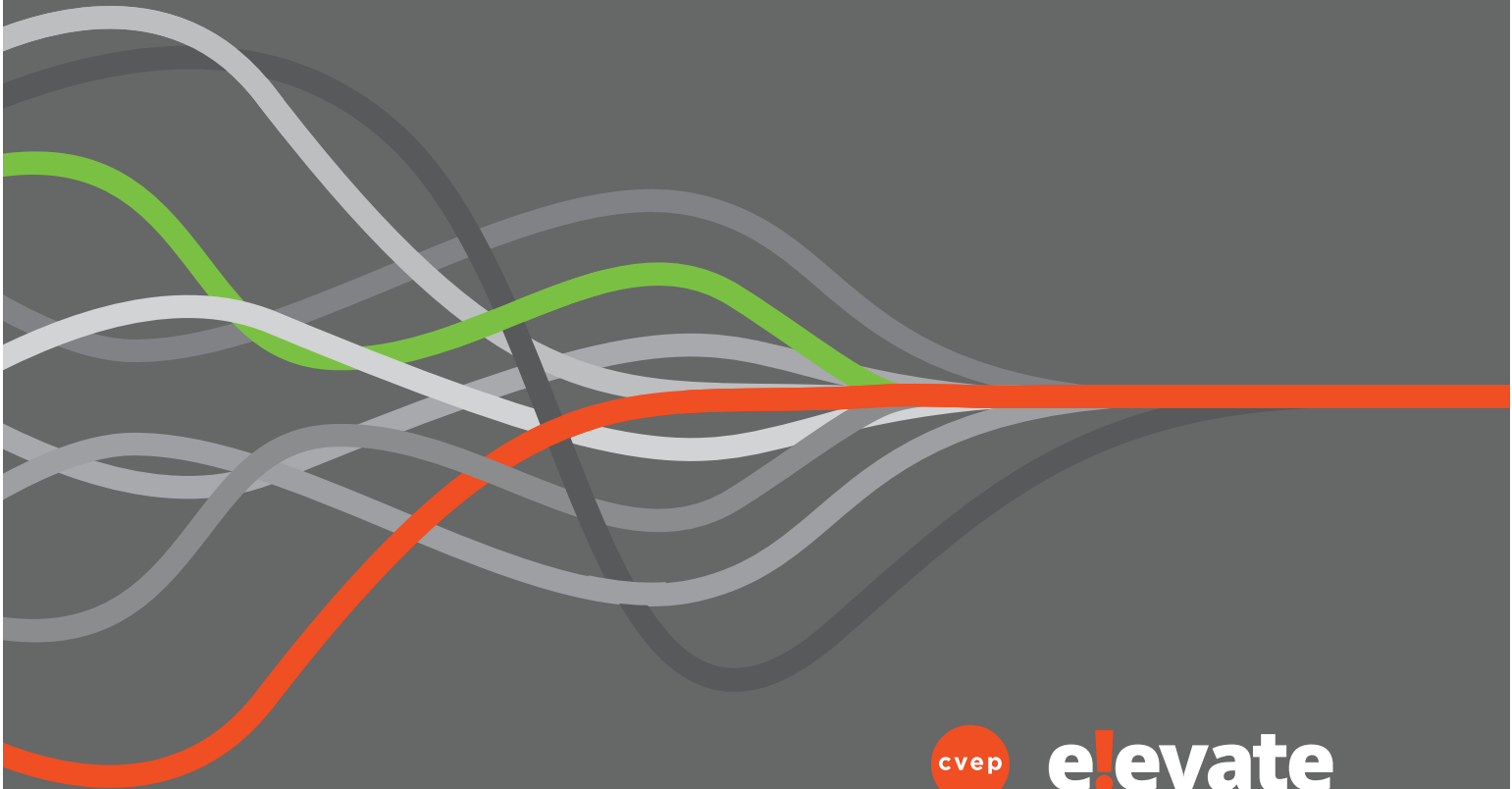


PURSUIT

2021 GREATER PALM SPRINGS ECONOMIC REPORT



e!evate





CONTENTS

A MESSAGE FROM THE CHAIRPERSON	3
LEADERSHIP AND INVESTORS	4
MESSAGE FROM THE CEO	7
2021 ECONOMIC REPORT	11

THANK YOU TO OUR SPONSORS

PLATINUM SPONSOR



MEDIA SPONSORS



PALM SPRINGS LIFE



The Public Record

GOLD WELLS FARGO **SILVER** AGUA CALIENTE BAND OF CAHUILLA INDIANS | COLLEGE OF THE DESERT |
IMPERIAL IRRIGATION DISTRICT | MASSAGE ENVY | RIVERSIDE COUNTY OFFICE OF ECONOMIC DEVELOPMENT
| SOUTHERN CALIFORNIA EDISON | U.S. BANK **PARTNER** BEST BEST & KRIEGER | CSUSB - PALM DESERT
CAMPUS HOSPITALITY MANAGEMENT PROGRAM | DESERT VALLEYS BUILDERS ASSOCIATION | HR GREEN |
OSBORNE RINCON CPAs | SOUTHERN CALIFORNIA GAS COMPANY | UNIVERSITY OF CALIFORNIA RIVERSIDE -
PALM DESERT CENTER | WINSLOW DRAKE **CITIES** CITY OF CATHEDRAL CITY | CITY OF COACHELLA | CITY OF
DESERT HOT SPRINGS | CITY OF INDIO | CITY OF INDIAN WELLS | CITY OF LA QUINTA | CITY OF PALM DESERT
| CITY OF PALM SPRINGS | CITY OF RANCHO MIRAGE



A MESSAGE FROM THE CHAIRPERSON: JAN HARNIK

What a year! A year of frustration, confusion, and uncertainty - and at the same time, a year of clarity, revelation, and opportunity. Certainly, a year that allowed us to reflect and a year that taught us many lessons and most importantly, lessons I hope we will not forget.

We learned that we are better together. That when we help each other we can accomplish more and when we help each other, we are all heroes. We learned that many of the jobs in the Coachella Valley are considered by some to be “non-essential”. The struggles showed us our weaknesses and accelerated changes that were already in process. We learned that our educational systems need work and updating so that they can offer accessible, relevant education and training. The disparities in the Coachella Valley were exposed and glaring due to our weak, inconsistent, and unavailable broadband. We learned – we have work to do!

The Coachella Valley Economic Partnership (CVEP) didn't have the luxury to stop and lick the COVID inflicted wounds. Work to help our businesses apply for PPP kept CVEP busy, distribution of PPE throughout our valley kicked into overdrive, and counseling of businesses to find ways to make it through was offered and accepted. Work continued in the iHubs and the CVEP team offered their voices and expertise to areas across

Southern California and a few areas beyond. CVEP has shared the message before and now shares it more loudly than ever - we need education, we need broadband, we need diversification of our economy, and we need to work together, as a region, to achieve those goals.

What we saw was promising. Across the region collaboration was the norm. It was evident and it was encouraging. CVEP's reputation is garnering attention. Visitors meet with CVEP to learn more about what the Coachella Valley offers, business opportunities, the cybersecurity program, success stories, our iHubs. We still have work to do. It will take regional collaboration - not only financially but in spirit and in energy.

And when you're in a restaurant and served by a robot, the question shouldn't be, “Who lost a job?” but instead, “How can we prepare our workforce to build the robot, to program the robot, to repair the robot?”.

LEADERSHIP AND INVESTORS



2021 - 2022

EXECUTIVE COMMITTEE

Chair: Jan Harnik	City of Palm Desert
Vice-Chair: Todd Hooks	Agua Caliente Band of Cahuilla Indians
Treasurer: Rick Axelrod	LifeStream Blood Bank
Secretary: Joel Kinnamon	College of the Desert
Member at Large:	
Deborah McCarrey	Southern California Gas Company

CVEP BOARD MEMBERS

Russell Betts	City of Desert Hot Springs	Antonio Ortega	Imperial Irrigation District
Alan Brimmer	U.S. Bank	Oscar Ortiz	City of Indio
Mark Carnevale	City of Cathedral City	Lee Osborne	Osborne Rincon
Sandra Cuellar	Charter Communications	Greg Sanders	City of Indian Wells
Jennifer Cusack	Southern California Edison	Patrick Sinclair	California Alliance for Renewable Energy Solutions
Emily Falappino	Greater Coachella Valley Chamber of Commerce		Sunrise Company
Randy Florence	Palm Desert Area Chamber of Commerce	Phil Smith	College of the Desert
	UCR Palm Desert Center	Christine Tafoya	Riverside County EDA
Tamara Hedges	Desert Care Network	Joaquin Tijerina	Gulf California Broadcast Company
Gary Honts	Hunter Johnsen	Jerry Upham	City of Rancho Mirage
Christine Hunter	Pacific Western Bank	Ted Weill	Eisenhower Health
Erin Klink	Wells Fargo Bank	Ken Wheat	Best, Best & Krieger
Amanda Kramer	Palm Springs Life	To be determined	
Paulina Larson	City of Palm Springs		
Lisa Middleton	The Desert Sun		
Tom Niva	City of Desert Hot Springs		
Robert Nunez	Oliphant Enterprises		
Richard Oliphant			

HONORARY BOARD MEMBERS

Joseph Tormey	CSUSB Palm Desert Campus
---------------	--------------------------

CVEP INVESTORS

BUSINESS DEVELOPMENT

Greater Coachella Valley Chamber of Commerce
Palm Desert Area Chamber of Commerce
Riverside County Economic Development Agency

EDUCATION

College of the Desert
CSUSB Palm Desert Campus
UCR Palm Desert Center

ENERGY

California Alliance for Renewable Energy Solutions

FINANCIAL AND CAPITAL SERVICES

Pacific Western Bank
U.S. Bank
Wells Fargo Bank

GOVERNMENT: CITIES

City of Cathedral City
City of Desert Hot Springs
City of Indian Wells
City of Indio
City of Palm Desert
City of Palm Springs
City of Rancho Mirage

GOVERNMENT: TRIBAL

Agua Caliente Band of Cahuilla Indians

HEALTH SERVICES/HOSPITALS

Desert Care Network (Desert Regional Medical Center, Hi-Desert Medical Center and JFK Memorial Hospital)
Eisenhower Medical Center
LifeStream Blood Bank

MANAGEMENT SERVICES

Oliphant Enterprises

MARKETING, ADVERTISING, DESIGN AND PUBLIC RELATIONS

Hunter | Johnsen

MEDIA

Gannett Foundation/The Desert Sun
Gulf California Broadcast Company
Palm Springs Life

PROFESSIONAL SERVICES

Best Best & Krieger
KHA Architects
Osborne Rincon

REAL ESTATE DEVELOPMENT

Sunrise Company

TECHNOLOGY AND COMMUNICATIONS

Charter Communications

UTILITIES

Imperial Irrigation District
Southern California Edison
Southern California Gas Company





CVEP 2021 SUMMIT: CEO WELCOME AND MESSAGE

The theme selected for CVEP's 2021 Summit is "Pursuit." This year's theme follows the 2020 Summit theme of "Becoming Essential." These themes work very well together to describe why the Coachella Valley, Maui and Las Vegas suffered disproportional job losses when the lockdowns began, and recreational activities were forbidden. At some point in the past, these highly impacted regions chose to pursue the enjoyable but non-essential activities associated with tourism and hospitality. In most cases personally, culturally, and regionally, we are today what we chose to pursue at some point in the past. Those of us who chose to pursue careers such as healthcare, public safety, or technology were either too important to furlough or could easily work from home.

Telecommuting became a real opportunity during the COVID-19 crisis and has forever changed the way many of us work. Companies like Zoom, DocuSign, Teledoc and other enabling technologies to telecommuters have seen their profits and revenue grow beyond their biggest goals. Amazon, food delivery services and other online shopping platforms struggled to keep up with demand before the supply chain disruptions of 2021 started. Home improvement projects became a welcome distraction from the doldrums of losing our face-to-face social lives and many of us developed skills that we never dreamed of learning.

Demand for homes in the Coachella Valley accelerated due to the realization of just how wonderful the Coachella Valley is as a place to live. Educated professionals from Silicon Valley, Orange County and even New York poured into our neighborhoods paying cash for half of the transactions in 2020 and 2021. In November of 2019, the median family home in the Coachella Valley averaged \$400,000 and by December 2021 that number had risen over 50% to \$615,000. While this did not help the region's affordability metrics, it literally created over \$30 Billion in wealth for Coachella Valley homeowners. As I'm writing this, the available housing inventory listed is less than a single month's supply.

The new residents who moved here to telecommute have increased important metrics for diversification and elevation of our economy like educational attainment, disposable income, and entrepreneurial potential. These telecommuters are good for the Coachella Valley, and they make us more attractive to essential businesses.

Of course, our world class tourism and hospitality industry will continue to be our base when it comes to employment. By integrating the opportunities to innovate in that sector and others, our economy has the potential to amplify our essentialness while becoming less susceptible to economic shocks like pandemics, earthquakes, or environmental issues. We have much work to do to lay the groundwork for

broadly enjoyed prosperity. Automation is actualizing faster than ever, and the hospitality industry is ripe for the benefits of automation. Wouldn't it be great if the Coachella Valley became the Silicon Valley of service industry automation? With a balanced investment in regional economic development and tourism, this is within our reach.

The Coachella Valley has never been more poised to make highly impactful choices on what we want to be in the future. My closing statement at the 2020 Summit stated, "the Virus of the Century is Opportunity of the Century," and it is truer now than ever before. We must strengthen the exposed weaknesses and embrace the prosperity that the future always holds for those who relentlessly pursue betterment. The Coachella Valley is visibly at a crossroads and there is no going back. Will we invest in economic diversification, elevate our educational achievements, and join the essential and highly productive regions of the world, or will we let this opportunity of the century pass us by?



Helping Businesses Grow and Prosper

CVEP offers one-on-one consulting, access to capital, education programs, and support services to help your business thrive. Our free monthly speaker series features experts who can give you new insight into managing and marketing a profitable enterprise.

Contact us for details.

CVEP.COM | 760.340.1575

e!evate

DRIVING INNOVATION AND ENTERPRISE IN GREATER PALM SPRINGS

cvep



ABOUT THE COACHELLA VALLEY ECONOMIC PARTNERSHIP (CVEP)

The mission of the Coachella Valley Economic Partnership is to incite vision-driven transformation in the Greater Palm Springs region. Established in 1994, the nonprofit organization has emerged as a vital innovator of regional business development initiatives by fostering entrepreneurship and diversifying industry. As the only regional entity with the capacity to execute technology-led economic development, the partnership promotes a diversified, year-round economy by facilitating programs that stimulate job creation in key industries through business attraction, retention and expansion. Visit www.cvep.com or call 760.340.1575.

CVEP TEAM

Joe Wallace

Chief Executive Officer

Lesa Bodnar

Chief of Staff

Laura James

Vice President of Innovation

David Robinson

Director of Analytic Services

Rebecca Martinez

Accounting

Patty Clouser

Administrative Assistant



RED LIGHT GREEN

BY MANFRED W. KEIL, PH.D. | ROBERT A. KLEINHENZ, PH.D. | DAVID ROBINSON

The initial title for this report was going to be “What Goes Down Must Come Up — Sloooowly”. The image we wanted to plant in your mind was that there had been a steep recession during the first two quarters of 2020, and that the economy was recovering steadily following a spectacular initial improvement that is less amazing in its current phase. But this is not a V-shaped cycle, it is more like the first bounce back of a bungee jump; you have not returned from where you started off. Then one of my research analysts convinced me that not even her parents would get the Blood Sweat and Tears reference in the title (Spinning Wheels), although her grandparents might, and she confirmed that with a text to her mother. Ouch. Well, then the current title should mean something for the younger audience. This economic cycle was not “lights off-lights on” with the room shining as bright when compared to February 2020. To stress the point, that would be a V-shaped event. Instead, and similarly to the first game of the Netflix series Squid Game, not all players are still alive when the red light finally turns to green - similar to not all firms and workers still “being there” after the initial downturn. Note that in the game, there was some authority which turns off the lights (lockdown) and turns them back on.

Keil wrote the main analysis of the report, Kleinhenz was in charge of the housing sections. Keil: Chief Economist, Inland Empire Economic Partnership and Director, Lowe Institute of Political Economy, Claremont McKenna College. Kleinhenz: CEO, Kleinhenz Economics, and California State University, Long Beach. Robinson: Coachella Valley Economic Partnership. Keil has benefited from support received from research analysts at the Lowe Institute.

From the outset, we stress that we do not mean to sound too pessimistic about the future. While everyone can clearly hear the flight-stall warning sound when an annualized growth rate of only 2.0% for the third quarter of 2021 was published, we believe that this is a false alarm. Speed in the U.S. economy will pick up again during the fourth quarter of 2021 and especially in early 2022. However, given the increased numbers of infections and hospitalizations currently in Europe, the more optimistic forecast does depend on the absence of a fourth Coronavirus wave, as currently experienced in the Netherlands, Germany, and Austria. Hospitalization rates are currently also increasing in certain regions of the U.S., in particular in Riverside County and the Inland Empire, in general.

ECONOMIC FORECAST

Economic forecasts typically are based on either some forward looking ("leading economic") indicators, or more complicated systems of mathematical equations (an econometric model). Both focus on variables that turn during the business cycle prior to current economic activity. Examples of such variables might be the stock market, consumer sentiment, unemployment rate movements over the previous quarter relative to the previous year, the yield curve, housing starts, and so on. Some of these are conveniently summarized by the *Index of Leading Economic Indicators* published by the Conference Board. The index is basically a weighted average of close to a dozen leading variables.

So here are our forecasts for the remainder of 2021, and then 2022-2023:

TABLE 1:

Economic Forecasts, GDP Growth Rate, Unemployment Rate, Inflation Rate

GDP	2021	2022	2023
U.S.	5.3%	4.6%	3.1%
CA	4.3%	5.1%	3.5%
Inland Empire (IE)	6.5%	4.8%	3.0%

UNEMPLOYMENT RATE	2021	2022	2023
U.S.	4.5%	3.9%	3.5%
CA	7.1%	4.8%	4.1%
Inland Empire (IE)	6.2%	5.0%	4.6%

INFLATION RATE	2021	2022	2023
U.S.	4.5%	3.2%	2.1%

We do not feel comfortable forecasting more than two to three years ahead and do not believe that any serious economist should attempt to do so. There are people out there to sell you snake oil, but we don't fall into that category.

CURRENT ECONOMIC SITUATION

For the second year in a row, it was decided by CVEP not to deliver the economic report to a live audience at the Palm Springs Convention Center, an event that always attracted a large indoor audience. In the end, CVEP followed the format that seems to be standard practice these days with all economic forecast events in Southern California, which is to stage the event in a non-live format.

I also want to mention that the title for our last live meeting was "Party Like It's 2019 vs 1999: Which Hangover Will Be worse?," an obvious reference to a Prince song, released, by the way, in 1982 when you were xx years old (fill in the xx or maybe just one digit y; not born is a possible answer, in which case you mark this a "0"). The central theme was that we were in a record-setting economic expansion – which eventually came to an end in March 2019 after 128 months. Booms do not have to die of old age, unless certain conditions are met. In our view, these did not apply then to the United States in 2019, and therefore we forecasted continued economic growth for 2020 and 2021.

Recessions typically are the result of a serious shock to the system. These “surprises” are unpredictable, although in some cases, you can determine whether the time is ripe for a shock to have a serious impact, meaning, for the expansion to end. That certainly was the case for the Great Recession of 2008-2009, when the housing bubble

burst and there had been signs of overinvestment in housing as early as 2006 in some of the regions in Southern California and especially in the Inland Empire. We are currently in the second year of a new economic recovery (the dating committee of the National Bureau of Economic Research (NBER) has determined that the Coronavirus

downturn ended in April 2020). In what follows, we will give a brief description of the national, state, regional, and Coachella Valley economic situation. This will be followed by a series of more detailed graphs for the various geographic areas with a focus on the Coachella Valley.

TABLE 2: General Economic Conditions, 2017-2021

	2017 Q4	2018 Q3	2019Q3	2020 Q3	2021 Q3
PRESIDENT	TRUMP	TRUMP	TRUMP	TRUMP	BIDEN
DOW JONES	22,268	26,828	26,077	27,020	36,052
\$CAD/\$US	1.21	1.30	1.33	1.30	1.24
CONSUMER SENTIMENT	93.4	96.2	95.5	80.4	71.4
UNEMPLOYMENT RATE - US	4.3	3.7	3.7	6.9	4.6
UNEMPLOYMENT RATE - CALIFORNIA	5.1	4.2	4.1	11.0	7.5
UNEMPLOYMENT RATE - INLAND EMPIRE	5.3	4.0	4.2	10.4	6.6
INFLATION CONSUMER PRICE INDEX (CPI)	1.7	2.7	1.8	1.2	5.4
OIL PRICES (WEST TEX INT)	\$46.46	\$75.37	\$54.09	40.84	82.62
FEDERAL FUNDS RATE	1.00-1.25	2.00-2.25	1.75-2.00	0.00-0.25	0.00-0.25
HOUSING STARTS U.S.	1,155,000	1,282,000	1,191,000	1,388,000	1,555,000

NATIONAL ECONOMY

There are really only three general indicators of economic well-being that you pay attention to if you want to get a general impression about the state of the economy. These are

- the growth rate of the gross domestic product (GDP)
- the inflation rate, and
- the unemployment rate

Consider the Coachella Valley to be a non-standard “patient” in that you also want to pay attention to the exchange rate. This is due to the large number of foreign tourists that come to the area, in particular Canadians (“snow birds”). The number of international visitors can be affected by the exchange rate, primarily the Canadian Dollar/U.S. Dollar rate, if there are large swings. Movements in this exchange rate will also influence the local housing market if Canadians,

or foreigners in general, own property there. For example, a large appreciation in the Canadian Dollar will enable foreign owners to sell their property “under market values.”

In a patient visiting a medical doctor’s office, these economic indicators of well-being would be the equivalent of temperature, blood pressure, and weight, or the first metrics recorded by

a nurse before you get to see a doctor (followed by some annoying questions these days about topics I don't dare to put in writing). Next there may be much more detailed checks, such as blood analysis, which require more thorough procedures. The same is true for the economy when we look beyond the initial indicators and talk about topics such as the housing market, labor force participation rates, behavior of GDP components, the stock market, oil prices, wages, income distributions, etc.

So what can we say about the three main economic indicators?

REAL GROSS DOMESTIC PRODUCT (GDP)

A year ago, at our last annual meeting, we had seen some recovery from the 12th post World War II U.S. recession (note that a recession is not defined as two quarters of negative growth but instead is dated by month by the Dating Committee of the NBER). The 2020 recession lasted only two months from March to April 2020, and this episode had followed the longest business cycle expansion in modern U.S. history. The economy had not fully recovered its losses a year ago at the time, but it finally did so during the second quarter of 2021. This was, however, before we were about to experience the third wave of Coronavirus infections, which was the strongest of them all so far (parts of Europe are currently experiencing even higher cases of infection), and it occurred before general vaccination began at the start of 2021.

Figure 1 puts the most recent recession into historical perspective: the Coronavirus downturn was relatively short but also more severe by a factor of magnitude. A 31.2% fall into the abyss was followed by a 33.8% bungee-type return (note that if the stock market declines by 50%, from 100 to 50 say, and subsequently grows by 50%, you do not return to the initial point of decline; instead you end up at 75). There were five sectors of the economy that were primarily affected:

- Leisure and Hospitality,
- Retail Sales,
- Other Services,
- Health and Education, and
- Professional and Business Services.

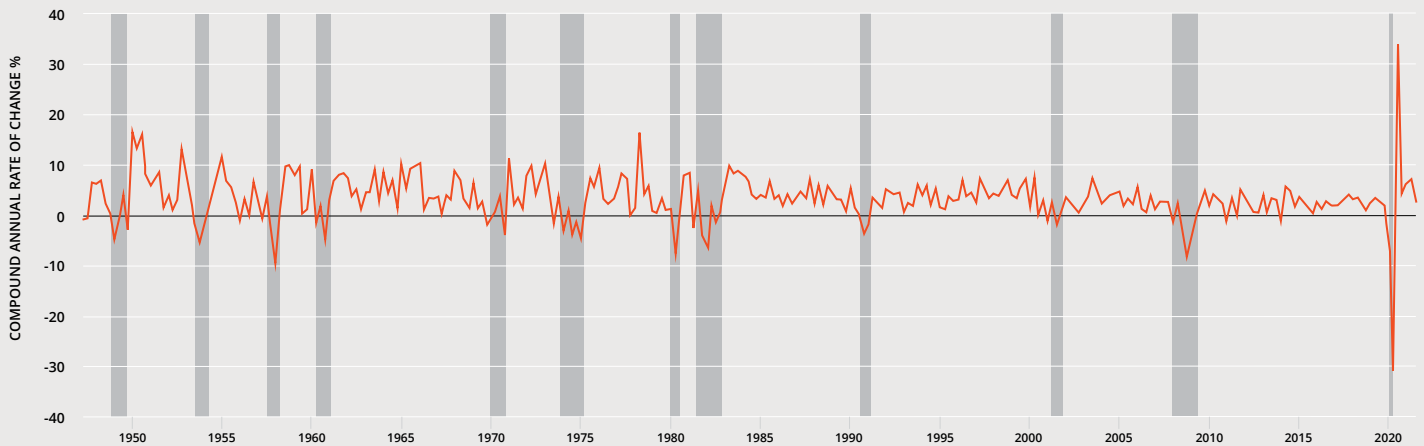
The recession impacted lower paid workers more than higher paid ones, and it was labeled a “she-session.” Women were more heavily affected since, first, there are more females working in the Leisure and Hospitality industry. But perhaps more importantly, second, women ultimately had to take care of children and the elderly when schools shut down for in-person instruction and grandparents required help. This is in contrast to the Great Recession of 2008-2009, which has been called a “man-session” (the most heavily affected workers here were those employed in Construction, and Manufacturing, industries typically dominated by males).

Data for the fourth quarter of 2020 (2020:Q4) were not available when our meeting took place and our last PowerPoint slide showed how we pinned our hopes on the arrival of a vaccine, which did not happen until 2021:Q1. As a result, growth in 2020:Q4 was relatively strong by historical standards, but

relatively muted compared to the initial recovery and measured 4.5%. It was not until the New Year (2021) that we saw the economy opening up on a larger scale, at least in some of the U.S. states. The combination of vaccination progress and President Biden's stimulus package resulted in economic growth picking up during the first two quarters of 2021 (growth rates of 2021:Q1 and 2021:Q2 were 6.3% and 6.7% respectively). Initial forecasts for 2021:Q3 were even more optimistic by most analysts, including ourselves. We predicted growth of around 9% earlier during the year before the delta variant of the virus struck prior to the U.S. population reaching herd immunity. This caused a significant setback to the recovery in the form of restrictions on services, and supply chain problems in the U.S. and especially abroad.

The most recent release shows a strikingly low real GDP growth of 2.0% as a result. However, we expect the current phase of the Coronavirus related slow-down to be temporary, and therefore see the economy picking up pace during 2021:Q4 and 2022:Q1 (see our forecast below). The fact is that households in the U.S. still have not spent much of the fiscal stimulus money they received, and we do not expect long term savings rates to be very different from what they were prior to the 2020 recession: the pent up demand of consumers continues to be there. There are still more than \$2.5 trillion excess savings out there to be spent. Third quarter growth was an aberration and higher growth rates will return during one of the next two quarters. Current estimates of the Federal Reserve Bank of Atlanta estimate real GDP growth to be as high

FIGURE 1: Real Gross Domestic Product, Quarterly Growth Rates, U.S., Seasonally Adjusted Annual Rate (SAAR), 1947-2021, shaded areas indicate recessions



Source: U.S. Bureau of Economic Analysis

as 8.5% for the fourth quarter. The Blue Chip Consensus forecast is substantially lower. The current situation is sufficiently volatile that we only want to commit to higher growth rates returning either in 2021:Q4 or 2022:Q1, although we are leaning towards the higher growth rate for this quarter.

Part of the temporary slowdown stems from the fact that people are still not willing to gather in the same ways as they did prior to March 2020. For example, the L.A. Department of Convention and Tourism Development announced that there were three major live conferences in October, but that the attendance was only 1/3 to 1/2 of the crowds seen during the pre-pandemic October conferences. Along the same lines, the Indian Wells tennis tournament attendance was significantly smaller this October compared to its usual April time slot. This is not just a U.S. problem: the largest book fair in the

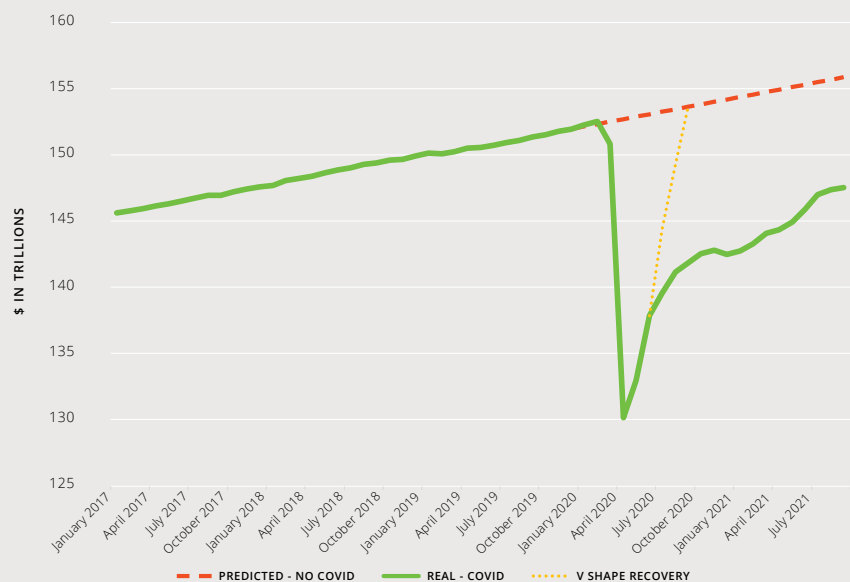
world, which takes place in late October of each year in Frankfurt/Germany, had an in-person attendance of exhibitors of 1/4 of the pre-pandemic level.

Figure 2 focuses on more recent GDP data which indicates that real GDP will not be back to levels where it would

have been had growth continued at a pace seen prior to the recession – we will not reach that point until mid-2022 the earliest.

The initial pace of the recovery made those forecasters who had predicted a V-shaped recession look good – the more

FIGURE 2: Real Gross Domestic Product, Predicted and Actual Level, U.S., Seasonally Adjusted Annual Rate (SAAR), 2017-2021



recent behavior of real GDP has resulted in a “right arm” of the V that suggests a much longer time to full recovery. We never sided with those forecasters who predicted a V shaped event of “lights off-lights on.” Instead, we thought that when you flip the switch, some of the lights would not come back on. The red light (March 2020) green light (May 2020) analogy from the Netflix Squid Game show is much better, where half the contestants disappeared after the first round - similarly, many firms did not survive and a significant number of workers dropped out of the labor force. Still, the proponents of the V-shape recovery may argue that this episode has seen a faster return to

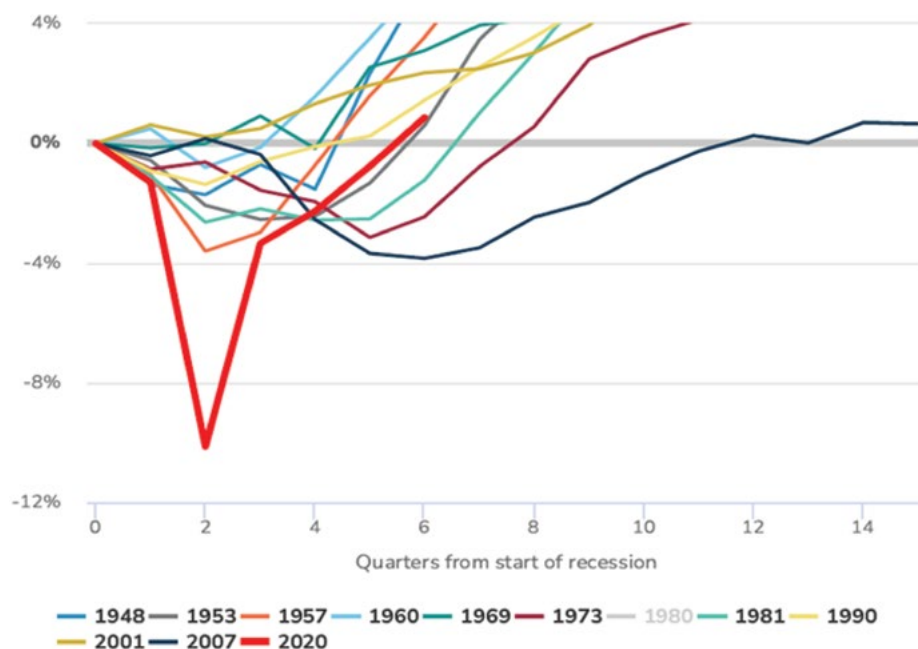
full employment output than previous recessions. Wrong again - out of the previous 12 post World War II recessions, only four (Korean War recession of 1953 - just so, OPEC I of 1974, the Volcker recession of 1981, the Great Recession of 2008/9) took longer, at this stage, to recover previous output losses. Note that these were sufficiently severe recessions to deserve a special name.

Figure 3 presents the evidence.

To forecast that this would be a V-shaped recession/recovery is, in our view, a disservice to businesses and administrators in that it makes these

entities believe that everything will be back to normal very quickly. Hence there is little need to be overly concerned and the need for counter-cyclical policies in general, and expansionary fiscal policy in particular. The idea that the Coronavirus downturn changed our economy and society in a fundamental way is beyond comprehension for these forecasters. The thought of an accelerated period of automation and robotics (the large-scale arrival of artificial intelligence in the workplace) and the coinciding capital-labor substitution, events that we expected to happen anyways but not until the end of the decade, is absent from their overly optimistic forecasts.

FIGURE 3: Real Gross Domestic Product, Percent Change from the Start of Recessions, Post World War II



Source: Bureau of Economic Analysis



Finally, **Figure 4** shows you why the idea of a V-shaped description also adds insult to injury to lower wage earners, who have not seen much of a recovery at all. The source of the figure is a joint project at Harvard University and Brown University (www.tracktherecovery.org) which allows you to separate out employment movements by wage category. Figure 4 explains why we look at the current business cycle episode as K-shaped, where the upper arm of the K represents middle and high wage earners, and the lower leg shows the experience of low wage earners. Of course if you only focus

on those that are better off, then the upper half of the “K” strikingly resembles a “V”. However, that omission would also be a misrepresentation.

INFLATION

So, if the body temperature is returning to normal, albeit slowly, what about the blood pressure?

Inflation was subdued initially during the downturn, actually showing overall declining prices at some point, before it picked up earlier this year. This initially

generated the “base effect” problem. Much of the focus during the recovery has now shifted towards this indicator of economic well-being. Also there are other variables in the economy that adjust with the inflation rate, such as certain tax brackets, social security payments or contracts with nominal variables that are linked to cost of living adjustment (COLA) clauses. Finally nominal interest rates react by definition to the expected inflation rate, which, under some specifications, takes the current inflation rate into account.

FIGURE 4: Employment, January 2020 - August 2021, High-Middle-Low Wage Earners

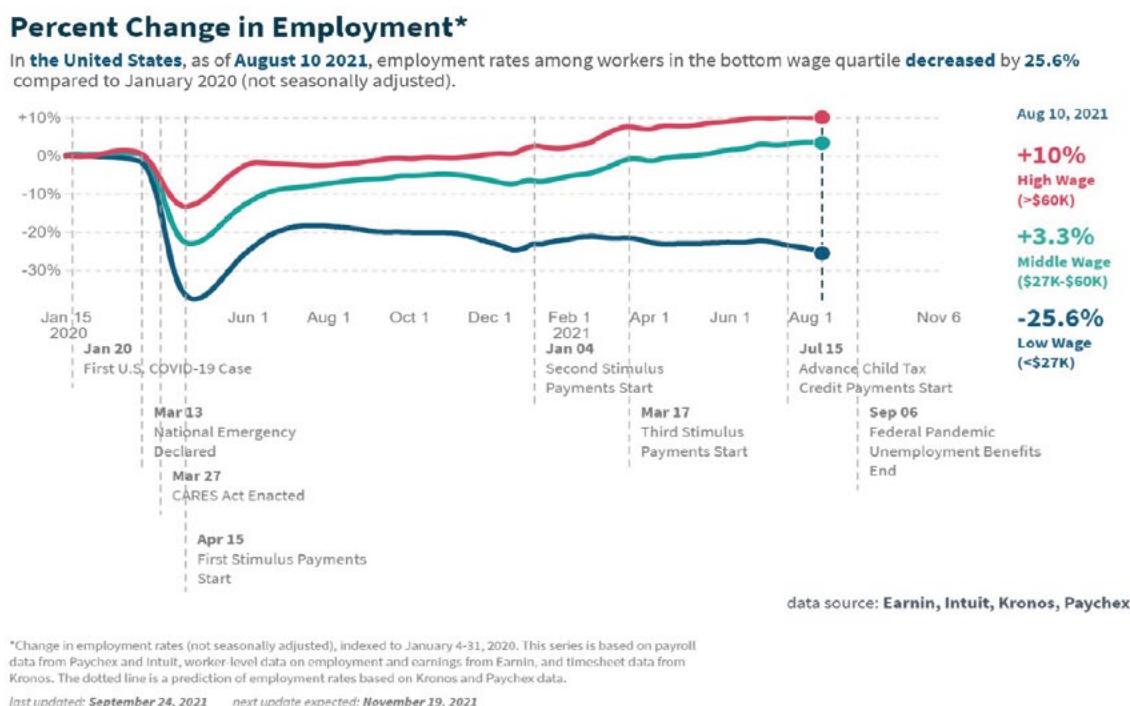


FIGURE 5: Inflation Rate, Consumer Price Index, U.S., Seasonally Adjusted, 1947-2021

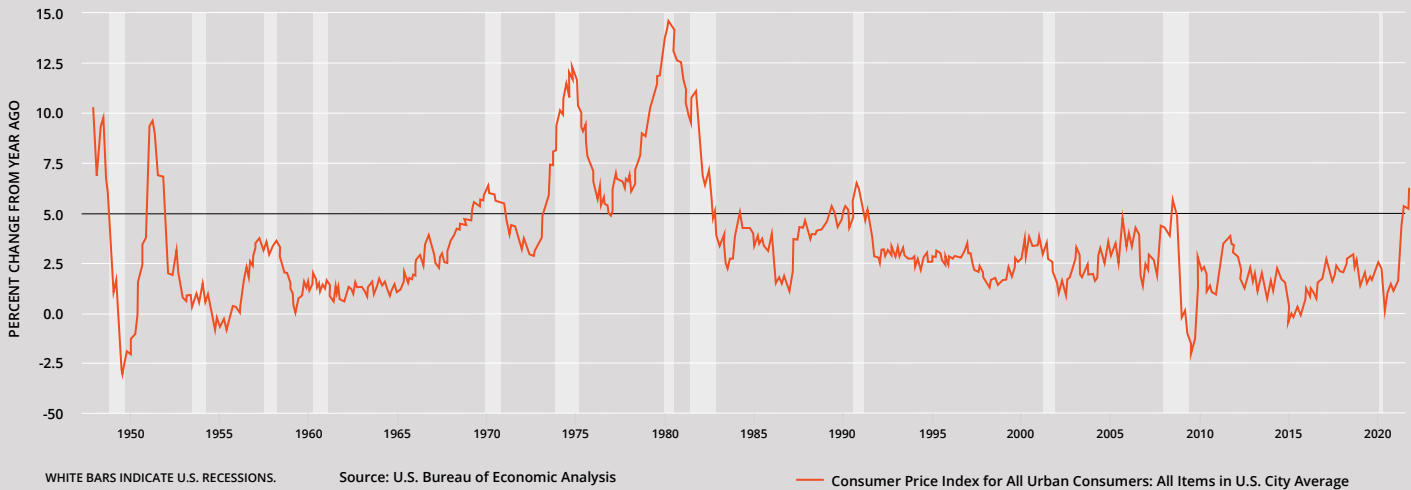


Figure 5 shows the annual inflation rate as measured from a year ago.

The problem here is that taking your blood pressure is less straightforward than you might think. The Federal Reserve has a target inflation rate of 2%, but this is no longer an upper limit; instead, it has become an average, thereby allowing the inflation rate to be above 2% sometime. As a result, it is okay for your blood pressure to be above 140, as long as it does not happen systematically (or after taking a few deep breaths before a second measurement takes place).

There are different “machines” available to measure the inflation rate, and the doctor claims to only pay attention to one of them – which is not the year-to-year inflation rate indicated by the consumer price index (CPI). What is the reading she pays attention to? For a long time this did not matter because there was no sign

of trouble using any of the machines. This changed in March of 2021, when the annual inflation rate reached 2.6%. It then went up to above 4% (April) and 5% (June) and has currently settled at 6.2%. You have to go back to October 1990 and then July 1982 to find annual inflation rates of this magnitude.

The inflation measure is more “scary” if you annualize monthly inflation rates. Annual inflation rates average out large positive swings with those that were very small over the span of the year. Monthly inflation rates just focus on the behavior of the CPI over the last 30 days.

Then there is the so-called “core” inflation rate, which excludes two particularly volatile components: food and energy prices. Given that crude oil prices have doubled over the last year and you don’t remember paying gasoline prices of the

current magnitude back then, you would expect the core inflation rate to be lower. It is by a little, but not by much recently: the year-to-year measure shows 4.2% inflation in July followed by 4.6% inflation in October. Regardless, it is more than double the 2% target.

The next measurement in the medical examination is the GDP deflator, which is based broadly on all goods and services produced in the U.S., not just those consumed by the typical U.S. 4-person urban household. More importantly, since it is a GDP measure, it does not include imports but it does include exports. However, even that measure reached 4% during the second quarter of 2021.

Not quite there yet, but we are getting closer. Focus on a subset of the GDP deflator, namely the part that deals with personal consumption expenditures (PCE). Unfortunately for the Fed, even that measure shows a 3.9% inflation rate and an upward trend. Is there any way we can get the blood pressure below 140? Short meditation? And there it is: the “trimmed mean” version of the PCE. This measure eliminates the most and least volatile components of the PCE and focuses on the “middle” price increases. These numbers, calculated by the Federal Reserve in Dallas, went barely above 3% for the first time in July 2021, and are now slightly below it. According to this metric, we are still doing okay and do not have to worry much about permanently and persistently higher inflation rates for the U.S. economy.

We have finally found a machine that indicates that we are healthier than we thought we were and felt after discovering those daily car rental fees in excess of \$100 for Hawaii and gasoline prices of \$4.50 and higher that basically tax the income of gasoline car owners (not taxes paid to the government, but to oil producers in Texas and North Dakota, and the sheiks). And perhaps we can be innovative to avoid these general price hikes: how about renting a U-Haul to watch the surfers on the North Shore. Maybe instead of the top down we can get used to putting our partner in the back of the truck with the back-door open and let her/him enjoy the view.

STAGFLATION

But it is not safe to go back into the water yet, because someone next to you whispered “stagflation” in your ear. This seems to be a fashionable word these days and was first used in the 1970s: it combines stagnation, or low/negative GDP growth, with inflation.

Some forecasters have raised the concern that the U.S. economy is currently entering into this type of business cycle experience. High inflation is typically associated with an overheating economy, or a situation where we approach output (unemployment rate) levels above (below) what is considered “full employment.” For GDP, that level is called “potential GDP” or “full employment GDP” and in the labor market we refer to the situation as being below the “non-accelerating inflation rate of unemployment” (NAIRU). Translation: a booming economy close to capacity.

By contrast, stagflation is observed when output growth is below potential output, as is currently the case, and inflation is high (above 2%). Here inflation is generated by supply shocks, such as the OPEC oil-price hikes in 1973 and 1979, or supply chain problems, such as the ones associated with a chip shortage originating in Taiwan, energy shortages in mainland China, more than 70 container ships being anchored outside the ports of Los Angeles and Long Beach, or even the mismatch problems stemming from the U.S. labor market where we observe more job openings than unemployed workers. There is even talk about

calling the current episode “The Great Resignation” given the unusually high number of people quitting their job and/or dropping out of the labor force, not only among older workers retiring but younger workers. The crucial question here is, are these problems temporary in that they will work themselves out sooner rather than later, or are they of a permanent nature?

For inflation rates to stay permanently at higher levels, several, in our view, unlikely scenarios have to manifest themselves:

- First, workers would have to show stronger wage bargaining power than they had for decades. It is true that we are currently observing some strike activity (even at Kaiser Permanente if you have a regular check-up appointment) related to the demand for higher wages that we have not seen for quite a while. Still, the strength of the arm wrestling in the wage bargain between employees and employers has favored the latter, as became apparent towards the end of the last expansion when wages did not start to accelerate even at unemployment rates significantly below 4.5% (the level currently assumed to be “full employment” by the Congressional Budget Office).
- Second, firms would have to show that their price mark-up power has returned to a degree where they could increase prices systematically above unit labor costs. Again, this has not happened as we can observe from the share of labor in national income having increased recently. Unit labor costs have not risen significantly as a result of labor productivity running above long-term average rates.

- Third, while there is some evidence of a fourth Coronavirus wave in Europe with some record setting numbers, we don't expect to see a repeat resembling what we experienced last December. Once it becomes clear that we have achieved herd immunity, workers will reconsider their current reluctance to accept available jobs.

- Fourth, immigration will return to pre-pandemic levels and provide additional labor supply which has been missing this year so far.

Warning: do not make big statements such as “we are in for a period of stagflation” based on a few observations. We do not think that this is a likely scenario for 2022 and will try to convince you of our view through a more positive forecast. Note that all this talk of higher

inflation is dwarfed by the inflation rates seen in the early '80s (close to 15% in the U.S. and 22% in the U.K.) when we were experiencing stagflation for the last time.

UNEMPLOYMENT

That leaves us with one last national economic indicator of well-being: the unemployment rate, or better, the situation in the labor market in general.

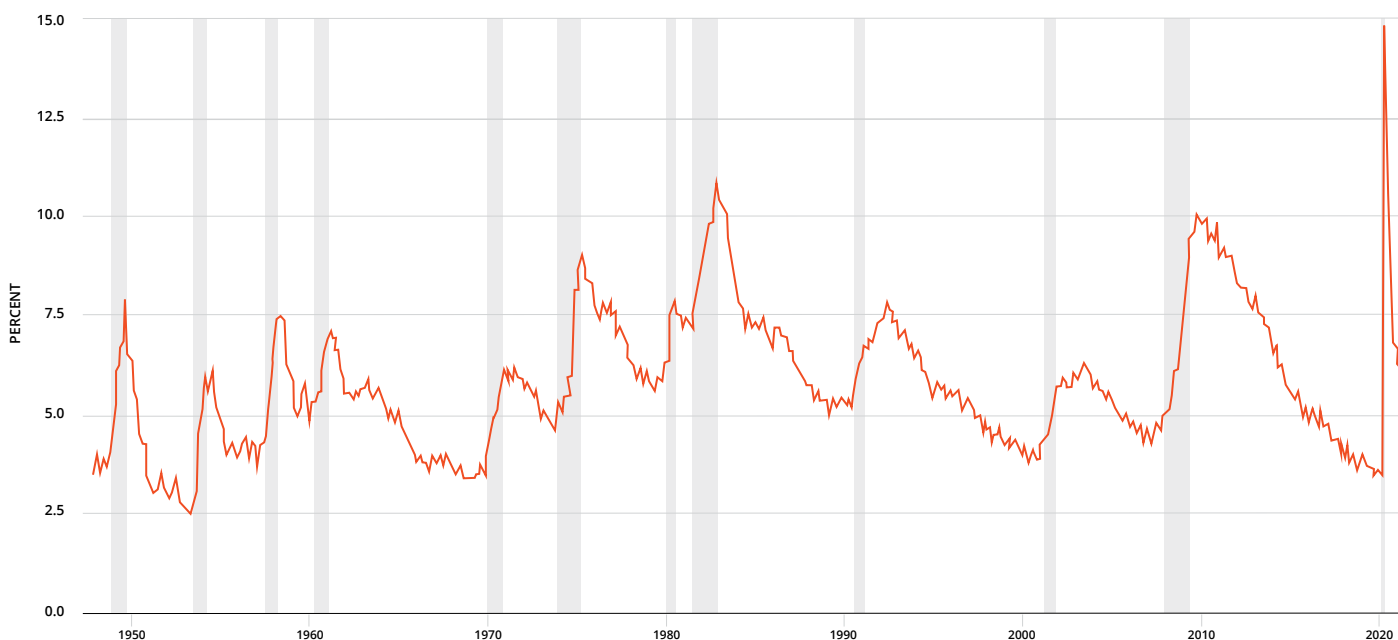
Figure 6 shows the historical and recent data at the national level.

The unemployment rate was as low as 3.5% prior to the Coronavirus downturn in February 2020. The initial increase of 0.9 percentage points was unprecedented (with one exception) during the post-World War II period, and the March 2020 unemployment rate reached 4.4%. However the March increase was masked

by the fact that the survey on which the unemployment rate is based, takes place during the week around the 12th day of the previous month. You may recall that the shutdown did not really happen until March 19, and hence could not have been fully reflected in that statistic. The complete picture of the devastation became visible with the publication of the April 2020 numbers: the unemployment rate shot up to 14.8%. The economy had fallen into the abyss.

Since then, the unemployment rate has decreased month-to-month with two exceptions (April and June 2021), although this happened faster at times than others. There were visible stalls during the peak of the 3rd wave in November and December 2020, and again, during the late spring of 2021. Most recently, the national

FIGURE 6: Unemployment Rate, U.S., Seasonally Adjusted, 1947-2021



SHADED AREAS INDICATE U.S. RECESSIONS.

Source: U.S. Bureau of Economic Analysis

unemployment rate fell by 0.2 percentage points to 4.6% in October 2021. As mentioned above, the CBO considers 4.5% full employment, a number that we will easily reach before the end of the year.

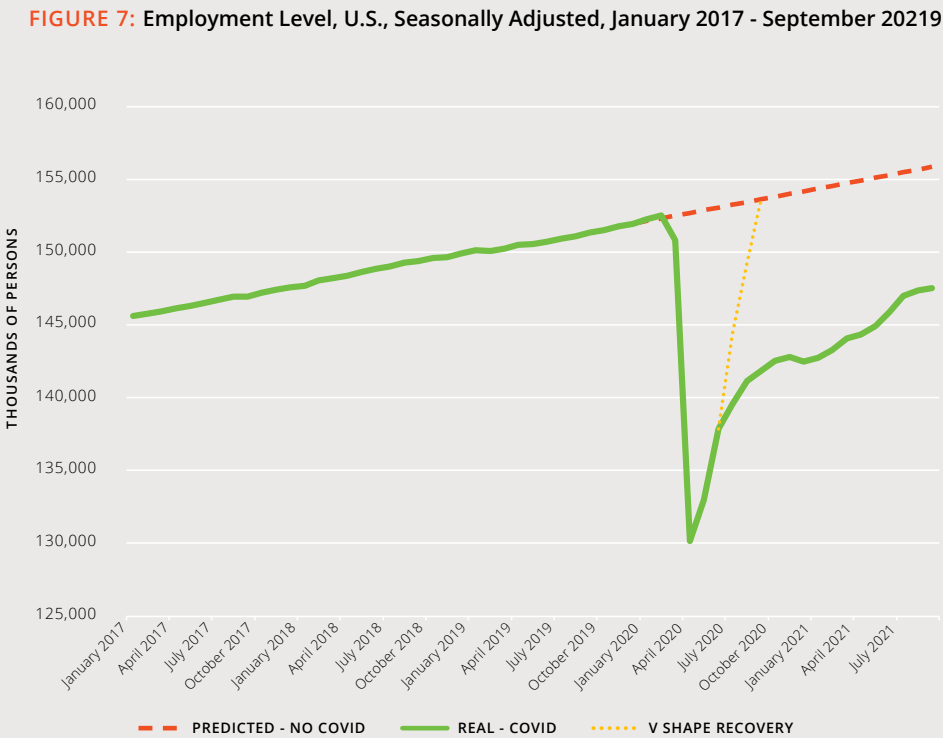
In general, changes in the unemployment rate result from the difference between the labor force growth rate and the growth rate of employment. The unemployment rate can therefore decrease even without an increase in employment: it may simply be due to workers giving up looking (“discouraged workers”) or (early) retirements. What is desirable from a policy maker’s point of view is if the

unemployment rate decreases because of the pace of employment growth outweighing the labor force growth. What is the evidence here?

Figure 7 shows the national employment levels since 2017. This looks much less positive than the unemployment rate numbers suggest. It also looks less healthy when you compare it to Figure 2 of lost GDP. We have not returned to pre-pandemic employment levels, and certainly are still far away from those numbers if we extrapolate the pre-pandemic employment growth. Certainly not a V-shape recovery here.

Compared to the last month of the previous economic expansion in February of 2020, we are roughly 4.7 million (4,693,000) workers short of where we were. In addition, the labor force has shrunk by roughly 3 million people (2,990,000). Being basically 7.7 million workers short of where we were prior to the pandemic means that the celebration should not be over the top.

The unemployment rate is 1.1 percentage points higher when compared to February 2020 since the employment loss (2.9 percent) outweighed the drop out of the



labor force (1.8 percent). Without those workers who dropped out of the labor force, the current unemployment rate would be 6.3%. Of the 4.7 million jobs still missing, 1.4 million (or 1,383,000) or 30% are in a single sector: Leisure and Hospitality, which, at some point, had shed 50% of its jobs. Keep this in mind when we will talk about the Coachella Valley.

Figure 8 compares the employment decline and recovery from this business cycle to all previous post World War II business cycles. There has only been one other recession, the Great Recession of 2008/9, when we had recovered as few jobs as we have done so this time at this stage of the cycle. Those commentators who will try to convince you that this is a fast recovery will compare the current data only to the previous recession, but not all recessions before that.

FIGURE 8: Non-Farm Employment, Percent Change from the Start of Recessions, Post World War II

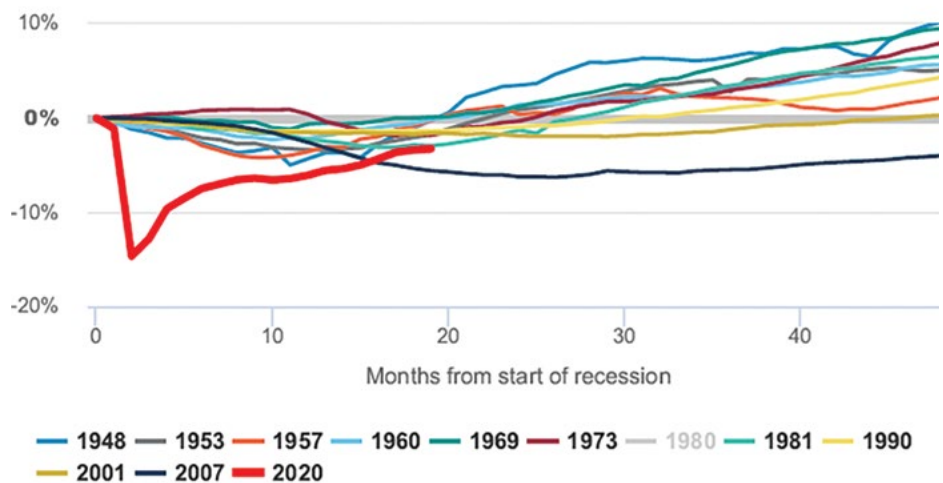
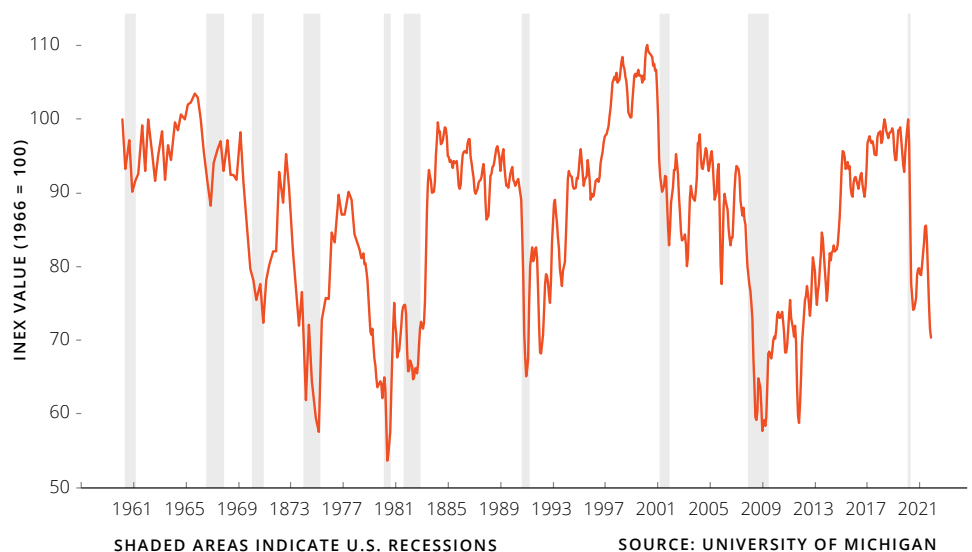
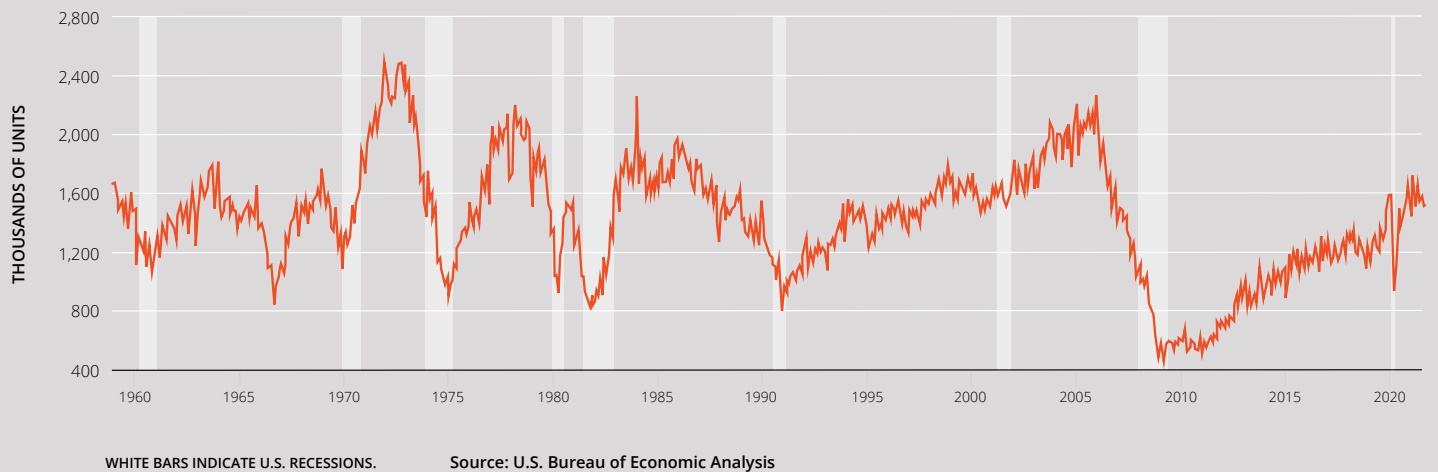


FIGURE 9: Index of Consumer Sentiment, January 2011 - October 2021



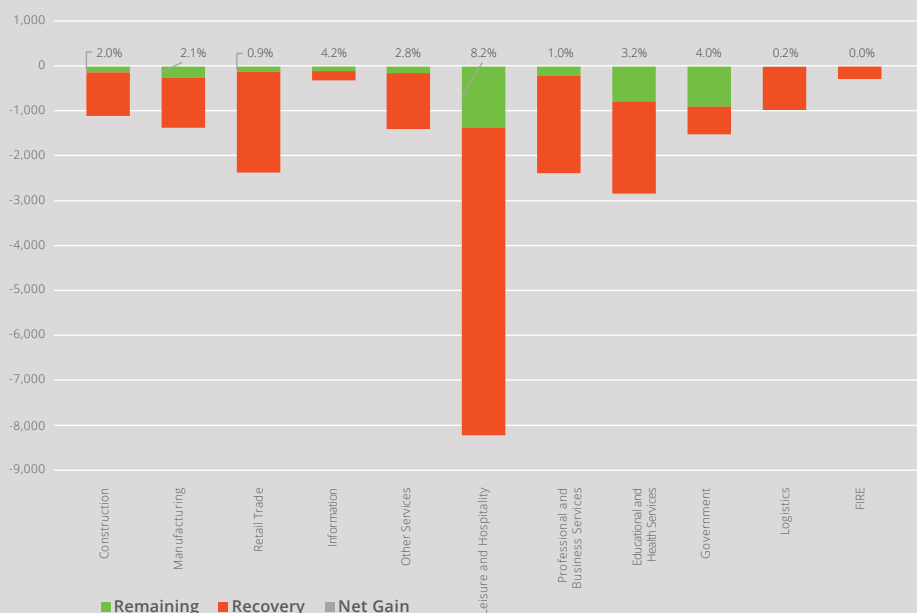
- October 2021 does not recover from low current levels;
- Severe initial decline, which started in March 2020, was partially reversed until June 2021;
- Renewed decline has the index sitting at low levels not seen since December 2012.

FIGURE 10: Housing Starts, U.S., New Privately Owned, Total Units, January 1959 - September 2021



- Housing Starts, by some considered strongest Leading Economic Indicator, continue upward trend;
- Surpass pre-Coronavirus value of February 2020;
- Long-run average is 1.5 million units per month (annualized): roughly at that average now.

Figure 11: Employment Development in Industry Sectors, U.S., February 2020 - October 2021, Largest Initial Decline and Subsequent Recovery.



- Leisure and Hospitality initially suffered the largest decline in employment, followed by Education and Health Services, Professional and Business Services, and Retail Trade;
- Most sectors have recovered much of the employment lost;
- Leisure and Hospitality still has the most jobs missing, but even here, the number is down to 8.2% of initial job losses;
- Both in absolute terms and in percentage, Government is the sector with the second lowest recovery.

CALIFORNIA

Our state was one of the hardest hit by the pandemic. The Leisure and Hospitality industry plays a prominent role here. Take an example: there were over 150 direct weekly flights from China to either SFO or LAX. A back-of-the-envelope calculation of the loss, assuming that there are 300 people on the plane who will stay for 14 days in California and spend \$100 a day will show a large drop in tourism dollars. These 150 weekly flights were basically reduced to zero, and California also had some of the more stringent regulations in place when compared to other states. For example, Disneyland was kept closed for a prolonged period while Disneyworld in Florida was open. Wearing of face masks

remained a requirement here while other states were more lenient. Ultimately the question we will have to answer will be, was it worth it to shut down the state to the extent that we did or not?

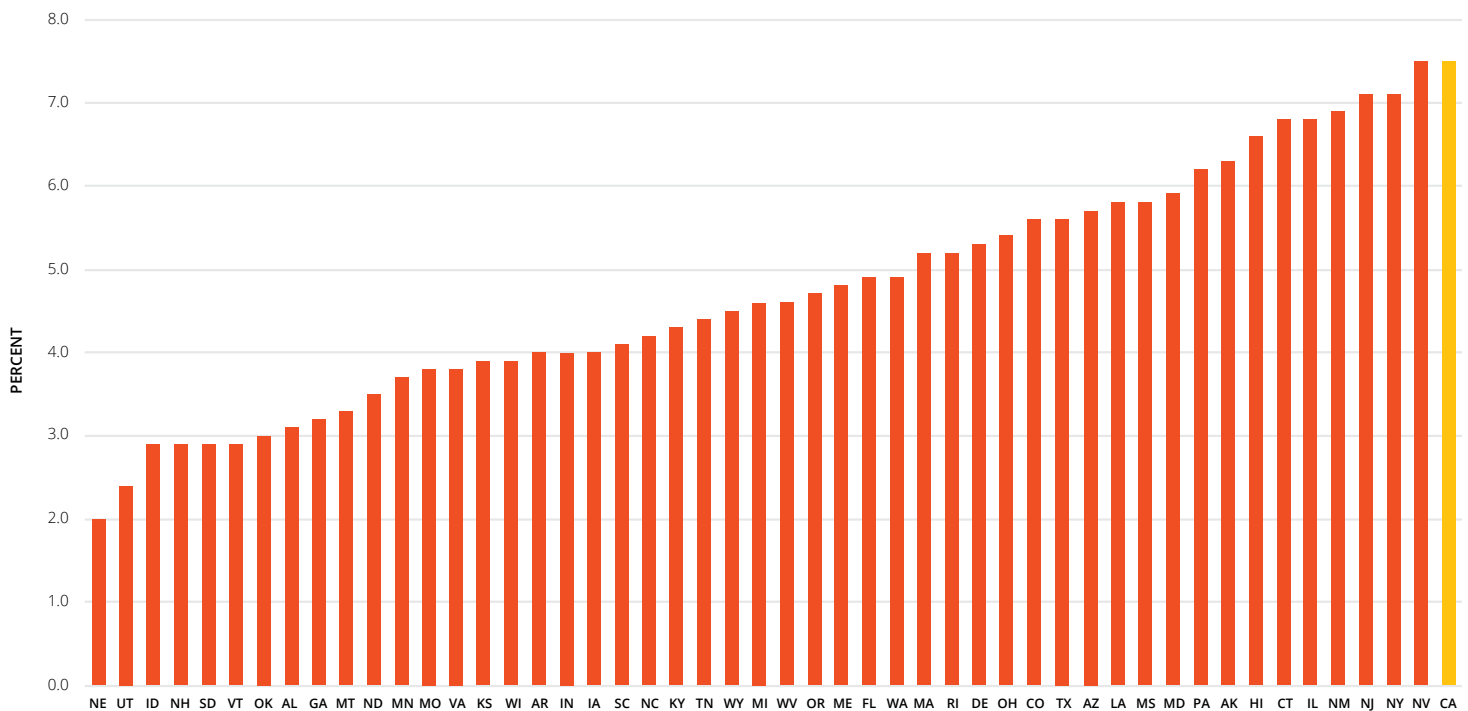
For those of you who do not want to consider the statistical value of human life when talking about the trade-off between mortality rates and economic activity, let me point out that we make those types of calculations elsewhere in a less emotional environment. Consider, for example, road fatalities. Every year, there are about 40,000 people who die on the roads in the United States. I have a simple policy that would bring this number down to basically zero: let's impose a 5 mph speed limit everywhere and at all times, and enforce them. Somehow we are willing to allow

for 40,000 people to die because we don't want to limit ourselves to driving extremely low speeds. Of course many more people have died from the Coronavirus.

Having said this, there are economists, including myself, who are working on that subject. Basically what you need to determine is to what extent mortality rates differ between states and to what extent that is due to reduced economic activity. At the same time you have to figure out how much economic activity in a given state was reduced as a result of more stringent policies.

There is no denying that states, to this day, show large unemployment rate differences which first appeared on a large scale through different increases in

FIGURE 12: Unemployment Rate - US States, Seasonally Adjusted, September 2021



state unemployment rates from February to April/May 2020. Subsequently there was also a difference in the speed of reducing the unemployment rates from their peak levels. Figure 12 shows the most recent unemployment rate distribution across U.S. states.

California is at the top, shared with Nevada. This is hardly surprising at this stage of the recovery since both states have not seen a significant return in international, or in particular, Asian tourism. Note that at the other end we have Nebraska, which currently has an unemployment rate of 2% (not a typo).

Figures 13a and 13b display a time series of state unemployment rates for the four most populous states (California, Texas, New York, Florida) together with a small state without any restrictions during the Coronavirus episode (South Dakota) and a representative from the farming states (Nebraska). We added Nebraska and South Dakota to show you what happens if you have a small Leisure and Hospitality industry that does not depend on international tourism (the capital, Pierre, Mount Rushmore and the Badlands in South Dakota notwithstanding...).

Note that there have always been differences in the unemployment rates, and that the ranking can change depending, for example, on relative price

movements that favor one state over others, or by other demand differences. California, for example, did poorly when it was hit with the peace dividend in the early '90s, with much of its aerospace industry experienced cut backs, the dot.com recession at the turn of the millennium, and while being one of the epicenters of the burst of the housing bubble (note that Nevada and Florida were the other epicenters of the housing bubble burst). It also does poorly when its industrial composition is heavily impacted (Leisure and Hospitality). Note that we actually covered the last four U.S. recessions in our discussion.

Today, at 7.5%, California's unemployment rate sits at over 2 percentage points above the national rate; it also remains substantially higher than in its rival states Texas and Florida. New York state is also substantially away from full employment.

Smaller and more agricultural states (California obviously produces a lot of agriculture but the share of that sector is relatively small within the state economy) do better in general, showing unemployment rates substantially below the national average. They end up today with unemployment rates of 2.2% (NE

and 2.9% (SD) currently, but must have socio-economic characteristics that allow them to be protected from general demand and supply shocks, at least partially. Note that Florida outperformed these in the run-up to the housing bubble collapse.

Texas has another feature that is of interest and helps to explain the current situation. The state does well when oil prices are rising and when they are high (see the OPEC I and OPEC II episodes in 1973 and 1979). The state does poorly when oil prices are crashing - as they did in 1986 when energy prices collapsed. What else do Texas, Florida and South Dakota have in common that is relevant for the current economic situation? All three states have higher mortality rates as a result of less stringent policies regarding the virus spread (see Figure 14). As does NY state, but that had less to do with stringency than with the earlier mistakes made by the Trump administration when it decided to shut off tourism from Asia but not from Europe. It was the European strain of the Coronavirus that caused havoc early in the East Coast states.

FIGURE 13A: Unemployment Rate, U.S. and Selected States, Seasonally Adjusted, January 1976 - September 2021

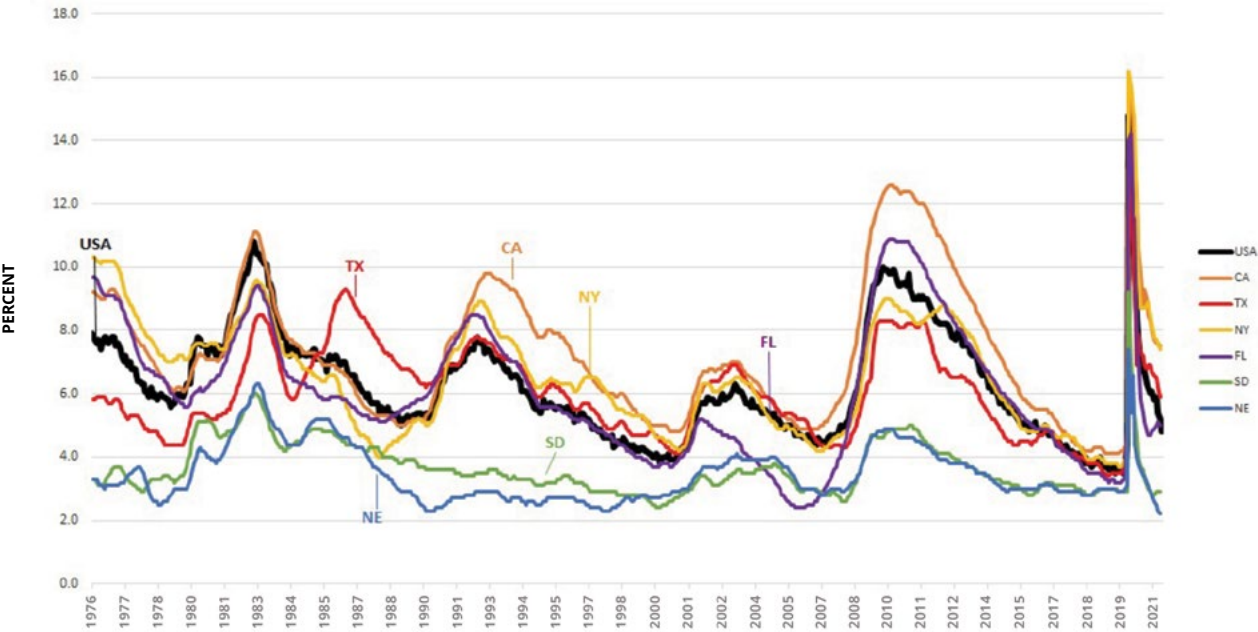


FIGURE 13B: Unemployment Rate, U.S. and Selected States, Seasonally Adjusted, September 2019 - September 2021

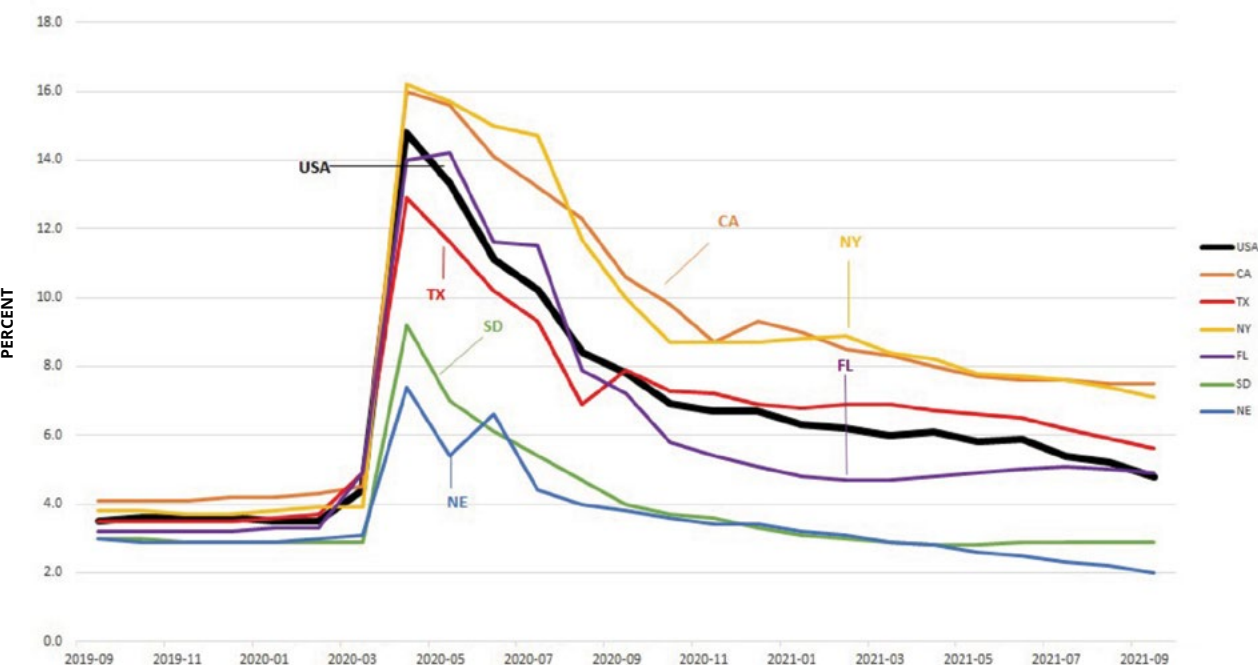


FIGURE 14: Cumulative Deaths per 100,000, U.S. States, February 2020 - September 2021

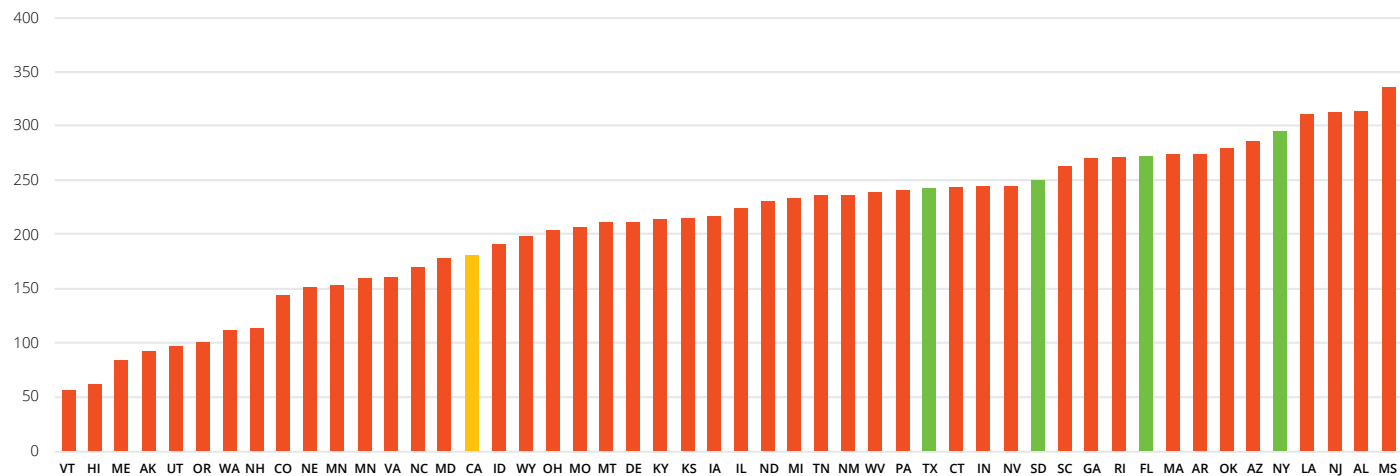
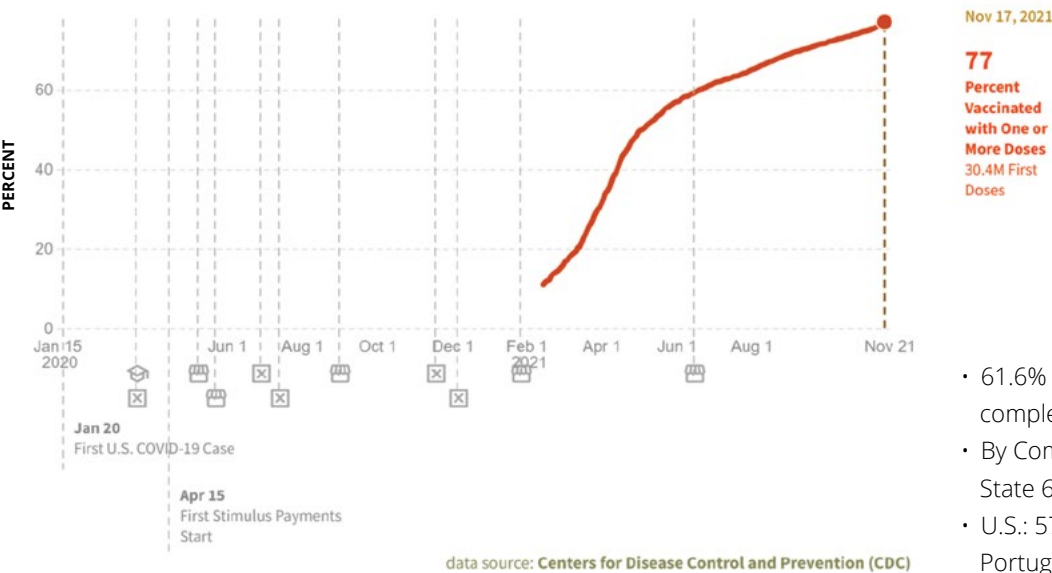


FIGURE 15: Population Share of Vaccinated People, California, November 5, 2021



*Percent of population reported to have been administered at least one vaccine dose. The daily number of new vaccinations is calculated as a 7-day moving average. This series uses the data published by the Centers for Disease Control and Prevention (CDC).

last updated: November 18, 2021 next update expected: November 23, 2021

- 61.6% of California's population is completely vaccinated;
- By Comparison: Texas 53.6%, New York State 67.0%, Florida 60.0%;
- U.S.: 57.7% completely vaccinated, Portugal 87.4%, U.K. 67.1%, Mexico 46.9%, Germany 66.4%, Israel 65.3%

INLAND EMPIRE

Real GDP for 2021 of the Metropolitan Statistical Area (MSA) of Riverside-San Bernardino-Ontario, also known as the Inland Empire and consisting of San Bernardino County and Riverside County, will not be available until December 2022 (the release for 2020 MSA GDP is December 8, 2021). Hence, current economic analysis must rely on other indicators. This resembles having as little information as a supertanker entering a fog bank without its radar working and with several icebergs lurking in the dark. We will have to rely on other indicators here. Unemployment rates and inflation rates are available with less of a delay.

Table 3 gives you the unemployment rates for the nation, the state, and the region, including all of the other MSAs in Southern California for the most recent numbers available (September 2021).

Note that not all regions started with a relatively low unemployment rate in February 2020, a level that we can consider either close to full employment or above full employment. Remarkably, and despite its socioeconomic demographics, the Inland Empire was below that level for California and Los Angeles County, although other coastal regions in Southern California had even lower unemployment rates. Imperial County always stands out as the county/MSA with one of the highest unemployment rates among the roughly 3,500 counties in the United States. For comparison, during the Great Depression in the 1930s, national unemployment rates reached roughly 25%.

The Coronavirus downturn did not hit these geographical areas equally. Note that the usual classification for the Inland Empire “First In, Last Out” does not apply to the last recession. Los Angeles County

was the hardest hit with an increase of 14.1 percentage points. This was massive and clearly beat the national increase of 9.8 percentage points; in itself a record setter by historical standards. Why was Los Angeles County so heavily affected? Leisure and Hospitality, and in particular, international travel, play a big role in Los Angeles County, and we will identify that as a driving factor in the initial increase in the unemployment rate.

The Inland Empire fared relatively well during the initial disaster, ending up with unemployment rates in the neighborhood of coastal areas, even beating out San Diego County. The increase in the Inland Empire’s unemployment rate of 11.3 percentage points was certainly similar to those increases in Orange County (12.1 percentage points), Ventura County (10.8 percentage points) and San Diego County (12.7 percentage points), probably within a margin of error in the labor market survey. The explanation lies in the fact that the logistics sector (Warehouse and Transportation Industry, Wholesale Trade) suffered less of a setback than other industries since households still had to buy non-durable goods. With households relying more on mail orders and delivery services, and the Inland Empire being one of the centers of distribution, employment in that sector held up relatively well.

There are two issues remaining before we turn to the Coachella Valley. First, can we gain insights into the initial increases in the 9-city unemployment rates of the Coachella Valley by looking at the labor market for the 29 MSAs for

TABLE 3: Unemployment Rates, U.S. and California (Seasonally Adjusted), and select Southern California areas (Not Seasonally Adjusted), in Percent

AREA	FEBRUARY 2020	PEAK LEVEL	SEPTEMBER 2021
U.S.	3.5	13.3	4.8
California	4.3	16.0	7.5
Inland Empire	3.9	15.2	6.6
Los Angeles	4.7	18.8	9.7
Orange County	2.8	14.9	6.0
San Diego	3.2	15.9	6.6
Ventura County	3.7	14.5	6.2
Imperial County	18.1	28.6	19.4

California? Furthermore the picture in the popular press often gets distorted by the fact that publicly available data is not adjusted for regularly occurring seasonal fluctuations in employment here. We will apply standard statistical techniques to filter these out and to give you a more objective picture of the labor market.

Looking at the 29 MSAs for California and in particular the Inland Empire (the third most populous MSA in California if you go by the U.S. definition), then the following picture emerges: there is a single variable that can explain, to a large extent, the variation in the initial increases in the unemployment rates among the 29 MSAs. That variable is the share of employment of the Leisure and Hospitality sector (see **Figure 16**).

Take two observations, Silicon Valley (San Jose, SJO) and Santa Barbara (SBA). In Silicon Valley, the unemployment rate increased by much less than in Santa Barbara. The figure suggests that much of the increase experienced in Santa Barbara was due to the much larger share in employment in the Leisure and Hospitality industry. The difference was 6.1 percentage points which should have resulted in an unemployment rate increase of slightly more than 3.5 percentage points (in truth, the increase was almost 2.5 percentage points).

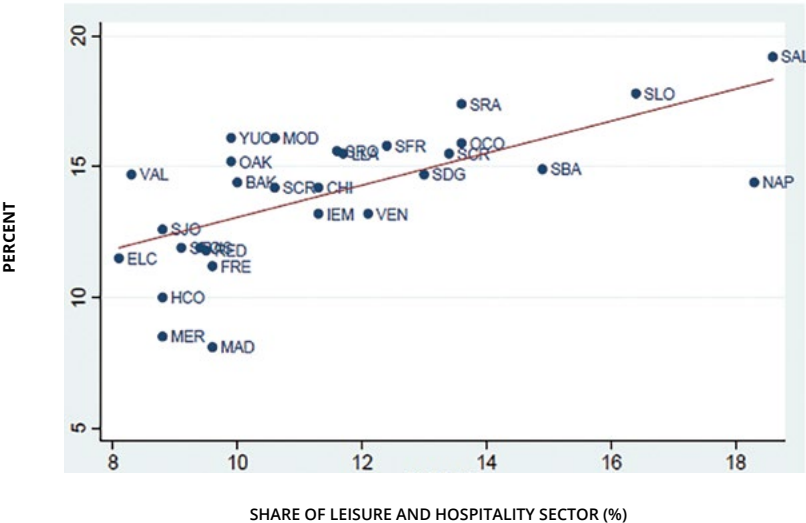
The Inland Empire did relatively well during the downturn since its Leisure and Hospitality industry is not that large, or at least the area does not rely as much on international travelers with the exception of the Coachella Valley.

What about seasonal adjustment? While the officially available data is raw in the sense that it does not take into account regularly occurring seasonal fluctuations, this effect can be substantial in some areas during certain times of the year. Take the Coachella Valley as an example: as temperatures reach 110 degrees Fahrenheit, we know that there are fewer tourists coming to the area. Canadians actually are enjoying pleasant summers at home and mostly stay north of the border. Seasonal employment in the Coachella Valley falls by 8% every summer. This results in some businesses just shutting down during the hottest months - you would neither conclude from this that businesses are leaving the area permanently nor that they will stay closed in the fall/winter/spring.

The analogy here is measuring temperature in humans. Every evening the temperature tends to be higher than during the morning. Instead of assuming that humans become less healthy during the day, you take that into account when looking at the measured (raw) values. Seasonal adjustment techniques do something similar.

Currently reported unemployment rates for the Inland Empire would look much more positive (healthy) during certain periods of the year if we removed regularly occurring seasonal fluctuations. **Table 4** lists published unemployment rates for the nation, the state, and the region since May 2020.

FIGURE 16: Change in California Metropolitan Statistical Areas (MSA's) Unemployment Rates 2020 to 2021 compared to the Leisure and Hospitality Sector's share of total employment



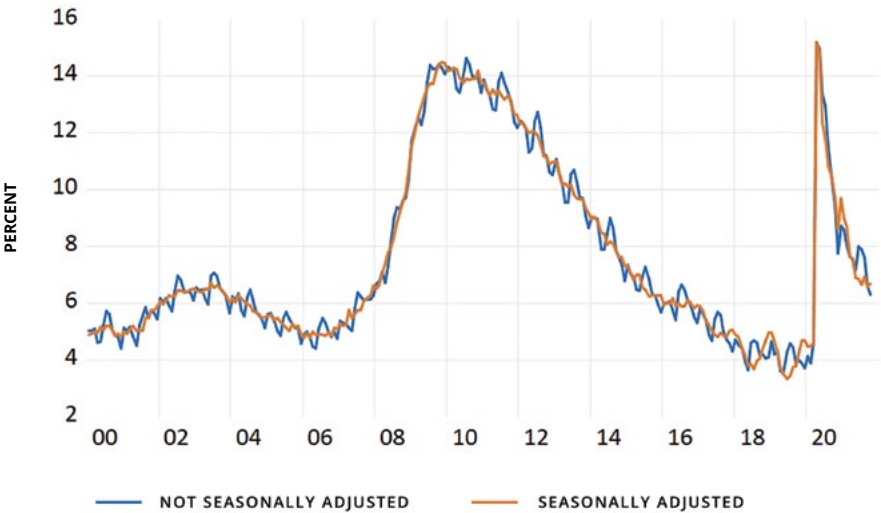
Note that the U.S. has seen a steady, sometimes even dramatic, decline in the national unemployment rate. Much of the decline from August to September, however, was due to a drop in the labor force, possibly as a result of discouraged workers or workers leaving the labor force for other reasons, but also resulting from retirements. California looks much more sluggish: the decline since May has been small. The Inland Empire is only now back to levels last reported in May due to a large increase (0.8 percentage points) from May to June 2021. We calculate that the Inland Empire unemployment rate would have been a full percentage point lower in June and July if we seasonally adjusted the data. This makes more sense, since it is somewhat strange to observe a steep increase in the official unemployment rate data when all anecdotal evidence points to an economy that is running closer to full employment due to the current success story of the Logistics sector. Businesses and administrators should be aware of these calculations as they plan for the near future.

Figure 17 shows the difference between the officially published non-seasonally adjusted unemployment rates for the Inland Empire, and what these would have looked like after removing seasonal fluctuations. For the latest observation, there is no difference.

TABLE 4: Unemployment Rates (%), Seasonally Adjusted,

MONTH IN 2021	UNITED STATES	CALIFORNIA	INLAND EMPIRE
May	5.8	7.7	7.2
June	5.9	7.6	8.0
July	5.4	7.6	7.9
August	5.2	7.5	7.6
September	4.8	7.5	6.6

FIGURE 17: Unemployment Rates US, California, and Inland Empire - Comparison of Seasonally Adjusted and Not Seasonally Adjusted Rates, January 2000 to September 2021



We described the national Coronavirus downturn and subsequent recovery as being K-shaped in our analysis above. As evidence, we presented a figure for the United States showing the employment behavior of high-middle-low wage earners. We repeat the analysis here in **Figures 18a and 18b** for San Bernardino County and Riverside County, although the tracktherecovery.org project at Harvard University and Brown University only makes above and below median wage employment behavior available at the county level. The picture tells the same story: full employment recovery for above median wage earners, not much of a recovery at all for below median wage earners. Ignoring this difference will result in policy mistakes and a misunderstanding of the current economic situation.

There is a small probability that our positive forecast for the national, state, and regional economy is overly optimistic. That probability will increase if we experience a fourth wave of the Coronavirus this winter at the scale of or more severe than what we saw a year ago. There are countries in Europe, such as Germany, that are currently observing higher infection and hospitalization rates even though they show higher vaccination rates than the U.S. What is particularly worrisome is that completed vaccination rates in the Inland Empire are significantly lower than for California (see **Figures 19a and 19b**).

FIGURE 18A: Change in Employment (%), January 1 - August 2021, Above-Below Median Wage Earners, San Bernardino County

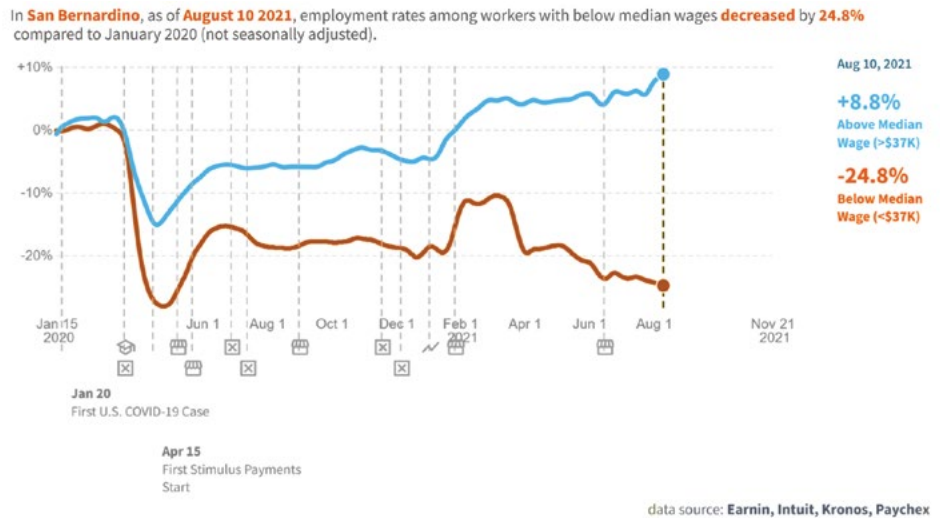


FIGURE 18B: Change in Employment (%), January 1 - August 2021, Above-Below Median Wage Earners, Riverside County

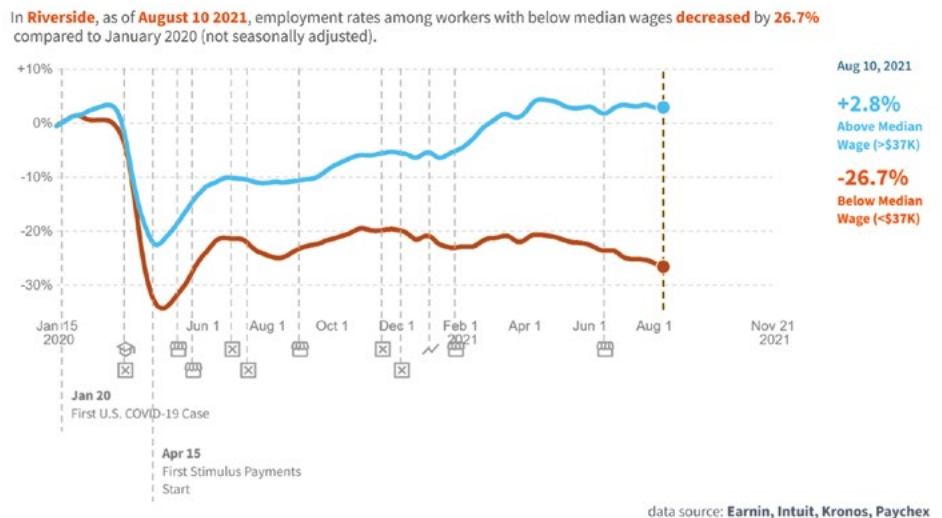
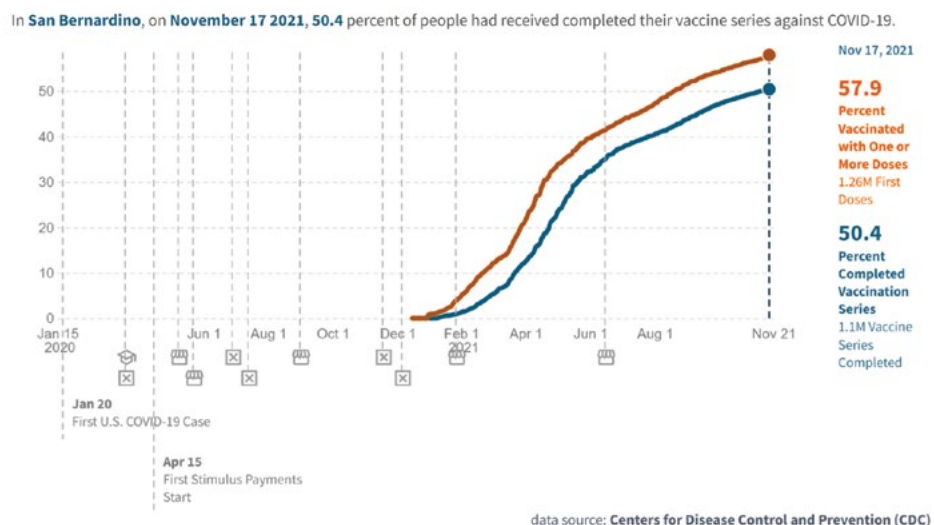


FIGURE 19A: Share of Population (%) Vaccinated against COVID-19, as of November 17, 2021, San Bernardino County



Due to these relatively low vaccination rates, it should not come as a surprise that current infection rates are relatively high when compared to other surrounding counties such as Los Angeles. **Figure 20** shows the infection rates within Riverside County. We have used the old four-color code scheme for California (purple-red-orange-yellow) to show you how local areas within Riverside County would be classified. To be in the purple zone, you must have seen over 100 infections per 100,000 people during the previous seven days. Basically the entire county would be back in the worse category, purple.

The LA Times reports on November 9 that there has been a sharp rise in COVID19 hospitalization rates, and especially so in the Inland Empire. This is consistent with our concern regarding the relatively low vaccination rates in our area. Hospitalization rates are up 20% in recent weeks. For what it is worth, countries that are experiencing high infection rates, such as Germany, would also be in the purple category at this point. Germany is currently at a rate of slightly close to 300 infections per 100,000 people over the last 7 days. This is a higher level than what that country experienced a year ago during the third wave. Of particular concern is the number of breakthrough cases, especially for older people.

FIGURE 19B: Share of Population (%) Vaccinated against COVID-19, as of November 17, 2021, Riverside County

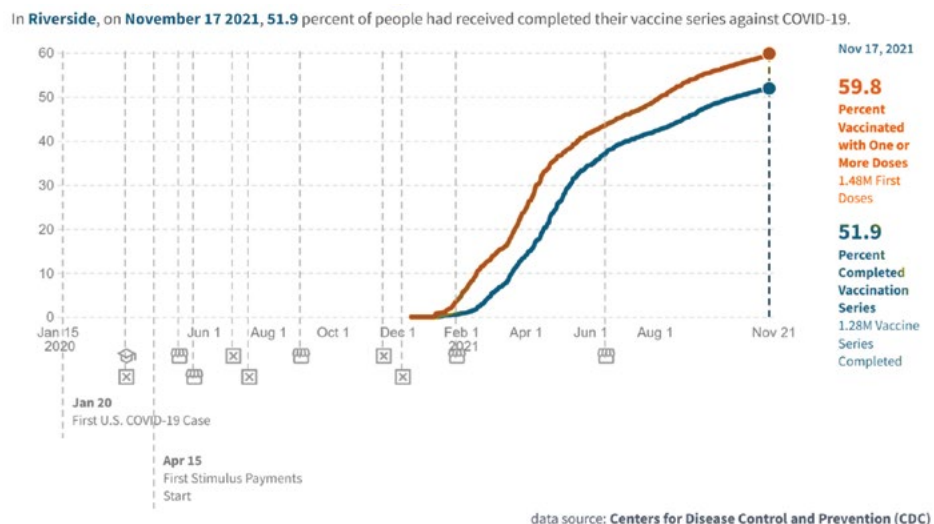
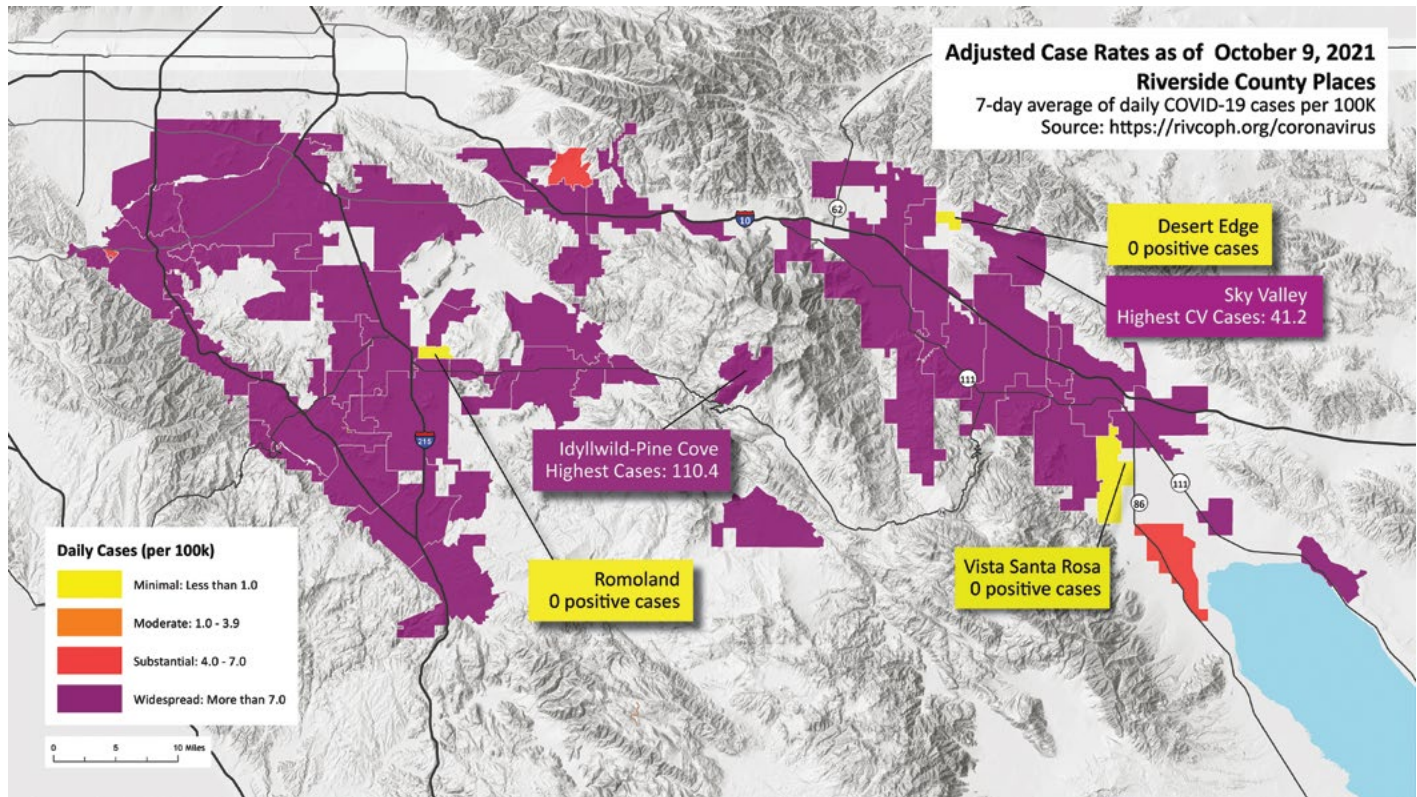


FIGURE 20: Adjusted COVID-19 Positive Case Rates, Areas within Riverside County, as of October, 2021



COACHELLA VALLEY

I do not have to tell this audience that the Coachella Valley differs significantly from the rest of the Inland Empire or Riverside County. While its population makes up close to 20% of Riverside County, it is located sufficiently far to the east of the county to make daily commuting into the coastal areas not practical. In this sense, it is self-contained, whereas 20% of the labor force in the Inland Empire daily commutes to the coastal areas, creating traffic jams twice a day on the I-210, I-10, I-5 and the CA-90, where a round trip from Upland to Downtown LA (37 miles)

takes up to 4½ hours round trip (on a Thursday leaving Upland at 7:00 and returning at 5:00).

Yet the Coachella Valley was particularly hard hit economically by the Coronavirus downturn since it depends much more on foreign visitors during its high season (late fall, winter, spring), and has a large Leisure and Hospitality industry. Other Services and Retail Trade also play a major role although Other Services, while heavily impacted, does not employ nearly as many workers as the other impacted sectors do. To the surprise of many, Education and Health Services initially also contracted significantly, which could not be expected given the demand for

treatment for those who were infected. However, people shied away from hospital and dental services if they were not absolutely essential. Similar to other areas in the U.S. and in Europe, hospital wards stood empty when they did not deal with Coronavirus complications.

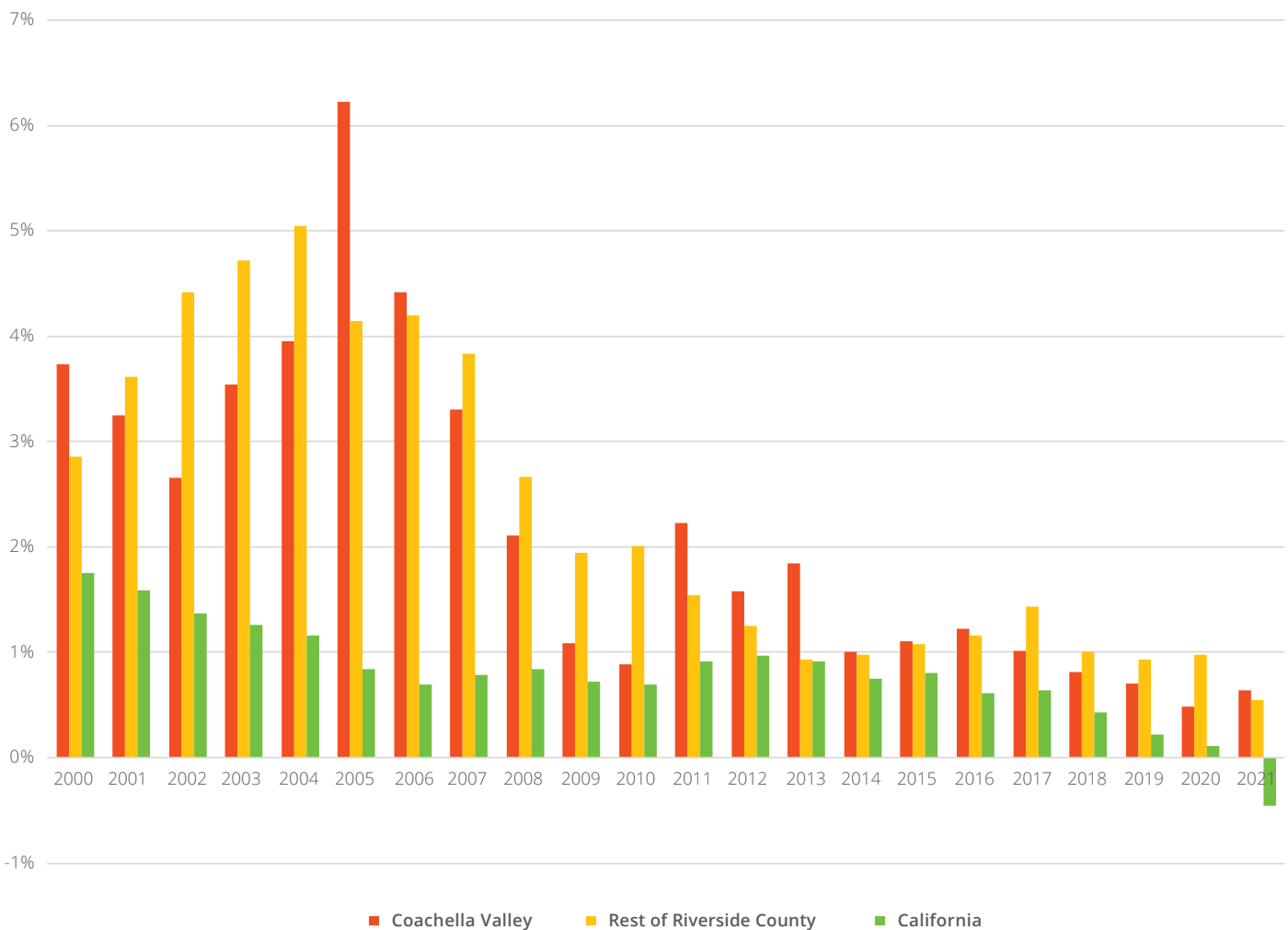
We will start our analysis with a look at population growth in the Coachella Valley since 2000, and compare it to the rest of Riverside County and the state. Let me explain that when we talk about population in the Coachella Valley, we only consider residents in the nine cities and thereby miss those who live outside the city boundaries and in unincorporated areas.

Figure 21 shows the growth rates since 2000 until the most recently available data. California shows negative growth for the first time since the start of the millennium. We assume that this is a COVID19 aberration and largely the result of lower immigration numbers - but that needs to be seen. The Rest of

Riverside County continues to grow at the 1% rate seen since 2013, but this is significantly lower than the 2% growth experienced since the end of the Great Recession, and certainly miles away from the 4% average seen before that. To put matters into perspective, if you grow at 4% per year, your population roughly

doubles every 17 years. Coachella Valley has followed a similar pattern with slightly lower growth rates. The record 6% increase in the population at the end of the housing bubble in 2005 is unsustainable and is not going to happen again for some time.

FIGURE 21: Annual Population Growth, Coachella Valley, Rest of Riverside County, California, 2000-2021



Indio is clearly the largest city within the Coachella Valley with over 91,000 residents (see **Figure 22**). There is basically a tie for the second largest city, with Cathedral City winning marginally over Palm Desert (both close to 54,000). Palm Springs is also in a tie with the City of Coachella, the two being just below 48,000, and Coachella completing its upward trend in catching up to Palm Springs. The remaining cities are not that close to each other, with La Quinta leading Desert Hot Springs, Rancho Mirage, and Indian Wells.

Figure 23 shows how the cities developed over time. Palm Springs was the largest city until 1993, but has not grown much since then due to geographical constraints. Indio's growth really took off in 2004. The City of Coachella also started

FIGURE 22: 2021 Population Estimates, Nine Coachella Valley Cities

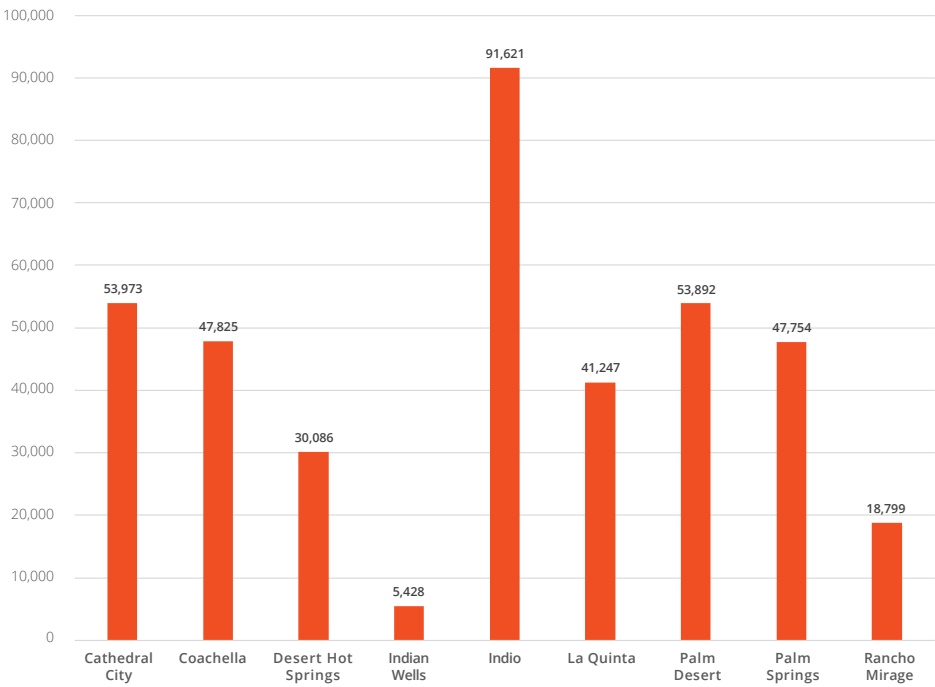
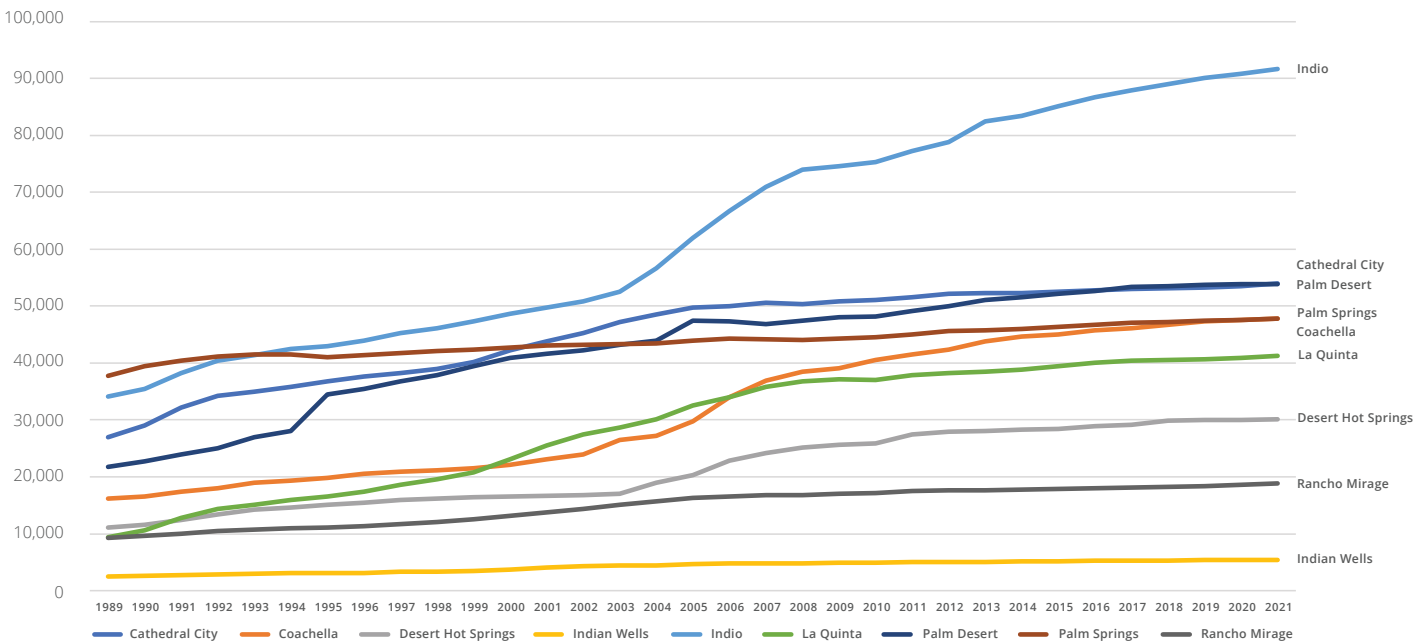


FIGURE 23: Estimated Population of the Nine Coachella Valley Cities, 1990 to 2021



to show higher growth rates around that time, but the trajectory has flattened out as it overtook Palm Springs.

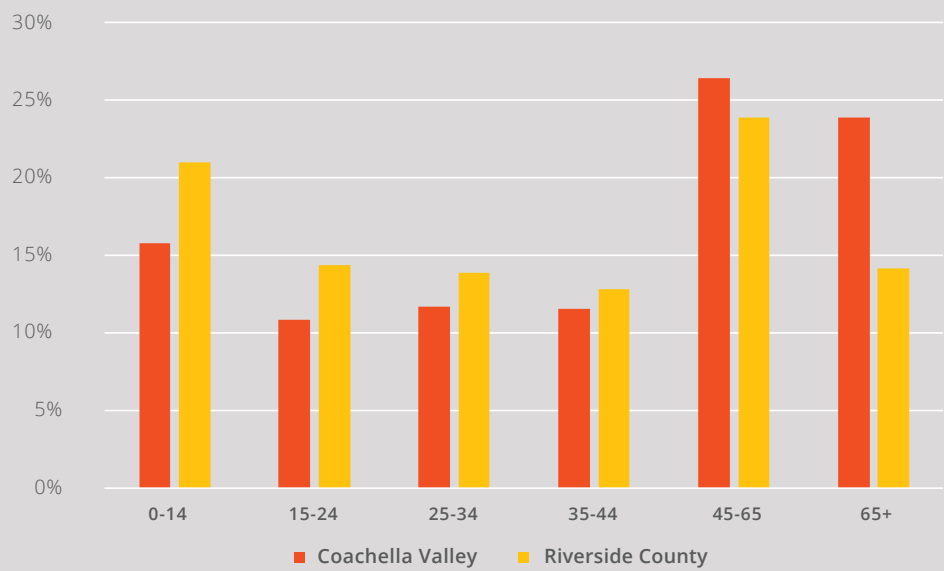
We display the age distribution next (Figure 24) for both Riverside County and the Coachella Valley. Not surprisingly, there is a larger share of residents who are 45 years and older in the Coachella Valley, and the difference is most pronounced in the 65 and older age category. This implies that some other age categories must contain a smaller

share, and this is most pronounced for the under 15 age category.

Due to a variety of restrictions, travel has been seriously impacted by the Coronavirus downturn and even after the opening up of the economy. This is especially true for international tourism. Perhaps somewhat surprisingly, the Coachella Valley has experienced less of a tourism downturn than other areas in California that rely heavily on Leisure and Hospitality. This is the result of residents

in Southern California still wanting to take a holiday, but preferring to travel only as far as a gasoline tank would take them. Hotel rates in July and August of 2021, for example, were relatively high compared to previous years. A good statistic to look at here is the total passenger traffic in Palm Springs airport (PSP). While there was a serious decline in passengers passing through the airport during the spring of 2020, there has been a recovery lately to the point where new records have been set during late spring and

FIGURE 24: Age Distribution, Coachella Valley and Riverside County



early summer. These are, of course, substantially lower than the numbers during the high season (see Figure 25).

If you pay attention to longer term trends, then **Figure 25** is actually encouraging. Note that passenger traffic showed a trend increase for year-to-year peak number until 2020. Should we return to normal soon then this gives you a rosy outlook for the spring of 2022. Finally, realize that the U.S. is opening up for foreign travelers early in November. This should result in additional bookings from international travelers, although much of the initial increase in tourists coming to the U.S. will be from Europe, which represented 20% of the 79 million visits to the U.S. in 2019, prior to the Coronavirus event. More importantly for the Coachella Valley is the lifting of restrictions for Canadian travelers as well during the second week of November 2021. In 2019, 20.2 million Canadians travelled to the U.S., which represented a share of over 25% of all tourists. In 2020, that number fell to 4.8 million or by over 60%. Snowbird Canadians predominantly travel to Florida or California, depending on which part of Canada they reside in. Google Trends reveals that primarily Canadians from British Columbia and Alberta google Palm Springs, while more eastern provinces google Miami for their winter vacation.

For comparison, **Figure 26** shows the passenger numbers for Los Angeles International Airport (LAX). Different from PSP, air traffic in Los Angeles has not recovered and still sits at only about 60% of pre-Coronavirus levels. Prior to early 2020, peak travel showed impressive year-to-year increases and we hope that

with the opening up of international travel during the first half of November, passenger numbers will be closer to what we saw at the end of 2019.

Turning now to employment. **Figure 27** indicates both the initial decline in the major employment sectors of the Coachella Valley, and the subsequent recovery. Here, we look at the development in percent changes. Not

surprisingly, Leisure and Hospitality show the largest percent decline initially, losing almost half of the jobs. That is a stunning number especially since it happened from February 2020 to May 2020, typically considered a high season for the Coachella Valley. In terms of percentage losses, the Information sector comes in second, but as a graph below will show, there were not that many people working in that sector. More significantly, Other

FIGURE 25: Passenger Traffic, Palm Springs International Airport (PSP)

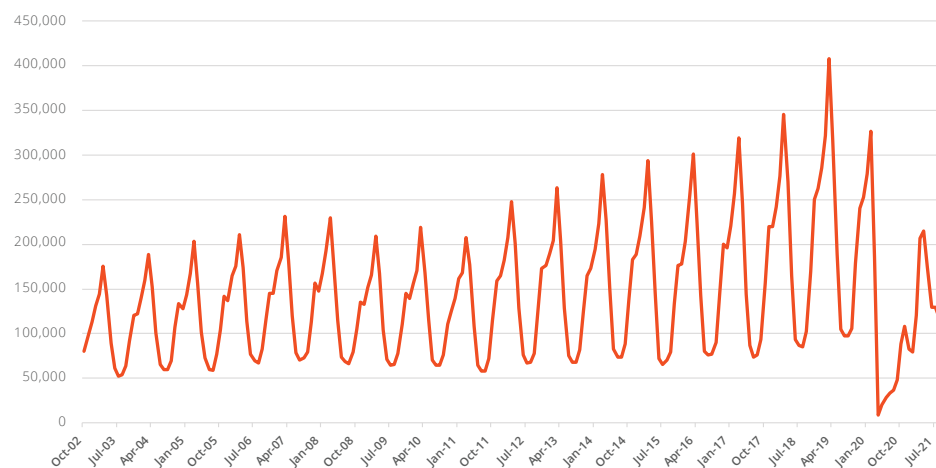
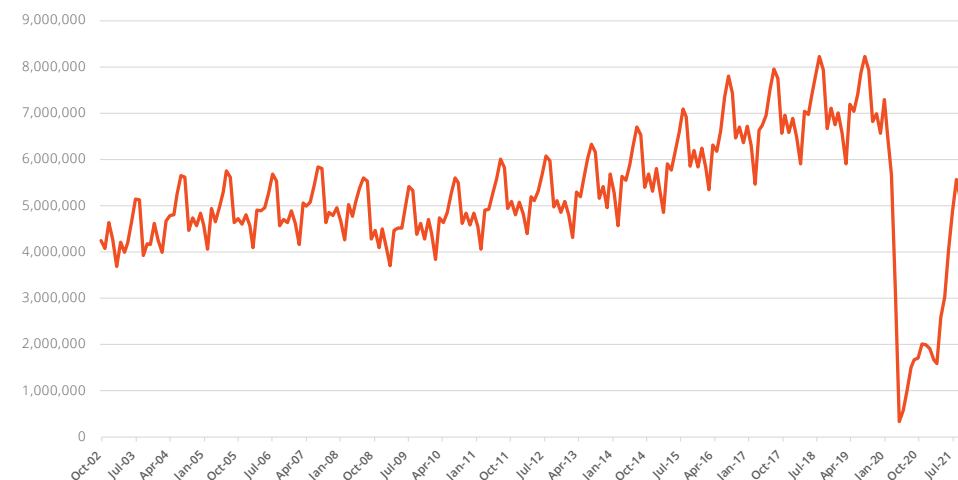


FIGURE 26: Passenger Traffic, Los Angeles International Airport (LAX)



Services, which includes gyms and spas, and hair cutting, manicure, etc., lost over 30% of the jobs existing in February 2020. Here, the difference is that not many of those jobs were recovered by

March 2021, the latest date for which we have data available from the California EDD. Again, this needs to be put into perspective as not that many people were working in Other Services. The

initial loss in Retail Trade is more serious, because a much larger fraction of Coachella Valley residents actually work in this sector.

As you could see from the previous graph, looking at percentage changes does not really give you an adequate picture of the employment disaster that the Coachella Valley experienced since small losses in an unimportant sector (in terms of employment) will show up as large percentage changes.

To give you a more complete picture, **Figure 28** displays the same employment losses and subsequent recovery in terms of the number of jobs lost and subsequently recovered. In addition, it also shows the percent of February 2020 jobs that still have not been recovered. Take Leisure and Hospitality as an example. That sector lost over 16,000 positions during the initial decline. Of these, over 6,000 jobs were recovered by March 2021, but that meant that we were still some 9,000 positions short from where we started. Those 9,000 jobs represented 27.5% of all jobs that Leisure and Hospitality had in February 2020, or over a quarter of them.

Figure 28 shows you that the second most jobs lost in the Coachella Valley were in Retail Trade, followed by Education and Health Services, and Professional and Business Services. Of these, Retail Trade continues to show the largest amount of jobs not recovered. Note that Other Services still has over a third of existing jobs in February 2020 not recovered - again, it is a rather small sector if counted by number of jobs.

FIGURE 27: Change in Employment (%) by Industry Sector, Coachella Valley

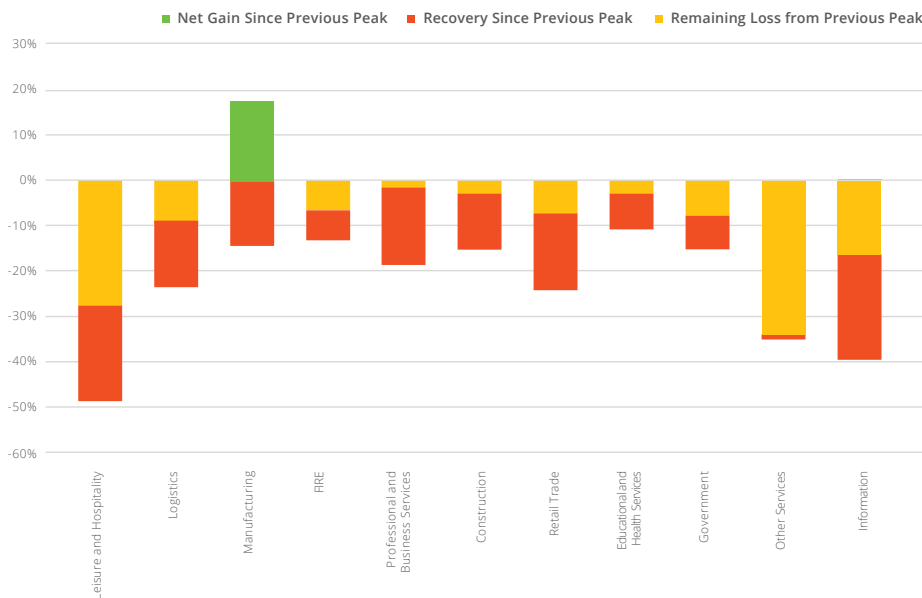


FIGURE 28: Change in Employment (Number of Workers) by Industry Sector, Coachella Valley

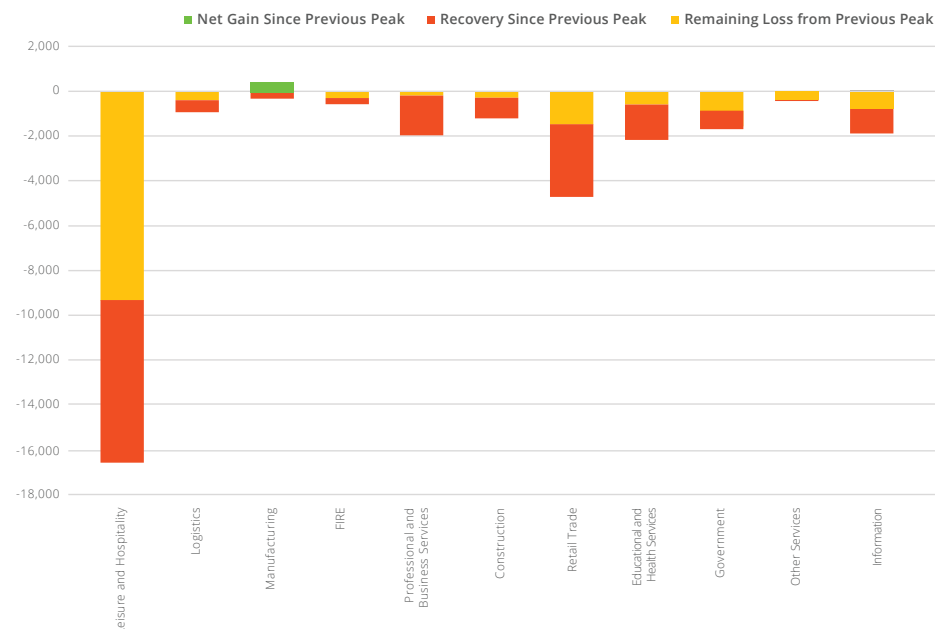


Figure 29 is similar to the previous two graphs but now shows the loss and subsequent recovery by city. Keep in mind that these are jobs in the location, e.g. Palm Springs, regardless of who occupied that job (the person who lost the job may have resided in Indio, for example). Hence these numbers are not job losses by residency but by establishment.

Both Palm Desert and Palm Springs were the most hurt by the downturn initially. This is not surprising given the employment composition in those two cities: a large number of jobs here are in the Leisure and Hospitality sector, and in Retail Trade. Both cities also had the lowest recovery in the number of jobs lost, basically still missing half of them. In terms of existing jobs in February 2020, both cities are still short by over 10% of them. While Indio had the third highest number of jobs lost, it has also recovered a substantial amount.

One of the problems with data here is that the California Employment Development Department only makes available data up to March 2021. Hence we know little about what happened over the summer or early in the fall.

We have further statistics on some of the relevant socio-economic factors for the Coachella Valley, but prefer to list them with short comments rather than analyzing these in detail. One option is for the reader to skip this section and to go straight to the housing report.

FIGURE 29: Change in Employment (Number of Workers) by Industry Sector, Nine Cities of the Coachella Valley, February 2020 - March 2021



FIGURE 30: Small Business Revenue, Change from March 25, 2020 to May 26, 2020, by Zip Code

- Wealthy areas experienced more of a small business revenue loss than other locations;
- The biggest loss was by 80% of revenue;
- Some less wealthy areas actually experienced a gain.

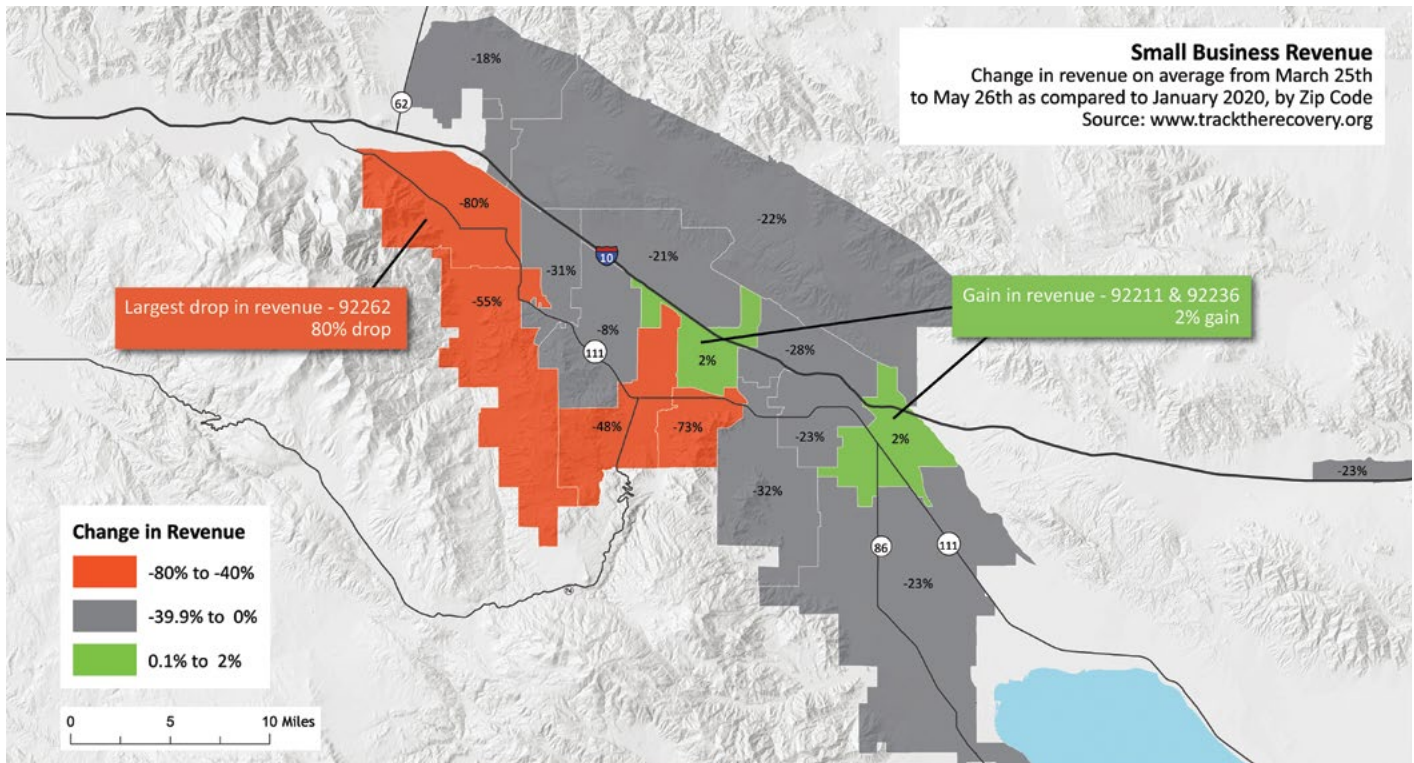
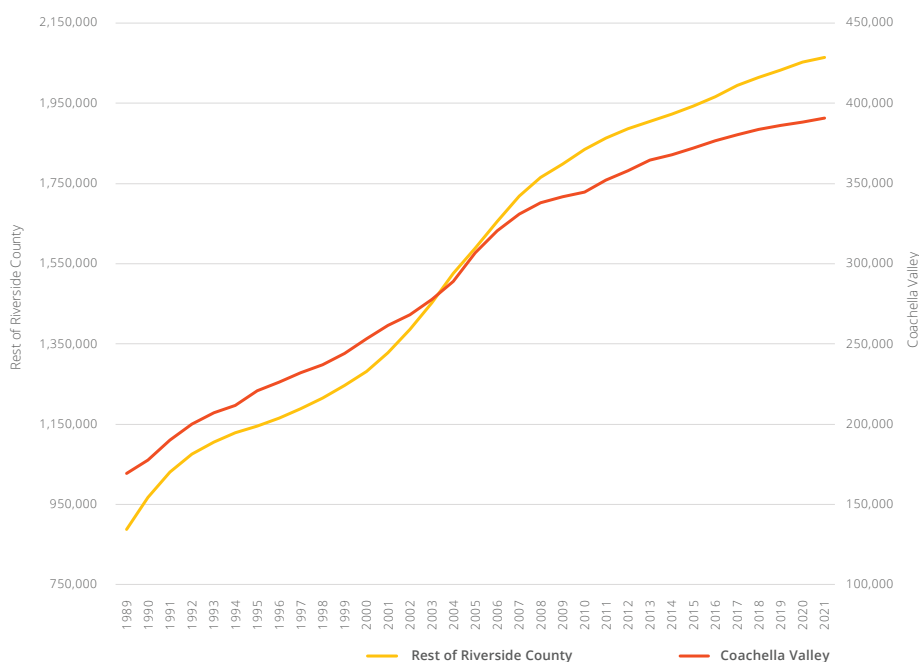
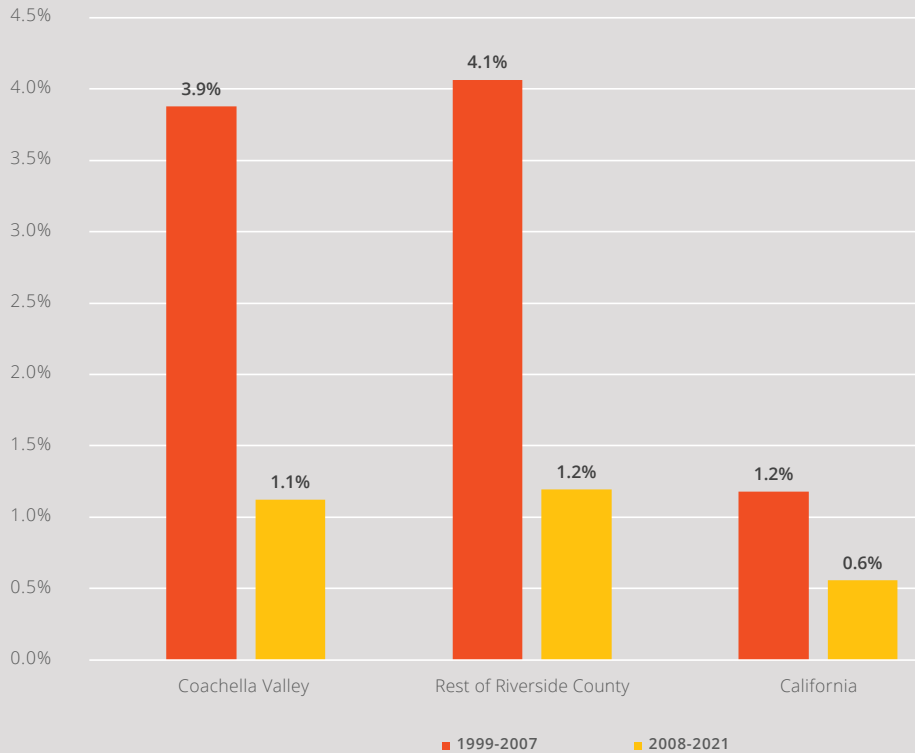


FIGURE 31: Population Levels for the Coachella Valley (right scale) and the Rest of Riverside County (left scale), 2000- 2021



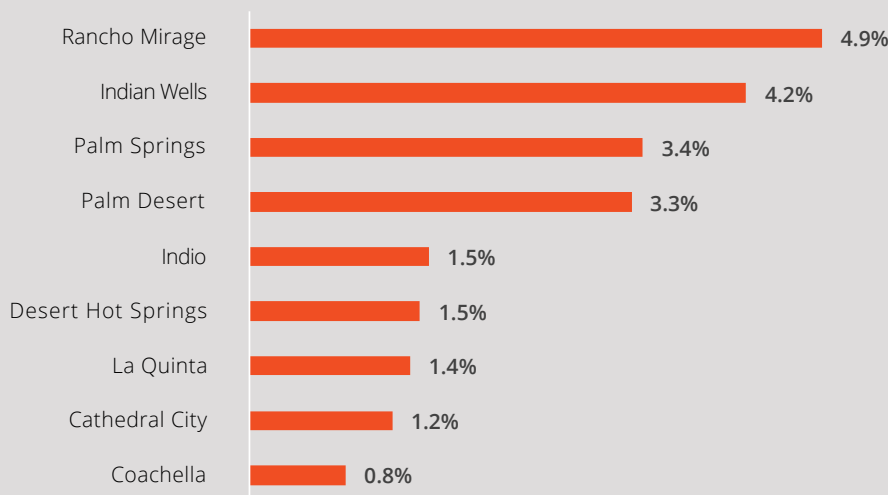
- The population levels for both Coachella Valley and the Rest of Riverside County have continued to increase;
- Coachella Valley reached a population of over 390,600 people in 2021, an increase of almost 2,500 people from 2020. The Rest of Riverside County increased to a population of close to 2,064,000, in 2021, an increase of over 11,000 people from 2020.

FIGURE 32: Compounded Annual Growth Rate of Population, 1999-2007 vs. 2008-2021



- The compounded annual growth rate of 2008-2021 for California, Coachella Valley, and the Rest of Riverside County all dropped significantly from the compounded annual growth rates for 1999-2007;
- Coachella Valley and the Rest of Riverside County have similar compounded annual growth rates for 1999-2007 and 2008-2021 although Coachella Valley's are slightly lower for both time periods;
- The compounded annual growth rates for Coachella Valley (3.9% for 1999-2007 and 1.1% for 2008-2021) and the Rest of Riverside County (4.1% for 1999-2007 and 1.2% for 2008-2021) are higher than California's (1.2% for 1999-2007 and 0.6% for 2008-2021).

FIGURE 33: COVID19 Mortality Rates, 9 Cities, Coachella Valley, Dec 2020



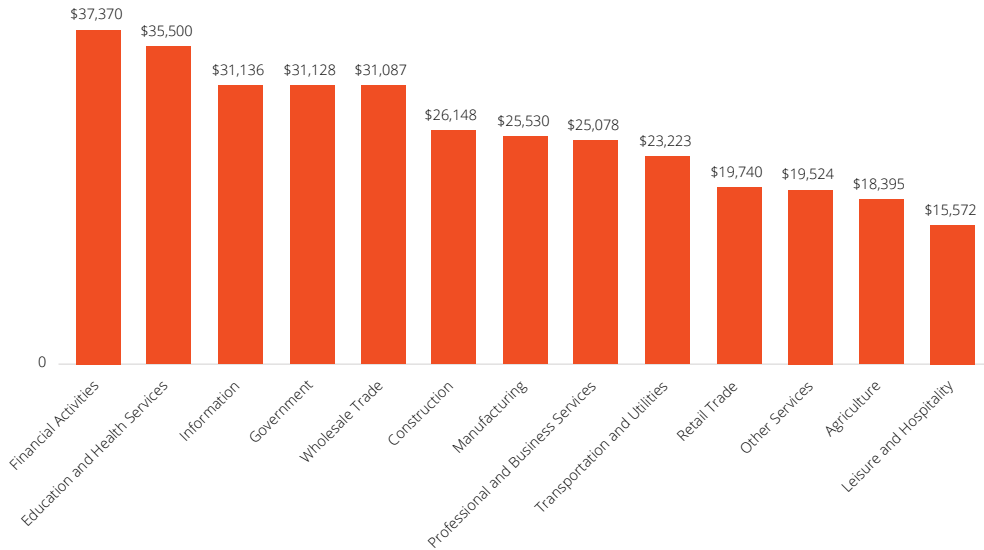
- Rancho Mirage has a COVID19 mortality rate of 4.9%, far above the United States' average rate of 1.6%;
- Indian Wells, Palm Springs, and Palm Desert also have COVID19 mortality rates over double the national average;
- Indio, Desert Hot Springs, La Quinta, and Cathedral City are all within 0.4 percentage points of the national average;
- The City of Coachella has the lowest COVID19 mortality rate, at 0.8% (half of the national average).

TABLE 5: Commuting Flows in Coachella Valley, 2018

LIVES/WORKS	INDIO	CATHEDRAL CITY	PALM DESERT	PALM SPRINGS	COACHELLA	LA QUINTA	DESERT HOT SPRINGS	RANCHO MIRAGE	INDIAN WELLS
Indio	5,415	822	4,118	1,727	1,679	2,833	185	1,817	769
Cathedral City	765	2,068	2,095	4,703	183	562	297	2,247	256
Palm Desert	962	553	4,102	1,490	241	1,082	105	1,907	561
Palm Springs	329	650	984	5,102	89	251	212	991	120
Coachella	2,322	344	1,773	597	2,157	1,123	43	644	339
La Quinta	1,337	321	2,089	814	428	1,906	77	963	475
Desert Hot Springs	408	595	894	1,957	84	216	993	617	81
Rancho Mirage	157	249	592	571	46	142	48	784	88
Indian Wells	59	30	226	82	24	99	2	93	64
Inflow (How many people from outside the city work in the city)	14,168	8,211	25,014	23,772	6,299	10,335	2,388	14,727	3,890
Outflow (How many people from within the city work outside the city)	28,545	20,009	14,820	10,827	15,568	13,325	10,103	4,506	1,348
Static (How many people from within the city work within the city)	5,415	2,068	4,102	5,102	2,157	1,906	993	784	64
% Inflow (What percent of a city's workforce is from another city in the Coachella Valley)	72	80	86	82	75	84	71	95	98
% Outflow (What percent of a city's employed population works elsewhere in the Coachella Valley)	84	91	78	68	88	88	91	85	96
% Static (What percent of a city's employed population lives and works in the same place)	16	9	22	32	12	13	9	15	5

- The employed population tends to work outside of their residential cities. On average, only 15% of people work in their city of residence;
- Around 83% of each city's workforce is made up of residents from a different city;
- 96% of the residents in Indian Wells work outside of the city, and the supply of the city's workforce mainly comes from residents of other cities; the city has the highest percentages of the two kinds in Coachella Valley;
- Palm Springs provides the most workers for itself.

FIGURE 34: Average Income Per Worker by Industry, Coachella Valley, 2020



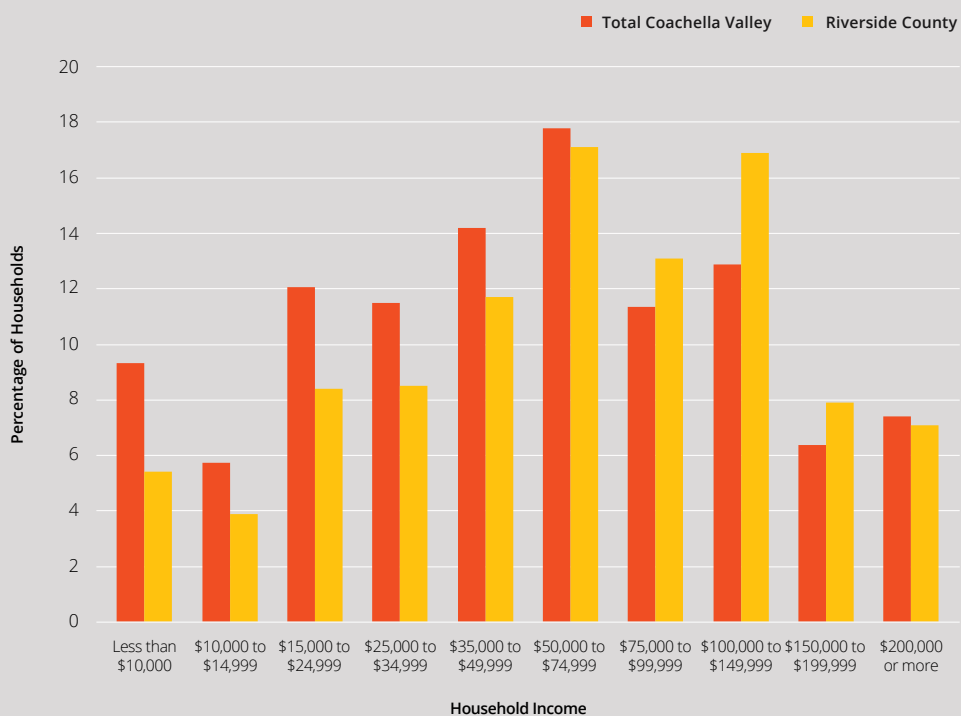
- Government industry workers in the Coachella Valley received the highest average income in 2020, while agriculture industry workers received the lowest average income in 2020;
- Service sectors relating to Financial Activities, Professional and Business Services, and Government had relatively high income per worker. The aforementioned sectors earned above \$25,000 per worker. These roles were not as negatively impacted by the COVID19 pandemic as many businesses applied for more loans and required more business expertise;
- Agriculture, retail trade, construction and manufacturing had very low income per worker of less than \$27,000 per worker possible due to the Coronavirus related business shutdowns in 2020.

FIGURE 35: Percentage Change in Employment by City, Coachella Valley, Peak to Trough, Dec 2020 - March 2021



- Only 2 of the cities have restored employment to within 10% of the pre-pandemic high;
- Indian Wells was the most affected by the pandemic in terms of percentage changes (not in numbers);
- Indio and Desert Hot Springs have rebounded faster than the other cities in the area.

FIGURE 36: Income Distribution, Coachella Valley and Riverside County, 2019



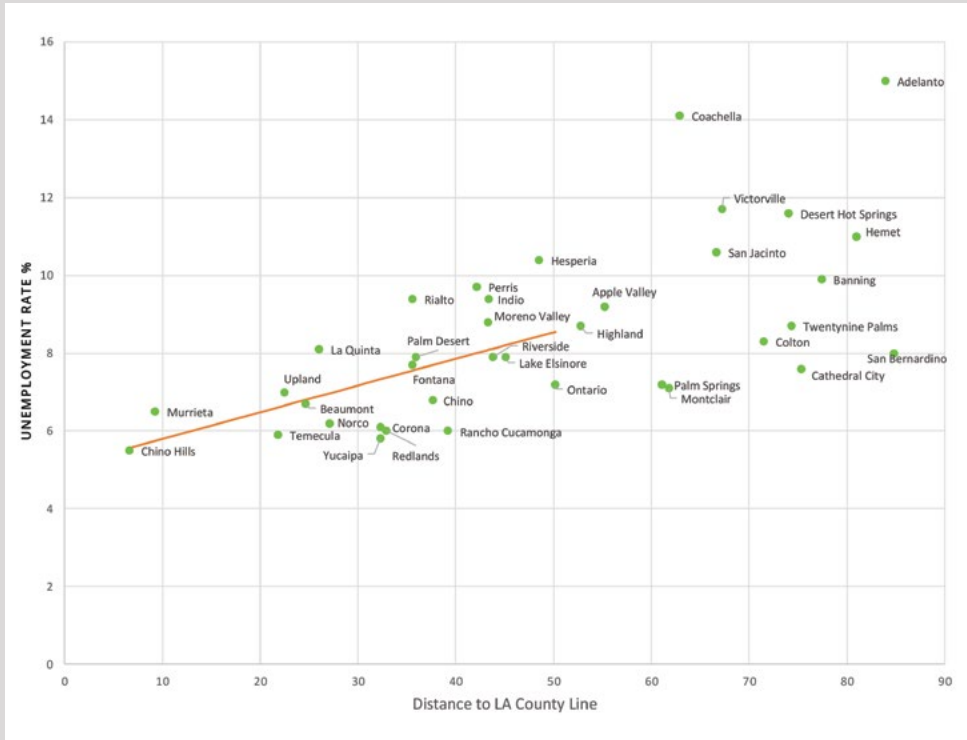
- Coachella Valley, on average, has more households with incomes less than \$50,000;
- The only category where the concentration of an income class is lower in Coachella Valley than in Riverside County is the \$75,000-\$199,999 range;
- The \$200,000+ income class has about the same relative frequency in the Coachella Valley and the Rest of Riverside County.

FIGURE 37: Mean and Per Capita Income, Coachella Valley, Riverside County, California, U.S., 2019



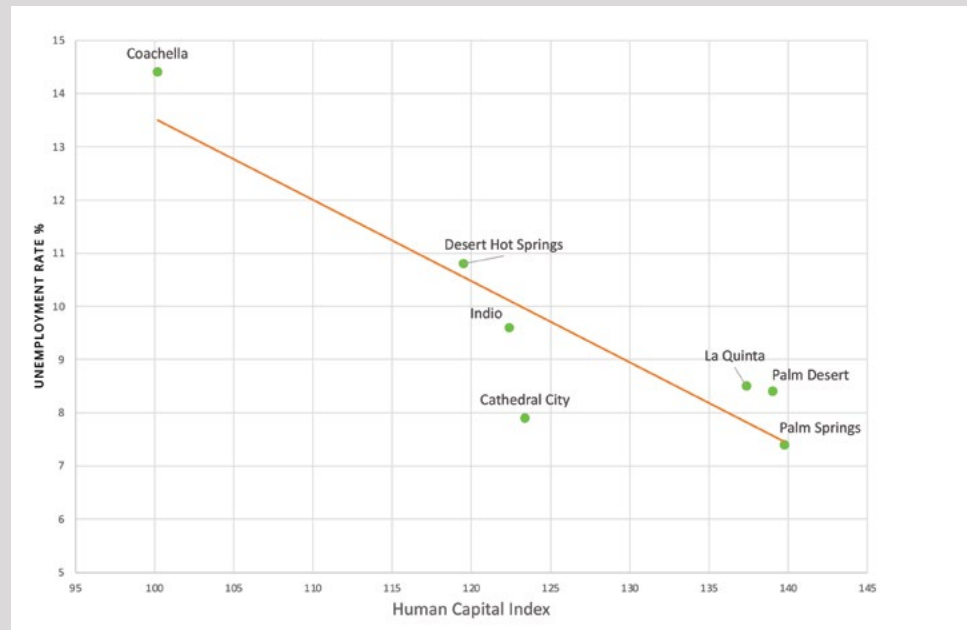
- Coachella Valley has, on average, a lower average household income than California, Riverside County, and the United States;
- Average per capita income for Coachella Valley was slightly over \$33,700, which was higher than the almost \$28,000 for Riverside County;

FIGURE 38: City Unemployment Rates and Distance to Greater Los Angeles/San Diego County Line, Inland Empire, July 2021



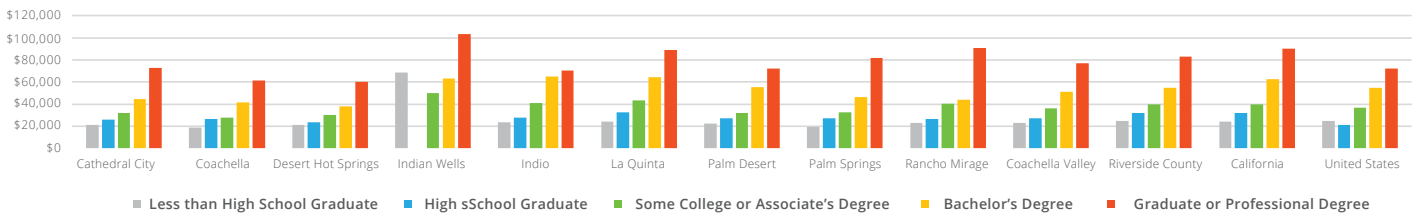
- Cities that are farther from the Greater Los Angeles/San Diego county line tend to have a higher unemployment rate;
- City distance from the Greater Los Angeles/San Diego county line explains over 40% of the variation of the respective unemployment rate.

FIGURE 39: City Unemployment Rates and Human Capital Index, Coachella Valley, 2020



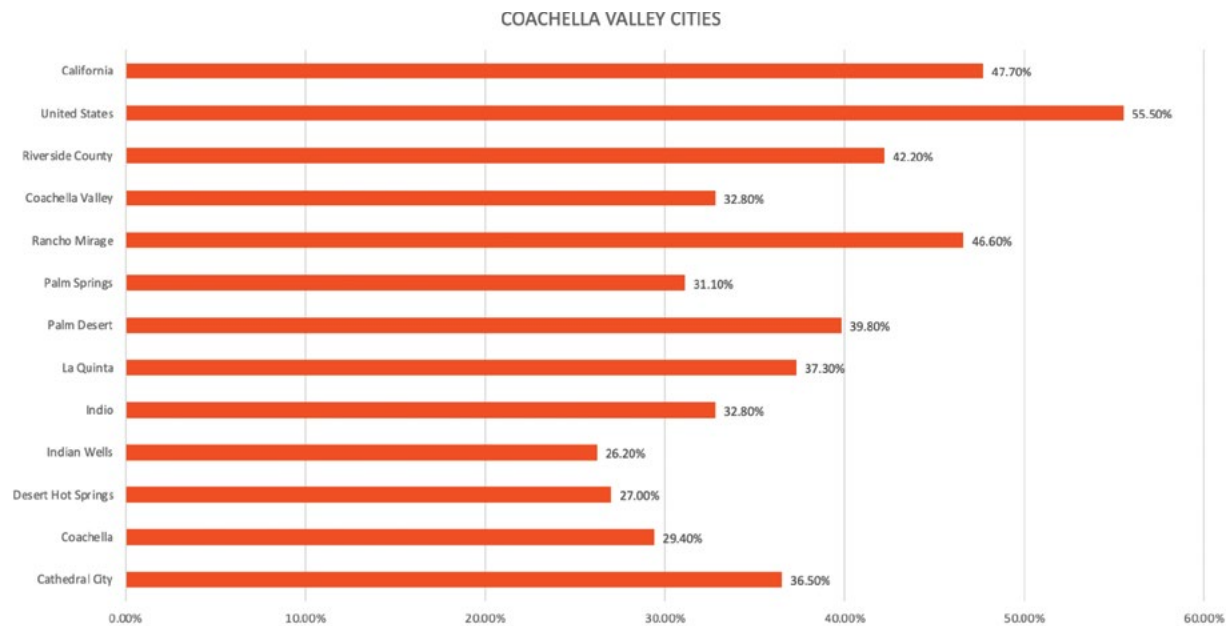
- City of Coachella has the highest unemployment rate and the lowest human capital index rating. The lowest unemployment rate and the highest human capital index are observed for Palm Springs;
- Areas with higher unemployment rates have lower rates of education.

FIGURE 40: Median Earnings Based on Education Attainment, 2018



- In 2018, the Coachella Valley median average earnings were lower across all educational attainment levels when compared to Riverside County, with a difference of \$2,100-\$6,300. When compared to California, Coachella Valley averages remained lower, ranging about \$1,300-\$13,250;
- The average rise in median earnings when obtaining a Bachelor's versus a Graduate degree in the Coachella Valley is \$26,000. Coachella, Desert Hot Springs, Indio, La Quinta, and Palm Desert fall below this average, with Indio notably only seeing a \$5,320 increase. Rancho Mirage shows the highest increase with a \$46,800 increase;
- Coachella Valley has lower median earnings across the board regardless of educational attainment when compared to Riverside County and California, but higher earnings than the national average for the categories of high school graduate, and graduate or professional degrees.

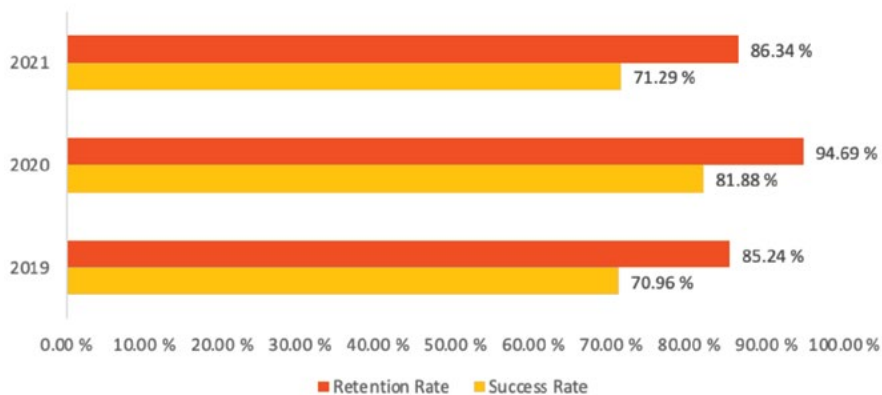
FIGURE 41: College and Graduate Enrollment of Population 18-24 Years Old in Coachella Valley cities, Riverside County, California, and the United States, 2018



- The enrollment in college and graduates between 18-24 in the Coachella Valley was significantly lower than the U.S. percentage by 22.2% and the California percentage;
- The lowest enrollment rates are in Indian Wells, Desert Hot Springs, and the City of Coachella.



FIGURE 42: College of the Desert Degree-Applicable Success and Retention Rates in Spring 2019, 2020, 2021 Semesters



- For Spring 2019, 2020, and 2021, retention rates are higher than success rates. Retention rates measure the number of enrollments with grades from A-D and pass/fail options, whereas success measures the number of enrollments with grades A-C with more limited pass-fail variations/options;
- for 2019 to 2020, College of the Desert's overall student success rate increased by 10.9 percentage points, and its retention rate increased by 9.6 percentage points;
- for 2020 to 2021, College of the Desert's overall student success rate decreased by 10.59 percentage points, and its retention rate decreased by 8.35 percentage points

HOUSING REPORT COACHELLA VALLEY

Housing has done remarkably well considering the damage done to the economy by the pandemic. Recent trends in home prices were driven by low interest rates, caused by aggressive monetary policy on the part of the Fed, and households that were little affected

economically and financially by the pandemic who seized the opportunity to capitalize on low rates.

The buying decisions by these households were constrained by very limited supplies of existing and new homes for sale. As a result, home prices in Coachella Valley communities and elsewhere achieved record highs. On the other hand, after plunging in the first part of 2020, sales

levels rebounded in the latter part of 2020 and first part of 2021, before retreating during the second half of 2021.

Looking ahead, home prices will continue to rise in 2022, but home sales will be adversely affected by affordability constraints as rates rise. As a consequence, high end communities will see more activity than low end communities in the year ahead.

TABLE 6: Existing Home Market, Southern California, 2020 and 2021

Southern California	Sept, 2020	Aug, 2021	Sept, 2021	Price MTM% Chg	Price YTY% Chg	Sales YTY% Chg
Los Angeles	\$766,010	\$830,070	\$886,050	7%	16%	2%
Orange	\$915,000	\$1,100,000	\$1,100,000	0%	20%	-14%
Riverside	\$480,000	\$570,000	\$570,000	0%	19%	-15%
San Bernardino	\$359,900	\$435,000	\$437,000	0%	21%	-10%
San Diego	\$735,000	\$835,000	\$850,000	2%	16%	-10%
Ventura	\$787,500	\$853,000	\$815,000	-4%	3%	-11%

SOURCE: CALIFORNIA ASSOCIATION OF REALTORS, KE

- Across the Southern California region, existing home prices rose to record levels;
- Riverside County median price reached a new high with double-digit price gains over several months;
- Sales in Riverside County and elsewhere have retreated from previous levels because of declining affordability.

TABLE 7: Home Prices, Coachella Valley Cities, 2020 and 2021

City	Sept, 2020	MEDIAN PRICE, \$		PERCENTAGE CHANGE	
		Aug, 2021	Sept, 2021	MTM	YTY
Cathedral City	358,750	440,000	477,500	8.5%	33.1%
Coachella	309,000	330,000	385,000	16.7%	24.6%
Desert Hot Springs	275,000	312,500	345,000	10.4%	25.5%
Indian Wells	815,000	737,500	1,075,000	45.8%	31.9%
Indio	386,000	484,500	485,000	0.1%	25.6%
La Quinta	555,000	650,000	616,500	-5.2%	11.1%
Palm Desert	435,636	468,500	460,000	-1.8%	5.6%
Palm Springs	523,500	516,000	525,000	1.7%	0.3%
Rancho Mirage	575,000	732,000	800,000	9.3%	39.1%

Source: Redfin, KE


- Coachella Valley communities generally shared in the price gains that have played out nationally and in the Southern California region;
- Median price changes in September varied widely across the Valley communities, ranging from a 39% gain in Rancho Mirage to a marginal 0.3% increase in Palm Springs;
- Indian Wells continues to be the highest-priced community in the Valley with a median price of just over \$1 million, followed by Rancho Mirage and La Quinta.
- With a median price of \$345,000, Desert Hot Springs was the most affordable of the Coachella Valley Cities.

TABLE 8: Inventory of Homes for Sale, Southern California Counties, 2020 and 2021

UNSOLD INVENTORY INDEX (MONTHS)			
REGION	Sept, 2020	Aug, 2021	Sept, 2021
Los Angeles	2.3	2.0	2.0
Orange	2.2	1.6	1.5
Riverside	2.1	2.0	2.0
San Bernardino	2.0	2.4	2.3
San Diego	1.7	1.7	1.6
Ventura	2.0	1.9	1.9

Source: California Association of Realtors, KE

- With roughly 2 months of inventory, the supply of existing homes for sale in the Southern California region remains extremely low;
- Even as interest rates increase in the coming year, they will remain low by historic standards, creating upward pressure on home prices;
- Demographic trends will also come into play, as large numbers of first time buyers demand entry level homes, and growing numbers of older households at or near retirement seek out Coachella Valley communities for the next stage of their lives.



Coming together is a beginning,
staying together is progress,
and working together is success.

– HENRY FORD



HUNTER | JOHNSEN
SUCCESSFUL MARKETING BY DESIGN

HUNTERJOHNSEN.COM



COLLEGE
of the
DESERT



Fueling economic growth in the Coachella Valley through innovative training and academic programs developed in conjunction with community partners.



HEALTHCARE



HOSPITALITY



ENGINEERING



AUTOMOTIVE
TECHNOLOGY



BUSINESS



SOLAR ...
AND MORE

We create tomorrow's entrepreneurs, today.



WWW.COLLEGEOTHEDESERT.EDU

Be a part of the **Exciting Development Opportunities** within Cathedral City



**Agua Caliente Casino
Cathedral City**



Mary Pickford Theatre

DOWNTOWN ARTS & ENTERTAINMENT DISTRICT



Coachella Valley Repertory



**Cathedral City
Community Amphitheater**



Contact:

Cathedral City Dr. Stone James, Economic Development Director • 760-770-0336 • sjames@cathedralcity.gov

Great things in business
are never done by one
person; they're done by
a team of people.

– STEVE JOBS



LOCAL EXPERTS, TRUSTED FRIENDS

LA QUINTA, CALIFORNIA, 760.564.6800 • SCOTTSDALE, ARIZONA, 480.477.8043

desertinsurancesolutions.com

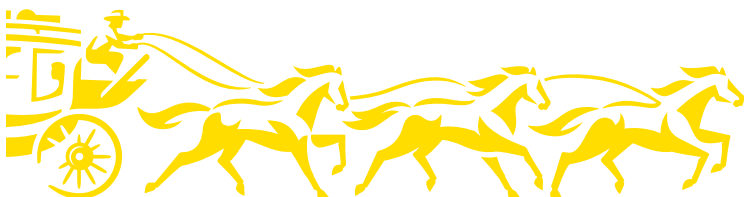


Give. Grow. Gather together.

Building a stronger community brings out the best in everyone. Together, we can share more, create more change, and do more good for the places we call home.

Coachella Valley Economic Partnership, we are proud to celebrate your commitment and service to the community.

wellsfargo.com/donations



**WELLS
FARGO**



INVEST IN INDIO.

In the desert's largest, most culturally diverse city, we've set the stage for your business growth. Here, you will find opportunity in every direction and a youthful, growing community to support your success.



indio.org



Small business, big impact.

Always open at usbank.com
Or the U.S. Bank Mobile App.



U.S. Bank supports the small businesses and business development programs that build and sustain our community. We value the role small businesses play in providing jobs, contributing to local charities, and shaping the identity of our community. Local businesses are proof that with vision and determination, we can create our own possibilities. usbank.com/communitypossible

U.S. Bank is proud to support CVEP's 17th Annual Greater Palm Springs Summit.




Member FDIC. ©2019 U.S. Bank 219404c 7/19





Hot Purple Energy **THE DESERT WE WANT** WEBINAR SERIES

A PALM SPRINGS LIFE EVENT

In Partnership with 

Learn more about the future of the Coachella Valley with
The Desert We Want webinar series.

RENEWABLE ENERGY

With the political winds at its back, alternative energy could see a quantum leap in progress in coming years. This webinar sheds light on advancements in solar, wind, and other “green” energy technologies being developed and deployed in the region.

THE SALTON SEA

Imagine a healthy Salton Sea. It can happen. In this webisode, experts and insiders discuss how the sea reached a crisis point and the variety of legislative actions aimed at righting the ship.

OUR WATER

With California in a drought, water is on everyone’s mind. In the Coachella Valley, most water used in homes and businesses comes from a vast underground aquifer.

EDUCATION – BUILDING CAREER PATHS

OneFuture Coachella Valley in partnership with our local school districts, higher education, nonprofit and business partners promotes educational and career attainment for low income students as a driver of economic success across multiple career pathways.

WATCH NOW AT: palmspringslife.ca/desert-we-want

SPONSORED BY



Hot Purple Energy



Together

We Have the Power to Build a Clean Energy Future

Southern California Edison is working hard for our communities, our environment, and our future. We're bringing more clean and renewable sources of energy to Southern California. And we're working hard to power electric vehicles. We're cutting emissions and greenhouse gases to provide cleaner air for everyone.

We are proud to sponsor the
Coachella Valley Economic Partnership
17th Annual Greater Palm Springs Summit

For more information please visit
edison.com/mindthegap

Energy for What's Ahead®



SOUTHERN CALIFORNIA
EDISON®



PALM DESERT

**THE CITY OF PALM DESERT
WELCOMES YOU!**

Business Support Hotline: (760) 776-6362
bizsupport@cityofpalmdesert.org
www.PDBizSupport.com



Identify and Target Your Best Customers

Using the latest technology, we can help you to capture, analyze and manage data in order to profile and segment your customers, as well as help you to acquire and retain new ones.

Contact us to learn how we can provide solutions to help your business grow.

CVEP.COM | 760.340.1575

e!evate

DRIVING INNOVATION AND ENTERPRISE IN GREATER PALM SPRINGS

cvep



Local Trust. National Scale.

And the tech to put it to work for you
Marketing technology,
performance insights
and digital solutions
to help local business win.

Desert Sun.

PART OF THE USA TODAY NETWORK

LOCALiQ

PALM SPRINGS | Denise Fleig | 760-770-880-5871



The place Opportunity calls home. New hotel, retail and industrial development, established iHub and accelerator campus.

PALM SPRINGS

City of Palm Springs Community & Economic Development | 760-323-8259 | ecodev@palmsspringsca.gov
BUILD • PRODUCE • CREATE • INNOVATE

Investing in the Coachella Valley



AGUA CALIENTE
BAND OF CAHUILLA INDIANS

aguacaliente-nsn.gov





PATRICK
EVANS

ANGELA
CHEN

JEFF
STAHL

KAREN
DEVINE

JOHN
WHITE

HALEY
CLAWSON

PETER
DAUT



THE DESERT'S NEWS LEADER
5 - 7 :00 a.m.
Noon, 5, 6, 11:00 p.m.

THE DESERT'S NEWS LEADER
WITH IN-DEPTH COVERAGE
WATCH AT 6:30 p.m.



THE DESERT'S NEWS LEADER
7 - 9 :00 a.m.
FIRST AT 10:00 p.m.



MARCO
REVUELTA

ELIANA
LÓPEZ

MAYRA
PÉREZ

**ONLY LOCALLY PRODUCED
SPANISH LANGUAGE NEWSCASTS**
WATCH AT 6 & 11:00 p.m.



City of Coachella

FIND YOUR FUTURE IN THE VALLEY'S HERITAGE CITY

Explore our unique opportunities at Coachella.org



COACHELLA, CA 92236 | (760) 398-3502 | COACHELLA.ORG



IID

A century of service.

**AT IID,
CUSTOMERS
ALWAYS
COME FIRST!**

• Low Cost • Reliable • Publicly Owned

Day in and day out, your publicly-owned Imperial Irrigation District proudly delivers low-cost, reliable energy service to its customers in the Imperial and Coachella Valleys.

www.iid.com

When compared to other power providers, IID customers save up to 50 percent on their monthly energy bills.

That's because IID is committed to more than just delivering power. IID is committed to YOU.





ALPHAMEDIA
LIVE, LOCAL, PALM SPRINGS



CALL US TODAY FOR A NO OBLIGATION CONSULTATION.
(760)416-8435



**TREAT
YOUR BODY
LIKE YOU
LIVE IN IT.**



MASSAGE



SKIN CARE



RAPID TENSION RELIEF



**Proud Sponsor of the
Coachella Valley Economic Partnership**

LA QUINTA

79485 Highway 111 at Dune Palms

PALM SPRINGS

5200 E. Ramon at Gene Autry

PALM DESERT

73111 Country Club Next to Bristol Farms

(760) 904-0123

[f @MassageEnvyDesert](#)

*Session times include a total of 10 minutes of time for consultation and dressing, which occurs pre- and post-service. Additional taxes and fees may apply. Prices subject to change. Rapid Tension Relief (RTR) services may be provided by massage therapists or certified personal trainers if permitted under state and local law. RTR is generally known to help ease minor aches and pains and help ease muscle tension. RTR services are not intended to diagnose, prevent, or treat any medical condition, and you should consult your doctor if you are experiencing continual or severe pain in any area of your body. Individual results may vary. Rates and services may vary by franchised location and session. Not all Massage Envy locations offer all services. For a specific list of services available, check with the specific location or see [MassageEnvy.com](#). Each location is independently owned and operated. ©2021 ME SPE Franchising, LLC.



CITY OF DESERT HOT SPRINGS

Growing into the Future



- Fastest Growing City in the Coachella Valley according to 2020 Census
- Cannabis Epicenter with 61 Cultivation, Manufacturing & Distribution Facilities
- California's Spa City with New & Renovated Hotels and Resorts
- Abundant & Diverse Family Housing with New Homes Under Construction
- A New Wave of Retail Growth & Room to Expand

Visit us at [CityofDHS.org](#)



SMART AUDIO

SMARTPHONE SMARTSPEAKER SMARTTV SMARTDASHBOARD



SMARTLISTENER

There's a smart choice for radio listeners who love life in the Coachella Valley. Radio 111 presents an around-the-clock schedule of locally-hosted audio content streaming live and available on-demand as podcasts. From Auto Enthusiast to Arts & Entertainment, Health & Wellness to Economic Opportunity, Food & Wine to Regional History, and so much more. Radio 111 is the only source for non-stop Desert Cities news, talk and entertainment. 100% Free. Radio111.com or on smart devices with the TuneIn Radio App (no subscription required). We're talking about the things that are relatable to YOUR life.



SMART LOCAL TALK



Dr. Stone James is *The Success Doctor* and discusses economic opportunity for business and individuals on Mondays at 2 pm and 7 pm on Radio 111.



www.Radio111.com

TUNE IN Radio One-Eleven

There Are So Many Reasons to Add Indian Wells Golf Resort to Your Bucket List

Indian Wells Golf Resort lures those looking for championship golf. It's ranked in the Top 25 "Best Municipal Courses in the United States" by Golfweek Magazine. Yet, this is a rare property to add to your "bucket list" since it also offers unmatched dining and family golf fun.

VUE Grille & Bar

VUE is the onsite restaurant at the golf resort and is an upscale trendy gastropub dining experience which now offers an extensive list of over 300 Bourbons and Whiskeys; the largest in the valley.



Expect warm hospitality, delicious food, signature bourbon inspired dishes, unique appetizers, exquisite steak and seafood, comfort food, upscale pub-fare and tasty desserts from the kitchen of Executive Chef Nestor Ruiz



This impressive Grille & Bar lives up to its inspirational name with floor-to-ceiling windows and expanded scenic views like none other.

An After Dark Golf Experience

Shots in the Night is great for the whole family. Imagine a unique golf experience with multi-color LED golf balls with a variety of exciting and challenging games on the putting green or driving range. Lively music, craft beers, delicious food and cocktails add to the outdoor golfing fun.

Indian Wells Golf Resort has many unforgettable experiences waiting for you!



44-500 Indian Wells Lane,
Indian Wells, CA
760.346.4653
indianwellsgolfresort.com

INDIAN WELLS
GOLF RESORT



We are ready to help your business navigate through relocation or expansion, and offer guidance with the many business resources and programs available.

PROUD SPONSOR OF CVEP'S 2021 GREATER PALM SPRINGS SUMMIT

www.rivcoed.org | bizinfo@rivco.org | (951) 955-0493
3403 10th Street, Suite 400, Riverside, CA 92501





You think about your business **24/7** right?

Shouldn't you expect the same from **your city?**

This is
The Hub.



La Quinta
— CALIFORNIA —

Best Best & Krieger LLP proudly supports
CVEP in its **PURSUIT** to elevate the
economy of the **Coachella Valley**.



BB&K is a full-service law firm that has called the Coachella Valley home for 50+ years. Our attorneys and advocates provide business innovators with creative and timely solutions to complex legal issues.



BBKLAW.COM



At SoCalGas, our mission is to build the cleanest, safest, most innovative energy company in America.

To learn more about our Clean Energy projects, visit **SoCalGas.com/clean-energy**

© 2021 Southern California Gas Company. All copyright and trademark rights reserved. N21J205A 1015



Nurturing the Innovative Spirit

The Palm Springs iHub is a business incubator for entrepreneurs. It's the only California iHub with an accelerator campus – offering an extraordinary ecosystem to drive innovation. It's a unique environment where entrepreneurs, investors, academics and government come together to collaborate, create, and grow.

Launch your company at the Palm Springs iHub.

CVEP.COM | 760.340.1575

e!evate

DRIVING INNOVATION AND ENTERPRISE IN GREATER PALM SPRINGS



cvep

RANCHO MIRAGE

Where the Road Leads to Growth & Prosperity

CITY OF RANCHO MIRAGE



www.rancho Mirage.ca.gov

**OUR CLIENTS TRUST US
TO KEEP THEM INFORMED
IN THIS EVER-CHANGING
TAX WORLD.**



**OSBORNE
RINCON**

CERTIFIED PUBLIC ACCOUNTANTS

79-245 Corporate Ctr. Dr.
La Quinta, CA 92253
www.OsborneRincon.com
760.777.9805

**The largest CPA firm in
the Coachella Valley.**

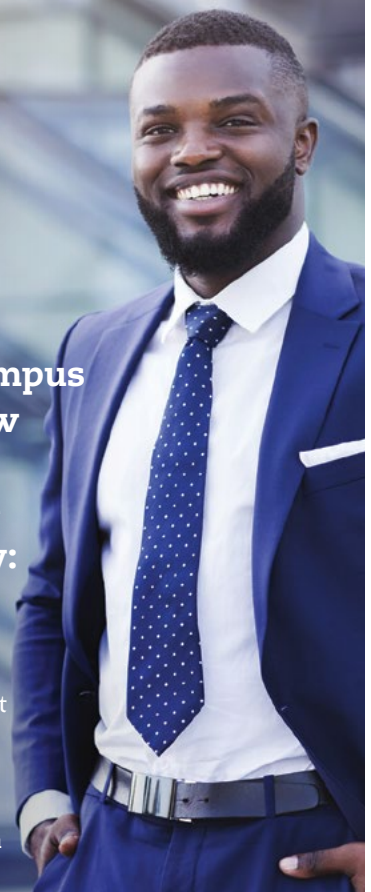
WE DEFINE THE
Future

**CSUSB
Palm Desert Campus
brings three new
and in-demand
programs to the
Coachella Valley:**

Cybersecurity
Entrepreneurship
Hospitality Management

 **CSUSB**
PALM DESERT CAMPUS

760.341.2883 | pdc.csusb.edu





We're glad to be part of the community!

Engineering, public works, planning, broadband, and building department solutions for cities and agencies.

▷ 44651 VILLAGE COURT, SUITE 123
PALM DESERT, CA 92260
760.250.6722

▷ HRGREEN.COM

Proud sponsor of the Coachella Valley Economic Partnership



Fiduciary Wealth Management

Learn why a **Fiduciary Wealth Manager** is better than a Broker Financial Advisor with our **Complimentary review** of your Investment Portfolio and Retirement Plan.

www.WinslowDrake.com

760.449.6349
213.596.8399



Small Business of the Year 2020-21

Winslow Drake Investment Management is a California State-Registered Investment Advisory company headquartered in the Coachella Valley.



Our thanks to the Coachella Valley Economic Partnership for supporting economic growth and opportunity in the Coachella Valley.

UC Riverside is committed to strengthening the economic sustainability of the Coachella Valley. Our innovative academic programs, scientific research, community partnerships, and state-of-the art healthcare all play a role in advancing the public good.

**We are proud to support the
2021 CVEP Economic Summit**



Proudly Supports "The Summit"

The DVBA is the Association of Building Industry Professionals for Eastern Riverside & Imperial Counties, representing all levels of the

Construction industry and committed to ensuring that

Building of all types remains vibrant and

Strong in our region.

Contact: www.TheDVBA.org 760-776-7001



We are proud to
support CVEP and
the desert business
community.

THE DESERT'S BUSINESS & PUBLIC AFFAIRS WEEKLY

The Public Record

When we come together as a united Coachella Valley to help our business community survive and thrive, we have more impact than entities serving any single authority could have. We are much better together.

JOE WALLACE, CHIEF EXECUTIVE OFFICER, CVEP

To learn more about the changing face of business in Greater Palm Springs, **CVEP** is your one-stop resource.

cvep.com



e!evate



3111 EAST TAHQUITZ CANYON WAY • PALM SPRINGS, CALIFORNIA 92262
PH: 760.340.1575 • FX: 760.548.0370 • WEB: CVEP.COM