



NORTH FAR NORTH REGIONAL CONSORTIUM STRONG WORKFORCE PROGRAM REGIONAL PLAN 2016-2020

North Far North Community College Districts and Colleges

Butte-Glenn CCD

- Butte Community College

Feather River CCD

- Feather River College

Lake Tahoe CCD

- Lake Tahoe Community College

Lassen College CCD

- Lassen College

Los Rios CCD

- American River College
- Cosumnes River College
- Folsom Lake College
- Sacramento City College

Mendocino-Lake CCD

- Mendocino College

Redwoods CCD

- College of the Redwoods

Shasta-Tehama-Trinity Joint CCD

- Shasta College

Sierra Joint CCD

- Sierra College

Siskiyou Joint CCD

- College of the Siskiyous

Yuba CCD

- Yuba College
- Woodland College

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INTRODUCTION

California's Strong Workforce Program (SWP) is an initiative designed to expand career technical education (CTE) programs in the state's community colleges, further improve response to workforce demands, and deliver the skill sets required by our local employers.

To implement the SWP, seven regional consortia were established by the California Community College Chancellor's Office to provide leadership in the creation and implementation of vocational education.

The North Far North Regional Consortium is charged with coordinating the planning and implementation of the program in the North Far North (NFN) Region of California.

The NFN Region (Figure 1) spans from Sacramento, north to the Oregon border, and from the Pacific Ocean, east to the Nevada state line. This region is home to about 3.5 million residents in 22 counties, and includes 11 community college districts and 15 member colleges.

This plan represents the collaborative planning efforts of the community college districts, member colleges, K-14 education, workforce development, economic development and a broad spectrum of employers throughout the NFN Region. The process was led by the North Far North Regional Consortium.

Purpose

The purpose of the North Far North Regional Strong Workforce Program plan is to enhance and/or expand existing Career and Technical Education (CTE) programs and identify new programs and opportunities for collaboration with colleges and other partners within the region, including local industry.

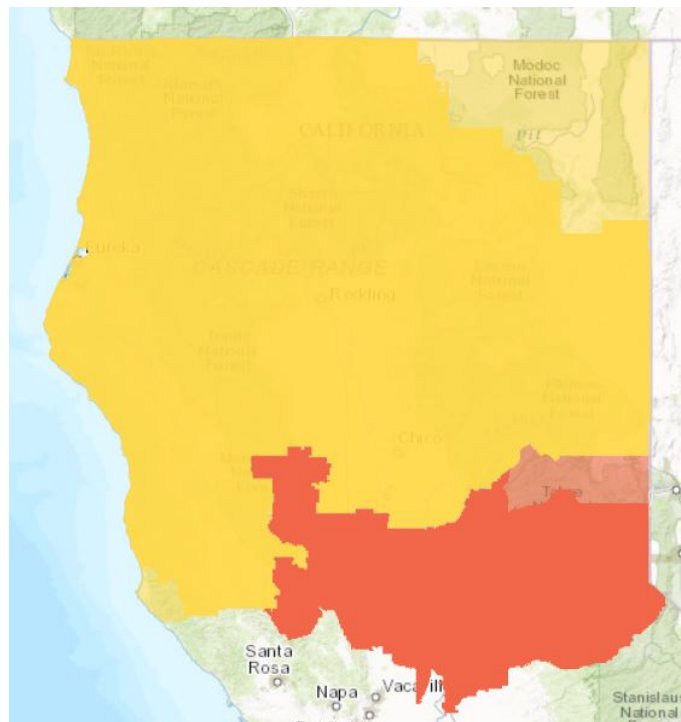


Figure 1. North Far North Region

WHO IS ENGAGED

Given that one of the goals of the SWP is to align activities throughout the region and with external partners, the NFN Regional Consortium determined that the best way to achieve this and expand our current collaboration was to make this plan readily available to all.

To accomplish this, the plan was built on a GIS/Story Map platform that uses a combination of maps, graphics, data, and narrative to tell the story visually (Figure 2). The NFN Regional Strong Workforce Program Plan's Story Map will be housed on the NFN Regional Consortium website, www.nfnrc.org.

The SWP Plan is intended to be a living document, open and available to the public. The NFN Regional Consortium involved their partners in the creation of the Story Map and will continually promote it and encourage partners to update information thereby providing everyone access to the most current activities and accomplishments.

Approximately 109 unique individuals were involved in the compilation of the NFN Region SWP Plan. This group includes representatives of the NFN Regional Consortium Members, Coordinating Council, Education, Workforce Development, Economic Development and Industry leaders, as noted on the next page.

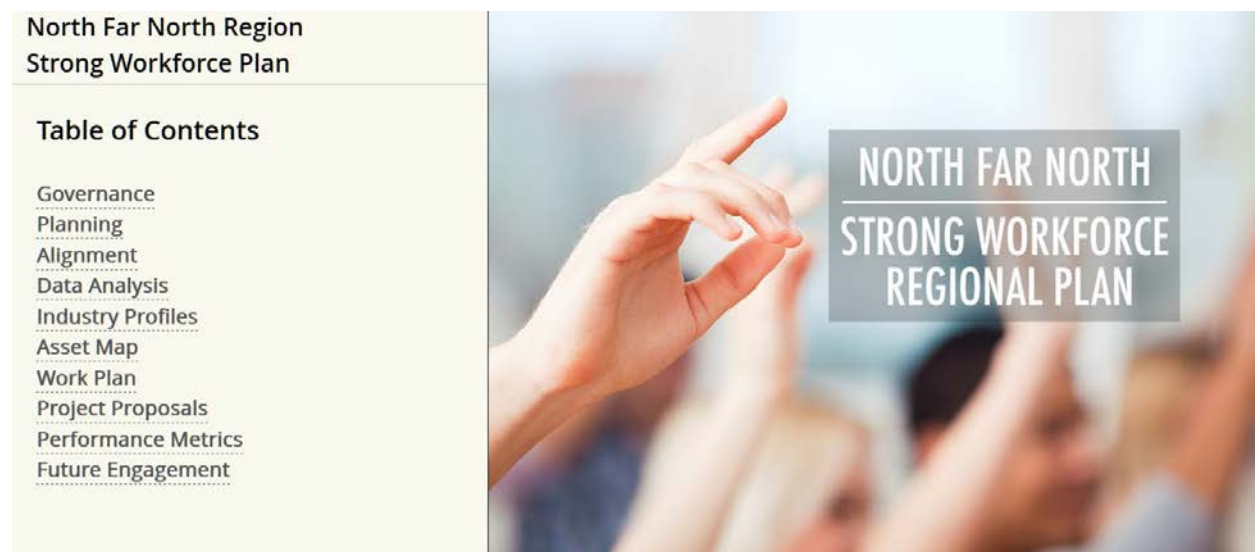


Figure 2. North Far North Strong Workforce Regional Plan is available online.

Consortia Members

Jerome Countee, AVP, American River College
Denise Adams, Dean, Butte College
Marla Gleave, Dean, College of the Redwoods
Robert Taylor, Dean, College of the Siskiyous
Torence Powell, AVP, Cosumnes River College
Derek Lerch, CIO, Feather River College
Monica Pactol, AVP, Folsom Lake College
Brad Deeds, Dean, Lake Tahoe College
Terri Armstrong, VP, Lassen College
Dennis Aseltyne, Dean, Mendocino College
Gabriel Meehan, AVP, Sacramento City
Eva Jimenez, Dean, Shasta College
Darlene Jackson, Director, Sierra College
Monica Chahal, Dean, Woodland College
Daren Otten, Dean, Yuba College

NFN Coordinating Council

Tessa Miley, NFNRC Co-Chair, Butte College
Jamey Nye, Assoc. Vice Chancellor, Los Rios CCD
William Duncan, President, Sierra College
Scotty Thomason, Pres. College of the Siskiyous
Debra Sutphen, VP Instruction, Sierra College
Linda Zorn, Sector Navigator, Butte College
Derek Lerch, CIO, Feather River College

Sector Navigators

Linda Zorn, Health
Jose Anaya, Advanced Manufacturing
Peter Davis, Adv. Transportation & Renewables
Nancy Gutierrez, Ag, Water & Environ. Tech.
Jim Caldwell, Energy, Construction & Utilities
Jeffery Williamson, Global Trade & Logistics
Stephen Wright, ICT & Digital Media
Sandra Slivka, Life Sciences & Biotech
Philip Sutton, Retail, Hospitality, Tourism
Charles Eason, Small Business

Deputy Sector Navigators (North)

Steve Dicus, Advanced Manufacturing
Carol Pepper-Kittredge, Adv. Mfg/Maker Space
Carrie Peterson, Ag, Water & Environ. Tech.
Brooks Ohlson, Global Trade & Logistics
Sue Hussey, Health
Steve Lithicum, ICT & Digital Media
Cornelius Brown, Small Business

Deputy Sector Navigators (Far North)

Charlie Pooler, Advanced Manufacturing
Heather Kelnhofer, Ag, Water & Environ. Tech.
Angela Cordell, Global Trade & Logistics
Trudy Old, Health
Myron Curtis, ICT & Digital Media
Rachelle Modena, Small Business

Other Key Talent and Stakeholders

Marilyn Ashlin, Foundation
Tanya Meyer, Far North Region
Theresa Milan, Labor Market Data Provider
Teri Munger, North Region
Orion Walker, Prop 39
Maureen White, Chancellor's Office
Workforce Development Boards (8)
Adult Education Block Grant Partners (10)
County Offices of Education (22)
One-Stop Operators
Economic Development Organizations
Industry Leaders

How Planning Was Organized

The initial planning meeting for the NFN Region SWP Plan was held in August, 2016. Meetings continued to be held each month, rotating locations throughout the region, and were supplemented with conference calls, webinars, and focus groups.

Regional Meetings

Four regional meetings were held between August and December 2016 at Los Rios, Butte College, Shasta College, and via conference calls. Attendees were there to 1) learn about the SWP Plan, 2) how it is to align with current initiatives and activities, 3) where to find data and other resources of interest to them, and 4) participate in discussions about goals, projects, and investments.

Project Website

A project-specific website was built to keep all participants and interested parties informed of the planning process, progress, and to share data and other resources. The website (www.nfnswp.com) was updated regularly throughout the planning process with: a schedule of meetings and webinars; copies of presentations; guidelines; legislation; industry research; data sources, and more. 180 interested parties registered on the website to receive notices and updates.

Webinars

Eight webinars were held between November 2016 and January 2017 to present the status of the draft NFN Region Strong Workforce Program Plan and solicit input.

Focus Groups

Industry-specific focus group meetings were convened in the NFN Region to garner input on and validate the in-demand occupations and skill sets employers want and need to be successful.

Presentations and Interviews

Each of the six Workforce Development Boards (WDB) in the NFN Region were contacted and interviewed about their priority industry sectors, with whom and how they collaborate, what occupations and skills they see are in demand, and initiatives they participate in.

Multiple calls and/or meetings were held with Sector Navigators and Deputy Sector Navigators in the NFN Region through the course of developing the plan. They were interviewed about their activities, collaboration, initiatives, and any ideas they to improve industry engagement, regional partnerships, etc. Sections of the draft plan were sent for their review and comment.

Information gathered through all these various methods was used to formulate the NFN Region Strong Workforce Program Plan.

Plan is Aligned with Mandated Partners

The sector priorities and projects proposed for 2016-2017 NFN Region Strong Workforce Program Plan are “informed by, aligned with, and expand upon the activities of existing workforce and educational region partnerships.”

The industry sectors prioritized by the NFN Region represent the major economic drivers of the region. Throughout the planning process, personal meetings, and telephone interviews, regional partners were asked and confirmed that their goals, programs and activities are aligned with these industry sectors. Figure 3 shows that each of the NFN Region priority industry sectors are also identified by our external partners and stakeholders as priorities.

In addition to industry sectors, NFN Region colleges and partners participate in over 40 shared programs, initiatives, and activities. They are included among the NFN Regional Assets (pg. 25).

Industry Alignment within the NFN Region					
Industry	Adv Mfg	Ag WET	Health	ICT DM	Small Biz
North / Far North Region	◆	◆	◆	◆	◆
NoRTEC WDB / One Stops	◆	◆	◆	◆	◆
NCCC WDB / One Stops	◆	◆	◆	◆	
SETA WDB / One Stops	◆	◆	◆	◆	
Golden Sierra WDB	◆	◆	◆	◆	
Yolo WDB	◆	◆	◆	◆	
Adult Ed Block Grant			◆		◆
K-14 Pathways	◆	◆	◆	◆	◆
Economic Development	◆	◆	◆	◆	◆
Next Economy Cluster	◆	◆	◆	◆	

Note: Global Trade is a business *function* vs. an industry sector and as such crosses multiple industry sectors including those listed here.

Figure 3. NFN Region and external partners' priority industry sectors are aligned

DATA ANALYSIS

The NFN Region Labor Market data was prepared by the Los Rios Center of Excellence. The occupational data is organized by industry cluster and provides regional labor market supply and demand data for occupations that are relevant to the NFN Region's priority industry sectors and to community college-level education and training.

Demand

Five-year estimates for occupations relevant to the NFN Region's primary and emergent industry sectors are presented in the table below. More detailed industry and occupation data for the NFN Region can be accessed on the industry profile pages that follow.

Five-Year Projected Growth for Select Occupations						
SOC Major Occupational Groups	2015 Jobs	2015 - 2020 Change	2015 - 2020 % Change	2015-20 Avg Annual Openings	2015-20 Total Openings	Median Hrly Earnings
11 Management	18,088	(816)	(4.7%)	438	2,191	\$33.21
13 Business and Financial Operations	18,404	1,166	6.0%	528	2,638	\$29.84
15 Computer and Mathematical	34,035	2,547	7.0%	1,092	5,463	\$38.39
17 Architecture and Engineering	6,053	302	4.7%	213	1,065	\$28.87
19 Life,Physical and Social Science	10,889	292	2.6%	479	2,396	\$26.30
27 Arts, Design, Entertainment, Sports, Media	5,919	255	4.1%	258	1,288	\$19.61
29 Healthcare Practitioners and Technical	50,177	6,039	10.7%	2,402	12,009	\$28.57
31 Healthcare Support	28,393	5,560	16.4%	1,864	9,321	\$15.79
35 Food Preparation, Serving, Personal Care	2,222	206	8.5%	84	414	\$18.33
41 Sales and Related	13,193	595	4.3%	423	2,114	\$26.52
43 Office and Administrative Support	2,852	44	1.4%	84	424	\$22.51
45 Farming,Fishing, Forestry	1,532	(46)	(3.1%)	43	214	\$21.13
47 Construction and Extraction	30,697	587	1.9%	886	4,433	\$25.41
49 Installation, Maintenance, Repair	33,589	2,366	6.6%	1,393	6,963	\$23.54
51 Production	11,270	732	6.1%	449	2,258	\$20.19
53 Transportation and Material Moving	35,402	2,286	6.1%	1,278	6,391	\$31.98
	302,714	22,115	6.8%	11,914	59,580	\$25.86

Source: Los Rios Center of Excellence

Figure 4. Estimated five-year growth for major occupational groups in the NFN Region

Supply

The supply of certificates and degrees awarded during 2014-2015 is presented in the table below and includes the number of students completing, number of colleges, and awards.

Supply of Certificates and Degrees Awarded 2014-2015					
Sector	Students Completing Courses	At Number of Colleges	Local Certificates Awarded	Approved Certificates Awarded	Associate Degrees Awarded
Ag, WET	1,724	15	41	116	136
Adv. Manufacturing	15,063	13	352	384	159
Global Trade	4	1	0	0	1
Health	5,392	15	156	338	871
ICT/DM	8,701	15	289	484	1,637
Small Business	9,482	15	566	674	1,782

Figure 5. Supply data sourced from Launch Board, 2014-2015 data

REGIONAL INDUSTRIES

The wages earned by those employed in the in-demand occupations of the priority and emergent industry sectors of the NFN Region are substantial. The median hourly wage for occupations in these industry sectors is two or three times as much as the living wage for the NFN Region, which is depicted by the gray line on the chart to the right.

Of course, wages paid for specific occupations within these industry sectors varies. For example, in the health sector wages range from \$50.35 for RNs to \$11.33 for Home Health Aides.

The treemap below (Figure 6) shows the top 20 in-demand occupations for all these industry sectors along with the median hourly wage paid in the NFN Region. The estimated number of total openings between 2015 and 2020 is represented by the size of the rectangle. For example, there is a high demand for RNs (approximately 6700 total openings over the five years). On the other end of the scale, there is expected to be about 650 openings for Sales Managers.

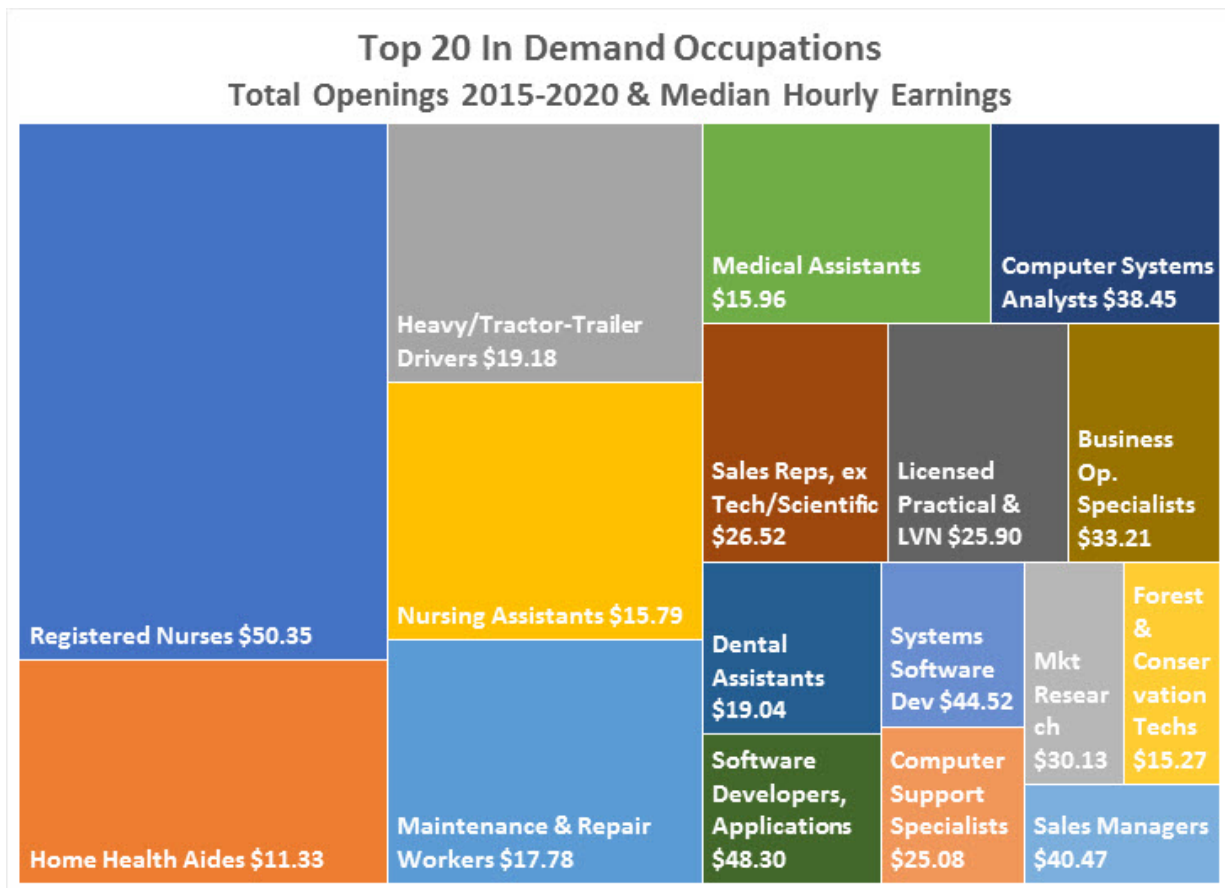


Figure 6. Top 20 In-Demand Occupations of NFN Region Priority Sectors. Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Provided by the Centers of Excellence

On the following pages, a similar treemap depicts the top in-demand occupations and median earnings in each NFN Region priority industry sector. A complete database of in-demand occupational information and industry job growth projections for the NFN Region was prepared by the Los Rios Community College District's Center of Excellence and available at www.NFNWP.com.

The following industry profiles present a description of the industry sector, occupation and skills, job growth projections, current trends and economic importance of the industry to the NFN Region economy. This information is based on the data collected and is supplemented with input from regional employers, workforce development boards, and other partners.

ADVANCED MANUFACTURING

Advanced Manufacturing can apply to nearly every successful, competitive manufacturer. Any production-based business that is progressive, uses new materials, or pioneers new processes and innovative technologies is considered part of the advanced manufacturing industry sector. Typically, advanced manufacturing includes aerospace, chemical, computers, electronics, plastic products, food, transportation, and machinery manufacturing—which are generally the industry sectors that readily adopt and apply new technologies, such as:

- the latest computer technologies for modeling, simulation, analysis
- precision and custom manufacturing processes to scale their production
- robotics and other automation systems to monitor and control
- cutting edge materials, technologies, and processes

Economic Impact to the Region

There are approximately 930 businesses in the advanced manufacturing industry sectors in the North Far North Region employing over 28,000 workers. Employment in these industry sectors grew by a net 8% over the 2010-2015 five-year period, and demand is expected to continue over the next five-year period (2015-2020).

Most of the 930 firm are in food processing, chemical manufacturing, machinery and machine shops, computer and electronic products, electrical equipment, and software publishing.

The top 25 employers account for 70 percent of the jobs. The largest employment is in electronic computer manufacturing (2,600).

The greatest job growth from 2016-2020 is expected in: petroleum and other chemical products, turbines and turbine generators, food manufacturing, packaging machinery, instruments, semiconductor machinery, other electronic components, plastic products, welding equipment, machine tools and other industrial machinery. Each of these sectors are expected to increase employment by at least 20 percent (about 1,200 jobs).

Average wages paid by these growing businesses range from \$30,000 to \$118,000 or a median annual wage of \$56,400. The living wage in the North Far North is estimated at \$22,400 (one working adult, no children).

The success of these employers will have a significant impact on the North Far North economy. The economic impact of 100 new jobs in the region's manufacturing sector could be as much as \$44 Million. This includes direct and indirect payroll, value of new construction, local and state property and sales taxes.

Occupation and Skills Demand

For years, manufacturers have reported that there is a significant gap between the talent they need to maintain and grow their businesses and what they can find. This has been true across the nation, not just in California or in the North Far North Region.

A fourth industrial revolution—referred to as Industry 4.0—is upon us; manufacturing is become a more digitally-oriented culture. Technological innovations are quickly changing the workplace; e.g. advanced robotics, artificial intelligence, cyber security, cloud computing, sensors and advanced analytics (customer markets, logistics, and machinery maintenance), 3D printing, PLC programming, e-commerce, and more.

These advancements are changing manufacturing operations and processes, and skills required of employees. The trend is expected to not only continue but accelerate, creating demand for more workers and fundamentally new skills. We can expect to see entirely new occupations develop, occupations for which some level of science, technology, engineering and math will be a priority.

Aggravating the talent crunch is the loss of older and more experienced employees due to retirement and the difficulty in finding younger talent to replace them.

Production occupations account for over 50 percent of the total manufacturing workforce, unmet demand in these occupations present a significant challenge for the North Far North Regional employers.

Through the outreach conducted while developing the North Far North Regional Plan, employers expressed the following facts and opinions:

- There are many openings for CNC positions that need to be filled.
- Need more mechatronic program/certificates in the region.
- Would like to see more manufacturing fundamentals, such as electricians training.
- Apprenticeships, hands-on learning, and on-the-job training are components that need to be a part of advanced manufacturing education; as one employer in the region stated: “If you don’t have hands-on experience with tools and a workpiece, a SolidWorks certification—or any sort of similar certification—is pretty much worthless.”
- Industry-recognized certifications are often preferred over degrees.
- We need to signal to children and families the excellent career opportunities in manufacturing and show what today’s manufacturing environment looks like. This will help to increase the worker pipeline and lead to more CTE. “Americans consider manufacturing among one of the most important domestic industries for maintaining a strong national economy, yet they rank it low as a career choice for themselves [or their children]” (The Skills Gap in U.S. Manufacturing 2015 and Beyond; by Deloitte).

Degree and Certificate Offerings

Community colleges in the NFN Region currently offer 30 different Career and Technical Education for advanced manufacturing. The proposed investments will add new programs, expand and improve existing programs and help to meet industry's five-year (2015-2020) job openings, which are estimated to be 1,674. The top 20 in-demand occupations are presented below. A complete database of in-demand occupational information and industry job growth projections for the NFN Region was prepared by the Los Rios Community College District's Center of Excellence and available at www.NFNSWP.com

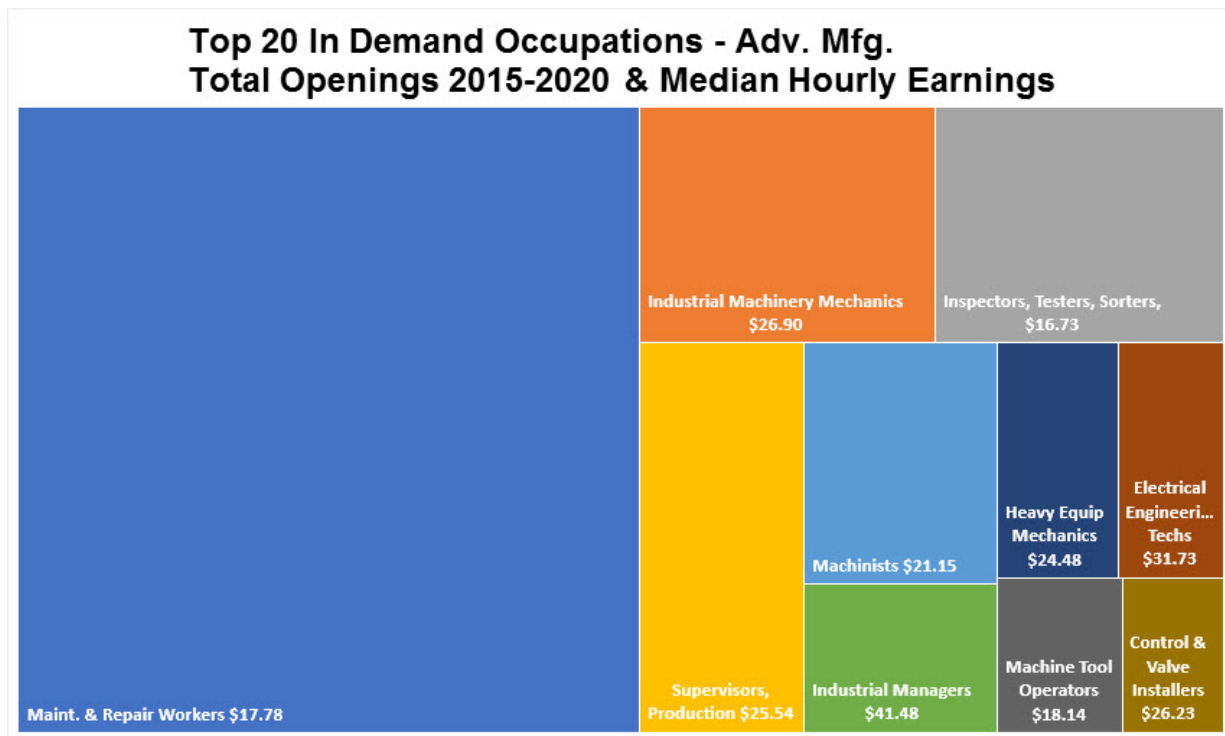


Figure 7. Top 20 In-Demand Occupations of NFN Region Advanced Manufacturing Sector. Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Provided by the Centers of Excellence

AGRICULTURE, WATER & ENVIRONMENTAL TECHNOLOGIES

With the influence and use of a variety of sciences and technology, today's agriculture industry goes beyond farming and ranching. For the purposes of this report, agricultural activities are broken down into four specific clusters within the sector. These four clusters and examples of business types and activities are listed here.

- **Support:** equipment operators, mechanic services, veterinary services, forest and conservation activities, extermination and pest control
- **Production:** crop, vegetable and animal farming, poultry and egg production, aquaculture
- **Wholesale Trade:** including farm and garden machinery and equipment, packaged and fresh food merchants, food wholesalers (dairy, poultry, fish, seafood, meat, fruit, vegetable), grains and livestock
- **Water and Environmental Services:** water treatment, environmental consulting and planning, irrigation, hazardous materials, septic service, inspectors, environmental science and protection

Economic Impact to the Region

There are approximately 5,500 businesses in the Agriculture, Water and Environmental Technology (Ag/WET) industry sector in the NFN Region. These companies employ about 59,400 workers. Employment in these industry sectors grew by a net 9% over the 2010-2015 five-year period, and demand for workers is expected to be grow at a slightly slower pace (5%) during the next five-year period (2015-2020).

Crop production is by far the largest sub-sector, accounting for nearly 2,000 establishments and 17,500 workers who are earning on average \$34,300. This industry sector employs a range of occupations including more skilled jobs related to soil preparation, e.g. fertilizer, pesticides, and water management.

The top ten sectors account for 79% of the jobs. Besides crop production these jobs are in farm labor contractors, post-harvest crop activities, vet services, scientific and technical consulting, and environmental consulting services.

The greatest job growth from 2015-2020 is expected in the wholesale sub-sectors, including farm supplies (34%), grain (26%), grocery (22%), meat products (20%), and wine/distilled alcoholic beverages (15%). About 40% of U.S. wineries are located in California, primarily Northern California.

On the technical side, employment in scientific and/or technical consulting and geographic surveying is expected to increase by 22% and 21% respectively.

Adding new workers and training to advance the careers of existing workers in this industry sector will have a significant effect on the North Far North economy. The annual economic impact from the wages on 100 new Ag/WET jobs at an annual wage of \$39,466 could be as much as \$25 million. This includes direct and indirect payroll, property and sales tax.

Occupation and Skills Demand

Industry input from the Ag/WET sector comes from individual and industry listening sessions and educators' participation in local and regional industry groups. The information from these primary sources is supplemented with industry research from regional and national sources.

Finding qualified workers is a challenge that many employers experience, expect will continue and impede their ability to grow their business.

Technical skills are most often mentioned as lacking by Ag/WET employers. While a high school diploma is often a sufficient education attainment, experience is favored because of the technical know-how that comes with it.

Many Ag/WET employers would be willing to partner with local schools and colleges on job training programs, work experience, or internships to students. Often, they just don't know how to go about accessing a program.

Advancements in agriculture technology have dramatically changed the skills required for some employment. Automated machinery is used at various stages throughout prep, growing, harvesting and processing. Scientific skills and knowledge are used to help farms improve water and electrical efficiencies and soil management. It is not uncommon for farms and ranches to use drone aircraft to monitor crops and herds.

The geophysical surveying and similar industries are also faced with rapidly changing technology. New equipment and software can render companies obsolete and require ongoing training to keep their employees. Companies offering surveying and other scientific services employ highly-trained professionals who are in high demand.

Degree and Certificate Offerings

Community colleges in the NFN Region currently offer 31 different Career and Technical Education for agriculture, water and environmental technologies. The proposed investments will add new programs, expand and improve existing programs and help to meet industry's five-year (2015-2020) job openings, which are estimated to be nearly 600. The top 20 in-demand occupations are presented below. A complete database of in-demand occupational information and industry job growth projections for the NFN Region was prepared by the Los Rios Community College District's Center of Excellence and available at www.NFNSWP.com

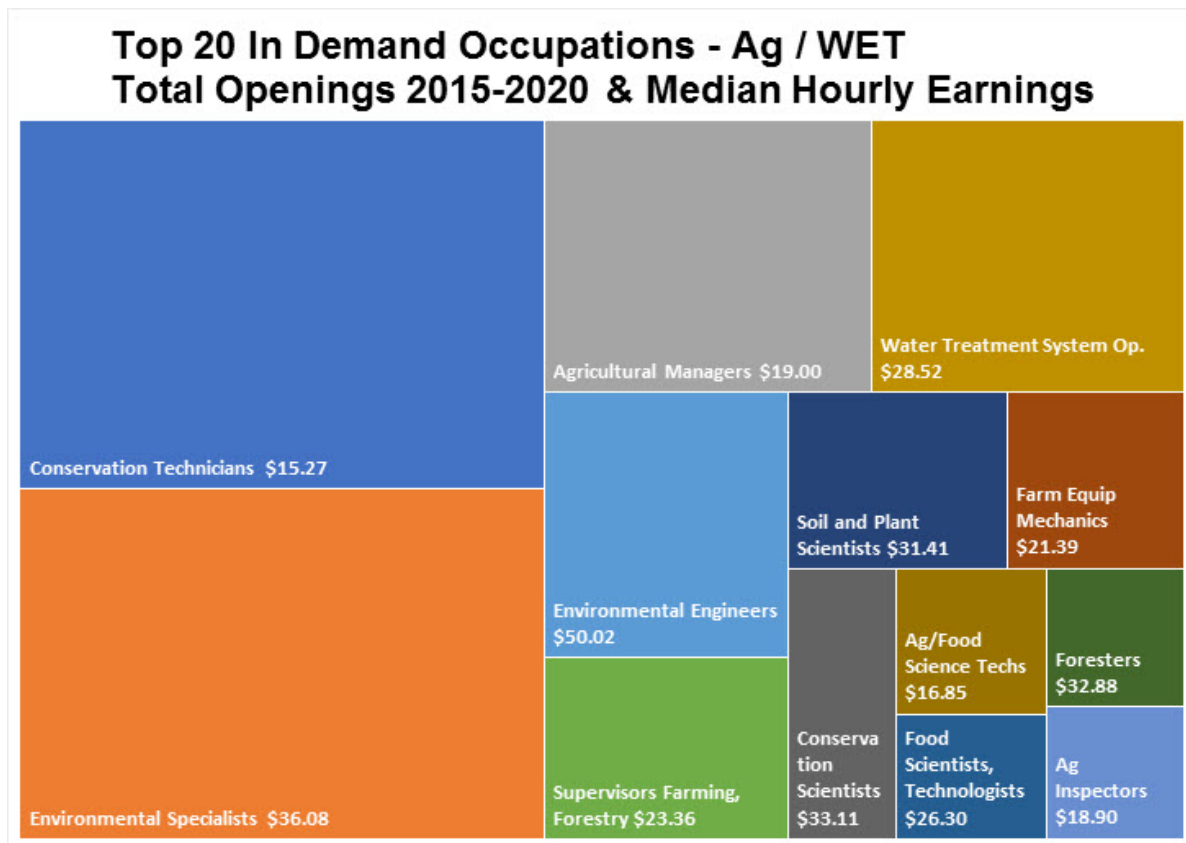


Figure 8. Top 20 In-Demand Occupations of NFN Region Agriculture, Water and Environmental Technologies Sector. Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Provided by the Centers of Excellence

GLOBAL TRADE

Global Trade is a functional area of a company and crosses many industry sectors. In the North Far North region these sectors include primarily agriculture and manufacturing. Exporting activities are generally spread among multiple divisions or departments within a company—sales, marketing, production, purchasing, accounting and finance—therefore, international trade requires integrating specialized skills and knowledge into the more typical occupational skills.

An important aspect of international trade is Global Competency which refers to the knowledge and understanding of world cultures; the skills to work with people from diverse linguistic and cultural backgrounds; the ability to effectively communicate, verbally and non-verbally, with diverse audiences and in culturally diverse settings; and the expertise to determine and use the appropriate technology and media for marketing and communications.

In 2013 the Northern California World Trade Center convened partners and community leaders from more than 30 regional jurisdictions and economic development organizations to develop a strategic export growth plan for the region called the California Capital Region Export Plan. A goal that resulted from this work is to “Grow the global fluency of the capital region.”

Economic Impact to the Region

U.S. Department of Commerce International Trade Administration (ITA) reported an increase of over \$1Billion in new export sales in 2015 in the north state. These export sales were generated by the same industry sectors that the North Far North has identified as primary and emergent.

The ITA also estimates that for every \$1Million in new export trade, approximately five jobs are either retained or created. It is critical that the workforce is prepared with the skills to fill these jobs.

Evidence suggests that as exports grow, more and higher-paying jobs are created. Workers in exporting industries earn an average of 18% to 20% more than their counterparts in non-export businesses (California Capital Region Export Plan).

The top products that are exported from the NFN Region are computer equipment, ag products, precision instruments and other manufactured products—identified as NFN Region’s priority and emergent industries.

Occupation and Skills Demand

Ag employers—one of the most important economic sectors and among the largest exporters in the NFN Region—have consistently said that they would like employees to come to them with basic international trade knowledge or aptitude.

The job skills required to meet international sales and market demands of the NFN Region include the ability to learn and/or overcome: cultural and language barriers; negotiating and contracting; complex regulations dealing with customs, trademarks, duties, taxes, and different agencies; financing and payment collections.

Degree and Certificate Offerings

Folsom Lake College offers two Certification Courses for Global Trade & Logistics: International Exporting and Global Trade Business. The Far North Region DSN is currently planning a number of new and expanded Global Trade and Global Competency curriculum that will be folded into existing course offerings and eventually provide Certification. Shasta College is updating its International Trade Class curriculum with the hopes of being able to add a Certification.

The proposed investments will add new programs, expand and improve existing programs and help to meet industry's five-year (2015-2020) job openings. The top 20 in-demand occupations are presented below. A complete database of in-demand occupational information and industry job growth projections for the NFN Region was prepared by the Los Rios Community College District's Center of Excellence and available at www.NFNSWP.com

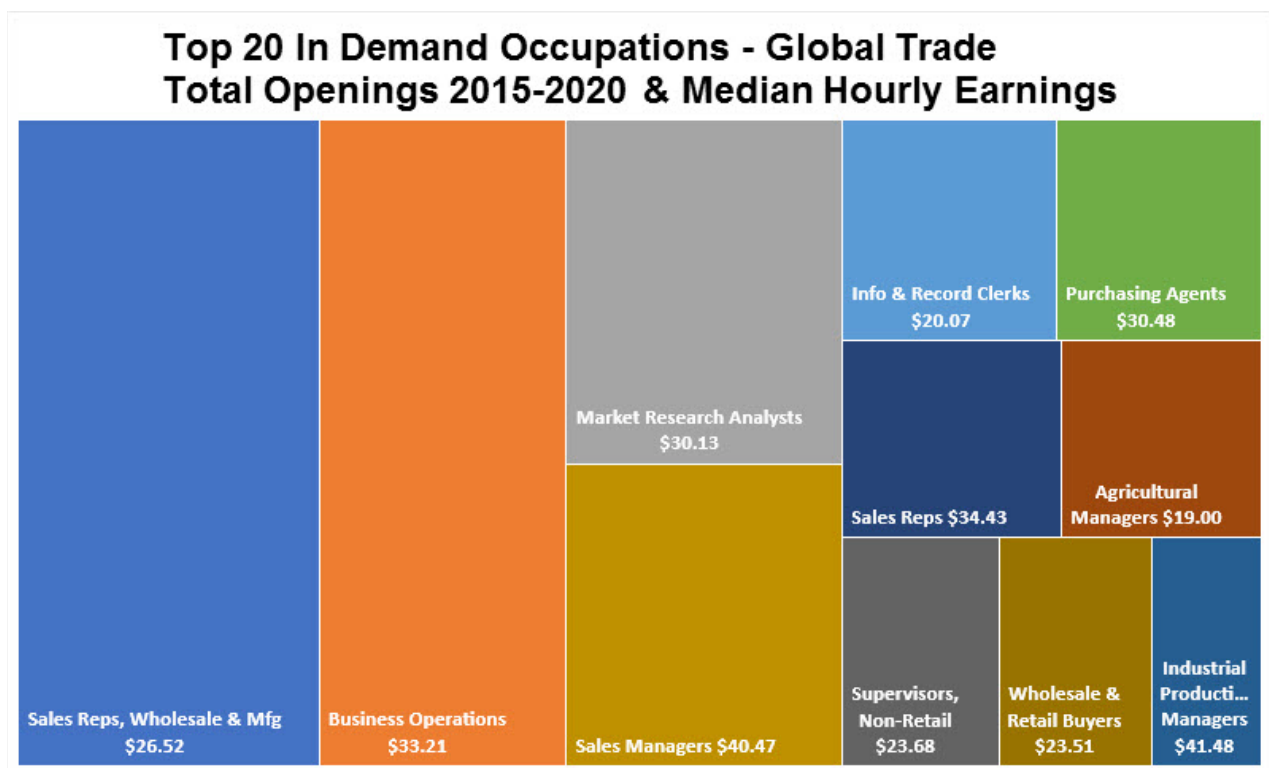


Figure 9. Top 20 In-Demand Occupations of NFN Region Global Trade & Logistics Sector. Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Provided by the Centers of Excellence

HEALTHCARE

The healthcare sector is a significant employer throughout the North Far North region. There is demand for workers and expanded services in both rural and urban areas of the region. With the large aging baby boomer population and medical advancements enabling many people to live longer and have more active lives, this industry sector and its related occupations will continue to be an important industry sector in the North Far North Region for many years to come.

Included in this industry sector are hospitals, outpatient care centers, medical and diagnostic labs, physician offices, nursing and residential care centers, home health and other care services.

Economic Impact to the Region

There are an estimated 6,600 businesses in the health care industry sector in the North Far North Region employing about 138,100 workers. Employment in these industry sectors grew by a net 10% over the 2010-2015 five-year period, and demand is expected to continue at an even greater pace during the 2015-2020 five-year period (13%).

Offices of physician, dental, and other health care service providers make up most of the establishments (4,724); followed by hospitals and skilled care facilities (1,092); labs, diagnostic centers and home health services (431); and outpatient care and surgical centers (371).

Hospitals and skilled care facilities employ half of the workers in the health care industry sector. Physician, dental and other offices employ about 30%; outpatient care and surgical centers account for 12% and the remaining 8% are employed in labs, diagnostic centers, and home health care services.

All sectors are expected to add jobs between 2016 and 2020. The greatest job growth will be in outpatient care and surgical centers (29%) followed by labs, diagnostic centers and home health services (10%). Employment in hospitals and skilled care facilities is expected to increase by 7 percent.

Average wages paid in this industry range from \$22,000 (assisted living facilities) to \$126,300 (HMO medical centers) or a median annual wage of \$45,300. The living wage in the North Far North is estimated at \$22,400 (one working adult, no children).

There are obstacles faced by health care providers in both urban and rural areas of the region. Among them are cultural, ethnic, social, education and economic levels. For example:

- Rural populations are generally older, have chronic conditions that require more services.
- The ratio of healthcare workers to residents in rural areas is lower than in urban areas.
- Attracting and retaining healthcare workers is more difficult in the NFN region because of wage the differential between rural and urban areas. Healthcare practitioners and technical workers in rural areas of the North Far North region can earn as much as 19% less than those in urban areas; RNs in rural areas earn as much as 32% less than those in urban areas.

- The more urban centers of the NFN region are also faced with wage competition from Bay Area communities (EDD, Labor Market Information) which adds to the demand for healthcare professionals.

Adding new healthcare workers and training to advance the careers of existing healthcare workers in the NFN region will have a significant effect on the regional economy. The annual economic impact from wages on 100 new health care jobs at an annual wage of \$45,300 could be as much as \$11.8 million. This includes direct and indirect payroll, property and sales taxes.

Occupation and Skills Demand

Industry input from the healthcare sector comes from the Statewide Health Workforce Initiative Industry Advisory Committee which meets three times a year. This is supplemented with individual and small group listening sessions and educators' participation in local and regional industry groups. Industry partners have been quite vocal about their workforce needs and the disconnect between secondary data sources and reality. For example:

- There are much larger staff shortages—due to the increase in demand for health services from the aging population and staff retirements—than what state and federal data resources show, primarily because the data collected is not current.
- Industry is asking community colleges to increase student enrollment in healthcare programs, particularly those that require clinical sites. Enrollment cannot be increased until there are more instructors and additional clinical spaces for students.
- The shortage of RNs is a common issue. However, there is a critical need in the medical industry for Specialty RNs; e.g. emergency department, critical care, labor and delivery, peri-operative, etc. This demand is not seen in the typical data reports, there is no specific SOC for these occupations. In a small sampling of the over 1,100 job openings in NFN regional hospitals on January 12, 2017, over 30% of the medical career jobs were for Specialty RN positions such as those noted above.
- Technology advances require new and upgraded skills; for example, advanced modalities in imaging, e.g. CT, MRI, IR. These specific occupational skills are not reflected in the job demand as reported by secondary data sources.
- The need for qualified assistants (medical and physical therapy among others) is another issue throughout the NFN region. Data sources often show the Sacramento region has an oversupply. However, according to industry, the programs that are offered by private education institutions are inadequate. They are producing unqualified graduates that do not satisfying employer expectations or needs. Industry's only option is the hire and train on their own which is costly and time consuming. The feedback from the medical community is that it would be supportive of expanded MA and PTA programs at the community colleges.
- Additional occupations currently in demand and expected to have greater demand in the coming years are: Patient Navigators, Coordination Clerks, Case Managers, and Community Health Workers, an emerging profession. Community Health Workers (SOC 21-1094) are liaisons or intermediaries between healthcare workers, social services, and individuals in the community. They facilitate access to services, advocate, provide information and education to residents to

help them access proper healthcare. In urban and rural communities with limited resources, jobs for community health workers are expected to increase.

- There is also a big demand for health care soft skills, e.g. communication, active listening, workplace ethics, team building, embracing diversity, demonstrating compassion, etc. The NFN region launched a pilot program in late 2016 to address this in the high schools.

Degree and Certificate Offerings

Community colleges in the NFN Region currently offer 43 different Career and Technical Education for the healthcare industry. The proposed investments will add new programs, expand and improve existing programs and help to meet industry's five-year (2015-2020) job openings, which are estimated to be over 4,000. The top 20 in-demand occupations are presented below. A complete database of in-demand occupational information and industry job growth projections for the NFN Region was prepared by the Los Rios Community College District's Center of Excellence and available at www.NFNSWP.com

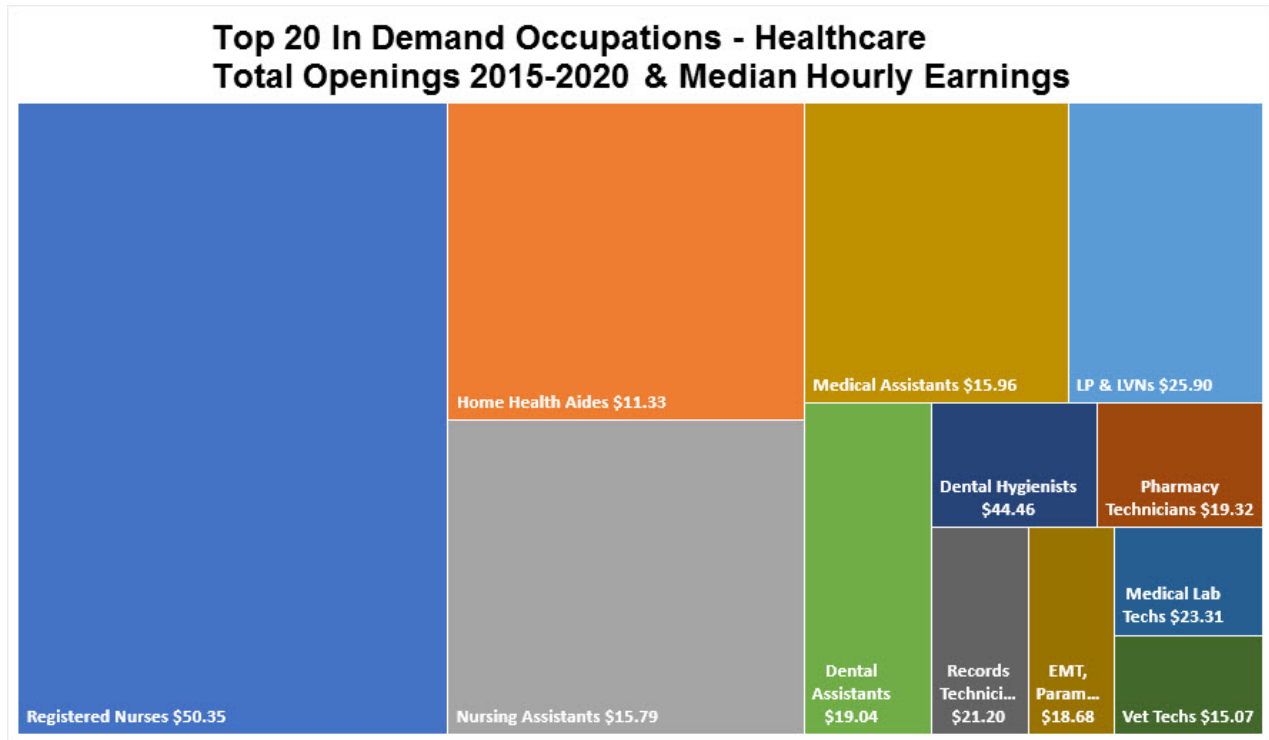


Figure 10. Top 20 In-Demand Occupations of NFN Region Health Care Sector. Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Provided by the Centers of Excellence

ICT & DIGITAL MEDIA

The Information and Communications Technology (ICT) sector is comprised of industries and occupations related to telecommunications, computing, networking, software, programming and information systems and management. Included in the sector are firms involved in the manufacturing and wholesale/retail sale of hardware and software, and services including programming, repair, maintenance, data collection and analysis.

While this core set of industries engage primarily in ICT activities and are used to define the sector, ICT occupations cross all industry sectors, some level of technology skills is required by all businesses, regardless of industry type or employment size. The demand for IT occupations and skills should be considered applicable all industry sectors.

Economic Impact to the Region

There are approximately 3,900 businesses in the Information and Communications Technology (ICT) industry sectors in the North Far North (NFN) Region. These companies employ about 49,000 workers. Employment in these industry sectors grew by a net 3% over the 2010-2015 five-year period, and demand for workers is expected to be grow by an even greater margin during the next five-year period (2015-2020)—as much as 10%.

Seventy-one percent of the firms (2,790) are in the Professional, Scientific and Technical Services industry subsector. This includes engineering, computer programming and systems design, and scientific/technical consulting services firms. These companies are currently employing 29,970 workers who are earning on average over \$67,000.

The remaining 30% of the firms are in the Wholesale/Retail subsector (14%) and Information subsector (13%) which includes software publishing, cable broadcasting, wired and wireless telecommunications, and data processing. The remaining firms are in Computer Training and Equipment Repair.

The greatest job growth from 2015-2020 is expected in the Information subsector (1,000 new jobs, or 11% employment growth). Professional, Scientific & Technical services is expected to add approximately 2,500 jobs (8% increase from 2015-2020).

IT skills and experience can demand wages that are significantly higher than the national average, and the average salary for IT professionals is on the rise. Currently, average wages paid by businesses in the NFN range from \$35,000 (equipment repair, graphic designers) to \$100,000 for engineers and programmers. The living wage in the North Far North is estimated at \$22,400 (one working adult, no children).

The success of employers and workers will have a significant impact on the North Far North economy. The economic impact of 100 new jobs in the region's ICT industry sector could be as much as \$36 Million. This includes direct and indirect payroll, additional new jobs in support and supplier industries, local and state property and sales taxes.

Occupation and Skills Demand

Industry input from the ICT sector comes from individual and industry listening sessions and educators' participation in local and regional industry groups. The study from primary resources is supplemented with industry research from regional and national sources.

The occupational demand presented here includes all industries, not just those in the Information industry sector. Some portion of every company's investment and workforce is ICT related and the ever-increasingly fast adoption of information and communication technology as well as replacement of hardware and software by business and consumers will only serve to increase the demand for technology-savvy workers. Findings from the local industry input and research are summarized here.

- Hiring and retaining employees with ICT skills is an ongoing concern for IT companies and departments. Employee turnover is an issue faced by many companies. The competition for experienced tech workers is strong especially for the NFN Region given the proximity to Silicon Valley and the Bay Area.
- The NFN region is often viewed by workers as a launching site or first-job location while their sites are really set on landing a job with a highly visible tech company. Building a strong pipeline of new workers and upgrading the skills of the existing workforce is and will remain critical to employers in the NFN region.
- Industry intelligence experts expect companies will invest hundreds of millions transforming and expanding digital operations and systems. Over the next five to ten years, the demand for talent to build and manage digital capabilities is expected to significantly exceed supply.

Cyber Security

- IT or Cyber Security is the technology area most likely to be expanding now and in the coming years. Cyber Security occupations fall in these job titles/positions: Cyber Security Engineer, Network Engineer / Architect, Auditor, Software Developer / Engineer, Systems Engineer, Systems Administrator, IT Director, Systems Analyst, and Computer Support Specialist.
- Employers report difficulty finding skilled talent to fill open positions even though workers with these skills can earn higher than average salaries. Panelists at the March 2016 ICT Cluster Forum stated that "Cyber Security and Robotics careers are emerging occupations... but the region is lacking in Cyber Security and Machine Training opportunities."
- There are opportunities for workers to start and advance careers in cybersecurity. Career Pathways can be established with common skill sets and transition.

Demand for Training and Professional Development

- It is the expectation of most employers that employees can do multiple tasks: coding, administration, scribing, and application development, etc.
- Increasing innovation and new technology will be a continuing factor facing businesses, employees, and job seekers. Continuous learning and professional development—especially for technology businesses and departments—will be the norm.

- Digital media producers, computer systems analysts, network and computer systems administrators, computer network support specialists, and computer support specialists are all expected to have completed some college, received a postsecondary certificate or associate degree.
- Within the business community, certifications are considered beneficial for both IT and non-IT professionals. According to Global Knowledge, 59% of IT professionals responding to their survey are currently working on, or plan to pursue, some form of certification this year. This number may be more for networking operations and engineering, cloud computing, and help desk, professionals. The trend is unlikely to change given the speed of innovation and market demand.
- The demand for classroom training or formal training at the worksite is greatest for non-IT professionals. IT professionals prefer to learn in a hands-on lab environment. Webinars are popular with both IT and non-IT professionals.
- Digital badges are considered a valid indicator of workers' skills and accomplishments. But to the general population and/or non-IT professionals, there is little recognition or understanding of what they mean. A good awareness campaign could increase participation and acceptance.

Degree and Certificate Offerings

Community colleges in the NFN Region currently offer 30 different Career and Technical Education for the ICT/Digital Media industry. The proposed investments will add new programs, expand and improve existing programs and help to meet industry's five-year (2015-2020) job openings, which are estimated to be about 1,275. The top 20 in-demand occupations are presented below. A complete database of in-demand occupational information and industry job growth projections for the NFN Region was prepared by the Los Rios Community College District's Center of Excellence and available at www.NFNSWP.com

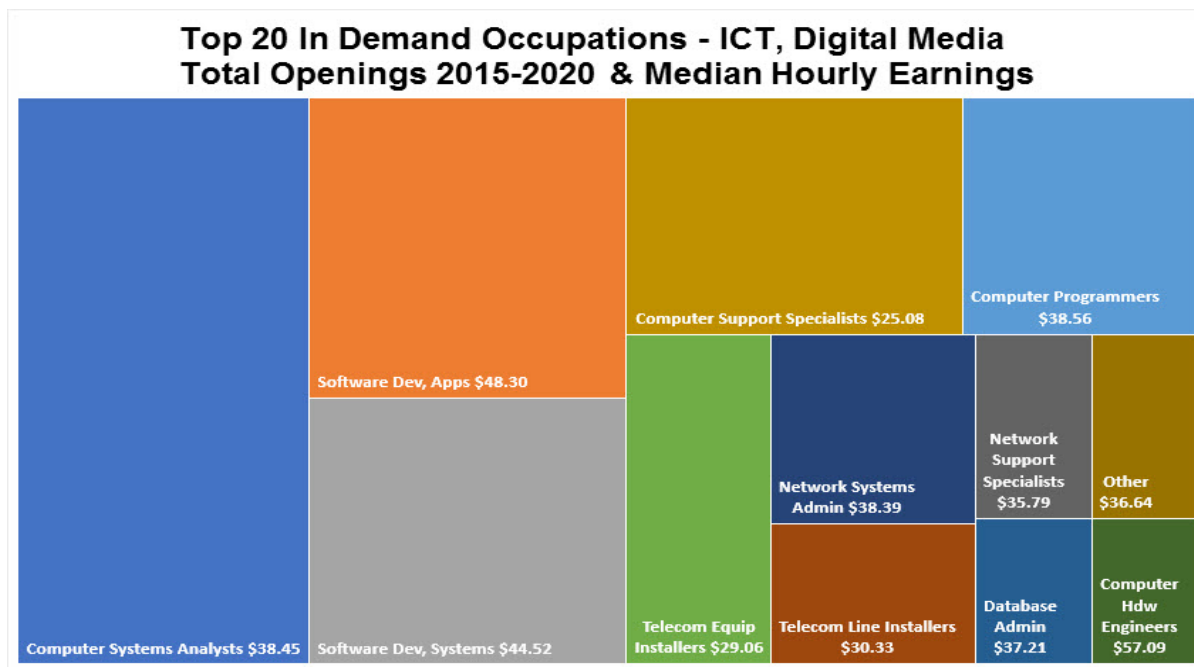


Figure 11. Top 20 In-Demand Occupations of NFN Region Global Trade & Logistics Sector. Source: EMSI 2016.4 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Provided by the Centers of Excellence

SMALL BUSINESS

Small businesses are found in virtually all industry sectors and are a major component of the NFN Region's economy. As shown in the graphic below, a large majority of businesses in the NFN Region employ fewer than 20 workers. Over half of the businesses in the region employ less than five workers.

According to the Northern California Small Business Development Center (SBDC), small business startups in the NFN Region are expected to increase 10 to 20% during the 2015-2020 five-year period and existing small businesses are projected to expand.

Supporting small businesses and startups with foundational business skills will help them launch their businesses and, more importantly expand and hire new workers.

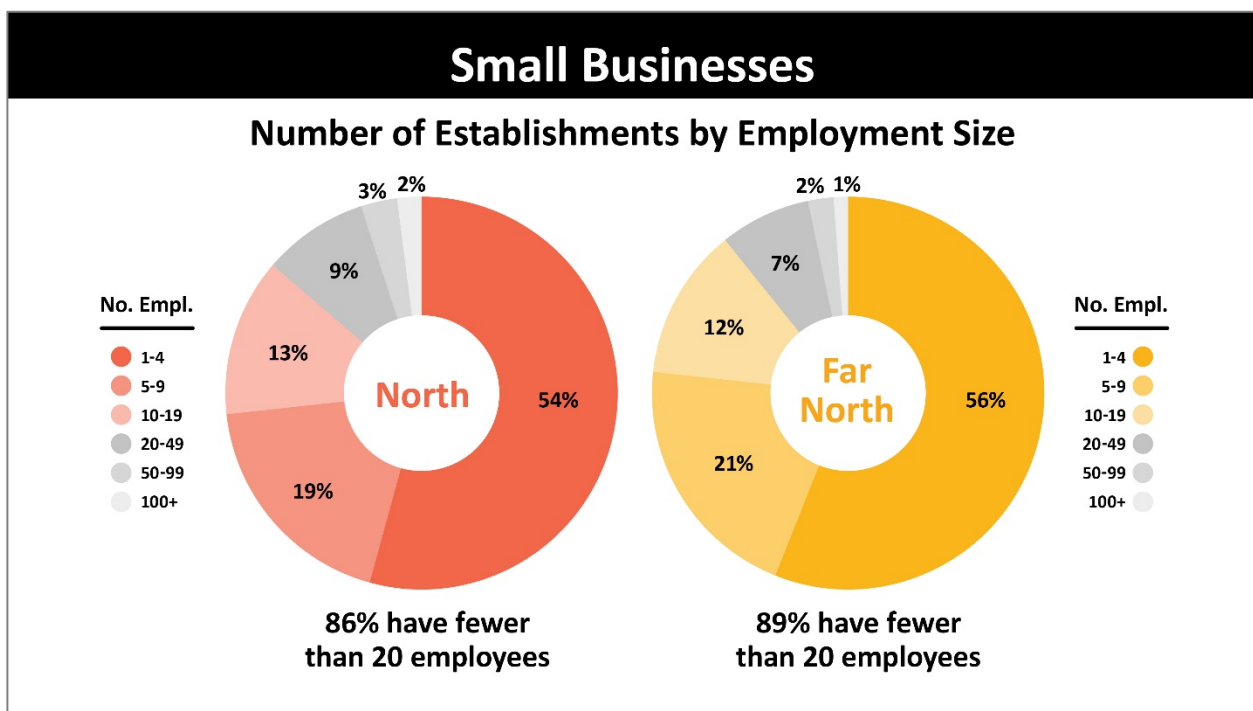


Figure 12 NFN Business Establishments by Employment. Source: US Census Bureau, County Business Patterns, 2014.

Degree and Certificate Offerings

Community colleges in the North Far North region offer a variety of for Small Business and Entrepreneurship including: 43 programs in Business and Finance; 12 in Marketing and Sales; and 23 in Retail, Hospitality, Tourism. The proposed investments will help to meet demand in these and all industry sectors.

ASSET MAP

Major Initiatives Underway

The NFN Region has a long history of collaborating. Listed below are the programs, initiatives, and activities currently underway in the NFN Region.

CTE Pathways / Initiatives / Activities	North	F North	K-14	AEBG	WDB	Ind.
Industry-specific CTE, Certif. AA, AS, and/or ADT	◆	◆	◆	◆	◆	◆
Advanced Imaging / Advisory Group	◆	◆				◆
Advisory Board Health Career Pathways Task Force	◆	◆				◆
Align Capital Region	◆		◆	◆	◆	◆
Advanced Mfg Apprenticeship Initiative	◆			◆		◆
Ag Bio Camp		◆				◆
Board / Council appointments	◆	◆	◆		◆	◆
Broadband Alliance of N. California		◆			◆	◆
CalAgX / Calif Ag Export Training Program	◆	◆			◆	◆
California Conservation Corp Partnership	◆	◆				
California Endowment Health Career Pathways	◆					
California Healthcare Workforce Academy	◆					◆
Capital Region/Next Econ. Workforce Action Plan	◆					◆
Career Days, Career Awareness, Job Fairs	◆	◆	◆		◆	◆
Central Valley AgPlus	◆	◆	◆			
CyberPatriot Program	◆	◆	◆			◆
Digital Badge (industry certification)		◆	◆			◆
Erosion Control Summit & Stream Restoration		◆	◆			◆
Farm City Day		◆	◆			◆
Get Focused-Stay Focused / Crane Pathways	◆	◆	◆	◆		
Girls Who Code	◆	◆	◆			◆
Grow Manufacturing		◆	◆		◆	◆
HACCP / Hazard Analysis & Critical Path	◆	◆				◆
HASPI / Health & Science Pipeline Initiative	◆	◆	◆		◆	◆
Health Pathways Community of Practice	◆		◆			
HESI / Health Careers Exploration Institute	◆		◆		◆	◆
High School Global Business Competition		◆	◆			
High Touch Health Care	◆	◆	◆	◆		◆
Highway to Hire		◆	◆			◆
Humboldt Made		◆			◆	◆
Membership / participation in industry groups	◆	◆			◆	◆
Mini Maker Faires	◆					◆
No. California STREAM Pathways Consortium	◆	◆	◆			◆

CTE Pathways / Initiatives / Activities	North	F North	K-14	AEBG	WDB	Ind.
Non-Traditional Employment for Women	◆					◆
Northstate Global Trade Alliance	◆	◆				◆
Pathways for Paycheck	◆		◆			◆
Promise Zone	◆		◆		◆	
Slingshot Grant	◆	◆				◆
STEP / State Trade Expansion Promotion	◆	◆			◆	◆
Teacher Externships / Summer Institute	◆	◆	◆			◆
Workshops, Seminars, Special Events	◆	◆	◆		◆	
YEP / Youth Entrepreneurship Program		◆	◆			
Funding (CTE awareness, upgrade & develop curriculum, incumbent worker training, professional development, etc.	◆	◆	◆	◆	◆	◆

Figure 13. Alignment of NFN Region initiatives and activities as of January 25, 2017

Regional Allocation

The table below shows the distribution of the NFN Strong Workforce Program Regional funding model for the proposed projects presented in the Work Plan.

40% Regional Share Allocation (25% - 75%)							
		Consensus		Collaborative	% Allocation of \$2,193,914	Collaborative Per District	% of Total
District		25% North	25% Far North				
North	Los Rios			\$600,000	\$1,082,290	\$1,682,290	49.33%
	Sierra			\$150,000	\$265,926	\$415,926	12.12%
	Yuba			\$300,000	\$185,018	\$485,018	8.43%
Far North	Butte			\$150,000	\$203,257	\$353,257	9.26%
	Feather River			\$150,000	\$21,616	\$171,616	0.99%
	Lake Tahoe			\$150,000	\$31,085	\$181,085	1.42%
	Lassen			\$150,000	\$30,526	\$180,526	1.39%
	Mendocino Lake			\$150,000	\$61,512	\$211,512	2.80%
	Redwoods			\$150,000	\$108,726	\$258,726	4.96%
	Shasta-Tehama-Trinity			\$150,000	\$158,032	\$308,032	7.20%
	Siskiyou			\$150,000	\$45,926	\$195,926	2.09%
Total North & Far North		\$1.035M	\$446,083	\$2,250,000	\$2,193,914	\$4,443,914	100.00%

Figure 14. NFN Region Strong Workforce Program Regional Funding Model

STRATEGIC PRIORITIES

Based on the regional analysis conducted and job demand, consensus was reached on six industry sectors that are the region's focus for next three years.

- **Priority Sectors:** Ag / WET, Healthcare, Small Business
- **Emergent Sectors:** Advanced Manufacturing, Global Trade & Logistics, ICT/Digital Media

Pathways

The following suggestions for helping students move through the region's career pathways were supplied by Sector Navigators, Deputy Sector Navigators, external partners, and private industry.

What more must be done for students to move through the NFN Region's career pathways?

- Partner with companies to develop valuable internship programs that may help to improve work ethics and allow young candidates to gain valuable on-the-job experience.
- Create and promote internships and partnership opportunities to get more and new companies involved with community colleges or technical schools.
- Assist businesses in creating opportunities for job shadowing and apprenticeship.
- Identify new opportunities for increasing dual enrollment, promote.
- Continue supporting and expanding career/job fairs.
- Continue to engage employers in sharing job skills and occupational demands.
- Expand communications and linkages with Adult Education and other training providers.
- Continue to engage with workforce development and economic development partners in business visits, entrepreneurial development, and other relevant programs.
- Increase outreach to high school students and parents to promote CTE programs, internships, and career opportunities.
- Continue to build collaboration with High Schools and local employers to ensure pathways meet business' need and to build a pipeline for CTE enrollments.
- Address the need for facilities and up-to-date equipment for training.
- Identify a portal or process to help students navigate the system, programs, courses and connect with employers.
- Identify methods of building a pipeline of instructors qualified on the latest methods and equipment.

Work Based Learning

Included in the proposed projects are those that promote work-based learning and a collaborative regional approach to job development and placement for students in the NFN Region. Just a few examples are noted here.

How will job placement, internships, and regional industry engagement be coordinated?

- Health-Career Exploration Summer Institute (HESI), part of the Building a Stronger Healthcare Community project, is a very successful job-shadow program for high school students interested in healthcare careers.
- Regional Clinical Placement Developer will secure clinical sites for student exploring healthcare careers.
- NetLAB provides colleges remote access to virtual machines, routers, switches, and firewalls to improve instruction for cybersecurity and other occupations.

Development additional work-based learning opportunities will be a topic of discussion during conversations with industry via Advisory Committees, Grow Manufacturing Initiative and other industry groups, and business visits with Workforce and Economic Development partners, and Intermediaries.

PROJECT PROPOSALS

The NFN Regional planning process resulted in the creation of diverse and creative projects proposed for funding. These projects are based on supply and demand data, industry input, and the goals and priorities of the districts and colleges. Below is a summary of the proposed projects. Full project proposals are available on the project website, NFNSWP.com

Advanced Manufacturing Network Initiative

Investment: \$1,937,052
Lead: Butte
Participating Colleges: 8

Advanced Manufacturing / Maker Space

Investment: \$120,000
Lead: Los Rios
Participating Colleges: 4

Advanced Transportation

Investment: \$275,748
Lead: Los Rios
Participating Colleges: 3

Agriculture Enhancement and Improvement

Investment: \$367,774
Lead: Feather River
Participating Colleges: 2

Big Data / Business Analytics / Cyber Security

Investment: \$117,248
Lead: Sierra College
Participating Colleges: 2

Building a Stronger Healthcare Community

Investment: 216,000
Lead: Sierra College
Participating Colleges: 3

Construction Internships & Job Placement Svcs

Investment: \$40,000
Lead: Los Rios
Participating Colleges: 3

CTE Website

Investment: \$60,000
Lead: Los Rios
Participating Colleges: 4

Emergency Medical Services: High Fidelity Simulation Labs

Investment: \$841,541
Lead: American River College
Participating Colleges: 4

Employer Engagement & Industry Alignment

Investment: \$50,000
Lead: Los Rios
Participating Colleges: 4

HVACR and Environmental Controls Collaborative

Investment: \$155,000
Lead: Sacramento City College
Participating Colleges: 5

Integrating Emerging Digital Educational Technologies to Support ECE

Investment: \$105,440
Lead: College of the Redwoods
Participating Colleges: 3

Interdisciplinary Entrepreneurship Program

Investment: \$180,000
Lead: Sierra College
Participating Colleges: 5

Job Placement Services

Investment: \$125,000
Lead: Los Rios
Participating Colleges: 4

Net Labs

Investment: \$125,000

Lead: Sierra College

Participating Colleges: 5

Nudge Pilot Project

Investment: \$20,000

Lead: Sacramento City

Participating Colleges: 1

Physical Therapy Assistant

Investment: \$124,839

Lead: Shasta

Participating Colleges: 2

Psychiatric Technology Program

Investment: \$129,247

Lead: Yuba

Participating Colleges: 1

Public Safety

Investment: \$574,328

Lead: Sierra

Participating Colleges: 5

Regional Clinical Placement Developer

Investment: \$130,000

Lead: Sacramento City College

Participating Colleges: 7

Strengthening our Workforce with Global Trade Proficiency, Competency, and Fluency

Investment: \$150,000

Lead: Los Rios

Participating Colleges: 7

Projects in Common

For several of the Strong Workforce recommendations, there is economy of scale to do "projects in common" across all regions. Existing pilots have informed effective practices for addressing these recommendations. According to the Strong Workforce Program flowchart, 10% of regional share allocation can be deployed for task force recommendations with attention to:

- region-wide outreach to employers on CTE by sector for purposes of internship/job placements;
- region-wide outreach to students and families on career awareness;
- additional data-related needs; and
- professional development to streamline curriculum approval.

The NFN projects in common are:

- Marketing and Outreach \$345,834¹
- Employability / Soft Skills \$150,000
- Get Focused Stay Focused \$150,000
- CTE Professional Development \$104,563

¹ \$67,000 of this project budget is a contribution from College of the Redwoods

PERFORMANCE METRICS

The NFN Strong Workforce Plan performance measures listed below meet the SWP performance accountability measure in that they "to the extent possible, align with the performance accountability measures of the federal Workforce Innovation and Opportunity Act (WIOA).

These performance metrics are intended to provide policy makers, NFN Regional Collaboration Chairs, and the public the information needed to evaluate progress in increasing:

- the amount of CTE instruction
- CTE completions
- job placements
- and wage advancements

Increase the number of completers and skills builders who secure employment at a living wage by 5 percent in three years.

Benchmark: 2016-17 CTE Outcome Survey Data

Lag Indicator: 2017-18, 2018-19 and 2019-20 CTE outcome Survey Data

Increase the number of students who earn a CTE degree or certificate by 10 percent in three years.

Benchmark: 2016-17 MIS Award Data

Lag Indicator: 2017-18, 2018-19 and 2019-20 MIS Award Data

Increase enrollment of CTE targeted programs by 5 percent by Fall of 2018.

Benchmark: Fall 2016 MIS Enrollment Data

Lag Indicator: Fall 2017 MIS Enrollment Data

Increase number of transfer students to four-year institutions by 3 to 5 percent.

Benchmark: 2016-17 Launchboard

Lag Indicator: 2017-18, 2018-19, and 2019-20 Launchboard Data

NFN Region Local Share Investment

The chart below depicts the distribution of the North Far North Region's Local Share Investments as of January 25, 2017; the regional plan will be updated to include a summary of all local investments as they become available.

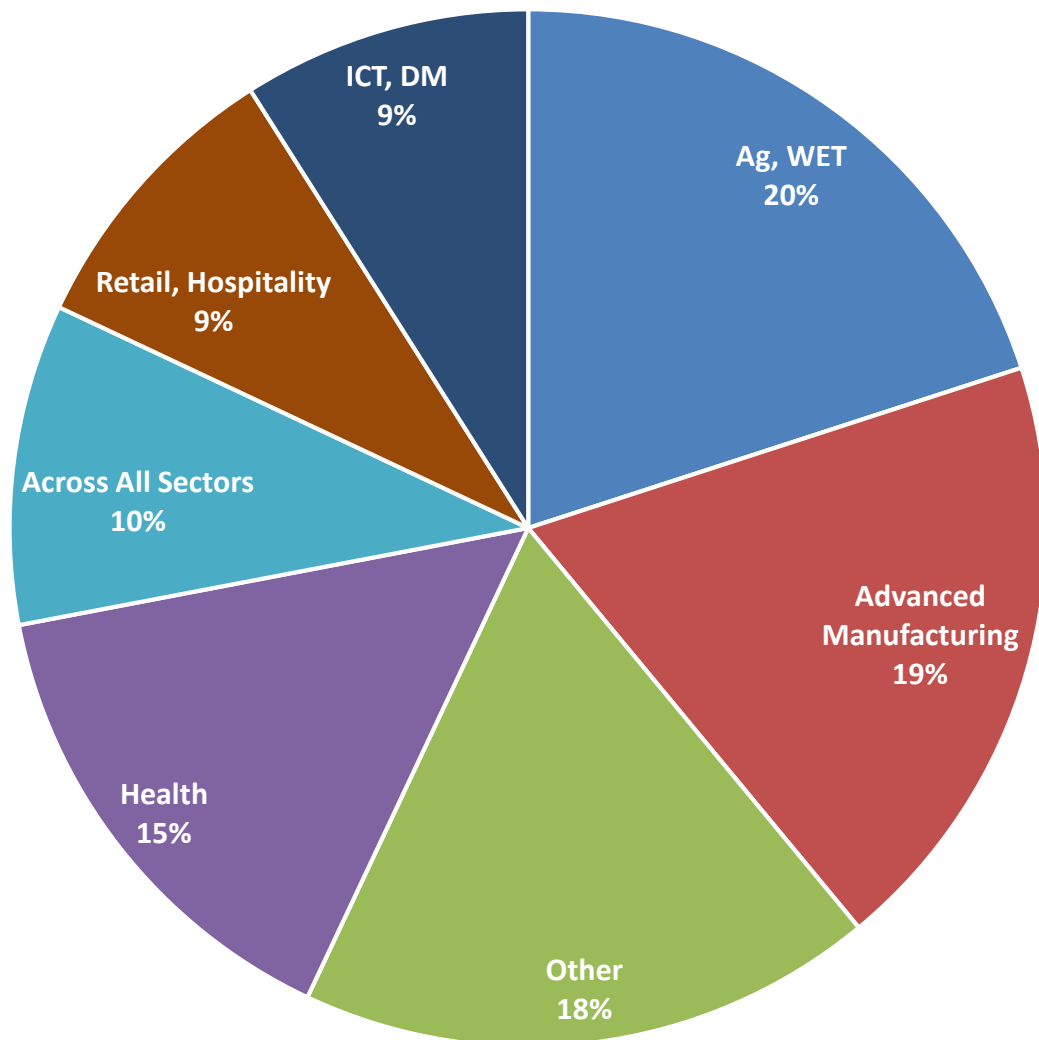


Figure 15. Distribution of the NFN Region Local Share Investment by Industry Sector

FUTURE ENGAGEMENT

Annual and Four-Year Updates

The NFN Coordinating Council convenes monthly to ensure activities are aligned with the Work Plan and in the best interest of the NFN Region, and that colleagues throughout the region are apprised of regional activities. The Coordinating Council will initiate the planning process in the spring. The NFN Region Co-Chairs will present a framework for the planning and budgeting process. Framework will be finalized with input from the Coordinating Council.

The final process and timelines will be presented at the NFN Regional Consortium spring meeting. The annual and four-year updates will conclude on or about September 1 so that funds can be allocated to regional projects by October 1.

Members of the Coordinating Council are:

- William Duncan, Superintendent/President Sierra College
- Jamey Nye, Associate Vice Chancellor Los Rios CCD
- Derek Lerch, CIO Feather River College
- Scotty Thomason, President College of the Siskiyous
- Deborah Sutphen, VP Instruction, Sierra College
- Linda Zorn, Statewide Sector Navigator Butte College
- Tessa Miley, Co-Chair NFN Regional Consortium, Butte College

Industry Engagement

Business leaders involved in the creation of this plan are also actively involved in workforce and economic development initiatives throughout the region. Improving and expanding this industry involvement is a priority of the NFN Region as we move forward.

How can industry inform and co-invest in CTE development?

Opportunities for continued participation and providing input will be encouraged through:

- Employer driven initiatives, e.g. the Far North's Grow Manufacturing Initiative and other industry and professional groups throughout the region. The Grow Manufacturing Initiative has well-established partnerships throughout the NFN Region with workforce development and education institutions.
- Intermediary individuals and organizations such as the Butte-Glenn Intermediary Organization. The main goal of intermediaries is to align business, education and community organizations for employment and training opportunities, job placement, industry engagement, work-based learning, and internships.
- Continued involvement and participation with Advisory Committees.

- Proposed project to contract with Valley Vision to develop an approach for partnering with industry that aligns its needs with local community college training programs.
- Workforce Development Boards and Centers
- Promoting the use of the NFN Region Strong Workforce Story Map as a resource for data, CTE programs, internships, work-based learning, etc.

DATA SOURCES

Average Wages: Centers of Excellence using data from EMSI

Employment by Industry (historic and projected): Centers of Excellence using data from EMSI

Living Wages: Living Wage Calculator (livingwage.mit.edu)

Number of Firms: Centers of Excellence using data from EMSI

Occupation Information (historic and projected jobs, average hourly earnings, openings): Centers of Excellence using data from EMSI; employer interviews

Occupations, Critical to Industries: Bureau of Labor Statistics, Industry to Occupation Matrix and Occupational Employment Estimates for 2014; employer interviews

Occupation in Demand: Centers of Excellence Labor Market Assessment, Far North Region August 2016 and North/Greater Sacramento Region, August 2016; employer interviews

Personal Contact

NFN Sector Navigators

NFN Deputy Sector Navigators

Industry Meetings

Websites

North Far North Hospitals (job postings)

National Rural Health Association www.ruralhealthweb.org

American Public Health Association www.apha.org

Global Trade Magazine www.globaltrademag.com

Hoover's First Research Industry Reports www.firstresearch.com

The Asia Society's Center for Global Education www.asiasociety.org

U.S. Department of Commerce International Trade Administration www.trade.gov

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San Diego State University Center for International Business Education & Research, Fowler College of Business Administration

Sierra College. Sacramento Capital Region Next Economy Cluster Workforce Action Plan: Advanced Manufacturing Cluster Forum Proceedings. Jan 13, 2016.

Valley Vision. Sacramento Capital Region Next Economy Cluster Update Workforce Action Plan. Life Sciences and Health Services Cluster Forum Proceedings. Feb 2016.

Valley Vision. Sacramento Capital Region Next Economy Cluster Update Workforce Action Plan, Information and Communication Technologies Cluster Forum Proceedings. March 2016.

