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



Region D

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 D comprises a single school district: Albuquerque Public Schools

Regional Education Cooperatives (RECs) 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.

Sixteen degree-granting postsecondary institutions serve the area, including the University of New Mexico, Central New Mexico Community College and the Pima Medical Institute. The district is in Bernalillo County, which is within the Central Workforce Region.

**The Key Findings**

**The People**

* It is notable that the population of the region is aging. The youngest age bands have all declined in recent years, while those 65 years and older have experienced pronounced growth of more than 36% since 2010.
* More than 47% 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 that holds a bachelor’s degree or higher (32.9%) is slightly higher 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. Professional, Scientific and Technical Services
6. Administrative/Support and Waste Management/Remediation
7. Construction

One of the unique characteristics of this region is the concentration of the *Research and Development in the Physical, Engineering and Life Sciences* industry and the services that support it. Workers in this region are concentrated in the industry at a rate more than nine times the national average.

According to the New Mexico Department of Workforce Solutions, there are three organizations in the region that employ more than 5,000 workers.

* Da Vita Medical Group
* Sandia Corporation
* University of New Mexico

**The Jobs**

The occupation families with the largest projected growth include:

1. Personal Care and Service Occupations (4,382 new jobs)
2. Health Care Practitioners and Technical (2,387)
3. Management (1,915)
4. Business and Financial Operations (1,504)
5. Construction and Extraction (1,426)

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 ($75,024, 2,281 new jobs), Nurse Practitioners ($113,190, 299), Physical Therapists ($93,463, 184) and Diagnostic Medical Sonographers ($66,280, 168)

**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.

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 50,000 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 46% in the coming years.

Engineering

Many of the occupations that offer both high demand and higher-than-average wages come from the Architecture and Engineering Cluster. In particular, Electrical Engineers, Mechanical Engineers, Biomedical Engineers and Electronics Engineers are projected to experience significantly increased demand. High quality career opportunities in this field exist at every level of education.

Computer Occupations

Several careers from the IT Cluster are among the region’s highest-quality careers, offering both growing demand and high income potential. Among those careers are Applications Developers, Information Security Analysts and Network Support Specialists.

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

* Skilled construction trades
* Business Management and Financial Operations

The People

**Population**

There are 29,787 students enrolled in grades 9-12 across the region’s one school district. Trends in the region’s population will have an obvious effect on that enrollment and warrants regular analysis. CTE Region F has seen population growth trends slow over recent years, with a net change of 2.2% since 2010.

**Table 1: Population by County, 2010-2018:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bernalillo | 663,948 | 670,278 | 673,697 | 676,497 | 676,229 | 676,678 | 678,165 | 678,686 | 678,701 |

**Demographics-Race and Ethnicity**

**Table 2: Region D Population, by Race and Ethnicity:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Race/Ethnicity | 2010 Population | 2018 Population | Change | % Change | 2018 % of Total |
| White, Hispanic | 292,170 | 310,580 | 18,410 | 6% | 44.00% |
| White, Non-Hispanic | 276,244 | 261,179 |  (15,065) |  (5%) | 41.61% |
| American Indian or Alaskan Native, Non-Hispanic | 26,475 | 28,924 | 2,449 | 9% | 3.99% |
| Black, Non-Hispanic | 16,579 | 16,931 | 352 | 2% | 2.50% |
| Other, Hispanic | 26,357 | 31,123 | 4,766 | 18% | 4.6% |
| Other | 11,253 | 12,537 | 1,284 | 11% | 1.8% |
| *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 all declined in recent years, while those 65 years and older have increased dramatically since 2010.

**Table 3: Region D Population, by Age:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Age Cohort | 2010 Population | 2018 Population | Change | % Change | 2018 % of Cohort |
| Under 10 | 89,852 | 78,759 |  (11,093) | -12.3% | 11.6% |
| 10-19 | 88,276 | 85,589 |  (2,687) | -3.0% | 12.6% |
| 20-29 | 100,580 | 95,509 |  (5,071) | -5.0% | 14.1% |
| 30-39 | 87,717 | 97,311 | 9,594 | 10.9% | 14.3% |
| 40-49 | 88,975 | 81,193 |  (7,782) | -8.7% | 12.0% |
| 50-64 | 127,030 | 129,134 | 2,104 | 1.7% | 19.0% |
| 65+ | 81,528 | 111,215 | 29,687 | 36.4% | 16.4% |
| *United States Census Bureau, Annual Population Estimates* |

**Demographics-Educational Attainment**

**Table 4: Region D Population by Educational Attainment:**

|  |  |
| --- | --- |
| Education Level | Population |
| Less than 9th Grade | 5.4% |
| 9th Grade to 12th Grade | 6.5% |
| High School Diploma | 23.6% |
| Some College | 23.8% |
| Associate’s Degree | 7.8% |
| Bachelor’s Degree | 18.2% |
| Graduate Degree or Higher | 14.7% |
| *United States Census Bureau, American Community Survey* |

More than 47% 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 (32.9%) is slightly higher than the national average of 30.9%.

The Employers

To gain perspective on the businesses that employ workers in Region D, 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, and 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.

**Table 5: Components of Top Industry Sectors, Region D:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sector/Top Detailed Industries** | **2019 Jobs** | **Average Wages** | **Location Quotient** |
| **Government** |
|  | Local Government, Excluding Education and Hospitals | 16,184 | $45,329 | 1.25 |
|  | Education (Local Government) | 15,281 | $34,380 | 0.85 |
|  | Federal Government, Civilian, Excluding Postal Service | 12,545 | $84,962 | 2.43 |
|  | Education (State Government) | 10,614 | $54,330 | 1.71 |
| **Health Care and Social Assistance** |
|  | General Medical and Surgical Hospitals | 9,506 | $69,571 | 0.89 |
|  | Services for the Elderly and Persons with Disabilities | 6,785 | $19,575 | 1.54 |
|  | Offices of Physicians | 4,967 | $85,400 | 0.83 |
|  | Other Outpatient Care Centers | 4,583 | $59,319 | 3.01 |
|  | Home Health Care Services | 4,417 | $25,766 | 1.31 |
|  | Nursing Care Facilities (Skilled Nursing Facilities) | 2,918 | $41,293 | 0.81 |
| **Sector/Top Detailed Industries** | **2019 Jobs** | **Average Earnings** | **Location Quotient** |
| **Professional, Scientific and Technical** |
|  | Research/Development-physical, Engineering, Life Science | 13,336 | $104,541 | 9.13 |
|  | Offices of Lawyers | 3,302 | $78,697 | 1.38 |
|  | Computer Systems Design and Related Services | 3,120 | $72,050 | 0.63 |
|  | Engineering Services | 3,074 | $92,633 | 1.37 |
|  | Accounting, Tax Prep, Bookkeeping, Payroll Services | 2,030 | $52,675 | 0.88 |
| **Administrative and Support and Waste Management and Remediation Services** |
|  | Temporary Help Services | 4,039 | $27,984 | 0.61 |
|  | Telephone Call Centers | 3,058 | $34,504 | 2.69 |
|  | Janitorial Services | 2,771 | $15,336 | 1.13 |
|  | Investigation, Guard, and Armored Car Services | 2,719 | $27,739 | 1.50 |
|  | Professional Employer Organizations | 1,828 | $44,698 | 2.11 |
|  | Landscaping Services | 1,545 | $31,479 | 0.86 |
|  | Facilities Support Services | 1,068 | $64,683 | 3.00 |
| **Construction** |
|  | Electrical Contractors, Wiring Installation Contractors | 3,166 | $54,547 | 1.44 |
|  | Commercial and Institutional Building Construction | 2,899 | $58,635 | 1.88 |
|  | Plumbing, Heating, and Air-Conditioning Contractors | 2,433 | $51,730 | 0.94 |
|  | Residential Building Construction | 1,766 | $50,042 | 0.94 |
|  | Highway, Street, and Bridge Construction | 1,236 | $55,852 | 1.59 |
|  | Water/Sewer Line and Related Structures Construction | 1,122 | $62,563 | 2.55 |
| **Manufacturing** |
|  | Semiconductor and Other Electronic Component  | 1,600 | $64,576 | 1.89 |
|  | Navigational…, Electromedical, Control Instruments  | 949 | $81,318 | 1.01 |
|  | Pharmaceutical and Medicine  | 635 | $52,761 | 0.94 |
|  | Frozen Food  | 451 | $27,168 | 2.20 |
|  | Jewelry and Silverware  | 424 | $32,103 | 7.89 |
|  | Printing | 415 | $41,646 | 0.45 |
|  | Breweries | 393 | $26,641 | 2.11 |
| **Finance and Insurance** |
|  | Direct Life, Health, and Medical Insurance Carriers | 4,384 | $63,844 | 2.97 |
|  | Insurance Agencies and Brokerages | 1,821 | $61,450 | 0.72 |
|  | Credit Unions | 1,618 | $54,079 | 2.61 |
|  | Commercial Banking | 1,407 | $66,339 | 0.46 |
| *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 6: Occupation Employment, Region D, 2010-2019:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Description | 2010 Jobs | 2019 Jobs | 2010 - 2019 Change | 2010 - 2019 % Change | Annual Openings | Median Annual Earnings |
| Personal Care Aides | 4,652 | 9,909 | 5,257 | 113% | 1,594 | $21,483 |
| Customer Service Representatives | 8,686 | 11,221 | 2,535 | 29% | 1,595 | $29,673 |
| Food Prep/Serving Workers, Fast Food | 7,040 | 9,135 | 2,095 | 30% | 1,664 | $19,591 |
| Registered Nurses | 7,424 | 8,890 | 1,466 | 20% | 619 | $75,024 |
| Secretaries and Administrative Assistants | 10,449 | 11,513 | 1,064 | 10% | 1,662 | $34,726 |
| Cooks, Restaurant | 2,723 | 3,762 | 1,039 | 38% | 567 | $23,215 |
| General and Operations Managers | 4,733 | 5,730 | 997 | 21% | 564 | $92,376 |
| Medical Assistants | 2,592 | 3,403 | 811 | 31% | 443 | $31,231 |
| Sales Representatives, Services, All Other | 1,329 | 1,970 | 641 | 48% | 309 | $44,505 |
| Laborers, Freight, Stock, Material Movers | 3,589 | 4,203 | 614 | 17% | 605 | $26,597 |
| Heavy and Tractor-Trailer Truck Drivers | 2,651 | 3,242 | 591 | 22% | 399 | $41,099 |
| Supervisors-Food Preparation and Serving | 2,511 | 3,073 | 562 | 22% | 485 | $26,856 |
| Medical Secretaries | 1,736 | 2,229 | 493 | 28% | 285 | $34,297 |
| Food Servers, Nonrestaurant | 1,041 | 1,439 | 398 | 38% | 243 | $20,312 |
| Cleaners of Vehicles and Equipment | 1,071 | 1,392 | 321 | 30% | 213 | $24,387 |
| Market Research Analysts and Specialists | 511 | 822 | 311 | 61% | 101 | $54,955 |
| Construction Laborers | 2,806 | 3,116 | 310 | 11% | 369 | $30,724 |
| Insurance Sales Agents | 1,128 | 1,436 | 308 | 27% | 176 | $34,207 |
| Food Batchmakers | 210 | 507 | 297 | 141% | 82 | $23,351 |
| Maintenance and Repair Workers, General | 3,092 | 3,375 | 283 | 9% | 379 | $34,157 |
| Supervisors-Construction Trades/Extraction  | 1,921 | 2,202 | 281 | 15% | 258 | $56,950 |
| Managers, All Other | 924 | 1,201 | 277 | 30% | 112 | $95,155 |
| Fitness Trainers and Aerobics Instructors | 602 | 865 | 263 | 44% | 148 | $41,121 |
| Waiters and Waitresses | 6,519 | 6,781 | 262 | 4% | 1,351 | $18,961 |

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 7: Projected Change, Occupations, 2016-2026, Region D:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| High Quality Career | 2016 Jobs | 2026 Jobs | New Jobs | % Change | Annual Openings | Average Earnings |
| **Health Care Practitioners and Technical Occupations** |
| Registered Nurses | 7,424 | 9,705 | 2,281 | 31% | 614 | $75,024 |
| Nurse Practitioners | 236 | 475 | 239 | 101% | 34 | $113,190 |
| Physical Therapists | 420 | 604 | 184 | 44% | 35 | $93,463 |
| Diagnostic Medical Sonographers | 230 | 398 | 168 | 73% | 29 | $66,280 |
| Respiratory Therapists | 299 | 453 | 154 | 52% | 30 | $60,073 |
| Pharmacists | 640 | 773 | 133 | 21% | 42 | $127,120 |
| Speech-Language Pathologists | 270 | 400 | 130 | 48% | 26 | $65,287 |
| Physician Assistants | 326 | 446 | 120 | 37% | 30 | $114,248 |
| Occupational Health and Safety Specialists | 224 | 338 | 114 | 51% | 24 | $74,069 |
| Radiologic Technologists | 492 | 605 | 113 | 23% | 39 | $60,215 |
| **Management Occupations** |
| Financial Managers | 1,022 | 1,325 | 303 | 30% | 109 | $102,594 |
| Medical and Health Services Managers | 633 | 923 | 290 | 46% | 80 | $119,781 |
| Construction Managers | 558 | 713 | 155 | 28% | 57 | $80,884 |
| Administrative Services Managers | 741 | 887 | 146 | 20% | 80 | $93,945 |
| Computer and Information Systems Managers | 461 | 590 | 129 | 28% | 49 | $100,327 |
| Natural Sciences Managers | 129 | 240 | 111 | 86% | 24 | $99,298 |
| Human Resources Managers | 189 | 299 | 110 | 58% | 30 | $99,127 |
| Property, Real Estate, Association Managers | 244 | 317 | 73 | 30% | 26 | $55,784 |
| Social and Community Service Managers | 293 | 353 | 60 | 20% | 33 | $65,051 |
| Marketing Managers | 213 | 269 | 56 | 26% | 26 | $89,740 |
| **High Quality Career** | **2016 Jobs** | **2026 Jobs** | **New Jobs** | **% Change** | **Annual Openings** | **Average Earnings** |
| **Business and Financial Operations** |
| Market Research Analysts and Specialists | 511 | 912 | 401 | 78% | 101 | $54,955 |
| Management Analysts | 1,226 | 1,554 | 328 | 27% | 151 | $80,311 |
| Accountants and Auditors | 2,953 | 3,244 | 291 | 10% | 308 | $62,463 |
| Compliance Officers | 473 | 710 | 237 | 50% | 69 | $62,957 |
| Training and Development Specialists | 630 | 856 | 226 | 36% | 97 | $55,323 |
| Logisticians | 311 | 488 | 177 | 57% | 53 | $73,475 |
| **Architecture and Engineering Occupations** |
| Electrical Engineers | 857 | 1,062 | 205 | 24% | 87 | $114,444 |
| Mechanical Engineers | 823 | 941 | 118 | 14% | 77 | $116,991 |
| Biomedical Engineers | 232 | 310 | 78 | 34% | 29 | $104,100 |
| Materials Engineers | 132 | 206 | 74 | 56% | 17 | $141,500 |
| Electronics Engineers | 464 | 476 | 12 | 3% | 36 | $122,066 |
| **Computer and Mathematical** |
| Software Developers, Applications | 574 | 899 | 325 | 57% | 72 | $80,537 |
| Computer Systems Analysts | 948 | 1,104 | 156 | 16% | 88 | $81,239 |
| Software Developers, Systems Software | 1,029 | 949 |  (80) |  (8%) | 77 | $94,546 |
| Network and Computer Systems Administrators | 766 | 760 |  (6) |  (1%) | 58 | $73,444 |
| Computer Network Architects | 289 | 336 | 47 | 16% | 28 | $107,323 |
| Information Security Analysts | 237 | 503 | 266 | 112% | 44 | $104,824 |
| **Installation, Maintenance and Repair** |
| Supervisors-Mechanics, Installers, and Repairers | 972 | 1,028 | 56 | 6% | 97 | $56,133 |
| Electrical Power-Line Installers and Repairers | 138 | 172 | 34 | 25% | 17 | $70,074 |
| Aircraft Mechanics and Service Technicians | 420 | 419 |  (1) |  (0%) | 39 | $60,945 |

The Talent Development Ecosystem

**Assets**

Sixteen degree-granting postsecondary institutions serve the area, including the University of New Mexico, Central New Mexico Community College and the Pima Medical Institute.

**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 8: Program Awards and Openings in Related Occupations, Region D:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Description | 2018 Awards | Openings-Related Occupations | 2019 Jobs | Equilibrium Value |
| Business Administration and Management, General | 1,226 | 1,290 | 13,074 |  (64) |
| Registered Nursing/Registered Nurse | 712 | 592 | 8,890 | 120 |
| Psychology, General | 688 | 43 | 559 | 645 |
| Medical/Clinical Assistant | 370 | 437 | 3,556 |  (67) |
| Biology/Biological Sciences, General | 316 | 60 | 505 | 256 |
| Emergency Medical Technology/Technician (EMT Paramedic) | 306 | 85 | 739 | 221 |
| Nursing Assistant/Aide and Patient Care Assistant/Aide | 280 | 330 | 2,550 |  (50) |
| Child Care Provider/Assistant | 261 | 174 | 1,087 | 87 |
| Business/Commerce, General | 252 | 1,146 | 11,876 |  (894) |
| Computer and Information Sciences, General | 205 | 405 | 4,517 |  (200) |
| Sociology | 182 | 1 | 4 | 181 |
| Elementary Education and Teaching | 180 | 124 | 1,663 | 56 |
| Accounting | 166 | 355 | 3,671 |  (189) |
| Dental Assisting/Assistant | 163 | 143 | 1,167 | 20 |
| English Language and Literature, General | 160 | 361 | 4,319 |  (201) |
| Rhetoric and Composition | 160 | 361 | 4,319 |  (201) |
| Spanish Language and Literature | 152 | 20 | 187 | 133 |
| Corrections | 152 | 156 | 1,670 |  (4) |
| Cosmetology/Cosmetologist, General | 151 | 151 | 1,097 | 0 |
| Accounting Technology/Technician and Bookkeeping | 128 | 507 | 4,295 |  (379) |
| Mechanical Engineering | 126 | 214 | 2,526 |  (88) |
| Political Science and Government, General | 125 | 3 | 20 | 122 |
| History, General | 121 | 1 | 6 | 120 |
| Automobile/Automotive Mechanics Technology/Technician | 116 | 180 | 1,804 |  (64) |
| Business Administration and Management, General | 1,226 | 1,290 | 13,074 |  (64) |
| Registered Nursing/Registered Nurse | 712 | 592 | 8,890 | 120 |

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