



SONOMA COUNTY ECONOMIC RECOVERY ACTION PLAN

COVID-19

2020



A WHOLE COMMUNITY APPROACH

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FOREWARD

It is our honor to present this Economic Recovery Action Plan to the Sonoma County Board of Supervisors. We are grateful that over 500 community members invested their time to share their insights to enable us to craft 13 strategies that will help to lead to our recovery not only through this global pandemic, but from our recent fires and any future disasters that we may face.

We would like to thank the individuals who participated on our Steering Committee to help guide the design of our plan. We are also grateful for the people who served on our three work groups: Business Recovery, Workforce Recovery, and Community Recovery. The work group members helped us design the key actions and tactics included in this plan. Please take a moment to see the names of those we invited to join our Steering Committee and three workgroups in the appendix.

We are especially grateful to the community members who took the time to complete our online survey and participate in our two listening sessions. The survey responses and listening session input helped shape the priorities included in the plan and provided direction for specific actions and tactics we need to take on our path to recovery. We'd also like to thank local childcare experts who provided us with current statistics on the childcare crisis we are facing.

This report would not have been possible without the leadership of our project managers, Ethan Brown, EDB Director of Business Development, and John Kessel, ORR Recovery and Resiliency Coordinator, and Dr. B.J. Bischoff and Sarah Stierch of Bischoff Consulting. We would also like to thank the project team, comprised of staff from the EDB, the County Administrator's Office, and the Office of Equity. We're appreciative of the translation and interpretation services provided by Ricardo Ibarra of Watza Labs and the expert listening session facilitation provided by Melissa Valle, Communications & Engagement Coordinator for the county.

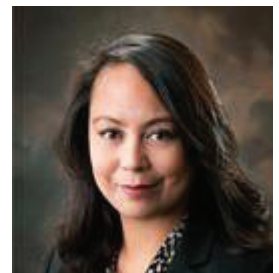
We now look to all members of our Sonoma County community to help us implement this Economic Recovery Action Plan. For us to successfully recover from this pandemic and other disasters and disruptions, we all need to work together to implement the key actions and tactics included in the plan. As you review the plan and find that certain tactics resonate with you and that you want to be a part of a team that helps to make those tactics happen, please contact us at EconRecovery@sonoma-county.org. We would welcome your help and dedication to our county's economic and community recovery.

We look forward to partnering with our county's businesses, professional associations, educational institutions, community- and faith-based organizations, and members of the community to implement this Economic Recovery Action Plan. Together, we will recover and build an economy that's stronger than ever.



Sheba Person-Whitley
Executive Director
Sonoma County Economic Development Board

Christel Querijero
Deputy County Administrator
County of Sonoma



EXECUTIVE SUMMARY

In May 2020, during the midst of the COVID-19 global pandemic, the Sonoma County Board of Supervisors asked the Sonoma County Economic Development Board (EDB) and the Sonoma County Office of Recovery and Resiliency (ORR) to collaborate to develop an Economic Recovery Action Plan, with broad based community input. The initial impetus of the plan was to present guidance for Sonoma County's economic recovery from the pandemic. During the development of this plan, disaster struck the county again, in the form of the Glass, Walbridge, and Meyers fires. As a result, community leaders recommended for this plan to guide the county's recovery not only from the coronavirus, but from current and future disasters.

This Economic Recovery Action Plan aligns with Sonoma County's Recovery and Resiliency Framework, developed by the county's Office of Recovery and Resiliency (ORR) as a roadmap for recovery from the 2017 Sonoma Complex Fires. The plan also supports and reinforces major actions included in Strategic Sonoma, a 2018 economic strategy approved by the Board of Supervisors after the 2017 Sonoma Complex Fires. Both ORR and EDB implemented a Whole Community approach in developing these plans to establish a vision for Sonoma County of a healthy economy, an inclusive recovery, and a resilient community. The Whole Community approach drove the development of this action plan, as well, resulting in 13 strategies, with key actions and tactics that support the framework's vision for disaster recovery and community resiliency. To successfully implement these 13 strategies over a 5-year period, the County of Sonoma will continue this Whole Community approach by partnering with many businesses, professional associations, educational institutions, community- and faith-based organizations, and the general public.

Between June and October 2020, the EDB and ORR reached out to leaders of businesses, government agencies, professional associations, educational institutions, community- and faith-based organizations, and the general public to obtain input on what needs to happen in Sonoma County to achieve an economic recovery after enduring the impacts of COVID-19 and other disasters. This plan reflects the feedback we received from 500 community members regarding ways that our businesses, workforce, and community can recover and become resilient.

To guide the development of this plan, EDB and ORR assembled a Steering Committee, comprised of business and community leaders from throughout Sonoma County. Three work groups informed the work of the Steering Committee. Work groups included Business Recovery, comprised of business leaders knowledgeable about current business needs; Workforce Recovery, comprised of business, nonprofit, and education leaders knowledgeable about workforce development needs and solutions; and Community Recovery, comprised of community-based leaders who understand the community's recovery needs. After the work groups and steering committee developed the basic framework of the plan, with 13 priority strategies, EDB and ORR turned to the broader community for ideas on how to implement these strategies. We conducted two 60-minute listening sessions in Spanish and English via Zoom Webinar and Facebook Live. The team also developed an online survey in both English and Spanish, designed to obtain input from the business community, primarily, and any other members of the community, as well.

EXECUTIVE SUMMARY

The Economic Recovery Action Plan includes the following 13 strategies, organized in three categories: business recovery, workforce recovery, and community recovery:

Business Recovery

1. Make funding, equipment, and facilities easily accessible to businesses.
2. Provide innovative regulations and temporary laws (called urgency ordinances) to keep businesses operational.
3. Support hardest-hit business sectors, while increasing economic diversification throughout the county.
4. Ensure that businesses are prepared for future disasters.

Workforce Recovery

1. Provide creative solutions to enable the county's childcare industry to thrive.
2. Provide workforce re-skilling and training opportunities.
3. Retain and attract Sonoma County's workforce.
4. Ensure that social safety net services are available to help the most vulnerable residents meet their basic needs.

Community Recovery

1. Serve the access and functional needs of local community members, including individuals with disabilities, older adults, children, individuals from diverse cultures, and people with limited English proficiency.
2. Address housing and transportation needs.
3. Expand broadband infrastructure and services to increase internet access.
4. Leverage the creative power of our community, including artists, cultural workers, and their organizations, to develop and implement innovative solutions for our recovery.
5. Address climate and energy impacts.

SHORT-TERM KEY ACTIONS

Number	Key Action
	Business Recovery
1.1	Establish a program to provide emergency stabilization funding, with a special focus on assisting greatly impacted underrepresented populations.
1.2	Work with banks, credit unions, Community Development Financial Institutions (CDFIs), and nonprofit organizations to increase access to capital for small businesses.
2.1	Expedite discretionary permits and structurally address the impact of regulations established by the county.
2.2	Establish small industry-sector work groups to identify specific regulations that could be temporarily suspended because they are barriers for recovery.
3.1	Provide businesses in target clusters hardest hit by disasters, specifically hospitality & recreation and agriculture & food, with the immediate support they need to remain operational.
3.2	Prepare businesses, especially those owned by people from underrepresented communities, for current conditions and future opportunities by helping them adopt new technologies, use eCommerce tools to sell products online, expand marketing, and upskill/reskill workers.
3.3	Continue to offer and market financing and entrepreneurial support programs to help existing businesses adopt new technologies, diversify products and services, expand markets, and provide critical products to strengthen our local supply chain
3.4	Communicate with one reliable voice during disasters and disruptions, ensuring that all communication is presented in culturally responsive ways so that all community residents remain informed.
	Workforce Recovery
5.1	Stabilize Sonoma County's childcare industry to enable childcare providers to remain open, especially during disasters and disruptions.
6.1	Actively communicate with county residents who have lost jobs and businesses, especially those from vulnerable populations, about the availability of JobLink and other public programs.
7.3	Implement short-term strategies to make Sonoma County a more attractive and competitive place to live, work, and play.
8.1	Ensure that community members know how to access the comprehensive safety net services provided by multiple government agencies, nonprofit and faith-based organizations, and educational institutions throughout the county.
8.3	Develop a dedicated fund to support community residents who are unable to access existing safety net programs.
	Community Recovery
9.3	Ensure that all county residents have food and nutrition security.
10.1	Explore options that provide rental support structures and assistance, including prioritizing the use of federal funds to keep people in their homes
11.1	Explore municipal broadband and ways for the county, cities, and other entities to deploy publicly managed infrastructure and services into unserved communities.
11.2	Support internet service providers' broadband deployment projects by assisting with project design development, data collection, grant writing, streamlined permitting, community support, public-private-partnerships, and more.
11.3	Advocate for state and federal broadband legislation that promotes regional broadband goals as well as economic development, recovery, and resiliency.

BACKGROUND: CONTEXT FOR DISASTER RECOVERY PLANNING

In May 2020, during the midst of the international COVID-19 pandemic, the Sonoma County Board of Supervisors charged the county's Economic Development Board (EDB) and the Office of Recovery and Resilience (ORR) with collaborating to obtain community input on strategies for the county's economic recovery from COVID-19 and other disasters the county will likely encounter in the future. The following background information serves as the context for why recovery planning is critical to the county's economic future.

Unlike other natural disasters, a serious pandemic may last for months (or even years) and occur in several waves of infection. Response and recovery activities may be occurring simultaneously. Additionally, transiting from response to recovery to resiliency may be an on-going effort over many months or years.

During the preliminary health orders issued by the County and State, Sonoma County's Economic Development Board (EDB) quickly implemented the SoCo Launch program. The EDB team partnered with local business sectors, economic development partners and the Department of Public Health to develop mitigation strategies to help reopen local businesses as quickly and safely as possible. These strategies are available to businesses in English and Spanish on the SoCo Launch webpage.

The EDB webpage strategies are in alignment with those of several local efforts to catalyze this work. With the collaboration of local industry stakeholders and the County Department of Health Services, EDB was able to develop comprehensive, yet concise virus mitigation strategies for use in each of our respective local industry operational settings. Also included on this page are required California State Guidance and all provisions of the State Stay at Home Order and related guidance.

COVID-19 PANDEMIC TIMELINE

March 4, 2020

At approximately 10:00 A.M., the Sonoma County Health Officer declared the existence of a local health emergency and the Director of Emergency Services proclaimed the existence of a local emergency due to the potential introduction of COVID-19 into the County of Sonoma/Sonoma County Operational Area. The Director-issued emergency activated the County's Operational Area Emergency Operations Center (EOC) to coordinate the County's response.

March 13, 2020

The President of the United States declared the COVID-19 outbreak a national emergency.

April 1, 2020

The Shelter-in-Place order was extended to May 3, 2020. This order was intended to "flatten the curve" and help stabilize the medical provider system. This order's additional consequences include loss of income, loss of some normal outlets for food consumption, and may contribute to food insecurity at new levels in the County.

December 2019

A novel coronavirus, COVID-19, was first detected in Wuhan City, Hubei Province, China. Symptoms of COVID-19 include fever, cough, and shortness of breath; outcomes have ranged from mild to severe illness, and in some cases death.

March 4, 2020

A Resolution ratifying the Proclamation of a local emergency was adopted by the Sonoma County Board of Supervisors. In addition, Governor Gavin Newsom issued a statewide emergency declaration.

March 17, 2020

The Sonoma County Health Officer issued a shelter in place order.

October 5, 2020

Sonoma County has had 7,940 total cases, representing 1.56% of the county's population. Of those cases, 1,410 are active, 6,408 have recovered, and 122 have died. A total of 177,913 tests have been performed, with 4% positive results. Of those infected with the coronavirus, 54% of Sonoma County's cases are Latinx; 16% are white, non-Latinx; 25% are from unknown races/ethnicities, and the remaining 5% are from all other races combined. It is important to note the disparity in that the Latinx population represents 25.6% of the total county population, and 54% of the positive cases countywide. The county's total population comprises 64.2% white, non-Latinx individuals, but represents only 16% of those infected with the virus. (<https://socoemergency.org/emergency/novel-coronavirus/coronavirus-cases/>)

BACKGROUND: CONTEXT FOR DISASTER RECOVERY PLANNING

COVID-19: Economic Impact

As a result of COVID-19 job losses, **Sonoma County's unemployment rate peaked at 14.5% in April 2020**. The rate decreased to 12.7% in May 2020. By August 2020, the unemployment rate in Sonoma County was 7.7%, down from a revised 10% percent in July 2020, and above the year-ago estimate of 2.7%. This data compares with an unadjusted unemployment rate of 1.6% for California and 8.5% percent for the US during the same period.

The May 16, 2020 Sonoma County report of initial unemployment insurance claims (UI) and initial pandemic unemployment assistance claims (PUA) showed a continued increase in new unemployment claims since the Shelter in Place order was made on March 17, 2020. **As of September 2020, a total of 127,568 initial UI claims have been made in Sonoma County since the Shelter in Place order.** Additionally, the California Employment Development Department September 2020 Monthly Labor Force Data for Counties reports the Labor Force in Sonoma County at 248,678.

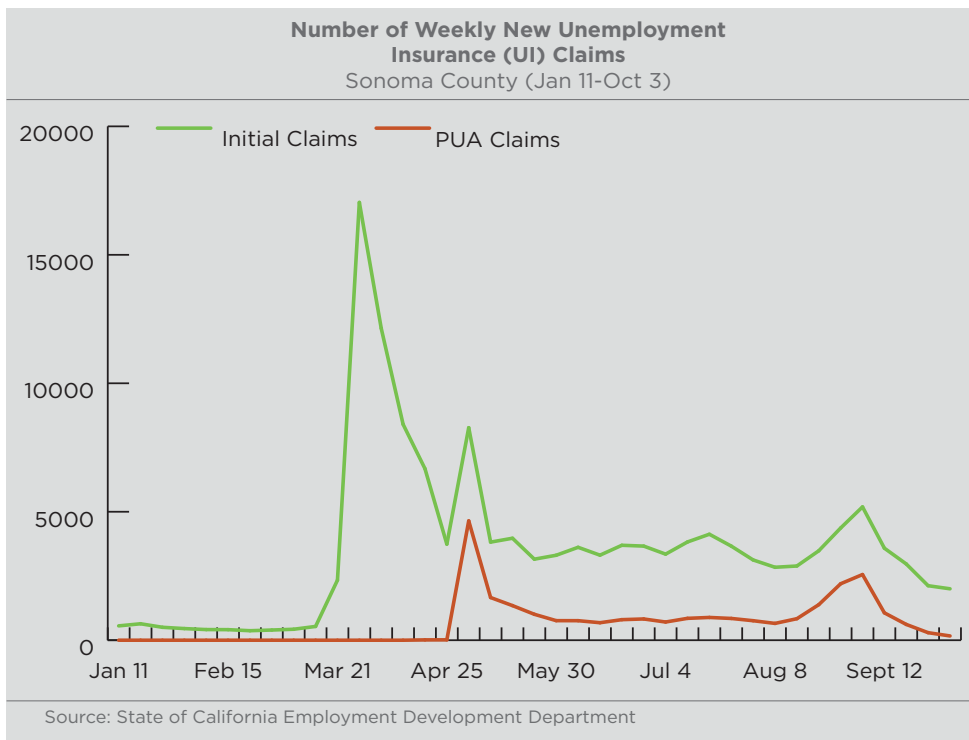
CalFresh (food stamps) application rates since the Shelter in Place order on March 17, 2020 have increased in Sonoma County. The total CalFresh applications since Shelter in Place is 5,735 new applications, representing an increase of 21.45% since pre-Shelter in Place.



5,735
New CalFresh
Applications

As a way to gain a comprehensive understanding of the impact of the coronavirus on the local economy, the EDB commissioned Dr. Robert Eyler, Sonoma State University Professor of Economics, to develop a report detailing the impacts of COVID-19 on the Sonoma County economy. According to Dr. Eyler, **Sonoma County's economy depends on regional, state and national economic recovery.** Many of the important industries in Sonoma County depend on broader economic connections providing income and job opportunities for Sonoma County businesses and residents.

The loss of commercial activity, lower pay levels, lost jobs, or a mix have reduced household income levels and spending. **Some local businesses, especially those that rely on visitors coming to Sonoma County wineries, beaches, and restaurants, will not survive this recession.** City and county governments, providing services to nine cities and the unincorporated county, are going to face challenges of both rising expenses from increased services demand and falling government revenues in fiscal year 2020-21 at the minimum.



Dr. Eyler considered the impacts through three different scenarios from 2020 to 2023. Potential job losses for local employ-

BACKGROUND:

CONTEXT FOR DISASTER RECOVERY PLANNING

ers affecting local residents and the capacity of the local economy to generate income and tax revenues drive the estimated impacts. According to Dr. Eyler, the estimated economic impact for lost jobs, lost gross regional product (value-added income), and state/local tax revenues in 2020 are the following:

Economic Impact from COVID-29 in 2020: Jobs Lost, Reduced Incomes, and Tax Revenues			
Scenario	Job Lost	Income Lost (Lost Gross Regional Product)	State/Local Revenue Lost
Better	20,700	\$1,539,700,000	\$328,596,000
Median	30,135	\$2,421,800,000 (16.7% of economy)	\$613,917,000
Worse	48,451	\$4,134,600,000	\$811,518,000

Note: The jobs estimates include self-employed and payroll workers

Dr. Eyler's projected estimated economic impact for lost jobs, lost gross regional product (value-added income), and state/local tax revenues through 2023 at the median level appear in the following table.

Economic Impact from COVID-19 from 2021 through 2023: Jobs Lost, Reduced Incomes and Tax Revenues (Median Calculations)				
Year	Jobs Lost	Jobs Gained from Prior Year	Income Lost (Lost Gross Regional Product)	State/Local Revenue Lost
2021	22,547	7,588	\$1,747,000,000	\$461,000,000
2022	17,345	5,202	\$1,308,000,000	\$376,000,000
2023	9,492	7,853	\$679,000,000	\$233,000,000

According to Dr. Eyler, there will be lingering impacts from COVID-19 on the county economy as recession leads to recovery. He predicts that **Sonoma County's economy will not recover to 2019 year-end jobs levels before 2023 and that there is likely to be a net loss of employers** in Sonoma County by 2023. He estimates that the cumulative impacts in 2020 dollars through 2023 for the median recovery scenario include the following:

- **Jobs Lost from Dec 2019 on annual average:** 19,880 jobs below December 2019 level
- **Total Gross Regional Product (GRP) lost 2020-2023:** \$6.157 Billion
- **Total State and Local Tax Revenues lost 2020-2023:** \$1.685 Billion
- **Estimated loss of employers by 2023:** Down 6.9 percent for the median scenario, with a range between -1.5% for the better scenario and -15.6% percent for the worse scenario.

Both California and Sonoma County have experienced extensive job losses across all industries. Dr. Eyler reports that while jobs are slowly returning, this recession's depth and breadth likely makes recovery a matter of years and not months. He states that specific industries remain at risk, as do some cities and unincorporated areas in Sonoma County, under any of the three scenarios.

BACKGROUND: CONTEXT FOR DISASTER RECOVERY PLANNING

Between March 2020 and July 2020, industries that have experienced job losses from the previous year of close to or more than 20% job losses included the following:



Dr. Eyler reports that healthcare employers, even though front-line medical responders were standing by to treat COVID-19 patients, many procedures and visits were canceled due to fears of the contagion and restrictions of elective medical procedures.

Manufacturing and construction jobs, as of July 2020, **are now growing from July 2019**, and leading the county's economic recovery. As of July 2020, farm jobs were also up from July 2019. However, **the 2020 wildfires may result in smoke taint of the grape harvest and the elimination of many farm jobs during harvest**. In the municipalities of Cloverdale, Healdsburg, Sebastopol, Sonoma, and Windsor, the percentage change in residents working remains below 10% lower than July 2019 levels as of July 2020.



>10%

Percentage change in residents working in Cloverdale, Healdsburg, Sebastopol, and Windsor.

According to Dr. Eyler, home prices have moved very little, and have actually increased as of July 2020 from July 2019 for many of Sonoma County's cities. Home prices in Healdsburg and the unincorporated areas of Sonoma County are down slightly from last year. **Home prices falling and large numbers of businesses closing are the largest threats to local economic recovery from COVID-19's social policies and negative economic impacts**. Commercial real estate values and vacancy are likely to see more uncertainty under any scenario to 2023. Property taxes should follow current estimates if home prices remain stable.

Along the path to recovery, Dr. Eyler reports that the county will experience a variety of short- and long-term impacts.

The short-term impacts of COVID-19 on the Sonoma County economy include the following:

BACKGROUND: CONTEXT FOR DISASTER RECOVERY PLANNING

Lost jobs in services, with many workers that are at lower wage, out of work regionally

State and local tax revenues falling in 2020 to create budget difficulties for fiscal year 2020-21 and likely 2021-22

Business losses that track the lost jobs closely

Housing markets remain stable for now, as commercial real estate markets are likely to see more reallocation and concerns for 2020-21

Dr. Eyler predicts that the long-term impacts depend on the following three major events, some of which are unknown until later in this decade:

HOUSING MARKET INSTABILITY and POTENTIAL OUT-MIGRATION OF LOWER WAGE WORKERS

Subsequent slowdown in incentives to build more housing in an environment with a lower, older population, creating a **HOUSING SHORTAGE** later in the 2020's

LONGER SPELLS OF UNEMPLOYMENT increasing pressure on nonprofit organizations and county government to provide more goods and services and housing relief

Dr. Eyler summarizes that the long-term impacts depend on the short-term outlook becoming recovery momentum. He cautions that we should not expect a true sense of recovery momentum until 2022 at the national level. For Sonoma County and the jurisdictions in the county, planning on this two-year horizon is a conservative way to approach how the regional economy will react to the short- and long-term impacts.

The full economic impact report appears in the appendix of this document.

BACKGROUND: CONTEXT FOR DISASTER RECOVERY PLANNING

Sonoma County's Disasters and Disruptions: 2017-2020

Since October 2017, Sonoma County has endured an unprecedented number of natural disasters and power disruptions. Many of these disasters have resulted in lost lives, destroyed and damaged homes and commercial properties, and business income loss and closures. The following is an overview of the losses caused by disasters and disruptions, other than the coronavirus, that Sonoma County have experienced over the past three years.

2017 NORTH BAY FIRES

Three wildfires devastated Sonoma County in October 2017: the Tubbs, Nuns and Pocket Fire.

The Tubbs Fire started in Calistoga the evening of October 8. Within three hours, the fire, fueled by near hurricane force winds, had reached the Mark West Springs in unincorporated Santa Rosa. By the morning of October 9, the fire had spread into the Santa Rosa city limits and had ravaged Larkfield/Wikiup, Fountaingrove and Coffey Park. **The Tubbs Fire took the lives of 22 individuals, destroying 4,658 homes, and almost 1,000 commercial and additional structures. The Tubbs Fire burned over 36,800 acres.**

The Nuns Fire, impacted Sonoma Valley and the Carneros area, burning a total of 56,556 acres. On October 8, a series of smaller wildfires, including the Nuns Fire, started in various areas of Sonoma Valley, including in Oakmont, Glen Ellen, Kenwood and Sonoma. Eventually, the fires merged into the Nuns Fire. **Two residents of Glen Ellen and one fire personnel member were killed. In total, 1,355 buildings were destroyed including 639 homes.**

Finally, the Pocket Fire started near Geyserville on October 9. **The fire resulted in the evacuation of Geyserville and destroyed three homes while burning 17,357 acres.**

In total, these three fires killed 25 people, destroyed over 7,000 structures, and burned a total of 110,720 acres, making the complex the most devastating wildfires in modern California history until the 2018 Camp Fire.

2019 KINCADE FIRE

Little over two years after the North Bay Fires devastated the County, the Kincade Fire burned over 77,000 acres in Geyserville, Windsor and Healdsburg. First reported burning on the evening of October 23 in The Geysers, **the Kincade Fire resulted in the evacuation of 90,000 residents in Sonoma County and Lake County.** The result of a PG&E equipment failure, **the fire destroyed 174 homes and 200 additional structures**, including winery facilities. By its containment on November 6, the Kincade Fire was not only the largest wildfire to burn in Sonoma County, but it was also the largest fire of the 2019 California wildfire season.

2019 LOWER RUSSIAN RIVER FLOODING

In February 2019, an atmospheric river brought up to 20 inches of rain to Sonoma County over three days. The heavy rains caused the Russian River to raise 13 feet above flood stage to 45.4 feet in Guerneville. The result would be the **worst flood in the County in 24 years.** The flood impacted Russian River communities including Guerneville, Jenner, Rio Nido, Monte Rio, Sebastopol, Healdsburg. **Over 40 people were rescued, 3,600 residents were evacuated and 8,000 were without power. Additionally, more than 2,000 homes and businesses were flooded, with 527 structures damaged and 31 declared uninhabitable due to flood damage.** The flood impacted 578 businesses, totaling \$35 million in damages (The Press Democrat, March 4, 2019).

BACKGROUND: CONTEXT FOR DISASTER RECOVERY PLANNING

2020 WALBRIDGE AND MEYERS FIRES

In the overnight period of August 16 to August 17, California experienced rare thunderstorms, the aftermath of Tropical Storm Fausto off the shores of Mexico. **The thunderstorms launched over 10,800 lightning strikes which sparked 376 fires across the state.** By August 18, 2020, two of those fires had grown in Sonoma County: the Walbridge Fire and the Meyers Fire. These two fires were part of the larger, LNU Lightning Complex, which included the Hennessey Fire in neighboring Napa County.

The Walbridge Fire was first reported burning near Austin Creek Recreation Area in a hard-to-reach, mountainous area. The fire quickly grew and merged into a second, smaller fire, the Stewarts Fire, near Stewarts Point. **The Walbridge Fire resulted in the evacuation of residents in Guerneville, Healdsburg, Forestville, Rio Nido, Monte Rio, and more.** Walbridge Fire also burned through portions of Austin Creek Recreation Area and Armstrong Woods State Park. **In total, it burned 55,209 acres.**

First reported burning between Meyers Grade Rd. and Highway 1, just north of Jenner, **the Meyers Fire caused in evacuations in and around Jenner and Fort Ross.** At one point, the fire jumped Highway 1 and burned in Fort Ross State Historic Park, threatening the historic structures and visitors center. **The fire burned a total of 2,360 acres.**

In total, the Walbridge and Meyers Fires destroyed 298 structures, including 150 residences and 9 motor homes.

2020 GLASS FIRE

In September and October 2020, Sonoma County experienced a third major fire: the Glass Fire. The fire, which is 97% contained as of the publishing of this report, started September 27, 2020 in Napa County. Red Flag winds resulted in the fire starting two smaller fires, which eventually merged into the Glass Fire. These two smaller fires caused evacuations in Santa Rosa, Oakmont, Kenwood and Glen Ellen. **It has thus far burned 67,484 acres in both counties. The Glass Fire destroyed 611 structures, including 329 residences and 14 motor homes.**

OUR APPROACH

A Whole Community Approach

The success of Sonoma County's economic recovery is dependent on the entire community's ability to recover and develop a sense of resiliency after disasters. As a result, we have adopted a Whole Community approach to our county's recovery. Developed by the Federal Emergency Management Agency (FEMA) after an extensive national dialogue, a Whole Community approach is a way that **"community residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests."** Taking a Whole Community approach enables communities to build resilience and a sense of security.

The benefits of taking a Whole Community approach include the following:

- Shared understanding of community needs and capabilities identify creative ways to explore pausing fees, fee increases, and practices that pose a threat to well-being of the local small business community.
- Greater empowerment and integration of resources from across the community
- Strong social infrastructure
- Establishment of relationships that facilitate more effective prevention, protection, mitigation, response, and recovery activities
- Increased individual and collective preparedness
- Greater resiliency

This Economic Recovery Action Plan aligns with Sonoma County's Recovery and Resiliency Framework, developed by the county's Office of Recovery and Resiliency (ORR) as a roadmap for recovery from the 2017 Sonoma Complex Fires. ORR implemented a Whole Community approach in developing this framework to establish a vision for Sonoma County of a healthy economy, an inclusive recovery,

and a resilient community. The Whole Community approach drove the development of this action plan, as well, resulting in 13 strategies, with key actions and tactics that support the framework's vision for disaster recovery and community resiliency. **To successfully implement these 13 strategies over a 5-year period, the County of Sonoma will continue this Whole Community approach by partnering with many businesses, professional associations, educational institutions, community- and faith-based organizations, and members of the community.** This whole community engagement mirrors the methodology currently being conducted by the EDB on its implementation of Strategic Sonoma.

Between June and October 2020, the Sonoma County Economic Development Board (EDB) and the Office of Recovery and Resiliency (ORR) reached out to leaders of businesses, government agencies, professional associations, educational institutions, community- and faith-based organizations, and the general public to obtain input on what needs to happen in Sonoma County to achieve an economic recovery after enduring the impacts of COVID-19 and other disasters. **This plan reflects the feedback we received from 500 community members regarding ways that our businesses, workforce, and community can recover and become resilient.**

Methodology

The leadership of the Sonoma County Economic Development Board (EDB) and the Office of Recovery and Resiliency (ORR) determined that to take a Whole Community approach to developing this Economic Recovery Action Plan, there needed to be extensive broad-reaching community participation over a four-month period. To help facilitate the plan development process, staff hired the Sonoma-based consulting firm, Bischoff Consulting, with Dr. B.J. Bischoff, Principal Consultant, and Sarah Stierch, Research Director.

To guide the development of this plan, the team assembled a 36-member Steering Com-

OUR APPROACH

mittee, comprised of senior leaders from throughout Sonoma County. (Roster of invited participants and their affiliations included in the Appendix.) The Steering Committee was instrumental in developing the plan's strategies, identifying priorities, and assigning implementation time frames for each of the key actions. **Three work groups informed the work of the Steering Committee.**

Work groups included Business Recovery, comprised of 49 business leaders knowledgeable about current business needs; Workforce Recovery, comprised of 27 business, nonprofit, and education leaders knowledgeable about workforce development needs and solutions; and Community Recovery, comprised of 43 community-based leaders who understand the community's recovery needs. Each group conducted three 90-minute meetings. As this plan was developed during the pandemic, all meetings were conducted virtually via Zoom. (Rosters for the three work groups are included in the Appendix.)

After the work groups and Steering Committee developed the basic framework of the plan, with 13 priority strategies, **the team turned to the community for ideas on how to implement these strategies.** The team conducted two 60-minute listening sessions via Zoom Webinar and Facebook Live on September 17, 2020. The first one was conducted from 12 pm to 1 pm and included 66 participants. The second session was conducted from 6 pm to 7 pm and included 32 participants. The sessions were co-facilitated by Melissa Valle, Communications & Engagement Coordinator, County of Sonoma, and B.J. Bischoff. Spanish language interpretation for both sessions was provided by Ricardo Ibarra, Executive Director, Watza Lab.

Bischoff Consulting also developed an online survey in both English and Spanish, designed to obtain input from the business community, primarily, and any other members of the community, as well. The survey was open between September 7 and 26, 2020, and generated 229 responses.

Finally, to enable any community member to contact the team developing the action plan to voice their opinions, we established a dedicated email address.

The team also reviewed existing County of Sonoma plans, including ORR's Recovery and Resiliency Framework and EDB's Strategic Sonoma, and best practices implemented in other municipalities and states throughout the US. Finally, subject matter experts in the county were interviewed via email, phone, and Zoom to gain additional insight regarding high priority strategies, such as the great need for childcare during the pandemic.

CRITICAL APPROACHES

During the development of this plan, many issues emerged as being vitally important to our recovery and that must be addressed. **All of these priorities are organized into the short-term, medium-term and long-term actions** presented later in this document, and are highlighted here for the sake of clarity and additional detail.

1. Timely, Accurate Communication

During a disaster or disruption and recovery, it's important for community residents to be able to receive timely, concise information that they can trust. Multiple information sources from multiple jurisdictions communicate in multiple ways that may not be aligned.

The following actions can be implemented to improve disaster and post-disaster communication throughout the county:

- Provide as much advance communication as possible to businesses regarding re-opening regulations, since it can take two weeks or more to comply with all requirements prior to opening.
- Identify a designated county department/agency where businesses can get accurate information regarding reopening requirements for specific industries.

OUR APPROACH

- Assign a lead communications individual/department/agency to curate information from multiple sources and share that information in one voice with the public.

2. Regulatory Relief and Long-Term Change

There is a prevailing perception among members of the business community that government acts in a vacuum when establishing and maintaining the rules and regulations subject to the business community. **Local small businesses universally understand the public benefits of health and safety, thoughtful application and review of planning and zoning policy, and other regulations. However, they see the pandemic and continued financial challenges from local disasters as an opportunity to take a critical look at how these policies are applied, and how they help or hurt a robust economic recovery.**

Recommendations for what needs to be done now include the following:

- Immediately pause new local regulations, except for those mandated by state or federal law, that pose a threat to the well-being of the local small business community.
- Identify creative ways to explore pausing fees, fee increases, and practices that pose a threat to well-being of the local small business community.
- Create a reasonable accommodation that lets individual businesses ask for what they need to operate and still meet state guidelines.
- Develop pre-approved plans for certain structures that will enable businesses to remain operational.
- Continue the productive work that has begun during the pandemic with regards to urgency ordinances that enable entrepreneurial responses to disaster induced conditions.
- Create a permanent emergency ordinance that allows us to be nimble when emergencies occur.
- Consider quantifying the impacts to local businesses among a collection of positive, negative, and unintended consequences of

new or increased fees.

- Incorporate new realities into long-range planning and zoning efforts. Will more people work from home permanently? What are the creative redevelopment opportunities facing us with regards to a housing shortage and underutilized commercial property?

3. Access to Capital for Local Small Businesses

Local small businesses and start-ups continue to make difficult decisions with limited access to capital. On the smaller end of the spectrum, a local microloan fund, the product of a partnership between the Economic Development Board and Working Solutions, provides streamlined access to capital at low rates in the range of \$5,000 to \$50,000. However, over the past three years alone, local small businesses have weathered a debilitating pandemic, four significant fire incidents, multiple power shutoffs, and flooding along the Laguna de Santa Rosa and Lower Russian River. In each of these episodes, they have learned the only resource specifically tailored for recovery are direct loans from the federal government. **Businesses simply cannot continue to rebuild and recover on the backs of successive loan obligations and mounting interest costs.**

To safeguard the diversity and vitality of a local economy that is built on small business, the following options must be available:

- Continue to capitalize a recovery/stability grant fund to help businesses cover short-term expenses related to disaster response and recovery. Diversify funding sources so that assistance to underserved populations can be assured and maximized.
- Consider broadening Sonoma County Energy Independence Program (SCEIP) to include additional financing assistance for resiliency. Energy generation, storage and the recent addition of some seismic and fire improvements to the program have paved the way for other innovative approaches.
- Evaluate the need for a flexible local lending program to provide targeted access to cap-

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ital for businesses that help to broaden and diversify the local economic base.

4. Childcare

A childcare issue emerged during this pandemic of which many county residents were unaware—that our childcare industry is fragile and can easily break. **In Sonoma County, 37% of the county’s 621 licensed childcare facilities have shuttered since mid-March 2020 for financial reasons.** Of those that closed, 17 have closed permanently and many more will never re-open. Available childcare spaces have drastically reduced since March 2020, due to many providers closing their doors, as well as public health limits on group size. Pre-COVID, there were 12,749 slots available countywide. Today, there are only 5,497 available slots, a reduction of 57%. (Please see additional information about childcare facility closures in the appendix.) At the beginning of COVID-19 nearly all of Sonoma County childcare facilities closed and as the understanding that childcare is an Essential Service was understood and programs were able to implement the detailed guidance of the state, county and Community Care Licensing, more and more programs have reopened.

Nationwide, enrollment is down by 67%, according to a survey conducted in July 2020 by the National Association for the Education of Young Children (NAEYC). **Even before the pandemic, childcare facility operating costs were huge, profit margins were razor-thin, and salaries were low.** Plus, now there is the additional cost of cleaning/sanitizing and personal protective equipment (PPE) with less income because fewer children can attend for social distancing reasons. According to a group of childcare leaders in the county, **“Our childcare industry is hemorrhaging.”**

The following are some steps to take to stabilize this essential industry:

- Provide dedicated funding to enable childcare facilities to remain open.
- Encourage existing childcare providers to

obtain technical assistance provided by Sonoma County’s Child Care Resource & Referral Agencies, 4Cs and River to Coast Children’s Services, to ensure they receive the support and resources they need to remain open during disasters and disruptions.

- Identify strategies for increasing childcare as a viable and desirable career option and increasing employee wages and business revenue throughout the county’s historically low-paying childcare industry.

5. Connecting Workers with Job Opportunities

There are currently many Sonoma County residents who are out of work, have reduced hours, and have lost their businesses in industries severely affected by the pandemic and the recent fires. Among these hardest-hit industries are agriculture, tourism, and hospitality. At the same time, there are also industries that are experiencing unprecedented growth, such as delivery services, frozen food production, last mile distribution centers, construction, and e-commerce, among others. **For our economy and community to recover from recent disasters, it is essential to find ways to connect workers from struggling industries with those that are thriving in this new economy and provide them with the skills to flourish in the growth sectors.** One valuable local resource for connecting available workers with job opportunities and providing the training they need to succeed is JobLink, a career development service managed by the Sonoma County Workforce Investment Board (WIB).

Strategies for connecting workers who have lost their jobs or their businesses with jobs available in growing business sectors include the following:

- Promote the services of the WIB, including JobLink, to county residents who have lost jobs and businesses.
- Encourage businesses to contact the WIB if they need to downsize their workforce so the WIB can help the employees move into a growing business sector.

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- Implement a Hire Local campaign and provide incentives for businesses to hire locally.

6. Housing

Access to affordable housing was a problem facing Sonoma County before the pandemic and will continue to be a problem well into the foreseeable future. Families that have lost some or all of their household incomes are struggling to make their monthly rent. If these families don't receive some form of rental relief, many of them will be forced to leave the area, a trend we have seen since the 2017 fires.

To enable families facing hardships as a result of disasters to stay in their homes, we recommend the following actions:

- Combine CARES Act funding, PG&E settlement funding, redirected HUD funds, and other public and private dollars to provide rental assistance to individuals, distributed through public agencies and community- and faith-based organizations.
- Continue to evaluate the eviction defense ordinance. As recent state eviction legislation pre-empts major aspects of local residential eviction ordinances, including limiting the commencement date and length of repayment period, monitor the state's eviction defense actions and as appropriate evaluate the extension of the local orders.
- Provide financial support to the housing fund created by the Renewal Enterprise District (RED) to address housing across the affordability spectrum.
- Support reviews of higher density development opportunities within county Urban Service Areas near jobs and transit, as provided in the General Plan and the updating of Specific Plans, including fee studies and other planning documents, to support meeting regional housing needs.

7. Access to Food and Nutrition

Food banks throughout the county have never before experienced such a high demand for their services. As a result of COVID-19, Red-

wood Empire Food Bank CEO predicts that the number of people served this year will double from 82,000 to 164,000. In addition to being a health crisis, this pandemic has turned out to be a food crisis. Ensuring that Sonoma County residents have access to food and nutrition is a critical need during and after disasters. According to Reset the Table, a report published by The Rockefeller Foundation in July 2020, COVID-19 caused 33% of families unable to afford the amount or quality of food they want. To ensure that all county residents have food and nutrition security.

We recommend taking the following tactics within six months to a year:

- Encourage county agencies and organizations that serve vulnerable populations to amend their intake process to screen for food insecurity, chronic disease-related nutritional needs and functional assessment of ability to shop and cook.
- Ensure that county agencies and organizations that serve vulnerable individuals assessed as being food insecure are aligned on referral pathways to the most appropriate nutrition services, from CalFresh enrollment and food pantries to home delivered and medically tailored meals.
- During and after disasters and disruptions, assign one individual in the Sonoma County Emergency Operations Center to serve as the Emergency Food Coordinator to facilitate access to services, funding, and communications among all relevant food-providing organizations and pop-up initiatives throughout the county.

8. Digital Divide

It has become impossible to function in today's society without adequate broadband access. Rural communities in our county and throughout the nation face economic disenfranchisement and failed economies due to inadequate broadband access. When the pandemic forced us to move to virtual communication, including online learning for approximately 70,000 K-12

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school children, telehealth visits for vulnerable populations, and wellness checks for seniors, it became apparent that income disparities caused major barriers to broadband access. **Internet access has emerged as an education rights issue because students cannot connect with their schools and teachers without having it.** What also makes this an equity issue is that both students and adults from low-income and Latinx households are less likely to have internet connectivity than their peers.

School districts have had to establish mobile internet access points in school buses to enable many low-income students to have internet access. However, no such solution has been created for low-income adults who lack access to the internet. To address our digital divide, the Sonoma County EDB formed Access Sonoma Broadband (ASB) prior to the pandemic to work with communities to close the digital divide.

We recommend the implementation of the following key actions, all of which align with the work of ASB:

- Explore municipal broadband and ways for the county, cities, and other entities to deploy publicly managed infrastructure and services into unserved communities.
- Support internet service providers' broadband deployment projects by assisting with project design development, data collection, grant writing, streamlined permitting, community support, public-private-partnerships, and more.
- Advocate for state and federal broadband legislation that promotes regional broadband goals as well as economic development, recovery, and resiliency.

RECOVERY: STRATEGIES, KEY ACTIONS, & TACTICS

The culminating work of this Whole Community approach to developing a roadmap to recovery and resilience are the following 13 strategies and their corresponding key actions and tactics. **For this plan to become a reality, the County of Sonoma cannot do it alone.** It is important to note that many of our community partners are currently working on various action items and are not restricted by the timelines set forth in this plan.

To successfully implement this plan, we need the involvement and commitment of local businesses, professional associations, community- and faith-based organizations, government agencies from all jurisdictions within the county, educational institutions, and community members. Where previously identified through outreach, engagement and public input, local partnerships are noted in the following section. A critical component to this work will be continued identification and engagement of partners as the plan moved forward.

We have assigned one of the following three timeframes to the implementation of each key action: short-term, medium-term, and long-term.

The following lists presents the colors we use to designate the time frames and the definition of each of the three time frames.

Legend for Key Action Timeframe Icons

Short-term (Green): Key actions to be implemented within 6-12 months, including those to be implemented immediately **(November 2020-October 2021)**

Medium-term (Orange): Key actions to be implemented over the course of 1-3 years **(November 2021-October 2023)**

Long-term (Teal): Key actions to be implemented over the course of 3-5 years **(November 2023-October 2025)**

The plan is divided into the following three sections:

- Business Recovery
- Workforce Recovery
- Community Recovery

Each section includes critical priorities to address and specific key actions and tactics to be implemented as part of each priority. There are 18 key actions from the plan that emerged as short-term key actions that should be accomplished within six months to a year. Some of these key actions have already begun. Depending on the available of resources, all of these short-term key actions can be started or implemented immediately. The numbering convention used in this plan does not correspond to higher or lower priorities. All priorities are considered essential and all should be implemented over the next five years.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

This section includes four strategies for Sonoma County's businesses to recover from current and future disasters. These strategies were ranked by importance by the 228 respondents to the community survey and the 98 participants in the listening sessions. Responses to the community survey and listening session polls are located in the Appendix. The importance of economic diversification, regulatory relief, and providing access to capital, along with technical assistance, was also highlighted by the recently formed Sonoma County Business & Ag Consortium, which developed a ten-point economic recovery plan.

Community survey respondents weighed in on the importance of ten different business recovery actions identified by the Business Recovery Work Group.

They indicated that all ten of the following actions are very important:

- Provide immediate, emergency funds, with a special focus on helping business owners impacted the most by the disaster, including women and Latinos/people from diverse cultures.
- Help small businesses get long-term disaster recovery loans, grants, and investment money.
- Make it faster and easier to get the permits from the county that businesses need to operate.
- Temporarily stop local regulations that are barriers for recovery.
- Help businesses impacted by disasters work with their insurance companies.
- Help businesses, especially those owned by women and Latinos/people from diverse cultures, change the way they operate by adopting new technologies, learning how to sell products online, expanding their marketing, and helping train their employees.
- Encourage the growth of businesses in industries beyond the hospitality sector, so that our economy isn't so dependent on one type of business.
- Make sure we have a strong local supply chain, so we have what we need locally during and after a disaster.
- Make sure that all community residents receive accurate and timely information during a disaster by receiving one strong message from the county that people from all cultures can understand.
- Help businesses develop plans for how to remain open during and after a disaster.

* The term business used throughout this document includes for-profit and nonprofit enterprises.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Business Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 1: Make funding, equipment, and facilities easily accessible to businesses.	6-12 months	1. Establish a program to provide emergency stabilization funding, with a special focus on assisting greatly impacted underrepresented population	A. Launch an emergency grant program with transparent distribution protocols through Federal CARES Act Funding.
			B. Work with regional funders to ensure the long-term sustainability of the emergency grant program.
			C. Provide technical assistance and workshops on effective business practices to help stabilize businesses that request emergency funding.
	6-12 months	2. Work with banks, credit unions, Community Development Financial Institutions (CDFIs), and nonprofit organizations to increase access to capital for small businesses.	A. Forge a partnership with the financial institutions operating in Sonoma County to develop a financing program of loans and mini-grants funded by multiple lending institutions contributing to one funding pool.
			B. To increase their ability to pay back loans, establish a mentoring program to help business owners effectively manage their business operations.
			C. Identify which County of Sonoma business fees can be waived during a disaster and waive relevant fees, as appropriate.
	1-3 years	3. Develop a program to identify surplus business continuity equipment and supplies that businesses may make available to other local businesses that need them during disasters and disruptions.	A. Work with industry associations to establish industry-specific surplus business continuity equipment and supplies sharing programs.
			B. Conduct an inventory of available business assets, including real estate, that can be shared during a disaster.
			C. Identify local and state regulations regarding space utilization that are barriers for businesses and develop strategies for overcoming those barriers (example: ability of restaurants to use winery facilities for their outdoor dining).

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Business Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 2: Provide innovative regulations and temporary laws (called urgency ordinances) to keep businesses operational.	6-12 months	1. Expedite discretionary permits and structurally address the impact of regulations established by the county.	A. Facilitate meetings among permitting department staff in the county, the county's six jurisdictions, and businesses that have experienced the permitting process to identify strategies for improving and expediting permitting processes, while making them predictable, consistent, and transparent.
			B. Establish a one-stop center for issuing business permits throughout the county.
			C. Develop a program to reduce business fees, waive fees, eliminate/reduce inspections (while still maintaining safety), and/or impose a moratorium on fees during and after a disaster.
	6-12 months	2. Establish small industry-sector work groups to identify specific regulations that could be temporarily suspended because they are barriers for recovery.	A. Facilitate group and one-on-one meetings with existing industry groups to identify county and local regulations that are barriers to recovery and recommend ways to overcome these barriers.
			B. Develop fast-tracked recommendations for which county regulations should be immediately changed/suspended and implement an 18-month pilot to test regulatory change recommendations.
			C. Involve local elected officials in developing strategies for streamlining municipal regulations and fees during times of disaster.
	1-3 years	3. Assist businesses to be better prepared to successfully work with insurance companies.	A. Partner with the Napa-Sonoma Small Business Development Center (SBDC) to develop insurance workshops and consultations.
			B. Establish a mentorship program for business owners experienced in working with insurance companies after a disaster or disruption to help business owners with no prior experience with disaster/disruption-related insurance claims.
			C. Conduct audits of insurance coverage to determine if local businesses are adequately covered.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Business Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 3: Support hardest-hit business sectors, while increasing economic diversification throughout the county.	6-12 months	1. Provide businesses in target clusters hardest hit by disasters, specifically hospitality & recreation and agriculture & food, with the immediate support they need to remain operational.	A. Create a targeted messaging campaign encouraging the community to support hardest-hit businesses.
			B. Provide support for businesses to get the knowledge, equipment, and supplies they need to adapt to new requirements in operating their businesses.
			C. Help local businesses interpret state policies and regulations and understand how these policies and regulations are implemented at the county and municipal level.
	6-12 months	2. Prepare businesses, especially those owned by people from underrepresented communities, for current conditions and future opportunities by helping them adopt new technologies, use eCommerce tools to sell products online, expand marketing, and upskill/reskill workers.	A. Create a county-driven website that's easily accessible to small businesses to serve as a one-stop, comprehensive resource to help businesses quickly adapt to new ways of conducting business during and after a disaster.
			B. Quickly deploy a group of business advisors from the SBDC, the Economic Development Board (EDB), and local educational institutions, among others to be available to provide immediate assistance to businesses in need.
	6-12 months	3. Continue to offer and market financing and entrepreneurial support programs to help existing businesses adopt new technologies, diversify products and services, expand markets, and provide critical products to strengthen our local supply chain.	A. Through a mentoring program, connect business owners inexperienced in managing in times of disaster with business owners experienced in managing a business during and after a disaster.
			B. Develop online guidance to help businesses navigate through the myriad rules and regulations they need to follow to make it easier for them to open after a disaster.
			C. Provide technical assistance to businesses to help them navigate through established regulations so they can safely re-open.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Business Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 3: Support hardest-hit business sectors, while increasing economic diversification throughout the county (cont'd).	3-5 years	1. As a way for Sonoma County's economy to become less dependent on the hospitality and tourism sectors, which are notoriously hard-hit during disasters, support the growth of the six industry clusters identified in Strategic Sonoma by helping them adapt to the future economy, encouraging innovation and entrepreneurship, and leveraging the prestige of the Sonoma Brand. (These industry clusters are Agriculture, Cannabis, Craft Beverages, Creative Industry, Outdoor Recreation, and Specialty Food.)	A. Accelerate the growth of these industry clusters by making a revolving loan fund available that targets entrepreneurs who are from communities of color and women.
			B. Establish a marketing campaign and provide technical assistance to encourage businesses from hospitality and tourism sectors that are hard-hit during disasters and disruptions to start businesses related to the six targeted industry clusters.
			C. Establish a mentoring program to help entrepreneurs wanting to start businesses in the six industry clusters.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Business Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 4: Ensure that businesses are prepared for future disasters and disruptions and can quickly recover afterward	1-3 years	1. Provide what businesses need to quickly become operational after a disaster and then provide it, ranging from streamlined processes and reduction in fees to assistance with insurance claims and help with accessing business continuity equipment and supplies.	A. Provide technical assistance to help businesses access what they need to become operational after a disaster.
			B. Develop a disaster preparedness and post-disaster informational key tips document that can distributed to businesses when municipalities mail them their annual business licenses.
	6-12 months	2. Communicate with one reliable voice during disasters and disruptions, ensuring that all communication is presented in culturally responsive ways so that all community residents remain informed	A. During a disaster or disruption, establish a dedicated, centralized phone line and email address that businesses can access to receive up-to-date information and the help they need to recover.
			B. Use a text alert system to communicate directly with businesses in English and Spanish.
			C. Send timely emails to businesses explaining any new state, county, or local orders and regulations regarding disaster recovery immediately upon knowing of them.
	3-5 years	3. Provide education for businesses on the importance of continuity of operations planning and how to develop robust plans that address all possible types of disasters and disruptions and strategies for communicating key information with employees, contractors, and customers.	A. Develop a portal that businesses can access to obtain a wide variety of continuity of operations and disaster recovery tools.
			B. Provide user-friendly, web-based templates tailored to Sonoma County's major industries that businesses can quickly complete to create their continuity of operations plans.
			C. Provide workshops and webinars on disaster-related business continuity planning for businesses.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

This section includes four strategies for Sonoma County's workforce to recover from current and future disasters. These strategies were ranked by importance by the 228 respondents to the community survey and the 98 participants in the listening sessions. Responses to the community survey and listening session polls are located in the Appendix. The Sonoma County Business & Ag Consortium also included the importance of addressing workforce re-skilling and childcare in its ten-point plan.

We asked community survey respondents to provide feedback on the importance of eight different workforce recovery actions identified by the Workforce Recovery Work Group. They indicated that all eight of the following actions are very important:

- Establish emergency childcare sites for frontline workers and essential employees.
- Make it easy to open a childcare business that's safe for children and possible to convert unused available space in businesses and schools for childcare use.
- Make sure people who have lost jobs and businesses, especially older adults, women, and Latinos/people from diverse cultures, know how to get unemployment insurance and other public benefits.
- Help business owners and employees from industries that are losing jobs to find employment and business opportunities in industries that are growing.
- Develop an internship and mentoring program to introduce people who have lost jobs to careers in areas that are growing and pay good wages.
- Make Sonoma County a more attractive and competitive place for people to live, work, and play, so that people want to work here, and they don't leave after a disaster.
- Make sure everyone can access safety net services, that include getting financial assistance, housing, medical care, and food, during and after a disaster.
- Provide a special fund to support community residents who cannot get government-funded help

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Workforce Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 5: Provide creative solutions to enable the county's childcare industry to thrive.	6-12 months	1. Stabilize Sonoma County's childcare industry to enable childcare providers to remain open, especially during disasters and disruptions.	A. Provide dedicated funding to enable childcare facilities to remain open.
			B. Encourage existing childcare providers to obtain technical assistance provided by Sonoma County's Child Care Resource & Referral Agencies, 4Cs and River to Coast Children's Services, to ensure they receive the support and resources they need to remain open during disasters and disruptions.
			C. Identify strategies for increasing childcare as a viable and desirable career option and increasing employee wages and business revenue throughout the county's historically low-paying childcare industry.
	3-5 years	2. Expand the capacity of childcare facilities to enable the industry to become sustainable.	A. Forge a partnership with the financial institutions operating in Sonoma County to develop a financing program of loans and mini-grants funded by multiple lending institutions contributing to one funding pool.
			B. Support JobLink, local high schools, Santa Rosa Junior College, and Sonoma State University to implement a training and work experience initiative for individuals interested in pursuing childcare as a career pathway into K-12 education and for entrepreneurs interested in starting a childcare business.
			C. Identify opportunities for childcare providers to share services, including purchasing and other business services.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Workforce Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 5: Provide creative solutions to enable the county's childcare industry to thrive (cont'd).	1-3 years	1. Enable the development of new childcare sites and facilities.	A. Create a multi-jurisdictional Blue-Ribbon Panel to explore regulatory restrictions by local/county/state jurisdictions that affect the growth of the childcare industry; Develop and implement a plan for removing/changing the identified regulatory restrictions; Work with childcare advocates to join and support advocacy efforts at the state level.
			B. Identify specific sites suitable for childcare facilities.
			C. Develop a policy requiring childcare facilities located in geographic areas governed by the county to be included in commercial development or commercial re-development.
			D. Work with the Renewal Enterprise District (RED) and developers to identify and incentivize ways to have childcare facilities incorporated into their projects.
	1-3 years	2. Ensure that childcare providers are prepared for disasters and can manage during times of crisis.	A. Partner with Sonoma County's Child Care Resource & Referral Agencies to provide simple templates to help childcare providers develop continuity of operations and disaster recovery tools; Ensure that all templates and tools developed follow the California Department of Social Services Community Care Licensing guidelines.
			B. Institutionalize the role/partnership between the local Child Care Resource & Referral Agencies and the Emergency Operations Center during disasters; During disasters, identify an Emergency Childcare Coordinator within the County and local Child Care Resource & Referral Agencies to coordinate communications between County, State Licensing and the Child Care Providers to assist with emergency waivers; inform childcare providers of standardized and accepted health and safety requirements; and facilitate access to services, funding, and communications among childcare providers in the county.
			C. Develop mutual aid agreements with existing childcare facilities in advance that can be immediately activated during disasters; Ensure that obstacles to opening/re-opening childcare facilities are addressed in these agreements.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Workforce Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 6: Provide workforce re-skilling and training opportunities.	6-12 months	1. Actively communicate with county residents who have lost jobs and businesses, especially those from vulnerable populations, about the availability of JobLink and other public programs.	A. Provide information via outreach teams that go where people already gather throughout the community, including food banks, laundromats, and grocery stores, and to businesses that are downsizing.
			B. Partner with trusted organizations, including schools, membership organizations, and social service agencies that serve vulnerable populations, to provide them with relevant information for them to share with their constituents.
			C. Conduct outreach in multiple languages via traditional media, including radio and newspapers, and social media, including Facebook, Instagram, Next Door, and La Pulga Flea Market.
	1-3 years	2. Implement and strengthen programs to match businesses and employees from growth sectors with businesses and employees from shrinking sectors.	A. Implement a Hire Local campaign and provide incentives for businesses to hire locally.
			B. Promote the services of the Sonoma County Workforce Investment Board (WIB) and encourage businesses to contact the WIB if they need to downsize their workforce so the WIB can help the employees move into a growing business sector.
			C. Conduct a campaign to help small businesses know how to pivot employees performing an unnecessary job function into a high demand function within the same business.
	3-5 years	3. Implement and strengthen programs to provide career development assistance for high school and college students.	A. Build on existing internship programs with the County of Sonoma, Sonoma State University, and Santa Rosa Junior College to provide paid and unpaid internships for high school and college students.
			B. Produce a variety of video visits at businesses in growth sectors so that students can virtually explore the types of work provided by these businesses.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Workforce Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 7: Retain and attract Sonoma County's workforce.	1-3 years	1. Develop an internship and mentoring program to introduce displaced workers to career pathways that are growing and lead to prosperity.	A. Partner with Sonoma State University to create 40-hour Work Experience Projects tailored for displaced workers.
			B. Develop a program to introduce undocumented displaced workers to high growth career pathways.
			C. Partner with existing education providers to offer 21st Century Workplace Skills for displaced workers who want to transition into high demand industry sectors.
	3-5 years	2. Identify what needs to happen to make Sonoma County a more attractive and competitive place for people to live, work, and play.	A. Continue the survey work of the Talent Alignment Council, convened by the EDB, to identify barriers to new college graduates wanting to stay in Sonoma County.
			B. Partner with the Sonoma County Office of Equity to determine how to attract a more diverse workforce.
			C. Plan a social media campaign with video vignettes promoting the benefits of living, working, and playing in Sonoma County.
	3-5 years	3. Implement short-term strategies to make Sonoma County a more attractive and competitive place to live, work, and play.	A. Highlight the benefits that Sonoma County has to offer, as identified as needs in the Talent Alignment Council survey.
			B. Implement the Sonoma County Office of Equity's suggestions for ways to attract increased diversity.
			C. Implement a social media campaign promoting the benefits of living, working, and playing in Sonoma County.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Workforce Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 8: Ensure that social safety net services are available to help low income residents meet their basic needs.	6-12 months	1. Ensure that community members know how to access the comprehensive safety net services provided by multiple government agencies, nonprofit and faith-based organizations, and educational institutions throughout the county.	A. Create a campaign to encourage the use of 2-1-1 as the first place to go to access safety net services.
			B. Partner with First 5 so parents of young children know how to access safety net services.
			C. Distribute culturally relevant materials in multiple languages about how to access safety net services in locations where low-income and vulnerable families are located
	1-3 years	2. Identify and prioritize for policy makers the myriad structural issues that result in financial insecurity among community members.	A. Encourage policy makers to identify the root causes of financial insecurity among Sonoma County's low wage earners and develop working groups to identify possible solutions for each of the major causes.
			B. Encourage policy makers to explore promoting the importance of businesses paying livable wages and ways to incentivize and reward businesses that pay livable wages.
			C. Encourage policy makers to explore the impact of long-term rent control and eviction moratoriums on the financial security of low wage earners.
	6-12 months	3. Develop a dedicated fund to support community residents who are unable to access existing safety net programs.	A. Work with funding partners, including Un-docuFund, United Way of the Wine Country, Redwood Credit Union, and Community Foundation Sonoma County and funds available through PG&E and the CARES Act to establish a dedicated fund to support undocumented community residents during and after disasters and disruptions.
			B. Distribute safety net funding for undocumented individuals through existing community-based and faith-based organizations experienced in distributing and tracking relief funding to undocumented individuals.
			C. Provide access to safety net funding for undocumented individuals in the same places that FEMA funding is available, such as at Local Assistance Centers.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

This section includes five strategies for the community to recover from current and future disasters. These strategies were ranked by importance by the 228 respondents to the community survey and the 98 participants in the listening sessions. Responses to the community survey and listening session polls are located in the Appendix.

Community survey respondents provided their opinion on the importance of nine community recovery actions identified by the Community Recovery Work Group. Respondents reported that the following eight of the nine actions are very important:

- Provide safety net services, such as financial assistance, housing, medical care, and food, in neighborhoods where people live—especially in areas where the most impacted populations live, including Latinos/people from diverse cultures, older adults, people living alone, and people experiencing homelessness.
- Let people know that mental health services are available and how important it is to address personal trauma related to disasters.
- Make sure county residents can get the nutritious food they need.
- Provide rental assistance so people don't lose their housing.
- Use empty space that businesses no longer are using for housing and other community needs.
- Make internet service available to everyone throughout the county.
- Continue working toward the county's zero waste goals during disasters.
- Expand existing transportation programs during disasters.

The following community recovery action was rated as somewhat important:

Use our creativity and the arts to work together to identify innovative ways to solve community challenges that become worse in times of disaster, including social inequities

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Community Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 9: Serve the access and functional needs of local community members, including individuals with disabilities, older adults, children, individuals from diverse cultures, and people with limited English proficiency.	1-3 years	1. Explore opportunities to provide equitable satellite safety net services in communities where people live—especially in areas populated by the most impacted populations of Latinx, older adults, people living alone, and people experiencing homelessness.	A. Map the geographic locations where there is a lack of services, the locations of vulnerable residents who need access to services, and the services that are needed in each location.
			B. Identify existing organizations located where there is a lack of services that are willing to serve as hubs for providing services, including libraries, Federally Qualified Health Centers, WIC sites, chambers of commerce, visitor's centers, family resource centers, food distribution sites, and faith-based organizations, etc.
			C. Identify existing organizations that make deliveries to vulnerable populations, including meals and medical-related products, to determine if they can include additional safety net materials and supplies with their home deliveries.
			D. Create memoranda of understanding between the County of Sonoma and selected organizations to provide services, as needed, during and after disasters
	1-3 years	2. Increase awareness of the availability of mental and behavioral health supports and the importance of addressing trauma.	A. Conduct an awareness campaign focused on what trauma is, how to recognize it, and how to get support to manage it.
			B. Work with existing providers of behavioral health services to encourage them to provide telehealth services for individuals living in areas of the county that don't have behavioral health services.

RECOVERY: STRATEGIES, KEY ACTIONS, & TACTICS

Community Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 9: Serve the access and functional needs of local community members, including individuals with disabilities, older adults, children, individuals from diverse cultures, and people with limited English proficiency (cont'd).	6-12 months	3. Ensure that all county residents have food and nutrition security.	A. Encourage county agencies and organizations that serve vulnerable populations to amend their intake process to screen for food insecurity, chronic disease- related nutritional needs, and functional assessment of ability to shop and cook.
			B. Ensure that county agencies and organizations that serve vulnerable individuals assessed as being food insecure are aligned on referral pathways to the most appropriate nutrition services, from CalFresh enrollment and food pantries to home delivered and medically tailored meals.
			C. During and after disasters and disruptions, assign one individual in the Sonoma County Emergency Operations Center to serve as the Emergency Food Coordinator to facilitate access to services, funding, and communications among all relevant food-providing organizations and pop-up initiatives throughout the county.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Community Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 10: Address housing and transportation needs.	6-12 months	1. Explore options that provide rental support structures and assistance, including prioritizing the use of federal funds to keep people in their homes.	A. Combine CARES Act funding, PG&E settlement funding, redirected HUD funds, and other public and private dollars to provide rental assistance to individuals, distributed through public agencies and community- and faith-based organizations.
			B. Continue to evaluate eviction defense ordinance. As recent state eviction legislation pre-empts major aspects of local residential eviction ordinances, including limiting the commencement date and length of repayment period, monitor the state's eviction defense actions and as appropriate evaluate the extension of the local orders.
			C. Extend the Sonoma County Eviction Defense Ordinance that went into effect March 24, 2020 for 12 months beyond the duration of the declared Local Emergency in Sonoma County and reinstate the ordinance during declared Sonoma County State of Emergencies.
	1-3 years	2. Expand transportation opportunities within geographic areas where highly impacted populations live.	A. Identify geographic areas where highly impacted populations live in which transportation is needed during and after disasters.
			B. Develop memoranda of understanding with community- and faith-based organizations and schools that own vans/buses to be able to access their transportation services during times of disaster to serve vulnerable populations in targeted geographic areas.
			C. Work with United Way of the Wine Country/2-1-1 to expand the LYFT Relief Ride Program/Ride United into Sonoma County.
	1-3 years	3. Explore possibilities of using empty space that businesses no longer are using to creatively address housing and other community needs.	A. Work with Permit Sonoma to determine the zoning and permitting barriers and restrictions that need to be addressed for adaptive reuse of available space.
			B. Provide financial support to the housing fund created by the Renewal Enterprise District (RED) to address housing across the affordability spectrum.
			C. Support reviews of higher density development opportunities within county Urban Service Areas near jobs and transit, as provided in the General Plan and the updating of Specific Plans, including fee studies and other planning documents, to support meeting regional housing needs.
			D. Use the MAC (Municipal Advisory Council) process to involve community members in discussing building reuse initiatives.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Community Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 11: Expand broadband infrastructure and services to increase internet access.	6-12 months	1. Explore municipal broadband and ways for the county, cities, and other entities to deploy publicly managed infrastructure and services into unserved communities.	A. Create a new publicly governed broadband entity to deploy, own, and manage broadband infrastructure and services in Sonoma County's unserved and under-served regions.
			B. Develop a Municipal Broadband Business Plan for Sonoma County.
			C. Create a Steering Committee to drive the implementation of Sonoma County's Municipal Broadband Business Plan.
	6-12 months	2. Support internet service providers' broadband deployment projects by assisting with project design development, data collection, grant writing, streamlined permitting, community support, public-private-partnerships, and more.	A. Maintain full-time County of Sonoma staff to support internet service provider's broadband deployment projects.
			B. Adopt department policies to streamline processes for deployment projects wherever possible.
	6-12 months	3. Advocate for state and federal broadband legislation that promotes regional broadband goals as well as economic development, recovery, and resiliency.	A. Establish a process for legal counsel to frequently (e.g. monthly/bi-monthly) review, analyze, and advocate for state and federal broadband legislation.
			B. Coordinate with local initiatives and priorities around broadband needs.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Community Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 12: Leverage the creative power of our community, including artists, cultural workers, and their organizations, to develop and implement innovative solutions for our recovery.	3-5 years	1. Enhance our sense of community by engaging as many county residents as possible—from all geographic areas, backgrounds, and ages—to plan and implement solutions for recovery.	A. Create a targeted messaging campaign encouraging the community to support hardest-hit businesses.
			B. Provide support for businesses to get the knowledge, equipment, and supplies they need to adapt to new requirements in operating their businesses.
			C. Help local businesses interpret state policies and regulations and understand how these policies and regulations are implemented at the county and municipal level.
	3-5 years	2. Leverage the creativity and arts within our communities to bring innovative ideas to community challenges that become amplified in times of disaster, including social inequities.	A. Develop ongoing funded public art projects to enable community members to express themselves in productive and proactive projects to enhance our spirit of recovery and resilience.
			B. Launch a demonstration project to explore underlying issues related to financial insecurity, food insecurity, and social inequities amplified during disasters and provide creative solutions; Build future projects based on any learnings.
			C. Facilitate networks of artists and creatives to help them prepare themselves and their organizations for future crises; Leverage the network to provide arts experiences designed to promote community healing.
	3-5 years	3. Provide incentives and reduce barriers so that local artists and creatives can afford to contribute to making Sonoma County a more attractive and competitive place to live, work and play, including creating art in public spaces.	A. Develop new revenue streams to underwrite the cost of public art throughout the county, including a countywide percent for art ordinance for public and private construction projects.
			B. Support new physical and virtual outlets for artists to sell their work through opportunities including online marketplaces, kiosks in public spaces, etc.
			C. Develop affordable spaces where artists can live, work, and showcase their art for public purchase, including making necessary zoning changes and tax incentives for developers.

RECOVERY:

STRATEGIES, KEY ACTIONS, & TACTICS

Community Recovery			
STRATEGY	LAUNCH TIMING	KEY ACTION	TACTIC
STRATEGY 13: Address climate and energy impacts.	3-5 years	1. Explore the creation of community microgrids as a path to resilience and sustainability.	A. Identify neighborhoods of vulnerable residents hardest hit during disasters and disruptions that could benefit from a community microgrid to sustain power during outages.
			B. Work with the California Energy Commission to obtain funding to develop a microgrid demonstration project in targeted neighborhoods.
			C. Implement the microgrid demonstration project and evaluate results.
	3-5 years	2. Promote strategies for how to continue working toward the county's zero waste goals during disasters	A. During disasters, promote practices presented in Tips for Zero Waste and Resilience During the Pandemic developed by the Zero Waste North Bay Task Force (https://zerowastesonoma.gov/uploads/documents/ZW-tips-for-Pandemic.pdf).
			B. Establish county and local jurisdiction ordinances regarding reuse and recycling practices to implement during disasters and disruptions that can be activated during disasters and disruptions.
			C. Update Sonoma County's Countywide Integrated Waste Management Plan and the Sonoma County Regional Climate Action Plan to include disaster-related recommendations.
	1-3 years	3. Explore expanding the use of public transportation programs during disasters.	A. Ensure that Sonoma-Marin Area Rail Transit's (SMART) plans and the Sonoma County Transportation Authority's (SCTA) 2050 Comprehensive Transportation Plan: Moving Forward 2050 include goals and actions for moving people throughout the county during evacuations and other disaster-related incidents.
			B. Support the work of the Renewal Enterprise District (RED) to apply for grants for transit-oriented infill development projects.
			C. Provide information to the public before disasters happen about available public transportation options to use during evacuations and other disaster-related incidents.

POLICY ISSUES FOR FUTURE CONSIDERATION

Throughout the development of this action plan, participants suggested myriad ideas for actions to take to help develop a resilient community. Some of these actions fell outside the parameters of this report and should really be a part of additional ongoing community conversations to improve the quality of life in Sonoma County. One of these suggestions centered on discussions regarding the need for a living wage. Other suggestions had to do with structural changes that form the underlying reasons why we have disparities, inequities, and financial insecurity in our community. We present these issues for the future consideration to the leadership of the County of Sonoma.

Living wage

Among a number of critical topics raised by business and community leaders in the Steering Committee and Work Groups, as well as many who participated in two listening sessions and a survey, was the issue of Living Wage and/or advanced minimum wage increases. It must be acknowledged that these issues are and must be subject to careful scrutiny and review among local leaders and policy makers. **While it was generally accepted among all participants that the cost of living in Sonoma County is not sustainable on the current state minimum wage, business owners and representatives were quick to point out unintended consequences of new policies, especially against the backdrop of economic challenges faced in recent years.** Community members and leaders in support were equally steadfast in pointing to those very challenges as the basis of an argument for living wage ordinances and/or an increase in the minimum wage.

Suggestions raised include the following:

- Evaluate the comprehensive economic impact (businesses and residents) of similar ordinances statewide, as well as that of a local ordinance.
- Follow the lead of Petaluma, Santa Rosa and the City of Sonoma in adopting a similar local minimum wage ordinance.
- Strengthen connections between employers, educators, and the Workforce Investment Board to ensure the availability of resources and programming to help individuals identify meaningful career paths.
- Many participants noted a direct correlation among income, cost of living, and health outcomes as a critical issue facing county residents

Structural change

Throughout the community discussions that formed this plan, many people raised issues about the cause and effect of some of the ideas presented. Many participants stated that if people made more money or if the cost of living weren't so high, then they wouldn't experience financial insecurity. Issues of disparity and equity were discussed in every work group meeting, driven by the unfortunate fact that 54% of all COVID-19 cases are among the Latinx population, while Latinx individuals only represent 25.65 of the county's population. In the summer of 2020, the percentage of Latinx individuals with COVID-19 exceeded 75% of the county's cases.

Many of our discussions included issues of disparities throughout our communities stemming from social determinants of health. According to the Federal Office of Disease Prevention and Health Promotion, our health is determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the

POLICY ISSUES FOR FUTURE CONSIDERATION

and the nature of our social interactions and relationships. The conditions in which we live explain in part why some people in our county are healthier than others and why others are not as healthy as they could be.

Through A Portrait of Sonoma study conducted in 2014, Sonoma County examined disparities among our population by calculating a Human Development Index (HDI) for each of the county's census tracts. The county's HDI for white residents was reported as 6.01, while the HDI for the Latinx population was 4.27. The study revealed that **education was the single biggest predictor of earnings for racial and ethnic groups and for census tracts in Sonoma County**. A Portrait of Sonoma also revealed sharp divides in standards of living. An example of this divide is that the top fifth of Sonoma County taxpayers take home 60% of Sonoma County's total income, while the bottom fifth take home 2.5%.

CONCLUSION

Based on the conversations conducted among community residents during this plan development process, we recommend that the County of Sonoma's leadership consider discussing the following issues to determine if there are steps that can be taken to address the underlying issues that result in inequities and disparities among members of our community:

- Societal inequities related to social determinants of health, an underlying cause of the high percentage of Latinx community members who test positive for COVID-19
- Income disparities
- Lack of affordable housing
- High cost of living
- Lack of medical insurance coverage for all residents

It's essential for us to take a Whole Community approach to implementing the 13 strategies of this Economic Recovery Action Plan. Leadership with County of Sonoma agencies will need to reach out to businesses, professional associations, educational institutions, community- and faith-based organizations, and members of the community to collaboratively assign roles and responsibilities for addressing the tactics presented in the plan.

Recovery takes time, but by working together, we can achieve the results we need to ensure that Sonoma County's economy and entire community are back on track.

By striving to become resilient, we will all be better prepared to handle future disasters and have the fortitude to manage the current crises facing us.



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APPENDIX

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1	Economic Recovery Strategies, Key Actions, & Tactics
2	Steering Committee and Work Group Members
3	Community Survey Summary
4	Listening Sessions Polls: Priority Strategies
5	Sonoma County Broadband Service
6	Childcare changes since Covid-19
7	Economic Impacts from Covid-19 on the Sonoma County Econom by Dr. Robert Eyler

Appendix 1

Economic Recovery Strategies, Key Actions, and Tactics

**Sonoma County Economic Development Board
Sonoma County Office of Recovery and Resiliency**



**Economic Recovery Action Plan
Strategies, Key Actions, & Tactics
October 2020**

Legend for Key Action Timeframe Icons	
	Short-term: Key actions to be implemented within 6-12 months, including those to be implemented immediately (November 2020-October 2021)
	Medium-term: Key actions to be implemented in 1-3 years (November 2021-October 2023)
	Long-term: Key actions to be implemented in 3-5 years (November 2023-October 2025)

Short-term Key Actions	
Key Action Number	Key Action
Business Recovery	
1.1	Establish a program to provide emergency stabilization funding, with a special focus on assisting greatly impacted underrepresented populations.
1.2	Work with banks, credit unions, Community Development Financial Institutions (CDFIs), and nonprofit organizations to increase access to capital for small businesses.
2.1	Expedite discretionary permits and structurally address the impact of regulations established by the county.
2.2	Establish small industry-sector work groups to identify specific regulations that could be temporarily suspended because they are barriers for recovery.
3.1	Provide businesses in target clusters hardest hit by disasters, specifically hospitality & recreation and agriculture & food, with the immediate support they need to remain operational.
3.2	Prepare businesses, especially those owned by people from underrepresented communities, for current conditions and future opportunities by helping them adopt new technologies, use eCommerce tools to sell products online, expand marketing, and upskill/reskill workers.
3.3	Continue to offer and market financing and entrepreneurial support programs to help existing businesses adopt new technologies, diversify products and services, expand markets, and provide critical products to strengthen our local supply chain
4.2	Communicate with one reliable voice during disasters and disruptions, ensuring that all communication is presented in culturally responsive ways so that all community residents remain informed.
Workforce Recovery	
5.1	Stabilize Sonoma County's childcare industry to enable childcare providers to remain open, especially during disasters and disruptions.

6.1	Actively communicate with county residents who have lost jobs and businesses, especially those from vulnerable populations, about the availability of JobLink and other public programs.
7.3	Implement short-term strategies to make Sonoma County a more attractive and competitive place to live, work, and play.
8.1	Ensure that community members know how to access the comprehensive safety net services provided by multiple government agencies, nonprofit and faith-based organizations, and educational institutions throughout the county.
8.3	Develop a dedicated fund to support community residents who are unable to access existing safety net programs.
9.3	Ensure that all county residents have food and nutrition security.
10.1	Explore options that provide rental support structures and assistance, including prioritizing the use of federal funds to keep people in their homes
11.1	Explore municipal broadband and ways for the county, cities, and other entities to deploy publicly managed infrastructure and services into unserved communities.
11.2	Support internet service providers' broadband deployment projects by assisting with project design development, data collection, grant writing, streamlined permitting, community support, public-private-partnerships, and more.
11.3	Advocate for state and federal broadband legislation that promotes regional broadband goals as well as economic development, recovery, and resiliency.



Economic Recovery Action Plan: Strategies, Key Actions, & Tactics


Business Recovery

Strategy 1. Make funding, equipment, and facilities easily accessible to businesses. *

* The term *business* used throughout this document includes for-profit and nonprofit enterprises.




Key Actions and Tactics:

1.  **Establish a program to provide emergency stabilization funding, with a special focus on assisting greatly impacted underrepresented populations.**
 - a. Launch an emergency grant program with transparent distribution protocols through federal CARES Act funding.
 - b. Work with regional funders to ensure the long-term sustainability of the emergency grant program.
 - c. Provide technical assistance and workshops on effective business practices to help stabilize businesses that request emergency funding.
2.  **Work with banks, credit unions, Community Development Financial Institutions (CDFIs), and nonprofit organizations to increase access to capital for small businesses.**
 - a. Forge a partnership with the financial institutions operating in Sonoma County to develop a financing program of loans and mini-grants funded by multiple lending institutions contributing to one funding pool.

- b. To increase their ability to pay back loans, establish a mentoring program to help business owners effectively manage their business operations.
 - c. Identify which County of Sonoma business fees can be waived during a disaster and waive relevant fees, as appropriate.
- 3.  **Develop a program to identify surplus business continuity equipment and supplies that businesses may make available to other local businesses that need them during disasters and disruptions.**
 - a. Work with industry associations to establish industry-specific surplus business continuity equipment and supplies sharing programs.
 - b. Conduct an inventory of available business assets, including real estate, that can be shared during a disaster.
 - c. Identify local and state regulations regarding space utilization that are barriers for businesses and develop strategies for overcoming those barriers (example: ability of restaurants to use winery facilities for their outdoor dining).

Strategy 2. Provide innovative regulations and temporary laws (called *urgency ordinances*) to keep businesses operational.



Key Actions and Tactics:


- 1.  **Expedite discretionary permits and structurally address the impact of regulations established by the county.**
 - a. Facilitate meetings among permitting department staff in the county, the county's six jurisdictions, and businesses that have experienced the permitting process to identify strategies for improving and expediting permitting processes, while making them predictable, consistent, and transparent.
 - b. Establish a one-stop center for issuing business permits throughout the county.
 - c. Develop a program to reduce business fees, waive fees, eliminate/reduce inspections (while still maintaining safety), and/or impose a moratorium on fees during and after a disaster.
- 2.  **Establish small industry-sector work groups to identify specific regulations that could be temporarily suspended because they are barriers for recovery.**
 - a. Facilitate group and one-on-one meetings with existing industry groups to identify county and local regulations that are barriers to recovery and recommend ways to overcome these barriers.
 - b. Develop fast-tracked recommendations for which county regulations should be immediately changed/suspended and implement an 18-month pilot to test regulatory change recommendations.
 - c. Involve local elected officials in developing strategies for streamlining municipal regulations and fees during times of disaster.
- 3.  **Assist businesses to be better prepared to successfully work with insurance companies.**
 - a. Partner with the Napa-Sonoma Small Business Development Center (SBDC) to develop insurance workshops and consultations.

- b. Establish a mentorship program for business owners experienced in working with insurance companies after a disaster or disruption to help business owners with no prior experience with disaster/disruption-related insurance claims.
- c. Conduct audits of insurance coverage to determine if local businesses are adequately covered.

Strategy 3. Support hardest-hit business sectors, while increasing economic diversification throughout the county.




Key Actions and Tactics:

1.  **Provide businesses in target clusters hardest hit by disasters, specifically hospitality & recreation and agriculture & food, with the immediate support they need to remain operational.**
 - a. Create a targeted messaging campaign encouraging the community to support hardest-hit businesses.
 - b. Provide support for businesses to get the knowledge, equipment, and supplies they need to adapt to new requirements in operating their businesses.
 - c. Help local businesses interpret state policies and regulations and understand how these policies and regulations are implemented at the county and municipal level.
2.  **Prepare businesses, especially those owned by people from underrepresented communities, for current conditions and future opportunities by helping them adopt new technologies, use eCommerce tools to sell products online, expand marketing, and upskill/reskill workers.**
 - a. Create a county-driven website that's easily accessible to small businesses to serve as a one-stop, comprehensive resource to help businesses quickly adapt to new ways of conducting business during and after a disaster.
 - b. Quickly deploy a group of business advisors from the SBDC, the Economic Development Board (EDB), and local educational institutions, among others. to be available to provide immediate assistance to businesses in need.
3.  **Continue to offer and market financing and entrepreneurial support programs to help existing businesses adopt new technologies, diversify products and services, expand markets, and provide critical products to strengthen our local supply chain.**
 - a. Through a mentoring program, connect business owners inexperienced in managing in times of disaster with business owners experienced in managing a business during and after a disaster.
 - b. Develop online guidance to help businesses navigate through the myriad rules and regulations they need to follow to make it easier for them to open after a disaster.
 - c. Provide technical assistance to businesses to help them navigate through established regulations so they can safely re-open.

4.  **As a way for Sonoma County's economy to become less dependent on the hospitality and tourism sectors, which are notoriously hard-hit during disasters, support the growth of the six industry clusters identified in *Strategic Sonoma* by helping them adapt to the future economy, encouraging innovation and entrepreneurship, and leveraging the prestige of the *Sonoma Brand*. (These industry clusters are Agriculture, Cannabis, Craft Beverages, Creative Sonoma, Outdoor Recreation, and Specialty Food.)**
 - a. Accelerate the growth of these industry clusters by making a revolving loan fund available that targets entrepreneurs who are from communities of color and women.
 - b. Establish a marketing campaign and provide technical assistance to encourage businesses from hospitality and tourism sectors that are hard-hit during disasters and disruptions to start businesses related to the six targeted industry clusters.
 - c. Establish a mentoring program to help entrepreneurs wanting to start businesses in the six industry clusters.

Strategy 4. Ensure that businesses are prepared for future disasters and disruptions and can quickly recover afterward.

Key Actions and Tactics:


1.  **Provide what businesses need to quickly become operational after a disaster and then provide it, ranging from streamlined processes and reduction in fees to assistance with insurance claims and help with accessing business continuity equipment and supplies.**
 - a. Provide technical assistance to help businesses access what they need to become operational after a disaster.
 - b. Develop a disaster preparedness and post-disaster informational key tips document that can be distributed to businesses when municipalities mail them their annual business licenses.
2.  **Communicate with one reliable voice during disasters and disruptions, ensuring that all communication is presented in culturally responsive ways so that all community residents remain informed.**
 - a. During a disaster or disruption, establish a dedicated, centralized phone line and email address that businesses can access to receive up-to-date information and the help they need to recover.
 - b. Use a text alert system to communicate directly with businesses in English and Spanish.
 - c. Send timely emails to businesses explaining any new state, county, or local orders and regulations regarding disaster recovery immediately upon knowing of them.
3.  **Provide education for businesses on the importance of continuity of operations planning and how to develop robust plans that address all possible types of disasters and disruptions and strategies for communicating key information with employees, contractors, and customers.**


- a. Develop a portal that businesses can access to obtain a wide variety of continuity of operations and disaster recovery tools.
- b. Provide user-friendly, web-based templates tailored to Sonoma County's major industries that businesses can quickly complete to create their continuity of operations plans.
- c. Provide workshops and webinars on disaster-related business continuity planning for businesses.


Workforce Recovery


Strategy 5. Provide creative solutions to enable the county's childcare industry to thrive.

Key Actions and Tactics:

1.  **Stabilize Sonoma County's childcare industry to enable childcare providers to remain open, especially during disasters and disruptions.**
 - a. Provide dedicated funding to enable childcare facilities to remain open.
 - b. Encourage existing childcare providers to obtain technical assistance provided by Sonoma County's Child Care Resource & Referral Agencies, 4Cs and River to Coast Children's Services, to ensure they receive the support and resources they need to remain open during disasters and disruptions.
 - c. Identify strategies for increasing childcare as a viable and desirable career option and increasing employee wages and business revenue throughout the county's historically low-paying childcare industry.



2.  **Expand the capacity of childcare facilities to enable the industry to become sustainable.**
 - a. Develop and implement a strategy to attract, retain, and expand the number of childcare facility owners and employees in Sonoma County; Work with providers to recruit low-wage earners into a career path with \$60,000-\$70,000 earning potential.
 - b. Support JobLink, local high schools, Santa Rosa Junior College, and Sonoma State University to implement a training and work experience initiative for individuals interested in pursuing childcare as a career pathway into K-12 education and for entrepreneurs interested in starting a childcare business.
 - c. Identify opportunities for childcare providers to share services, including purchasing and other business services.


3.  **Enable the development of new childcare sites and facilities.**
 - a. Create a multi-jurisdictional Blue-Ribbon Panel to explore regulatory restrictions by local/county/state jurisdictions that affect the growth of the childcare industry; Develop and implement a plan for removing/changing the identified regulatory restrictions; Work with childcare advocates to join and support advocacy efforts at the state level.
 - b. Identify specific sites suitable for childcare facilities.

- c. Develop a policy requiring childcare facilities located in geographic areas governed by the county to be included in commercial development or commercial re-development.
 - d. Work with the Renewal Enterprise District (RED) and developers to identify and incentivize ways to have childcare facilities incorporated into their projects.
4.  **Ensure that childcare providers are prepared for disasters and can manage during times of crisis.**
- a. Partner with Sonoma County's Child Care Resource & Referral Agencies to provide simple templates to help childcare providers develop continuity of operations and disaster recovery tools; Ensure that all templates and tools developed follow the California Department of Social Services Community Care Licensing guidelines.
 - b. Institutionalize the role/partnership between the local Child Care Resource & Referral Agencies and the Emergency Operations Center during disasters; During disasters, identify an Emergency Childcare Coordinator within the County and local Child Care Resource & Referral Agencies to coordinate communications between County, State Licensing and the Child Care Providers to assist with emergency waivers; inform childcare providers of standardized and accepted health and safety requirements; and facilitate access to services, funding, and communications among childcare providers in the county.
 - c. Develop mutual aid agreements with existing childcare facilities in advance that can be immediately activated during disasters; Ensure that obstacles to opening/re-opening childcare facilities are addressed in these agreements.

Strategy 6. Provide workforce re-skilling and training opportunities.




Key Actions and Tactics:

- 1.  **Actively communicate with county residents who have lost jobs and businesses, especially those from vulnerable populations, about the availability of JobLink and other public programs.**
 - a. Provide information via outreach teams that go where people already gather throughout the community, including food banks, laundromats, and grocery stores, and to businesses that are downsizing.
 - b. Partner with trusted organizations, including schools, membership organizations, and social service agencies that serve vulnerable populations, to provide them with relevant information for them to share with their constituents.
 - c. Conduct outreach in multiple languages via traditional media, including radio and newspapers, and social media, including Facebook, Instagram, Next Door, and La Pulga Flea Market.
- 2.  **Implement and strengthen programs to match businesses and employees from growth sectors with businesses and employees from shrinking sectors.**
 - a. Implement a *Hire Local* campaign and provide incentives for businesses to hire locally.




- b. Promote the services of the Sonoma County Workforce Investment Board (WIB) and encourage businesses to contact the WIB if they need to downsize their workforce so the WIB can help the employees move into a growing business sector.
 - c. Conduct a campaign to help small businesses know how to pivot employees performing an unnecessary job function into a high demand function within the same business.
- 3.  **Implement and strengthen programs to provide career development assistance for high school and college students.**
 - a. Build on existing internship programs with the County of Sonoma, Sonoma State University, and Santa Rosa Junior College to provide paid and unpaid internships for high school and college students.
 - b. Produce a variety of video visits at businesses in growth sectors so that students can virtually explore the types of work provided by these businesses.

Strategy 7. Retain and attract Sonoma County's workforce.

Key Actions and Tactics:

- 1.  **Develop an internship and mentoring program to introduce displaced workers to career pathways that are growing and lead to prosperity.**
 - a. Partner with Sonoma State University to create 40-hour Work Experience Projects tailored for displaced workers.
 - b. Develop a program to introduce undocumented displaced workers to high growth career pathways.
 - c. Partner with existing education providers to offer 21st Century Workplace Skills for displaced workers who want to transition into high demand industry sectors.
- 2.  **Identify what needs to happen to make Sonoma County a more attractive and competitive place for people to live, work, and play.**
 - a. Continue the survey work of the Talent Alignment Council, convened by the EDB, to identify barriers to new college graduates wanting to stay in Sonoma County.
 - b. Partner with the Sonoma County Office of Equity to determine how to attract a more diverse workforce.
 - c. Plan a social media campaign with video vignettes promoting the benefits of living, working, and playing in Sonoma County.
- 3.  **Implement short-term strategies to make Sonoma County a more attractive and competitive place to live, work, and play.**
 - a. Highlight the benefits that Sonoma County has to offer, as identified as needs in the Talent Alignment Council survey.
 - b. Implement the Sonoma County Office of Equity's suggestions for ways to attract increased diversity
 - c. Implement a social media campaign promoting the benefits of living, working, and playing in Sonoma County.




Key Actions and Tactics:

1.  **Ensure that community members know how to access the comprehensive safety net services provided by multiple government agencies, nonprofit and faith-based organizations, and educational institutions throughout the county.**
 - a. Create a campaign to encourage the use of 2-1-1 as the first place to go to access safety net services.
 - b. Partner with First 5 so parents of young children know how to access safety net services.
 - c. Distribute materials in multiple languages about how to access safety net services in locations where low-income and vulnerable families are located.
2.  **Identify and prioritize for policy makers the myriad structural issues that result in financial insecurity among community members.**
 - a. Encourage policy makers to identify the root causes of financial insecurity among Sonoma County's low wage earners and develop working groups to identify possible solutions for each of the major causes.
 - b. Encourage policy makers to explore promoting the importance of businesses paying livable wages and ways to incentivize and reward businesses that pay livable wages.
 - c. Encourage policy makers to explore the impact of long-term rent control and eviction moratoriums on the financial security of low wage earners.
3.  **Develop a dedicated fund to support community residents who are unable to access existing safety net programs.**
 - a. Work with funding partners, including UndocuFund, United Way of the Wine Country, Redwood Credit Union, and Community Foundation Sonoma County and funds available through PG&E and the CARES Act to establish a dedicated fund to support undocumented community residents during and after disasters and disruptions.
 - b. Distribute safety net funding for undocumented individuals through existing community-based and faith-based organizations experienced in distributing and tracking relief funding to undocumented individuals.
 - c. Provide access to safety net funding for undocumented individuals in the same places that FEMA funding is available, such as at Local Assistance Centers.

Community Recovery


Strategy 9. Serve the access and functional needs of local community members, including individuals with disabilities, older adults, children, individuals from diverse cultures, and people with limited English proficiency.



Key Actions and Tactics:

1.  **Explore opportunities to provide equitable satellite safety net services in communities where people live—especially in areas populated by the most impacted populations of Latinx, older adults, people living alone, and people experiencing homelessness.**
 - a. Map the geographic locations where there is a lack of services, the locations of vulnerable residents who need access to services, and the services that are needed in each location.
 - b. Identify existing organizations located where there is a lack of services that are willing to serve as hubs for providing services, including libraries, Federally Qualified Health Centers, WIC sites, chambers of commerce, visitor's centers, family resource centers, food distribution sites, and faith-based organizations, etc.
 - c. Identify existing organizations that make deliveries to vulnerable populations, including meals and medical-related products, to determine if they can include additional safety net materials and supplies with their home deliveries.
 - d. Create memoranda of understanding between the County of Sonoma and selected organizations to provide services, as needed, during and after disasters.
2.  **Increase awareness of the availability of mental and behavioral health supports and the importance of addressing trauma.**
 - a. Conduct an awareness campaign focused on what trauma is, how to recognize it, and how to get support to manage it.
 - b. Work with existing providers of behavioral health services to encourage them to provide telehealth services for individuals living in areas of the county that don't have behavioral health services.
3.  **Ensure that all county residents have food and nutrition security.**
 - a. Encourage county agencies and organizations that serve vulnerable populations to amend their intake process to screen for food insecurity, chronic disease-related nutritional needs, and functional assessment of ability to shop and cook.
 - b. Ensure that county agencies and organizations that serve vulnerable individuals assessed as being food insecure are aligned on referral pathways to the most appropriate nutrition services, from CalFresh enrollment and food pantries to home delivered and medically tailored meals.
 - c. During and after disasters and disruptions, assign one individual in the Sonoma County Emergency Operations Center to serve as the Emergency Food Coordinator to facilitate access to services, funding, and communications among all relevant food-providing organizations and pop-up initiatives throughout the county.

Strategy 10. Address housing and transportation needs.


Key Actions and Tactics:



1.  **Explore options that provide rental support structures and assistance, including prioritizing the use of federal funds to keep people in their homes.**

- a. Combine CARES Act funding, PG&E settlement funding, redirected HUD funds, and other public and private dollars to provide rental assistance to individuals, distributed through public agencies and community- and faith-based organizations.
 - b. Create a centralized countywide hub that identifies all county agencies and nonprofit organizations that provide rental assistance through both public and private dollars and can make appropriate referrals to individuals in need.
 - c. Extend the Sonoma County Eviction Defense Ordinance that went into effect March 24, 2020 for 12 months beyond the duration of the declared Local Emergency in Sonoma County and reinstate the ordinance during declared Sonoma County State of Emergencies.
- 2.  **Expand transportation opportunities within geographic areas where highly impacted populations live.**
 - a. Identify geographic areas where highly impacted populations live in which transportation is needed during and after disasters.
 - b. Develop memoranda of understanding with community- and faith-based organizations and schools that own vans/buses to be able to access their transportation services during times of disaster to serve vulnerable populations in targeted geographic areas.
 - c. Work with United Way of the Wine Country/2-1-1 to expand the LYFT Relief Ride Program/Ride United into Sonoma County.
- 3.  **Explore possibilities of using empty space that businesses no longer are using to creatively address housing and other community needs.**
 - a. Work with Permit Sonoma to determine the zoning and permitting barriers and restrictions that need to be addressed for adaptive reuse of available space.
 - b. Provide financial support to the housing fund created by the Renewal Enterprise District (RED) to address housing across the affordability spectrum
 - c. Use the MAC (Municipal Advisory Council) process to involve community members in discussing building reuse initiatives.

Strategy 11. Expand broadband infrastructure and services to increase internet access.



Key Actions and Tactics:


- 1.  **Explore municipal broadband and ways for the county, cities, and other entities to deploy publicly managed infrastructure and services into unserved communities.**
 - a. Create a new publicly governed broadband entity to deploy, own, and manage broadband infrastructure and services in Sonoma County's unserved and underserved regions.
 - b. Develop a Municipal Broadband Business Plan for Sonoma County.
 - c. Create a Steering Committee to drive the implementation of Sonoma County's Municipal Broadband Business Plan.

2.  **Support internet service providers' broadband deployment projects by assisting with project design development, data collection, grant writing, streamlined permitting, community support, public-private-partnerships, and more.**
 - a. Maintain full-time County of Sonoma staff to support internet service provider's broadband deployment projects
 - b. Adopt department policies to streamline processes for deployment projects wherever possible.
3.  **Advocate for state and federal broadband legislation that promotes regional broadband goals as well as economic development, recovery, and resiliency.**
 - a. Establish a process for legal counsel to frequently (e.g. monthly/bi-monthly) review, analyze, and lobby for state and federal broadband legislation
 - b. Coordinate with local initiatives and priorities around broadband needs.

Strategy 12. Leverage the creative power of our community, including artists, cultural workers, and their organizations, to develop and implement innovative solutions for our recovery.




Key Actions and Tactics:

1.  **Enhance our sense of community by engaging as many county residents as possible—from all geographic areas, backgrounds, and ages—to plan and implement solutions for recovery.**
 - a. Work with the Sonoma County Community Organizations Active in Disaster (COAD) to encourage their members to reach out to the community residents they serve to help implement the strategies included in the Sonoma County Economic Recovery Plan.
 - b. Engage artists and other creatives to serve as ambassadors to encourage and facilitate place-based community engagement to help implement the strategies included in the Sonoma County Economic Recovery Plan.
 - c. Use surveys, social media, and partnerships with community cultural organizations to reach their artists, audiences, and supporters to encourage their participation in planning activities.
2.  **Leverage the creativity and arts within our communities to bring innovative ideas to community challenges that become amplified in times of disaster, including social inequities.**
 - a. Develop ongoing funded public art projects to enable community members to express themselves in productive and proactive projects to enhance our spirit of recovery and resilience.
 - b. Launch a demonstration project to explore underlying issues related to financial insecurity, food insecurity, and social inequities amplified during disasters and provide creative solutions; Build future projects based on any learnings.
 - c. Facilitate networks of artists and creatives to help them prepare themselves and their organizations for future crises; Leverage the network to provide arts experiences designed to promote community healing.

3.  **Provide incentives and reduce barriers so that local artists and creatives can afford to contribute to making Sonoma County a more attractive and competitive place to live, work and play, including creating art in public spaces.**
 - a. Develop new revenue streams to underwrite the cost of public art throughout the county, including a countywide percent for art ordinance for public and private construction projects.
 - b. Support new physical and virtual outlets for artists to sell their work through opportunities including online marketplaces, kiosks in public spaces, etc.
 - c. Develop affordable spaces where artists can live, work, and showcase their art for public purchase, including making necessary zoning changes and tax incentives for developers.

Strategy 13. Address climate and energy impacts.

Key Actions and Tactics:

1.  **Explore the creation of community microgrids as a path to resilience and sustainability.**
 - a. Identify neighborhoods of vulnerable residents hardest hit during disasters and disruptions that could benefit from a community microgrid to sustain power during outages.
 - b. Work with the California Energy Commission to obtain funding to develop a microgrid demonstration project in targeted neighborhoods.
 - c. Implement the microgrid demonstration project and evaluate results.
2.  **Promote strategies for how to continue working toward the county's zero waste goals during disasters.**
 - a. During disasters, promote practices presented in *Tips for Zero Waste and Resilience During the Pandemic* developed by the Zero Waste North Bay Task Force (<https://zerowastesonoma.gov/uploads/documents/ZW-tips-for-Pandemic.pdf>).
 - b. Establish county and local jurisdiction ordinances regarding reuse and recycling practices to implement during disasters and disruptions that can be activated during disasters and disruptions.
 - c. Update Sonoma County's *Countywide Integrated Waste Management Plan* and the *Sonoma County Regional Climate Action Plan* to include disaster-related recommendations.
3.  **Explore expanding the use of public transportation programs during disasters.**
 - a. Ensure that Sonoma-Marin Area Rail Transit's (SMART) plans and the Sonoma County Transportation Authority's (SCTA) 2050 Comprehensive Transportation Plan: *Moving Forward 2050* include goals and actions for moving people throughout the county during evacuations and other disaster-related incidents.
 - b. Support the work of the Renewal Enterprise District (RED) to apply for grants for transit-oriented infill development projects.

- c. Provide information to the public before disasters happen about available public transportation options to use during evacuations and other disaster-related incidents.

Appendix 2

Steering Committee and Work Group Members

**Sonoma County Economic Development Board
Sonoma County Office of Recovery and Resiliency**

Economic Recovery Planning



Community Leaders Invited to Participate in the Development of the Plan

Economic Recovery Steering Committee: Invited Participants		
Ingrid	Alverde	City of Petaluma
Lisa	Badenfort	North Bay Association of Realtors
John	Bly	Northern California Engineering Contractors Association
Mark	Bodenhamer	Sonoma Valley Chamber of Commerce
Cathy	Capriola	City of Sonoma
Oscar	Chavez	County of Sonoma Human Services Department
Frank	Chong	Santa Rosa Junior College
Larry	Florin	Burbank Housing
Peggy	Flynn	City of Petaluma
Kathy	Goodacre	CTE Foundation
Katie	Greaves	Workforce Investment Board
David	Guhin	City of Santa Rosa
Sandra	Gutierrez	Hispanic Chamber of Sonoma County
Herman J.	Hernandez	Los Cien
Judy	James	Kaiser Permanente
Darrin	Jenkins	City of Rohnert Park
Ariel	Kelley	Corazon Healdsburg
David	Kelley	City of Cloverdale
David	Kiff	City of Healdsburg
Karissa	Kruse	Sonoma County Winegrowers
Ken	MacNab	Town of Windsor
Alma	Magallon	Hispanic Chamber of Commerce
Brett	Martinez	Redwood Credit Union
David	McCuan	Sonoma State University
Larry	McLaughlin	City of Sebastopol
Cynthia	Murray	North Bay Leadership Council
Damien	O'Bid	City of Cotati
Barbie	Robinson	Sonoma County Department of Health Services/Community Development Commission
Peter	Rumble	Santa Rosa Metro Chamber
Lisa	Schaffner	John Jordan Foundation
Geof	Syphers	Sonoma Clean Power
Tawny	Tesconi	Sonoma County Farm Bureau

Claudia	Vecchio	Sonoma County Tourism
Tennis	Wick	Permit Sonoma
Keith	Woods	North Coast Builders Exchange

Business Recovery Work Group: Invited Members		
Jessica	Adkins	Amy's
Mariana	Almaraz	Small Business Development Center
Mike	Arendt	Exchange Bank
Lisa	Badenfort	North Bay Association of Realtors
Kelly	Bass Seibel	Sonoma County Tourism
Mark	Belhumeur	AutoCamp Russian River
Mark	Bodenhamer	Sonoma Valley Chamber
Adam	Borovkoff	Sonoma County Airport
Brian	Bottari	Comcast
Percy	Brandon	Vintners Inn
Diana	Brennan	Sonoma Raceway
Jennifer	Buffo	Pure Luxury Transportation
Denia	Candela	Los Cien
Natalie	Cilurzo	Russian River Brewing
Janet	Connors	Poppy Bank
Maureen	Cottingham	Sonoma Valley Vintners and Growers
Mark	Davis	Wright Contracting
Chris	Denny	The Engine is Red
Octavio	Diaz	Notre Mere
Barry	Freidman	Freidman's Home Improvement
Ezequiel	Guzman	Latinos Unidos of Sonoma County
Mike	Haney	Sonoma Vintners
Jim	Happ	Labcon
Juan	Hernandez	La Luz Center
Ricardo	Ibarra	Watza Lab
Judy	James	Kaiser
Steve	Jung	Double Tree
Jordan	Kivelstadt	Free Flow Wines
Henri	Komrij	Keysight Technologies
Frankie	Lemus	Latino Alliance
Andrew	Leonard	LIME Foundation/Sonoma County Board of Education
Crista	Luedtke	BOON Brands
Neil	Pacheco	What's Cooking in Sonoma Co.
Steve	Page	Sonoma Raceway
Dan	Poirer	Johnson's Beach
Barbara	Roberts	Wright Engineered Plastics

Rocio	Rodriguez	COAD
Edward	Roe	Sonoma Mission Inn
Ed	Sheffield	Sutter
Aaron	Smith	Adobe Associates
Terri	Stark	Stark Reality Restaurants
Jon	Stout	STS
Willie	Tamayo	La Tortilla Factory
Liz	Thach	Sonoma State University
Don	Tomasi	TLCD Architecture
Carolyn	Wasem	Jackson Family Wines
Tennis	Wick	Permit Sonoma
Keith	Woods	North Boast Builder's Exchange

Workforce Recovery Work Group: Invited Participants		
Michael	Allen	North Bay Labor Council
Robin	Bartholow	North Coast Builders Exchange
Lea	Baylis	Keysight
Dan	Blake	Sonoma County Office of Education
Josh	Dunlap	Viavi Solutions
Brandon	Jewell	CTE Foundation
Cindy	Gillespie	Amy's Kitchen
Katie	Greaves	County of Sonoma HSD
Zeke	Guzman	La Cooperativa Campesina and Latinos Unidos
Letetia	Hanke	ARS Roofing/Solar and LIME Foundation
Maddy	Hirschfield	North Bay Labor Council
Judy	James	Kaiser Permanente
Karissa	Kruse	Sonoma County Winegrowers
Lauralynn	Larsen	Santa Rosa JC
Christy	Lubin	Graton Day Labor Center
Gabriel	Machabanski	Graton Day Labor Center
Yvonne	Myers	Medtronic
Gabriela	Orantes	North Bay Organizing Project
Renee	Saucedo	ALMAS, Graton Day Labor Center
Chris	Snyder	Operating Engineers 3
Ananda	Sweet	SR Metro Chamber
Tawny	Tesconi	Sonoma County Farm Bureau
Will	Thorn	Redwood Credit Union
Audra	Verrier	Sonoma State University
Mike	Yates	Teamsters
Caitlin	Young	North Bay Industries

Community Recovery Work Group: Invited Participants		
Reilly	Briggs	Ceres Community Project
Elizabeth	Brown	Community Foundation Sonoma County
Beatriz	Camacho	NBOP
James	Cameron	Sonoma County Transportation Authority
Martha	Cheever	Sonoma County Community Development Commission
Susan	Cooper	CAP Sonoma County
Cathryn	Couch	Ceres Community Project
Marta	Cruz	Cloverdale City Council
Raissa	de la Rosa	City of Santa Rosa
Marnie	Dupere	14 Steps
Jane	Elias	County of Sonoma
Scott	Farmer	Coastal MAC
Michael	Gause	Sonoma County Community Development Commission
David	Goodman	Redwood Empire Food Bank
Amanda	Hernandez	La Luz Center
Herman J.	Hernandez	Los Cien
Juan	Hernandez	La Luz Center
Johannes	Hoevertsz	Sonoma County Transportation and Public Works
Jennielynn	Holmes	Catholic Charities
Kate	Kelly	Sonoma Clean Power
Alex	Khalfin	CA Apartment Association
Kristen	Madsen	Creative Sonoma
Jennifer	Mangosong-Shankle	Council on Aging
Don	McEnhill	Russian Riverkeeper
Berenice	Monroy	VOICES Sonoma
Tanya	Narath	Regional Climate Protection Agency
Jennifer	O'Donnell	United Way of the Wine Country
Gabriela	Orantes	North Bay Organizing project
Joanne	Parker	SMART
Lily	Payan	SMART
Adam	Peacocke	COAD
Jane	Riley	Permit Sonoma
Rafael	Rivero	City of Santa Rosa
Rocio	Rodriguez	COAD
Aracely	Romo Flores	Healdsburg School Board and Sonoma County Office of Education
Sandy	Sanchez	La Luz Center
Janet	Spilman	Sonoma County Transportation Authority

Tara	Thompson	City of Santa Rosa
Hector	Velasquez	Nexo Media
Christine	Walker	Design Guild
Michelle	Whitman	Renewal Enterprise District

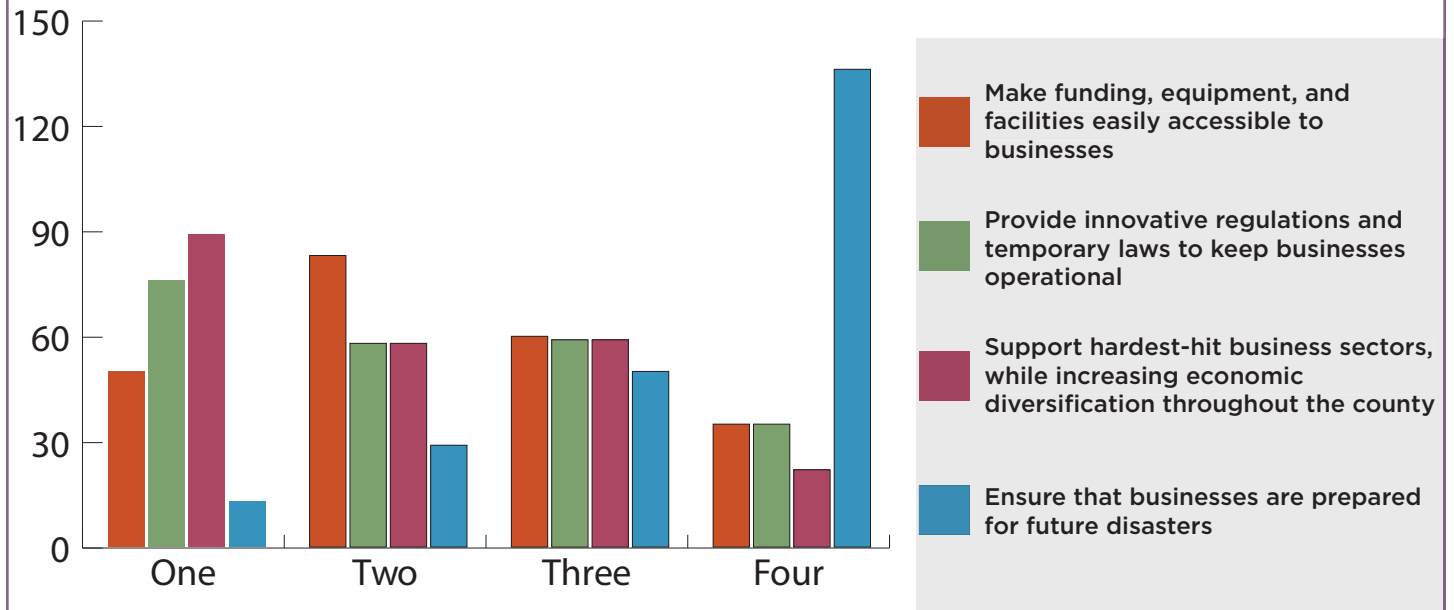
Appendix 3

Community Survey Summary

Sonoma County Economic Recovery Survey Results

Importance of Business Recovery Strategies:

Please rank the following 4 business recovery strategies by importance. 1=Most Important; 4=Least Important (We plan to implement all of these strategies and want to know which ones you think are most important).



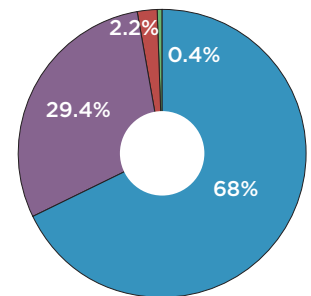
Importance of Business Recovery Actions:



N= 228

Provide immediate, emergency funds, with a special focus on helping business owners impacted the most by the disaster, including women and Latinos/people from diverse cultures.

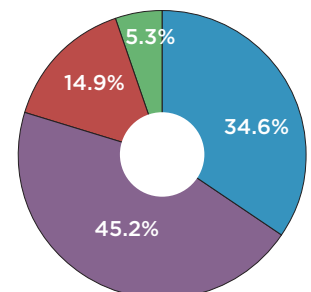
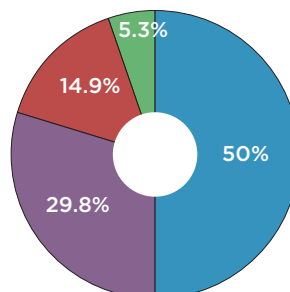
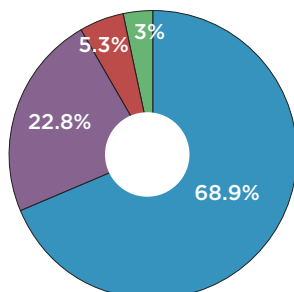
Help small businesses get long-term disaster recovery loans, grants, and investment money.



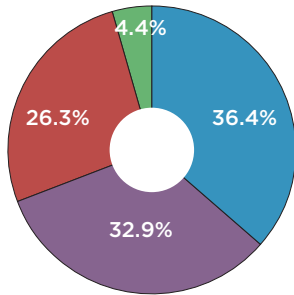
Make it faster and easier to get the permits from the county that businesses need to operate.

Temporarily stop local regulations that are barriers for recovery.

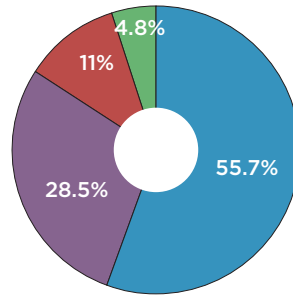
Help businesses impacted by disasters work with their insurance companies.



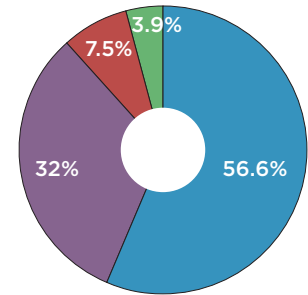
Help businesses, especially those owned by women and Latinos/people from diverse cultures, change the way they operate by adopting new technologies, learning how to sell products online, expanding their marketing, and helping train their employees.



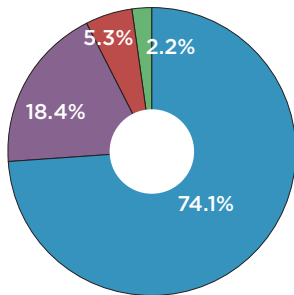
Encourage the growth of businesses in industries beyond the hospitality sector, so that our economy isn't so dependent on one type of business.



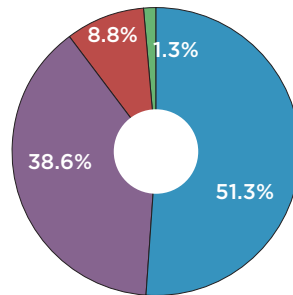
Make sure we have a strong local supply chain, so we have what we need locally during and after a disaster.



Make sure that all community residents receive accurate and timely information during a disaster by receiving one strong message from the county that people from all cultures can understand.



Help businesses develop plans for how to remain open during and after a disaster.



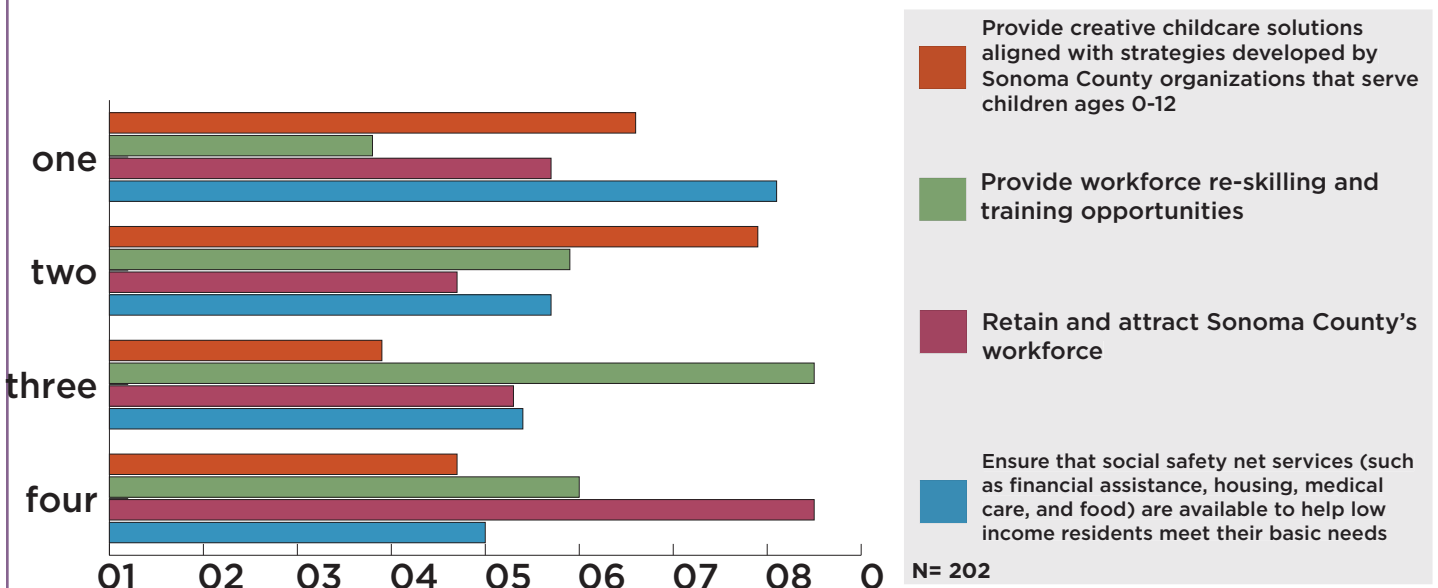
Importance of Business Recovery Actions:



N= 228

Workforce Recovery Strategies:

Please rank the following 4 workforce recovery strategies by importance. 1=Most Important; 4=Least Important (We plan to implement all of these strategies and want to know which ones you think are most important).



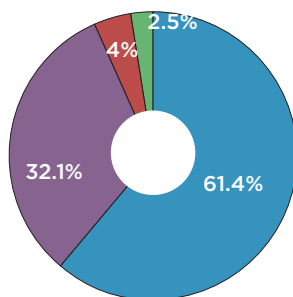
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Workforce Recovery Actions:

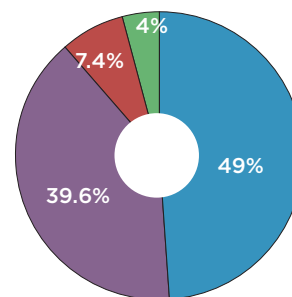


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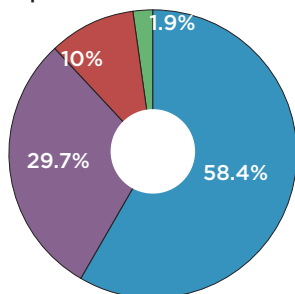
Establish emergency childcare sites for frontline workers and essential employees.



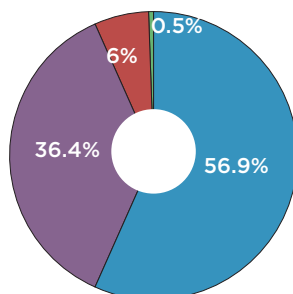
Make it easy to open a childcare business that are safe for children and possible to convert unused available space in businesses and schools for childcare use.



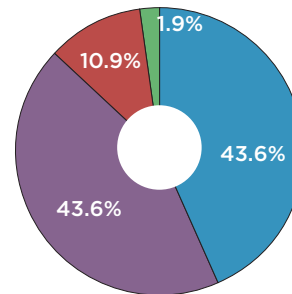
Make sure people who have lost jobs and businesses, especially older adults, women, and Latinos/people from diverse cultures, know how to get unemployment insurance and other public benefits.



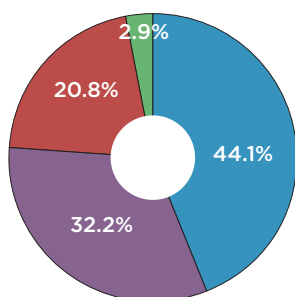
Help business owners and employees from industries that are losing jobs to find employment and business opportunities in industries that are growing.



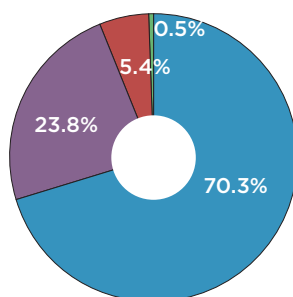
Develop an internship and mentoring program to introduce people who have lost jobs to careers in areas that are growing and pay good wages.



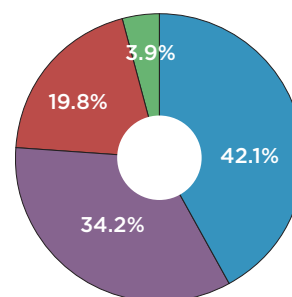
Make Sonoma County a more attractive and competitive place for people to live, work, and play, so that people want to work here, and they don't leave after a disaster.



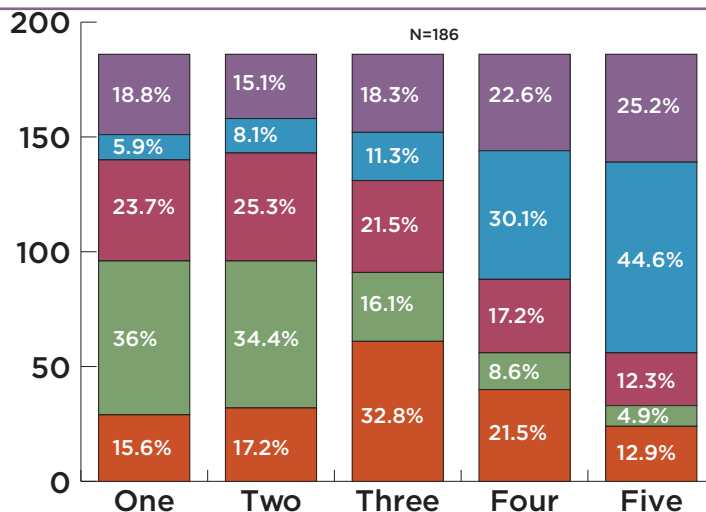
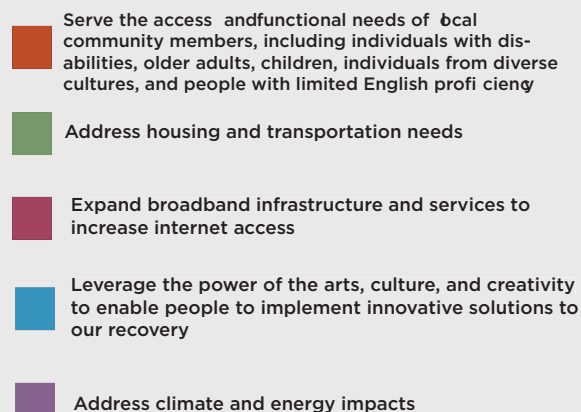
Make sure everyone can access safety net services, that include getting financial assistance, housing, medical care, and food, during and after a disaster.



Provide a special fund to support community residents who cannot get government-funded help.



Community Recovery Strategies:



Community Recovery Actions:

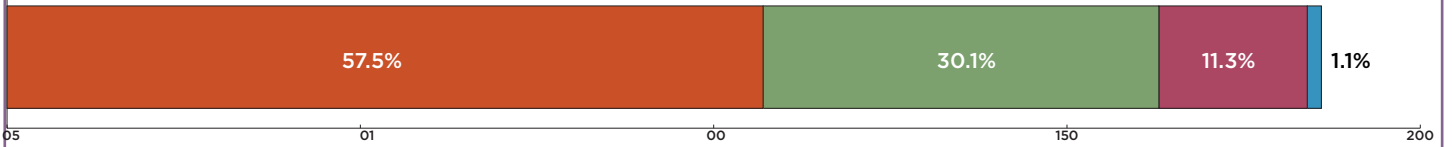
Very Important

Not Important

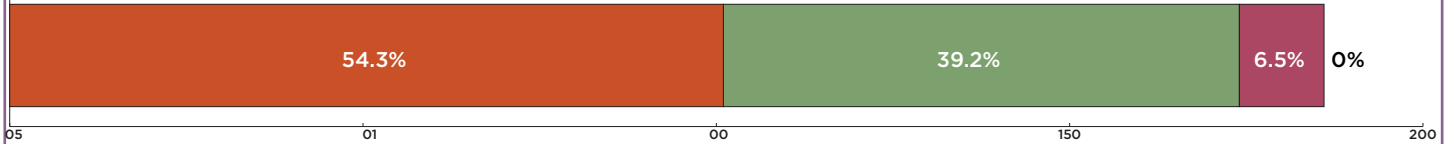
Somewhat Important

Don't Know

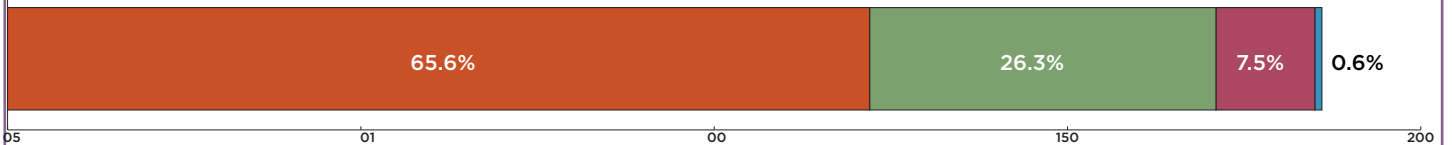
Provide safety net services, such as financial assistance, housing, medical care, and food, in neighborhoods where people live—especially in areas where the most impacted populations live, i.e. Latinx, older adults, homeless, etc.



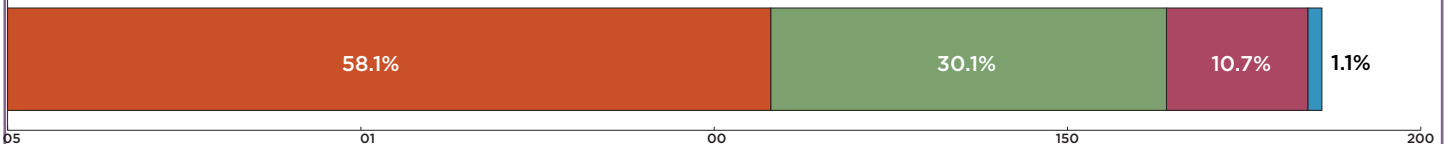
Let people know that mental health services are available and how important it is to address personal trauma related to disasters.



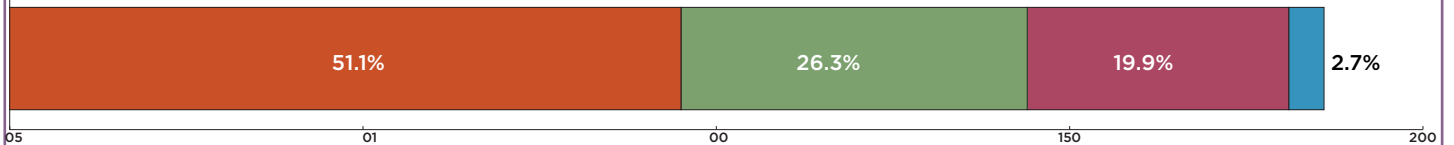
Make sure county residents can get the nutritious food they need.



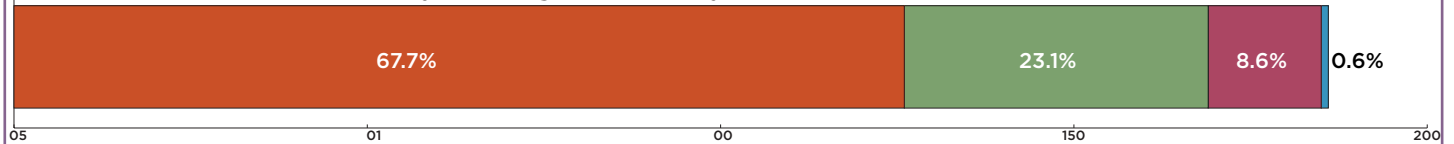
Provide rental assistance so people don't lose their housing.



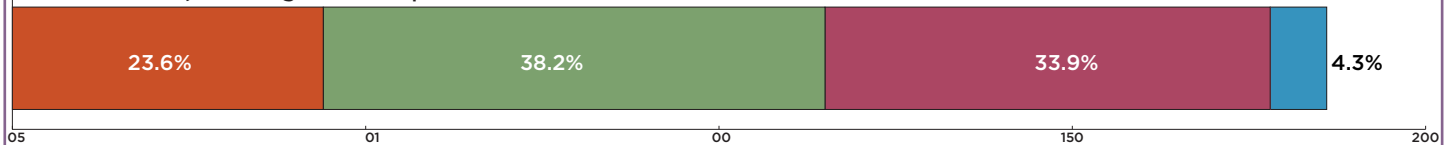
Use empty space that businesses no longer are using for housing and other community needs.



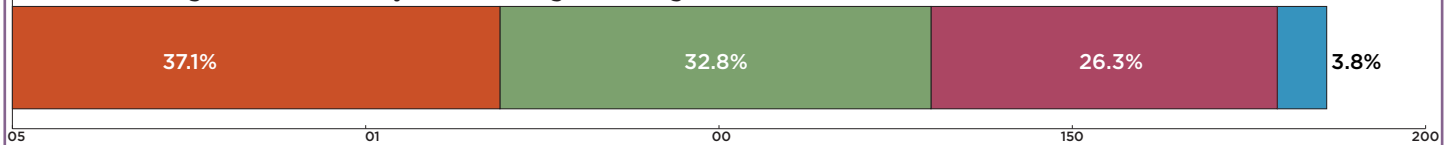
Make internet service available to everyone throughout the county.



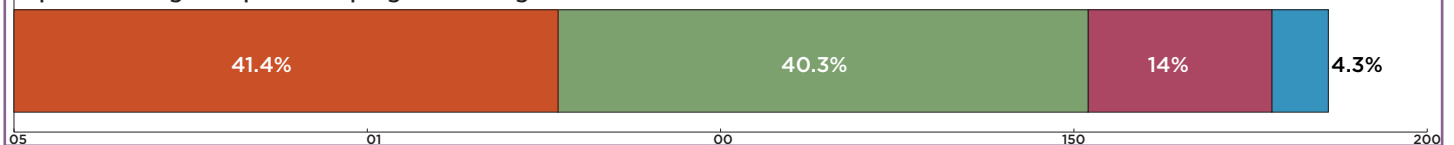
Use our creativity and the arts to work together to identify innovative ways to solve community challenges that become worse in times of disaster, including social inequities.



Continue working toward the county's zero waste goals during disasters.



Expand existing transportation programs during disasters.

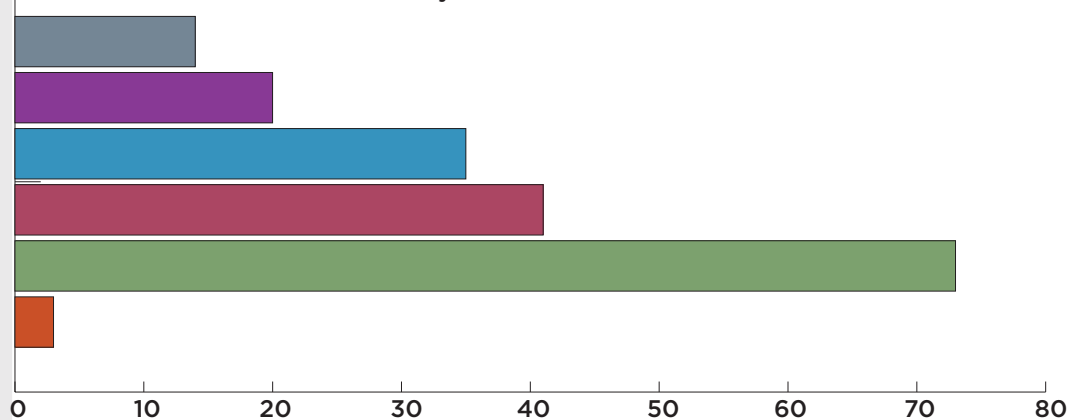


Community Profile of Survey Participants:

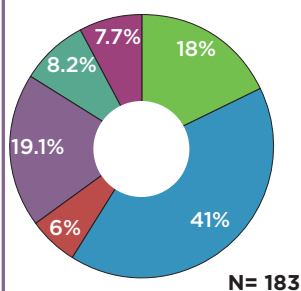
- Less Than 5 Years
- 6-10 years
- 11-20 Years
- 21-30 Years
- 30+ Years
- Non Resident

N= 186

How Long Have You Lived In Sonoma County?



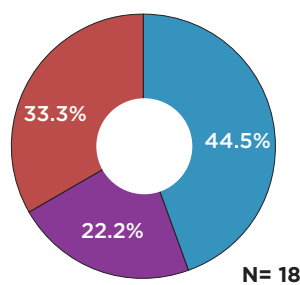
Place of Residence



N= 183

- Northern Sonoma County
- Central Sonoma County
- Russian River
- Sonoma Valley
- Southern Sonoma County
- Western Sonoma County
- The Sonoma Coast (n=0)

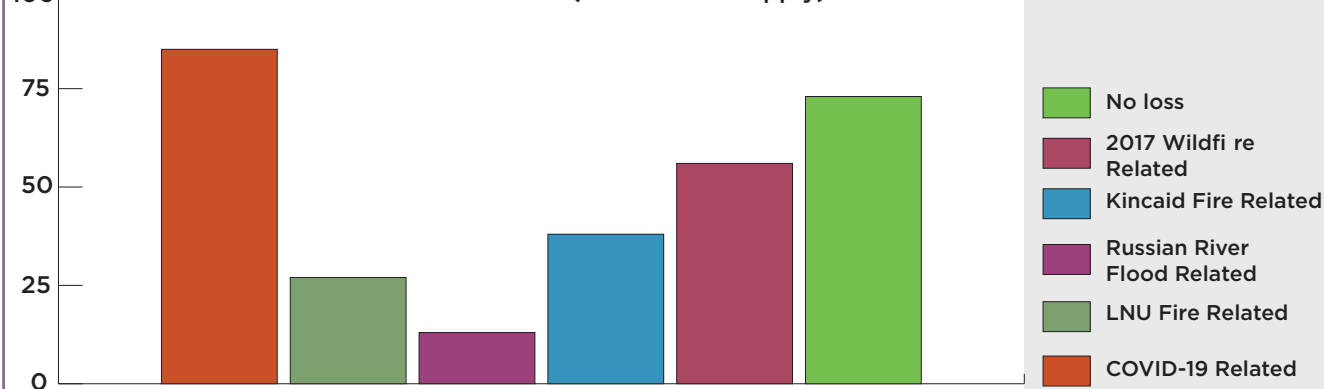
Nonresident Interests



N= 18

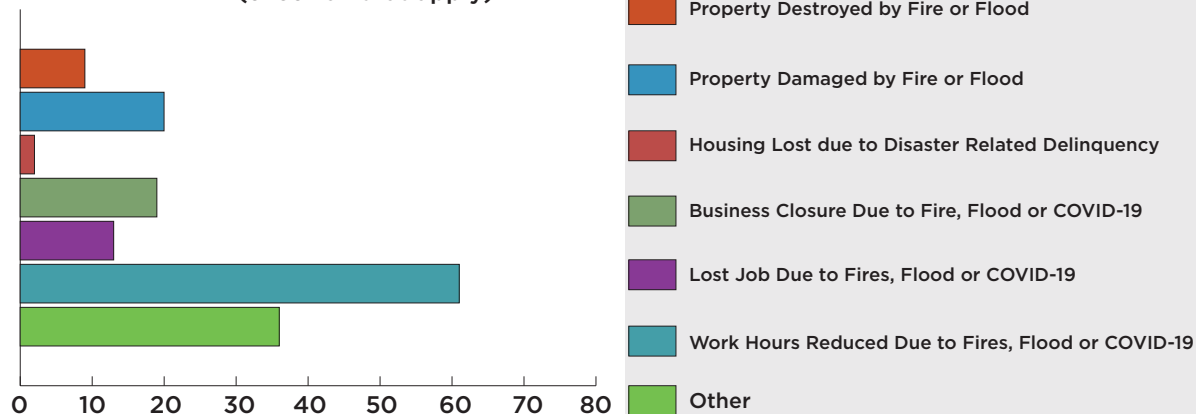
- Other
- Sonoma County Business Owner
- Work in Sonoma County

Financial Loss Due To Disasters (check all that apply)

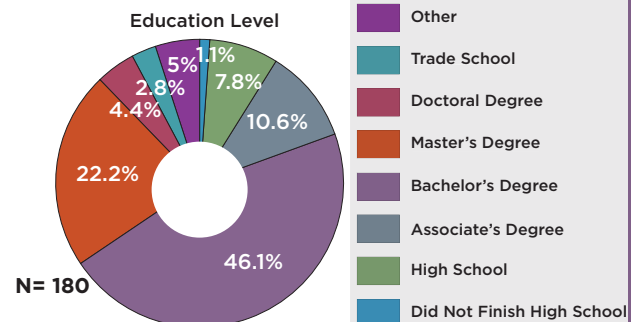
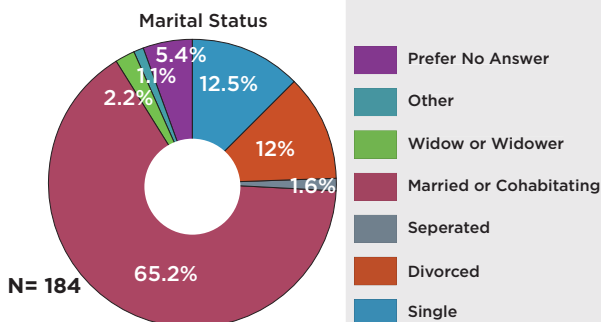
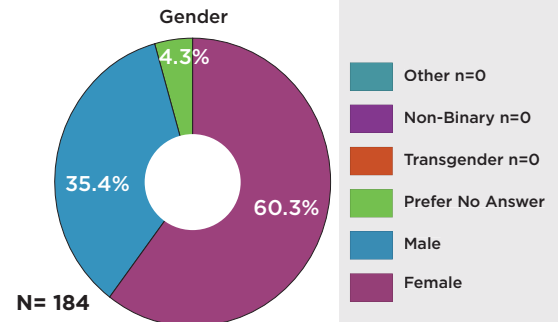
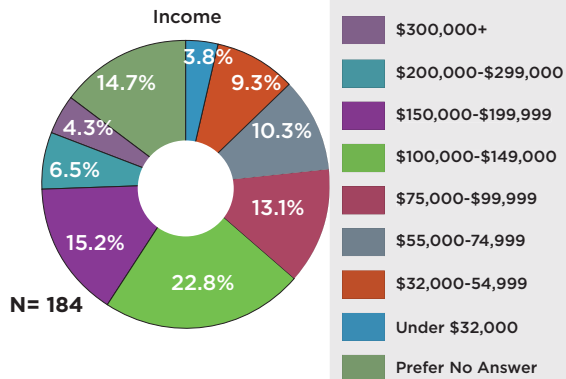
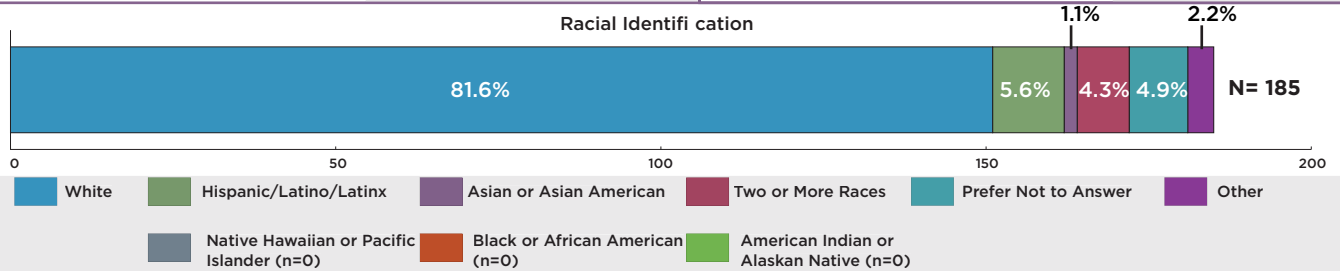
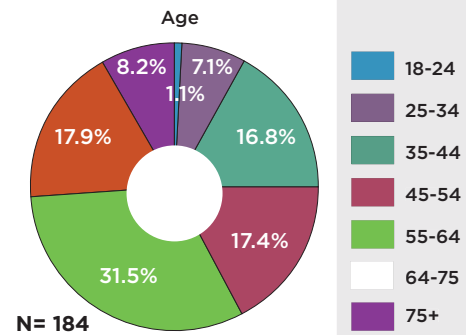
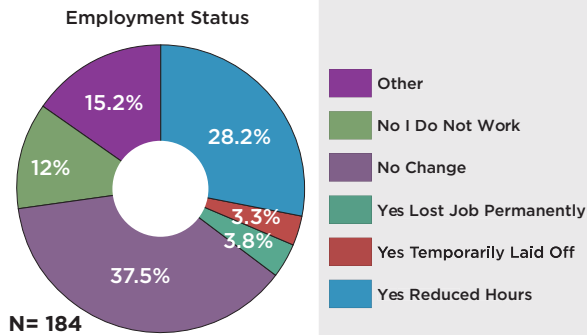
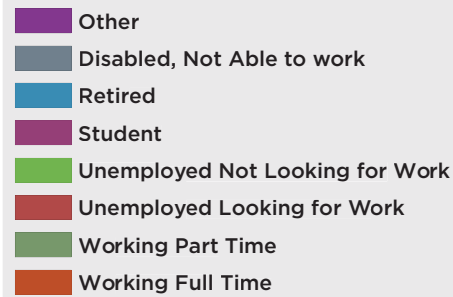
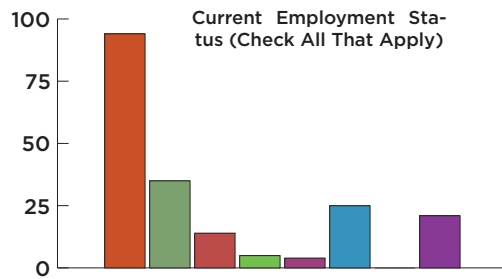


- No loss
- 2017 Wildfire Related
- Kincaid Fire Related
- Russian River Flood Related
- LNU Fire Related
- COVID-19 Related

Other Loss Due To Disasters (check all that apply)



- Property Destroyed by Fire or Flood
- Property Damaged by Fire or Flood
- Housing Lost due to Disaster Related Delinquency
- Business Closure Due to Fire, Flood or COVID-19
- Lost Job Due to Fires, Flood or COVID-19
- Work Hours Reduced Due to Fires, Flood or COVID-19
- Other



Appendix 4

Listening Sessions Polls: Priority Strategies

Listening Session Poll: 12 noon, 66 participants

Business	Top Priority
Strategy 1. Make funding, equipment, and facilities easily accessible to businesses	14%
Strategy 2. Provide innovative regulations and temporary laws to keep businesses operational	38%
Strategy 3. Support hardest-hit business sectors, while increasing economic diversification throughout the county	48%
Strategy 4. Ensure that businesses are prepared for future disasters	0%
Workforce	Top Priority
Strategy 5. Provide creative childcare solutions	27%
Strategy 6. Provide workforce re-skilling and training opportunities	20%
Strategy 7. Retain and attract Sonoma County's workforce	24%
Strategy 8. Ensure that social safety net services are available	29%
Community	Top Priority
Strategy 9. Serve the access and functional needs of local community members	11%
Strategy 10. Address housing and transportation needs	44%
Strategy 11. Expand broadband infrastructure and services to increase internet access	18%
Strategy 12. Leverage the power of the arts to enable people to implement innovative solutions to our recovery	6%
Strategy 13. Address climate and energy impacts	21%

Listening Session Poll: 6 pm, 32 participants

Business	Top Priority
Strategy 1. Make funding, equipment, and facilities easily accessible to businesses	18%
Strategy 2. Provide innovative regulations and temporary laws to keep businesses operational	59%
Strategy 3. Support hardest-hit business sectors, while increasing economic diversification throughout the county	23%
Strategy 4. Ensure that businesses are prepared for future disasters	0%
Workforce	Top Priority
Strategy 5. Provide creative childcare solutions	21%
Strategy 6. Provide workforce re-skilling and training opportunities	32%
Strategy 7. Retain and attract Sonoma County's workforce	26%
Strategy 8. Ensure that social safety net services are available	21%
Community	Top Priority
Strategy 9. Serve the access and functional needs of local community members	0%
Strategy 10. Address housing and transportation needs	62%
Strategy 11. Expand broadband infrastructure and services to increase internet access	14%
Strategy 12. Leverage the power of the arts to enable people to implement innovative solutions to our recovery	10%
Strategy 13. Address climate and energy impacts	14%

Appendix 5

Sonoma County Broadband Service

Sonoma County Broadband Service

Broadband is high-speed internet access that transmits over many technologies, including Digital Subscriber Line (DSL), Cable Modem, Fiber, Wireless, and Satellite; however, these technologies do not provide equal service quality and some prove to be superior to the others. Wireless and satellite are growing technologies that continue to improve in service speeds, but they still depend on wireline technology for interconnection in order to serve end users. The image below shows how much bandwidth each wireline technology can transmit and how fiber optics is the fastest and most valued form of technology to transmit broadband services. The more bandwidth that broadband technology can transmit means the faster the service. In this case, fiber optics, which is composed of glass strands that transmit data at the speed of light, has the technical structure that delivers the most bandwidth and fastest speeds.

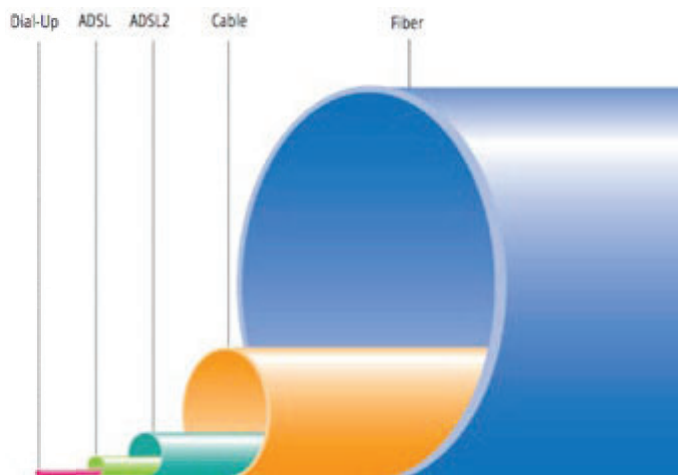
Dial-Up – 56Kbps
Legacy Technology

ADSL – 10Mbps
First Generation of DSL

ADSL2 – 24Mbps
Second Generation DSL

Cable – 150Mbps
Data Over Cable Service Interface Specification

Next Generation Fiber – 1Gbps
Passive Optical Network (PON)



The maps on the following pages show the status of broadband service availability in Sonoma County at three different speed thresholds that state and federal organizations use to define broadband for different purposes.

The Table below shows the broadband speed thresholds represented by the maps and their definitions and purposes according to state and federal legislation.

What Defines Broadband?	Broadband Speed		Purpose
	Download (Mbps)	Upload (Mbps)	
California Legislature AB 1665 Minimum Level of Broadband Service ¹	6	1	To identify the most unserved communities in California
The Federal Communications Commission (FCC)	25	3	To identify unserved communities in the U.S.

¹ https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1665

Minimum Level of Broadband Service ²			
Governor Newsom's Executive Broadband Order (EO-N-73-20) ³ and FCC's "Above Baseline" ⁴	100	20	California's 2020 Broadband Action Plan Speed Threshold Goal

The unserved communities shown in the maps help to portray the status of broadband infrastructure in Sonoma County and identifies the locations where infrastructure is lacking or non-existent – primarily fiber optics. At the broadband speed threshold of 6/1, the maps help show which communities may only have access to slower speed broadband technologies, such as copper-based wireline that provide traditional dial-up or DSL services. As the speed rises to 100/20, the maps show which communities may have access to higher speed broadband technologies such as cable and fiber optics. It is evident that the communities with higher population density located closest to major corridors like Highway 101 tend to have access to higher speed broadband technologies where there is a greater incentive and return on investment for service providers.

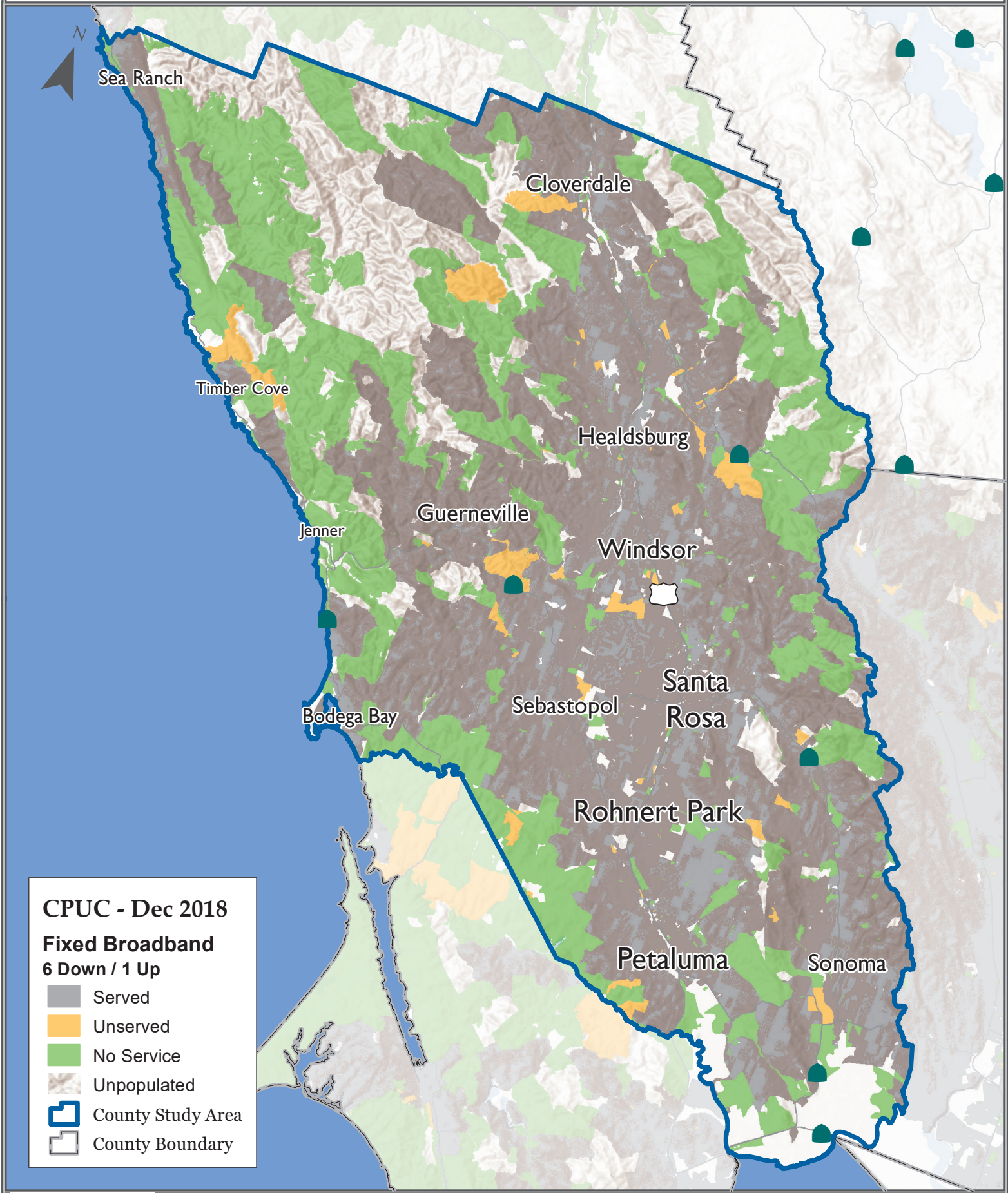
Even though 100/20 is the statewide goal for broadband, the private sector economics cannot make new wireline broadband deployment financially viable in unserved and low-density communities. This is one of the primary issues causing the Digital Divide to grow; and as Sonoma County's dependency for broadband rises, the supply of broadband access using a private structure model may never meet the public's demand. This provides an opportunity for public entities (e.g. County, Cities, public districts, etc.) to explore an approach to deploy municipal broadband infrastructure and services in higher cost communities using a not-for-profit operating structure to make deployment financially viable.

² <https://www.fcc.gov/auction/904/factsheet>

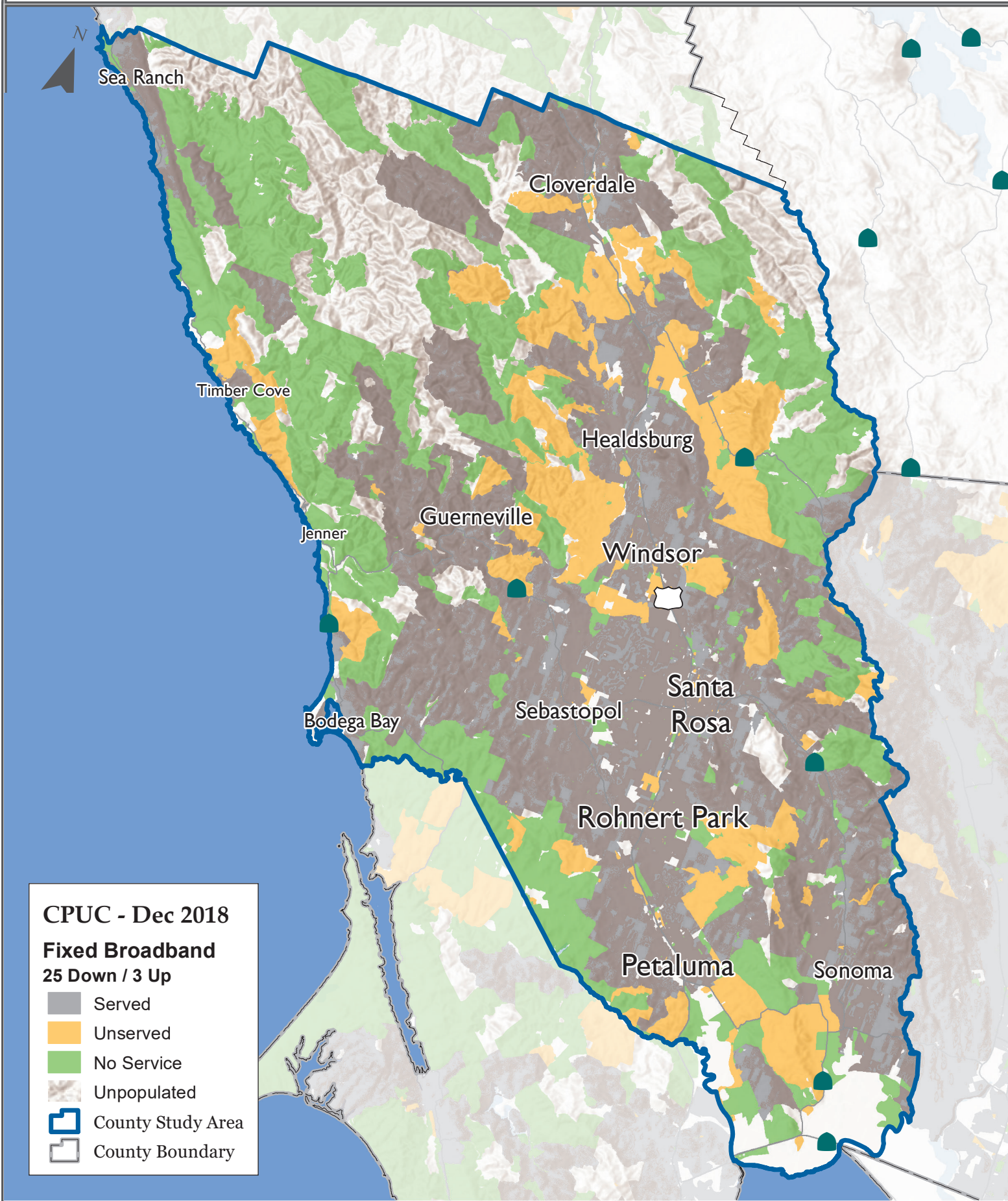
³ <https://www.gov.ca.gov/wp-content/uploads/2020/08/8.14.20-EO-N-73-20.pdf>

⁴ <https://www.fcc.gov/auction/904/factsheet>

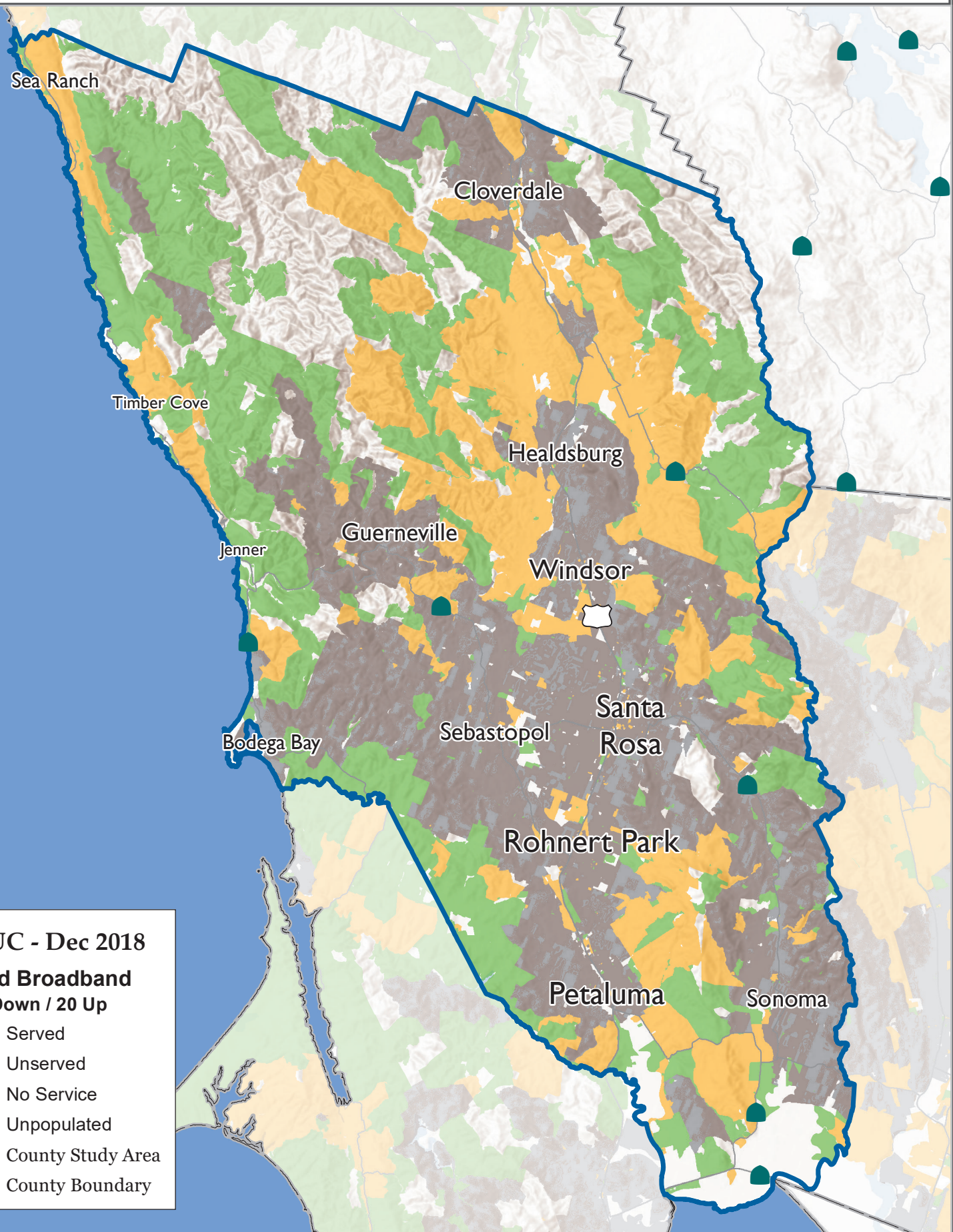
Sonoma County - Wireline and Fixed Wireless Broadband



Sonoma County - Wireline and Fixed Wireless Broadband









Sonoma County - Wireline and Fixed Wireless Broadband



CPUC - Dec 2018

Fixed Broadband
100 Down / 20 Up

-  Served
-  Unserved
-  No Service
-  Unpopulated
-  County Study Area
-  County Boundary



GEOGRAPHICAL
INFORMATION CENTER
California State University, Chico

0 2.5 5 10 15 Miles

Date: 16 December 2019
Projection: NAD 1983 California Teale Albers
Source: Consumer Fixed Broadband Deployment
California Public Utilities Commission, data as of 31 December 2017

Appendix 6

Childcare Changes Since COVID-19

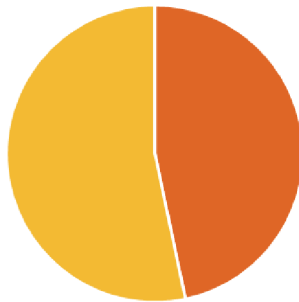


Our Mission is to provide access to quality child care and early education in Sonoma County through advocacy, direct service, and empowerment.

COVID-19 Pandemic - Changes in Child Care Capacity

Available facilities pre-COVID, compared with October, 2020*

Facilities by Type, Pre-COVID



Centers Licensed Family Child Care

Facilities by Type, October 2020

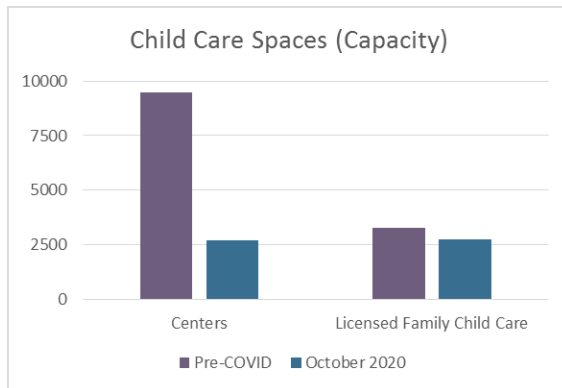


Centers Licensed Family Child Care Closed and Inactive

These graphs show the number of facilities available, by type, as a whole of Sonoma County. See data table below for more detail.

Facility Type	Pre-COVID	Current	Inactive	Permanently closed	New
Centers	284	130	149	5	0
Family Child Care	324	257	79	12	24

Available Spaces pre-COVID, compared with October, 2020*



Available child care spaces have drastically reduced since March, 2020, due to many providers closing their doors, as well as public health limits on group size. (See data table below)

	<u>Total spaces (Pre-COVID) - All Programs (Active and Inactive)</u>	<u>Total currently available spaces - Active programs only</u>
Centers	9472	2731
Licensed Family Child Care	3277	2766

* All data from 4Cs' My Child Care Plan Database, October 9, 2020



**Sonoma County EDB
Economic Impacts from COVID-19 on Sonoma County Economy**

August 2020

**Economic Forensics and Analytics, Inc.
Petaluma, CA
eyler@econforensics.com**

Executive Summary

This study, commissioned by Sonoma County Economic Development Board (EDB), considers the economic impacts of COVID-19 on Sonoma County's economy through three scenarios from 2020 to 2023. Data at the industry-sector level by city and the unincorporated areas of the county are aggregated to county totals to provide detail as to the effects on specific industries and places. Different risks exist for different industries and municipalities in Sonoma County. The estimated impacts are driven by potential job losses for local employers, affecting local residents and the capacity of the local economy to generate income and tax revenues. The estimated economic impact for 2020 for lost jobs, lost gross regional product (value-added income) and state/local tax revenues are (in terms of planning, this study's data provide similar estimates for 2021, 2022 and 2023):

Economic Impact from COVID-19 in 2020: Jobs Lost, Reduced Incomes and Tax Revenues

Scenario	Jobs Lost	Income Lost	S/L Tax Revenue Lost
Better	20,700	\$1,539,700,000	\$328,596,000
Median	30,135	\$2,421,800,000	\$613,917,000
Worse	48,451	\$4,134,600,000	\$811,518,000

Note: The jobs estimates include self-employed and payroll workers

There will be lingering impacts from COVID-19 on the county economy as recession leads to recovery. Holding all other concerns constant, Sonoma County's economy should not expect to have recovered to 2019 year-end jobs levels before 2023 (median scenario has a return in 2024, hence the four-year economic impact). Residential employment levels and unemployment rates follow the county jobs counts at its employers (businesses, non-profits and government employers). Unfortunately, there is likely to be a net loss of employers in Sonoma County by 2023.

To 2023, the estimated cumulative impacts in 2020 dollars for the median recovery scenario are:

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- Total Gross Regional Product (GRP) lost 2020-2023: \$6.157 Billion;
- Total State and Local Tax Revenues lost 2020-2023: \$1.685 Billion; and
- Estimated loss of employers by 2023 as -6.9 percent for the median scenario, with a range between -1.5 and -15.6 percent for the better and worse scenarios respectively.

The national economy has begun to recover as of August 2020; if that recovery continues and California follows, the better scenario becomes more likely. Interest rates are similar to their levels in 2009 based on aggressive Federal Reserve policy to stimulate growth. Spending by the federal government on households, employers and governments has been relatively large and ubiquitous. Job losses are reversing due to these policies meant to stimulate economic growth and the gradual lifting of social policy. Both California and Sonoma County have experienced unprecedented losses of jobs across all industries; while jobs are slowly returning, this recession's depth and breadth likely makes recovery a matter of years and not months.

Specific industries remain at risk as do some cities and unincorporated areas in Sonoma County under any of the three scenarios. Between March 2020 and July 2020, industries that have experienced job losses from the previous year of close to or more than 20% job losses included:

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- Hotels and motels (Accommodation), affecting transient occupancy tax (TOT) revenues ;

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Healthcare employers, even with front-line responders standing by, saw job cuts because many procedures and visits were not possible due to physical distancing concerns. Manufacturing and construction, as of July 2020, are now growing from July 2019, and leading the county's economy recovery. Farm jobs are also up from July 2019 as of July 2020.

At the city level, the percentage change in residents working remains below 10-percent lower than July 2019 levels as of July 2020 for:

- Cloverdale; Healdsburg; Sebastopol; Town of Sonoma; Windsor.

Home prices have moved very little, and in fact have increased as of July 2020 from July 2019 for many of Sonoma County's cities; Healdsburg and the unincorporated areas of Sonoma County are down slightly from last year. Home prices falling and large numbers of businesses closing are the largest threats to local economic recovery from COVID-19's social policies and negative economic impacts. Commercial real estate values and vacancy are likely to see more uncertainty under any scenario to 2023. Property taxes should follow current estimates if home prices remain stable.

EDB also ran weekly surveys of businesses in Sonoma County, asking questions about the effects of COVID-19 and the current recession on their businesses from a few different angles. Summary data are provided in presentations as appendices to this report. The following conclusions can be drawn from those data:

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Challenges	Opportunities
<ul style="list-style-type: none"> • Retail, restaurant demand for workers; • Housing affordability for low-wage workers if fewer jobs in their industry remain after 2020; • Tourism employment opportunities, especially hotels, after 2020; • Breadth of businesses in retail, restaurant and personal services based on estimated business closures; • Goods resilience (food, beverage, medical supplies, etc.) if there are natural disasters during an increase caseload. 	<ul style="list-style-type: none"> • Goods resilience: <ul style="list-style-type: none"> ○ More local manufacturing and farming to provide goods and food production breadth; ○ More storage and processing; ○ Regional distribution outlets to complement supra-regional channels; • Workforce development for permanently-displaced workers: <ul style="list-style-type: none"> ○ Manufacturing, especially in life sciences given regional cluster in place; ○ Construction; ○ STEM-Related fields; and ○ Healthcare.



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August 2020

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1. Introduction

This study was commissioned by Sonoma County Economic Development Board (EDB). In February 2020, economists and politicians in the United States began to become concerned about the worldwide spread of COVID-19, a novel (new) coronavirus. Regional transmission came to parts of Europe after starting in Asia. Countries affected by the rising number of cases and the potential detriment to healthcare systems placed their countries and sometimes entire regions on social hibernation, where business and economic interactions slowed or stopped per normal. By March 2020, it became apparent that the United States would need to follow similar measures seen elsewhere to control possible overloading of healthcare systems and also reduce the number of potential deaths. By the end of March, much of the American, California and Sonoma County economies ceased to function normally because of social measures meant to constrain the spread of COVID-19 at the opportunity cost of reducing economic activity.

This time is different as to how recession began. Many of the same outcomes as previous recessions are occurring with jobs and incomes lost; jobs are slowly coming back as lower interest rates and government spending and more complete lifting of social policy is generating more hiring by employers and consumer demand. One of the key differences is that the foundations of the national, state and local economies were relatively strong close to the timing of the recession's cause. In theory, such strength can help recovery be quicker and more robust. Like other recessions, strong efficacy of fiscal and monetary policy to sustain workers through the tough, transition period and ultimately provide consumer, investor and employer confidence is needed for sustained recovery. That challenge awaits the remainder of 2020 and the next three to four years for the national and state economies.

Sonoma County's economy depends on regional, state and national economic recovery. As we see throughout this report, many of the important industries in Sonoma County depend on broader economic connections providing income and job opportunities for Sonoma County businesses and residents. The loss of commercial activity, lower pay levels, lost jobs, or a mix have reduced household income levels and spending. Some local businesses, especially those that rely on visitors coming to Sonoma County wineries, beaches and restaurants, will not survive this recession. City and county governments, providing services to nine cities and the unincorporated county, are going to face challenges of both rising expenses from increased services demand and falling government revenues in fiscal year 2020-21 at the minimum. Our economic impact analyses estimate those lost revenues.

This study has the following sections. Section 2 looks at the main economic effects of COVID-19 to August 2020 that reflect the initial effects and also a macroeconomic view on recovery from recession. Section 3 looks at key local effects as a way to build assumptions for the economic impact analyses. Those analyses are in Section 4, estimating job losses, loss of local income, and tax revenues to 2023 on an annual basis. Three scenarios are provided. Section 5 provides a summary of those scenarios, followed by references and appendices. It is important to see this study as one way to view the future, based on data available as of August 2020, as a preliminary look at an evolving situation.

2. The Macroeconomic Environment Before and After COVID-19

The economic effects of COVID-19 on Sonoma County can be summarized in five, categorical ways:

- Lost jobs;
- Lost businesses;
- Reduced revenues for surviving businesses;
- Reduced revenues and rising expenses for local government; and
- Price pressure on local housing and commercial real estate markets due to the above.

Global and national forecasts have provided some considerations as to what may assist the national economic recovery (or create continued struggles in some industries if recovery is slow) through the end of 2023:

1. Social policies to close businesses are no longer needed after December 2020;
2. Child care and in-person schooling becomes available again for working families as to not lead to marginal decisions between going back to work versus providing child care;
3. Restrictions are lifted that allow pre-COVID volumes (what we will call “normal” from here) of tourism, events (theaters or concerts), and other business opportunities where people gather;
4. No other major economic or social events that could disrupt economic recovery take place before mid-2021;
5. A vaccine emerges and generalizes in use before Q2 2021 **globally to minimize** the virus threat.

These assumptions combine to provide background for the scenario analyses and economic impact estimates in this report. Let’s now look at some macroeconomic variables as of August 2020.

The Macro Environment

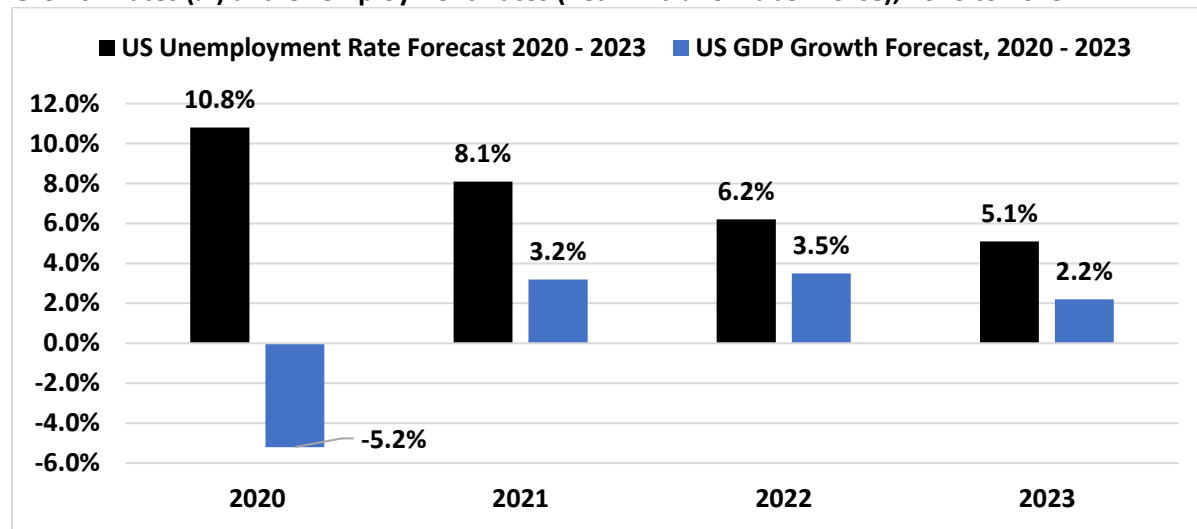
Policy makers are trying to avoid a deep recession and one that lasts a long time. While the American economy is historically resilient, the expectation of economic recovery where a quick fall in employment is matched by a quick return to January 2020 jobs levels does not have historic precedent.¹ To track the US economy’s evolution, the Philadelphia Federal Reserve Branch has a quarterly survey of 40 forecasters.² Figure 1’s data provide a four-year forecast of gross domestic product (GDP) growth on a seasonally-adjusted, annualized basis and also unemployment rates to 2023 as of August 2020 as a median (most likely) forecast. Full economic recovery is unlikely before 2024, given data available as of August 2020.

These current forecast data suggest a similar emergence from this recession as the Great Recession (2008-10), albeit not forecasting a housing market decline of similar magnitude. The forecast window used for our study is also from 2020 to 2023.

¹ See a recent paper by economist Hall and Kudlyak (2020) and a co-author on this issue. A simple overview is at voxeu.org.

² See <https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/> for more details.

Figure 1: US Economy Forecast Summary, Philadelphia Federal Reserve Branch, August 2020, GDP Growth Rates (%) and Unemployment Rates (Year-End % of Labor Force), 2020 to 2023



Sources: Philadelphia Federal Reserve Branch and EFA

The California Department of Finance (DOF) forecast for the May 2020 Revise of the Governor's Budget have the same quarterly forecast window as our study (to 2023).³ As of July 2020, the unemployment rate in California initially peaked at a seasonally-adjusted rate of 16.4 percent and is 13.7 percent as of July 2020; for the US economy, the seasonally-adjusted unemployment rate peaked in April 2020 at 14.7 percent, 10.3 percent in July 2020 and 8.8 percent in August 2020. Lower interest rates, based on aggressive movements by the Federal Reserve in March 2020 after three interest rate cuts in 2019, helped restore investor confidence, and lay groundwork for general economic recovery as in past recessions.

Lower interest rates, consumers, businesses and housing markets

Lower interest rates help Sonoma County's economy in four key ways:

- Reduce the cost of credit to households and increase consumer confidence;
- Reduce the cost of credit to businesses and increase business confidence;
- Provide investor confidence in equity markets due to the above; and
- Reduce the cost of borrowing to finance federal stimulus spending (the CARES Act, for example), likely providing more resources to states, counties and cities through 2020.⁴

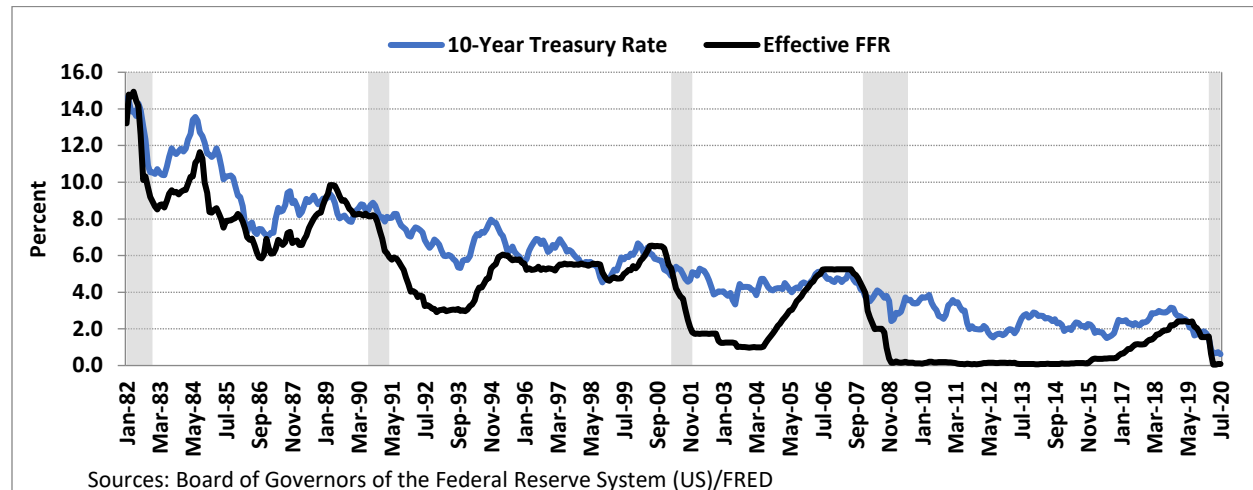
The Federal Reserve's aggressive movements on policy rates (the "Effective Federal Funds Rate" is shown in Figure 2, the rate at which banks and credit unions trade money with each other based on the where the Federal Reserve sets a policy rate range) forced other interest rates down. The prime interest

³ See the [updated forecast](#) in May 2020 for the May Revise from the original forecast in January 2020 at California Department of Finance.

⁴ See the US Treasury for an overview of the CARES Act spending in April 2020: <https://home.treasury.gov/policy-issues/cares>

rate, the rate that business loans begin for the least-risky business borrowers, is tied directly to the Federal Funds Rate (3.25 percent as of August 2020). The interest rate on 10-year Treasury debt, which affects how mortgage markets determine rates, has fallen to historic lows also as of August 2020. Monetary policy is now doing similar work as in late 2008 and 2009 with the same goals of providing economic recovery fuel. Lower interest rates also help reduce the cost of federal stimulus spending as the government expands our national debt's levels.

Figure 2: Effective Federal Funds Rate and 10-Year Treasury Rate, 1982 – July 2020, Percent, Shaded Areas are Recessions



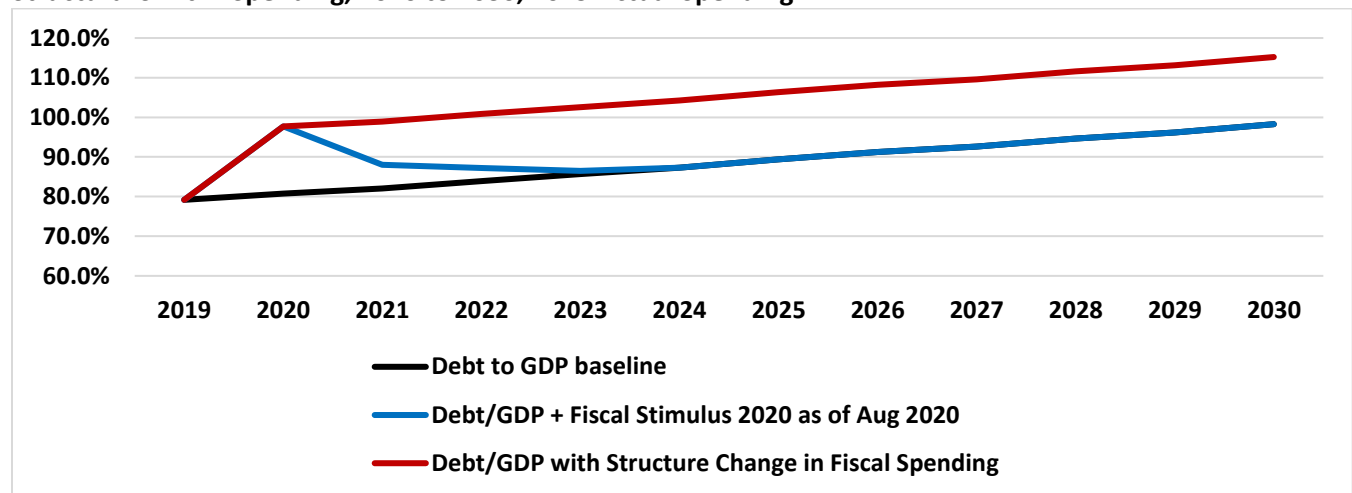
The year 2020 has seen historic amounts of federal spending activity. As in 2009 with the American Recovery and Reinvestment Act (ARRA) stimulus, acronyms such as PPP and EIDL became part of our daily news feeds. Many households, under a certain income level and in many cases with children or both, received direct transfer payments as part of the initial federal stimulus spending in 2020. Further, unemployment benefits were augmented and extended to dates past normal to help both households and businesses. For businesses specifically (but indirectly for workers), the Paycheck Protection Plan (PPP) lending through the Small Business Administration (SBA) came with the promise of becoming a grant (basically a tax refund) to a business that meets specific criteria of having workers remain in their current jobs.⁵ Economic Injury Disaster Loan (EIDL) funds were also made available, similar to natural disaster lending supporting businesses with good terms and lower interest rates.

For Sonoma County as of June 2020, there were 7,757 PPP loans made under \$150,000 for a total of just over \$298 million for local employers; the average loan size was \$38,433. If all this is converted to grants, one of the promises of the PPP program, it is similar to a \$298 million injection of fiscal spending coming to 7,757 businesses in Sonoma County. In Sonoma County, there were also 1,408 loans larger than \$150,000, 89 percent of which were below \$1 million. The federal stimulus' ultimate outcomes are to create a multiplier effect on the national economy, where that spending going directly to businesses and then spent on workers and vendors becomes even more spending. This support leads to

⁵ See [sba.gov/funding-programs/loans/coronavirus-relief-options/paycheck-protection-program](https://www.sba.gov/funding-programs/loans/coronavirus-relief-options/paycheck-protection-program) for SBA's website on PPP loans. Sonoma County's total PPP loans over \$150,000 were not initially reported by the US Treasury.

business and worker spending can generate additional tax revenues at all levels of government. Figure 3 shows a forecast by the Congressional Budget Office (CBO), revised in July 2020 from their January 2020 estimates of national debt levels as a percentage of gross domestic product (GDP). As the percentage rises toward 100 percent, there are voluminous and decades-long debates about how financial markets may react to rising debt levels beyond that threshold without resolution. Spending in 2020 has accelerated the American economy's path toward that number. As of August 2020, the timing of this writing, components of additional fiscal stimulus were still being debated in the US Congress.

Figure 3: CBO Forecast of National Debt to GDP, 2020 Pre-COVID, With May 2020 Stimulus, and Structural Shift in Spending, 2020 to 2030, 2019 Actual Spending



Source: Congressional Budget Office, July 2020 report and EFA

Summary of Broader Economic Conditions and Importance for Sonoma County

As of August 2020, the economic fallout from COVID-19 and the social policies that restricted the national and state economy is still unfolding. There are four major effects:

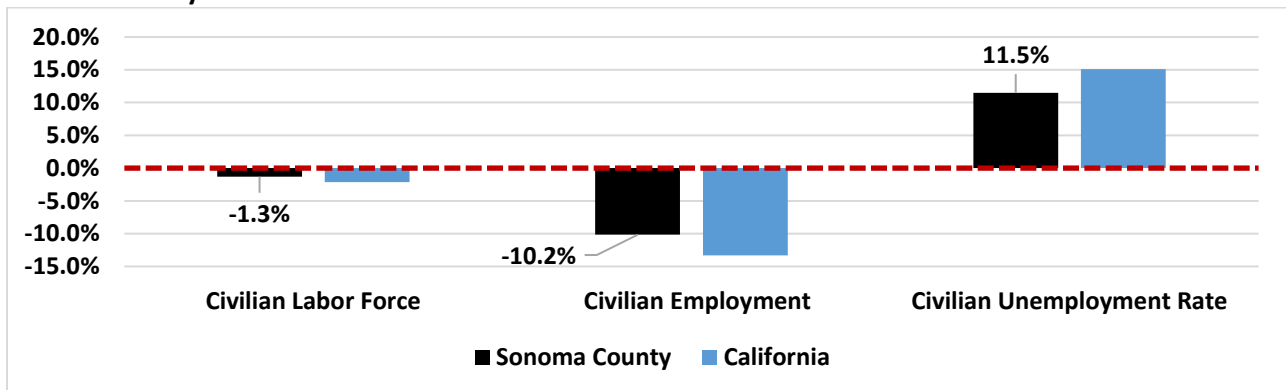
- Job losses are likely to be slow to come back because of business closures and consumer confidence rising slowly due to continued economic uncertainty;
- Business closures reduce the economy's capacity to produce personal incomes, jobs, spending and taxable sales;
- Interest rates are back at 2009 levels (much like the end of the Great Recession), and fiscal spending has generated more business and consumer spending and recovery momentum as of August 2020; and
- COVID-19 caseloads and spread are going to continue to dictate specific industry restraints until below public-health determined limits, which have multiplicative effects on other industries that may not face restrictions due to jobs and spending losses during the restriction period.

While equity markets (the S&P 500 as a specific indicator) have shown a strong recovery after initial sell-offs and lost value, regional housing markets have been resilient to date in 2020 and are performing close to original predictions, if not exceeding expectations slightly. Let's now look at data describing Sonoma County in the initial stages of COVID-19.

3. Initial Effects of COVID-19: Sonoma County Industries and Communities

Figure 4 shows the local labor market concerning local residents (versus those that work at employers in Sonoma County, which include some amount of county residents as well): labor force; employment levels; unemployment levels; and the unemployment rate.

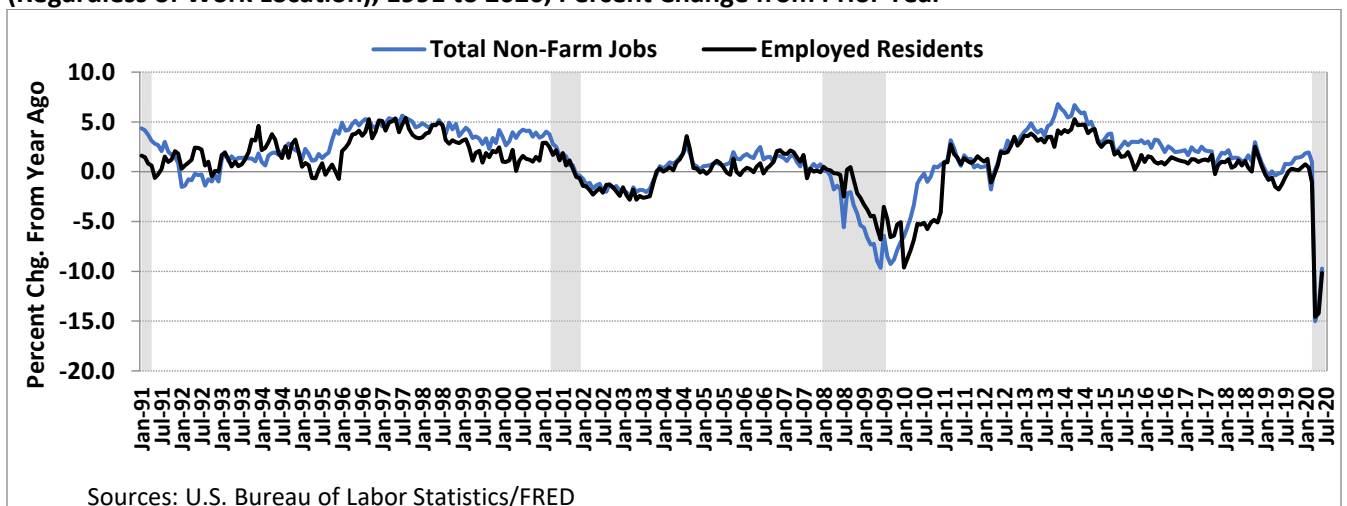
Figure 4: Residential Labor Force Data, Percent (%) Change in Selected Data, July 2019 –July 2020, Sonoma County and California



Sources: California EDD and EFA

Job losses mean lower incomes, further feeding an economic downturn. This shifts household budgets to staying in a home and away from retail, restaurant, travel, and other personal services demand. The shift down in household income can also reduce demand locally such that businesses perhaps not hurt initially by the shock to spending become affected in its secondary and tertiary rounds. Also, communities not affected by the initial change in spending may be affected in those later rounds of change. This is why the economic impacts are important to consider in both directions: we are all connected economically. Figure 5 shows the connection between employed residents and jobs in Sonoma County outside of farming from January 1991 to July 2020.

Figure 5: Jobs in Sonoma County, Non-Farm (Employed in Sonoma County) and Employed Residents (Regardless of Work Location), 1991 to 2020, Percent Change from Prior Year



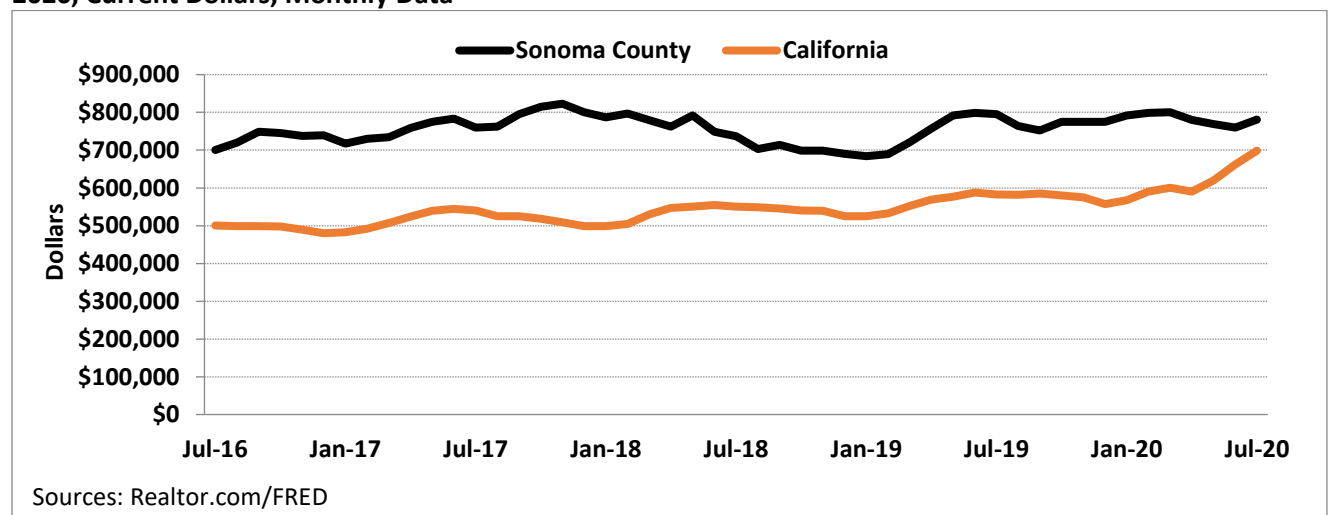
Sources: U.S. Bureau of Labor Statistics/FRED

Housing and Commercial Real Estate

What should concern elected officials, businesses and residents of Sonoma County is a potential shock to housing. The Great Recession (2008 to 2010 in Sonoma County) affected almost every household by either job loss, reduced wealth in their homes, rising rents, or some combination. Rental vacancy was reduced during between 2008 to 2011 in Sonoma County. Rental homes being available help homeowners sell a home and not have to leave the area if not purchasing a new home immediately. By filling that rental vacancy, rents increase, making rental prices more expensive for those in rental before the crisis. A big question for this recession is: will the woes of that period return?

The listing prices when homes are offered for sale are data to watch in terms of real estate agent and owner confidence. Figure 6 shows the median listing prices for homes for sale from July 2016 to July 2020 for Sonoma County and California, where rising listing prices suggest more housing market confidence in 2020; notice the upward movement in 2020 as of July 2020.

Figure 6: Median Listing Prices, Homes for Sales, Single-Family and Condominiums, July 2016 to July 2020, Current Dollars, Monthly Data



For commercial real estate, vacancy rates and transactions depend on how workers come back to the office for work (or not) and if classic “brick-and-mortar” businesses are lost and their market absorbed by a warehousing to home-delivery model. Forecasts for commercial real estate outcomes likely depend on how local jobs return by industry and the type of commercial property in question. Notice the data in Figure 7 are unsure about the office submarket for now. There may be some structural changes in the number of businesses that remain as a result of this crisis. The subsequent change in the labor market may or may not be tied to physical space. There are multiple categories of commercial spaces, and each may have slightly different outcomes:

- Office;
- Industrial;
- Retail;

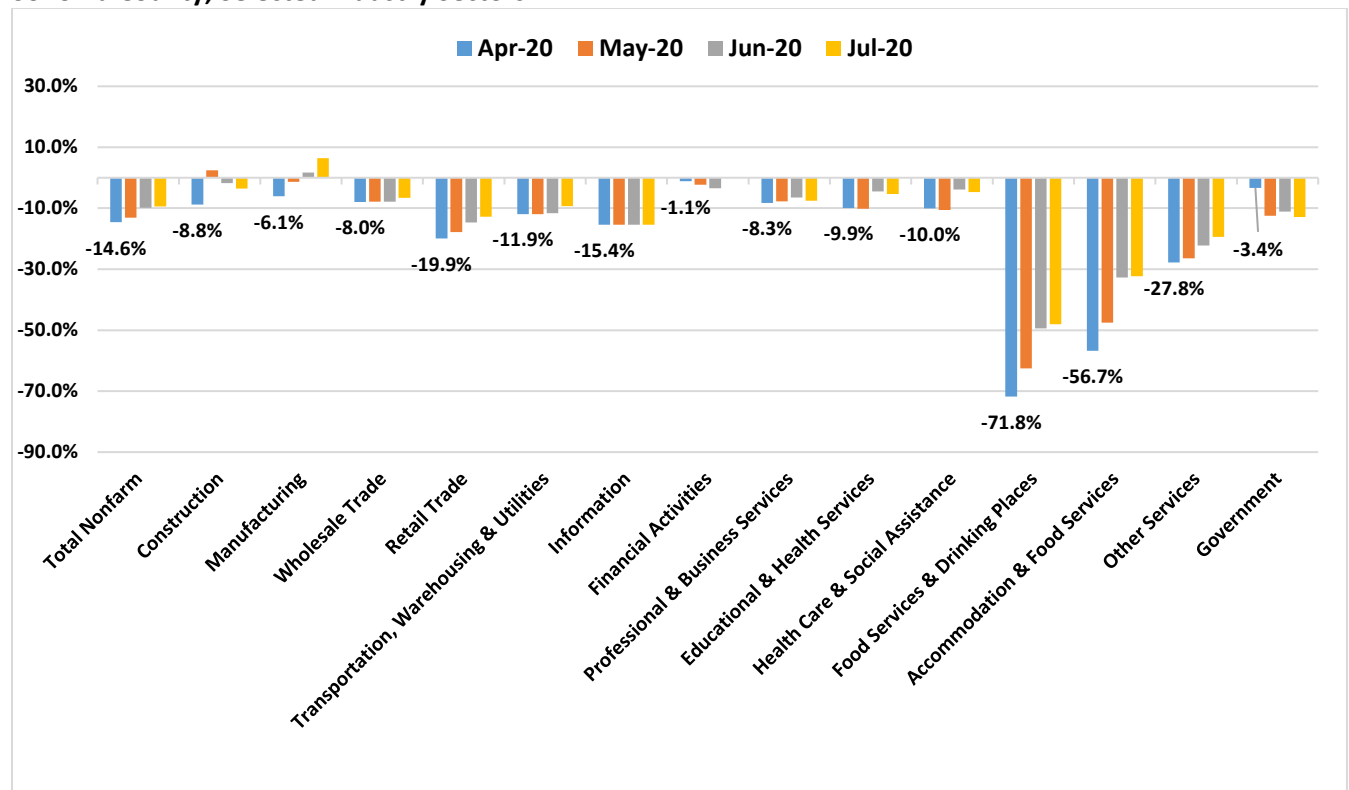
- R&D/Flex; and
- Apartments for Rent (Multifamily).

It is in the residential real estate market that local cities and the County of Sonoma may have the most concern given the experience of the Great Recession (2008 to 2010) on property tax rolls and general revenues to the County. Avoiding a downturn in the housing market is a critical component to both sustaining recovery but also not creating additional uncertainty for housing developers and construction workers.

Jobs

Figure 8 shows the percentage of jobs lost from the same month in 2019, helping to estimate the depth of loss by industry to inform our forecasts later. Figure 9 shows a forward-looking variable in initial claims for unemployment insurance. These data, as they rise, act as a portent to rising unemployment rates or a slowdown in the economy and the fall in unemployment rates from recent high levels.

Figure 8: Industry Level Changes in Jobs, Percent Change from Prior Year, April 2020 to July 2020, Sonoma County, Selected Industry Sectors



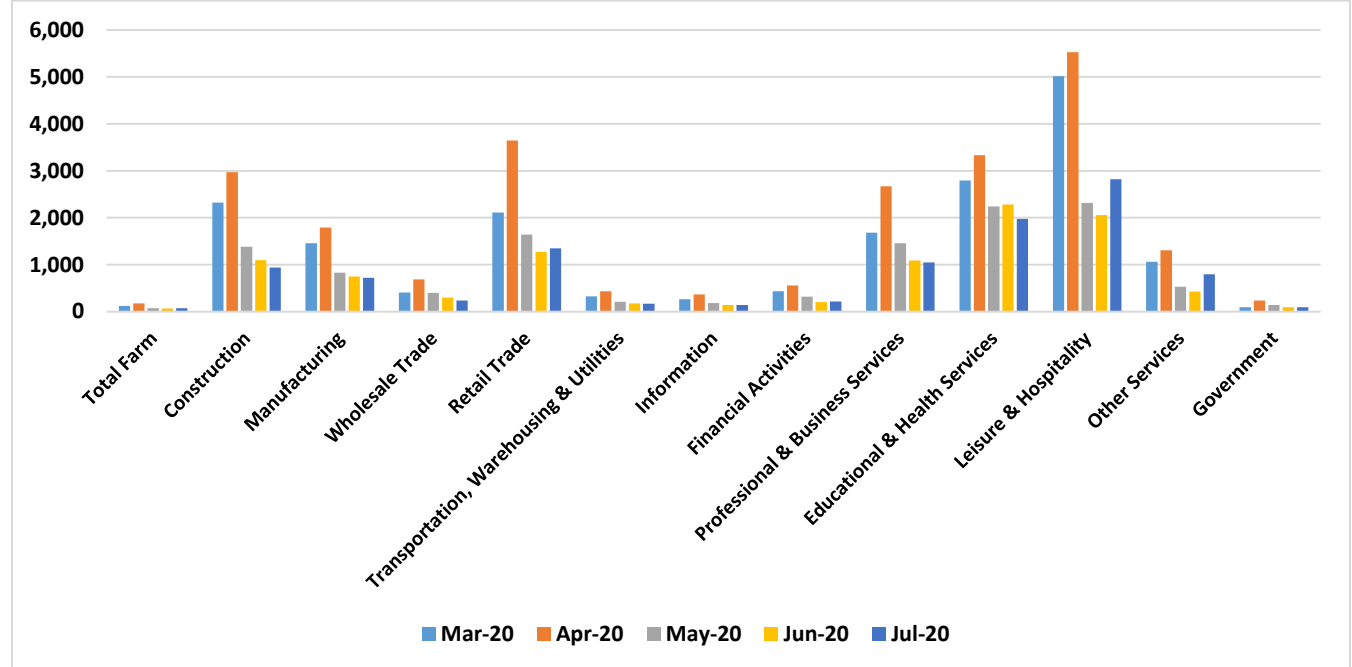
Sources: California EDD and EFA

Figure 7: Office Space Market, All Office, 2020 Q2 Comparisons

MARKET SUMMARY				
	Current Quarter	Prior Quarter	Year Ago Period	12 Month Forecast
Total Inventory	7.2M SF	7.2M SF	8.0M	↔
Vacancy Rate	13.5%	12.5%	11.9%	↔
Quarterly Net Absorption	-147K SF	18K SF	-39.0K	↔
Direct FS Asking Rent	\$1.91/SF	\$1.90/SF	\$1.89/SF	↔
Under Construction	?	?	881,840	↑
Deliveries	?	?	0	↔

Source: Newmark Knight Frank Commercial

Figure 9: Initial Claims for Unemployment by Industry Sector (NAICS-2), March 2020 to July 2020, Number of Workers (data available as of August 2020)



Sources: California EDD and EFA

Summary as of August 2020

- 10.2 percent of residents that had jobs in July 2019 are not working in July 2020;
- The unemployment rate for Sonoma County is 11.5 percent in July 2020, approximately two (2) percentage points lower than the state on average, not seasonally adjusted;
- Housing prices have grown since 2020 started, and COVID-19 has not shown any direct effects on housing markets as of August 2020;
 - Regional fires in August 2020 may change markets, confounding the COVID-19 effects on housing regionally;
- Commercial real estate is at risk, with office and retail markets experiencing rising vacancy rates and uncertain futures; and
- As of July 2020, reversals of job losses by industry have begun, signs of economic recovery.

Risks to Specific Industries in Sonoma County

Some of the assumptions we need to make in forecasting Sonoma County's economic recovery at the industry level include how doing business in each industry sector may change as a result of COVID-19. Most industries face increases in the costs of doing business, coupled with uncertain future revenues. Specific changes in use of spaces and expenses are forming:

- **More frequent and costly maintenance, including cleaning;**
- **Shifts in use and configuration of commercial real estate;**
- **Need to provide personal protection equipment (PPE) to employees;**
- **Needs to manage employees at remote locations (home);**

- **General employee resistance to coming back to work (kids at home with limited to no daycare options) and concerns over infections.**

We now provide some details where possible by industry as a way to further consider assumptions for the forecasts and economic impact estimates below. We start with hospitality industries: hotel and events; followed by restaurants.

Hotels and Events

Figure 10 shows data from July 2020 comparing hotel occupancy rates and subsequent revenue per available room or RevPAR for Sonoma County and other places throughout California. These data are important with respect to recovery in that when below the previous year, the lower revenues and increased costs of conforming to public health regulations act as a double problem for maintaining staffing levels and also re-hiring over time. For Sonoma County's cities and the county government overall, transient occupancy tax (TOT) revenues that come directly from overnight stays suffer in proportional to the movement of RevPAR data. Reduced ability to have events where people gather is yet another factor in hotel stays, especially weddings at county event facilities.

Figure 10: Comparisons of Occupancy Rates (Occ Rate) and Revenue per Available Room (RevPAR), as of August 2020 compared to August 2019, Sonoma County and Selected Areas

	Occ Rate	Occ Rate	RevPAR	RevPAR
Place	2020	2019	2020	2019
Palm Springs, CA	40.5%	48.4%	\$48	\$56
Napa County, CA	47.8%	84.6%	\$164	\$333
Monterey County, CA	63.6%	90.2%	\$126	\$356
Sonoma County, CA	63.3%	82.5%	\$91	\$167
South Lake Tahoe, CA	64.8%	76.5%	\$90	\$107

Sources: Smith Travel Research (data provided from various tourism organizations regionally) and EFA

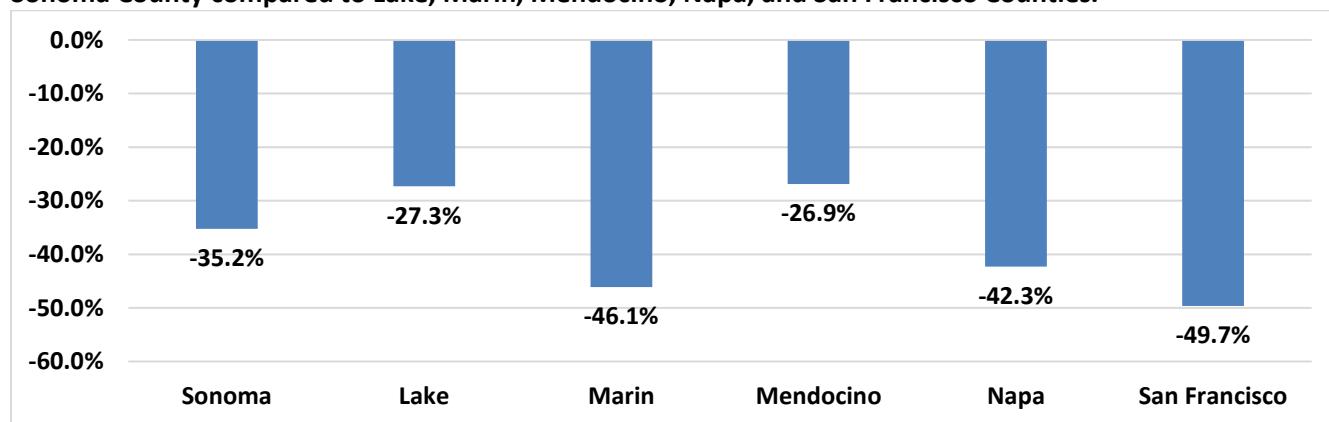
Restaurants: Related and Not Related to Visitors

Restaurants may have one of the tougher roads out of the COVID-19 downturn, especially due to their link to visitors coming to Sonoma County. The basic restaurant business model is one of utilizing tables in specific, weather-indifferent areas to maximize the revenue of patrons. Part of that is making the tables close enough to allow for room while eating while not making each table its own suite. Then the issue is the number of times the tables are used individually per night, the so-called "turns". The ability of the restaurant to up-sell diners and also have a certain number of turns generates the revenue side of the restaurant model. The shelter-in-place orders eliminated that model in some cases or converted restaurants to a take-away model where the tables are not utilized and waiting for the social policy lift or there is no revenue at all.

From a market-size standpoint, many of Sonoma County's restaurants depend on some flow of visitors to help increase revenue opportunities. If the summer 2020 tourism season is slower and dramatically so in Sonoma County, that adds risk to the restaurant industry's structure locally and the number of jobs that

may return. Different from other recessions, there may be medium- to long-term changes to cost structure and the configuration of restaurants that may change the local landscape; we should also expect change in terms of innovation and new restaurant models to address consumers wanting to have dining-out options with fewer brick-and-mortar restaurants. Figure 11 shows the evolution of restaurant businesses since 2019 in Sonoma County and California based on the number per 1,000 residents.

Figure 11: Restaurants and Bars, Taxable Sales Comparisons, Percentage Change, 2019 Q1 to 2020 Q1, Sonoma County compared to Lake, Marin, Mendocino, Napa, and San Francisco Counties.



Sources: [California Department of Tax and Fee Administration](#), EFA

Restaurants are one complement to visitor spending, retail is another.

Retail: Related and Not Related to Visitors

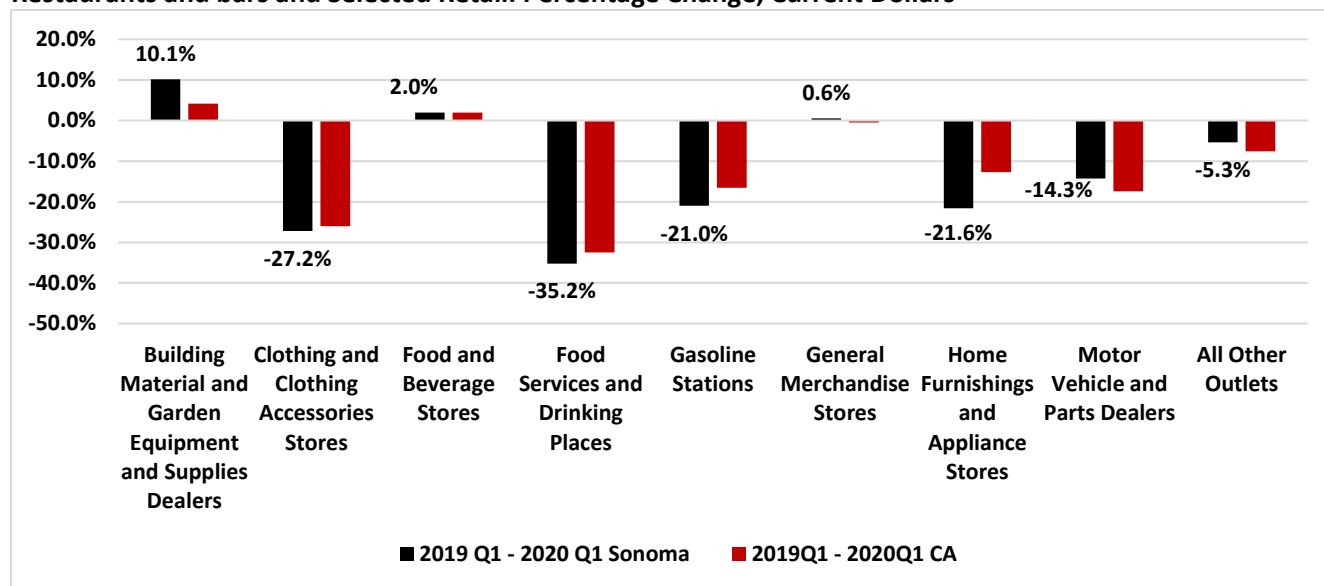
Not all retailers have suffered during the initial stages of the COVID-19 recession, as some were declared essential versus non-essential. Essential retailers included: grocery/food stores, building materials, auto dealerships. Retail otherwise was very limited due to public health orders. The reduction in retail sales that came from these temporary closures had effects on retail jobs starting in March 2020. In April 2020, the real harm in retail became apparent and has affected jobs to July 2020 (the latest data).

Job losses in retail may be among the most difficult to re-hire due to a reduced number of local retailers remaining and shifts to more online shopping by force. Data for how much online retail sales increased since mid-March 2020 as of August 2020 for Sonoma County are still emerging. As online sales rise, local retailers face rising costs of doing business to conform to public health regulations and growing competition simultaneously and basically overnight from February 2020. As retail re-opens slowly in August and September 2020, consumer demand may remain at lower levels or shifted to online not to return; the medium- to long-term viability of local retail remains in question for many merchants.

Visitors not coming to Sonoma County at the expected volume for spring and summer 2020 also shifted forecasts for local retail demand. Visitors to Sonoma County spend on hotel rooms, restaurant meals, an array of retail items when they come, increasing overall retail sales for Sonoma County. While the visitor counts are not followed consistently by any entity, we can use overall data on taxable sales and

hotel stays to consider what may be the spending gaps in 2020, assuming some percentage reduction in visitors from 2019. Taxable sales are connected to sales tax revenues from retail. Even in food stores, taxable sales take place. Figure 12 provides comparisons across major sales tax categories and the beginning of COVID-19's effects on retail and restaurant businesses.

Figure 12: Taxable Sales Comparisons, Sonoma County and California, 2019 Q1 to 2020 Q1, Restaurants and bars and Selected Retail. Percentage Change, Current Dollars



Source: [California Department of Fee and Tax Administration](https://www.sfta.ca.gov/) and EFA

Similar to TOT revenues for the local municipalities, these percentage changes are directly related to downturns in sales tax revenues as compared to previous time periods. On a per-capita basis, Sonoma County ranked 10th and 12th in 2019 and 2020 respectively in terms of taxable sales per capita of the 58 counties in California; Napa County was 3rd highest and 4th highest out of California's 58 counties over the same time, suggesting some dependence on the flow of outsiders to drive taxable sales. Marin County, with almost double the median household income as Sonoma County, was 9th and 11th highest.

Agriculture, including cannabis

Agriculture, based on its supply-chain links, has a mixed outlook as COVID-19 shelter in place orders end and may be among the more complex industries to consider in terms of the next two years. The mix of effects depends on how restaurants open and how competitive supply chains become for goods if the final stop on that chain is smaller than before. The reverberations from retail back to farmer affects crop farmers and livestock ranchers alike, where the specific industries depend on what types of restaurants and grocery retail patterns emerge as residents and businesses slowly get back to work. For example, with more people working from home, lunch-time restaurant meals may see lower demand and a shift to home delivery or grocery. On a positive note, the July 2020 labor-market data show Sonoma County farm jobs are up from July 2019, suggesting recovery has started.

However, some general themes exist for farming and ranching in Sonoma County as COVID-19 has had mixed effects;

- For local grocery, farmer's markets and community-supported agriculture, job and income losses seem to be small so far;⁶
- Shifts in restaurant demand has trickled back to local farmers and wineries through lower distributor demand and direct-to-restaurant sales;
- A lack of local processing, for both livestock and crops, underscores regional farmers' vulnerability to supply-chain problems nationally and internationally; and
- Schools, junior colleges, and universities not having students back on campus reduce the amount of restaurant and quasi-restaurant meals being served, reducing local food production demand.

For livestock and dairy farmers, a lack of local processing, warehousing and distribution created shortages in local grocery in some cases and wastage of products. These should also be seen as potential opportunities as the local economy recovers from COVID-19 to help farmers. Considering some reductions in regulation to allow more local and mobile processing likely allows local farmers to produce more, remain viable for a longer period of time, and also help on local food resiliency.

For wineries and vineyards, supply-chain issues exist throughout California, which represents about 90 percent of national wine production.⁷ Concerns include:

- Labor availability problems due to labor-force shifts to other areas and continued health concerns;
- Undocumented workers that may be utilized in vineyard and winery work that have left the local area to find work elsewhere once shelter-in-place began;
- Rising revenues for wine sold through direct-to-consumer (DTC) channels may not last, affecting plans for harvest yields in 2020 affecting vineyard-owner revenues; and
- Costs of doing business to rise for wineries across harvesting, bottling and tasting room units.

For cannabis farming, there are three, major challenges:

- Like vineyards, labor availability given the local labor market opportunities otherwise, may be difficult to find even with relatively-high unemployment rates;
- Cannabis demand may be rising while the costs of farming and compliance continue to rise; and
- Due to rising workplace compliance costs and rising demand, more production may go underground, short of nationalization.

Healthcare providers have seen a mix of results, due to some procedures and visits not being available due to public health decrees alongside of rising acute care planning and needs based on COVID-19.

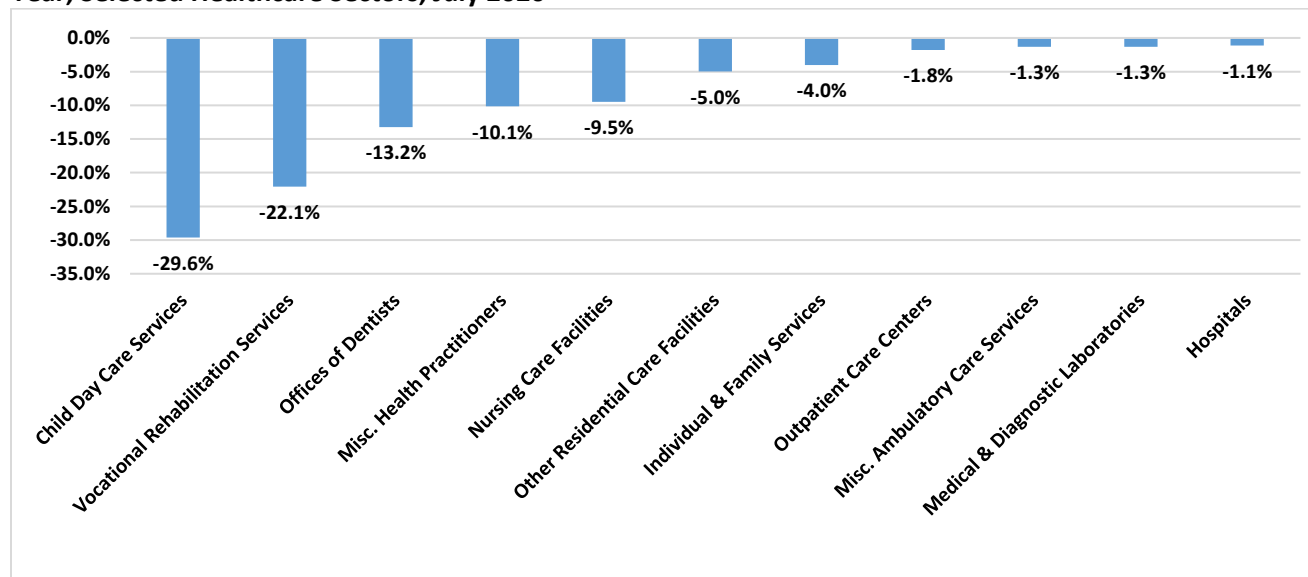
⁶ EFA is engaged with Sonoma County Ag and Open Space to look more deeply at the economic effects of COVID-19 on Sonoma County food producers. Interviews were done with specific food producers across crops and livestock to provide perspective. That report is forthcoming in 2020.

⁷ The Wine Institute provided initial estimate of losses for the US Wine Industry in late April 2020: <https://wineinstitute.org/press-releases/us-wine-losses-from-covid-19-could-reach-5-94-billion/>.

Healthcare and Public Health

While parts of the healthcare system prepared to assist with COVID-19 cases and preparedness, other parts of the healthcare system were put on hold similar to personal services otherwise due to proximity and needs to take on safety protocols. Initial jobs data suggest net, local job losses in healthcare. Similar to natural disasters otherwise, we should see most healthcare providers and related industries emerge from this crisis well. Some of this is continued demographic needs; older populations tend to demand more healthcare services. Second, there is likely to be an initial surge in demand as those that can afford (or are insured) to seek regular medical and dental maintenance will want to go soon after it is available again. Figure 13 is the July 2020 data for California across selected health-care industries that experiences the most, negative changes in jobs.

Figure 13: Healthcare and Social Assistance Industry Jobs in California, Percent Change from Previous Year, Selected Healthcare Sectors, July 2020



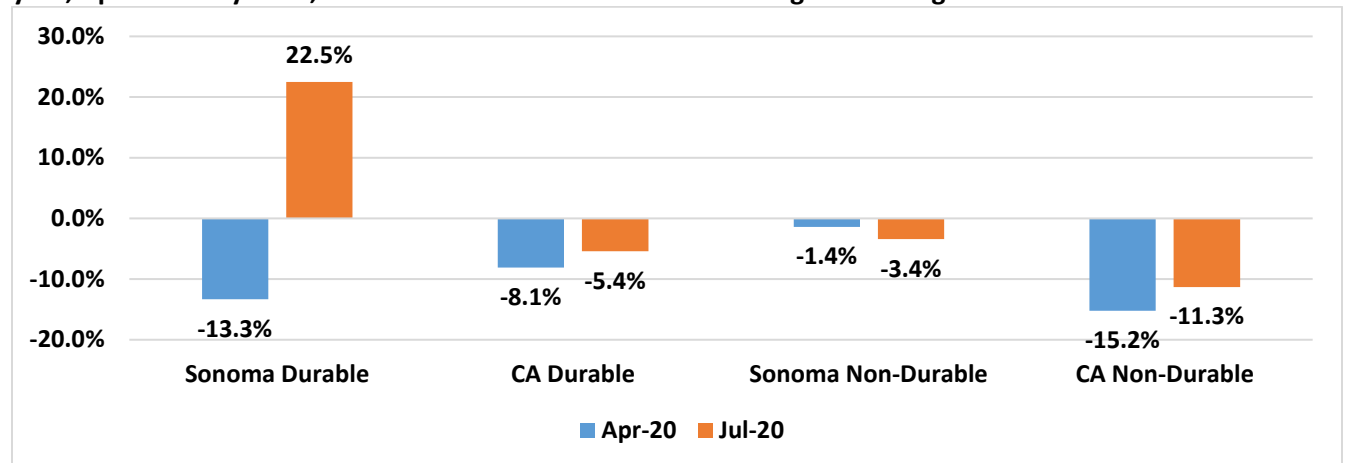
Sources: California EDD and EFA

Manufacturing

Sonoma County has a wide array of manufacturing taking place, some of it linked to local supply chains, and others to global markets. Below are data on the percentage change in jobs for April 2020 and July 2020 (the latest data) versus the same month in 2019. Manufacturing is generally split into two major subgroups. Figure 14 shows durable (heavy and more advanced manufacturing of equipment and other technology, such as life-sciences products) versus non-durable (food, beverages and clothing primarily). Manufacturing wages are generally higher than local averages (as 2019 ended, Sonoma County employers in manufacturing paid approximately \$1,808 per week on average versus \$1,201 for the county overall, a 50.5 percent difference for manufacturing). Figure 14 shows a strong bounce back in

durable manufacturing for Sonoma County versus the state overall. Non-durable manufacturing jobs are performing better (in terms of percentage job lost) than the state on average of July 2020.⁸

Figure 14: Manufacturing Jobs in Sonoma County and California, Percentage Change from the Previous year, April and July 2020, Durable vs Non-Durable Manufacturing Jobs Changes



Sources: California EDD and EFA

Construction

The Great Recession (2008 to 2010) was a time of change for construction industries in many ways. Figure 15 compares California and Sonoma County permits to build new housing units, and generally three concerns defined the 2006 to 2017 period in Sonoma County housing and construction:

- Reduction in jobs in construction, mainly in-home projects, that lasted nearly a decade;
- Housing markets did not recover from large declines 2008 until 2015, though construction jobs started to come back in 2013 due to increased renovation demand; and
- Housing and rental vacancies moved to very low levels because of rising populations against available housing stock.

The 2017 wildfires destroyed almost 9,000 structures in Sonoma County. Construction jobs and incomes in Sonoma County was provided a dubious boost due to these losses being partially replaced. Rebuilding continues in the county, but building permits for new housing rose much more quickly in 2018 and 2019 versus the trend after the Great Recession. While building permits for new houses have fallen from recent high levels in Sonoma County, that change was expected after the 2017 fires rebuilding effects began to fade; the early months of COVID-19 effects do show a slowdown in housing permits in Sonoma County similar to the state on average.⁹

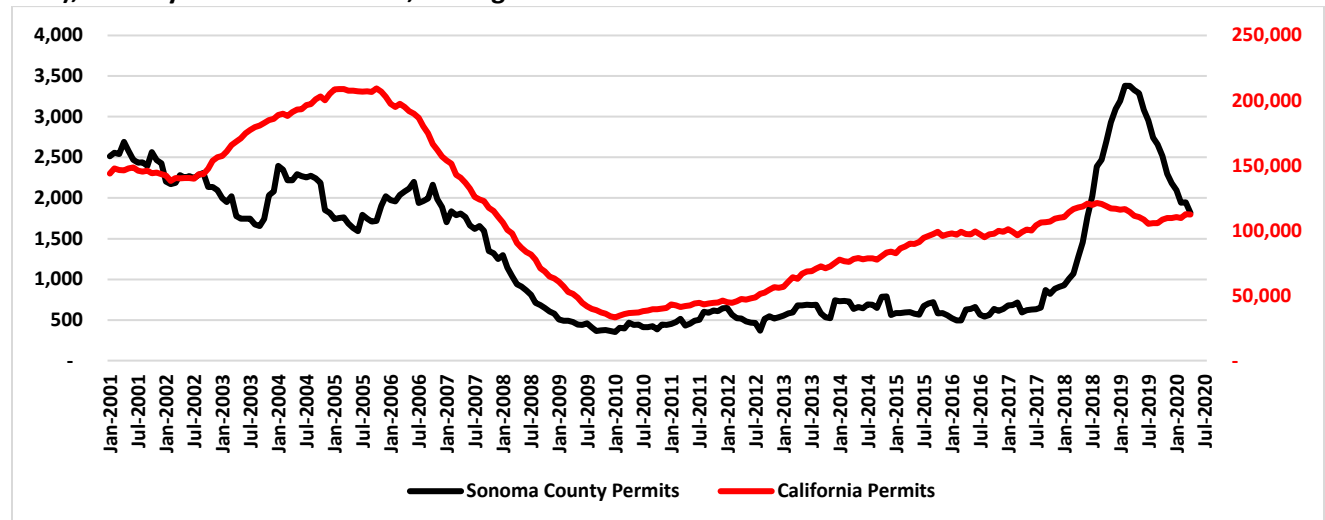
Construction jobs have shown less of a contraction than other industries (see Figures 8 and 9). Per the July 2020, labor-market data for Sonoma County, construction jobs are above their July 2019 levels, suggesting construction has fared better than other industries in the early stages of this recession. The

⁸ See Quarterly Census of Employment and Wages for California, California EDD, June 2020.

⁹ See Census Bureau Building Permits Survey (www.census.gov/construction/bps) for more.

trades provide jobs that are naturally, physically distant and outside in some cases. Lower interest rates and projects already funded likely support a quick return to work in construction through summer and fall 2020 in Sonoma County. Figure 15 shows permits data for new homes as a 12-month rolling sum from January 2001 to June 2020 for Sonoma County and the State of California.

Figure 15: Building Permits for New Housing Units, Sonoma County (Left Axis), and California (Right Axis), January 2001 to June 2020, Rolling 12-month Sum



Sources: Census Bureau Building Permits Survey (www.census.gov/construction/bps) and EFA

Other Services and Non-Profits outside of Healthcare/Social Assistance

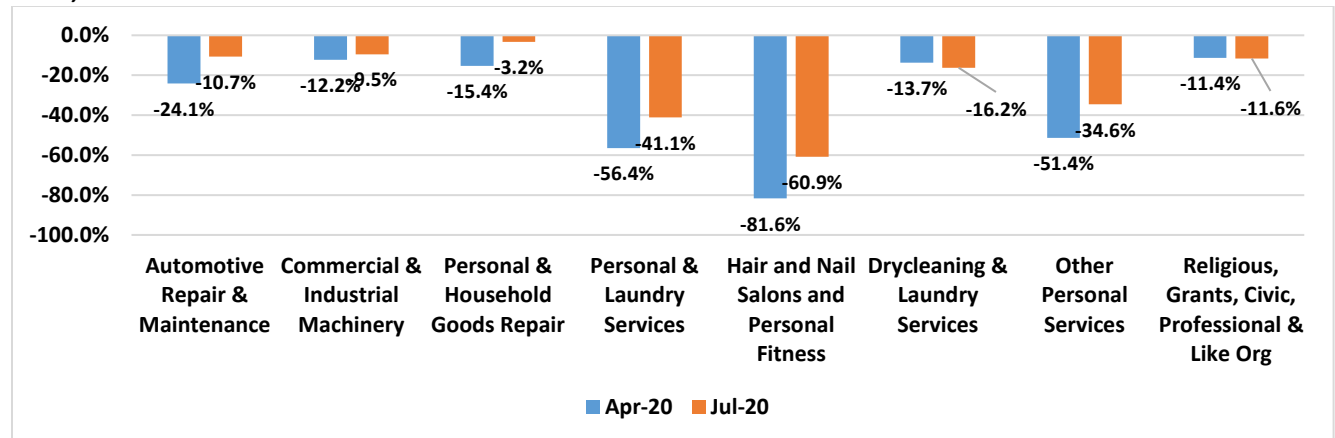
As of July 2020, approximately 3.3 percent of the jobs at Sonoma County employers were in an array of industries called “Other Services”. These employers were among the largest jobs losses in terms of percentage change in Sonoma County, California and the United States. Included in these jobs are hair salons, nail salons, fitness centers, business and civic associations, as well as religious organizations. Similar to healthcare and social assistance, employment data for Sonoma County is not available month-by-month for these subindustries; the state-level data is available and shown in Figure 16 comparing April 2020 and July 2020 (the latest data available as of this writing) to the previous year. Our local non-profit organizations provide a large amount of services for our lower-income workers and communities of need. During recessions, reductions of philanthropy or shifts of giving to specific non-profits and missions or both versus general giving compromise overall resources available.

Government

The May 2020 revise of the State of California budget for fiscal year 2020-21 showed the beginnings of a painful one to two years for state, county and city governments. All these municipal governments are tied together by property and sales tax measures and legislation, as well as the reallocation of personal income and capital gains tax revenues that come to the state and then are used for an array of services throughout the state. As of August 2020, government personnel cuts in Sonoma County have started (according to California EDD, there are -12.9 percent fewer jobs at all levels of government as of July 2020 versus July 2019 in Sonoma County; statewide that figure is -6.7 percent). There will likely be more

voluntary or involuntary reductions in overall, full-time equivalent government employees. We will see in Section 4 estimated fiscal impacts of COVID-19 on state and local tax revenues. These changes can affect the ability of Sonoma County's cities to provide services across an array of areas.

Figure 16: Other Services Jobs in California, Percentage Change from the Previous Year, April and July 2020, Selected Sectors



Sources: California EDD and EFA

Summary on Industries Effects

Figure 17 provides the most recent data available as of August 2020, summarizing the considerations above in terms of industry-sector riskiness to help determine how the forecast scenarios below show certain industries recovering faster than others. Figure 17 also provides, a “location quotient” or LQ is used to provide a snapshot of relative industry risk. Normally, LQs (and sister statistic “Shift Share”) are used by economic development professionals to focus resources on “clusters” of businesses that may have a natural reason to stay and grow in an area.¹⁰ Industry LQs are ratios of an industry’s local employment level to the total, local (Sonoma County) employment level as the numerator; the denominator is the same ratio for a larger comparative area (for example, employment in retail for California overall divided by total industry employment for California overall). A LQ above or below 1.0 is not necessarily good or bad, it is a way to measure the relative risk of engaging economic development efforts around industries that have concentrated businesses and employment. New firms may be attracted and retained by similar employers locally that form a regional cluster of potential employees as well.

When jobs are lost, especially in a general way as with COVID-19, LQs greater than 1.0 can also represent local risk in industries of concentrated job losses versus other parts of the state. For our purposes, we will use the LQ as a way to suggest more risk of a longer recovery period than other industries, especially if there are also larger, relative job losses than other local industries. For now, the industry-level effects of COVID-19 on Sonoma County’s economy are following state and national trends. Because job losses may linger, the Sonoma County economy may more slowly climb back to where it

¹⁰ See https://www.economicmodeling.com/wp-content/uploads/2007/10/emsi_understandingshiftshare.pdf for more on this topic.

started 2020 versus the state on average because important industries lost a larger number of jobs. For example, construction slowly came back after the Great Recession, and it took the Sonoma County economy five years to get back to 2008 Q4 employment levels (it was not until 2013 Q4 that there was a return), and our scenarios below have four years of recovery as the median outcome. Recovery may be quicker, it may be longer, and much depends on how local residents and local workers get back to work in specific industries.

Figure 17: Jobs in July 2019 and July 2020 and Relative Risk of Recovery, Sonoma County

Industry	Jobs July 2020 Number of Workers	Jobs July 2019 Number of Workers	Change Jobs 2019-20 Number of Workers	% Change Since July 2019	LQ (as an inverse measure of local risk)
Accommodation and Food Services	15,100	21,300	-6,200	-29.1%	1.06
Public Administration	23,700	29,900	-6,200	-20.7%	0.90
Health Care and Social Assistance	32,100	35,800	-3,700	-10.3%	1.14
Retail Trade	21,100	24,100	-3,000	-12.4%	1.21
Other Services	5,800	7,100	-1,300	-18.3%	1.05
Professional, Scientific, Tech Services	22,000	22,900	-900	-3.9%	0.60
Administrative and Waste Management	10,300	11,200	-900	-8.0%	0.87
Wholesale Trade	7,100	7,600	-500	-6.6%	1.49
Information	2,200	2,600	-400	-15.4%	0.39
Educational Services	1,900	2,300	-400	-17.4%	0.59
Transport, Logistics and Warehousing	3,200	3,450	-250	-7.2%	0.45
Real Estate and Rental and Leasing	3,900	4,100	-200	-4.9%	1.10
Natural Resources	200	200	0	0.0%	0.61
Management of Companies	2,100	2,100	0	0.0%	0.71
Utilities	700	650	50	7.7%	1.10
Finance and Insurance	4,900	4,700	200	4.3%	0.73
Arts, Entertainment, and Recreation	4,000	3,800	200	5.3%	1.01
Construction	16,400	15,800	600	3.8%	1.59
Agriculture	7,300	6,400	900	14.1%	1.19
Manufacturing	25,000	22,900	2,100	9.2%	0.91

Sources: California EDD, EFA

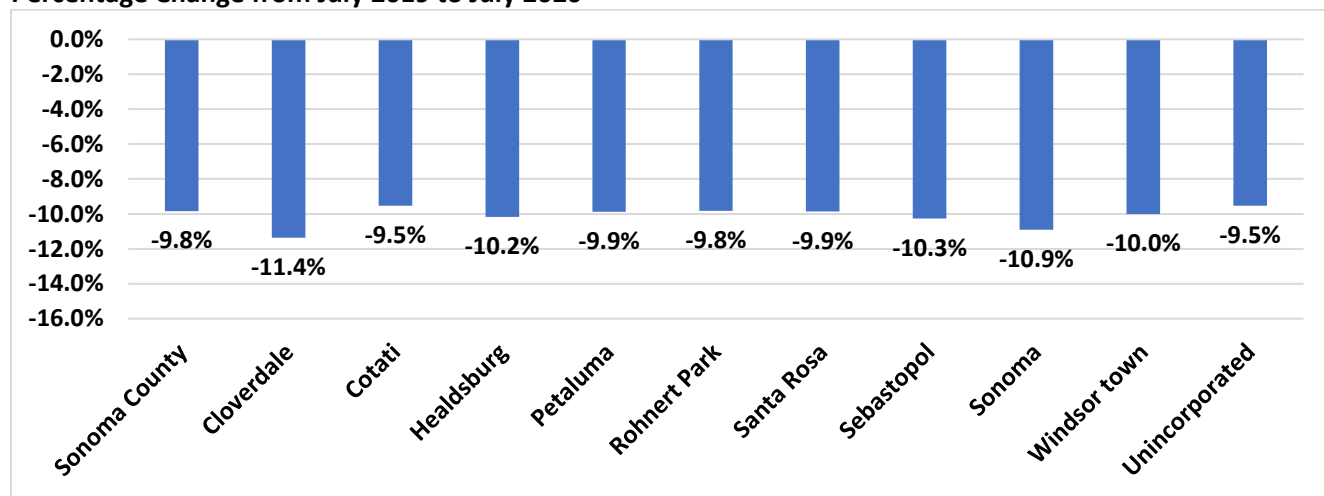
City-Level Considerations

Because county economies are made of incorporated cities and unincorporated areas, this report builds scenarios for each city or town and the unincorporated areas by industry sector, adding up to the full county scenario. Each of these areas have unique industry mixes of both employers and jobs that employ local residents (who may work outside the county in some cases). We show the data currently available on industry mix by city from both Census Bureau and California EDD data, and then forecast data for each of the areas forward to 2023 as part of the scenario analysis below.

The main data to be used are employment data by industry sector and then data describing the residents of each city. The residential employment data are updated monthly and provide a way to think about local income levels and spending; the industry data show the types of local employers and the number of employees in each industry sector. As COVID-19 has effects on both local residents **and** local employers, economic and workforce development effort addressing lost jobs may need to consider where residents work (inside or outside the local area) and where local businesses derive their workers from generally (workers live in the same city, Sonoma County, otherwise, or outside the county), as there may be opportunities to retrain workers for careers with Sonoma County employers and convert commuting workers otherwise.

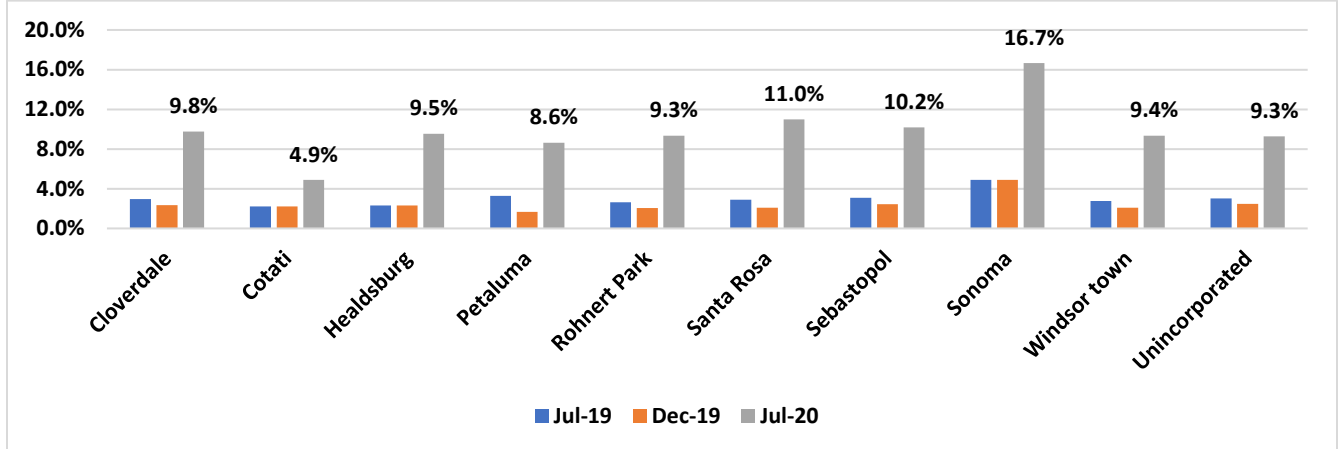
Like the county as a whole, the cities have certain risks from COVID-19 that are potentially structural. Being a place where visitors come and thus multiple industries depend on hotel stays and visitor spending, certain cities thrive from increased visitor activity. How these key tourism areas are affected by COVID-19 affects the county overall. Areas with winery tasting rooms, beaches, restaurants, and other recreation assets, have different risks than other areas of Sonoma County. The unincorporated areas in particular also act as a place where many people live (as of January 2020, approximately 28.1 percent of Sonoma County's population). Figures 18 to 22 show different perspectives on the city economies in Sonoma County: jobs changes, changes in taxable sales and housing market changes.

Figure 18: Employment Level Comparisons, Sonoma County Cities and Unincorporated Areas, Percentage Change from July 2019 to July 2020



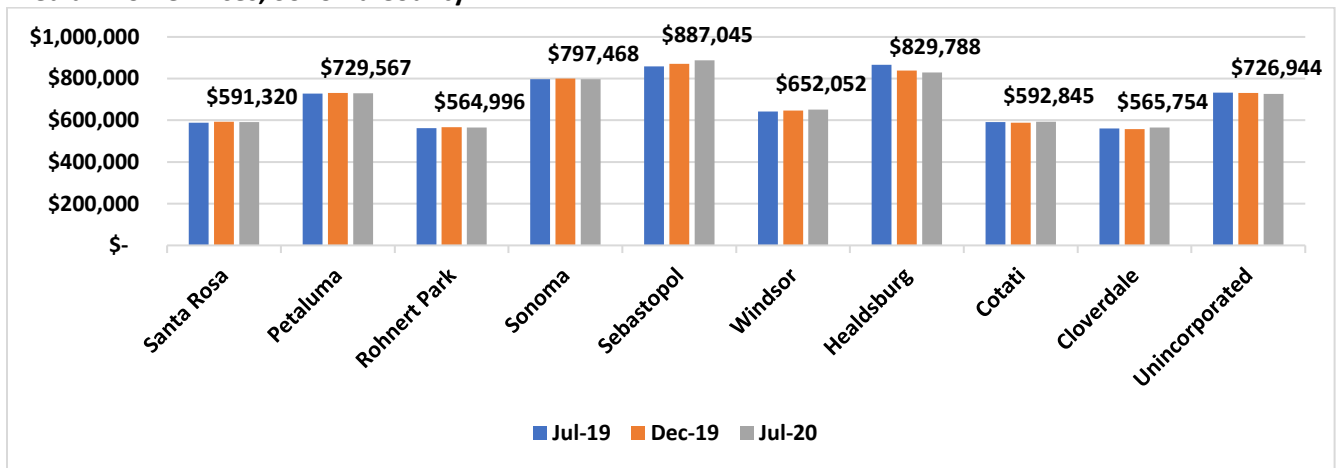
Sources: California EDD and EFA

Figure 19: Unemployment Rate Comparisons, Sonoma County Cities and Unincorporated Areas, July 2019, Jan 2020 compared to July 2020, Percentage of Labor Force



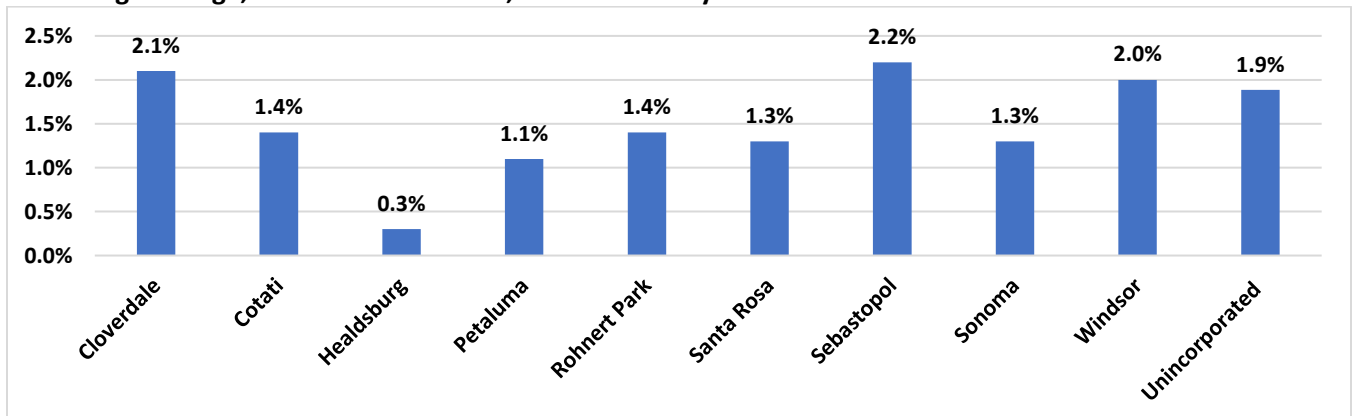
Sources: California EDD and EFA

Figure 20: Median Home Prices, Zillow™ Research, July 2010, July 2019 and July 2020, Current Dollars, Median Home Prices, Sonoma County



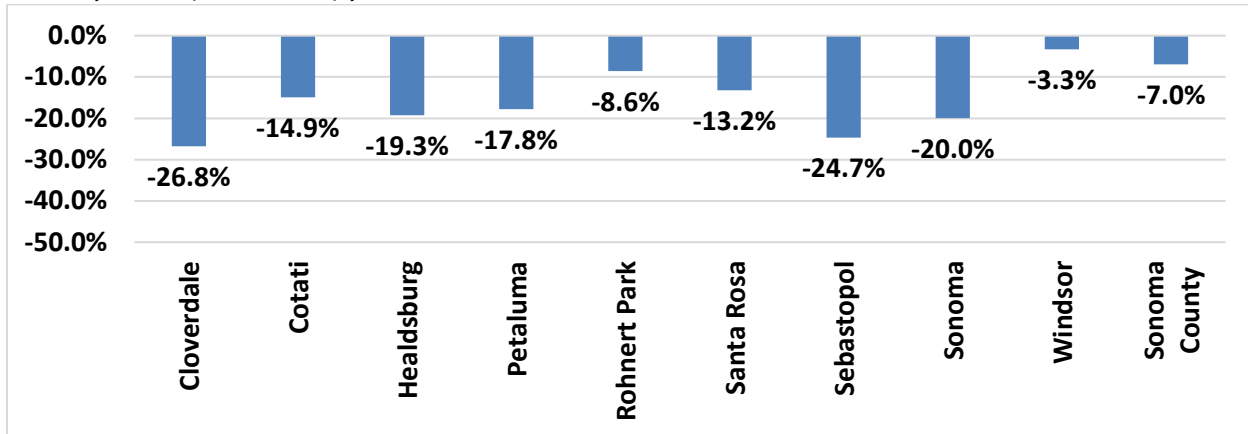
Sources: Zillow™ Research and EFA

Figure 21: City and Unincorporated Area Forecast, Zillow™ Research, July 2020 to July 2021, Percentage Change, Median Home Prices, Sonoma County



Source: Zillow™ Research and EFA

Figure 22, Percentage Change in Taxable Sales, Sonoma County, Incorporated Cities and County Overall, 2019 Q1 to 2020 Q1, Total Taxable Transactions



Source: California Department of Tax and Fee Administration and EFA

Summary of City-Level Considerations

For Sonoma County, the city and unincorporated county effects have shown some differential effects for data available as of August 2020.

- The percentage of local residents that have lost their jobs from July 2019 to July 2020 (the latest data) is relatively similar across all municipalities;
- Unemployment rates are highest in the town of Sonoma and Santa Rosa as of July 2020;
- Median home prices are down in Healdsburg since January 2020, and all other municipalities are up slightly or basically the same level as January 2020;
 - All municipalities have rising home prices since July 2019, so any changes in the post-COVID world have yet to affect Sonoma County in terms of housing prices;
- Taxable sales are down across the county from 2019, where Cloverdale, town of Sonoma, Sebastopol, Healdsburg, and Petaluma have seen drops near 20 percent or more in 2020 Q1;
 - 2020 Q2 will be worse when the data are fully available later this year on taxable sales.

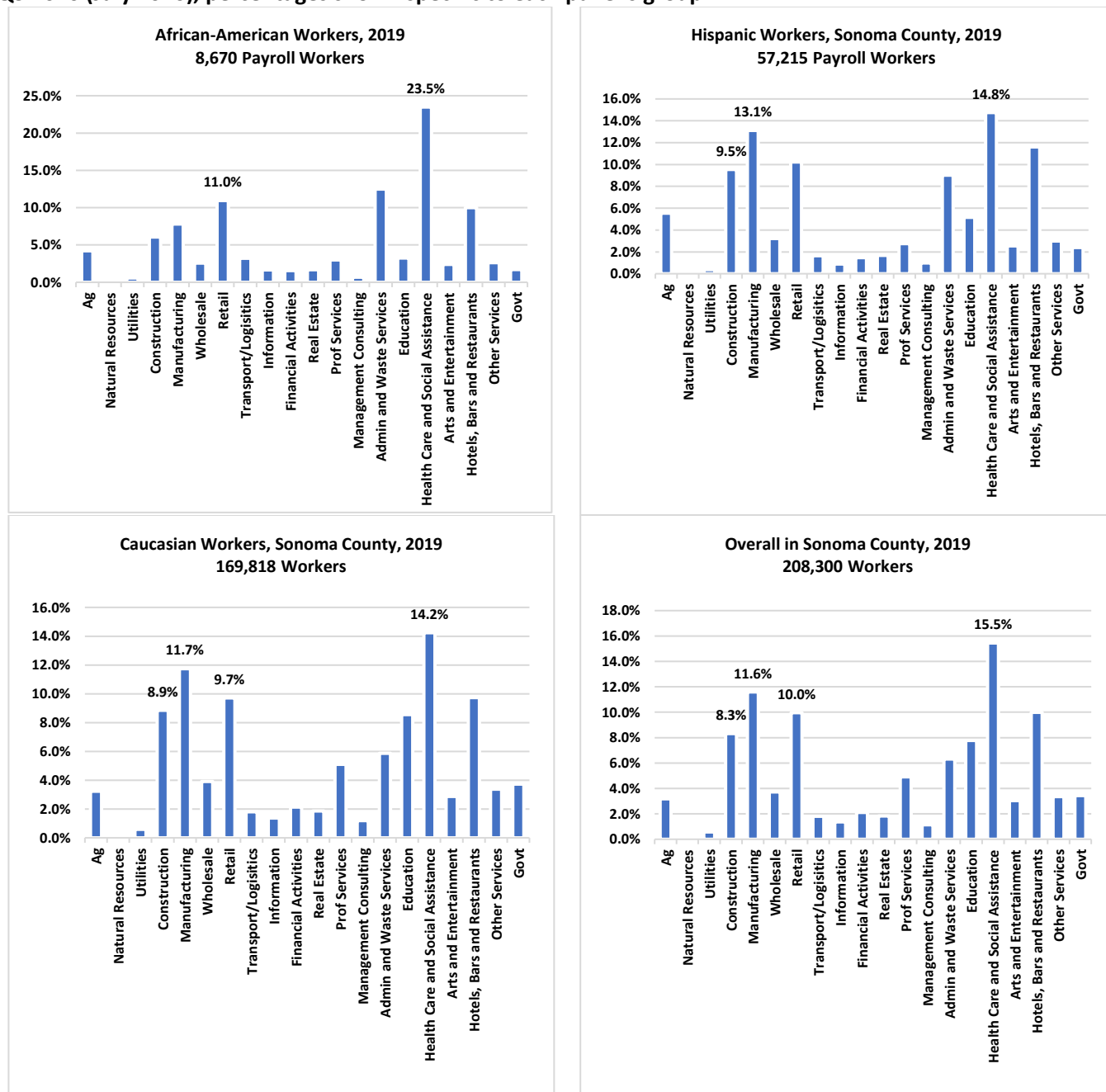
Social Justice and COVID-19: Sonoma County Opportunities and Challenges

Not only has 2020 been a year of economic recession, it has been a year of social upheaval and increased focus on racial divides and injustice that unfortunately remain in the United States. This study recognizes economic recession can affect under-represented groups differently and perhaps relatively adversely vis-à-vis other socioeconomic groups. The official data on how workers of different ethnicities and races lost jobs, remained unemployed, or experienced other economic loss continues to emerge at the county and city level.

Figure 23 shows the mix of employees as compared to industry-level job losses for Caucasian, Hispanic and African-American workers as a way to gauge where workforce challenges may lie early in this recession. From economic and workforce development angles, there may be opportunities here to train

and support new businesses for displaced workers, especially in industries where there may be structural shifts and fewer jobs available in the future (due to lost businesses not coming back). These data represent payroll workers, not self-employed or those working for cash payments.

Figure 23: Workers by Industry by Ethnicity/Race, start of Q3 2019 and Percent Change in Jobs start of Q3 2020 (July 2020), percentages shown specific to each panel's group.



Sources: California EDD, Census Bureau Quarterly Workforce Indicators, and EFA

The percentages shown in Figure 23's panels are for each ethnicity or race or group, and not the county total. For example, 23.5 percent of African-American workers at Sonoma County employers are in

healthcare or social assistance jobs; for Hispanic workers, that percentage is 14.8 of all Hispanic workers for employers here in Sonoma County. The estimated number of workers uses the total number in the specific graph multiplied by the percentage; for example, the 14.8 percent of Hispanic workers in healthcare and social assistance is approximately 8,468 workers that are Hispanic and work in healthcare or social assistance. The “Overall” panel is all workers in Sonoma County at the end of 2019.

The mix of workers among the major industries in Sonoma County is wide in breadth and thus provides some relief against the industries that have experienced major job loss; the breadth of job opportunities by ethnicity/race in Sonoma County also suggests mobility of under-represented groups among different career tracks and industry sectors. This recession is an economic crisis **and** opportunity for workforce development to look at training in manufacturing and construction and health care, where wages are higher than average and recovery is likely more certain, for African-American and Latinx/Hispanic workers that have lost their jobs due to COVID-19. It is important to see these data as a point in time and not a trend, as trends continue to evolve.

Survey Data: Additional Information from County Businesses

Starting in April 2020, Sonoma County Economic Development Board (SCEDB) began a survey instrument that asked simple questions about business reactions to the COVID-19 shutdowns and subsequent problems in the regional economy. Survey data gathered by Sonoma County EDB and synthesized by EFA are available in presentation form with city-level results.¹¹ The survey is not scientific and these data are meant to add to industry-level and city-level evidence as to how COVID-19 has affected Sonoma County’s economy. The main questions were as follows:

- Was your business considered “essential” or not?
- Did the hours that your business was open increase, decrease or not change?
 - If hours changed, by what percentage of hours was the change?
- Did your business make job cuts?
 - If job cuts were made, what percentage of jobs were cut?
- Has revenue increased, decreased or stayed the same?
 - If revenue has changed, by what percentage has it changed?
- Did your business utilize CARES Act funding, including PPP, EIDL, etc.?
 - If so, how much money did you receive as a business?

Based on both industry and geography, the first four weeks of data had the following results, where over 600 total respondents provided survey data between April and August 2020.¹²

¹¹ EFA is providing Sonoma County EDB with PowerPoint files with summary data on the survey responses.

¹² Note: the number associated with each industry is the industry sector “code” of the North American Industrial Classification System (NAICS), 2-digit level. EFA is providing summary presentations as appendices of this project with details results from the surveys.

Initial Conclusions Drawn from Survey Data

The data from Sonoma County EDB's survey provide some simple conclusions about how businesses navigated the initial stages of COVID-19's effects on the local economy. These data allow more refined conclusions about the depth and breadth of economic concerns in Sonoma County for building assumptions to perform the economic impact analyses in Section 4.

- May to June 2020
 - \$140,000,000 in this sample of PPP, EIDL, CARES Act used
 - Many of those sampled essential, may suggest some sample bias;
 - Larger cities and towns: more essential businesses.
 - Hours reduced across industries and municipalities:
 - Rohnert Park the sole exception on average, probably due to essential retail remaining open;
 - Jobs cuts across took place across all areas and industries;
 - Transport and warehousing an exception, which makes sense with increase in home delivery; and
 - Unincorporated Sonoma County hurt marginally more;
 - Revenues decreased across the board;
 - Similar to job losses seen in the California EDD data for local residents.
- June to July 2020
 - An additional \$14,732,000 in this sample of PPP, EIDL, CARES Act used, as later stages of round one upon Sonoma County;
 - Industries affected continue to follow job-loss data;
 - Unincorporated Sonoma County more loss relative to cities and towns for jobs and revenue (more tourism risk exposure over a wider area);
 - Many of those sampled essential, may suggest some sample bias
 - Larger cities and towns had more essential businesses;
 - Hours reduced across industries and municipalities as first survey round; and
 - Windsor is an exception on average and showed recovery more quickly, perhaps due to construction and grocery/essential retail and office opening more quickly there.

These data describe the estimated effects of COVID-19 on the Sonoma County economy, where some bright spots exist, and also begin to build the assumptions around the forecasts and the broader economic impacts. In the next section, we show the estimated employment loss data for Sonoma County as known through Q2 2020 and then forecasted to the end of 2023 as the basis of the economic impact analyses for the county economy. Because of the preliminary nature of the economic effects from COVID-19, the three scenarios provide a “most likely” or median scenario with a bandwidth around it. The bandwidth's positive end is a “better” case and the negative end is a “worse” case going forward.

4. Economic Impacts of COVID-19: Scenarios for Jobs, Business Incomes and State and Local Tax Revenues in Sonoma County

The scenarios in Section 4 provide three potential paths for the Sonoma County economy resulting from the current recession, based on projected job losses. The economic impact analyses consider estimated jobs lost since the end of 2019 to the end of 2023 in specific industries as the “direct” economic impacts. Those losses then create negative ripple effects on the county economy. Estimates are provided by industry sector as shown in Figure 17. Industry-level and city-level risks for the nine cities and towns and the unincorporated county areas are considered. Economic development efforts can use these estimates, as the actual data unfold, to focus resources on industries most affected and re-estimate the economic impacts over time.

The estimated economic impacts of COVID-19 on Sonoma County use the following methodology:

- **Estimated Jobs losses for local employers imply estimated revenue lost because of general jobs losses to county residents, visitors, workers that are employed locally, and lost local employers;**
- **These lost jobs imply a certain amount of gross regional product (GRP) lost, the dollar level of economic impacts; and then**
- **The GRP lost imply reduced municipal revenues at the state and local level in specific categories, which are included in the GRP impacts.**

One of the key differences between a classic economic impact study (for example, how the PSPS episodes in 2019 affected the county economy) and this study is that COVID-19 has had a general impact on county jobs.¹³ The approach below is to consider three scenarios and not just one estimate; because of the preliminary nature of available data, we consider a median scenario is seen as “most likely”, as of information available to August 2020. Each scenario uses recent estimates of income and productivity per worker by industry category, which become the dollar-based economic impact estimates of COVID-19, implying lost state and local tax revenues because of lower taxable transactions and employment levels.

For example, Transient Occupancy Tax (TOT) is a sales tax derived from visitors to Sonoma County staying overnight at hotels; estimated TOT revenues lost come from reduced tourism flows in 2020 so far and then estimated through 2023. In general, county and city fiscal impacts also depend on state budget outlooks; the California state budget for fiscal year 2020-21 had its revise in May 2020. The changes are relatively dramatic and negative based on an updated forecast by the California Department of Finance of the California and national economies released in May 2020. For Sonoma County and its cities, the following line item revenues are where the impacts begin to change budgets:

- Property taxes;
- Sales taxes;
- TOT;
- Fees and other payments.

¹³ See <https://sonomacounty.ca.gov/DEM/pdf/Power-Shutoff-After-Action-Report-March-2020/> for this study.

The scenarios below allow a framework for the County of Sonoma’s Economic Development Board to track the impacts and where vulnerabilities lie beyond August 2020. Let’s now look at the scenarios and the estimated changes in jobs to start.

Scenario Analysis

Given the data above, we use data available through June 30, 2020 as of August 2020 to estimate the three scenarios.¹⁴ Using national and state level forecasts, as well as history, the scenarios look out to 2023. Connections to the state economy are critical, given Sonoma County faces state-level policies and regulations. There is also close tracking of the county economy’s jobs growth historically to the state’s economy overall. Potential businesses lost from Sonoma County connect to job losses also; estimating the loss of businesses can be tricky given the lack of true data on self-employed businesses, we estimate all workers that lost jobs below, where the large proportion include payroll workers (those that work for an employer and not self-employed).

Baseline January 2020 and Scenarios to 2023

These scenarios look at the economy to the end of 2020 and then to the end of 2023. The baseline for recovery is January 1, 2020 employment levels, or where the final quarter of 2019 ended. This baseline employment level establishes the pre-COVID “capacity” of Sonoma County’s economy to provide jobs.

Why Employment Changing is Important: Key Assumptions for Each Scenario

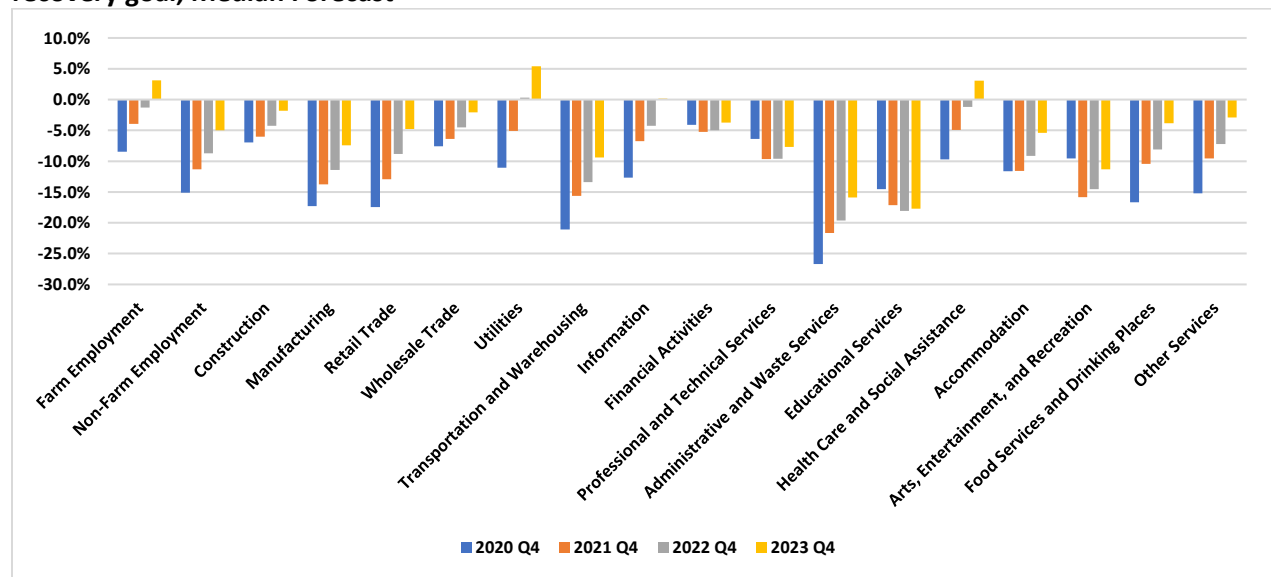
In each of the scenarios below, employment data and estimates compare end-of-year data rather than each quarter, reducing concerns over seasonal aspects of Sonoma County’s economy. We need to be careful in focusing on **cyclical** (based on economic downturn or recovery) and **structural** shocks in jobs recovery as scars for certain industries may persist. Using the fourth quarter of each year to 2023 achieves that outcome.

Estimated Jobs lost in Sonoma County by industry is the driver of the COVID-19 economic impacts on local residents, businesses and governments. In contrast to recent disasters (fires and floods specifically), these scenarios do not expect any significant property destruction from COVID-19. Recent, regional fires in August 2020 have created some damage that likely have a short-term effect (both positive and negative) on local economy recovery from COVID-19. However, sectoral shifts in jobs and businesses may create changes in commercial and residential real estate values, which are the value of capital “stock” and until sold do not represent current cash flow, just current wealth levels.

Figure 24 shows the median forecast of jobs lost versus 2019 Q4 by industry as a way to summarize the estimated, direct economic impacts over the next four years.

¹⁴ By using the actual, year-end data and plugging into an algorithm (this file is available at Sonoma County EDB from EFA), the County of Sonoma can track estimated economic impacts as actual data are available.

Figure 24: Scenario Summary, Employment shifts by industry by year from 2019 Q4 as baseline recovery goal, Median Forecast

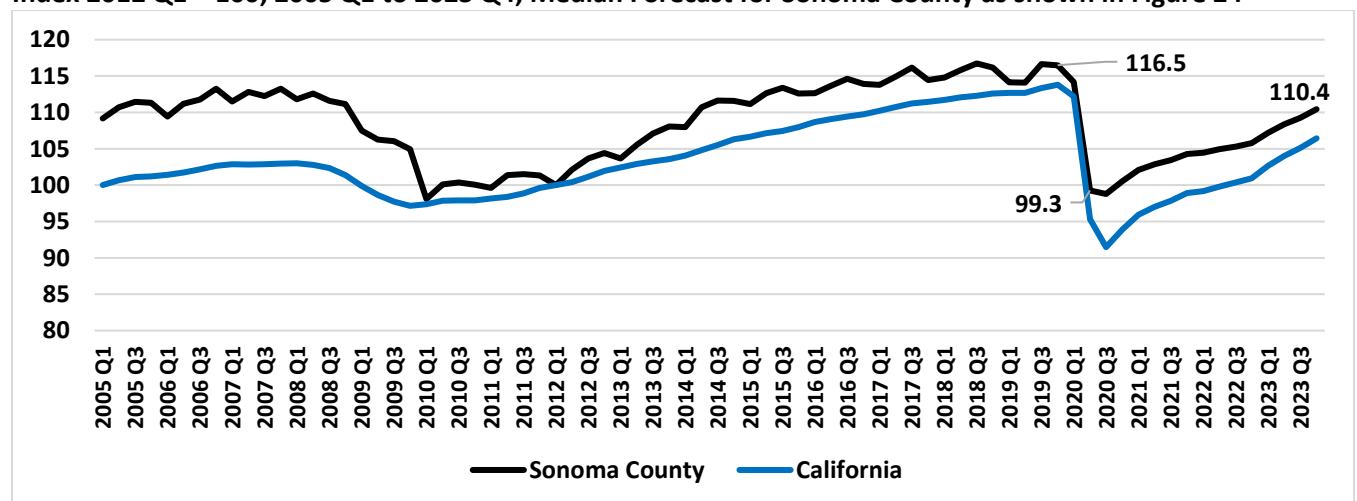


Sources: EFA and California EDD (for 2019 Q4 data)

Forecasts of Residential Labor Force Data

These data look at the forecasts for Sonoma County residents, regardless of where they live, and if they are working or not working. The two main variables shown here in Figures 25 and 26 are employment (who is working) and the unemployment rate (the percent of labor force locally that do not have a job but are actively seeking work). The labor force is the sum of the employed and unemployed that are actively seeking work; we know there are some that have dropped out of the labor force due to retirement or a discouraged outlook at getting another job and are available but may not be actively looking for a new job.

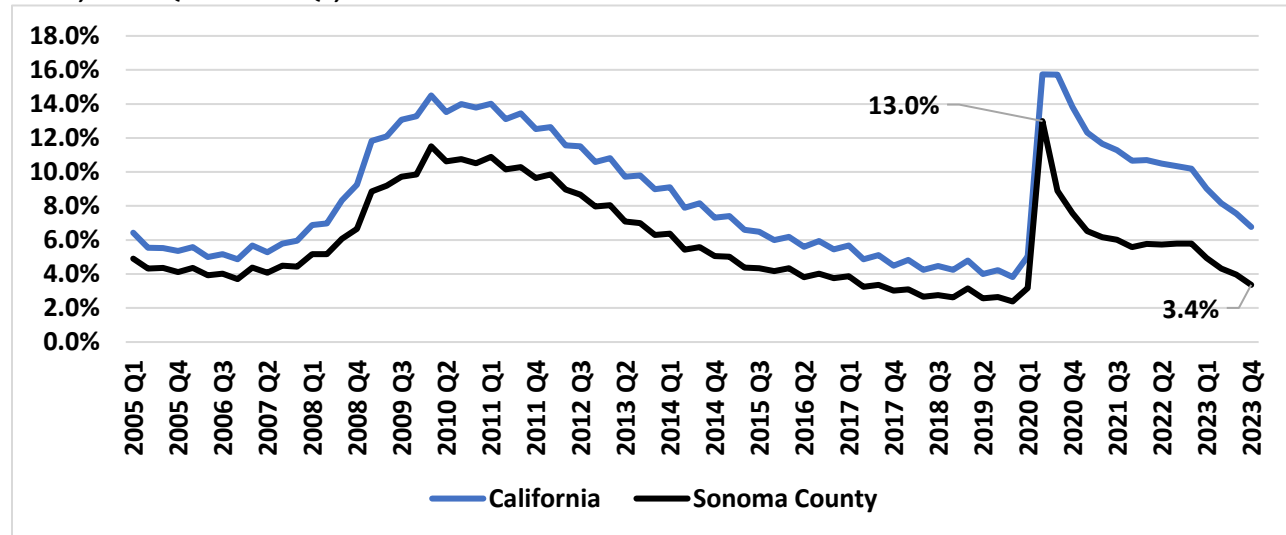
Figure 25: Sonoma County and California, Employment Levels for Local Residents
Index 2012 Q1 = 100, 2005 Q1 to 2023 Q4, Median Forecast for Sonoma County as shown in Figure 24



Sources: California EDD, California Department of Finance, and EFA

Looking forward, key concerns for policy makers include the number of employed residents and the unemployment rate to compare to other areas. The figures below show comparisons to the state of California overall using the California Department of Finance forecast for the May Budget Revise and recent, actual data. A critical issue that connects Figures 25 and 26 is labor force. This forecast expects there to be a smaller labor force of working residents in Sonoma County by 2023 compared to 2019.

Figure 26: Sonoma County and California, Unemployment Rates for Local Residents, Percent of Labor Force, 2005 Q1 to 2023 Q4, Median Forecast



Sources: California EDD, California Department of Finance, and EFA

Potential Business Losses: Caveats and Concerns

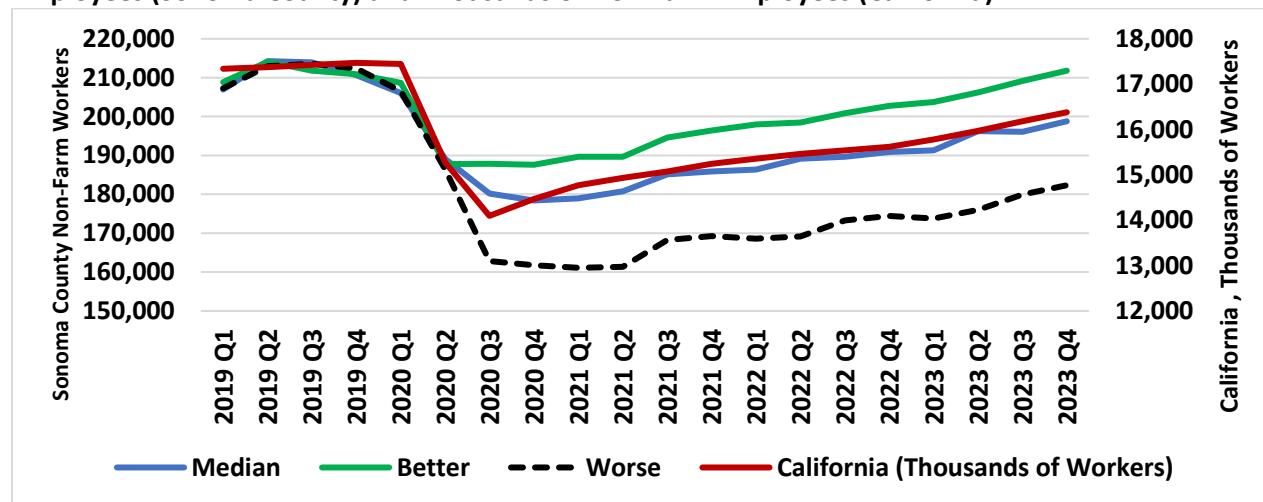
For economic development, predicting the number of new businesses helps direct resources and support businesses that may be predicted as lost for macroeconomic reasons rather than their own planning and operations. However, because some businesses operate on small margins, even a small economic problem can cause a business to close. Looking at the forecasts to come, we can use the estimated changes in jobs, and the ratio of businesses to workers in Sonoma County (called “establishments” in the Bureau of Labor Statistics’ [Quarterly Census of Employment at Wages](#) or QCEW) as one way to estimate the change. Some considerations include:

- The three scenarios below provide an estimate of the employment losses, and a four-year average from 2019 Q4 to 2023 Q4;
- The average jobs lost annually in net are then calculated, and divided by the number of workers per business in the major industry categories in Figures 28 to 30 and in Appendix B;
- An estimate is then possible of the number of employers lost in Sonoma County by 2023:
 - **-6.9 percent for the median scenario, with a range between -1.5 and -15.6 percent;**
- Caveats to estimating business losses are delays due to policy helping: PPP lending, for example;
- Further, we do not track non-payroll businesses well officially, and losses for non-payroll businesses (think self-employed workers) may be different magnitudes than payroll.

The Median Scenario, Back to 2019 Q4 Employment in 2024

Sonoma County lost over 10 percent of its jobs at local employers; 9.8 percent of county residents working in July 2019 lost their job by July 2020 (the latest data available as of August 2020). The loss of jobs for Sonoma County residents from 2008 Q4 to 2009 Q4 was approximately -5.6% and by 2010 Q4 that fell to approximately -10 percent before rising in 2011. For local employers, job cuts from 2008 Q4 to 2009 Q4 was -6.5%. The magnitude of the jobs changes is on a similar track as the Great Recession as in this change. Figure 27 summarize the non-farm employment forecasts for the Sonoma County scenarios and California's forecast by the California Department of Finance.

Figure 27: California and Sonoma County Employment Actuals and Forecasts, Number of Non-Farm Employees (Sonoma County) and Thousands of Non-Farm Employees (California)



Sources: California Department of Finance and EFA

Assumptions of Median Forecast:

- Non-Farm employment does not recover until 2024 to 2019 Q4 levels (2020 to 2023 lower employment levels at Sonoma County employers than how 2020 started);
 - California Department of Finance as of May 2020 does not expect the California economy overall to be back at 2019 Q4 employment levels until 2024 or 2025;
- Construction and utilities and healthcare employers will be bright spots initially;
- Slow recovery in retail, administrative services, education, and hospitality (tourism and hotels, bars and restaurants), and other services to drag on the local economy to 2023;
- Assumes no additional policies that further reduce recovery momentum generally (there may be industry-specific concerns in retail, hospitality and other services from 2020 to 2023); and
- The national and state economies recover at a similar pace under similar assumptions.

The data in Figures 28 to 30 provide detailed economic impact data by industry and place in Sonoma County, summing up to a countywide impact. Figure 28 shows employment impacts, Figure 29 shows the change to gross regional product (GRP) or the local amount of productivity (value-added), and Figure 30 shows the public finance losses based on the shock to value-added income or GRP losses. The value-added losses include the tax losses, as tax revenues are part of the GRP calculation.

Figure 28: Employment Impact Estimates, 2020 Q4 from 2019 Q4, Lost Jobs, Industry Sector and City/Unincorporated Area of Sonoma County

Industry	Cloverdale	Cotati	Healdsburg	Petaluma	Rohnert Park	Santa Rosa	Sebastopol	Sonoma	Windsor	Unincorp	Sonoma County
Agriculture, Forestry, Fishing and Hunting	-21	0	-9	-7	-2	-22	-1	-11	-8	-412	-493
Mining, Quarrying, and Oil and Gas Extraction	0	-	-1	0	0	-8	-	-	0	-14	-23
Utilities	0	-1	-2	-5	-3	-35	-1	-1	-4	-30	-82
Construction	-9	-47	-52	-145	-55	-296	-18	-21	-70	-474	-1,187
Manufacturing	-32	-38	-106	-748	-136	-938	-67	-59	-120	-1,872	-4,116
Wholesale Trade	-4	-11	-30	-114	-64	-115	-6	-14	-20	-196	-574
Retail Trade	-42	-130	-158	-612	-346	-2,020	-145	-183	-181	-483	-4,300
Transportation and Warehousing	-4	-17	-16	-167	-17	-220	-31	-2	-47	-242	-763
Information	-1	-7	-3	-46	-42	-156	-35	-8	-3	-26	-327
Finance and Insurance	0	-1	-5	-40	-12	-114	-6	-9	-5	-14	-206
Real Estate and Rental and Leasing	-1	0	-4	-16	-18	-57	-4	-5	-6	-43	-154
Professional, Scientific, and Technical Services	-2	-8	-21	-102	-23	-245	-19	-33	-21	-142	-616
Management of Companies and Enterprises	-	-1	0	-32	-10	-47	-3	-17	-1	-28	-139
Administration, Waste Management and Remediation	-21	-27	-59	-665	-185	-1,199	-28	-98	-152	-774	-3,208
Educational Services	-5	0	-8	-44	-18	-140	-9	-11	-17	-101	-353
Health Care and Social Assistance	-28	-85	-77	-361	-145	-1,694	-99	-141	-45	-539	-3,214
Arts, Entertainment, and Recreation	-1	-7	-14	-58	-48	-102	-6	-14	-10	-119	-379
Accommodation	-21	-40	-138	-241	-236	-631	-67	-152	-97	-360	-1,983
Food Services and Drinking Places	-17	-33	-113	-197	-193	-516	-54	-124	-79	-294	-1,620
Other Services (excluding Public Administration)	-12	-25	-27	-128	-73	-484	-25	-29	-40	-208	-1,051
Public Administration	-82	-78	-217	-385	-310	-3,559	-56	-62	-140	-458	-5,347
Totals	-303	-556	-1,060	-4,113	-1,936	-12,598	-680	-994	-1,066	-6,829	-30,135

Sources: Census Bureau, California EDD, Bureau of Labor Statistics, and EFA, ("Unincorp" = Unincorporated), no sign means a gain or "+".

Summary of Employment Impacts

Because the data in Figure 28 are the key estimates for the economic impacts from COVID-19 on Sonoma County, the reader should consider the following ideas as the basic way to read the data:

- Sonoma County is estimated to have approximately 30,135 jobs lost as compared to the end of 2019 Q4 by the end of 2020 Q4 as the median forecast;
 - The lost jobs in Rohnert Park for retail are 346 jobs by the end of 2020 as an example of how to read these data;
 - Santa Rosa's estimate job losses are 41.5 percent of the county (12,599), and Cloverdale is estimated to lose 304 jobs.
 - The Appendix shows data for the median forecast from 2020 to 2023, as well as "better" and "worse" forecasts;
- These jobs estimates become the basis of the Gross Regional Product shock in Figure 29 and subsequent state and local tax revenues lost by the end of 2020 in Figure 30.

Figure 29: Estimated Gross Regional Product Impacts, Industry Sector and City/Unincorporated Area, Sonoma County, 2020 Q4 from 2019 Q4, Thousands of 2020 Dollars, Private Industry ("Unincorp" = Unincorporated)

Industry	Cloverdale	Cotati	Healdsburg	Petaluma	Rohnert Park	Santa Rosa	Sebastopol	Sonoma	Windsor	Unincorp	Sonoma County
Agriculture, Forestry, Fishing and Hunting	(\$2,353)	(\$18)	(\$965)	(\$773)	(\$214)	(\$2,442)	(\$113)	(\$1,210)	(\$870)	(\$46,074)	(\$55,032)
Mining, Quarrying, and Oil and Gas Extraction	(\$12)	\$-	(\$72)	(\$5)	(\$2)	(\$479)	\$-	\$-	(\$3)	(\$834)	(\$1,407)
Utilities	(\$82)	(\$216)	(\$601)	(\$1,557)	(\$1,073)	(\$11,458)	(\$297)	(\$280)	(\$1,440)	(\$9,813)	(\$26,817)
Construction	(\$926)	(\$4,965)	(\$5,413)	(\$15,158)	(\$5,705)	(\$30,933)	(\$1,867)	(\$2,156)	(\$7,282)	(\$49,544)	(\$123,949)
Manufacturing	(\$4,845)	(\$5,775)	(\$15,972)	(\$112,963)	(\$20,576)	(\$141,588)	(\$10,041)	(\$8,979)	(\$18,048)	(\$282,627)	(\$621,414)
Wholesale Trade	(\$1,428)	(\$3,862)	(\$10,870)	(\$40,664)	(\$23,014)	(\$41,180)	(\$2,135)	(\$5,022)	(\$7,116)	(\$70,031)	(\$205,322)
Retail Trade	(\$3,181)	(\$9,762)	(\$11,936)	(\$46,063)	(\$26,072)	(\$152,177)	(\$10,941)	(\$13,816)	(\$13,655)	(\$36,400)	(\$324,003)
Transportation and Warehousing	(\$464)	(\$2,195)	(\$2,086)	(\$22,044)	(\$2,246)	(\$29,132)	(\$4,086)	(\$292)	(\$6,171)	(\$32,061)	(\$100,777)
Information	(\$367)	(\$1,755)	(\$881)	(\$12,267)	(\$11,166)	(\$41,326)	(\$9,362)	(\$2,079)	(\$697)	(\$6,990)	(\$86,890)
Finance and Insurance	(\$64)	(\$119)	(\$635)	(\$5,172)	(\$1,525)	(\$14,690)	(\$723)	(\$1,167)	(\$621)	(\$1,793)	(\$26,509)
Real Estate and Rental and Leasing	(\$161)	(\$79)	(\$682)	(\$3,119)	(\$3,441)	(\$10,912)	(\$818)	(\$1,035)	(\$1,188)	(\$8,190)	(\$29,625)
Professional, Scientific, and Technical Services	(\$184)	(\$639)	(\$1,701)	(\$8,239)	(\$1,871)	(\$19,745)	(\$1,499)	(\$2,652)	(\$1,686)	(\$11,409)	(\$49,625)
Management of Companies and Enterprises	\$-	(\$184)	(\$2)	(\$4,357)	(\$1,322)	(\$6,458)	(\$437)	(\$2,290)	(\$107)	(\$3,765)	(\$18,922)
Administration & Support, Waste Management and Remediation	(\$1,341)	(\$1,695)	(\$3,745)	(\$42,373)	(\$11,760)	(\$76,376)	(\$1,812)	(\$6,266)	(\$9,675)	(\$49,311)	(\$204,354)
Educational Services	(\$226)	(\$10)	(\$346)	(\$1,967)	(\$826)	(\$6,242)	(\$421)	(\$504)	(\$742)	(\$4,520)	(\$15,804)
Health Care and Social Assistance	(\$2,221)	(\$6,638)	(\$6,049)	(\$28,252)	(\$11,373)	(\$132,664)	(\$7,732)	(\$11,058)	(\$3,543)	(\$42,208)	(\$251,738)
Arts, Entertainment, and Recreation	(\$28)	(\$296)	(\$569)	(\$2,369)	(\$1,971)	(\$4,217)	(\$251)	(\$581)	(\$403)	(\$4,893)	(\$15,578)
Accommodation	(\$1,084)	(\$2,073)	(\$7,134)	(\$12,435)	(\$12,217)	(\$32,575)	(\$3,436)	(\$7,859)	(\$5,016)	(\$18,587)	(\$102,416)
Food Services and Drinking Places	(\$887)	(\$1,696)	(\$5,837)	(\$10,174)	(\$9,996)	(\$26,652)	(\$2,811)	(\$6,430)	(\$4,104)	(\$15,207)	(\$83,794)
Other Services (excluding Public Administration)	(\$872)	(\$1,824)	(\$1,980)	(\$9,462)	(\$5,424)	(\$35,893)	(\$1,831)	(\$2,177)	(\$2,968)	(\$15,407)	(\$77,838)
Totals	(\$20,726)	(\$43,801)	(\$77,476)	(\$379,413)	(\$151,794)	(\$817,139)	(\$60,613)	(\$75,853)	(\$85,335)	(\$709,664)	(\$2,421,814)

Sources: IMPLAN®, Bureau of Economic Analysis and EFA, no parentheses mean a gain or "+".

Figure 30: State and Local Tax Revenues Lost, 2020, Based on Regional Income Losses and Reduced Hotel Revenues, Thousands of Dollars

Tax Category	2020
Employment Taxes	(\$16,936)
Sales Taxes	(\$193,206)
Property Taxes - Commercial	(\$202,988)
Property Taxes - Residential	(\$4,893)
Transient Occupancy Taxes	(\$25,420)
Personal Income	(\$119,930)
Other Taxes and Fees	(\$50,544)
Total State and Local Taxes	(\$613,917)

Sources: IMPLAN®, Bureau of Economic Analysis, Dean Runyan Associates, Smith Travel Research courtesy of Sonoma County Tourism, and EFA

Better Scenario: Fiscal Stimulus and Lower Interest Rates Accelerate Post-Vaccine Economy

There were some forecasts for a “V” shaped recovery, a short burst of economic problems followed by economic exuberance and the problem gone within one year.¹⁵ That looks less likely as of August 2020 and the consensus forecasts available. However, there has been a large amount of fiscal spending throughout the United States and in California by government and interest rates are now back at 2008 Q4 levels. Assuming a vaccine is widely available in early 2021, and COVID-19 has no threat of general transmission after Fall 2021, we may see investor, business and consumer confidence blossom as 2021 ends and continue to have momentum into 2022 and help Sonoma County recover in 2023 to its non-farm employment level at the beginning of 2020. The data that show the details in Sonoma County are in the Appendix. The three main changes to the median scenario are:

- A vaccine is globally available in 2021;
- The national and state economy continue to recover throughout 2021 and no other economic concern slows down momentum;
- There is not a significant relapse of COVID-19 in fall 2020 and Winter 2021 (pre-vaccine), thus there are no reversals of social policy that slowdown recovery momentum.

Worse Scenario: No Vaccine until late 2021 and Relapse of COVID-19 in Fall 2020/Winter 2021

The longer a vaccine is delayed, the more business and investor confidence stagnate and potentially erodes, affecting consumer confidence. The presidential election is likely to have little lingering effects on the economy, but may cause some slower movements until after November 3, 2020. A longer duration of economic problems may come if a slow recovery puts more businesses at risk locally. Hospitality employers are among those most at risk; local fires in August 2020 may provide a dubious boost to hotel occupancy as emergency personnel use local hotels and motels, but may leave a post-fire Fall 2020 with a double problem of visitors concerned about fire coming to Sonoma County, as well as rising concerns of infection rates increasing again. Such problems may be general in the state and national economies if cases levels rise and uncertainty about economic progress remains. The three main changes to the median scenario for the worse scenario are:

- No vaccine until late 2021, thus rising uncertainty and slower economic momentum;
- The national and state economies recover at a slower pace than current forecasts; and
- Caseloads rise in fall 2020 and winter 2021 as to re-instate shelter-in-place orders that linger into the 2021 tourism season in Sonoma County.

Detailed data on each scenario is shown in the Appendix, Figure 31 in the conclusions provide a summary of how Sonoma County is affected overall by each scenario from Figures 28 to 30; the detailed tables in the Appendix provide industry and subarea detail for policy makers to consider. Appendix 2 provides detailed tables of the economic impact estimates.

¹⁵ Beacon Economics moved quickly to a relatively positive forecast in April 2020 for the California economy. See [The Case for V](#) for that document.

5. Conclusions

Forecasted jobs growth to 2023 suggests a slow comeback of the county economy from the shelter-in-place due to COVID-19 and the subsequent slow movement of the regional, state and national economies. The following are the **median forecast** results as a summary of the forecasted economic impacts on Sonoma County at the county level from the levels at the beginning of 2020.

2020 Summarized Losses: Estimated Jobs, Business Revenues and State and Local Taxes lost

- Lost Jobs: 30,135
- Lost Gross Regional Product (GRP): \$2,421 million (approximately 16.7% of economy)
- Lost State and Local Tax Revenues: \$614 Million

2021 Summarized Losses: Estimated Jobs, Business Revenues and State and Local Taxes lost

- Lost Jobs: 22,547 (7,588 jobs gained from 2020)
- Lost Gross Regional Product (GRP): \$1,747 million
- Lost State and Local Tax Revenues: \$461 million

2022 Summarized Losses: Estimated Jobs, Business Revenues and State and Local Taxes lost

- Lost Jobs: 17,345 (5,202 jobs gained from 2021)
- Lost Gross Regional Product (GRP): \$1,308 million
- Lost State and Local Tax Revenues: \$376 million

2023 Summarized Losses: Estimated Jobs, Business Revenues and State and Local Taxes lost

- Lost Jobs: 9,492 (7,853 jobs gained from 2022)
- Lost Gross Regional Product (GRP): \$679 million
- Lost State and Local Tax Revenues: \$233 million

The accelerated recovery and the structural problems scenarios have forecast summaries in the Appendix. Figure 30 summarizes the percentage differences in the losses here.

Figure 31: From Median Forecast, Better and Worse forecasts, 2020 to 2023, Percentage Difference in Economic Impacts, Thousands of 2020 Dollars (GRP and Tax Revenues) or Lost Jobs

	2020		2021		2022		2023	
Estimated Losses	Better	Worse	Better	Worse	Better	Worse	Better	Worse
GRP Lost	\$(1,539,700)	\$(4,134,600)	\$(846,700)	\$(3,305,300)	\$(319,800)	\$(2,835,800)	\$411,200	\$(2,188,600)
Jobs Lost	-20,700	-48,451	-11,917	-40,924	-7,964	-35,498	7,685	-27,621
S/L Tax Revenues	\$(328,596)	\$(811,518)	\$(186,742)	\$(688,537)	\$(86,080)	\$(596,263)	\$52,716	\$(462,597)

Note: No sign is a gain or “+”

Short-term and long-term: Challenges and Opportunities

Short-term

The short-term impacts of COVID-19 on the Sonoma County economy are relatively straightforward and are being seen in counties and states across our country. For Sonoma County, the details are where economic and workforce development can focus efforts and assist in recovery:

- Lost jobs in services, with many workers that are at lower-wage, out of work regionally;
- Business losses that track the lost jobs closely;
- State and local tax revenues falling in 2020 to create budget difficulties for fiscal year 2020-21 and likely 2021-22;
- Housing markets remain stable for now, as commercial real estate markets are likely to see more reallocation and concerns for 2020 and 2021.

Long-term

The long-term impacts depend on three major items, some of which are unknown until later in this decade:

- Housing market instability and potential outmigration of lower-wage workers;
- Subsequent slowdown in incentives to build more housing in an environment with a lower, older population, creating a housing shortage later in the 2020s;
- Longer spells of unemployment increasing pressure on non-profit organizations and county government to provide more goods and services and housing relief.

The long-term impacts depend on the short-term outlook becoming recovery momentum. As our forecasted scenarios above show, we should not expect a true sense of recovery momentum until 2022 at the national level. For Sonoma County and its city governments, planning on this horizon is a conservative way to approach how the regional economy will react to the short- and long-term impacts.

Challenges	Opportunities
<ul style="list-style-type: none">• Retail, restaurant demand for workers;• Housing affordability for low-wage workers if fewer jobs in their industry remain after 2020;• Tourism employment opportunities, especially hotels, after 2020;• Breadth of businesses in retail, restaurant and personal services based on estimated business closures;• Goods resilience (food, beverage, medical supplies, etc.) if there are natural disasters during an increase caseload.	<ul style="list-style-type: none">• Goods resilience;<ul style="list-style-type: none">○ More local manufacturing and farming to provide goods and food production breadth;○ More storage and processing;○ Regional distribution channels to complement supra-regional channels;• Workforce development for permanently-displaced workers<ul style="list-style-type: none">○ Manufacturing, especially in life sciences given regional cluster in place;○ Construction;○ STEM-Related fields; and○ Healthcare.

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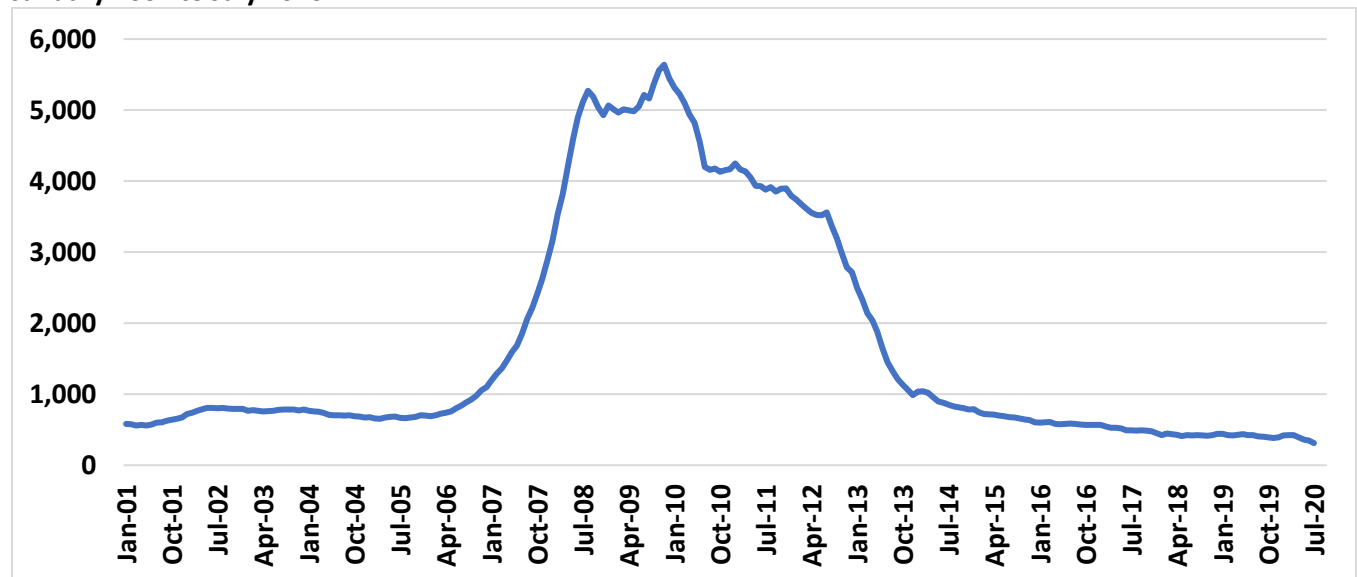
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Appendix 1: Bankruptcies, Delinquencies, Foreclosure, Notices of Default

As of August 2020, there have not been large numbers of foreclosures/notices of default on home lending as experienced by Sonoma County in 2007 to 2012 period. Figure A1-1 shows those data. The County of Sonoma Recorder tracks these data for the county and all areas within.

There are caveats to these data. For many banks and credit unions, loan deferment has become a way to keep homeowners from making quick decisions to sell homes and force profit reductions on other homeowners by offering at lower prices. Figure 6 in the main text shows median listing prices, an initial sign of trouble in housing market prices remaining stable, has actually increased a bit since 2020 began. For policy makers, jobs returning to Sonoma County is the critical factor in housing price stability.

**Figure A1-1: Notices of Default, Moving 12-month Sum of Defaults, Sonoma County
January 2001 to July 2020**



Sources: County of Sonoma and EFA

For personal and business bankruptcies, please see the following link:

<https://www.abi.org/newsroom/bankruptcy-statistics>

As with notices of default, there could be a delay in bankruptcy filings due to court closures or some help that has come from the federal government (PPP, EIDL lending) that may become a business bankruptcy. Personal bankruptcy, Chapter 7 and 13, have different implications for foreclosure on a home. Chapter 11 is for small businesses "reorganization". As of the July 2020 data, California bankruptcies are down significantly from last year, but that may be a simply a delay. Again, jobs gains and reducing unemployment reduces that pressure. Delinquency data also has the same caveats as notices of default, but would likely proceed foreclosure and bankruptcy as a leading indicator. Sonoma County should prepare for 2021 to be a year of change for personal and business financial issues either to recovery or to a downturn based on continued job losses.

Appendix 2: Economic Impact Estimates, Three Scenarios, 2020 to 2023

Jobs Impacts: Three Scenarios to 2023

Figure A2-1: Jobs Changes from 2019 Q4, Median Scenario, 2020 Q4 to 2023 Q4 Annual

Industry	2020	2021	2022	2023
Agriculture, Forestry, Fishing and Hunting	-493	-228	-75	183
Mining, Quarrying, and Oil and Gas Extraction	-23	-22	-19	-13
Utilities	-82	-38	2	40
Construction	-1,187	-1,027	-727	-307
Manufacturing	-4,116	-3,276	-2,713	-1,770
Wholesale Trade	-574	-483	-343	-159
Retail Trade	-4,300	-3,191	-2,171	-1,180
Transportation and Warehousing	-763	-564	-485	-339
Information	-327	-175	-110	4
Finance and Insurance	-206	-262	-251	-187
Real Estate and Rental and Leasing	-154	-197	-189	-141
Professional, Scientific, and Technical Services	-616	-934	-927	-742
Management of Companies and Enterprises	-139	-209	-208	-166
Administration & Support, Waste Management and Remediation	-3,208	-2,606	-2,360	-1,909
Educational Services	-353	-417	-440	-432
Health Care and Social Assistance	-3,214	-1,632	-398	1,020
Arts, Entertainment, and Recreation	-379	-628	-576	-448
Accommodation	-1,983	-1,242	-964	-454
Food Services and Drinking Places	-1,620	-1,016	-789	-372
Other Services (excluding Public Administration)	-1,051	-659	-496	-199
Public Administration	-5,347	-3,741	-3,106	-1,921
Totals	-30,135	-22,547	-17,345	-9,492

Place	2020	2021	2022	2023
Cloverdale	-303	-214	-159	-77
Cotati	-556	-402	-288	-134
Healdsburg	-1,060	-780	-599	-324
Petaluma	-4,113	-3,194	-2,525	-1,506
Rohnert Park	-1,936	-1,450	-1,121	-624
Santa Rosa	-12,598	-9,222	-7,013	-3,750
Sebastopol	-680	-495	-366	-179
Sonoma	-994	-741	-560	-290
Windsor	-1,066	-811	-641	-382
Unincorporated	-6,829	-5,238	-4,073	-2,226
Sonoma County	-30,135	-22,547	-17,345	-9,492

Note: No sign is a gain or “+”

Figure A2-2: Jobs Changes from 2019 Q4, Better Scenario, 2020 Q4 to 2023 Q4 Annual

Industry	2020	2021	2022	2023
Agriculture, Forestry, Fishing and Hunting	-220	81	267	565
Mining, Quarrying, and Oil and Gas Extraction	-18	-16	-12	-5
Utilities	-49	1	47	90
Construction	-374	-141	245	761
Manufacturing	-3,112	-2,143	-1,459	-367
Wholesale Trade	-218	-92	87	314
Retail Trade	-3,263	-2,006	-834	316
Transportation and Warehousing	-616	-396	-299	-130
Information	-213	-41	38	169
Finance and Insurance	40	1	32	120
Real Estate and Rental and Leasing	30	0	25	91
Professional, Scientific, and Technical Services	-155	-452	-408	-174
Management of Companies and Enterprises	-35	-101	-91	-39
Administration & Support, Waste Management and Remediation	-2,759	-2,085	-1,785	-1,264
Educational Services	-247	-306	-321	-304
Health Care and Social Assistance	-1,687	108	1,548	3,196
Arts, Entertainment, and Recreation	-195	-444	-375	-224
Accommodation	-1,476	-653	-314	275
Food Services and Drinking Places	-1,208	-534	-257	225
Other Services (excluding Public Administration)	-751	-315	-116	228
Public Administration	-4,173	-2,383	-1,606	-239
Totals for Sonoma County	-20,700	-11,917	-5,588	3,604

Place	2020	2021	2022	2023
Cloverdale	-212	-109	-43	52
Cotati	-371	-193	-58	123
Healdsburg	-732	-409	-190	131
Petaluma	-2,852	-1,780	-963	233
Rohnert Park	-1,341	-776	-377	205
Santa Rosa	-8,784	-4,906	-2,236	1,576
Sebastopol	-459	-245	-89	129
Sonoma	-667	-371	-151	166
Windsor	-746	-453	-246	58
Unincorporated	-4,536	-2,675	-1,235	931
Sonoma County	-20,700	-11,917	-5,588	3,604

Note: No sign is a gain or “+”

Figure A2-3: Jobs Changes from 2019 Q4, Worse Scenario, 2020 Q4 to 2023 Q4 Annual

Industry	2020	2021	2022	2023
Agriculture, Forestry, Fishing and Hunting	-1,019	-762	-602	-347
Mining, Quarrying, and Oil and Gas Extraction	-36	-34	-31	-25
Utilities	-148	-106	-66	-29
Construction	-2,758	-2,558	-2,227	-1,785
Manufacturing	-6,065	-5,234	-4,649	-3,712
Wholesale Trade	-1,268	-1,159	-1,006	-812
Retail Trade	-6,318	-5,240	-4,236	-3,250
Transportation and Warehousing	-1,044	-856	-772	-628
Information	-553	-406	-338	-225
Finance and Insurance	-681	-715	-688	-613
Real Estate and Rental and Leasing	-514	-539	-519	-462
Professional, Scientific, and Technical Services	-1,512	-1,767	-1,729	-1,528
Management of Companies and Enterprises	-339	-396	-388	-342
Administration & Support, Waste Management and Remediation	-4,083	-3,505	-3,248	-2,802
Educational Services	-560	-610	-623	-608
Health Care and Social Assistance	-6,178	-4,639	-3,405	-1,993
Arts, Entertainment, and Recreation	-734	-948	-887	-758
Accommodation	-2,965	-2,259	-1,969	-1,464
Food Services and Drinking Places	-2,426	-1,849	-1,611	-1,198
Other Services (excluding Public Administration)	-1,628	-1,254	-1,084	-789
Public Administration	-7,622	-6,088	-5,420	-4,251
Totals for Sonoma County	-48,451	-40,924	-35,498	-27,621

Place	2020	2021	2022	2023
Cloverdale	-483	-394	-338	-257
Cotati	-914	-761	-645	-490
Healdsburg	-1,695	-1,419	-1,231	-955
Petaluma	-6,558	-5,638	-4,938	-3,914
Rohnert Park	-3,097	-2,613	-2,271	-1,772
Santa Rosa	-20,003	-16,679	-14,391	-11,123
Sebastopol	-1,110	-927	-793	-607
Sonoma	-1,635	-1,381	-1,193	-921
Windsor	-1,681	-1,429	-1,252	-992
Unincorporated	-11,275	-9,683	-8,446	-6,590
Sonoma County	-48,451	-40,924	-35,498	-27,621

Note: No sign is a gain or “+”

Gross Regional Product (Income) Impacts: Three Scenarios to 2023

Figure A2-4: Gross Regional Product Changes, 2019 Q4, Median Scenario, 2020 Q4 to 2023 Q4 Annual, Thousands of Dollars (does not include Government)

Industry	2020	2021	2022	2023
Agriculture, Forestry, Fishing and Hunting	(\$55,000)	(\$25,000)	(\$8,400)	\$20,500
Mining, Quarrying, and Oil and Gas Extraction	(\$1,400)	(\$1,300)	(\$1,100)	(\$800)
Utilities	(\$26,800)	(\$12,100)	\$700	\$13,100
Construction	(\$123,900)	(\$105,300)	(\$76,000)	(\$32,100)
Manufacturing	(\$621,400)	(\$504,500)	(\$409,600)	(\$267,200)
Wholesale Trade	(\$205,300)	(\$79,500)	(\$57,500)	(\$26,600)
Retail Trade	(\$324,000)	(\$235,600)	(\$163,500)	(\$88,900)
Transportation and Warehousing	(\$100,800)	(\$73,300)	(\$61,700)	(\$42,400)
Information	(\$86,900)	(\$45,200)	(\$28,000)	\$900
Finance and Insurance	(\$26,500)	(\$33,100)	(\$31,100)	(\$22,900)
Real Estate and Rental and Leasing	(\$29,600)	(\$37,000)	(\$34,800)	(\$25,500)
Professional, Scientific, and Technical Services	(\$49,600)	(\$73,700)	(\$71,700)	(\$56,400)
Management of Companies and Enterprises	(\$18,900)	(\$28,100)	(\$27,400)	(\$21,500)
Administration & Waste Management and Remediation	(\$204,400)	(\$162,700)	(\$144,500)	(\$115,000)
Educational Services	(\$15,800)	(\$18,300)	(\$18,900)	(\$18,200)
Health Care and Social Assistance	(\$251,700)	(\$125,300)	(\$30,000)	\$75,500
Arts, Entertainment, and Recreation	(\$15,600)	(\$25,400)	(\$22,800)	(\$17,500)
Accommodation	(\$102,400)	(\$62,900)	(\$47,900)	(\$22,200)
Food Services and Drinking Places	(\$83,800)	(\$51,500)	(\$39,200)	(\$18,200)
Other Services (excluding Public Administration)	(\$78,000)	(\$48,000)	(\$35,400)	(\$13,900)
Totals for Sonoma County	\$(2,421,800)	\$(1,747,800)	\$(1,308,800)	\$(679,300)

Place	2020	2021	2022	2023
Cloverdale	(\$20,700)	(\$14,000)	(\$9,900)	(\$4,000)
Cotati	(\$43,800)	(\$30,200)	(\$21,200)	(\$9,300)
Healdsburg	(\$77,500)	(\$53,900)	(\$40,300)	(\$20,800)
Petaluma	(\$379,400)	(\$280,000)	(\$217,900)	(\$126,900)
Rohnert Park	(\$151,800)	(\$104,600)	(\$78,500)	(\$40,700)
Santa Rosa	(\$817,100)	(\$587,600)	(\$427,600)	(\$207,800)
Sebastopol	(\$60,600)	(\$42,500)	(\$30,800)	(\$14,200)
Sonoma	(\$75,900)	(\$55,300)	(\$41,200)	(\$20,800)
Windsor	(\$85,300)	(\$62,800)	(\$48,400)	(\$27,700)
Unincorporated	(\$709,700)	(\$516,900)	(\$393,000)	(\$207,100)
Sonoma County	\$(2,421,800)	\$(1,747,800)	\$(1,308,800)	\$(679,300)

Note: No sign is a gain or “+”

Figure A2-5: Gross Regional Product Changes, 2019 Q4, Better Scenario, 2020 Q4 to 2023 Q4 Annual, Thousands of Dollars (does not include Government)

Industry	2020	2021	2022	2023
Agriculture, Forestry, Fishing and Hunting	(\$24,600)	\$8,900	\$29,900	\$63,200
Mining, Quarrying, and Oil and Gas Extraction	(\$1,100)	(\$900)	(\$700)	(\$300)
Utilities	(\$15,900)	\$300	\$15,300	\$29,300
Construction	(\$39,100)	(\$14,500)	\$25,600	\$79,600
Manufacturing	(\$469,800)	(\$329,900)	(\$220,300)	(\$55,300)
Wholesale Trade	(\$77,900)	(\$15,100)	\$14,600	\$52,700
Retail Trade	(\$245,800)	(\$148,100)	(\$62,800)	\$23,800
Transportation and Warehousing	(\$81,600)	(\$51,400)	(\$38,100)	(\$16,300)
Information	(\$56,300)	(\$10,600)	\$9,700	\$42,200
Finance and Insurance	\$5,200	\$100	\$4,000	\$14,700
Real Estate and Rental and Leasing	\$5,800	\$100	\$4,500	\$16,400
Professional, Scientific, and Technical Services	(\$12,500)	(\$35,700)	(\$31,600)	(\$13,200)
Management of Companies and Enterprises	(\$4,800)	(\$13,600)	(\$12,000)	(\$5,000)
Administration & Waste Management and Remediation	(\$175,700)	(\$130,200)	(\$109,300)	(\$76,100)
Educational Services	(\$11,000)	(\$13,400)	(\$13,800)	(\$12,800)
Health Care and Social Assistance	(\$132,100)	\$8,300	\$116,600	\$236,700
Arts, Entertainment, and Recreation	(\$8,000)	(\$17,900)	(\$14,800)	(\$8,700)
Accommodation	(\$76,300)	(\$33,100)	(\$15,600)	\$13,400
Food Services and Drinking Places	(\$62,400)	(\$27,100)	(\$12,800)	\$11,000
Other Services (excluding Public Administration)	(\$55,800)	(\$22,900)	(\$8,200)	\$16,000
Totals for Sonoma County	\$(1,539,700)	\$(846,700)	\$(319,800)	\$411,200

Place	2020	2021	2022	2023
Cloverdale	(\$13,200)	(\$6,200)	(\$1,200)	\$5,600
Cotati	(\$27,200)	(\$13,300)	(\$2,500)	\$11,300
Healdsburg	(\$48,200)	(\$25,600)	(\$9,100)	\$13,600
Petaluma	(\$246,600)	(\$148,000)	(\$73,400)	\$32,500
Rohnert Park	(\$93,600)	(\$48,800)	(\$17,300)	\$26,600
Santa Rosa	(\$519,700)	(\$274,000)	(\$83,600)	\$170,800
Sebastopol	(\$39,100)	(\$19,400)	(\$5,600)	\$13,600
Sonoma	(\$47,000)	(\$25,400)	(\$8,600)	\$15,100
Windsor	(\$55,600)	(\$32,500)	(\$15,100)	\$9,000
Unincorporated	(\$449,500)	(\$253,500)	(\$103,400)	\$113,100
Sonoma County	\$(1,539,700)	\$(846,700)	\$(319,800)	\$411,200

Note: No sign is a gain or “+”

Figure A2-6: Gross Regional Product Changes, 2019 Q4, Worse Scenario, 2020 Q4 to 2023 Q4 Annual, Thousands of Dollars (does not include Government)

Industry	2020	2021	2022	2023
Agriculture, Forestry, Fishing and Hunting	\$(114,100)	\$(83,600)	\$(67,400)	\$(38,800)
Mining, Quarrying, and Oil and Gas Extraction	\$(2,100)	\$(2,000)	\$(1,800)	\$(1,500)
Utilities	\$(48,200)	\$(33,800)	\$(21,500)	\$(9,400)
Construction	\$(288,600)	\$(262,400)	\$(233,000)	\$(186,800)
Manufacturing	\$(915,600)	\$(806,000)	\$(701,800)	\$(560,400)
Wholesale Trade	\$(453,000)	\$(190,800)	\$(168,900)	\$(136,300)
Retail Trade	\$(475,900)	\$(386,900)	\$(319,100)	\$(244,800)
Transportation and Warehousing	\$(138,200)	\$(111,100)	\$(98,300)	\$(78,600)
Information	\$(146,200)	\$(105,200)	\$(85,900)	\$(56,200)
Finance and Insurance	\$(87,900)	\$(90,500)	\$(85,400)	\$(74,800)
Real Estate and Rental and Leasing	\$(98,300)	\$(101,100)	\$(95,400)	\$(83,600)
Professional, Scientific, and Technical Services	\$(121,700)	\$(139,400)	\$(133,800)	\$(116,300)
Management of Companies and Enterprises	\$(46,400)	\$(53,200)	\$(51,000)	\$(44,300)
Administration & Waste Management and Remediation	\$(260,000)	\$(218,800)	\$(198,900)	\$(168,700)
Educational Services	\$(25,000)	\$(26,700)	\$(26,800)	\$(25,700)
Health Care and Social Assistance	\$(483,900)	\$(356,300)	\$(256,500)	\$(147,600)
Arts, Entertainment, and Recreation	\$(30,200)	\$(38,300)	\$(35,200)	\$(29,500)
Accommodation	\$(153,200)	\$(114,400)	\$(97,800)	\$(71,500)
Food Services and Drinking Places	\$(125,300)	\$(93,600)	\$(80,000)	\$(58,500)
Other Services (excluding Public Administration)	\$(120,800)	\$(91,200)	\$(77,300)	\$(55,300)
Totals for Sonoma County	\$(4,134,600)	\$(3,305,300)	\$(2,835,800)	\$(2,188,600)

Place	2020	2021	2022	2023
Cloverdale	(\$35,300)	(\$27,600)	(\$23,300)	(\$17,300)
Cotati	(\$76,000)	(\$59,400)	(\$50,100)	(\$37,900)
Healdsburg	(\$134,200)	(\$102,900)	(\$88,400)	(\$68,400)
Petaluma	(\$637,200)	(\$508,200)	(\$441,000)	(\$347,400)
Rohnert Park	(\$264,800)	(\$201,000)	(\$173,000)	(\$134,000)
Santa Rosa	(\$1,394,500)	(\$1,129,800)	(\$958,700)	(\$731,900)
Sebastopol	(\$102,400)	(\$82,400)	(\$69,900)	(\$52,700)
Sonoma	(\$131,900)	(\$107,000)	(\$91,700)	(\$70,500)
Windsor	(\$143,000)	(\$115,000)	(\$99,800)	(\$78,500)
Unincorporated	(\$1,215,300)	(\$972,000)	(\$839,900)	(\$650,000)
Sonoma County	(\$4,134,600)	(\$3,305,300)	(\$2,835,800)	(\$2,188,600)

Note: No sign is a gain or “+”

State and Local Tax Revenue Impacts: Three Scenarios to 2023

Figure A2-7: Estimated State and Local tax Revenue Changes, 2019 Q4, Median Scenario, 2020 Q4 to 2023 Q4 Annual, Thousands of Dollars

Tax Category	2020	2021	2022	2023
Employment Taxes	(\$16,936)	(\$13,070)	(\$10,822)	(\$7,050)
Sales Taxes	(\$193,206)	(\$143,820)	(\$116,566)	(\$71,142)
Transient Occ Tax (TOT)	(\$25,420)	(\$18,922)	(\$15,337)	(\$9,360)
Property Taxes - Commercial	(\$202,988)	(\$151,101)	(\$122,468)	(\$74,744)
Property Taxes - Residential	(\$4,893)	(\$3,782)	(\$3,132)	(\$2,043)
Personal Income	(\$119,930)	(\$92,720)	(\$76,785)	(\$50,090)
Other Taxes and Fees	(\$50,544)	(\$38,001)	(\$30,947)	(\$19,179)
Total State and Local taxes	(\$613,917)	(\$461,416)	(\$376,057)	(\$233,608)

Note: No sign is a gain or “+”

Figure A2-8: Estimated State and Local tax Revenue Changes, 2019 Q4, Better Scenario, 2020 Q4 to 2023 Q4 Annual, Thousands of Dollars

Tax Category	2020	2021	2022	2023
Employment Taxes	(\$9,065)	(\$5,290)	(\$2,477)	\$1,591
Sales Taxes	(\$103,413)	(\$58,206)	(\$26,682)	\$16,054
Transient Occ Tax (TOT)	(\$13,606)	(\$7,658)	(\$3,511)	\$2,112
Property Taxes - Commercial	(\$108,648)	(\$61,152)	(\$28,033)	\$16,867
Property Taxes - Residential	(\$2,619)	(\$1,531)	(\$717)	\$461
Personal Income	(\$64,192)	(\$37,525)	(\$17,576)	\$11,303
Other Taxes and Fees	(\$27,053)	(\$15,380)	(\$7,084)	\$4,328
Total State and Local taxes	(\$328,596)	(\$186,742)	(\$86,080)	\$52,716

Note: No sign is a gain or “+”

Figure A2-9: Estimated State and Local tax Revenue Changes, 2019 Q4, Worse Scenario, 2020 Q4 to 2023 Q4 Annual, Thousands of Dollars

Tax Category	2020	2021	2022	2023
Employment Taxes	(\$22,387)	(\$19,504)	(\$17,158)	(\$13,961)
Sales Taxes	(\$255,394)	(\$214,612)	(\$184,824)	(\$140,878)
Transient Occ Tax (TOT)	(\$33,602)	(\$28,236)	(\$24,317)	(\$18,535)
Property Taxes - Commercial	(\$268,323)	(\$225,477)	(\$194,181)	(\$148,010)
Property Taxes - Residential	(\$6,468)	(\$5,643)	(\$4,966)	(\$4,045)
Personal Income	(\$158,532)	(\$138,359)	(\$121,749)	(\$99,190)
Other Taxes and Fees	(\$66,812)	(\$56,706)	(\$49,068)	(\$37,978)
Total State and Local taxes	(\$811,518)	(\$688,537)	(\$596,263)	(\$462,597)

Note: No sign is a gain or “+”