

Chapter 4

From Gold to Silicon: California's Economy and Tax Structure

Economic changes have helped shape California's tax structure, from the expansion of the manufacturing base after 1929 to today's vibrant and diverse economy. As a result, California's tax structure and fiscal management look different than those in other states.

A Brief History of Growth in California's Manufacturing Base

California's manufacturing sector grew significantly between 1929 and 1997 as the state added manufacturing firms at an annual rate of 2.1 percent.⁸ Meanwhile, manufacturing output grew by 5.8 percent each year.⁹

1929 through 1939. Resource processing, not manufacturing, accounts for half the state's industrial output through 1935. This activity—ranging from produce canning to winemaking, from lumber processing to petroleum refining—generates income for each region of the state.¹⁰

1940 through 1946. Manufacturing becomes the primary driver of the state's economic growth during World War II. Manufacturing employment increases from 271,000 in 1939 to 530,000 in 1947.¹¹ Manufacturing output triples as the state develops a base for building ships, aircraft, and electrical components (including radios, radar-jamming equipment, signal generators, and sonar).

1947 through 1971. The U.S. enjoys sustained economic growth despite cyclical recessions. California benefits in the period immediately following World War II. However, starting in 1958, the state's manufacturing base (as measured by output or employment) grows more slowly than the national average for 14 years. The state's manufacturing and service sectors grow more rapidly than the resource-processing sectors.¹²

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The state's industrial sector increasingly includes "knowledge-based" companies such as those involved in aerospace, electronic components, and technology parts.

1972 through 1995. Silicon Valley-based companies, including Hewlett-Packard, Apple, and Intel, lead the personal computer revolution. California-based software and components companies benefit from their proximity and association with Silicon Valley manufacturers. For 15 years starting in 1972, the number of California manufacturing firms grows by 42 percent (compared to the national average growth of about 12 percent).¹³ California leads the nation in the manufacture of electrical components, computing equipment, printing equipment, and scientific instruments. Manufacturing employment grows by 5.8 percent in the state, but falls by 9.5 percent nationally.¹⁴ During the 1970s and 1980s, California's old manufacturing base begins to experience major decline. Steel, auto, and tire manufacturers nearly disappear by 1990.¹⁵ In the 1991-1994 recession, the state's aerospace sector is hit hard.

Since 1995. From 1995 until 2000, the state's economy—manufacturing and otherwise—consistently grows faster than the nation's as a whole.¹⁶ There is a transformation from "old industries" to "advanced manufacturing." Although the sector employs fewer people, the jobs are good, productivity is strong, and manufacturing remains an important part of the innovation economy ecosystem. The internet/dotcom boom that began in 1995 accelerates and diversifies in 2000 and beyond—growing jobs at both ends of the technical, professional, software/internet, entrepreneurial sector.

Assessing California's Economy in Context

California, like other states, forged its own economic path based on its history, culture, and politics. How does its current economy and tax structure stack up, in terms of industrial sector diversity, other economic indicators, overall tax load, and fiscal resiliency?

Measuring Diversity. In 2011, the state of Hawaii, using two widely accepted indices of economic diversity, ranked California at fourth or sixth. These methodologies found other large states also near the top including Texas, Illinois, Michigan, Massachusetts, and North Carolina. Some smaller Western states also ranked highly such as Utah, Oregon, and Colorado. In 2014, a Missouri study ranked California the 20th most diverse economy. The state of Utah, in a 2012 analysis, put California just above the middle (25th among 50 states and the District of Columbia, the U.S. Virgin Islands, and Puerto Rico).

Figure 9 shows that California's top five sectors look much like those for the U.S. as a whole. For example, the sector that includes finance, insurance, real estate, and rental and leasing accounted for 21 percent of California's gross domestic product, compared to 20 percent for the nation. Not surprisingly, the information sector in California accounted for a bigger share of economic activity than for the U.S., 8 percent compared to 5 percent.

Figure 9

Top Five State Industries as a Percent of Total GDP (2014)



Some other states also resemble the U.S. as a whole in industrial composition, including Florida, Illinois, and Colorado. Obvious divergences show in Texas, for instance, where the sector including finance, insurance, real estate, and rentals and leasing accounts for 6 percentage points less than for the nation as a whole, while mining is 11 percentage points higher. New York’s finance sector surpasses the U.S. average by 12 percentage points. Nevada relies more heavily on the sector of arts, entertainment, recreation, accommodations, and food services. Oregon’s durable goods manufacturing sector is 17 percentage points higher than the national average, and Washington’s is 4 percentage points higher.

Other Indicators. In other ways, California’s economy differs from the rest of the U.S. Per capita personal income in 2014 of \$49,985 was 109 percent of the national average and ranked 11th among the states.

For two decades, the state’s unemployment rate has exceeded the nation’s, but this can be attributed to a faster growing and younger labor force, according to a January 2016 publication by the Public Policy Institute of California (PPIC).¹⁷ At the same time, California workers earn 12 percent more than their counterparts in the rest of the U.S., and output per worker is 13 percent higher. The states that border California (Nevada, Arizona, and Oregon) all rank lower in wages and productivity, PPIC found.

Employers, too, may be attracted by a more highly skilled workforce and more ready access to capital. California ranks first in venture capital per capita and first in patents granted per capita.

On the other hand, housing costs are substantially higher than the U.S. average. A 2015 LAO report showed this gap has been widening over the past four decades, with California home prices now two-and-a-half times the national average.

California's Tax Structure

Figure 10 tracks an index of tax load, derived by dividing total revenues by overall personal income, between 1967 and 2016. This index can serve as a measure of “tax affordability.”¹⁸

For the last 50 years, the annual tax load averaged 6.92 percent of overall personal income. In the 10 years starting in 1967, the annual tax load steadily increased from 6.30 percent to 7.50 percent, showing tax costs outpaced personal income for the decade.

The measure hit its lowest points—falling below 6.00 percent—in 1970 and 2008. In these years, taxes took the smallest

share of the economy, making them more “affordable.” The index went above 7.70 percent in 1977, 1999, and 2000, marking these three years as “least affordable.”

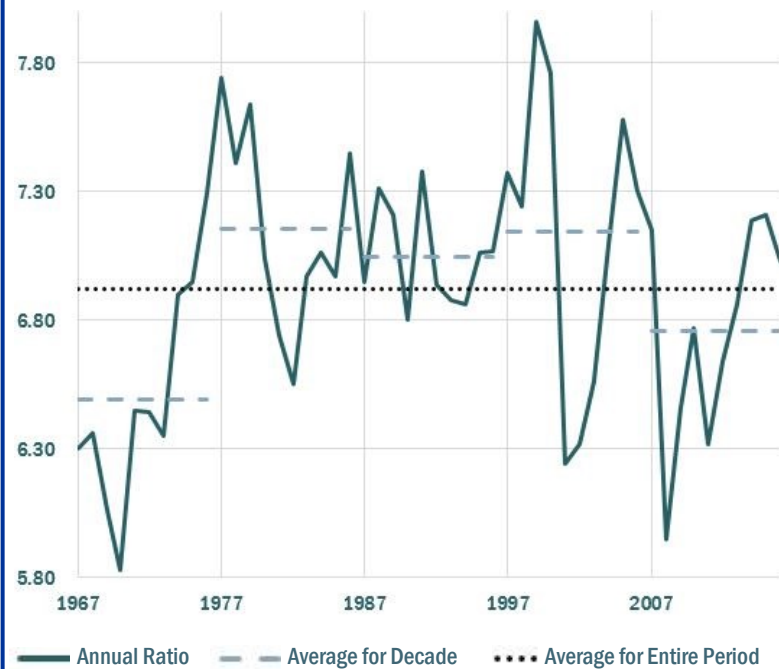
The tax load statistics change annually, depending on:

- The tax structure, especially legislated adjustments to tax rates or the tax base. For example, the large increase in sales and income tax rates—adopted as part of Proposition 30—increased tax collections by more than \$6 billion in 2012.
- Taxable income. If taxable income rises faster than personal income, the index will rise. For example, when investors realize stock gains, this typically triggers a taxable event that will increase tax collections.
- Personal income. When personal income increases—through inflation or productivity—without a commensurate increase in tax revenue, the index will fall. This can happen in periods of high inflation without commensurate wage increases.

Changes in tax loads are not simply a function of changes in personal income. The tax load measure also can respond both to changes in the tax system (such as rate or base changes).

Figure 10

**Ratio of Total State Taxes to Personal Income
California (1967-2016)**



Source: Governor's Budget Summary 2016-17, Schedule 2, January 2016

Vacillating Tax Loads. The load index varies a great deal, even when the tax structure itself has not changed. Ten-year averages, as displayed in Figure 10, show moderate swings. For the years 1967 through 1986, the average tax load was 6.49 percent. It hovered around 7.10 percent in the next three decades, before falling to 6.76 starting in 2007.

The tax load measure in Figure 10 is a broad index, not intended to gauge effects on individuals or classes of taxpayers.

Comparing California to Other States. Figure 11 compares California’s tax structure to other Western states, from Washington to New Mexico. Figure 12 compares California’s tax structure to that of other states with large economies in the Northeast, Midwest, and South.

To facilitate cross-state comparisons, the figures include all state and local taxes for 2013 as reported to the U.S. Census Bureau. Local taxes are included for a complete picture of the tax burden across states with very different ways of dividing up taxing authority between levels of government. For example, because its local governments have limited flexibility and authority to levy most kinds of taxes, California may raise comparatively more of its revenue at the state level than do most other states.

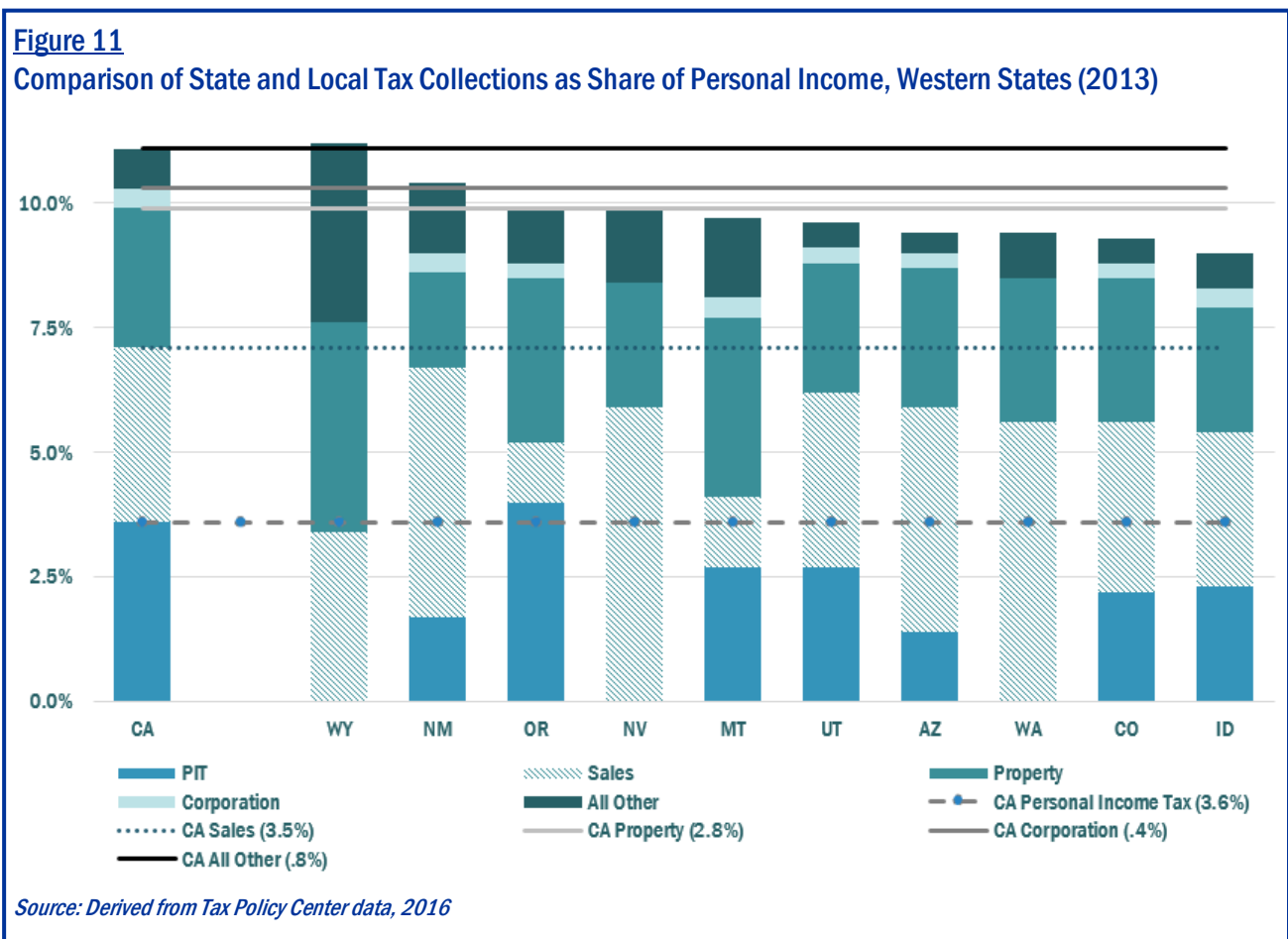
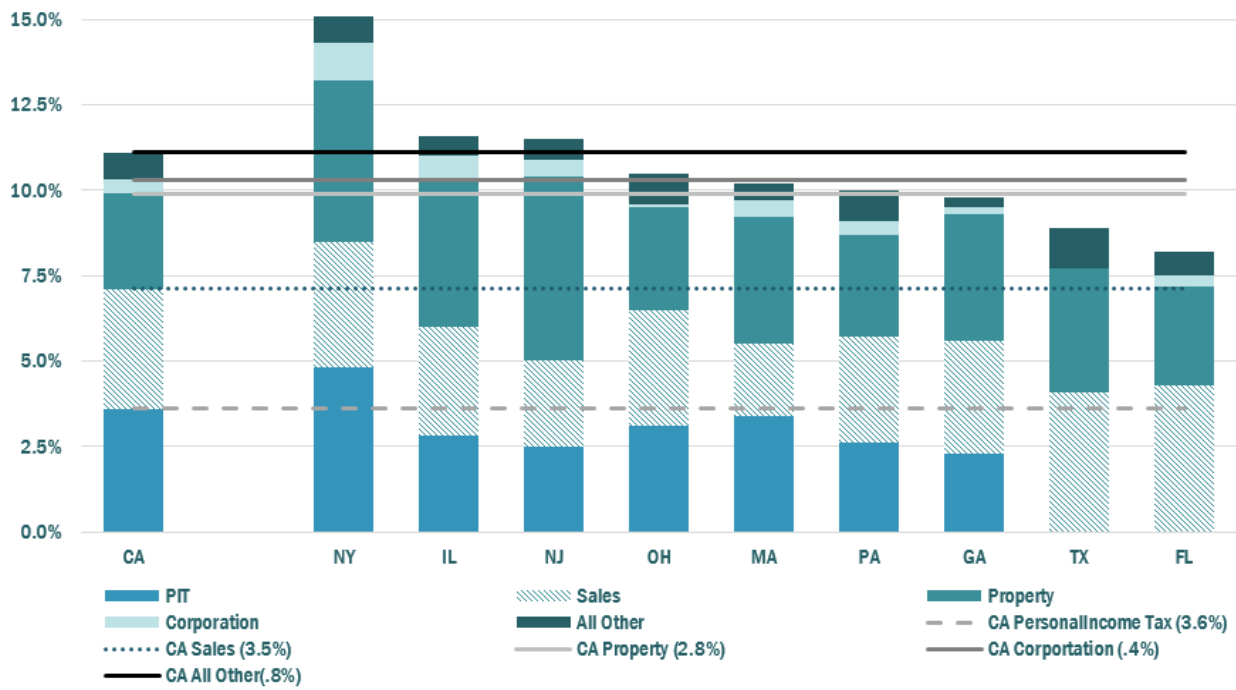


Figure 12

California Tax Structure Compared to Other States with Large Economies (2013)



Source: Derived from Tax Policy Center data, 2016

To account for these differences in fiscal capacity, Figures 11 and 12 show tax collections of both state and local levies for all states.

Western States—Similar Overall Tax Loads in 2013. Each Western state relies on a different mix of taxes. Even without a personal income tax, Wyoming generates about as much tax revenue, 11.1 percent of personal income, as does California. It relies more heavily, compared to California, on the proceeds of its property tax and other taxes—mostly an oil severance tax and a tax on mineral extraction.

Idaho, Washington, and Colorado report the lowest tax loads, between 9.0 percent and 9.3 percent.

The differences in loads can be explained by a number of factors that may be unique to the state, its tax structure, and a given tax year. Care should be taken in making generalizations from these comparative indices. At best, the cross-state index provides a one-year snapshot of a state's tax load relative to its neighbors. It is not clear, for example, whether the index would move uniformly for each state from year to year.

California generates revenue equivalent to 3.6 percent of personal income from the personal income tax. Though Washington and Wyoming do not levy a personal income tax, all other Western states do, collecting revenues between 1.4 percent and 2.7 percent of personal income. Only one other Western state—Oregon—generates more from this source.

California generates revenue equal to about 3.5 percent of personal income from its sales and use tax. All Western states, including Oregon, reported getting a significant share of revenue from the sales tax. New Mexico, Arizona, Nevada, and Washington generate more revenue than does California through this levy.

Three Western states, including Nevada, Washington, and Wyoming, do not levy a corporation tax. California and the other Western states levy this tax, collecting between 0.2 percent and 0.4 percent of personal income.

California generates revenue equal to about 2.8 percent of personal income from its property tax. Four Western states—Oregon, Montana, Colorado, and Wyoming—collected a greater share of revenues than California through property taxes.

Other Large States. Figure 12 shows that among other large states, New York, New Jersey, and Illinois all exceed California’s state-local tax load, ranging from 11.6 percent to 15.1 percent of personal income.

Florida, Georgia, and Texas have the lowest tax loads among the large states, ranging from 8.2 percent to 8.9 percent. Neither Florida nor Texas levy a personal income tax but, compared to California, the two states collect a greater share of personal income through the sales and property taxes.

States Evidence Greater Differences in Tax Mix than Tax Load. Most states generate between 8.2 percent and 11.6 percent of personal income from state and local taxes. New York State may be something of an outlier with its concentration of financial services in New York City, allowing it to tax 15.1 percent of personal income—well above other states in this analysis.

Most states rely on a mix of sales, property, and personal income taxes. Yet some have chosen not to levy a personal income tax, relying instead on sales and property taxes (or extraction taxes). The most significant difference among states appears to be their relative reliance on the sales, property, or personal income taxes, possibly resulting from constitutional, judicial, or statutory limitations.

Do Tax Loads Affect Overall Economic Growth?

Senate Bill 1837 of 1994 required DOF to conduct a “dynamic” revenue analysis for any proposed legislation with a revenue impact of 10 million dollars or more. The goal of such a model is to account for how tax changes affect overall economic output, in contrast to direct economic responses under a “static” model. Since September 1995, economic modeling techniques, surveys of other states, literature surveys, and preliminary internal and external dynamic analyses have been examined. This work resulted in better understanding limitations to a dynamic revenue model, including the need to incorporate California-specific data. Further development of the model has halted.¹⁹

In December 2015, William G. Gale, Aaron Krupkin, and Kim Rueben, reported in the *National Tax Journal* that the “effects on state-level growth [of tax changes] have been the subject of continuing controversy with many conflicting and fragile results in the literature.”²⁰ (Rueben is a member of the Controller’s Council of Economic Advisors.) In constructing their own model, the authors found the interaction of tax revenues and personal income growth to be dramatically time-sensitive. Specifically, they found that states with higher revenues generally had lower personal income growth for the period from 1977 to 1991; they also found that states with higher revenues had higher personal income growth from 1992 to 2006. They also found marginal tax rates do not generally affect personal income tax growth. These findings suggest that policymakers should be more concerned about overall tax burdens than about the effects of particular taxes, specifically the marginal rates of the personal income tax.

California has one of the most progressive tax structures in the country, putting a higher relative burden on high-income taxpayers.

Moreover, they found that higher property tax burdens have a positive correlation with economic growth, suggesting that property values (and associated tax revenues) appreciate as the economy expands. The study did not examine the effects of tax expenditures such as those identified in Appendix IV on page 79. (Tax expenditures are credits, deductions, exclusions, exemptions, or other tax benefits.)

California has one of the most progressive tax structures in the country, putting a higher relative burden on high-income taxpayers. The alternative is lower revenues or shifting the burden to other taxpayers.

California’s Fiscal Management: Where We Stand among States

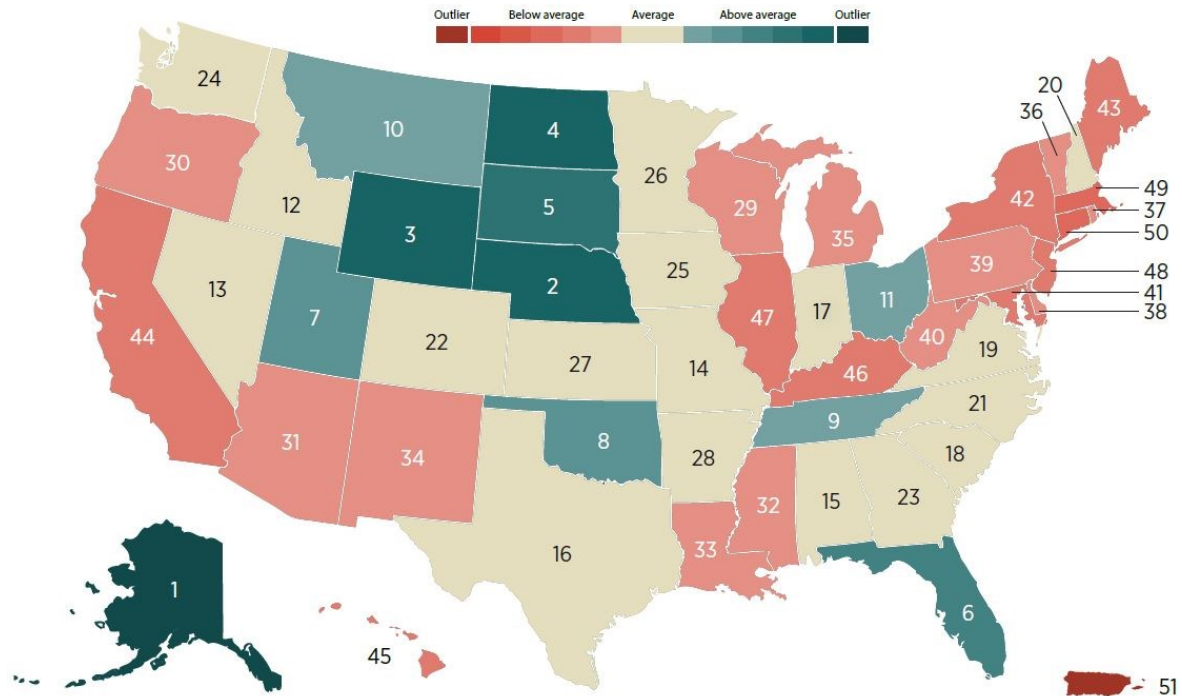
A 2015 simulation by U.S. Government Accountability Office (GAO) highlights that the state and local government sector could continue to face fiscal imbalance (the gap between revenue and spending) during the next 50 years if reform are not implemented soon and sustained. The GAO simulation assumes no tax structure changes and spending remaining constant. While the GAO recognized that revenues are on the rise after the Great Recession, long-term challenges remain for states and localities about how they will meet expenditure demands, especially in the area of health care. The GAO estimates that states and localities without reform would have to cut spending or increase revenue by five percent and sustain those actions to permanently stave off operating deficits.²¹

Research has considered whether indicators can be developed to predict fiscal stress. For example, the Mercatus Center at George Mason University developed a measure of fiscal stress²² based on:

Figure 13

Overall Fiscal Solvency: How Do the 50 States Rank?

(Based on FY 2013-14)



Source: Eileen Norcross and Olivia Gonzalez, "Ranking the States by Fiscal Condition, 2016 Edition" (Mercatus Research, Mercatus Center at George Mason University; Arlington, VA; June 2016)

- Cash solvency,
- Budget solvency (a measure of whether the state can cover fiscal-year spending with current revenue),
- Long-term solvency (assessing a state's ability to deal with large long-term obligations),
- Service-level solvency (a measure of "fiscal slack" that would allow a state to raise taxes),
- Trust fund solvency (taking into account unfunded pension liabilities, other post-employment benefit obligations, and other debt compared to personal income), and
- State debt (taken from comprehensive annual financial reports).

Figure 13 shows that California ranked 44th among the 50 states for 2013-14, according to the Mercatus Center. The state did poorly in the categories of cash solvency, long-run solvency, and trust fund solvency. Among other large states that placed better than California, Florida ranked sixth, performing well in its cash solvency and service-level solvency. Overall, New Jersey and Illinois fared worse than California.

California has made fiscal changes since 2014 including strengthening its budget reserves. Reform of the state's tax structure could further improve fiscal management.