



LOS ANGELES COUNTY QUARTERLY FORECAST

JULY 2022

Long-term Forecast for Los Angeles County

Prepared by

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THE LOS ANGELES REPORT: HIGH INFLATION AND MONETARY TIGHTENING

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July 2022

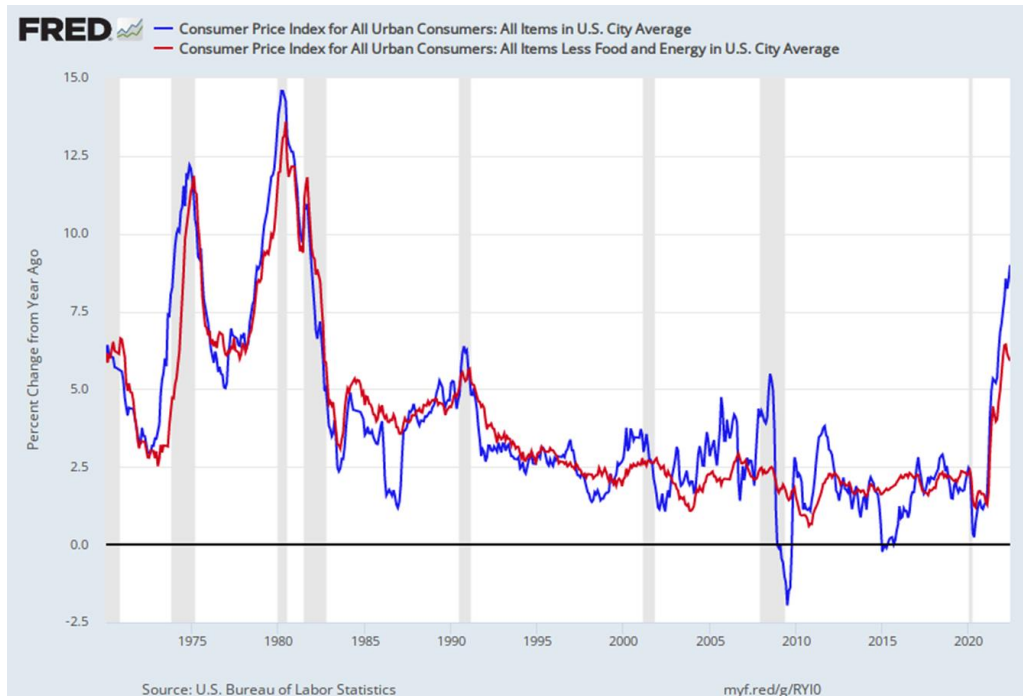
U.S. Economic Overview

U.S. inflation is running at the highest level in four decades. The consumer price index (CPI) inflation rose 9.1% in June 2022 over the past year (Figure 1). The core inflation rate, which is the CPI without food and energy prices, rose 5.9% over the year. Note that the core inflation rate, a more stable measurement of inflation, is also at its highest point in 40 years. Therefore, even if the food and energy prices go down in the near future, the inflation problem is not going to disappear soon.

Historically, the most effective way to bring down an overheating economy with high inflation has been a recession. However, the current economy is a bit different from the past. The Federal Reserve raised the federal fund rates by 0.75% in June and in July. Our forecast is for the Fed to raise the short-term interest rates to around 3.5% by the end of 2022. Rising interest rates have caused money supply, M2, to decline for the first time in June, following the \$6.5 trillion increase since March 2020.

The monetary tightening policy also elevated 30-year mortgage rates to a high of 6.1% and as of the end of July it is running at 5.6%. This increased the cost for home buyers significantly and is expected to slow home sales and home price growth. However, the unintended consequence of this policy is to push potential home buyers to become renters, which further propels demand for rental properties. Figure 2 shows that rent growth has increased rapidly over the past year. Note that rental price is an important component in the consumer price index. The long-term insufficient supply of housing is expected to continue contributing to higher rent growth and inflation over the next two years.

Figure 1. Year-over-year Inflation Rates in the U.S.



If history is any guide, the interest rate spread between 10-year Treasury 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 July 28, the spread between 10-year and 3-month Treasuries (blue line) has become negative, and the spread between 10-year and 2-year (red line) has been negative for a while.

U.S. real GDP growth turned to negative in the past two quarters: -1.6% in Q1 and -0.9% in Q2. This is not an official definition of a recession. Note that most labor market indicators still show a strong job market. In summary, we forecast the U.S. economy is slowing down with a soft-landing trajectory in response to on-going monetary tightening. However, the leading indicator suggests a rising risk of a coming recession in 2023.

Figure 2. Year-over year Growth of Rent of Primary Residence in U.S. City Average

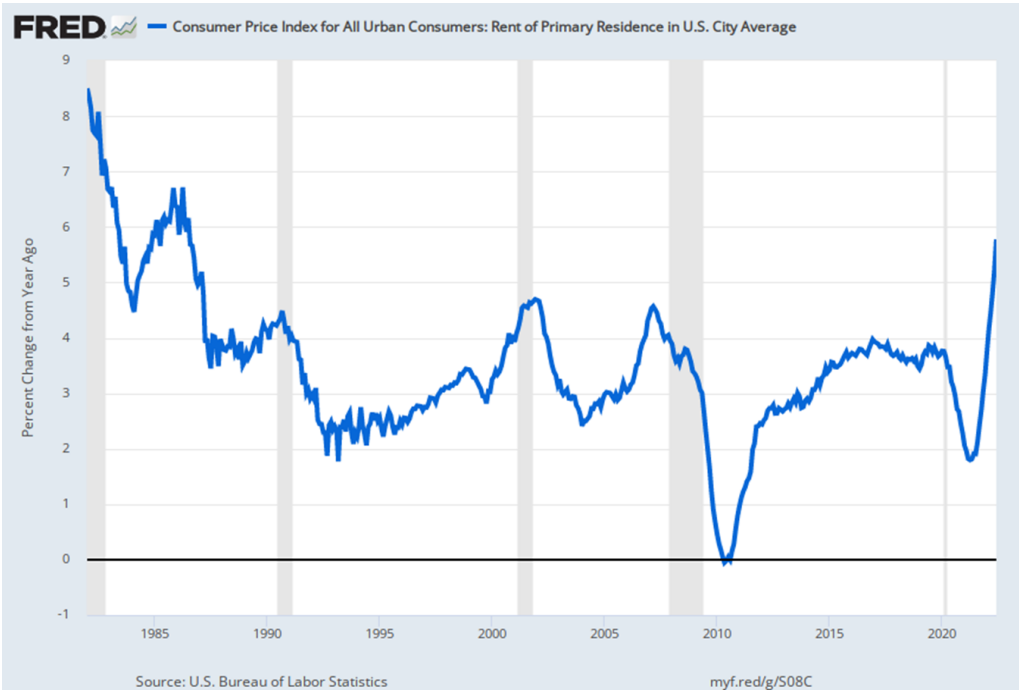
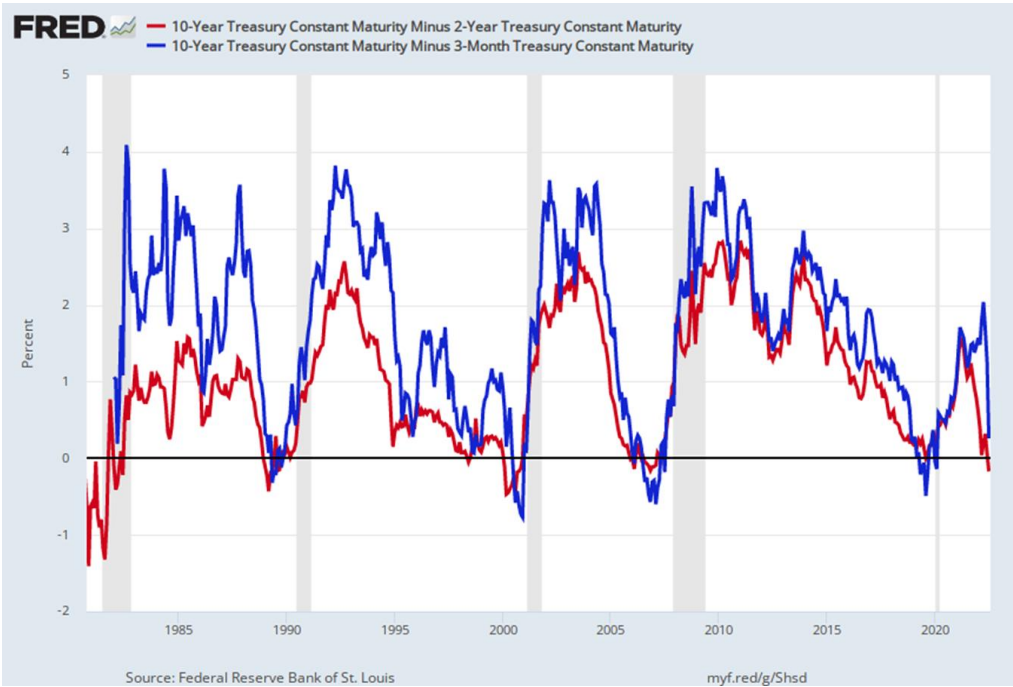


Figure 3. Interest Rate Spreads between the 10-Year and Short-Term Treasury Yields



The Los Angeles Economy

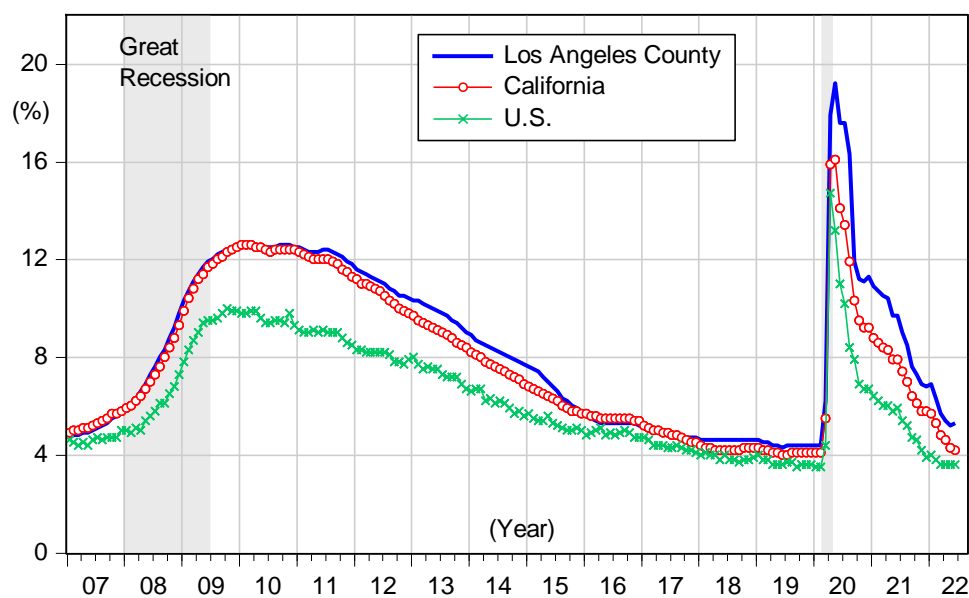
In June 2022, L.A.'s unemployment rate dropped to 5.3% versus California's 4.2% and the U.S.'s 3.6% (Figure 4). All three have seen a slowing decline of the unemployment rate, indicating that each economy has almost reached full employment. Figure 5 shows the percentage change of household survey employment since February 2020, which captures all employment and not just payroll jobs. We can see that L.A. has had a slower recovery (-3.7% below the pre-pandemic peak) in employment compared to California (-1%) and the nation (-0.5%). As reported in the past, L.A.'s large low-educated service sector workforce was sidelined by the pandemic. L.A. has a greater proportion of international tourism, business, and trade than the nation as a whole, all of which were curtailed by the pandemic. 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 2.8% 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. Now, L.A.'s population is 2.5% below its pre-pandemic peak in 2016. We expect a gradual recovery in the L.A. labor force.

Figure 7 illustrates that payroll job recovery has been robust over the past few months. In fact, L.A. payroll job numbers have come back to their pre-pandemic level.¹

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 June 2019 (blue circle) and June 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 LA 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 share supporting record imports via L.A. seaports. L.A.'s information sector share, heavily dependent upon entertainment production and much larger than the national average, increased its share. This sector was hurt severely during the early days of the pandemic. The professional and management sector, a high-paying sector, also had an increased share.

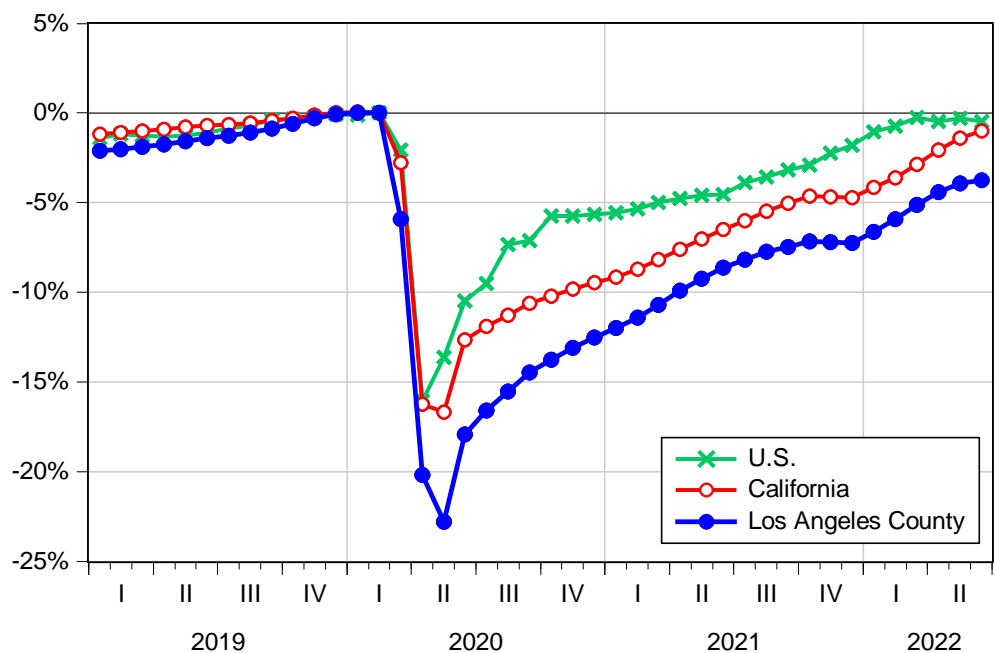
¹ It is unclear at this time why L.A. would have declining payroll jobs in the second half of 2021 while California's continue to rise. We see a similar pattern in 2020. It could be data seasonality and/or measurement issues and we expect some revisions next year. Subsequent to the revisions we will complete a thorough analysis of this pattern in the data.

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



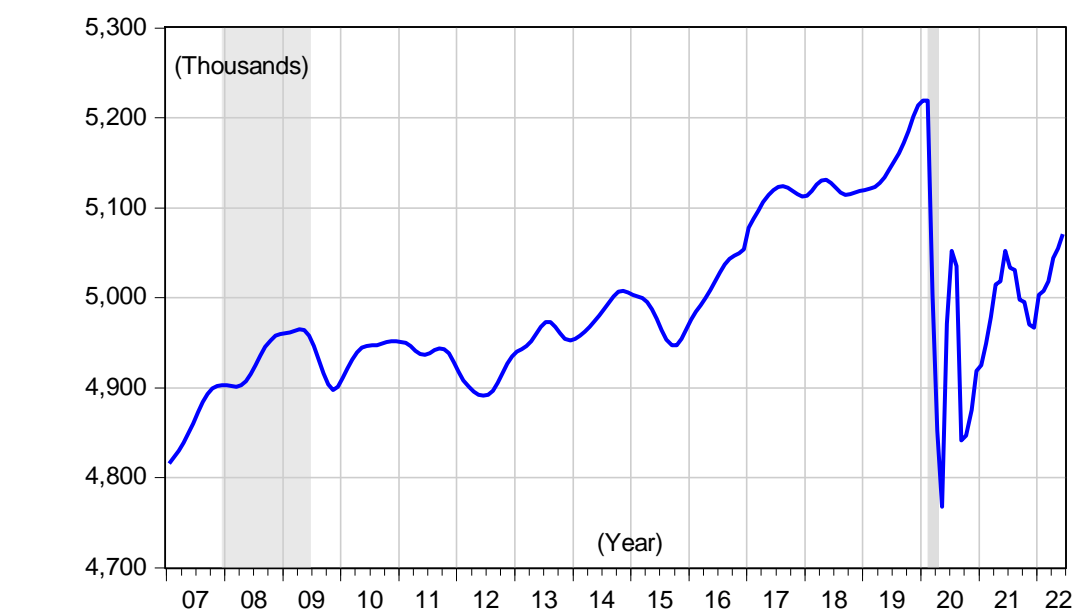
Sources: California Employment Development Department and Bureau of Labor Statistics

Figure 5. Household Survey Employment
(Percentage Change Since February 2020)



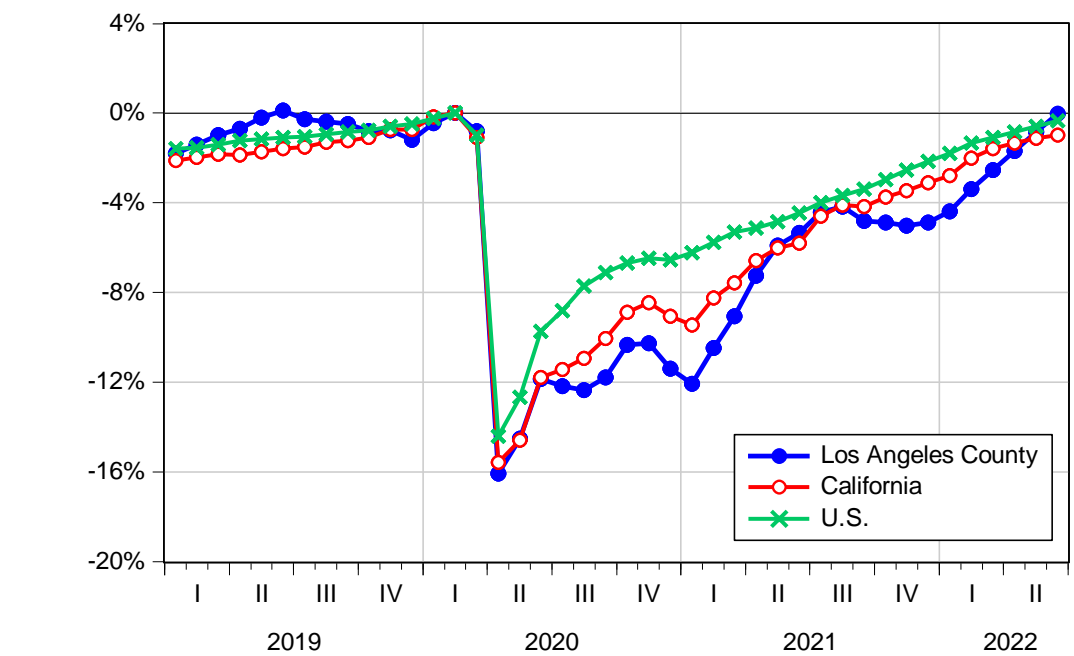
Sources: California Employment Development Department and Bureau of Labor Statistics

Figure 6. Labor Force in Los Angeles County



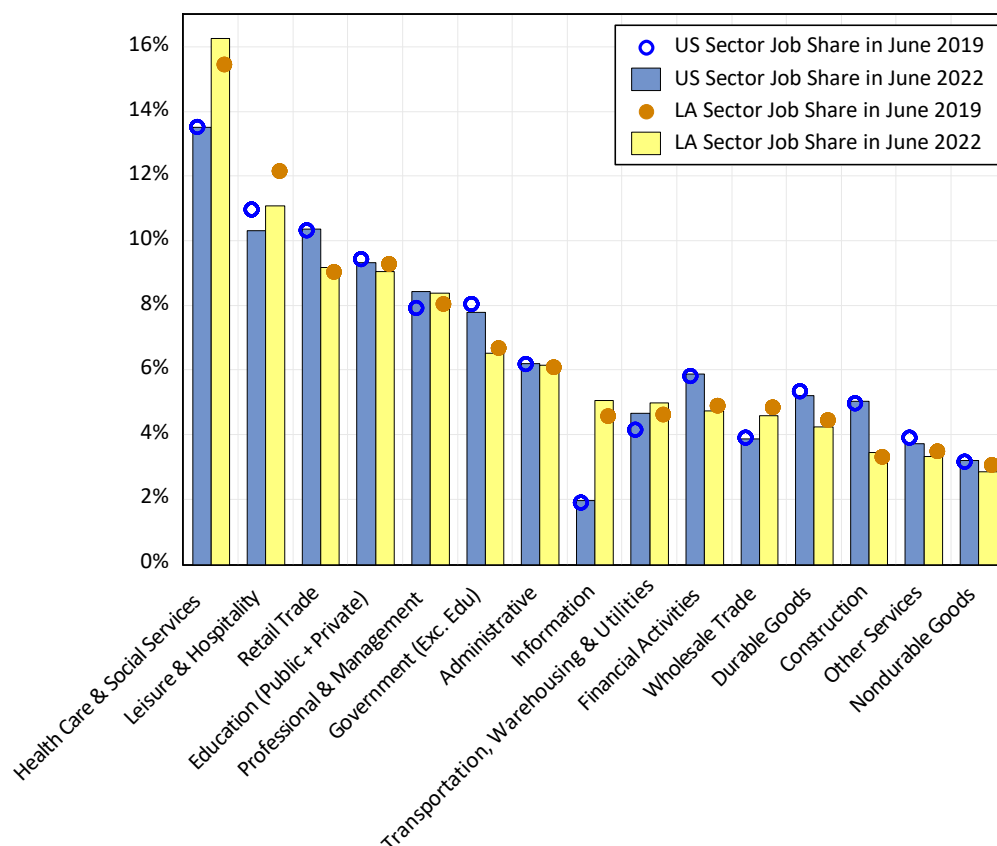
Source: California Employment Development Department

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



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

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



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

Figure E1 shows the payroll job change from 2019 Q3 to 2021 Q3, across the 2020 recession, by zip code in Los Angeles County. The blue colors indicate job numbers that have gained or slightly declined (no less than -300) during the period, and the orange colors represent a significant loss of jobs. The largest decline in jobs occurred in zip code 90045 where LAX is located because of the decline in air travel. Up to 2021 Q3, LAX traffic was still 40% below its pre-pandemic peak. Downtown L.A. (zip codes 90015, 90012, 90017) lost about 16,000 jobs. Burbank (zip codes 91504, 91505) lost about 13,000 jobs. Many of these lost jobs were in the accommodation and food services sector (Figure E2), as many offices remained closed (see also Figure B4).

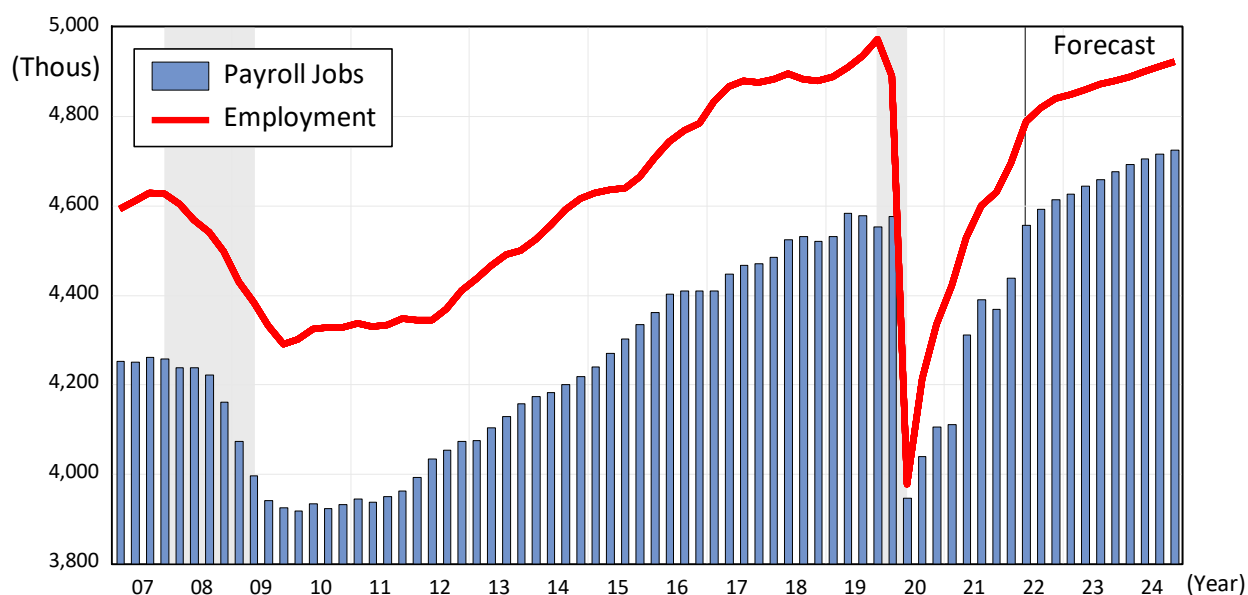
Short-term Forecast for Los Angeles County

Despite continued out-migration and negative population growth in the past few years, the L.A. economy, following California and the nation, has recovered robustly over the past two years. However, the tightening money cycle by the Fed will slow down the L.A. economy in the coming two years. A recession in 2023 or 2024 is a possibility and a risk to our forecast. In general, we forecast slower growth of employment and jobs over the next two years and a soft-landing scenario (Figure 9). We also forecast L.A. inflation will remain elevated through 2023. Our forecast on L.A. inflation is slightly higher than the national average due to the assumption that its rental price growth will catch up with the current national average.

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 decline to an annual average of 4.9% in 2023, and 5.1% 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% in 2021. We forecast it will rebound by 5.9% in 2022, 2.2% in 2023, and 1.2% in 2024, reaching 4.61 million by the end of 2022, 4.67 million by the end of 2023, and 4.72 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 reach 4.84 million people employed by the end of 2022, 4.88 million by the end of 2023, and 4.92 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% in 2022 and increase by 0.7% in 2023 and 1.3% in 2024. There are two reasons for these low forecasts: (1) unusually high personal income from the fiscal stimuli in 2020/21 elevated the base to make continued high growth unlikely in the near future, and (2) soft-landing economy in response to the Fed's tightening policy over the next two years. With continued elevated rental prices but some ease of the energy prices, we forecast that high inflation will come down gradually. Our forecast of inflation is 3.5% in 2023 (Q4 to Q4), and 2.9% in 2024 (Q4 to Q4). Nominal personal income growth is estimated to be 3.4% in 2022, 5.1% in 2023, and 4.3% in 2024.
- **Nominal taxable sales** declined by 8.4% in 2020 and increased by 21.7% in 2021. We forecast they will increase by 24% in 2022, by 3.4% in 2023, and by 0.4% in 2024. Nominal taxable sales are forecast to reach \$245 billion by the end of 2022, \$246 billion by the end of 2023, and \$247 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

Long-term Forecast for Los Angeles County

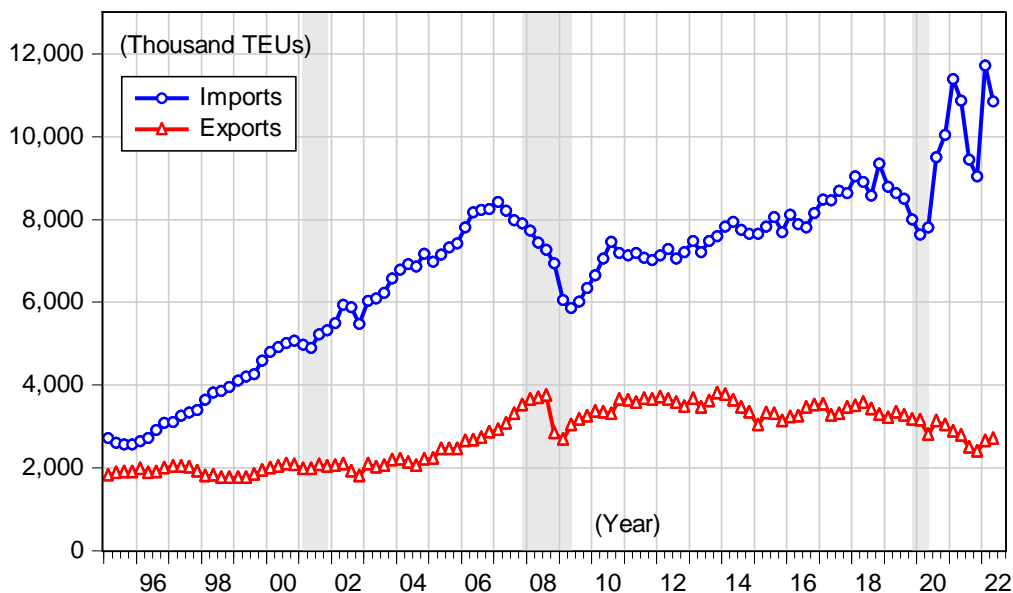
Due to the continued rising costs of living and declining fertility rates, we have not changed our long-term forecast for L.A. County's population growth rate from 0.3% in the 2030s and 2040s. This is similar to the recent estimates and forecasts for the L.A. population from the U.S. Census and California Department of Finance. In the long run, job growth is forecast to converge to a 0.7% annual growth rate. Increased commuting for people living in Inland Empire for a lower cost of living and working in L.A. County partially explain the differential between population growth and job growth. Nominal taxable sales growth is forecast to converge to a 2% annual growth rate. Nominal personal income is forecast to converge to a 3.7% rate. Real personal income is forecast to converge to a 1.7% annual growth rate. In conclusion, our forecast for long-term L.A. County economy is steady but slow economic growth.

Appendix A: Los Angeles Airport and Seaport Activity

Los Angeles' seaports and LAX are handling inbound cargo volumes that are substantially greater than before the pandemic. This reflects a strong domestic demand for goods and an easing of supply chain constraints. Figure A1 shows that the annualized seasonally adjusted import volume through the seaports of Los Angeles and Long Beach surged in the past two quarters after the infamous supply chain bottlenecks of Q3 and Q4 2021. 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 rising rapidly over the past three years.

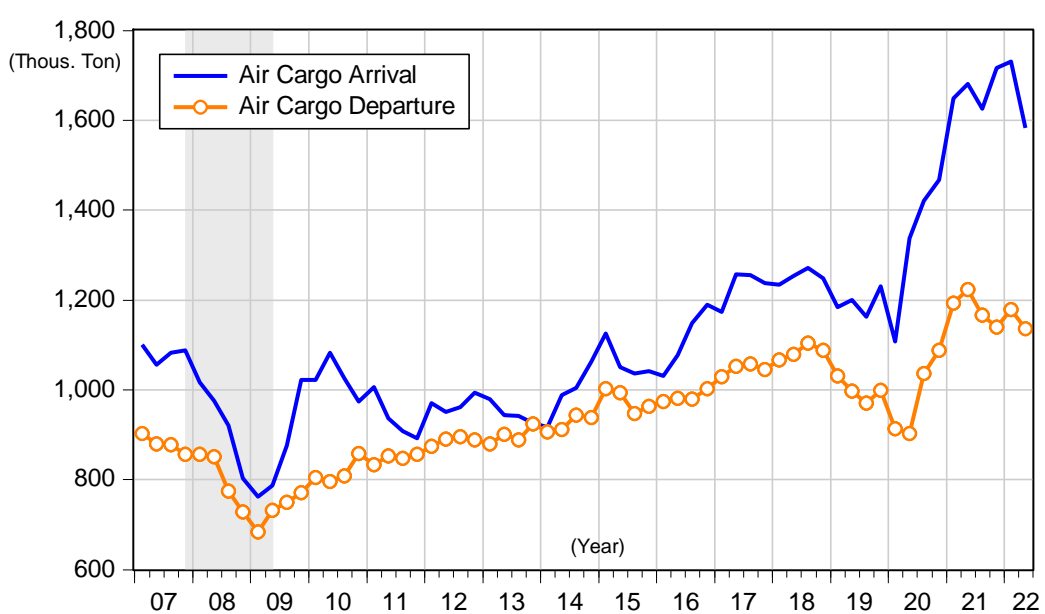
Figure A3 shows domestic and international passenger traffic, including both arrivals and departures, through LAX. We see the collapse of passenger air travel in March 2020 and the beginning of a recovery in 2021 Q2. The recovery speeds up in 2022 Q2. As a whole, LAX air passenger traffic in 2022 Q2 is about 79% 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, as we predicted previously, L.A. air traffic will probably not return to its pre-pandemic peak. With demand for goods increasing, L.A.'s courier and warehousing jobs have increased substantially (Figure 8). In contrast, 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)



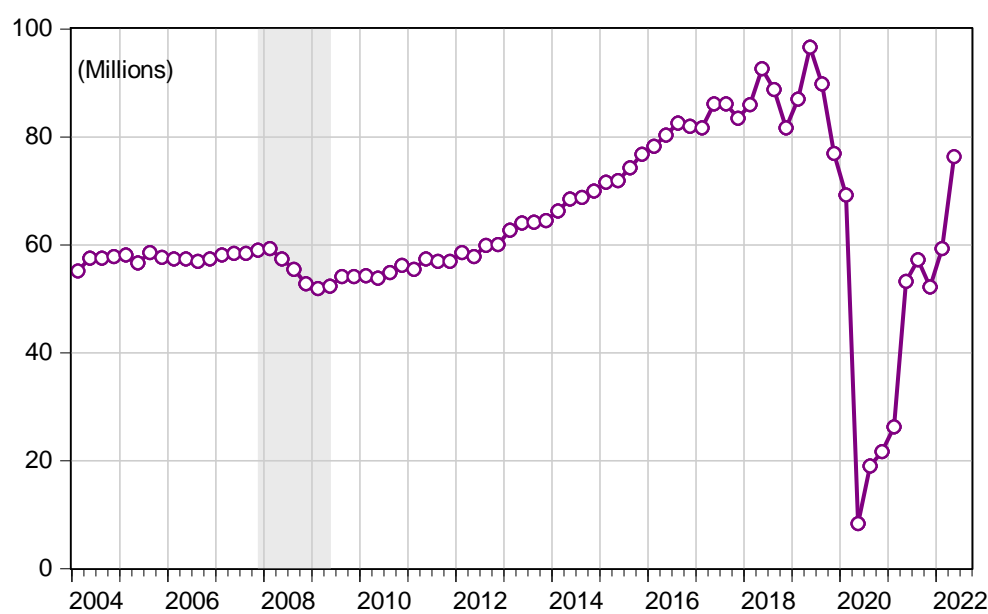
Sources: Ports of Los Angeles and Long Beach
Note: A “TEU” is a “twenty-foot equivalent,” a standard shipping container

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



Source: LA World Airports

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

During the pandemic, U.S. house price growth rates surged to the highest level in two decades. Figure B1 shows year-over-year house price growth rates for the 20-city composite index (red line) and for Los Angeles (blue line). Like the rest of the country, L.A. has seen its home prices increase by above 20% in the past year. Phoenix (32%), Miami (33%) and Dallas (30%) have seen even higher home appreciation rates. While home prices seem bubbly and they will encounter adjustments in the near future as they weather the rapid increases of mortgage rates, we suggest that the adjustment may be milder compared to the housing market bust in 2008. Figure B2 shows that annualized housing starts and the historical average is around 1.5 million per year. Note that the current level is above historically average levels but still lower than the 2 million starts in the period of 2003 to 2006 during the housing bubble. In other words, we are not seeing alarming over-building. Part of the high home price inflation, in fact, is due to a chronically insufficient housing supply in the past decade. 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. Year-over-year Growth Rates of S&P/Case-Shiller Home Price Indexes

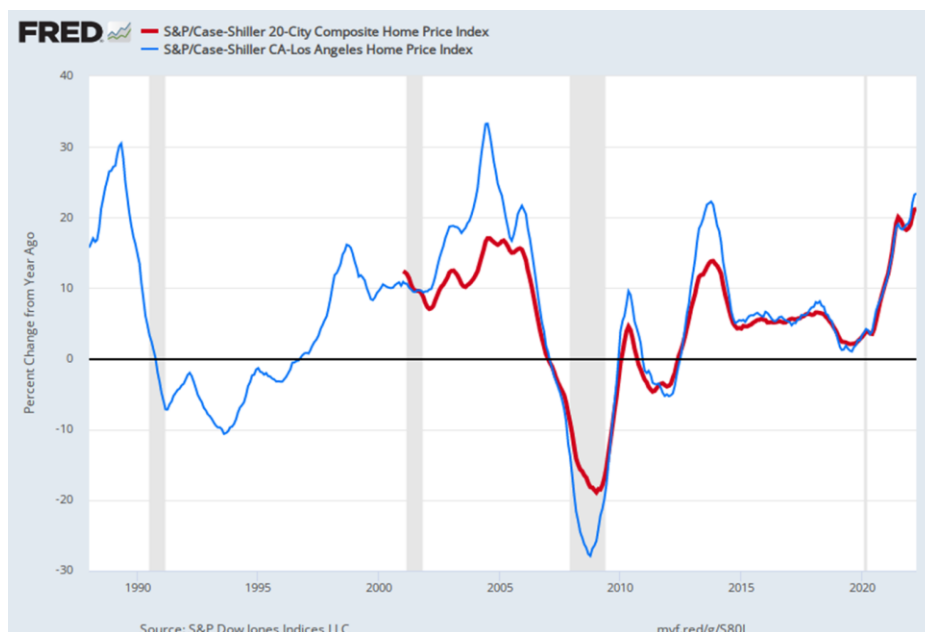


Figure B2. U.S. Housing Starts
(Seasonally Adjusted Annual Rate)

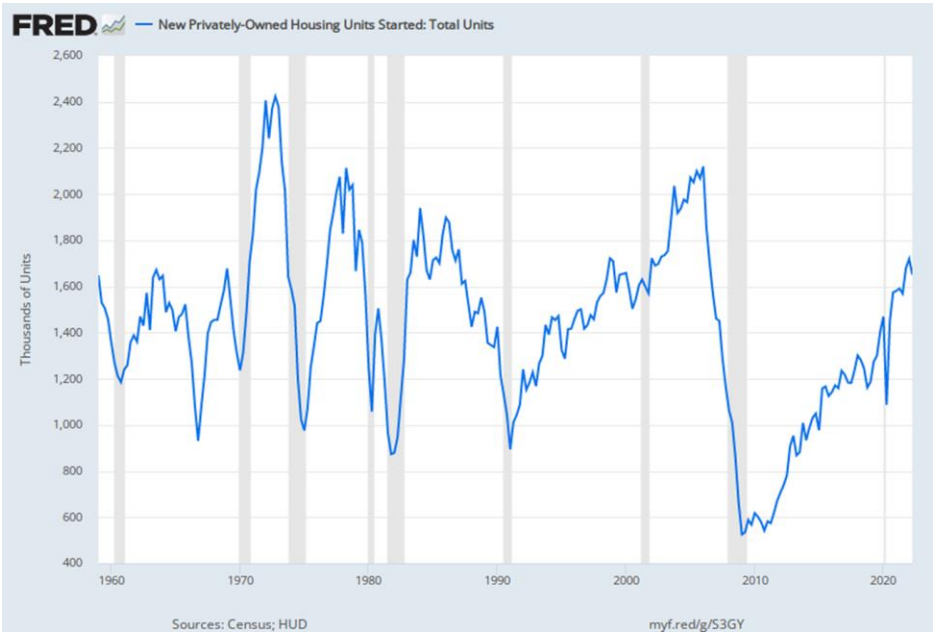
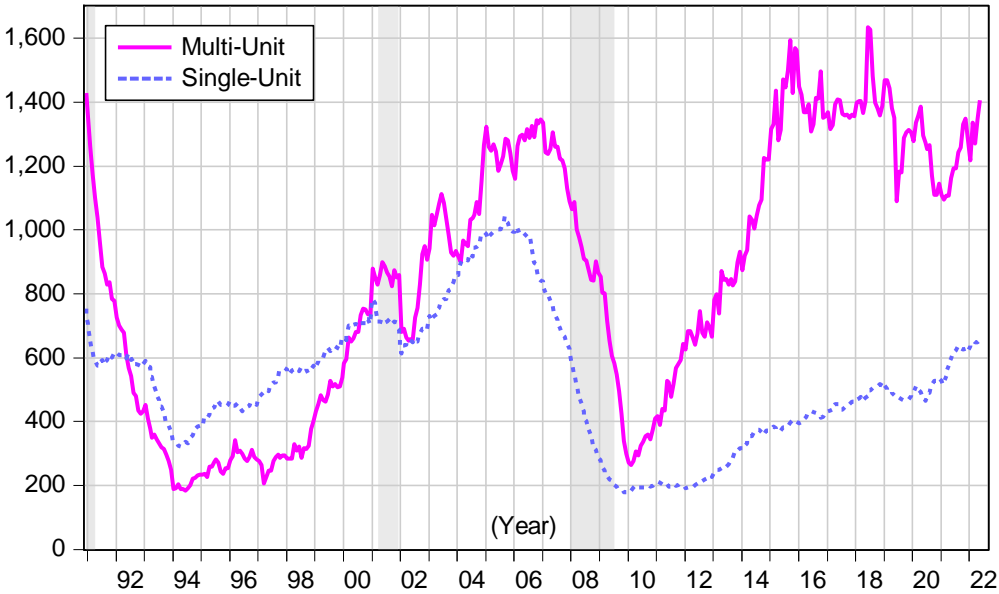


Figure B3. Los Angeles County New Residential Building Permits
(Monthly, 12-Month Moving Average)

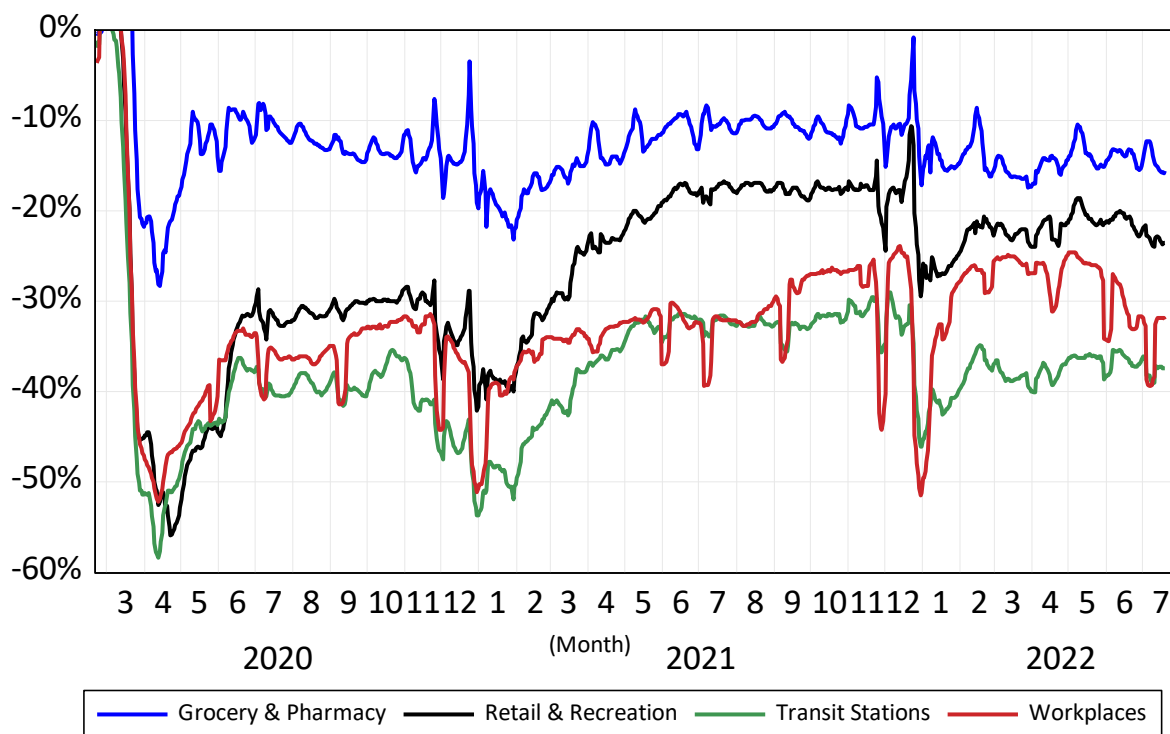


Source: Census Bureau

Appendix C: Los Angeles Traffic and Mobility Activity

Traffic to four different destinations in L.A.—workplaces, transit stations, grocery and pharmacy, and retail and recreation—has been stagnating over the past seven months (Figure C1). Traffic to workplaces was declining in the past three months. As of July 2022, traffic to grocery stores in L.A. is 16% below the average level before the pandemic, and traffic to retail (-24%), offices (-32%), and transit stations (-37%) are lower yet.

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)

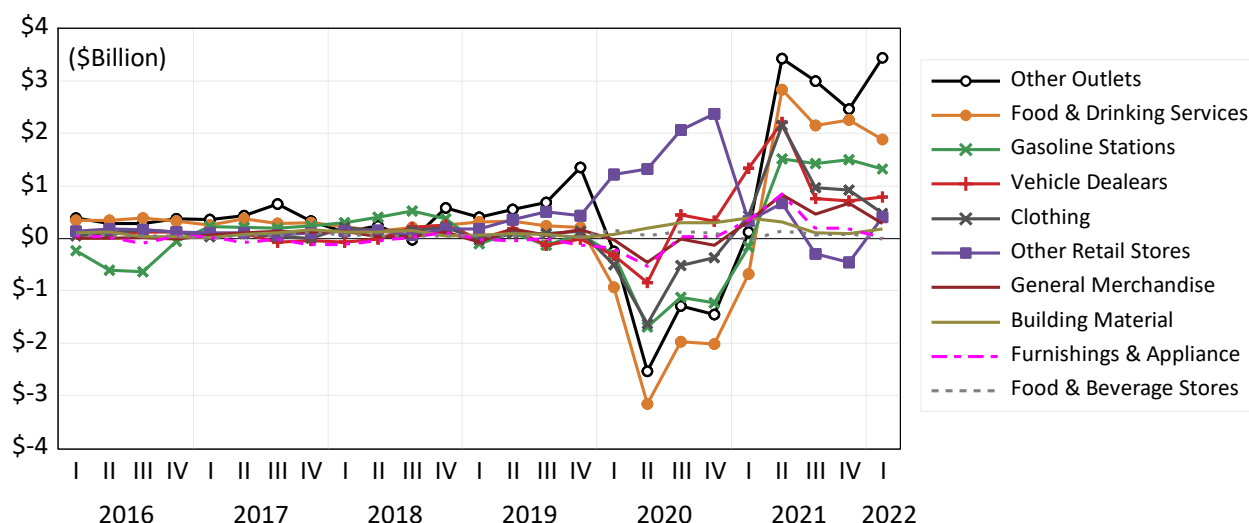


Source: Google Mobility Data

Appendix D: Taxable Sales Analysis

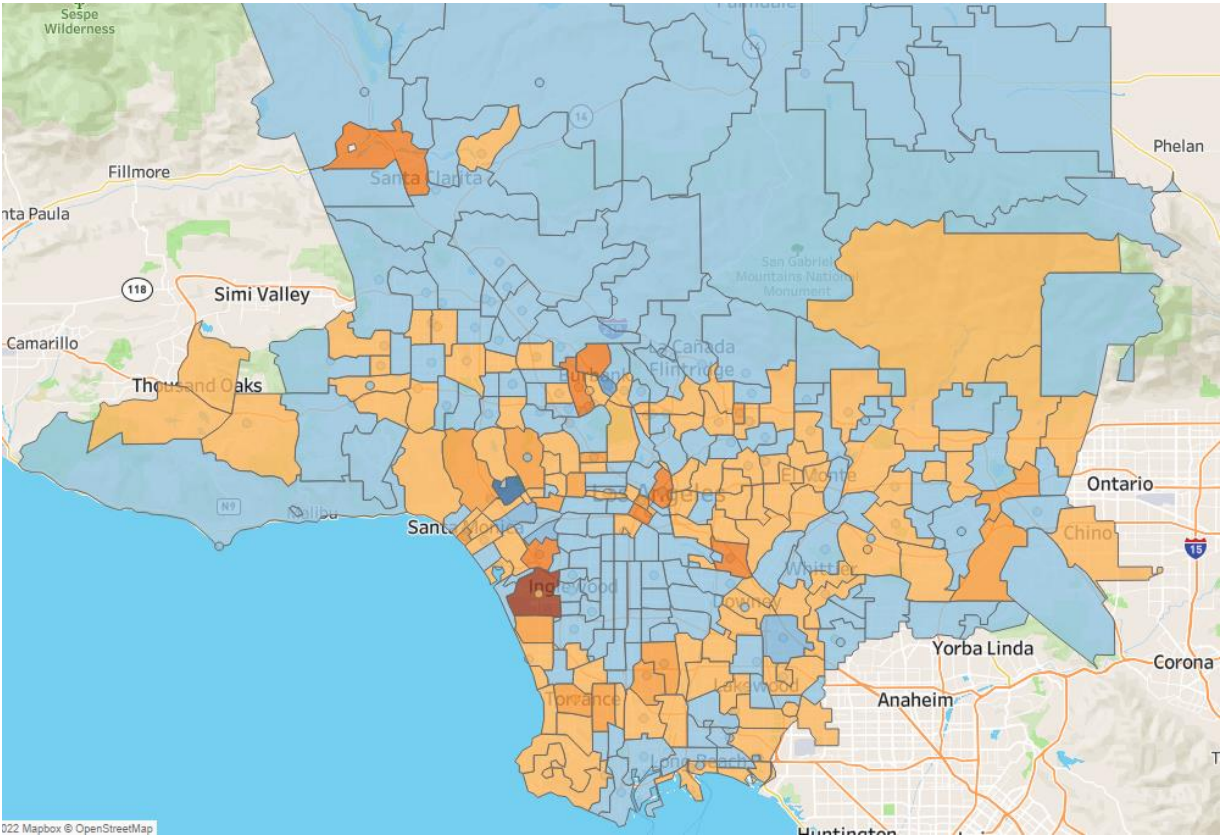
Figure D1 shows the year-over-year nominal taxable sales changes by sector in Los Angeles County between the years 2015 and 2022. We can see a dramatic change in scale of taxable sales since 2020. In 2020, most sectors experienced deep declines of sales except for “other retail stores,” or, e-commerce. The biggest contributor to the increase of taxable sales compared to the pre-pandemic level is other outlets, followed by other retail stores and motor vehicle dealers. We forecast most of these high increases will abate in the next few quarters. High prices would increase nominal sales, but if income does not keep up they will also decrease consumer purchasing power. This will lead to a smaller volume of goods and services being purchased.

Figure D1. Year-over-year Changes of Nominal Taxable Sales from 2015 to 2022 period, Los Angeles County



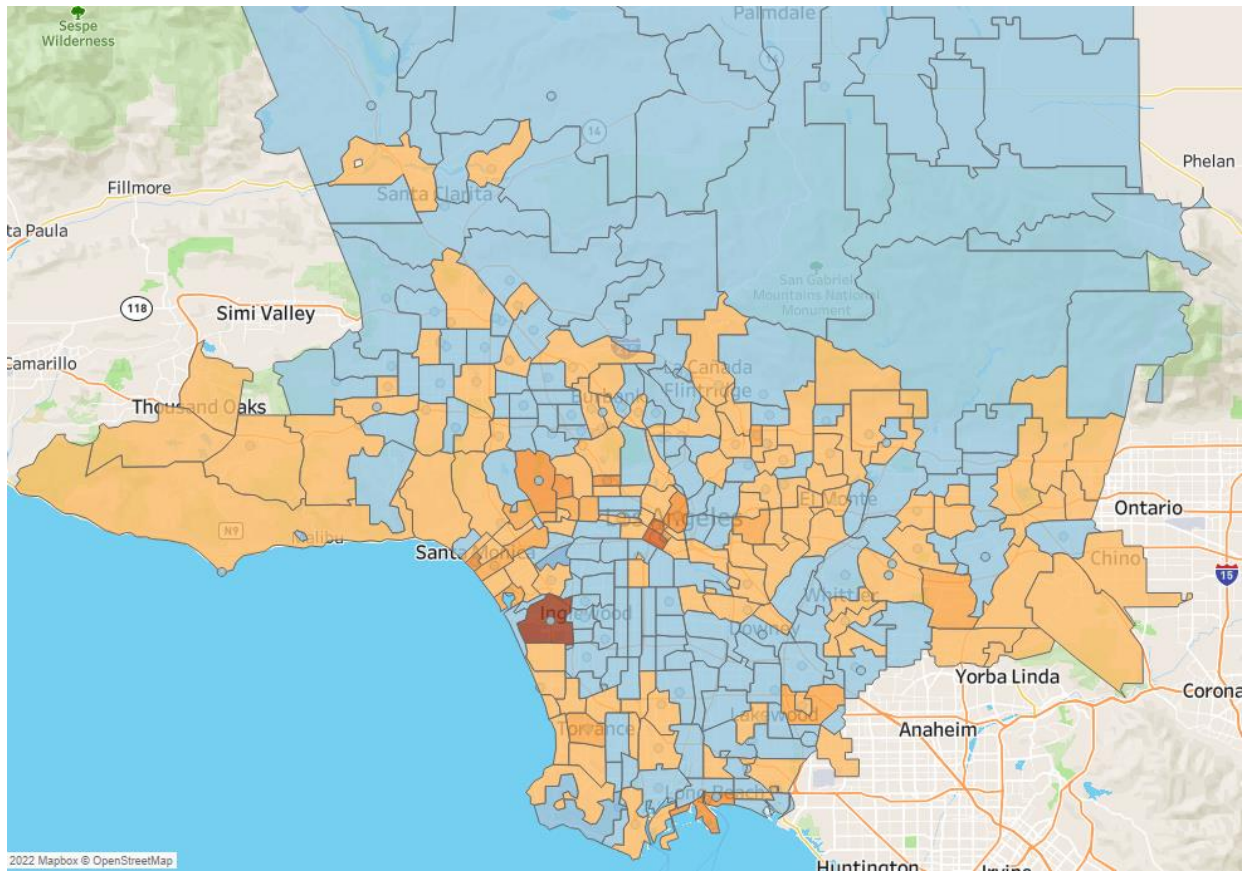
Source: California Department of Tax and Fee Administration

Figure E1: Total Payroll Job Changes from 2019 Q3 to 2021 Q3 By Zip Code in L.A. County



Source: Quarterly Census of Employment and Wages of California Employment Development Department
Note: 2021 Q3 data is the latest zip code data available.

Figure E2: Payroll Job Changes in The Accommodation and Food Services Sector from 2019 Q3 to 2021 Q3 By Zip Code in L.A. County



Source: Quarterly Census of Employment and Wages of California Employment Development Department

**Summary of the UCLA
Anderson Forecast for Los
Angeles County by Quarter**

	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Personal Income and Taxable Sales												
Personal Income												
(Billion \$)	743.3	745.0	756.2	767.3	777.5	786.9	795.7	804.0	812.3	820.7	829.3	837.9
(%Change)	2.1	0.9	6.2	6.0	5.4	4.9	4.6	4.2	4.2	4.2	4.2	4.2
Real Personal Income												
(Billion 2012\$)	581.6	570.6	572.4	574.2	576.0	577.8	579.7	581.6	583.4	585.3	587.3	589.2
(%Change)	-7.2	-7.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Taxable Sales												
(Billion \$)	214.6	245.2	245.0	245.3	245.4	245.6	245.6	245.7	245.7	246.1	246.6	247.4
(%Change)	41.4	70.4	-0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.6	0.9	1.3
Real Taxable Sales												
(Billion 2012\$)	167.9	187.8	185.5	183.5	181.8	180.3	178.9	177.7	176.5	175.5	174.6	174.0
(%Change)	28.6	56.5	-4.8	-4.1	-3.7	-3.2	-3.0	-2.7	-2.7	-2.2	-2.0	-1.5
Price Inflation												
Consumer Prices (%Change)	10.0	8.9	4.8	4.7	4.1	3.6	3.2	2.9	2.8	2.9	2.9	2.9
Employment and Labor Force (Household Survey, %Change)												
Employment	5.8	8.2	2.5	1.8	0.7	0.9	0.9	0.6	0.6	1.1	0.9	0.8
Labor Force	2.6	3.8	0.9	1.0	1.1	1.1	1.1	1.0	1.0	1.1	1.1	1.1
Unemployment Rate (%)	6.3	5.3	4.9	4.7	4.8	4.9	4.9	5.0	5.1	5.1	5.1	5.2
Nonfarm Employment (Payroll Survey, %Change)												
Total Nonfarm	6.5	11.1	3.1	1.9	1.1	1.5	1.3	1.4	1.4	1.0	0.9	0.8
Natural Resources & Min.	3.1	10.4	-69.1	-4.8	-5.0	-4.9	-4.2	-3.7	-2.9	-1.8	-0.5	0.7
Construction	11.6	2.7	-2.3	-1.6	-1.0	-0.7	-0.5	-0.3	-0.5	-0.1	0.3	0.9
Manufacturing	5.6	8.5	0.2	0.1	0.3	0.3	0.4	0.2	0.3	0.3	0.4	0.5
Nondurable Goods	4.4	8.5	-0.0	-0.0	0.3	0.2	0.2	-0.5	-0.1	0.3	0.7	1.1
Durable Goods	6.4	8.4	0.4	0.3	0.3	0.4	0.5	0.6	0.5	0.4	0.2	0.0
Tran., Warehousing & Utility	17.3	10.3	4.7	3.9	5.6	6.6	5.4	4.7	4.0	3.7	3.6	3.8
Trade	8.3	13.0	-3.2	-1.3	-2.8	-2.3	-2.5	-0.5	-0.1	1.0	0.1	-0.9
Information	-5.5	48.2	-8.7	-4.4	-3.1	-1.1	0.4	1.7	0.9	0.4	0.2	0.6
Financial Activities	2.8	8.7	4.7	3.7	3.0	2.3	1.6	1.0	0.6	0.4	0.3	0.2
Professional & Bus. Servs.	6.9	10.2	0.1	0.7	0.5	0.7	1.0	1.1	1.1	1.1	1.2	1.4
Educational & Health Servs.	7.7	6.4	0.3	2.1	1.8	1.9	1.5	1.9	2.7	0.1	0.6	0.9
Leisure & Hospitality	13.7	27.3	25.5	8.4	3.2	5.0	3.3	1.9	1.1	1.2	0.2	0.3
Other Services	10.0	22.0	0.7	2.3	-0.3	0.4	0.5	0.4	0.6	1.6	1.5	1.6
Federal Government	7.3	-5.4	4.5	2.4	1.0	0.8	-0.1	-1.8	-1.6	-1.6	-1.3	-1.1
State and Local Government	-1.9	3.0	3.0	3.4	3.6	3.5	3.4	3.1	2.8	2.5	2.1	1.8
Nonfarm Employment (Payroll Survey, Thousand)												
Total Nonfarm	4437.8	4556.6	4591.6	4612.8	4624.9	4642.7	4657.3	4673.7	4689.9	4702.1	4712.4	4722.4
Natural Resources & Min.	1.6	1.6	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1
Construction	154.0	155.1	154.2	153.6	153.2	152.9	152.8	152.6	152.4	152.4	152.5	152.9
Manufacturing	315.9	322.4	322.6	322.7	323.0	323.3	323.6	323.7	323.9	324.2	324.5	324.9
Nondurable Goods	128.3	131.0	131.0	131.0	131.1	131.1	131.2	131.0	131.0	131.1	131.3	131.7
Durable Goods	187.6	191.4	191.7	191.8	191.9	192.1	192.4	192.7	192.9	193.1	193.2	193.2
Tran., Warehousing & Utility	224.3	229.8	232.5	234.8	238.0	241.8	245.0	247.8	250.3	252.6	254.9	257.2
Trade	614.9	634.0	628.9	626.9	622.4	618.7	614.8	614.1	613.9	615.4	615.7	614.3
Information	217.6	240.0	234.6	232.0	230.2	229.6	229.8	230.8	231.3	231.5	231.6	232.0
Financial Activities	209.5	213.9	216.4	218.4	220.0	221.2	222.1	222.7	223.0	223.3	223.4	223.6
Professional & Bus. Servs.	650.9	666.9	667.2	668.3	669.2	670.4	672.0	673.9	675.7	677.6	679.7	682.1
Educational & Health Servs.	863.0	876.5	877.1	881.6	885.5	889.6	892.9	897.2	903.1	903.4	904.8	906.8
Leisure & Hospitality	477.8	507.5	537.1	548.1	552.3	559.1	563.7	566.3	567.8	569.5	569.9	570.3
Other Services	144.1	151.4	151.7	152.6	152.4	152.6	152.8	152.9	153.2	153.8	154.3	154.9
Federal Government	48.0	47.3	47.8	48.1	48.2	48.3	48.3	48.1	47.9	47.7	47.5	47.4
State and Local Government	512.7	516.5	520.3	524.7	529.3	533.9	538.4	542.5	546.2	549.5	552.4	554.9
Construction Activity, Registered Autos and Population												
Residential Building Permits												
(Thous. Units)	24.1	30.5	28.2	25.9	24.6	23.8	23.2	22.8	22.6	22.6	22.8	23.1
Nonresidential Construction												
Real (Mil. 2012 \$)	1091.5	875.1	659.4	944.3	1232.4	1483.9	1685.2	1849.0	2002.7	2153.7	2298.4	2444.9
Nominal (Mil. \$)	1425.1	1150.8	873.2	1259.3	1655.0	2006.8	2295.1	2535.6	2765.1	2993.6	3216.4	3444.8
Registered Autos (Thous.)	6631.6	6634.0	6632.8	6631.3	6632.0	6634.8	6638.9	6643.3	6647.4	6651.2	6654.9	6658.5
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

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

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Personal Income and Taxable Sales										
Personal Income										
(Billion \$)	728.4	752.9	791.0	825.0	860.1	896.2	934.5	975.7	1019.9	1062.2
(%Change)	7.3	3.4	5.1	4.3	4.3	4.2	4.3	4.4	4.5	4.2
Real Personal Income										
(Billion 2012\$)	598.9	574.7	578.8	586.3	594.9	604.6	615.4	627.5	640.9	652.7
(%Change)	3.4	-4.0	0.7	1.3	1.5	1.6	1.8	2.0	2.1	1.8
Taxable Sales										
(Billion \$)	191.8	237.5	245.6	246.4	249.6	256.9	264.0	271.3	278.6	287.4
(%Change)	21.7	23.8	3.4	0.4	1.3	2.9	2.8	2.8	2.7	3.1
Real Taxable Sales										
(Billion 2012\$)	157.6	181.2	179.7	175.1	172.6	173.3	173.9	174.5	175.1	176.6
(%Change)	17.2	14.9	-0.8	-2.5	-1.4	0.4	0.3	0.4	0.3	0.9
Price Inflation										
Consumer Prices (%Change)	3.8	7.7	4.3	3.0	2.8	2.5	2.4	2.4	2.3	2.3
Employment and Labor Force (Household Survey, %Change)										
Employment	4.4	5.3	1.6	0.8	1.1	0.9	0.8	0.7	0.7	0.7
Labor Force	0.6	1.2	1.2	1.0	0.9	0.7	0.6	0.6	0.6	0.6
Unemployment Rate (%)	9.0	5.3	4.9	5.1	4.9	4.7	4.6	4.5	4.5	4.5
Nonfarm Employment (Payroll Survey, %Change)										
Total Nonfarm	3.1	5.9	2.2	1.2	1.0	0.8	0.7	0.7	0.6	0.7
Natural Resources & Min.	-4.9	-13.2	-17.3	-2.6	11.3	13.4	11.6	10.2	9.2	2.1
Construction	2.2	3.0	-0.9	-0.2	0.6	0.7	0.7	0.6	0.6	0.9
Manufacturing	-1.1	3.0	0.8	0.3	2.1	2.5	2.3	2.1	2.0	0.6
Nondurable Goods	1.0	3.2	0.6	0.1	3.1	3.3	2.8	2.5	2.3	0.6
Durable Goods	-2.5	2.8	0.9	0.4	1.4	1.9	1.9	1.9	1.9	0.5
Tran., Warehousing & Utility	3.1	7.6	5.6	4.3	2.4	0.6	0.9	0.5	-0.2	0.7
Trade	4.1	3.7	-1.4	-0.4	0.2	0.4	0.4	0.4	0.4	0.4
Information	12.1	8.3	-0.4	0.6	0.2	0.2	0.2	0.1	0.1	0.4
Financial Activities	-0.8	1.8	3.2	0.8	0.3	0.4	0.4	0.4	0.4	0.3
Professional & Bus. Servs.	5.0	5.4	1.2	1.1	0.9	0.6	0.4	0.4	0.3	0.7
Educational & Health Servs.	2.4	4.2	1.9	1.5	0.9	1.0	1.0	1.0	1.0	1.0
Leisure & Hospitality	9.0	20.7	8.3	1.6	0.8	1.0	1.0	1.0	1.0	1.1
Other Services	4.2	11.8	1.8	0.9	1.1	0.8	0.7	0.7	0.7	0.8
Federal Government	-5.0	0.3	0.9	-1.2	7.2	-0.2	-0.4	-0.4	-0.4	-0.1
State and Local Government	-1.8	1.5	3.4	2.7	1.5	0.6	0.2	-0.0	-0.2	0.1
Nonfarm Employment (Payroll Survey, Thousand)										
Total Nonfarm	4295.6	4549.7	4649.7	4706.7	4754.7	4792.9	4828.2	4860.2	4889.2	4922.1
Natural Resources & Min.	1.6	1.4	1.2	1.1	1.3	1.4	1.6	1.8	1.9	2.0
Construction	149.8	154.2	152.9	152.6	153.5	154.5	155.5	156.5	157.5	158.9
Manufacturing	311.7	320.9	323.4	324.4	331.2	339.4	347.1	354.5	361.8	363.8
Nondurable Goods	126.2	130.3	131.1	131.3	135.3	139.8	143.7	147.3	150.7	151.6
Durable Goods	185.5	190.6	192.3	193.1	195.9	199.6	203.4	207.2	211.1	212.2
Tran., Warehousing & Utility	214.2	230.4	243.2	253.7	259.9	261.4	263.9	265.1	264.7	266.6
Trade	603.5	626.1	617.5	614.8	615.8	618.5	621.3	624.0	626.8	629.5
Information	213.4	231.1	230.1	231.6	232.2	232.6	233.0	233.2	233.4	234.4
Financial Activities	210.8	214.5	221.5	223.3	224.1	225.0	225.8	226.7	227.5	228.2
Professional & Bus. Servs.	629.5	663.3	671.4	678.8	685.1	688.9	691.8	694.2	696.3	700.9
Educational & Health Servs.	839.6	874.5	891.3	904.5	912.2	921.4	930.7	940.0	949.5	959.3
Leisure & Hospitality	429.0	517.6	560.3	569.4	573.7	579.6	585.5	591.4	597.2	603.9
Other Services	134.1	149.9	152.7	154.0	155.7	156.9	158.0	159.1	160.2	161.5
Federal Government	47.6	47.8	48.2	47.6	51.1	51.0	50.8	50.6	50.3	50.3
State and Local Government	510.8	518.6	536.0	550.8	559.1	562.4	563.3	563.0	562.1	562.9
Construction Activity, Registered Autos and Population										
Residential Building Permits (Thous. Units)	22.8	27.2	23.6	22.8	24.3	24.4	23.8	22.9	21.9	21.4
Nonresidential Construction										
Real (Mil. 2012 \$)	1172.7	892.6	1562.6	2224.9	2568.6	2575.6	2490.0	2396.0	2298.8	2366.2
Nominal (Mil. \$)	1504.1	1177.1	2123.1	3105.0	3681.1	3789.2	3760.1	3712.3	3654.7	3861.2
Registered Autos (Thous.)	6597.8	6632.4	6637.3	6653.0	6667.6	6680.8	6691.7	6700.9	6708.4	6715.3
Net Immigration (Thous.)	-130.9	-17.7	-8.7	-3.8	4.5	18.9	17.9	17.5	15.7	16.2
Population (Thous.)	9829.5	9841.4	9857.3	9873.2	9894.6	9928.3	9959.2	9987.6	10013.8	10040.0
(%Change)	-1.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3

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

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Personal Income and Taxable Sales										
Personal Income										
(Billion \$)	1104.6	1148.2	1193.2	1239.6	1287.4	1336.7	1387.6	1440.0	1494.0	1549.6
(%Change)	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.7
Real Personal Income										
(Billion 2012\$)	663.8	675.1	686.7	698.4	710.3	722.4	734.7	747.3	760.0	773.0
(%Change)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Taxable Sales										
(Billion \$)	293.9	300.7	309.7	317.5	325.8	336.9	346.4	356.4	366.9	378.1
(%Change)	2.3	2.3	3.0	2.5	2.6	3.4	2.8	2.9	3.0	3.0
Real Taxable Sales										
(Billion 2012\$)	176.6	176.8	178.2	178.9	179.8	182.1	183.4	184.9	186.7	188.6
(%Change)	0.0	0.1	0.8	0.4	0.5	1.3	0.7	0.8	0.9	1.0
Price Inflation										
Consumer Prices (%Change)	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0
Employment and Labor Force (Household Survey, %Change)										
Employment	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Labor Force	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Unemployment Rate (%)	4.5	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.2
Nonfarm Employment (Payroll Survey, %Change)										
Total Nonfarm	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Natural Resources & Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Manufacturing	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nondurable Goods	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Durable Goods	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Tran., Warehousing & Utility.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Trade	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Information	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Financial Activities	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Professional & Bus. Servs.	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Educational & Health Servs.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Leisure & Hospitality	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Other Services	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Federal Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nonfarm Employment (Payroll Survey, Thousand)										
Total Nonfarm	4956.7	4991.6	5026.9	5062.5	5098.3	5134.5	5171.1	5207.9	5245.1	5282.6
Natural Resources & Min.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Construction	160.4	161.9	163.4	165.0	166.5	168.1	169.7	171.3	172.9	174.5
Manufacturing	364.1	364.4	364.7	365.0	365.3	365.6	365.9	366.1	366.4	366.7
Nondurable Goods	151.6	151.7	151.7	151.8	151.9	151.9	152.0	152.0	152.1	152.1
Durable Goods	212.5	212.7	212.9	213.2	213.4	213.7	213.9	214.1	214.4	214.6
Tran., Warehousing & Utility	269.3	272.1	274.9	277.7	280.6	283.5	286.4	289.3	292.3	295.3
Trade	632.2	635.0	637.8	640.6	643.4	646.2	649.0	651.9	654.7	657.6
Information	235.7	237.1	238.5	239.8	241.2	242.6	244.0	245.4	246.8	248.2
Financial Activities	228.7	229.3	229.9	230.5	231.1	231.7	232.2	232.8	233.4	234.0
Professional & Bus. Servs.	706.4	711.9	717.5	723.1	728.7	734.4	740.2	746.0	751.8	757.7
Educational & Health Servs.	969.3	979.5	989.7	1000.0	1010.5	1021.0	1031.7	1042.4	1053.3	1064.3
Leisure & Hospitality	611.0	618.2	625.5	632.9	640.4	648.0	655.6	663.4	671.2	679.1
Other Services	162.7	164.0	165.3	166.6	168.0	169.3	170.6	172.0	173.4	174.7
Federal Government	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
State and Local Government	564.4	565.9	567.5	569.0	570.5	572.0	573.5	575.1	576.6	578.1
Construction Activity, Registered Autos and Population										
Residential Building Permits (Thous. Units)	21.2	21.1	21.0	20.9	20.8	20.8	20.7	20.7	20.7	20.6
Nonresidential Construction										
Real (Mil. 2012\$)	2469.7	2552.3	2617.5	2668.5	2708.2	2738.8	2762.2	2779.9	2793.1	2802.8
Nominal (Mil. \$)	4135.9	4386.3	4616.4	4830.0	5030.5	5220.8	5403.6	5581.0	5754.7	5926.3
Registered Autos (Thous.)	6722.4	6729.4	6736.4	6743.4	6750.4	6757.4	6764.4	6771.4	6778.4	6785.4
Net Immigration (Thous.)	16.7	17.3	17.8	18.4	18.4	18.5	18.5	18.6	18.6	18.7
Population (Thous.)	10066.2	10092.6	10119.0	10145.5	10172.0	10198.7	10225.4	10252.1	10278.9	10305.8
(%Change)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

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

	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Personal Income and Taxable Sales										
Personal Income										
(Billion \$)	1607.0	1666.1	1727.0	1789.8	1854.4	1921.1	1989.7	2060.3	2133.1	2208.1
(%Change)	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.6	3.5	3.5
Real Personal Income										
(Billion 2012\$)	786.2	799.6	813.2	827.1	841.2	855.5	870.1	885.0	900.1	915.4
(%Change)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Taxable Sales										
(Billion \$)	386.2	394.3	402.6	410.9	419.3	427.8	436.4	445.1	453.9	462.7
(%Change)	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Real Taxable Sales										
(Billion 2012\$)	188.9	189.2	189.6	189.9	190.2	190.5	190.9	191.2	191.5	191.8
(%Change)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Price Inflation										
Consumer Prices (%Change)	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8
Employment and Labor Force (Household Survey, %Change)										
Employment	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Labor Force	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Unemployment Rate (%)	4.2	4.2	4.1	4.1	4.1	4.0	4.0	3.9	3.9	3.8
Nonfarm Employment (Payroll Survey, %Change)										
Total Nonfarm	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Natural Resources & Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Manufacturing	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nondurable Goods	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Durable Goods	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Tran., Warehousing & Utility	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Trade	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Information	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Financial Activities	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Professional & Bus. Servs.	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Educational & Health Servs.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Leisure & Hospitality	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Other Services	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Federal Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nonfarm Employment (Payroll Survey, Thousand)										
Total Nonfarm	5320.5	5358.7	5397.2	5436.1	5475.4	5515.0	5554.9	5595.3	5636.0	5677.0
Natural Resources & Min.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Construction	176.2	177.8	179.5	181.2	182.9	184.7	186.4	188.2	190.0	191.7
Manufacturing	367.0	367.3	367.6	367.9	368.2	368.5	368.8	369.1	369.4	369.7
Nondurable Goods	152.2	152.2	152.3	152.4	152.4	152.5	152.5	152.6	152.6	152.7
Durable Goods	214.8	215.1	215.3	215.6	215.8	216.0	216.3	216.5	216.8	217.0
Tran., Warehousing & Utility	298.3	301.4	304.5	307.6	310.8	313.9	317.2	320.4	323.7	327.0
Trade	660.5	663.4	666.3	669.2	672.1	675.1	678.0	681.0	684.0	687.0
Information	249.6	251.1	252.5	254.0	255.4	256.9	258.4	259.9	261.4	262.9
Financial Activities	234.6	235.2	235.8	236.4	237.0	237.6	238.2	238.8	239.4	240.0
Professional & Bus. Servs.	763.6	769.6	775.6	781.7	787.8	793.9	800.1	806.4	812.7	819.1
Educational & Health Servs.	1075.4	1086.7	1098.0	1109.5	1121.1	1132.8	1144.6	1156.5	1168.6	1180.8
Leisure & Hospitality	687.1	695.3	703.5	711.8	720.2	728.7	737.3	746.0	754.8	763.7
Other Services	176.1	177.5	178.9	180.3	181.8	183.2	184.7	186.1	187.6	189.1
Federal Government	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
State and Local Government	579.7	581.2	582.8	584.3	585.9	587.4	589.0	590.6	592.2	593.7
Construction Activity, Registered Autos and Population										
Residential Building Permits										
(Thous. Units)	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
Nonresidential Construction										
Real (Mil. 2012\$)	2809.7	2814.5	2817.6	2819.3	2820.1	2820.1	2819.4	2818.3	2816.8	2815.0
Nominal (Mil. \$)	6096.8	6267.5	6439.1	6612.3	6787.8	6965.9	7147.1	7331.8	7520.2	7712.7
Registered Autos (Thous.)	6792.5	6799.5	6806.5	6813.6	6820.6	6827.6	6834.7	6841.7	6849.0	6852.8
Net Immigration (Thous.)	18.7	18.8	18.8	18.9	18.9	19.0	19.0	19.1	19.1	19.2
Population (Thous.)	10332.8	10359.9	10387.0	10414.2	10441.4	10468.7	10496.1	10523.6	10551.1	10578.8
(%Change)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3