

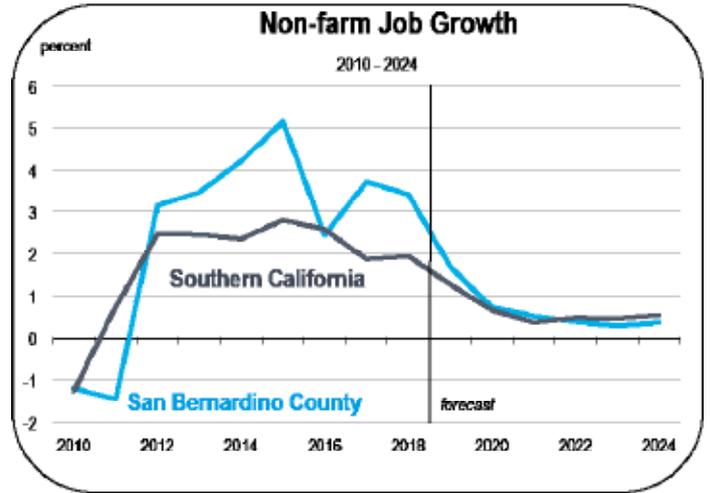
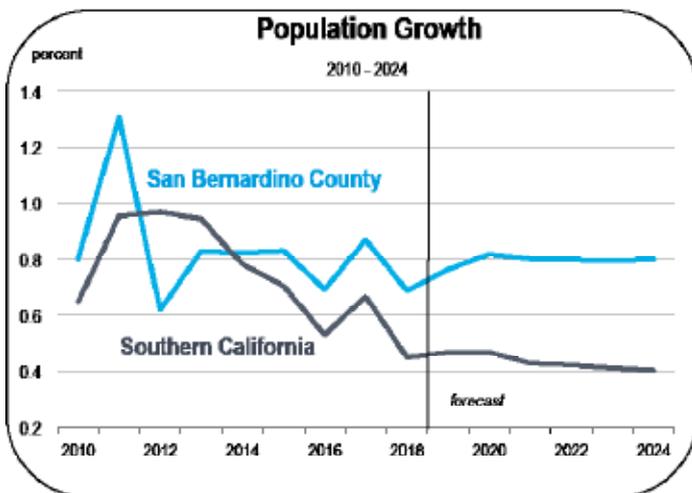
San Bernardino County Economic Forecast

Forecast Summary

- 13,300 non-farm jobs will be created in San Bernardino County during 2019. Over the following five years, an average of 3,700 new jobs per year are expected.
- Employment growth will be led by professional services, education and healthcare, transportation and warehousing, and government. These sectors will account for 93 percent of net job creation through 2024.
- Job losses are expected in construction and manufacturing.
- The unemployment rate averaged 4.0 percent in 2018, but may deteriorate to 4.2 percent in 2019.
- The population is expanding faster than most of Southern California, and will continue to do so. Affordable housing and plentiful job opportunities are drawing people to the county.
- Housing production is generally accelerating, but is not keeping pace with population growth. Most new units have been single-family homes.

Job Growth

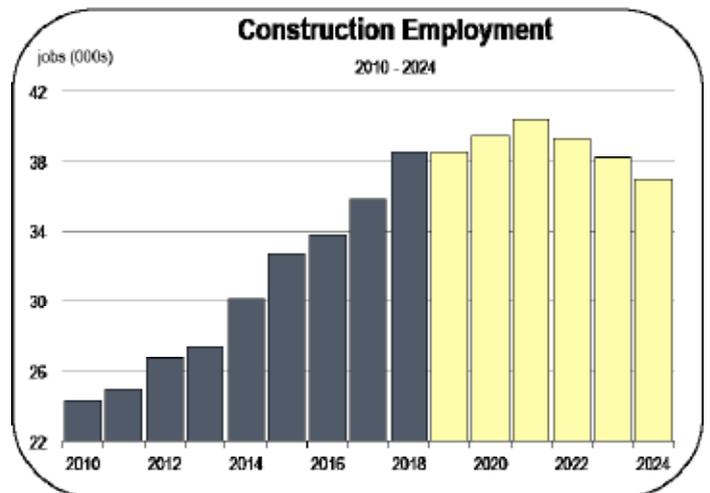
- In 2018, San Bernardino County had the fastest rate of job creation in Southern California.
- Job growth will be slower in 2019, and could turn negative in 2020 or 2021 if the economy enters a recession.
- Job creation in 2018 was highest in construction, education and healthcare, transportation and warehousing, and government.



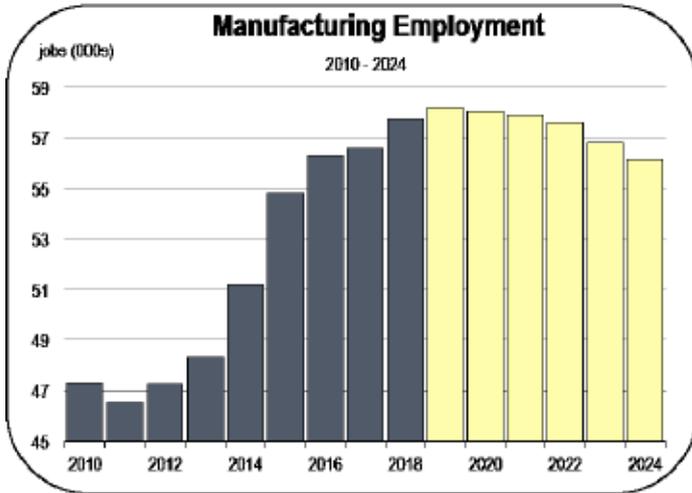
- Between 2012 and 2018, non-farm job growth averaged 3.7 percent per year.
- Between 2018 and 2024, growth is forecast to average 0.7 percent.
- Approximately 13,300 non-farm jobs will be created during 2019.
- Through 2024, an average of 3,700 new non-farm wage and salary jobs per year are forecast, with a rising number of self-employed workers.

Construction Employment

- The construction industry continues to generate large numbers of jobs.
- In 2018, construction workers were deployed most heavily to single-family housing projects, apartment and condo projects, and industrial real estate projects.



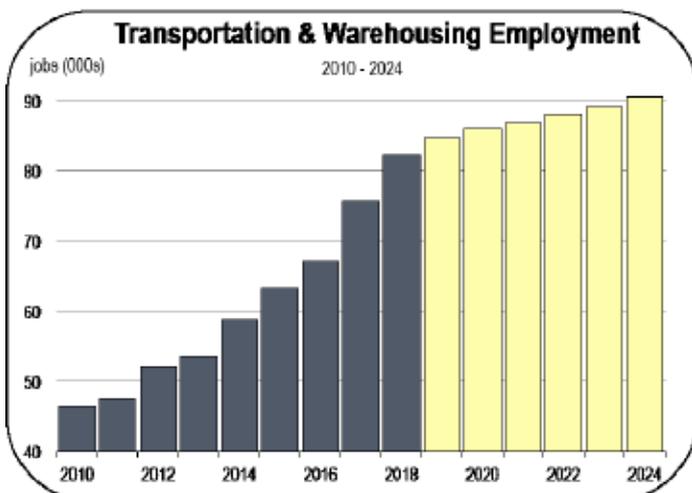
San Bernardino County Economic Forecast



- But we are near the peak of the building cycle, and construction companies are not expected to create a significant number of new jobs during the forecast period.

Manufacturing Employment

- This sector created 1,100 jobs in 2018.
- Job gains were strongest at companies that make plastic bottles and construction materials.
- Jobs were lost at firms that make furniture and transportation equipment.
- Growth will be slow over the next two years, as manufacturers continue to move jobs to lower cost areas of the U.S., or to other nations. We are also near the peak of the economic cycle, and the manufacturing sector typically loses jobs during recessions.

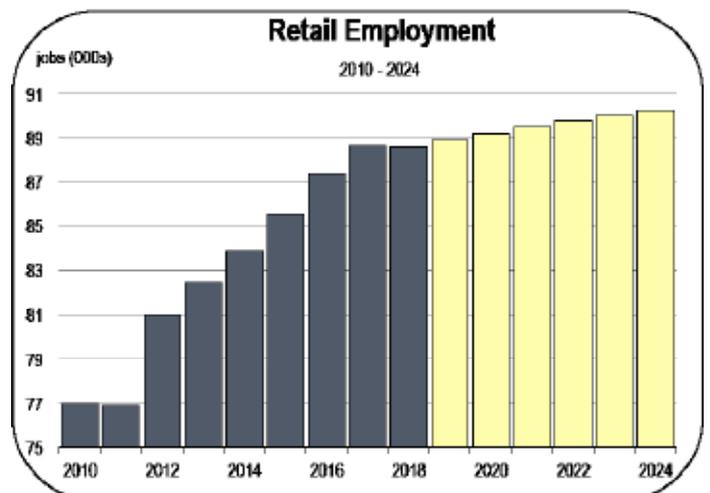


Transportation and Warehousing Employment

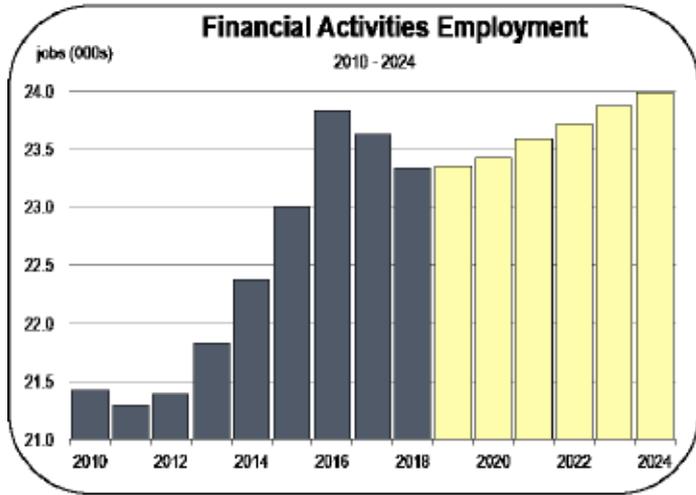
- The transportation and warehousing sector is booming. This industry accounts for 11 percent of the San Bernardino County employment base, but has been responsible for 22 percent of all job growth over the past five years.
- Logistics firms have been relocating to the county, but most growth has come from expansions at existing companies.
- Due to heavy development of logistics space, the Inland Empire is now a leading region for "megawarehouses," facilities of 1 million square feet or more.
- Examples include the Amazon buildings in Redlands and at the former site of Norton Air Force Base in the City of San Bernardino.
- More jobs will be created in 2019 and 2020 due to San Bernardino's comparative advantage as a hub for transportation and warehousing services.

Retail Trade Employment

- Retail employment was stagnant in 2018.
- The retail industry is being divided into two groups: stores that face heavy online competition, and stores that don't.
- Jobs were lost in sectors facing online competition:
 - Clothing stores
 - Sporting goods stores
 - Consumer electronics stores
 - Department stores (i.e. Macy's)



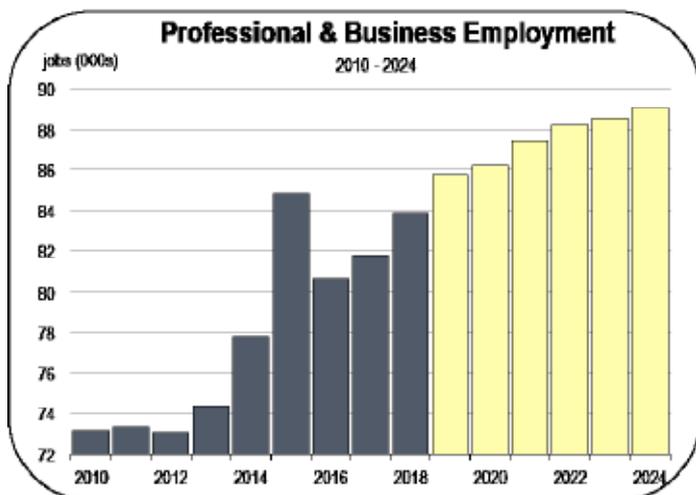
San Bernardino County Economic Forecast



- Jobs were gained in sectors not facing heavy online competition:
 - Car dealerships
 - Drug stores and healthcare stores
 - Grocery stores
 - Building materials stores
 - Gas stations
- Growth will continue to be slow, and could turn negative in 2020 or 2021 if the economy falls into recession.

Financial Activities Employment

- The financial activities industry is now losing jobs, but could return to growth over the forecast period.
- Banks and lending institutions reduced their headcounts because internet banking is overtaking in-person services, and because real estate transactions are declining.



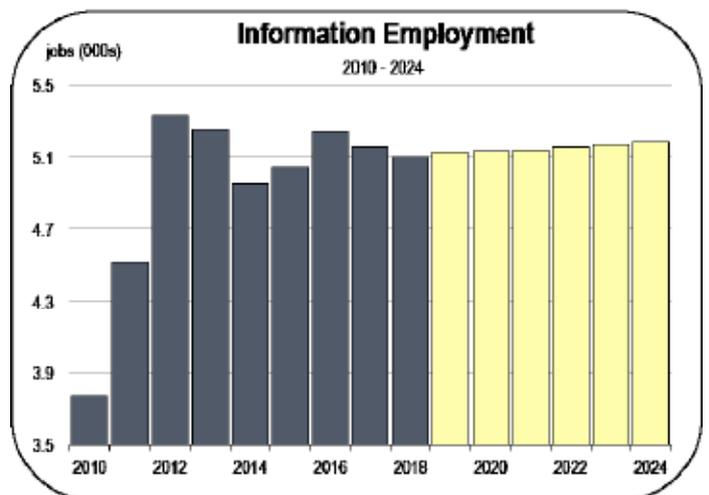
- Job losses were also observed at insurance firms.
- Very few jobs will be created in 2019, but the industry could expand in 2020 and 2021 if the economy has not yet moved into recession.

Professional and Business Services Employment

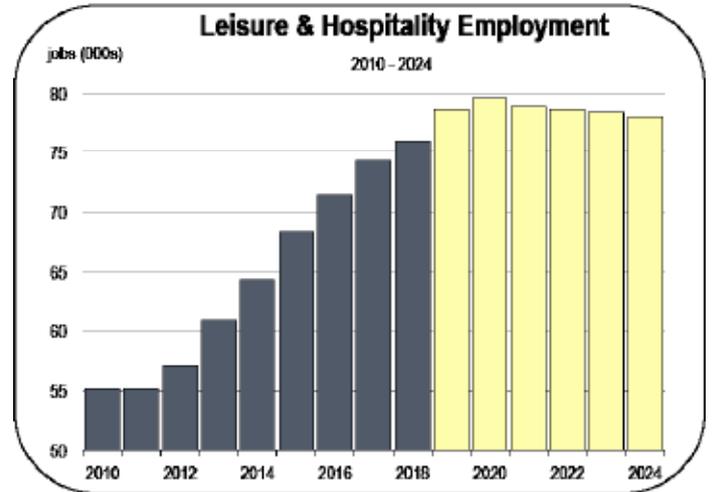
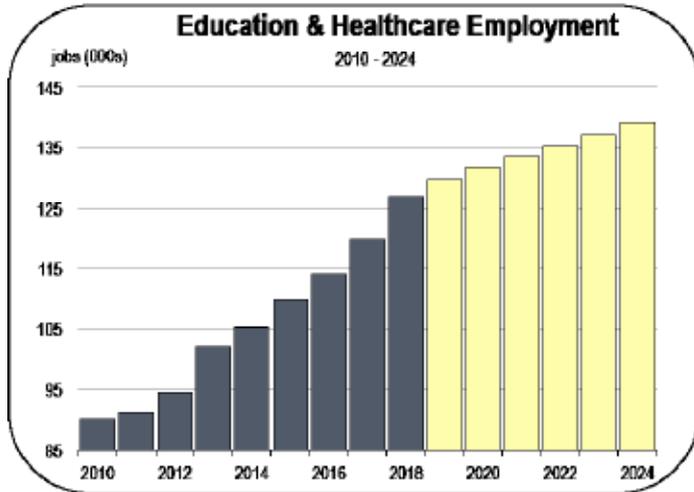
- This industry is now expanding at healthy rates.
- This industry is mostly comprised of business and technical consulting firms, and business support companies.
- Most of the 2018 gains were in IT consulting, engineering companies, and firms that provide corporate security.
- This industry will continue to expand, and will generate almost 2,000 jobs in 2019.

Information Employment

- This industry has been stagnant for several years, and this stagnation is forecast to persist.
- The information industry is primarily composed of telecommunications companies, newspaper publishers, software publishing firms, and data services companies (such as web hosting and cloud storage).
- Positive trends in data services have been offset by losses at newspapers and telecommunications companies, which are in long-term patterns of decline. The same dynamics will continue over the next few years.



San Bernardino County Economic Forecast



Private Education and Healthcare Employment

- Healthcare gains have been widespread, with strength in doctors' offices, home health services, outpatient care centers, and facilities that serve the elderly and disabled.
- Growth has been minimal in private schools and universities (public schools are included in the government industry).
- The future of the U.S. health insurance landscape is unknown, and legislative changes could influence job growth in this sector.

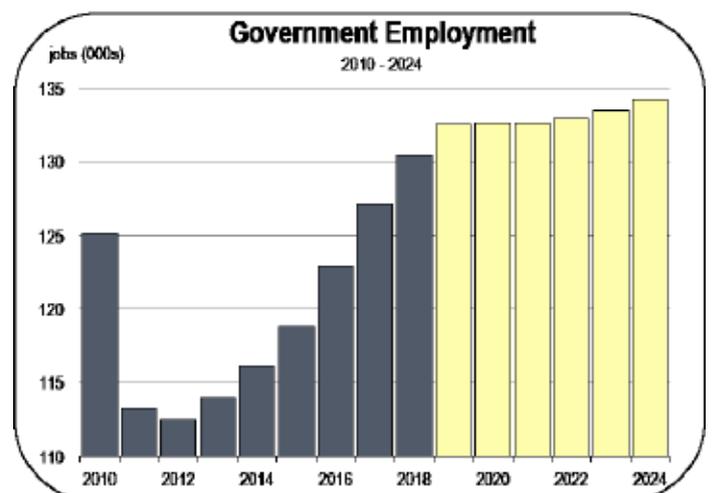
- Almost 200 jobs were created at California State University San Bernardino and the local community colleges.
- More than 2,000 jobs were generated at public elementary, junior high, and high schools.
- Another 800 were gained at municipal agencies.
- Future gains will depend on population growth and the condition of state and local government budgets, but the expanding public sector workforce is expected to slow down over the forecast horizon.

Leisure and Hospitality Employment

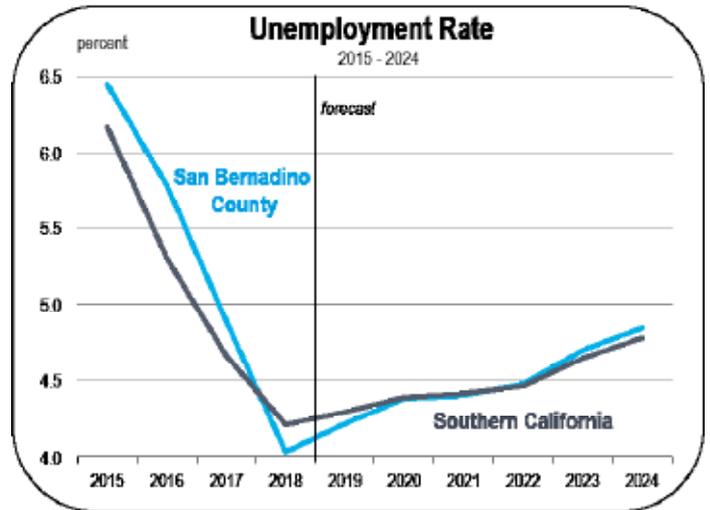
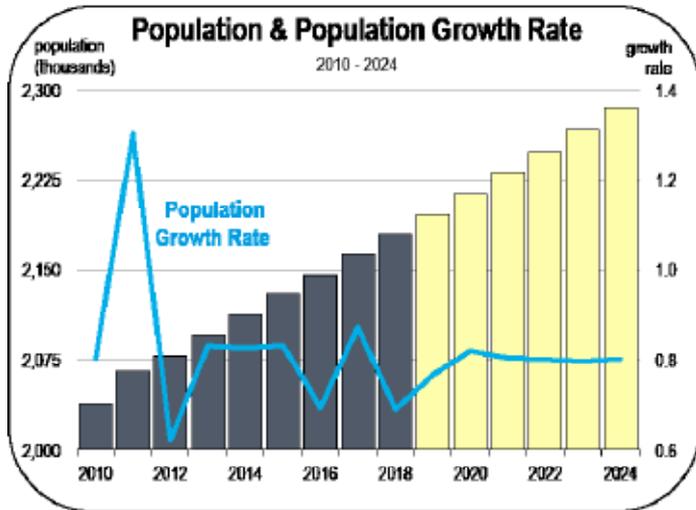
- Increased consumer demand has led to higher spending at restaurants, generating 1,500 new restaurant jobs in 2018.
- Some of these jobs were in the takeout and "fast casual" market segment, but a large contingent was also in full-service, sit-down eateries. In 2018, approximately 35 fast casual and 35 full-service restaurants opened their doors.
- 100 new jobs were also generated at gyms and fitness centers.
- Growth will be strong in 2019, but gains could become more elusive in 2020 and 2021.

Government Employment

- The government sector created more than 3,000 new jobs last year.



San Bernardino County Economic Forecast

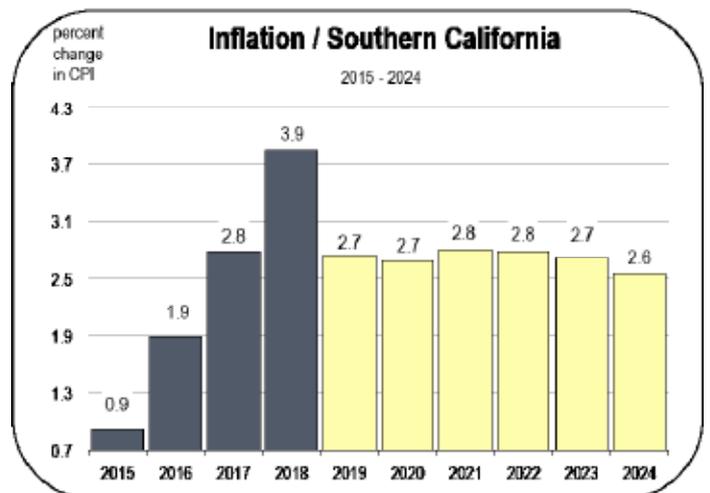
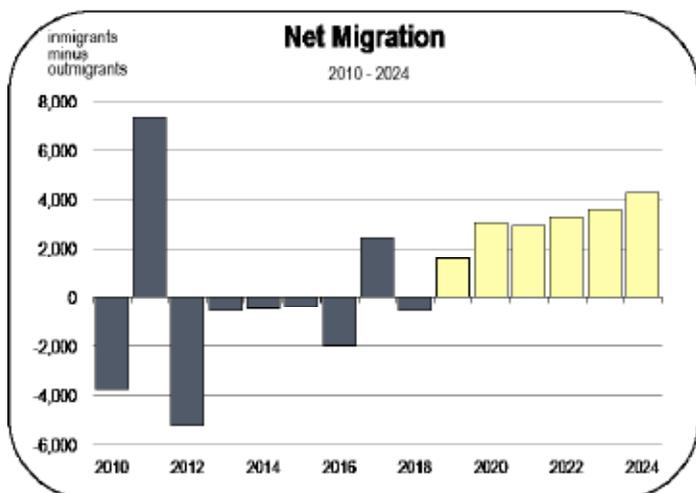


Population Growth

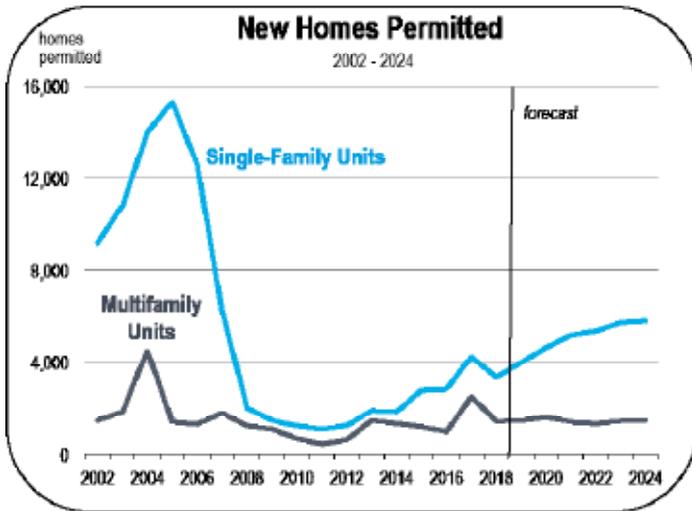
- The County population is growing faster than most of Southern California, and growth will accelerate slightly from here.
- Virtually all population growth has been the result of new births, as net migration was negative in most of the years between 2013 and 2018.
- Net migration will be positive but low over the forecast period, with an average of 3,100 net migrants entering the county each year.
- Population growth will average 0.8 percent per year, and the county will approach 2.3 million residents by 2024.

Unemployment and Inflation Rates

- The unemployment rate in San Bernardino County averaged 4.0 percent in 2018, which is similar to the composite rate for Southern California.
- In 2019, the unemployment rate may begin to deteriorate, but with an unemployment rate of just 4.2 percent, the job market will remain very tight.
- Inflation accelerated in 2018 as home prices and energy costs increased across Southern California.
- In 2019 and 2020, inflation is expected to be within a range of 2.5 percent and 3 percent.



San Bernardino County Economic Forecast

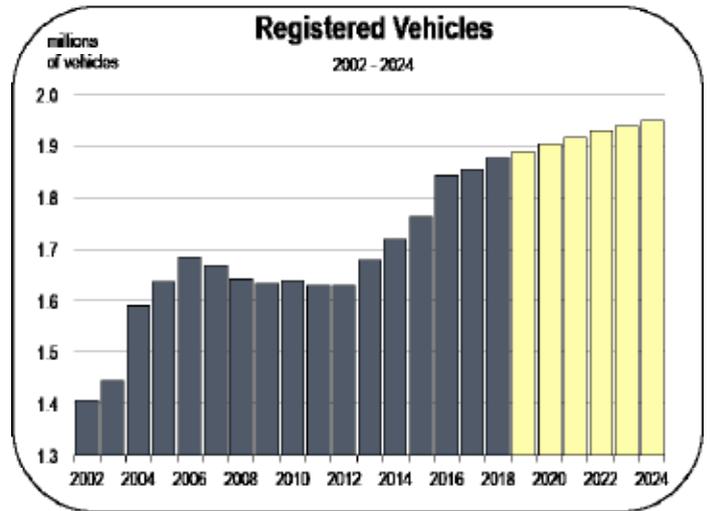
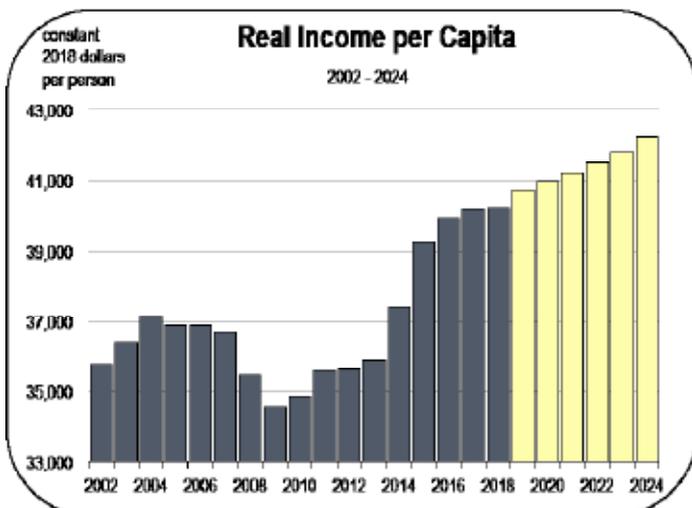


New Housing Production

- From 2013 to 2018, an average of 4,200 new homes were authorized per year. Housing production will average 6,500 homes per year from 2019 to 2024. This will be a major improvement, but still below the amount needed to match population growth.
- Single-family units will continue to be the dominant form of new housing. The region has large amounts of buildable land, allowing development to spread outward rather than be forced upward into apartment skyscrapers.
- Most of these new homes will be located in Ontario, with almost 18,000 units already approved in the Ontario Ranch project. Additional homes have been proposed at the site, which has a 20-year development timeline.

Income per Capita

- Income per capita in 2018 was \$40,200, which is below the Southern California average of \$57,200.



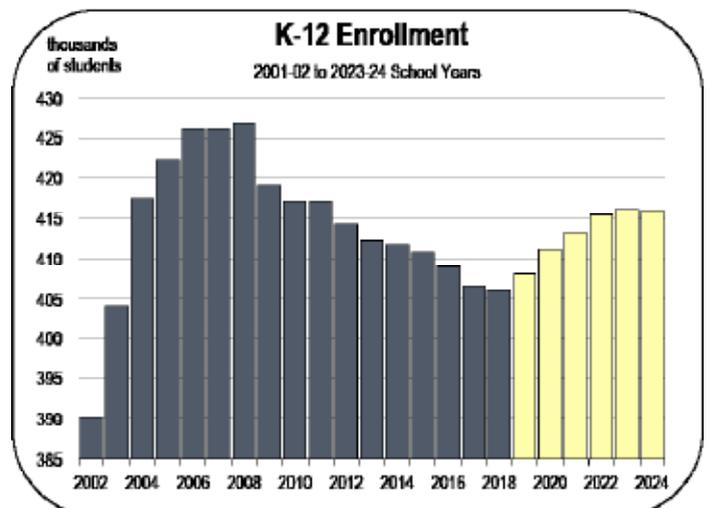
- Over the last six years, incomes have risen at an average rate of 2.0 percent per year, which is slightly faster than the Southern California average of 1.6 percent.
- Over the next six years, incomes are expected to rise by approximately 0.8 percent per year.

Registered Vehicles

- There were 1.87 million registered vehicles in San Bernardino County in 2018. By 2024, it is expected that the county will have approximately 1.95 million registered vehicles.

Public School Enrollment

- In San Bernardino County, approximately 406,000 students were enrolled in K-12 public schools during the 2017–2018 school year.
- By 2024, there are expected to be 415,900 K-12 students in the county. Enrollment will turn around this year because the 5 to 17 year old cohort is now growing faster.



San Bernardino County Economic Forecast

Economic Indicators

2015-2018 History, 2019-2050 Forecast

	Population (people)	House- holds (thousands)	Average Household Income (dollars)	New Homes Permitted (homes)	Registered Vehicles (thousands)	Personal Income (billions)	Taxable Retail Sales (billions)	Local Sales Tax (millions)	Real Industrial Production (billions)	Real per Capita Income (dollars)	School Enrollment (thousands)	Births (people)	Deaths (people)
2015	2,130,075	636.0	\$120,853	3,912	1,761	\$76.9	\$22.8	398.9	12.6	\$39,253	410.8	30,530	13,555
2016	2,144,867	640.0	\$125,272	3,761	1,842	\$80.2	\$23.9	417.8	12.8	\$39,904	409.0	31,032	14,109
2017	2,163,561	641.9	\$130,459	6,672	1,854	\$83.7	\$25.0	436.8	13.0	\$40,198	406.6	29,643	14,514
2018	2,178,492	644.2	\$136,006	4,713	1,875	\$87.6	\$25.8	452.1	13.5	\$40,220	406.0	29,881	14,903
2019	2,195,165	647.3	\$141,970	5,389	1,889	\$91.9	\$26.8	469.1	13.8	\$40,745	408.0	30,325	15,239
2020	2,213,153	652.1	\$146,667	6,203	1,903	\$95.6	\$27.8	485.7	14.0	\$40,959	411.1	30,612	15,650
2021	2,230,933	657.7	\$151,607	6,532	1,915	\$99.7	\$28.8	503.4	14.2	\$41,202	413.2	30,934	16,068
2022	2,248,799	663.5	\$156,772	6,653	1,927	\$104.0	\$29.8	521.6	14.5	\$41,484	415.4	31,202	16,576
2023	2,266,705	669.5	\$162,094	7,134	1,938	\$108.5	\$30.8	539.4	14.7	\$41,797	416.1	31,453	17,109
2024	2,284,886	675.9	\$167,670	7,245	1,948	\$113.3	\$31.8	556.8	15.0	\$42,222	415.9	31,664	17,733
2025	2,303,184	682.3	\$172,977	7,225	1,957	\$118.0	\$32.8	574.0	15.3	\$42,594	415.8	31,813	18,404
2026	2,321,507	688.8	\$178,704	7,203	1,966	\$123.1	\$33.8	591.4	15.6	\$43,055	415.5	31,943	19,055
2027	2,339,727	695.3	\$184,373	7,351	1,975	\$128.2	\$34.8	608.7	15.9	\$43,501	416.3	32,061	19,725
2028	2,357,582	701.8	\$190,946	7,500	1,983	\$134.0	\$35.8	626.8	16.2	\$44,115	417.2	32,145	20,441
2029	2,374,947	708.6	\$196,462	7,595	1,992	\$139.2	\$36.9	645.9	16.5	\$44,423	417.3	32,298	21,188
2030	2,391,759	715.4	\$201,953	7,691	2,001	\$144.5	\$38.0	664.9	16.8	\$44,749	418.3	32,444	21,981
2031	2,407,985	722.2	\$207,467	7,814	2,010	\$149.8	\$39.1	683.9	17.1	\$45,106	418.7	32,632	22,754
2032	2,423,767	729.2	\$212,994	7,940	2,020	\$155.3	\$40.3	704.7	17.3	\$45,363	418.9	32,885	23,528
2033	2,439,019	736.3	\$218,624	7,868	2,030	\$161.0	\$41.3	723.3	17.7	\$45,803	418.7	33,116	24,302
2034	2,453,626	743.4	\$224,576	7,611	2,041	\$166.9	\$42.5	743.8	18.0	\$46,201	418.6	33,280	25,054
2035	2,467,360	750.2	\$230,865	7,339	2,052	\$173.2	\$43.7	765.5	18.3	\$46,590	418.9	33,427	25,849
2036	2,480,155	756.8	\$237,511	7,053	2,063	\$179.7	\$45.2	791.0	18.5	\$46,840	420.4	33,539	26,579
2037	2,491,938	763.1	\$244,532	6,825	2,075	\$186.6	\$46.7	818.0	18.7	\$47,082	422.0	33,591	27,262
2038	2,502,733	769.2	\$251,772	6,535	2,087	\$193.7	\$48.2	844.3	19.0	\$47,423	423.6	33,630	27,918
2039	2,512,439	775.0	\$259,419	6,398	2,100	\$201.1	\$49.9	873.1	19.2	\$47,712	425.6	33,680	28,547
2040	2,521,360	780.8	\$267,205	6,126	2,112	\$208.6	\$51.5	901.9	19.5	\$48,037	427.3	33,750	29,131
2041	2,529,524	786.3	\$275,104	5,864	2,125	\$216.3	\$53.1	929.9	19.7	\$48,434	429.4	33,804	29,596
2042	2,536,952	791.5	\$283,219	5,747	2,138	\$224.2	\$54.7	957.8	20.0	\$48,876	431.5	33,877	30,030
2043	2,543,788	796.7	\$291,560	5,887	2,150	\$232.3	\$56.3	985.6	20.3	\$49,371	433.9	34,002	30,459
2044	2,550,192	801.9	\$299,909	5,879	2,162	\$240.5	\$57.8	1,012.2	20.6	\$49,941	436.3	34,099	30,913
2045	2,556,110	807.2	\$308,563	5,868	2,174	\$249.1	\$59.5	1,041.5	20.9	\$50,439	438.8	34,200	31,434
2046	2,561,646	812.4	\$317,317	5,713	2,185	\$257.8	\$61.2	1,070.6	21.2	\$50,972	441.7	34,319	31,867
2047	2,566,851	817.6	\$326,232	5,282	2,196	\$266.7	\$62.9	1,100.4	21.5	\$51,493	444.9	34,490	32,205
2048	2,571,499	822.3	\$335,619	5,108	2,206	\$276.0	\$64.6	1,131.0	21.8	\$52,039	447.9	34,623	32,497
2049	2,575,642	826.9	\$345,381	4,930	2,216	\$285.6	\$66.4	1,162.5	22.1	\$52,605	450.7	34,719	32,762
2050	2,579,274	831.3	\$355,528	4,745	2,225	\$295.5	\$68.3	1,194.8	22.4	\$53,191	453.4	34,806	33,054

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	710.1	2.2	32.7	54.9	63.3	123.8	23.0	84.8	5.0	109.9	68.3	118.8
2016	727.1	1.9	33.8	56.3	67.0	126.5	23.8	80.7	5.2	114.1	71.5	122.9
2017	754.1	1.8	35.9	56.6	75.7	128.3	23.6	81.8	5.2	119.9	74.3	127.2
2018	779.8	1.8	38.6	57.7	82.3	129.8	23.3	83.9	5.1	127.0	75.9	130.4
2019	793.1	1.8	38.6	58.2	84.8	130.1	23.4	85.8	5.1	129.7	78.6	132.6
2020	798.8	1.8	39.5	58.0	86.0	130.2	23.4	86.2	5.1	131.7	79.6	132.6
2021	803.0	1.7	40.4	57.9	86.9	130.4	23.6	87.5	5.1	133.4	78.8	132.6
2022	806.0	1.7	39.3	57.6	88.0	130.9	23.7	88.2	5.2	135.2	78.6	132.9
2023	808.3	1.7	38.2	56.8	89.2	131.3	23.9	88.5	5.2	137.2	78.3	133.4
2024	811.2	1.7	37.0	56.1	90.6	131.7	24.0	89.1	5.2	139.1	77.9	134.3
2025	814.8	1.6	36.0	55.4	91.9	132.1	24.2	89.5	5.2	141.0	77.7	135.3
2026	818.8	1.6	35.3	54.7	93.2	132.6	24.4	90.0	5.2	142.8	77.7	136.2
2027	823.3	1.6	35.0	54.2	94.5	133.2	24.6	90.5	5.2	144.6	77.6	137.1
2028	828.0	1.6	34.9	53.9	95.7	133.9	24.8	90.9	5.2	146.2	77.5	137.9
2029	832.8	1.6	34.8	53.7	96.9	134.5	24.9	91.4	5.2	147.9	77.3	138.6
2030	837.6	1.5	34.8	53.5	98.1	135.1	25.0	91.9	5.3	149.6	77.2	139.4
2031	842.5	1.5	34.9	53.4	99.3	135.5	25.0	92.4	5.3	151.3	77.1	140.4
2032	847.5	1.5	35.0	53.3	100.5	136.0	25.1	92.9	5.3	153.1	77.1	141.3
2033	852.2	1.5	34.9	53.2	101.8	136.5	25.1	93.4	5.3	154.8	77.0	142.0
2034	856.8	1.5	34.6	53.2	103.0	136.9	25.1	93.9	5.3	156.5	76.9	142.9
2035	861.4	1.5	34.4	53.2	104.1	137.4	25.2	94.3	5.3	158.3	76.9	143.6
2036	865.8	1.5	34.1	53.2	105.2	137.8	25.2	94.8	5.3	160.0	76.8	144.3
2037	870.1	1.5	33.9	53.2	106.2	138.3	25.2	95.3	5.3	161.8	76.8	144.8
2038	874.2	1.4	33.7	53.2	107.2	138.8	25.2	95.8	5.3	163.5	76.8	145.3
2039	878.4	1.4	33.6	53.2	108.2	139.2	25.3	96.4	5.3	165.3	76.8	145.6
2040	882.4	1.4	33.3	53.2	109.1	139.7	25.3	96.9	5.3	167.1	76.8	145.9
2041	886.2	1.4	33.1	53.2	110.0	140.1	25.4	97.4	5.3	168.8	76.8	146.0
2042	890.1	1.4	33.0	53.2	110.8	140.6	25.5	97.9	5.3	170.6	76.9	146.1
2043	894.4	1.4	33.1	53.2	111.7	141.0	25.5	98.4	5.3	172.4	76.9	146.2
2044	898.5	1.4	33.1	53.2	112.5	141.5	25.6	98.9	5.4	174.2	77.0	146.4
2045	902.8	1.3	33.1	53.3	113.4	141.9	25.6	99.5	5.4	176.0	77.1	146.7
2046	907.0	1.3	33.0	53.3	114.2	142.4	25.6	100.0	5.4	177.8	77.2	147.1
2047	911.0	1.3	32.7	53.3	115.0	142.8	25.7	100.5	5.4	179.7	77.2	147.5
2048	915.3	1.3	32.5	53.3	115.8	143.2	25.7	101.0	5.4	181.5	77.3	147.9
2049	919.5	1.3	32.4	53.3	116.5	143.7	25.8	101.6	5.4	183.3	77.4	148.4
2050	923.8	1.3	32.3	53.3	117.2	144.1	25.9	102.1	5.4	185.2	77.5	148.9

San Bernardino County Economic Forecast

Socioeconomic Indicators

