2020

Labor Markets in New Mexico's Career and Technical Education Region H

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NS4ED

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Region H

Introduction

Career Technical Education (CTE) provides students of all ages with the academic and technical skills necessary to succeed in future careers and to become lifelong learners. In total, about 12.5 million high school and college students are enrolled in CTE across the nation. Funded by the Carl D. Perkins Career and Technical Education Act (Perkins), CTE prepares these learners for the world of work by introducing them to workplace competencies, and makes academic content accessible to students by providing hands-on experiences in various industry sectors.[1]

More than 62,000 New Mexico students are enrolled in CTE programs, and more than 17,000 are "concentrators," who take two or more CTE courses. CTE Concentrators graduate high school at a rate more than 23 percentage points higher than the general student body. More than half of the state's community college students are enrolled in CTE programs, with more than 33,000 concentrating in CTE fields.

Federal legislation requires a Comprehensive Local Needs Assessment for proposed CTE programs, and the New Mexico Public Education Department commissioned this initiative to provide parameters and guidance to CTE program applicants. Our intention is to provide intelligence on regional labor markets and economic trends to inform CTE strategies that make high-quality career opportunities more available to the students we serve.

The Region

Region H comprises a number of school districts and charter schools:

- Alamogordo
- Capitan Municipal
- Carrizozo Municipal
- Cloudcroft Municipal
- Corona
- Hondo Valley
- Ruidoso Municipal
- Tularosa Municipal

Regional Education Cooperatives (REC) REC exists to provide educational services to students, staff, and families of the member districts and communities. REC's provide ancillary support and technical assistance in implementing federal and state statutes and regulations; professional development; and support for members in meeting the Public Education Department's requirements The region is served by Regional Education Cooperative #9.

Three degree-granting postsecondary institutions serve the area: New Mexico State University-Alamogordo, Eastern New Mexico State University-Ruidoso and the Olympian Academy of Cosmetology. The districts lie primarily in Otero and Lincoln Counties, both of which are within the Eastern Workforce Region.

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[1] *https://webnew.ped.state.nm.us/bureaus/college-career-readiness/career-technical-education/*

The Key Findings

The People

- CTE Region H has seen uneven population trends over recent years, with Otero County experiencing net positive growth since 2010 and Lincoln experiencing a decline. Combined, the region's population has increased 1.8% since that time.
- It is notable that the population of the region is aging. The youngest age bands have declined in recent years, as have those of prime working age (40-64), while the number of those 65 years and older have increased significantly (20.8%) since 2010.
- More than 54% of the population in the region has either a high school diploma and no college experience or some college experience and no degree.
- The percentage who hold a bachelor's degree or higher (21.3%) is significantly lower than the national average of 30.9%.

The Employers

The largest industries in the region are

1. Government and Government Enterprises
2. Health Care and Social Assistance
3. Retail Trade
4. Accommodation and Food Service
5. Construction

One of the unique characteristics of this region is the concentration of the *Facilities Support Services* industry, which is employed in the region at more than 23 times the national average, and the military, which is one of the region's largest employers.

According to the New Mexico Department of Workforce Solutions, there are two organizations in the region who employ more than 500 workers.

- Gerald Champion Regional Medical Center
- Inn of the Mountain Gods

The Jobs

The occupation families with the largest projected growth include:

1. Health Care Practitioners and Technical (299 new jobs)
2. Personal Care and Service Occupations (256)
3. Business and Financial Operations (184)
4. Health Care Support (141)
5. Architecture and Engineering (104)
6. Construction and Extraction (77)

This report sought to identify "quality careers," which are projected to grow significantly in coming years in this region and which typically pay higher-than-average wages.

Several of these Quality Careers were from the Health Sciences cluster, including Registered Nurses ($66,729, 217 new jobs), Licensed Practical Nurses ($47,373, 20) and Radiologic Technologists ($57,858, 14). A related occupation from the Management cluster was Medical and Health Services Managers ($93,080, 20). Several other occupations came from the Computer Occupations cluster, including Computer User Support Specialists ($41,805, 6) and Computer Network Support Specialists ($56,527, 4).

The Observations

This report identifies three segments of the regional economy which can serve as a starting point for conversations about the region's economic priorities.

Skilled Construction Trades

The skilled construction trades offer some of the region's most in-demand careers, with great earning potential and the prospect of a high-quality career pathway without the burden of large student debt loads. Many of these careers make use of cutting-edge technology and offer work environments and working conditions other than the interior office environments and formal processes of many other fields.

Public Administration

Government and government enterprises are some of the largest employers in this region. Education, local government and state government are some of the largest employers in the state. These entities employ New Mexicans in a broad range of occupations, but there are certain skills and knowledge elements that cut across the spectrum of government jobs.

Health Care

Ten of the region's largest-growth occupations are from the Health Care Practitioners and Technical Occupations family or the Health Care Support Occupations family. Health Care businesses employ more than 3,000 people, and many of these jobs pay higher-than-average wages. Five different pathways provide a spectrum of career opportunities:

- Therapeutic Services
- Health Informatics
- Diagnostic Services
- Biotechnology Research and Development
- Support Services

Another career, Medical and Health Services Managers is one of the region's highest-paying fields and is projected to grow by 44% in the coming years.

Others

Other areas that were considered for this recommendation, but ultimately not included were:

- Architecture and Engineering
- Business Management

The People

Population

There are 2,826 students enrolled in grades 9-12 across the region's eight school districts. Trends in the region's population will have an obvious effect on that enrollment and warrants regular analysis. CTE Region H has seen uneven population trends over recent years, with Otero County experiencing net positive growth since 2010 and Lincoln experiencing a decline. Combined, the region's population has increased 1.8% since that time.

Table 1: Population by County, 2010-2018:

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Otero	64,399	65,644	66,226	66,326	65,362	64,739	65,644	66,198	66,781
Lincoln	20,453	20,409	20,200	19,981	19,605	19,365	19,399	19,483	19,556

Population, by Annual Percentage Change, by County
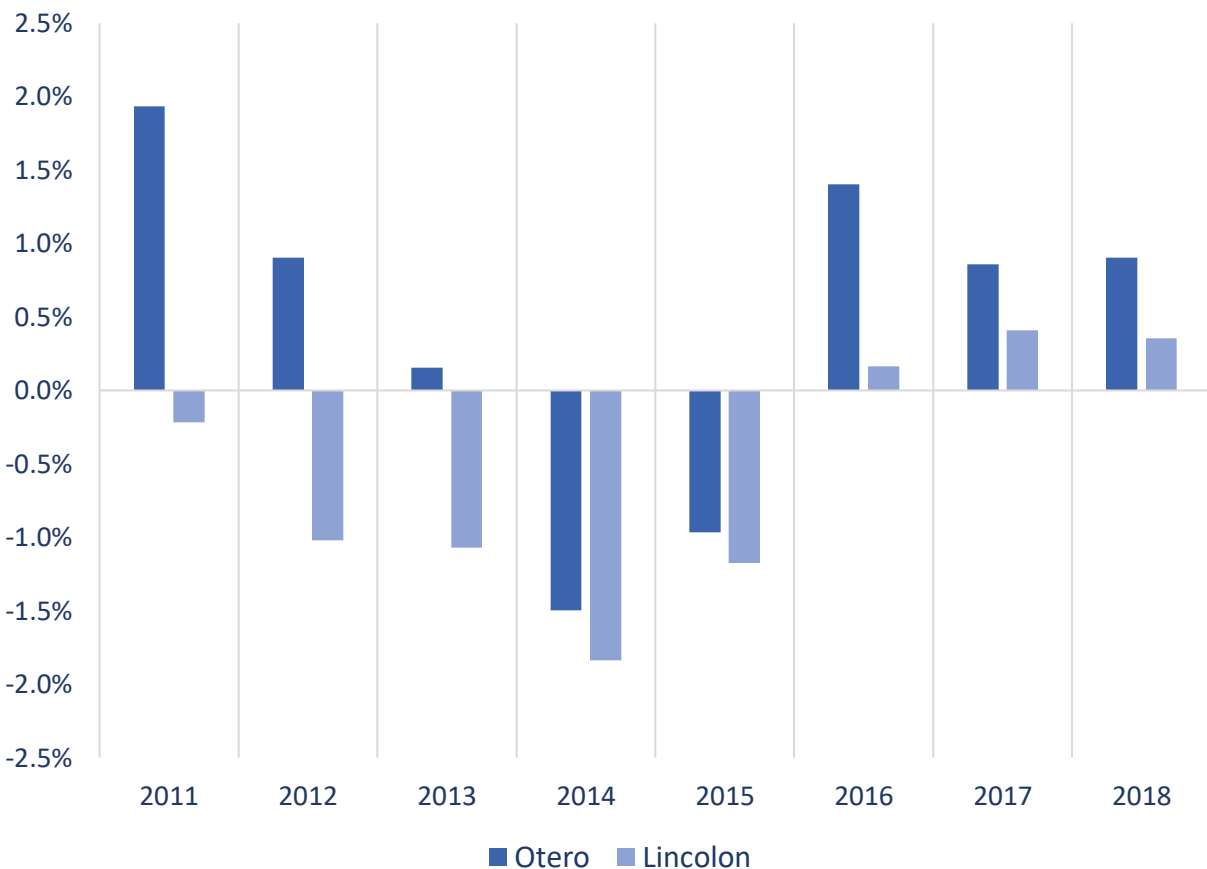
Demographics-Race and Ethnicity

Table 2: Region H Population, by Race and Ethnicity:

Race/Ethnicity	2010 Population	2018 Population	Change	% Change	2018 % of Total
White, Non-Hispanic	47,641	44,241	(3,400)	(7%)	51.24%
White, Hispanic	26,155	28,973	2,818	11%	33.56%
American Indian, Non-Hispanic	4,181	4,593	412	10%	5.32%
Black, Non-Hispanic	2,189	2,338	149	7%	2.71%
Other, Hispanic	2,242	3,488	1,246	55.6%	4.04%
Other	2,443	2,703	260	10.6%	3.13%

United States Census Bureau, Annual Population Estimates
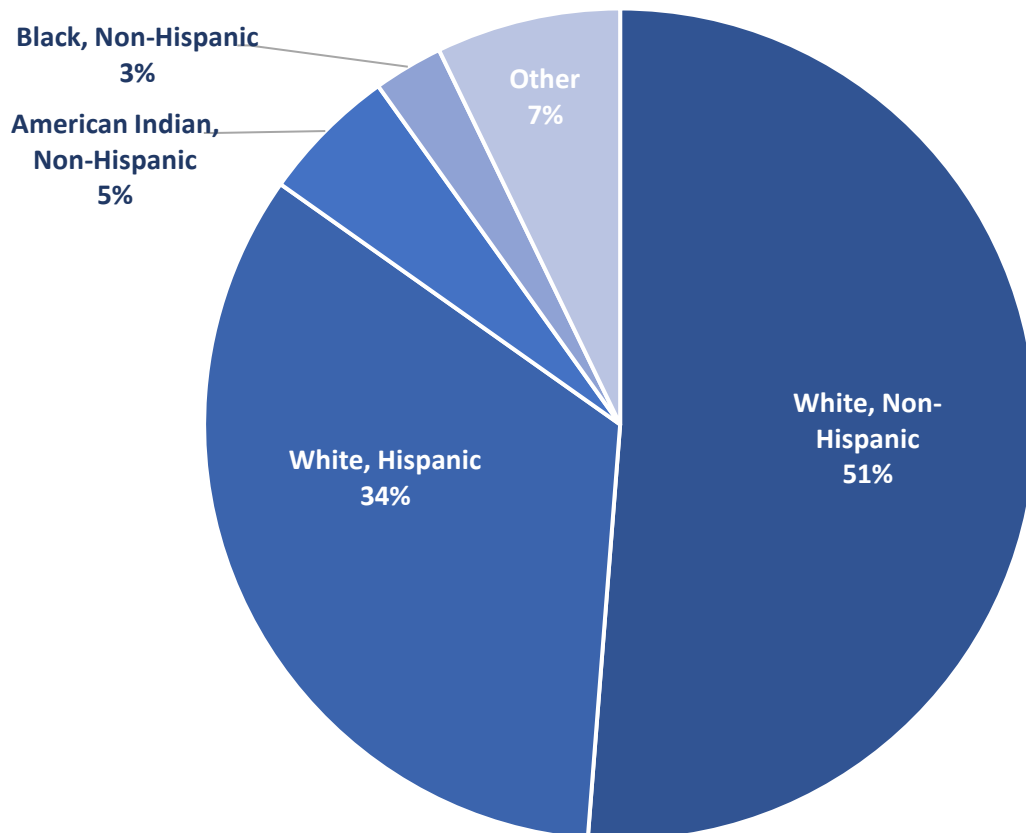
Demographics-Age

It is notable that the population of the region is aging. The youngest age bands have declined in recent years, as have those of prime working age (40-64), while the number of those 65 years and older have increased significantly (20.8%) since 2010.

Table 3: Region H Population, by Age:

Age Cohort	2010 Population	2018 Population	Change	% Change	2018 % of Cohort
Under 10	11,275	10,857	(418)	-3.7%	12.6%
10-19	10,801	10,274	(527)	-4.9%	11.9%
20-29	11,430	12,438	1,008	8.8%	14.4%
30-39	9,071	10,753	1,682	18.5%	12.5%
40-49	10,611	8,614	(1,997)	-18.8%	10.0%
50-64	17,511	16,310	(1,201)	-6.9%	18.9%
65+	14,147	17,091	2,944	20.8%	19.8%

United States Census Bureau, Annual Population Estimates

Demographics-Educational Attainment

Table 4: Region H Population by Educational Attainment:

Education Level	Population
Less than 9th Grade	7.6%
9th Grade to 12th Grade	6.3%
High School Diploma	29.1%
Some College	26.5%
Associate's Degree	9.9%
Bachelor's Degree	12.5%
Graduate Degree or Higher	8.2%

United States Census Bureau, American Community Survey

More than 54% of the population in the region has either a high school diploma and no college experience or some college experience and no degree.

The percentage who hold a bachelor's degree or higher (21.3%) is significantly lower than the national average of 30.9%.

The Employers

To gain perspective on the businesses who employ workers in Region H, we look at data from the New Mexico Department of Workforce Solutions, in particular the *Quarterly Census of Employment and Wages*. Data from that instrument are organized according to the *North American Industry Classification System (NAICS)*, in which businesses are categorized by their primary lines of business into general industry sectors, then subdivided into more granular industry definitions. For this report, we look first at the general industry sectors, then at the detailed industries they include.

An Employment Location Quotient is an indexed value that illustrates the concentration of an industry in a particular location. An LQ of 1.0 indicates that employment in the target industry is exactly equal to the national average. An LQ of 2.0, then would indicate that employment in the target industry is double the national average.

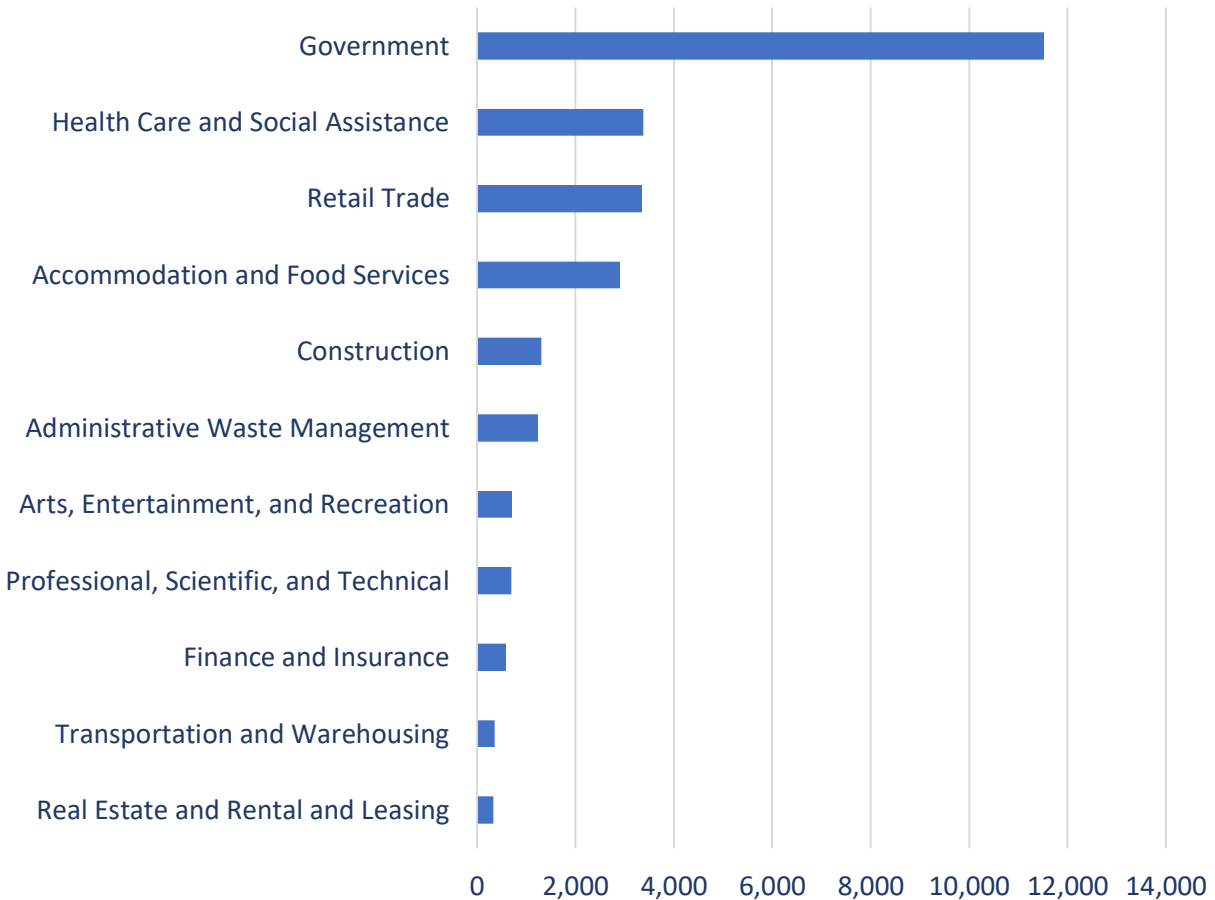**Employmnent, Top Industry Sectors, Region H**

Table 5: Components of Top Industry Sectors, Region H:

Sector/Top Detailed Industries	2019 Jobs	Average Wages	Location Quotient
Government			
Federal Government, Military	4,213	$62,251	11.77
Local Government, Excluding Education and Hospitals	3,055	$35,112	2.84
Federal Government, Civilian, Excluding Postal Service	1,679	$61,390	3.93
Education (Local Government)	1,535	$38,020	1.03
Construction			
Residential Building Construction	266	$30,615	1.71
Plumbing, Heating, and Air-Conditioning Contractors	222	$34,585	1.03
Commercial and Institutional Building Construction	182	$45,408	1.42
Health Care and Social Assistance			
General Medical and Surgical Hospitals	1,027	$75,837	1.16
Home Health Care Services	404	$15,600	1.45
Services for the Elderly and Persons with Disabilities	363	$18,005	1.00
Offices of Physicians	311	$61,262	0.63
Nursing Care Facilities (Skilled Nursing Facilities)	281	$29,814	0.94
Other Outpatient Care Centers	178	$67,273	1.41
Administrative and Waste Management			
Facilities Support Services	683	$46,545	23.22
Investigation, Guard, and Armored Car Services	159	$25,314	1.06
Landscaping Services	90	$22,644	0.61
Janitorial Services	69	$16,221	0.34
Waste Collection	59	$33,309	1.70
Telephone Call Centers	28	$52,366	0.30

Sector/Top Detailed Industries	2019 Jobs	Average Earnings	Location Quotient
Professional, Scientific and Technical			
Engineering Services	279	$76,383	1.50
Veterinary Services	93	$29,451	1.26
Offices of Lawyers	62	$50,746	0.31
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	52	$33,294	0.27
Finance and Insurance			
Commercial Banking	192	$47,710	0.76
Credit Unions	93	$38,170	1.81
Insurance Agencies and Brokerages	92	$28,538	0.44

Economic Modelling Specialists International

Detailed Industries by County

It is also instructive to look at detailed industries in each of the counties that make up this CTE Region. In our quest to prioritize industries and occupations, one of the most valuable pieces of intelligence we can utilize is industry employment data.

Table 6: Employment by Industry, Otero County, 2019:

San Juan	2019 Jobs	Average Wages/ Earnings	Location Quotient	Age 45+
Federal Government, Military	4,164	$62,723	15.22	3.3%
Local Government, Excluding Education and Hospitals	2,641	$33,478	3.22	46.0%
Federal Government, Civilian, Excluding Postal Service	1,623	$61,279	4.97	44.2%
Education (Local Government)	1,093	$37,952	0.96	47.9%
General Medical and Surgical Hospitals	739	$72,320	1.09	49.1%
Facilities Support Services	630	$47,225	28.00	35.1%
Education (State Government)	404	$33,506	1.03	54.5%
Home Health Care Services	343	$16,158	1.61	60.9%
Services for the Elderly and Persons with Disabilities	325	$18,002	1.17	47.1%
Offices of Physicians	290	$62,473	0.77	39.3%

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Table 7: Employment by Industry, Lincoln County, 2019:

McKinley	2019 Jobs	Average Wages/ Earnings	Location Quotient	Age 45+
Education (Local Government)	442	$38,190	1.26	48.0%
Local Government, Excluding Education and Hospitals	414	$45,534	1.64	46.1%
General Medical and Surgical Hospitals	288	$84,875	1.38	49.0%
State Government, Excluding Education and Hospitals	228	$42,962	2.28	N/A
Residential Building Construction	115	$27,271	3.13	44.3%
Home Health Care Services	61	$12,473	0.93	68.9%
Federal Government, Civilian, Excluding Postal Service	55	$64,628	0.55	N/A
Facilities Support Services	54	$38,566	7.74	N/A
Commercial Banking	52	$57,889	0.87	N/A
Site Preparation Contractors	50	$34,361	3.20	N/A

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The Jobs

Another instrument of the New Mexico Department of Workforce Solutions that provides valuable perspective on career opportunities in this region is the *Occupational Employment Statistics* Series. Employment and wages are estimated for more than 750 occupation categories, and to evaluate growth in demand for particular occupations, we return the occupations with the largest growth since 2010.

Table 9: Occupation Employment, Region H, 2010-2019:

Description	2010 Jobs	2019 Jobs	2010 - 2019 Change	2010 - 2019 % Change	Annual Openings	Median Annual Earnings
Personal Care Aides	204	606	402	197%	109	$18,532
Registered Nurses	416	531	115	28%	41	$66,729
Janitors and Cleaners	513	618	105	20%	106	$21,161
Cooks, Restaurant	284	388	104	37%	62	$22,069
Logisticians	74	168	94	127%	23	$74,448
Food Prep/serving Workers, Fast Food	627	720	93	15%	139	$18,387
Security Guards	158	241	83	53%	56	$25,470
Maids and Housekeeping Cleaners	215	286	71	33%	45	$20,943
Maintenance and Repair Workers, General	352	416	64	18%	49	$29,266
Sales Representatives, Services, All Other	81	133	52	64%	21	$38,214
General and Operations Managers	330	376	46	14%	39	$79,307
Customer Service Representatives	234	280	46	20%	41	$27,698
Managers, All Other	189	231	42	22%	23	$89,809
Postsecondary Teachers	73	115	42	58%	19	$47,985
Correctional Officers and Jailers	229	270	41	18%	38	$32,980
Cashiers	869	904	35	4%	182	$20,143
Gaming and Sports Book Writers and Runners	16	50	34	213%	9	$18,969
Hotel, Motel, and Resort Desk Clerks	110	143	33	30%	26	$21,639
Food Servers, Nonrestaurant	70	99	29	41%	20	$18,242
Medical Assistants	100	129	29	29%	17	$28,595
Medical Secretaries	139	167	28	20%	22	$26,582
Secretaries and Administrative Assistants	912	937	25	3%	117	$29,070
Emergency Medical Technicians, Paramedics	106	131	25	24%	15	$28,376
Stock Clerks and Order Fillers	402	423	21	5%	64	$22,544

Many factors go into an evaluation of a career's potential, including demand and earning potential. The New Mexico Department of Workforce Solutions also projects changes in total employment for every occupation by 2026. The occupations that are projected to experience the largest growth and that pay wages above the region's average are categorized here as high-quality careers, and detailed occupations are grouped into general "occupation families."

Table 10: Projected Change, Occupations, 2016-2026, Region H:

High Quality Career	2016 Jobs	2026 Jobs	New Jobs	% Change	Annual Openings	Average Earnings
Health Care Practitioners and Technical Occupations						
Registered Nurses	416	633	217	52%	43	$66,729
Licensed Practical/Licensed Vocational Nurses	65	85	20	31%	7	$47,373
Physical Therapists	28	48	20	71%	3	$104,382
Nurse Practitioners	14	32	18	129%	2	$116,998
Surgical Technologists	20	35	15	75%	3	$44,604
Speech-Language Pathologists	21	35	14	67%	2	$76,780
Radiologic Technologists	48	62	14	29%	4	$57,858
Respiratory Therapists	17	27	10	59%	2	$59,807
Occupational Therapists	11	18	7	64%	1	$84,460
Management						
Medical and Health Services Managers	45	65	20	44%	6	$93,080
Property, Real Estate, Association Managers	27	36	9	33%	3	$35,635
Training and Development Managers	26	33	7	27%	4	$98,273
Administrative Services Managers	49	56	7	14%	6	$77,013
Architecture and Engineering						
Civil Engineers	46	75	29	63%	8	$78,980
Architectural and Civil Drafters	11	20	9	82%	3	$44,589
Civil Engineering Technicians	17	22	5	29%	2	$41,018
Surveying and Mapping Technicians	27	31	4	15%	4	$44,896
Environmental Engineers	15	17	2	13%	2	$65,627

High Quality Career	2016 Jobs	2026 Jobs	New Jobs	% Change	Annual Openings	Average Earnings
Business and Financial						
Logisticians	74	169	95	128%	20	$74,448
Market Research Analysts and Specialists	13	25	12	92%	3	$43,184
Financial Analysts	18	25	7	39%	3	$135,426
Computer Occupations						
Computer User Support Specialists	55	61	6	11%	6	$41,805
Computer Network Support Specialists	22	26	4	18%	3	$56,527
Software Developers, Applications	17	18	1	6%	2	$78,325
Computer Network Architects	11	11	0	0%	1	$102,652

The Talent Development Ecosystem

Assets

CTE Region H is served by Regional Education Center #9. Postsecondary educational institutions in the region include New Mexico State University-Alamagordo, Eastern New Mexico State University-Ruidoso and the Olympian Academy of Cosmetology.

Awards

In 2018, the most recent academic year for which data are available, 2,349 degrees and certificates were awarded by these institutions, including 2,010 which were awarded in programs not offered as distance education.

Workforce Equilibrium

Finally, we use a crosswalk from the United States Department of Education to estimate the balance between the region's emerging supply of qualified talent and projected demand for workers with relevant skills. The difference between awards in a program and the aggregated number of openings in related occupations is quantified here as a "Workforce Equilibrium Value."

Ideally, the numbers representing emerging supply will be roughly equal to projected demand. Where an imbalance exists, there may be an opportunity to expand program offerings or to encourage students and jobseekers to consider careers in these fields. The educational system thus becomes a valuable factor in not only the success of individual students, but also in the economic success of the region.

Table 11: Program Awards and Openings in Related Occupations, Region H:

Description	2018 Awards	Openings-Related Occupations	2019 Jobs	Equilibrium Value
Cosmetology/Cosmetologist, General	278	6	40	272
Barbering/Barber	61	0	0	61
Nail Technician/Specialist and Manicurist	57	0	0	57
Aesthetician/Esthetician and Skin Care Specialist	53	0	1	53
Cosmetology, Barber/Styling, and Nail Instructor	19	6	38	13
Emergency Medical Technology/Technician (EMT Paramedic)	13	16	153	(3)
Health Services/Allied Health/Health Sciences, General	10	218	2,075	(208)
Nursing Assistant/Aide and Patient Care Assistant/Aide	9	34	243	(25)
Business/Commerce, General	8	78	822	(70)
Criminal Justice/Safety Studies	7	5	72	2
Social Work	7	11	107	(4)
Information Technology	6	7	67	(1)
Computer/Information Systems Security/Assurance	5	14	154	(9)
Biomedical Technology/Technician	5	1	10	4
Occupational Safety and Health Technology/Technician	5	1	20	4
Education, General	5	75	828	(70)
Solar Energy Technology/Technician	5	11	97	(6)
Liberal Arts and Sciences/Liberal Studies	5	18	115	(13)
Graphic Design	5	2	13	3
Administrative Assistant and Secretarial Science, General	4	108	971	(104)
Pre-Nursing Studies	4	52	601	(48)
Business Administration and Management, General	4	88	917	(84)
Pre-Engineering	3	0	0	3
Energy Management and Systems Technology/Technician	3	0	0	3
Cosmetology/Cosmetologist, General	278	6	40	272
Barbering/Barber	61	0	0	61

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