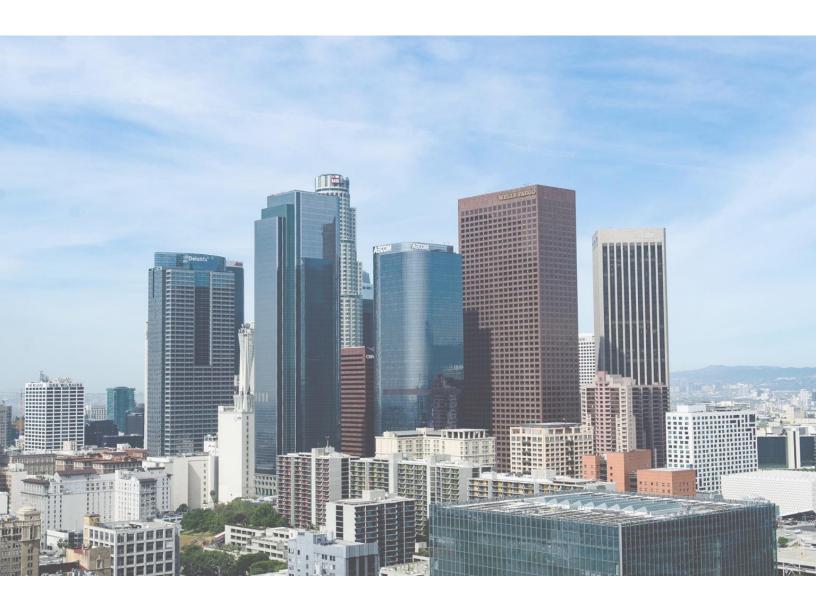
UCLAAnderson FORECAST



LOS ANGELES COUNTY QUARTERLY FORECAST

OCTOBER 2022

THINK IN THE NEXT



THE LOS ANGELES REPORT TRADEOFF: HIGH INFLATION OR RECESSION

William Yu Economist UCLA Anderson Forecast October 2022

U.S. Economic Overview

The U.S. economy is approaching an inflection point: Either there will be (1) continuing high inflation reinforcing people's expectation of elevated inflation that would further persevere inflation, or (2) an induced recession causing people's economic difficulty to reduce demand significantly and therefore to bring down inflation. It is unclear whether inflation or recession has a higher social and economic cost for the American people. The Federal Reserve, the most important voice in this decision, is seeming to lean toward Option 2 because FOMC thinks the recession will be the lesser of two evils. That said, with the Fed's aggressive tightening inflation-fighting policy, the U.S. economy is likely to slip into a recession in either 2023 or 2024.

Over the past 7 months, the Fed has rapidly raised the Federal Funds Rate, the Fed Monetary Policy Instrument, from 0% to 3%. One of the direct consequences is that the 30-year fixed mortgage rate has jumped from 3% to 7%. Figure 1 shows the Federal Fund Rates and 30-year Fixed Mortgage Rates, both of which display a meteoric rise in the past months. Home buyers are facing the highest mortgage rates in two decades.

Figure 2 shows the year-over-year percentage changes of 30-year mortgage rates (blue line, left axis) and U.S. home prices (red line, right axis). The scale of the increase of mortgage rates in 2022 resembles that of the late 1970s. Therefore, it is reasonable to predict that home price growth will go down rapidly in 2023 as it did in the early 1980s. This could be one source of a possible recession.



FRED Federal Funds Effective Rate

30-Year Fixed Rate Mortgage Average in the United States

25

20

15

20

1975 1980 1985 1990 1995 2000 2005 2010 2015 2020

Sources: Board of Governors: FHLMC myf.red/e/VeUe

Figure 1. Federal Funds Rates and 30-Year Mortgage Rates in the U.S.

If history is any guide, the interest rate spread between 10-year and short-term Treasury yields tends to be a simple and reliable indicator of a coming recession. Figure 3 shows that when the interest rate spread is dipping into negative territory, a so-called "inverted yield curve," a recession (shaded bars) has usually followed in one year or two. As of October 28, 2022, the spreads between 10-year and 3-month Treasuries (blue line) and 2-year (red line) have become negative. In summary, it is likely we will encounter a recession in 2023 or 2024.

Figure 2. Year-over year Change of 30-year Mortgage Rates and Percentage Change of House Price in the U.S.

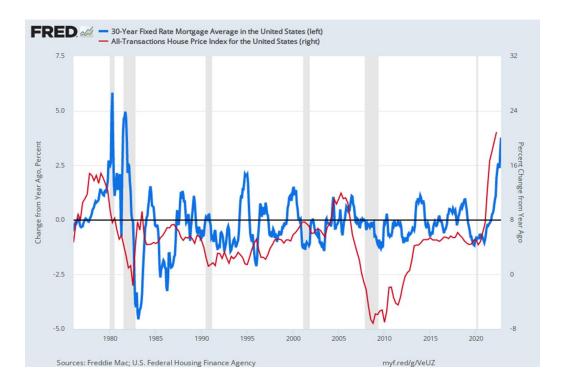
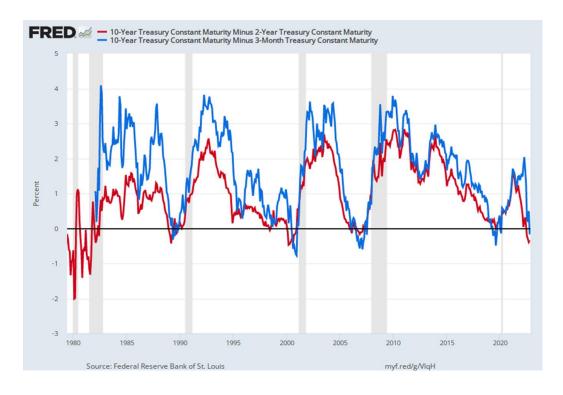


Figure 3. Interest Rate Spreads between the 10-Year and Short-Term Treasury Yields





The Los Angeles Economy

In September 2022, L.A.'s unemployment rate dropped to 4.8% versus California's 3.9% and the U.S.'s 3.5% (Figure 4). All three have seen a slowing decline of the unemployment rate, indicating that each economy has almost reached full employment. Figure 5 shows the percentage change of household survey employment since February 2020, which captures all employment and not just payroll jobs. We can see that L.A. has had a slower recovery (-4.5% compared to the pre-pandemic peak) in employment compared to California (-1%) and the nation, which has returned to pre-pandemic levels.

Based on Yu's recent analysis¹, the following factors could contribute to the relatively higher unemployment rate in L.A.: (1) an urban and large population, (2) lower human capital, (3) higher COVID-19 mortality rate, (4) higher job share in health care and social assistance and accommodation and food services sectors and lower job share in the manufacturing sector (see Figure 8). The labor force in L.A. has seen some ebb and flow over the past two years (Figure 6). Now, the L.A. labor force is 4.2% below the pre-pandemic level. In part this is due to L.A.'s population declining over the past few years from out-migration and a slowing of international migration. Figure 7 illustrates that payroll job growth has been stagnant over the past few months. L.A. payroll job numbers are about 1% below their pre-pandemic level.

To see how sector job shares changed during the pandemic in the U.S. and L.A., consider Figure 8, which presents the U.S.'s sector job share in September 2019 (blue circle) and September 2022 (blue bar) against L.A.'s for the same months (orange circle and yellow bar respectively). L.A.'s health care and social services sector has an increased share. L.A.'s leisure and hospitality sector lost the most percentage points compared to other sectors in L.A. and more than the U.S. leisure and hospitality sector. This is because of L.A.'s greater dependence on international tourism. L.A.'s transportation, warehousing, and utilities sector increased its. L.A.'s information sector share, heavily dependent upon entertainment production and much larger than the national average, increased its share. The professional and management sector, a high-paying sector, also had an increased share.

1

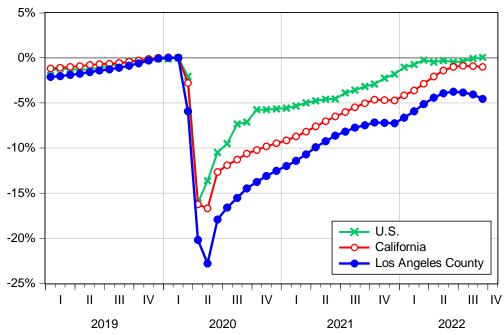
¹ William Yu, "What Explains the Variation in Unemployment Rates Across the United States?" September 2022, UCLA Anderson Forecast Quarter Report.

Great Los Angeles County 20 Recession California (%) U.S. 16 12 8 (Year) 07 08 09 10 11 12 13 14 15 16 17 18

Figure 4. Unemployment Rates in Los Angeles County, California, and the U.S.

Sources: California Employment Development Department and Bureau of Labor Statistics





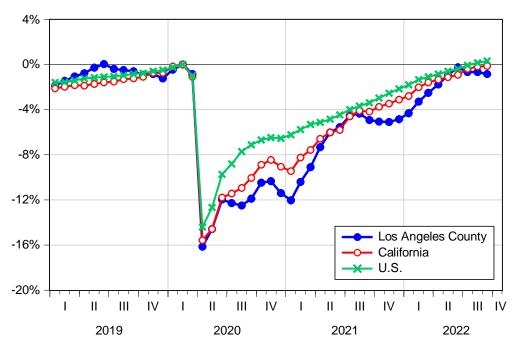
Sources: California Employment Development Department and Bureau of Labor Statistics

Figure 6. Labor Force in Los Angeles County



Source: California Employment Development Department

Figure 7. Nonfarm Payroll Jobs (Percentage Change Since February 2020)



Sources: California Employment Development Department (EDD) and Bureau of Labor Statistics

16% US Sector Job Share in Sept. 2019 US Sector Job Share in Sept. 2022 14% LA Sector Job Share in Sept. 2019 LA Sector Job Share in Sept. 2022 12% 10% 8% 6% 4% 2% Transportation, Male trough Res. Utilities. 0% Government less Edul Education Problem Privated Andrews Total & Manage Rent Financial Activities Norduralle Goods Health Care & Social Services Land Berne & Hospitality underde trade Other Services Durable Goods Construction

Figure 8. Sector Job Shares in the U.S. and L.A., September 2019 and September 2022

Sources: California Employment Development Department (EDD) and Bureau of Labor Statistics



Short-term Forecast for Los Angeles County

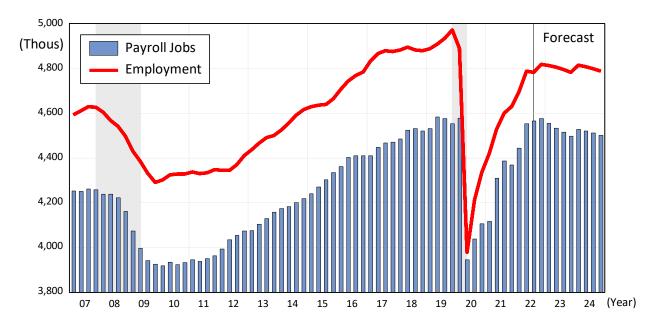
As mentioned earlier, the tightening money cycle by the Fed is likely to bring a recession to the nation and L.A. in 2023 or 2024. The upside risk to this forecast is that supply side constraints significantly improve, in particular for the energy sector as well as the Fed stop its interest rate hikes in the near future. In general, we forecast a slightly negative growth of employment and jobs over the next two years (Figure 9). We also forecast L.A. inflation will remain elevated through 2023.

We forecast the following for the Los Angeles County economy:

- The unemployment rate peaked at 18% in 2020 Q2 when the official pandemic recession ended. It is forecast to increase to an annual average of 5.6% in 2023 and 6.7% in 2024. Prior to the pandemic (2019 Q4) it was 4.4%.
- Nonfarm payroll jobs plunged by 8.7% in 2020 and recovered by 3.1% and 5.6% in 2021 and 2022. We forecast it will decline by 0.2% in 2023 and decline by 0.2% in 2024, reaching 4.50 million by the end of 2023 and 4.50 million by the end of 2024. Prior to the pandemic (2019 Q4) nonfarm payroll employment in Los Angeles County was 4.55 million.
- **Total employment**, including the self-employed, is forecast to decline to 4.78 million by the end of 2023 and to 4.79 million by the end of 2024. Prior to the pandemic (2019 Q4) total employment in Los Angeles County was 4.97 million.
- Real personal income is forecast to decrease by 4.8% in 2022, to decrease by 0.6% in 2023, and to increase by 0.5% in 2024. With the Fed's aggressive tightening monetary policy, we forecast that high inflation will come down gradually. Our forecast of inflation is 3.4% in 2023 (Q4 to Q4) and 2.5% in 2024 (Q4 to Q4). Nominal personal income growth is estimated to be 3.8% in 2023 and 3.7% in 2024.
- Nominal taxable sales declined by 8.4% in 2020 and increased by 21.9% and 15.3% in 2021 and 2022. We forecast they will increase by 3.2% in 2023 and by 1.3% in 2024. Nominal taxable sales are forecast to reach \$227 billion by the end of 2022, \$230 billion by the end of 2023, and \$232 billion by the end of 2024.



Figure 9. History and Forecast of Los Angeles County Employment



Sources: California Employment Development Department and UCLA Anderson Forecast



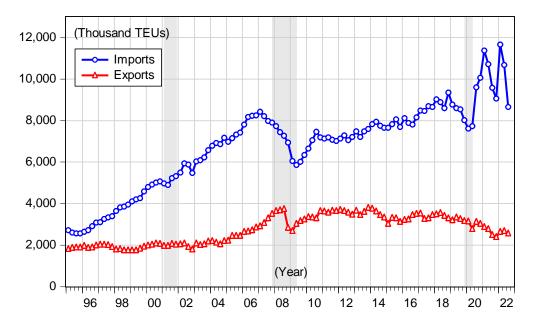
Appendix A: Los Angeles Airport and Seaport Activity

Los Angeles' seaports and LAX are handling inbound cargo volumes that substantially declined over the past two quarters. This reflects the fact that the strong domestic demand for goods has been easing. For example, year-over-year growth of real retail sales in the U.S. has dropped from 9% on average prior to February 2022 to around 0% on average since March 2022. Figure A1 shows that the annualized seasonally adjusted import volume through the seaports of Los Angeles and Long Beach plunged in the past two quarters after the record high in 2022 Q1. Figure A2 shows air cargo through Los Angeles International Airport (LAX) including both domestic and international traffic. The volume of high-value and time-sensitive airborne freight arrivals through LAX has been contracting rapidly over the past two quarters.

Figure A3 shows domestic and international passenger traffic, including both arrivals and departures, through LAX. The recovery of air traffic has stalled in 2022 Q3. As a whole, LAX air passenger traffic in 2022 Q3 is about 71% of the pre-pandemic peak level. Note that LAX air passenger traffic is a direct indicator of the L.A. tourism economy. Until COVID-19 is totally over at home and abroad (e.g. China), L.A. air traffic will probably not return to its pre-pandemic peak. As a result, leisure and hospitality jobs have yet to fully recover (Figure 8).



Figure A1. Los Angeles Seaport Traffic, Ports of Los Angeles and Long Beach Combined (Thousand TEUs, Annualized, Seasonally Adjusted)



Sources: Ports of Los Angeles and Long Beach

Note: A "TEU" is a "twenty-foot equivalent," a standard shipping container



Figure A2. Los Angeles Airport (LAX) Air Cargo (Thousand Tons, Annualized, Seasonally Adjusted)

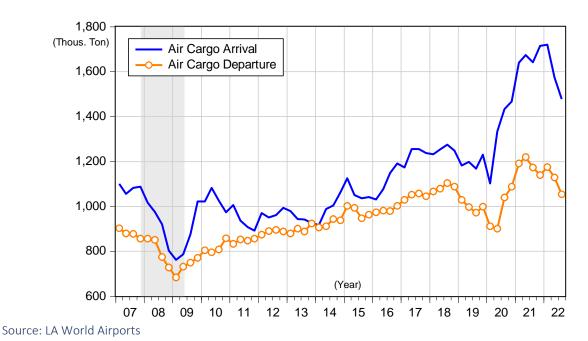
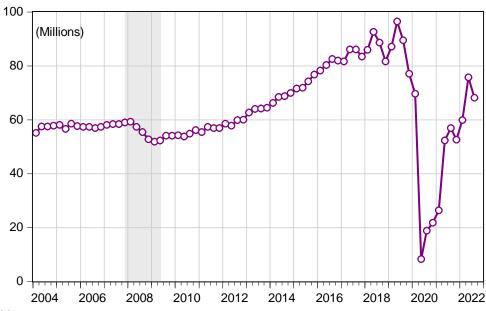


Figure A3. Los Angeles Airport (LAX) Passenger Traffic (Arrival and Departure Combined, Annualized, Seasonally Adjusted, Scheduled Carriers)



Source: LA World Airports

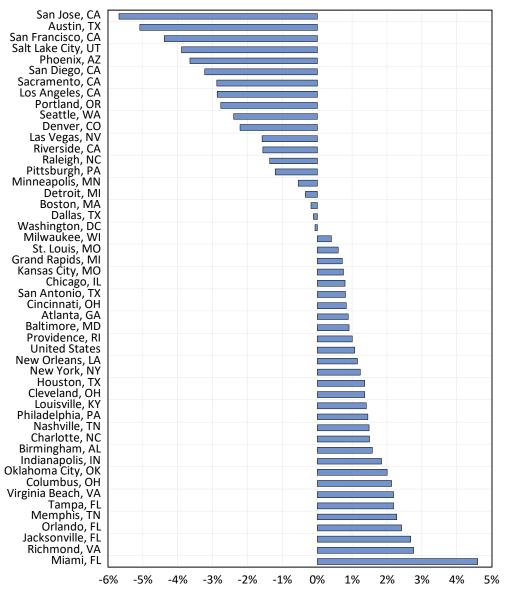


Appendix B: Los Angeles Construction and Housing Markets

With 30-year mortgage rate rising over 7% rapidly, we expect the housing markets will face adjustment in prices and sales in the coming year. Some metros are seeing their home prices dropping in recent months. Figure B1 shows the home price percentage change from June 2022 to September 2022 for the 50 largest metros. The top three metros with the most declines are San Jose (-5.7%), Austin (-5.1%), and San Francisco (-4.4%), followed by many metros in California and other western states. The common feature of these metros is either their home prices are expensive or have increased rapidly in the past few years. Figure B2 shows that annualized housing starts have declined from 1.72 million in 2022 Q1 to 1.46 million in 2022 Q3. Figure B3 lists the residential building permit numbers in L.A. County. Over the past year, we saw continued elevation in multi-unit builds and increases in single-unit construction projects in L.A. One reason for L.A.'s robust housing starts activity has been the popularity of accessory dwelling units (ADUs) and the passage of SB9 and SB10.



Figure B1. Growth Rates of Zillow Median Home Prices from June to September 2022



Source: Zillow



Figure B2. U.S. Housing Starts (Seasonally Adjusted Annual Rate)

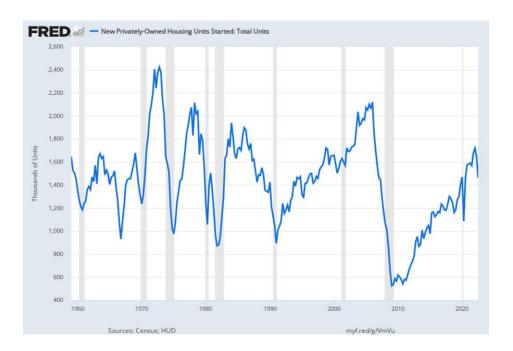
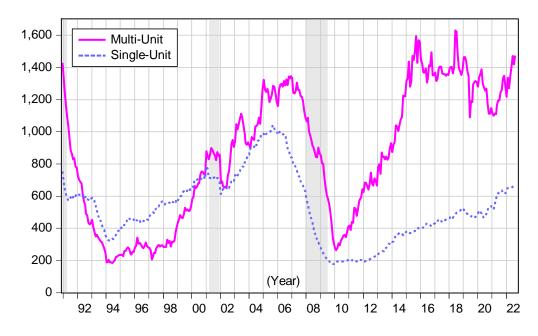


Figure B3. Los Angeles County New Residential Building Permits (Monthly, 12-Month Moving Average)



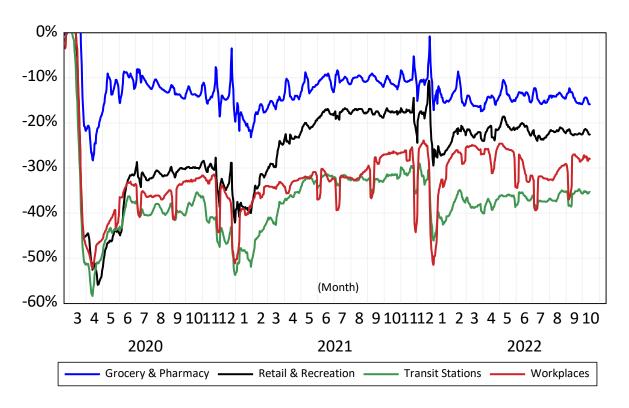
Source: Census Bureau



Appendix C: Los Angeles Traffic and Mobility Activity

Traffic to four different destinations in L.A.— transit stations, workplaces, grocery and pharmacy, and retail and recreation—has been remaining stable over the past seven months (Figure C1). Traffic to workplaces was rising in the past three months, mostly due to the end of summer when students and teachers went back to school. As of October 15, 2022, traffic to grocery stores in L.A. is 16% below the average level before the pandemic, and traffic to retail (-23%), workplaces (-28%), and transit stations (-35%) are lower yet. Compared to the traffic mobility patterns in the nation (grocery: -2%; retail: -9%; workplaces: -20%; transit: -17%), L.A. has lower recovery, perhaps due to net outmigration and more prevalent e-commerce and remote work.

Figure C1. Google Traffic Data for Four Types of Destinations in Los Angeles County (Percentage Change Relative to 2020 January Average, 7-day Moving Average)



Source: Google Mobility Data



Appendix D: Taxable Sales Analysis

Figure D1 shows the nominal taxable sales between 2021 Q3 and 2022 Q2 by city in Los Angeles, Orange, Riverside, and San Bernardino Counties. The size of the circle represents the size of the total taxable sales over the past 4 quarters. The color of the circle represents the percentage change of taxable sales between the 2018 Q3-2019 Q2 period and the 2021 Q3-2022 Q2 period, in which the red colors mean higher growth rates (higher than 20%) while blue colors represent lower growths (lower than 20%). We can see that many cities in Riverside and San Bernardino Counties had higher growth of taxable sales than those in Los Angeles and Orange Counties. This reflects the fact that over the course of the pandemic, we saw more net migration inflow and job growth in the Inland Empire than in coastal counties. Table D1 list the details of taxable sales in these cities across the pandemic period.

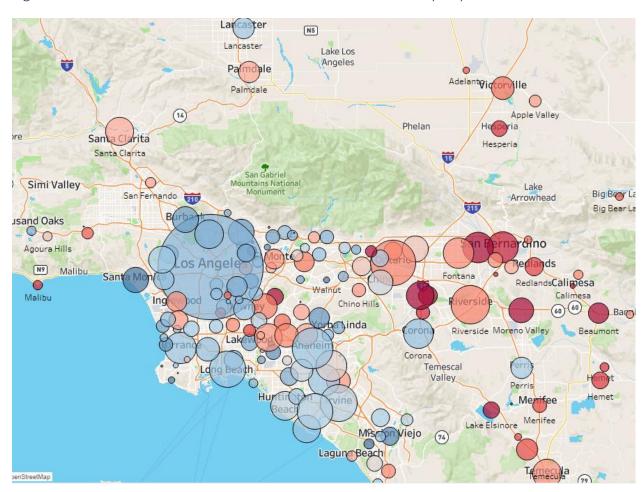


Figure D1. Nominal Taxable Sales between 2021 Q3 to 2022 Q2 by City in Southern California

Source: California Department of Tax and Fee Administration



Table D1. Nominal Taxable Sales by City in Southern California

County	2018Q3 to 2019Q2 (\$M)	2020Q3 to 2021Q2 (\$M)	2021Q3 to 2022Q2 (\$M)	% Change from '19 to '22	City	2018Q3 to 2019Q2 (\$M)	2020Q3 to 2021Q2 (\$M)	2021Q3 to 2022Q2 (\$M)	% Change from '19 to '22	
LOS ANGELES COUNTY	168,626	175,041	207,396	23%	Hawaiian Gardens	84	77	95	13%	
ORANGE COUNTY	68,590	70,801	84,726	24%	Hawthorne	1,520	1,548	1,897	25%	
RIVERSIDE COUNTY	39,620	49,136	59,657	51%	Hemet	1,060	1,396	1,489	40%	
SAN BERNARDINO COUNTY	41,115	50,119	58,047	41%	Hermosa Beach	265	245	297	12%	
					Hesperia	870	1,046	1,234	42%	
City					Hidden Hills	1	0	3	447%	
Adelanto	172	189	234	36%	Highland	257	302	339	32%	
Agoura Hills	374	354	453	21%	Huntington Beach	3,500	3,640	4,143	18%	
Alhambra	1,478	1,334	1,586	7%	Huntington Park	600	606	686	14%	
Aliso Viejo	521	378	497	-4%	Indian Wells	119	56	131	9%	
Anaheim	7,351	5,956	8,439	15%	Indio	1,073	1,172	1,431	33%	
Apple Valley	613	704	766	25%	Industry	2,976	2,934	3,043	2%	
Arcadia	980	722	1,048	7%	Inglewood	1,541	1,473	1,962	27%	
Artesia	254	238	312	23%	Irvine	5,866	5,584	6,915	18%	
Avalon	80	75	107	33%	Irwindale	333	361	394	18%	
Azusa	539	556	665	23%	Jurupa Valley	1,151	1,805	1,869	62%	
Baldwin Park	563	610	679	21%	La Canada-Flintridge	257	228	282	10%	
Banning	250	282	315	26%	La Habra	976	1,050	1,210	24%	
Barstow	638	618	726	14%	La Habra Heights	4	3	4	-5%	
Beaumont	459	620	2,160	370%	La Mirada	991	1,108	1,317	33%	
Bell	221	244	295	34%	La Palma	221	161	215	-3%	
Bell Gardens	274	257	309	13%	La Puente	287	290	309	8%	
Bellflower	540	684	749	39%	La Quinta	836	890	1,074	28%	
Beverly Hills	3,159	2,815	3,679	16%	La Verne	395	377	431	9%	
Big Bear Lake	223	275	298	34%	Laguna Beach	475	414	585	23%	
Blythe	138	159	166	20%	Laguna Hills	502	470	577	15%	
Bradbury	0	0	0	60%	Laguna Niguel	1,023	1,053	1,226	20%	
Brea	2,011	1,732	2,102	5%	Laguna Woods	81	82	98	21%	
Buena Park	2,174	2,255	2,799	29%	Lake Elsinore	883	1,192	1,329	50%	
Burbank	3,187	2,712	3,370	6%	Lake Forest	1,372	1,389	1,609	17%	
Calabasas	491	542	663	35%	Lakewood	1,250	1,177	1,361	9%	
Calimesa	82	97	128	56%	Lancaster	1,985	2,116	2,295	16%	
Canyon Lake	40	29	33	-18%	Lawndale	270	255	308	14%	
Carson	2,476	2,481	2,819	14%	Loma Linda	768	737	947	23%	
Cathedral City	864	1,010	1,182	37%	Lomita	163	163	198	22%	
Cerritos	2,970	3,060	3,731	26%	Long Beach	5,780	5,554	6,648	15%	
Chino	2,548	2,711	3,034	19%	Los Alamitos	286	274	306	7%	
Chino Hills	713	716	899	26%	Los Angeles	50,123	44,307	55,903	12%	
Claremont	390	507	630	61%	Lynwood	388	453	525	35%	
Coachella	336	358	448	33%	Malibu	316	333	452	43%	
Colton	889	1,074	1,127	27%	Manhattan Beach	803	651	851	6%	
Commerce	1,943	1,666	2,136	10%	Maywood	159	185	209	32%	
Compton	790	980	924	17%	Menifee	752	876	1,038	38%	
Corona	3,859	3,920	4,405	14%	Mission Viejo	1,693	1,421	1,702	0%	
Costa Mesa	5,471	5,116	6,435	18%	Monrovia	891	883	1,012	14%	
Covina	809	862	925	14%	Montclair	1,211	1,234	1,417	17%	
	97	93	112	15%	Montebello					
Cudahy Culver City	1,833		2,098	14%	Monterey Park	1,115 689	1,019 778	1,163 871		
•		1,738			Moreno Valley					
Cypress	1,101	991	1,134	3%	· · · · · · · · · · · · · · · · · · ·	1,810	2,502	3,128		
Dana Point	490	422	569	16%	Murrieta	1,603	1,940	2,208		
Desert Hot Springs	157	186	266	69%	Needles	42	63	69		
Diamond Bar	451	404	497	10%	Newport Beach	3,358	3,169	3,858		
Downey	1,953	1,963	2,223	14%	Norco	645	762	924		
Duarte	492	492	540	10%	Norwalk	1,061	1,022	1,248		
Eastvale	801	2,379	3,838	379%	Ontario	8,024	8,545	10,392		
El Monte	1,521	1,661	1,933	27%	Orange	4,101	4,130	4,924		
El Segundo	985	906	1,120	14%	Palm Desert	1,787	1,741	2,242		
Fontana	3,650	4,051	4,653	27%	Palm Springs	1,288	1,354	1,734		
Fountain Valley	1,109	1,091	1,294	17%	Palmdale	1,842	2,060	2,273	23%	
Fullerton	1,995	1,989	2,454	23%	Palos Verdes Estates	22	17	23	7%	
Garden Grove	2,099	2,046	2,488	19%	Paramount	710	734	909	28%	
Gardena	1,056	1,061	1,233	17%	Pasadena	3,239	2,791	3,403	5%	
Glendale	3,889	3,464	4,282	10%	Perris	1,956	2,122	2,292	17%	
Glendora	799	814	887	11%	Pico Rivera	845	854	974	15%	
Grand Terrace	69	87	101	46%	Placentia	570	565	648	14%	



Table D1. Nominal Taxable Sales by City in Southern California

	2018Q3 to	2020Q3 to	2021Q3 to	% Change	
City	2019Q2	2021Q2	2022Q2	from '19 to	
	(\$M)	(\$M)	(\$M)	'22	
Pomona	1,532	1,458	1,857	21%	
Rancho Cucamonga	2,810	2,785	3,406	21%	
Rancho Mirage	537	483	605	13%	
Rancho Palos Verdes	217	142	212	-2%	
Rancho Santa Margarita	605	628	714	18%	
Redlands	1,199	1,440	1,667	39%	
Redondo Beach	896	795	939	5%	
Rialto	1,880	3,337	4,728	152%	
Riverside	5,785	6,388	7,515	30%	
Rolling Hills	0	1	2	283%	
Rolling Hills Estates	109	100	124	14%	
Rosemead	483	448	559	16%	
San Bernardino	3,295	3,983	4,794	46%	
San Clemente	854	946	1,042	22%	
San Dimas	573	657	676	18%	
San Fernando	465	535	578	24%	
San Gabriel	369	298	382	3%	
San Jacinto	281	333	397	41%	
San Juan Capistrano	775	859	993	28%	
San Marino	43	28	43	-1%	
Santa Ana	4,410	4,379	5,085	15%	
Santa Clarita	3,264	3,384	4,004	23%	
Santa Fe Springs	2,439	2,536	3,179	30%	
Santa Monica	3,357	2,780	3,251	-3%	
Seal Beach	358	343	3,231	11%	
Sierra Madre	30	26	38	25%	
Signal Hill	1,596	1,755	1,809	13%	
		454			
South El Monte South Gate	450 950	_	551	22% 18%	
		982	1,120		
South Pasadena	193	172	218	13%	
Stanton	370	396	442	20%	
Temecula	3,291	3,528	4,175	27%	
Temple City	190	142	193	2%	
Torrance	4,326	4,188	4,975	15%	
Tustin	2,262	2,435	2,844	26%	
Twentynine Palms	116	123	133	15%	
Upland	1,238	1,373	1,567	27%	
Vernon	742	917	869	17%	
Victorville	1,996	2,353	2,638	32%	
Villa Park	20	22	24	20%	
Walnut	191	153	187	-2%	
West Covina	1,531	1,674	2,002	31%	
West Hollywood	1,519	1,235	1,669	10%	
Westlake Village	400	367	438	10%	
Westminster	1,476	1,424	1,623	10%	
Whittier	909	1,112	1,427	57%	
Wildomar	183	197	253	39%	
Yorba Linda	661	631	730	10%	
Yucaipa	347	371	447	29%	
Yucca Valley	325	383	410	26%	

Source: California Department of Tax and Fee Administration



Summary of the UCLA Anderson Forecast for Los Angeles County by Calendar

Angeles County by Calendar Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
		Pe	rsonal Ir	ncome ar	nd Taxabl	le Sales					
Personal Income											
(Billion \$)	510.6	544.2	562.7	580.8	602.4	631.2	678.8	728.4	746.7	775.1	803.7
(%Change) Real Personal Income	6.3	6.6	3.4	3.2	3.7	4.8	7.6	7.3	2.5	3.8	3.7
(Billion 2012\$)	500.8	529.0	536.8	539.1	538.7	547.6	579.5	598.9	570.4	567.0	569.9
(%Change)	4.9	5.6	1.5	0.4	-0.1	1.7	5.8	3.4	-4.8	-0.6	0.5
Taxable Sales											
(Billion \$)	147.3	151.9	155.0	160.1	165.9	172.1	157.6	192.1	221.4	228.5	231.4
(%Change)	5.2	3.1	2.1	3.3	3.6	3.8	-8.4	21.9	15.3	3.2	1.3
Real Taxable Sales	4445	4.47.0	4.47.0	440.0	4 40 0	4.40.0	404.5	457.0	400.4	407.0	4044
(Billion 2012\$) (%Change)	144.5 3.8	147.6 2.1	147.9 0.2	148.6 0.5	148.3 -0.2	149.3 0.7	134.5 -9.9	157.8 17.3	169.1 7.1	167.2 -1.1	164.1 -1.8
(%Change)	3.0	2.1	0.2	Price Inf		0.7	-9.9	17.3	7.1	-1.1	-1.0
Consumer Prices (%Change)	1.3	0.9	1.9	2.8	3.8	3.1	1.6	3.8	7.6	4.4	3.2
	Emplo	yment a	nd Labor	Force (H	lousehol	d Survey	, %Chang	je)			
Employment	2.2	1.5	2.3	2.4	0.4	0.9	-11.6	4.4	5.0	0.6	0.1
Labor Force	0.5	-0.2	0.9	1.8	0.2	0.7	-3.6	0.6	0.8	0.9	1.2
Unemployment Rate (%)	8.3	6.7	5.3	4.8	4.6	4.4	12.4	9.0	5.2	5.6	6.7
Total Nonfarm	1.9	Nonfarm 2.2	Employi 2.5	ment (Pa	yroll Surv 1.5	vey, %Ch 1.0	ange) -8.7	3.1	5.6	-0.2	-0.2
Natural Resources & Min.	-6.5	-8.0	-15.8	-16.8	-4.9	-0.4	-10.9	-4.9	-7.6	-24.2	-0.2
Construction	3.4	6.4	6.3	3.5	5.5	2.4	-2.2	2.2	3.8	-0.7	-0.9
Manufacturing	-1.2	-0.8	-2.0	-3.2	-2.2	-0.5	-7.5	-1.1	2.8	0.5	0.4
Nondurable Goods	-1.4	-1.5	-1.6	-6.0	-4.3	-2.4	-10.2	1.0	3.4	-0.1	-0.1
Durable Goods	-0.9	-0.3	-2.3	-1.0	-0.7	0.8	-5.7	-2.5	2.3	0.9	0.8
Tran., Warehousing & Utility.	3.7	4.9	6.4	4.9	2.8	4.6	-2.4	3.1	6.5	0.7	0.2
Trade	1.8	1.5	0.3	0.1	0.1	-1.5	-9.1	4.1	3.8	-1.3	-1.5
Information Financial Activities	0.9 -0.8	4.3 2.1	10.5 2.0	-6.5 0.8	0.3 0.7	0.3 0.2	-11.5 -4.9	12.1 -0.8	8.7 1.3	-1.4 -1.0	-0.3 -0.5
Professional & Bus. Servs.	1.1	0.4	1.6	1.6	3.1	2.3	-7.3	5.0	5.4	-1.0	-0.3
Educational & Health Servs.	2.6	2.9	3.6	3.6	2.6	2.7	-2.3	2.4	4.3	-0.4	2.0
Leisure & Hospitality	5.7	4.9	4.8	2.9	2.3	2.0	-28.1	9.0	17.4	1.3	-0.7
Other Services	3.3	0.4	1.5	1.5	2.0	-0.3	-18.7	4.2	13.3	-0.4	-2.2
Federal Government	-1.0	1.4	0.8	0.5	-1.5	0.2	5.9	-5.0	-1.3	0.5	-0.0
State and Local Government	1.1	2.3	1.5	1.7	1.0	-0.7	-3.6	-1.8	1.4	0.8	-0.7
Total Nanfarm						ey, Thou		420E 4	4505.4	4505 C	45457
Total Nonfarm Natural Resources & Min.	4193.3 3.1	4286.6 2.9	4395.9 2.4	4448.9 2.0	4515.6 1.9	4561.5 1.9	4166.3 1.7	4295.4 1.6	4535.1 1.5	4525.6 1.1	4515.7 1.1
Construction	118.5	126.1	134.0	138.7	146.3	149.8	146.6	149.8	155.5	154.4	153.0
Manufacturing	372.3	369.3	362.0	350.3	342.5	340.7	315.1	311.7	320.3	321.9	323.2
Nondurable Goods	163.5	161.0	158.5	148.9	142.6	139.2	124.9	126.2	130.5	130.3	130.2
Durable Goods	208.9	208.3	203.5	201.4	199.9	201.5	190.1	185.5	189.8	191.5	193.0
Tran., Warehousing & Utility	169.2	177.5	188.8	198.1	203.6	212.9	207.7	214.2	228.0	229.6	230.1
Trade	635.2	644.6	646.6	647.4	647.8	638.2	579.8	603.5	626.5	618.5	609.0
Information Financial Activities	198.7 211.2	207.2 215.6	228.9 219.8	213.9 221.6	214.6 223.2	215.2 223.6	190.3 212.6	213.4 210.8	231.8 213.6	228.5 211.4	227.8 210.5
Professional & Bus. Servs.	591.9	594.2	603.8	613.1	632.2	647.0	599.7	629.5	663.8	656.6	650.1
Educational & Health Servs.	722.6	743.3	769.9	797.5	817.8	839.9	820.2	839.6	875.6	872.3	890.1
Leisure & Hospitality	464.0	486.5	509.8	524.4	536.3	547.0	393.5	428.8	503.6	510.4	506.9
Other Services	150.5	151.0	153.3	155.7	158.8	158.4	128.7	134.1	152.0	151.4	148.2
Federal Government	46.7	47.3	47.7	48.0	47.3	47.3	50.1	47.6	47.0	47.3	47.3
State and Local Government	509.4	521.1	528.9	538.1	543.4	539.5	519.9	510.7	517.8	522.2	518.5
Construction Activity, Registered Autos and Population											
Residential Building Permits (Thous. Units)	18.8	23.5	21.3	21.7	22.5	21.5	20.3	22.8	26.2	19.3	19.4
Nonresidential Construction Real (Mil. 2012\$)	5779.1	4497.1	4309.9	4642.7	4763.0	4689.3	2656.5	1173.5	890.0	1266.7	1778.0
Nominal (Mil. \$)	6219.6	4940.4	4309.9	5248.1	5577.7	5681.0	3300.7	1505.1	1173.0	1721.4	2481.1
Registered Autos (Thous.)	6181.0		6545.7	6659.1	6707.3	6724.0	6647.3	6452.3	6381.0	6397.9	6400.0
Net Immigration (Thous.)	-24.4	-23.7	-41.9	-60.6	-80.0	-92.4	-102.9	-130.9	-17.7	-8.7	-3.8
Population (Thous.)		10077.3					9943.1	9829.5	9841.4	9857.3	9873.2
(%Change)	0.5	0.4	0.2	-0.0	-0.3	-0.5	-0.7	-1.1	0.1	0.2	0.2



Summary of the UCLA Anderson Forecast for Los

2022Q1 2022Q2 2022Q3 2022Q4 2023Q1 2023Q2 2023Q3 2023Q4 2024Q1 2024Q2 2024Q3 2024Q4

Angeles County by Quarter	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Personal Income and Taxable Sales												
Personal Income		16	i Sonai III	come an	u Taxabi	e Jaies						
(Billion \$)	743.3	745.0	744.5	753.8	762.7	771.2	779.3	786.9	794.0	800.7	807.1	813.1
(%Change)	2.1	0.9	-0.2	5.1	4.8	4.5	4.3	3.9	3.7	3.4	3.2	3.0
Real Personal Income												
(Billion 2012\$)	581.6	570.6	564.4	565.1	565.9	566.6	567.4	568.1	568.8	569.5	570.2	570.9
(%Change)	-7.1	-7.3	-4.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Taxable Sales												
(Billion \$)	213.6 34.9	218.5 9.4	226.5 15.5	227.0 0.8	227.3 0.6	228.0 1.2	228.8 1.5	229.8 1.7	230.6 1.4	231.1 1.0	231.7 1.0	232.2 0.9
(%Change) Real Taxable Sales	34.9	9.4	15.5	0.8	0.6	1.2	1.5	1.7	1.4	1.0	1.0	0.9
(Billion 2012\$)	167.1	167.4	171.7	170.2	168.6	167.5	166.6	165.9	165.2	164.4	163.7	163.1
(%Change)	22.8	0.5	10.9	-3.6	-3.5	-2.7	-2.1	-1.7	-1.7	-1.9	-1.6	-1.6
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Price Infl								
Consumer Prices (%Change) 9.9 8.9 4.2 4.6 4.3 4.0 3.7 3.4 3.1 2.9 2.7 2.5												
	Employment and Labor Force (Household Survey, %Change)											
Employment	5.8	8.2	-0.5	3.1	-0.4	-0.7	-0.9	-1.1	2.8	-0.6	-0.7	-0.9
Labor Force	2.6	3.6	-1.8	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3
Unemployment Rate (%)	6.3	5.2	5.0	4.5	4.9	5.3	5.8	6.3	6.0	6.4	6.9	7.4
Nonfarm Employment (Payroll Survey, %Change)												
Total Nonfarm	7.0	10.3	1.0	1.0	-2.0	-1.8	-1.6	-1.6	2.7	-0.7	-0.8	-0.9
Natural Resources & Min. Construction	2.6 10.6	10.4 3.6	-6.6 4.8	-70.1 -1.9	-6.3 -1.9	-6.9 -1.9	-5.7 -1.6	-3.9 -1.4	-2.7 -1.0	-1.9 -0.5	-1.6 0.0	-1.5 0.8
Manufacturing	5.8	8.3	-1.8	0.5	0.3	0.2	0.1	0.0	1.2	0.2	0.0	0.8
Nondurable Goods	4.8	9.0	0.3	-0.5	-0.8	-1.0	-1.0	-1.1	1.9	-0.6	-0.5	-0.4
Durable Goods	6.5	7.9	-3.1	1.2	1.1	1.0	0.9	0.9	0.8	0.7	0.7	0.8
Tran., Warehousing & Utility	16.6	10.0	-0.4	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Trade	8.5	12.3	-1.6	-2.6	-2.3	-2.0	-1.8	-1.6	-1.5	-1.4	-1.3	-1.2
Information	-3.7	43.1	-3.5	-6.1	-5.3	-2.7	-0.9	-0.0	0.3	0.2	-0.4	-1.0
Financial Activities	3.1	7.8	4.1	-1.7	-2.3	-2.6	-2.9	-3.0	6.1	-2.0	-2.4	-2.7
Professional & Bus. Servs.	7.1	9.8	2.8	-3.0	-2.4	-1.7	-2.5	-3.1	2.9	-2.0	-1.8	-1.4
Educational & Health Servs.	7.9	6.8	4.0	-4.7	-2.3	-0.3	1.2	2.0	2.4	2.8	2.4	1.6
Leisure & Hospitality	15.6	22.7	-4.9	26.8	-3.3	-7.0	-7.6	-8.1	17.5	-4.2	-4.5	-4.5
Other Services	11.1	20.3	16.7	-5.4	-4.4	-3.6	-3.0	-2.5	-2.0	-1.7	-1.5	-1.3
Federal Government State and Local Government	6.3 -1.3	-4.7 2.5	-11.2 2.9	8.0 0.9	3.3 0.6	1.3 0.3	-0.2 -0.1	-2.4 -0.5	3.7 -0.8	-1.7 -1.0	-1.2 -1.2	-1.0 -1.4
State and Essai Sovernment		Nonfarm						0.0	0.0	1.0	1.2	1
Total Nonfarm	4443.8	4553.8	4565.6	4577.1	4554.5	4534.1	4515.9	4498.1	4528.6	4520.7	4511.9	4501.8
Natural Resources & Min.	1.6	1.6	1.6	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Construction	153.7	155.1	156.9	156.2	155.4	154.7	154.0	153.5	153.1	152.9	152.9	153.2
Manufacturing	316.1	322.5	321.1	321.5	321.7	321.8	322.0	322.0	323.0	323.1	323.3	323.5
Nondurable Goods	128.4	131.2	131.3	131.1	130.9	130.5	130.2	129.8	130.4	130.2	130.1	130.0
Durable Goods	187.7	191.3	189.7	190.3	190.8	191.3	191.8	192.2	192.5	192.9	193.2	193.6
Tran., Warehousing & Utility	224.1	229.5	229.2	229.3	229.4	229.5	229.6	229.7	229.9	230.0	230.2	230.4
Trade	615.2	633.3	630.7	626.6	623.0	619.8	616.9	614.4	612.1	609.9	607.9	606.0
Information Financial Activities	218.5 209.8	238.9 213.7	236.8 215.9	233.1 214.9	230.0 213.7	228.4 212.2	227.9 210.7	227.9 209.1	228.0 212.3	228.1 211.2	227.9 209.9	227.3 208.5
Professional & Bus. Servs.	651.2	666.6	671.2	666.1	662.1	659.3	655.1	650.0	654.6	651.3	648.4	646.2
Educational & Health Servs.	863.3	877.5	886.1	875.4	870.3	869.7	872.4	876.7	881.9	888.0	893.4	896.9
Leisure & Hospitality	480.3	505.5	499.1	529.6	525.1	515.7	505.6	495.1	515.4	509.9	504.0	498.2
Other Services	144.4	151.2	157.2	155.0	153.3	151.9	150.7	149.8	149.0	148.4	147.8	147.4
Federal Government	47.9	47.3	46.0	46.9	47.2	47.4	47.4	47.1	47.5	47.3	47.2	47.0
State and Local Government	513.3	516.5	520.2	521.3	522.1	522.5	522.4	521.8	520.8	519.5	517.9	516.0
Construction Activity, Registered Autos and Population												
Residential Building Permits			-	. •			•					
(Thous. Units)	24.0	30.5	26.8	23.4	21.0	19.5	18.6	18.1	18.3	19.0	19.9	20.5
Nonresidential Construction Real (Mil. 2012 \$)	1098.7	076.0	906 7	600.0	054.0	1101.0	1204.0	1500.0	1620.0	1700.0	1821.6	1027 5
Nominal (Mil. \$)	1434.5	876.3 1152.3	896.7 1187.5	688.3 917.9	951.3 1277.4	1191.2 1611.0	1391.6 1895.2	1532.9 2102.1	1639.2 2263.1	1723.8 2396.1	2549.3	1927.5 2715.8
Registered Autos (Thous.)	6374.6	6374.7	6382.7	6392.0	6397.2	6398.7	6398.2	6397.4	6397.7	6398.9	6400.8	6402.8
Net Immigration (Thous.)	-43.8	-22.0	-6.8	2.0	-11.4	-9.4	-7.7	-6.2	-6.1	-4.7	-3.0	-1.2
Population (Thous.)	9836.3	9839.5	9843.0	9846.7	9851.3	9855.3	9859.3	9863.3	9866.4	9870.7	9875.4	9880.4
(%Change)	0.9	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2