

Four Corners Regional Education Cooperative #1

Aztec Municipal Schools — Bloomfield Public Schools—Central Consolidated Schools—Farmington Municipal Schools—Gallup-McKinley County Schools—Zuni Public Schools—San Juan College

Analysis of Regional Career Technical Education

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A. Purpose and Scope

By request of the REC-1 Board, the Four Corners Regional Education Cooperative #1 (REC-1) has collected and analyzed data regarding local student participation in Career-Technical Education (CTE) programming, benchmarked those data against other state regions, and compared participation with estimated labor market demands.

Three districts submitted current participation data, necessitating reliance on external data sources for regional interpretation. For full understanding of local participation rates and to enable comparability, REC-1 accessed the most recent, fully disaggregated data from state sources, consisting of SY 2021-2022 Perkins data reports.

Aggregate, regional data reflecting recent participation rates and labor market demands were similarly collected from a variety of sources, including the NM Public Education Department, NM Legislative Education Study Committee, and the Division of Workforce Solutions. Although these data sources provide minimal district-by-district data and analysis, they do offer meaningful insights into region-wide programming and market needs. Furthermore, these data primarily focus on "CTE Concentrators," i.e., students who take multiple classes within a defined career cluster, rather than individual course enrollments.

This report is intended to help district leaders evaluate current CTE offerings, assess student participation trends, and better align programming with projected labor market demand to enhance student career opportunities.

Specific district-by-district data are included in Appendix A.

B. Regional Data, SY 2021-2022

Given that overall programming and participation likely evolve slowly, findings from this school year may be relevant to understanding current rates.

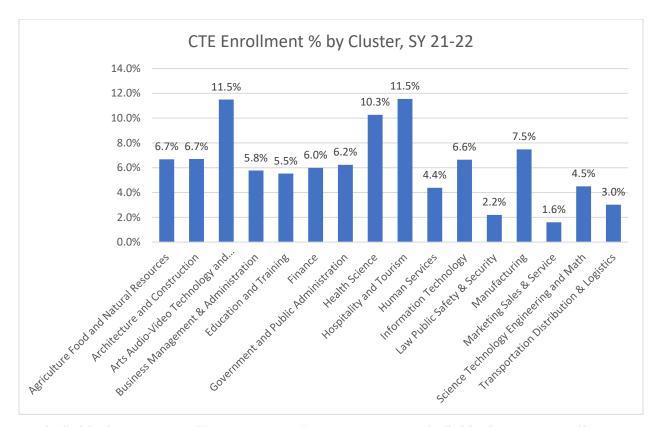
During this school year, there were 31,302 total enrollments (8,949 unduplicated students).

1. Enrollment by Cluster

Of the 16 career clusters, the majority of enrollments (54.2%) is within six career clusters:

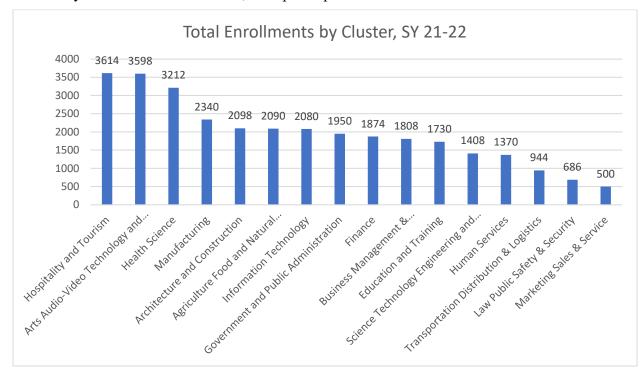
- Arts, Audio-video Technology and Communications (11.5%)
- Hospitality and Tourism (11.5%)
- Health Sciences (10.3%)
- Manufacturing (7.5%)
- Agriculture, Food and Natural Resources (6.7%)
- Architecture and Construction (6.7%)

The percentages of all enrollments by career cluster is demonstrated in the following graph.



By individual course enrollment counts, there were 31,302 individual course enrollments, a duplicated count as students may have enrolled in more than one CTE course. The unduplicated count of students enrolling in CTE courses was 8,949.

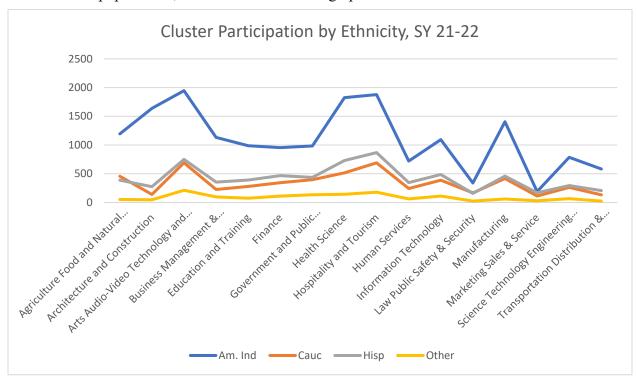
Ranked by individual course counts, total participation was as follows:



2. Enrollment by Ethnicity

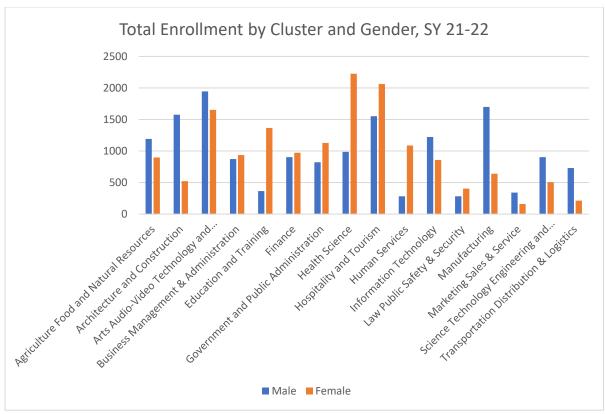
Total CTE enrollment by ethnicity closely mirrors regional student populations. For example, Native American students compose approximately 58% of student district population and 56% of CTE enrollments.

Similarly, enrollment by cluster by ethnicity shows similar rates among various ethnic populations, indicating similar CTE interests among ethnic groups, with one exception. Native American students appear to demonstrate higher interest in the Architecture and Construction Trades cluster than other subpopulations, as demonstrated in the graph below.



3. Enrollment by Gender

Course enrollment rates by gender are approximately the same, with 50% course enrollment by both male and female students. Rates for unduplicated student counts are nearly identical, with 51.8% of male students and 48.2% of female students. Together, these rates suggest that female students take slightly more CTE courses than male students, though the difference is likely not significant. All clusters comprise both male and female enrollment, as shown in the following graph:

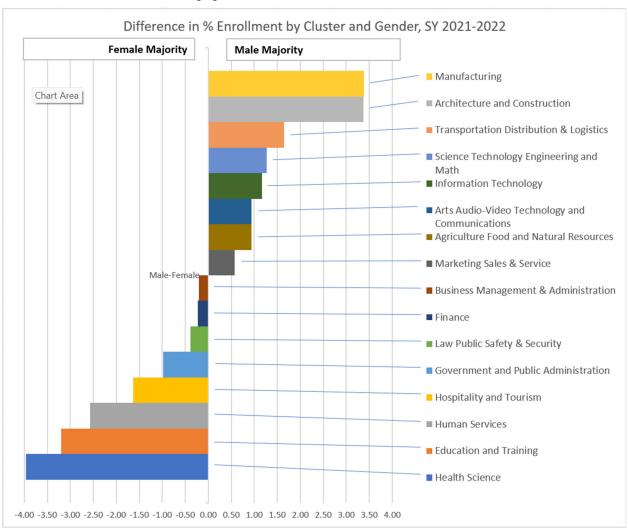


As shown, participation rates within career clusters shows much greater variance between male and female students, suggesting that course and career interests vary between the two populations.

CLUSTER	MAJORITY
Health Science	High Minority Female
Education and Training	High Minority Female
Human Services	High Minority Female
Hospitality and Tourism	Majority Female
Government and Public Administration	Slight Majority Female
Law Public Safety & Security	Slight Majority Female
Finance	Slight Majority Female
Business Management & Administration	Slight Majority Female
Marketing Sales & Service	Slight Majority Male
Agriculture Food and Natural Resources	Slight Majority Male

Arts Audio-Video Technology and
Communications
Slight Majority Male
Information Technology
Majority Male
Science Technology Engineering and Math
Transportation Distribution & Logistics
Architecture and Construction
High Majority Male
Manufacturing
High Majority Male

The following graph demonstrates the degree of preference by gender, with bar length indicating the scale of variation between populations.



These variations become meaningful when enrollment by cluster is compared to market labor demands as reflect in estimated job openings.

4. Alignment with Labor Market Demands

Labor market demand is defined as the estimated number of annual job openings within a particular career cluster, inclusive of all jobs related to the cluster.

The top eight clusters with demand, ranked by number of openings, are as follows:

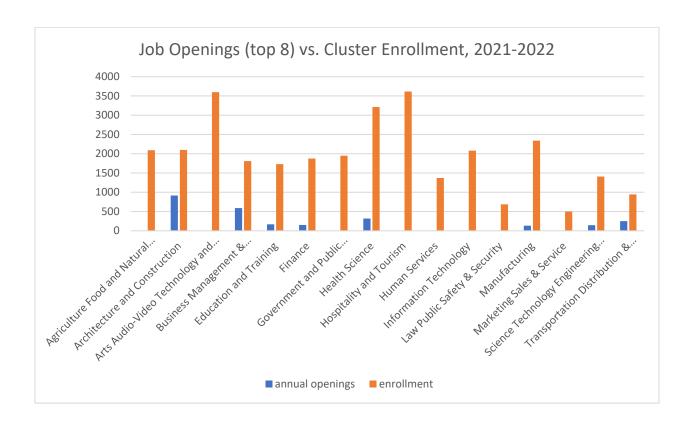
- 1. Architecture and Construction (916 annual job openings)
- 2. Business Management and Administration (590 annual job openings)
- 3. Health Sciences (318 annual job openings)
- 4. Transportation Distribution and Logistics (250 annual job openings)
- 5. Education and Training (168 annual job openings)
- 6. Finance (151 annual job openings)
- 7. Science, Technology, Engineering, and Math (145 annual job openings)
- 8. Manufacturing (133 annual job openings)

CTE enrollment shows misalignment with job market demands, with examples to follow.

Over-enrollment: Arts etc., and Hospitality and Tourism are the top two clusters by enrollment with a combined 23% of all enrollments and 7,212 individual course enrollments. However, job openings in these fields are not within the top eight clusters, with each having fewer than 133 potential job openings. This finding suggests that a high number of students enrolling in courses may have difficulty finding jobs within those fields and may face strong competition for the few job openings that do exist.

Under-enrollment: The career fields of Architecture and Manufacturing, Business Management and Administration, and Transportation Distribution and Logistics have the highest numbers of job openings, representing the top three fields by job openings. However, the percentage of CTE enrollment in these fields is low, with Architecture comprising only 6.7% of enrollments, Business Management and Administration comprising only 5.8% of enrollments, and Transportation Distribution and Logistics comprising only 3.0% of enrollments. This finding suggests CTE preparation may be insufficient to meet labor market demands in the region. Conversely, students who complete preparation in these fields may find

These disparities are further demonstrated in the following graph. *Note that the clusters showing job openings represent only the top eight fields based on job openings.*



C. Synopsis of CTE Outcomes for SY 23-24

The following information focuses not on all course enrollments, as above, but rather on CTE Concentrators, i.e., students taking multiple courses within a Career Cluster.

CTE Participation

CTE Concentrator Rate: ~25% of HS students, with the following range of rates:

- Gallup-McKinley CS: ~45% (high due to whole-school Career Academy model)
- Farmington MS: ~11%
- Regional Average: Moderated by high rates in tribal/rural schools and lower rates in urban districts.

High-Value Occupations by Annual Openings

Occupation	Career Cluster	Annual Openings	Median Wage
General & Operations Managers	Business Mgmt. & Admin	343	\$89,090
Registered Nurses	Health Science	254	\$75,260
Heavy/Tractor-Trailer Truck Drivers	Transportation & Logistics	250	\$44,480
Supervisors in Construction/Extraction	n Architecture & Construction	180	\$57,110

Top Postsecondary Programs by Number of Degrees

Career Cluster	Degrees Awarded
Education & Training	440
Health Science	404
Transportation & Logistics	123
Manufacturing	117

Regional Comparison of CTE Concentrator Rates

Region	CTE Concentrators (% of HS Students)	Notes
Northwest (Region A)	~25%	Gallup-McKinley: ~45%; Farmington: ~11%
Northeast	~20%	Santa Fe: ~20%; smaller districts have limited CTE pathways
Southwest	~25%	Gadsden: ~43%; Las Cruces: 12–15%
Southeast	~25–30%	Roswell: ~43%; Carlsbad: ~47%; Hobbs: ~11%

Implications for the Region

- Strengths: High engagement in Gallup and tribal/rural schools; good alignment with local labor markets in health, construction, and logistics.
- Challenges: Urban districts like Farmington lag in concentrator rates; potential to expand IT and manufacturing pathways to better match labor demands.

D. Synopsis of Labor Market Demand and CTE Pipelines

Key Industries and Labor Demand

- Energy and Natural Resources: Longstanding focus on oil, gas, and coal. Jobs in these fields are declining due to plant closures but still heavily concentrated (location quotient of 6.0).
- Renewables and STEM: Future growth anticipated in green energy, requiring STEM and manufacturing skills.
- Hospitality & Tourism: Strong due to cultural and natural attractions (e.g., Navajo Nation, Route 66).
- Construction: High demand for infrastructure development, especially on tribal lands.
- Healthcare: Persistent shortages of nurses, techs, and doctors; major employers include Indian Medical Centers and regional hospitals.

CTE Participation and Alignment

- High Participation: Agriculture/Natural Resources clusters are popular due to cultural ties (e.g., FFA programs), despite limited local job openings.
- Under-Aligned Areas:
 - o Health Science: Critical local need, yet underrepresented in CTE enrollments.
 - o Construction Trades: Strong job growth; student participation is not keeping pace.
 - o Renewables/STEM: Emerging need with minimal current CTE pipeline.

Postsecondary & Credentialing

- Local institutions (San Juan College, UNM-Gallup, Navajo Tech, etc.) produce strong numbers in:
 - Health Science
 - Education & Training
 - Manufacturing and Transportation Trades
- Top occupations needing workforce include:
 - Registered Nurses
 - Construction Supervisors
 - Welders and Industrial Mechanics
 - Truck Drivers
 - o Oil & Gas Operators

Policy Considerations

- Expand CTE in health, construction, and renewables/STEM fields to match local labor demand.
- Sustain culturally aligned programs like Agriculture, but broaden scope to include environmental science and sustainable land use.
- Strengthen industry-education partnerships for pathways in energy transitions, tribal infrastructure, and rural healthcare.

Appendix A: Individual Participation Rates, SY 21-22

Regional Rates

Am. Ind	Cauc	Hisp	Other	Male	Female	Econ Dis
1194	456	388	52	1192	898	1860
1638	140	274	46	1576	522	2000
1946	690	750	212	1946	1652	3022
1132	226	354	96	872	936	1638
988	278	390	74	364	1366	1478
954	344	466	110	902	972	1692
984	396	436	134	822	1128	1608
1824	516	730	142	986	2226	2838
1878	690	868	178	1552	2062	2984
720	242	346	62	282	1088	1146
1094	388	486	112	1222	858	1854
338	166	158	24	282	404	596
1406	416	458	60	1700	640	2068
190	112	168	30	340	160	382
786	262	294	66	902	506	1112
582	132	206	24	730	214	866
17654	5454	6772	1422	15670	15632	27144
5200	1512	1854	383	4636	4313	7760
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Aztec Municipal Schools

CLUSTER	Am. Ind	Cauc	Hisp	Other	Male	Female	Econ Dis
Agriculture Food and Natural Resources	36	130	86	4	126	130	182
Architecture and Construction	0	2	0	0	2	0	2
Arts Audio-Video Technology and Comm	16	58	52	12	58	80	88
Business Management & Administration	2	0	0	0	0	2	2
Education and Training	26	36	46	6	6	108	88
Finance	2	6	0	0	2	6	8
Government and Public Administration	2	10	6	0	4	14	10
Health Science	20	52	46	0	24	94	84
Hospitality and Tourism	8	26	32	0	16	50	50
Human Services	14	26	34	4	2	76	60
Information Technology	68	114	126	20	150	178	240
Law Public Safety & Security	22	60	62	0	46	98	114
Manufacturing	92	248	228	18	408	178	376
Marketing Sales & Service	0	2	2	0	2	2	4
Science Technology Engineering and Math	6	18	14	4	28	14	28
Transportation Distribution & Logistics	4	12	16	2	22	12	30
Total Enrollments	318	800	750	70	896	1042	1366
Unduplicated Enrollments	89	265	232	22	313	295	410

Bloomfield Public Schools

	Am.						Econ
CLUSTER	Ind	Cauc	Hisp	Other	Male	Female	Dis
Agriculture Food and Natural Resources	182	132	104	10	220	208	428
Architecture and Construction	6	0	4	0	10	0	10
Arts Audio-Video Technology and Communications	94	76	52	4	76	150	226
Business Management & Administration	14	8	10	0	24	8	32
Education and Training	16	18	14	0	8	40	48
Finance	42	42	34	2	52	68	120
Government and Public Administration	40	28	38	4	54	56	110
Health Science	150	98	76	10	150	184	334
Hospitality and Tourism	122	112	142	12	156	232	388
Human Services	16	18	14	0	8	40	48
Information Technology	66	42	32	2	94	48	142
Law Public Safety & Security	4	0	2	0	4	2	6
Manufacturing	66	68	74	6	178	36	214
Marketing Sales & Service	0	4	0	0	4	0	4
Science Technology Engineering and Math	8	10	10	0	18	10	28
Transportation Distribution & Logistics	32	10	10	0	30	22	52
Total Enrollments	858	666	616	50	1086	1104	2190
Unduplicated Enrollments	220	177	168	11	294	282	576

Central Consolidated School District

CLUSTER	Am. Ind	Cauc	Hisp	Other	Male	Female	Econ Dis
Agriculture Food and Natural Resources	626	32	38	14	460	250	710
Architecture and Construction	30	2	0	2	30	4	34
Arts Audio-Video Technology and Communications	274	8	18	12	192	120	312
Business Management & Administration	68	6	0	2	34	42	76
Education and Training	302	8	20	12	82	260	342
Finance	184	12	14	12	102	120	222
Government and Public Administration	52	4	6	6	12	56	68
Health Science	188	0	8	12	92	116	208
Hospitality and Tourism	708	20	40	24	298	494	792
Human Services	254	8	20	8	76	214	290
Information Technology	158	8	20	8	118	76	194
Law Public Safety & Security	4	0	0	0	2	2	4
Manufacturing	262	4	8	4	214	64	278
Marketing Sales & Service	8	2	2	0	6	6	12
Science Technology Engineering and Math	6	0	0	2	6	2	8
Transportation Distribution & Logistics	8	0	0	0	4	4	8
Total Enrollments	3132	114	194	118	1728	1830	3558
Unduplicated Enrollments	992	39	53	34	574	544	1118

Farmington Municipal Schools

CLUSTER	Am. Ind	Cauc	Hisp	Other	Male	Female	Econ Dis
Agriculture Food and Natural Resources	180	134	110	20	228	216	288
Architecture and Construction	174	96	110	14	330	64	296
Arts Audio-Video Technology and Communications	590	428	340	128	886	600	960
Business Management & Administration	138	140	148	44	264	206	300
Education and Training	240	194	248	48	148	582	504
Finance	188	166	172	46	316	256	390
Government and Public Administration	154	260	182	52	280	368	314
Health Science	380	292	328	64	320	744	724
Hospitality and Tourism	686	482	542	126	910	926	1222
Human Services	224	170	210	44	140	508	442
Information Technology	114	108	74	36	220	112	194
Law Public Safety & Security	60	80	44	12	98	98	136
Manufacturing	62	74	68	14	156	62	156
Marketing Sales & Service	168	100	146	30	306	138	326
Science Technology Engineering and Math	180	210	164	52	390	216	324
Transportation Distribution & Logistics	74	70	112	14	210	60	196
Total Enrollments	3612	3004	2998	744	5202	5156	6772
Unduplicated Enrollments	970	803	777	192	1398	1344	1751

Gallup-McKinley County Schools

CLUSTER	Am. Ind	Cauc	Hisp	Other	Male	Female	Econ Dis
Agriculture Food and Natural Resources	84	28	50	4	104	62	166
Architecture and Construction	1382	40	160	30	1178	434	1612
Arts Audio-Video Technology and Communications	956	120	288	56	726	694	1420
Business Management & Administration	902	72	196	50	546	674	1220
Education and Training	394	22	62	8	116	370	486
Finance	508	118	246	50	412	510	922
Government and Public Administration	702	94	204	72	456	616	1072
Health Science	988	74	272	56	392	998	1390
Hospitality and Tourism	338	50	112	16	162	354	516
Human Services	206	20	68	6	50	250	300
Information Technology	630	116	234	46	602	424	1026
Law Public Safety & Security	218	26	50	12	122	184	306
Manufacturing	842	22	80	18	686	276	962
Marketing Sales & Service	14	4	18	0	22	14	36
Science Technology Engineering and Math	572	24	106	8	456	254	710
Transportation Distribution & Logistics	456	40	68	8	456	116	572
Total Enrollments	9192	870	2214	440	6486	6230	12716
Unduplicated Enrollments	2746	228	624	124	1962	1760	3722

Zuni Public Schools

CLUSTER	Am. Ind	Cauc	Hisp	Other	Male	Female	Econ Dis
Agriculture Food and Natural Resources	86	0	0	0	54	32	86
Architecture and Construction	46	0	0	0	26	20	46
Arts Audio-Video Technology and Communications	16	0	0	0	8	8	16
Business Management & Administration	8	0	0	0	4	4	8
Education and Training	10	0	0	0	4	6	10
Finance	30	0	0	0	18	12	30
Government and Public Administration	34	0	0	0	16	18	34
Health Science	98	0	0	0	8	90	98
Hospitality and Tourism	16	0	0	0	10	6	16
Human Services	6	0	0	0	6	0	6
Information Technology	58	0	0	0	38	20	58
Law Public Safety & Security	30	0	0	0	10	20	30
Manufacturing	82	0	0	0	58	24	82
Marketing Sales & Service	0	0	0	0	0	0	0
Science Technology Engineering and Math	14	0	0	0	4	10	14
Transportation Distribution & Logistics	8	0	0	0	8	0	8
Total Enrollments	542	0	0	0	272	270	542
Unduplicated Enrollments	183	0	0	0	95	88	183