

# A tale of two states: Contrasting economic policy in California and Texas

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## KEY TAKEAWAYS

- California's state and local government revenues and spending are 60 percent above Texas' on a per-resident basis.
- On economic performance — both have much to celebrate. Population and employment surged in Texas while California's per-capita income and GDP have soared in recent years.
- Both states have plenty of room to improve. California stands out for its high rate of homelessness and low air quality. But compared to all other states, Texas has the largest share of residents without health insurance.
- Crime rates and renewable energy production are similar in the two states despite very different policies. And while K-12 spending is much higher in California, student outcomes are better in Texas.

California and Texas are the most populous states in the U.S., with more than one in five Americans living in either the Golden or Lone Star states. In recent years, they have been on different trajectories, with Texas one of the fastest growing states in the country and California growing more slowly than the national average. These trends earned Texas two additional seats in the House of Representatives earlier this year while California — for the first time — lost one seat.

These differences have many speculating that Texas' approach of lower taxes and limited government is better than California's model of higher taxes and stronger regulation for fostering economic growth and a brighter future. And there is no shortage of news stories about companies moving from California to Texas and other states with lower tax rates. At the same time, many maintain that California remains the dominant destination for venture capital funding and other drivers of innovation, while also noting some of the downsides of Texas' lower spending on programs related to health, education, and other social priorities.

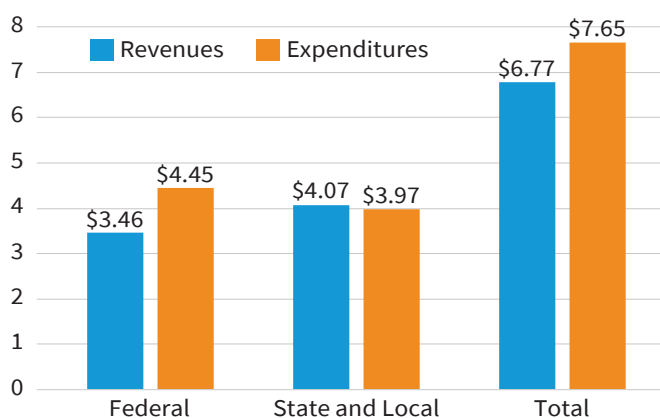
This policy brief provides an overview of state and local economic policy in both California and Texas, with a focus on taxation, government services, and regulation. It also highlights some key metrics of state and local government performance including health outcomes, educational attainment, net migration, environment and energy issues, and economic well-being. Of course, many factors influence these important outcomes beyond just government policies. We therefore also highlight the results from some recent research regarding the effects of alternative government interventions.

## The size of state and local government in California and Texas

Two frequently used measures of the scope of government activity are total revenues and expenditures. These two measures are far from perfect — for example, they do not capture the effect of policies such as the minimum wage or most environmental regulations. However, since GDP and income per capita are among the most frequently used measures of economic well-being, government revenues and spending are useful for gauging the size of this sector relative to the economy overall.

U.S. state and local governments collected \$4.07 trillion in revenues and spent \$3.97 trillion during the 2019 fiscal year (the most recent year with data available and most recent pre-COVID recession year) (*U.S. Census Bureau, 2021*). These revenue and spending figures represent \$12,412 and \$12,090 per U.S. resident and about 19 percent of U.S. GDP, and they are comparable to federal revenues and expenditures in the same year (\$3.46 trillion and \$4.45 trillion, respectively) as shown in Figure 1 (*CBO, 2021*).

**Figure 1. Government Revenues and Spending**  
(in trillions of dollars), 2019



Source: CBO Monthly Budget Reviews, U.S. Census Bureau — State and Local Government Finances Tables

Total revenues and total spending by all three levels of government in 2019 were \$6.77 trillion and \$7.65 trillion, respectively, representing approximately one-third of the \$21.43 trillion in 2019 GDP (*BEA, 2020*).<sup>1</sup> One notable contrast between the two pairs of government finance numbers is that — in contrast to the federal government — most state and local governments have laws requiring them to balance their budgets and prevent them from running deficits. Because of this and given the strong state of the economy in 2019, the state and local government sector ran a modest surplus (in accounting terms on an annual basis) while the federal government ran an almost \$1 trillion deficit that year.<sup>2</sup>

California and Texas differ significantly with respect to the overall size of their state and local government sector. As shown in Appendix Table 2, California’s state and local governments spent \$16,145 per state resident in 2019, while Texas’ counterparts spent just \$10,024 per resident. The revenue figures were similar at \$16,879 and \$9,997, respectively (see Appendix Table 1).

Measured in this way, state and local governments in the Golden State were in the aggregate more than 60 percent larger than those in the Lone Star State. It is also noteworthy that the per capita California revenues and expenditures are significantly higher than the national average while the Texas amounts are much lower, consistent with the conventional wisdom that California’s state and local governments are overall more interventionist than the average while the opposite is true for Texas.

A large part of this difference between California and Texas, however, is driven by differences between the two states in GDP per capita, which is 22 percent higher in California (\$79,405) than in Texas (\$65,077) (*BEA, 2020*). Even adjusting for this, state and local governments loom much larger in California, with their spending representing 20.3 percent of the state’s GDP versus just

1 To avoid “double counting” we subtract \$762 billion from the sum of federal, state, and local spending and revenues in 2019, as this represents transfers from the federal government to state and local governments.

2 Governments also loom large in the U.S. labor market, with 2.8 million federal workers, 5.2 million state workers, and 14.6 million local government workers in July 2019 (*BLS, 2019*). Taken together, government employment accounted for 14.9 percent of all U.S. employment at that time.

15.4 percent in Texas. By this metric California’s public sector is about one-third larger than in Texas, implying that the greater per capita GDP in California explains almost half of its higher state and local spending.

The state government raises slightly more revenue than local governments in both states, but local governments actually spend slightly more due to their receipt of state revenues. In California, state transfers account for nearly one-third of local government revenues while the corresponding share in Texas is just one-fifth. This likely reflects a greater effort in California to transfer funds from high- to low-income parts of the state.<sup>3</sup>

### Where does the money come from?

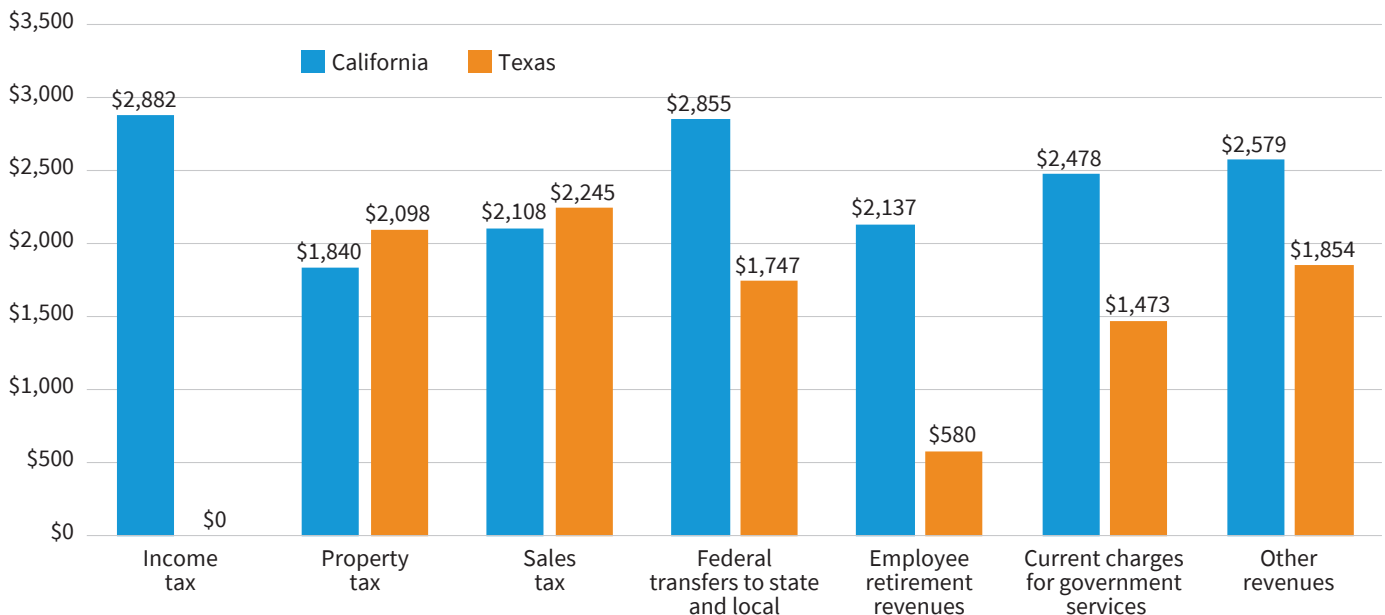
In both California and Texas, taxes are the largest source of revenue for the state and local governments, although the composition of this tax revenue differs significantly

between the two states. As Appendix Table 1 shows, state and local tax revenue per capita in California was \$7,326 per state resident versus just \$4,709 in Texas. This difference is entirely explained by income taxes (including capital gains taxes) — with the sum of individual and corporate income taxes at \$2,882 per capita in California but \$0 in Texas, which is reflected in Figure 2 below.

To put an even finer point on the difference, California has the country’s highest top marginal individual income tax rate, while Texas is one of just eight states with no individual income tax (*Tax Foundation, 2021*). Recent research suggests California’s tax hikes from nearly a decade ago caused a large number of wealthy residents to leave the state (*Rauh and Shyu, 2021*).

In contrast, property tax revenue per state resident is somewhat higher in Texas than in California (\$2,098 versus \$1,840). This difference is especially striking

**Figure 2. CA vs. TX State and Local Revenues per State Resident, 2019**



Source: U.S. Census Bureau – State and Local Government Finances Tables

<sup>3</sup> Additional redistribution of funds for education in Texas is achieved through the recapture (commonly known as “Robin Hood”) provisions Texas established under a Supreme Court order in 1993. In 2019-2020, the state transferred about \$2 billion in property tax revenues from wealthier school districts to poorer ones via this mechanism. See: <https://www.txsc.org/texas-school-finance-faqs/>.

when one considers that the median value of a home in California is almost three times higher than in Texas (\$550,000 versus \$190,000) (*U.S. Census Bureau, 2021*).

Figure 3 contrasts the distribution of these values in these states. As this figure shows and according to U.S. Census data, 57.8 percent of California units have a value of \$500,000 or more while just 7.8 percent in Texas do. The higher property tax revenues in Texas are therefore driven by higher rates.

Consistent with this, property taxes as a share of the value of owner-occupied housing were recently estimated to be more than twice as high in Texas as in California (1.60 percent versus 0.70 percent) (*Tax Foundation, 2021*). Much of this difference is driven by California’s Proposition 13, a 1978 ballot measure limiting the rate at which property taxes can grow to less than 2 percent annually.

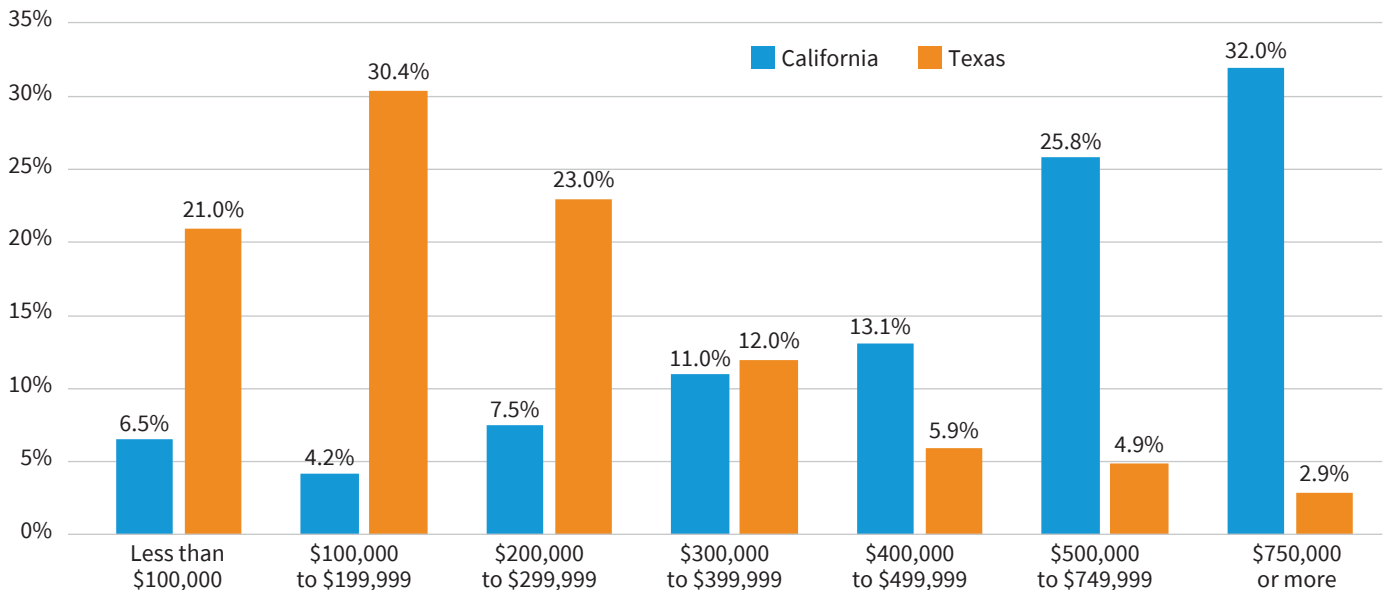
As Figure 2 above shows, average state and local sales tax revenues per capita are nearly identical in the two states (\$2,108 in California and \$2,245 in Texas), which is perhaps not surprising given average state and

local sales tax rates of 8.68 percent and 8.19 percent in the Golden and Lone Star states, respectively (*Tax Foundation, 2021*).

Intergovernmental revenue from the federal government represents the next largest category of revenues for both California and Texas, accounting for about one-sixth of revenues in both states. These revenues are mainly federal matching funds for each state’s Medicaid program, which provides health insurance for low-income individuals (explained in more detail below). The much greater per capita intergovernmental revenues in California largely reflect the state’s much larger Medicaid program, which enrolls 13 million versus just 5 million in Texas. The difference in Medicaid enrollment between the two states surged in 2014, when California expanded its Medicaid program as called for in the Affordable Care Act while Texas did not (*Duggan et al., 2019*).

Another striking difference between the two states’ revenue sources is in their pension systems, which include both public employee contributions and market earnings on those assets. California’s revenues

**Figure 3. Percent of Total Housing Units in Housing Value Range, 2019**



Source: U.S. Census Bureau — American Housing Survey

are almost four times as high as in Texas (\$2,137 per resident versus \$580). This disparity is likely driven by a combination of four factors: (a) a larger share of residents who currently hold government jobs, (b) a larger share of state and local workers in the state’s pension system, (c) greater assets in California’s pension funds, and (d) relatively more generous pensions in California that require higher contributions.

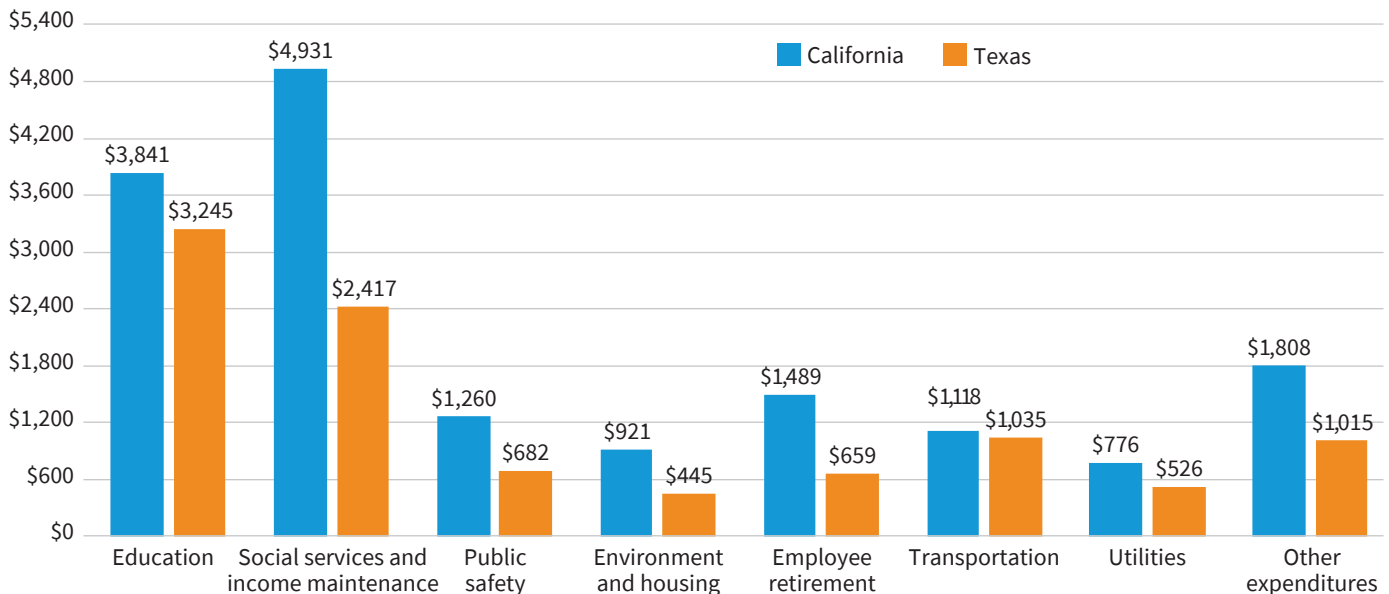
Receipts for government services such as tuition, room and board at public universities; payments to public hospitals; and vehicle registration are also much higher in California than in Texas (\$2,478 per resident versus \$1,473). This difference to a large extent reflects a larger footprint of the government on economic activity in California. For example, 23 percent of hospital beds are in public hospitals versus just 16 percent in Texas (American Hospital Association, 2020). And consistent with this, state and local hospital revenues per state resident are 61 percent higher in California than in Texas (\$834 versus \$518).

Taken together, several factors explain why per capita state and local revenues are so much higher — either on a per capita basis or as a share of state GDP — in California than in Texas. The four most important ones are individual and corporate income taxes, federal intergovernmental revenues, employee retirement programs, and receipts (aka charges) for government services. These four factors collectively explain 95 percent of the nearly \$7,000 difference in per resident state and local revenues between the two states.

### Where does the money go?

State and local governments in California and Texas spent \$638 billion and \$291 billion, respectively, in the 2019 fiscal year, which represented \$16,105 and \$10,024 per resident. As shown in Figure 4 and in Appendix Table 2, education represented the largest area of spending for Texas and the second largest for California. California’s overall education spending was 18 percent higher at \$3,841 versus \$3,245 in Texas, which is a relatively small difference compared with the overall difference

**Figure 4. CA vs. TX State and Local Expenditures per State Resident, 2019**



Source: U.S. Census Bureau — State and Local Government Finances Tables

of 61 percent. In both states, almost two-thirds of that spending was driven by K-12 education with virtually all the rest going to higher education, which includes two- and four-year colleges and universities.

The largest category of state and local spending in California in 2019 and the second highest in Texas was social services and income maintenance, which mainly represents spending on the Medicaid program. As shown in Figure 4, California’s spending is much higher, at \$4,931 per resident versus \$2,417 in Texas. This large difference is not surprising since one in three Californians are insured through the Medicaid program whereas in Texas only 16 percent are (CMS, 2021). California also spends much more on hospitals and other health care at \$1,533 per resident versus \$953 in Texas. The difference in this category explains almost half of the difference between the two states in total per capita state and local spending.

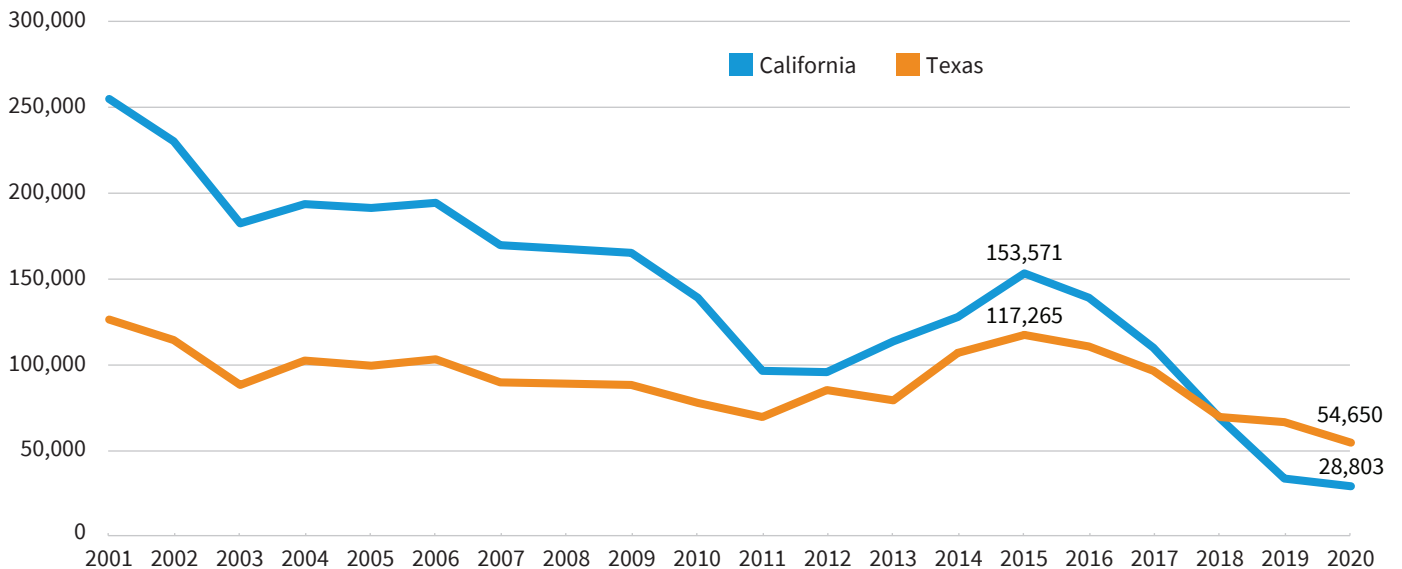
The pattern of higher spending in California is repeated for most other categories of state and local services. For example, the Golden State spends about twice as

much per capita on public safety (\$1,260 versus \$682) as well as on environment and housing (\$921 versus \$445). Similarly, California’s spending on employee retirement programs is more than twice as high (\$1,489 versus \$659).

But there are some interesting contrasts as well. As Appendix Table 2 shows, while California spends four times as much on public transit (\$420 versus \$107 per state resident), Texas spends substantially more on highways (\$836 versus \$489).

Taken together, this overview of state and local spending in America’s two most populous states reveals stark differences for most categories of spending with California substantially higher. We discuss below whether it appears higher government spending in California leads to stronger student performance, better environmental and health outcomes, and safer neighborhoods than in a small government state such as Texas, with the caveat that there are many factors beyond government policy that influence these outcomes.

Figure 5. Net Immigration CA vs. TX, 2001-2020



Source: U.S. Census Bureau — National Population Totals (Components of Change)

### Metrics of economic performance

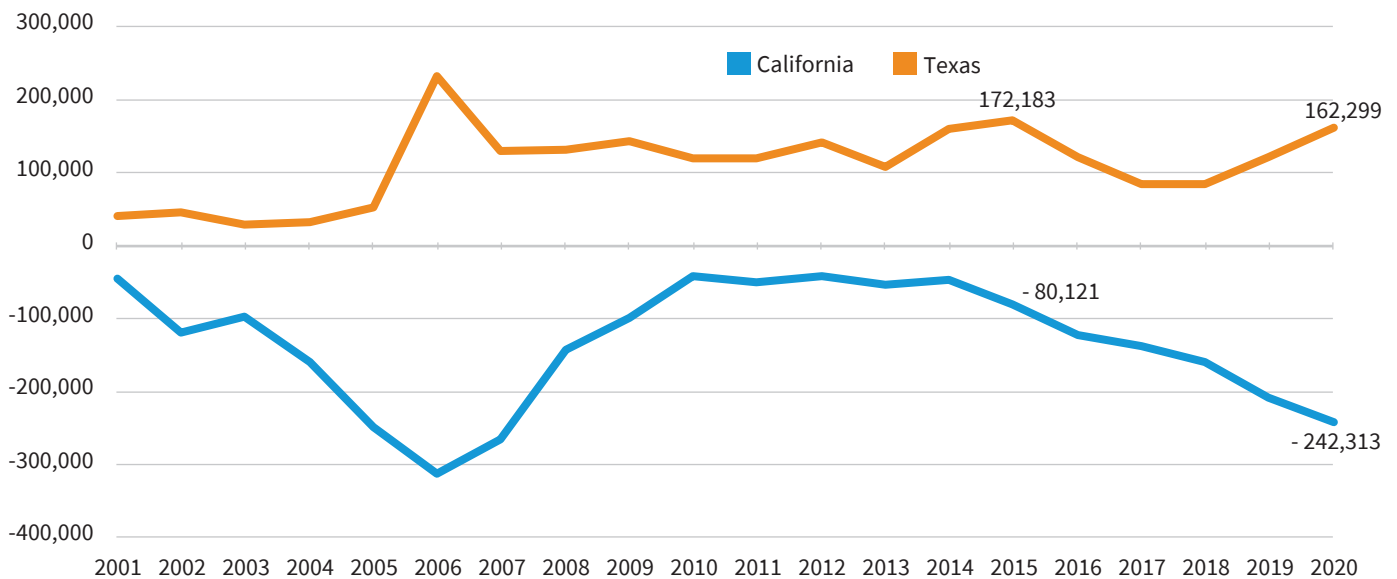
One frequent measure of the economic health or influence of a city or state in the U.S. is its rate of population growth. For decades, the population of both California and Texas grew significantly more rapidly than the national average. As a result, the number of congressional representatives from the two states steadily rose while the overall number in the U.S. House of Representatives remained at 435. During the mid to late 1960s, the two states had a combined 61 representatives (38 from CA and 23 from TX). Twenty years later, that number had grown to 72 (45 from CA and 27 from TX) and by the mid-late 2000s there were 85 members of the House from either California (53) or Texas (32). This trend has continued for Texas, which will beginning in early 2023 have 38 House members due to the 2020 Census apportionment (U.S. Census Bureau, 2021).

But for the first time since it became a state more than 170 years ago, California’s influence in Congress is set to decline, with its delegation shrinking from 53 to

52 beginning in 2023. This is the result of California’s population growth falling behind the national average in recent years. From 2000 to 2015, California’s population grew at the same rate as the national average — 0.9 percent annually — while Texas grew twice as fast at 1.8 percent per year. But from 2015 to 2020, California’s population growth slowed to less than half of the national average (0.2 percent annual versus 0.5 percent). The growth rate in Texas also slowed, though to just 1.3 percent so it still significantly outpaced the national average. These recent changes were not driven by COVID, as they were well underway before 2020.

These divergent trends were driven by two factors depicted in Figure 4 and Figure 5. First, immigration to the U.S. plummeted by 55 percent, from just over 1 million in 2015 to 477,000 in 2020 (USAFacts, 2021). However, and as Figure 5 shows, the decline was much more pronounced in California (81 percent) than in Texas (53 percent).<sup>4</sup>

Figure 6. Net Domestic Migration CA vs. TX, 2001-2020



Source: U.S. Census Bureau – National Population Totals (Components of Change)

4 Despite this, California is the state with the highest share of its residents born in another country (26.7 percent).

Second, net migration from California to other states more than tripled from 2015 to 2020 (from 80.1k to 242.3k as shown in Figure 6). During this same period, Texas continued to attract more people from other states than the number that left it and this remained stable, declining by just 6 percent (from 172.2k to 162.3k). Similar to the rest of the country, both California and Texas saw declines in their birth rates and increases in their mortality rates in each year from 2015 to 2020 ([U.S. Census Bureau, 2021](#)).

Research by [Rauh and Shyu \(2021\)](#) strongly suggests that the increases in California’s marginal tax rates in 2013 increased the rate at which California residents moved out of state. If true, this suggests that the much larger effective increases caused by the federal 2017 tax reform — which essentially eliminated the deductibility of state income taxes — may have added further fuel to this fire. In 2017 and before, California’s 13.3 percent top marginal tax rate was effectively 8.0 percent for high-income taxpayers (due to the earlier deductibility of state income taxes) but this changed immediately to 13.3 percent in 2018.

In light of these population trends during the last decade or two, one might expect other measures of economic performance to show Texas as a rising force and California as a receding one. However, and as shown

in Table 1 below, California’s performance stands out when considering the growth in per capita income (PCI) in recent years. Between 2000 and 2020, California’s PCI was significantly greater than both Texas and the U.S. as a whole ([BEA, 2021](#)). Both disparities grew substantially from 2015 to 2020. For example, while California’s per capita income was 20 percent higher than Texas’ in 2015, this gap surged to 30 percent just 5 years later. And this was not simply a COVID-induced phenomenon, as the rising disparity was apparent in 2019 even before the pandemic. Similar patterns emerge when one considers state-specific GDP per capita during this same period.

Of course, changes in average income alone do not capture how the distribution of income is changing over time. For example, an area’s per capita income could soar with little improvement for the most disadvantaged. However, the data displayed in Table 2 show that the fraction of the population with family incomes below the federal poverty line has declined in both California and Texas relative to the nation as a whole ([U.S. Census Bureau, 2020](#)). For example, in the 19 years from 2000 to 2019, California’s poverty rate fell by 0.9 percentage points (from 12.7 percent to 11.8 percent) and Texas’ declined by 1.0 percentage points (from 14.6 percent to 13.6 percent) while the national poverty rate increased by

**Table 1.** Per Capita Income in California and Texas from 2000 to 2020 (inflation-adjusted to 2020 dollars)

	Per Capita Income			Ratio of Per Capita Income		
	CA	TX	US	CA / TX	CA / US	TX / US
2000	\$50,143	\$42,284	\$46,075	1.19	1.09	0.92
2005	\$52,050	\$43,392	\$47,505	1.20	1.10	0.91
2010	\$51,779	\$45,419	\$48,112	1.14	1.08	0.94
2015	\$60,991	\$50,837	\$53,510	1.20	1.14	0.95
2019	\$67,554	\$53,469	\$57,159	1.26	1.18	0.94
2020	\$71,480	\$54,841	\$59,729	1.30	1.20	0.92

Source: Bureau of Economic Analysis



1.0 percentage points (from 11.3 percent to 12.3 percent). Different base periods can lead to slightly different results though the table suggests that both the Golden and Lone Star states have enjoyed larger poverty rate declines than the U.S. overall since 2005 or 2010 as well.<sup>5</sup>

**Table 2.** Poverty Rates in California and Texas from 1999 to 2019

	CA	TX	US
1989	12.7%	17.7%	12.8%
1995	16.5%	18.5%	13.8%
2000	12.7%	14.6%	11.3%
2005	13.3%	17.5%	13.3%
2010	15.8%	17.9%	15.3%
2015	15.4%	15.9%	14.7%
2019	11.8%	13.6%	12.3%

Source: U.S. Census Bureau – Small Area Income and Poverty Estimates Program

Depending on the metric that one uses, both Texas and California have much to celebrate in recent years. The population of Texas is growing much more rapidly than in the U.S. as a whole and the state is therefore enjoying increasing influence economically and politically. On the other hand, per capita incomes are growing significantly more rapidly in California, which has benefited differentially from the incredible successes of advanced technology companies such as Alphabet, Apple, and Facebook that are headquartered in the state. And by arguably the most common metric of economic well-being among the disadvantaged (the poverty rate), both states are doing well relative to the rest of the U.S.

## Metrics of government performance

Government policy influences educational attainment, health status, crime, air quality, housing security, and many other measures of well-being. For example, government policy can reduce the student-teacher ratio in public school classrooms, increase Medicaid reimbursement to physicians, revise subsidies for renewable energy or affordable housing development, or change the number of police on the streets.

Of course, policy levers are not the only determinants of these metrics. A large body of research in economics and other social sciences strives to disentangle the causal effect of specific policies so that lawmakers and others have the best possible evidence when making decisions. Unfortunately, empirical evidence often loses out to politics and other factors in deciding which policies are implemented, which ones stay in place, and which ones are rescinded.

In this section we examine how California and Texas measure up when it comes to health, homelessness, education, crime, energy grid stability, and air quality. This treatment is not meant to be exhaustive but simply to shine the light on several metrics that should represent important priorities to policymakers and their constituents now and in the future.

## Health policy differences: The case of Medicaid

One in three Californians obtain their health insurance through the state Medicaid program known as Medi-Cal. The corresponding fraction in Texas is less than half that amount at 16 percent, even though a larger fraction of Texans than Californians live in poverty (*CMS, 2021*). The primary reason for this difference is that California

<sup>5</sup> California's poverty rate is significantly higher when one uses the Census Bureau's Supplemental Poverty Measure, which among other differences with the official measure of poverty accounts for differences across geographic areas in housing costs. Using the SPM, California's most recent poverty rate (an average of 2017 through 2019) was 17.2 percent, which was the highest rate in the U.S. and substantially greater than California's official poverty rate measure of 11.4 percent during that same period. In contrast, in both Texas and the U.S. overall, the SPM was almost identical to the official poverty rate measure (*U.S. Census Bureau, 2020*).

expanded its Medicaid program in 2014 as called for in the Affordable Care Act (ACA), with this significantly increasing both Medicaid enrollment and health insurance coverage (*Duggan et al., 2019*). Texas joined 11 other states in choosing not to expand its Medicaid program.

As the first row of Table 3 shows, the fraction of Texans without health insurance is more than twice as large as the corresponding share of Californians (18.4 percent versus 7.7 percent) (*U.S. Census Bureau, 2020*). In fact, Texas was in 2019 the state with the lowest rate of health insurance coverage in the U.S. Additionally, California had the second largest increase in health insurance coverage of all states from 2010 to 2019 while the increase in Texas was lower than the national average.

**Table 3. Health Policy and Outcome Differences**

	CA	TX	US
Percent of residents uninsured	7.7%	18.4%	9.2%
Percent of residents on Medicaid	33.2%	16.4%	25.3%
Life expectancy	80.8	78.4	78.7
Infant mortality rate (per 1K infants)	4.1	5.5	5.6

Source: U.S. Census Bureau, Centers for Disease Control and Prevention

Recent research has demonstrated that ACA-induced expansions in health insurance coverage reduced mortality in the U.S. (*Miller et al., 2020*). The different policy choices by California and Texas about whether to expand Medicaid are symptomatic of different underlying attitudes toward public health assistance generally. It is plausible that these differences contribute to the much higher life expectancy at birth in California (80.8) than in Texas (78.4) (*CDC, 2021*) and the much lower infant mortality rate in California (4.1 per 1,000 infants) than in Texas (5.5) (*CDC, 2021*).

## Housing and homelessness in California and Texas

As shown above in Figure 3, housing prices are significantly higher in California than in Texas. One contributor to this difference has been the much more burdensome regulations in California that severely limit housing construction (*Hsieh and Moretti, 2019; Glaeser and Gyourko, 2018*). Consistent with this, data from the U.S. Census Bureau indicate that Texas had more than twice as many building permits as California during 2020 (224,356 versus 105,925) despite its population being 25 percent lower (*U.S. Census Bureau, 2021*). Similarly, the number of new houses built in California has not kept up with population growth in recent years (*CA Budget Summary, 2020*). High prices and low supply contribute to the much lower rate of home ownership in California (55.9 percent) than in Texas (65.5 percent) (*Census Bureau, 2021*).

**Table 4. Housing and Homelessness**

	CA	TX	US
Homelessness rate (per 100k residents)	409	94	177
Building permits	105,925	224,356	1,451,579
Building permits (per 1k residents)	2.7	7.7	4.4

Source: U.S. Department of Housing and Urban Development, U.S. Census Bureau – Building Permits Survey

The low rate of construction of owner-occupied and rental units is one of many factors, such as declining mental health, that have contributed to high and rising rates of homelessness in California. The fraction of residents who are homeless is significantly higher in California (409 per 100,000 residents in 2020) than in any other state, with the exception of Hawaii and New York. In contrast, the share of Texans who are homeless (94 per 100,000) is lower than the national average of 177 per 100,000 residents. Similarly, while national rates of homelessness have been relatively stable since 2015, rising from 176 to 177 per 100,000 residents, the

corresponding rate in California rose by 37 percent (from 298 to 408) and in Texas rose by just 9 percent (from 86 to 94) (*HUD, 2021*).

California's low rate of housing construction has increased the price of housing (both for purchase and rental), which is much higher in California than in any other state. As a result, California has the nation's highest poverty rate when adjusting for the cost of housing, despite having a poverty rate almost equal to the national average — and lower than Texas — without this adjustment (*U.S. Census Bureau, 2020*).

### Education inputs and outcomes: The case of K-12

As demonstrated above, K-12 education accounts for a large fraction of state and local spending in America's two most populous states. This is not surprising, since the two states have a combined 11.7 million students in public elementary and secondary schools (*NCES, 2020*). The needs of K-12 students in these two states are in many respects quite different from in other states. For example, in both California and Texas, fully 19 percent of public K-12 students in fall 2018 were deemed "English Language Learners" by the U.S. Department of Education (which places them in the top 2 of all 50 states). The corresponding fraction for all other states was less than half that amount at just 8 percent (*NCES, 2021*).

With respect to spending per K-12 student and as shown in Table 4, California's level of \$13,129 in 2017-18 was almost identical to the national average of \$13,118 in 2017-18 while spending in Texas was much lower at \$10,025 (*NCES, 2020*).<sup>6</sup> Several states with similar costs of living to California's have much higher spending per pupil, including New York (\$24,556), New Jersey (\$21,062), and Connecticut (\$20,886). This disparity is to some extent surprising given that average teacher

salaries in California are higher than in any other state at \$72,230 versus \$51,320 in Texas and just \$49,890 nationally (*NCES, 2019*). California also has the highest student-teacher ratio of any state at 23.1, which partially explains this apparent disconnect, while this ratio in Texas is just 15.1 (*NCES, 2020*).

**Table 5. Education Differences**

	CA	TX	US
# of public K-12 students in Fall 2018 (in millions)	6.3	5.4	50.7
Percent of K-12 students who were ELL students	19.4%	18.7%	10.2%
Spending per K-12 student (2017-18)	\$13,129	\$10,025	\$13,118
Average teacher salaries	\$72,230	\$51,320	\$49,890
Student to teacher ratio	23.2	15.1	16.0
High school graduation rate	85%	90%	86%

Source: National Center for Education Statistics

Whether and to what extent higher salaries for teachers, lower student-teacher ratios, or other increases in K-12 resources lead to better outcomes for students is the subject of voluminous literature in the economics of education. With respect to high school graduation rates, which is no doubt a very incomplete measure of the quality of a K-12 system, Texas fares much better at 90 percent relative to California's 85 percent according to the most recent data from the U.S. Department of Education for the 2018-19 academic year (*NCES, 2020*).

These disparities in graduation rates are present for essentially all groups of students. For example, in 2018-19 the graduation rate among both Hispanics and whites in Texas was 6 percentage points higher than in California while the differences for both Blacks and Native Americans were even larger at 9 and 12 percentage

<sup>6</sup> This 30 percent disparity is somewhat larger than the 18 percent disparity described above between the two states in state and local education spending per state resident. One important reason for this difference is that public elementary and secondary school students account for a larger share of the population in Texas than in California (19 percent versus 16 percent). Additionally, this focuses only on K-12 spending.

points, respectively. The Texas advantage is lower for Asians (2 percent) though this partially reflects their high graduation rates in both states of 96 and 94 percent. K-12 students in Texas with disabilities, in foster care, who are limited English proficient, disadvantaged economically, or homeless are all more likely to graduate from high school than their counterparts in California.

Therefore, on this (highly imperfect) metric, Texas government outperforms California despite the Lone Star State's much lower per pupil expenditures.<sup>7</sup> This may partly reflect the fact that in Texas the state scores well on holding its public K-12 schools accountable (with strong ratings on two of three metrics used in a state-by-state assessment) — as allowed for by the federal Every Student Succeeds Act — while in contrast California scores poorly (with a weak rating on all three metrics) (*Fordham Institute, 2017*).

## Crime and incarceration

State and local governments spend a significant amount of money on policing and incarceration. In 2019 and as shown in Table 6, crime rates in California and Texas were quite similar. According to the Federal Bureau of Investigation, the violent crime rate in California was 441.2 per 100,000 residents while it was 5 percent lower in Texas at 418.9 (*FBI, 2020*). In contrast, the property crime rate in Texas was slightly higher at 2,390.7 per 100,000 versus 2,331.2 per 100,000 in California. Both Texas and California had slightly higher violent and property crime rates than the U.S. overall. However, when considering this data, it is important to account for the fact that many crimes are under-reported. Homicides, which rarely go unreported, are below the national rate of 5.0 per 100,000 residents in both states.

**Table 6. Crime and Incarceration**

	CA	TX	US
Violent crime rate (per 100k residents)	441.2	418.9	379.4
Property crime rate (per 100k residents)	2,331.2	2,390.7	2,109.9
Homicide rate (per 100k residents)	4.3	4.9	5.0
Incarceration rate (per 100k residents)	640	990	750

Source: Federal Bureau of Investigation, U.S. Bureau of Justice Statistics

Previous research suggests that more police on the streets leads to reductions in crime (Chalfin et al., forthcoming). Consistent with most other areas of government activity, California spends significantly more on police per state resident, at \$526 versus \$302 in Texas.

Another potentially important driver of criminal activity is the incarceration rate, which at the national level has fallen significantly during the past decade. Despite similar crime rates, Texas has a larger share of its population in either prison or jail, which is likely driven by the state's harsher sentencing. More specifically, the incarceration rate in California at the end of 2019 (including both local jails and state prisons) was 640 per 100,000 residents versus 990 per 100,000 residents in Texas (BJS, 2021). Given California's much lower incarceration rate, it is to some extent surprising that spending on prisons and jails per state resident is 72 percent higher in California than in Texas (\$380 versus \$221).

<sup>7</sup> Comparisons of standardized test scores in the two states paint a somewhat mixed picture. For example, among 8th graders on the National Assessment of Educational Progress mathematics test, Texas students on average outperform those in California (*NCES, 2020*). In contrast, California 8th graders outperform fellow 8th graders in Texas in the NAEP reading measure (*NCES, 2020*).

## Energy and environmental metrics

California takes a much more assertive approach to environmental regulation than Texas. For example, California is allowed under the 1970 Clean Air Act (CAA) to set stricter-than-federal emission standards for new motor vehicles, because California (alone among U.S. states) had emission standards for mobile sources (vehicles, engines, and motorized equipment) that predate the CAA. The Golden State's congressional delegation regularly ranks at the top of the [League of Conservation Voters' scorecard](#) for U.S. states, and it has enacted a set of ambitious policies for reducing the greenhouse gas emissions that are changing the global climate ([Berkeley Law, 2021](#)). In contrast, Texas was among the coalition of 24 states that sued the Obama administration over the Clean Power Plan (a keystone of that administration's climate policy) and its federal lawmakers regularly rank at the bottom of the LCV scorecard ([Collier, 2015](#)).

However, California's pre-CAA regulations came about due to the state's severe urban air pollution. While air quality in California has improved along with the rest of the country since the passage of the CAA, the state still struggles with poor air quality, in comparison with most other U.S. states, including Texas. The American Lung Association's most recent lists of the 10 most polluted U.S. cities include a majority in California ([American Lung Association, 2021](#)).<sup>8</sup> No cities in Texas are on these "top 10" lists.

In Table 3 below, we report the median value of the Air Quality Index (AQI), which rates air quality on a scale from 0 to 500 (the higher the number, the worse the pollution). California's 2021 population weighted median AQI (48.9) is about 77 percent higher than that in Texas (27.7) ([EPA, 2021](#)).<sup>9</sup>

Elevated levels of air pollution, especially PM2.5, are causally linked to severe health and development problems including infant mortality and early death among adults, as well as premature births, low birth weights, student school absences, lower student test scores, and declines in worker productivity and long-run earnings ([Graff Zivin and Neidell, 2013](#)).

Thus, despite the Golden State's stronger attention to environmental regulation, on a population-weighted basis, exposure to the most common air pollutants that cause serious illness and premature mortality is much higher in California than in Texas, on average.

As noted above, California's climate change targets and regulations are ambitious, while Texas has no statewide emissions reduction target or adaptation plan.<sup>10</sup> Surprisingly, however, the two states have seen comparable growth in the share of electricity generated by renewable sources such as wind and solar energy ([EIA, 2021](#)).

As shown in Table 7, 21 percent of electricity generated in California and 18 percent of that generated in Texas comes from wind and solar ([EIA, 2021](#)). The federal Production and Investment Tax Credits for renewable energy projects have encouraged this development in both states. But if California's achievements in this area also have been spurred in part by its climate change goals, Texas' growth in renewable electricity generation has more to do with deregulation of the electric grid in the early to mid-2000s (which favors energy sources with low marginal costs), as well as the state's substantial public investment in high-voltage transmission infrastructure ([Powering Texas, 2018](#)).

8 The ALA's 2021 rankings use the most recent "quality-assured nationwide air pollution data publicly available," from 2017, 2018, and 2019.

9 The AQI combines five major air pollutants that are all regulated under the CAA: ground-level ozone, particulate matter (both PM2.5 and PM10), carbon monoxide, sulfur dioxide, and nitrogen dioxide.

10 Texas cities including [Austin](#), [Dallas](#), and [Houston](#) have developed their own climate change plans and policies.

**Table 7. Energy and Environment**

	CA	TX	US
Median AQI	48.9	27.7	43.0
Percent of electricity generated from wind and solar (2019)	21%	18%	9%
Power outages per TWh of electricity generated (2000-2016)	0.061	0.018	0.022
Average retail electricity price (per kWh) (2021)	\$0.203	\$0.087	\$0.113

Source: U.S. Environmental Protection Agency, U.S. Energy Information Administration, Mukherjee et al.

Unfortunately, another similarity between the two states' electric grids is low reliability. Between 2000 and 2016, electric utility customers in California experienced 201 major power outages, while those in Texas experienced 127 such outages, according to data from the U.S. Department of Energy, easily ranking them first and second among all U.S. states in the frequency of major outages during this period. Severe weather was the most frequent cause in both states ([Mukherjee et al., 2018](#)).

Adjusting for differences in the quantity of electricity generated, California experienced about 0.061 outages per terawatt-hour (TWh) generated from 2000 to 2016, and Texas experienced about one-third as many, at 0.018 outages per TWh (see Table 7) ([EIA, 2021](#)).

Politicians and pundits often try connecting the grid reliability issues in both California and Texas with the increasing renewable electricity generation discussed above.<sup>11</sup> However, while integrating large quantities of intermittent energy sources is a challenge for both states, academic analyses tend not to support the contention that green electricity plays a major role in the two states' current and past grid reliability challenges ([Busby et al., 2021](#); [Borenstein, 2021](#)).

Economic damages from such outages can be large. For

example, estimated damages from the February 2021 Texas winter storm include \$80-\$130 billion in direct and indirect costs ([Golding et al., 2021](#)), and hundreds of deaths ([TDSHS, 2021](#)).

Finally, the two states' energy prices differ significantly. California has the third-highest average retail electricity price among U.S. states (after Alaska and Hawaii), at \$0.203/kWh, and Texas has the fifth-lowest, at \$0.087/kWh ([EIA, 2021](#)). Average wholesale electricity prices in the two states are very similar, with the difference in retail prices largely attributable to differences in the two states' response to the dramatic decline in the wholesale price of U.S. natural gas due to the rise of hydraulic fracturing in the mid-2000s ([Wolak, 2018](#)). Natural gas generates the largest share of electricity in both states, and the savings from this price drop has benefited Lone Star State consumers in the form of lower utility bills. In contrast, the Golden State has used this shale dividend to fund new regulations to reduce carbon intensity in the energy sector ([Wolak, 2018](#)).

The costs of California's climate approach can be compared with the benefits of reducing carbon emissions, currently about \$51/ton according to the U.S. federal Interagency Working Group ([IWG, 2021](#)) and likely to rise significantly with new estimates expected in early 2022 ([Chemnick, 2021](#)). California's approach to reducing energy sector emissions clearly generates climate benefits. However, the majority of those benefits do not accrue to the state's residents. Many of the Golden State's climate change regulations may be efficient in a global sense, but whether they are net beneficial *within* state boundaries may depend on whether associated local air pollution reductions are significant ([Scovronik et al., 2019](#)).

<sup>11</sup> See [Mena \(2021\)](#) and [Wall Street Journal \(2021a, 2021b\)](#).

## Conclusion

California and Texas have much to celebrate in recent years but also multiple fronts on which improvement is needed. Economically, each state has become significantly more powerful. Texas has seen a population boom while California's growth has been in per capita incomes and GDP. With respect to other measures of well-being, California excels on health outcomes but fares poorly on housing affordability and air quality while Texas is the opposite in all three cases.

Many things have changed in the Golden and Lone Star states since the start of the pandemic in early 2020. Crime has surged in both states while each has been beset by more natural disasters. A recall election has rocked the political system in California while new voting regulations and abortion restrictions in Texas have further polarized the state. Different lockdown, vaccine, and masking policies have been controversial and both states have been hit very hard by COVID, with the cumulative death rate in Texas 20 percent higher than in California (201 versus 168 per 100 thousand residents as of 9/13/2021) ([CDC, 2021](#)). Changes in federal policies including immigration, trade, and tax policy along with possible expansions of infrastructure and social service spending will significantly affect these two states.

America's founders were careful to constrain the powers of the federal government in crafting the Constitution. This gave states and their local governments considerable latitude to regulate economic and other activities within their borders. Almost 90 years ago, former Supreme Court Justice Louis Brandeis referred to this freedom as allowing states to serve as "laboratories of democracy." California and Texas have much to teach each other and the other 48 states about how to craft policies that will allow their current and future residents to thrive and to realize their full potential. But both clearly still have much to learn from the experiences in other states and from empirical research.

Is California's big government approach better or worse than Texas' limited government approach? Recent developments give ammunition to both sides of this debate. We hope that empirical evidence will increasingly inform those debates and subsequent policy decisions, as each state confronts the massive challenges of a steadily aging population (and the associated state and local government pension challenges), disruptive technologies that may further amplify inequality, and increasingly unpredictable and dangerous weather due to the changing climate.

## APPENDIX

**Table 1.** State and Local Revenues per Capita by Source in 2019 in California and Texas

	Revenues per State Resident		Total Revenues (in billions)	
	CA	TX	CA	TX
<b>Total state and local government revenues</b>	\$16,879	\$9,997	\$666.9	\$289.9
<b>Total tax revenues</b>	\$7,326	\$4,709	\$289.5	\$136.5
Individual income taxes	\$2,533	\$0	\$100.1	\$0.0
Corporate income taxes	\$349	\$0	\$13.8	\$0.0
Property taxes	\$1,840	\$2,098	\$72.7	\$60.8
Sales and gross receipt taxes	\$2,108	\$2,245	\$83.3	\$65.1
All other taxes	\$496	\$366	\$19.6	\$10.6
<b>Federal transfers to state and local</b>	\$2,855	\$1,747	\$112.8	\$50.6
<b>Employee retirement revenues</b>	\$2,137	\$580	\$84.4	\$16.8
<b>Current charges for government services</b>	\$2,478	\$1,473	\$97.9	\$42.7
<b>Utility revenues</b>	\$836	\$529	\$33.0	\$15.3
<b>Other insurances trust revenue</b>	\$412	\$134	\$16.3	\$3.9
<b>Miscellaneous general revenue</b>	\$836	\$825	\$33.0	\$23.9

Source: U.S. Census Bureau – State and Local Government Finances Tables



**Table 2.** State and Local Expenditures per Capita by Source in 2019 in California and Texas

	Expenditures per State Resident		Total Expenditures (in billions)	
	CA	TX	CA	TX
<b>Total state and local government expenditures</b>	\$16,145	\$10,024	\$637.9	\$290.6
<b>Education services</b>	\$3,841	\$3,245	\$151.7	\$94.1
Elementary and secondary (K-12)	\$2,404	\$2,041	\$95.0	\$59.2
Higher education	\$1,257	\$1,110	\$49.7	\$32.2
Other education	\$179	\$93	\$7.1	\$2.7
<b>Social services and income maintenance</b>	\$4,931	\$2,417	\$194.9	\$70.1
Public welfare	\$3,391	\$1,427	\$134.0	\$41.4
Hospitals and other health	\$1,533	\$953	\$60.6	\$27.6
All other social services	\$8	\$37	\$0.3	\$1.1
<b>Public safety (corrections, police, fire)</b>	\$1,260	\$682	\$49.8	\$19.8
<b>Environment and housing</b>	\$921	\$445	\$36.4	\$12.9
<b>Employee retirement expenditures</b>	\$1,489	\$659	\$58.8	\$19.1
<b>Transportation</b>	\$1,118	\$1,035	\$44.2	\$30.0
Highways	\$489	\$836	\$19.3	\$24.2
Public transit (utility)	\$420	\$107	\$16.6	\$3.1
Air transportation (airports)	\$156	\$66	\$6.2	\$1.9
All other transportation	\$53	\$25	\$2.1	\$0.7
<b>Government administration</b>	\$579	\$330	\$22.9	\$9.6
<b>Interest on general debt</b>	\$458	\$341	\$18.1	\$9.9
<b>Water, electric, gas utilities</b>	\$776	\$526	\$30.7	\$15.3
<b>Other insurance trust expenditures</b>	\$327	\$84	\$12.9	\$2.4
<b>General expenditures not elsewhere classified</b>	\$444	\$259	\$17.6	\$7.5

Source: U.S. Census Bureau – State and Local Government Finances Tables

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