

COVID-19

ECONOMIC IMPACT & RECOVERY OUTLOOK FOR THE CENTRAL COAST

REACH



REACH

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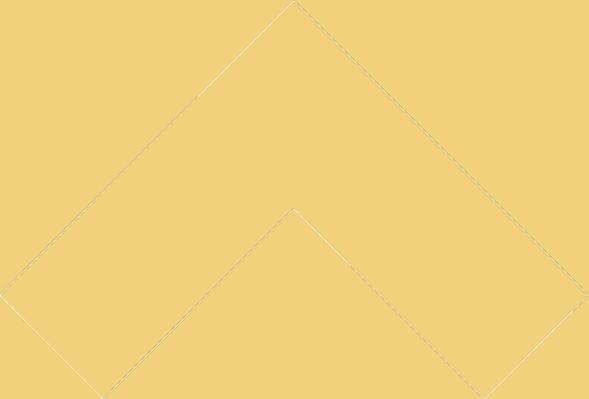
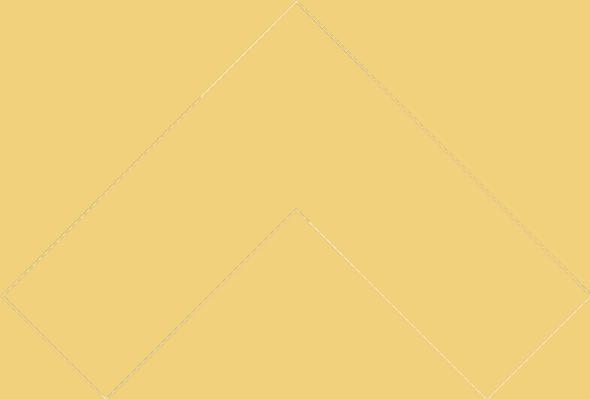
County of San Luis Obispo



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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

This research was funded in part by the County of San Luis Obispo and delivered by REACH and BW Research in order to develop a better understanding of the economic and workforce impacts of the COVID-19 pandemic on the Central Coast's (San Luis Obispo and Santa Barbara Counties) regional economy. A thorough understanding of the dynamics of how the pandemic impacted the regional economy will allow regional stakeholders to make data-driven decisions and implement targeted programs and initiatives that will effectively provide support to businesses and communities across the Central Coast.

This research was produced using data from a range of public and proprietary data sources. Several data sets used in this report were produced specifically for tracking the impacts and outcomes of the pandemic. The analyses and discussion around secondary data are contextualized by executive interviews with local stakeholders.

KEY FINDINGS

- 1. Businesses in the Central Coast Region have suffered significantly in the pandemic-impacted economy.** As of early February 2021, business revenues remain 32% lower than their pre-pandemic levels. While this rate fluctuated over the past year, revenues have remained at least 20% lower than pre-pandemic rates with one brief exception in October during a temporary re-opening period. Similarly, the number of businesses open in the region have declined. As of early February 2021, there were 40% fewer businesses open in the Central Coast Region than in early March 2020. Please see page 13 for more information on COVID-impacts on business.
- 2. The scale of Paycheck Protection Program loans disbursed in the Central Coast Region likely prevented even more substantial economic devastation.** In total, nearly 14,000 businesses in the Central Coast Region received \$1.5 billion in loans. Businesses in the Tourism, Hospitality, and Recreation industry cluster as well as those in the Agriculture and Food cluster received the greatest share of these loans, amounting to more than \$211 million across each industry cluster. Please see page 16 for more information on PPP loans in the Central Coast Region.
- 3. The industry clusters with the lowest-average wages are also the industry clusters that have been hit the hardest economically.** Tourism, Hospitality, and Recreation; Other Services; and Retail are the three industries clusters with the lowest average annual

earnings per worker. These industry clusters also generally saw the greatest job losses. Conversely, industry clusters with the highest average annual earnings, such as Information and Communications Technologies, saw much milder declines in employment. Please see page 20 for more information on changes in industry clusters within the Central Coast Region.

4. **Lowest-earning workers made up a majority of COVID-related job losses.** Of all jobs lost due to COVID-19 in the Central Coast Region, two-thirds (66%) were Tier 3 jobs, representing the lowest-paying and lowest-skill jobs in the region. This means roughly 37,000 Tier 3 workers—many of whom likely had little savings to fall back on—have lost their jobs. In contrast, Tier 1 workers, or those who are highest-earning and highest-skilled, saw fewer than 7,000 jobs across the region disappear. For more information on job quality in the Central Coast Region, please see page 29.
5. **Several industry clusters are poised to help propel the region's recovery.** Along with demonstrating robust growth going into the pandemic and resiliency during it, several industry clusters offer a range of career pathways that are accessible to a wide range of workers and offer living wages and upward mobility. These industry clusters are Healthcare; Building and Design; Information and Communications Technology; and Defense, Aerospace, and Transportation Manufacturing. For more in-depth discussion around these industry clusters, please see page 39.
6. **Preliminary data suggests that disruption from the pandemic appears to have inspired entrepreneurs and startups.** Venture capital invested in regional businesses hit a new record in 2020 as more than \$722 million in investment flowed to regional startups. New business formations statewide also saw an increase of activity, with 20% more formations in 2020 than 2019. The Central Coast Region's new business formations have trended closely with historical statewide rates, and if the Central Coast Region continues to follow statewide trends, new business formations in the region will have also increased notably between 2020 and 2021. For more detail on new business formations, please see page 14.

CONCLUSIONS & RECOMMENDATIONS

BW Research offers the following conclusions and recommendations based on the research findings and input from stakeholders on the Central Coast.

1. **Develop industry-specific strategies to increase entrepreneurship and assist businesses that are looking to expand within the region.** Through the destruction of the pandemic, a substantial number of businesses—particularly those in the hardest-hit industries—will have closed their doors for good. As the uncertainty associated with the pandemic begins to recede, REACH and its partners should consider initiatives that help entrepreneurs open new businesses across different industries. Special emphasis or support could be given to

those industries most-impacted and industries that are likely to evolve and grow through the recovery. The entrepreneurial industry segment strategies could include:

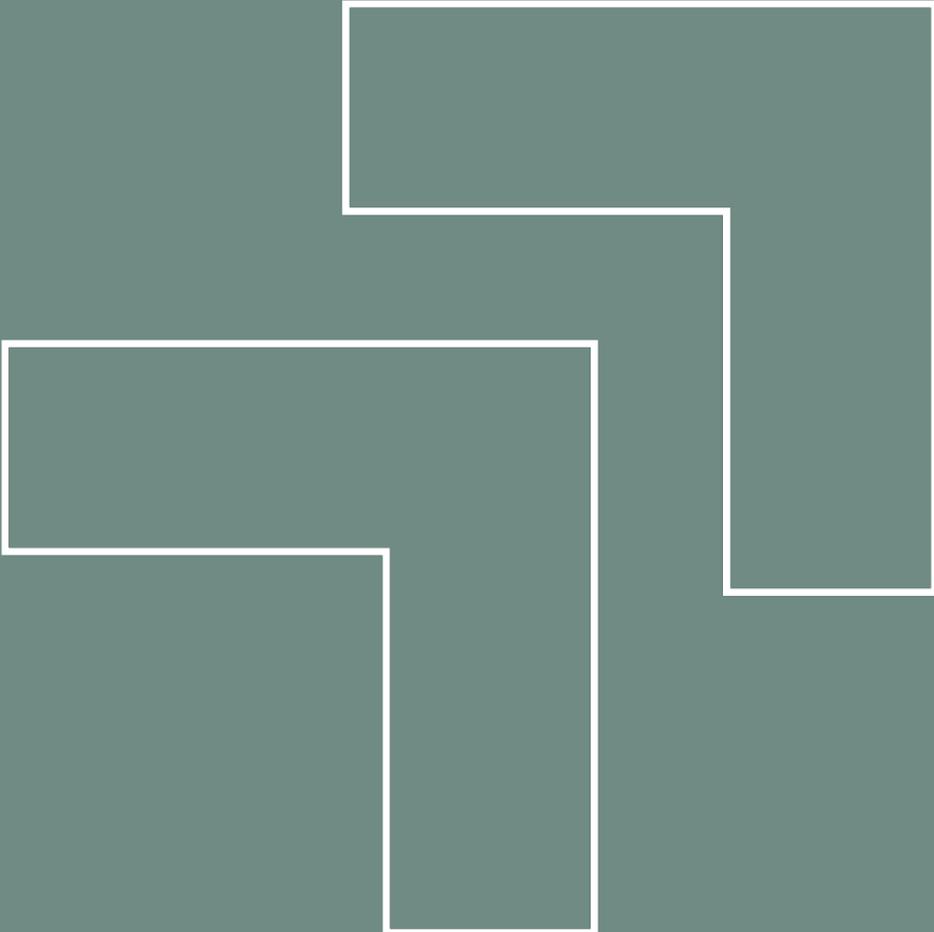
- a. **Commercializing and attracting innovative businesses** in Defense, Aerospace, and Transportation Manufacturing (DATM) and Information & Communication Technologies (ICT). This could include identifying evolving supply chains within both of these industries as well as attracting technology firms that are looking to develop satellite technology.
 - b. **Supporting new and expanding tourism and personal service businesses** that are likely to emerge as the economy and domestic travelling improves and regional travelers flock back to the Central Coast.
 - c. **Develop a regional strategy to support clean energy employment and the transition to a low-carbon footprint.** The statewide and national focus on reducing carbon emissions is only expected to increase and provides a regional opportunity for both workforce and economic development.
2. **Identify regional infrastructure investments to support the business community.** With federal and state funding already in place and potentially more to come, the Central Coast Region should be prepared to make its case for infrastructure upgrades in the region. Businesses and workers alike would benefit from several infrastructure improvements, including investments in transportation, childcare facilities, expanded broadband access both for businesses and residents, and an increased supply of affordable housing. Organizing with regional stakeholders to identify and prepare proposals for specific infrastructure improvement sites would ensure the region is ready to request funding as it becomes available.
 3. **Enhance partnerships with local universities and community colleges to improve educational attainment opportunities in the region.** These strategies should be two-fold. First, REACH and its partners should work with K-12 partners to promote career exploration, particularly in communities with historically lower educational-attainment levels. Second, REACH and its partners should work with employers and post-secondary education providers to develop mid-career learning opportunities that allow workers to supplement their education to advance their careers.
 4. **Reinforce support for middle-stage startups.** A supportive entrepreneurial community and the SLO HotHouse incubator do a good job of nurturing entrepreneurs and start-ups in the initial stage of their development. However, support for start-ups looking to take on new employees and scale is not available to the same extent. Assisting and promoting these transitions may help expand and retain the region's growing entrepreneurial sector.
 5. **Prepare for a rise in remote work.** The growth of remote work presents a new paradigm for employers and workers. One way the region can benefit from remote work is by leveraging the region's high quality of life to attract smaller clusters of workers from larger companies. Small groups of workers or project teams could work and live in the Central Coast Region

using flexible workspaces while remaining close enough to Silicon Valley to return to the corporate office as needed.

REACH and its partners can also help existing employers adapt to the new world of flexible remote work. While many employers plan on offering flexible remote work at least some of the time, very few are sure what the implementation and logistics will look like. As employers begin to experiment with different schedules and strategies, developing and sharing a list of best practices and strategies may help firms quickly find systems that work best for them.

6. **Emphasize targeted recovery efforts.** The pandemic and the subsequent “k-shaped” recovery have left some portions of the population in dire economic circumstances while others experienced swift recoveries and even growth. To maximize the effectiveness and efficiency of resources, well-targeted deployment of funds and efforts will be important. An essential component of this will be outreach. Many of the populations in greatest need are also among the hardest to reach. Outreach through alternative means, offered in a variety of languages and potentially even through canvassing campaigns, will ensure that residents are not left behind simply because they are not well-connected. These targeted recovery efforts should also likely include a focus on racial equity and other underserved communities on the Central Coast.
7. **Consider a campaign to highlight the benefits of employment beyond a paycheck.** In a time of systemic upheaval, long-term unemployment, and increased unemployment benefits, workers returning to the world of work may struggle to re-enter the workforce. Resources—shared with potential employees as well as employers looking to hire—can illuminate the benefits of developing social and communication skills, starting a career, or taking on a part-time role. Access to re-skilling and upskilling will also be important as some workers may transition into unfamiliar industries and a lack of knowledge or experience may serve as a barrier to potential industry entrants.
8. **Work with local governments to develop a strategy for increasing housing, including opportunities to convert surplus commercial buildings into residential space.** Housing and high costs of living are prohibitive for many workers, leading to more traffic and longer commutes. Furthermore, the rise of telework will likely attract more people looking to enjoy the quality of life that the Central Coast Region has to offer. Increasing housing—particularly housing that is accessible to lower-income workers—can help remediate some of the damage of the pandemic and ensure that workers in the region are able to live in the region.

BUSINESS IMPACT



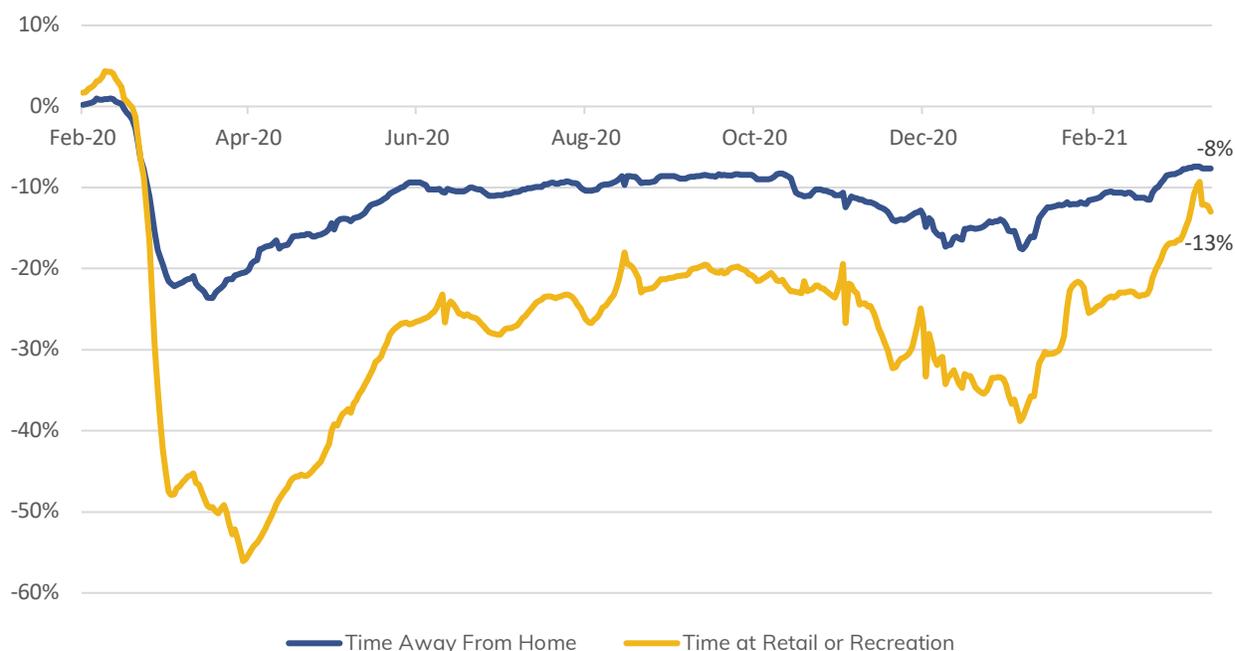
BUSINESS IMPACT

The COVID-19 pandemic and the accompanying public health measures have had substantial impacts on businesses across the globe. The data in this section highlight the impact of COVID-19 on business in the Central Coast Region through a range of metrics and datapoints. To best describe the volatile economic environment, this report utilizes propriety models developed by BW Research, as well as proprietary data aggregated and prepared by Opportunity Insights¹, a team of researchers at Harvard University. The Opportunity Insights data is compiled from a range of private sources, which provide a near real-time picture of national and local economies.

The pandemic has drastically shifted where residents spend their time. As Figure 1 highlights, Central Coast residents spent more than 20% less time outside their home during the start of the pandemic. As of early April 2021, Central Coast residents are now spending about 8% less time at home. The share of time residents spend at Retail (in-person shopping) or Recreation (restaurants and movie theaters) locations has drastically increased in recent months; at the end of January 2021, residents were spending 38% less time at these types of locations. By early April 2021, residents were only spending 13% less time at Retail and Recreation locations. The convergence of these two trends suggests that, while some people remain hesitant to leave their homes, others are beginning to return to Retail and Recreation locations and activities.

¹ For more information about the Opportunity Insights data and methodology, please visit <https://www.tracktherecovery.org/>

Figure 1. Change in Time Spent at Location



COVID-19 IMPACTS ON LOCAL BUSINESSES

Consumer spending in the Central Coast Region has returned to pre-pandemic levels, though a greater portion of this spending may be going outside the region.

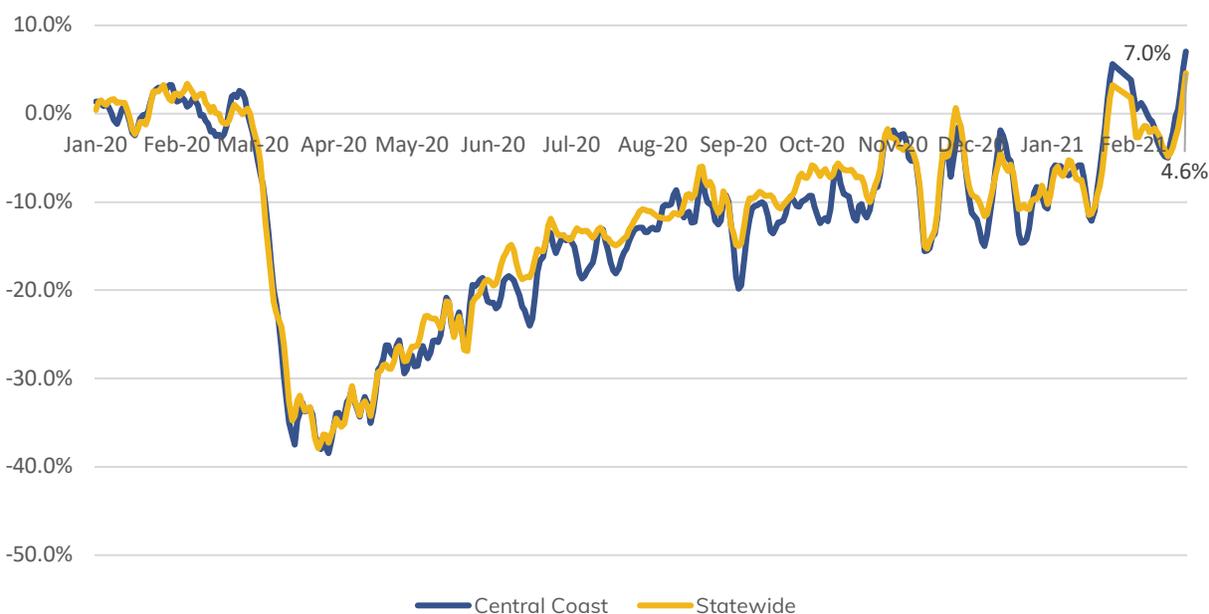
Spending by residents in the Central Coast Region gradually resumed to normal levels after declining 38% in April 2020 (Figure 2).

While this return to baseline levels is an encouraging indicator of consumer sentiment and economic well-being, the rise of online shopping and continued local business closures means that a smaller portion of this overall spending is likely going toward local businesses. Conversely, spending tends to be a leading indicator that precedes revenues and hiring activity, suggesting that the recovery is already underway and other indicators may be trailing further behind.

“I feel very optimistic for the region. There have been massive stimulus bills passed and proposed. Confidence is coming back. There is tremendous pent-up demand and resources on the sidelines, and I think we’ll see this economic energy surge towards the middle or end of the year.”

Erik Justesen, President and CEO of RRM Design Group

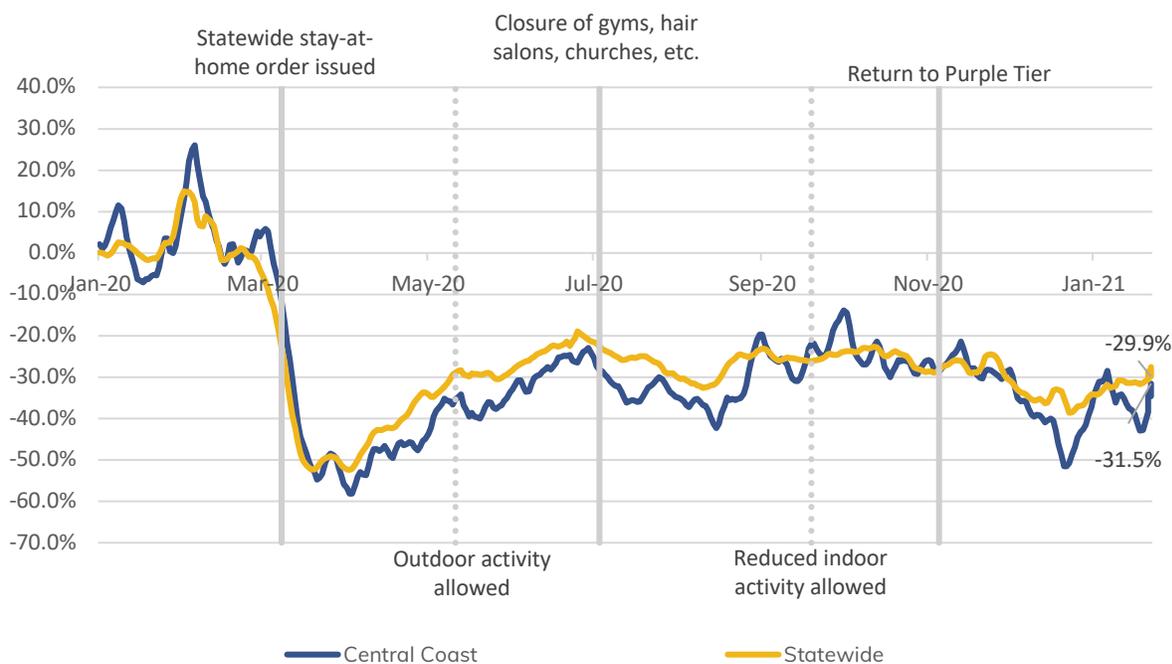
Figure 2. Change in Consumer Spending²



Business revenues have seen a modest recovery but remain at substantially suppressed levels relative to pre-pandemic baselines. Business revenues in the Central Coast Region were 58% lower in April 2020 than before the pandemic. As of Feb. 2, 2021, business revenues in the Central Coast Region were still 31% lower than pre-pandemic levels (Figure 3). This suggests businesses in the region continue to suffer, and those who are able to open may be struggling to remain open. Despite a rebound in consumer spending, revenues cannot return to pre-pandemic levels without commensurate reopening of businesses. As some businesses remain closed, consumers are directing their spending elsewhere. While the fluctuations in revenues correlate closely with changes in public health orders, the gradual pace of trends suggests that COVID-19 cases and public concern about the virus are also likely significant driving factors of changes in activity.

² "The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data," by Raj Chetty, John Friedman, Nathaniel Hendren, Michael Stepner and the Opportunity Insights Team. November 2020. Available at: https://opportunityinsights.org/wp-content/uploads/2020/05/tracker_paper.pdf

Figure 3. Change in Business³ Revenues⁴



The loss in revenues has led many local businesses to close their doors and remain closed. While the summer of 2020 saw a small percentage of businesses reopen, about one in four businesses in the Central Coast Region remained closed as of early February 2021 (Figure 4). The longer that these businesses remain closed, the less likely they will be to reopen.

These data to date cannot provide precise estimates of which closures are temporary and which are permanent. A study conducted by Yelp using its national data found that as the pandemic has worn on, an increasing share of temporary closures became permanent. At the end of April 2020, 21% of business closures were permanent, but by September of 2020, 40% of closures were permanent.⁵ If this national trend is extended to the Central Coast Region, roughly 13% of businesses in the Central Coast Region had closed permanently as of September 2020. Given that the second COVID-19 wave in the winter of 2020 was even more challenging for many businesses, this number could be even greater. Fortunately, more recent data from Yelp also indicates strong interest in new business openings; year-over-year (March 2020–March 2021) new business openings are only down by 14%,

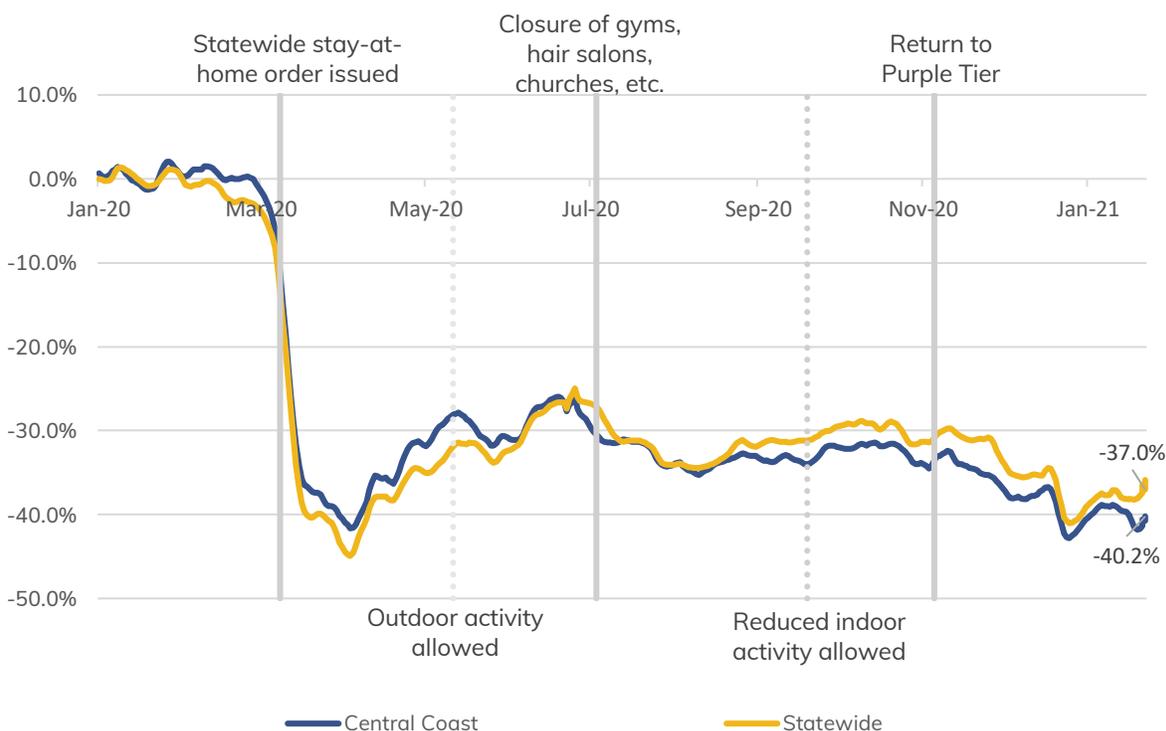
³ This analysis uses the SBA definition of a small business and varies by industry. Generally speaking, these are firms with less than 1,200 employees or less than \$45 million in annual revenue, which account for a majority of firms in the Central Coast Region. For more information about this definition, please visit <https://www.sba.gov/document/support--table-size-standards>

⁴ "Tracking the Recovery." Opportunity Insights.

⁵ "Yelp: Local Economic Impact Report." September 2020. <https://www.yelpeconomiccoverage.com/business-closures-update-sep-2020.html>

and new openings of restaurants and food businesses are down 18%.⁶ Efforts that encourage the opening of new businesses—potentially even prioritizing those who had to close due to the pandemic—could help spur the return of businesses in these industries.

Figure 4. Change in Open Businesses in the Central Coast Region⁷

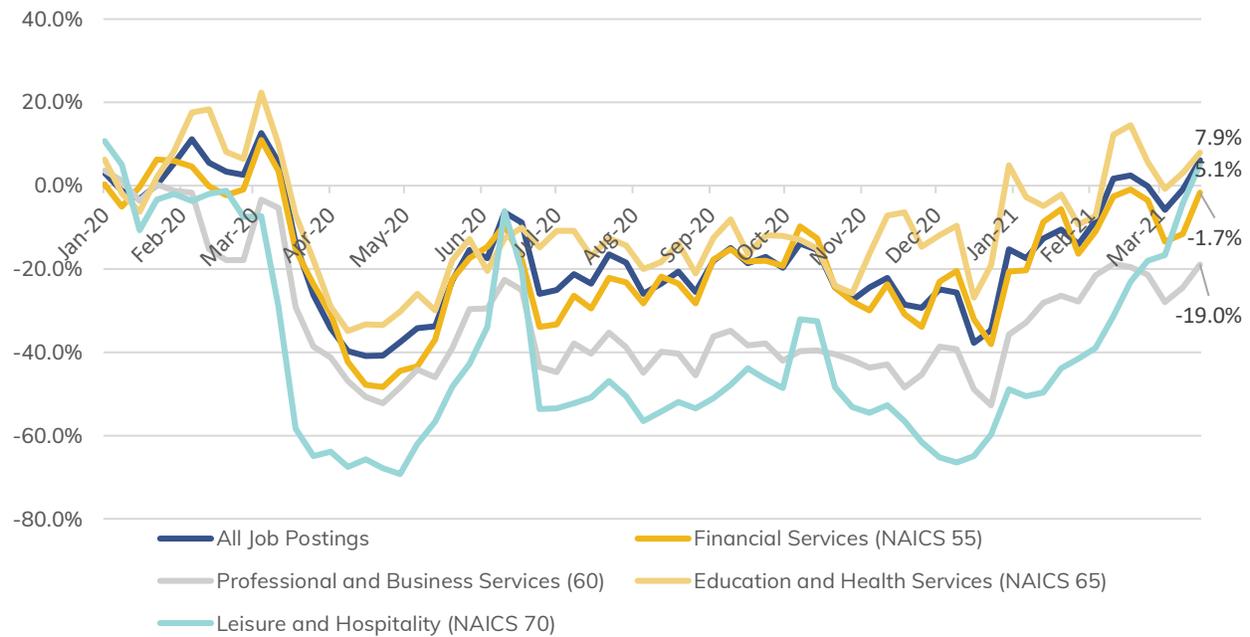


Hiring has shown a strong rebound across many industries. An examination of statewide online job postings suggests that there are substantially fewer companies looking for fewer workers. New job postings in the Leisure and Hospitality industries saw the steepest declines initially, though by the first week of April 2021, postings have seen a net increase from before the pandemic. While seasonal differences may account for some of this increase, it is a positive indication that this sector is recovering quickly. Other industries, such as Professional and Business Services, and Financial Services continue to see suppressed hiring, but to a less severe extent (Figure 5). Job postings can be considered a forward-looking indicator and suggest that regional employers are optimistic about the future and looking to bolster their staff for increased demand for their goods and services.

⁶ “One Year into the Pandemic, Yelp Data Reveals Impact on Local Economies.” March 10, 2020. <https://www.yelpeconomiccoverage.com/covid-19-anniversary.html>

⁷ “Tracking the Recovery.” Opportunity Insights.

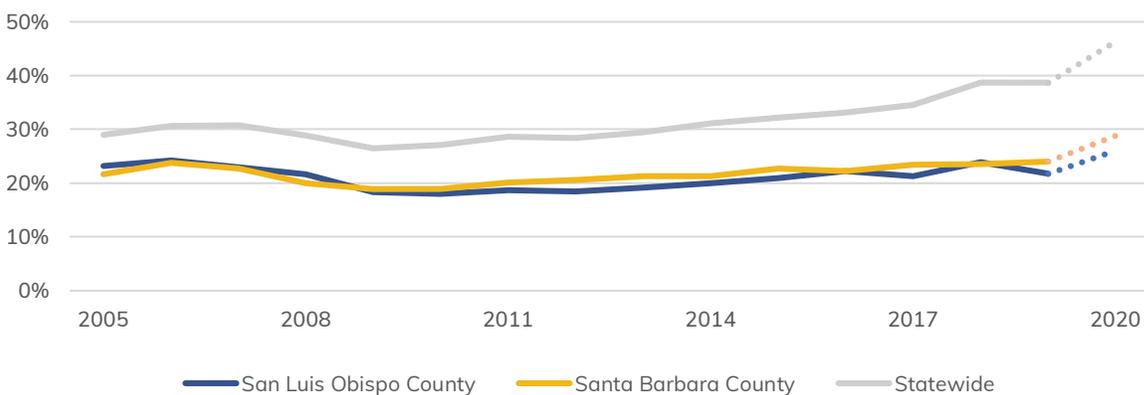
Figure 5. Change in Online Statewide Job Postings⁸



NEW BUSINESS AND VENTURE CAPITAL

The disruption of the pandemic has also fostered new business formations and ventures across the state and within the Central Coast Region. After dropping in the immediate aftermath of the Great Recession, new business formations as a percentage of overall businesses in San Luis Obispo and Santa Barbara Counties have seen steady increases in recent years. Preliminary statewide data suggests that new business formation has increased in 2020 (Figure 6).

Figure 6. New Business Formation as a Share of Overall Business Establishments^{9 10}



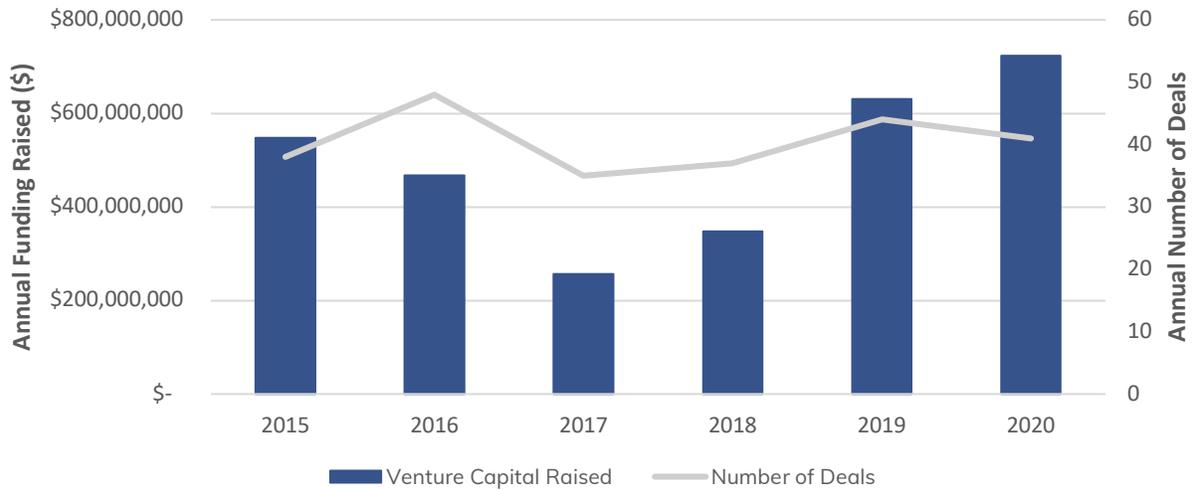
⁸ "Tracking the Recovery." Opportunity Insights.

⁹ Data from U.S. Census Bureau Business Formation Statistics Experimental Data.

¹⁰ 2020 and 2021 Projection are based on annual statewide estimates. These projections present the possible rate of new business formations at the local level but were developed using preliminary statewide data and local base rates.

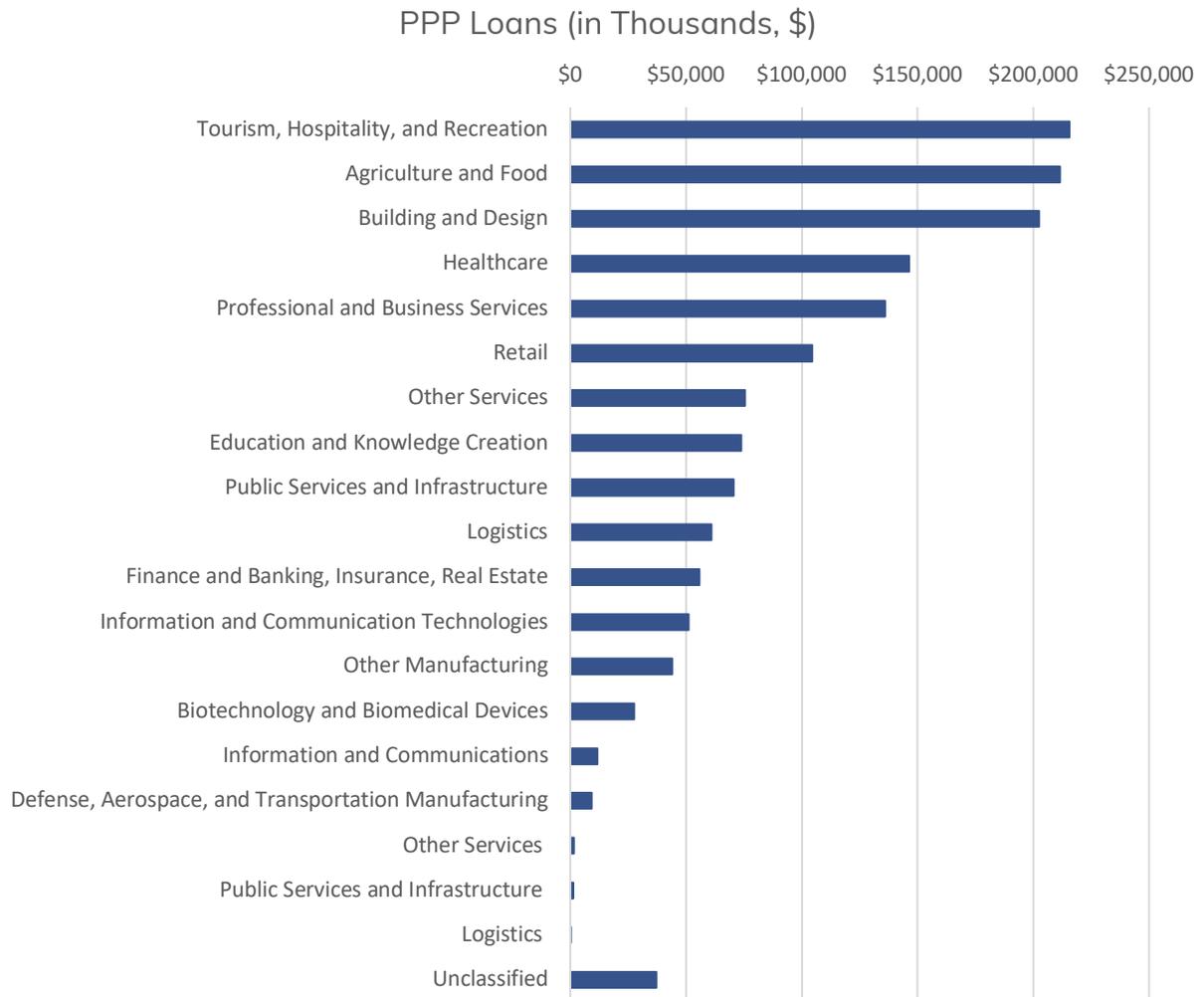
The pandemic did not slow venture capital from investing in businesses in the Central Coast Region. A record \$722 million went to startups in the Central Coast Region in 2020. This money was raised across 41 different deals, representing an average of \$17.6 million raised per deal (Figure 7). The largest capital raises were by [Apeel Sciences](#), [Lynda](#) and [Procore](#), and two of these three largest deals occurred in 2020. [IQMS](#) and [Hortau](#) were the companies with the largest capital raises in San Luis Obispo County.

Figure 7. Venture Capital Funding to Businesses in Central Coast Region (2015-2020)¹¹



¹¹ Crunchbase. Extracted April 7, 2021

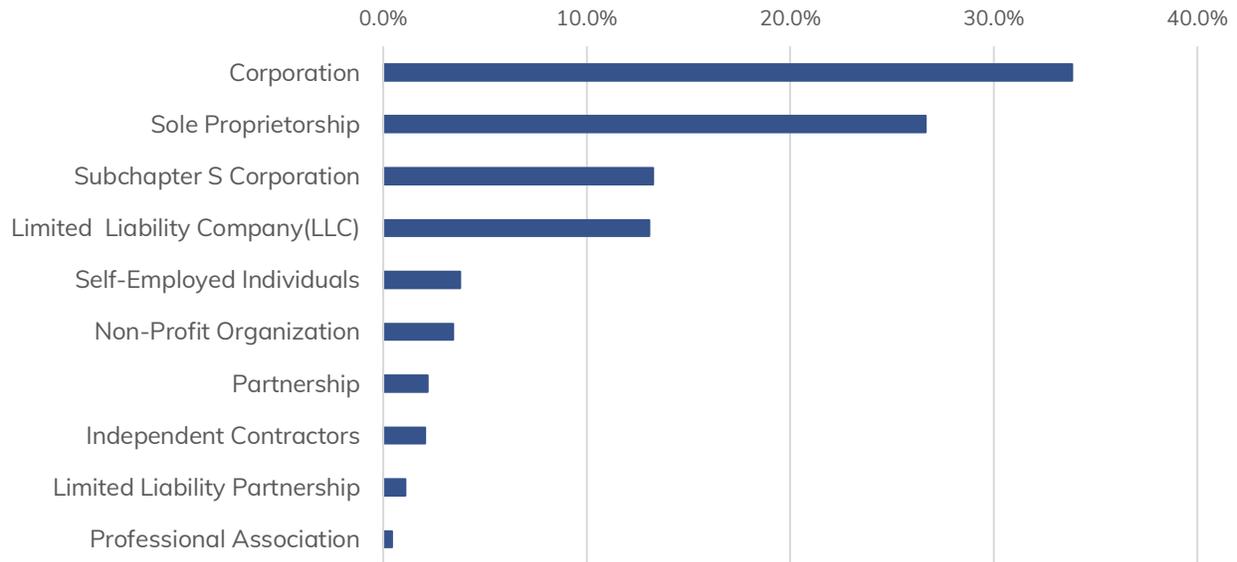
Figure 9. Paycheck Protection Program (PPP) Loans by Industry Cluster (First Round)¹³



¹³ Data from the U.S. Small Business Administration

Corporations and Sole Proprietorships accounted for 61% of all first-round PPP loans disbursed in the Central Coast Region. S-Corporations and Limited Liability Companies (LLCs) were also common loan recipients (Figure 10).

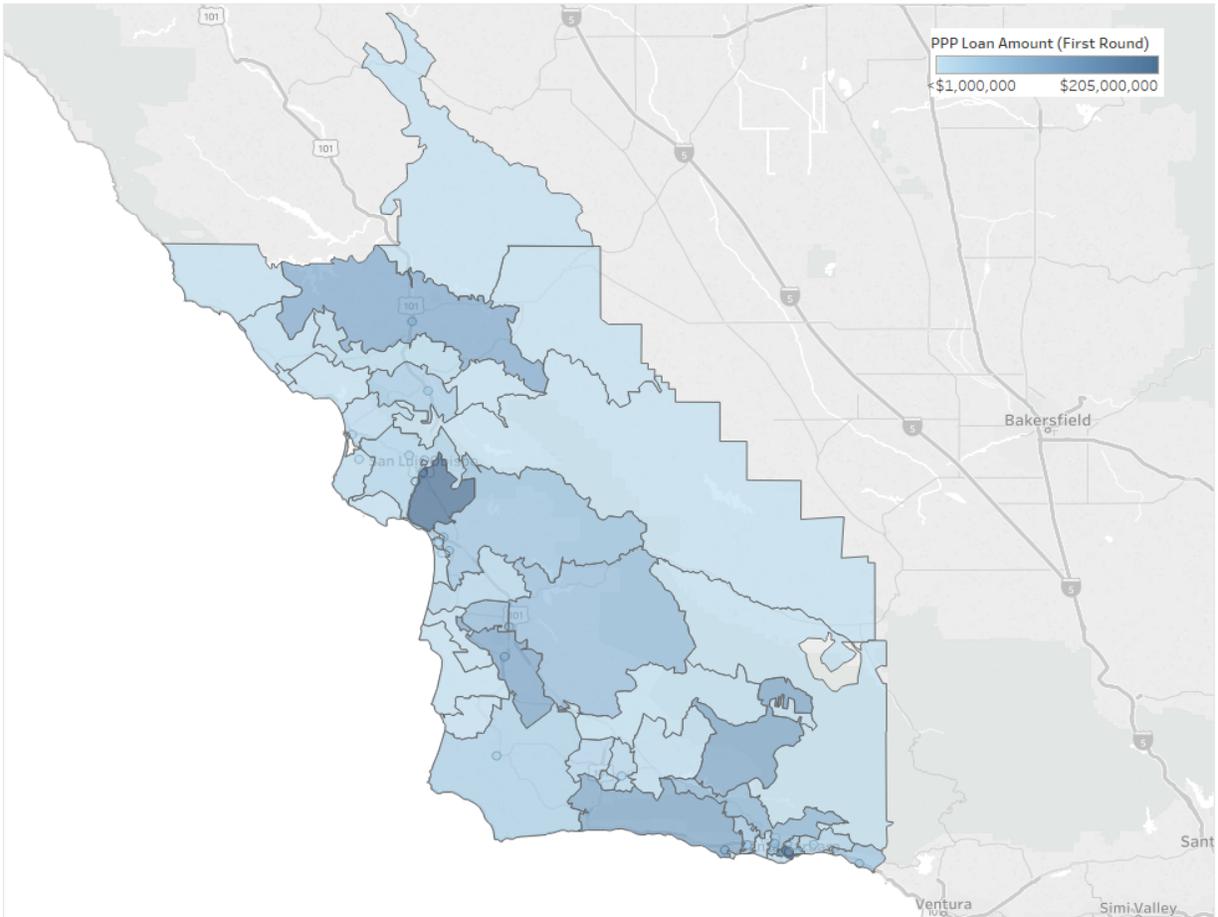
Figure 10. PPP Loans by Business Type¹⁴



¹⁴ Top Ten Business Types reported. Data from U.S. Small Business Administration.

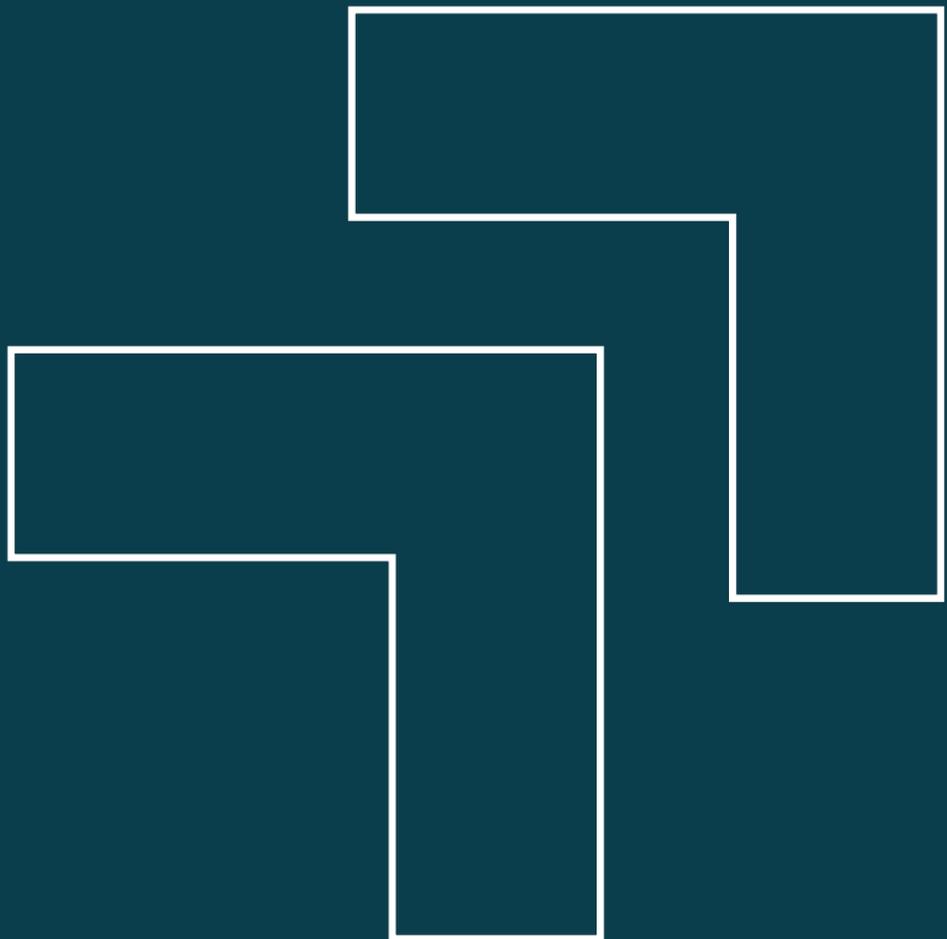
The zip codes that received the greatest funding amounts of PPP loans in the first round were 93401 (city of San Luis Obispo), 93101 (city of Santa Barbara) and 93455 (Orcutt). Each of these three zip codes received more than \$105 million in loans. In fact, 93401 and 93101 received \$205 and \$190 million respectively, equating to 13% and 12% of total loans received in the region, respectively (Figure 11).

Figure 11. Total Amount of PPP Loans Received by Zip Code (First Round)¹⁵



¹⁵ U.S. Small Business Administration

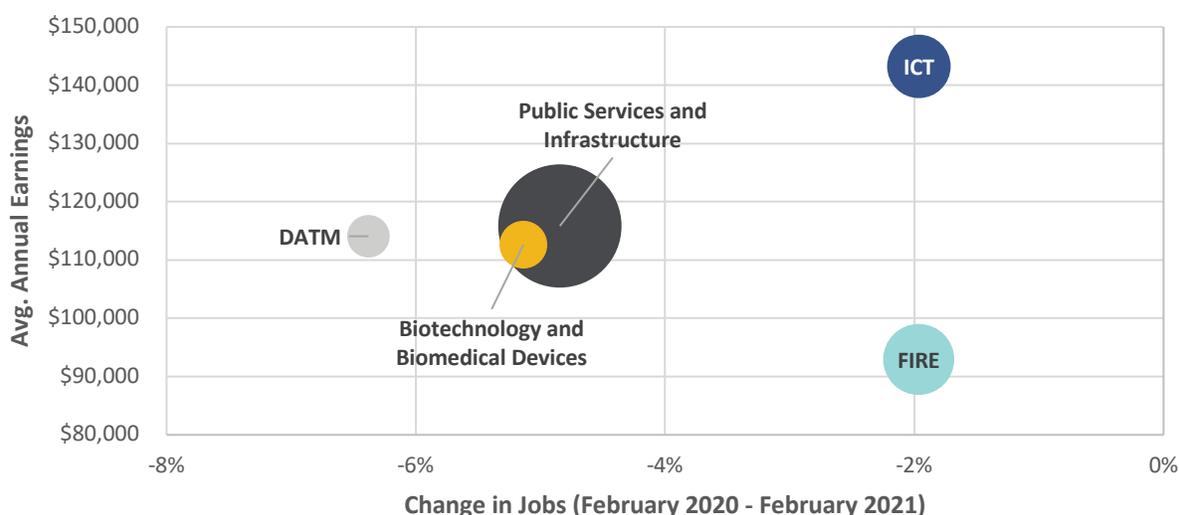
INDUSTRY CLUSTER ANALYSIS



INDUSTRY CLUSTER ANALYSIS

The COVID-19 pandemic has produced significantly different impacts across different industry clusters. Generally speaking, industry clusters with the highest-average earnings, such as those seen in Figure 12, experienced the lowest declines in employment. In contrast, the lowest-paying industry clusters tended to bear the brunt of the economic devastation, particularly among industries like Tourism, Hospitality, and Recreation.

Figure 12. Highest-Earning Industry Clusters¹⁶



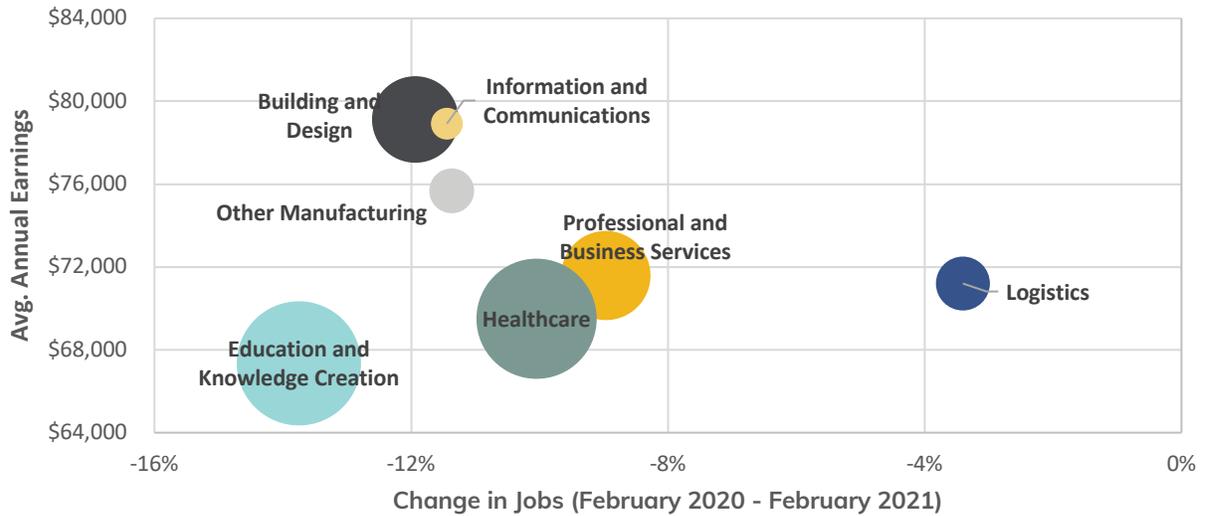
“I believe we’re going to have a robust recovery because of strong demand. Most other markets have a sense of optimism as well. There’s a sense that ‘We’ve made it through, so now we need to start ordering.’”

Brian Talley, President of Talley Vineyards

Mid-earning industry clusters have seen some strong losses in employment. Education and Knowledge Creation and Building and Design saw employment decline 14% and 12%, respectively, between February 2020 and 2021. Even healthcare has seen employment declines, as medical providers tightened budgets following the decline in elective surgeries (Figure 13).

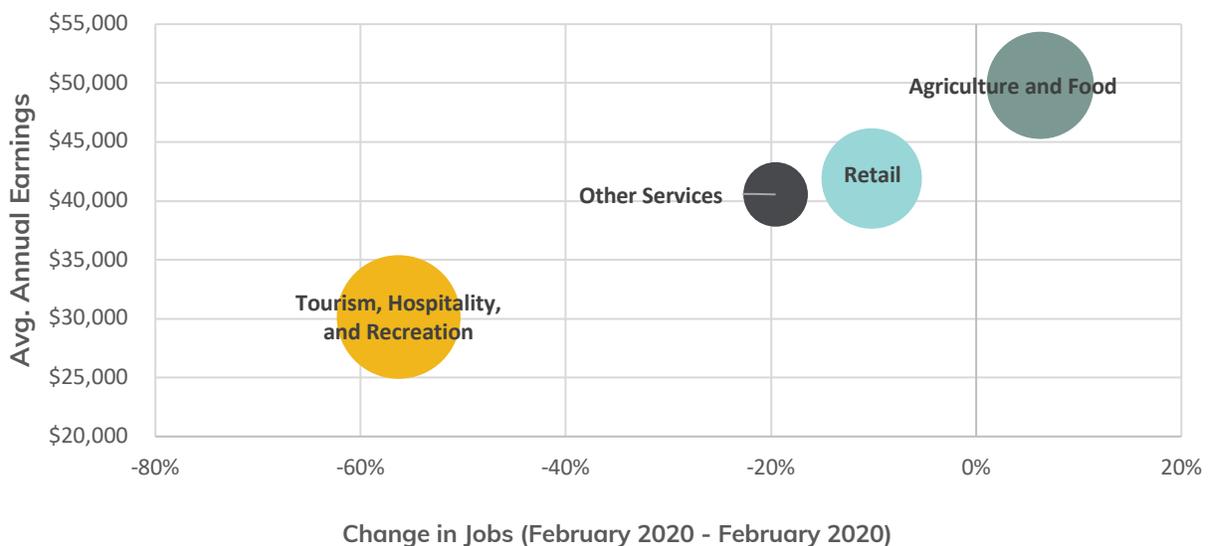
¹⁶ Emsi 2020.4

Figure 13. Mid-Earning Industry Clusters¹⁷



The industry clusters with the lowest average earnings have seen the most volatility. Tourism, Hospitality, and Recreation has seen employment decline by more than half (56%). Industry clusters like Retail and Other Services (which includes businesses such as nail and hair salons) have seen notable declines in employment as well (Figure 14). Increases in Agriculture and Food are largely attributable to seasonal variances.

Figure 14. Lowest-Earning Industry Clusters¹⁸



¹⁷ Emsi 2020.4

¹⁸ Emsi 2020.4

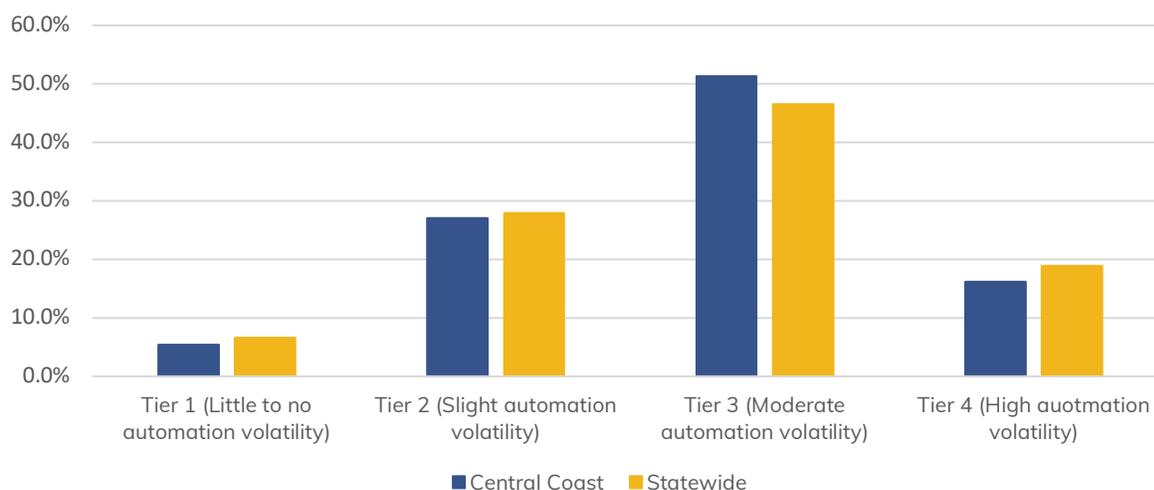
JOB VOLATILITY

BW Research has developed a job volatility index that ranks occupations based on the share of their skills and abilities that can be replaced by modern technology. To do this, the research team examined O*NET data that contains occupation-level survey data on 26 different skills. These skills were examined on their relative importance to the job and their complexity. The scores for each of these skills were then aggregated within each occupation, resulting in a metric that demonstrates the relative risk an occupation has of change due to technological advancement.

TIER 1 AUTOMATION VOLATILITY	TIER 2 AUTOMATION VOLATILITY	TIER 3 AUTOMATION VOLATILITY	TIER 4 AUTOMATION VOLATILITY
Tier 1 occupations have a very low share of activities that can be replaced or heavily augmented by technology within five years. These occupations include Coaches and Scouts, Surgeons, and Chief Executives.	Tier 2 occupations have some tasks that can be automated, though automation will likely expand these roles rather than replace them. These occupations include Pest Control Workers, Graphic Designers, and Energy Auditors.	Tier 3 occupations have a moderate share of work that can be replaced by technology. These occupations include Landscaping and Groundskeeping Workers, Dishwashers, and Travel Agents.	Tier 4 occupations are the most at risk of automation. A large share of work activities can be replaced or heavily augmented by technology within five years. These occupations include Slaughterers and Meat Packers, and Sewing Machine Operators.

The Central Coast Region has a lower share of occupations facing high risk of automation-related volatility compared to the broader state. Challenges in finding workers and the ongoing public health measures have led employers to increasingly consider automation of tasks and roles. While the Central Coast Region has relatively lower automation-volatility risk than the state, 51% of jobs have moderate exposure to automation-related volatility (Figure 15), suggesting that working with regional education and training providers to upskill existing talent will be increasingly important.

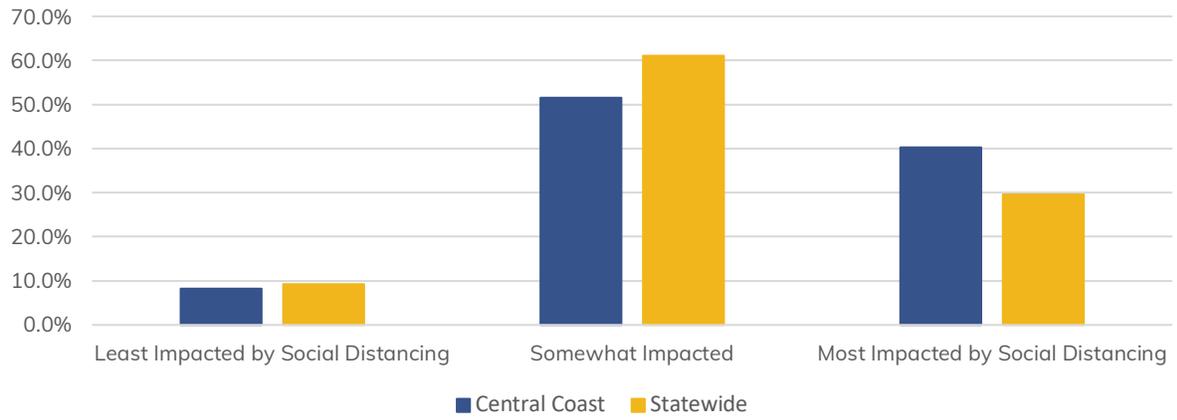
Figure 15. Job Volatility Due to Automatability of Tasks

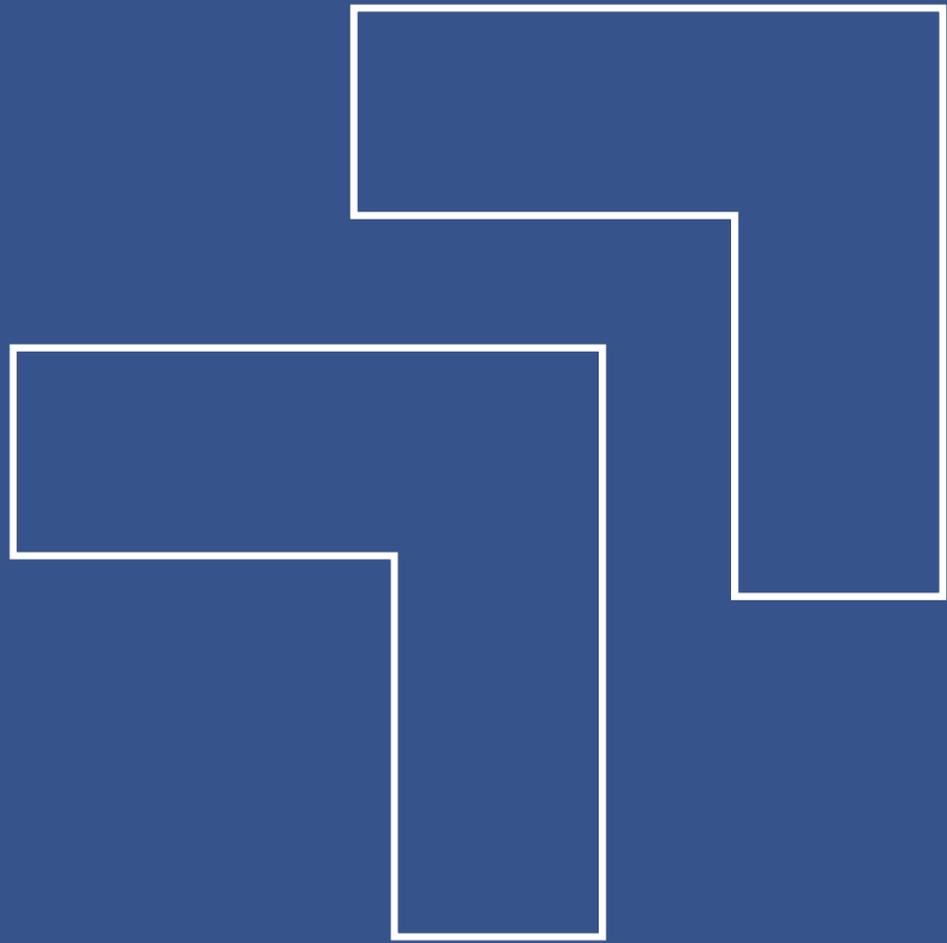


BW Research developed an occupation-level volatility index based on an occupation’s physical proximity score in O*NET occupation data. This analysis classifies jobs into three tiers. Occupations where physical proximity to others is most important are classified as Tier 3. Tier 3 occupations, including Waitresses and Teachers, have likely seen notable volatility or disruption as a consequence of social distancing and public health mandates. Occupations with middling human-proximity needs, such as Advertising Agents and Real Estate Agents, are classified as Tier 2 and have likely seen some volatility and disruption but remain largely unchanged. Tier 1 jobs, ranging from Graphic Designers to Loggers, are occupations with the lowest need for physical proximity to others. These jobs have been least affected by social distancing requirements.

The Central Coast Region has a relatively high concentration of jobs that have likely been most impacted by social distancing and public health requirements. Four in 10 jobs fall under the category that is most impacted by social distancing requirements (Figure 16). While this is harmful in the short-term, this also suggests that as the virus is increasingly contained, these jobs will be less susceptible to the disruption they have faced.

Figure 16. Job Volatility Due to Social Distancing Requirements





EMPLOYMENT ANALYSIS

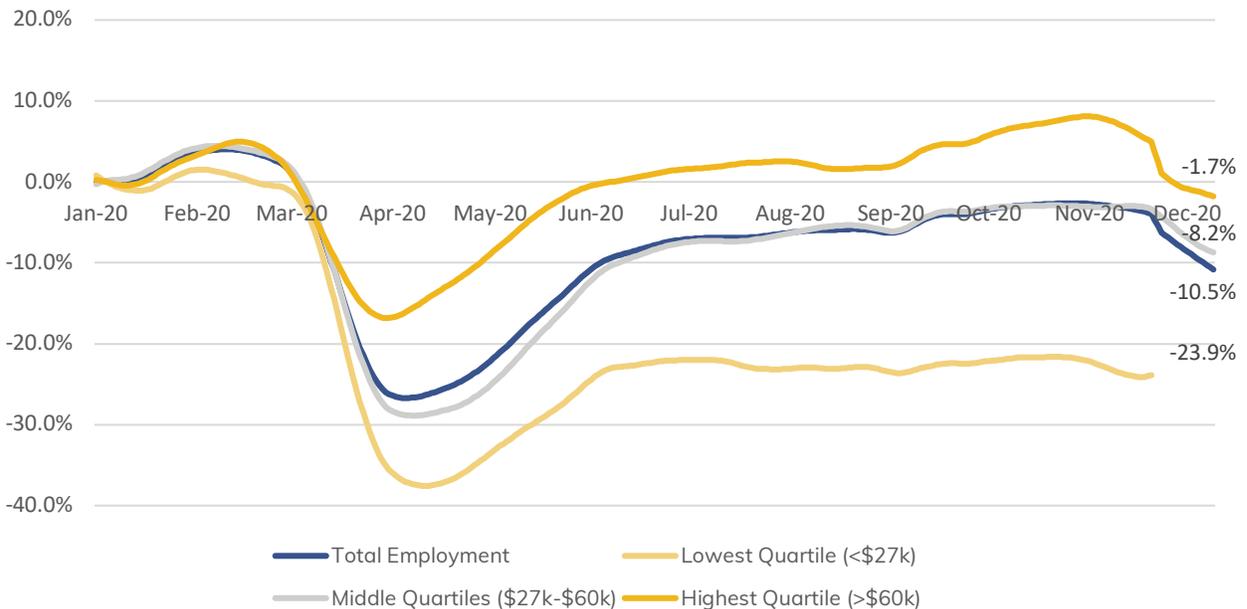
EMPLOYMENT ANALYSIS

This section looks at the effects of COVID-19 at the workforce level. Examining changes and characteristics that preceded the pandemic on the supply side reveals specific challenges that the workforce has and provides insight into challenges employers have as they look for talent in the region.

COVID-19 CHANGES IN EMPLOYMENT

The lowest-earning workers in the region have borne the brunt of the pandemic, while the highest-earning workers have actually seen the labor market grow over the course of the pandemic. Workers in the lowest-earning quartile (those earning less than \$27,000 per year) have seen jobs decrease by nearly a quarter (24%). Conversely, workers in the highest-earning quartile (those making more than \$60,000 per year) have seen the number of jobs recover to pre-pandemic rates (Figure 17). The two median quartiles of workers have seen jobs decrease by 8% or more, a substantial figure by any pre-COVID-19 measure.

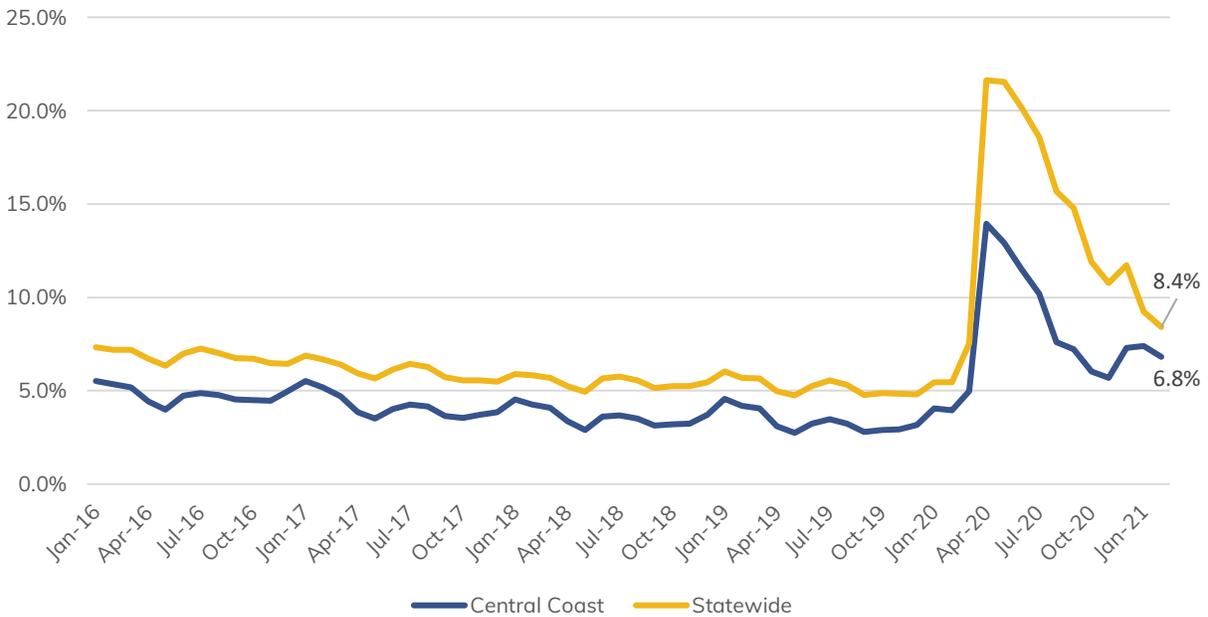
Figure 17. Change in Employment by Income Quartiles¹⁹



¹⁹ "Tracking the Recovery." Opportunity Insights.

Though unemployment in the Central Coast Region has declined by nearly half from its peak in April, the region still faces an unemployment rate of roughly 7% as of February 2021. In fact, the February 2021 unemployment rate (6.8%) is more than 70% higher than the unemployment rate one year prior in February 2020 (4.0%) (Figure 18). This means more than 23,500 residents are out of work.

Figure 18. Unemployment Rate (2016-2020)²⁰



“We’ve heard about a lot of hardship around hiring. Of those who are hiring, many of the hotels and restaurants are having trouble finding employees for their \$15-\$19 per hour jobs. Some employers are planning to fill in for the shifts that staff do not want, offer more working hours, or offer more money.”

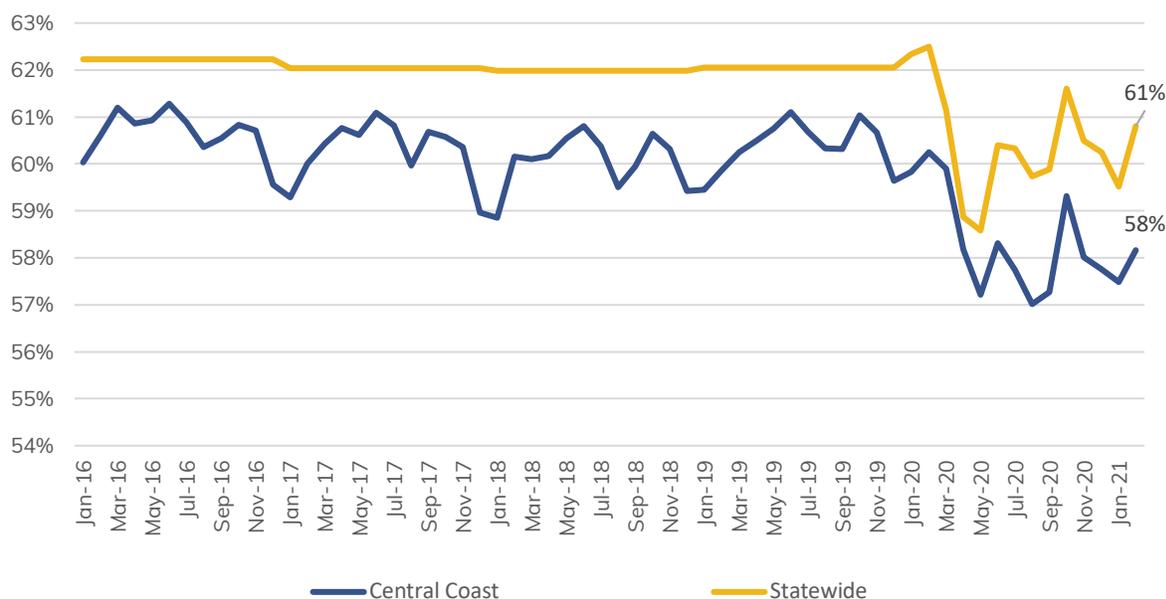
Erica Crawford, President and CEO of Morro Bay Chamber of Commerce

Unemployment and declines in jobs only tell part of the story. The labor force participation in the Central Coast Region has also declined considerably over the course of the pandemic. The labor force participation rate declined 2 percentage points since the start of the pandemic, suggesting roughly 10,000 workers in the Central Coast Region have left the workforce and are no longer seeking work. This sizable change in the labor force may have drastic impacts on the regional economy, particularly considering

²⁰ California Employment Development Department

the Central Coast is already facing severe unemployment and an aging workforce. The economic impacts alone of such a shift are tremendous considering that the loss of these workers equates to 10,000 fewer workers producing goods and services, 10,000 fewer incomes in the region, and roughly 10,000 households with decreased appetite for regional economic goods. Furthermore, as the Great Recession demonstrated, getting these workers back into the workforce may take a substantial amount of time. Seeking to bring these workers back—whether through increased access to childcare or easing employment transitions—will be essential to the region’s long term economic prospects.

Figure 19. Change in Labor Force Participation²¹



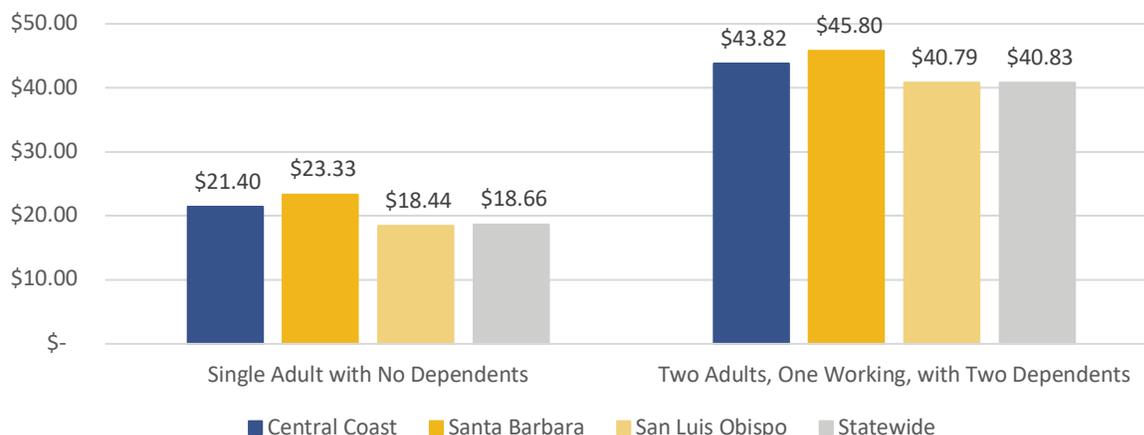
JOB QUALITY

Employment growth can bring little benefit to a region if the jobs are low-quality. This is particularly true in a region—such as the Central Coast Region—that has a high cost of living. To account for regional costs of living it is important to look at living wages. Living wages are similar in concept to the poverty line, but include regionally specific costs such as housing, insurance and childcare. This provides a clearer picture into the true cost of living in a region and the economic well-being of its residents.

²¹ California Employment Development Department

Figure 20 highlights the relatively high cost of living in the Central Coast Region according to the M.I.T. Living Wage Calculator.²² For a single adult with no dependents, the living wage in the Central Coast Region is \$21.40 an hour. For a family of four and one working parent, the hourly rate doubles to \$43.82 an hour. These metrics are important to consider when discussing jobs and job quality in the region. If residents cannot afford to live in the region off the wages that employers provide, employers will face challenges finding and retaining talent.

Figure 20. Hourly Living Wages²³



Job quality is an important measure of a region’s labor market. A region may have a lot of jobs, but if most of those jobs are paying low wages and require relatively little skill and education, the regional workforce and economy are likely to suffer. BW Research examined wage data from the Bureau of Labor Statistics’ Occupational Employment Statistics (OES) to determine job quality. Occupations within 3-digit NAICS industries were assigned tiers based on median annual earnings. Looking at occupations within specific industries allows for differentiation between occupations across industries. This captures the difference between, for example, a medical equipment sales representative and a clothing retail sales representative. Since wages are strongly correlated with a job’s skill, education and experience requirements, wages provide an intuitive metric to assess job quality.

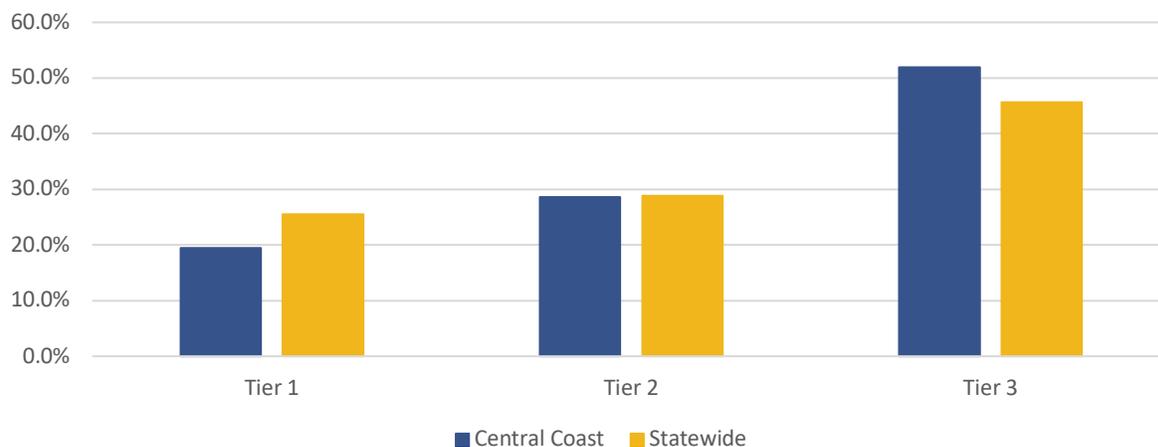
²² <https://livingwage.mit.edu/>

²³ M.I.T. Living Wage Calculator.

Tier 1 Occupations	Tier 2 Occupations	Tier 3 Occupations
<p>Tier 1 occupations are typically the highest-paying, highest-skilled occupations in the economy. This occupational category includes positions such as managers (e.g., Chief Executives and Sales Managers), professional positions (e.g., Lawyers and Physicians), and highly skilled technology occupations, such as Scientists, Engineers and Software Developers.</p>	<p>Tier 2 occupations are typically the middle-skill, middle-wage occupations. This occupational category includes positions such as technicians, teachers, office and administrative positions (e.g., Accounting Clerks and Secretaries), and manufacturing, operations, and production positions (e.g., Assemblers, Electricians, and Machinists).</p>	<p>Tier 3 occupations are typically the lowest-paying, lowest-skilled occupations that have historically provided the largest portion of employment in the region. These occupations include positions such as security guards, food service and retail positions, building and grounds cleaning positions (e.g., Janitors), and personal care positions (e.g., Home Health Aides and Child Care Workers).</p>

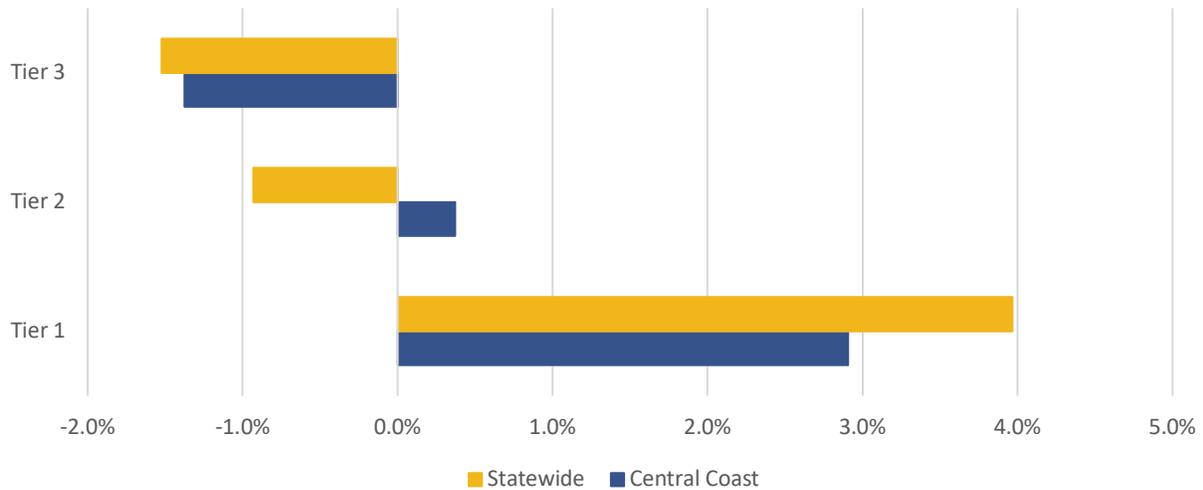
The Central Coast Region has a relatively high concentration of lower-paying, lower-skilled occupations (Tier 3 occupations). Fifty-two percent of jobs in the Central Coast Region fall under this category. The Central Coast Region also has a relatively low proportion of Tier 1 jobs, or those that are generally the highest-paying and highest-skilled jobs (Figure 21).

Figure 21. Job Quality



The Central Coast Region has made progress in job quality. Between 2014 and 2019, the proportion of Tier 1 and Tier 2 jobs increased, while the share of Tier 3 jobs declined. It is worth noting that this trend occurred statewide as well, and in greater amplitude (Figure 22).

Figure 22. Change in Job Quality (2014-2019)

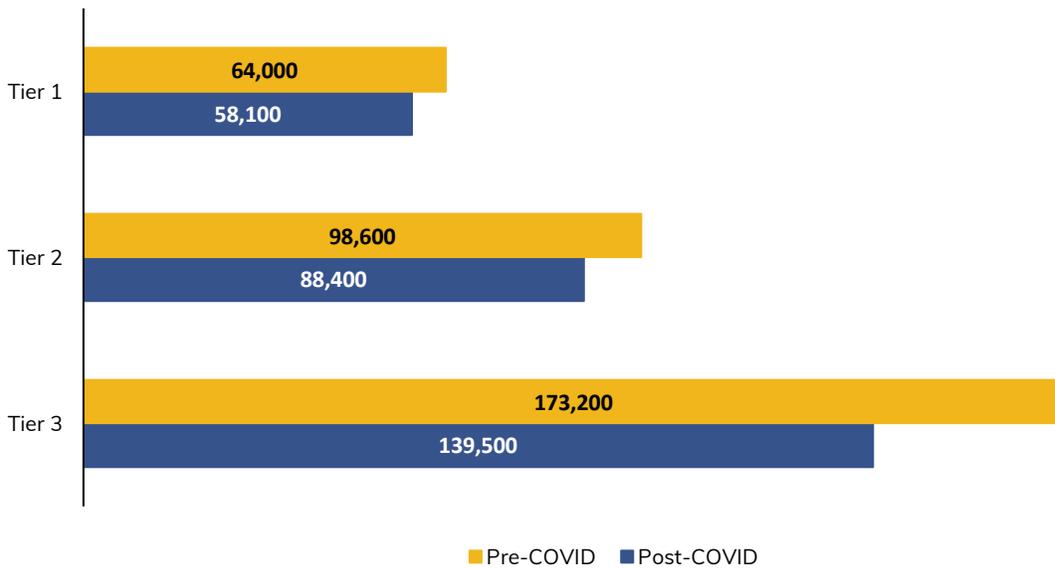


“The region’s biggest challenge is the ‘k-shaped’ recovery. How can we provide an equitable recovery to help those who have been most battered in this storm, and how can we help get them back to an even better position than before the pandemic?”

Kevin Walthers, President of Allan Hancock College

Tier 3 has lost nearly twice as many jobs as Tier 1 and Tier 2 combined. Job losses among Tier 3 occupations account for two-thirds (68%) of all jobs lost in the Central Coast Region (Figure 23). These workers are the least likely to have substantial savings to fall back on should they lose their job.

Figure 23. COVID-19 Changes in Employment by Job Quality

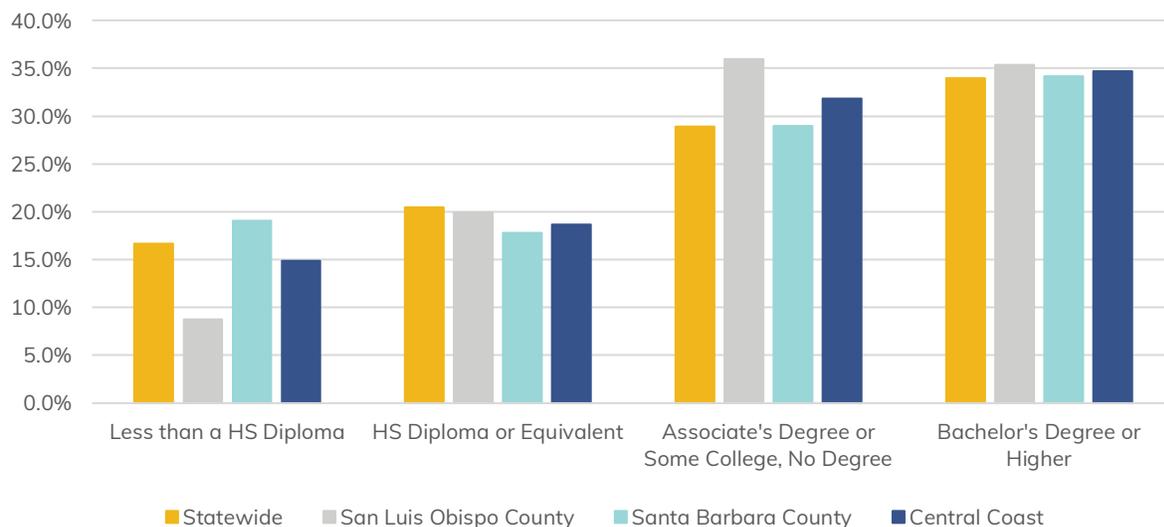


THE UNDERLYING WORKFORCE

This section examines some of the conditions and labor market characteristics that existed before the pandemic. These population and workforce characteristics will be essential to recovery efforts and ensuring that regional businesses can access the talent they need.

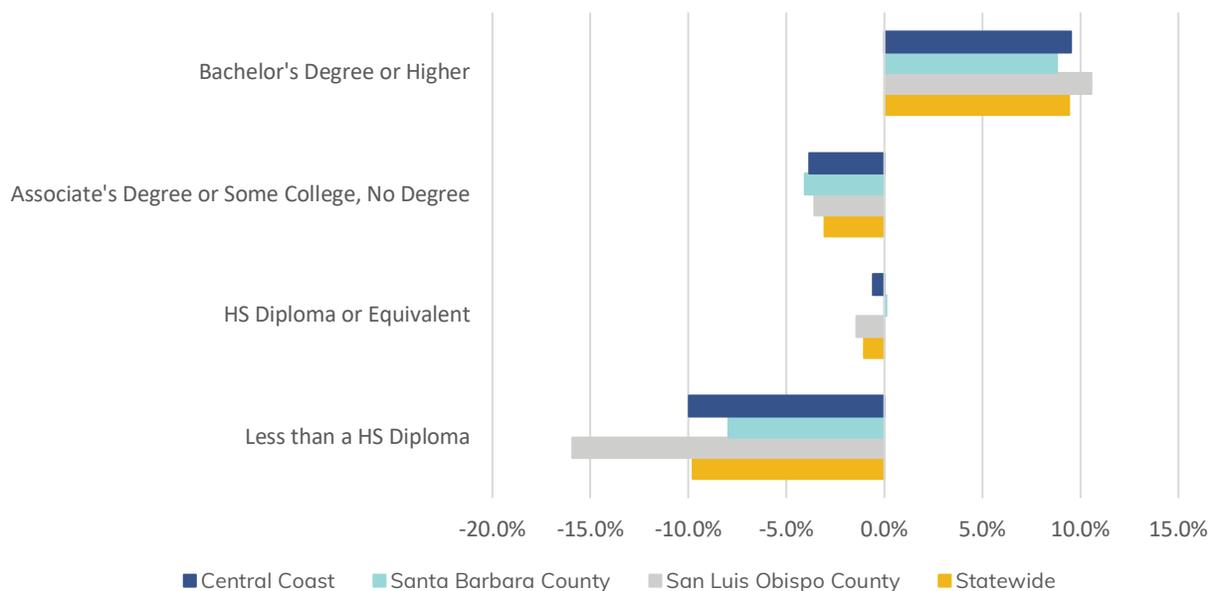
The Central Coast Region has a better-educated population than the state. Two-thirds (67%) of the Central Coast Region’s population has more than a high school diploma, compared to 63% statewide. Within the Central Coast Region, the population in San Luis Obispo County tends to have higher educational attainment rates than Santa Barbara County (Figure 24).

Figure 24. Educational Attainment of Residents 25 Years and Older²⁴



Between 2014 and 2019, the Central Coast Region population has become better-educated, decreasing the share of residents without a high school diploma while increasing the number of residents with a Bachelor’s degree or higher. This trend was similarly observed across the broader state (Figure 25).

Figure 25. Change in Educational Attainment (2014-2019)²⁵

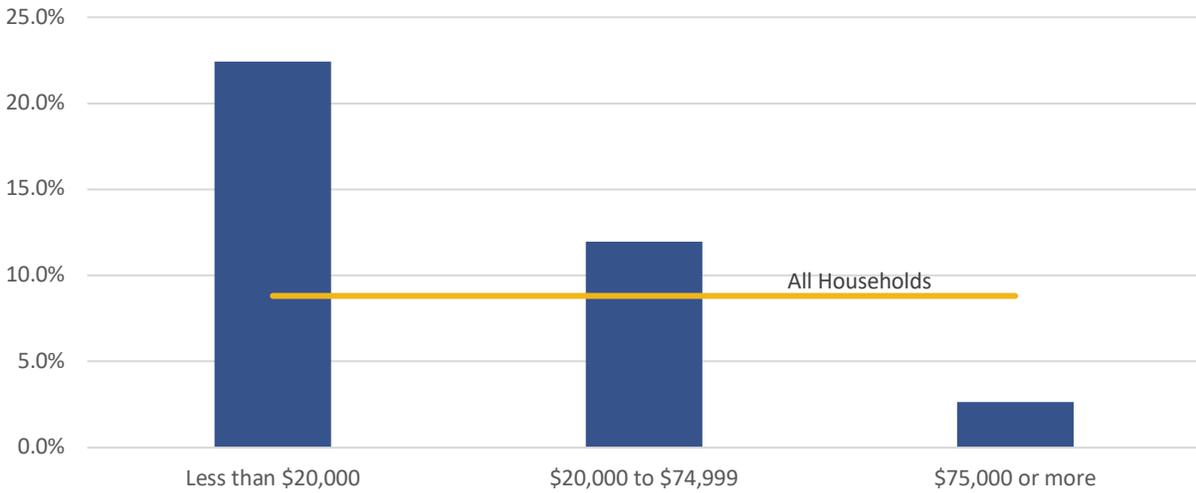


²⁴ U.S. Census Bureau, 2014-2019 American Community Survey 5-Year Estimates.

²⁵ U.S. Census Bureau, 2014-2019 American Community Survey 5-Year Estimates.

Internet access is much less common among lower-income households. While about 9% of households in the Central Coast Region do not have internet access, more than one-in-five households (22%) with incomes lower than \$20,000 per year do not have internet access (Figure 26). As internet access becomes increasingly important to work and everyday life, it will be evermore important to make sure that internet is available to residents across the region.

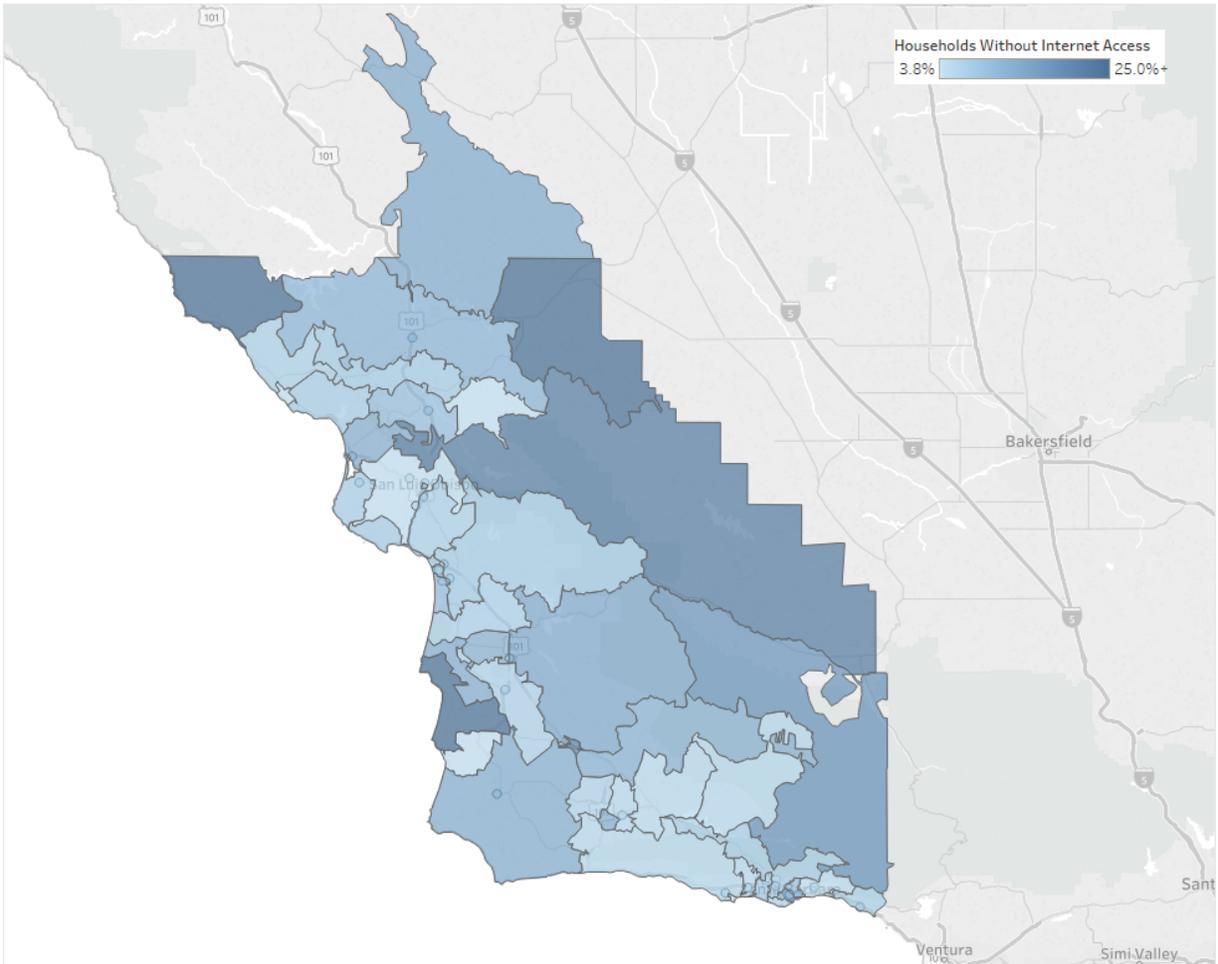
Figure 26. No Internet Access and Annual Household Income²⁶



²⁶ U.S. Census Bureau, 2014-2019 American Community Survey 5-Year Estimates.

Lack of internet access among households is also geographically concentrated. Figure 27 highlights that more rural and eastward zip codes tend to have higher rates of households lacking internet access.

Figure 27. Share of Households Without Internet Access (2019)²⁷

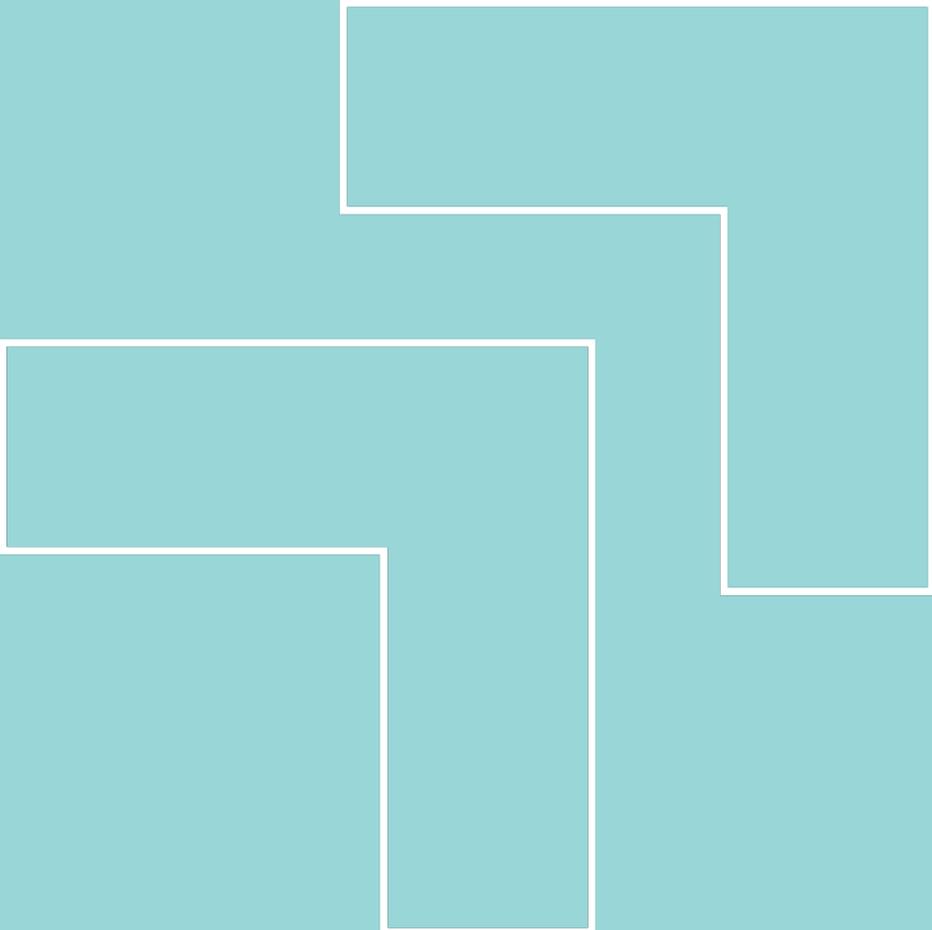


“Fostering public-private partnerships will be essential for long-term recovery. I don’t think either sector can go it alone.”

Jim Brescia, San Luis Obispo County Superintendent of Schools

²⁷ U.S. Census Bureau, 2014-2019 American Community Survey 5-Year Estimates.

**CENTRAL COAST
REGIONAL RECOVERY**



CENTRAL COAST REGIONAL RECOVERY

This section highlights several themes that will have substantial impact on the speed, shape and outcomes of the recovery in the Central Coast Region.

THE FUTURE OF REMOTE WORK

Remote work, at least in some capacity, is here to stay. Remote work has become a staple of everyday life for millions of Americans over the course of the pandemic. Thousands have even started new jobs entirely remotely, never having met their coworkers in person. As vaccinations

“Most of our team can work from anywhere, which was originally good because it meant we could still move forward through the pandemic. However, the small conversations and hallway talk that make integration easier and inspire creative solutions is where remote life fails.”

**Dominick Barry, President and COO of
Quintron Systems, Inc.**

increase and COVID-19 cases subside, employers and employees are questioning when, or if, they will return to the office. The research team spoke with a dozen employers and leads across San Luis Obispo and Santa Barbara Counties to get a better understanding of what the future of work—and those endless Zoom calls—might look like.

A vast majority of employers reported a transition to a flexible workforce. For employees capable of

working remotely, many employers stated that a mixed and flexible schedule of in-office and remote work would be the plan moving forward. Having demonstrated that remote work was a feasible option, it would be difficult—and unpopular among employees—to completely return to a 40-hours a week in-office schedule. In an environment where securing and retaining top talent is very competitive, many employers see flexible working schedules as a necessary benefit. Employers also noted, however, the importance of face-to-face interactions, which are fundamental to the creative and innovation process. As one employer noted, fully remote employees may face different career trajectories; a fully remote employee is “out of sight and out of mind, and therefore less likely to be staffed on new projects that could lead to promotions.” Flexible scheduling allows for the best of both worlds; happy employees able to work remotely when they need to without sacrificing office camaraderie and creativity that helps a business flourish.

Under these conditions, the demand for commercial real estate may decline slightly, but not nearly as significantly as in a fully-remote world. Employers switching to a more flexible work schedule

stated they would either be remaining at their current location or leasing a new, slightly smaller, location. Flexible work environments will require a rethinking of business operations and office organizations.

GROWTH OF INNOVATION

Innovation is a growing factor in the Central Coast economy. Preliminary data suggest that new business formation in the Central Coast Region will hit a historical high point. Venture capital funding paints an even more optimistic picture. In 2020, startups in the Central Coast Region attracted more than \$720 million in venture capital, a 32% increase from 2015 levels (Figure 7). Furthermore, these ventures span a range of sectors and industries, including Medical Devices, Internet of Things, Manufacturing, Finance, and AgTech. AgTech in particular is a niche sector in which the Central Coast Region is well-positioned to foster a competitive advantage.

There are two important considerations for the future of the innovation economy in the Central Coast Region. First, Santa Barbara County is currently the site of most of these startups and their funding. Region-wide initiatives may help spread this activity into San Luis Obispo County. Second, retaining these companies as they grow, and in many cases become acquired, will be important. The growing prominence of a remote and disbursed workforce mean that the pull of Silicon Valley may no longer be as strong as it once was. Presenting the Central Coast Region as an innovation hub that is still in close proximity to the Bay Area may help attract and retain top talent in the innovation space.

KEY INDUSTRY CLUSTERS

There are three main industry clusters that show strong growth in the Central Coast Region and will be instrumental in the recovery process. Each of these three industries is analyzed below.

HEALTHCARE

Even before the pandemic, healthcare played a prominent role in the Central Coast economy. This role has only been solidified, as the region gets older and quality healthcare is top of mind. Healthcare is a cornerstone industry cluster for several reasons. First, it accounts for more than one in 10 (12%) of all jobs in the Central Coast Region. The industry cluster also offers a range of strong career pathways and earning potential, with average annual earnings just shy of \$70,000. The roughly 10% decline over the course of the pandemic was largely due to a decline in elective procedures. As the rate of vaccinations increases and people are willing and able to carry out their elective procedures, this employment should quickly rebound.

BUILDING AND DESIGN

The Building and Design industry cluster is also primed for a quick recovery. A housing market with demand that far exceeds supply, historically low interest rates and the announcement of the Biden Administration's infrastructure plan provide substantial tailwinds to the industry cluster. The possibility of greater remote work also makes it likely that the region will see an influx of

professionals who can work remotely and are looking for a location that can provide a higher quality of life. The Building and Design industry cluster also offers a substantial number of career pathways for a wide variety of workers with a range of educational attainment. The industry cluster offers attractive compensation with annual average earnings of \$79,100.

INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)

While the technology industry cluster in the Central Coast Region is still relatively small (roughly 8,400 jobs in February 2020), the industry has been relatively resilient to pandemic-induced changes and offers the highest average earnings of any industry cluster at \$143,200 per year on average. While many roles within the ICT industry cluster require a 4-year or advanced degree, there are many technology jobs in and outside the industry cluster that do not require these levels of education. In fact, there are more than 5,100 technology jobs in the Central Coast Region that are not within the tech industry.

DEFENSE, AEROSPACE, AND TRANSPORTATION MANUFACTURING (DATM)

DATM is a small but growing industry cluster in the Central Coast Region. The industry cluster is centered around Vandenberg Air Force Base, soon to be Vandenberg Space Force Base. The name is not all that is changing around this industry. In fall of 2020, REACH unveiled an initiative to support the space industry and a regional space-related value chain of ancillary businesses. As one of few regions in the U.S. well-positioned for the impending blossom of the space industry, the Central Coast Region is poised to see substantial future growth in DATM.

STRONG RETURN OF TOURISM, HOSPITALITY, AND RECREATION

Tourism, Hospitality, and Recreation was the hardest-hit industry cluster in the Central Coast Region. At the height of the pandemic, 68% of the workers in this industry cluster had lost their jobs. Now, the industry shows several indicators for a strong recovery. First, as vaccinations increase and the public feels safer to travel, pent-up demand will likely drive many to vacation. The travel in 2021 will likely look different than previous years, with less international travel and more travel within the country. Nestled along the historic California coast and surrounded by numerous parks and landmarks, the Central Coast Region is relatively well positioned for change. Disposable incomes nationally are also primed for spending: disposable income was nearly 6% greater in 2020 than 2019 and 8% greater than 2018.²⁸ Hiring for positions in Tourism, Hospitality, and Recreation is already picking up; after a near 70% decline in new job postings, Leisure and Hospitality businesses are now—as of the first week of April—posting more new job postings than they were before the pandemic (Figure 5). Furthermore, Central Coast residents are now spending only 13% less time at Retail and Recreation locations, compared to 40% less time observed in late January 2021 (Figure 1).

²⁸ Table 2.1 Personal Income and Its Disposition. Bureau of Economic Analysis. Last revised March 25, 2021. [Bea.gov](https://www.bea.gov)

HOUSING

The lack of affordable housing continues to be a headwind for the region. Employers were quick to note that a lack of affordable housing was the driving force behind most of their hiring challenges, as the wages they're able to offer cannot allow workers to live in the region. Several disrupting factors wrought by the pandemic will likely flow into the housing market. The increase in remote work may drive a notable number of fully remote workers into the region. Another side effect of remote work may be diminished interest in commercial office space. While most employers seem to be keeping some in-person presence, a partially remote workforce will likely have some erosive effects on the demand for commercial space. Any unused commercial space presents opportunity to be rezoned and transformed into residential housing. Such a solution would introduce more residential housing while alleviating any excess supply of commercial space.

ECONOMIC RECOVERY IN THE CENTRAL COAST

No single datapoint in this report tells the entire story of the economic landscape in the Central Coast, but the collection of metrics and stakeholder insights provides a mosaic of the local economy in the age of the COVID-19 pandemic. Through data and discussion highlighting key aspects of the economic downturn and subsequent beginnings of the recovery, this report highlights several key challenges and opportunities for the region. Some datapoints, such as the substantial loss of jobs and declines in labor force participation, highlight considerable challenges as the region seeks to bounce back. Other metrics, such as the return of consumer spending and the recent rise in job postings, highlight a recovery that is already be underway. REACH and its partners within the region are uniquely positioned to leverage some of the opportunities outlined in this report to help ensure that recovery efforts are targeted to populations that were hit hardest by the pandemic and transition the Central Coast onto a new economic trajectory that is even stronger than the one it was on before the appearance of COVID-19.

APPENDIX A: RESEARCH METHODOLOGY

Population and demographic figures at the zip code and county level were obtained from the U.S. Census Bureau, 2014-2019 American Community Survey 5-Year Estimates.

BW Research utilized EMSI for employment and regional education completion figures. EMSI updates data quarterly. The 2020.4 dataset was used for this report.

To capture the most up-to-date data available on the impacts of the COVID-19 pandemic, BW Research drew from a range of data sources. Employment and unemployment claims data were collected from the California Employment Development Department, and business loan data was retrieved from the U.S. Department of the Treasury. Another substantial source of COVID-19 impact data was retrieved from Opportunity Insights, a team of researchers at Harvard University led by Raj Chetty. The Opportunity Insights data is compiled from a range of private sources, which provide a near real-time picture of national and local economies. For more information about the Opportunity Insights data and methodology, please visit <https://www.tracktherecovery.org/>.