



Solano County 2020

Index of Economic and Community Progress

County of Solano and Solano Economic Development Corporation

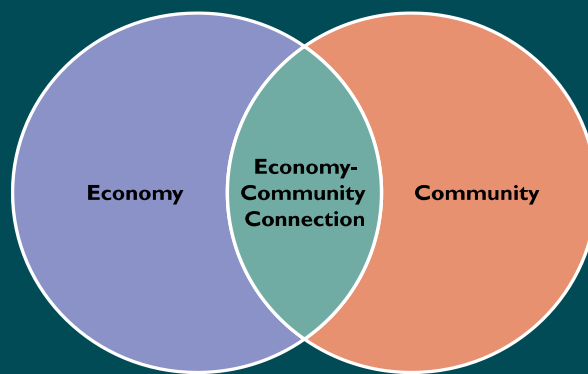
May 2021

Solano County 2020

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The *Solano County Index of Economic and Community Progress* is a project that was launched in 2007 after a series of economic summits identified a need for more fact-based information to guide efforts by public and private sector leaders to expand Solano County's economy and support its long-term viability.

Three comprehensive editions were produced for 2008, 2009 and 2010 by the consultant Collaborative Economics for the County of Solano and the Solano Economic Development Corporation. These insightful documents provided an objective analysis of key indicators shaping the local economy.



In 2011, the Index became a project for County staff, in cooperation with the Solano EDC, to maintain and update throughout the year. The Index was expanded to include comparisons in many instances to the Sacramento Area, the Bay Area, California, and the United States. The 2012 to 2020 editions include the objective analysis of Dr. Robert Eyler from Economic Forensics and Analytics (www.econforensics.com).

All of the annual index reports, as well as several in-depth analyses of local industry clusters, can be found at www.solanocounty.com/economicindex.



Index of Economic and Community Progress

We are proud to present to you the 13th annual Solano County Index of Economic and Community Progress. As in previous years, the intent of this report is to provide a “foundation” of various economic indicators, capturing trends shaping our local economy while providing long-term perspectives and considerations for regional economic development.

What makes this Index different from previous years is the impact of the COVID-19 pandemic and regulations intending to mitigate the negative health impacts to the community. There is optimism in the air and hope that with vaccinations and continued vigilance, we will be able to dramatically reduce the spread of the virus and “re-open” our economy in 2021. A year of the pandemic has taken a significant toll on the national, state and regional economies. Additional care has been taken in this edition to provide policy makers and the community a comprehensive data-based view of Solano County’s economy to help support future decisions for the County. Objectivity is critical, and official data sources are utilized to support this analysis. We are proud to partner again with Dr. Robert Eyler, President of Economic Forensics and Analytics, as our research lead in the development of this annual Index.

COVID-19 Job Impacts

Not surprisingly, the annual trend of job growth in Solano County was interrupted by the pandemic. Through the end of 2020, employers in the County retained 10,500 fewer non-farm employees that at the start of that year. In addition, there were 16,500 fewer employed residents in Solano County (those both employed in and out of the County). Prior to March of 2020, the unemployment rate had been relatively stable and near four percent, a level considered “full employment” by most economists. By the end of 2020 the unemployment rate reached 9.5 percent, the highest rate since 2013. This was actually an improvement over previous months leading to December 2020, reaching 15.7 percent in April of 2020. Employment data revealed significant job loss remains in March 2021, particularly in industries effected by statewide health and “social-distancing” orders: retail, restaurants, business services, and tourism/hospitality. In addition, Solano County’s labor force has been dramatically changed as some workers had to give up their jobs to care for themselves or others in their households, while many others changed their work locations from office to home, often even changing where they lived.

Recovery and Resilience

A number of city, county, state, and federal agencies, including healthcare providers and members of private industry, have dedicated time and resources to mitigate the long-term effects of this economic downturn. In 2020, the County of Solano authorized discretionary funds from the Federal CARES Act to be spent on rental assistance grants for Solano County residents in jeopardy of evictions due to job loss and engaged with the Workforce Investment Board of Solano County to issue grants to small business owners to stay open and keep employees working. In addition, over \$584 million dollars of the federal Paycheck Protection Program (PPP) was received by businesses and employers based in Solano County between April 2020 and March 2021. County government continues to focus extreme efforts to address the health impacts from COVID-19 in 2021 and continues to advocate for additional vaccines. Of another positive note, the Solano EDC recently has just received a new EDA CARES Act Grant supported by matching funds from the County of Solano, all cities in the County, and Solano Transportation Authority to create a comprehensive regional plan for economic recovery. All of these efforts continue to move Solano County forward through economic recovery from COVID-19 impacts and beyond.

Sincerely,



John M. Vasquez
Chairperson
Solano County Board of Supervisors



Robert Burris
President
Solano Economic Development Corporation

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Solano County Key Facts

Area

Rural land area	675 square miles
Urban land area	150 square miles
Water area	84 square miles

2020 Population (January 1, 2021) 438,527

Benicia	27,111
Dixon	20,197
Fairfield	118,005
Rio Vista	10,080
Suisun City	28,882
Vacaville	98,041
Vallejo	117,846
Unincorporated	18,365

Population Change: 2020 to 2021 (Jan 1) -684

Solano County 2030 Population Est. 472,048 (CA Dept. of Finance, estimate as of Jan 2021)

Top 5 Employment Sectors (as of Dec. 2020)

Education & Health Services	28,500
All Government (incl. US Military)	23,500
Retail Trade	16,700
Manufacturing	12,300
Leisure & Hospitality	12,300
Construction	10,900

Total Industry Jobs (Dec. 2020) 134,400

Employment to Housing Units (2020) 83.2%

Employment to Housing Units (2019) 90.7%



Educational Attainment (2015–19 Avg.)

Less than high school	11.6%
High school graduate only	23.8%
Some college, no degree	27.4%
Associate's degree	10.3%
Bachelor's degree	18.6%
Graduate or Professional degree	8.3%

Age Distribution of Pop (2015–19 Avg.)

Under 5 years old	6.1%
5 to 19	18.6%
20 to 44	33.7%
45 to 64	26.4%
65 and older	15.2%

Ethnic Composition of Pop (2015–19 Avg.)

White	38.0%
Hispanic	26.5%
Asian	15.0%
African-American	13.5%
Other (incl. mixed race/Pacific Islander)	7.0%

Building Permits Issued, New Housing Units (Fiscal Year 2019–20) 1,131

Sources and Notes:

1. Population and housing data come from California Department of Finance (www.dof.ca.gov), as of May 2021.
2. Employment data from California Employment Development Department (www.edd.ca.gov), as of April 2021.
3. Employment to housing unit ratios help city and county development plan for efficient municipalities and transit networks. A ratio of 100 percent suggests a balance in housing units and commuting workers. Ratios below 100 percent suggest the local economy has more residents working outside (or fewer jobs locally) in net versus other areas; ratios above 100 suggest rising numbers of commuters coming to the local area from other areas to work.
4. Demographic data from the Census Bureau's American Community Survey (factfinder.census.gov), March 2021.
5. Building Permits data provided in March 2021 by the County of Solano, fiscal year 2019–20, ending June 30, 2020.

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Key Highlights from the 2020 Index

Our Changing Economy

- Solano County employers hired 10,500 fewer workers in 2020, a 7.3 percent decrease from 2019. Solano County's labor force fell by 5,300 in 2020, 2.5 percent of residents working or seeking a job.
- 183,600 residents of Solano County were employed as 2020 ended, 16,500 less than 2019.
- Solano County's unemployment rate was 9.5 percent at the start of 2021, the highest rate for Solano County's economy since 2013.
- Industry losses of jobs in 2020 were driven by hotel/motel, restaurant, other personal services, and retail jobs lost due to the COVID-19 recession.
- Based on the most recent data available, inflation-adjusted (real) gross product for Solano County grew by 3.6 percent in 2019, slightly faster than both California and the national economy.
- Solano County's personal income per person increased in 2019 by 3.7 percent after inflation.
- Median household income also increased in 2019 after inflation to \$65,055 in 2012 dollars (+1.9%).
- Employment in industries focused on customers outside Solano County ("base" industries) fell in 2019 by approximately 4,900 jobs.
- Solano County median wages in 2020 increased from 2019 for local workers to just \$0.02 below California on average, the first time on record that gap was closed suggesting new jobs have been above average wages and pulling all wages up.
- Poverty rates for Solano County residents fell in 2019 (the latest data), based on five-year averages.
- Regional cost of living increased for Solano County by 1.6 percent in 2019 (the latest data), slower than the state and national averages.
- Local farmers made slight gains in 2019 (the latest data) from 2018 to the highest level of agriculture value since 2010.
- \$584 million in PPP loans came to Solano County employers from April 2020 to April 2021 amid job losses from the COVID-19 recession, approximately 3.2 percent of county gross product.
- Social equity metrics for Solano County suggest the County has performed well since 2012 on poverty alleviation and median household income, less so on homeownership versus state and national averages for under-represented communities.

Our Changing Community

- Solano County's population fell by 684 people in 2020 (-0.16 percent), and grew by 6.1 percent since 2010 to January 1, 2021.
- Population growth estimates show a county population of approximately 472,040 by 2030.
- Solano County's population is forecasted to grow from 2020 to 2060 by approximately 23.8 percent.
- Data from the US Postal Service suggests more households came to Solano County than left during 2020, even though population fell.
- Solano County's high-school graduation rate increased to 86.9% of eligible students, ahead of the state average for the 2019-20 academic year.
- Eligible African-American students in Solano County graduated from high school 81.8 percent of the time in academic year 2019-20.
- Median housing prices increased 7.9 percent in 2020 to \$485,950; housing affordability in Solano County decreased slightly.
- Recent allocations of housing units from state government assigned over 10,990 more units need to be built to balance supply and demand in Solano County between 2023 and 2031.
- 1,131 building permits were issued for new homes for fiscal year 2019-20. Approximately 251,000 square feet of commercial space was permitted during fiscal year 2019-20, about 12 percent of the 2018-19 fiscal year total.
- Commute times to work increased in 2019 (the latest data) by 2.1 minutes from 2018 for Solano County residents; the COVID-19 recession may transform commute patterns to 2025.
- Solano County's assessed property values increased to over \$60 billion in fiscal year 2019-20, while taxable sales fell slightly in calendar year 2020.

Considerations for the Future

The COVID-19 recession wreaked havoc on Solano County's labor markets for the first half of 2020. Forecasts suggest that Solano County will return to pre-COVID levels of employment by 2023, as re-opening and federal stimulus assist jobs recovery. Housing markets are forecasted to continue price growth in 2021 due to strong demand conditions, but may exacerbate inequities for lower- to middle-income households trying to own homes.

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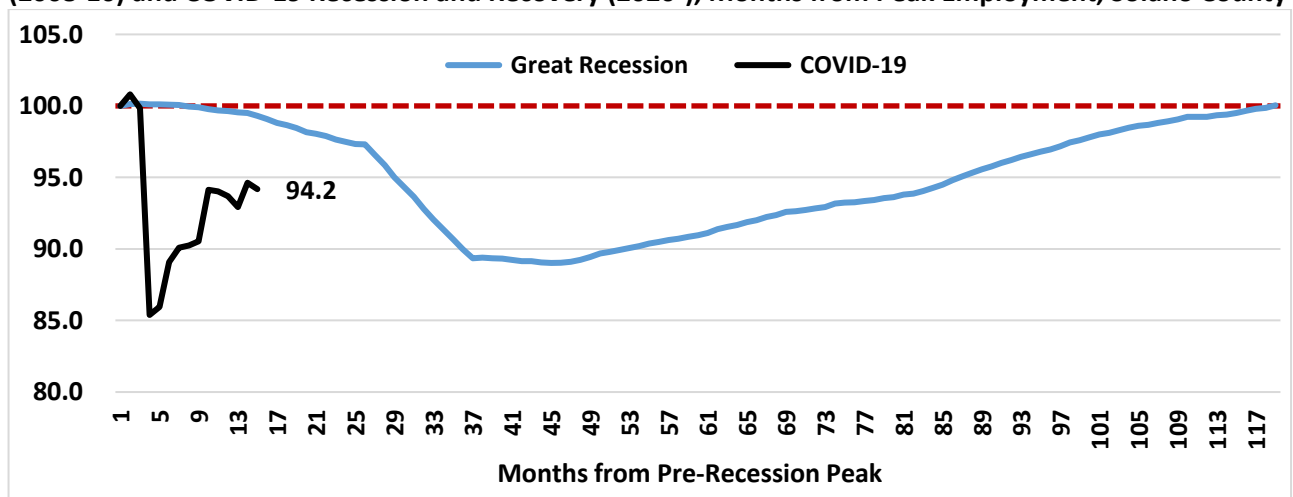
Solano County and the COVID-19 Recession

Social policies constrained the American economy in 2020 creating recession conditions as a reaction to rising cases of the COVID-19 virus. Solano County experienced recession also. Economic progress toward the end of 2020 and into 2021 helped ease fears of a longer recession. Forecasts for 2021 through 2024 are rising as of April 2021 (the latest data) in expectations of a strong economic recovery. In the 2019 Index of Economic and Community Progress, we noted the economic effects of the COVID-19 recession may put pressure on county government due to lower taxable transactions and property values. Median housing prices actually increased from March 2020 to March 2021. Lower interest rates and higher-income jobs preservation helped to increase housing demand. Taxable sales fell sharply in quarter 2 2020 versus quarter 2 2019, but increased in 2020 quarters 3 and 4 for Solano County. Solano County's taxable sales are likely to return to 2019 levels by the end of 2021.

Three rounds of "fiscal stimulus" have been passed by the US Congress since April 2020 as of April 2021. The initial round, called the CARES Act, initiated the Paycheck Protection Program (PPP) and the Economic Injury Disaster Loan (EIDL) program from the federal Small Business Administration. Over \$584 million in PPP loans came to Solano County, most of which is likely convertible to a federal grant. For Solano County, this amount was approximately 3.2 percent of county gross product. Solano County used some of its CARES Act funding to give out more than \$4 million to Solano County residents in need of rental assistance. Over \$350 billion of funds in the March 2021 round are slated for state and local government.

For Solano County, jobs losses were acute in April and May 2020 specifically (see figure below). However, from June to November 2020, labor-market recovery took place across California and most of its counties, including Solano County. As of March 2021 (the latest labor-market estimates at the county level available shown in the figure), Solano County's residents are 94.2 percent back to pre-COVID employment levels. 2022 is likely the year that Solano County recovers jobs lost in 2020 in the aggregate; for some workers and industries, the COVID-19 recession's effects may linger beyond 2022.

Residential Employment Levels, Index = 100 for November 2007 and January 2020, Great Recession (2008-10) and COVID-19 Recession and Recovery (2020-), Months from Peak Employment, Solano County



Source: California EDD (<https://www.labormarketinfo.edd.ca.gov/data/employment-by-industry.html>) and EFA Calculations

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Index Overview

Solano County Jobs fell to 134,400 Workers in 2020

After nine consecutive years of growth, approximately 10,500 workers lost jobs at non-farm employers in Solano County, a reduction of 7.3 percent in 2020 from 2019; farm jobs stayed the same as in 2019. From 2010 to 2019, Solano County employers added a total of 23,700 jobs; COVID-19 reduced the net gains since 2010 to just 13,300 or 11 percent growth over 11 years to 2020. Leisure and hospitality and other personal services jobs were hurt more than other industries. These employers' inability to stay open consistently and also reduced travel levels lowered revenues. The state and national economies also contracted.

In 2020, Solano County employment decreased by 7.3%, approximately 10,500 workers lost jobs across Solano County employers.

The Broader Context: State and National Economic Updates

Forecasts through 2024 suggest a slow but steady recovery from the COVID-19 recession across the national and state economies

The California and national economies entered 2020 with jobs and income expansions for the longest period on record. As 2020 ended, California's unemployment was 10.1 percent versus 4.2 percent as 2019 ended. Jobs in California as 2020 ended contracted by 1,305,200 workers or a 7.3 percent reduction of

employment levels as compared to those working in 2019.

The national economy also experienced jobs losses in 2020; by December 2020, there were approximately 10.74 million workers in the United States out of work. This is approximately 5 million more than in February 2020. Lower interest rates and multiple rounds of fiscal stimulus increased employment quickly from May 2020 to November 2020 across the American economy, slowing down from December 2020 to March 2021 (the time of this writing). However, the combination of vaccines, reduced social restrictions, low interest rates, and large fiscal stimulus packages all generated optimistic forecasts through 2024. Inflation pressure and expectations, slow initially in the COVID-19 recession, are being watched closely as a gauge of rising interest rates and problems for consumers. For Solano County, local costs of living measures are influenced largely by local housing costs.

National and state economic recovery since May 2020 has been accelerated by lower interest rates and three rounds of fiscal stimulus as of March 2021.

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Housing Prices Grew Quickly in 2020 and More Growth Predicted in 2021

Solano County’s housing price forecast slowly increased over 2020 as lower interest rates and movements around the state and Bay Area region led to rising demand for purchasing homes in Solano County. The median sale price for homes in Solano County was approximately \$485,950 in December 2020, up 7.9 percent from the previous year according to Zillow™ Research.

Zillow™ Research predicted Solano County home prices to rise by 12.3 percent to March 2022 as of March 2021 after rising by 7.9 percent in 2020.

In comparison, median home prices in California overall grew 9.8 percent in 2020 to just over \$618,000. Regional fires that happened in 2020 – initially called the Lightning Complex Fires in Sonoma-Napa-Lake counties (or LNU for short), including both the Wallbridge and Glass Fires – were more destructive to regional property and lives than any fires since 2017. However, housing price forecasts for Solano County and the Bay Area region remain positive for 2021.

Building permits in Solano County were strong for housing though relatively low for commercial real estate in fiscal year 2019-20 (July 1 to June 30) compared to fiscal year 2018-19. Residential building permits activity in Solano County increased by 1,131 new housing units permitted in fiscal year 2019-

Regional economic development faces challenges to keep businesses in commercial real estate, but there may be opportunities for new businesses and ways to use office space.

20. Commercial square feet under construction was up 251,000 new square feet of space between July 2019 and June 2020. In the previous fiscal year, Solano County permitted over 2.1 million square feet). The COVID-19 recession has created uncertainty in office space demand. According to Colliers International, office-vacancy rates in Solano County remained relatively flat during 2020 at 18.1 percent, with rents also relatively flat at \$2.40 per square foot as 2020 ended.

Solano County: Residents lost jobs initially due to COVID-19 and then partial recovery in 2020

Solano County’s residents working or looking for work (the labor force) fell in 2020 by 2.5 percent

overall. The number of Solano County residents with a job fell by 8.2 percent in 2020. The number of people working for Solano County employers fell by 7.2 percent, regardless of where the workers live. Jobs

	<i>Number of Workers</i>			<i>Percent Change</i>	
	<i>2010</i>	<i>2019</i>	<i>2020</i>	<i>2010</i>	<i>2019</i>
Labor Force	202,500	208,100	202,800	0.1%	-2.5%
Employed Residents	176,500	200,100	183,600	4.0%	-8.2%
Unemployment Residents	26,000	8,000	19,200	-26.2%	140.0%
Industry Employment	121,100	144,800	134,400	11.0%	-7.2%

Source: EDD (<http://www.labormarketinfo.edd.ca.gov/>), Labor Market Information, Annual Averages; a new benchmark of 2020 was set with some revisions.

growth is expected to take place each month of 2021 for Solano County and California overall as recovery continues. Changing labor force levels reflect the choice to not seek a new job, to retire, and also to leave Solano County and thus be counted elsewhere.

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Goods-Producing Employment Watch: Moving Solano Forward

Economic development efforts by Solano EDC, called Moving Solano Forward, focus on specific industries that combine economic diversity, economic mobility for workers and a focus on external markets to help the county's economy grow over the next decade. Those industries include:

- Advanced Materials;
- Biotech/Biomedical;
- Food and Beverage Manufacturing;
- Logistics; and
- Travis Air Force Base.

Goals of Moving Solano Forward include an expansion of goods-producing jobs in Solano County due to higher-than-average wages and larger ripple effects from growth on Solano County's economy than services jobs. As 2020 ended, the California Employment Development Department (EDD) estimated that jobs in construction and manufacturing fell by approximately 1,700 jobs while private-sector services jobs fell by 7,500; government jobs at all levels fell by 1,300. The downturn at employers in Solano County affected almost all county industries.

**Solano County Employment, Sorted by Changes During 2020
2020 Annual Average Gains and (Losses) of Jobs Since 2010 and 2019**

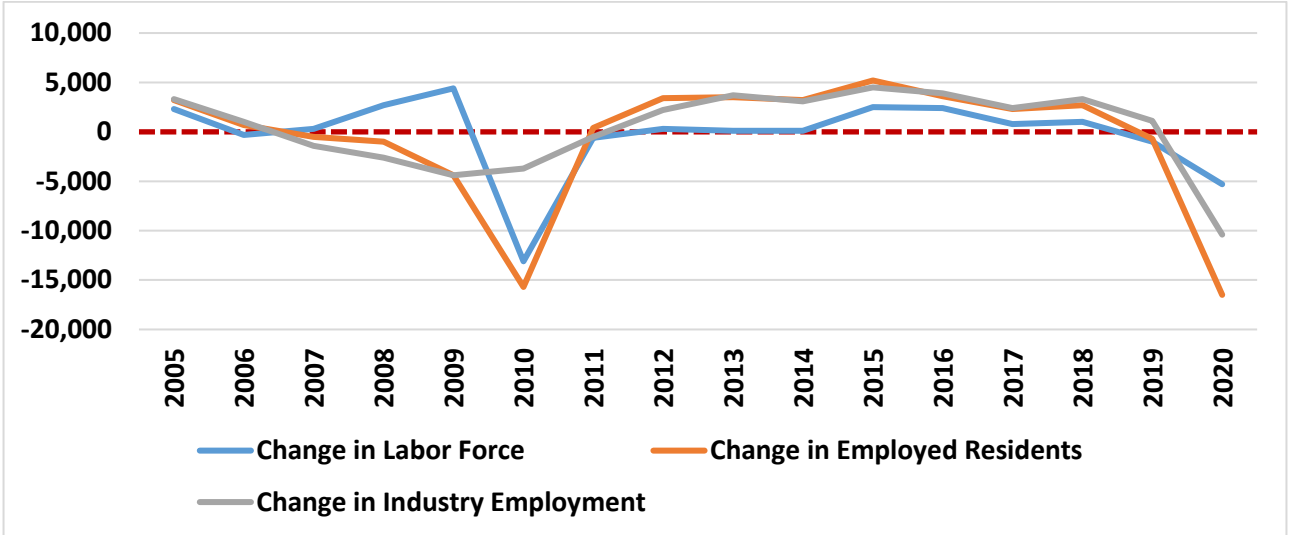
<i>Industry</i>	<i>Since 2010</i>		<i>Since 2019</i>	
	<i>Gain/(Loss)</i>	<i>% Chg.</i>	<i>Gain/(Loss)</i>	<i>% Chg.</i>
Federal Government (incl. Travis AFB)	-900	-19.6%	100	2.8%
Agriculture (Farm)	100	7.1%	0	0.0%
State Government Excl. Education	200	4.3%	0	0.0%
Financial Activities	-300	-5.8%	-200	-3.9%
Manufacturing	2,600	26.8%	-200	-1.6%
Wholesale Trade	100	2.4%	-200	-4.5%
Information (Software and Publishing)	-400	-30.8%	-300	-25.0%
Healthcare	7,100	36.8%	-500	-1.9%
Local Government Education	-300	-3.4%	-900	-9.7%
Retail Trade	300	1.8%	-1,100	-6.2%
Construction	3,700	51.4%	-1,400	-11.4%
Bars and Restaurants	400	4.0%	-2,000	-16.0%
All Other Industries	700	2.5%	-3,700	-11.3%
Total, All Industries (Farm + Non-Farm)	13,300	11.0%	-10,400	-7.2%

Source: EDD (<http://www.labormarketinfo.edd.ca.gov/>), Labor Market Information, Annual Data, Chg. = Change

Another goal of Moving Solano Forward is more economic diversity, especially comparing the private sector to the public sector. Since 2010, Solano County has done just that due to both an expansion of private-sector businesses and jobs (reflected in the gross product data to 2019, which are the latest data available), but also smaller government levels, including Travis Air Force Base (TAFB). A recent [economic impact study](#) by the U.S. Department of Defense estimated \$2.1 billion of local economic impact from TAFB in 2019. As economic recovery continues in 2021, Solano County is likely to see more growth in private-sector services jobs than goods-producing or government as visitor-supporting and retail industries rebound.

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Solano County Labor Force and Industry Employment, 2005–2020, Annual Change in Number of Workers



Source: EDD (<http://www.labormarketinfo.edd.ca.gov/>), Labor Market Information, Annual Averages

Sector Shares of Gross Product at the County, State, and National Levels
Percent of Total Gross Product in 2012 Dollars, 2010 to 2019, Selected Years

Year	Goods-Producing			Services-Producing			Public Sector		
	Solano County	CA	US	Solano County	CA	US	Solano County	CA	US
2010	28.2%	18.7%	19.3%	52.7%	67.9%	66.5%	19.1%	13.3%	14.2%
2015	31.9%	17.1%	19.1%	51.9%	71.5%	68.5%	16.2%	11.4%	12.3%
2016	31.3%	17.2%	18.9%	52.0%	71.4%	68.9%	16.7%	11.4%	12.2%
2017	29.4%	17.2%	18.9%	53.9%	71.9%	69.1%	16.7%	10.9%	12.1%
2018	29.3%	17.3%	19.0%	54.5%	72.0%	69.1%	16.3%	10.6%	11.9%
2019	30.0%	17.1%	19.0%	54.2%	72.5%	69.2%	15.9%	10.4%	11.7%

Source: Bureau of Economic Analysis (<http://www.bea.gov/regional/index.htm>), 2019 data are the latest available

Standards of Living Rising for Solano County in 2019, in 2020 Mixed Results are Likely

Standard of living measures include income measures in real (inflation-adjusted) terms per person or household: median household income and personal income per person are examples. Median household income (MHI) is generally estimated by the United States Census Bureau, based on a household of four people. MHI remains the basis of affordable housing eligibility determination as well as establishing income thresholds for measuring poverty levels.

In 2019, real personal income per person and gross product per person in Solano County grew but remains below the national and California averages. MHI adjusted for inflation grew almost 1.9 percent in 2019. Solano County continues to have MHI levels above statewide and national averages. All three measures increased in 2019 (the latest data). In 2020, due to job losses, gross product per person is likely to fall sharply. In contrast, federal stimulus and jobs recovery in late 2020 may lead to stable or perhaps slight growth in both personal income per person and median household income levels. When all three of these indicators are rising, Solano County's economy is improving its living standards unambiguously.

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Standard of Living Measures at the County, State, and National Levels 2010, 2018 and 2019 (latest available data), in 2012 Dollars

Place	Gross Product per Person			Personal Income per Person			Median Household Income		
	2010	2018	2019	2010	2018	2019	2010	2018	2019
Solano County	\$42,566	\$49,032	\$50,571	\$40,378	\$44,855	\$46,523	\$66,065	\$67,812	\$69,132
California	\$55,551	\$68,648	\$70,877	\$45,482	\$58,020	\$59,553	\$60,519	\$62,236	\$63,840
United States	\$50,844	\$57,204	\$58,164	\$42,188	\$49,509	\$50,319	\$49,238	\$51,512	\$52,735

Sources: Bureau of Economic Analysis (<http://www.bea.gov>) and Census Bureau (<http://data.census.gov>); there have been changes in benchmarking that make these data different than previous Index versions for the same date and place.

Social Equity Metrics and the COVID-19 Recession

The 2020 edition of this Index adds social equity metrics. The indicators consider poverty, median household income (which is related to income derived from both wealth and from working), and homeownership versus renting for county residents by race and ethnicity. Comparisons made to statewide and national averages suggest Solano County has relatively good equity as of 2019 in lifting under-represented residents out of poverty and to higher median household income levels. Homeownership gaps remain for African-Americans and Hispanic-Americans, less so for Solano County's Asian-American residents versus the state and national averages.

Community Indicators: Continued Gains and Some Challenges

Population estimates by the California Department of Finance help California's counties compare to annual Census estimates. In 2020, Solano County's population fell by an estimated 684 people (the latest data as of May 7, 2021). This estimated reduction in Solano County's population is a function of both aging residents and people leaving Solano County in net, the first year of population loss since 2010. In contrast, Sonoma County has lost population for four years in a row; Marin and Napa counties are estimated to have lost population for five years in a row. As of January 1, 2021, Solano County's population was estimated to be 438,527 residents.

Solano County's graduation rate was 86.9 percent in the 2019-20 academic year

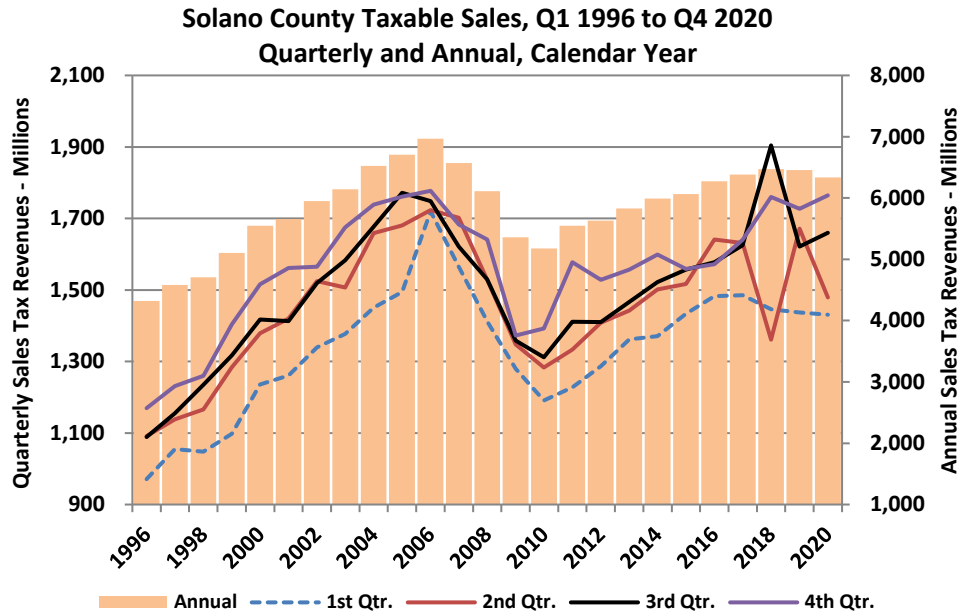
Solano County's graduation rate increased to 86.9 percent for the 2019-20 academic year (the latest year for which data are available as measured by the California Department of Education) from 84.9 percent in the academic year 2018-19, ahead of California's average that decreased slightly from 84.5 to 84.3 percent. The percent of graduates that were UC/CSU-ready was 50.0 percent of Solano County graduates in 2019-20 versus 50.9 percent of graduates for the state of California. Current and expected loss of population in Solano County of school-age residents is a looming concern for attendance and funding, but fiscal stimulus in 2021 should help relieve short-term pressures caused by COVID-19 on Solano County's schools.

Graduation rates at Solano County high schools were higher than the state on average again in academic year 2019-20, with gains also made in graduates that were UC/CSU eligible.

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Taxable sales fell slightly in 2020 and assessed property value increased in Fiscal Year 2019-20

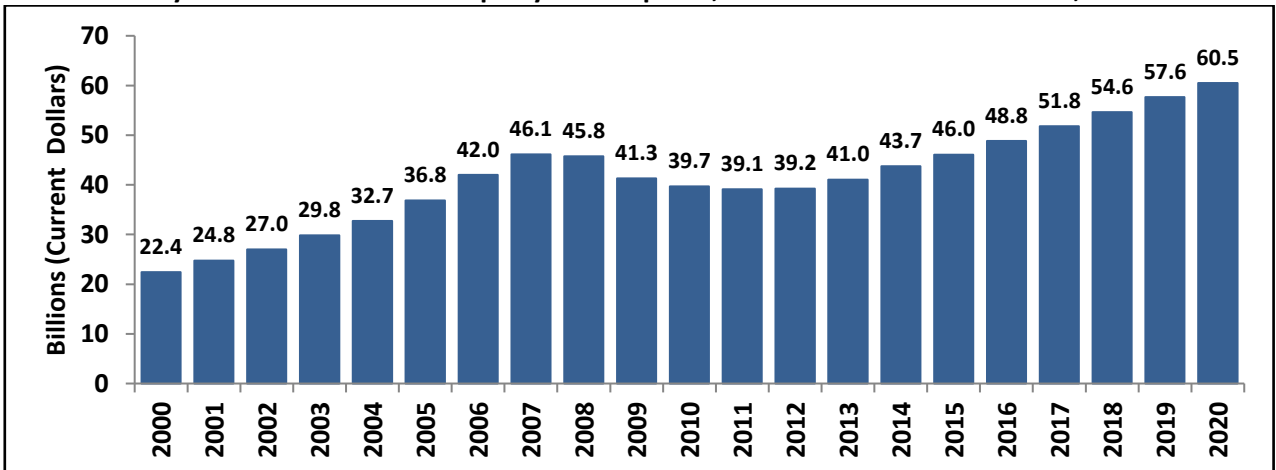
The County of Solano saw a small downturn in calendar-year 2020 taxable sales due to the COVID-19 recession, though there was a large drop in quarter 2 2020 versus quarter 2 2019. Taxable sales fell by 0.6 percent for calendar year 2020. Taxable sales are forecasted to rise in the last two quarters of fiscal year 2020-21 to provide overall, fiscal-year gains from 2019-20; taxable sales from online merchants were a key reason for any taxable sales stability in 2020.



Source: California Department of Tax and Fee Administration (CDTFA), Latest Data Through Dec 2020

Solano County’s aggregate, assessed property values continued to grow in the 2019-20 fiscal year; current values are used by the Solano County Assessor’s Office to set the property tax roll each year. As of June 30, 2020, the assessed value of property in Solano County was approximately \$60.5 billion, the eighth year of increased property tax rolls in a row. While the Index version in 2019 predicted lower home prices in 2020, the combination of stable jobs for higher-income households and lower interest rates increased demand for homes and helped to reduce concerns of assessed values falling in Solano County; this is a much different, positive outcome of the COVID-19 recession versus the Great Recession (2008-10).

Solano County Assessed Values for Property Tax Purposes, Fiscal-Year End 2000 to 2020, Current Dollars



Source: Solano County Assessor’s Office (current assessed value for Fiscal Year end)

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Geographic Comparisons

Unless stated otherwise, the 2020 Index groups counties into the following three areas in California for the purpose of making comparisons. In some cases, individual counties in each of these areas are used instead and as appropriate.

- Bay Area Other: San Francisco, Santa Clara, Alameda, San Mateo, Contra Costa counties;
- North Bay: Sonoma, Marin and Napa counties;
- Sacramento Metropolitan Statistical Area (MSA): Sacramento, Placer, El Dorado, and Yolo counties.

Takeaways, Opportunities and What Lies Ahead

Because of continued volatility in 2021 due to COVID-19, the 2020 Index provides brief “**TAKEAWAY**” sections and also one of two additional conclusions to most subsections. An “**OPPORTUNITY**” for Solano County economic development may be considered when data suggest alignment with Moving Solano Forward goals, workforce development opportunities or both. In cases where there may be lingering concerns from the COVID-19 recession, we use “**Beyond 2021**” and try to point the reader to challenges and also most-likely scenarios based on the COVID-19 recession’s effects on Solano County, as well as issues to watch toward 2025. The American economy was still in recession officially as of May 1, 2021; this may change if there is an announcement by the [National Bureau of Economic Research](#) that it ended sooner. The report starts with a look at Solano County’s economy followed by community indicators.

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Our Changing Economy

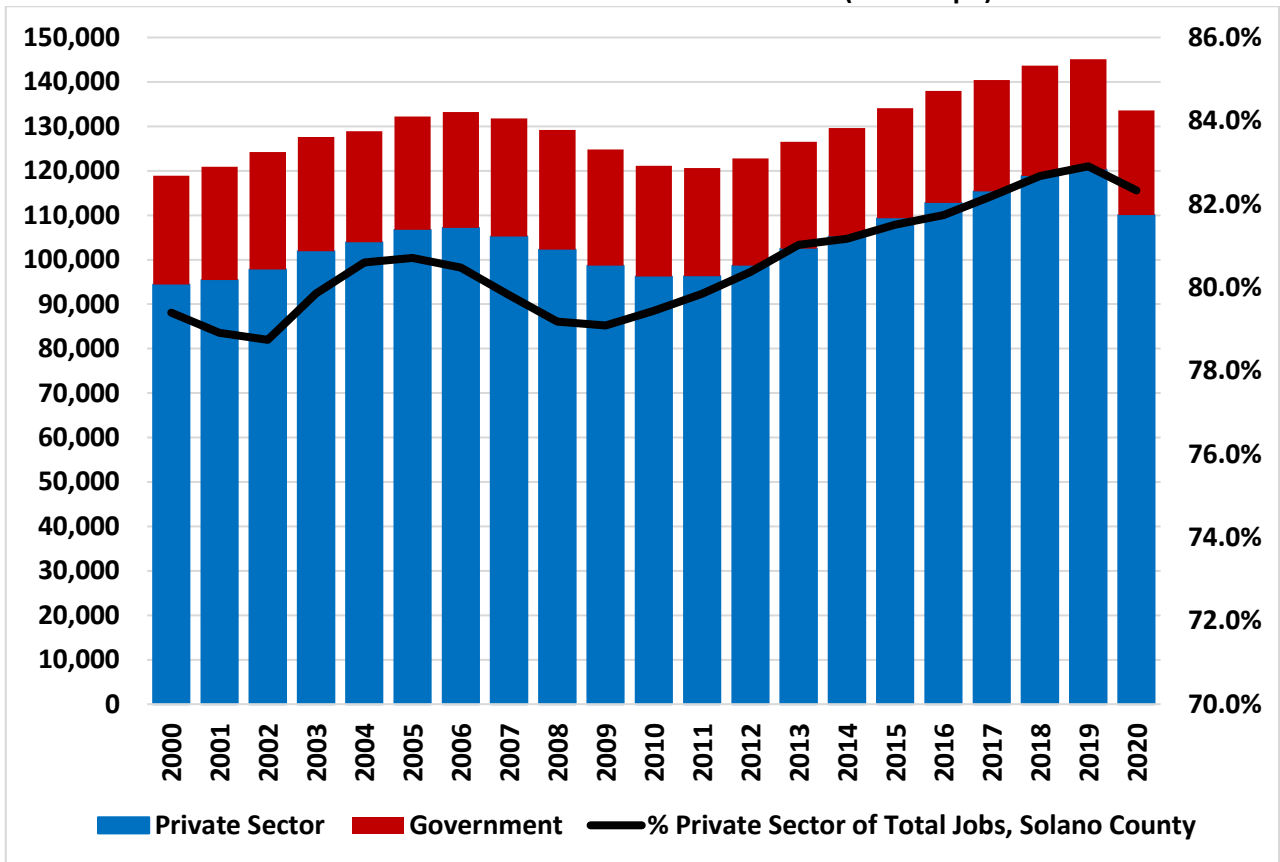
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Labor Markets

Annual Local Industry Employment

Labor markets were deeply and broadly affected by the COVID-19 recession in 2020. Solano County employers decreased payroll workers from 144,900 workers at the end of 2019 to 134,400 as 2020 ended. Private-sector employment fell by 9,200 workers and government employment fell by 1,300 workers.

Solano County Private and Public Sector Employment, Annual Averages, 2000–2020
Number of Jobs and % of Private-Sector Jobs (Line Graph)



Source: California Employment Development Department (www.edd.ca.gov). Private- and public-sector employment levels are indicated on the left-hand axis; share of private-sector (%) jobs to total employment is indicated on the right-hand axis.

TAKEAWAY: COVID-19 created a major change in Solano County’s labor market, reducing the total number of workers to levels equal to 2013.

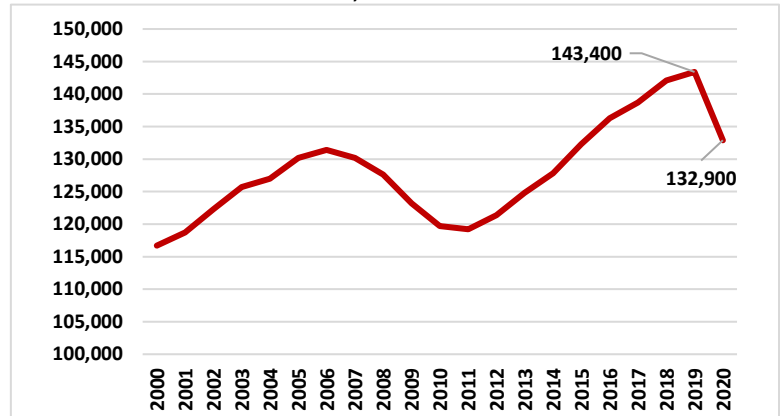
Beyond 2021: As we see later, specific industries to watch due to lingering job losses as 2021 began include retail, leisure and hospitality and other services. Due to stimulus funding and PPP lending/grants in 2021 coming directly to local municipalities and states, government job losses may stabilize and ultimately increase slightly before 2021 ends.

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Total Non-Farm Employment

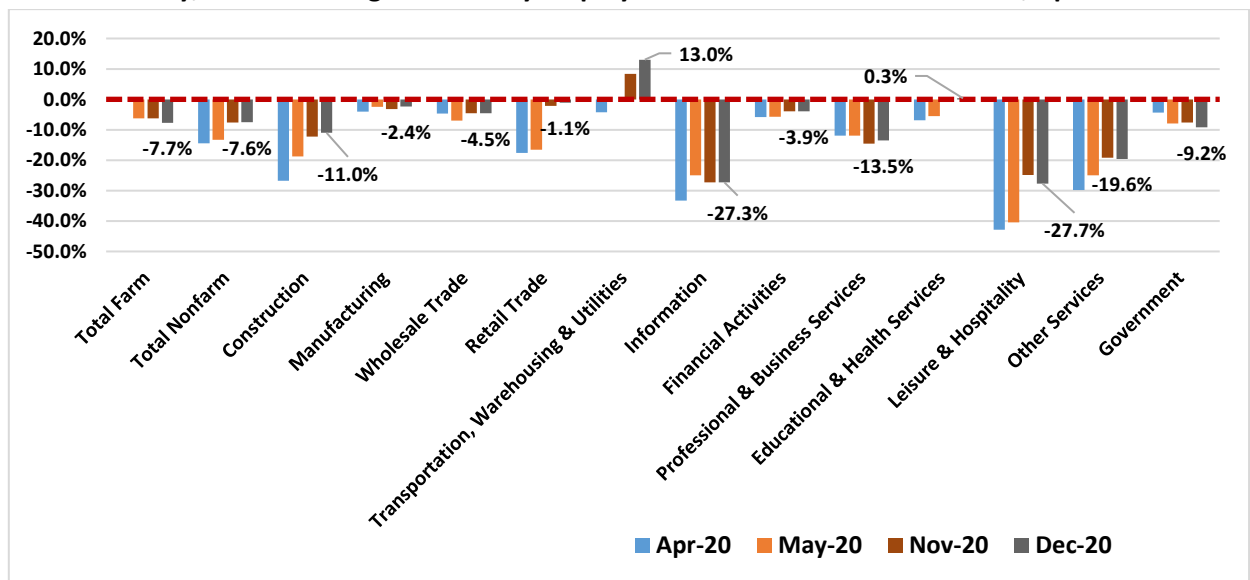
The graph to the right summarizes the non-farm jobs loss in Solano County. The graph below summarizes the industry-level job losses compared to the 2019 levels of jobs for the same month from April 2020 to December 2020. Agricultural jobs growth in Solano County was basically flat in 2020 (+20 jobs). The overall loss of jobs for Solano County’s employers in 2020 was primarily in leisure and hospitality, other personal services and retail jobs. Initially in the COVID-19 recession, all major industry categories experienced job losses, except for federal government (government jobs were lost in net when all government levels considered). As 2020 ended, jobs recovery had begun. The figure below shows many of Solano County’s industries remained more than 10 percent below the same month’s employment level in 2019.

Solano County Non-Farm Employment, 2000–2020, Annual Data, Number of Workers



Source: California Employment Development Department (www.edd.ca.gov)

Solano County, Percent Change in Industry Employment from Same Month in 2019, April to Dec 2020



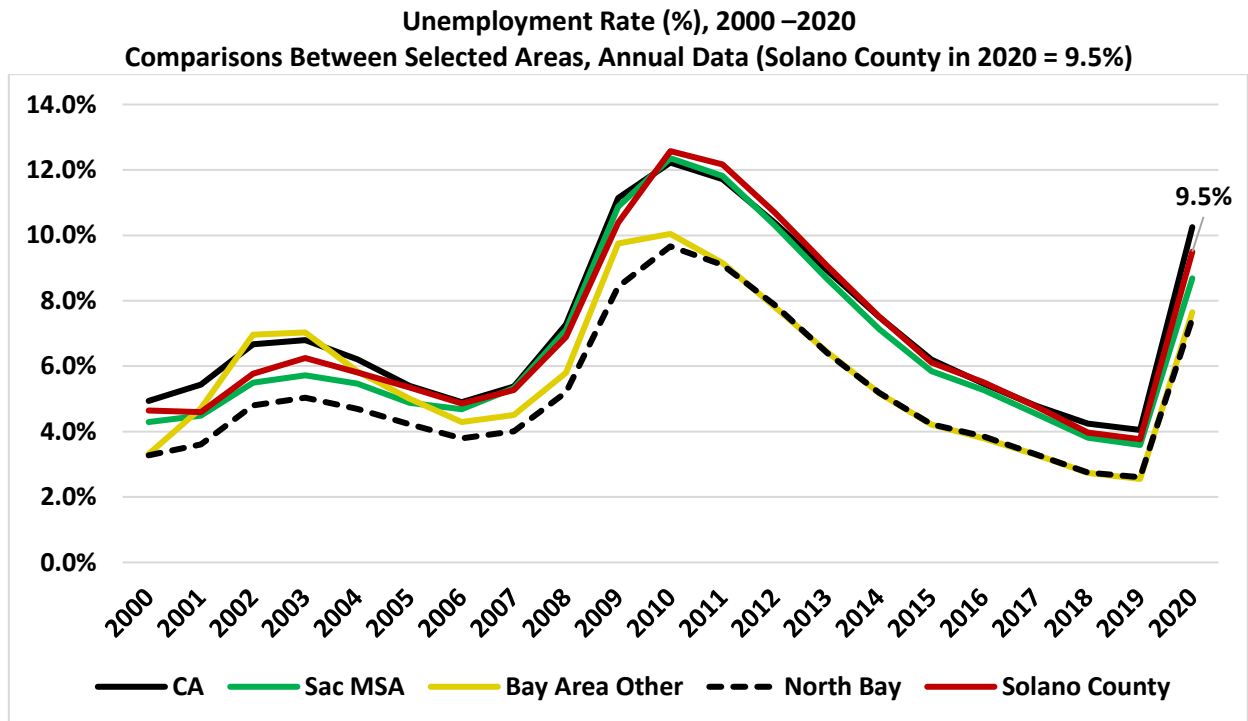
Source: California Employment Development Department (www.edd.ca.gov)

TAKEAWAY: Jobs at Solano County’s employers contracted quickly in 2020, as low as 124,100 workers (equivalent to the same volume of non-farm employment as September 2012) before rising to 132,900 by the end of 2020 (equivalent to September 2015 levels). **Beyond 2021:** While Solano County may return to the same volume of workers as it started with in 2020 by the end of 2022, Solano County needs to be concerned about structural shifts in industry employment, especially lower-wage and low barriers to entry jobs such as retail, leisure and hospitality and other services. Slow recovery of such jobs can lead to more demand on social services provided by government and nonprofits.

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Unemployment Rate Comparisons

Solano County's unemployment rate measures county residents and how many are looking for work but not currently employed. As 2020 ended, Solano County's unemployment rate was 9.5 percent. The rate was 3.8 percent when 2020 began. The state of California ended 2020 at 10.1 percent unemployment, while the United States overall had 8.1 percent unemployment in 2020 on an annualized basis.



Source: California Employment Development Department (<http://www.edd.ca.gov>)

TAKEAWAY: Unemployment rates in Solano County and California went from among the lowest unemployment rates on record to among the highest in May 2020, with unemployment rates moderating across the state as 2020 ended.

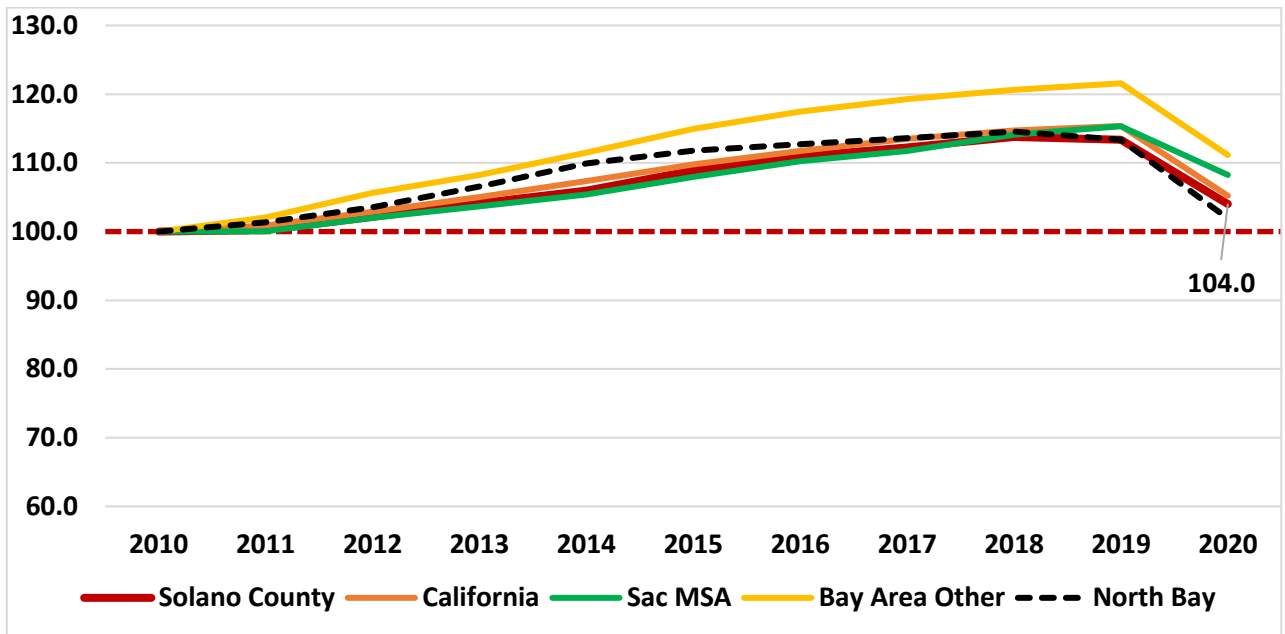
Beyond 2021: The unemployment rate in Solano County will fall from 9.5 percent in 2021 and likely continue to fall in 2022, as vaccinations and social practices adjust to reduce COVID-19 cases; a shrinking, regional labor force in and around Solano County may create lower unemployment rates technically while Solano County's economic capacity shrinks due to a smaller labor force and thus fewer residents available for work. Fewer workers means lower levels of income produced by businesses and lower spending levels.

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Total Employed Residents Comparisons

This section considers how Solano County’s residents remained employed as compared to regional areas and California on average. Notice in the graph the sharp downturn in employed residents across the comparison areas. Solano County saw this index (an index is used to allow for easy comparisons of different-sized labor markets) drop from 113.4 in 2019 to 104.0 in 2020, approximately the same level of employment as in 2013.

**Total Employed Residents, 2010-19, Index 2010 = 100 (Solano County in 2020 = 104.0)
Comparisons Between Selected Areas, Seasonally-Adjusted Monthly Data**



Source: California Employment Development Department (<http://www.edd.ca.gov>)

Percent Change in Employed Residents, 2010 and 2019 Annual Data Compared to 2020

Employed Residents	2010-20	2019-20
Solano County	4.0%	-8.2%
California	5.2%	-8.8%
Sacramento MSA	8.2%	-6.2%
Bay Area Other	11.1%	-8.6%
North Bay	1.9%	-10.1%

Source: California EDD (www.edd.ca.gov)

TAKEAWAY: The sharp reduction in county residents with a job due to COVID-19 social restrictions came after nine consecutive years of growth.

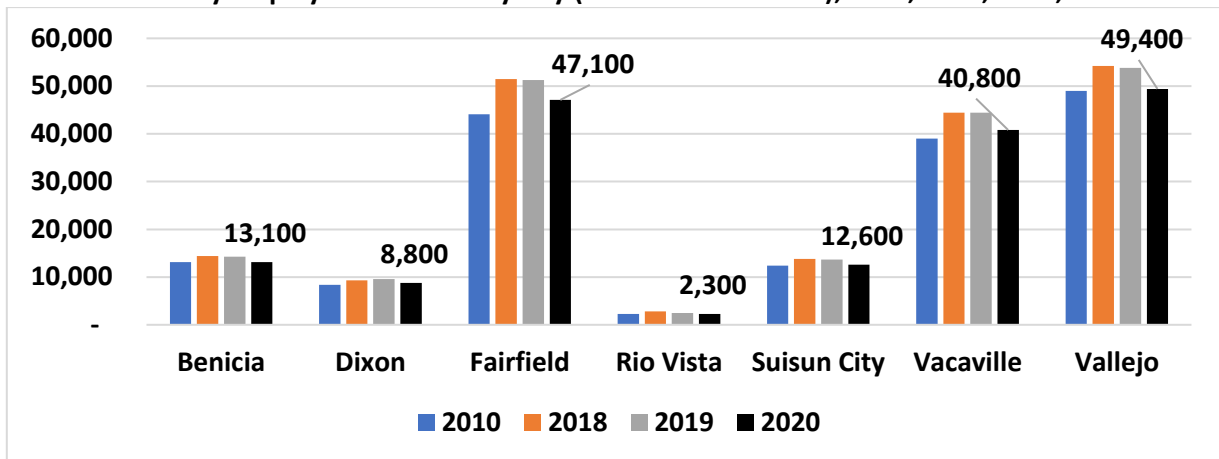
OPPORTUNITY: The volume of employed residents reflects regional job markets and capacity to produce goods and services. Solano County residents that may now work from home versus commuting to work could help increase demand for locally-serving industries in Solano County during the week, but may also reduce tax revenues from specific markets like those from gasoline sales while also reducing traffic and classic commute problems and accidents.

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Cities Overview: Labor Markets

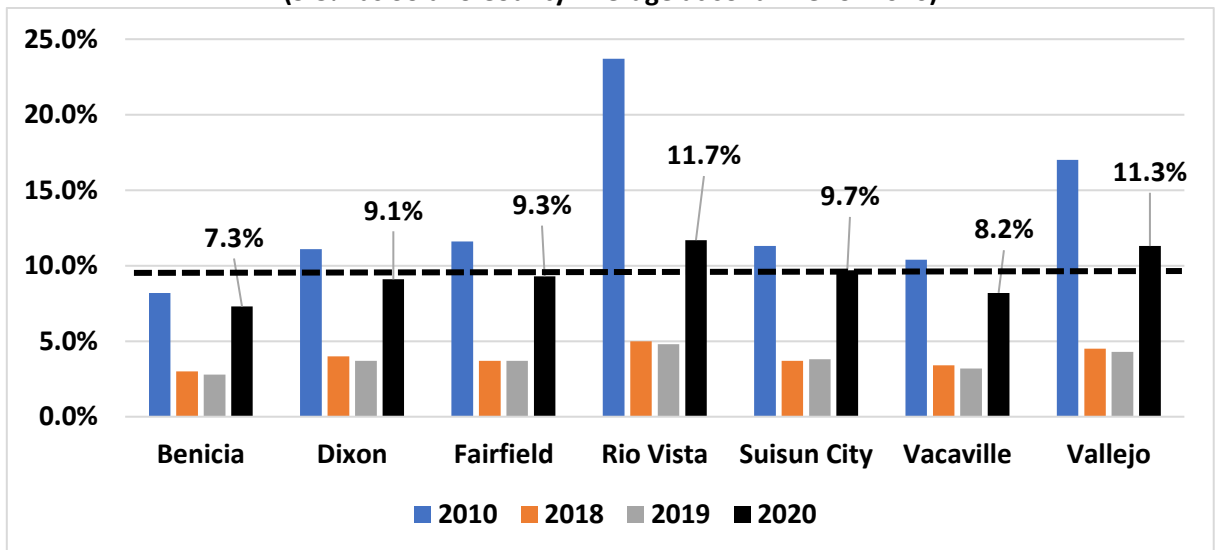
Data on Solano County’s incorporated cities and their labor markets come from California’s Employment Development Department (EDD). Jobs were lost in 2020 in all Solano County’s cities; unemployment rates also increased with reduced labor force levels. Solano County’s unemployment rate had an annual average of 3.7 percent in 2019 and 9.5 percent in 2020.

Solano County Employed Residents by City (Number of Workers); 2010, 2018, 2019, and 2020



Source: California EDD (www.edd.ca.gov)

Solano County Unemployment Rate (% of Labor Force) by City, 2010, 2018, 2019, and 2020 (9.5% as Solano County Average at solid line for 2020)



Source: California EDD (www.edd.ca.gov)

TAKEAWAY: For Solano County cities, the number of employed residents decreased sharply in 2020. Some cities, such as Vallejo, have historically recovered more slowly from recession.

Beyond 2021: Uneven jobs recovery in 2021 and 2022 may affect economic development in different parts of Solano County such that some cities grow faster than others; coordinating economic development strategies across Solano County’s cities is critical to not compete internally given broader, regional competition for similar industries outside Solano County.

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Employment in Base Industries and Locally-Serving Industries

The COVID-19 recession's effects on local employers can be seen below in a slightly different way than data seen above. Base-industry employment includes jobs that primarily serve markets either outside Solano County or visitors to Solano County. As of Quarter 2 2020 (the latest official data available as of February 2021), Solano County jobs growth fell by over 18,640 jobs (recovery took place after June 30, 2020 according to estimated monthly data). For base industries (**4,932** jobs lost as shown in the table), only professional services, transportation and warehousing, and federal government (including Travis Air Force Base) experienced jobs growth.

All locally-serving industries (**11,803** jobs lost) shown here experienced estimated lower levels of jobs from 2019 to 2020. These data suggest how general the effects of the COVID-19 were initially on Solano County. Quarter 2 2020 is likely the low point in the COVID-19 recession for jobs lost in both Solano County and California on average. There were **1,914** jobs lost in industries that are unassigned to base or locally-serving also, as shown in the table.

Solano County Base versus Locally-Serving Industry Employment, Number of Workers, Second Quarter Data for 2010, 2018, 2019, and 2020

	2010 Q2	2018 Q2	2019 Q2	2020 Q2	Change 2019-20	% Chg. 2019-20
Base Industries Totals	32,401	36,537	36,804	31,872	-4,932	-13.4%
Agriculture	1,489	1,673	1,572	1,495	-77	-4.9%
Mining	223	560	524	385	-139	-26.5%
Wholesale Trade	3,986	4,203	4,212	3,903	-309	-7.3%
Information	612	267	237	218	-19	-8.0%
Finance and Insurance	991	1,047	1,070	1,043	-27	-2.5%
Real Estate, Rental and Leasing	119	275	316	280	-36	-11.4%
Prof., Sci, Technical Services	266	306	283	304	21	7.4%
Management/Consulting	1,217	797	763	702	-61	-8.0%
Arts, Entertainment and Rec	2,455	2,833	2,822	689	-2,133	-75.6%
Hotels, Bars and Restaurants	701	702	886	481	-405	-45.7%
Federal government	4,975	3,548	3,579	3,626	47	1.3%
State government	4,618	5,400	5,982	5,781	-201	-3.4%
Manufacturing	6,109	9,816	9,559	8,947	-612	-6.4%
Retail Trade	2,334	2,249	2,070	969	-1,101	-53.2%
Transport and Warehousing	2,306	2,861	2,929	3,049	120	4.1%
Locally-Serving Ind Totals	68,902	87,552	95,707	83,904	-11,803	-12.3%
Utilities	480	585	593	582	-11	-1.9%
Construction	7,119	11,047	12,679	10,165	-2,514	-19.8%
Information	586	636	1,170	823	-347	-29.7%
Finance and Insurance	2,323	2,445	3,417	3,338	-79	-2.3%
Real Estate, Rental and Leasing	1,218	1,210	1,728	1,517	-211	-12.2%
Prof, Sci, Technical Services	3,121	3,659	3,863	3,336	-527	-13.6%
Admin/Waste Manage Services	6,579	6,059	5,387	4,841	-546	-10.1%
Educational Services	1,537	1,322	2,034	1,789	-245	-12.0%
Healthcare/Social Assistance	12,777	24,068	25,914	24,341	-1,573	-6.1%
Arts, Entertainment and Rec	222	144	97	36	-61	-62.9%
Bars and Restaurants	438	437	496	240	-256	-51.6%
Other Services	3,097	3,734	4,475	3,285	-1,190	-26.6%
Local Government	15,380	16,077	15,847	14,382	-1,465	-9.2%
Local Portion of Retail Trade	13,281	15,886	17,689	14,986	-2,703	-15.3%
Local Trans and Warehouse	744	243	318	243	-75	-23.6%
Jobs in industries unassigned	21,332	17,567	11,655	9,741	-1,914	-16.4%

Sources: Bureau of Labor Statistics (www.bls.gov) and its Quarterly Census of Wages and Employment (QCEW), Calculations by Author

("Unassigned" jobs in industries that serve a mix of local and export markets).

TAKEAWAY: Base industries employment fell by almost 5,000 workers from Quarter 2 2019 to Quarter 2 2020, while locally-serving industries saw a loss of over 11,800 jobs at such Solano County employers between the same quarters.

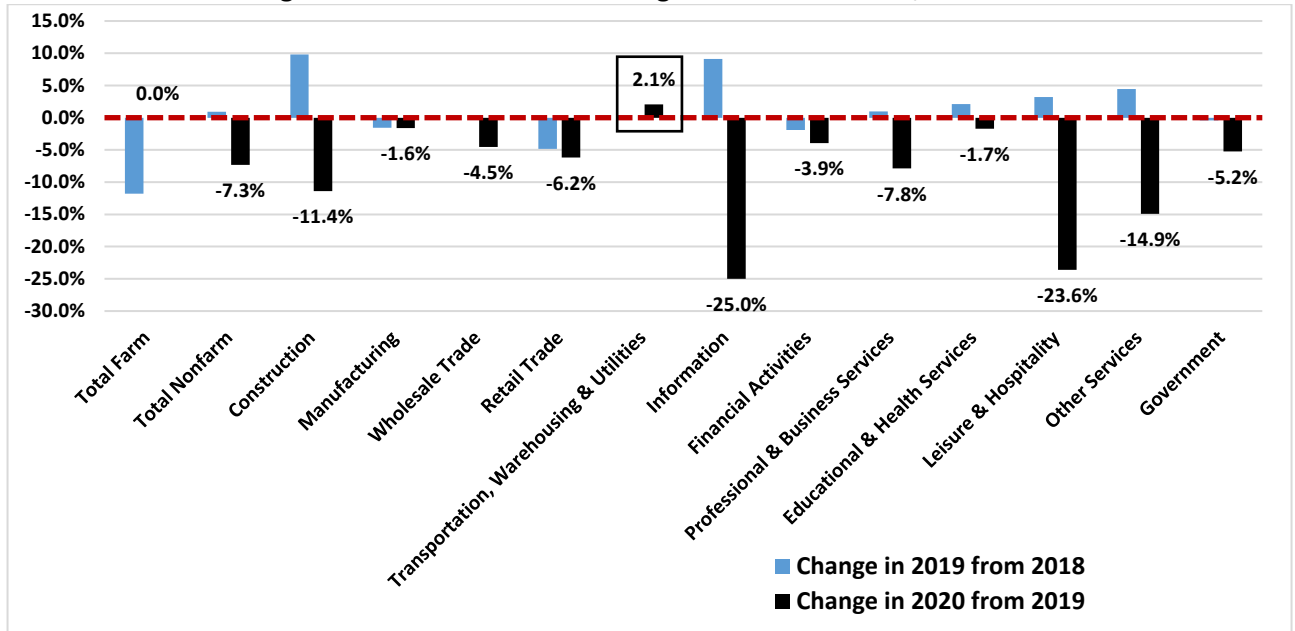
OPPORTUNITY: Base industry jobs lost in Solano County were primarily in services versus goods-producing industries, suggesting that the mix of goods-producing jobs was preserved or expanded by local policy declaring such businesses as "essential" as the COVID-19 recession began.

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Change in Jobs by Industry and Long-Term Jobs Forecasts

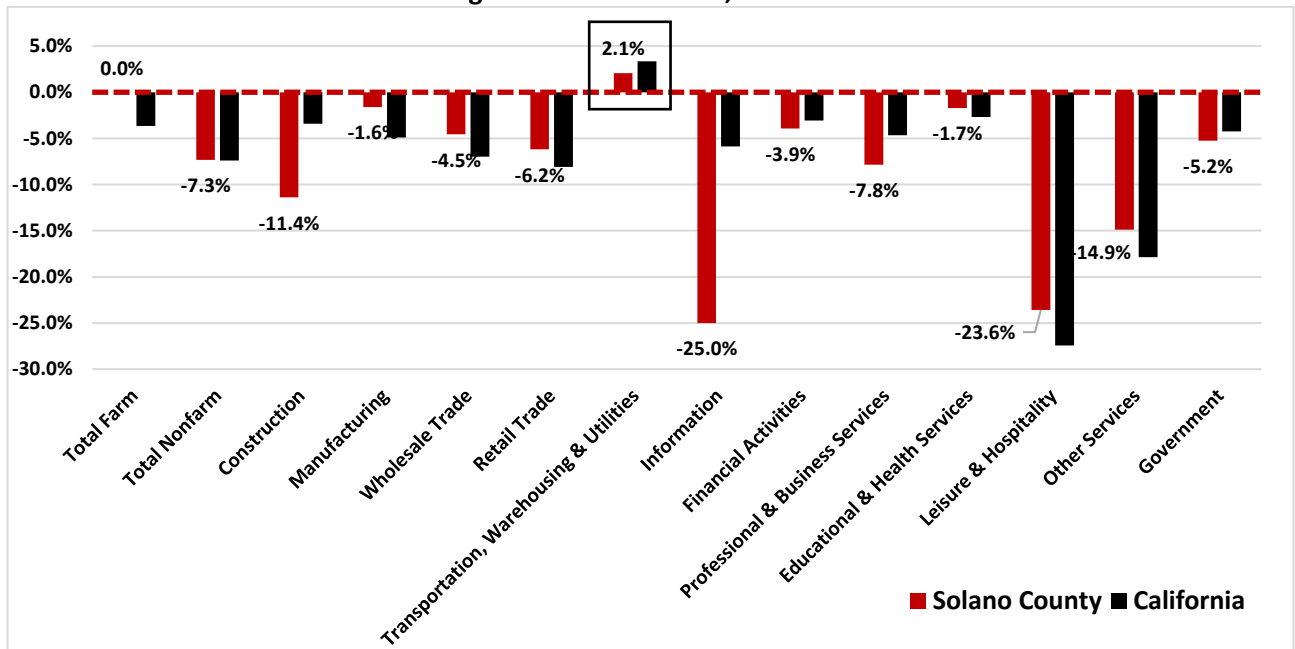
Many industries in Solano County’s economy had come back from initially lows in 2020 by the year’s end, but no one industry exited 2020 without job losses from 2019 except “Transportation, Warehousing and Utilities” (outlined in figures) and agriculture (no change).

Percentage Change in Jobs by Industry, Solano County
Change in 2019 from 2018 and Change in 2020 from 2019, Annual Data



Source: California Employment Development Department (<http://www.edd.ca.gov>)

Percentage Change in Jobs by Industry, Solano County and California
Change in 2020 from 2019, Annual Data



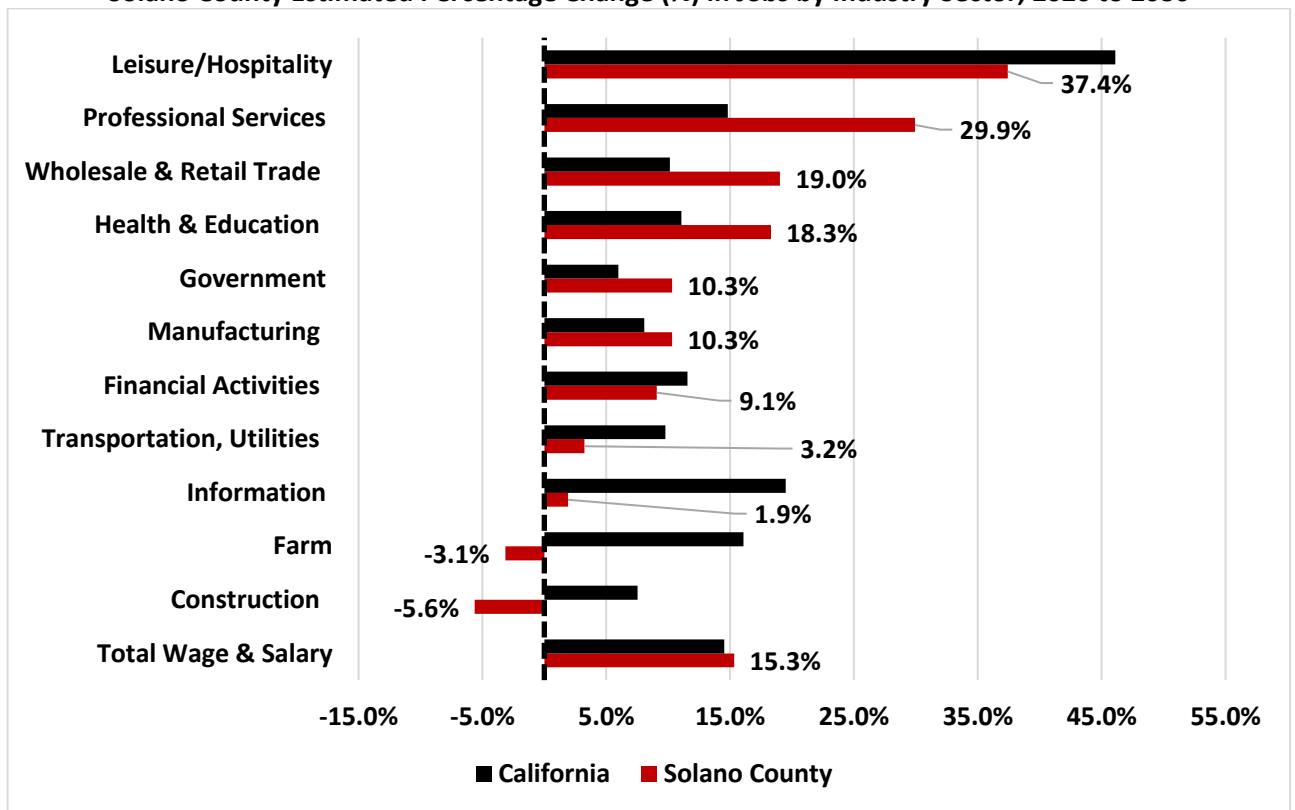
Source: California Employment Development Department (<http://www.edd.ca.gov>)

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Long-Term Jobs Forecast to 2030

The COVID-19 recession is likely to leave some longer-term concerns for jobs in specific industries. These include retail, restaurants, hotels and motels, and other personal services. Long-term jobs forecasts assume a certain amount of employer and population growth to then estimate employment growth. These estimates from CalTrans provide a perspective on county employment. Notice there is forecasted growth in leisure and hospitality from the end of 2020 to 2030 that is robust. Much of this growth is due to 2020 being a year where leisure and hospitality jobs contracted more than any other industry sector in this figure; these industries are expected to recover as the decade continues. Construction jobs in Solano County are forecasted to contract; such a change may be due to limited job loss in 2020 and low interest rates and housing policy providing more growth to 2025 and then slower growth to 2030. Solano County’s growth of jobs is forecasted to outpace California’s growth on average.

Solano County Estimated Percentage Change (%) in Jobs by Industry Sector, 2020 to 2030



Sources: California EDD (www.edd.ca.gov) and CalTrans (www.caltrans.org)

TAKEAWAY: While the jobs lost in 2020 were historic, the latter months of 2020 began jobs recovery and most industries saw jobs gains from the initial lows and forecasts suggest that jobs growth is coming across most industries to 2030.

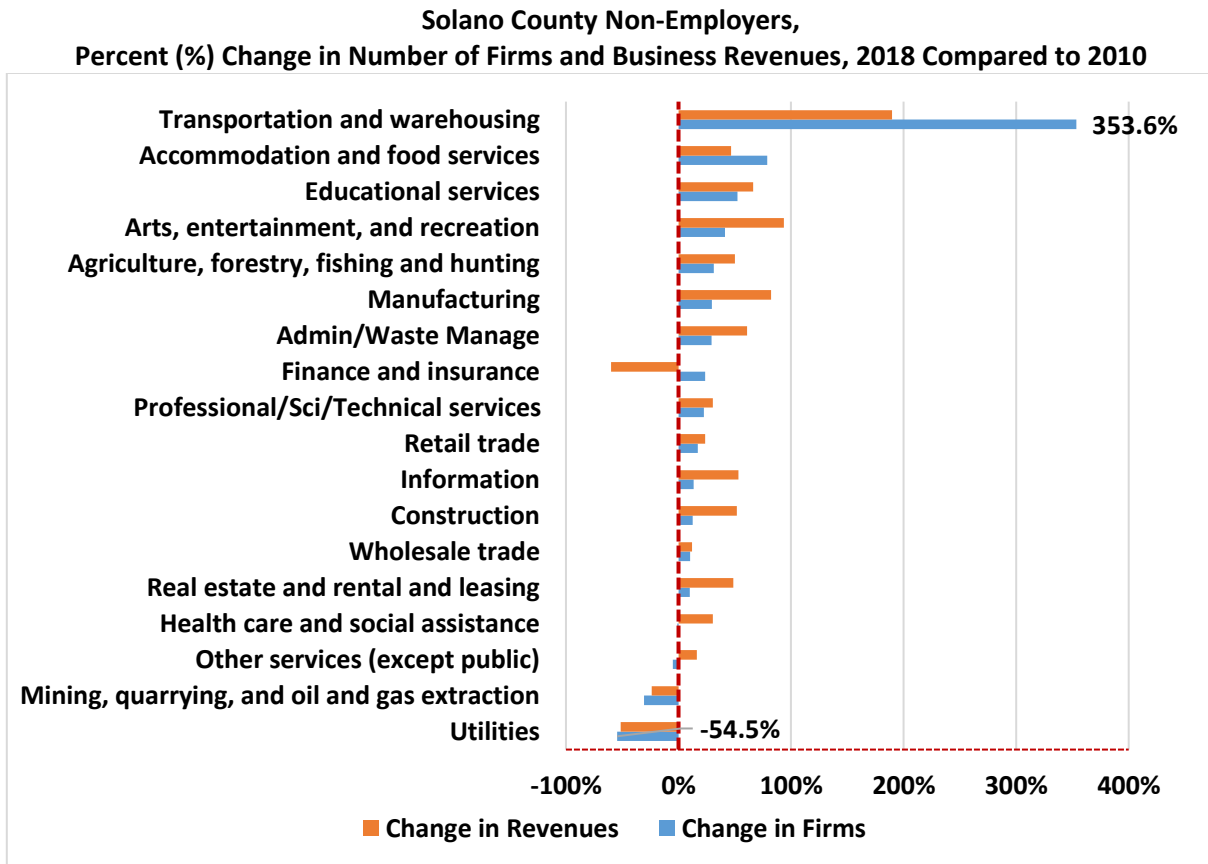
OPPORTUNITY: For industries in Solano County that have relatively low or negative growth forecasts from 2020 to 2030, these industries may provide some possible economic and workforce development opportunities. These forecasts show continued industry diversity in Solano County toward 2030.

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Businesses and Incomes

Non-Employer Businesses

The growth of transportation and warehousing businesses for self-employed, “non-employer” (those that hire fewer than four (4) workers) businesses from 2010 to 2018 continued to outpace all other self-employed businesses in Solano County (353.6 percent growth as shown in the figure). This is likely due to drivers being workers for example businesses such as Uber, Lyft, and Amazon Prime. Of Solano County’s 851 self-employed businesses that newly opened in 2018, 65.6 percent were transportation/warehousing businesses.



Source: Census Bureau (<http://data.census.gov>) 2018 is the latest data year available for Non-Employer data

TAKEAWAY: While growth in transportation and warehousing have dominated these data since 2015, manufacturing, farming, restaurants, and other industries also experienced growth in the number of businesses and revenues since 2010.

OPPORTUNITY: As the COVID-19 recession transitions to recovery, starting a new business for those workers that may not easily find work is a workforce development option. Assets need to be in place in Solano County and marketed in terms of available funding, business plan support and also working with workforce development partners (such as Solano Community College) for training opportunities.

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Paycheck Protection Program (PPP) Lending and Solano County in 2020

The Paycheck Protection Program (PPP) was part of each federal stimulus package after the COVID-19 recession began (April 2020). The idea was to provide grant funding to qualified businesses to reduce job losses; PPP lending allowed businesses to keep workers on payroll. The loan would convert to a grant if jobs were preserved. As of April 2021, 4,980 Solano County businesses utilized this program, reporting approximately 62,120 jobs protected. Nearly \$584,000,000 were borrowed in Solano County, close to 3.2 percent of county gross product in 2019. Solano County was 43rd in terms of highest percentage of gross product borrowed among the 58 counties; Marin, Napa and Sonoma counties were the top three counties in California borrowing PPP funds as a percentage of county gross product as of April 2021.

PPP Lending in Solano County, April 2020 to April 2021, Dollars Lent and Jobs Supported (Self-Reported by Borrower), and Number of Individual Borrowers

Industry	PPP Lending (Dollars)	Jobs Supported	Number of Borrowers
Construction	\$120,904,479	8,994	550
Accommodation and Food Services	\$58,767,926	10,539	543
Health Care and Social Assistance	\$56,212,109	6,856	601
Other Services (except Public Administration)	\$45,740,926	5,669	678
Advanced Manufacturing	\$42,794,193	3,010	139
Retail Stores	\$41,356,070	4,333	293
Professional, Scientific, and Technical Services	\$35,565,115	3,303	501
Food and Bev Manu	\$29,325,320	2,360	66
Long-Distance Travel and Hauling Transport	\$26,369,481	2,743	268
Wholesale Trade	\$26,281,394	1,968	129
Administrative, Support and Waste/Remediation Services	\$21,880,342	2,630	234
Real Estate and Rental and Leasing	\$14,579,174	1,435	222
Light Manufacturing	\$11,858,575	870	60
Agriculture, Forestry, Fishing and Hunting	\$8,821,083	1,301	84
Educational Services	\$8,325,003	1,356	91
Non-stores Retail	\$6,500,869	828	131
Arts, Entertainment, and Recreation	\$5,636,337	1,218	107
Postal and Delivery	\$5,328,409	495	39
Mining, Quarrying, and Oil and Gas Extraction	\$4,681,325	233	9
Unclassified	\$4,190,260	1,118	72
Finance and Insurance	\$3,772,460	356	105
Information	\$3,586,359	364	42
Utilities	\$705,174	73	5
Govt	\$604,384	48	8
Management of Companies and Enterprises	\$225,393	22	3
Totals	\$584,012,159	62,122	4,980

Source: United States Treasury, Small Business Administration and EFA, Data through April 1, 2021 (<https://sba.app.box.com/v/SBACovidResources>)

TAKEAWAY: PPP lending acted as a stop-gap measure to provide incentives for businesses not to reduce their employment levels after the COVID-19 recession became evident. Construction, hotels, motels, restaurants, and health care were among the largest volume users of PPP lending and also among the major employers in Solano County.

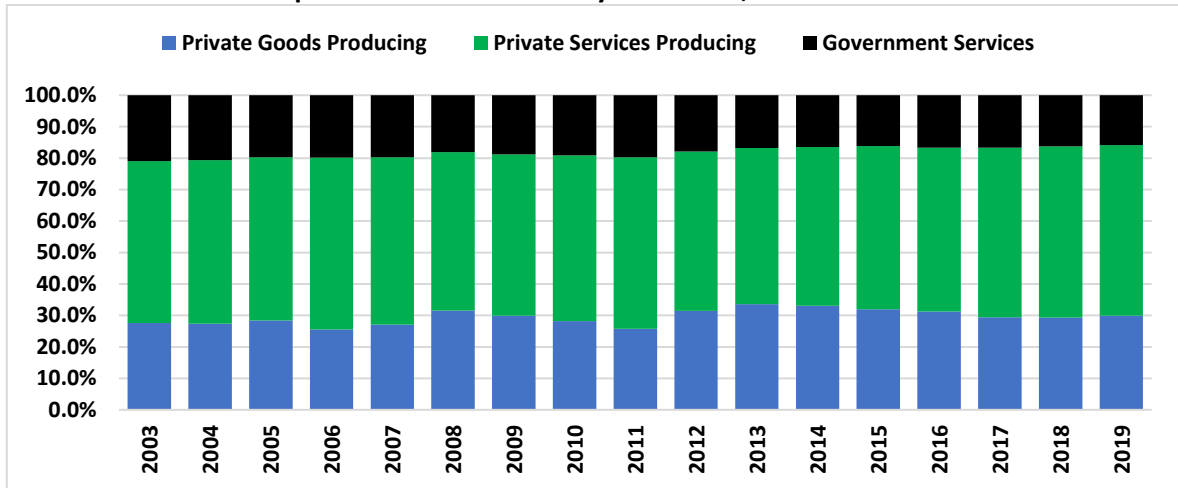
Beyond 2021: Because the PPP data are public, Solano County should track the individual businesses that utilized PPP lending to see how many remained in business 12 months after their borrowing and then survived beyond 2021 as a way to truly measure the PPP program's effectiveness locally and inform public policy concerning future assistance.

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Gross Product Change by Industry Sector and Overall Growth Rate

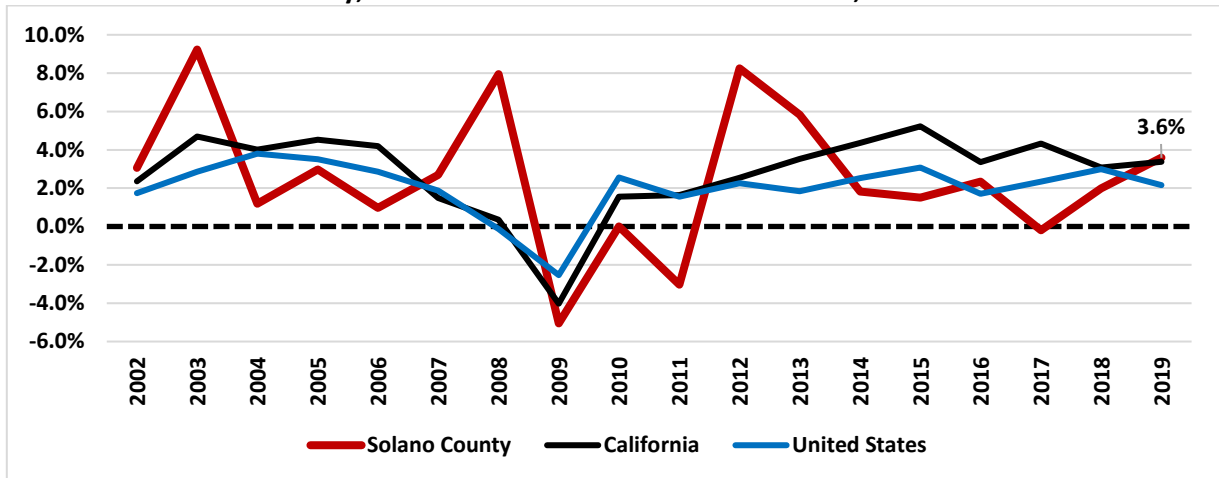
Gross product measures how employers add value to raw materials and create goods and services. Gross County Product (GCP) data show Solano County continued to grow across industry sectors and countywide in 2019 (the latest data available). Economic development initiatives such as Moving Solano Forward have made positive strides on both growth of gross product and economic diversity with more private sector than public sector jobs as employment increased since 2011.

Gross Product Share (%) by Major Industry Sector, 2001-19
Proportions in Solano County Over Time, in 2012 Dollars



Source: Bureau of Economic Analysis (www.bea.gov)

Gross Product Growth Annually, 2002–2019, Percent (%) Growth
Solano County, California and the United States Overall, in 2012 Dollars



Source: Bureau of Economic Analysis (www.bea.gov)

TAKEAWAY: Solano County’s gross product growth after inflation was 3.6 percent in 2019 (the latest data available), outpacing both the national (2.2 percent) and state (3.4 percent) economies.

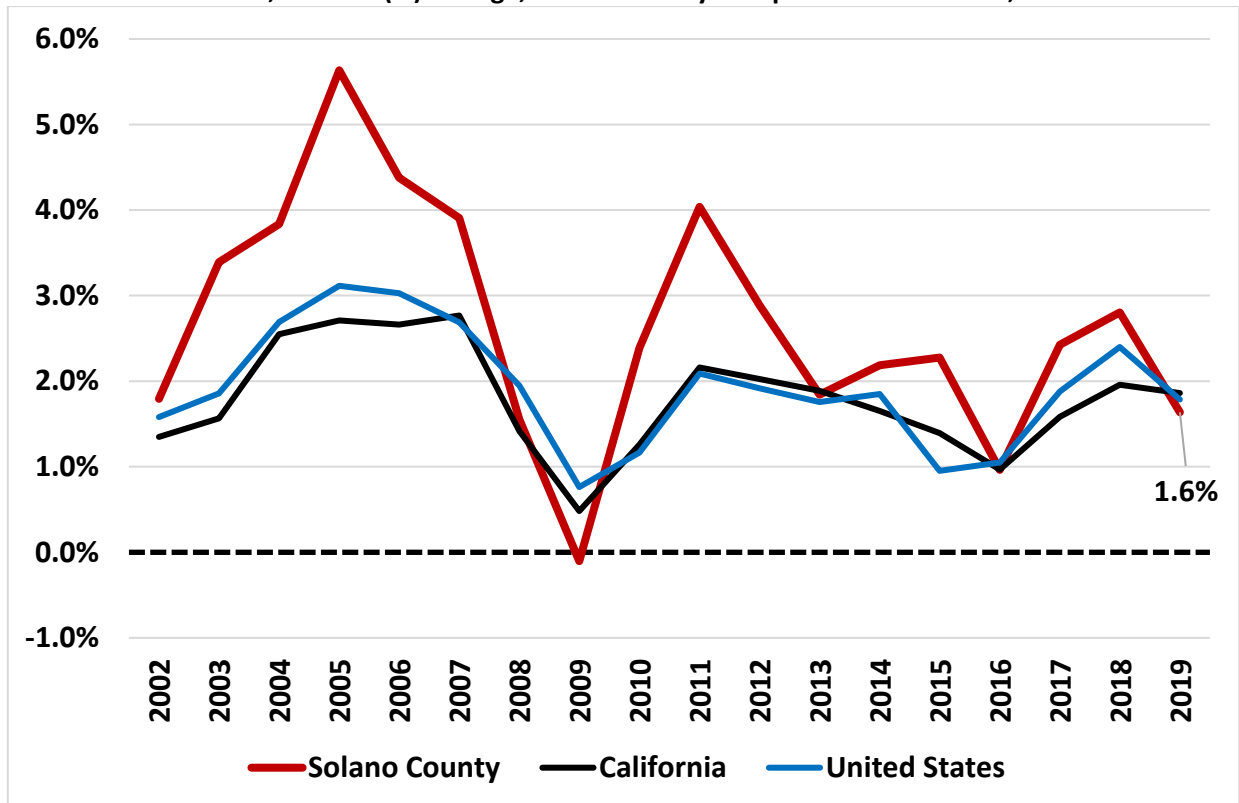
Beyond 2021: The sharp decrease in jobs during 2020 means a quick drop in gross product growth after inflation across all comparison areas, and slowly-rising prices may also affect inflation-adjusted growth in 2022 and 2023; however, 2021 should be a strong year of gross product growth as vaccines and lower COVID-19 case counts restore business and consumer confidence.

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Gross Product Deflator and Solano County's Local Cost of Living

While there is not a consumer price index (CPI) at the local level, the Gross Product Deflator (GP Deflator) calculated by the Bureau of Economic Analysis (www.bea.gov) is highly correlated with state and national CPI measures. The GP Deflator is the ratio of nominal to real (inflation-adjusted) gross product. For Solano County, a 1.6 percent change in 2019 (the latest data available) means a slowdown in local cost of living inflation, but it is 1.6 percent more expensive to live in Solano County since 2018.

GP Deflator, Percent (%) Change, Solano County Compared to US and CA, 2002-19



Source: Bureau of Economic Analysis, Regional Data (<http://www.bea.gov/regional>)

TAKEAWAY: The cost of living in Solano County changed at a slower pace than the national and state economies in 2019, all growing just under 2.0 percent. The local cost of living is tied closely to housing costs.

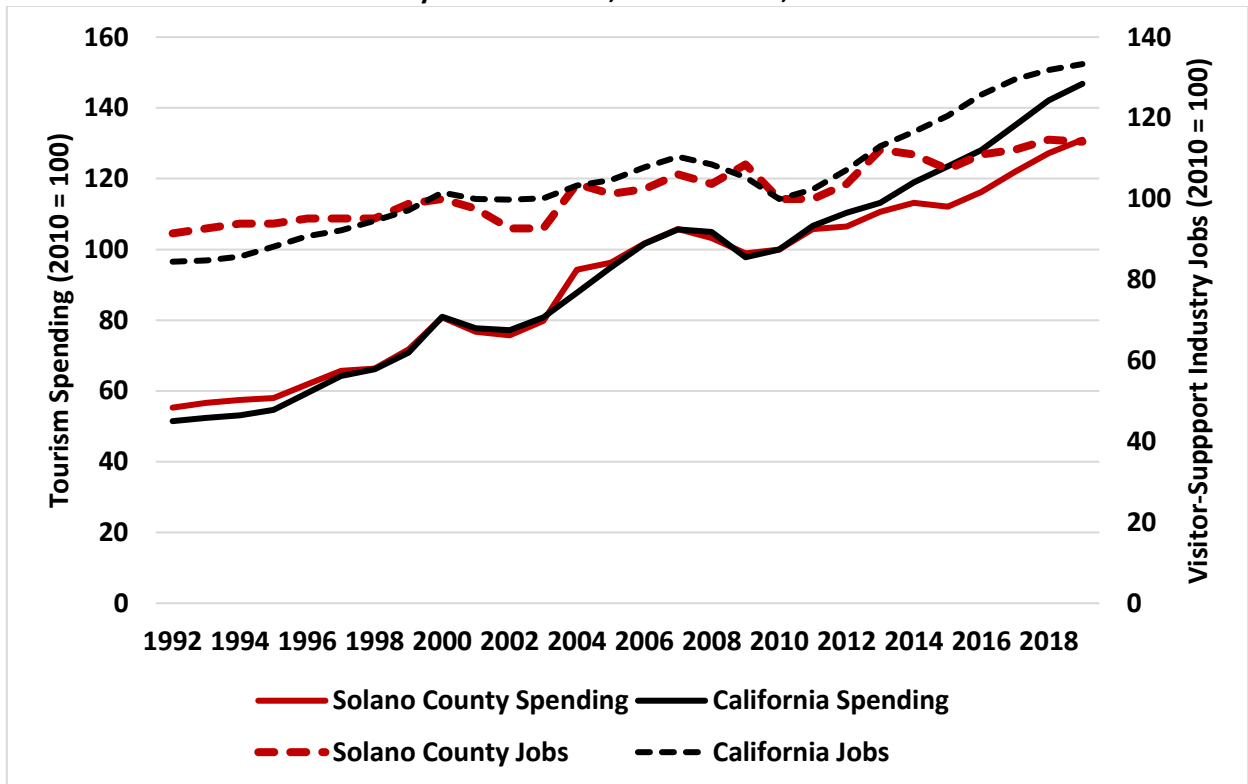
Beyond 2021: Housing prices in 2020 and 2021 rising put more pressure on the local cost of living; inflation predictions for the US economy are rising as of April 2021. The combination of relatively-large fiscal stimulus and low interest rates likely lead to larger changes in the cost of living from 2021 to 2023 than the 2011 to 2020 time period.

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Tourism Industry: Supporting Visitors

While 2020 was a very difficult year for visitor-supporting industries throughout California, 2019 (the latest data available) was yet another year of growth for both jobs and spending. For Solano County, tourism spending increased in 2019 while jobs growth serving tourism was relatively flat. According to Dean Runyan Associates, Solano County had approximately 9,360 jobs serving visitors, or 6.5 percent of jobs in 2019. Unfortunately, regional fires in northern California came again in both 2019 and 2020; the fires' effects were also felt in Solano County.

**Tourism Spending and Jobs, Visitor-Support Industries
Solano County and California, 1992 to 2019, Index 2010 = 100**



Source: Dean Runyan Associates (<http://www.deanrunyanassociates.com>), 2019 Report Available at <https://industry.visitcalifornia.com/research/economic-impact>

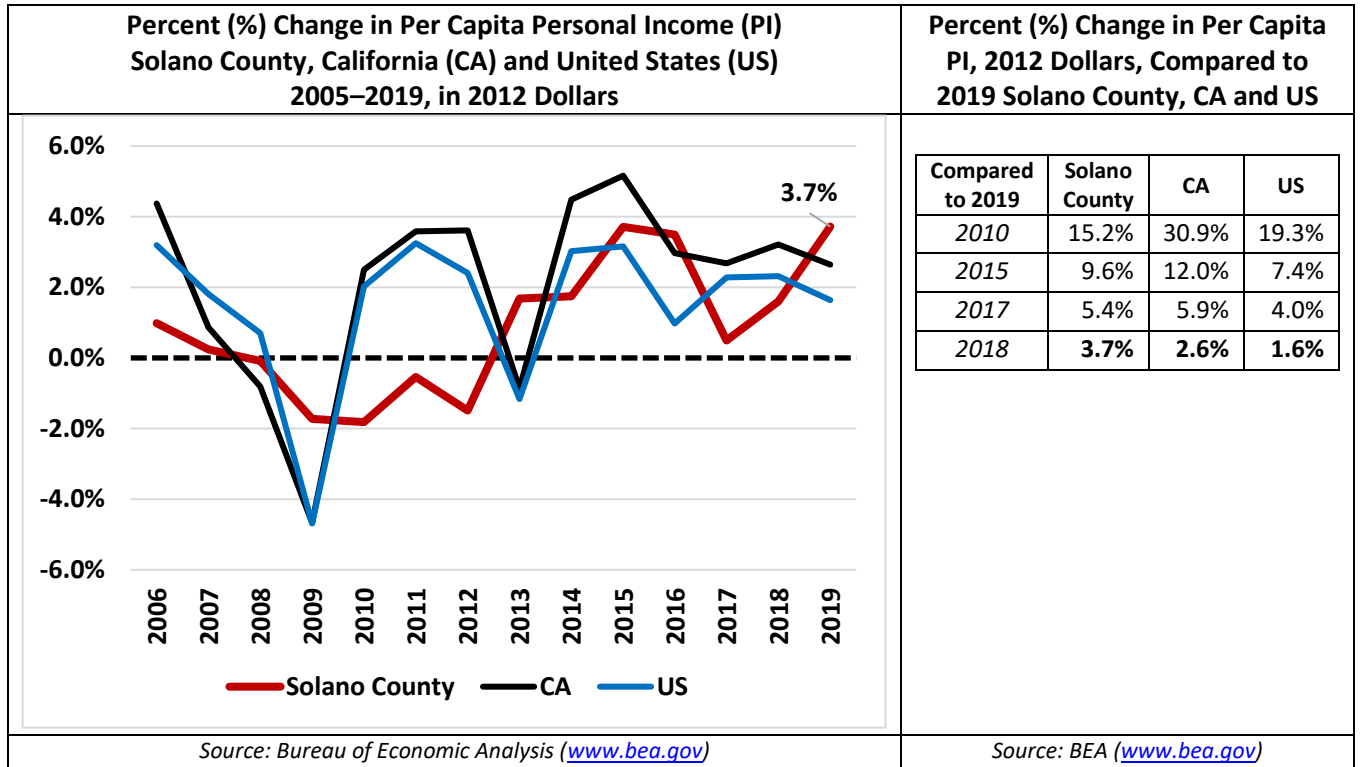
TAKEAWAY: Jobs in visitor-supporting industries fell slightly in 2019 versus 2018 and continued a relatively-flat trend in Solano County versus California on average since 2013. We saw earlier that “leisure and hospitality” jobs remained the industry with the largest downturn in jobs due to the COVID-19 recession as 2020 ended.

Beyond 2021: The COVID-19 recession hit jobs connected to serving visitors hardest: hotel, motel, restaurant, and retail workers. Without strong recovery and growth toward 2021 and 2022, there may be lingering effects on employment in these industries. Former workers in these industries are generally at wages below the county average, creating workforce-development opportunities and social challenges in Solano County to retrain or retool such workers as the economy recovers but old jobs do not return as quickly or at all.

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Personal Income

Solano County’s personal income per person level increased by 3.7 percent in 2019 (the latest data available) compared to 2018. The national and California economies experienced slower, per-capita income growth. Personal income estimates in Solano County are the sum of wages and salaries, social transfer payments from all levels of government, investment income (dividends, interest, and rents), income from owning a business (proprietor’s income), and other income sources for county residents.



TAKEAWAY: Personal income per capita increased again in 2019 and more quickly than the state or national economies. Jobs, housing price and equity market growth drove the increase in per-capita personal income as Solano County’s population growth also slowed a bit (see the Community Indicators section below).

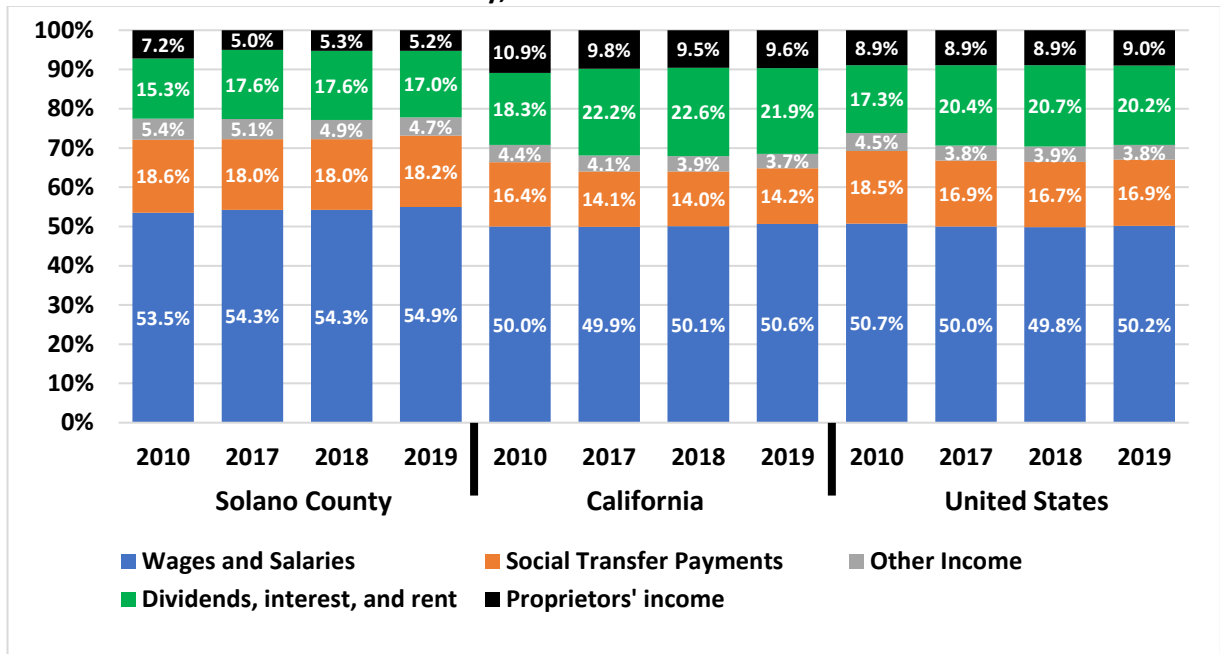
Beyond 2021: By avoiding both stock market and housing market contractions in 2020, personal income per person may be stable in 2021 and 2022 for Solano County, especially given federal fiscal stimulus that provided direct relief to lower-income households, households with children, and also in terms of unemployment benefits extensions and expansions. Such relief and stability may help restaurant and retail demand more quickly recover locally in Solano County because residential income levels and wealth were maintained.

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Sources of Personal Income

The figure shows California and the United States had slight growth in investment income (dividends, interest) proportions while Solano County was slightly lower at 17.0 percent of total personal income in 2019 (the latest data available). Governmental social transfer payments were 18.2 percent of Solano County’s total; transfer payments also include social assistance from county government, including \$4 million in rental assistance used by the County of Solano from the federal government’s CARES Act in April 2020 for County residents in need.

**Sources of Personal Income (Percent (%) of Total), 2010 to 2019, in 2012 Dollars, Selected Years
Solano County, California and the United States**



Source: Bureau of Economic Analysis (www.bea.gov)

TAKEAWAY: Solano County residents experienced a small increase in both wage and salary income and also from government payments (social transfer payments) in 2019 as a proportion of personal income overall. Business owners also saw a slight increase. **Beyond 2021:** With the large rounds of fiscal stimulus in both 2020 and 2021, Solano County (like most other counties in California) is likely to see a quick increase in the social transfer payments category as a share of county personal income.

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Business Affordability: Wages

Wages and salaries are a large part of both personal income and the costs of doing business. Occupation wage data for jobs in Solano County help compare such costs to other regional economies and the state overall. Solano County's median wage of \$21.76 was virtually equal to the statewide median wage of \$21.78 in Quarter 1 2020, just before the COVID-19 recession began. San Francisco and San Jose continue to have relatively-high median wage levels in 2020.

Solano County 2020 Wages and Occupations, Wage Data in 2020 Dollars and Percent (%) of Median Wages (\$/hour) in California

Occupational Categories	CA	Solano County Wages	Solano County	Napa County	Sonoma County	Sacramento MSA	Alameda County	San Jose MSA	San Francisco County
Total all occupations	\$21.78	99.9%	\$21.76	\$21.78	\$21.41	\$21.99	\$25.55	\$30.56	\$31.29
Management Services	\$59.75	85.1%	\$50.86	\$55.77	\$52.95	\$53.44	\$66.16	\$78.91	\$76.62
Business and Financial Operations	\$36.95	100.4%	\$37.08	\$35.70	\$34.41	\$35.76	\$40.28	\$43.70	\$44.39
Computer and Mathematical	\$52.47	81.4%	\$42.73	\$40.04	\$41.91	\$46.05	\$55.47	\$63.89	\$61.42
Architecture and Engineering	\$47.52	89.4%	\$42.48	\$39.69	\$46.01	\$48.17	\$48.69	\$57.53	\$52.15
Life, Physical, and Social Science	\$40.87	103.3%	\$42.20	\$33.34	\$38.92	\$37.06	\$45.46	\$41.68	\$49.81
Community and Social Services	\$25.67	86.1%	\$22.11	\$26.70	\$23.34	\$26.19	\$27.46	\$29.11	\$28.95
Legal Services	\$50.77	89.9%	\$45.62	\$58.28	\$48.90	\$54.29	\$52.09	\$79.03	\$69.43
Education, Training, and Library	\$28.47	89.4%	\$25.45	\$26.34	\$27.48	\$26.90	\$27.73	\$30.57	\$30.85
Arts, Design, Entertainment, Sports, Media	\$30.13	75.7%	\$22.82	\$25.60	\$27.51	\$25.11	\$27.36	\$32.94	\$36.66
Healthcare Practitioners and Technical	\$46.05	110.8%	\$51.04	\$44.65	\$44.76	\$50.90	\$51.40	\$57.65	\$57.42
Healthcare Support Services	\$14.32	101.7%	\$14.57	\$16.07	\$16.20	\$14.33	\$15.39	\$15.85	\$16.09
Protective Services	\$22.96	192.1%	\$44.11	\$23.22	\$25.37	\$22.48	\$24.89	\$23.03	\$22.90
Food Preparation and Serving-Related	\$13.47	100.2%	\$13.50	\$14.15	\$14.04	\$13.50	\$14.89	\$14.89	\$16.37
Building and Grounds Maintenance	\$16.15	99.7%	\$16.10	\$16.37	\$17.33	\$15.95	\$20.16	\$17.77	\$18.32
Personal Care and Services	\$14.62	97.1%	\$14.20	\$15.02	\$15.22	\$13.95	\$15.79	\$15.70	\$17.28
Sales and Related Services	\$16.53	92.8%	\$15.34	\$20.02	\$18.17	\$15.56	\$18.14	\$20.45	\$22.85
Office and Administrative Support	\$20.78	103.4%	\$21.49	\$22.81	\$21.50	\$20.32	\$23.78	\$24.08	\$25.88
Farming, Fishing, and Forestry	\$13.50	103.3%	\$13.94	\$17.97	\$16.30	\$13.01	\$16.89	\$13.50	\$18.46
Construction and Extraction	\$28.08	109.4%	\$30.73	\$28.71	\$30.06	\$26.74	\$34.16	\$30.80	\$33.42
Installation, Maintenance, and Repair	\$25.36	108.6%	\$27.54	\$26.24	\$25.72	\$25.31	\$28.60	\$28.56	\$29.80
Production Jobs	\$17.56	115.4%	\$20.26	\$22.75	\$18.77	\$18.00	\$21.06	\$19.86	\$19.79
Transportation and Material Moving Services	\$16.48	103.2%	\$17.00	\$18.20	\$17.39	\$16.09	\$19.09	\$18.80	\$20.82

Source: Employment Development Department, Occupations Data (www.edd.ca.gov), Q1 2020, 2010 Data Adjusted for Inflation
Wages in GREEN are for occupations where Solano County median wages are greater than California wages.

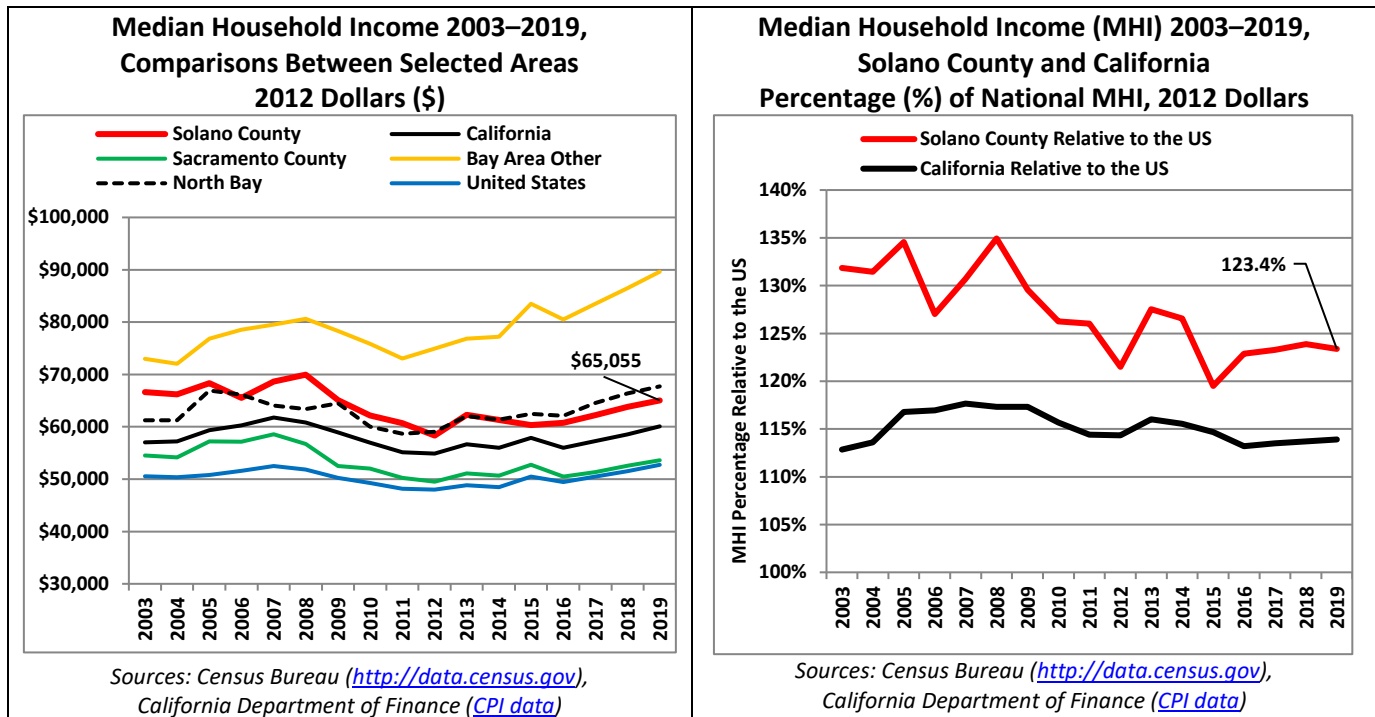
TAKEAWAY: The gap between Solano County's median wage per hour (\$21.76) and the state median wage (\$21.78) shrunk in 2020 to its lowest gap since 2010; many occupational categories pay higher median wages in Solano County (shown in GREEN) than the state on average, mainly in services jobs but also those in production and manufacturing.

OPPORTUNITY: Versus the Bay Area's urban counties, Solano County remains a place of relatively low wages. These lower wages may also be why many Solano County's residents commute out of the county versus working within it (see section on commuting in Community Indicators). An opportunity lies in expanding a business mix that achieves Moving Solano Forward's goals and also provides county residents job opportunities within the county.

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Median Household Income Comparisons

For Solano County, inflation-adjusted, MHI increased in 2019 (the latest data) as compared to the state and national averages, adding to recent gains since 2017. Comparison regions shown in the figures all experienced rising median household income in 2019. The median “household” here represents four people in one housing unit. In 2019, Solano County’s MHI in 2012 dollars was \$65,055, up \$1,243 from 2018.



TAKEAWAY: Median household income (MHI) after inflation adjustments increased in 2019 (the latest data available) for Solano County as MHI has in each year since 2015.

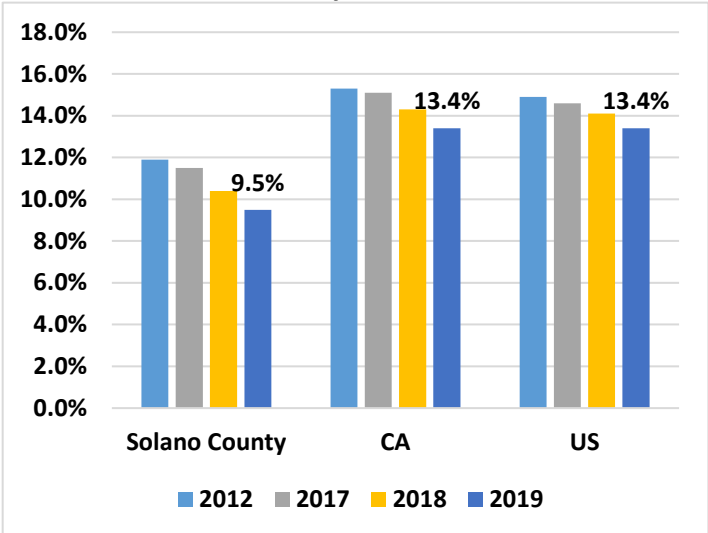
Beyond 2021: Measures of local standard of living including MHI may change as a result of COVID-19 for three reasons: (1) fiscal stimulus provided household income in the face of job loss; (2) lost jobs became augmented unemployment insurance (UI) benefits stabilizing household income in addition to fiscal stimulus payments; and (3) higher-income workers lost fewer jobs than lower-income workers, potentially leaving Solano County’s income distributions somewhat unchanged for 2021 and 2022.

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Poverty Rates

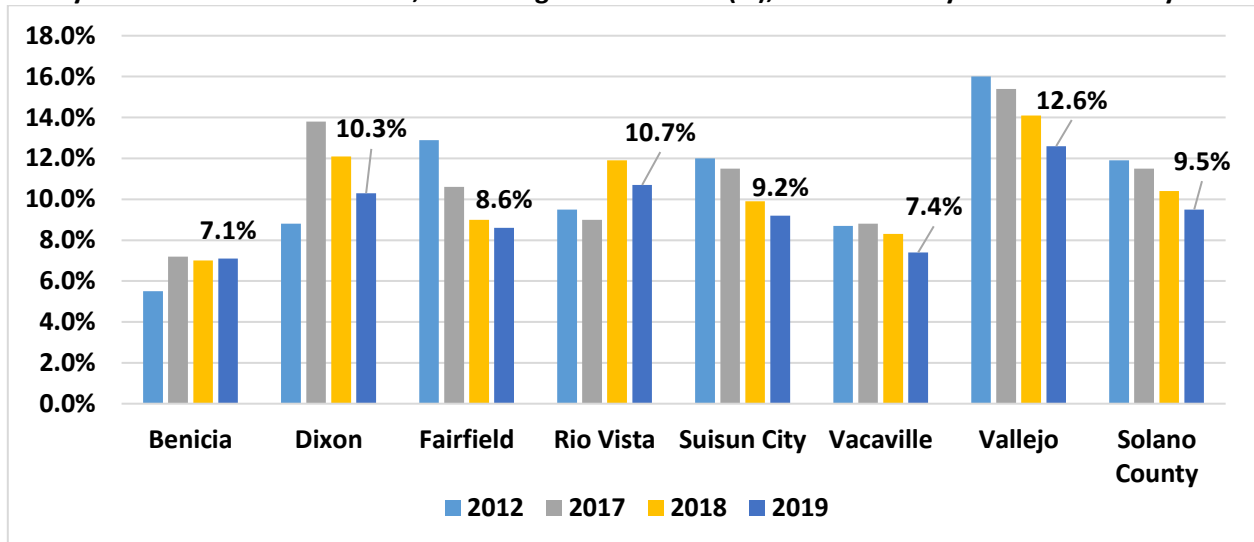
Poverty rates continued to improve across Solano County in 2019 (the latest data available). The American Community Survey (ACS) of the Census Bureau tracks poverty rates, the percent of local residents with annual incomes below the federal poverty line (for a family of four, the federal poverty level was an annual income of \$25,750 or less in 2019). Poverty rates shown here are based on averages over five years from the ACS. Solano County had a poverty rate of 9.5 percent in 2019. Since 2010, Vallejo continued to have a relatively high poverty rate among Solano County cities.

Poverty Rates, 2012, 2017, 2018, 2019; Percent (%) of Residents in Solano County, California and United States



Source: American Community Survey (ACS) Table DP03: <http://data.census.gov>

Poverty Rates in 2012 and 2017-19, Percentage of Residents (%), Solano County Cities and County Overall



Source: American Community Survey (ACS) Table DP03: <http://data.census.gov>

TAKEAWAY: Poverty rates continue to fall across Solano County in 2019 (the latest data). **Beyond 2021:** Because of job losses in the COVID-19 recession remain early in 2021, primarily in lower-wage occupations and industries, Solano County may face rising household poverty levels in 2021 and 2022. Fiscal stimulus payments, unemployment benefits should help to stabilize poverty incidence in Solano County, but perhaps not beyond 2021 if the local economy does not provide opportunities for displaced workers.

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Agriculture

Agricultural values increased in 2019 (the latest data) from 2018 slightly. Solano County’s farmers are supply-chain partners with both global and local food and beverage manufacturing, thus are a base industry. The Solano County Agricultural Commissioner’s annual data (the Crop Report) showed almonds fell in value while walnuts increased sharply in value. Cattle and calves value fell also.

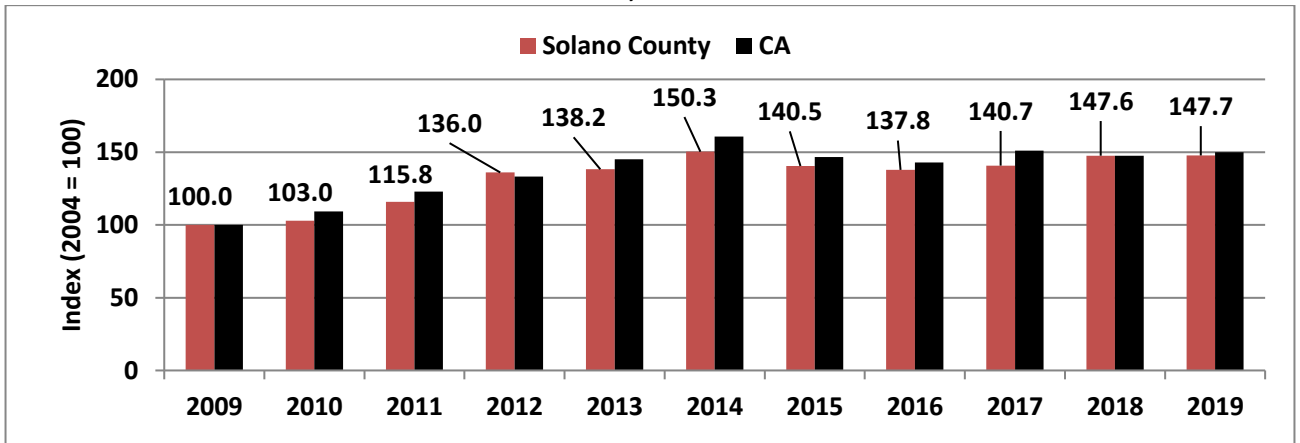
**Solano County Top 10 Agricultural Industry Revenues (\$)
2010, 2015, 2016, 2017, 2018, and 2019 Sorted by 2019 Values**

Agricultural Product	2010	2015	2016	2017	2018	2019
Total Solano County	\$259,398,000	\$353,869,000	\$347,172,000	\$354,556,000	\$371,715,000	\$372,113,000
Walnuts	\$9,274,800	\$44,822,000	\$47,358,000	\$25,133,000	\$27,492,000	\$44,822,000
Nursery Products	\$22,608,000	\$39,754,000	\$44,627,000	\$43,248,000	\$31,231,000	\$39,754,000
Almonds	\$23,352,000	\$35,917,000	\$38,619,000	\$29,299,000	\$55,312,000	\$35,917,000
Tomatoes (Processed)	\$36,901,400	\$33,843,000	\$27,022,000	\$34,720,000	\$37,041,000	\$33,843,000
Alfalfa	\$8,468,100	\$22,267,000	\$25,612,000	\$31,746,000	\$27,159,000	\$22,267,000
Grapes	\$7,845,300	\$19,560,000	\$20,369,000	\$29,404,000	\$21,587,000	\$19,560,000
Sunflower Seeds	\$31,161,700	\$11,414,000	\$17,233,000	\$25,203,000	\$15,666,000	\$11,414,000
Sheep	\$6,355,600	\$9,339,000	\$6,032,000	\$3,721,000	\$4,386,000	\$9,339,000
Cattle/Calves	\$19,742,700	\$9,192,000	\$25,113,000	\$38,746,000	\$36,967,000	\$9,192,000
Wheat	\$9,672,700	\$7,428,000	\$7,261,000	\$7,580,000	\$5,825,000	\$7,428,000
All Other Ag Products	\$84,015,700	\$120,333,000	\$87,926,000	\$85,756,000	\$109,049,000	\$138,577,000

Source: Solano County Agricultural Commissioner

(http://solanocounty.com/depts/agriculture/crop_report/2009_2019.asp)

**Total Agricultural Value, Solano County and California, 2004 to 2019
Current Dollars, Index 2009 = 100**



Sources: BEA (www.bea.gov) and Solano County Agricultural Commissioner

TAKEAWAY: Agricultural values increased slightly in 2019 (the latest data), and the largest agricultural markets shifted in terms of crops or livestock produced in the county from 2018.

OPPORTUNITY: Linking local farmers and their products to local food and beverage producers that need similar inputs can help support local farmers, provide more food resiliency for regional communities during fire or disaster generally as the regional economy recovers from the COVID-19 recession. Regional fires have not been as detrimental to agriculture as potential drought conditions may be.

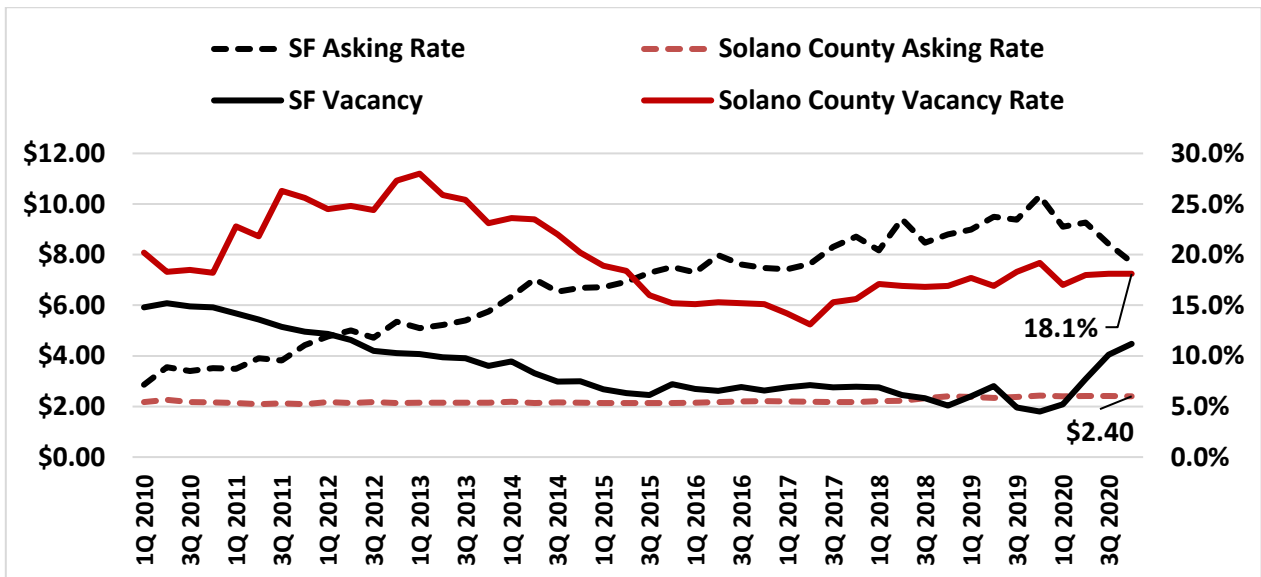
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Commercial RE and Housing Demand

Commercial Real Estate Pricing and Vacancy

Once the COVID-19 recession began, commercial real estate markets became a concern. As of 2020 Quarter 4, there have been quick increases in vacancy rates in San Francisco (the historic comparison area for Solano County and this Index since inception) and falling asking-lease rates. For Solano County, very little changed in the first three quarters of recession. Prices for office space in San Francisco County were approximately \$7.70 per square foot (sq ft) as of Quarter 4 2020 with a vacancy rate of 11.2 percent compared to \$2.40 per sq ft in Solano County for Class A space and 18.1 percent vacancy. Industrial space vacancy in Solano County was at 4.1 percent as 2019 ended (down from 5.6 percent in 2019 Quarter 4, priced at \$0.70 per square foot on average (up from \$0.63 in 2019 Quarter 4).

Solano County Office Space Asking Lease Rates(\$)/Sq Ft and Vacancy Rates (%), 2010 Q1 to 2020 Q4, Compared to San Francisco, Class A Space



Source: [Colliers International](#)

Asking Price is indicated on the left-hand axis; Vacancy Rate is indicated on the right-hand axis.

TAKEAWAY: For the first time in 10 years, vacancy rates in Solano County changed very little at the same time that San Francisco’s vacancy rates increased.

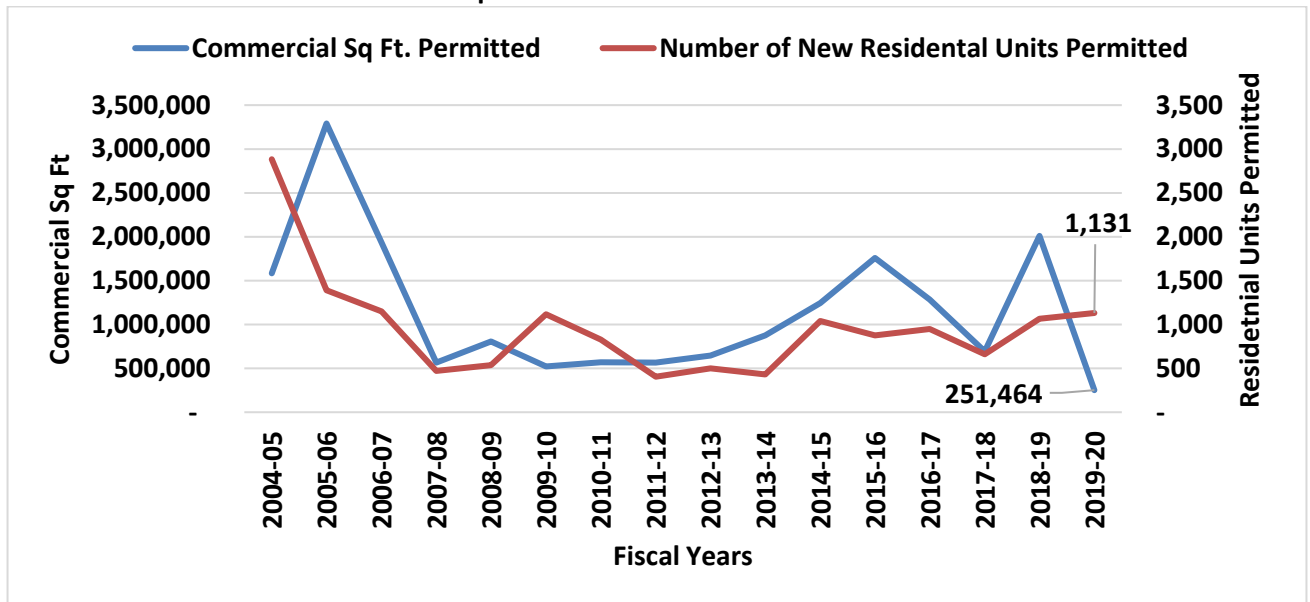
OPPORTUNITY: The COVID-19 recession led some Bay Area employers to allow working from home as the primary way to work. Residents of Solano County that were commuters may work from home in 2021 and perhaps beyond; new residents of Solano County from 2020 forward may also plan to work primarily from home. Solano County’s vacant office spaces may have more demand in 2021 and 2022 as gathering spaces for regional workers that used to commute to the urban Bay Area and now work from home. Such spaces may fuel entrepreneurship or provide indirect economic development in technology businesses by locating satellite offices in Solano County.

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Building Permits

Building permits for new residential units in Solano County increased at a faster pace in fiscal year 2019-20 versus the previous year (+1,131 units permitted), despite the COVID-19 recession beginning in that fiscal year's final quarter. Permitted, commercial square feet grew more slowly from the previous fiscal year, likely due to both rising vacancy rates regionally and also concerns over the types of commercial space that may lease profitably to 2025 outside of warehousing and industrial spaces. Approximately 251,000 square feet of new commercial space was permitted in the period of July 2019 to June 2020, 1.75 million fewer feet than fiscal year 2018-19.

Solano County Residential and Commercial Building Permits, Fiscal Years 2004-05 to 2019-20
Commercial Square Feet and Residential Units Permitted



Source: County of Solano, data provided by county staff

TAKEAWAY: Building permits for new homes increased in fiscal year 2019-20, slightly more units than the previous fiscal year permitting 2,197 units in two fiscal years, but new commercial space permitted grew more slowly than in recent fiscal years.

OPPORTUNITY: For commercial real estate markets, COVID-19 may leave some problems in retail and in restaurant spaces. New commercial spaces are more likely to happen in industrial and warehousing markets, given the increase in logistics demand from internet purchases and delivery at home retail modes for many businesses otherwise. The short-term fate of office and retail spaces in Solano County is likely to take until 2022 to be completely known. Building permits for new homes also help achieve regional housing needs per draft RHNA estimates below as of April 2021 (RHNA estimates are subject to change).

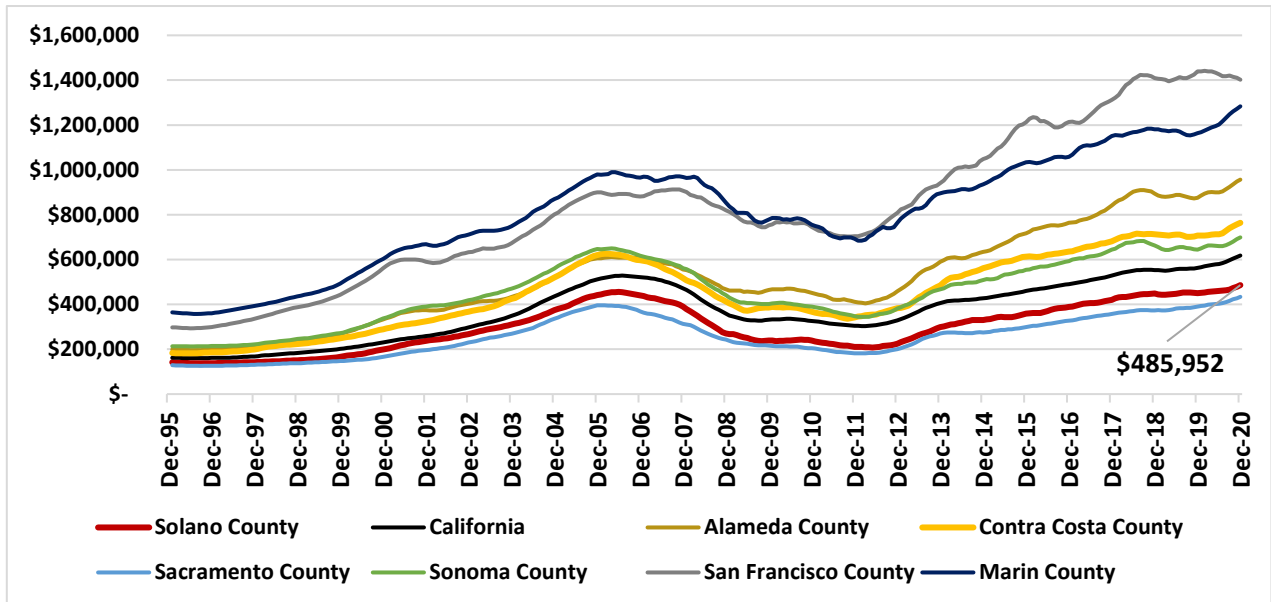
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Housing Markets

Median Home Prices and Affordability

Solano County's median home price ended 2020 at approximately \$485,950, up 7.9 percent from December 2019. The statewide median home price was \$618,000 according to Zillow™ Research (+10.9 percent) as 2020 ended. The first figure shows home prices in current dollars for selected places and California on average as compared to Solano County from January 1996 to December 2020.

Median Home Price, 1996 to 2020, Selected Area Comparisons in Current Dollars, Monthly



Source: Zillow® Research (<https://www.zillow.com/research/data/>)

Note: Sacramento and San Francisco counties are shown alone based on their size within their respective metro areas (MSAs).

The COVID-19 recession shifted housing affordability based on lower median income levels (due primarily to job losses) for Solano County residents and rising home prices. This measure is from California Association of REALTORS® and is a “Housing Affordability Index” or HAI. The HAI is a ratio of households that can pay the cost of owning a home (mortgage, average cost of utilities and maintenance, etc.) at the current median household income in an area.

Housing Affordability Index, 2010 Q3 to 2020 Q3
Percent (%) of Households That Can Afford a Median-Priced Home

Quarter	Solano	Sacramento	Calif.	Sonoma	Napa	Santa Clara	Alameda	Contra Costa	Marin	San Francisco
2010.Q3	71%	68%	46%	40%	41%	30%	31%	21%	23%	22%
2011.Q3	75%	72%	52%	46%	48%	34%	36%	27%	25%	26%
2012.Q3	77%	73%	49%	46%	45%	32%	34%	28%	27%	25%
2013.Q3	56%	50%	32%	31%	28%	22%	21%	22%	18%	16%
2014.Q3	49%	48%	29%	29%	21%	21%	21%	20%	15%	12%
2015.Q3	45%	47%	29%	26%	23%	19%	20%	34%	19%	11%
2016.Q3	43%	43%	30%	26%	24%	21%	23%	36%	18%	13%
2017.Q3	43%	43%	28%	25%	26%	17%	20%	33%	18%	13%
2018.Q3	38%	42%	27%	22%	24%	17%	18%	32%	19%	15%
2019.Q3	47%	45%	31%	28%	29%	22%	26%	39%	22%	18%
2020.Q3	45%	44%	28%	29%	27%	22%	24%	34%	22%	20%

Source: California Association of REALTORS® (<http://www.car.org/marketdata/data/haitraditional/>),

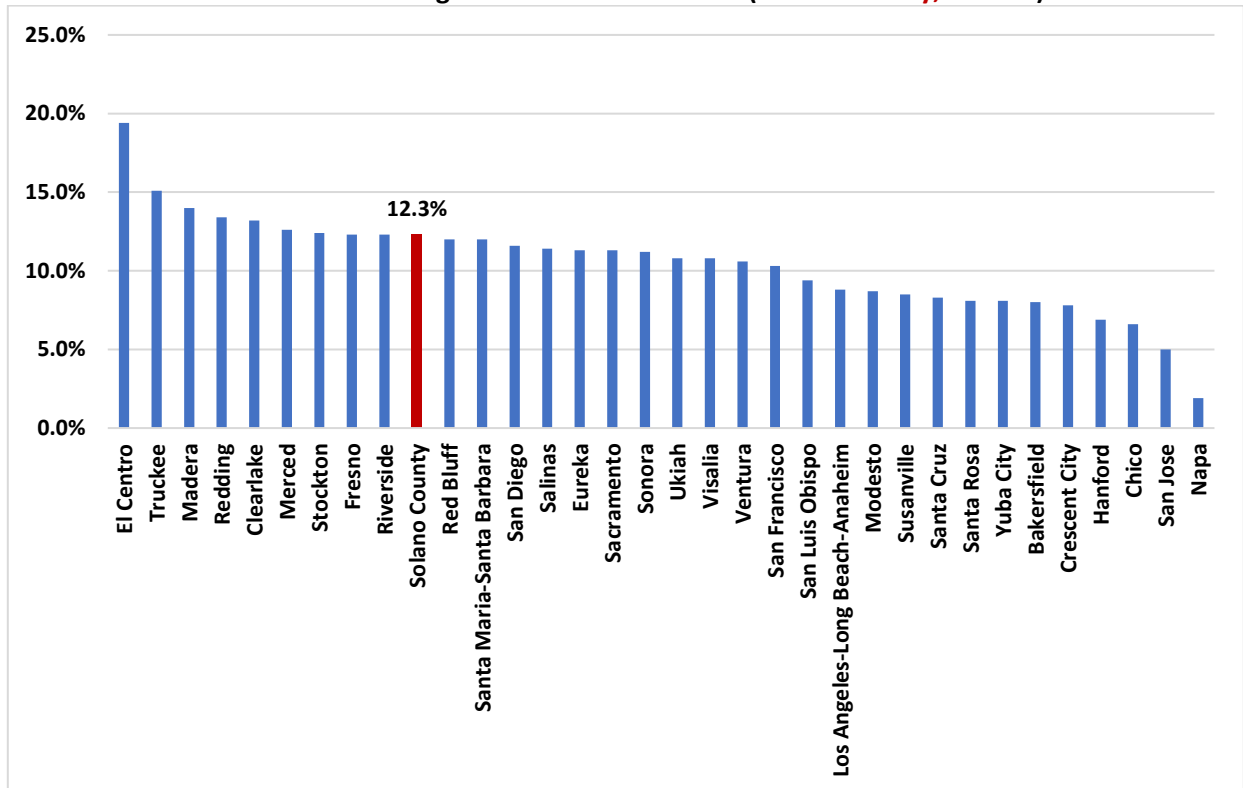
Quarter 3 2020 is the latest data point as of March 2021

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Median Home Price Forecasts

Solano County is forecasted for another year of median home prices rising. The latest forecast (as of the time of this writing) per Zillow™ Research is 12.3 percent growth for Solano County from March 2021 to March 2022. This growth forecast is larger than all regional comparison areas. We are likely to see forecasts revised downward later in 2021 as rising market prices are beginning to flatten early in 2021, especially if long-term interest rates begin to rise.

Housing Forecast, March 2021 to March 2022, California and California Metro Areas, Forecasted % Change in Median Home Price (Solano County, +12.3%)



Source: Zillow® Research (<https://www.zillow.com/research/data/>),
March 2021 to March 2022 Forecast latest available as of April 2021

TAKEAWAY: Solano County median home prices experienced strong growth in 2020 and are forecasted for more price growth to 2022, affecting current homeowner wealth positively but home purchase affordability negatively.

Beyond 2021: Housing burden (the percent of monthly income that is paid for housing) may increase after 2021 unless there is obvious economic recovery for lower-income households. Refinancing home mortgages took place in 2020 as interest rates fell, reducing housing cost burdens for many **current** homeowners. Rising inflation expectations may increase interest rates, including mortgage rates, slowing down the growth of median housing prices.

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Regional Housing Needs Allocation (RHNA)

Each of Solano County's cities face a regional allocation for new housing units from the State of California as policy. Because cities and counties have different zoning and general plans concerning housing units, the regional housing needs allocation or RHNA estimates are sometimes highly debated by the Bay Area's city and county governments. These numbers are a part of Plan Bay Area, regional planning for employment, housing and ultimately transportation infrastructure by California's Metropolitan Transportation Authority (MTC). Notice in the figure that over one-half of new housing units needed to serve Solano County residents are for those with less than 120 percent of area median income.

DRAFT Regional Housing Needs Allocation (RHNA), Number of Units by Defined Income Categories Years 2023 to 2031, Solano County as of April 2021

Jurisdiction	VERY LOW INCOME (<50% of Area Median Income)	LOW INCOME (50-80% of Area Median Income)	MODERATE INCOME (80-120% of Area Median Income)	ABOVE MODERATE INCOME (>120% of Area Median Income)	TOTAL
SOLANO COUNTY					
Benicia	200	121	117	273	712
Dixon	116	64	65	184	429
Fairfield	774	453	525	1,239	2,992
Rio Vista	90	46	56	177	369
Suisun City	162	97	100	270	629
Vacaville	695	410	413	1,118	2,626
Vallejo	685	371	501	1,354	2,921
Unincorporated Solano	81	49	55	129	314
Solano County	2,803	1,612	1,832	4,745	10,992

Source: RHNA Subregional Delegation, report by Placeworks Consulting for [Metropolitan Transportation Commission](#) (MTC).
Data provided by County of Solano. **These are provisional numbers and may change after April 2021.**

TAKEAWAY: With lower interest rates and higher-income workers and households not having the same effects on jobs or wealth as lower-income households, demand to purchase homes in Solano County has driven median home prices up during the COVID-19 recession, and forecasts to 2022 remain strong as of March 2021. Recent permitting data suggests Solano County can achieve these goals.

OPPORTUNITY: As rising home prices change affordability for local residents, Solano County can use the RHNA data to consider ways to motivate more construction of residential units and broaden the mix of unit types available versus single-family homes alone.

Summary on Housing Markets

As of March 2021 (the latest data available), Solano County housing markets continue to provide increased values and take advantage of incentives for home ownership. Like other markets, the current rise is not only a function of slow-growing supply, it is also a function of rising demand due to a lower cost of credit (lower interest rates) and also relatively-lower prices in Solano County versus Bay Area counties otherwise. What the RHNA estimates suggest is more, new units are coming to Solano County; their mix (rental versus ownership focused) helps to determine supply of homes for sale through 2030. The regional mix must also be considered, as well as how workers may have the option or be asked explicitly to work from home.

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Social Equity Metrics: Baseline for Monitoring in Solano County

This 2020 Index of Economic and Community Indicators is adding three data points to monitor as “social equity” metrics. These variables provide one way, based on best practices, of monitoring social equity progress for Solano County: (1) Median Household Income by Head of Household race/ethnicity; (2) Poverty Rates by race/ethnicity; and (3) Homeownership by race/ethnicity. Median household income has been inflation-adjusted to show “real” progress for different groups to 2012 dollars.

Median Household Income, 2012 and 2019, 2012 Dollars, Solano County, California and United States

Race or Ethnicity	2012			2019		
	US	CA	Solano County	US	CA	Solano County
Hispanic or Latino origin	\$41,994	\$47,332	\$58,090	\$46,138	\$49,330	\$60,030
White/Caucasian	\$56,203	\$64,213	\$71,568	\$59,250	\$65,804	\$71,195
African American	\$35,564	\$44,609	\$54,848	\$37,343	\$43,560	\$52,113
Asian-American	\$71,709	\$76,337	\$82,010	\$78,546	\$81,480	\$81,975

Source: American Community Survey, 5 Year Average, Census Bureau, (<http://data.census.gov>)

Poverty Rates, 2012 and 2019, Percent of Population Below Annual Poverty Threshold Solano County, California and United States

Race or Ethnicity	2012			2019		
	US	CA	Solano County	US	CA	Solano County
Hispanic or Latino origin	24.1%	22.0%	18.1%	19.6%	17.7%	10.9%
White/Caucasian	12.1%	13.5%	9.5%	11.1%	12.2%	7.6%
African American	26.5%	22.6%	19.0%	23.0%	20.5%	16.9%
Asian-American	12.1%	11.4%	7.0%	10.9%	10.2%	6.3%

Source: American Community Survey, 5 Year Average, Census Bureau, (<http://data.census.gov>)

Owner versus Rental, Percentage of Occupied Households by Race or Ethnicity of Head of Household Years 2012 and 2019, Solano County, California and United States

Owner, 2012				Renter, 2012			
Race or Ethnicity	US	CA	Solano County	Race or Ethnicity	US	CA	Solano County
Hispanic or Latino origin	47.5%	44.3%	52.4%	Hispanic or Latino origin	52.5%	55.7%	47.6%
White/Caucasian	70.6%	60.4%	69.2%	White/Caucasian	29.4%	39.6%	30.8%
African-American	44.5%	36.8%	47.4%	African-American	55.5%	63.2%	52.6%
Asian-American	58.3%	57.1%	68.8%	Asian-American	41.7%	42.9%	31.2%
Owner, 2019				Renter, 2019			
Race or Ethnicity	US	CA	Solano County	Race or Ethnicity	US	CA	Solano County
Hispanic or Latino origin	47.3%	43.8%	53.3%	Hispanic or Latino origin	52.7%	56.2%	46.7%
White/Caucasian	69.5%	58.8%	66.3%	White/Caucasian	30.5%	41.2%	33.7%
African-American	41.8%	34.8%	42.7%	African-American	58.2%	65.2%	57.3%
Asian-American	59.6%	59.3%	69.3%	Asian-American	40.4%	40.7%	30.7%

Source: American Community Survey, 5 Year Average, Census Bureau, (<http://data.census.gov>)

TAKEAWAY: Solano County has lower poverty rates across all races and ethnicities from 2012 to 2019; Solano County median household income is larger in inflation-adjusted terms than comparison areas; homeownership rates are higher in Solano County for all races and ethnicities, but within Solano County White and Asian-American households tend to have higher levels of ownership versus Hispanic and African-American households.

Beyond 2021: Solano County has shown broader opportunities for Asian-Americans versus Hispanic and African-American residents, workers and households. To 2025, economic recovery may continue to leave some groups behind even though Solano County performs well in terms of social equity against state and national comparisons. Homeownership may be one focus area of local and regional policy.

We now look at community indicators for Solano County.

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Our Changing Community

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People

Population Growth

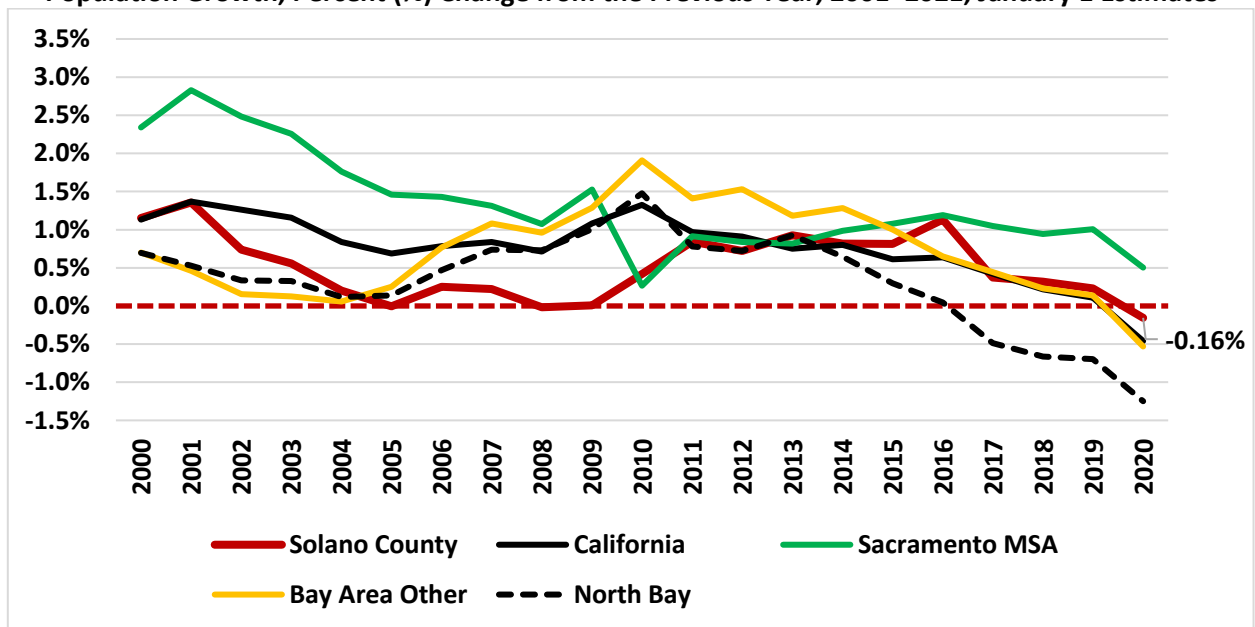
Population growth slowed regionally in 2020 as COVID-19 caused shifts in workplace and also where people chose to live; Solano County’s population fell by 684 residents (-0.16 percent). Estimates by the California Department of Finance are at the county and city levels for January 1, 2021. California’s population also fell in 2020 by approximately 182,080 people.

Change in Total Population, compared to January 1, 2021
Number of People and Percent (%) Change, Solano County and Selected Comparison Areas

Place	Change in Population			Percentage Change		
	2010	2019	2020	2010	2019	2020
Solano County	25,504	322	-684	6.2%	0.1%	-0.16%
California	1,905,231	-138,506	-182,083	5.1%	-0.3%	-0.46%
Sacramento MSA	210,796	35,450	11,903	9.7%	1.5%	0.50%
Bay Area Other	448,896	-25,138	-34,106	7.6%	-0.4%	-0.53%
North Bay	2,580	-17,387	-11,124	0.3%	-1.9%	-1.25%

Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)
 Estimates were re-benchmarked in 2021, thus comparisons to earlier Index reports do not work

Population Growth, Percent (%) Change from the Previous Year, 2001–2021, January 1 Estimates



Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

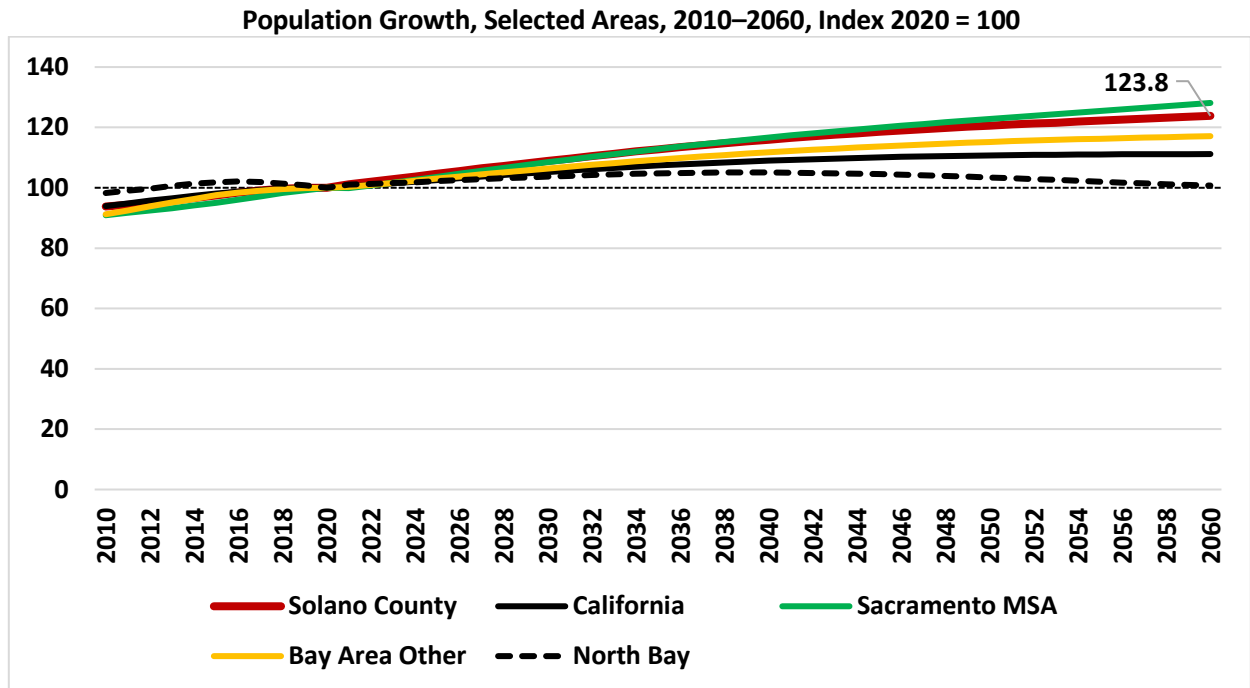
TAKEAWAY: Population growth in Solano County fell by 0.16 percent in 2020 versus 2019, 684 fewer residents. California’s population was also estimated to fall in 2020, by 0.46 percent, as more people left California in 2020 than came to California.

OPPORTUNITY: As population changes take place due to the COVID-19 recession’s effects, understanding new residents’ demography and finding available workers in Solano County for workforce development and entrepreneurial opportunities is a key consideration for local economic and workforce development professionals.

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Population Growth Projections

The California Department of Finance (DOF) updated its county-level forecasts on population growth to 2060 in March 2021. Solano County is compared to other areas in the figure reflecting these updated forecasts. Population forecasts help build employment and housing forecasts based on assumed labor-force participation rates, people per household and the number of children that become local students and potentially local workers.



Source: CA Department of Finance, Demographics Unit, Revised March 2021
<http://www.dof.ca.gov/Forecasting/Demographics/Projections>

TAKEAWAY: Solano County’s population growth is forecasted to grow at a decreasing rate toward 2060, but much depends on how Solano County’s population grows after 2021 given the recent, estimated population decline.

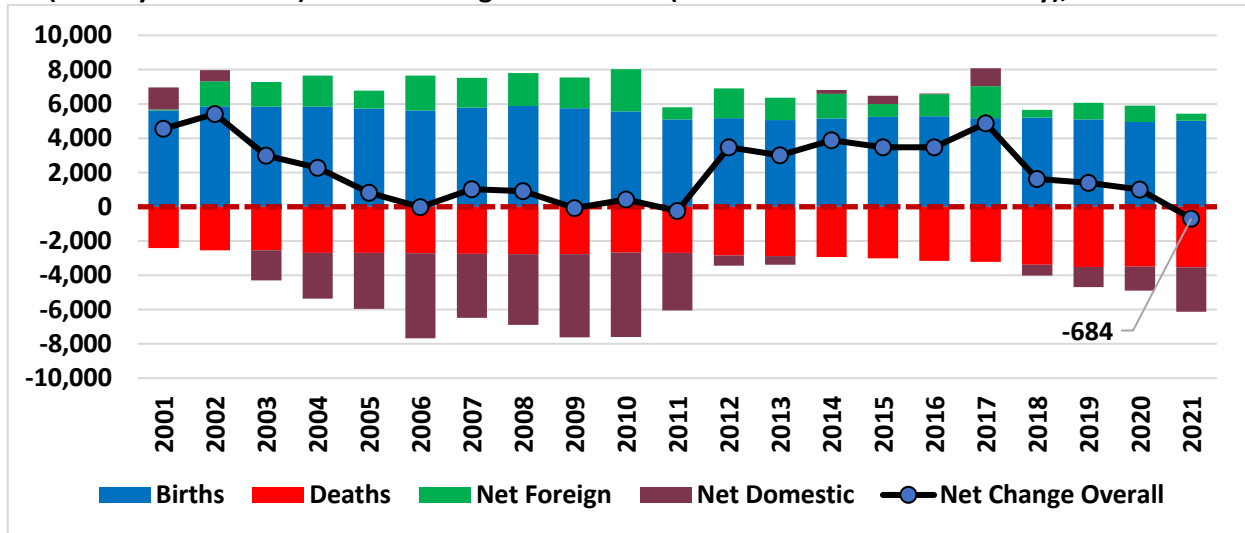
OPPORTUNITY: If Solano County’s population changes follow these predictions, an opportunity may exist for a more diverse workforce and more working families versus an aging workforce with more retirees.

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Components of Population Change

Solano County’s population decreased in calendar-year 2020 from 2019 by 684 people. While births outpaced deaths, a loss of residents from movements out of Solano County in net to other places in the United States drove 2020’s downturn. The state of California also lost population due primarily to net outmigration, but also slightly faster natural losses from COVID-19 cases.

Solano County Components of Population Change (People) from Previous Year (January 1 estimates) and Net Change in Residents (-684 in 2020 for Solano County), 2000–2021



Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

Solano County Change in Population Compared to 2021, Number of People

Fiscal Year End	Births	Deaths	Net New Residents from other Countries (Net Foreign)	Net New Residents from the United States (Net Domestic)	Net New Residents Moving to Solano County
2010	56,455	-34,595	11,909	-8,510	3,399
2013	41,127	-26,205	8,142	-4,030	4,112
2014	35,985	-23,279	6,689	-4,251	2,438
2015	30,733	-20,276	5,945	-4,724	1,221
2016	25,452	-17,128	4,647	-4,759	-112
2017	20,275	-13,915	2,783	-5,802	-3,019
2018	15,066	-10,539	2,345	-5,158	-2,813
2019	9,968	-7,022	1,373	-3,997	-2,624
2020	5,027	-3,525	407	-2,593	-2,186

Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

TAKEAWAY: Solano County’s population fell in a year dominated by a pandemic and subsequent recession. Outbound migration to other parts of California and the United States acted as the main reason for the lower county population level.

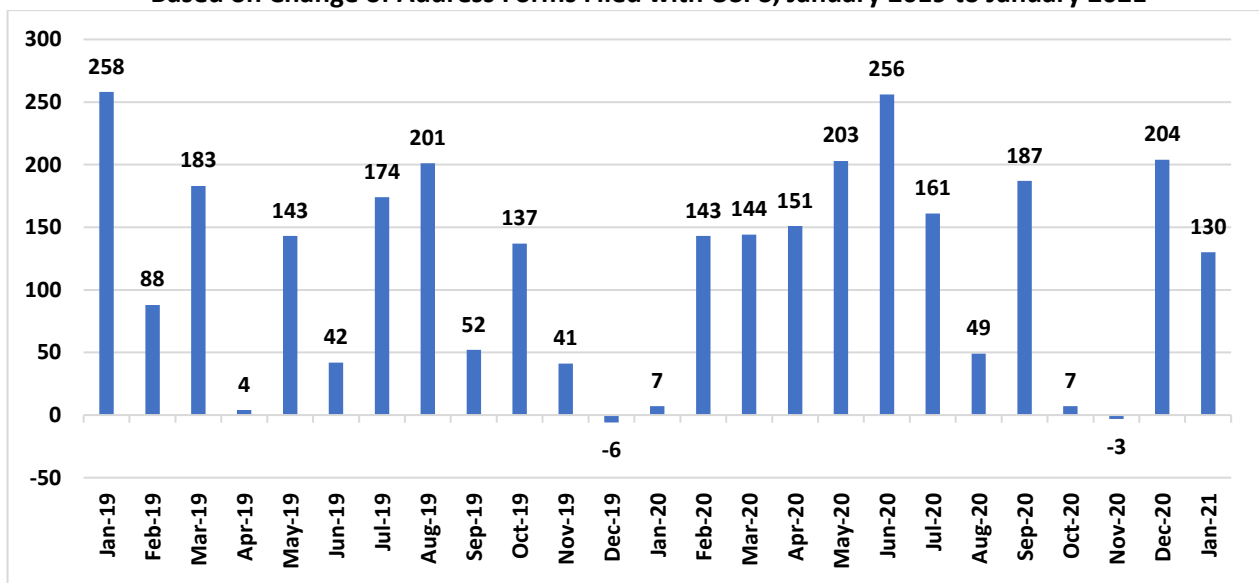
Beyond 2021: Population movements due to COVID-19 changes in workplace flexibility and also job losses may change population growth components and the composition of Solano County’s households toward 2025, including a lower population level over the next few years. The key is if new households come with new labor force participants in Solano County or not; when outmigration takes place, Solano County likely loses some part of its labor force (see more below on Labor Force Participation) as well as local school-age children.

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Measuring Population Change in Real Time: US Postal Service Changes of Address

Due to many large employers in California allowing workers that can work from home to do so, and perhaps with no plans to return due to COVID-19, there have been some concerns and speculation about people and households moving around the state and also leaving California. The figure shows two years of monthly data from the US Postal Service to January 2021 based on change of address forms submitted. Solano County has seen net inbound households all but two of these months, slowing down toward the end of 2020. There were more inbound households in net between February and July 2020. San Francisco County and California overall lost households and residents in 2020. These data were obtained via a Freedom of Information Act (FOIA) request.

Change in Net Number of Households in Solano County
Based on Change of Address Forms Filed with USPS, January 2019 to January 2021



Sources: United States Postal Service and EFA (based on Freedom of Information Act (FOIA) Request)

TAKEAWAY: Estimates of Solano County’s household count when released by the Census Bureau should be rising in the 2020 and 2021 data due to more inbound households more than outbound leaving Solano County, but population change may be relatively unaffected if new households have fewer people or if birth rates slowed down. If population actually fell, as shown in the estimated data by the California Department of Finance, new households have fewer people than those lost in Solano County.

Beyond 2021: The composition of these new households is a critical factor as to how Solano County’s economy is affected. Younger, working families are more stable due to schools and community connections, augmenting both Solano County’s labor force, school attendance and market for local businesses.

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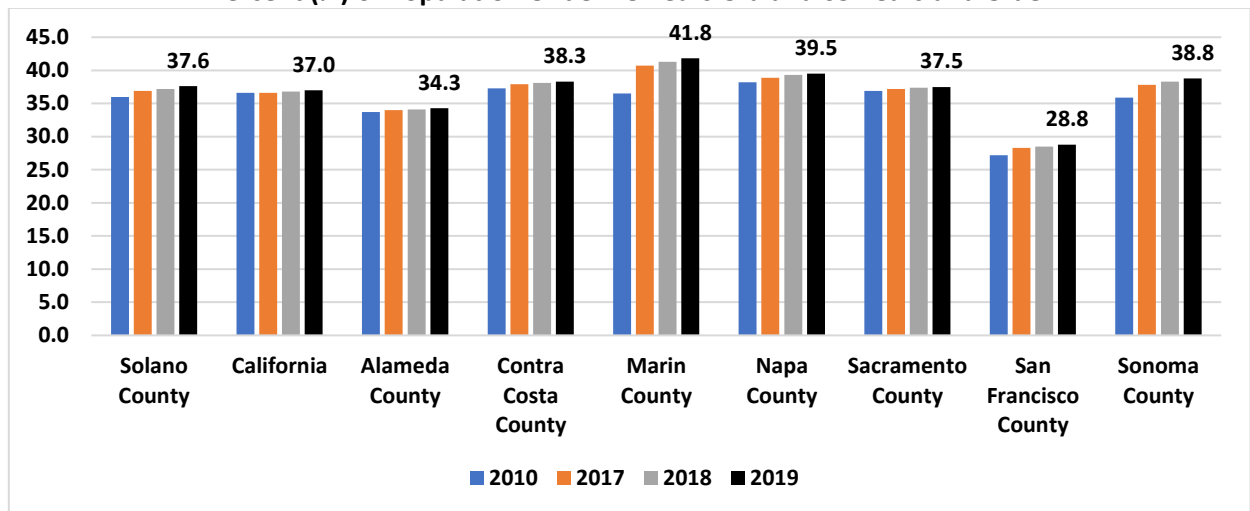
Workforce Readiness and Supply

Dependency Ratios, High-School Graduation Rates and UC/CSU Readiness

Dependency Ratio

An area's total dependency ratio measures the percentages of area residents 65 and older and also children under 18 years of age. As the ratio rises, fewer local residents may be part of the labor force, but there may be more students in local schools. Solano County's total dependency ratio was 36.0 percent in 2010 and has continued to rise to 37.6 percent in 2019 (the latest data available). San Francisco County continued with a relatively lower, dependent population versus regional counterparts at 28.8 percent (though rising slightly since 2010 annually) in 2019.

Total Dependency Ratio, Comparison Between Selected Areas, 2010, 2017 and 2018
Percent (%) of Population Under 18 Years Old and 65 Years and Older



Source: Census Bureau (www.census.gov) at <http://data.census.gov>

TAKEAWAY: Solano County's dependency ratio increased again in 2019 (0.4 percentage points), as did all other comparison counties.

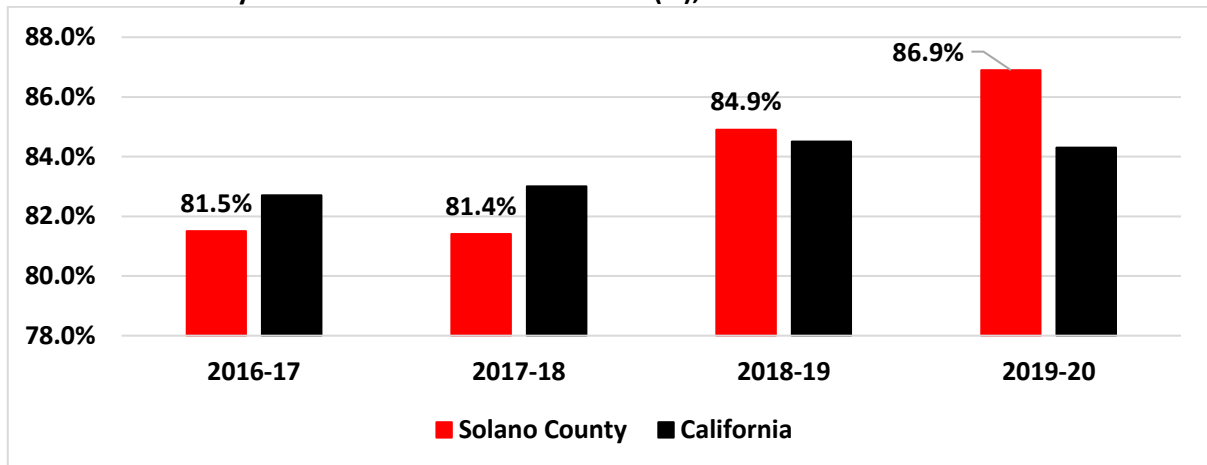
OPPORTUNITY: An older workforce is not necessarily a loss of economic capacity. For Solano County, residents over 65 years of age may be a workforce in need of training and re-tooling, currently employed residents or potential business owners that simply need economic development tools to provide a main source or an additional source of income to their household.

High-School Graduation Rates and CSU/UC Readiness

Solano County's graduation rate increased to 86.9 percent in academic year 2019-20 (the latest data available) versus the previous academic year and remained above the state of California's graduation rate on average. In the 2019-20 academic year (the latest data available), Solano County increased its percentage of college-ready graduates to 50.0 percent from 43.7 percent, versus the 2018-19 academic year, very close to California on average at 50.9 percent. Public higher education at UC Davis, CSU Maritime, and Solano Community College are located within or next to Solano County as additional workforce development, as is Touro University for health care and other professions.

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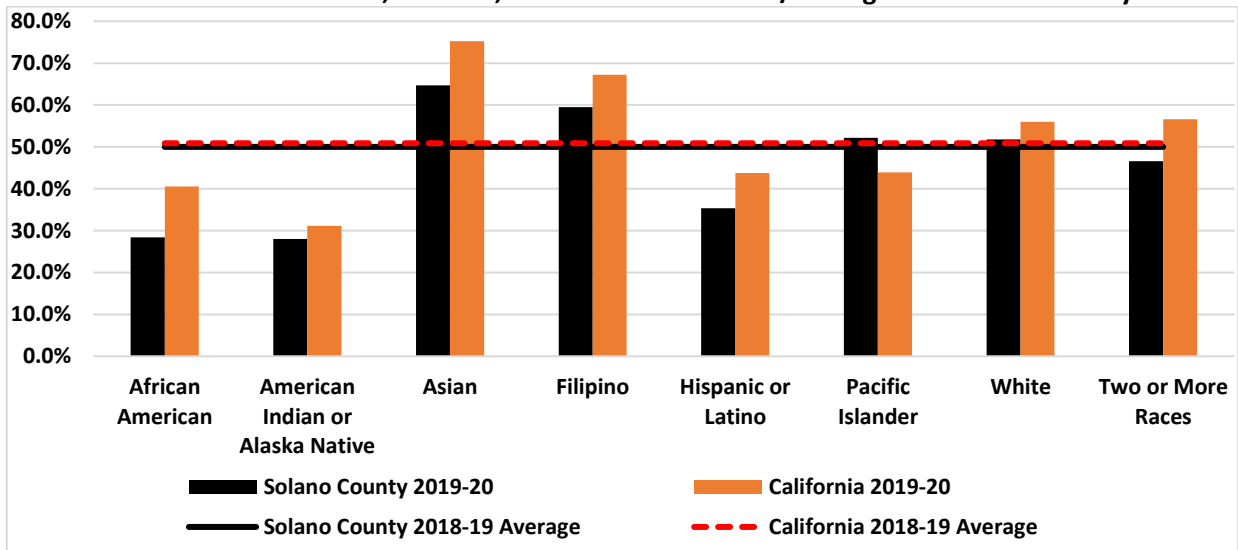
Solano County and California Graduation Rates (%), 2016-17 to 2019-20 Academic Years



Source: California Department of Education (www.cde.ca.gov)

Note: There was a methodological change at the Department of Education that does not allow a comparison before 2016-17 academic year with the most recent data.

Comparisons of Percentages (%) of UC/CSU-Ready Solano County High-School Graduates Selected Races and Ethnicities, 2019-20, 50% of Graduates CSU/UC Eligible in Solano County Overall



Source: California Department of Education (www.cde.ca.gov)

Note: There was a methodological change warning at the California Department of Education against comparisons before 2016-17 with the most recent data.

TAKEAWAY: The 2019-20 academic year closed the gap between Solano County and the state of California in terms of CSU/UC eligible students making this gap virtually zero for the first time since 2010. Also, for the second academic year in a row, Solano County graduated a larger percentage of its seniors than the state on average, though both percentages grew.

Beyond 2021: Two major concerns for Solano County schools exist looking forward. The first is possible learning loss from online school during 2020 and 2021 and subsequent effects on test scores due to COVID-19 and online school, and then labor-market readiness and college preparation (these problems are not exclusive to Solano County). The second concern is a changing population in Solano County and overall numbers of students in K-12 schools throughout the county to maintain current or to augment educational funding levels to 2030, including funding for Solano Community College.

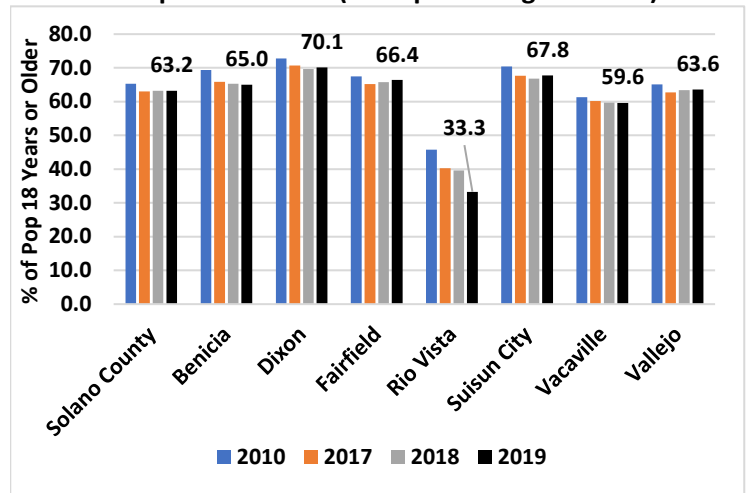
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Labor Force Participation Rates

For Solano County, labor-force participation only recently began to increase after a decade of falling levels. In 2020, labor force participation rates fell in Solano County and also across California and the United States, as measured by the working age (over 18 years old) population percentage that is employed or considered actively seeking work (collecting unemployment insurance).

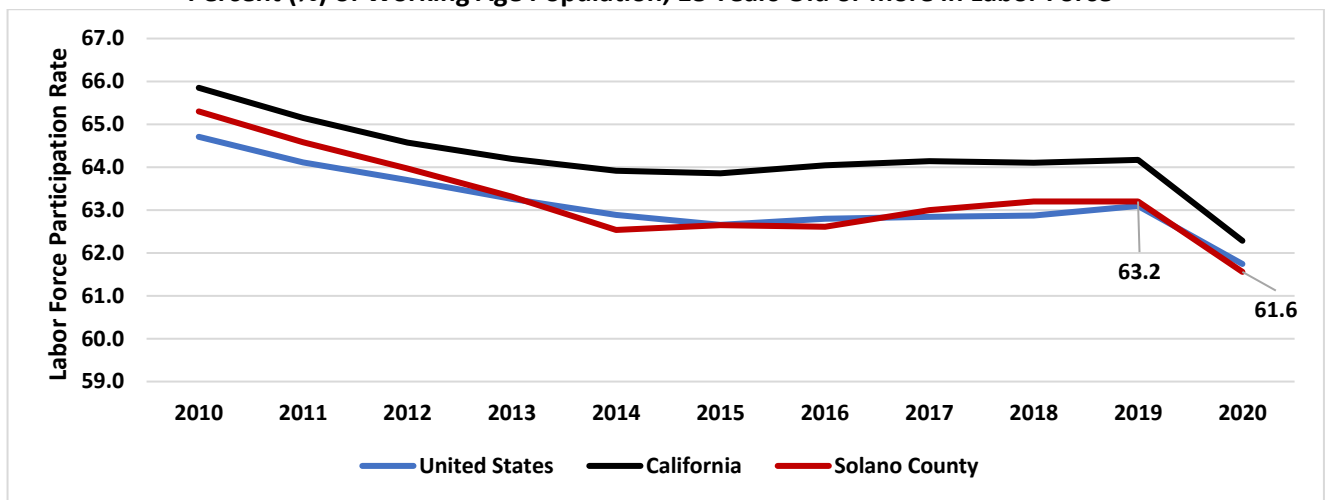
The latest data on Solano County’s cities is 2019. In 2019, Solano County’s estimate is 63.2 percent of local residents 18 or older are currently in the workforce, the same as in 2018. While estimates for Solano’s cities and their population, the figure comparing Solano County to California and the United States is updated to the end of 2020.

Labor Force Participation Rates (%), Workers 18 and older, 2010, 2017, 2018, and 2019 Solano County and its Incorporated Areas (2019 percentages shown)



Source: Census Bureau (<http://data.census.gov>)

Labor Force Participation Rates, 2010 to 2019, Solano County, California and US, Percent (%) of Working Age Population, 18 Years Old or more in Labor Force



Sources: California Department of Finance (Population) and Bureau of Labor Statistics (<http://www.bls.gov>) for Labor Force, where 2020 estimates are the latest as of May 1, 2021.

TAKEAWAY: Labor force participation in Solano County was flat in 2019, and fell from 63.2 to 61.6 percent of county residents over 18 years of age in 2020.

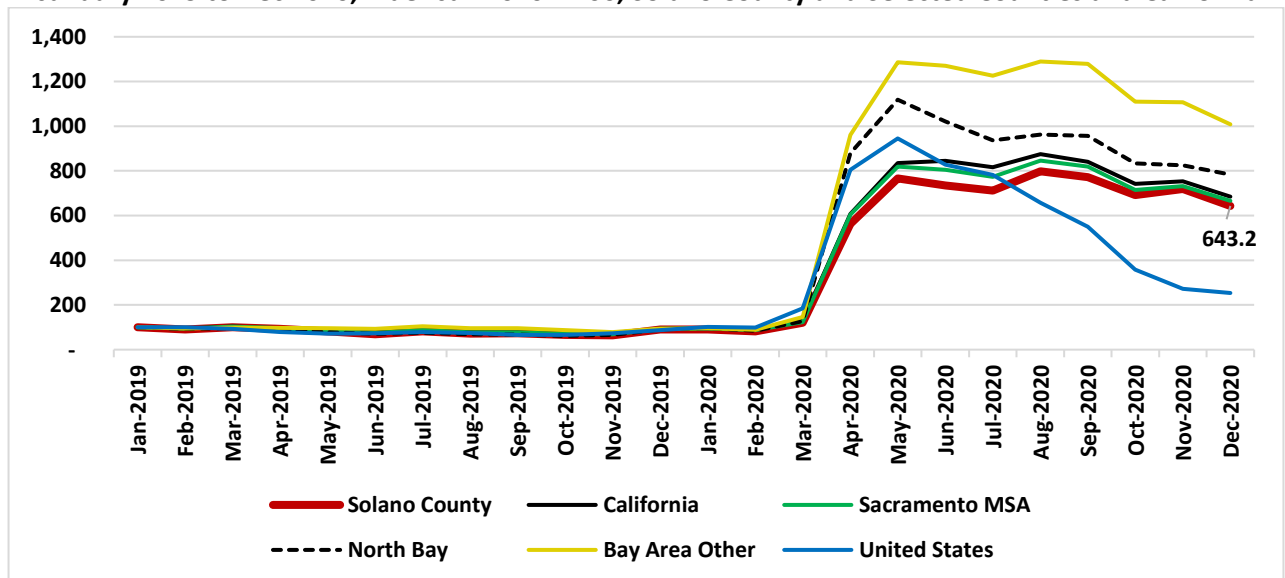
OPPORTUNITY: The COVID-19 recession created shifts in labor force throughout the state of California as workers retired, exited the labor force for childcare reasons and also left the state pursuing new possibilities. For Solano County, a relatively lower labor force participation rate than state and national data points to a combination newly-retired or career-transitioning workers that become available workers as economic recovery continues in Solano County in 2021 and beyond.

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Unemployment Insurance and COVID-19, Solano County

Lessons learned from the Great Recession (2008-10) led to immediate federal spending to support displaced workers in 2020. Federal stimulus spending on households and displaced workers began in April 2020. Two more spending packages came between May 2020 and March 2021 (the time of this writing). Each fiscal stimulus round included extended and increased unemployment insurance (UI) benefits. Some economists were concerned (and remain so) that larger and more inclusive UI benefits create disincentives for workers to return to work at current wages. The data shown here are the continued claims for UI (total weeks of UI paid by the Department of Labor for unemployment insurance by month) from January 2019 to December 2020. Solano County remained relatively high (643.2 or 6.43 times as many weeks paid on unemployment for local residents as in January 2019) as of December 2020 compared to the January 2019 level. These data need to fall to signal true labor-market recovery.

Continued Claims for Unemployment Insurance (UI), Number of Weeks Paid to UI Recipients, January 2019 to Dec 2020, Index Jan 2020 = 100, Solano County and Selected Counties and California



Source: California EDD, Report R513 (provided by EDD Staff Monthly to EFA)

TAKEAWAY: The COVID-19 recession created a large demand for unemployment insurance benefits that has yet to fade significantly across all comparison areas as of April 2021.

OPPORTUNITY: Solano County's labor force may not reduce its use of UI funding quickly in 2021 if workers remaining on UI are primarily lower-wage workers that may be receiving the same or more monthly income due to extended or augmented UI benefits. However, as economic recovery begins, these data suggest there is a workforce in Solano County that can be hired to fuel growth back to pre-COVID conditions. The augmented UI benefits are likely to fade completely by the federal fiscal year 2020-21 end (September 30, 2021).

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City Overview: Education, Housing and Income

Solano County continues to show improvements in occupied housing units, new construction and residential education levels across its cities. These data are five-year averages (2015-19 is the latest data available from the Census Bureau).

Median Age (Years) in Solano County and Its Cities, 2010, 2016, 2017, 2018, 2019

Place	2010	2016	2017	2018	2019
Solano County	36.5	37.5	37.7	37.9	38.1
United States	36.9	37.5	37.8	37.9	38.1
California	34.9	36.0	36.1	36.3	36.5
Benicia	45.0	44.2	44.9	45.7	46.1
Dixon	32.3	34.0	35.0	34.0	34.0
Fairfield	32.8	34.4	34.8	35.0	34.8
Rio Vista	55.8	62.3	62.3	62.2	64.4
Suisun City	32.7	33.1	33.7	34.4	34.4
Vacaville	36.7	37.1	37.4	37.3	37.5
Vallejo	37.5	38.3	37.8	38.0	38.4

Source: American Community Survey, Census Bureau (<http://data.census.gov>)

Housing and Occupancy, 5-Year Averages Ending in Stated Year: 2010, 2018 and 2019 (How many homes are there and what percentage (%) are occupied or vacant.)

Place	Total Housing Units			Occupied (%)			Vacant (%)		
	2010	2018	2019	2010	2018	2019	2010	2018	2019
Solano County	151,616	156,896	157,800	91.7%	95.0%	95.0%	8.3%	5.0%	5.0%
United States	130,038,080	136,384,292	137,428,986	87.8%	87.8%	87.9%	12.2%	12.2%	12.1%
California	13,552,624	14,084,824	14,175,976	91.4%	92.1%	92.0%	8.6%	7.9%	8.0%
Benicia	11,905	11,649	11,786	91.7%	95.5%	95.8%	8.3%	4.5%	4.2%
Dixon	6,124	6,304	6,389	94.2%	95.4%	94.9%	5.8%	4.6%	5.1%
Fairfield	36,283	37,892	38,372	91.7%	95.9%	95.8%	8.3%	4.1%	4.2%
Rio Vista	3,592	4,629	5,130	92.7%	92.6%	93.4%	7.3%	7.4%	6.6%
Suisun City	9,291	9,495	9,650	93.3%	98.1%	96.5%	6.7%	1.9%	3.5%
Vacaville	31,780	34,195	34,176	94.4%	96.3%	95.7%	5.6%	3.7%	4.3%
Vallejo	45,297	44,869	44,543	88.9%	93.6%	94.4%	11.1%	6.4%	5.6%

Source: American Community Survey, Census Bureau (<http://data.census.gov>)

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Income, Household Size, and Education, 2010, 2018, and 2019, Five-Year Averages

Place	Median Household Income (2012 Dollars)			Average Household Size (People/Housing Unit)			Percent (%) of Residents with HS Diploma or Better			Percent (%) of Residents with Bachelor's Degree or Better		
	2010	2018	2019	2010	2018	2019	2010	2018	2019	2010	2018	2019
Solano County	\$71,796	\$74,040	\$75,992	2.83	2.87	2.82	85.8%	88.0%	88.4%	24.0%	26.2%	26.9%
United States	\$54,661	\$62,354	\$65,749	2.61	2.63	2.67	85.0%	87.6%	88.0%	27.9%	31.5%	32.1%
California	\$63,898	\$67,952	\$70,175	2.89	2.95	2.93	80.7%	83.0%	83.3%	30.1%	33.3%	33.9%
Benicia	\$91,327	\$94,464	\$96,457	2.53	2.52	2.51	94.7%	96.5%	96.8%	41.2%	43.4%	44.7%
Dixon	\$73,195	\$73,652	\$77,016	3.00	3.13	3.11	82.1%	78.3%	80.1%	19.6%	17.4%	19.7%
Fairfield	\$71,377	\$77,227	\$78,869	3.00	3.00	2.99	84.8%	85.6%	87.4%	22.2%	26.5%	28.3%
Rio Vista	\$57,270	\$66,781	\$64,922	2.13	2.13	2.12	93.1%	95.3%	93.4%	25.3%	29.2%	33.6%
Suisun City	\$75,350	\$76,091	\$77,716	3.15	3.15	3.14	86.1%	88.9%	88.8%	19.3%	20.5%	21.9%
Vacaville	\$74,346	\$78,417	\$81,916	2.71	2.71	2.70	85.4%	89.1%	89.1%	21.0%	23.5%	23.6%
Vallejo	\$64,525	\$63,543	\$64,737	2.82	2.81	2.80	84.7%	87.9%	88.0%	24.7%	26.1%	25.8%

Source: American Community Survey, Census Bureau (<http://data.census.gov>)

TAKEAWAY: As of 2019 (the latest data available), Solano County continued to see progress across its cities on a wide variety of social indicators; growth of median household income took place with slightly older and more educated residents. Housing units across Solano County's cities fell for larger areas and grew slightly in the smaller cities.

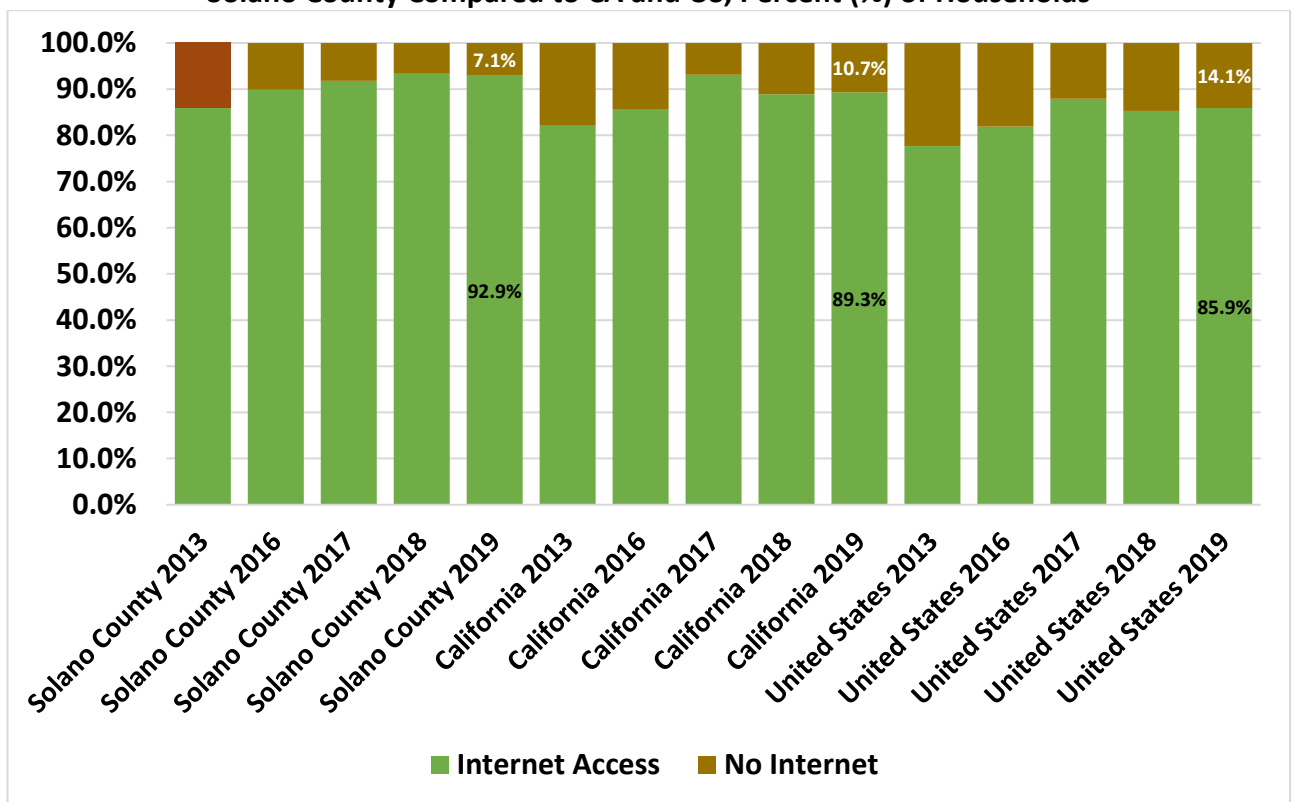
Beyond 2021: Median household income may not change much for Solano County's cities and its cities may receive relatively younger residents as a result of the COVID-19 recession due to flight from the urban parts of the Bay Area. Education levels may also rise due to new residents, but the housing units occupied rising means more pressure on both prices for homes to buy and rents when the COVID-19 recession ends.

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Broadband and Computer Access

The Census Bureau’s American Community Survey estimates broadband and computer access for households. During the COVID-19 recession in 2020, such access was critical for workers to continue their employment if their job was portable, sustain and continue a home-based business, and perhaps most important to provide students resources for their education. Data here compare Solano County to the national and state economies overall. Solano County remains well connected versus its state and national counterparts, though it slipped slightly in the one-year sample from 2019 using the same methods as in 2018 (93.3 percent to 92.9 percent). Such a change could be due to an aging population.

**Broadband and Computer Access, 2013, 2016, 2017, 2018, and 2019
Solano County Compared to CA and US, Percent (%) of Households**



Source: American Community Survey, 1-year Survey Samples (<http://data.census.gov>)

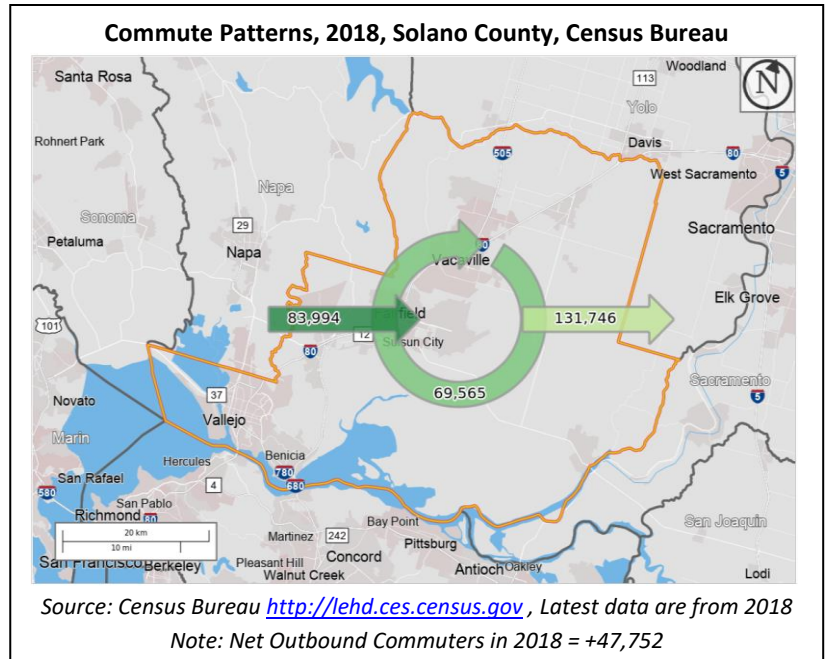
TAKEAWAY: Estimated broadband access fell slightly as a percentage of all households in Solano County in 2019 (the latest data) while the state of California and the United States experienced slight increases.

OPPORTUNITY: While Solano County is more connected in terms of percentage of its households with an internet subscription, COVID-19 and the experiences of families both working or attending school from home made the need for broadband access across all households that want access a goal for both community and economic development. If federal infrastructure spending focuses on expanding broadband, Solano County may be able to connect virtually all homes and provide more entrepreneurial opportunities countywide.

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Commuting

Time to work data can provide ways of understanding length of commuting and also potential traffic conditions. As the Solano County economy has experienced more hiring and more economic growth since 2010, the time to work has increased (the 2019 data are the latest available, 2018 for origin-destination commute data as in the map). While commute times were up in 2019 from 2018 and mean travel time the highest on record, the 2020 commute data is likely quite different due to COVID-19 and reduced movements of workers, students and residents otherwise. One of the



opportunity costs for reduced commute times is lower fuel-tax revenues and thus lower, recurring funding for road and bridge improvements. The map shows approximately 47,750 more workers commuted outside Solano County for work than came to Solano County for a job in 2018.

Time to Get to Work, Solano County Residents: 2010, 2016, 2017, 2018, and 2019
Count (People) and % Share of Annual Total

Time to Work (minutes)	2010		2016		2017		2018		2019	
	Count	Share	Count	Share	Count	Share	Count	Share	Count	Share
Less than 10 minutes	22,618	12.7%	21,827	12.0%	21,805	11.7%	21,478	11.2%	22,937	11.2%
10 to 14 minutes	26,714	15.0%	27,070	15.2%	27,956	15.0%	27,614	14.4%	23,961	11.7%
15 to 19 minutes	25,111	14.1%	24,933	14.0%	26,278	14.1%	27,039	14.1%	25,395	12.4%
20 to 24 minutes	19,056	10.7%	18,700	10.5%	19,010	10.2%	19,177	10.0%	19,865	9.7%
25 to 29 minutes	7,480	4.2%	8,192	4.6%	8,014	4.3%	8,821	4.6%	7,987	3.9%
30 to 34 minutes	20,837	11.7%	18,878	10.6%	19,196	10.3%	19,944	10.4%	27,852	13.6%
35 to 44 minutes	12,110	6.8%	11,576	6.5%	12,487	6.7%	12,848	6.7%	11,264	5.5%
45 to 59 minutes	17,631	9.9%	17,275	9.7%	18,078	9.7%	18,985	9.9%	22,118	10.8%
60 or more minutes	26,536	14.9%	30,097	16.9%	33,547	18.0%	35,860	18.7%	43,417	21.2%
Mean travel time to work (minutes)	29.5		30.4		31.8		32.6		34.7	

Source: American Community Survey, Census Bureau (<http://data.census.gov>)

TAKEAWAY: Commute times and distances continued to rise in 2019 (the latest data available) to 34.7 minutes on average, with commutes over 30 minutes rising sharply as a percentage of total commuting residents.

OPPORTUNITY: The COVID-19 crisis in 2020 may provide an opportunity to reduce commuter time in the car because more people are working from home. As economic development continues to attract, retain and expand businesses in Solano County, matching formerly commuting workers to local job or entrepreneurial opportunities also helps achieve goals of Moving Solano Forward.

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Quality of Place Index

This final section looks at comparison data describing quality of place compared to California (San Francisco in the case of housing prices) on average: high-school graduation rates; commute times; air quality; educational attainment; home purchase and rental prices; and taxable sales per person. There are 58 counties in California; the data below in many cases are rankings out of these 58 counties. Key takeaways are given by element.

Quality of Place Elements, 2020 (2019 Data are the latest in some cases)

Element			Key Takeaway
Graduation Rates for High School			Graduation rates were up in Solano County in 2019-20, gaining ground on many CA counties.
2010-11 44 th in CA	2018-19 33 rd in CA	2019-20 28th in CA	
Commute Times			Solano County experienced rising commute times in 2019, likely to be sharply down on average in 2020.
2010 49 th in CA	2018 52 nd in CA	2019 51st in CA	
Air Quality			Air quality relative to California averages was better in 2020 for Solano County than 2019, with statewide air quality rising due to less commuting due to COVID-19.
2010 20 th in CA	2019 18 th in CA	2020 16th in CA	
Educational Attainment: % of Pop, 18 years old or more, BA min			Solano County population above 18 years old remains in the top half of California counties for residents with a BA-degree minimum attainment.
2010 29 th in CA	2018 25 th in CA	2019 24th in CA	
Home and Rental Prices (as a % of San Francisco County)			Solano County's home prices increased against San Francisco, as prices of homes in San Francisco fell in 2020. Solano County remains an affordable real-estate market versus the core Bay Area.
2010 Rent: 50% of SF Buy: 28% of SF	2019 Rent: 51% of SF Buy: 32% of SF	2020 Rent: 48% of SF Buy: 35% of SF	
Taxable Sales/Capita			Solano County residents' and visitors' taxable purchases remained at levels similar to 2019 versus the state average.
2010 98.6% of State Avg	2019 102% of State Avg	2020 102% of State Avg	

Sources: California Department of Education; American Community Survey; Zillow™ Research; California Air Resources Board; California Board of Equalization and County of Solano, <https://www.epa.gov/outdoor-air-quality-data/air-quality-index-report>

Quality of Index indicators suggest **opportunities** when in green and **challenges** for policy makers and the community when in red.

OVERALL TAKEAWAY: The effects of COVID-19 are mixed on these quality of place indicators primarily because the recession created by social policy as a reaction to COVID-19 affected jobs and incomes but housing markets and commutes were both preserved and also held firm in many cases. Graduation rates increased in 2019-20, and educational attainment increased in 2019 based on the latest Census data. With less traffic and higher home prices, we are watching housing markets to see if the 2020 changes in both San Francisco and in Solano County remain. Taxable sales per capita fell across the state, but Solano County maintained its level of taxable sales primarily through home-improvement stores and internet merchant sales versus the state average.

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Data Sources and Methodology

Solano County Key Facts

Area

Data provided by the Solano Economic Development Corporation (EDC) and the County of Solano.

Population

Data are from the [California Department of Finance](#) (DOF) for Solano County as part of DOF's estimates for all counties in California. Estimates available in May 2021 are for January 1, 2021.

Jobs

Solano County employment data are provided by the [California Employment Development Department \(EDD\)](#). The industry data may include employees who live outside the county. December 2020 and Annual 2020 data are preliminary estimates.

Foreign Immigration and Domestic Immigration

Data are from the [E-6: Population Estimates and Components of Change by County – July 1, 2010–2020](#) report by the California Department of Finance and are for Solano County, the Bay Area Other (including Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara counties), the North Bay (Napa and Sonoma counties), and for California overall. Estimates for fiscal year 2019-20 are preliminary. Net migration includes all legal and unauthorized foreign immigrants, residents who left the state to live abroad, and the balance of people moving to and from California from within the United States.

Adult Educational Attainment, Age Distribution, and Ethnic Composition

Data are provided by the [U.S. Census Bureau American Community Survey](#) in 2020 is an average of data over the years 2015 to 2019 for Solano County.

Taxable Sales and Assessed Property Value

Data for taxable sales are from the State of [California Department of Fee and Tax Administration](#) and the Solano County Department of Finance. Data on the assessed value of residential properties are from the Solano County Assessor's office.

Our Changing Economy

Annual Employment

Solano County employment data are provided by the California Employment Development Department (EDD). The industry data reflects the number of jobs in the county that may pay employees who live outside of the county. <https://www.labormarketinfo.edd.ca.gov/data/industries.html>

Change in Annual Jobs

Solano County employment data are provided by the California Employment Development Department (EDD). The industry data reflect the number of jobs in the county that may pay employees who live outside of the county. The data are as of March 2021 and are estimates, see <https://www.labormarketinfo.edd.ca.gov/data/industries.html>. Jobs forecasts are also available at [CalTrans](#).

Total Employed Residents and Total Unemployed Residents

Solano County resident employment data is provided by the California Employment Development Department (EDD) Local Area Unemployment Statistics (LAUS). The data reflects the number of residents employed and unemployed in the county. Monthly data reports for Solano County and selected areas originate at the Bureau of Labor Statistics (www.bls.gov) and EDD reports the estimates.

Non-Employer Firm Growth and Percentage of Non-Employers by Industry

Data for Non-employers are from the [U.S. Census Bureau](#). Non-employer statistics originate from tax return information of the Internal Revenue Service. Data are subject to tax forms data, as well as errors of response, non-reporting and coverage. Values provided by each firm are slightly modified to protect the respondent's confidentiality. The latest Census Bureau data are from 2018.

Paycheck Protection Program (PPP) Loans

Data on PPP loans made by Small Business Administration as of March 2021 are available at <https://data.sba.gov/dataset/ppp-foia>

Median Household Income

Data for Median Household Income are from the 2003-2019 [American Community Survey data](#) reports from the U.S. Census Bureau, including the decennial Census in 2010. All income values are inflation-adjusted and reported in 2012 dollars, using the California CPI from the California Department of Finance. This California CPI is a weighted average of consumer price index (CPI) data that the Bureau

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of Labor Statistics (BLS) reports for the San Francisco, Los Angeles, and San Diego metropolitan areas.

Tourism and Visitor Support

Estimated data on visitor spending, jobs that support visitors and tax receipts generated from tourism and hotel stays are provided for all 58 California counties and the state overall by [Dean Runyan Associates](#). Data are from 1992 to 2019.

Gross Product

Data are provided by the U.S. Bureau of Economic Analysis through 2019 Bureau of Economic Analysis (www.bea.gov). Values are inflation-adjusted and reported in 2012 dollars.

Personal Income

Total personal income and population data are from the [Bureau of Economic Analysis](#). Income values are inflation-adjusted and reported in 2012 dollars, using the California CPI from the [California Department of Finance](#).

Sources of Personal Income

Data are provided by the [Bureau of Economic Analysis](#) (BEA) through 2019. Data are from Personal Income by Major Source and Earnings by NAICS Industry through 2019.

Personal income has been adjusted into 2012 dollars using either the California CPI from the California Department of Finance or the U.S. City Average Consumer Price Index (CPI) of all urban consumers, published by the Bureau of Labor Statistics, when data are national.

Economic Base and Locally-Serving Industries: Moving Solano Forward Phase II

These data come from the Quarterly Census of Employment and Wages (QCEW) which allows for a look at employment, wages, and establishments data at the NAICS-4-digit level. The North American Industry Classification System (NAICS) allows analysis for major industry sectors. These data are the official estimates from the Bureau of Labor Statistics (<http://www.bls.gov/cew>).

Agriculture

Data on county agriculture and the industries within that sector come from the [Solano County Agricultural Commissioner](#) and the Bureau of Economic Analysis (BEA). The BEA tracks farm incomes, almost like an income statement, annually with a one-year lag. The latest data are from 2019.

Poverty Rates

Poverty rates represent the percentage of households under the federal poverty level in terms of household income in a given year. Five-year averages for Solano County are provided by the [American Community Survey](#) of the Census Bureau. The latest data are from 2019.

Wages by Occupation

Wages data are available from The California Employment Development Department (www.edd.ca.gov) and the U.S. Bureau of Labor Statistics (www.bls.gov) by occupation following Standard Occupation Classification (SOC) codes. Wages are adjusted to 2012 dollars using the California CPI from the California Department of Finance or the U.S. City Average Consumer Price Index (CPI) of all urban consumers, published by the Bureau of Labor Statistics, when the data are national. These data are from May 2020.

Commercial Real Estate

Data on Solano County's commercial real estate comes from author contact with Colliers International's research department. The tracking of office space, both class A and B, as well as industrial space, is from a survey instrument that is proprietary to Colliers. Other commercial real estate firms, such as Cushman-Wakefield, will likely have different estimates, but there is not a governmental source for these data. The latest data are from Quarter 4 2020.

Housing and RHNA Estimates

Data on forecasted housing units need come from both [Metropolitan Transportation Commission](#) (MTC). Housing type is estimated by the California Department of Finance as part of its demographic research and housing tenure (own versus rental) data comes from the Census Bureau's American Community Survey. Regional Housing Needs Allocation (RHNA) estimates were provided by County of Solano staff in April 2021 and may change.

Our Changing Community

Population Growth Components and Domestic and Foreign Immigration

Data are from the E-6: Population Estimates and Components of Change by County – July 1, 2000–2020 report by the [California Department of Finance](#) and are for Solano County, the Bay Area Other (including Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara counties), the North Bay (Napa and Sonoma counties) and California overall. Net migration includes all legal and unauthorized foreign immigrants, residents who left the state to live abroad, and the balance of hundreds of

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thousands of people moving to and from California from within the United States. Population projections data come from the [California Department of Finance](#), P-3 report (State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010–2060 (by year)). The latest estimates are from January 2021.

USPS Change of Address Data

Data on changes of address from January 2019 to January 2021 were provided by US Postal Service (USPS) staff based on a Freedom of Information Act (FOIA) request by EFA.

Dependency Ratios

Data for the dependency ratios, which are the percentage of the population that is either under 18 years of age or over 65 years of age, come from the [American Community Survey](#) from the U.S. Census Bureau, including the decennial Census in 2010, covering years between 2005 and 2019.

High School Dropout Rates

Data for the 2019–2020 academic year are provided by the [California Department of Education](#) Educational Demographics Office. The 4-year, derived dropout rate is a percentage estimate of students who would drop out in a four-year period based on one year of data collected. A recent change in methodology such that time periods before 2016-17 are not comparable to those after 2016-17.

High School Graduation Rates and UC/CSU-Readiness

Data for the 2019–2020 academic year are provided by the [California Department of Education](#). In theory, the methodology used calculates an approximate probability that one will graduate on time by looking at the number of 12th grade graduates and number of 12th, 11th, 10th and 9th grade dropouts over a four-year period. There has been a recent change in methodology such that time periods before 2016-17 are not comparable to those after 2016-17.

Home Sales and Housing Affordability

Data were provided by [Zillow™ Research](#) for median home prices and forecasts. California Association of REALTORS® calculates a housing affordability index (HAI) published quarterly at www.car.org.

Labor Force Participation Rates

This is a ratio of the population over 16 years old and under 65 years of age to the total population traditionally. Some measures have expanded that to 16 years and above as a

way of measuring local working-age residents and their engagement in local labor markets. Data are a combination of population data from the [Census Bureau](#) and [California EDD](#) as described above. The authors make the calculation.

Broadband and Computer Access

The Census Bureau, in its [American Community Survey](#), is now tracking the number of households with a computer or with broadband access of both. These data are shown here as a way to consider Solano County versus the state and nation and the ability to use tools at home to increase labor supply readiness and learning opportunities. The latest data is as of 2019.

Building Permits

Building permits data are available from both the County of Solano and the Census Bureau at the metropolitan statistical area (MSA) level. The County of Solano provided both residential permit counts and square footage of new commercial construction permitted. The building permits database at the Census Bureau can be found at: <http://www.census.gov/construction/bps/>

City Data: Economics and Demographics

Data on the cities and their demographics come from the [American Community Survey](#) (ACS) of the Census Bureau through 2019. While this survey has some data limitation for smaller municipalities and the unincorporated portions of counties, it is the best current source of information on cities and towns between the ten-year Census dates. Data shown here are five-year averages.

Continued Claims for Unemployment Insurance

Continued claims for unemployment insurance (UI) come from California EDD and their Report R-513. Continued claims are the total number of weeks of unemployment insurance paid in one month by each California County. The R-513 report is available direct from California EDD by request from EDD staff.

Commuting Data and Time to Work

Data on commuting workers come from the Census Bureau to 2019 ([American Community Survey](#)) and also its partnership with the Bureau of Labor Statistics and the QWI called the [Longitudinal Employer-Household Dynamics](#) (LEHD) database. These data are from 2002 to 2018 as of January 2021.

The 2020 Solano County Index of Economic and
Community Progress can be found at:

www.solanocounty.com/economicindex

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