

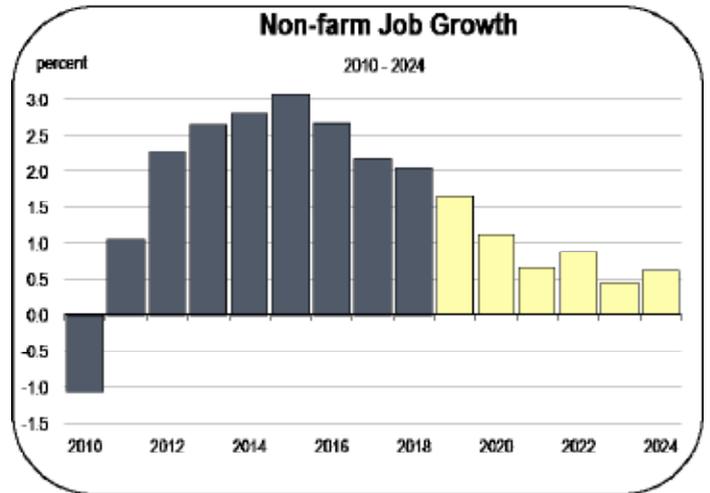
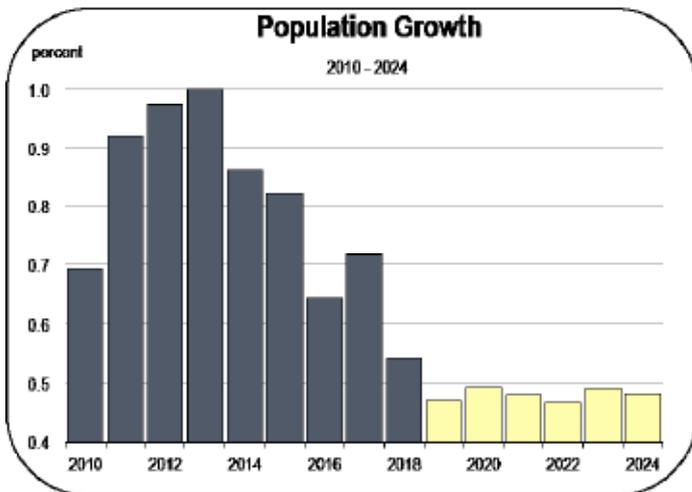
# California Economic Forecast

## Forecast Summary

- 284,000 non-farm jobs will be created in California during 2019.
- Job growth will decelerate, and over the entire 2018–2024 period, an average of 156,000 new jobs per year are expected.
- Employment growth will be led by healthcare, professional business services, leisure and hospitality, and government. Together, these sectors will account for 79 percent of net job creation through 2024.
- Between 2018 and 2024, employment contractions are projected for manufacturing and retail trade. The risk of contraction is also elevated in wholesale trade.
- The unemployment rate averaged 4.2 percent in 2018, and is near its lowest sustainable level. The unemployment rate may begin to rise in 2020 or 2021.
- The population of California is expanding relatively slowly, and will expand even more slowly during the forecast period.
- Housing production has accelerated, but has not been sufficient to keep home prices from rising quickly, and housing affordability has become a major problem in parts of California.

## Job Growth

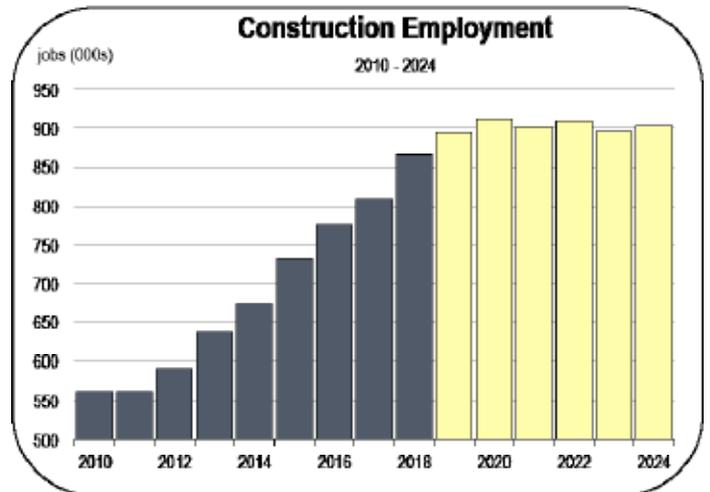
- Job growth decelerated sharply between 2015 and 2018, and will decelerate further in 2019 and 2020.



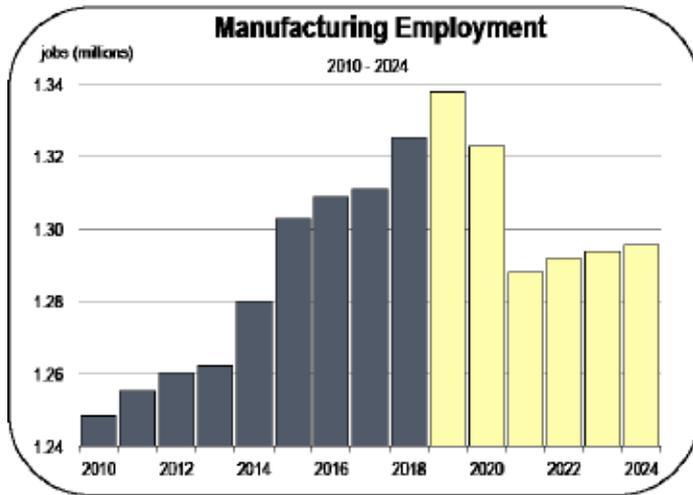
- The largest gains in 2018 were observed in professional business services (+80,000 jobs), private education and healthcare (+76,000 jobs), construction (+50,000 jobs), leisure and hospitality (+34,000 jobs), and transportation and warehousing (+32,000 jobs).
- The same industries are expected to produce the largest gains in 2019 as well.

## Construction Employment

- Construction employment is increasing at a rapid rate as building projects continue to break ground across the state.



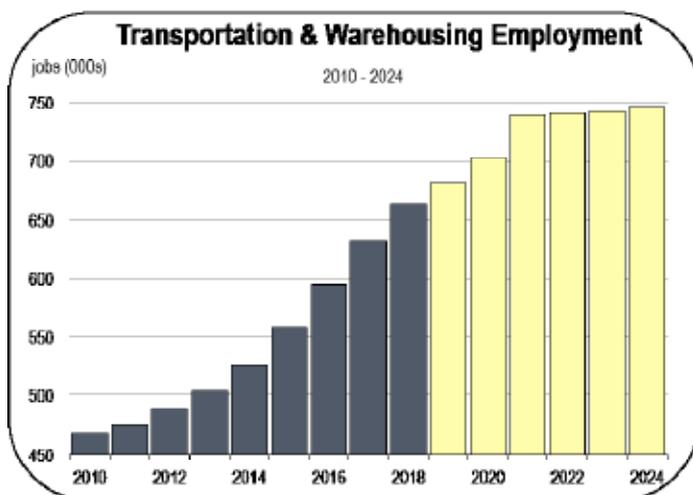
# California Economic Forecast



- Statewide, more than 114,000 new housing units were built in 2018 and more than \$32 billion was spent constructing and renovating non-residential structures.
- The peak of the building cycle is approaching, and construction employment may not increase substantially after 2020 or 2021.

## Manufacturing Employment

- Employment in the California manufacturing sector has been expanding for several years and will expand further in 2019.



- After 2019, employment levels may begin to contract.
- New trade barriers, including tariffs, have been implemented in the U.S. and its major trading partners, which may reduce demand for manufacturing workers in California, a state that is highly connected to the global marketplace.
- The manufacturing sector is highly sensitive to changes in the business cycle, and if the economy falls into recession in 2020 or 2021, California manufacturing jobs may be lost.

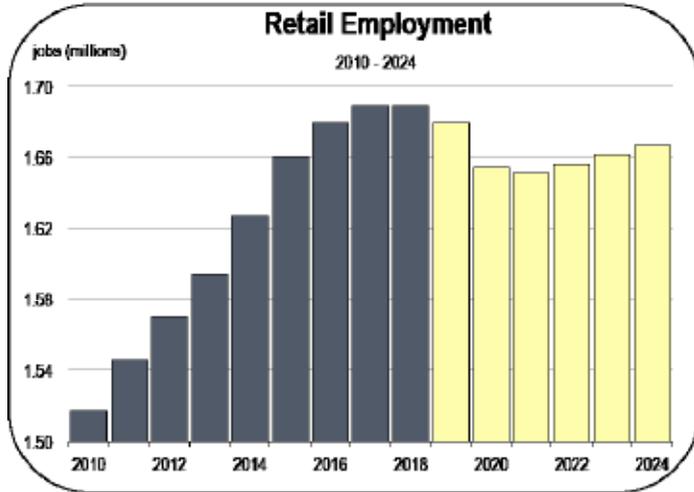
## Transportation and Warehousing Employment

- The transportation and warehousing sector is expanding sharply. This industry accounts for four percent of the employment base in California, but has been responsible for seven percent of all job growth over the past five years.
- Logistics firms have been relocating to Inland Southern California, the Central Valley, and the Sacramento Valley, which have affordable real estate and are close to major ports and freeways.
- Logistics centers are becoming a more prominent part of the business landscape because consumers are buying more goods online, rather than in stores, and having them shipped directly to their homes. Firms like Amazon and Walmart are establishing large warehouses that store goods close to large consumer markets, allowing them to deliver these goods in short time periods.
- The transition to online shopping is also creating jobs at delivery firms like UPS and FedEx.
- Growth in this sector will slow down in 2019 and 2020. The risk of recession will increase, and the transportation/warehousing industry is highly susceptible to changes in the business cycle.

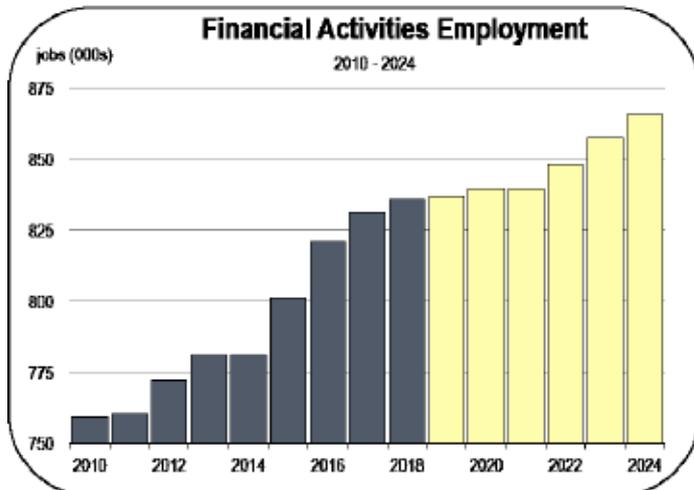
## Retail Trade Employment

- Employment in the California retail sector did not change in 2018 and will begin to contract in 2019.
- The retail industry is being divided into three groups: stores that face heavy online competition, stores that don't, and online retailers themselves.

# California Economic Forecast



- In 2018, jobs were lost in sectors facing online competition:
  - Clothing stores
  - Consumer electronics stores
  - Department stores (e.g. Macy's)
  - Office supply stores
- Jobs were gained at stores not yet facing strong online competition:
  - Car dealers
  - Gas stations
  - Warehouse supercenters (e.g. Costco).
- In 2018, more than 4,000 jobs were created at online retailers located in California.



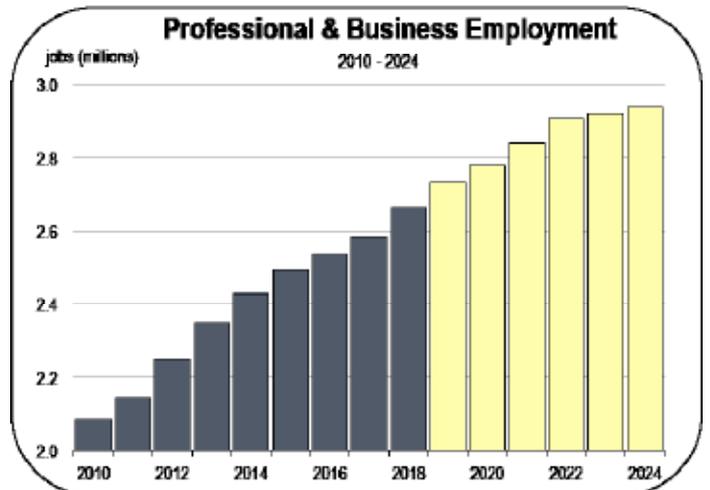
- In 2019 retail employment will be contracting as losses from brick-and-mortar stores outweigh gains at online retailers. This contraction is expected to continue for several years.

## Financial Activities Employment

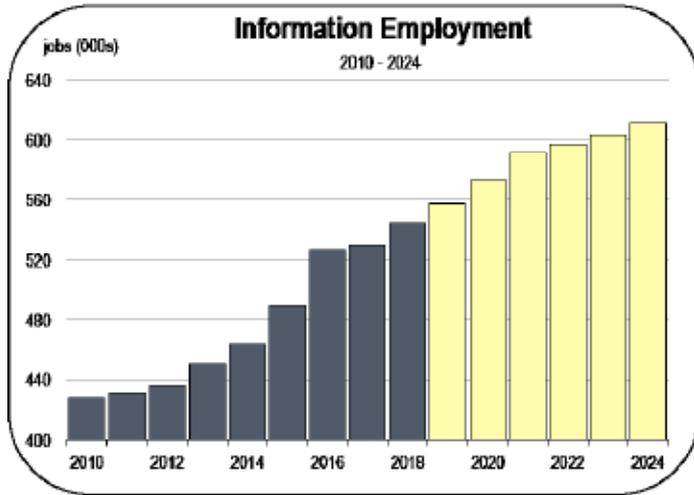
- The financial activities sector generated 5,000 new jobs last year.
- In the major business areas of the state, such as Los Angeles County and the San Francisco Bay Area, this sector contains money management firms and transaction-clearing businesses.
- In most counties of California, including entire regions like the Central Valley and Northern California, the financial activities sector is comprised almost entirely of banks and real estate firms.
- Local banks have been shedding jobs as the banking sector offers more online options and fewer customers utilize in-person services.
- Real estate companies have been expanding to accommodate an uptick in homebuilding and non-residential leasing activity.
- Slow growth is expected in 2020 or 2021, but contractions are possible if the housing market softens or the economy falls into recession.

## Professional and Business Services Employment

- 80,000 professional and business services jobs were created in 2018. Many were in high-paying sectors but some were in blue collar and service positions.



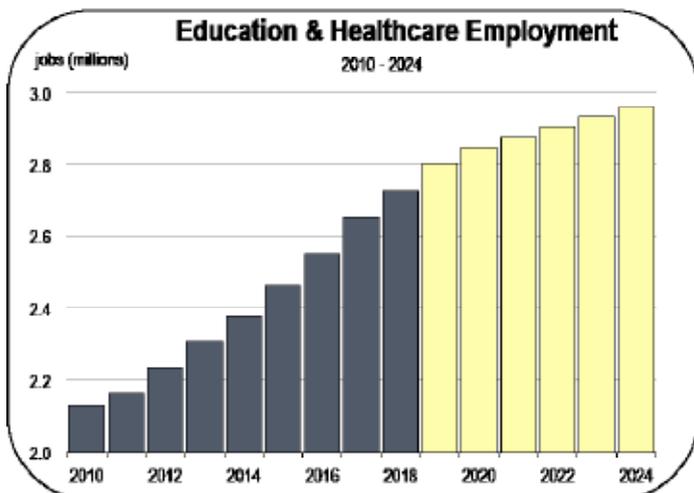
# California Economic Forecast



- Corporate and regional headquarters (22,000 jobs created in 2018)
- Business consulting firms (19,000 jobs)
- Temp agencies (16,000 jobs)
- Business security and maintenance contractors (14,000 jobs)
- IT consulting companies (14,000 jobs)
- Scientific research labs (12,000 jobs)
- Architecture and engineering firms (7,000 jobs)
- Accounting and bookkeeping services (5,000 jobs)
- Law firms (3,000 jobs)
- Job growth will decelerate over the forecast period, but this sector will still create more jobs than any other industry in the state.

## Information Employment

- In many parts of California, the information sector is primarily comprised of newspapers, telecommunications firms, and movie theaters.



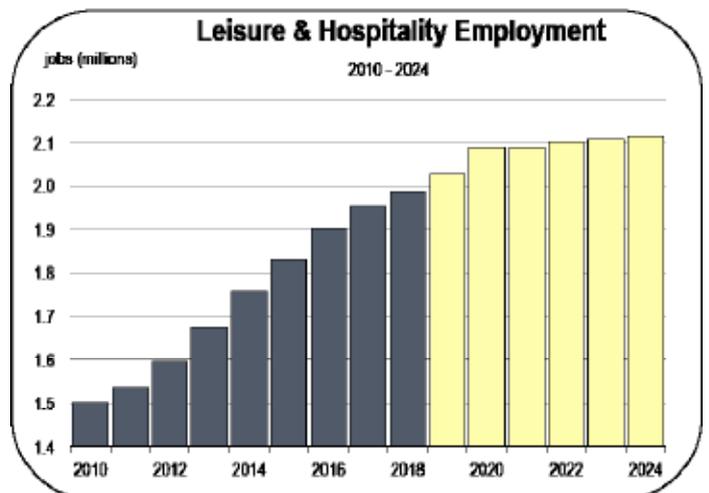
- In the major business sectors of Los Angeles County and the San Francisco Bay Area, the information sector is home to tech firms that build software, create online content platforms (e.g. YouTube), provide data services, and provide access to the internet.
- The information sector has created 108,000 jobs over the last five years, and virtually all have been in tech and data firms. Telecommunications companies, newspapers, and movie theaters have typically lost jobs across the state.
- Between 65,000 and 70,000 more jobs should be generated by 2024, almost exclusively in tech and data services.

## Private Education and Healthcare Employment

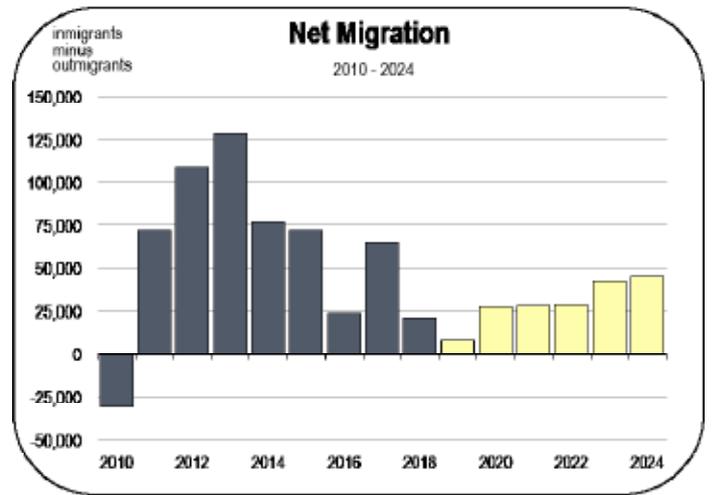
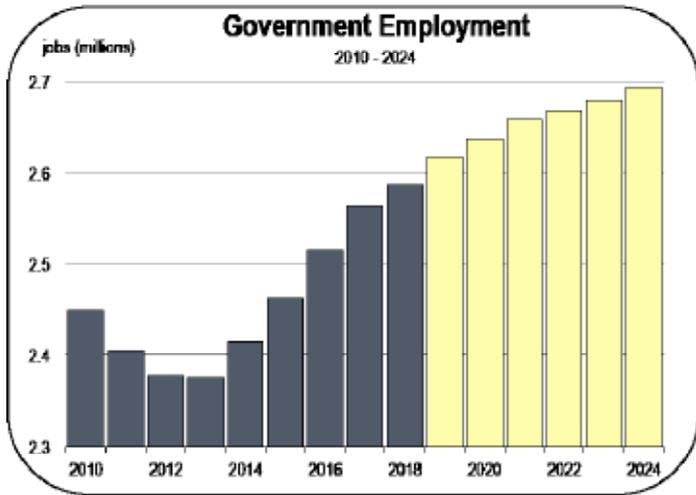
- This sector grew quickly for much of the last decade and more than 75,000 jobs were created in 2018.
- Gains have been widespread, with strength in doctors' offices, home health services, outpatient care centers, and facilities that serve the elderly and people with disabilities.
- The private education industry gained approximately 22,000 jobs in 2018 (public schools are included in the government sector).
- The future of the U.S. health insurance landscape is unknown, and legislative changes could influence job growth in this sector.

## Leisure and Hospitality Employment

- The leisure and hospitality sector created 389,000 jobs between 2012 and 2018 and is expected to create 41,000 more in 2019.



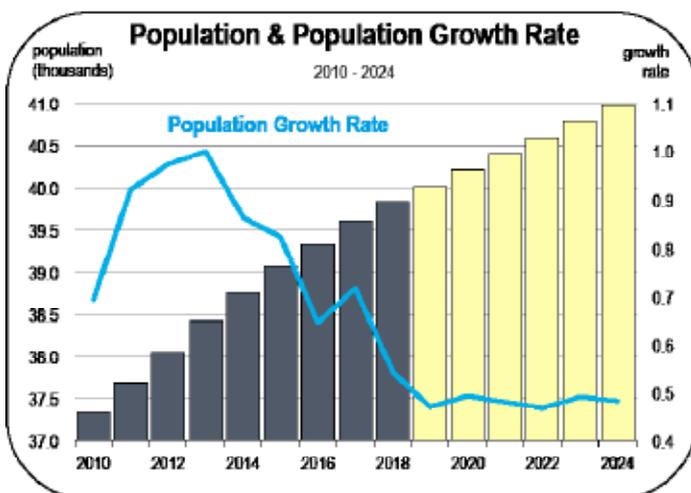
# California Economic Forecast



- There has been a large-scale expansion in the California hotel and restaurant industries as visitor activity has increased and as busy households have chosen to eat out rather than cook at home.
- After 2020, growth in the leisure sector may become more moderate, and this sector may be characterized by employment contraction if the economy falls into recession during the 2018–2024 forecast period.
- The leisure industry is sensitive to changes in the minimum wage. As California’s minimum wage rises to \$15 per hour by 2022, job growth could be impacted.

## Government Employment

- Government agencies created 23,000 jobs in 2018 and will generate approximately 30,000 new jobs in 2019.
- Future employment levels will be determined by population growth and by the condition of federal, state, and local government budgets.

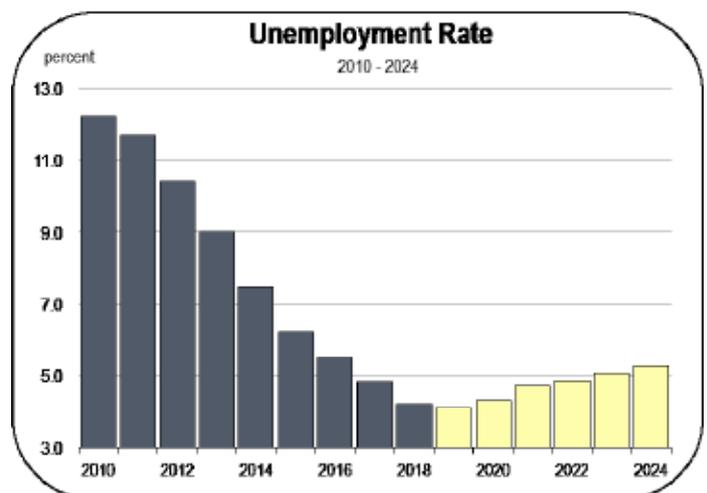


## Population Growth

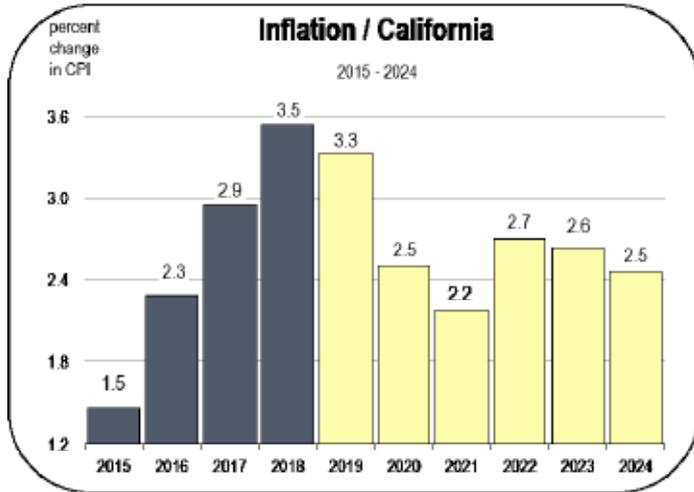
- The California population expanded by 0.5 percent in 2018.
- Net migration was low, adding 20,900 residents to the statewide population.
- Population growth is expected to average 0.5 percent per year between 2018 and 2024, and the state will approach 41 million residents by 2024.

## Unemployment and Inflation Rates

- The unemployment rate in California was 4.2 percent in 2018, which is the lowest annual rate in at least 60 years.
- The unemployment rate is near its lowest sustainable level and may begin to rise in 2020 or 2021.
- Inflation accelerated in 2018 as home prices and energy costs increased across California.



# California Economic Forecast



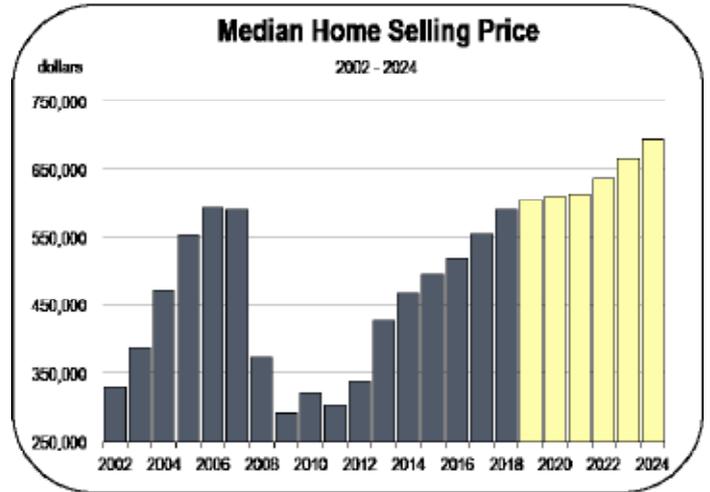
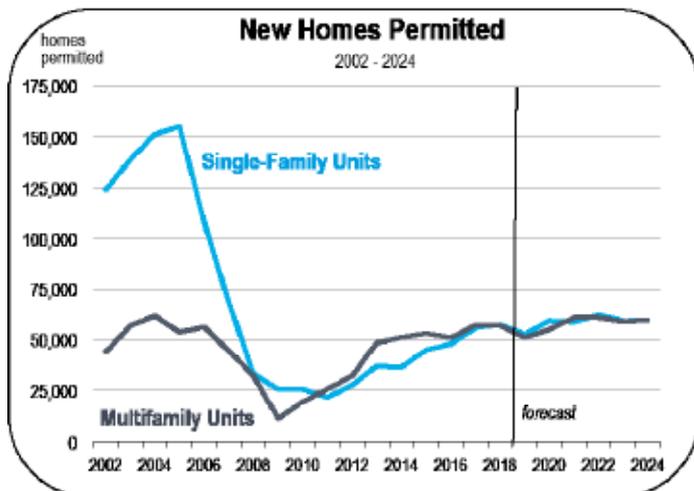
- In 2019 and 2020, inflation is expected to be within a range of 2.0 percent and 3.5 percent.

## New Housing Production

- From 2013 to 2018, an average of 99,500 new homes were permitted each year.
- Between 2019 and 2024, housing production is expected to average 116,200 units per year. Construction should be split fairly evenly between single-family and multifamily units.
- Development will be concentrated in the largest areas of the state, including Los Angeles County and the San Francisco Bay Area.

## Home Prices

- Home prices in California have increased rapidly in recent years, and the median home price has now exceeded \$590,000.

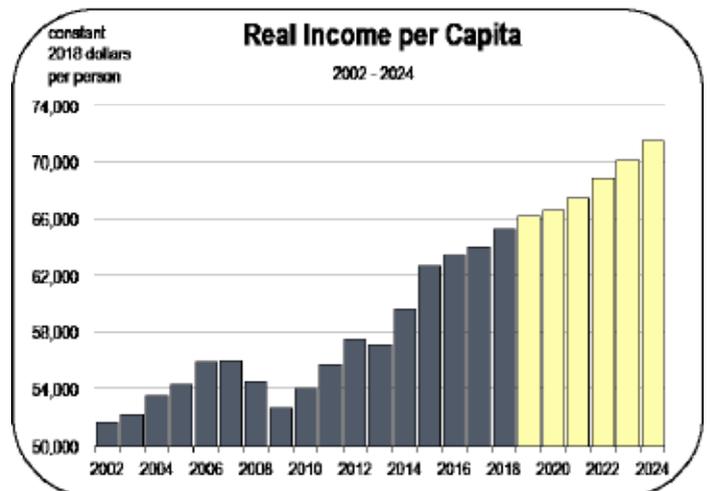


- Housing affordability has become a major problem along the coastal areas of the state. Homebuilding has not been sufficient to keep pace with population growth, and the typical household now spends between 35 percent and 50 percent of its income on housing costs.

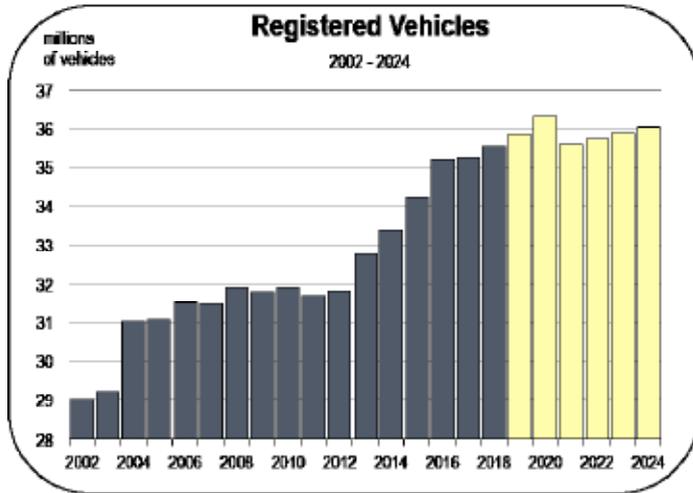
- Homes are much more affordable in the central, eastern, and northern regions of California. In these places, the typical household spends less than 25 percent of income on housing costs.

## Income per Capita

- Income per capita in California was \$65,200 in 2018.
- Over the last six years, real income per capita has risen at a rate of 2.1 percent per year.
- Over the next six years, real income per capita is expected to increase by an average of 1.5 percent per year.

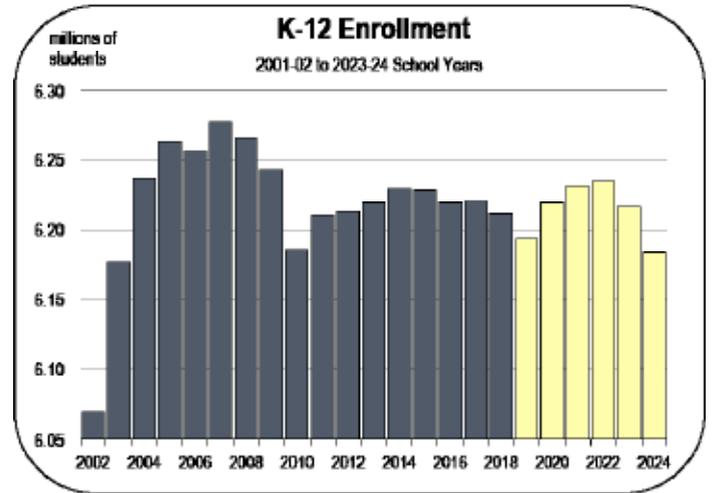


# California Economic Forecast



## Registered Vehicles

- There were 35.6 million registered vehicles in California in 2018.
- By 2024, it is expected that the state will have 36.0 million registered vehicles.



## Public School Enrollment

- In California, approximately 6.21 million students were enrolled in K-12 public schools in 2018.
- By 2024, there are expected to be 6.18 million enrolled students. Enrollment will decline because the population aged 5 to 17 will decline.

# California Economic Forecast

## Economic Indicators

## 2015-2018 History, 2019-2050 Forecast

	Population (people)	House- holds (millions)	Average Household Income (dollars)	New Homes Permitted (homes)	Registered Vehicles (millions)	Personal Income (trillions)	Taxable Retail Sales (billions)	Local Sales Tax (billions)	Real Industrial Production (billions)	Real per Capita Income (dollars)	School Enrollment (millions)	Births (people)	Deaths (people)
2015	39,076,128	12.8	\$175,495	98,073	34.2	\$2.3	\$438.4	\$26	\$417.5	\$62,610	6.2	491,748	259,206
2016	39,328,337	12.9	\$180,955	98,881	35.2	\$2.3	\$447.9	\$27	\$419.6	\$63,394	6.2	488,827	262,240
2017	39,610,556	12.9	\$188,615	112,886	35.3	\$2.4	\$465.4	\$28	\$436.3	\$64,010	6.2	471,658	268,189
2018	39,825,181	13.0	\$199,655	114,370	35.6	\$2.6	\$480.2	\$29	\$449.9	\$65,231	6.2	454,920	275,409
2019	40,012,386	13.1	\$208,507	103,712	35.9	\$2.7	\$492.8	\$30	\$456.5	\$66,172	6.2	450,935	281,185
2020	40,209,730	13.2	\$214,140	114,313	36.3	\$2.8	\$508.5	\$31	\$458.5	\$66,611	6.2	454,151	283,834
2021	40,402,830	13.3	\$220,811	119,425	35.6	\$2.9	\$521.5	\$31	\$463.8	\$67,472	6.2	454,231	289,084
2022	40,591,810	13.4	\$230,463	122,839	35.7	\$3.1	\$537.1	\$32	\$472.7	\$68,853	6.2	457,189	296,399
2023	40,791,200	13.5	\$239,874	118,040	35.9	\$3.2	\$555.8	\$33	\$482.4	\$70,113	6.2	460,581	303,695
2024	40,988,040	13.6	\$249,800	119,069	36.0	\$3.4	\$570.7	\$34	\$492.5	\$71,527	6.2	463,001	310,905
2025	41,167,990	13.8	\$258,879	120,964	36.2	\$3.6	\$584.5	\$35	\$501.7	\$72,743	6.1	464,250	318,565
2026	41,349,810	13.9	\$267,740	119,426	36.5	\$3.7	\$598.2	\$36	\$510.8	\$73,876	6.1	466,602	325,938
2027	41,534,900	14.0	\$277,141	121,157	36.7	\$3.9	\$611.5	\$37	\$520.5	\$75,144	6.1	470,076	333,626
2028	41,709,580	14.1	\$286,740	123,505	36.9	\$4.0	\$625.5	\$38	\$529.7	\$76,388	6.0	473,782	341,754
2029	41,887,850	14.2	\$294,618	122,281	37.1	\$4.2	\$640.3	\$38	\$534.9	\$77,051	6.0	478,695	350,188
2030	42,066,860	14.3	\$302,625	120,365	37.4	\$4.3	\$654.8	\$39	\$540.1	\$77,761	6.0	483,034	359,263
2031	42,235,540	14.4	\$310,659	118,395	37.6	\$4.5	\$669.0	\$40	\$545.5	\$78,511	5.9	485,735	368,127
2032	42,392,790	14.6	\$318,323	116,877	37.8	\$4.6	\$684.8	\$41	\$548.7	\$78,979	5.9	486,982	377,020
2033	42,540,380	14.7	\$326,656	114,126	38.1	\$4.8	\$698.3	\$42	\$554.9	\$79,880	5.9	490,585	385,933
2034	42,685,110	14.8	\$335,397	112,407	38.3	\$5.0	\$713.4	\$43	\$560.1	\$80,670	5.8	494,001	394,606
2035	42,825,560	14.9	\$344,546	110,297	38.5	\$5.1	\$729.6	\$44	\$565.1	\$81,426	5.8	497,999	403,862
2036	42,967,620	15.0	\$353,873	109,274	38.7	\$5.3	\$749.0	\$45	\$567.6	\$81,840	5.8	499,968	412,421
2037	43,106,580	15.1	\$363,613	107,870	39.0	\$5.5	\$769.7	\$46	\$569.7	\$82,211	5.8	502,821	420,453
2038	43,230,810	15.2	\$373,734	105,882	39.2	\$5.7	\$789.4	\$47	\$573.1	\$82,786	5.9	503,427	428,247
2039	43,343,650	15.3	\$384,125	103,228	39.4	\$5.9	\$811.2	\$49	\$575.3	\$83,211	5.9	503,486	435,725
2040	43,444,210	15.4	\$394,664	101,892	39.6	\$6.1	\$832.7	\$50	\$577.7	\$83,696	5.9	500,585	442,705
2041	43,531,660	15.5	\$405,243	99,559	39.9	\$6.3	\$853.2	\$51	\$580.9	\$84,309	5.9	496,833	448,338
2042	43,608,380	15.6	\$415,888	97,098	40.1	\$6.5	\$873.4	\$52	\$584.2	\$84,971	5.9	493,954	453,645
2043	43,675,510	15.7	\$426,592	94,771	40.3	\$6.7	\$893.2	\$54	\$587.8	\$85,678	5.9	493,253	458,962
2044	43,735,670	15.7	\$437,398	93,280	40.5	\$6.9	\$911.7	\$55	\$592.1	\$86,524	6.0	494,030	464,575
2045	43,787,930	15.8	\$448,221	92,072	40.8	\$7.1	\$932.4	\$56	\$594.8	\$87,165	6.0	494,455	471,020
2046	43,834,080	15.9	\$459,019	90,859	41.0	\$7.3	\$952.6	\$57	\$597.6	\$87,843	6.0	495,138	476,385
2047	43,874,840	16.0	\$469,771	89,726	41.2	\$7.5	\$973.2	\$58	\$600.1	\$88,470	6.0	495,692	480,678
2048	43,910,780	16.1	\$480,779	88,614	41.4	\$7.7	\$994.3	\$60	\$602.5	\$89,105	6.0	496,337	484,398
2049	43,942,560	16.2	\$492,065	87,514	41.6	\$8.0	\$1,015.9	\$61	\$604.8	\$89,748	6.1	497,165	487,764
2050	43,969,930	16.3	\$503,643	86,450	41.9	\$8.2	\$1,037.9	\$62	\$607.2	\$90,401	6.1	498,002	491,455

## Employment Sectors

## 2015-2018 History, 2019-2050 Forecast

	Total Wage & Salary	Farm	Construction	Manufac- turing	Transportation & Utilities	Wholesale & Retail Trade (thousands of jobs)	Financial Activities	Professional Services	Information	Health & Education	Leisure	Government
2015	16,475	422	732	1,303	558	2,351	801	2,493	489	2,465	1,828	2,463
2016	16,905	425	776	1,309	595	2,372	821	2,534	527	2,553	1,901	2,516
2017	17,258	422	810	1,311	632	2,385	831	2,584	530	2,651	1,952	2,564
2018	17,605	424	865	1,325	664	2,388	836	2,664	544	2,727	1,986	2,587
2019	17,899	434	895	1,338	681	2,375	837	2,736	557	2,804	2,027	2,617
2020	18,088	429	912	1,323	702	2,355	840	2,778	573	2,850	2,088	2,637
2021	18,206	431	901	1,288	739	2,353	840	2,843	591	2,879	2,090	2,658
2022	18,360	432	909	1,292	741	2,361	848	2,908	597	2,907	2,100	2,667
2023	18,440	432	897	1,294	743	2,368	858	2,918	603	2,934	2,108	2,680
2024	18,551	432	903	1,296	746	2,375	865	2,938	611	2,962	2,115	2,694
2025	18,664	432	907	1,302	748	2,384	873	2,956	618	2,991	2,126	2,709
2026	18,773	433	909	1,308	751	2,391	881	2,974	625	3,016	2,139	2,722
2027	18,887	433	920	1,313	753	2,395	891	2,991	631	3,041	2,151	2,736
2028	18,997	433	929	1,318	755	2,405	900	3,009	636	3,060	2,163	2,749
2029	19,103	433	932	1,322	756	2,415	909	3,027	641	3,084	2,175	2,762
2030	19,206	434	935	1,325	757	2,424	918	3,045	647	3,106	2,186	2,775
2031	19,309	434	938	1,327	758	2,433	926	3,063	652	3,129	2,198	2,788
2032	19,413	434	942	1,330	760	2,441	934	3,081	658	3,153	2,210	2,801
2033	19,513	435	942	1,332	761	2,450	942	3,100	664	3,176	2,222	2,814
2034	19,616	435	946	1,334	762	2,458	949	3,118	669	3,199	2,233	2,827
2035	19,719	435	949	1,337	764	2,467	956	3,137	675	3,223	2,245	2,840
2036	19,825	435	956	1,339	765	2,475	963	3,155	681	3,246	2,256	2,853
2037	19,929	436	961	1,341	766	2,484	969	3,174	687	3,270	2,268	2,866
2038	20,033	436	964	1,343	768	2,492	975	3,193	692	3,295	2,279	2,880
2039	20,134	436	964	1,345	769	2,501	981	3,212	698	3,319	2,290	2,893
2040	20,240	436	969	1,347	770	2,509	987	3,231	704	3,344	2,301	2,906
2041	20,342	437	971	1,348	772	2,518	992	3,250	710	3,369	2,313	2,920
2042	20,444	437	972	1,350	773	2,527	997	3,270	716	3,394	2,324	2,934
2043	20,547	437	974	1,352	775	2,535	1,002	3,289	722	3,420	2,335	2,947
2044	20,653	437	978	1,354	776	2,544	1,007	3,309	729	3,445	2,346	2,961
2045	20,761	438	984	1,355	777	2,553	1,011	3,328	735	3,471	2,357	2,975
2046	20,868	438	990	1,357	779	2,562	1,015	3,348	741	3,497	2,368	2,989
2047	20,976	438	996	1,359	780	2,570	1,019	3,368	747	3,523	2,378	3,003
2048	21,085	439	1,002	1,360	781	2,579	1,023	3,388	754	3,549	2,389	3,017
2049	21,193	439	1,008	1,362	783	2,588	1,027	3,408	760	3,575	2,400	3,031
2050	21,302	439	1,014	1,364	784	2,597	1,030	3,429	767	3,602	2,410	3,045

# California Economic Forecast

## Socioeconomic Indicators

