Document)

Program Code (CIP)	Program (CIP) Title	School	Program Completion/Enrollment			
			2010-11	2011-12	2012-13	2013-14
Total Secondary Programs of Study						
11.01802	Cisco Networking Academy	NA				
Total Post-Secondary Programs of Study						
11.0101	Computer and Information Sciences, General	Delaware Technical Community College	13	16	20	20
11.0101	Computer and Information Sciences, General	University of Delaware	32	39	31	38
11.1003	Computer and Information Systems Security/Information Assurance	Wilmington University	32	50	56	73
52.1206	Information Resources Management	Wilmington University	19	20	13	19
11.0901	Computer Systems Networking and Telecommunications	Delaware Technical Community College	10	11	8	15
52.1201	Management Information Systems	University of Delaware	34	37	28	20

Questions: LMI Supply Indicators by Secondary & Post-Secondary Levels

(see instructions on page 8, LMI Instructions & Guidance Document)

5. Is the Secondary Program articulated to or in any way related to the identified Post-Secondary Program(s)?

The Cisco Networking Academy is articulated with Delaware Technical Community College and negotiation for advanced standing is occurring with Wilmington University and the University of Delaware. As demonstrated above, there is a defined career ladder for careers in the IT field. Students who complete the Cisco program will have the opportunity to directly enter employment or continue their education in various fields.

6. How does the annual completion data at the Secondary and Post-Secondary level compare to the projected career pathway-related projected job openings in Table 4?

The numbers of enrolled students in IT related programs at the post-secondary level indicate that is a moderate interest area. The Cisco program in secondary schools will prepare students with the knowledge and abilities necessary to successfully participate in post-secondary programs and enter the workforce. This work will lead to students achieving articulated credit while in high school and lessening the amount of time required to enter the workforce.

Table 6: Other LMI Data Including Real-Time LMI (Questions/Analysis)

(see instructions on page 10, LMI Instructions & Guidance Document)

7. Are there additional LMI data (demand & supply) at the local, county, state, or Mid-Atlantic region that support starting a new program of study in this pathway? This includes additional occupations for which there is not an SOC, any other analysis of LMI data, and any additional information on demand & supply factors that influence employment which can include real-time labor market information.

Real-Time LMI Report will be published in the summer of 2016, prior to program start-up.