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



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]](#footnote-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.

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 |

**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.

**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:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Otero | 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% |
| *Economic Modelling Specialists International* |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Lincoln | 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 |
| *Economic Modelling Specialists International* |

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 8: 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 9: 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 10: 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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1. *https://webnew.ped.state.nm.us/bureaus/college-career-readiness/career-technical-education/* [↑](#footnote-ref-1)