2020

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



Trevor Stokes

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 17,000+ are "concentrators," who take two or more CTE courses. 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, Santa Fe, 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

- 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%.
- 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. Health Care and Social Assistance
3. Accommodation and Food Services
4. Professional, Scientific and Technical 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 (10,992) 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
- Santa Claran Hotel Casino
- Ohkay Hotel Casino
- Walmart Supercenter
- Presbyterian Espanola Hospital
- Los Alamos Medical Center
- Los Alamos National Bank
- Taos Municipal Schools
- Fisher Sand and Gravel
- Rio Rancho High School
- Black Mesa Casino
- UNM Sandoval Medical Center
- Hyatt Regency-Tamaya Resort
- Isleta Casino and Resort
- Intel Corporation
- New Mexico Government

The Jobs

The occupation families with the largest projected growth include:

1. Food Preparation and Serving Occupations (2,204 new jobs)
2. Personal Care and Service Occupations (1,324)
3. Health Care Practitioners and Technical Occupations (1,016)
4. Management (880)

5. Life, Physical and Social Science Occupations (676)
6. Construction and Extraction (598)
7. Business and Financial Operations Occupations (492)

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 ($69,788, 304 new jobs. Others came from the Management cluster, including General and Operations Managers ($84,270, 237 new jobs),

Medical and Health Services Managers ($97,565, 86 new jobs), Financial Managers ($87,201, 84), Farming and Agricultural Managers ($61,186, 77), and Computer and Information Systems Managers ($106,169, 49).

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

Four 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 15,000 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

STEM

Science, Technology, Engineering and Mathematics play an outsized role in the labor markets of this region. Health Care is a critical sector which faces challenging shortages of qualified talent in several fields. Engineering is a high-demand field, with applications in computer-oriented businesses, laboratories, research and development organizations and others. Computer occupations are some of the most high-demand, high-wage careers in the region. The evolving technological demands of these fields is blurring the lines between them. For that reason, this report identifies STEM as a priority field instead of identifying each area separately.

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.

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

- Skilled Construction Trades
- Advanced Manufacturing

The People

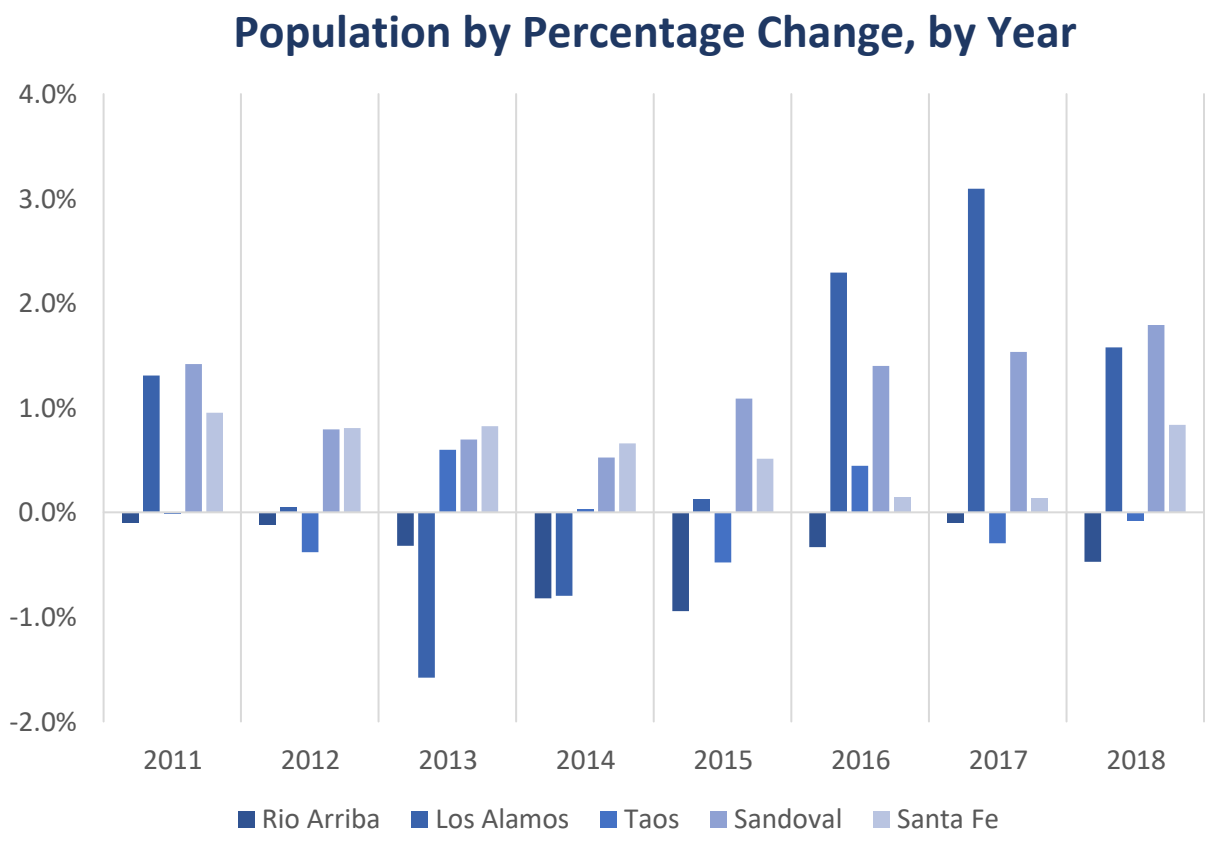
Population

Trends in the region's population will have an obvious effect on the region's school enrollment and warrants regular analysis. CTE Region B has seen uneven population trends over recent years, with only Los Alamos, Sandoval and Santa Fe Counties experiencing net positive growth since 2010. Combined, the region's population has increased 5.4% over that time. Almost all of the growth has occurred in Sandoval County (9.6%) and Santa Fe County (5.0%). 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
Santa Fe	141,702	143,053	144,209	145,400	146,361	147,108	147,320	147,514	148,750

United States Census Bureau, Annual Population Estimates

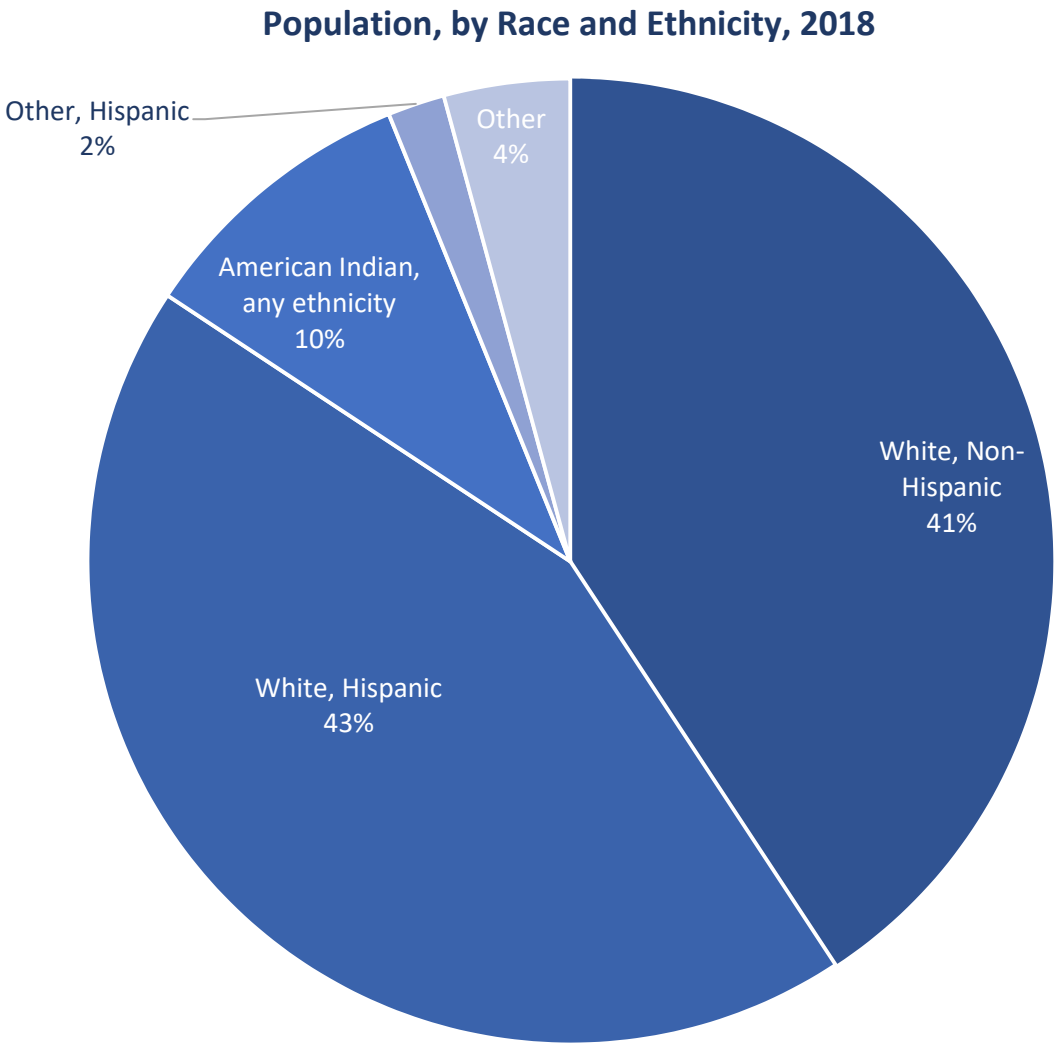


Demographics-Race and Ethnicity

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

Race/Ethnicity	2010 Population	2018 Population	Change	% Change	2018 % of Total
White, Non-Hispanic	157,913	157,333	(580)	-0.4%	40.7%
White, Hispanic	157,231	168,174	10,943	7.0%	43.5%
American Indian, any ethnicity	33,370	36,974	3,604	10.8%	9.6%
Other, Hispanic	6,057	7,375	1,317	21.7%	1.9%
Other	13,558	16,319	2,760	20.4%	4.2%

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	46,717	41,238	(5,480)	-11.7%	10.7%
10-19	48,288	47,275	(1,013)	-2.1%	12.2%
20-29	39,578	42,294	2,716	6.9%	11.0%
30-39	44,689	46,411	1,721	3.9%	12.0%
40-49	51,681	45,643	(6,038)	-11.7%	11.8%
50-64	84,855	81,418	(3,437)	-4.1%	21.1%
65 and over	52,320	81,897	29,576	56.5%	21.2%

United States Census Bureau, Annual Population Estimates

Demographics-Educational Attainment

Table 4: Region B Population by Educational Attainment:

Education Level	Population
Less than 9th Grade	4.6%
9th Grade to 12th Grade	6.6%
High School Diploma	24.8%
Some College	22.3%
Associate's Degree	7.6%
Bachelor's Degree	18.8%
Graduate Degree or Higher	15.4%

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.

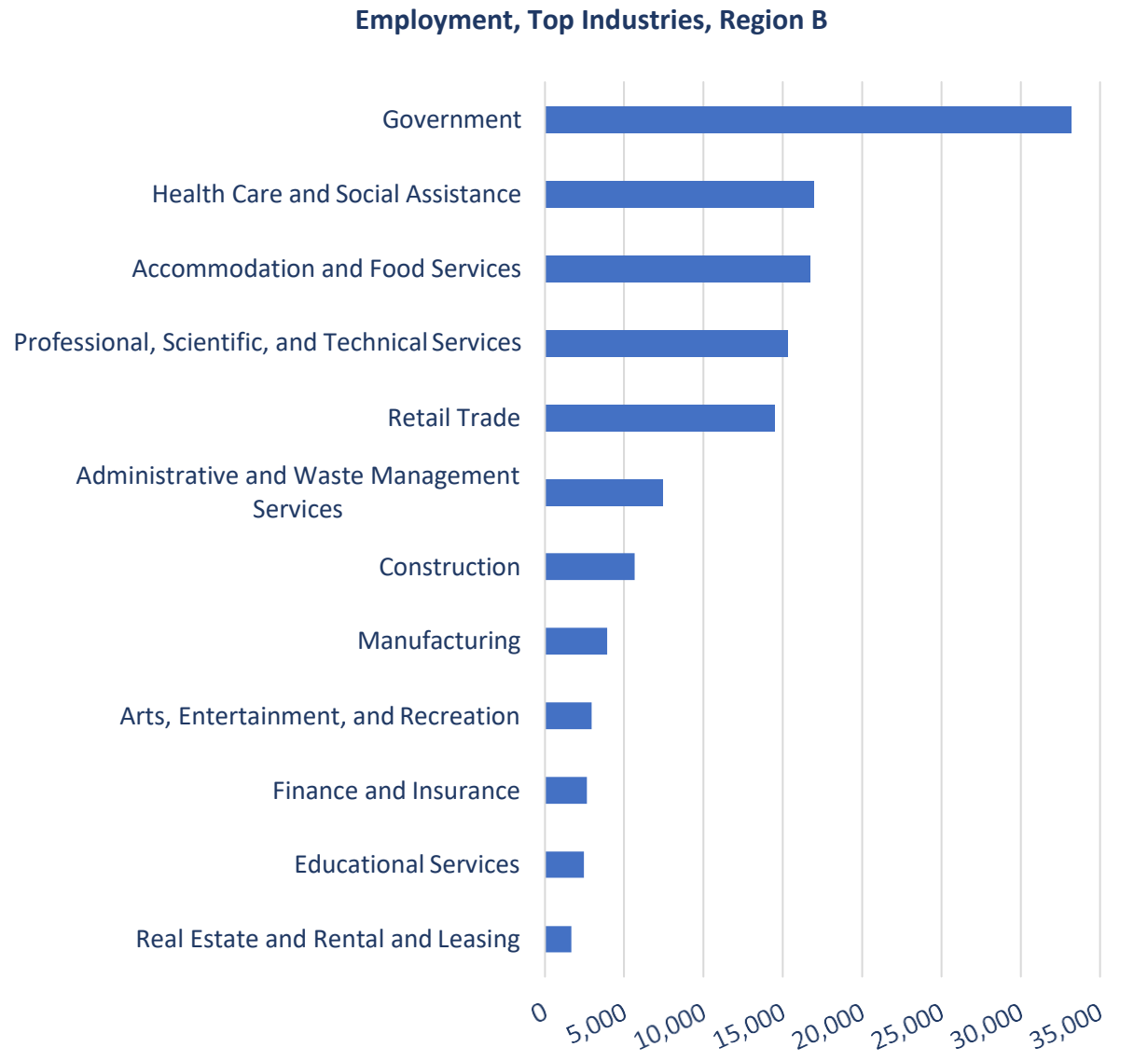


Table 5: Components of Top Industry Sectors, Region B:

Sector/Top Detailed Industries	2019 Jobs	Average Wages	Location Quotient
Professional, Scientific and Technical Services			
Research & Development-Physical, Engineering, Life Sciences	10,992	$104,250	29.47
Computer Systems Design and Related Services	792	$82,555	0.69
Offices of Lawyers	633	$84,052	0.69
Engineering Services	487	$88,521	0.56
Government			
Local Government, Excluding Education and Hospitals	12,578	$39,404	2.50
Education (Local Government)	8,619	$38,138	3.90
State Government, Excluding Education and Hospitals	7,729	$58,108	3.90
Federal Government, Civilian, Excluding Postal Service	1,588	$75,088	1.10
Education (State Government)	1,243	$28,455	2.77
Health Care and Social Assistance			
General Medical and Surgical Hospitals	3,191	$66,573	0.77
Services for the Elderly and Persons with Disabilities	2,898	$16,137	1.70
Offices of Physicians	2,022	$75,317	0.87
Offices of Dentists	1,100	$51,988	1.31
Continuing Care Communities and Elderly Living Facilities	985	$26,235	1.78
Nursing Care Facilities (Skilled Nursing Facilities)	813	$31,798	0.58
Child Day Care Services	770	$22,363	1.78
Accommodation and Food Services			
Restaurants and Other Eating Places	12,030	$20,093	1.34
Hotels (except Casino Hotels) and Motels	3,814	$27,604	2.65

Sector/Top Detailed Industries	2019 Jobs	Average Wages	Location Quotient
Manufacturing			
Semiconductor and Other Electronic Component Manufacturing	1,401	$134,796	4.28
Medical Equipment and Supplies Manufacturing	211	$39,031	0.75
Breweries	151	$27,833	2.10
Lighting Fixture Manufacturing	151	$40,818	4.33
Audio and Video Equipment Manufacturing	150	$57,986	8.40
Construction			
Residential Building Construction	1,283	$38,018	1.76
Plumbing, Heating, and Air-Conditioning Contractors	754	$44,533	0.75
Electrical Contractors and Other Wiring Installation Contractors	623	$50,152	0.73
Commercial and Institutional Building Construction	618	$61,794	1.03

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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 9: 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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Table 10: Employment by Industry, Santa Fe County, 2019:

Sante Fe	2019 Jobs	Average Wages/ Earnings	Location Quotient	Age 45+
State Government, Excluding Education and Hospitals	7,056	$59,025	7.47	42.6%
Full-Service Restaurants	4,467	$24,314	1.96	32.4%
Local Government, Excluding Education and Hospitals	4,244	$43,596	1.77	46.0%
Hotels (except Casino Hotels) and Motels	2,428	$29,467	3.54	40.9%
Elementary and Secondary Schools (Local Government)	1,948	$43,224	0.65	48.0%
Limited-Service Restaurants	1,891	$19,930	1.02	32.4%
Services for the Elderly and Persons with Disabilities	1,803	$15,839	2.22	49.3%
Supermarkets and Other Grocery (except Convenience) Stores	1,755	$29,248	1.67	39.4%
General Medical and Surgical Hospitals	1,678	$69,697	0.85	52.9%
Colleges, Universities, Professional Schools (Local Government)	1,628	$24,044	5.82	44.0%

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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 11: Occupation Employment, Region B, 2010-2019:

Description	2010 Jobs	2019 Jobs	2010 - 2019 Change	2010 - 2019 % Change	Annual Openings	Median Annual Earnings
Personal Care Aides	1,873	3,734	1,861	99%	626	$19,939
Customer Service Representatives	2,038	3,505	1,467	72%	536	$31,447
Food Prep/Serving Workers, Fast Food	2,655	3,491	836	31%	654	$20,340
Cooks, Restaurant	1,304	1,941	637	49%	294	$26,290
General and Operations Managers	2,314	2,781	467	20%	280	$84,270
Secretaries and Administrative Assistants	4,321	4,707	386	9%	617	$35,676
Waiters and Waitresses	2,743	3,090	347	13%	612	$19,174
Supervisors-Food Preparation and Serving	1,025	1,280	255	25%	207	$28,959
Sales Representatives, Services, All Other	351	573	222	63%	91	$47,974
Supervisors of Personal Service Workers	247	425	178	72%	51	$37,763
Bartenders	393	554	161	41%	101	$19,116
Ophthalmic Medical Technicians	153	312	159	104%	39	$38,721
Software Developers, Applications	340	496	156	46%	53	$70,885
Nuclear Engineers	301	452	151	50%	52	$140,871
Maintenance and Repair Workers, General	1,613	1,757	144	9%	190	$34,433
Teachers and Instructors, All Other	487	625	138	28%	89	$66,040
Landscaping and Groundskeeping Workers	857	989	132	15%	139	$28,828
Market Research Analysts and Specialists	195	319	124	64%	41	$53,505
Farmwork/Labor-Crop, Nursery/Greenhouse	113	233	120	106%	44	$18,538
Information Security Analysts	159	271	112	70%	29	$97,304
Registered Nurses	1,832	1,940	108	6%	140	$69,788
Computer & Information Research Scientists	243	347	104	43%	39	$138,425
Dental Assistants	382	486	104	27%	65	$36,088
Cashiers	3,061	3,165	104	3%	627	$21,947

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 12: 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	1,858	2,162	304	16%	141	$69,788
Nurse Practitioners	163	238	75	46%	19	$93,444
Emergency Medical Technicians and Paramedics	199	272	73	37%	26	$32,823
Ophthalmic Medical Technicians	274	328	54	20%	31	$38,721
Dental Hygienists	133	177	44	33%	16	$84,826
Physical Therapists	142	182	40	28%	11	$91,620
Management Occupations						
General and Operations Managers	2,633	2,870	237	9%	268	$84,270
Medical and Health Services Managers	249	335	86	35%	33	$97,565
Financial Managers	361	445	84	23%	41	$87,201
Farmers, Ranchers, Other Agricultural Managers	44	121	77	175%	41	$61,186
Computer and Information Systems Managers	243	292	49	20%	17	$106,169
Food Service Managers	229	278	49	21%	35	$56,050
Social and Community Service Managers	203	247	44	22%	25	$68,766
Administrative Services Managers	334	375	41	12%	35	$88,003
Architectural and Engineering Managers	234	267	33	14%	25	$174,963
Property, Real Estate, Association Managers	143	172	29	20%	16	$51,356
Natural Sciences Managers	143	170	27	19%	17	$84,365
Business and Financial Operations Occupations						
Market Research Analysts & Specialists	271	357	86	32%		$53,505
Management Analysts	672	745	73	11%		$56,738

High Quality Career	2016 Jobs	2026 Jobs	New Jobs	% Change	Annual Openings	Average Earnings
Computer and Mathematical Occupations						
Computer and Information Research Scientists	296	388	92	31%	37	$138,420
Computer Systems Analysts	241	267	26	11%	22	$76,465
Information Security Analysts	237	302	65	27%	27	$97,304
Computer Programmers	80	77	(3)	(4%)	6	$102,823
Software Developers, Applications	420	565	145	35%	52	$70,885
Architecture and Engineering Occupations						
Engineers, All Other	319	423	104	33%	41	$133,180
Engineering Technicians	492	564	72	15%	62	$87,900
Nuclear Engineers	433	465	32	7%	33	$140,871
Architects	80	108	28	35%	10	$68,273
Health and Safety Engineers	101	128	27	27%	12	$122,034

The Talent Development Ecosystem

Assets

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.

Awards

In 2018, the most recent academic year for which data are available, 1,844 degrees and certificates were awarded by these institutions, including 941 degrees and 903 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 13: 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	147	103	889	44
Registered Nursing/Registered Nurse	123	140	1,940	(17)
Business Administration and Management, General	101	627	5,932	(526)
Nursing Assistant/Aide and Patient Care Assistant/Aide	95	127	932	(32)
Cinematography and Film/Video Production	80	11	66	69
General Studies	65	0	0	65
Emergency Medical Technology/Technician	50	35	238	15
Creative Writing	46	15	103	31
Early Childhood Education and Teaching	45	77	629	(32)
Secondary Education and Teaching	43	89	1,070	(46)
Social Work	42	144	1,219	(102)
Accounting	40	150	1,411	(110)
Medical/Clinical Assistant	37	111	840	(74)
Phlebotomy Technician/Phlebotomist	37	10	61	27
Cosmetology/Cosmetologist, General	33	53	341	(20)
Elementary Education and Teaching	33	129	1,501	(96)
Fine/Studio Arts, General	32	1	9	31
Accounting Technology/Technician and Bookkeeping	27	251	1,805	(224)
Special Education and Teaching, General	27	207	1,563	(180)
Art Therapy/Therapist	27	2	21	25
Physical Sciences	24	17	155	7
Community Health Services/Liaison/Counseling	22	43	301	(21)
Acupuncture and Oriental Medicine	22	2	16	20
Criminal Justice/Safety Studies	21	29	331	(8)

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

NS4ED

200 E Broadway
Maryville, TN

NS4ed.com

Joseph Goins, President

