

2020

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



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NS4ED

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Region B

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 B comprises a number of school districts and charter schools:

- Chama Valley
- Cuba Independent
- Dulce Independent
- Española
- Jemez Mountain
- Jemez Valley
- Los Alamos
- Mesa Vista
- Peñasco Independent
- Pojoaque Valley
- Questa Independent
- Santa Fe
- Taos Municipal
- State Charter-Academy for Technology and the Classics
- State Charter-Monte del Sol
- State Charter-Vista Grande
- State Charter Walatow

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 #2.

Postsecondary educational institutions in the region include Santa Fe Community College, Northern New Mexico College, University of New Mexico-Taos and UNM-Los Alamos.. The districts lie primarily in Rio Arriba, Sandoval, Los Alamos and Taos Counties, all of which are within the Northern Workforce Region.

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

The Key Findings

The People

- CTE Region B has seen uneven population trends over recent years, with only Los Alamos and Sandoval Counties experiencing net positive growth since 2010. Combined, the region’s population has increased 5.6% over that time. Almost all of the growth has occurred in Sandoval County (9.6%). Rio Arriba has seen a 3.2% decline.
- It is notable that the population of the region is aging. The age band with the largest growth since 2010 is 65 years and older. While the school-age population has declined significantly over that period, the oldest segment of the population has increased at a remarkable rate of more than 50%.
- Just more than half (50.7%) 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 (29.3%) is somewhat lower than the national average of 30.9%.

The Employers

The largest industries in the Region are

1. Government
2. Professional, Scientific and Technical Services
3. Health Care and Social Assistance
4. Accommodation and Food Services
5. Retail Trade
6. Administrative and Support and Waste Management and Remediation

One of the unique characteristics of this region is the concentration of the *Professional, Scientific and Technical Services* industry, in which the region’s workers are employed at a rate almost 3 times the national average. Specifically, many of these jobs (10,813) are in the *Research and Development in the Physical, Engineering, and Life Sciences* industry.

According to the New Mexico Department of Workforce Solutions, there are 15 organizations in the region who employ more than 250 workers.

- | | | |
|----------------------------------|-----------------------------|-------------------------------|
| • Jicarilla Apache Tribe Police | • Los Alamos Medical Center | • Black Mesa Casino |
| • Santa Claran Hotel Casino | • Los Alamos National Bank | • UNM Sandoval Medical Center |
| • Ohkay Hotel Casino | • Taos Municipal Schools | • Hyatt Regency-Tamaya Resort |
| • Walmart Supercenter | • Fisher Sand and Gravel | • Isleta Casino and Resort |
| • Presbyterian Espanola Hospital | • Rio Rancho High School | • Intel Corporation |

The Jobs

The occupation families with the largest projected growth include:

1. Office and Administrative Support Occupations (1,140 new jobs)
2. Personal Care and Service Occupations (880)
3. Health Care Practitioners and Technical Occupations (722)
4. Life, Physical and Social Science Occupations (670)
5. Food Preparation and Serving Occupations (647)

6. Management (593)
7. Construction and Extraction (569)

This report also 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 (\$69,182, 186 new jobs), Dental Hygienists (81,578, 46) and Physical Therapists (\$88,932, 26). Others came from the Management cluster, including Medical and Health Services Managers (\$101,765, 60 new jobs), Financial Managers (\$90,266, 45), Administrative Services Managers (\$105,565, 35 new jobs), Computer and Information Systems Managers (\$123,824, 31) and Architectural and Engineering Managers (\$171,421, 31).

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

Nine 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 12,000 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

Business Management

A number of business and financial careers were profiled in this report, including Financial Managers, Compliance Officers, Human Resources Specialists, Accountants and Health Services Managers. These careers are crucial to many of the region’s most critical industries. Professional, Scientific and Technical Services, Hospitals and Construction.

Architecture and Engineering

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

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

- Skilled Construction Trades
- Advanced Manufacturing

The People

Population

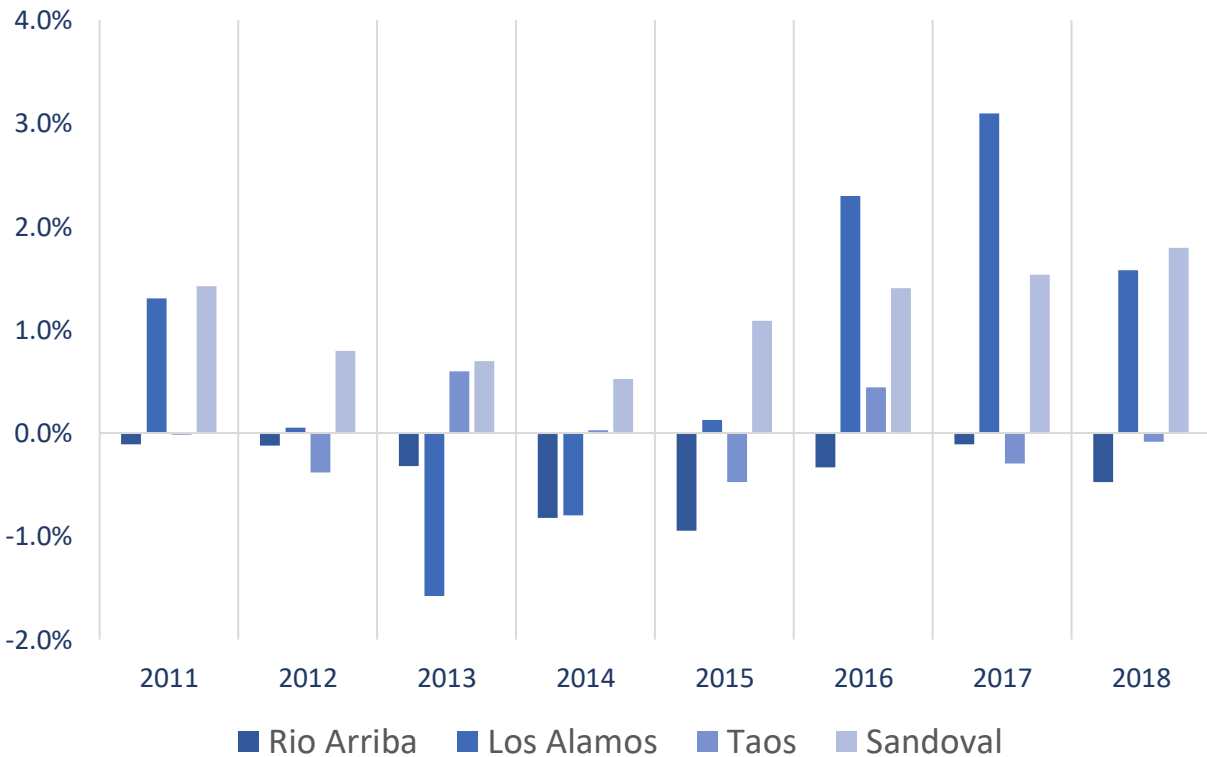
There are 8,611 students enrolled in grades 9-12 across the region’s ten school districts. Trends in the region’s population will have an obvious effect on that enrollment and warrants regular analysis. CTE Region B has seen uneven population trends over recent years, with only Los Alamos and Sandoval Counties experiencing net positive growth since 2010. Combined, the region’s population has increased 5.6% over that time. Almost all of the growth has occurred in Sandoval County (9.6%). Rio Arriba has seen a 3.2% decline.

Table 1: Population by County, 2010-2018:

County	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rio Arriba	40,289	40,246	40,197	40,069	39,739	39,364	39,233	39,191	39,006
Los Alamos	17,994	18,229	18,238	17,950	17,807	17,830	18,239	18,804	19,101
Taos	32,896	32,891	32,766	32,962	32,971	32,814	32,960	32,862	32,835
Sandoval	132,430	134,312	135,381	136,326	137,039	138,531	140,471	142,624	145,179

United States Census Bureau, Annual Population Estimates

Population, by Annual Percentage Change, by County

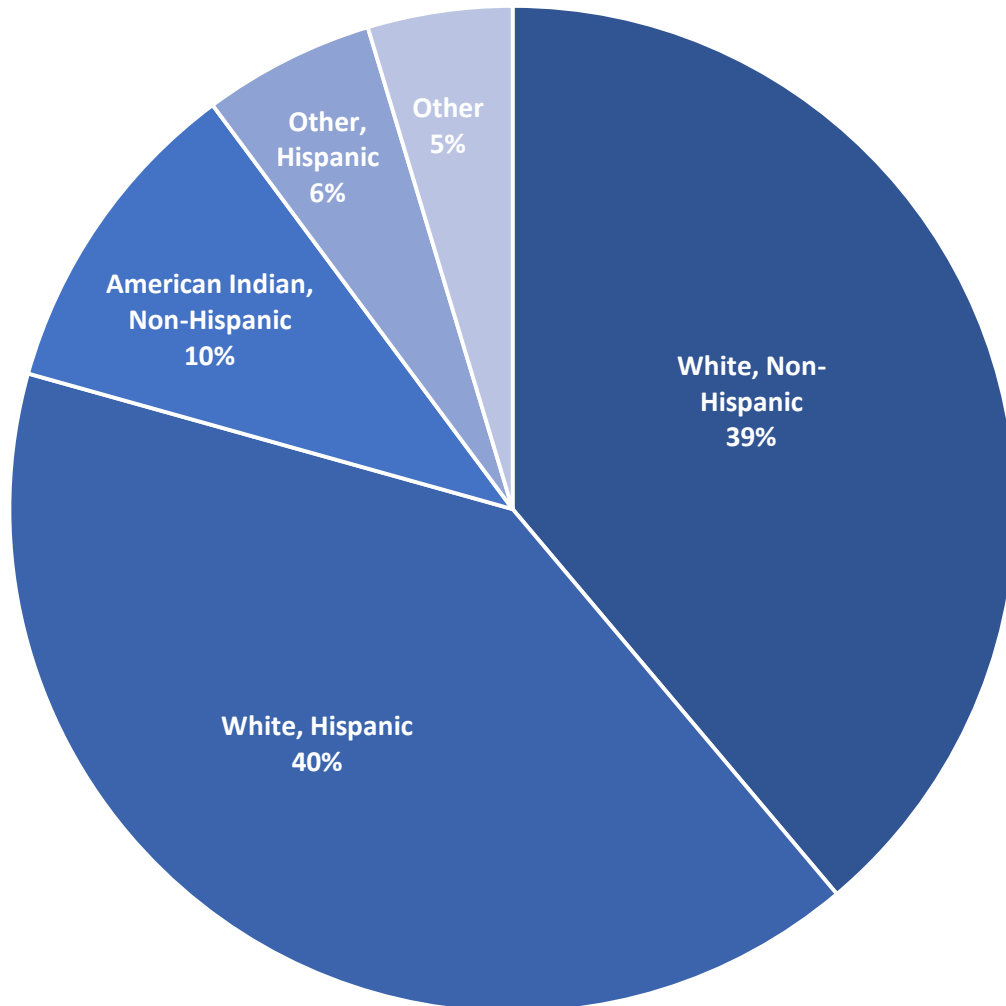


Demographics-Race and Ethnicity

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

Race/Ethnicity	2010 Population	2018 Population	Change	% Change	2018 % of Total
White, Non-Hispanic	94,181	92,832	(1,349)	-1.4%	38.9%
White, Hispanic	88,456	96,718	8,262	9.3%	40.5%
American Indian, Non-Hispanic	23,618	25,063	1,445	6.1%	10.5%
Other, Hispanic	10,188	13,183	2,995	29.4%	5.5%
Other	9,368	11,106	1,738	18.6%	4.6%

United States Census Bureau, Annual Population Estimates



Demographics-Age

It is notable that the population of the region is aging. The age band with the largest growth since 2010 is 65 years and older. While the school-age population has declined significantly over that period, the oldest segment of the population has simultaneously increased at a remarkable rate of more than 50%.

Table 3: Region B Population, by Age:

Age Cohort	2010 Population	2018 Population	Change	% Change	2018 % of Cohort
Under 10	30,256	27,491	(2,765)	-9.1%	11.64%
10-19	31,363	30,892	(471)	-1.5%	13.08%
20-29	23,941	26,131	2,190	9.1%	11.07%
30-39	27,311	29,316	2,005	7.3%	12.42%
40-49	31,655	28,409	(3,246)	-10.3%	12.03%
50-64	48,895	48,465	(430)	-0.9%	20.53%
65 and over	30,183	45,412	15,229	50.5%	19.23%

United States Census Bureau, Annual Population Estimates

Demographics-Educational Attainment

Table 4: Region B Population by Educational Attainment:

Education Level	Population
Less than 9 th Grade	3.7%
9 th Grade to 12 th Grade	7.2%
High School Diploma	26.2%
Some College	24.5%
Associate's Degree	8.5%
Bachelor's Degree	17.1%
Graduate Degree or Higher	12.8%

United States Census Bureau, American Community Survey

Just more than half (50.7%) 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 (29.3%) is somewhat lower than the national average of 30.9%.

The Employers

To gain perspective on the businesses who employ workers in Region B, 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.

Employment, Top Industry Sectors, Region B

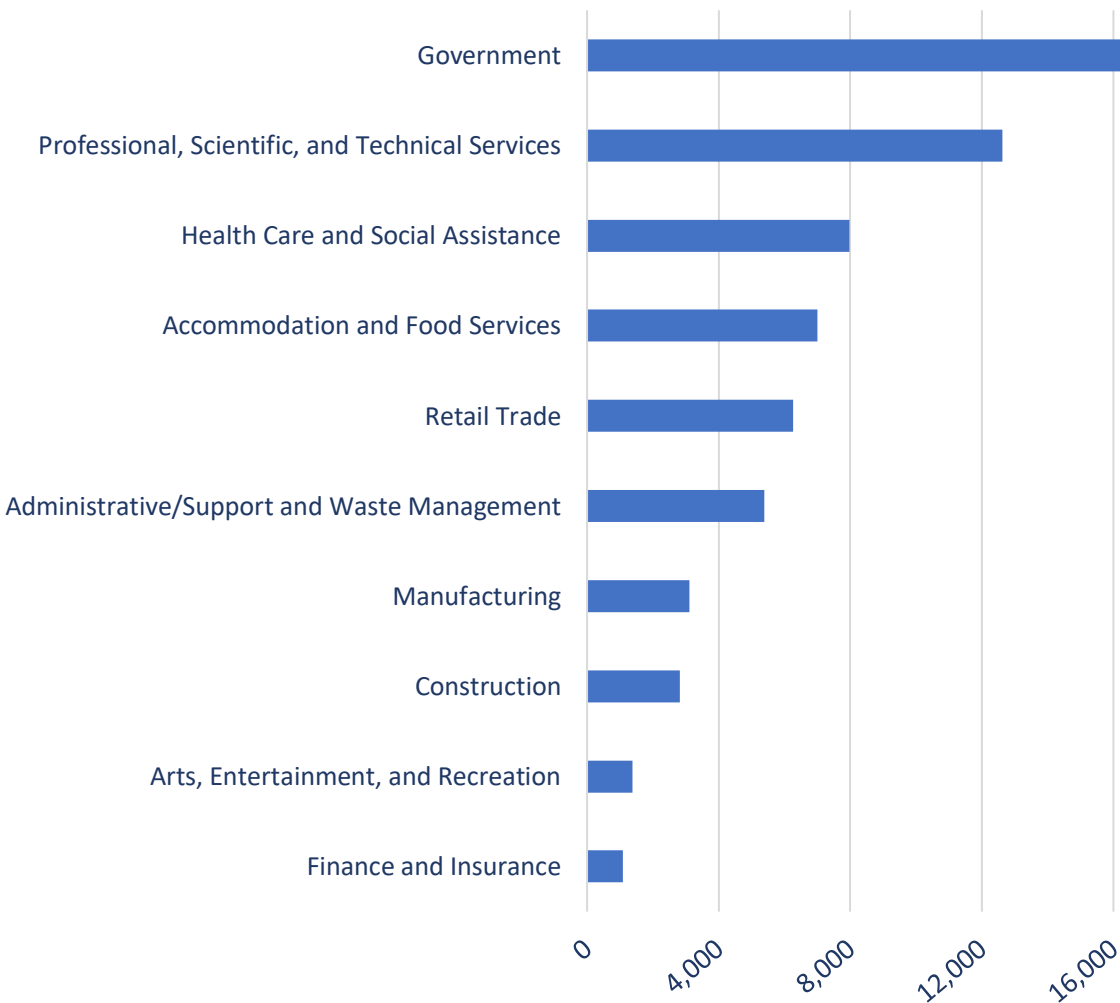


Table 5: Components of Top Industry Sectors, Region B:

Sector/Top Detailed Industries	2019 Jobs	Average Wages	Location Quotient
Professional, Scientific and Technical Services			
Research/Development-Physical, Engineering, and Life Sciences	10,813	\$104,558	36.5
Computer Systems Design and Related Services	359	\$70,073	0.4
Engineering Services	335	\$95,763	0.7
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	206	\$36,152	0.4
Environmental Consulting Services	199	\$98,887	4.9
Government			
Local Government, Excluding Education and Hospitals	8,334	\$37,270	3.2
Education (Local Government)	5,013	\$40,625	1.4
Education (State Government)	879	\$26,096	0.7
Federal Government, Civilian, Excluding Postal Service	852	\$74,666	0.8
Health Care and Social Assistance			
General Medical and Surgical Hospitals	1,513	\$63,110	0.7
Services for the Elderly and Persons with Disabilities	1,095	\$16,627	1.2
Offices of Physicians	858	\$65,220	0.7
Retirement Communities and Elderly Assisted Living Facilities	638	\$23,723	1.5
Offices of Dentists	563	\$49,778	1.3
Nursing Care Facilities (Skilled Nursing Facilities)	550	\$28,329	0.8
Child Day Care Services	496	\$20,597	1.2
Accommodation and Food Services			
Restaurants and Other Eating Places	5,229	\$16,534	1.1
Hotels (except Casino Hotels) and Motels	1,386	\$24,341	1.8

Sector/Top Detailed Industries	2019 Jobs	Average Earnings	Location Quotient
Manufacturing			
Semiconductor and Other Electronic Component Manufacturing	1,401	\$134,796	8.2
Medical Equipment and Supplies Manufacturing	199	\$38,589	1.4
Lighting Fixture Manufacturing	150	\$40,846	8.2
Audio and Video Equipment Manufacturing	149	\$57,890	16.0
Aerospace Product and Parts Manufacturing	138	\$43,261	0.6
Construction			
Commercial and Institutional Building Construction	481	\$64,718	1.5
Residential Building Construction	464	\$32,448	1.2
Electrical Contractors and Wiring Installation Contractors	383	\$56,637	0.9
Plumbing, Heating, and Air-Conditioning Contractors	327	\$44,842	0.6

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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, Los Alamos County, 2019:

Los Alamos	2019 Jobs	Average Wages/ Earnings	Location Quotient	Age 45+
Research/Development-Physical, Engineering, Life Sciences	10,697	\$104,320	153.98	54.8%
Education (Local Government)	699	\$42,390	0.81	57.4%
Local Government, Excluding Education and Hospitals	631	\$51,568	1.01	38.0%
Restaurants and Other Eating Places	367	\$19,795	0.31	26.7%
Supermarkets and Other Grocery Stores	297	\$32,455	1.08	30.3%
Offices of Physicians	267	\$69,021	0.93	46.1%
Facilities Support Services	223	\$52,445	13.17	50.7%
Education (State Government)	197	\$30,460	0.66	49.7%
Federal Government, Civilian, Excluding Postal Service	197	\$103,709	0.79	50.3%
Engineering Services	190	\$97,765	1.77	64.2%

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Table 7: Employment by Industry, Rio Arriba County, 2019:

Rio Arriba	2019 Jobs	Average Wages/ Earnings	Location Quotient	Age 45+
Local Government, Excluding Education and Hospitals	2,566	\$31,120	6.73	38.0%
Education (Local Government)	903	\$38,971	1.71	57.1%
Restaurants and Other Eating Places	771	\$16,035	1.08	25.9%
Education (State Government)	474	\$24,305	2.59	49.8%
General Merchandise Stores, Warehouse Clubs, Supercenters	396	\$26,081	3.04	41.7%
General Medical and Surgical Hospitals	344	\$84,444	1.10	47.4%
Nursing Care Facilities (Skilled Nursing Facilities)	255	\$29,873	2.40	51.4%
Federal Government, Civilian, Excluding Postal Service	217	\$66,051	1.43	49.8%
Home Centers	191	\$23,995	4.03	45.0%
Services for the Elderly and Persons with Disabilities	191	\$18,093	1.50	52.9%

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Table 8: Employment by Industry, Taos County, 2019:

Taos	2019 Jobs	Average Wages/ Earnings	Location Quotient	Age 45+
Restaurants and Other Eating Places	1,292	\$16,941	1.65	30.0%
Local Government, Excluding Education and Hospitals	844	\$34,784	2.02	38.0%
Hotels (except Casino Hotels) and Motels	749	\$22,009	6.28	46.3%
Education (Local Government)	596	\$35,052	1.03	57.2%
Skiing Facilities	581	\$26,776	192.80	43.2%
Supermarkets and Other Grocery Stores	373	\$28,512	2.02	38.9%
General Medical and Surgical Hospitals	336	\$61,774	0.98	55.1%
Services for the Elderly and Persons with Disabilities	264	\$16,367	1.89	53.4%
Federal Government, Civilian, Excluding Postal Service	209	\$70,562	1.25	49.8%
Residential Building Construction	199	\$28,670	3.30	46.7%

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Table 8: Employment by Industry, Sandoval County, 2019:

Sandoval	2019 Jobs	Average Wages/Earnings	Location Quotient	Age 45+
Local Government, Excluding Education and Hospitals	4,285	\$38,337	3.6	46.1%
Education (Local Government)	2,834	\$41,447	1.7	48.0%
Restaurants and Other Eating Places	2,817	\$16,067	1.3	19.4%
Semiconductor, Other Electronic Component Manufacturing	1,401	\$134,796	18.0	72.8%
Merchandise Stores, Warehouse Clubs and Supercenters	938	\$22,867	2.3	32.0%
General Medical and Surgical Hospitals	651	\$49,513	0.7	36.9%
Services for the Elderly and Persons with Disabilities	608	\$16,255	1.5	45.6%
Retirement Communities and Elderly Assisted Living Facilities	598	\$24,315	3.0	41.1%
Supermarkets and Other Grocery (except Convenience) Stores	501	\$26,119	1.0	41.1%
Hotels (except Casino Hotels) and Motels	418	\$30,013	1.2	37.6%

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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 B, 2010-2019:

Description	2010 Jobs	2019 Jobs	2010 - 2019 Change	2010 - 2019 % Change	Annual Openings	Median Annual Earnings
Customer Service Representatives	1,447	2,776	1,329	92%	434	\$31,647
Personal Care Aides	666	1,668	1,002	150%	276	\$20,272
Food Prep/Serving Workers, Fast Food	1,495	1,846	351	23%	351	\$18,518
Secretaries and Administrative Assistants	2,216	2,489	273	12%	326	\$32,607
Registered Nurses	737	932	195	26%	78	\$69,182
Cooks, Restaurant	507	698	191	38%	108	\$23,748
Nuclear Engineers	300	452	152	51%	52	\$140,876
General and Operations Managers	1,001	1,135	134	13%	114	\$84,574
Supervisors-Food Preparation and Serving	516	617	101	20%	102	\$26,849
Cashiers	1,754	1,846	92	5%	370	\$20,244
Computer & Information Research Scientists	209	300	91	44%	34	\$147,537
Sales Representatives, Services, All Other	200	289	89	45%	47	\$50,204
Hazardous Materials Removal Workers	20	109	89	445%	18	\$75,852
Teachers and Instructors, All Other	236	324	88	37%	48	\$48,169
Medical Assistants	289	376	87	30%	53	\$28,309
Information Security Analysts	120	198	78	65%	21	\$118,258
Engineering Technicians, Other	482	555	73	15%	69	\$88,131
Dental Assistants	184	255	71	39%	35	\$36,430
Emergency Medical Technicians, Paramedics	104	174	70	67%	17	\$31,113
Recreation Workers	285	355	70	25%	64	\$18,417
Retail Salespersons	1,488	1,558	70	5%	236	\$22,750
Medical and Health Services Managers	95	164	69	73%	18	\$101,765
Supervisors of Personal Service Workers	115	183	68	59%	22	\$33,610
Supervisors-Office & Administrative Support	832	896	64	8%	105	\$50,857

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 B:

High Quality Career	2016 Jobs	2026 Jobs	New Jobs	% Change	Annual Openings	Average Earnings
Health Care Practitioners and Technical Occupations						
Registered Nurses	889	1,075	186	21%	73	\$69,182
Dental Hygienists	98	144	46	47%	13	\$81,578
Nurse Practitioners	54	84	30	56%	7	\$106,597
Physical Therapists	47	73	26	55%	5	\$88,932
Clinical Laboratory Technologists/Technicians	147	173	26	18%	14	\$49,540
Occupational Health and Safety Specialists	104	124	20	19%	9	\$78,232
Management Occupations						
General and Operations Managers	1,041	1,229	188	18%	119	\$84,574
Medical and Health Services Managers	128	188	60	47%	19	\$101,765
Financial Managers	160	205	45	28%	19	\$90,266
Administrative Services Managers	167	202	35	21%	19	\$105,556
Computer and Information Systems Managers	144	175	31	22%	16	\$123,824
Architectural and Engineering Managers	214	245	31	14%	23	\$171,421
Construction Managers	87	109	22	25%	10	\$78,416
Natural Sciences Managers	65	84	19	29%	9	\$114,100
Social and Community Service Managers	58	76	18	31%	8	\$59,195
Business and Financial Operations Occupations						
Accountants and Auditors	479	544	65	14%	55	\$60,257
Human Resources Specialists	211	256	45	21%	29	\$60,226
Training and Development Specialists	179	219	40	22%	26	\$59,556
Management Analysts	252	292	40	16%	30	\$91,718

High Quality Career	2016 Jobs	2026 Jobs	New Jobs	% Change	Annual Openings	Average Earnings
Computer and Mathematical Occupations						
Computer and Information Research Scientists	261	343	82	31%	32	\$147,537
Information Security Analysts	179	220	41	23%	19	\$118,258
Computer Systems Analysts	137	161	24	18%	14	\$88,167
Statisticians	26	46	20	77%	5	\$87,026
Software Developers, Applications	115	133	18	16%	12	\$87,902
Architecture and Engineering Occupations						
Nuclear Engineers	432	465	33	8%	33	\$140,876
Health and Safety Engineers	100	128	28	28%	12	\$122,041
Civil Engineers	119	138	19	16%	14	\$98,718
Architects, Except Landscape and Naval	21	38	17	81%	4	\$64,281
Petroleum Engineers	11	23	12	109%	3	\$101,448
Environmental Engineering Technicians	14	25	11	79%	3	\$50,356

The Talent Development Ecosystem

Assets

CTE Region B is served by Regional Education Center #2. Postsecondary educational institutions in the region include Santa Fe Community College, Northern New Mexico College, the University of New Mexico-Taos and the University of New Mexico-Los Alamos.

Awards

In 2018, the most recent academic year for which data are available, 414 degrees and certificates were awarded by these institutions, including 294 degrees and 120 certificates.

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 B:

Description	2018 Awards	Openings-Related Occupations	2019 Jobs	Equilibrium Value
Liberal Arts and Sciences/Liberal Studies	78	28	260	50
Business Administration and Management, General	71	165	1,577	(94)
Emergency Medical Technology/Technician (EMT Paramedic)	48	7	78	41
Registered Nursing/Registered Nurse	32	32	532	(0)
Physical Sciences	28	7	65	21
Nursing Assistant/Aide and Patient Care Assistant/Aide	23	52	384	(29)
General Studies	15	0	0	15
Engineering, General	14	49	501	(35)
Electrical & Electronic Engineering Technologies/Technicians	14	7	67	7
Health Professions and Related Clinical Sciences, Other	11	5	46	6
Environmental Science	10	41	309	(31)
Massage Therapy/Therapeutic Massage	10	1	7	9
Truck and Bus Driver/Commercial Vehicle Operator...	10	68	476	(58)
Biology/Biological Sciences, General	9	14	117	(5)
Elementary Education and Teaching	8	25	312	(17)
Holistic Health	8	1	7	7
Pre-Engineering	7	0	0	7
Computer Engineering Technology/Technician	7	7	67	0
Criminal Justice/Safety Studies	6	4	53	2
Art/Art Studies, General	6	1	6	5
Early Childhood Education and Teaching	6	20	167	(14)
Nuclear and Industrial Radiologic Technologies, Other	5	2	9	3
Robotics Technology/Technician	5	3	18	2
Computer and Information Sciences, General	4	103	1,045	(99)
Social Work	4	21	169	(17)

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

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Joseph Goins, President

