

YEAR 2 UPDATE (2022–2023)

JUNE 2024

ACKNOWLEDGEMENTS

COMMISSIONED BY THE COUNTY OF MONTEREY



Monterey County is located on the Central Coast of California just south of the Bay Area, about 45 miles from San Jose, and 106 miles from the City of San Francisco. The rich Salinas Valley extends through the heart of the County, making Monterey the third largest agricultural county in California. The County also offers the longest coastline of any California county and attracts more than 3 million visitors annually to destinations such as Fisherman's Wharf, the Cannery and the Monterey Bay Aquarium. As a subdivision of the state, the County is charged with providing numerous services that affect the lives of all residents, including law enforcement, tax collection, public health protection, public social services, elections, and flood control.

PREPARED BY:



Grow America, formerly NDC, is the first dedicated American community and economic development nonprofit organization. Founded in 1969, the organization focuses on four program areas: investments in community development, innovative lending and entrepreneurial support, advisory support for community and economic development, and professional education and training. Grow America's mission is to invest capital to craft equitable, vibrant futures and to improve the lives of millions of people through new economic opportunity. Learn more at growamerica.org



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Note: All figures and tables that appear throughout this document are based on the most recent data available at the time of analysis.



PREFACE

In June 2021, the County of Monterey released the Countywide Comprehensive Economic Development Strategy (CEDS): 2021–2026. The County must prepare a new CEDS at least every five years for local communities and organizations to qualify for U.S. Economic Development Administration (EDA) funding. More broadly, the CEDS development process provides a vehicle for regional stakeholders — including, but not limited to, community-based organizations, nonprofits, organized labor, local governments, academic institutions, and private industry — to chart a path towards greater economic wellbeing.

This document — the Year 2 Update — is the second update to the most recent CEDS. The Year 1 Update focused on Monterey County's recovery from the Covid-19 pandemic with respect to numerous economic, demographic, and housing metrics and an emphasis on the Agriculture, Tourism & Hospitality, and Health Care sectors. This year's report provides a brief overview of key indicators across the three target sectors, but primarily focuses on the state of the County's technology and innovation ecosystem as a potential engine for growth.

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INTRODUCTION

The hallmarks of Monterey County's economy have historically leveraged the natural environment, from fertile farmlands to the stunning vistas and enclaves that attract visitors from around the world. Indeed, the agricultural and tourism sectors are and will continue to serve as cornerstones of the County's economy. Yet they also face significant headwinds at a time when public health risks, environmental hazards, and a shifting economic landscape may lead to increasingly frequent cycles of disruption. To ensure the viability of these sectors — and by extension, the viability of the overall economy — Monterey County needs to reorient the economic development conversation away from legacy policy and practices and towards novel ways to make the region more globally competitive.

Key to this discussion is the role that the County's fledgling technology and innovation ecosystem will play in modernizing and diversifying the economy.1 Regions that prioritize the development of robust technology and innovation ecosystems are better positioned to attract and retain businesses, cultivate a skilled workforce, and drive sustainable economic development. What this does not mean is attempting to recreate a Silicon Valley or sidelining existing industries that are acknowledged economic pillars. Rather, investing in the establishment of a formal technology and innovation ecosystem would establish avenues to foster cross-sector collaboration, nurture emerging industries, attract and retain top talent and businesses, and provide high-skill employment and training opportunities.

Of course, building a robust technology and innovation ecosystem is not without its challenges. Monterey County faces obstacles such as geographic isolation from major technology hubs, limited access to venture capital and funding resources, workforce development needs, and infrastructure requirements. Moreover, there are many equity issues to consider.² Who benefits from investments in technology and innovation, and who is left out? Do investments in technology and innovation translate to cuts in funding for other industries, communities, or programs? Overcoming these hurdles will require a coordinated and strategic approach that involves collaboration among local governments, educational institutions, businesses, and community stakeholders.

This report, the Monterey County Comprehensive Economic Development Strategy: Year 2 Update, focuses on the current composition of the region's technology and innovation ecosystem (including a spotlight on the U.S. Department of Defense's presence in the County), highlights the current challenges and potential opportunities, and presents priorities that can inform ecosystem-building policies, programs, and initiatives. But first, it offers a highlevel overview of industry performance economywide and briefly summarizes key indicators for Monterey County's three target sectors — Agriculture, Tourism & Hospitality, and Health Care & Social Assistance — for context.

²For a recent study into questions of regional economic inclusiveness, see "Building an Inclusive Economy in the Monterey Bay Region: A Progress Report (December 2023)" produced jointly by the Monterey Bay Economic Partnership and the University of California Santa Cruz's Institute for Social Transformation. Report available here: https://transform.ucsc.edu/building-an-inclusive-economy-in-the-monterey-bay-region/



¹The need to nurture cluster development, especially with respect to advanced technology, is listed as one of the six overarching goals of the 2021–2026 County of Monterey Comprehensive Economic Development Strategy.

ECONOMIC CONDITIONS

Rising price levels, ballooning housing costs, and an uneven recovery from the Covid-19 pandemic may have all contributed to a sense that Monterey County's economy is struggling, but in many respects its economy as a whole has not only remained resilient but thrived in the wake of the two largest economic shocks of the past two decades: the Great Recession of 2007-2008 and the economic downturn following Covid-19 lockdowns. Real gross regional product (GRP) - or the value of a region's goods and services adjusted for inflation — growth was relatively stagnant through the Great Recession in 2008 (Figure 1). After modest gains between 2012 and 2016, economic output grew a substantial 23.0% to \$33.3 billion by 2022. Put another way, GRP per capita rose from \$62,140 to \$76,617 over the course of six years.

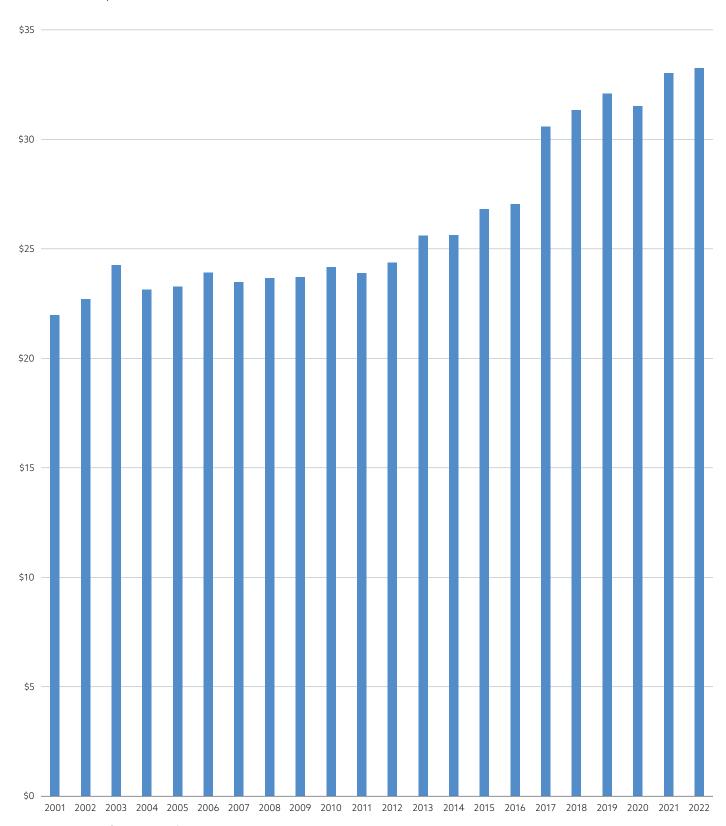
While such gains are meaningful, they do mask some on-the-ground realities. Strong GRP per capita growth performance is muted by the fact that Monterey County's population continues to contract in the wake of the pandemic (Figure 2). Resident population counts peaked in 2020 at nearly 440,000 and had declined by over 10,000 (or 2.3%) by 2023. The drop was more pronounced in some cities compared

to others. Seaside lost nearly 11% of its residents between 2018 and 2023, while its North County neighbors Monterey and Marina saw their populations contract by 3.6% and 0.3%, respectively. King City's population decline was partially offset by an increase in Soledad.

Although there are many factors at play, cost of living is a major driver. Inflation in California has fallen from its 2022 height of 7.3%, but prices still increased by 3.9% over the course of 2023. Wage growth (at 21.4%) outpaced inflation between 2018 and 2023 by a large margin, but the explosive rise in home values is putting homeownership and long-term housing stability out of reach for large swaths of the population (Figure 3). The average home value countywide increased by 44.5% from \$569,068 in 2018 to \$822,837 in 2023, and the rise in home prices was even greater for communities in South County. In a region where average annual wages amounted to \$58,299 in 2023, high housing costs have a disproportionate impact on lower-income households and serve as a barrier to skilled workers who may otherwise wish to relocate to the County.

FIGURE 1: REAL GROSS REGIONAL PRODUCT FOR MONTEREY COUNTY

2001 TO 2022 | IN BILLIONS OF 2022 USD



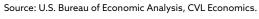
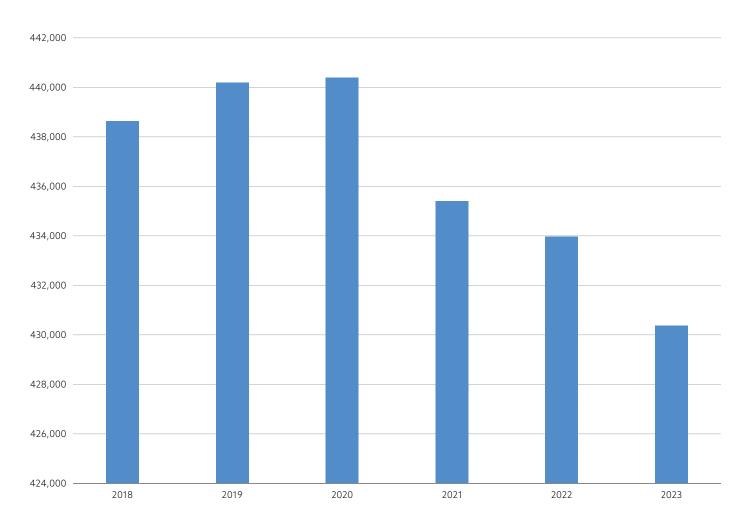




FIGURE 2: CHANGE IN RESIDENT POPULATION

2018 TO 2023

(A) MONTEREY COUNTY



Source: California Department of Finance, CVL Economics.

(B) SELECT CITIES IN MONTEREY COUNTY

	2018	2023	CHANGE	% CHANGE
Seaside	33,767	30,187	-3,580	-10.6%
Soledad	25,680	26,462	782	3.0%
King City	14,347	13,968	-379	-2.6%

Source: California Department of Finance, CVL Economics.

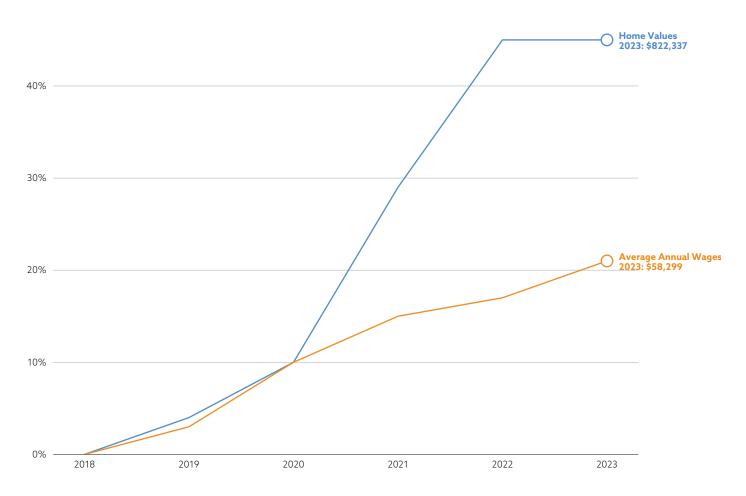


FIGURE 3: CHANGE IN HOME VALUES

2018 TO 2023

(A) MONTEREY COUNTY

50%



(B) SELECT CITIES IN MONTEREY COUNTY

	2018	2023	% CHANGE
Seaside	\$535,255	\$770,313	43.9%
Soledad	\$384,872	\$585,676	52.2%
King City	\$310,584	\$484,424	56.0%

 $Source: U.S.\ Bureau\ of\ Labor\ Statistics,\ U.S.\ Census,\ Zillow,\ CVL\ Economics.$



INDUSTRY OVERVIEW

Where GRP and home values saw significant gains in recent years, employment growth on average has been relatively slower. Monterey County job growth increased by 3.7% between 2018 and 2022, though certain sectors outperformed the overall economy (Table 1). Not surprisingly, the Real Estate & Rental and Leasing sector saw the highest rate of employment growth at 22.3% and added over 2,200 jobs (second only to the Agriculture sector). That the Construction sector experienced only moderate growth in comparison, expanding its ranks by fewer than 500 jobs (a 5.2% growth rate), suggests that most of this real estate activity is centered on existing properties rather than the sale of new ones. In both cases, wages grew at a faster clip (19.1% for Real Estate & Rental and Leasing and 18.1% for Construction) than the 15.8% average across all sectors.

Elsewhere in the economy, the Government sector (which includes federal, state, and local employees) saw minimal changes in employment over the five-year period and remained the second largest sector overall in 2022, with nearly 40,000 workers. Gains in highwage sectors were mixed; the Finance and Insurance

sector expanded its workforce by 20.1%, adding nearly 1,300 jobs to the economy, and the Management of Companies and Enterprises sector grew at an even faster rate (30.0%), though only adding around 500 jobs between 2018 and 2022. In contrast, the Wholesale Trade, Manufacturing, Information, and Utilities sectors all suffered job losses even as average annual wages continued to increase.

The County's three target sectors (Agriculture, Health Care & Social Assistance, and Tourism & Hospitality, which comprises some industries in the Accommodations & Food Services and Arts, Entertainment, and Recreation sectors) accounted for 41.1% of all jobs countywide in 2022. These sectors, or industry clusters, are defined as a set of businesses, organizations, and institutions that specialize in the production of similar goods and services. Given their size and economic contribution to the Monterey County economy, tracking them in more detail on an annual basis provides insights into their overall health and trendlines.

TABLE 1: EMPLOYMENT AND AVERAGE ANNUAL WAGES BY SECTOR IN MONTEREY COUNTY $2018 \, \text{TO} \, 2023$

	1	NUMBER OF JOBS			RAGE ANNUAL W	/AGES
	2018	2022	% Change	2018	2022	% Change
Government	39,488	39,965	1.2%	\$67,213	\$77,364	15.1%
Health Care & Social Assistance	20,806	21,651	4.1%	\$51,4472	\$61,471	19.4%
Other Services (except Public Administration)	13,411	13,261	-1.1%	\$29,187	\$32,894	12.7%
Administrative & Support Services	10,665	11,701	9.7%	\$32,794	\$37,546	14.5%
Construction	9,377	9,861	5.2%	\$54,658	\$64,535	18.1%
Construction	7,577	7,001	3.276	754,050	304,333	10.176
Transportation & Warehousing	6,447	7,367	14.3%	\$40,361	\$37,317	-7.5%
Manufacturing	6,087	5,642	-7.3%	\$50,733	\$59,335	17.0%
Educational Services	3,659	3,785	3.4%	\$33,739	\$38,432	13.9%
Information	1,589	1,573	-1.0%	\$54,123	\$58,490	8.1%

Note: Includes W-2 and Self-Employed workers.

AGRICULTURE

Despite the unprecedented challenges posed by disruptions in supply chains, labor shortages, and fluctuating consumer demand in recent years, the County's diverse array of agricultural products continued to sustain local economies and contribute significantly to the state's food production. Agriculture sector employment reached an all-time high in 2022 with 62,356 jobs, which represented an 8.3% increase from a pandemic low of 57,556 jobs (Figures 4 and 5). At the same time, the sector is grappling with the impacts of climate change, water scarcity, and a regulatory environment that can at times make it harder to compete on a global scale.

Land use constraints and housing shortages also threaten the sector's ability to plan for growth.³ With wage gains beginning to plateau (Figure 6) — the 13.9% increase in average annual wages between 2018 and 2022 fell significantly below the 15.8% figure across all sectors — the ability of farmworkers to find adequate housing that is affordable and free from overcrowding grows increasingly precarious. This in turn may impact the Agriculture sector's ability to remain an economic powerhouse over the long term. It directly contributed \$6.4 billion in gross value added to Monterey County's \$33.3 billion economy in 2022 (Table 2), but ensuring that growth continues will require a re-evaluation of the status quo.

³Leslie Duarte. "Monterey County leaders concerned by lack of farmworker housing," KSBW Action News 8. April 26, 2024. https://www.ksbw.com/article/monterey-county-lack-farm-worker-housing/60610455

FIGURE 4: AGRICULTURE SECTOR EMPLOYMENT GROWTH IN MONTEREY COUNTY 2018-2022

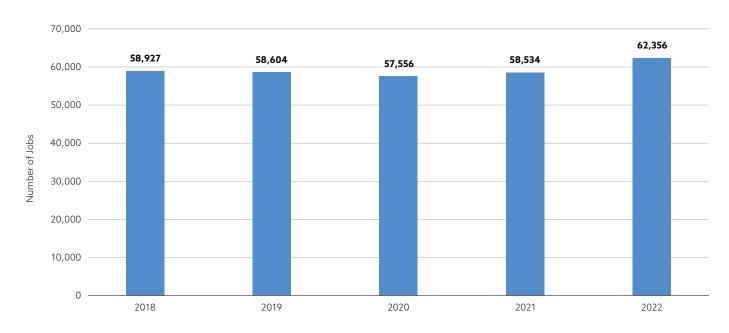
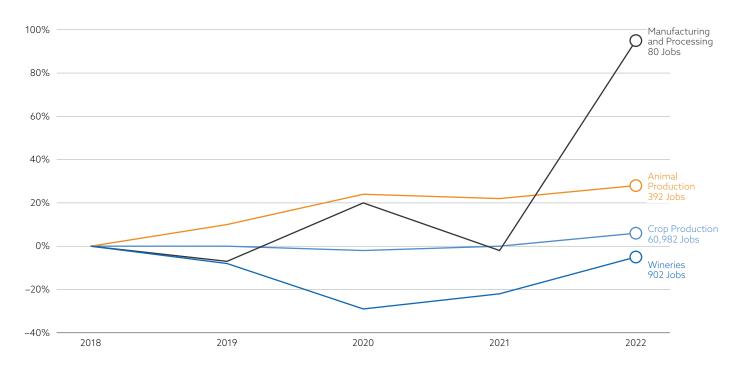




FIGURE 5: RELATIVE EMPLOYMENT GROWTH BY AGRICULTURE SUBSECTOR IN MONTEREY COUNTY 2018-2022



Source: U.S. Bureau of Labor Statistics, U.S. Census, Lightcast, CVL Economics.

FIGURE 6: AGRICULTURE SECTOR AVERAGE ANNUAL WAGE GROWTH IN MONTEREY COUNTY 2018-2022

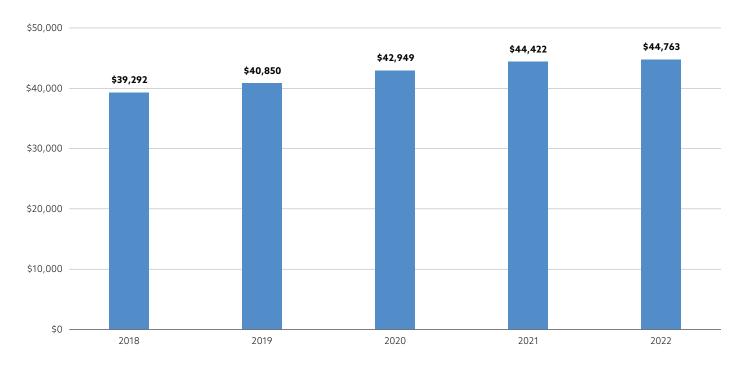




TABLE 2: AGRICULTURE SECTOR ECONOMIC AND FISCAL IMPACT IN MONTEREY COUNTY 2022

	EMPLOYMENT	LABOR INCOME	VALUE ADDED	TAX REVENUE
Direct Impact	61,872	\$4,088,522,048	\$6,431,704,202	\$1,417,695,158
Indirect Impact	2,505	\$201,628,804	\$457,208,650	\$146,441,844
Induced Impact	12,277	\$759,040,760	\$1,323,505,986	\$379,418,382
Total Impact	76,654	\$5,049,191,612	\$8,212,418,838	\$1,943,555,383

Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Census, IMPLAN, CVL Economics.

TOURISM & HOSPITALITY

The Tourism & Hospitality sector has seen significant job growth since the depths of the pandemic, but it has yet to return to pre-pandemic employment levels (Figure 7). Although tourism spending ticked upwards between 2021 and 2022 by 19.1% to \$3.1 billion, See Monterey (formerly the Monterey County Convention & Visitors Bureau) reported that this figure was still 8.6% below where it was in 2019.4 As See Monterey's CEO Rob O'Keefe explains, "We're losing the race when it comes to domestic visitors" in addition to international tourists and conference business.⁵ Such secular trends can take a toll on sectors like Tourism & Hospitality that are more vulnerable than most to economic cycles, shocks, and the protracted effects of inflation. This partially explains why amenities that rely on local patronage repeat customers (such as bars and restaurants) experienced stronger employment rebounds than amenities like hotels that almost exclusively cater to out-of-town quests (Figure 8). Moreover, environmental hazards that effectively

shut down tourist destinations like Big Sur have had cascading effects on the sector in the past year.

Wages across the board remain low on average topping out at \$38,255 in 2022 — though average annual wages increased by 21.8% between 2020 and 2022 (Figure 9). Labor shortages in the Accommodations and Food Services sector were widely reported during the period once referred to as the "Great Resignation," and the trends persist to this day. Although long overdue wage gains are good for workers, the industry could well take longer to recover as these costs are passed on to consumers, who in turn may further cut back on domestic travel.⁶ Whether the sector's 2022 direct gross value added of just over \$1.8 billion is a temporary peak remains to be seen (Table 3). But absent any major economic shifts in their favor, the Tourism & Hospitality industries may benefit from innovations in their business models.

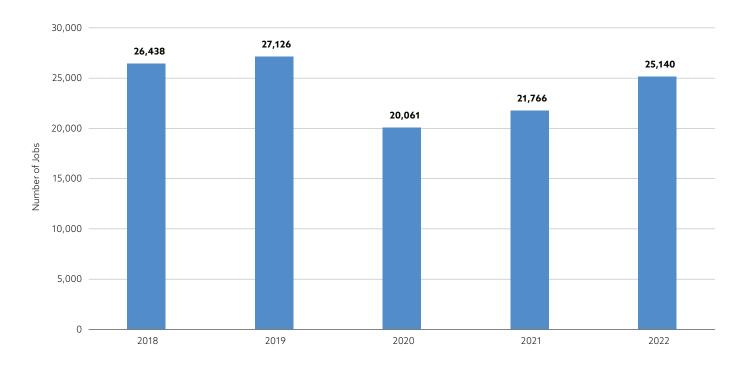
⁶ Will Feuer. "Hotel Staff Shortages Threaten to Push Travel Costs Even Higher." The Wall Street Journal. February 27, 2024. https://www.wsj.com/business/hospitality/hotel-staff-shortages-threaten-to-push-travel-costs-even-higher-004e5341



⁴ The Economic Impact of Travel: Monterey County 2023 Preliminary Estimates provided by See Monterey.

⁵Pam Marino. "The county's tourism bureau updates itself to boost lagging business after Covid shutdowns." Monterey County Now. August 31, 2023. https://www.montereycountynow.com/news/local_news/the-county-s-tourism-bureau-updates-itself-to-boost-lagging-business-after-covid-shutdowns/article_fbd110ae-475f-11ee-80c0-bf930fac8fdd.html

FIGURE 7: TOURISM & HOSPITALITY SECTOR EMPLOYMENT GROWTH IN MONTEREY COUNTY 2018-2022



Source: U.S. Bureau of Labor Statistics, U.S. Census, Lightcast, CVL Economics.

FIGURE 8: RELATIVE EMPLOYMENT GROWTH BY TOURISM & HOSPITALITY SUBSECTOR IN MONTEREY COUNTY 2018-2022

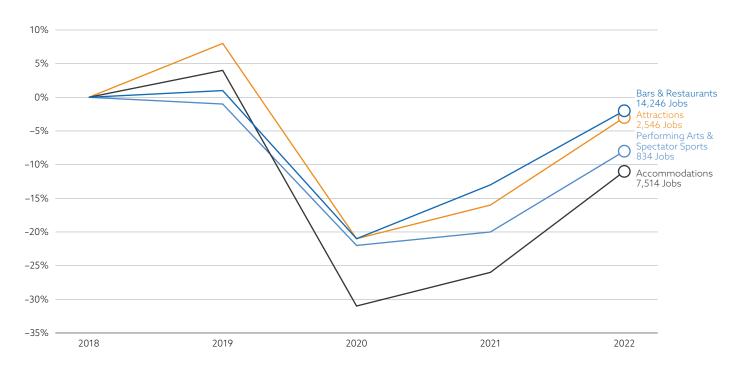
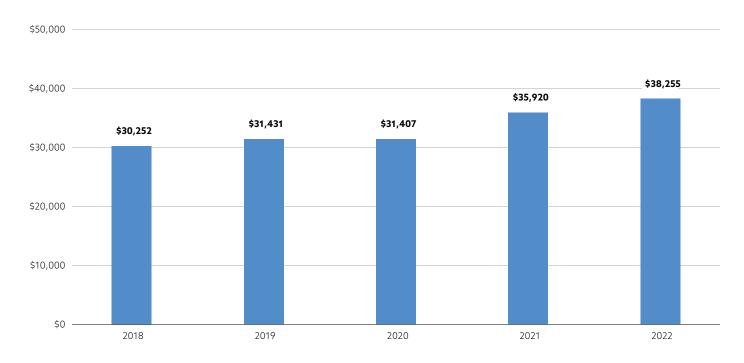


FIGURE 9: TOURISM & HOSPITALITY SECTOR AVERAGE ANNUAL WAGE GROWTH IN MONTEREY COUNTY 2018-2022



Note: Average annual wages are calculated as total wages divided by average annual employment. Since the Tourism & Hospitality sector comprises a relatively high proportion of part-time employees, average annual wages are considerably less than the pay levels in sectors with a higher share of full-time employees.

Source: U.S. Bureau of Labor Statistics, U.S. Census, Lightcast, CVL Economics.

TABLE 3: TOURISM & HOSPITALITY SECTOR ECONOMIC AND FISCAL IMPACT IN MONTEREY COUNTY 2022

	EMPLOYMENT	LABOR INCOME	VALUE ADDED	TAX REVENUE
Indirect Impact	2,805	\$214,783,877	\$307,398,896	\$83,386,242

Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Census, IMPLAN, CVL Economics.

HEALTH CARE & SOCIAL ASSISTANCE

Employment in the Health Care & Social Assistance sector has remained stable over the past six years (Figure 10). Job counts fell nearly 2% in 2020 but surpassed pre-pandemic levels in 2022 with 21,651 workers. As demand for emergency services in response to Covid-19 (such as Ambulatory Health Care Services) waned between 2021 and 2022, job growth in industries associated with Social Assistance and Nursing & Residential Care Facilities began to spike (Figure 11). Major staff shortages across the sector placed upward pressure on average annual wages, which shot up by 12.9% between 2020 and 2022 and significantly outpaced wage growth in prior years (Figure 12). When taking direct, indirect, and induced impacts into account, the sector supported 26,953 jobs in 2022, generated \$2.4 billion in gross value added, and contributed \$642.4 million in tax revenue at the local, state, and federal levels (Table 4).

FIGURE 10: HEALTH CARE & SOCIAL ASSISTANCE SECTOR EMPLOYMENT GROWTH IN MONTEREY COUNTY 2018-2022

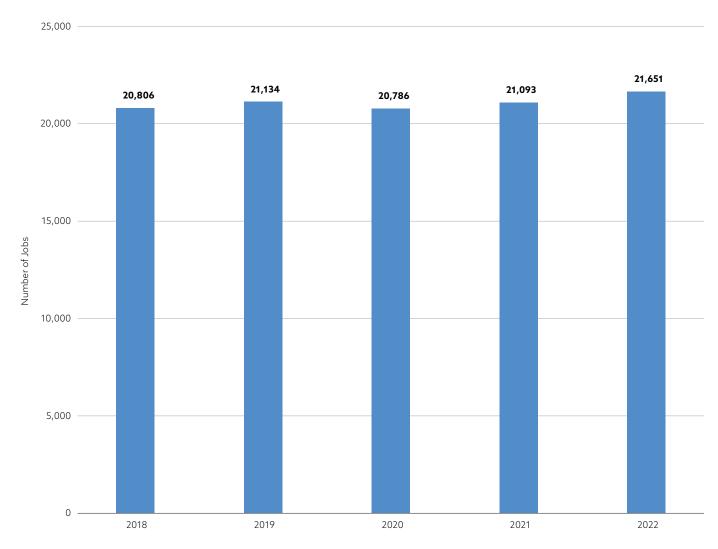
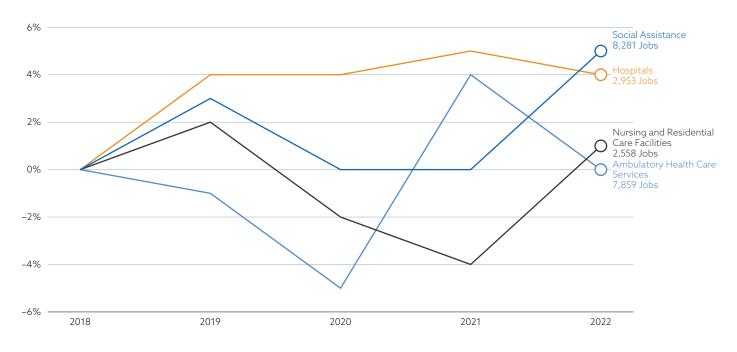




FIGURE 11: RELATIVE EMPLOYMENT GROWTH BY HEALTH CARE & SOCIAL ASSISTANCE SUBSECTOR IN MONTEREY COUNTY

2018-2022



Source: U.S. Bureau of Labor Statistics, U.S. Census, Lightcast, CVL Economics.

FIGURE 12: HEALTH CARE & SOCIAL ASSISTANCE SECTOR AVERAGE ANNUAL WAGE GROWTH IN MONTEREY COUNTY

2018-2022

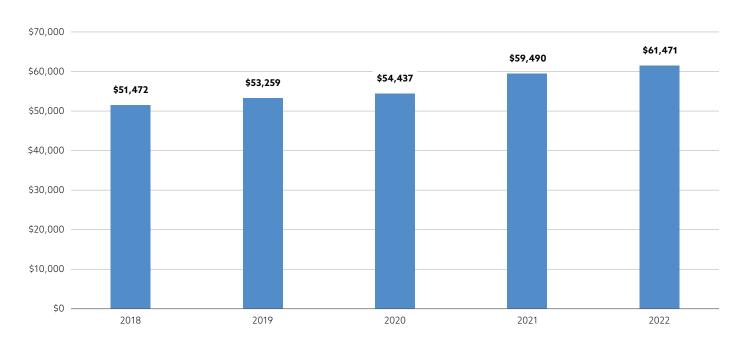




TABLE 4: HEALTH CARE & SOCIAL ASSISTANCE SECTOR ECONOMIC AND FISCAL IMPACT IN MONTEREY COUNTY

2022

	EMPLOYMENT	LABOR INCOME	VALUE ADDED	TAX REVENUE
Direct Impact	20,974	\$1,573,085,906	\$1,757,996,679	\$446,337,084
Indirect Impact	2,345	\$146,559,862	\$268,917,994	\$73,349,548
Induced Impact	3,635	\$215,523,500	\$419,366,912	\$122,722,321
Total Impact	26,953	\$1,935,169,268	\$2,446,281,584	\$642,408,953

Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Census, IMPLAN, CVL Economics.

TECHNOLOGY AND INNOVATION ECOSYSTEM

Technology and innovation ecosystems ("tech ecosystems") comprise an interconnected and interdependent network of entrepreneurs, established firms, investors, academic institutions and research centers, and public sector support. Startups can inject creativity and develop pioneering solutions, while investors offer the capital needed to nurture these ideas. Universities and research institutions contribute through cutting-edge research, talent development, and technology transfer, acting as incubators and accelerators. By offering supportive policies, funding, and infrastructure, governments can facilitate the growth of tech ecosystems and remove barriers to innovation. For a regional tech ecosystem to be successful, these different entities need to establish a shared vision, and relationships need to be nurtured and operationalized on a sustained basis.

Monterey County cannot today be characterized as a successful regional tech ecosystem by these standards. Employment in tech-oriented industries has shrunk in recent years and is mostly concentrated in the Architecture & Engineering and Informational Technology industries (Figure 13 and Table 5).⁷ The composition of jobs in these fields is not a problem in and of itself, but the fact that there isn't more activity across the other disciplines demonstrates a track record of missed opportunities. On a per capita basis, Monterey's tech sector employment has fallen from about 8.0 jobs per 1,000 residents in 2014 to 6.1 jobs in 2023 (Figure 14). This performance ranks it last among the five counties that make up the Central Coast (which, in addition to Monterey, includes Santa Cruz, San Luis Obispo, Santa Barbara, and Ventura Counties), home to between 19 and 23 tech sector jobs for every 1,000 residents over the same period.

Still, Monterey County has many of the critical elements that could feed into a formal tech ecosystem (Table 6). What it lacks in comparison to traditional urban hubs and its Central Coast neighbors — deep talent pools, entrepreneurial infrastructure, knowledge-sharing opportunities — is offset by the presence of unique institutions (see "Spotlight: The Defense Sector") and a natural environment that lends itself to climate studies, sustainability innovation, food science, and eco-tourism. Currently, Monterey County's technology and innovation footprint extends across three fields:

• Marine Research & Development: Research into marine carbon sequestration, offshore wind power generation, and environmental remediation are well-established in the Monterey Bay Peninsula. Home to the Monterey Bay Aquarium Research Institute, Stanford's Hopkins Marine Station, the Middlebury Institute of International Studies at Monterey's Center for the Blue Economy, and San José State University's Moss Landing Marine Lab (which provides technology transfer and entrepreneurship support to students, faculty, and staff through its SpartUp program), Monterey County has a high concentration of academic and empirical activity in one of the most cutting-edge disciplines. Yet the ties between marine R&D and the private sector are not as strong as they could be, and concepts developed in the region are often implemented and commercialized in more established tech ecosystems nationwide. Moreover, research budgets are often tied to federal funding, which can have an impact on an organization's ability and bandwidth to pursue commercialization efforts if not incentivized to do so.

For more information, see: https://www.sjsu.edu/innovation/spartup/.hospitality/hotel-staff-shortages-threaten-to-push-travel-costs-even-higher-004e5341



⁷Tech-oriented industries can take many forms; they include industries traditionally thought of as making up the "tech sector," like software and information technology, as well as industries like advanced manufacturing and scientific research and development. Monterey County is well-represented in this sense.

- Advanced Air Mobility (AAM): While Monterey County may not be as prominent as some other AAM hubs in California, it has been actively positioning itself as a viable candidate. The Monterey Bay Drone, Automation and Robotics Technology (Monterey DART) is a long-standing proponent of AAM development and has established partnerships with industry, educational institutions, economic development agencies and foundations to establish workforce development programs and regional innovation sites. More recently, the Monterey Bay Tech Hub a tri-county initiative led by Monterey DART, the Monterey Bay Economic Partnership, and the University of California, Santa Cruz was established to improve regional AAM infrastructure, build training pathways, and develop startup financing opportunities. Creating such an environment that is more targeted to Monterey will be critical to seeding, attracting, and retaining firms in the face of domestic competition (such as from Dayton, OH).
- AgTech: Given the dominant role agriculture plays in the regional economy, AgTech is firmly entrenched in Monterey County. Events such as the Global Organization for Agricultural Robotics' FIRA USA conference have placed the region on a global stage and served as a platform to encourage and showcase regional entrepreneurship. Local organizations such as the Western Growers Center for Technology and Innovation have been integral to the introduction and mainstreaming of advanced technologies. Hartnell College has been a regional leader on the workforce development front and has attempted to build high-skill talent pipelines, developing the first mechatronics associate degree and certificate program in the region. The California State University at Monterey Bay is similarly investing in more advanced agricultural curricula. That said, the region has historically been a consumer of AgTech rather than a springboard for innovation.

Although there would be clear benefits to cross-pollination among the three areas, efforts to share knowledge and resources, initiate tech transfers, and develop joint strategic goals have failed to materialize. Although collaboration across these three areas is not strictly necessary — any one of these sub-ecosystems can operate productively in a self-contained way — there have been some fledgling efforts to build bridges. The University of California Santa Cruz's Monterey Bay Education, Science, and Technology Center (MBEST), a 70-acre campus that falls within an opportunity zone in Marina and boasts over 200,000 square feet of commercial office space servicing advanced technology firms, was one recent push to establish a regional technology hub. A promising start, the Center remains under-resourced and has not realized its full potential. In many ways, this is a microcosm of the challenges that face the nascent Monterey County tech ecosystem: without collective action on a broader scale, individual enterprises and small-scale collaborations end up needing to chart their own paths, expend resources, and maintain momentum indefinitely.

¹²For instance, although a regular sponsor of AgTech conferences that highlight new technologies, the Western Growers Association has not launched any companies in the region.



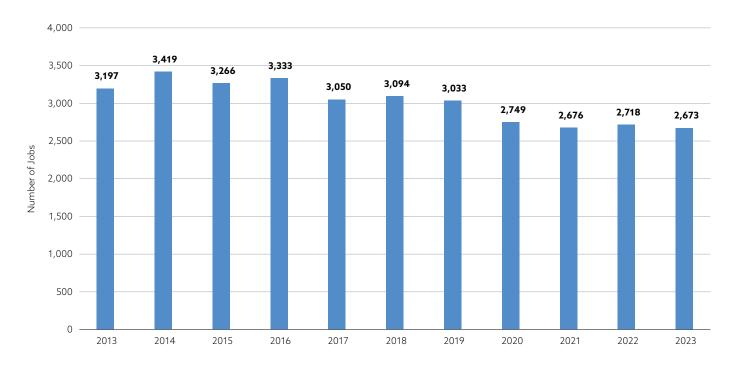
Steven Starr. "Rust to riches? Ohio city's fortunes set to rise with flying taxi startup." The Guardian. March 29, 2024. https://www.theguardian.com/us-news/2024/mar/29/flying-taxi-joby-aviation-ohio

¹⁰ The Global Harvest Automation Initiative, for instance, aims to automate 50% of the County's crop harvesting by 2031 and assist startups in bringing products to market as quickly as possible. See the WGCIT Agtech Blog: http://www.wginnovation.com/blog/ GHAI.

¹¹Rey Mashayekhi. "CSUMB's 'Greater Vision' forum shows students a path to the skilled ag tech jobs of the future." Monterey County Now. October 3, 2023. https://www.montereycountynow.com/opinion/mcnow_intro/csumb-s-greater-vision-forum-shows-students-a-path-to-the-skilled-ag-tech-jobs/rticle_45548b54-6248-11ee-b8f9-b34a3fb9b348.html

FIGURE 13: CIVILIAN TECH SECTOR EMPLOYMENT IN MONTEREY COUNTY

2013-2022



Note: Includes W-2 and Self-Employed workers.

Source: U.S. Bureau of Labor Statistics, U.S. Census, Lightcast, CVL Economics.

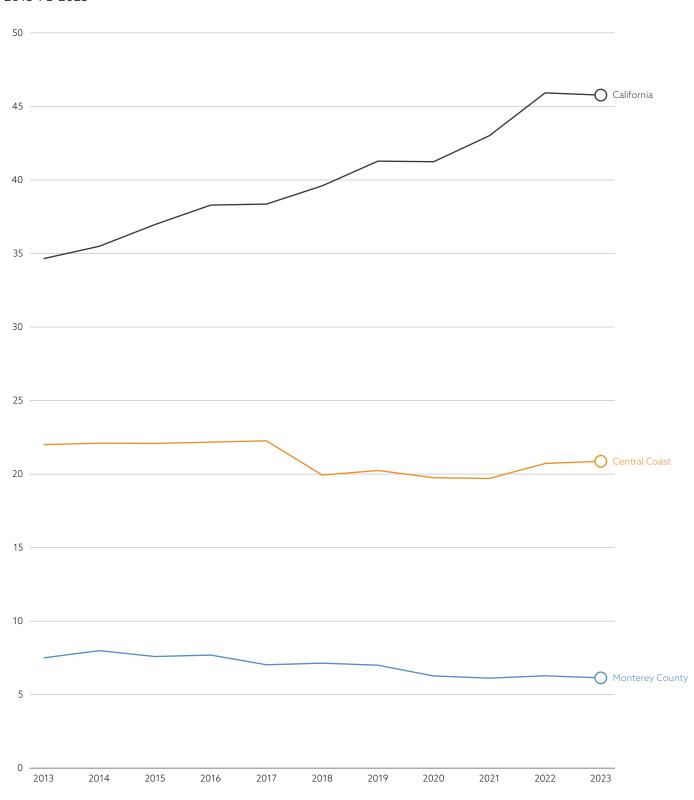
TABLE 5: COMPOSITION OF TECH SECTOR EMPLOYMENT BY INDUSTRY GROUP

2013 VS. 2023

	2013 JOBS	2023 JOBS	CHANGE	% CHANGE
Information Technology	912	760	-152	-16.7%
Scientific Research & Development	584	342	-242	-41.4%
Software	53	72	19	35.8%
Green Technology	82	<10	-	-

FIGURE 14: TECH SECTOR JOBS PER 1,000 RESIDENTS

2013 TO 2023



Note: Includes W-2 and Self-Employed workers.



TABLE 6: EXISTING TECH ASSETS AND KEY PLAYERS IN MONTEREY COUNTY

MARINE RESEARCH & DEVELOPMENT	ADVANCED AIR MOBILITY	AGTECH	WORKFORCE DEVELOPMENT	DEFENSE
Monterey Bay Aquarium Research Institute (MBARI)	Monterey Bay Tech Hub	Western Growers Association	Hartnell College	Naval Postgraduate School (NPS) and associated research labs
San José State University Moss Landing Marine Lab	Monterey Drone, Automation, and Robotics Technology (DART)	University of California Agriculture and Natural Resources	University of California, Santa Cruz	Naval Innovation Center at NPS
Stanford University Hopkins Marine Station	UCSC Monterey Bay Education, Science and Technology Center	USDA Agricultural Research Service Crop Improvement and Protection Research Laboratory	California State University, Monterey Bay	NavalX / Central Coast Tech Bridge at NPS
Middlebury Institute Center for the Blue Economy	Monterey Bay Economic Partnership	Monterey Drone, Automation, and Robotics Technology (DART)	Monterey Peninsula College	Naval Research Lab at Monterey
			Digital Nest	NPS Joint Interagency Field Experimentation (JIFX) at Camp Roberts
				Fleet Numerical Meteorology and Oceanography Center at Monterey
				Defense Manpower Data Center
				Defense Language Institute Foreign Language Center

Yet the past does not need to be prologue in this case. By carefully examining the challenges and opportunities that lie ahead, tech ecosystem stakeholders across the public, private, and nonprofit sectors can collaboratively chart a course towards establishing Monterey County as a thriving center for technology and innovation, particularly in areas that address pressing environmental and sustainability challenges.

CHALLENGES

LEADERSHIP VACUUM:

A lack of formal direction, structured coordination, and a shared vision has thus far prevented Monterey County from developing a fully-fledged tech ecosystem. Although many parties, both in the public and private sectors, acknowledge that a functional tech ecosystem adapted to the regional context is desirable, there is currently no entity designated to rally leaders from foundations, community-based organizations, industry, academia, and government. More pointedly, there is a need for more vocal support from County leadership (including major philanthropic organizations like the Community Foundation for Monterey County) that prioritizes a next-generation economy.

LACK OF ENTREPRENEURIAL INFRASTRUCTURE:

The County lacks a steady state of startup formation due to limited investment in entrepreneurship development and the dearth of accelerators that can absorb recent college graduates (akin to the University of California Berkeley's SkyDeck accelerator program), experienced professionals (such Y-Combinator), and retiring military personnel. At the same time, the commercialization of research and development initiatives often fails to occur because tech transfer mechanisms do not exist or due to an inability for firms to raise adequate funding. This gap between ideation and implementation hampers the region's ability to capitalize on its intellectual property (IP) and innovations.

NARROW TALENT PIPELINE:

Building a skilled workforce is essential for fostering a thriving tech and innovation ecosystem. Monterey County may face challenges in developing a talent pipeline in these fields, particularly if there are limited educational programs or industry-specific training opportunities locally. Without a strong existing talent pool, companies in Monterey County may struggle to find and retain qualified workers, which can hamper their growth and competitiveness. This challenge can be compounded by competition from other regions with more established tech ecosystems and educational institutions focused on these fields.

• BRAIN DRAIN:

The rise in outmigration in recent years has had a disproportionate impact on high-skilled workers (using educational attainment as a proxy). Individuals who had attended some college or graduated with at least an associate degree accounted for 65.5% of the over 13,800 residents ages 25 and older who left Monterey County in 2017 (Figure 15). This share fell slightly by 2022, but the broader trend still held: residents with higher earning potential were choosing to leave the region. This partially accounts for Monterey County's diminished presence of early- to mid-career workers in critical science and engineering fields relative to tech hubs like San Francisco (Figure 16). Given the higher cost of living in the Bay Area (which can translate to lower real incomes), it is likely the lack of opportunity has a bigger impact on this exodus of high-skill labor than rising home prices alone.

OPPORTUNITIES

CLIMATE AND SUSTAINABILITY TECH:

Monterey County's coastal location, research and development capabilities, and agricultural practices provide the region with a unique laboratory with which to explore emerging climate and sustainability technology applications. Federal spending has increased for work related to carbon sequestration, ocean acidification, and offshore renewable energy; investment into the applied sciences is scaling up accordingly.¹³ By virtue of its strengths in marine research, AgTech, and electric aircraft, Monterey County embodies the brand of a region dedicated to climate and sustainability. What's missing, though, is a commitment by regional policymakers to invest as much in these parts of the economy as they do in legacy sectors like Tourism & Hospitality.

¹³ David Rotman. "Climate tech is back—and this time, it can't afford to fail." MIT Technology Review. December 2, 2023. https://www.technologyreview.com/2023/12/02/1084059/climate-tech-startups-are-back-and-this-time-they-might-survive/



AAM INFRASTRUCTURE DEVELOPMENT:

The AAM field is still nascent, and agglomeration opportunities on a national scale have been few and far between. Leaning into the development of test site infrastructure will not only attract firms from across the state but also incentivize firms like Joby Aviation to expand regional operations. Building out test site capacity would also have positive spillover effects into AgTech, where next-generation technology advancement is turning to airborne sensors. But leveraging this opportunity effectively will require coordination among jurisdictions and industry partners to lobby relevant authorities at the state level and to pave a path forward.

TECHNOLOGY AND INNOVATION CONSORTIUM FOR EDUCATIONAL INSTITUTIONS:

Within the academic realm, communication among regional colleges and universities has been ongoing though sporadic. Formalizing a tech ecosystem partnership among Hartnell College, the California State University at Monterey Bay, the Naval Postgraduate School, and the University of California, Santa Cruz, and developing curricula in coordination with each other can reveal gaps, avoid duplication, and ensure that educational programs align with industry needs.

VENTURE CAPITAL:

Access to capital is crucial for the growth and success of startups and innovative companies. To date, Monterey County has not benefited from the concentration of venture capital firms, angel investors, and other sources of funding that are readily available in other major tech hubs. While it may be too soon to determine whether these tides are turning, the recent founding of early-stage venture capital firm HawkTower signals there is interest in investing in what it calls "underleveraged CA." By seeking out emerging technology-focused enterprises built by local entrepreneurs exploring footholds in the marine research, AgTech, and AAM spaces, HawkTower is attempting to be the first of many firms to craft a next-generation economic identity for Monterey County.

PRIORITIES

DESIGNATE A TECH ECOSYSTEM LEAD:

The tech ecosystem needs an entity that can convene stakeholders, establish targets, and gain consensus around a roadmap for development. Given its purview and mandate to promote inclusive, equitable growth, the County of Monterey government may be in the best position to serve this coordinating role (either directly or through the creation of a public-private partnership) in fostering collaboration and focusing efforts on a common set of goals.¹⁴

TRACK ECOSYSTEM DEVELOPMENT:

As Monterey County's tech ecosystem continues to evolve, a mechanism needs to be put in place to track its progress. To date, the extent to which the three target sectors are employing next generation technologies is not documented nor do we know how many start-ups operating in the region are headquartered elsewhere. It would also be useful to benchmark Monterey County's budget contributions to tech ecosystem development to those in comparable regions statewide.

¹⁴ Joe Mariani, Deborah L. Wince-Smith, Chad Evans, and William D. Eggers. "Revisiting the government's role in catalyzing modern innovation." Deloitte Insights. July 20, 2023. https://www2.deloitte.com/us/en/insights/industry/public-sector/role-of-government-in-innovation.html



BUILD BRIDGES BETWEEN DEFENSE SECTOR AND PRIVATE INDUSTRY:

While certain enterprises have established close relations with the Department of Defense (namely Joby Aviation by virtue of their business model), coordination between research and development at military institutions and the private sector is not as strong as it could be. Creating accelerator programs (ideally, one for each of the three fields) will provide new venues for collaborative ideation, technical assistance, investment, and the launch of new ventures.

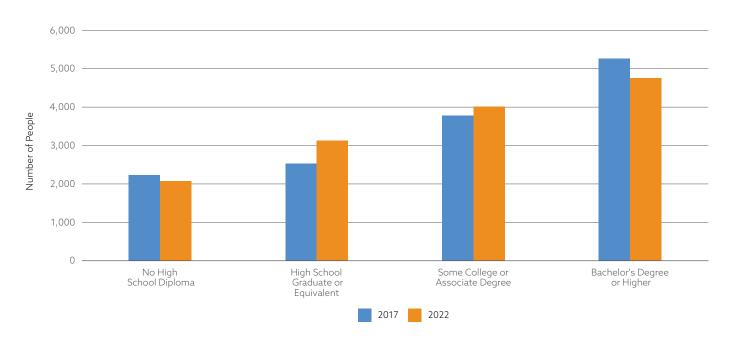
EXPLORE INCENTIVES TO SEED, ATTRACT, AND RETAIN TALENT AND BUSINESSES:

The relationship between talent and industry is inextricable; the inability to grow one side of the equation means that attempts to grow the other side will likely suffer. Whether through novel local incentives or via stronger lobby efforts at the state-level, Monterey County needs to do more to nurture entrepreneurship, keep valued firms in place, and stem brain drain.

Growing the regional technology and innovation ecosystem is a long-term proposition, and progress will necessarily be incremental. The good news is that the County is arguably approaching a moment where stars may be aligning. Climate science and environmental sustainability grow more vital by the day. Federal funding and private capital are starting to flow more freely in the region. Ecosystem participants are increasingly eager to push forward. The main question now is whether the political will at the local level is there to capitalize on this moment.

FIGURE 15: RESIDENTS AGES 25+ WHO LEFT MONTEREY COUNTY IN PREVIOUS YEAR BY EDUCATIONAL ATTAINMENT

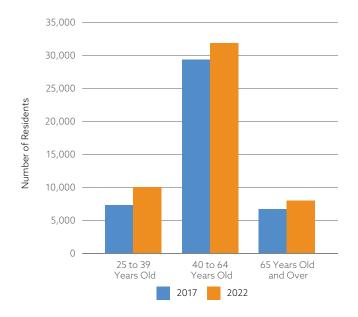
2017 VS. 2022



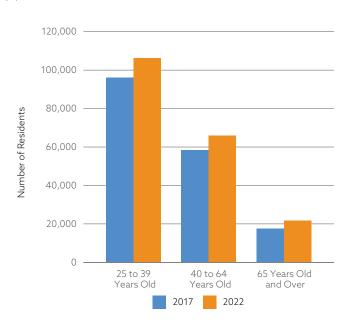
Source: U.S. Census American Community Survey 5-Year Estimates, CVL Economics.

FIGURE 16: POPULATION AGED 25 YEARS+ WITH AT LEAST A BACHELOR'S DEGREE IN SCIENCE OR ENGINEERING 2017 VS. 2022





(B) CITY AND COUNTY OF SAN FRANCISCO



Source: U.S. Census American Community Survey 5-Year Estimates, CVL Economics.





The Department of Defense (DoD) plays an important role in Monterey County and generates significant economic activity in the region. Its military installations are home to education and research institutions (such as the Naval Postgraduate School, Defense Language Institute Foreign Language Center, Fleet Numerical Meteorology and Oceanography Center, and the Naval Research Lab); personnel training and experimentation (Fort Hunter Liggett, Camp Roberts); and other operational and active-duty facilities (such as the Naval Support Activity Monterey, Presidio of Monterey, U.S. Coast Guard Station Monterey, Defense Manpower Data Center, and the Defense Resource Management Institute). These installations collectively employ thousands of military personnel and civilian workers across several occupations and contract with dozens of firms across the County.

EXPENDITURES

Department of Defense spending in Monterey County has remained consistent in the last eight years. In fiscal year (FY) 2022–23, total DoD contract spending across Monterey County reached roughly \$681.6 million, the largest amount in the County's history (Figure 17). NPS's total annual budget execution in FY 2021–22 and FY 2022–23 was \$218 million and \$228 million, respectively. Roughly \$28 million, or just over 4% of total DoD spending in Monterey County flows to local businesses in the region (Figure 18).

In 2022, total military personnel at Monterey County reached 8,860, including 4,583 active-duty members, 3,750 civilian employees, 67 national guard members, and 460 reserve personnel (Figure 19).¹⁶ Monterey County is among the top ten counties statewide with respect to military personnel spending yet falls short in terms of total number of civilian workers and active-duty members (Figure 20). The largest areas of DoD personnel spending in California are San Diego (\$7.4 billion) and Ventura (\$1.0 billion). Taking total personnel spending patterns per worker into account, Monterey County's per capita expenditures rank considerably high at \$80,790 — behind only Kern County (\$87,027) and Ventura County (\$80,952).¹⁷

¹⁷ "Defense Spending by State, FY 2022." Office of Local Defense Community Cooperation. https://oldcc.gov/sites/default/files/FY2022%20Defense%20 Spending_CA.pdf



¹⁵NPS Annual Reports. https://nps.edu/web/guest/nps-annual-report

¹⁶ The broad economic impacts of military activity in Monterey County are substantial when including supply chain and household spending impacts. A 2020 study prepared by the Military Bay Defense Alliance on the economic contributions of the military to Monterey County found that an estimated 18,000 jobs are supported by military spending in the region, and roughly \$4.3 billion is generated in total economic output.

RESEARCH

The Naval Postgraduate School (NPS) plays an outsized and ever-increasing role in applied research and development.¹⁸ Its Technology Transfer Program, established in response to legislation to "encourage the transfer of federally funded technologies to the private sector," serves as a key player in identifying ways of bringing new technologies to market.¹⁹ It's important to note, though, that NPS's research focuses largely on early-stage development, which doesn't often result in commercialization of products or technologies. The addition of the NavalX Tech Bridge and Naval Innovation Center has begun to address this gap by introducing capabilities for dual-use technology development.

NPS is heavily involved with various organizations and academic institutions across the state and nationwide. It currently has 32 active Cooperative Research and Development Agreements (CRADA), with both startups and multinational corporations.²⁰ The school also has four educational partnership

agreements (EPAs) with regional universities. These relationships offer great potential for leveraging ongoing work in research-centric fields such as advanced air mobility, AgTech, and marine and oceanography studies.

In addition, NPS recently announced a new partnership with the Defense Innovation Unit in Silicon Valley to advance collaboration in emerging technologies for defense solutions.²¹ A recent partnership with AT&T is exploring 5G opportunities and researching computing-based maritime solutions.²² Qualcomm and NPS announced a Limited Purpose Cooperative Research and Development Agreement (LP-CRADA) to conduct research into 5G communications as well, in addition to artificial intelligence and hardware development platforms.²³ Another important partnership has been between the NavalX Central Coast (C2) Tech Bridge and the Innovation Accelerator Foundation, which promotes greater collaboration between NPS, public sector innovation organizations, and private industry.²⁴

²⁴ Office of University Communications, Naval Postgraduate School. "Problems Solved Here: Central Coast Tech Bridge, Innovation Accelerator Foundation to Collaborate on Technology Solutions." June 7, 2021. https://nps.edu/-/problems-solved-here-central-coast-tech-bridge-innovation-accelerator-foundation-to-collaborate-on-technology-solutions



¹⁸ NPS offers over 70 master's and doctoral degrees, as well as various professional development programs and certificates. In 2023, NPS enrolled 1,856 students in master's programs, and 99 students in doctoral programs. NPS also enrolls 543 students in certificate and non-degree programs and engages with over 10,000 students in executive education and professional development programs. NPS's departments are heavily concentrated in Science, Technology, Engineering, and Mathematics (STEM) fields.

¹⁹ Naval Postgraduate School. "Office of Research & Innovation: Technology Transfer." https://nps.edu/web/research/technology-transfer#:~:text=The%20 primary%20objectives%20of%20the,technologies%20to%20the%20private%20sector.

²⁰ Naval Postgraduate School. "Naval Postgraduate School 2023 Annual Report & Mission Measures." https://nps.edu/documents/10180/149156382/NPS+Annual+Report+2023+%28two+page%29.pdf/6f2d5922-6046-a722-15f7-2735a2e9ef22?t=1711472421657

²¹ Naval Postgraduate School Public Affairs. "NPS, Defense Innovation Unit Sign MOU to Enhance Learning, Experimentation, Prototyping for Maritime Advantage." April 9, 2024. https://nps.edu/-/nps-defense-innovation-unit-sign-mou-to-enhance-learning-experimentation-prototyping-for-maritime-advantage

²² Naval Postgraduate School Foundation & Alumni Association. "AT&T Awarded Naval Postgraduate School Foundation's 2023 Corporate Partner of the Year Award." June 6, 2023. https://www.npsfoundation.org/news-articles-and-press-releases/att-2023-corporate-partner-year-award#:~:text=The%20 agreement%20allows%20NPS%20faculty,%2C%20homeland%20security %2C%20and%20industry.

²³ Ed Early. "Qualcomm and Naval Postgraduate School Announce Collaboration to Advance Technological Solutions." Naval Postgraduate School Office of University Communications. February 13, 2023. https://www.navy.mil/Press-Office/News-Stories/Article/3296763/qualcomm-and-naval-postgraduate-school-announce-collaboration-to-advance-techno/

In 2022, the Secretary of the Navy announced the Naval Innovation Center (NIC) at NPS — a proposed facility within the school campus designed to foster innovation, applied research, development, and the testing of various technologies at greater speed and scale. The NIC will play a significant role as a technology accelerator for multipurpose applications that can attract seed funding for emerging tech companies as well as drawing more established industries to Monterey County. The NIC presents an opportunity for the County to support an ecosystem of local tech incubators and accelerators to help tech start-ups in the region that could work across institutions

Another important DoD asset is the Fleet Numeric Meteorology and Oceanography Center (FNMOC), which provides meteorological and oceanographic data and analysis for the United States Navy and strategic allies of the United States. Using high throughput computing and artificial intelligence technologies, and leveraging a robust network of satellites and sensors, the FNMOC conducts essential environmental modeling for ocean acoustic forecasting, aircraft routing, visibility forecasts, search and rescue, long-range planning, operational climatology, and more. To give a sense of its supercomputing capabilities, the Naval Meteorology and Oceanography Command, in which FNMOC is housed, retrieves over 124 million environmental observations per day, processing 2.3 billion core-hours of data and publishing over 400,000 forecast models annually. The Center employs 150 civilians and contractors, of which roughly 30% have advanced degrees primarily in STEM fields ranging from the physical sciences to computer science. The contractors is the computer science.

BRAIN DRAIN

Beyond the research and technological developments associated with the military in Monterey County, there is also a significant number of workers who leave the military seeking civilian employment. The Department of Defense has invested in the DoD Skill Bridge, a six-month paid internship that provides opportunities for military personnel in tech and higher-paying occupations. A large portion of mid-grade specialists leaving the military (officers and non-commissioned officers, alike) have significant skills in data science, research, tech, and engineering.

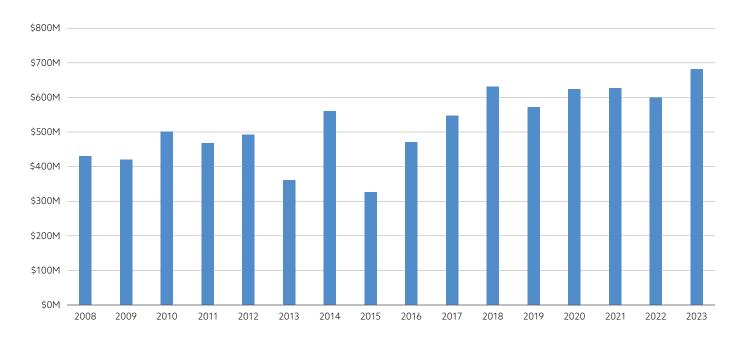
The issue in Monterey County is the lack of tech infrastructure and development to absorb these workers. The County's target sectors (Agriculture, Tourism & Hospitality, and Health Care & Social Assistance), for example, are not ideal landing pads for workers with the kinds of skill sets honed in career military occupations. Coupled with high costs of living, retiring military personnel seeking reliably middle-class lifestyles are subsequently forced to leave the region in search of either more favorable employment opportunities or more affordable communities (and often both). Creating a healthy tech ecosystem with a strong entrepreneurial infrastructure and sustained startup activity can go a long way in retaining this critical talent.

²⁵Brandi Vicent. "Navy oceanography enterprise adopts new, 'first of its kind' data strategy." DefenseScoop. June 7, 2023. https://defensescoop.com/2023/06/07/navy-oceanography-enterprise-adopts-new-first-of-its-kind-data-strategy/

²⁶ Defense Visual Information Distribution Service. "Assistant Secretary of Navy Berger Visits FNMOC." April 26, 2023. https://www.dvidshub.net/news/444961/assistant-secretary-navy-berger-visits-fnmoc

FIGURE 17: TOTAL DEPARTMENT OF DEFENSE SPENDING IN MONTEREY COUNTY

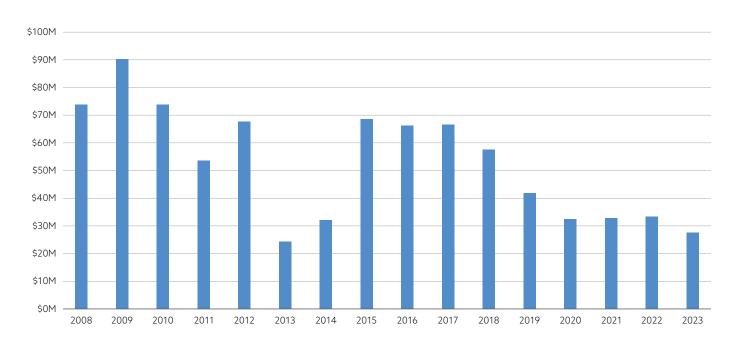
FY 2007-08 TO FY 2022-23 | IN MILLIONS OF USD



Source: USASpending.gov. Analysis by CVL Economics.

FIGURE 18: DEPARTMENT OF DEFENSE SPENDING RECEIVED BY MONTEREY COUNTY ENTITIES

FY 2007-08 TO FY 2022-23 | IN MILLIONS OF USD



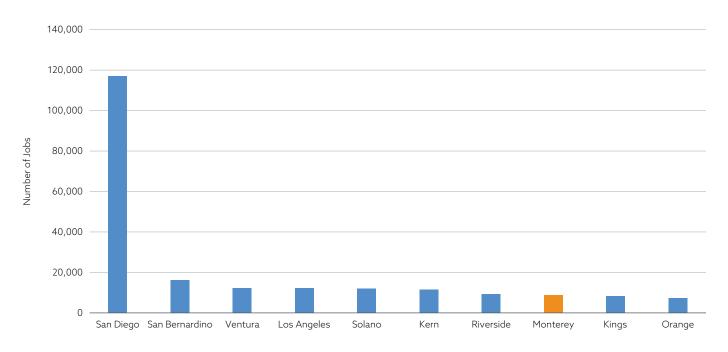
Note: Entities may be jurisdictions, contractors, or other organizations that have received Department of Defense contracts, awards, grants, direct payments, loans, or other financial assistance.

Source: USASpending.gov, CVL Economics.



FIGURE 19: FEDERAL MILITARY AND CIVILIAN EMPLOYMENT IN SELECT CALIFORNIA COUNTIES

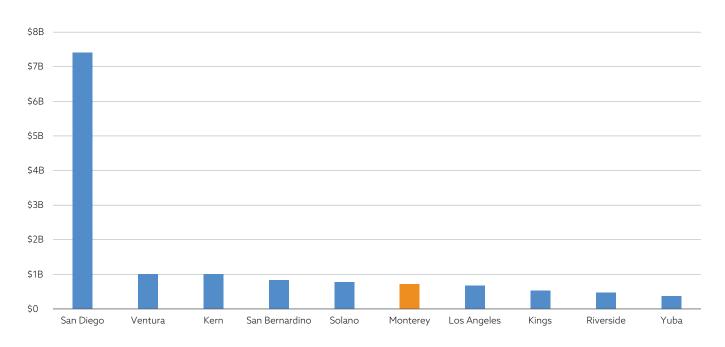
FY 2022



Source: Office of Local Defense Community Cooperation.

FIGURE 20: DEPARTMENT OF DEFENSE PERSONNEL SPENDING IN SELECT CALIFORNIA COUNTIES

FY 2022 | IN BILLIONS OF USD



Source: Office of Local Defense Community Cooperation.



APPENDIX 1: YEAR 2 UPDATE DEVELOPMENT PROCESS

Work on the Year 2 Update began in January 2024 with data analysis updates for the three target sectors (Agriculture, Tourism & Hospitality, and Health Care & Social Assistance), exploration of available data and literature related to Defense Department activity in the region, and a qualitative review of the Monterey County technology and innovation ecosystem. The project team also met with the Board of Supervisors on an individual basis to gain perspectives and insights into the opportunities and constraints governing technology and innovation ecosystem development.

In collaboration with the County, Grow America and CVL Economics identified relevant stakeholders to interview over the course of the project to gain broader insights into challenges, needs, and priorities across multiple economic dimensions. The County also convened two focus groups (one with

technology and innovation ecosystem participants and another that solicited input from individuals who had specialized knowledge of Defense Department research and development initiatives), which served as the narrative basis for this report.

The quantitative analysis conducted in this report draws from the most recent data available for a given indicator. In many cases, there can be a lag as much as 12 to 18 months between when official state and federal data are collected and when they are officially released. Given that certain data sets are only released on an annual basis, trends analyses that appear in this report (particularly for employment and average annual wages) run only through 2022. For other indicators, such as home values, reporting occurs more frequently, which allows for more timely analysis.

APPENDIX 2: PROJECT PARTICIPANTS

BOARD OF SUPERVISORS

Luis Alejo District 1
Glenn Church District 2
Chris Lopez District 3
Wendy Root Askew District 4
Mary L. Adams District 5

FOCUS GROUP PARTICIPANTS

Danny Bernstein HawkTower

Marlana Brown
 Naval Support Activity Monterey

Cody Cleverly Joby AviationJackie Cruz Hartnell College

PK Diffenbaugh Monterey Peninsula Unified School District

Dennis Donahue Western Growers Association

Adam Errahebi County of Monterey

Jim Hansen Naval Research Laboratory

Megan Hunter City of Soledad

Beth Fabinsky Jet Propulsion Laboratory

Ken Johnson Monterey Bay Aquarium Research Institute

Monica Lall Monterey Chamber of Commerce

Josh Metz Regional Government Services

Fred Meurer Governor's Military Council

Matthew Mogensen City of Marina

Jack Murphy County of Monterey

David Nystrom Naval Postgraduate School

Larry Samuels University of California, Santa Cruz

William Sherrod HawkTower

Sarasina Tuchen
 U.S. Department of Transportation

Hans Uslar City of Monterey

Alan Van Nevel Naval Postgraduate School

APPENDIX 3: SELECT CITY PROJECTS

2024 UPDATE									
2023 UPDATE	Project was approved by Planning Commission and construction started. The developer was unable to complete the project, and the project was stopped with only the excavation and partial construction of underground parking lot completed. The property is now under new ownership, who is in the process of seeking permits from the City for a new project consisting of a 22,900-squarefoot, two-story mixed-use building with 12 apartment units and approximately 9,000 square feet of commercial spaces, and an approximately 15,000-square-foot basement containing 27 below-ground parking spaces.	Project permitted and underway. Anticipate completion late Summer 2023.	Project permitted and underway. Anticipate completion late Summer 2024.	Project is going through entitlement process. Anticipate Planning Commission hearing Summer 2023.					
DESCRIPTION	Development of a 11,679-square-foot two-story mixed-use building with 1,697 square feet of commercial space and eight residential units.	Full exterior/interior renovation of a 42-room hotel, and the addition of a 2,290-square-foot, two-story meeting and guestroom building.	Full exterior/interior renovation of a 25-room hotel, and the addition of a gym, spa, and bar as guest amenities.	Construction of a 16,898-square-foot, two-story mixed-use development with an 11,371-square-foot basement garage.	Design and construction of intersection realignment and improvements to include roundabout.	Design and construction of road improvements from General Jim Moore to City Limit.	Develop approximately 250 acres of cityowned property on the former Fort Ord.	Develop approximately 20 acres of privately-owned property on the former Fort Ord for mixed-used, retail, and commercial opportunities.	Develop an RV resort on approximately 53 acres of privately-owned property on the former Fort Ord.
LOCATION	City of Carmel	City of Carmel	City of Carmel	City of Carmel	City of Del Rey Oaks	City of Del Rey Oaks	City of Del Rey Oaks	City of Del Rey Oaks	City of Del Rey Oaks
AGENCY	City of Carmel	City of Carmel	City of Carmel	City of Carmel	City of Del Rey Oaks	City of Del Rey Oaks	City of Del Rey Oaks	City of Del Rey Oaks, Private Developer	City of Del Rey Oaks, Private Developer
PROJECT NAME	Del Dono Project (now "Ulrika Plaza")	Carmel Lodge Renovation	Colonial Terrace Hotel Renovation (now "Carmel Beach Hotel and Spa")	JB Pastor Building	General Jim Moore/S. Boundary Rd. Intersection Improvements	South Boundary Rd. Improvements	Fort Ord Development Project	General Jim Moore/S. Boundary Rd. Development	Monument RV Resort Development



2024 UPDATE					The Specific Plan has been written, the EIR has had its first public circulation, and the City is responding to comments. The Development Agreement, Financing and Infrastructure plans are taking shape, along with An Affordable Housing Plan. Project is tracking for City pre-approval in Fall of 2024.	Project construction is complete for all improvements on Broadway Street from First Street to Russ Street. The City is still working on obtaining funding to construct improvements at the final intersection at Broadway Street and San Lorenzo Avenue.	Under construction
2023 UPDATE						Project will begin construction in April 2023 and projected to be completed by December 2023.	Construction contract has been awarded, construction will begin April 2023 and be completed by November 2023.
DESCRIPTION	The development of an additional crossing over the Union Pacific Railroad to connect to Alta Street. The crossing is to facilitate the expansion of the Gonzales Agricultural Industrial Business Park.	Development of road infrastructure to connect to the Vista Lucia region and the Puente del Monte region, where redevelopment efforts are being led. The road will connect to Associated Lane and Johnson Canyon Road in a bid to reduce traffic. The Arterial will support circulation of business traffic and connect industrial assets on the east end of town.	Provide necessary wastewater capacity for planned industrial projects and continued economic development of the City's Agricultural Industrial Business Park. This project will double job opportunities that will benefit the region for generations to come and deliver recyled water to adjacent farming operations.	New 3.0 MG storage tank and transmission main necessary to provide adequate daytime supply for agricultural industrial processing facilities.	The Vista Lucia Specific Plan Project will include a mix of 3,498 residential housing units in two neighborhoods and will include school sites, neighborhood greens, a central park, multiple smaller parks and walkways, a neighborhood commercial center, and the option for several civic and public facilities over 770 acres, east of the existing city limits.	A streetscape plan designed to revitalize (improvements of crosswalks, streetlights, public art, etc.) downtown City of King, Redevelopment of multiple publicly owned parking lots and buildings within the Salinas City Center (Downtown) with housing or other private development. Potential development of one or more parking garages within the corridor.	A plan to revitalize downtown City of King by making it more activity-oriented.
LOCATION	City of Gonzales	City of Gonzales	City of Gonzales	City of Gonzales	City of Gonzales and surrounding areas (to be incorporated)	City of King	City of King
AGENCY	City of Gonzales	City of Gonzales	City of Gonzales	City of Gonzales	City of Gonzales	City of King	City of King
PROJECT NAME	Union Pacific Railroad	Backbone Arterial Road	Industrial Wastewater System, Treatment Plant, and Recycled Water Capability	Backbone Water System and 18" water main	The Vista Lucia Specific Plan Project and First Phase tentative map	Downtown Streetscape Project	Downtown Plaza/ Visitor and History Center Project



2024 UPDATE					Grant funds have been approved for downtown property acquisition. An additional grant application is being submitted for installation of all 16 of the charging stations.		The first art pieces have been installed as part of the Downtown Streetscape Project. Two others have been funded and are in development.		
2023 UPDATE	Project is in progress.	Property has been purchased by the hotel developer and design is in progress.	Site has been identified, working on identifying funding strategies.	Farmworker and homeless housing projects under development; senior, low-income and market rate multi-family housing projects in the planning stages.		Project is in progress.	Contract for first 3 pieces have been awarded and pieces will be completed and installed by fall 2023.	Project is under design, partial funding is secured, and additional funding sources are being pursued.	City is coordinating with the SBDC to offer one on one professional retail assistance.
DESCRIPTION	A plan to support businesses by developing strategies and outreach efforts for new businesses. Includes workforce development through a partnership with the Small Business Development Center.	A collaboration between the City and a hotel developer to create a hotel development project along the U.S. 101 corridor.	Property acquisition, design, and construction of a pedestrian outoor market in the downtown area to include leased spaces to local vendors.	Promotion of low-income and marketrate multi-family housing projects, senior housing, homeless housing, and seasonal laborer housing projects.	Implementation of the City of King Citywide Electric Vehicle Charging Station Plan, which consists of 16 new fast charge stations at 7 City-owned sites. Project includes acquisition of property in downtown and development of a dedicated downtown electric vehicle charging station lot.	Local grants for businesses to construct building façade improvements and outdoor dining areas.	Program of installing wind sculpture kinetic art pieces throughout the downtown and other areas to beautify the community and serve as an attraction for visitors.	Development of an Amtrak stop, rail platform, station, track improvements, parking lot, and facilities for bus service, bicycles, passenger dropoff, and parkand-ride.	Provide consultant assistance to individual retail businesses to help downtown businesses be more successful and to meet local purchasing demands by assisting with product selection and store layout of displays and merchandise.
LOCATION	City of King	City of King	City of King	City of King	City of King	City of King	City of King	City of King	City of King
AGENCY	City of King	City of King	City of King	City of King	City of King	City of King	City of King	City of King, Caltrans, San Luis Obispo Council of Governments, Fort Hunter Liggett, Transportation Agency for Monterey County, Department of Transportation	City of King, Small Business Development Center
PROJECT NAME	Chamber of Commerce and Agriculture/City of King Ambassador Program	City of King Hotel Project	Downtown Outdoor Market Project	Housing Development Efforts	Citywide Electric Vehicle Charging Station Plan	Façade and Outdoor Dining Grant Program	Wind Sculpture Public Art Program	King City Multimodal Transit Center Project	Retail Consultant Assistance





2024 UPDATE	Working on final designs. Begin construction early 2025.	Construction starting July 2024.	Construction started April 2024; to be completed 2026.	Developing construction drawings, construction starting late 2024.				Construction starting July 2024.	The required Environmental Assessment will be completed by June 2024. The preferred action is a new building on the Boiler Plant Site aboard the Naval Support Activity Monterey Main Base. This allows the project to move forward within the U.S. Navy organization for final approvals and budget submission.
2023 UPDATE									Initial concept designs for the new facility on the Naval Support Activity Monterey base were finished. With this step complete, the required environmental assessment for the proposed facility design and six possible locations was initiated in 2023.
DESCRIPTION	Redesign of median and streetscapes to create community identity and to attract and sustain economic activity. Addition of roundabout, improved pedestrian and bikeways.	New 10-acre park to include playground, dog parks, pickleball courts, and walking paths.	Widening of Imjin Road to four lanes, building four roundabouts and separated pedestrian and bike paths.	Renovation of existing park to include bike pump track, playground, dog park, pickleball and basketball courts.	Connects Marina employment centers with publicly owned broadband infrastructure. The project aids companies that require access to fiber networks to locate in Marina.	Cluster initiative to facilitate the continued growth of the Monterey Bay Drone, Automation & Robotics Technology (DART) ecosystem. The goal is to expedite the creation of 100+ jobs over three to five years.	A plan to create a 20,000- to 50,000-square-foot technical workforce training facility to provide development in aerospace, automation, and robotics technology cluster.	Construction of a new 220,000-square- foot building for assembly and production of EVTOL aircraft (includes formation of EIFD).	This Secretary of the Navy initiative is focused on creating a purposefully-designed facility for rapid innovation and applied research at NPS. The goal of the Naval Innovation Center is to drive transformative advancements in national security concepts and capabilities towards adoption of emerging technologies by unifying defense-focused innovation efforts, building strategic interdisciplinary research relationships, enhancing NPS education, and cultivating premier talent to ensure maritime superiority and to safeguard national interests in a dynamic, multi-domain environment.
LOCATION	City of Marina	City of Marina	City of Marina	City of Marina	City of Marina	City of Marina	City of Marina	City of Marina	City of Monterey
AGENCY	City of Marina	City of Marina	City of Marina	City of Marina	City of Marina/ Marina Foundation	Monterey Bay DART	University of California, Santa Cruz	City of Marina	U.S. Navy
PROJECT NAME	Downtown Marina Streetscape	Sea Haven Park	Imjin Road Widening	Glorya Jean Tate Park	Marina Broadband Project	DART Ecosystem Development	Workforce Training Facility	Joby Aviation Manufacturing	Naval Innovation Center @ Naval Postgraduate School



2024 UPDATE	Bullard Hall renovation will be completed in Summer 2024; move-in, resumption of academic and research activities will begin this year. Renovation of the next scheduled building is Halligan Hall and is anticipated to begin in FY25.					
2023 UPDATE	Bullard Hall renovations continued in 2023.	In June 2022, the city entered into consultant contract agreements to study the feasibility of expanding the capacity of the Industrial Waste Treatment Facility (ITWF) to meet ag industry needs as they expand and redevelop facilities. In April 2023 a fee increase was passed to fund upcoming capital maintenance and expansion costs.	The City engaged economic consultants to revisit the use of an Enhanced Infrastructure Financing District (EIFD) as a potential infrastructure funding source for the SAIC. A 2023 update of the SAIC EIFD feasibility analysis prepared in 2016, confirms that an EIFD is the most viable infrastructure funding source. The City has initiated conversations with the County about their participation (March 2023)	Environmental review has been completed for the proposed mixed-use developments. A Conditional Use Permit along with a tentative map is to be considered by the Planning Commission by end of summer.	Site improvements and facilities for the Loves Travel Center are under construction. The hotel use has been entitled and a building permit has been approved but not yet issued.	
DESCRIPTION	To preserve the NPS education and research mission, the NPS campus requires a significant overhaul and modernization. Instructional and laboratory spaces will be modernized to deliver technology advances in the future.	Infrastructure capacity improvements to support the redevelopment of a 28-acre precooling, cooling, storage and shipping campus that meets industry standards. Existing facilities are 50+ years old and inefficient. The site is in an Opportunity Zone.	Infrastructure improvements to support development of a 257-acre complex devoted to agricultural-related uses including value added processing. The site is in an Opportunity Zone.	Transportation and utility infrastructure improvements required to redevelop underused properties, including an obsolete agricultural shipping facility, and with job-generating uses. Sites are in an Opportunity Zone.	"Transportation and utility infrastructure improvements required to develop properties at the Salinas Municipal Airport and Salinas Travel Center."	Collaboration with the County to increase infrastructure capacity and connect a former tire manufacturing facility to city sewer infrastructure to allow for more intensive manufacturing uses and job creation. The facility is 1.2 million square feet.
LOCATION	City of Monterey	City of Salinas	City of Salinas	City of Salinas	City of Salinas	City of Salinas
AGENCY	U.S. Navy	City of Salinas	City of Salinas	City of Salinas	City of Salinas	City of Salinas
PROJECT NAME	Naval Postgraduate School Campus Modernization	Growers Ice 3	Ag Industrial Center	Work, John, and Abbott Streets	Airport/Salinas Travel Center	Firestone Facility



2024 UPDATE					
2023 UPDATE	Target Area K: In March 2022 the City entered into an Extraterritorial Wastewater Service and Reimbursement Agreements to establish the terms and conditions under which the City would allow connection to its wastewater collection and disposal system. Developer is to obtain all permits and pay all fees to construct a 10-inch sewer line (New Sewer Line) from Sala Road Project site to the City Connection Point at Russell Road along Russell Road. Future development in Target Area K will reimburse Developer for connection based on their prorated share. The City has also received and is processing specific plan, pre-zoning, Sphere of Influence and annexation application for Target Area K. Proposed uses include business park, retail, and mixed-use. West and Central Area Specific Plan: Tentative maps for 425 residential units in the CASP were submitted and are currently under review. There is no update for WASP as the EIR is currently being challenged in court.	City has been awarded \$470,304 from the Local Agency Technical Assistance program to fund development of the Salinas Broadband Master Plan and Alisal Neighborhood Broadband Fiber Network Design. The project is estimated to be completed by late April 2025.	City Staff is currently undertaking environmental review to consider the rezone of a portion of the Marketplace. Proposed general plan and zoning amendments are expected to be presented to City Council in May 2023.	The City recently acquired two parcels, 34 Soledad Street, and continues to be in discussions with other property owners to assemble parcels to facilitate the redevelopment and revitalization in Chinatown.	In 2019 the City of Salinas rezoned city-owned surface parking lots within the Lincoln Corridor and is currently undergoing negotiations for potential development of three lots.
DESCRIPTION	Infrastructure is needed to facilitate and support the future development of the City's EDE future growth areas (K, M, and West and Central Area Specific Plans) as employment centers including a business park, general and light industrial, and commercial retail uses.	Infrastructure is needed to support the redevelopment of multiple opportunity sites in the Opportunity Zone.	Light industrial flex space, live-work units, co-working space, and mixed-use commercial retail.	Light industrial flex space, live-work units, co-working space, and mixed-use commercial retail.	Redevelopment of multiple publicly- owned parking lots and buildings within the Salinas City Center (Downtown) with housing or other private development.
LOCATION	City of Salinas	City of Salinas	City of Salinas	City of Salinas	City of Salinas
AGENCY	City of Salinas	City of Salinas	City of Salinas	City of Salinas	City of Salinas
PROJECT NAME	Infrastructure to support Future Growth Area Development	Infrastructure to support Infill Development	Alisal Market Place	Chinatown	Lincoln Avenue Corridor



2024 UPDATE			The Project design is complete, permits have been obtained, and most of the RW required for the Project has been obtained. The Project is now in need of funding for the construction phase in amount of \$25 million. Federal Funding is programmed for the bridge component of the Project.						
2023 UPDATE	City staff has developed a scope of work to select a consultant to prepare a master plan for the ITC that will include branding and identity, signage and banners, connectivity between the ITC and Salinas Downtown, site activation and the incorporation of mixed-used transit oriented development.	City staff entered into a Master Service Agreement with Underline to support the provision of public Wi-Fi on City owned properties throughout the city and to offer affordable high speed internet services at a low cost to residents.							
DESCRIPTION	Transit-oriented development at the site of a historic train station.	Partnership among Salinas local broadband infrastructure providers to facilitate infrastructure access to other internet service providers who want access to the Salinas market.	Public works project that replaces the low-level bridge over the Salinas River with a bridge that meets the current American Association of State Highway and Transportation Officials requirements.	Proposal to develop a mixed-use (entertainment, retail, housing, and lodging) urban village with a centralized main street. The plan includes pedestrianized streetscapes and parkand-ride facilities.	A workforce rental housing project that includes 90 units and townhouses (one- to three-bedrooms) and 16 lowincome units. The project includes a 4,000-square-foot retail space, shared parking area, and green space areas for residents.	Update street infrastructure to complement the lower Broadway street infrastructure improvements.	Study and plan to make upgrades to provide more capacity and repairs. This will help prevent flooding and sinkholes.	Replace aging and deficient storm drains.	Double roundabout design to improve traffic flow and reduce congestion.
LOCATION	City of Salinas	City of Salinas	City of Salinas	City of Seaside	City of Seaside	City of Seaside	City of Seaside	City of Seaside	City of Seaside
AGENCY	City of Salinas	City of Salinas	Monterey County Resource Management Agency	City of Seaside	City of Seaside	City of Seaside	City of Seaside	City of Seaside	City of Seaside
PROJECT NAME	Intermodal Transportation Center	Municipal Dark Fiber Network Installation	Davis Road Bridge Replacement and Road Widening Project	The Seaside Resort Development Project	The Ascent Project	Broadway Ave. Complete Streets	Storm Drain System Master Plan Update	Storm Drain Replacement Program	Coe Ave & General Jim Moore Blvd. Intersection Improvement



PROJECT NAME	AGENCY	LOCATION	DESCRIPTION	2023 UPDATE	2024 UPDATE
Fremont Blvd. Corridor Improvements	City of Seaside	City of Seaside	Design and construction of Complete Streets along Fremont Blvd.		
Wayfinding signage	City of Seaside	City of Seaside	Install clear and consistent wayfinding signage on former Ft. Ord lands, coordinated across all jurisdictions.		
Canyon Del Rey water well	City of Seaside	City of Seaside	Construction of water well to provide water for new homes and businesses.		
Water Supply Study, Design & Acquisition I Construction	City of Seaside	City of Seaside	Study to identify new sources of water supply to include groundwater recharge, recycled water treatment, or new well projects with design and acquisition / construction to follow.		
Fire Station #2	City of Seaside	City of Seaside	Construct second fire station to provide timely service to businesses and homes in the former Fort Ord area.		
General Jim Moore Corridor Improvements	City of Seaside	City of Seaside	Design and construction of intersection improvements to include roundabouts.		
Well Replacement	City of Seaside Municipal Water System	City of Seaside	Construct backup well for the Seaside Municipal Water System to insure continuous supply of water to homes, schools, and businesses.		
	City of Seaside, Partners	City of Seaside	Various projects to ensure greater broadband coverage throughout the City.		
West Broadway Urban Village Parking Structure	City of Seaside, Private Developer	City of Seaside	Establish a Parking Authority, plan and construct a parking structure to facilitate additional parking due to increased downtown business demand.		
Campus Town	City of Seaside, Private Developer	City of Seaside	Demolition, infrastructure, and construction to develop 1,485 units of housing, commercial, and mixed-use space on former Ft. Ord land.	Complete.	
	City of Seaside, Private Developer	City of Seaside	Infrastructure and construction for housing, commercial and mixed use on former Ft. Ord land.	Project approved.	
Accessory Dwelling Units	City of Seaside, Private Developer(s)	City of Seaside	Infrastructure, water, and construction of ADUs.		
Lightfighter Drive Corridor Improvements	City of Seaside, Private Developers	City of Seaside	Road improvements for Lightfighter Dr. in support of housing, commercial and mixed uses.		
Sanitary Sewer System Master Plan Update	Seaside County Sanitation District	City of Seaside	Update the 10-year Sewer System Master Plan to plan for future growth and provide more reliability.		



2024 UPDATE						This is an on-going Road Striping Program. The work for 2019 was completed, and each year's work is completed on a cyclical basis.	SJSU is currently awaiting the results of an EDA grant proposal to fund the planning phase of construction and renovation of aquaculture facilities, commercial fishing wharf, and research vessel facilities on Sandholdt Road.	
2023 UPDATE								Phase 1 - expansion of Caltrain to downtown Salinas, has received significant funding and is moving forward. Phase 2 adds a Pajaro train station and Phase 3 adds a Castroville train station.
DESCRIPTION	On/off ramp and intersection improvements to reduce congestion. Improve safety of vehicle traffic into City of Seaside.	Sewer upgrade project to provide additional sewer capacity for construction of new homes and businesses.	Road improvements to include roundabouts, pedestrian and bicycle improvements. Improves safety and circulation for a major thoroughfare.	Bicycle and pedestrian trail around the City of Seaside, connecting to the Inter-Coastal trail and other jurisdictions.	The Soledad Shipping Container Project seeks to create a new and exciting sense of place along the City's main commercial corridor, Front Street. The visionary project will assist Soledad and South Monterey County residents with a place to recreate, relax, enjoy food, and take in a small concert without having to travel to Salinas or the Monterey Peninsula.	Public works project that includes applying centerline striping and traffic control to roughly half of Monterey County's striped roads.	Climate change resilience and economic capacity building for SJSU's Moss Landing Marine Lab (MLML).	Expansion of Caltrain to downtown Salinas, Pajaro, and Castroville.
LOCATION	City of Seaside	City of Seaside & Sand City	City of Seaside and City of Del Rey Oaks	City of Seaside and surrounding areas	City of Soledad	Countywide	Moss Landing	North Monterey County (Salinas, Pajaro, Castroville)
AGENCY	Transportation Agency for Monterey County	Seaside County Sanitation District	City of Seaside and Transportation Agency for Monterey County	City of Seaside, City of Del Rey Oaks, and Transportation Agency for Monterey County	City of Soledad	Monterey County Resource Management Agency	San José State University	Transportation Agency for Monterey County
PROJECT NAME	North Fremont Highway Interchange Improvements	Fremont/Broadway/ Ortiz Sewer Main Upgrade	Highway 218 Corridor Improvements	Fort Ord Regional Trail & Gateway (FORTAG)	Soledad Shipping Container Project	Countywide Striping Project 2019	San José State University Moss Landing Marine Lab Improvement Project	Monterey County Rail Extension



2024 UPDATE		
2023 UPDATE	Program in planning stages.	The City's consultant (EPS) is refining the preferred site design and architecture option. Once completed, the City will look to market and partner with the private development community and Monterey County on development of the site. The City is also investing \$500K in ARPA funding for land development improvements with the intent of defraying the costs required for future development.
DESCRIPTION	Training programs at farmworker housing sites to create advancement opportunities for ag field workers.	Design and construction of roadway improvements, signage, and tourist facilities.
LOCATION	Salinas Valley	South Monterey County
AGENCY	Salinas Valley	Various Government Agencies
PROJECT NAME	Ag Worker Career Development and Advancement Training Program	Monterey County River Road Wine Trail Government Agencies

