

LOS MEDANOS
COLLEGE

2022 SUMMARY OF REGIONAL
WORKFORCE AND ECONOMIC
CONDITIONS

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EXECUTIVE SUMMARY

The Los Medanos College Workforce & Economic Development Department analyzes local and regional workforce data to inform college decisions about the potential creation, modification, and discontinuance of academic programs. Our analysis zone is the 4-county area of Contra Costa, Alameda, Solano, and San Francisco Counties to reflect the live/work patterns of our students and alumni. We focus on four metrics, in prioritized order, when evaluating industries - job growth, income, GRP impact, and total jobs – and consider the recommendations and plans of local and regional agencies. Based on these factors, we recommend that the college prioritize programs aligned to the following industries in order: 1) Healthcare and Social Assistance; 2) Information; 3) Professional, Scientific, and Technical Services; and 4) Manufacturing. We believe that doing so will meet the needs of students and employers, and will aid the college in achieving both internal and state-issued strategic goals.

BACKGROUND

The vision of the Workforce & Economic Development Department is for all Los Medanos College (LMC) students to be the preferred candidates for high-demand, high-wage careers because they have the knowledge, skills, and abilities to meet the current and future needs of the economy. To that end, we recommend program development that aligns with Guided Pathways based on labor market information, industry interviews, and faculty input.

Historically, LMC has examined labor market information for Contra Costa County alone and for the tri-county area of Contra Costa, Alameda, and Solano Counties in order to assess local demand in the areas that our students and alumni are most likely to live and work. Starting in 2021, we expanded our geography to include San Francisco County due to the high number of College alumni working in that county.

Area	Population (2021)	Projected Growth by 2026	Residents with HS diploma but no college degree
Contra Costa	1,156,588	1.1%	37.6%
Four-county	4,140,673	0.8%	34.3%

COVID-19 IMPACTS

The coronavirus pandemic had a significant short-term impact on the labor market in Contra Costa County and the 4-county region, and while recovery is underway, the long-term impact remains to be seen. According to Lightcast data, unemployment in the 4-county region is currently 2.9% (June 2022), fully recovering from a pandemic high of 8.9%. Contra Costa County has similarly fully recovered to its pre-pandemic rate of 3.2%. That low unemployment was, however, fueled by low-skill, low-wage jobs that were growing up to 5 times faster than middle- and high-wage jobs.¹ The labor force fell from 64.5% of working-age people in 2019 down to 61% in May 2021, suggesting that not only did people lose their jobs, but they were not actively seeking new employment. Participation has since recovered slightly to 64.0% as of June 2022, suggesting that most people have resumed their job search, based on some combination of financial necessity and becoming comfortable with COVID vaccination and adaptations in the workplace. Contra Costa labor force participation has rebounded more slowly and remains 2.1 percentage points lower than pre-pandemic. The total number of jobs in the 4-county region is slowly recovering from a -7.7% drop 2019-2020; the total job count has now rebounded to -6.0% compared to the 2019 high. For Contra Costa County, the pandemic drop was -6.5% and has

¹ Contra Costa Community College District. (2018). *Analysis of the Economic Impact and Return on Investment of Education*.

rebounded to -3.9%, indicating that Contra Costa was not hurt quite as badly and has recovered slightly more quickly.

COMMUNITY IMPACT

The low wages that were fueling the pre-pandemic job market disproportionately affected people of color, a population that is concentrated in the cities of Pittsburg and Antioch and that represent a plurality of the students at Los Medanos College.² These low wages have created a situation in which 31% of Contra Costa households struggle to make ends meet, and Black and Latino residents are more than twice as likely to struggle to meet basic needs compared to their White neighbors.³ According to the Insight Center for Community Development, the minimum self-sufficiency income (a “living wage”) for a single adult living in Contra Costa County is \$21.80 per hour, working full time; for a family of four (two working adults, one school-age child, one preschooler), the standard is \$29.98 per hour for each adult.⁴

LABOR MARKET DATA ANALYSIS BY INDUSTRY

We draw labor market data primarily from Lightcast (formerly Emsi Burning Glass), a labor market analytics tool that covers 99% of the workforce, “compiled from a wide variety of government sources, job postings, and online profiles and résumés.”⁵ The data in this report comes from the Q3 2022 data set. We identify industries by standard North American Industry Classification System (NAICS) codes. Additionally, we use data provided by Contra Costa

² Gambhir, Samir and Moore, Eli. (2019) *Lift Up Contra Costa Demographic Analysis*. Haas Institute for a Fair and Inclusive Society. Based on U.S. Census Bureau, American Community Survey, 5 year estimate, 2013-2017

³ Insight Center for Community Economic Development. (2021, May 18). *The Cost of Being Californian Contra Costa County Fact Sheet*. <https://insightcced.org/the-cost-of-being-californian-contra-costa-county-fact-sheet/>.

⁴ Insight Center for Community Economic Development. (2021). *Family Needs Calculator*. <https://insightcced.org/family-needs-calculator/>. Retrieved 5 November 2021.

⁵ <https://www.economicmodeling.com/company/>

County, local cities, and economic development workgroups to monitor local development and needs as they arise.

The 4 main industry metrics that we consider are, in order of importance, Fastest Growth (number of projected jobs), Average Pay (wage and benefits), Impact on Gross Regional Product (GRP), and Total Jobs. By identifying the top 10 industries for each metric for both Contra Costa and the 4-county region, we can score the industries. See Appendix A for charts of each industry metric for the county and the region. After creating a prioritized list for each area, we combine the scores to generate a net prioritization, effectively weighting Contra Costa data double that of each other county.

We also consider the Priority Sectors identified by the Bay Area Community College Consortium (BACCC), which are based on data from the state Centers of Excellence for Labor Market Research and on “the relatively high percentage of livable wage jobs directly accessible with a community college education; the changing nature of work within the sector due to rapidly evolving technology; the importance of skills taught within the sector to occupations across all sectors; [and] the importance of diversifying the workforce in the sector to achieve greater equity.”⁶

A third major consideration is the findings of the East Bay Economic Development Alliance, which identified five industries to watch because they “drive economic output in the East Bay and are positioned to generate substantial innovation, investment, and job and business growth over the coming years.”⁷ Furthermore, we have considered the conclusions of a range of

⁶ Bay Area Community College Consortium. (2021, August 25). *Bay Area Regional Plan 2021*. https://docs.google.com/document/d/1fY6tHGtLSkGBUjNmPAyJ1_RID7NF107YutXUSKOwwDU/edit. Retrieved 5 November 2021.

⁷ East Bay Economic Development Alliance. (2021). *East Bay Forward*. [Report]. https://eastbayeda.org/wp-content/uploads/2021/11/EB-Forward-Complete_Final.pdf.

other municipal and regional economic development reports and plans.

A fourth consideration is the report produced by the Equitable Economic Recovery Task Force, a joint effort of the Contra Costa Economic Partnership, the Contra Costa County Employment & Human Services department, and the Workforce Development Board of Contra Costa County. That report examined the disproportionate impacts of the COVID-19 pandemic and offered recommendations for equitable recovery. Its 5 core objectives included “grow the local healthcare workforce” and “improve broadband access,” and it repeatedly identified the lack of childcare and early child education as a major barrier⁸.

Finally, the input of College faculty and staff was collected during the New Program Summit held in March 2022. That input demonstrated strong interest and support for healthcare and information technology programs; those two industries accounted for 6 of the 9 specific programs that faculty and staff endorsed.

Based on the quantitative data and qualitative input, we have identified the following 4 priority industries for Los Medanos College, in order. See Appendix B for the scoring matrix.

Industry	NAICS	BACCC	East Bay EDA
Healthcare and Social Assistance	62	High Priority	Industry to Watch
Information	51	High Priority	Industry to Watch
Professional, Scientific, and Technical Services	54	Priority	Industry to Watch
Manufacturing	31-33	High Priority	Industry to Watch

⁸ Equitable Economic Recovery Task Force. (2022). *Shared Prosperity: Report on the Contra Costa County Equitable Economic Recovery Task Force*. [Report]. Retrieved October 10, 2022, from <https://www.ccpartnership.org/report>.

We recommend additional research before making substantial investments in the Manufacturing industry, despite it being a priority sector. While Manufacturing continues to dominate the GRP of Contra Costa County, its share of GRP has fallen dramatically from 23.9% to 14.8% in two years (2019-2021); during this time, no other industry has grown by more than 1.4% nor contracted by more than -0.2%, indicating that the Manufacturing industry is significantly more volatile than other industries. We recommend drilling into the economic data of each manufacturing subsector to identify relative opportunities and threats.

ASSOCIATED OCCUPATIONS

For each priority industry, we next identify associated occupations based on the Standard Occupational Classification (SOC) system to align with O*NET, “the nation's primary source of occupational information... developed under the sponsorship of the U.S. Department of Labor.”⁹ There is no standardized crosswalk of industries (NAICS codes) to occupations (SOC codes), so we use the U.S. Bureau of Labor Statistics’ (BLS) National Industry-Specific Occupation Employment and Wage Estimates (May 2021)¹⁰ listing to identify the most common occupations in each industry. We then filter those occupations through Lightcast to identify those that typically require between a high school diploma and a Bachelor’s degree (inclusive) and then generate local labor market projections

Below, we identify the 10 fastest growing jobs in each recommended industry for the 4-county region. At the occupation level, Annual Openings becomes an available subset of the Total Jobs metric. These lists are meant to be representative of the most promising occupations within each industry but should not be interpreted as a recommendation for any particular course

⁹ <https://www.onetcenter.org/overview.html>

¹⁰ <https://www.bls.gov/oes/current/oesrci.htm>

of study unless explicitly noted; however, some occupations align to multiple industries and may be worth additional consideration.

HEALTHCARE AND SOCIAL ASSISTANCE (NAICS 62)								
SOC	Description	2022 Jobs	2027 Jobs	New Jobs	2022 - 2027 % Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
29-1141	Registered Nurses	38,974	40,730	1,757	5%	2,420	\$74.74	Bachelor's degree
31-9092	Medical Assistants	13,156	14,694	1,538	12%	1,914	\$26.29	Postsecondary nondegree award
11-9111	Medical and Health Services Managers	7,402	8,558	1,156	16%	832	\$71.87	Bachelor's degree
21-1093	Social and Human Service Assistants	6,881	7,815	934	14%	1,026	\$22.55	High school diploma or equivalent
31-1131	Nursing Assistants	9,588	10,435	847	9%	1,373	\$20.99	Postsecondary nondegree award
43-6013	Medical Secretaries and Administrative Assistants	11,867	12,539	672	6%	1,437	\$22.51	High school diploma or equivalent
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	4,316	4,957	640	15%	551	\$27.24	Bachelor's degree
29-2061	Licensed Practical and Licensed Vocational Nurses	7,115	7,715	600	8%	673	\$34.59	Postsecondary nondegree award
25-2011	Preschool Teachers, Except Special Education	7,944	8,345	401	5%	882	\$19.91	Associate's degree
43-4171	Receptionists and Information Clerks	8,447	8,581	134	2%	1,090	\$20.05	High school diploma or equivalent

We recommend that the College particularly consider developing new programs of study in Allied Health. We believe that Certified Medical Assisting and Phlebotomy offer opportunities that align with strong LMI, low barriers to entry, and pathways to existing CTE programs in EMS and Nursing.

INFORMATION (NAICS 51)								
SOC	Description	2022 Jobs	2027 Jobs	New Jobs	2022 - 2027 % Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
15-1252	Software Developers	48,657	55,981	7,324	15%	5,206	\$77.58	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	17,199	18,390	1,191	7%	1,957	\$45.95	Bachelor's degree
15-1232	Computer User Support Specialists	8,814	9,763	949	11%	858	\$35.94	Some college, no degree
11-3021	Computer and Information Systems Managers	19,753	20,654	901	5%	1,681	\$97.41	Bachelor's degree
11-1021	General and Operations Managers	38,275	39,158	882	2%	3,345	\$60.20	Bachelor's degree
13-1111	Management Analysts	13,538	14,256	718	5%	1,392	\$55.15	Bachelor's degree
13-1082	Project Management Specialists	13,812	14,468	657	5%	1,148	\$57.31	Bachelor's degree
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	18,788	19,436	649	3%	2,330	\$37.69	High school diploma or equivalent
15-1211	Computer Systems Analysts	10,764	11,411	647	6%	905	\$61.89	Bachelor's degree
13-2011	Accountants and Auditors	19,755	20,142	387	2%	1,811	\$46.97	Bachelor's degree

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES (NAICS 54)								
SOC	Description	2022 Jobs	2027 Jobs	New Jobs	2022 - 2027 % Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
15-1252	Software Developers	48,657	55,981	7,324	15%	5,206	\$77.58	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	17,199	18,390	1,191	7%	1,957	\$45.95	Bachelor's degree
15-1232	Computer User Support Specialists	8,814	9,763	949	11%	858	\$35.94	Some college, no degree
11-3021	Computer and Information Systems Managers	19,753	20,654	901	5%	1,681	\$97.41	Bachelor's degree
11-1021	General and Operations Managers	38,275	39,158	882	2%	3,345	\$60.20	Bachelor's degree
13-1082	Project Management Specialists	13,812	14,468	657	5%	1,148	\$57.31	Bachelor's degree
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	18,788	19,436	649	3%	2,330	\$37.69	High school diploma or equivalent
13-2011	Accountants and Auditors	19,755	20,142	387	2%	1,811	\$46.97	Bachelor's degree
15-1231	Computer Network Support Specialists	1,788	1,999	212	12%	178	\$37.77	Associate's degree
27-2012	Producers and Directors	2,879	2,983	103	4%	271	\$49.88	Bachelor's degree

MANUFACTURING (NAICS 31-33)								
SOC	Description	2022 Jobs	2027 Jobs	New Jobs	2022 - 2027 % Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
11-1021	General and Operations Managers	38,275	39,158	882	2%	3,345	\$60.20	Bachelor's degree
17-2112	Industrial Engineers	2,440	2,828	388	16%	240	\$52.74	Bachelor's degree
49-9041	Industrial Machinery Mechanics	2,585	2,968	383	15%	311	\$35.31	High school diploma or equivalent
51-1011	First-Line Supervisors of Production and Operating Workers	5,252	5,592	341	6%	597	\$36.73	High school diploma or equivalent
51-2028	Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	5,913	6,253	339	6%	699	\$21.22	High school diploma or equivalent
51-4121	Welders, Cutters, Solderers, and Brazers	2,770	3,033	262	9%	356	\$27.15	High school diploma or equivalent
51-4041	Machinists	3,165	3,370	205	6%	370	\$26.97	High school diploma or equivalent
49-9071	Maintenance and Repair Workers, General	14,497	14,642	145	1%	1,403	\$26.41	High school diploma or equivalent
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	799	886	87	11%	103	\$20.97	High school diploma or equivalent
51-9111	Packaging and Filling Machine Operators and Tenders	4,034	3,928	(106)	(3%)	431	\$19.71	High school diploma or equivalent

Many jobs in the Manufacturing sector rely on apprenticeships rather than academic credentials, and “attracting a new generation of skilled, technology-savvy workers to the manufacturing sector has become increasingly important with the adoption of advanced manufacturing processes.”¹¹

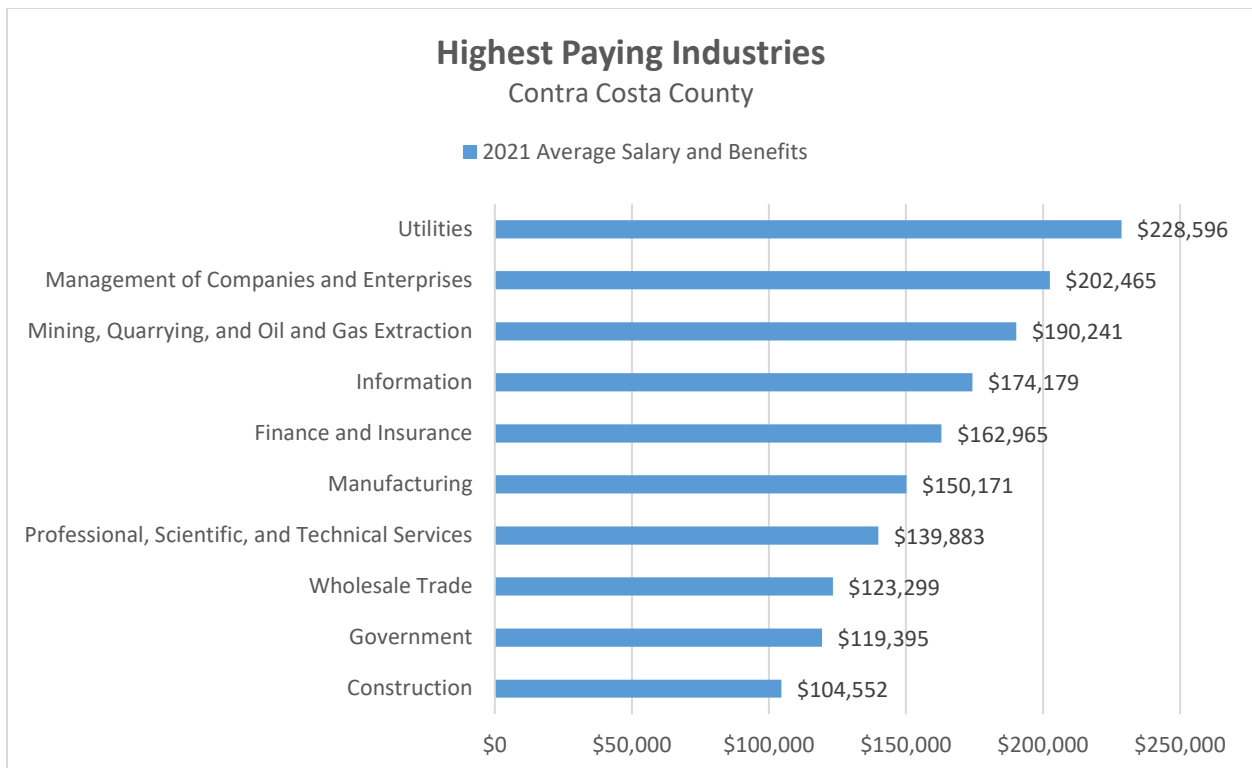
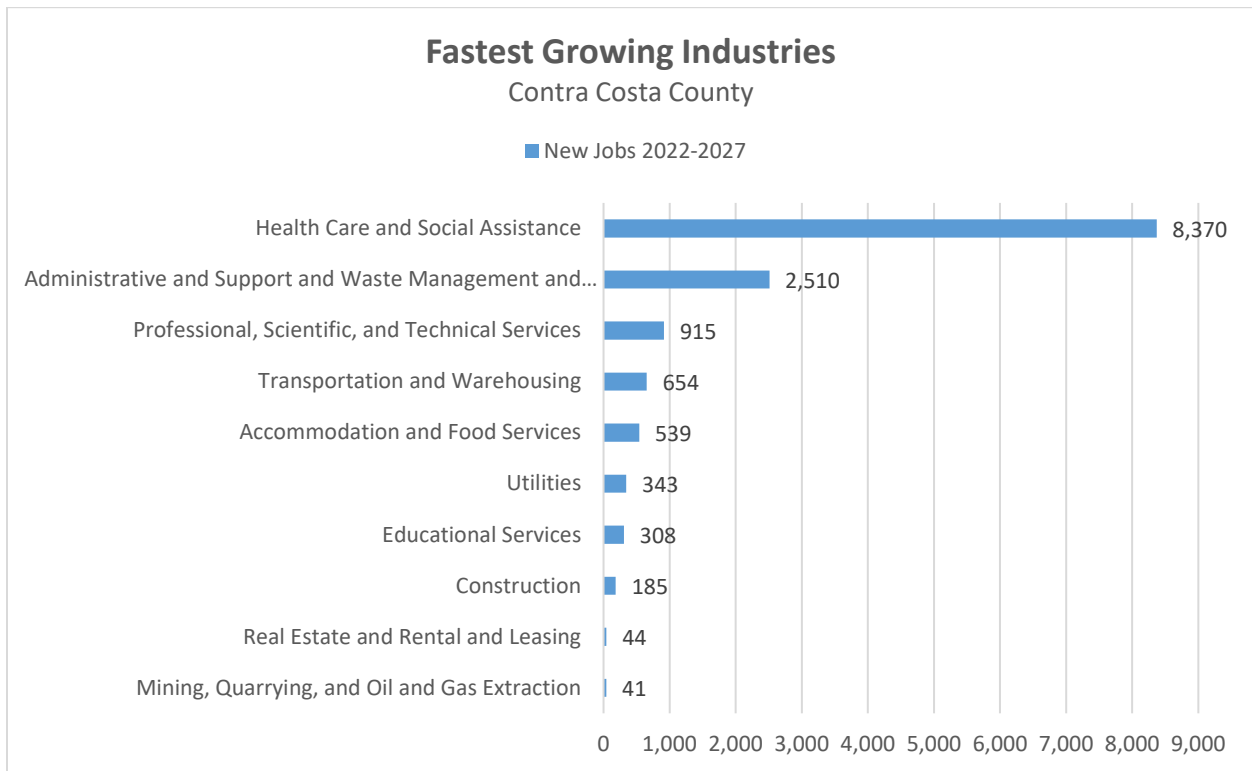
¹¹ Craft Consulting Group. (2019). *Northern Waterfront Economic Development Initiative (NWEDI) Strategic Action Plan*. Contra Costa County Department of Conservation and Development.

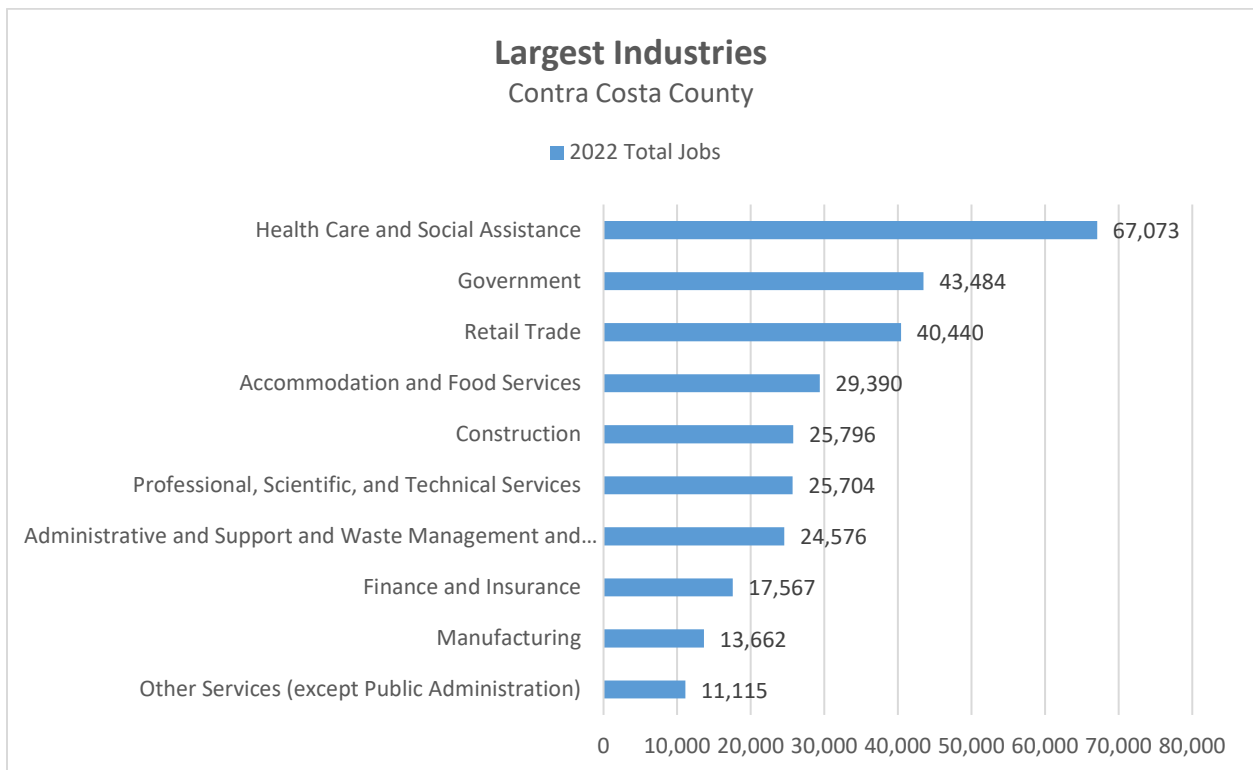
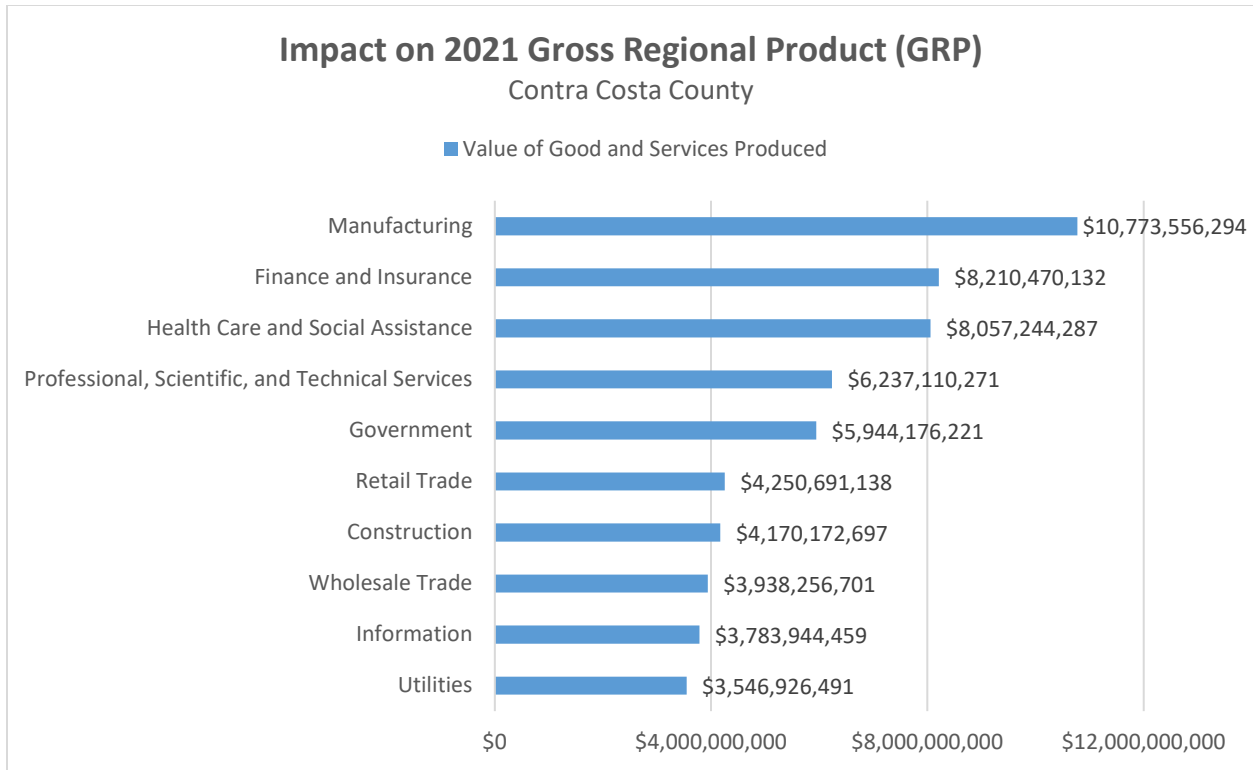
CONCLUSION

As the college considers creating, modifying, and discontinuing programs, we recommend that it carefully consider not only the broad economic factors throughout this report, but also focus on the areas in which the college can have the greatest potential benefit to its students and the larger community. We recommend that the college prioritize programs that lead to high growth, living wage jobs. Such a policy would support several of the Vision for Success goals of Los Medanos College and the California Community College Chancellor's Office for both student success and reducing equity gaps.

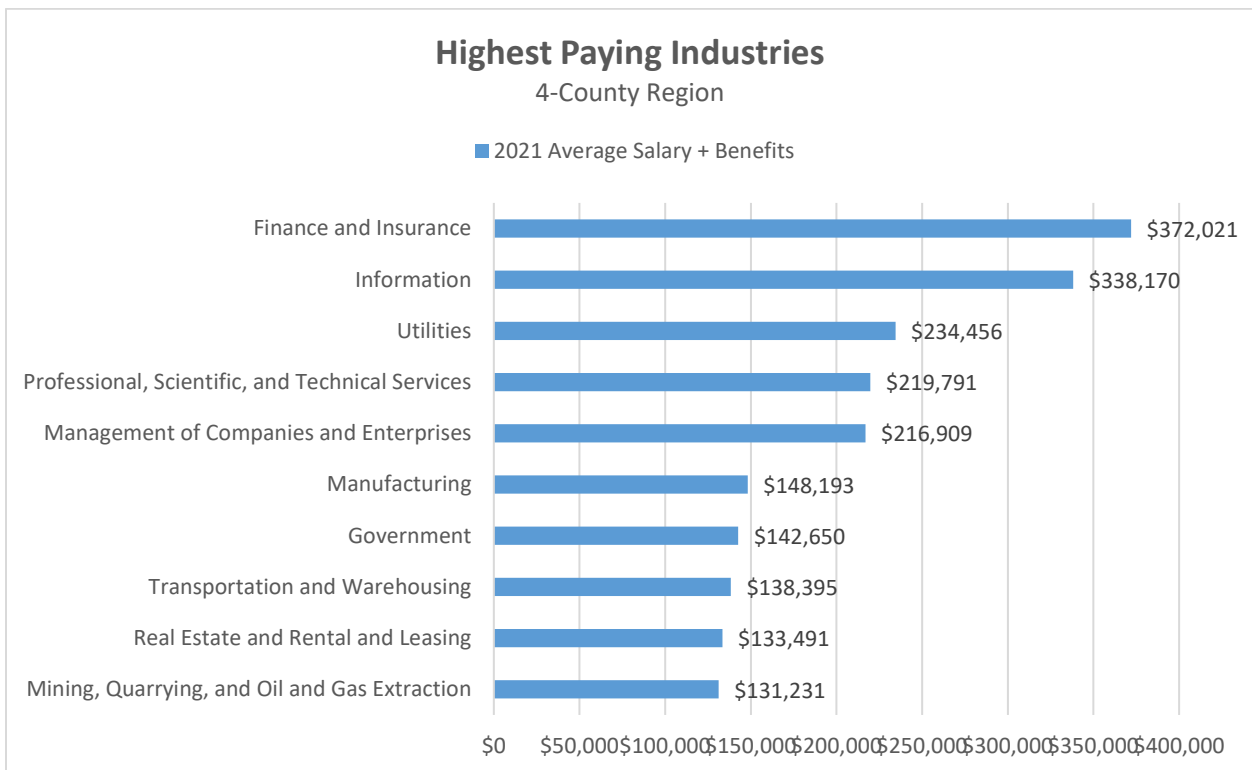
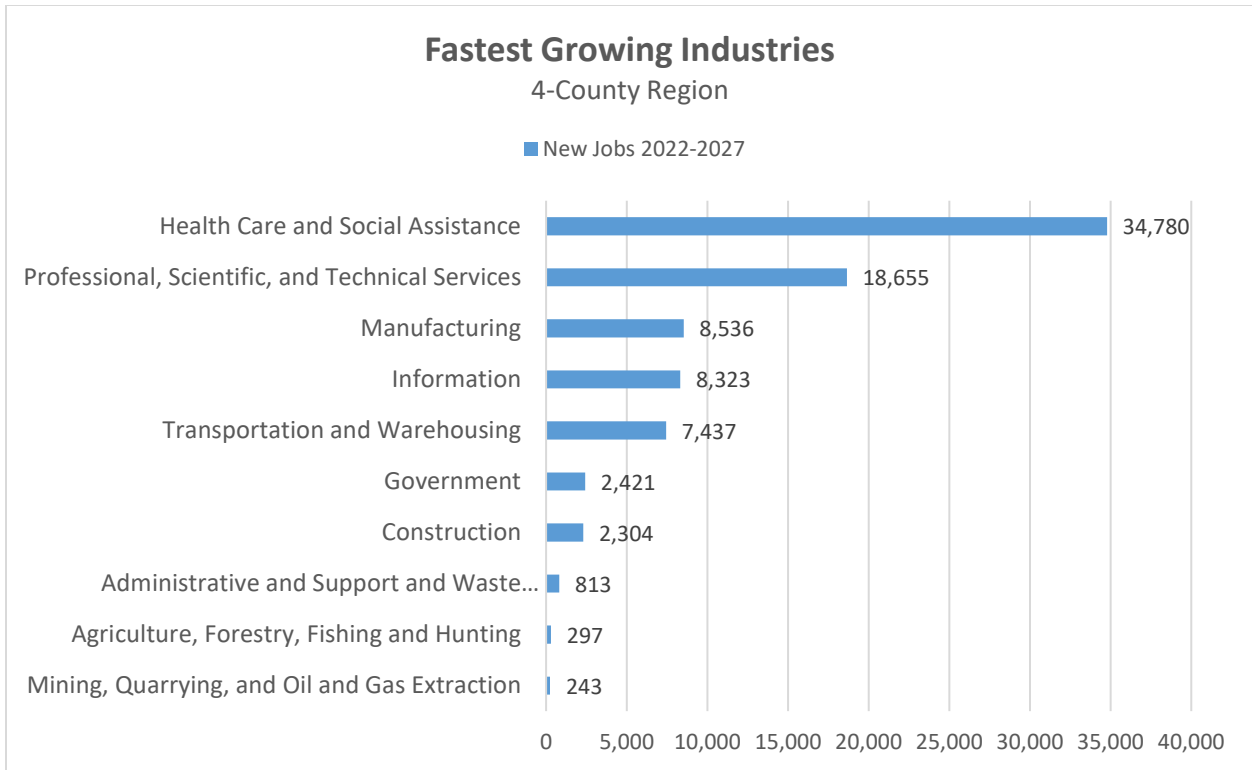
Appendix A: Industry Comparison Charts

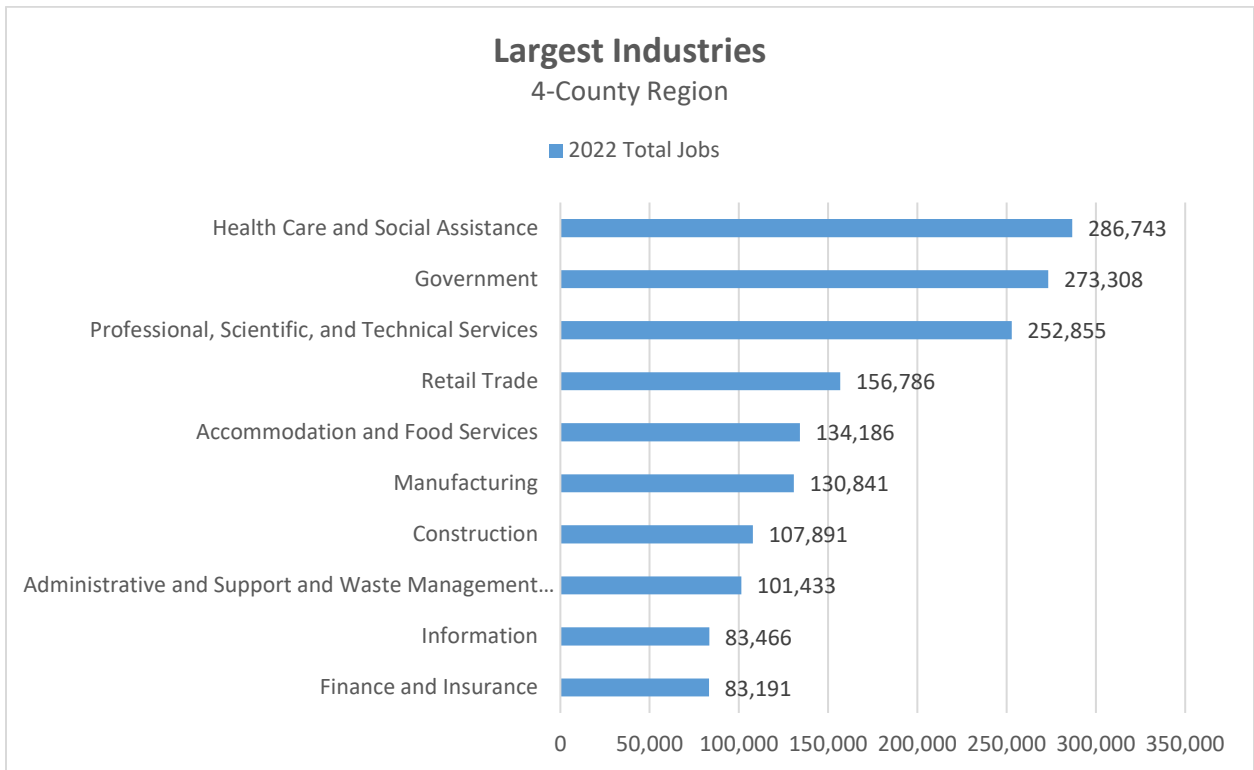
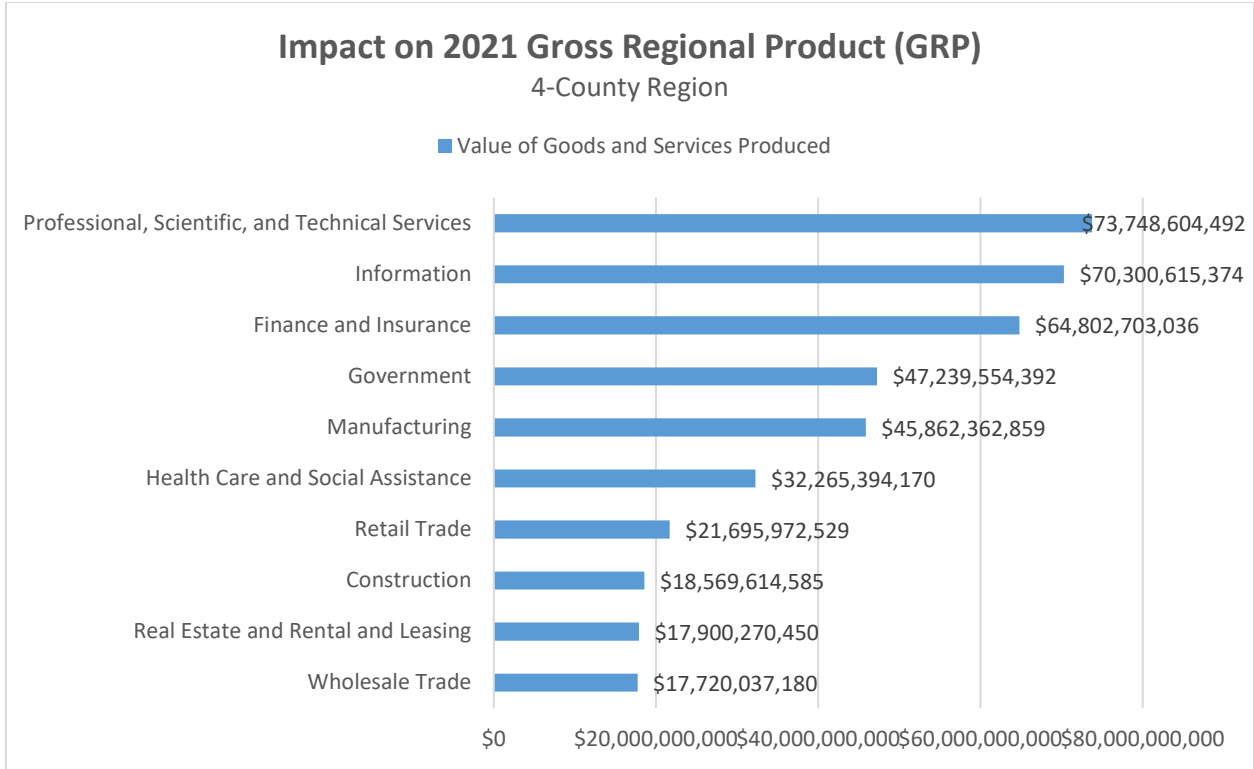
The following charts represent Contra Costa County only:





The following charts represent the 4-county region of Contra Costa, Alameda, Solano, and San Francisco.





Appendix B: Prioritization Scoring

Industry	TOTAL SCORE	Regional Emsi score	CoCo Emsi Score	BACCC	East Bay EDA
Professional, Scientific, and Technical Services	24	10	10	1	3
Manufacturing	22	10	6	3	3
Information	21	10	5	3	3
Health Care and Social Assistance	20	7	7	3	3
Government	19	10	6	3	
Construction	18	7	10	1	
Transportation and Warehousing	18	7	5	3	3
Mining, Quarrying, and Oil and Gas Extraction	15	7	7	1	
Utilities	13	3	9	1	
Finance and Insurance	12	6	6		
Wholesale Trade	11	2	5	1	3
Administrative and Support and Waste Management and Remediation Services	10	5	5		
Real Estate and Rental and Leasing	9	5	4		
Accommodation and Food Services	7	1	5	1	
Management of Companies and Enterprises	6	3	3		
Retail Trade	6	3	3		
Educational Services	5	0	4	1	
Arts, Entertainment, and Recreation	0	0	0		
Other Services (except Public Administration)	0	0	0		
Agriculture, Forestry, Fishing, and Hunting	4	4	0		

Scoring Rubric:

Lightcast Fastest Growing Top 10 = 4 points
 Lightcast Highest Paying Top 10 = 3 points
 Lightcast GRP Impact Top 10 = 2 points
 Emsi Largest Size Top 10 = 1 point
 BACCC High Priority = 3 points
 BACCC Priority = 1 points
 East Bay EDA Industry to Watch = 3 points