SCAG™
INNOVATING FOR A BETTER TOMORROW

Potential Economic Impacts of COVID-19 in the SCAG Region

May 14, 2020

Potential Economic Impacts of COVID-19 in the SCAG Region

May 14, 2020

STAFF CONTRIBUTORS:

Darin Chidsey, Chief Operating Officer

John Cho, PhD, Senior Regional Planner

Sarah Jepson, Director of Planning

Kevin Kane, PhD, Program Manager

Annie Nam, Manager of Goods Movement & Transportation Finance

Scott Strelecki, Senior Regional Planner

Tom Vo, Senior Regional Planner

Frank Wen, PhD, Manager of Research and Analysis

SPECIAL THANKS TO:

Diana M. Dorinson, Transportation Analytics

Michael Bracken, DMG Economics

Wallace Walrod, PhD, Orange County Business Council

Cameron Luther, Economic Associate, Regional Economics, Inc. (REMI)

Peter Evangelakis, PhD, Senior Economist, Regional Economics, Inc. (REMI)

***For questions or inquiries, please contact* Kevin Kane *at* kane@scag.ca.gov.**

SCAG™
INNOVATING FOR A BETTER TOMORROW

ABOUT SCAG

SCAG is the nation's largest metropolitan planning organization (MPO), representing six counties, 191 cities and more than 19 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California now and in the future..

MISSION STATEMENT

To foster innovative regional solutions that improve the lives of Southern Californians through inclusive collaboration, visionary planning, regional advocacy, information sharing, and promoting best practices.

visit us at **scag.ca.gov**

Potential Economic Impacts of COVID-19 in the SCAG Region

This white paper provides two separate analyses conducted by SCAG staff which present an initial assessment of potential employment and taxable sales implications of the COVID-19 pandemic. A discussion of data and information used in their development is also provided. The pandemic is having severe and unprecedented implications on a wide range of areas and the forecast toolkit of an economist is challenged because, in contrast to the Great Recession, this crisis is driven by a disease rather than financial factors.

While expert opinions vary widely about the depth of economic contractions, there is no doubt that U.S. and world economy is in recession. The Commerce Department's Bureau of Economic Analysis (BEA) released its advance estimate of first quarter 2020 GDP on April 29, and showed that the fallout from the COVID-19 pandemic caused the U.S. economy to contract by 4.8 percent—the largest decline since the great recession in 2008—and a time period which includes the unaffected months of January and February. The sharp declines in the first quarter GDP was led by negative contributions from consumer expenditure and business spending. Consumption by Americans tumbled by 7.6% and business investment shrank 8.6%. Unemployment claims, as another example, are orders of magnitude higher than ever before and as such any prediction of economic impacts (especially longer-range impacts) must be read with an understanding of the huge uncertainties which will be involved. While we have modeled the potential impacts on employment and taxable sales based on current information and assumptions, it is important to note that new data is being made available almost daily and we will work to provide updates as new information becomes available. **Preliminary estimates suggest a possible decrease in taxable sales of 26% to 38% over 2020-2021 and annual average unemployment rates of 19.3% in 2020 and 12.2% in 2021. These early figures, generated based on information available as of April 28, are provided as a starting point to catalyze further discussions among regional stakeholders.**

In collaboration with outside experts, SCAG staff will continue to provide economic status and recovery updates as new information becomes available.

This analysis proceeds as follows:

1. Discussion of key assumptions and timeline
2. Economic snapshot at the time of this writing
3. Analysis of potential impacts of COVID-19 on regional taxable sales in 2020 and 2021
4. Analysis of potential impacts of COVID-19 on regional employment in 2020 and 2021

DISCUSSION OF KEY ASSUMPTIONS AND TIMELINE

This section describes key assumptions about the nature and timeline of the economic impacts of the pandemic which are relied upon in the analysis of both taxable sales and employment. Due to differences in data availability and modeling strategies across both analyses conducted, additional assumptions which are specific to either analysis are described in later sections.

Initial impacts and stay at home orders

Since mid-March, most parts of the nation have been under a form of stay-at-home order. At the time of this writing it is generally understood that gradual reopening of certain public places and businesses will be possible upon the establishment of more specific and enforceable public health guidelines, testing protocols, and contact tracing but before a vaccine is widely available or herd immunity is achieved. **This dynamic makes a quick recovery to the conditions experienced at the beginning of 2020 unlikely.**

When will the low point be?

This analysis generally assumes a severe three-month impact due to the closures and distancing guidelines which have been necessary to prevent overwhelming medical treatment capacity and a major spike in COVID-19 deaths (i.e. "flattening the curve"). **For this analysis, we assume steep declines in March, April, and May 2020 with the low point occurring June 1st ("shutdown period").**

We assume that the various parts of the economy will gradually begin reopening, moving toward more "normal" levels of activity consistent with Governor Newsom's four-stage "pandemic roadmap." However, these are likely to result in reduced output levels which vary by industry. Industries more conducive to physical distancing, benchmarking, and contact tracing are likely to open more quickly and fully.

What will the shape of the recovery be?

As the depths of the shutdown period likely have longer-range effects throughout the economy such as reductions in demand due to unemployment, the challenge of restarting businesses which have been completely shuttered, or the impacts of depleting public and private reserves, we assume a longer recovery period. As some public health officials have noted an 18-month or more timeline needed for the development of a vaccine which may permit a return to full activity levels including conventions and sporting events, this analysis models economic impacts through the end of 2021.

At this time we do not have especially strong evidence to differentiate how a nearer "reopening period" and a longer "recovery period" will differ by industry sector as they are described above. The distinction between supply constraints needed to maintain public health and demand impacts such as aversion to in-person activities or delayed consumption due to layoffs will need to be analyzed further as more information becomes available. **Importantly, this analysis does not explicitly consider second or subsequent waves of infection which would necessitate subsequent shutdowns.**

Government intervention

It is fairly difficult to gauge the impact of government intervention—specifically federal funding—in mitigating the economic fallout from the pandemic. The roughly $2 trillion March 27th federal CARES act provided various grants and loans to businesses, expanded unemployment insurance, direct cash payments to households, public transit funding, and other benefits, while a $484 billion expansion is in progress at the time of this writing and further actions are expected. Early indications suggest that small business grants were oversubscribed, inaccessible, and would be slow to reach intended recipients. It is likely that tens of thousands of the 90% of California businesses with fewer than 19 employees completely closed in March 2020 leaving behind rents, utilities, inventory, and carrying minimal revenue. Firms of this size employ ¼ of the state's workers and as such many are unlikely to be able to carry employees through the end of the "shutdown period" when some revenue stability could return. Especially helpful to reducing 2020 and 2021 unemployment rates would be the rapid, efficient deployment of assistance which can carry businesses until they have a chance of revenue prospects during the "reopening" period. **Specific government interventions such as this are not explicitly modeled in this analysis.**

ECONOMIC SNAPSHOT AT THE TIME OF THIS WRITING

Estimating unemployment

At the end of February the US unemployment rate stood at 3.5%. Between March 14 and May 2, 33.5 million Americans filed for first time unemployment insurance.[1] **TABLE 1** analyzes initial unemployment claims data. Using non-farm wage and salary jobs in March 2020 as the base, SCAG estimates job loss rates based on these claims will reach 20% for the full month of April. The fast onset of these claims surpasses those experienced during the Great Depression, where the peak unemployment rate of 24.9% was not attained until 1933 and did not return to single digits until 1941. SCAG anticipates the number of new claims to decline through the rest of May with the unemployment rate continuing to rise. Should economic activity begin to resume in June as described above it is expected that some lost employment will be restored, but high unemployment rates are likely to continue through 2020 and 2021.

TABLE 1 Estimated U.S. Job Losses & Job Loss Rates

	US	CA	CA % of US
3/7/2020	211,000	43,385	20.6%
3/14/2020	282,000	58,208	20.6%
3/21/2020	3,307,000	186,333	5.6%
3/28/2020	6,867,000	878,727	12.8%
4/4/2020	6,615,000	918,814	13.9%
4/11/2020	5,237,000	655,472	12.5%
4/18/2020	4,427,000	533,568	12.1%
4/25/2020	3,846,000	325,343	8.5%
5/2/2020	3,169,000	318,064	10.0%
Total Since Week of 3/21/2020	**33,468,000**	**3,816,321**	**11.4%**
Non-farm Wage & Salary Employment (03/2020)	**151,786,000**	**17,505,000**	**11.5%**
Job Loss Rates for 04/2020	**22.0%**	**21.8%**	

Sources: US Department of Labor, BLS (DOL), CA EDD and SCAG estimates

Economic output

As indicated by the IHS Markit Flash US Composite Purchasing Manager's Index[2], private sector firm activity decline was unprecedented in April 2020 with manufacturing and service sectors both registering major contractions due to the pandemic. Service companies registered the steepest rate of decline in this market survey's history, while manufacturing declines were the steepest since the onset of the Great Recession in early 2009. **TABLE 2** provides a snapshot of several US and SCAG region economic indicators as of mid-April 2020:

1 https://www.dol.gov/ui/data.pdf
2 A market research service, see www.markiteconomics.com

TABLE 2 Mid-April 2020 Snapshot of US & SCAG Region Economy

	Mar 2020 month-over-month (i.e., vs. Feb 2020)	Mar 2020 year-over-year (i.e. vs. Mar 2019)
US Non-farm Jobs	-701,000	1,504,000
US Unemployment Rates (4.4%)	0.9%	0.6%
SCAG Region Non-farm Jobs	-99,500	150,400
SCAG Region Unemployment Rates (5.3%)	1.4%	1.1%
US Retail Trade	-8.7%	-6.2%
US Housing Permits	-6.8%	5.0%
US Housing Starts	-22.3%	1.4%
US Existing Home Sales	-8.5%	0.8%
US Exisiting Home Sale Prices	8.0%	3.8%
	CA Existing Home Sales	
Single Family Homes	-11.5%	-6.1%
Condo/Townhomes	20.0%	2.9%
	CA Exisiting Home Sale Prices	
Single Family Homes	5.6%	8.3%
Condo/Townhomes	3.1%	6.5%
Los Angeles Metro Area Existing Home Sales	20.4%	-0.1%
Los Angeles Metro Area Exisiting Home Sale Prices	1.1%	7.6%
	Ports of Los Angeles & Long Beach	
Loaded Inbound	-12.3%	-16.4%
Loaded Outbound	2.5%	-8.2%
Loaded Total	-7.4%	-13.6%
Air Cargo-LAX*	-6.42%	-8.3%
Air Passengers-LAX*	-2.3%	-3.9%
Air Cargo-Ontario	6.1%	19.7%
Air Passengers-Ontario	-55.7%	-46.5%
Rail^	-2.9%	-22.0%
Truck freight**	-8.3% to -18.0%	NA
Gas/VMT	-83%	NA

*Sources/Notes: *LAX reflects 2/2020 figures. ^Rail: 2nd quarter through 4/18/20. **Truck: from https://www.traffictechnologytoday.com/news/data; 3/16/20-03/27/20 baseined against 2/1/20-3/15/20. See also https://www.geotab.com/blog/impact-of-covid-19/*

Housing

Initial unemployment claims data alone indicate that the impact on the housing market may be large. After initial data indicated significant decline in new homebuyer traffic, the National Association of Homebuilders (NAHB)/Wells Fargo Housing Market Index (HMI) dropped from 72 in March to 30 in April—the lowest HMI score since 2012 and the largest monthly decline in the 35-year history of the index. Census data for March also indicate slowing construction in the months ahead with one-month drops of 18% for single-family construction and 30% for multifamily construction.

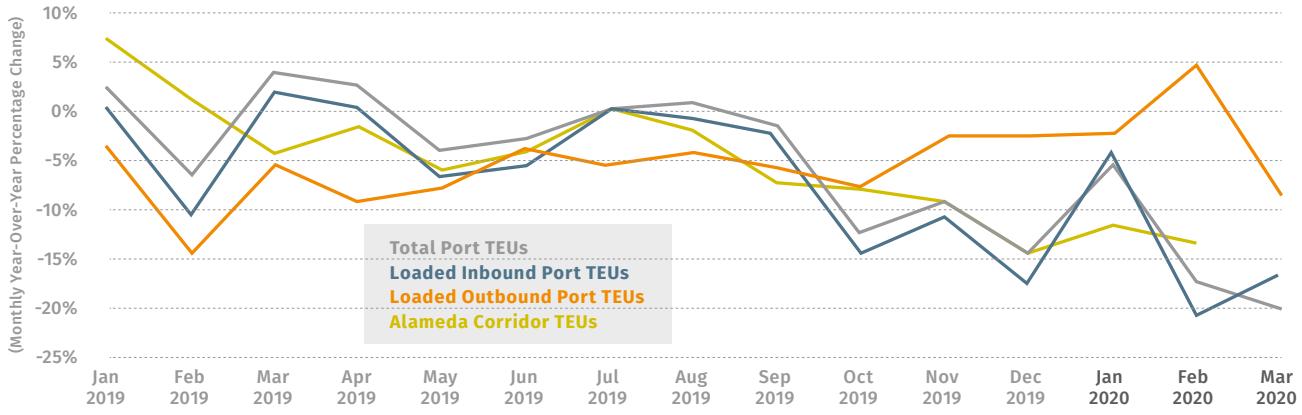
However, it is important to note that in contrast to the Great Recession prior to which housing had been overbuilt, housing supply is generally understood to be well below current demand. A National Association of Realtors states that six in ten buyers and sellers are stalling their transaction for a couple of months, but only one in ten are deciding not to buy or sell indefinitely suggesting only a delay of otherwise strong demand indicators. For this reason housing may play a major role in leading the economy out of recession once virus mitigation shows signs of progress.

Trade and freight

As COVID-19 has spread across the world, the U.S. has witnessed increasing challenges impacting its supply chains. This has ranged from substantial declines in import and export activity for discretionary cargo to surges in consumption of essential goods as consumers have rushed to purchase items of necessity in preparation of social distancing measures. The erratic shifts in consumer behavior has led to increasing storage needs for certain goods and extreme pressure on fulfillment and warehouse distribution facilities looking to accommodate the exponential increase in digital orders for home delivery. The uncertainties surrounding how local economies across the country will begin to re-open household and business activity complicates unknowns on how many variables will play out including the impact on freight rates, employment, business solvency, ability to meet consumer demand, etc.

Import and Export. The Ports of Los Angeles and Long Beach (San Pedro Bay Ports – SPBPs) have witnessed a substantial decline in twenty-foot equivalent container units (TEUs) during February and March of this year, particularly for imports (see **FIGURE 1**). While import shipments have been improving from March low points, overall performance in April is not anticipated to be better. Although manufacturing activity has been ramping back up in China, the pandemic's arrival in the U.S. has crippled America's demand for discretionary imported goods. With broad segments of the economy shut down, non-essential stores closed, and millions of U.S. consumers unemployed, depressed levels of import activity are likely to persist over the near-term, with uncertainty as to when demand will return to more normal levels. Many are forecasting double-digit declines for monthly retail imports in every month, at least through August 2020.

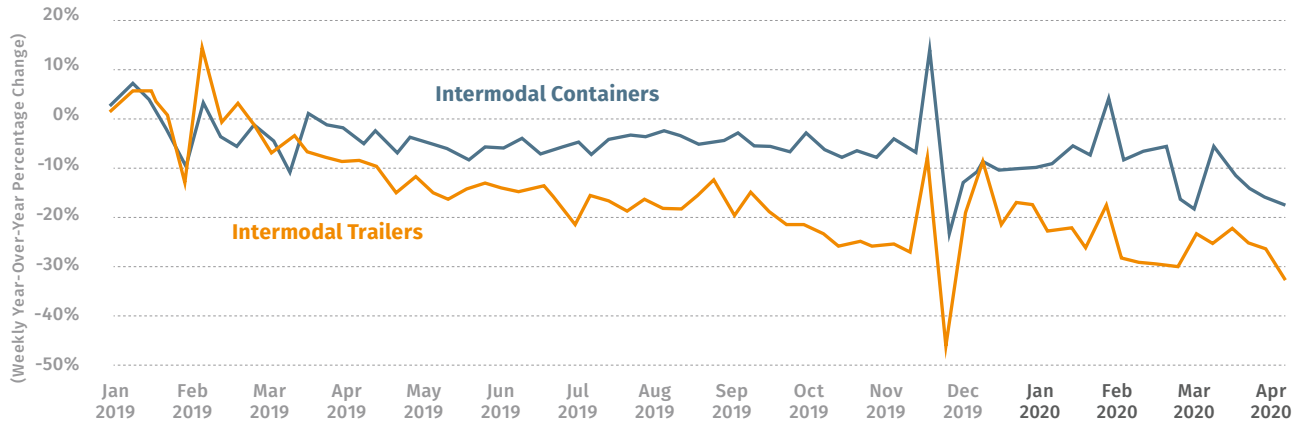
FIGURE 1A San Pedro Bay Ports & Alemeda Corridor TEU Performance



Sources: Ports of Los Angeles & Long Beach, & Alameda Corridor Transportation Authority

Rail traffic. National rail trends have displayed volatility since 2018. Despite lower performance throughout 2019, trends through mid-April have shown declines from COVID-19 disruptions. Both Union Pacific Railroad Company (UPRR) and BNSF Railway (BNSF) railroads, the largest rail operators in North America, serve the SCAG region. These rail operators have witnessed a 10% decline in international and domestic intermodal service and a 26% decline in trailer services through mid-April. The Alameda Corridor, which runs from the San Pedro Bay Ports to downtown Los Angeles, is one of the key rail infrastructure connections in the region and has reported declines through February 2020, with corridor total TEUs down 12% stemming from the declines in trade at the ports. This confirmation of April's continued woes is consistent with port data and has also illustrated how domestic intermodal freight is sensitive to the international declines which began earlier.

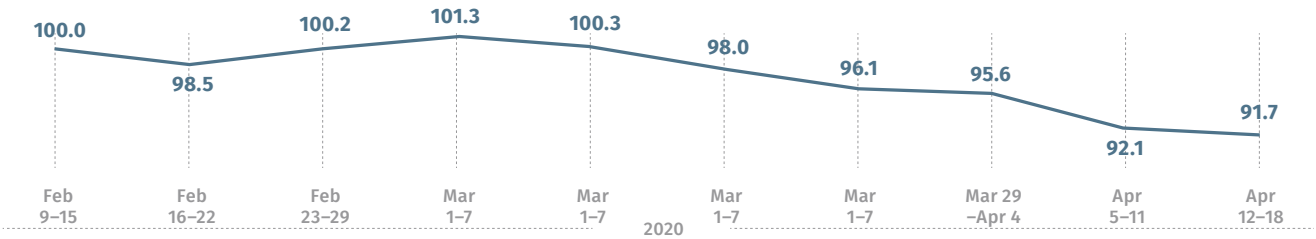
FIGURE 1B Railroad Intermodal Container/Trailer Performance



Sources: BNSF/Union Pacific carload/intermodal unit weekly reporting

Truck. Trucking performance nationwide has witnessed a brief bright spot during the COVID-19 pandemic. Notably, through mid-March, a surge in truck-related freight activity occurred as consumers flocked to retail stores to purchase essential goods as stay-at-home orders began. This led to a short-lived increase in freight demand, but demand has fallen off substantially through mid-April as consumption has focused explicitly on food and beverages, pet care, and many other household products. This has led to a narrower shift in freight that has severely affected truck freight rates due to an oversupply of drivers competing for this business.

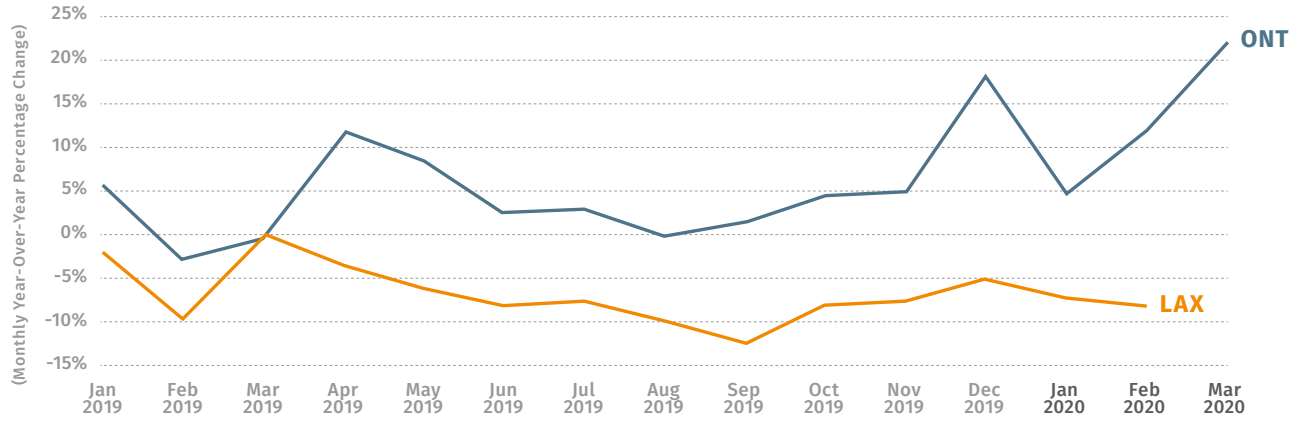
FIGURE 1C California Truck Activity Index



Sources: American Transportation Research Institute

Air cargo and passengers. Recent impacts on air freight has been mixed, primarily relating to domestic versus international performance. Domestic air freight has been much more associated with shipments from FedEx, UPS, and Amazon, which has been more correlated with household consumer deliveries of essential items. Los Angeles performance is indicative of its larger share of international freight, impacted similarly from declines in trade with Asia. For the year, Ontario freight tons are up 13% and Los Angeles are down 8%. Ontario's acceleration in March correlates with the strong rise in trucking demand shown above and may be indicative of a higher share of essential goods throughput.

FIGURE 1D Los Angeles & Ontario Airports Frieght Ton Performance



Sources: Los Angeles World Airports and Ontario International Airport

ANALYSIS OF POTENTIAL IMPACTS OF COVID-19 ON REGIONAL TAXABLE SALES IN 2020 AND 2021

Local vulnerability

The COVID-19 pandemic will impact different communities in different ways. However, evidence available to date suggests significant disruption of local and state revenue streams as taxable sales and tourism-based revenues are impacted. **TABLE 3** summarizes 2018 state Controller data on local jurisdictions' revenue sources across the counties of the SCAG region. An expanded list of economic, social, health, and housing variables across jurisdictions in the SCAG region can be found in Appendix A.

Analysis Background

This section presents a preliminary analysis of the potential impact of COVID-19 on taxable sales in the region. **Note that this is not a forecast or assessment of revenues in the region.** Given the uncertainty of the situation, SCAG has assessed a range in outcomes based on an array of assumptions that will be updated as new information becomes available. The impacts presented here are based on the latest data available to SCAG as of April 28, 2020. All figures below are presented in 2019 dollars.

This preliminary analysis should be used with caution. Information on the likely effects of the pandemic—and the governmental, business, and consumer responses to those effects—continues to change daily. Given the limited nature of relevant data that is available at this time, the preliminary forecast was developed using a top-down analysis at the regional level; overall findings about aggregate results may not translate directly to local jurisdictions. Staff is providing this first-cut assessment to help spur the conversation on appropriate actions to take at this time, but the forecast will necessarily change and become more detailed in the weeks and months ahead as more concrete data becomes available.

TABLE 3 Local Revenue Sources (2018)

		Total Revenues (Millions)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy (Hotel) Taxes (%)	Sales & Hotel Taxes Combined (%)
SCAG Region Local Jurisdictions (197)	Min.	$0.75	0.0%	0.0%	0.0%	0.3%
	Avg.	$119.55	21.1%	26.7%	6.3%	32.9%
	Max.	$6,359.45	73.8%	77.7%	48.9%	78.9%
Imperial County Jurisdictions (8)	Min.	$0.75	6.0%	0.0%	0.0%	2.1%
	Avg.	$14.78	15.3%	28.6%	2.7%	31.2%
	Max.	$50.69	32.0%	56.3%	7.9%	62.2%
Los Angeles County Jurisdictions (89)	Min.	$1.03	0.0%	0.3%	0.0%	0.3%
	Avg.	$176.69	20.1%	23.9%	5.3%	29.3%
	Max.	$6,359.45	73.8%	77.7%	48.9%	78.9%
Orange County Jurisdictions (35)	Min.	$3.20	4.3%	0.9%	0.0%	0.9%
	Avg.	$87.38	26.7%	28.3%	8.0%	36.3%
	Max.	$778.99	59.1%	48.4%	46.9%	71.6%
Riverside County Jurisdictions (29)	Min.	$4.62	2.3%	3.5%	0.0%	4.0%
	Avg.	$72.04	18.7%	29.3%	8.8%	38.1%
	Max.	$780.60	52.2%	51.1%	39.6%	66.1%
San Bernardino County Jurisdictions (25)	Min.	$3.52	0.0%	3.4%	0.0%	3.8%
	Avg.	$70.28	19.6%	29.6%	4.9%	34.5%
	Max.	$630.72	49.1%	56.9%	28.5%	60.4%
Ventura County Jurisdictions (110)	Min.	$6.30	8.1%	2.9%	0.0%	3.2%
	Avg.	$72.97	25.8%	28.7%	7.2%	35.9%
	Max.	$346.69	61.1%	43.7%	42.2%	60.3%

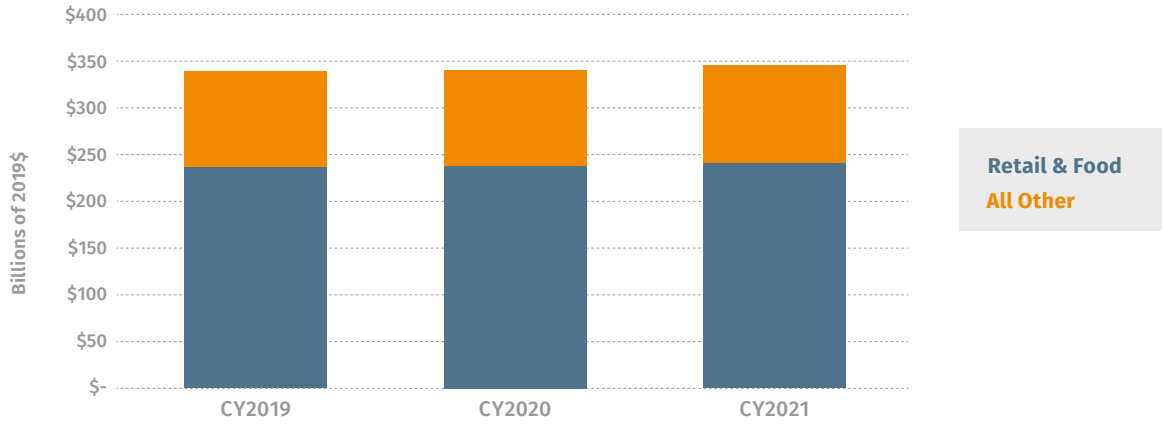
Source: CA State Controller

Methodology and Key Assumptions

SCAG developed a baseline estimate and a preliminary forecast for the value of taxable sales in the six-county region using historical actual data for CY2019, disaggregated by county and by industry group from the California Department of Tax & Fee Administration (CDTFA).[3] This data includes taxable sales from different types of retail and food services outlets as well as an "All Other Outlets" category that includes taxable sales from all other industry codes. The "All Other Outlets" category is dominated by wholesale trade (37% of the category in CY2019), manufacturing (22%), real estate (12%), and construction (5%).

The baseline assumes that, absent the pandemic, taxable sales would have grown at a composite rate of 1.34% per year in real terms.[4] In CY2019, the SCAG region had $238 Billion in taxable retail and food sales and $103 Billion in taxable sales from all other outlets, for a total of $341 Billion. Assuming continued growth, the SCAG region would have seen total taxable sales of $342 Billion and $348 Billion in CY2020 and CY2021, respectively, for a total of $690 Billion. The Baseline estimate of annual taxable sales for CY2019 through CY2021 is portrayed in **FIGURE 2**.

FIGURE 2 Annual Taxable Sales in SCAG Region (Baseline Estimate)



To develop a new forecast of taxable sales, SCAG relied on the following data sources:

- Analysis of retail and food service categories utilized the most recent data from the Monthly Advance Retail Trade Survey (MARTS), administered by the U.S. Census Bureau.[5] This regular sample of U.S. retail and food service establishments provides an early estimate of trends in retail sales each month before complete data for the entire month are available, and it is currently the only comprehensive published data set for these business types that reflects the impacts of the significant economic dislocations that began in March of this year. The Census will release additional retail data series over the next few weeks and months, and staff will be modifying the forecast based on this new information as it becomes available.

3 Available at https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=TaxSalesAllCounties
4 This 1.34% figure is a placeholder based on the long-term annual growth rate in sales tax revenues in the SCAG region as a whole, in constant dollars, over the full 25-year forecast period in Connect SoCal, without taking economic cycles into account. Future analysis efforts will assess trends at the county-level and evaluate prior expectations for near-term taxable sales and associated tax revenues.
5 Available at https://www.census.gov/retail/index.html

- Analysis of all other taxable sales utilized the IHS US Markit Flash Composite PMI (Purchasing Manager Index).[6] This proprietary data series is computed based on surveys of private businesses and provides a monthly snapshot of the manufacturing and services sectors that roughly tracks U.S. GDP. The March data is now final and preliminary data for April has just been released; a revised estimate for April is expected in the first week of May. In addition to reviewing any updates in the IHS Markit index, staff will also monitor emerging trends using future Census data releases for the wholesale trade, manufacturing, and real estate sectors.

SCAG estimated taxable sales for each month of 2020 and 2021, for each industry grouping in the CDTFA data, based on a common timeline of impacts from COVID-19:

- Estimated taxable sales for January and February of 2020 are assumed to be relatively normal and consistent with recent history.
- March through May of 2020 are assumed to have a significant decrease in taxable sales due to the artificial suppression of economic activity; effects are assumed to intensify during these three months as the full impact of large-scale unemployment takes hold. Stay-at home orders currently in place are assumed to be relaxed at the end of May.
- From June 2020 through December 2021, taxable sales are assumed to slowly increase as economic activity gradually expands again; for simplicity, the pace of this recovery is modeled by estimating a December 2021 endpoint for each industry relative to its own CY2019 baseline, and then extrapolating a linear increase between the May-2020 value and the Dec-2021 endpoint.

Although the forecast of taxable sales assumes a consistent timeline across industries, the scale of the impact for each industry is determined separately, so as to reflect differences that are already visible in the MARTS data release for March 2020. For example, the significant decline in sales at bars and restaurants is partially offset by a surge in sales for grocery stores. Scaling factors were utilized in the calculations to reflect the following considerations:

- California was the first state to issue formal shelter-in-place orders at the statewide level. National trends will lag those experienced in California by a week or more. The industry-specific effects for March 2020 taken from the MARTS and IHS Markit data were intensified to 125% of the values reported at the national level to reflect the earlier onset of the changes in our state.
- The changes visible in the MARTS data for March 2020 only reflect a partial month and will intensify in the months that follow, because recent increases in unemployment will further decrease consumer spending which, in turn, decreases taxable sales for businesses; the scaling factors reflect stronger effects over the course of the three months from March to May.
- The effects will vary in magnitude by industry. For example, changes in purchases of durable goods such as cars and appliances are likely to be more pronounced over time than changes in purchases of clothing.
- Due to new public health requirements, some industries may not be able to return to their former sales volume within the timeframe of this analysis. For example, it is likely that new table-spacing requirements will limit the total revenue potential of the restaurant industry for the next year or more.

Preliminary estimates of all of these effects were based on industry-specific information available to staff at the time of this writing and current expectations for when stay-at-home orders may start to be reduced or eliminated. Going forward, these estimates will be supplemented with additional research in order to refine the understanding of expectations and most-likely outcomes. Further information about the industry-specific inputs used in this analysis is presented in the next section.

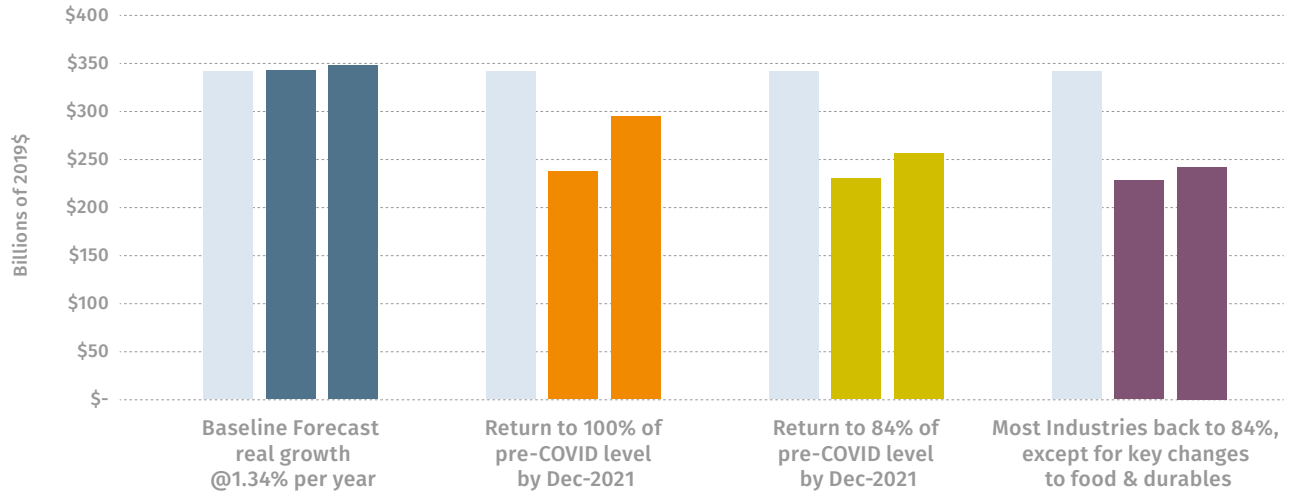
6 Available at www.markiteconomics.com

Preliminary Findings

At this early stage, staff opted to examine several possible recovery scenarios, in order to characterize a range of possible outcomes. Some of the tested scenarios are not considered plausible economic results; instead they help to illustrate the basis for arriving at the current forecast. In addition to the current Baseline estimate noted above, three exploratory scenarios were calculated:

- **Return to 100% of pre-COVID level by Dec-2021** – The first scenario assumed that the economy would manage to recover to the point that monthly taxable sales return to pre-COVID levels in all industries by the end of the two-year forecast period. This scenario seems overly optimistic at this stage, but as a point of reference, it would result in a loss of $158 Billion (in 2019 dollars) in taxable sales in the SCAG region over 2020 and 2021. This is a decrease of 23 percent compared to the $690 Billion in taxable sales in the Baseline estimate.
- **Return to 84% of pre-COVID level by Dec-2021** – A review of taxable sales data from the period that covers the Great Recession shows that six calendar quarters after the economy reached the bottom of the trough in June 2009, taxable sales in the SCAG region had returned to 84% of their pre-recession (2007-Q4) levels in constant dollar terms. As a benchmark, this scenario tested the results if all taxable sales categories were able to reach the same milestone by December 2021, six quarters after the assumed end of the shutdown period. This scenario results in a loss of $204 Billion (30 percent) in taxable sales over the two-year forecast period, compared to the Baseline estimate.
- **Most industries return to 84% of prior level, except for key changes to food & durables** – As a general matter, each industry will recover at different rates, and the public health issues unique to this crisis are likely to result in some long-term shifts in purchasing behaviors between industries. For example, we can expect significantly decreased activity in bars and restaurants and corresponding increases in grocery purchases relative to the prior condition. Also, given the scale of workers who are losing income, many households are likely to delay discretionary purchases of durable goods such as motor vehicles and appliances. This scenario alters the "84%" condition described above a step further by adjusting the Dec-2021 recovery targets for the industry categories mentioned above to reflect these possibilities. Total taxable sales lost under this scenario would be $220 Billion (32 percent below Baseline).

FIGURE 3 Annual Taxable Sales in the SCAG Region (Exploratory Scenarios, CY2019 to CY2021)



The total taxable sales by year for these exploratory scenarios are portrayed in **FIGURE 3**. The total taxable sales by month for each scenario are portrayed in **FIGURE 4**.

FIGURE 4 Total Taxable Sales in the SCAG Region by Month (Exploratory Scenarios, Jan-2020 to Dec-2021)

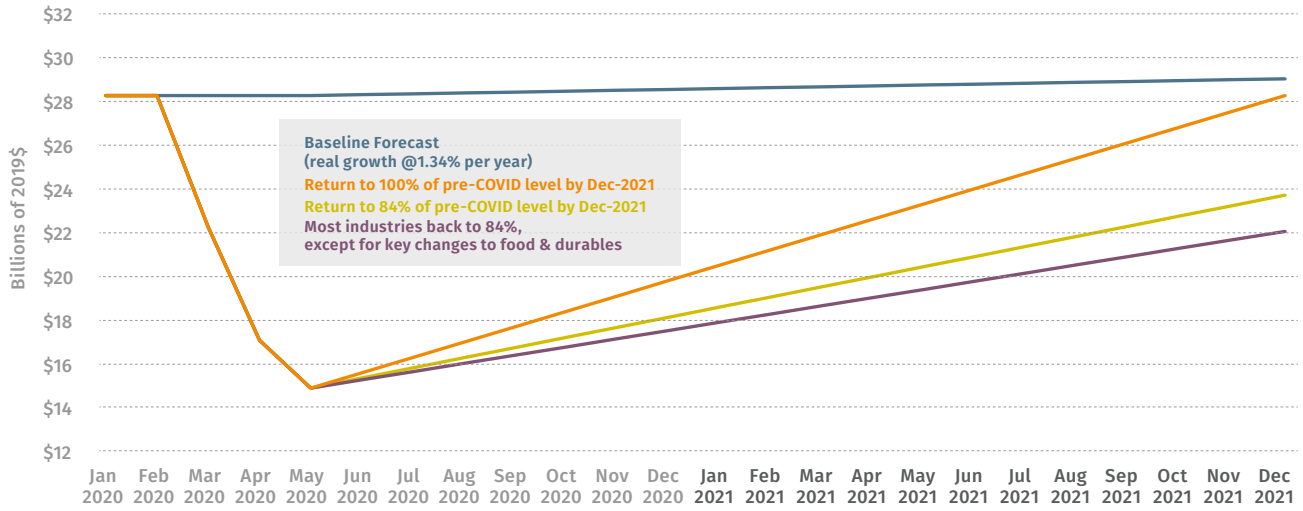


TABLE 4 Asserted Input Factors by Industry (Preliminary Forecast Midpoint)

	May-2020 as share of 2019 monthly level	Dec-2021 as share of 2019 monthly level
Motor Vehicle and Parts Dealers	41%	65%
Home Furnishings and Appliance Stores	51%	65%
Building Material and Garden Equipment and Supplies Dealers	108%	84%
Food and Beverage Stores	142%	125%
Gasoline Stations	28%	84%
Clothing and Clothing Accessories Stores	11%	84%
General Merchandise Stores	111%	84%
Food Services and Drinking Places	20%	50%
Other Retail Group	97%	84%
Sub-total: All Retail and Food Service	60%	76%
All Other Outlets	38%	84%
TOTAL, All Outlets	**53%**	**78%**

With the information currently available, the third (last) scenario described above is used as the preliminary forecast at this time. For reference, the key input factors used in the third scenario are presented below in **TABLE 4**. The values are presented relative to a typical month in CY2019, computed as a simple 1/12th of the annual total reported by CDTFA.

Given the significant uncertainty inherent in this simplified forecast method, range estimates were developed by varying the values of all asserted scaling factors by +/-10% from the levels described in **TABLE 4** to evaluate the results for lower impact (10% better) and higher impact (10% worse) conditions. The corresponding results over the two-year period for each industry category are presented below in **FIGURE 5** and **TABLE 5**.

FIGURE 5 Total Taxable Sales in the SCAG Region, by Month (Preliminary Forecast Range, Jan-2020 to Dec-2021)

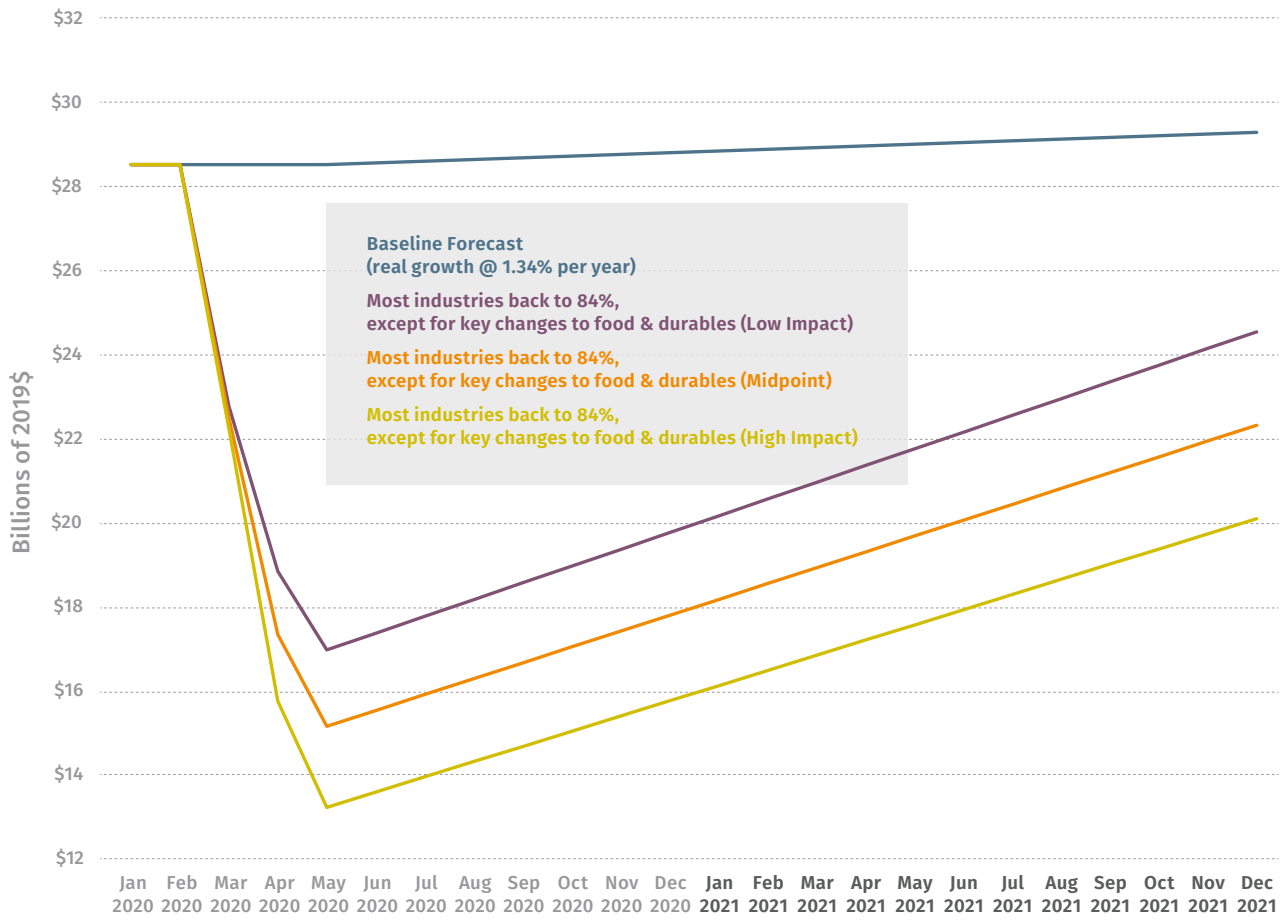


TABLE 5 Taxable sales in the SCAG Region by Industry Grouping (Preliminary Forecast Range, Jan-2020 to Dec-2021)

	Total Taxable Sales: 2020+2021 combined (in billions, 2019$)		Change vs. Baseline (in billions, 2019$)		Percent Change vs. Baseline	
	Lower Impact	Higher Impact	Lower Impact	Higher Impact	Lower Impact	Higher Impact
Motor Vehicle and Parts Dealers	$53	$44	($32)	($41)	-38%	-48%
Home Furnishings and Appliance Stores	$19	$16	($10)	($12)	-34%	-43%
Building Material and Garden Equipment and Supplies Dealers	$35	$33	$0	($2)	-1%	-7%
Food and Beverage Stores	$37	$35	$9	$7	33%	26%
Gasoline Stations	$33	$26	($17)	($24)	-35%	-48%
Clothing & Clothing Accessories Stores	$27	$20	($20)	($27)	-43%	-57%
General Merchandise Stores	$57	$53	$0	($3)	1%	-5%
Food Services and Drinking Places	$41	$31	($47)	($57)	-53%	-65%
Other Retail Group	$60	$56	($3)	($8)	-5%	-13%
Sub-total: All Retail and Food Service	**$362**	**$314**	**($120)**	**($168)**	**-25%**	**-35%**
All Other Outlets	**$150**	**$112**	**($58)**	**($96)**	**-28%**	**-46%**
TOTAL, All Outlets	**$515**	**$426**	**($178)**	**($264)**	**-26%**	**-38%**

Caveats and Next Steps

It should be noted that this estimate of impacts to taxable sales presented above is a first-order calculation of the direct effects of known and anticipated changes in economic activity. There will be significant economic interactions between industries over time, resulting in indirect and induced effects that can only be determined with detailed modeling of economic impacts using an input-output model; these cross-industry effects are not reflected in the starting point estimate described here. In particular, formal economic modeling could reveal that the re-opening period will initially be much slower than the linear interpolation suggests. And as noted elsewhere, this assessment does not reflect the possibility of further wave(s) of infection which could necessitate additional public health measures that constrain the economy.

In addition, these estimates do not formally incorporate the effects of government spending on relief efforts or fiscal stimulus. The latest available MARTS data was collected throughout the month of March, and many survey respondents may not have had information on whether they would be helped by the $2 Trillion CARES Act, which was not signed until the 27th of the month. An additional federal relief package has already been passed, other federal interventions are currently being debated, and state and local jurisdictions are tapping into reserve funding pools to support their communities. This government spending will surely affect future taxable sales over the next two years, but it is too early to know the timing and degree of impacts for different industries.

Finally, while this estimate provides insight on the scale of potential changes in total taxable sales by sector, it does not yet address key questions about the magnitude and timing of these changes on the associated government cash flow. A number of factors could influence the timing of when and whether the tax revenues associated with the taxable sales activity will actually be available to each jurisdiction. Governor Newsom has issued executive orders allowing for the deferral of multiple types of tax payments, and some local jurisdictions are deciding to waive penalties associated with late payment of property taxes as well.[7] At the same time, the pandemic has rapidly accelerated the trend towards online shopping and away from bricks-and-mortar retail establishments. The taxable sales trends computed above do not account for the possibility of intra-jurisdictional shifts associated with changes in the point-of-sale for these transactions. Although California has enacted several laws to enforce payment of sales taxes for online purchases as of October 1, 2019, it seems unlikely that enforcement will be a significant enough focus of the administration over the next two years to meaningfully reverse the trends that are already underway.[8]

ANALYSIS OF POTENTIAL IMPACTS OF COVID-19 ON REGIONAL EMPLOYMENT IN 2020 AND 2021

Background

The preceding analysis of taxable sales presents a first-order calculation of how certain assumptions about COVID-19's economic impact may be directly reflected in regional taxable sales through 2020 and 2021. In contrast, this analysis uses a structural economic forecasting model (REMI) to evaluate a similar yet distinct set of assumptions on employment in the region's six counties during 2020 and 2021. **This analysis captures economic interactions between industries over time, but relies on a greater number of assumptions.**

SCAG has long assessed the economic output and job creation impacts of the investments associated with its Regional Transportation Plan/Sustainable Communities Strategy (see the Economic and Job Creation Analysis Technical Report at www.connectsocal.org). The REMI model uses a system of equations based on county-specific information to forecast how the region's economy changes over time and reacts to new conditions by county and full year. SCAG staff developed assumptions of some of the direct shocks to output that certain industries are facing due to the COVID-19 pandemic, using them as inputs into the REMI model to evaluate some of the implications on the regional economy. The model then assesses downstream implications including the losses in supply chain spending that results from a decrease in output and the loss of consumption spending resulting from those now unemployed taking into account regional characteristics such as commuting patterns and regional trade relationships.

Caveats

Key assumptions are how much and how long each industry sector will be impacted, while the outputs shown take into account county-specific characteristics such as industrial composition. This analysis was conducted by SCAG staff in consultation with outside experts (including REMI staff) on April 28, 2020. In addition to reflecting the assumptions and time periods described at the beginning of this report, additional assumptions are made for specific industry sectors compared to 2019 levels.

7 See: (1) https://www.gov.ca.gov/2020/03/30/governor-newsom-signs-executive-order-providing-relief-to-california-small-businesses/, (2) https://www.gov.ca.gov/2020/04/02/governor-newsom-announces-new-help-for-small-businesses-workers-displaced-by-covid-19/, and (3) https://www.natlawreview.com/article/what-can-you-do-about-your-california-property-tax-payment-covid-19-s-impact

8 https://www.cdtfa.ca.gov/industry/MPFAct.htm

In contrast to the taxable sales analysis above which roots its assumptions in March 2020 data from MARTS and IHS Markit, this analysis necessitates assumptions on a broader range of industries for which similar data may not be readily available. For certain industries, reliable information or prognoses were not available and an assumption based on a related industry was used while in other instances there may not yet be an understanding of the shock of COVID-19. Some assumptions are informed by, but not directly based on an analysis conducted by USC's The National Center for Risk and Economic Analysis of Terrorism Events (CREATE).[9] Other assumptions mirror those presented in the background material and taxable sales analyses above; however, assumptions used in the REMI model may differ since they reflect direct output shocks rather than taxable sales impacts. Still other assumptions rely on the expertise on SCAG's Economic Bench, REMI, and SCAG research staff or reflect combinations of these information sources. Key assumptions are described in **TABLE 6**. As more information becomes available on the current and expected future trajectory of industry sectors, subsequent updates will be made to this analysis. Given the uncertainty of these inputs, we did not generate high and low scenarios. As such, interpretation of these preliminary results should take into account these substantial caveats.

Sector-based assumptions compared to 2019 levels:

Attempts are made to reflect, to the extent possible, the three impacted periods shown below. Assumptions by period are converted to total assumptions for the percentage of 2019 output which is expcted in 2020 and separately in 2021. Quicker or slower rebounds in specific sectors, or deeper low-points, will impact employment; however, the extent to which this is reflected in final figures depends on the prevalence of that industry in the county as well as the dynamic linkages captured through the REMI model.

Shutdown Period			Resuming Period							Recovery Period											
Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021

Preliminary Findings

The results of this analysis are shown in **TABLE 7** and **FIGURE 6**. Employment change is the number of jobs compared to the previous year. Unemployment rate is expressed as an annual average. For example, the 19.3% regional estimate for 2020 would reflect a pre-pandemic period during January and February where unemployment rates were near 4%, a peak around June 1st at the end of the "shutdown" period, and a lower-than-average rate by the end of the year. For historical context, the highest unemployment rate recorded by the BLS was 24.9% in 1933, three years into the Great Depression. The highest annual unemployment rate in recent memory in the SCAG region was 12.3% in 2010 following the Great Recession. Furthermore, similar to the recovery from the Great Recession, employment growth may first manifest itself in a combination of part-time and temporary positions.

9 See Rose, A. and Wei, D. 2019. Modeling the Impact of COVID-19. Sol Price School of Public Policy Center for Risk and Economic Analysis of Terrorism Events, University of Southern California. Webinar, 19 March.

TABLE 6 Description of selected industry-specific output assumptions used in REMI model

Durables Manufacturing	Assume a severe drop during the shutdown period (10%). Notably, much of American auto manufacturing is currently shuttered. Assume a return to 70% by the recovery period.
Nondurables Manufacturing	Assume a severe drop during the shutdown period (10%). Assume a more complete return to 90% during the recovery period compared to durables as demand remains stronger.
Retail & Wholesale	Informed by MARTA, assume 61% during shutdown period, rebounding to 70% during the recovery.
Tourism	National RevPAR data in early April indicate hotel activity at 16% of last year's levels, returning to 70% during the recovery.
Food & drink	Estimate 27% of capacity during shutdown, returning to 70% by recovery period.
Professional/ Business Services	Due to rapid adoption of telework, assume double the amount of BLS' "telework capable jobs," suggesting 80.1% capacity during shutdown. Return to 90% while resuming and 95% during recovery.
Real Estate & Construction	NAHB West Region HMI index decrease implies a 39% level during shutdown period. Due to low existing supply, rebound quickly to 90-100% during resuming and recovery periods.
Telecom & Data Businesses	Indications that broadband usage has increased to 133% (see www.fiercetelecom.com); tapering off but remaining above 100% through 2021 as some of the increased teleworking may be here to stay.
Oil, Gas & Petroleum	Based on OPEC's 4/9 announcement of cuts in May and June, assume announced cuts in May/June, assume 92% during shutdown, 87% during resuming, and 93.5% during recovery period.
Air & Water Transport	Passenger traffic at LAX reported to have decreased by 95% as of mid-April; assume lower demand through the recovery period (to 70%). Use Port of Los Angeles mid-April reported capacity (80%) for shutdown period, increasing to 85% to roughly mirror manufacturing expectations in subsequent periods.
Local Government	Increased expectations for service coupled with lower tax revenue suggests lengthy impacts. Using one example of the City of Santa Monica's 38% FY21 shortfall expectation (while being 1.4 times as reliant on sales/hotel taxes as the average SCAG city) suggests an assumption of 73% during shutdown and 82% through 2021.
Federal & State Government	No change assumed.

FIGURE 6 Preliminary Estimate of Annual Average Unemployment Rate

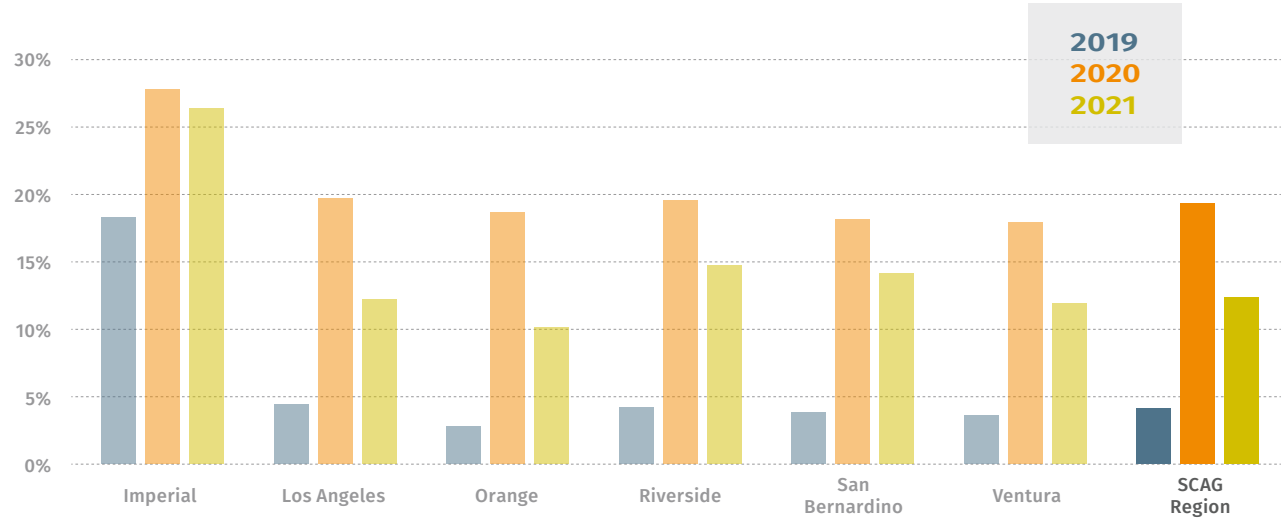


TABLE 7 Preliminary Assessment of Potential Impact of COVID-19 Output Shocks on Annual Employment, SCAG Region

	2019	2020		2021	
	Observed Unemployment Rate	Estimated Employment Change	Estimated Unemployment Rate	Estimated Employment Change	Estimated Unemployment Rate
Imperial County	18.2%	-8,800	27.6%	1,400	26.1%
Los Angeles County	4.4%	-760,900	19.5%	378,300	12.0%
Orange County	2.8%	-295,400	19.0%	158,100	10.3%
Riverside County	4.2%	-130,100	19.5%	41,000	14.7%
San Bernardino County	3.8%	-123,700	18.2%	34,300	14.2%
Ventura County	3.6%	-52,400	18.2%	20,700	12.4%
SCAG Region	4.1%	-1,371,300	19.3%	633,800	12.2%

NEXT STEPS

This preliminary analysis of taxable sales and employment impacts of the COVID-19 pandemic on the SCAG region is provided as a starting point to catalyze further discussions among regional stakeholders. As the situation unfolds and more information becomes available, SCAG will provide additional updates to these preliminary estimates. This will likely include:

- Reviewing forthcoming data that will provide a clearer picture of actual economic conditions during the shutdown period,
- Revising the timeline as necessary, including tracking a possible second wave of infections and reviewing industry sectors based on the extent to which they can increase activity following the shutdown period,
- Expanding from estimating the change in taxable sales to calculating the corresponding changes in tax revenues,
- Increased consideration of the differential impacts across counties, jurisdictions, or subpopulations including lower-resourced areas, and
- Monitoring the nature and extent of federal policy intervention, which is not explicitly included in these analyses.

This continual approach acknowledges that there is a high level of uncertainty in any estimates which could be developed at this time. However, initial estimates begin to suggest that the pandemic's economic impacts are likely to be severe and long-lasting. **Job losses are likely to be deeper than those experienced during the Great Recession, while the timeline described above would not suggest a quick return to normal tax revenues for local governments.**

APPENDIX A -
SELECTED COVID-19 VULNERABILITY INDICATORS

The COVID-19 pandemic is having severe and unprecedented implications on a wide range of areas which SCAG plans for including public health, transportation, housing, public finance, and the economy more generally. This appendix provides several economic, social, health, and housing-related indicators of potential vulnerability at the jurisdictional level.

The purpose of these indicators is to provide context and insightful information for local jurisdictions and stakeholders to understand better the impacts of the pandemic in numbers. It is important to note that the variables can be updated and expanded based upon comments and new research available.

METHODOLOGY

A comprehensive list of vulnerability indicators is made up of more than 70 variables from various sources from the Census American Community Survey (ACS), California State Controller's Office, InfoUSA, and the California Tax Credit Allocation Committee/Department of Housing and Community Development (TCAC/HCD). This appendix provides a selection of 12 key economic, social, health, and housing vulnerability indicators:

Category	Indicator	Year	Source
Basic	**Total Population**	2014-2018	ACS
Basic	**Total Housing Units**	2014-2018	ACS
Basic	**Median Household Income ($2018)**	2014-2018	ACS
Basic	**Total Tax Revenues**	2018	State Controller
Basic	**Total Residence-Based Employees**	2014-2018	ACS
Basic	**Total Workplace-Based Employees**	2016	InfoUSA
Economic	**Residence-Based Employees in Highest Impacted Sectors (%)**	2014-2018	ACS
Economic	**Workplace-Based Employees in Highest Impacted Sectors (%)**	2016	InfoUSA
Economic	**Secured and Unsecured Property Taxes (%)**	2018	State Controller
Economic	**Sales and Use Taxes (%)**	2018	State Controller
Economic	**Transient Occupancy Taxes (%)**	2018	State Controller
Economic	**TCAC/HCD High Segregation & Poverty (%)**	2019	TCAC/HCD
Social & Health	**Senior Population (65+) (%)**	2014-2018	ACS
Social & Health	**Population below Poverty Level (%)**	2014-2018	ACS
Social & Health	**No Health Insurance Coverage (%)**	2014-2018	ACS
Social & Health	**Disability Status (%)**	2014-2018	ACS
Housing	**Severely Overcrowded Household (1.51 or More) (%)**	2013-2017	ACS
Housing	**Severely Cost-Burdened Household (50% or More) (%)**	2013-2017	ACS

It is important to understand the definition of each indicator as they are calculated differently. The table below provides a data description. Some of the indicators were calculated by combining multiple variables together such as the “Residence-Based Employees in Highest Impacted Sectors” and “Workplace-Based Employees in Highest Impacted Sectors.” Similarly, the percentage of severely overcrowded and cost-burdened households were a combination of renters and owners.

Indicator	Detailed Description
Total Population	Total population
Total Housing Units	Total housing units
Median Household Income ($2018)	Median household income
Total Tax Revenues	Total tax revenues generated
Total Residence-Based Employees	Total employed civilian population 16 years and over who live in a jurisdiction
Total Workplace-Based Employees	Total employees who work in a jurisdiction
Residence-Based Employees in Highest Impacted Sectors (%)	Percentage of employed civilian population living in a jurisdiction who work in these industry sectors experiencing especially high impacts from COVID-19: 1) Food Preparation and Serving Related, 2) Personal Care and Service, and 3) Sales and Related Occupations
Workplace-Based Employees in Highest Impacted Sectors (%)	Percentage of employees who work in a jurisdiction and are employed in these industry sectors experiencing especially high impacts from COVID-19: 1) Accommodation and Food Services, 2) Arts, Entertainment, and Recreation, and 3) Retail Trade
Secured and Unsecured Property Taxes (%)	Percentage of jurisdiction's total revenue from secured and unsecured property tax
Sales and Use Taxes (%)	Percentage of jurisdiction's total revenue from sales and use tax
Transient Occupancy Taxes (%)	Percentage of jurisdiction's total revenue from transient occupancy (hotel) tax
TCAC/HCD High Segregation & Poverty (%)	Percentage of jurisdiction’s land area within a high segregation and poverty Census Tract as defined by the California Tax Credit Allocation Committee (see https://www.treasurer.ca.gov/ctcac/opportunity.asp)
Senior Population (65+) (%)	Percentage of population 65 years of age and over
Population below Poverty Level (%)	Percentage of population below 1.0 times the poverty level with poverty status (ratio of income to poverty level)
No Health Insurance Coverage (%)	Percentage of noninstitutionalized population with no health insurance coverage
Disability Status (%)	Percentage of noninstitutionalized population 18 to 64 years of age with disability status
Severely Overcrowded Household (1.51 or More) (%)	Percentage of households with more than 1.51 occupants per room
Severely Cost-Burdened Household (50% or More) (%)	Percentage of households pay more than 50% of income on housing costs

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
Imperial	Brawley	26,009	8,472	$42,687	$10,859,128	8,226	7,226	16%	17%	16%	21%	3%	0%	12%	32%	7%	14%	7%	43%
Imperial	Calexico	39,934	11,155	$40,925	$14,477,657	13,967	10,119	21%	29%	12%	51%	2%	0%	14%	25%	12%	10%	6%	48%
Imperial	Calipatria	7,458	1,400	$35,842	$927,584	930	1,610	13%	0%	6%	0%	2%	0%	6%	15%	7%	9%	7%	44%
Imperial	El Centro	43,898	13,769	$46,457	$31,482,328	15,324	22,730	19%	28%	11%	56%	6%	14%	13%	24%	9%	14%	7%	31%
Imperial	Holtville	6,458	2,126	$44,301	$1,923,225	2,101	1,596	16%	5%	18%	25%	0%	0%	12%	28%	8%	9%	4%	42%
Imperial	Imperial	17,175	5,502	$85,876	$7,085,032	6,919	4,731	19%	11%	18%	47%	0%	0%	8%	6%	4%	5%	2%	20%
Imperial	Westmorland	2,643	783	$33,846	$751,022	789	168	24%	21%	9%	18%	8%	0%	10%	36%	11%	18%	4%	46%
Imperial	Unincorporated	36,641	14,261	$36,318	$50,694,881	11,663	14,894	18%	15%	32%	10%	0%	0%	13%	20%	11%	13%	4%	34%
Los Angeles	Agoura Hills	20,636	7,787	$121,896	$18,491,359	10,687	11,529	20%	20%	15%	21%	15%	0%	14%	5%	4%	7%	0%	44%
Los Angeles	Alhambra	84,974	31,394	$57,117	$51,948,185	41,917	31,501	22%	19%	21%	32%	1%	0%	17%	14%	8%	5%	7%	46%
Los Angeles	Arcadia	58,207	21,198	$92,102	$50,426,132	26,884	28,233	19%	31%	29%	21%	7%	0%	18%	9%	5%	3%	3%	44%
Los Angeles	Artesia	16,817	4,853	$63,708	$7,394,113	7,698	5,320	21%	29%	12%	30%	4%	0%	15%	10%	11%	7%	9%	45%
Los Angeles	Avalon	3,763	2,330	$69,440	$9,477,892	2,088	2,138	29%	48%	11%	9%	49%	0%	14%	16%	11%	3%	13%	52%
Los Angeles	Azusa	49,544	13,767	$60,227	$31,758,282	23,899	16,534	21%	15%	15%	19%	2%	4%	10%	13%	9%	7%	7%	47%
Los Angeles	Baldwin Park	76,222	18,803	$62,227	$29,842,593	35,829	21,041	21%	27%	14%	20%	3%	0%	12%	14%	13%	7%	13%	43%
Los Angeles	Bell	35,809	9,095	$42,548	$18,542,778	15,752	7,792	19%	17%	4%	14%	2%	14%	8%	24%	16%	6%	15%	48%
Los Angeles	Bell Gardens	42,641	9,877	$41,355	$25,791,442	18,063	8,563	19%	39%	4%	12%	3%	62%	7%	30%	19%	6%	14%	52%
Los Angeles	Bellflower	77,529	25,209	$55,729	$29,220,082	35,436	15,208	17%	22%	11%	20%	3%	2%	11%	14%	12%	7%	6%	45%
Los Angeles	Beverly Hills	34,362	17,744	$103,403	$211,905,933	16,639	62,380	21%	32%	30%	16%	23%	0%	22%	9%	5%	5%	2%	55%
Los Angeles	Bradbury	916	394	$154,000	$1,032,360	454	198	20%	3%	42%	0%	0%	0%	22%	9%	5%	3%	0%	34%
Los Angeles	Burbank	104,275	43,595	$73,277	$131,019,749	53,850	96,873	18%	29%	25%	25%	9%	0%	15%	11%	7%	7%	3%	44%
Los Angeles	Calabasas	24,077	9,208	$119,926	$27,475,186	11,871	17,379	17%	33%	26%	19%	7%	0%	17%	7%	4%	5%	1%	56%
Los Angeles	Carson	92,517	26,113	$78,580	$66,772,081	43,920	54,782	16%	24%	11%	37%	3%	6%	16%	10%	8%	8%	9%	38%
Los Angeles	Cerritos	50,172	16,231	$99,528	$52,057,738	22,135	34,006	15%	36%	7%	65%	2%	0%	23%	5%	5%	5%	7%	38%
Los Angeles	Claremont	36,025	12,568	$97,363	$24,189,881	17,208	16,416	16%	16%	23%	19%	6%	0%	19%	7%	5%	6%	2%	39%
Los Angeles	Commerce	12,933	3,684	$47,083	$68,207,739	5,575	45,835	17%	29%	3%	42%	5%	0%	14%	16%	14%	10%	9%	39%
Los Angeles	Compton	97,301	24,939	$50,507	$73,854,851	39,367	24,528	16%	17%	5%	14%	0%	18%	9%	22%	13%	10%	15%	58%

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
Los Angeles	Covina	48,403	15,897	$69,449	$32,226,807	23,670	23,001	21%	21%	20%	28%	1%	0%	14%	9%	7%	8%	4%	34%
Los Angeles	Cudahy	24,016	5,775	$43,381	$7,740,862	10,146	2,741	18%	17%	2%	19%	1%	61%	7%	28%	19%	7%	11%	51%
Los Angeles	Culver City	39,295	17,371	$90,183	$91,895,403	21,906	49,537	19%	21%	6%	23%	9%	0%	16%	7%	5%	5%	5%	38%
Los Angeles	Diamond Bar	56,434	18,232	$96,628	$21,943,614	27,198	14,412	18%	15%	23%	23%	5%	0%	16%	6%	6%	5%	4%	41%
Los Angeles	Downey	112,901	34,473	$71,948	$76,207,980	55,135	42,623	20%	19%	19%	36%	2%	0%	11%	10%	11%	6%	7%	38%
Los Angeles	Duarte	21,713	7,326	$73,429	$11,647,201	10,450	9,765	19%	24%	14%	45%	1%	0%	19%	11%	10%	8%	6%	43%
Los Angeles	El Monte	115,669	31,157	$47,121	$73,393,625	51,496	25,692	22%	19%	9%	30%	1%	11%	13%	21%	17%	7%	12%	52%
Los Angeles	El Segundo	16,850	6,975	$98,813	$65,155,349	8,993	41,585	15%	18%	12%	16%	21%	0%	12%	8%	4%	6%	3%	29%
Los Angeles	Gardena	59,924	21,441	$55,351	$46,768,214	28,562	25,244	22%	21%	15%	25%	3%	0%	16%	15%	11%	8%	8%	47%
Los Angeles	Glendale	200,372	77,781	$62,531	$176,910,053	96,763	97,645	19%	19%	19%	33%	4%	0%	17%	15%	8%	8%	4%	56%
Los Angeles	Glendora	51,773	17,687	$92,674	$27,896,002	24,507	19,083	19%	21%	23%	32%	1%	0%	16%	9%	5%	8%	2%	35%
Los Angeles	Hawaiian Gardens	14,411	4,016	$44,792	$4,338,350	6,068	6,895	27%	51%	0%	20%	4%	60%	10%	23%	14%	8%	16%	66%
Los Angeles	Hawthorne	87,370	30,656	$50,948	$63,063,818	43,685	22,930	22%	22%	9%	29%	9%	3%	9%	15%	14%	8%	13%	49%
Los Angeles	Hermosa Beach	19,650	10,049	$137,188	$28,862,884	12,290	8,053	21%	26%	50%	12%	11%	0%	12%	5%	3%	4%	2%	30%
Los Angeles	Hidden Hills	1,634	580	$216,786	$3,468,109	608	296	16%	3%	26%	1%	0%	0%	19%	3%	1%	5%	0%	30%
Los Angeles	Huntington Park	58,694	14,976	$40,638	$27,766,022	25,913	14,955	18%	25%	3%	24%	0%	33%	8%	26%	20%	6%	27%	51%
Los Angeles	Industry	344	91	$85,417	$107,482,198	145	69,356	18%	26%	2%	34%	1%	0%	8%	6%	7%	4%	3%	9%
Los Angeles	Inglewood	110,327	38,354	$50,335	$121,823,560	52,716	30,030	21%	21%	7%	16%	5%	6%	12%	18%	14%	11%	8%	49%
Los Angeles	Irwindale	1,405	415	$59,375	$20,620,986	618	13,919	22%	12%	2%	21%	0%	0%	14%	9%	5%	9%	0%	30%
Los Angeles	La Canada Flintridge	20,374	7,016	$161,517	$13,195,841	9,325	6,575	13%	19%	40%	20%	0%	0%	18%	3%	2%	4%	2%	41%
Los Angeles	La Habra Heights	5,383	2,079	$111,551	$2,625,737	2,552	520	14%	10%	55%	1%	0%	0%	28%	3%	5%	4%	1%	31%
Los Angeles	La Mirada	48,974	14,692	$87,778	$34,421,629	22,633	15,531	18%	19%	20%	52%	4%	0%	17%	6%	6%	6%	20%	37%
Los Angeles	La Puente	40,268	9,654	$61,054	$12,790,104	18,616	5,901	20%	30%	11%	25%	2%	0%	11%	17%	14%	7%	14%	44%
Los Angeles	La Verne	32,358	11,785	$85,769	$21,901,628	14,951	14,421	20%	18%	23%	22%	0%	0%	18%	8%	5%	10%	2%	37%
Los Angeles	Lakewood	80,771	27,177	$89,469	$36,541,737	40,654	18,208	20%	38%	14%	39%	0%	0%	13%	6%	6%	6%	4%	37%
Los Angeles	Lancaster	159,662	52,516	$52,504	$75,939,103	56,103	48,116	18%	19%	5%	28%	3%	12%	10%	23%	7%	9%	3%	37%
Los Angeles	Lawndale	33,007	10,372	$58,447	$13,350,453	16,981	6,332	27%	22%	8%	21%	5%	0%	9%	14%	15%	8%	12%	43%

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
Los Angeles	Lomita	20,628	8,431	$69,827	$7,230,108	10,746	4,967	19%	24%	24%	24%	2%	0%	16%	12%	10%	9%	4%	34%
Los Angeles	Long Beach	468,883	175,235	$60,551	$464,544,000	227,972	165,172	20%	19%	19%	15%	7%	9%	11%	18%	10%	8%	10%	42%
Los Angeles	Los Angeles	3,959,657	1,474,043	$58,385	$4,834,137,829	1,988,936	1,576,946	20%	20%	27%	11%	7%	11%	12%	19%	13%	7%	11%	51%
Los Angeles	Lynwood	71,022	15,871	$49,684	$32,933,038	29,424	11,081	19%	18%	8%	38%	0%	18%	7%	20%	17%	7%	17%	52%
Los Angeles	Malibu	12,846	7,771	$147,934	$26,124,000	6,393	8,035	18%	26%	41%	14%	18%	0%	24%	8%	6%	8%	2%	47%
Los Angeles	Manhattan Beach	35,573	15,363	$150,083	$51,536,668	16,560	18,594	16%	39%	49%	17%	9%	0%	17%	3%	2%	3%	1%	28%
Los Angeles	Maywood	27,542	6,874	$39,738	$9,387,373	12,362	3,301	17%	22%	3%	16%	1%	50%	7%	26%	18%	5%	23%	50%
Los Angeles	Monrovia	37,006	13,788	$73,170	$37,708,803	19,451	18,967	19%	23%	21%	28%	5%	0%	13%	8%	8%	6%	3%	36%
Los Angeles	Montebello	63,099	20,444	$53,677	$47,001,507	28,934	25,785	21%	23%	8%	28%	1%	0%	15%	13%	14%	9%	6%	47%
Los Angeles	Monterey Park	60,792	21,304	$57,265	$41,487,903	27,499	40,251	24%	9%	23%	13%	3%	0%	21%	14%	8%	5%	7%	53%
Los Angeles	Norwalk	105,886	28,475	$66,453	$44,819,840	48,617	22,549	20%	20%	16%	25%	4%	9%	12%	13%	11%	8%	16%	43%
Los Angeles	Palmdale	156,904	47,320	$60,428	$83,610,620	62,499	31,961	20%	36%	7%	34%	5%	7%	9%	17%	9%	11%	3%	48%
Los Angeles	Palos Verdes Estates	13,523	5,442	$175,000	$11,492,242	5,525	2,476	24%	9%	70%	3%	0%	0%	26%	5%	2%	4%	0%	44%
Los Angeles	Paramount	54,776	15,041	$53,031	$25,785,263	24,511	18,241	21%	15%	7%	30%	0%	0%	8%	19%	13%	7%	11%	49%
Los Angeles	Pasadena	141,246	60,396	$78,941	$189,718,545	73,119	99,016	17%	19%	26%	18%	8%	5%	16%	15%	8%	7%	4%	42%
Los Angeles	Pico Rivera	63,432	17,244	$65,666	$40,018,750	29,038	21,700	19%	23%	7%	22%	1%	0%	14%	10%	11%	7%	10%	39%
Los Angeles	Pomona	152,494	40,772	$55,115	$86,571,769	67,758	47,278	20%	13%	19%	20%	3%	14%	10%	20%	13%	8%	12%	49%
Los Angeles	Rancho Palos Verdes	42,271	16,777	$133,286	$30,232,750	18,376	7,238	16%	33%	27%	8%	19%	0%	26%	4%	3%	4%	3%	42%
Los Angeles	Redondo Beach	67,700	29,979	$112,271	$66,979,594	37,496	21,875	17%	32%	39%	15%	14%	0%	13%	5%	4%	6%	1%	35%
Los Angeles	Rolling Hills	1,630	712	$239,375	$1,469,245	547	189	16%	5%	74%	0%	0%	0%	32%	2%	3%	6%	0%	41%
Los Angeles	Rolling Hills Estates	8,187	3,134	$143,873	$5,716,573	3,381	6,509	18%	22%	38%	23%	0%	0%	26%	4%	5%	6%	0%	36%
Los Angeles	Rosemead	54,417	15,532	$52,057	$20,113,517	24,637	14,878	25%	24%	14%	29%	12%	12%	16%	16%	8%	5%	10%	48%
Los Angeles	San Dimas	34,239	12,184	$84,749	$21,625,750	16,535	19,962	18%	18%	19%	29%	8%	0%	19%	8%	4%	9%	3%	42%
Los Angeles	San Fernando	24,585	6,893	$53,353	$21,477,996	11,301	9,940	16%	19%	7%	38%	0%	0%	10%	15%	13%	8%	12%	52%
Los Angeles	San Gabriel	40,242	13,234	$57,863	$30,187,769	19,735	12,890	24%	23%	17%	14%	7%	0%	16%	12%	9%	4%	4%	47%
Los Angeles	San Marino	13,285	5,051	$159,509	$20,352,711	5,474	3,560	14%	19%	72%	2%	0%	0%	22%	9%	3%	4%	1%	45%
Los Angeles	Santa Clarita	209,478	69,272	$94,282	$119,677,719	104,338	78,301	19%	24%	20%	31%	3%	0%	11%	8%	7%	8%	5%	39%

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
Los Angeles	Santa Fe Springs	17,791	5,383	$65,518	$44,048,585	7,963	48,977	18%	13%	6%	59%	0%	0%	14%	13%	8%	7%	14%	48%
Los Angeles	Santa Monica	92,078	50,901	$93,865	$280,646,701	52,410	90,224	17%	25%	11%	25%	22%	0%	17%	10%	5%	6%	2%	44%
Los Angeles	Sierra Madre	11,006	5,075	$96,630	$9,737,063	5,380	2,313	15%	17%	45%	3%	0%	0%	22%	6%	4%	5%	2%	32%
Los Angeles	Signal Hill	11,538	4,759	$75,684	$19,381,615	6,113	14,222	16%	23%	3%	78%	1%	0%	11%	13%	11%	7%	7%	35%
Los Angeles	South El Monte	20,727	5,306	$48,944	$12,096,825	8,967	14,393	17%	14%	7%	47%	2%	33%	12%	17%	16%	7%	8%	47%
Los Angeles	South Gate	95,103	24,385	$50,246	$40,104,868	42,468	19,303	19%	27%	7%	53%	1%	1%	9%	19%	17%	7%	16%	48%
Los Angeles	South Pasadena	25,824	10,893	$96,579	$22,881,513	13,612	9,258	16%	14%	47%	12%	0%	0%	14%	9%	5%	4%	2%	35%
Los Angeles	Temple City	36,137	12,049	$70,984	$11,804,163	16,360	6,099	22%	20%	36%	17%	1%	0%	18%	11%	6%	6%	7%	43%
Los Angeles	Torrance	146,392	58,283	$90,309	$169,018,348	72,573	108,209	18%	20%	20%	28%	7%	0%	17%	7%	5%	6%	4%	36%
Los Angeles	Vernon	90	38	$70,000	$37,319,606	48	33,522	4%	12%	7%	20%	0%	0%	7%	2%	7%	10%	4%	4%
Los Angeles	Walnut	30,008	9,567	$104,096	$11,193,120	14,158	7,625	18%	18%	19%	18%	0%	0%	19%	7%	5%	3%	3%	39%
Los Angeles	West Covina	107,242	31,946	$79,140	$56,343,252	51,697	27,256	21%	31%	24%	29%	3%	0%	15%	9%	8%	7%	5%	45%
Los Angeles	West Hollywood	36,384	25,781	$69,249	$74,330,244	25,919	27,632	21%	37%	22%	23%	33%	0%	15%	13%	7%	6%	1%	53%
Los Angeles	Westlake Village	8,424	3,518	$141,979	$12,548,959	3,772	14,287	14%	19%	18%	34%	31%	0%	26%	5%	3%	6%	0%	44%
Los Angeles	Whittier	86,523	28,628	$73,517	$43,109,330	41,438	29,986	17%	18%	13%	24%	2%	0%	14%	11%	8%	6%	8%	41%
Los Angeles	Unincorporated	1,050,740	313,895	$67,578	$6,359,450,812	473,660	227,540	19%	25%	54%	1%	0%	1%	13%	14%	11%	7%	10%	46%
Orange	Aliso Viejo	50,925	19,783	$108,558	$18,681,521	28,899	20,572	22%	16%	14%	35%	9%	0%	8%	4%	4%	5%	1%	35%
Orange	Anaheim	349,668	105,286	$69,443	$330,526,199	173,887	182,289	21%	34%	13%	25%	47%	3%	11%	15%	13%	6%	9%	44%
Orange	Brea	42,330	15,558	$93,703	$44,566,862	21,777	45,090	19%	24%	15%	43%	4%	0%	14%	6%	4%	5%	5%	34%
Orange	Buena Park	82,781	24,313	$72,814	$54,755,059	40,959	34,894	22%	35%	12%	38%	12%	9%	12%	13%	10%	6%	7%	44%
Orange	Costa Mesa	113,198	43,100	$79,207	$112,838,244	63,740	80,680	24%	30%	24%	48%	8%	3%	11%	13%	13%	6%	5%	43%
Orange	Cypress	48,955	16,328	$92,098	$34,086,309	24,242	21,755	18%	23%	27%	33%	8%	0%	15%	6%	6%	6%	2%	30%
Orange	Dana Point	33,913	17,317	$97,519	$35,271,763	17,652	12,565	22%	44%	24%	15%	39%	0%	22%	7%	7%	5%	2%	50%
Orange	Fountain Valley	56,372	19,019	$85,423	$48,088,953	27,125	30,096	21%	20%	26%	25%	3%	0%	19%	9%	6%	8%	3%	42%
Orange	Fullerton	139,866	48,095	$73,360	$74,623,124	68,479	63,548	21%	18%	38%	28%	4%	2%	13%	13%	8%	7%	7%	42%
Orange	Garden Grove	174,010	49,261	$65,591	$102,517,554	84,809	49,383	23%	23%	14%	20%	25%	0%	13%	15%	9%	7%	9%	47%
Orange	Huntington Beach	200,606	81,396	$91,318	$144,484,650	105,878	69,202	22%	29%	34%	21%	6%	4%	17%	9%	6%	6%	3%	39%

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
Orange	Irvine	265,502	101,434	$100,969	$212,719,735	128,029	256,701	16%	14%	20%	30%	7%	0%	10%	13%	5%	3%	3%	38%
Orange	La Habra	61,910	19,421	$76,452	$36,128,592	30,397	17,166	19%	28%	27%	43%	0%	0%	12%	11%	10%	7%	8%	40%
Orange	La Palma	15,733	5,062	$98,788	$10,566,409	7,584	5,692	19%	16%	20%	42%	4%	0%	18%	5%	6%	5%	1%	34%
Orange	Laguna Beach	23,147	13,487	$121,474	$58,884,445	11,778	14,967	22%	40%	54%	10%	25%	0%	23%	7%	4%	5%	0%	41%
Orange	Laguna Hills	31,185	10,980	$98,168	$19,562,797	16,348	21,882	24%	21%	36%	29%	7%	0%	16%	9%	6%	5%	6%	44%
Orange	Laguna Niguel	65,652	27,140	$103,910	$37,462,300	34,094	18,854	22%	27%	40%	30%	0%	0%	17%	8%	4%	5%	1%	44%
Orange	Laguna Woods	16,228	12,500	$41,928	$5,621,183	3,109	7,220	24%	9%	4%	16%	9%	0%	83%	12%	1%	14%	0%	68%
Orange	Lake Forest	82,911	29,995	$104,449	$55,197,369	45,762	36,053	22%	22%	17%	29%	7%	0%	13%	7%	7%	5%	5%	37%
Orange	Los Alamitos	11,628	4,326	$84,068	$10,526,370	5,690	12,986	27%	14%	20%	32%	2%	0%	16%	9%	7%	6%	2%	34%
Orange	Mission Viejo	96,124	34,664	$114,688	$56,487,868	50,071	37,439	21%	25%	41%	30%	2%	0%	19%	5%	5%	6%	2%	37%
Orange	Newport Beach	86,280	44,801	$122,709	$174,374,347	43,892	84,253	25%	24%	50%	20%	13%	0%	23%	7%	3%	5%	1%	45%
Orange	Orange	139,873	44,575	$86,027	$97,514,082	69,521	103,058	19%	17%	23%	42%	6%	0%	12%	12%	8%	6%	6%	39%
Orange	Placentia	52,049	17,063	$89,690	$28,161,206	26,456	16,246	22%	17%	29%	25%	3%	5%	14%	9%	7%	5%	7%	33%
Orange	Rancho Santa Margarita	48,792	17,628	$115,073	$16,275,984	26,978	14,620	22%	25%	15%	41%	0%	0%	8%	4%	4%	5%	2%	38%
Orange	San Clemente	65,045	27,868	$105,812	$50,976,522	32,264	24,433	25%	28%	48%	18%	6%	0%	17%	6%	5%	4%	6%	45%
Orange	San Juan Capistrano	35,952	13,116	$87,353	$25,610,526	16,343	14,511	27%	23%	25%	32%	4%	0%	19%	10%	10%	7%	7%	60%
Orange	Santa Ana	333,499	78,597	$61,774	$191,341,579	161,159	149,606	21%	15%	19%	24%	5%	8%	9%	17%	18%	6%	26%	45%
Orange	Seal Beach	24,364	13,774	$67,917	$23,723,189	10,005	11,387	20%	28%	34%	17%	7%	0%	39%	6%	3%	6%	3%	28%
Orange	Stanton	38,509	11,259	$56,506	$19,029,225	18,064	6,631	24%	25%	13%	44%	3%	14%	11%	19%	12%	8%	11%	50%
Orange	Tustin	80,140	27,489	$79,339	$55,832,418	42,448	41,769	20%	26%	17%	44%	3%	1%	10%	12%	9%	7%	7%	38%
Orange	Villa Park	5,912	2,107	$145,250	$3,201,056	2,416	1,534	21%	12%	59%	8%	0%	0%	28%	6%	3%	7%	8%	21%
Orange	Westminster	91,417	28,313	$61,834	$54,200,031	42,980	25,865	24%	36%	4%	30%	2%	4%	18%	16%	8%	8%	8%	51%
Orange	Yorba Linda	67,815	23,016	$129,391	$35,609,065	33,118	16,978	19%	22%	44%	21%	1%	0%	17%	4%	3%	5%	1%	39%
Orange	Unincorporated_OR	131,891	43,305	$124,250	$778,988,974	62,126	17,425	21%	18%	35%	1%	0%	0%	14%	7%	4%	5%	4%	42%
Riverside	Banning	30,942	11,815	$41,038	$10,978,780	9,761	6,518	23%	35%	23%	30%	8%	9%	26%	22%	8%	13%	6%	43%
Riverside	Beaumont	45,403	14,394	$78,111	$17,306,312	19,385	8,160	20%	29%	25%	28%	2%	0%	14%	10%	6%	9%	2%	39%
Riverside	Blythe	19,581	6,314	$43,141	$6,450,479	5,226	4,314	15%	29%	13%	27%	18%	9%	10%	19%	9%	15%	4%	33%

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
Riverside	Calimesa	8,651	3,724	$53,366	$4,623,157	3,248	1,473	14%	30%	52%	19%	1%	0%	27%	11%	6%	11%	0%	43%
Riverside	Canyon Lake	11,106	4,489	$97,237	$4,728,093	5,055	1,316	23%	15%	36%	6%	1%	0%	17%	5%	3%	9%	0%	43%
Riverside	Cathedral City	54,037	22,679	$46,370	$45,733,061	23,026	10,906	30%	41%	2%	33%	8%	4%	16%	21%	16%	9%	8%	50%
Riverside	Coachella	44,849	15,405	$33,870	$17,512,893	21,210	7,600	27%	19%	4%	43%	1%	41%	7%	23%	17%	6%	4%	66%
Riverside	Corona	165,355	51,504	$79,081	$96,252,439	80,196	69,936	20%	22%	28%	37%	3%	2%	10%	10%	10%	6%	4%	48%
Riverside	Desert Hot Springs	28,430	12,110	$34,814	$13,092,287	10,313	3,179	25%	28%	6%	13%	17%	13%	12%	33%	15%	14%	7%	55%
Riverside	Eastvale	61,337	15,310	$114,230	$25,260,349	28,774	6,414	19%	34%	34%	36%	0%	0%	8%	6%	5%	8%	1%	39%
Riverside	Hemet	84,069	33,113	$39,179	$44,587,789	26,973	20,088	22%	27%	12%	51%	2%	1%	22%	21%	9%	17%	4%	51%
Riverside	Indian Wells	5,317	5,694	$104,522	$20,135,476	1,697	4,438	24%	65%	13%	6%	39%	0%	59%	7%	2%	4%	2%	46%
Riverside	Indio	88,291	37,734	$50,824	$60,326,978	37,151	23,428	26%	30%	11%	20%	11%	8%	18%	17%	11%	8%	5%	47%
Riverside	Jurupa Valley	103,784	26,083	$67,002	$30,675,375	44,554	24,370	16%	16%	16%	37%	1%	12%	10%	15%	14%	10%	11%	45%
Riverside	La Quinta	40,704	25,143	$79,889	$46,539,689	17,180	14,385	25%	53%	15%	41%	23%	13%	25%	11%	9%	9%	2%	35%
Riverside	Lake Elsinore	64,037	18,059	$67,668	$26,495,483	26,981	12,760	22%	35%	10%	37%	2%	0%	7%	16%	9%	8%	5%	44%
Riverside	Menifee	88,515	30,533	$65,757	$42,542,507	35,589	11,759	21%	27%	29%	42%	1%	0%	18%	10%	7%	11%	3%	43%
Riverside	Moreno Valley	205,034	53,885	$63,572	$96,422,328	87,817	32,846	18%	29%	18%	24%	2%	4%	8%	16%	12%	9%	5%	43%
Riverside	Murrieta	111,427	33,890	$84,817	$55,126,076	47,936	28,329	25%	26%	35%	32%	2%	0%	12%	8%	7%	8%	3%	38%
Riverside	Norco	26,569	7,438	$95,441	$14,710,502	11,220	12,890	19%	19%	9%	47%	4%	0%	13%	7%	7%	9%	2%	38%
Riverside	Palm Desert	52,124	39,800	$57,578	$56,284,025	21,933	37,606	29%	38%	10%	33%	33%	0%	34%	13%	7%	11%	4%	44%
Riverside	Palm Springs	47,525	37,434	$50,361	$111,447,309	19,536	28,020	27%	39%	21%	12%	31%	0%	31%	17%	9%	12%	3%	46%
Riverside	Perris	76,276	17,661	$59,141	$73,848,994	31,253	14,231	15%	28%	7%	28%	0%	16%	6%	20%	13%	7%	7%	48%
Riverside	Rancho Mirage	18,075	15,555	$71,227	$25,636,586	5,879	14,834	21%	41%	12%	25%	40%	0%	53%	12%	5%	9%	0%	57%
Riverside	Riverside	323,935	96,797	$65,313	$237,739,102	149,034	131,208	21%	20%	9%	50%	3%	10%	10%	15%	11%	9%	5%	40%
Riverside	San Jacinto	47,474	14,225	$50,483	$11,883,776	17,894	5,915	18%	21%	15%	24%	0%	5%	11%	18%	12%	14%	5%	41%
Riverside	Temecula	112,230	35,936	$90,964	$102,770,431	51,576	49,110	24%	30%	7%	47%	3%	0%	10%	7%	7%	8%	1%	37%
Riverside	Wildomar	36,162	10,583	$73,282	$9,578,296	16,073	5,664	21%	13%	40%	19%	0%	0%	13%	11%	9%	11%	3%	42%
Riverside	Unincorporated	382,047	136,295	$66,136	$780,595,925	151,325	63,462	19%	33%	31%	4%	0%	4%	15%	16%	10%	10%	5%	43%
San Bernardino	Adelanto	33,416	8,626	$40,018	$8,842,082	9,898	4,786	18%	15%	4%	20%	0%	96%	6%	32%	11%	12%	7%	64%

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
San Bernardino	Apple Valley	72,359	26,119	$53,023	$28,755,697	26,030	14,377	19%	26%	16%	23%	0%	5%	17%	18%	5%	15%	1%	42%
San Bernardino	Barstow	23,812	9,390	$39,585	$25,043,006	8,101	9,400	27%	36%	22%	30%	13%	13%	11%	36%	8%	18%	3%	37%
San Bernardino	Big Bear Lake	5,229	9,778	$51,014	$18,780,564	2,206	3,827	27%	45%	38%	12%	28%	0%	22%	17%	13%	12%	4%	43%
San Bernardino	Chino	87,735	21,895	$79,477	$57,199,194	34,867	40,430	19%	22%	16%	45%	1%	0%	11%	9%	9%	6%	2%	41%
San Bernardino	Chino Hills	79,298	25,588	$104,590	$30,044,563	38,704	12,932	19%	32%	15%	27%	4%	0%	11%	7%	5%	5%	3%	32%
San Bernardino	Colton	54,415	18,864	$50,063	$24,360,431	22,813	15,509	18%	25%	15%	38%	4%	19%	10%	16%	10%	9%	5%	40%
San Bernardino	Fontana	208,943	55,561	$70,789	$108,743,388	96,001	44,973	18%	25%	14%	34%	1%	2%	7%	14%	11%	6%	8%	43%
San Bernardino	Grand Terrace	12,482	4,635	$66,912	$4,332,487	6,051	2,782	11%	12%	13%	17%	0%	11%	15%	9%	5%	11%	3%	37%
San Bernardino	Hesperia	93,609	27,951	$53,402	$35,984,078	34,284	18,401	21%	26%	13%	26%	4%	2%	10%	21%	8%	9%	4%	41%
San Bernardino	Highland	54,859	16,891	$59,395	$22,092,410	22,953	5,557	19%	26%	28%	12%	1%	11%	9%	20%	10%	9%	6%	46%
San Bernardino	Loma Linda	24,078	9,421	$53,371	$13,410,471	10,368	20,110	15%	5%	9%	57%	3%	13%	18%	17%	6%	9%	1%	37%
San Bernardino	Montclair	38,865	10,693	$58,012	$27,631,882	17,689	14,881	22%	38%	11%	56%	0%	19%	10%	17%	13%	7%	8%	40%
San Bernardino	Needles	4,962	2,930	$31,843	$3,515,111	1,643	1,654	25%	25%	39%	16%	25%	0%	19%	28%	11%	26%	2%	30%
San Bernardino	Ontario	173,580	52,063	$61,602	$223,880,702	83,270	90,676	18%	26%	13%	38%	7%	12%	9%	15%	12%	7%	7%	44%
San Bernardino	Rancho Cucamonga	175,679	58,649	$86,355	$127,548,784	85,379	69,755	18%	23%	25%	25%	3%	0%	11%	8%	6%	7%	2%	38%
San Bernardino	Redlands	71,012	26,327	$72,523	$55,102,155	31,427	34,188	17%	19%	35%	29%	2%	4%	15%	13%	6%	8%	3%	36%
San Bernardino	Rialto	102,873	27,100	$58,061	$63,338,151	43,786	20,747	19%	17%	9%	27%	0%	8%	9%	18%	12%	8%	7%	44%
San Bernardino	San Bernardino	215,182	62,760	$43,136	$112,622,195	81,687	81,433	18%	22%	0%	38%	4%	34%	9%	27%	13%	12%	9%	48%
San Bernardino	Twentynine Palms	26,109	10,102	$41,668	$9,708,803	6,487	3,508	26%	25%	20%	13%	15%	0%	6%	20%	6%	17%	0%	29%
San Bernardino	Upland	76,382	27,795	$68,551	$33,131,214	37,178	28,119	20%	22%	18%	41%	1%	5%	15%	14%	7%	8%	3%	42%
San Bernardino	Victorville	121,861	35,599	$50,691	$57,986,946	41,794	33,147	21%	31%	15%	46%	2%	29%	9%	22%	9%	10%	3%	47%
San Bernardino	Yucaipa	53,264	19,683	$63,657	$18,863,739	23,687	8,244	20%	21%	33%	19%	0%	0%	15%	12%	6%	9%	3%	39%
San Bernardino	Yucca Valley	21,543	9,964	$45,277	$15,285,162	7,910	6,199	21%	32%	17%	49%	4%	0%	20%	20%	8%	18%	1%	49%
San Bernardino	Unincorporated	303,866	137,787	$53,379	$630,716,092	118,222	45,486	19%	23%	49%	3%	0%	1%	14%	18%	10%	12%	5%	39%
Ventura	Camarillo	67,543	25,601	$92,913	$39,454,801	33,223	35,690	19%	28%	24%	35%	6%	0%	20%	7%	4%	7%	1%	37%
Ventura	Fillmore	15,598	4,593	$67,636	$6,296,286	7,143	2,718	15%	18%	8%	36%	2%	0%	12%	13%	9%	9%	7%	53%
Ventura	Moorpark	36,274	11,796	$104,839	$16,928,101	19,209	10,564	19%	27%	28%	25%	0%	0%	12%	4%	4%	7%	5%	35%

	SCAG Region Totals	18,809,261	6,510,436	$69,827	$23,550,851,678	8,820,114	7,369,909												
		Basic Indicators						Economic Indicators						Social & Health Inidcators				Housing Indicators	
County	City	Total Population	Total Housing Units	Median Household Income ($2018)	Total Tax Revenues	Total Residence-Based Employees	Total Workplace-Based Employees	Residence-Based Employees in Highest Impacted Sectors (%)	Workplace-Based Employees in Highest Impacted Sectors (%)	Secured and Unsecured Property Taxes (%)	Sales and Use Taxes (%)	Transient Occupancy Taxes (%)	TCAC/ HCD High Segregation & Poverty (%)	Senior Population (65+) (%)	Population below Poverty Level (%)	No Health Insurance Coverage (%)	Disability Status (%)	Severely Overcrowded Household (1.51 or More) (%)	Severely Cost-Burdened Household (50% or More) (%)
Ventura	Ojai	7,555	3,414	$70,403	$7,939,592	3,477	5,270	19%	33%	20%	18%	42%	0%	26%	8%	6%	14%	0%	51%
Ventura	Oxnard	207,568	55,148	$68,303	$126,648,408	98,652	59,197	17%	21%	27%	23%	5%	14%	10%	14%	17%	8%	13%	39%
Ventura	Port Hueneme	22,215	7,754	$65,243	$8,756,628	9,833	13,150	14%	5%	18%	24%	7%	0%	11%	12%	12%	10%	5%	41%
Ventura	San Buenaventura	110,234	43,463	$76,076	$96,628,875	53,606	63,113	20%	22%	26%	38%	7%	0%	16%	10%	7%	9%	3%	38%
Ventura	Santa Paula	30,258	9,374	$56,875	$13,576,959	12,992	6,119	18%	18%	24%	44%	1%	35%	13%	15%	13%	10%	7%	44%
Ventura	Simi Valley	126,199	43,272	$95,543	$63,874,199	65,367	44,463	19%	27%	29%	28%	3%	0%	14%	7%	6%	8%	2%	42%
Ventura	Thousand Oaks	128,481	47,749	$105,485	$75,874,594	63,346	77,369	21%	22%	19%	40%	6%	0%	18%	5%	5%	6%	2%	39%
Ventura	Unincorporated	96,187	35,334	$79,731	$346,690,533	45,380	29,422	18%	11%	61%	3%	0%	1%	17%	8%	8%	8%	4%	41%

MAIN OFFICE

900 Wilshire Blvd., Ste. 1700,
Los Angeles, CA 90017
Tel: (213) 236-1800

REGIONAL OFFICES

IMPERIAL COUNTY

1503 North Imperial Ave., Ste. 104
El Centro, CA 92243
Tel: (213) 236-1967

ORANGE COUNTY

OCTA Building
600 South Main St., Ste. 741
Orange, CA 92868
Tel: (213) 236-1997

RIVERSIDE COUNTY

3403 10th St., Ste. 805
Riverside, CA 92501
Tel: (951) 784-1513

SAN BERNARDINO COUNTY

1170 West 3rd St., Ste. 140
San Bernardino, CA 92410
Tel: (213) 236-1925

VENTURA COUNTY

4001 Mission Oaks Blvd., Ste. L
Camarillo, CA 93012
Tel: (213) 236-1960

scag.ca.gov

please recycle | #2951.2020.05.14