LOS MEDANOS COLLEGE

REGIONAL WORKFORCE AND ECONOMIC SUMMARY

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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. For 2021, we expanded our analysis zone to include San Francisco County to better 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: 1) Professional, Scientific, and Technical Services; 2) Manufacturing; 3) Information; 4) Healthcare and Social Assistance; and 5) Finance and Insurance. 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. For the current year, we have expanded our geography to include San Francisco County also.

Area	**Population**	**Projected Growth by 2025**	**Residents with HS diploma but no college degree**
Contra Costa	1,152,333	3.8%	38.1%
Four-county	4,128,197	3.9%	34.8%

LABOR MARKET DATA ANALYSIS BY INDUSTRY

We draw labor market data primarily from 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."[1] The data in this report comes from the Q4 2021 data set. We identify industries by standard North American Industry Classification System (NAICS) codes. Additionally, we use data provided by Contra Costa 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."[2]

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

[1] https://www.economicmodeling.com/company/

[2] Bay Area Community College Consortium. (2021, August 25). *Bay Area Regional Plan 2021.* https://docs.google.com/document/d/1fY6tHGtLSkGBUjNmPAyJ1_RlD7NFl07YutXUSKOwwDU/edit. Retrieved 5 November 2021.

over the coming years."[3] Furthermore, we have considered the conclusions of a range of other municipal and regional economic development reports and plans.

Based on the data and prioritization process described above, we have identified the following 5 priority industries for Los Medanos College. See Appendix B for the scoring matrix.

Industry	**NAICS**	**BACCC**	**East Bay EDA**
Professional, Scientific, and Technical Services	54	Priority	Industry to Watch
Manufacturing	31-33	High Priority	Industry to Watch
Information	51	High Priority	Industry to Watch
Healthcare and Social Assistance	62	High Priority	Industry to Watch
Finance and Insurance	52		

The "Government" industry (NAICS 90) would have been on the priority list based on scoring, but we excluded it as too broad in scope to be useful for purposes of evaluating potential academic programs. Government occupations are still reflected in labor market information under other industries by their functional role; for example, government accountants appear in the Finance industry (NAICS 52). We also excluded the "Transportation & Warehousing" industry (NAICS 48-49) from our final recommendation because only five occupations within it are middle-skill and only one projects substantive growth.

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."[4] There is no standardized crosswalk of industries (NAICS codes) to occupations (SOC codes), so

[3] East Bay Economic Development Alliance. (2021). *East Bay Forward.* [Report]. https://eastbayeda.org/wp-content/uploads/2021/11/EB-Forward-Complete_Final.pdf.
[4] https://www.onetcenter.org/overview.html

we use a combination of suggested occupational clusters provided by Emsi and best-judgement to create an inclusive list of occupations for each industry.

Below, we identify the 5 fastest growing jobs in each recommended industry, generally focusing on those that are considered middle-skill, meaning that they require more education than a high-school diploma but less than a bachelor's degree. Where fewer than 5 occupations resulted, education level was expanded. At the occupation level, Annual Openings becomes an available subset of Total Jobs that we use to assess prioritization. Where a slower-growing occupation is above-average in both Annual Openings and Median Wage, it is also added to the list. 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 of study; however, some occupations align to multiple industries and may be worth additional consideration when they appear.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES							
SOC	Description	2021 Jobs	2026 Jobs	2021 - 2026 Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
15-1232	Computer User Support Specialists	13,137	14,704	1,568	1,313	$36.44	Some college, no degree
41-3091	Sales Representatives of Services	17,434	18,687	1,254	2,295	$35.51	High school diploma or equivalent
15-1257	Web Developers and Digital Interface Designers	5,196	5,705	509	493	$49.10	Associate's degree
15-1231	Computer Network Support Specialists	2,536	2,875	339	262	$40.87	Associate's degree
23-2011	Paralegals and Legal Assistants	5,719	5,968	249	669	$34.68	Associate's degree

MANUFACTURING								
SOC	Description	2021 Jobs	2026 Jobs	2021 - 2026 Change	2021 - 2026 % Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
47-2111	Electricians	10,802	11,786	983	9%	1,365	$45.03	High school diploma or equivalent
43-5032	Dispatchers, Except Police, Fire, and Ambulance	2,403	3,002	598	25%	362	$24.63	High school diploma or equivalent
49-9071	Maintenance and Repair Workers, General	17,287	17,825	538	3%	1,755	$24.75	High school diploma or equivalent
51-2028	Electrical, Electronic, and Electro-mechanical Assemblers	4,916	5,298	382	8%	607	$21.04	High school diploma or equivalent
49-9041	Industrial Machinery Mechanics	2,555	2,905	351	14%	301	$33.94	High school diploma or equivalent

"Attracting a new generation of skilled, technology savvy workers to the manufacturing sector has become increasingly important with the adoption of advanced manufacturing processes."[5] Many jobs in this sector, as in Construction, rely on apprenticeships rather than academic credentials.

INFORMATION								
SOC	Description	2021 Jobs	2026 Jobs	2021 - 2026 Change	2021 - 2026 % Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
15-1232	Computer User Support Specialists	13,137	14,704	1,568	12%	1,313	$36.44	Some college, no degree

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

15-1257	Web Developers and Digital Interface Designers	5,196	5,705	509	10%	493	$49.10	Associate's degree
15-1231	Computer Network Support Specialists	2,536	2,875	339	13%	262	$40.87	Associate's degree
27-4011	Audio and Video Technicians	1,416	1,584	168	12%	181	$29.30	Postsecondary nondegree award
49-2022	Telecommun-ications Equipment Installers and Repairers	2,192	2,256	64	3%	280	$42.48	Postsecondary nondegree award

HEALTHCARE AND SOCIAL ASSISTANCE								
SOC	Description	2021 Jobs	2026 Jobs	2021 - 2026 Change	2021 - 2026 % Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
31-9092	Medical Assistants	11,635	12,617	982	8%	1,597	$26.54	Postsecondary nondegree award
31-1131	Nursing Assistants	11,213	12,163	950	8%	1,601	$21.53	Postsecondary nondegree award
29-2061	Licensed Practical and Licensed Vocational Nurses	6,785	7,326	541	8%	636	$35.18	Postsecondary nondegree award
29-2098	Medical Dosimetrists, Medical Records Specialists, and Other Health Technicians	4,280	4,647	367	9%	386	$28.48	Postsecondary nondegree award

29-2041	Emergency Medical Technicians and Paramedics	3,362	3,638	276	8%	294	$22.60	Postsecondary nondegree award

FINANCE AND INSURANCE							
SOC	Description	2021 Jobs	2026 Jobs	2021 - 2026 Change	Avg. Annual Openings	Median Hourly Earnings	Typical Entry Level Education
11-3031	Financial Managers	16,046	17,079	1,033	1,381	$81.81	Bachelor's degree
13-2011	Accountants and Auditors	21,896	22,730	834	2,123	$43.34	Bachelor's degree
13-2098	Financial and Investment Analysts, and Financial Risk Specialists	10,604	10,841	237	852	$50.39	Bachelor's degree
13-2052	Personal Financial Advisors	7,006	7,223	216	555	$62.95	Bachelor's degree
43-9061	Office Clerks, General	34,790	34,832	42	4,048	$22.06	High school diploma or equivalent

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 Emsi data, unemployment in the 4-county region is currently 6.1%, recovering from a pandemic high of 8.7%, but still well above the pre-pandemic historic low of 2.9%. 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.[6] 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

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

since recovered slightly to 61.7% as of August 2021, suggesting that some people are resuming their job search, based on some combination of financial necessity and becoming comfortable with COVID vaccination and adaptations in the workplace.

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.[7] 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.[8] 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.[9]

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 impact. In order to provide the most 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.

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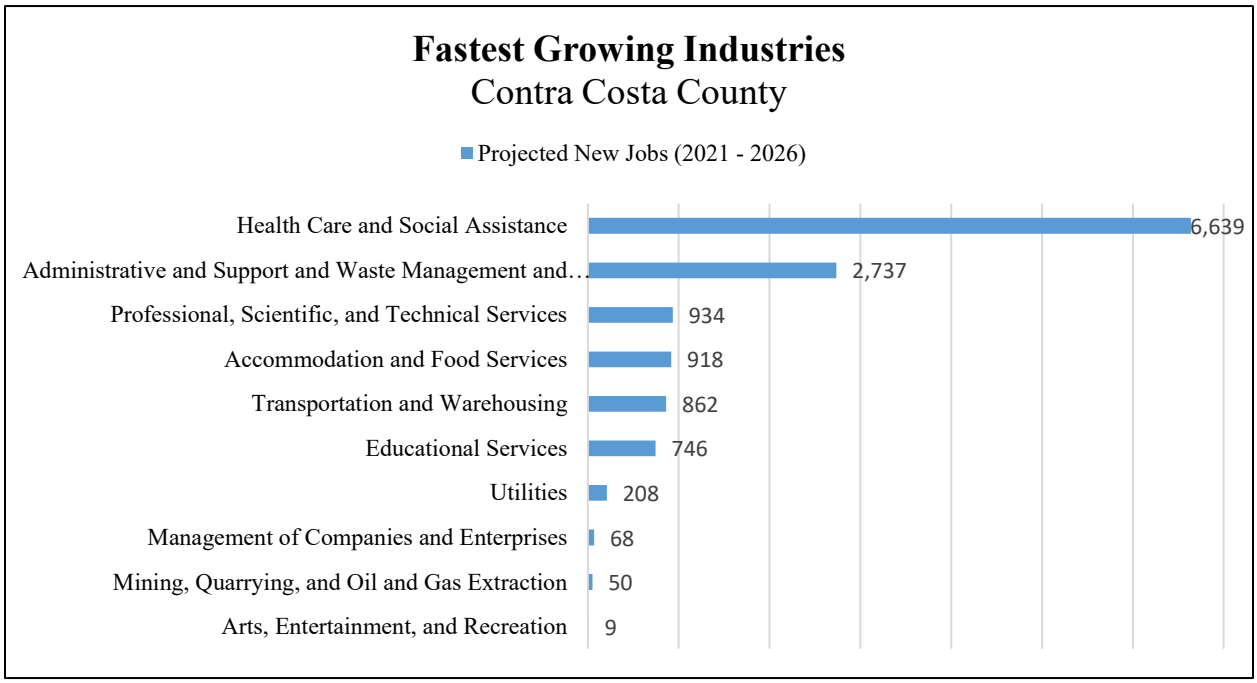
[7] Gambhir, Samir and Moore, Eli. (2019) *Lift Up Contra Costa Demographic Analysis*. Haas Institute for a Fair and Inclusive Society. Based on U.S. Census Bureau, American Community Survey, 5 year estimate, 2013-2017

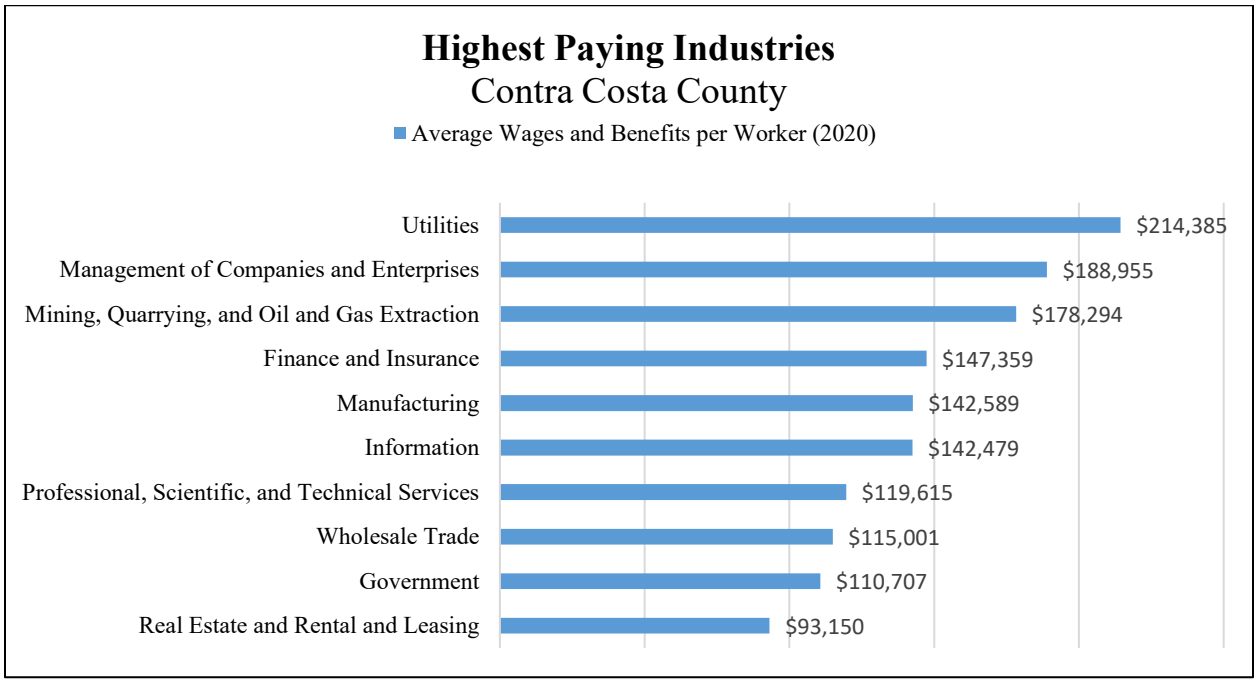
[8] Insight Center for Community Economic Development. (2021, May 18). *The Cost of Being Californian Contra Costa County Fact Sheet*. https://insightcced.org/the-cost-of-being-californian-contra-costa-county-fact-sheet/.

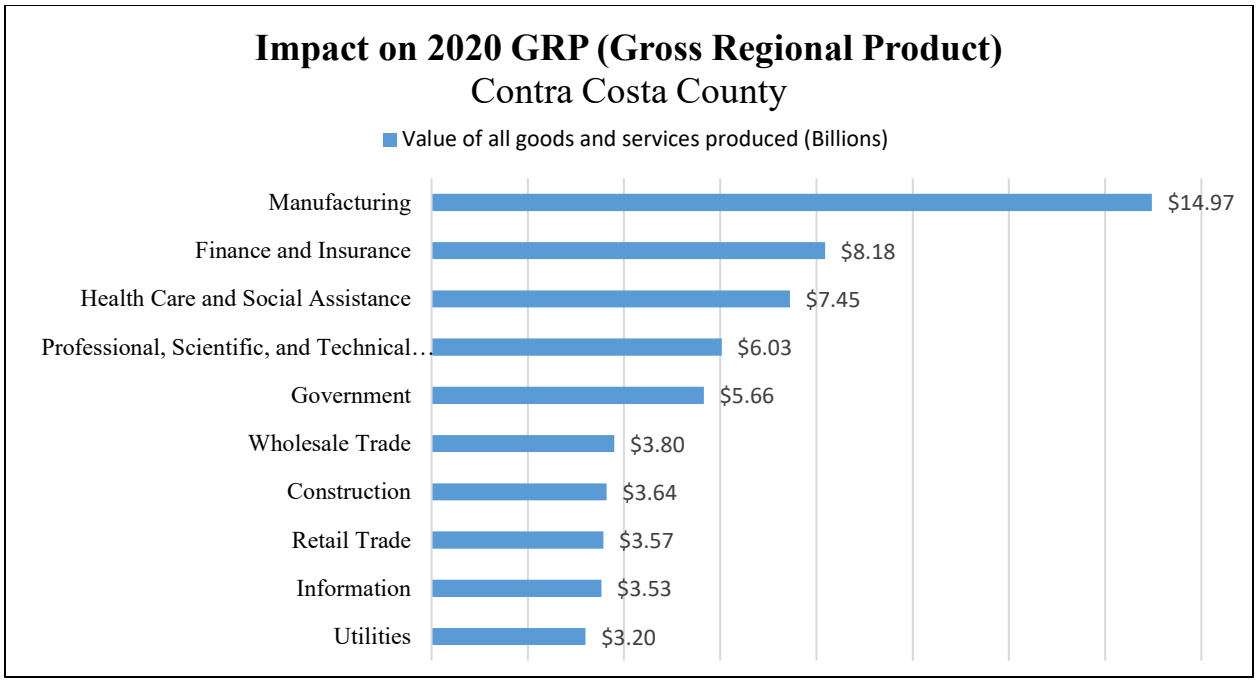
[9] Insight Center for Community Economic Development. (2021). *Family Needs Calculator*. https://insightcced.org/family-needs-calculator/. Retrieved 5 November 2021.

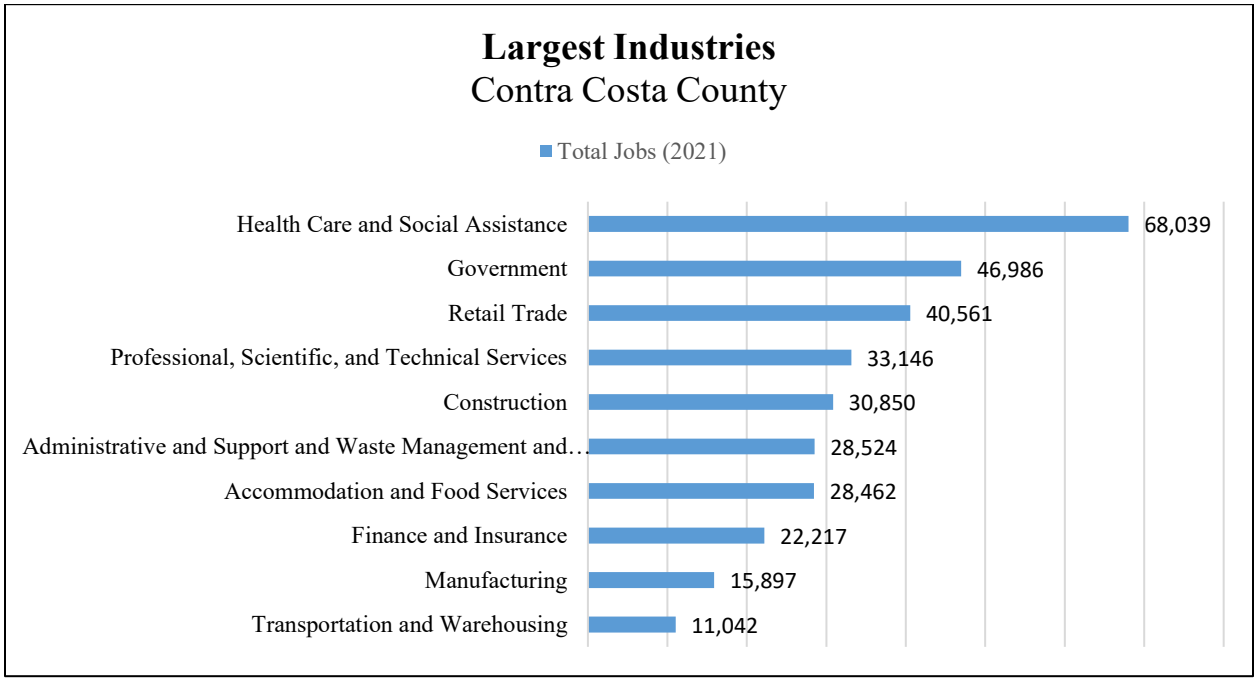
Appendix A: Industry Comparison Charts

The following charts represent Contra Costa County only:

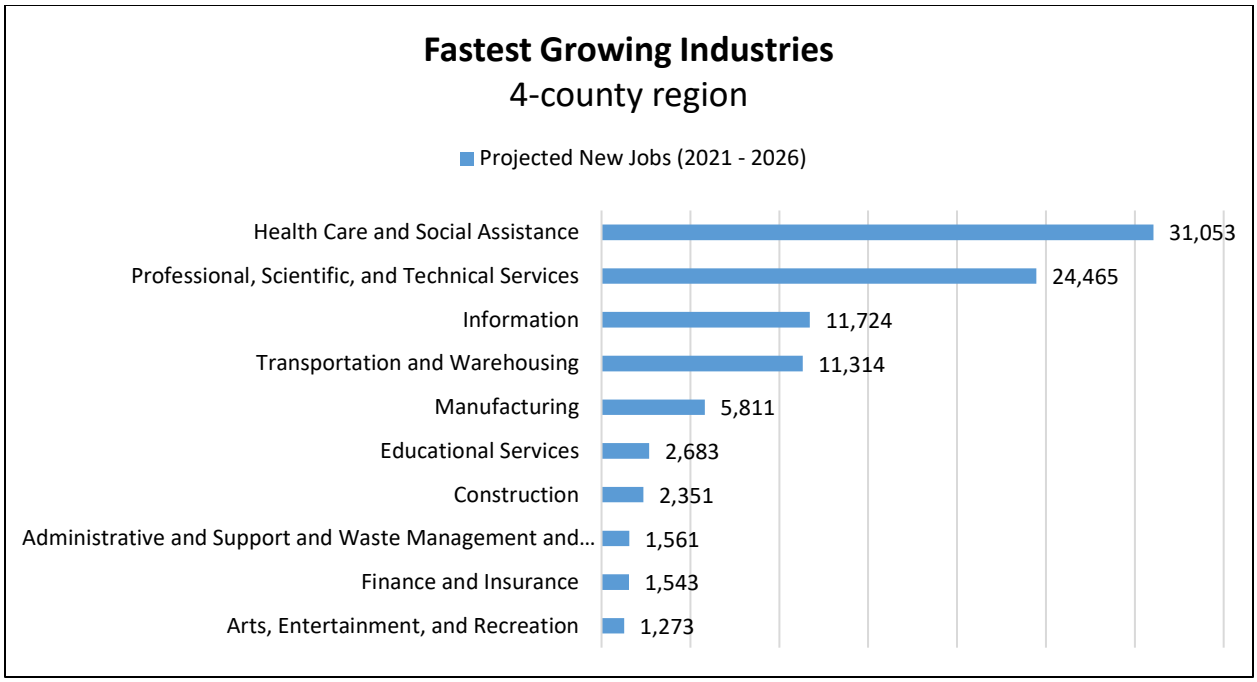


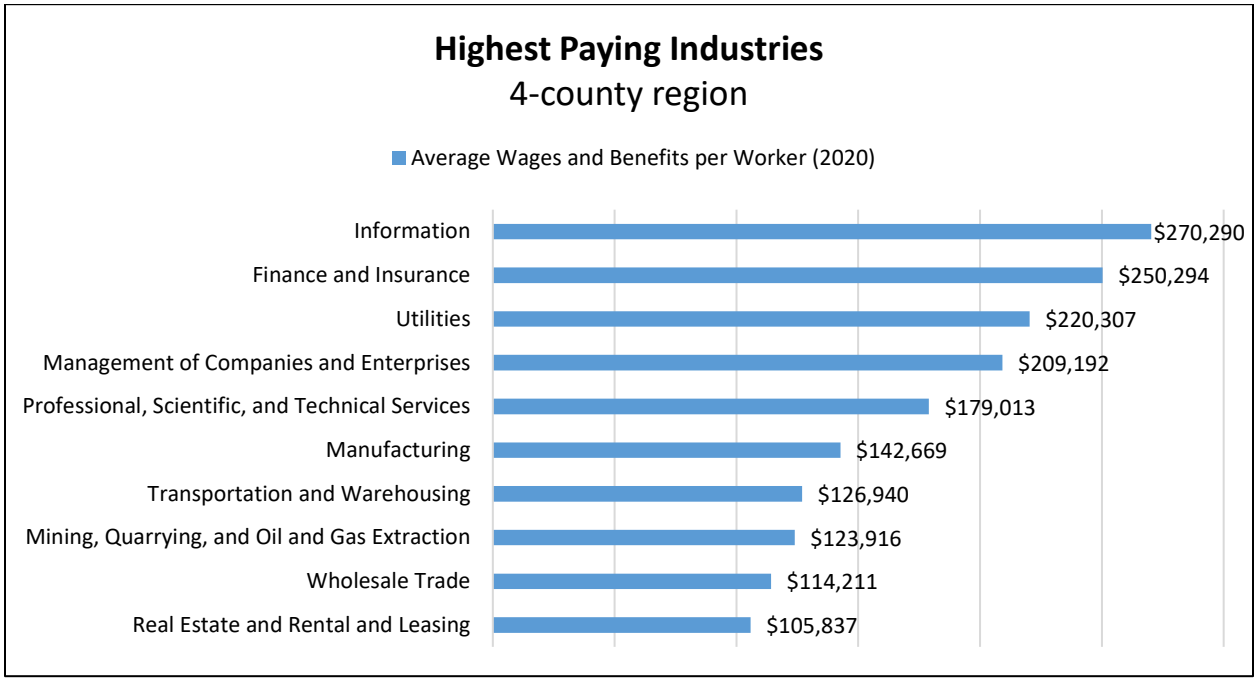


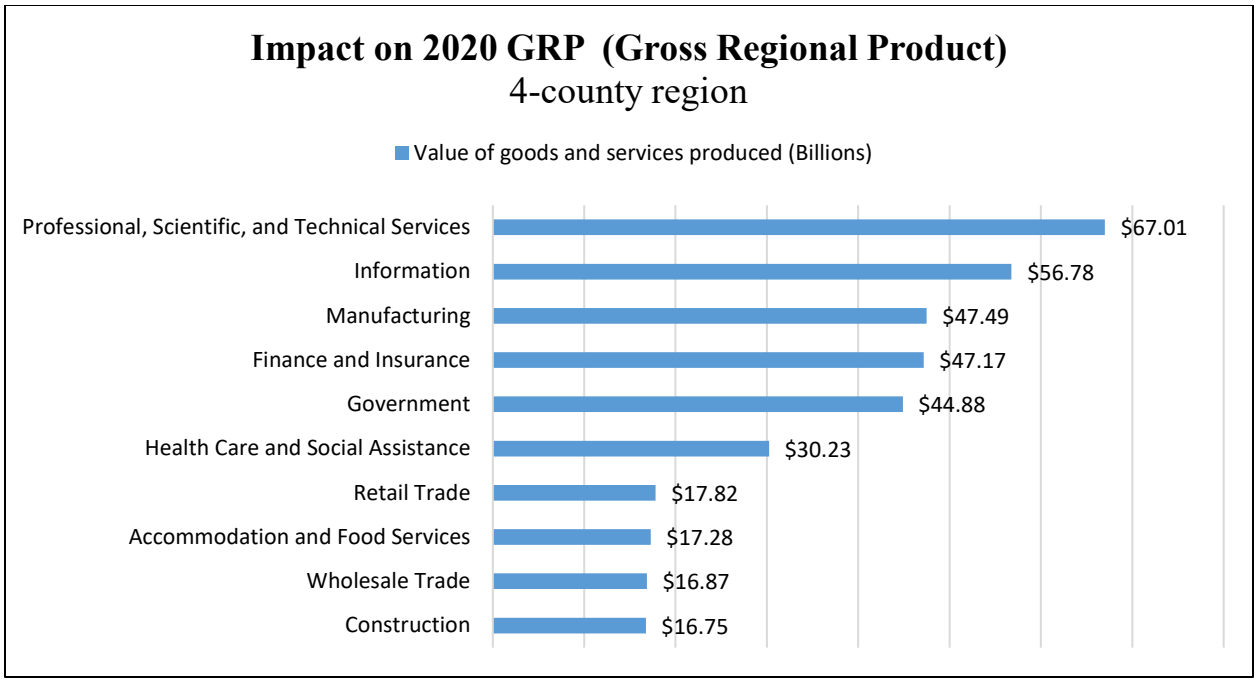


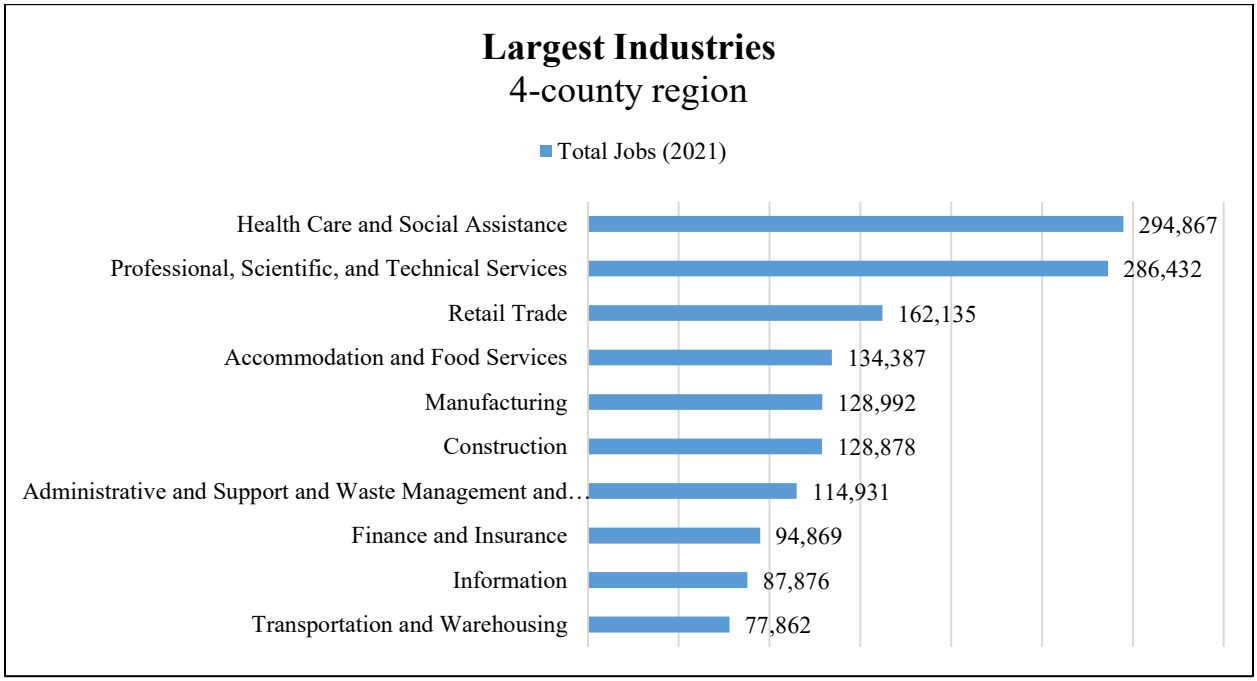


The following charts represent the 4-county region of Contra Costa, Alameda, Solano, and San Francisco.


Fastest Growing Industries
4-county region
Projected New Jobs (2021 - 2026)
Health Care and Social Assistance
31,053
Professional, Scientific, and Technical Services
24,465
Information
11,724
Transportation and Warehousing
11,314
Manufacturing
5,811
Educational Services
2,683
Construction
2,351
Administrative and Support and Waste Management and...
1,561
Finance and Insurance
1,543
Arts, Entertainment, and Recreation
1,273


Highest Paying Industries
4-county region
Average Wages and Benefits per Worker (2020)
Information
$270,290
Finance and Insurance
$250,294
Utilities
$220,307
Management of Companies and Enterprises
$209,192
Professional, Scientific, and Technical Services
$179,013
Manufacturing
$142,669
Transportation and Warehousing
$126,940
Mining, Quarrying, and Oil and Gas Extraction
$123,916
Wholesale Trade
$114,211
Real Estate and Rental and Leasing
$105,837


Impact on 2020 GRP (Gross Regional Product)
4-county region
Value of goods and services produced (Billions)
Professional, Scientific, and Technical Services
$67.01
Information
$56.78
Manufacturing
$47.49
Finance and Insurance
$47.17
Government
$44.88
Health Care and Social Assistance
$30.23
Retail Trade
$17.82
Accommodation and Food Services
$17.28
Wholesale Trade
$16.87
Construction
$16.75


Largest Industries
4-county region
Total Jobs (2021)
Health Care and Social Assistance
294,867
Professional, Scientific, and Technical Services
286,432
Retail Trade
162,135
Accommodation and Food Services
134,387
Manufacturing
128,992
Construction
128,878
Administrative and Support and Waste Management and…
114,931
Finance and Insurance
94,869
Information
87,876
Transportation and Warehousing
77,862

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	
Transportation and Warehousing	18	7	5	3	3
Finance and Insurance	16	10	6		
Wholesale Trade	14	5	5	1	3
Utilities	13	3	9	1	
Construction	11	7	3	1	
Mining, Quarrying, and Oil and Gas Extraction	11	3	7	1	
Administrative and Support and Waste Management and Remediation Services	10	5	5		
Management of Companies and Enterprises	10	3	7		
Other Services (except Public Administration)	10	5	5		
Accommodation and Food Services	9	3	5	1	
Educational Services	9	4	4	1	
Retail Trade	6	3	3		
Arts, Entertainment, and Recreation	4	0	4		
Real Estate and Rental and Leasing	3	0	3		

Scoring Rubric:

Emsi Fastest Growing Top 10
= 4 points

Emsi Highest Paying Top 10
= 3 points

Emsi 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