

2020

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



Trevor Stokes

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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

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

¹ <https://webnew.ped.state.nm.us/bureaus/college-career-readiness/career-technical-education/>

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

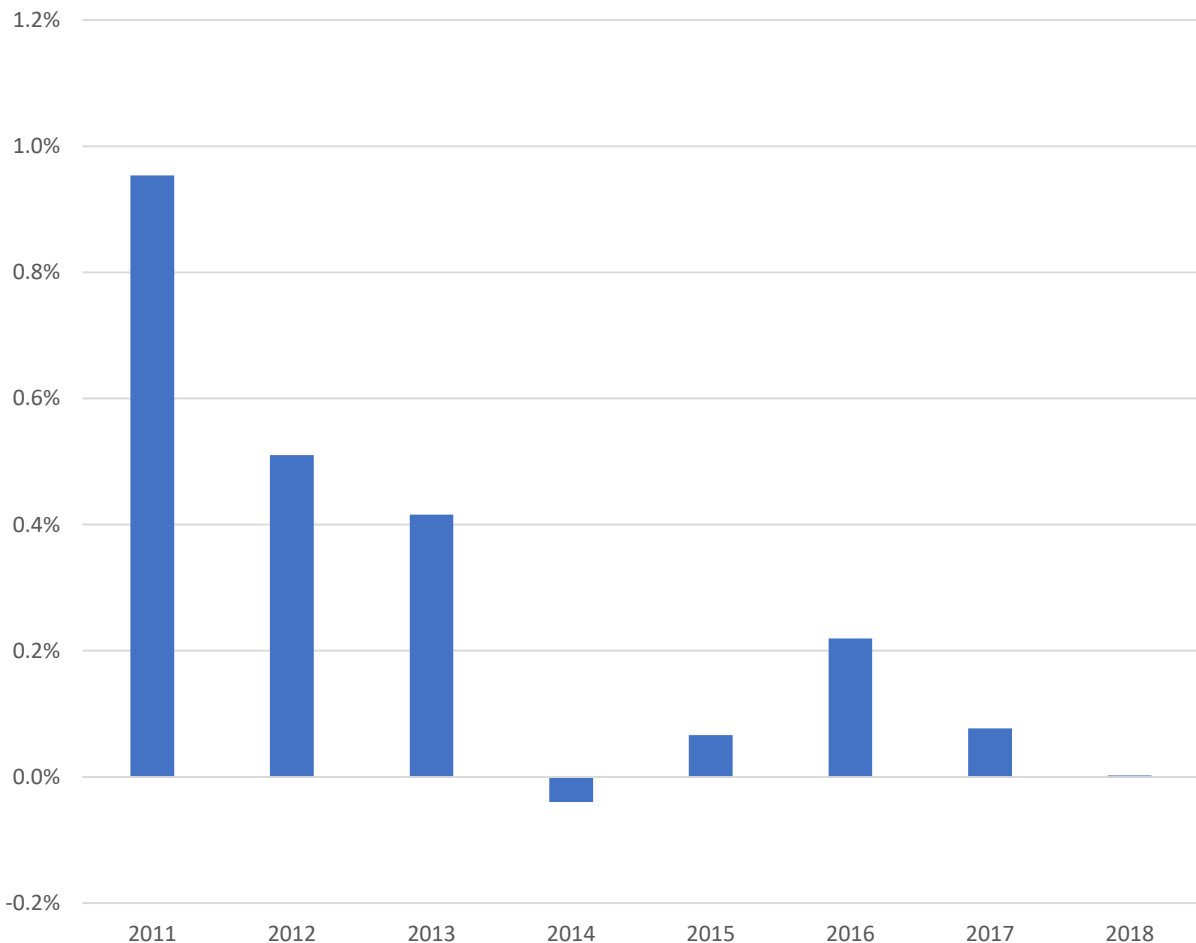
Population

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

Population, by Annual Percentage Change, by County

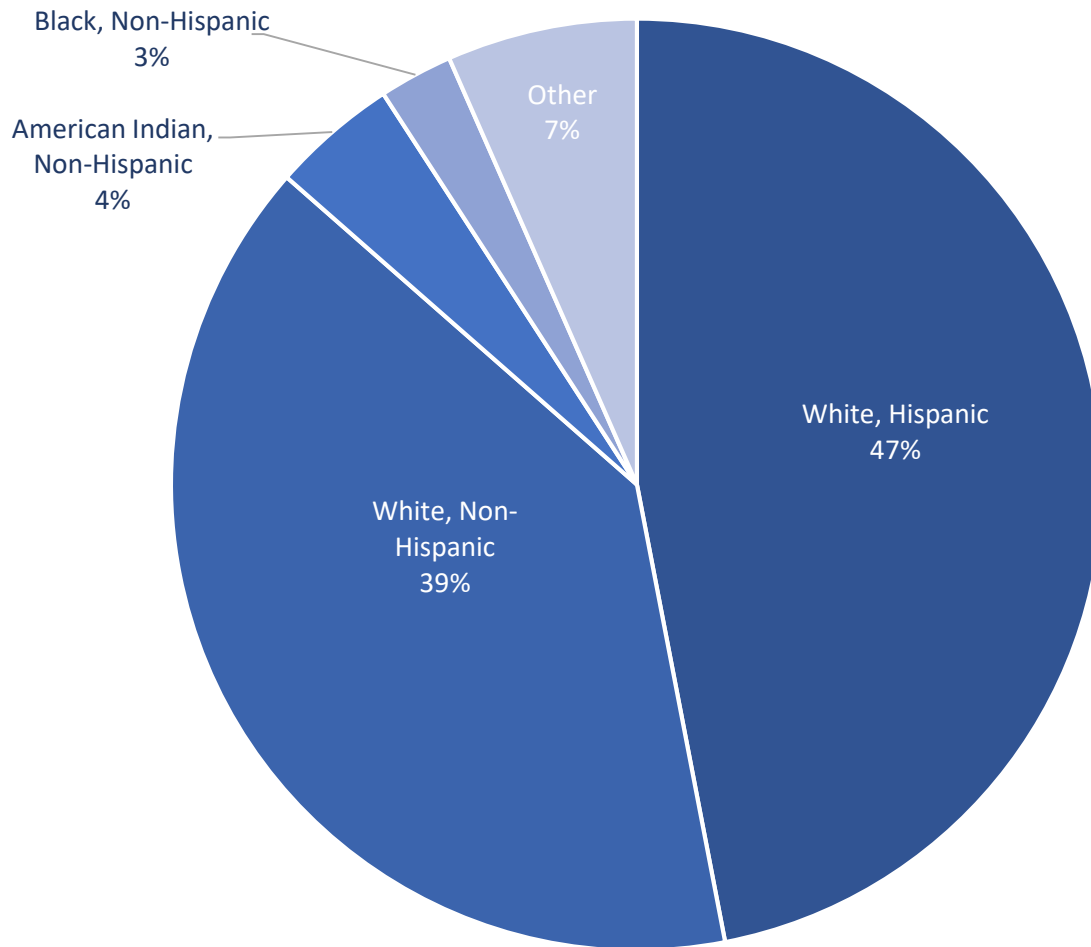


Demographics-Race and Ethnicity

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 9 th Grade	5.4%
9 th Grade to 12 th 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.

Employment, Top Industry Sectors, Region D

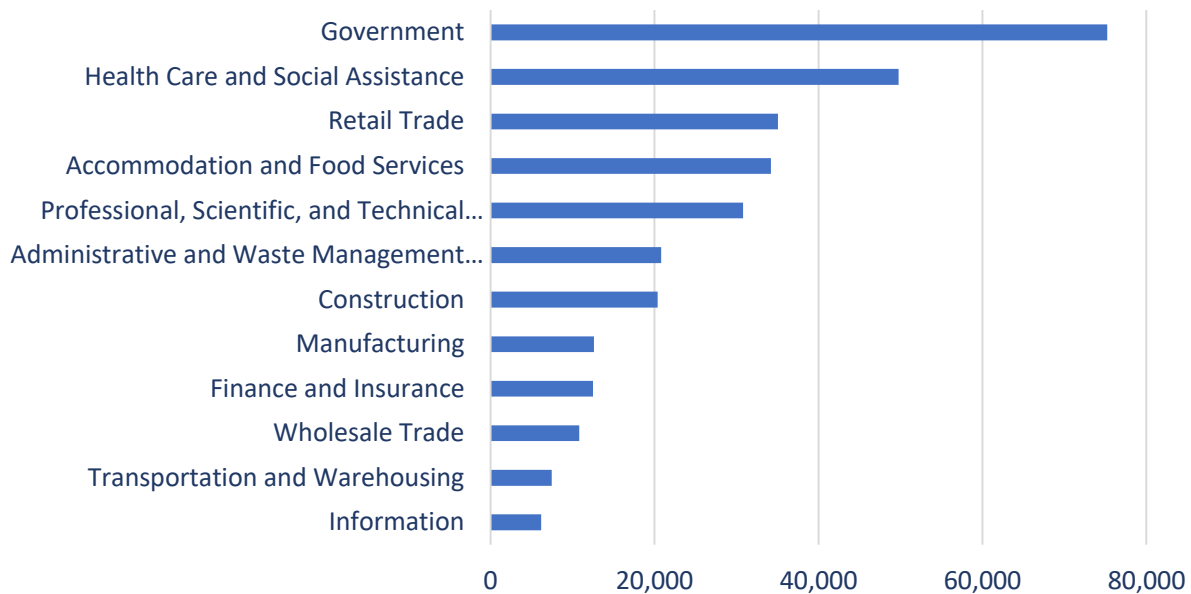


Table 5: Components of Top Industry Sectors, Region D:

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

For more information, contact Trevor Stokes at tstokes@careersthatwork.net

NS4ED

200 E Broadway
Maryville, TN

NS4ed.com

Joseph Goins, President

