CALIFORNIA’S FUTURE

- CLIMATE CHANGE
- CORRECTIONS
- ECONOMY
- HEALTH CARE
- HIGHER EDUCATION
- HOUSING
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- POLITICAL LANDSCAPE
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Climate Change threatens California’s future

Increases in global emissions of greenhouse gases (GHGs) are leading to higher air and water temperatures as well as rising sea levels, with serious consequences for California. Air temperatures are projected to increase throughout the state over the coming century. Sea level is expected to rise 17 to 66 inches by 2100, and the frequency of extreme events such as droughts, heat waves, wildfires, and floods is expected to increase. Higher temperatures will result in more precipitation falling as rain (and less as snow), diminishing reserves of water in the Sierra Nevada snowpack. Even if all GHG emissions ceased today, some of these developments would be unavoidable because the climate system changes slowly.

Air temperatures are projected to rise in California, especially under high emissions scenarios

In the face of these threats, California has taken the lead in global efforts to reduce emissions. Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, requires the state to reduce greenhouse gas emissions to 1990 levels by 2020; this will result in emissions roughly one-third less than what would be expected under “business as usual.” An executive order calls for emissions to be reduced to 80 percent below 1990 levels by 2050. Reductions of this magnitude are needed on a global scale to stabilize the earth’s climate. California now faces a twofold policy challenge: finding cost-effective ways to reduce emissions and preparing for the climate changes that are expected even if emissions are successfully reduced.

California is not alone in tackling this global issue, and the state now has collaborative climate policy agreements with Quebec, China, and Mexico. California must continue to forge new strategies, even though the nature and timing of climate change are uncertain and global efforts to reduce emissions may or may not be successful.
CALIFORNIA IS USING A MULTIFACETED APPROACH TO REDUCE EMISSIONS

The California Air Resources Board (CARB) is responsible for implementing the Global Warming Solutions Act. In late 2008, CARB adopted a Scoping Plan that outlines the programs designed to reach the 2020 target, the first comprehensive plan of its kind within the United States (and one of the first such plans internationally). The 2013 update to the plan found that California is on track to meet the 2020 target, but the state will need to significantly increase the pace of GHG emission reductions to meet its more ambitious longer term goals.

ENERGY AND TRANSPORTATION ARE THE LARGEST COMPONENTS OF THE SCOPING PLAN

![Energy and Transportation Pie Chart]

- **Transportation**: 32.9%
- **Energy efficiency and renewables**: 28.6%
- **Cap and trade**: 19.8%
- **High GWP measures**: 11.6%
- **Forestry**: 2.9%
- **Local government**: 2.9%
- **Other**: 1.4%


**NOTE**: GWP = global warming potential; gases with high GWP include refrigerants and solvents.

- **New standards for passenger vehicles are key** ...
  California adopted the first-ever greenhouse gas emission standards for passenger vehicles in 2002. These standards, which began with the 2009 model year, will reduce emissions from new passenger vehicles by approximately 30 percent by 2016. The federal government set national standards to match California’s. In 2012, California, along with the federal government, adopted further standards, to begin with the 2017 model year, which will reduce GHG emissions by 34 percent (based on 2014 levels) by 2025. This program includes putting more than 1.4 million zero-emission vehicles on the road by 2025.

- **... so are ambitious renewable energy goals.**
  California’s Renewable Portfolio Standard, established in 2002 and expanded in 2006 and 2011, sets one of the nation’s most ambitious targets for expanding renewable energy. The program requires utilities to provide 33 percent of total procurement from renewable energy resources by 2020. Although certain distribution, permitting, and financing challenges remain, California’s three large utilities provided 22.7 percent of their electricity sales from renewable power in 2013 and are on track to meet the 33 percent standard by 2020.

- **A statewide cap-and-trade program has been adopted.**
  California adopted the first GHG cap-and-trade program in the nation in 2011. Under this program, firms that would need to spend a lot to reduce emissions can trade emission reduction credits with firms that can reduce emissions at lower cost. The auctions—successfully launched in late 2012—began with electric utilities and large industrial emitters, will include transportation fuels in 2015, and will eventually cover 85 percent of the state’s GHG emissions. California’s program was linked with Quebec’s cap-and-trade program in January 2014, paving the way for other states and regions to link their programs in the future. Auction revenues support investments to reduce GHG emissions, including clean transportation and water and energy efficiency. A portion of the revenues is also returned to customers of electric utilities as a climate credit, which consumers are encouraged to spend on energy efficiency improvements.
• California has also implemented other innovative strategies. Adopted in 2008, Senate Bill (SB) 375 aims to reduce emissions from passenger vehicles by integrating investments in land use and transportation to reduce driving. This bill provides incentives to achieve these reductions by easing environmental review requirements for qualifying projects. In accordance with this bill, CARB has adopted regional per capita GHG emission reduction targets from passenger vehicles for 2020 and 2035. Fifteen of the 18 regions covered by the bill have plans in place, and most report meeting or exceeding their reduction targets. However, San Diego is under court order to strengthen its plan.

• California’s local governments are also addressing climate change. Roughly 80 percent of California’s cities and counties—home to 98 percent of the state’s residents—have already adopted or are developing plans and programs to address climate change. In many instances, these measures are also being promoted as ways to reduce energy costs and work toward broader sustainability goals. Opinion polls suggest continued public support for many of these state and local efforts, though support tends to decline if measures increase costs for consumers.

• California will need to build on current efforts to meet its longer term emission reduction goals. Meeting the more ambitious post-2020 goals will require scaling up the deployment of clean technologies and providing more low-carbon options in energy generation, transportation, and other sectors.

### LOCAL GOVERNMENTS ARE ADDRESSING CLIMATE CHANGE

<table>
<thead>
<tr>
<th></th>
<th>Jurisdictions</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopted</td>
<td>26%</td>
<td>45%</td>
</tr>
<tr>
<td>In progress</td>
<td>34%</td>
<td>40%</td>
</tr>
<tr>
<td>Planned</td>
<td>20%</td>
<td>13%</td>
</tr>
</tbody>
</table>

**SOURCE:** Governor’s Office of Planning and Research, “Annual Planning Survey Results 2012” (2012), updated online 6/17/14 (sample size: 471). The survey, mainly conducted in 2011, refers to policies and/or programs to address climate change and/or reduce greenhouse gas emissions.

### CALIFORNIANS’ SUPPORT FOR THE STATE’S CLIMATE POLICIES IS STRONG

<table>
<thead>
<tr>
<th>Policy Description</th>
<th>% Favor (all adults)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requiring automakers to significantly improve fuel efficiency</td>
<td>85</td>
</tr>
<tr>
<td>Increasing federal funding to develop wind, solar, and hydrogen technology</td>
<td>78</td>
</tr>
<tr>
<td>Requiring industrial plants, oil refineries, and commercial facilities to reduce emissions</td>
<td>77</td>
</tr>
<tr>
<td>Requiring oil companies to produce transportation fuels with lower emissions</td>
<td>76</td>
</tr>
<tr>
<td>Requiring one-third of the state’s electricity to come from renewable energy sources by 2020</td>
<td>76</td>
</tr>
<tr>
<td>Setting stricter emissions limits on power plants</td>
<td>75</td>
</tr>
<tr>
<td>Requiring an increase in energy efficiency for residential and commercial buildings and appliances</td>
<td>73</td>
</tr>
<tr>
<td>Global Warming Solutions Act of 2006</td>
<td>68</td>
</tr>
<tr>
<td>Imposing a carbon tax on companies for greenhouse gas emissions</td>
<td>58</td>
</tr>
</tbody>
</table>

**SOURCE:** Mark Baldassare et al., PPIC Statewide Survey: Californians and the Environment, July 2014.
California needs to prepare for the effects of climate change

California is ahead of other states in developing information on the effects of climate change, but much work must be done to prepare for these effects.

- **The effects of climate change are already being seen around the state.**
  Snowpack is melting earlier now than it did in the first part of the 20th century. Some plant and animal species normally found in the southern part of the state have been observed in more northern locations. Average annual temperatures are rising and wildfires are increasing.

- **Sea level rise threatens coastal infrastructure, homes, and habitat.**
  A 2012 National Research Council study projected that sea levels in California south of Cape Mendocino will rise by 17 to 66 inches by 2100. The Pacific Institute found that near the higher end of this range (55 inches), 1,750 and 1,800 miles of highways and roads along the ocean coastline and San Francisco Bay, respectively, are at risk of inundation. Coastal armoring (e.g., seawalls or breakwaters) can help protect infrastructure and homes along the coast, but this is an expensive remedy and would eliminate some recreational and ecological uses of the coastline.

- **Water management faces challenges.**
  The diminishing mountain snowpack reduces water storage and increases the risk of Central Valley flooding. Rainfall variability is also expected to increase, leading to more frequent droughts and floods. In addition, sea level rise threatens fragile levees in the Sacramento–San Joaquin Delta, which are important for the state’s water supply.

- **Public health will be at risk.**
  An increase in extreme events—heat waves, wildfires, and floods—will pose challenges to public health, the state’s emergency preparedness agencies, and health care infrastructure. Case in point: a prolonged heat wave in 2006 resulted in more than 140 confirmed deaths and a significant increase in emergency room visits and hospitalizations.

- **Air quality will worsen.**
  The San Joaquin Valley and the Los Angeles area already have some of the worst air quality in the nation. Rising temperatures and other effects of climate change will worsen air quality, likely requiring additional pollution controls to attain state and federal air quality standards.

- **Biodiversity is under threat.**
  Climate change places an additional burden on many of the state’s plants and animals. As temperatures rise, many species will need to migrate to more hospitable areas. Current development patterns could hinder this movement and threaten extinction for some species.

- **Readiness to cope is variable.**
  Water and electric utilities have begun to consider climate change in their long-range planning and have tools available to develop adaptation strategies. The Natural Resources Agency has developed a statewide adaptation strategy, and some regions are taking the lead in thinking about adaptation (e.g., San Diego and the Bay Area). But in areas such as ecosystem management and flood control, the institutional and legal frameworks are ill equipped to handle the changes.

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**SEA LEVEL RISE THREATENS THE BAY AREA**

| Inundation with 16-inch sea level rise |
| Inundation with 55-inch sea level rise |

*Sources: Map from San Francisco Bay Conservation and Development Commission; inundation data from N. Knowles, “Potential Inundation Due to Rising Sea Levels in the San Francisco Bay Region” (California Climate Change Center, 2009).*

*Note: The map illustrates the potential inundation with 16 inches and 55 inches of sea level rise, toward the upper end of the range expected by 2050 and 2100, respectively.*
• The state can help local governments prepare for climate change effects.
Two state-supported online tools may help to inform local adaptation planning. The online tool Cal-Adapt allows users to identify potential climate impacts in specific regions. Knowledge of these risks can help localities begin to determine and plan for their own vulnerabilities. Another online source, the California Climate Adaptation Planning Guide, provides an overview of climate effects and vulnerabilities by region, along with adaptive measures that are within the jurisdiction of local governments.

• Californians support action to address climate change effects.
A strong majority of residents (82%) think it is very or somewhat important for the state to pass regulations and spend money now to prepare for the future effects of climate change (PPIC Statewide Survey, July 2013).

CALIFORNIANS ARE CONCERNED ABOUT THE EFFECTS OF CLIMATE CHANGE

<table>
<thead>
<tr>
<th>Threat</th>
<th>Share of Adults Concerned (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More severe droughts</td>
<td>87</td>
</tr>
<tr>
<td>More severe wildfires</td>
<td>86</td>
</tr>
<tr>
<td>More severe heat waves</td>
<td>73</td>
</tr>
<tr>
<td>Rising sea levels</td>
<td>64</td>
</tr>
<tr>
<td>Threat to economy and quality of life</td>
<td>80</td>
</tr>
</tbody>
</table>

NOTE: For threats to the economy and quality of life, the figure shows the share of adults who think the problem is very or somewhat serious.

LOOKING AHEAD

California is on track to meet its emission reduction goals for 2020 and has begun to assess actions needed to meet its more ambitious goals for 2050. But to decrease the impact of climate change on California, emission reductions will be needed on a global scale—and large reductions will be needed soon to avoid the most severe effects. Even with these reductions, the state needs to prepare for some inevitable effects of climate change.

• Develop an integrated climate change policy.
An integrated climate change policy that includes efforts to reduce emissions and plans to prepare for climate change will ensure that mitigation and adaptation policies are complementary.

• Achieve near-term greenhouse gas emission reductions.
Actions taken today will affect the concentration of greenhouse gases in the atmosphere several decades from now. Therefore, near-term emission reductions are needed to work toward future climate stabilization.

• Undertake some “no regrets” measures now to reduce the effects of climate change.
In some areas, accounting for future climate changes in current planning will head off unacceptably high costs. For example, considering climate change in today’s land-use planning decisions could facilitate species’ migrations. And limiting development in areas at risk of flooding will avoid future costs.
• Tap into local enthusiasm for undertaking climate action.
Local governments’ experience and learning will be especially important in meeting the greenhouse gas emission reduction targets set under SB 375, the state’s transportation and land-use law.

• Continue to develop information to reduce policy uncertainties.
Better information is needed to assess progress toward meeting emission reduction goals and the cost-effectiveness of policy options. Detailed assessments of local climate effects will help pinpoint vulnerabilities and develop priorities for adaptation.

• Continue to play a leadership role.
California has long been a leader on environmental policy, and climate change is no exception. This leadership is important in encouraging other governments to address climate change. Without global cooperation to reduce emissions, California’s economy and society may face severe consequences.

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This series is funded by PPIC’s Donor Circle and the S. D. Bechtel, Jr. Foundation.
CALIFORNIA’S PRISON AND JAIL SYSTEMS CONTINUE TO FACE CHALLENGES

Over the past 40 years there have been remarkable changes to corrections in California. “Tough on crime” policies such as determinate sentencing, mandatory minimum sentences and sentence enhancements, the three-strikes law, and the war on drugs led to a more-than-sevenfold increase in the prison population between 1980 and 2006. During the same period, expenditures rose dramatically and the corrections share of the state budget tripled. These increases could arguably be justified by pointing to falling crime rates: violent crime dropped by about 40 percent and property crime declined by about 54 percent. But other factors—such as demographic and economic changes, as well as changes in policing and drug markets—likely contributed to the drop in crime.

Although the number of prisons increased from 12 to 33 between 1980 and 2006, the prison population grew faster than capacity, and overcrowding led to poor prison conditions. As a result, California was sued in federal court for providing inadequate mental health and medical care. In 2011 the U.S. Supreme Court upheld the mandate of a three-judge panel, which had ordered the state to reduce its institutional population to 137.5 percent of designed capacity. At the time, this amounted to a reduction of roughly 35,000 prisoners.

The state responded with Assembly Bill (AB) 109, which shifted responsibility for many non-serious, non-violent, and non-sexual offenders to county jail and probation systems. Implemented on October 1, 2011, this unprecedented policy shift—known as realignment—was intended to reduce the state’s reliance on incarceration. Premised on the idea that “locals can do a better job,” realignment was expected to lead to cost savings. The reform reduced the prison population by about 27,000 in its first year. It also led to increased coordination across local criminal justice agencies and incentivized the use of evidence-based practices. However, the prison population is still at 140.9 percent of capacity—about 2,800 inmates over the mandated target. Moreover, the county jail population has increased by about 11,000 since realignment began and is approaching historic highs. Also troubling is the historically high level of state expenditures on corrections.

CALIFORNIA’S TOTAL EXPENDITURES ON CORRECTIONS ARE AT A HISTORICAL HIGH

![Graph showing total annual corrections expenditure and share of total state expenditures](source: California Department of Finance. NOTES: Total annual expenditure includes general, special, and bond expenditures. Expenditures are adjusted for inflation and are expressed in 2014 dollars.)
STATE PRISON AND PAROLE POPULATIONS ARE DECREASING

- **Realignment has reduced the prison population.**
  In November 2014 the state prison population stood at 136,000, about 24,700 smaller than it was in September 2011. All of the reductions occurred in the first year of realignment; since then the population has increased by about 2,700. The vast majority of inmates (116,500) are in California Department of Corrections (CDCR) facilities. In addition to this group—known as the institutional prison population—there are 8,700 inmates housed in private facilities in Arizona, Mississippi, and Oklahoma, about 6,400 in contract beds in public and private in-state facilities, and about 4,000 in camps. The out-of-state population has not changed significantly in the past three years, but the in-state contract bed population has increased by 3,900.

- **Realignment ended the practice of sending parole violators back to prison, but re-arrest and reconviction rates remain high.**
  The one-year return-to-prison rate for released offenders has dropped from around 41 percent to about 8 percent—largely because parole violators are no longer returned to state prison. Other measures of recidivism are mostly unchanged, with one exception: the proportion of those arrested multiple times has increased by about 7 percentage points.

- **As the parole population declines, county probation caseloads are increasing.**
  Since realignment, most inmates released from state prison go to county probation—known as Post-Release Community Supervision—instead of state parole. As a result, the parole population has dropped dramatically (from 89,200 to 41,300), while county probation caseloads have increased by 42,200 (as of October 2013).

- **California is less reliant on prison incarceration than many other states but has the largest corrections budget in the nation.**
  California’s prison incarceration rate of 353 inmates per 100,000 residents is well below the national average of 431 and ranks 33rd in the country. However, in 2011, the most recent year of data allowing for state comparison, the state General Fund expenditure of about $8.5 billion was more than twice that of the second-highest spender, Texas—and almost as much as Texas, New York, and Florida combined. However, California’s per capita and per prisoner expenditures ($226 and $57,019, respectively) are not the highest in the nation—they are 5th and 9th.

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**CALIFORNIA’S PRISON AND PAROLE POPULATIONS PEAKED IN THE PAST DECADE**

![Graph showing population trends](source: California Department of Corrections (CDCR) weekly population reports.

NOTE: “Institutional” refers to the population housed in CDCR adult institutions within California; it does not include inmates in fire camps, private or public community correctional facilities, or facilities outside the state.)
COUNTIES ARE OFTEN SHORT ON JAIL BEDS AND SERVICE AND PROGRAMMING SPACE

• After an extended period of decline, the jail population is now growing.

After reaching a high of 84,275 inmates in September 2007, the monthly average daily jail population declined quite steadily to a low of 69,406 in May 2011—a decrease of 17.6 percent, or 14,869 inmates. Since realignment, the jail population has grown by 11,150 inmates, or 15.5 percent, and now stands at 82,930 inmates.

• The county jail systems face capacity challenges.

As of March 2014, the average daily jail population was about 5,500 inmates higher than the statewide rated jail capacity of around 77,400. Of the state’s 123 facilities, 56 had an average daily population above rated capacity. Additionally, 19 counties were operating under court-ordered population caps. To address these capacity constraints, counties released 13,550 inmates in March 2014, 3,200—or 30 percent—more than in September 2011. Counties also find it challenging to provide services and effective programming in jails that were not designed to house inmates for more than a year. The difficulties are especially acute in older facilities. To address some of these challenges, the state has dedicated $2.2 billion to county jail construction, which will add more than 13,000 jail beds across the state over the next decade.

• Sheriffs use alternatives to incarceration …

In managing the jail population, California sheriffs use a number of alternatives to incarceration—including electronic monitoring, day reporting centers, community service, and alternative work programs. According to the Bureau of Justice Statistics Annual Survey of Jails, approximately 16 percent of the population supervised by sheriffs was in an alternative to incarceration program in 2012. Realignment provided counties with some additional tools, such as brief periods of incarceration for probation violations and reduced maximum sentences for supervision violations (from 365 to 180 days). Importantly, the reform introduced split sentencing: instead of serving a sentence solely in county jails, an offender is sentenced to a jail term followed by a period of probation. The use of these sentences has increased, but slightly less than one-third of realigned offenders—lower-level felons who now serve time in county jails rather than state prisons—receive a split sentence.

• … and counties are increasingly emphasizing reentry services and programming.

Most counties report that they are introducing or expanding needs assessment as well as mental health, substance abuse, and cognitive behavioral treatment. Counties are also focused on programs aimed at addressing employment and housing. County budgets reflect this focus on reentry: most counties have allocated the biggest share of their budgets to programming and probation departments.

THE COUNTY JAIL POPULATION IS APPROACHING HISTORICAL HIGHS

![Graph showing the county jail population trends from 2006 to 2014.](image-url)

**SOURCE:** Board of State and Community Corrections (BSCC), Monthly Jail Profile Survey.

**NOTE:** The statewide rated jail capacity, 77,400 inmates as of March 2014, is set by the BSCC.
CRIME RATES ARE AT OR CLOSE TO HISTORICAL LOWS

- California’s violent crime rate is at its lowest level since 1967.
  After increasing slightly in 2012, California’s violent crime rate dropped in 2013, reaching a 46-year low of 397 per 100,000 residents. Since it peaked in 1992, violent crime has declined substantially. Nonetheless, California’s violent crime rate is higher than the national rate of 368 and ranks 18th among all states. In 2013, 59 percent of violent crimes in California were aggravated assaults, 35 percent were robberies, 5 percent were rapes, and 1 percent were homicides.

CALIFORNIA HAS EXPERIENCED A LONG-TERM DECLINE IN CRIME RATES

![Graph showing long-term decline in crime rates](image)


NOTE: Violent crime includes homicide, rape, robbery, and aggravated assault; property crime includes burglary, motor vehicle theft, and larceny theft (including non-felonious larceny theft).

- After a noticeable uptick in 2012, the number of property crimes decreased in 2013.
  The 2013 property crime rate of 2,665 per 100,000 residents is down 3.9 percent from 2012 and close to the 50-year low of 2,594 reached in 2011. Despite a 6.6 percent increase in 2012, California’s property crime rate remains below the national rate and ranks 27th among all states. Of all reported property crimes in California in 2013, 61 percent were larceny thefts, 23 percent were burglaries, and 16 percent were auto thefts.

- Crime rates vary dramatically by region and category.
  The lowest rates of both violent and property crime in 2013 were in the Sierra region (including the small rural counties from Alpine to Inyo) and on the South Coast (which includes Ventura, Orange, and San Diego Counties). Property crime rates in these two regions stood at 2,106 and 2,108 per 100,000 residents, respectively, while violent crime rates were 279 and 265. The state’s highest rates of property and violent crime were in the relatively poor San Joaquin Valley, at 3,658 and 562 per 100,000 residents, respectively. The crime category that varies most widely across regions is robbery: in 2013, the robbery rate in the San Francisco Bay Area (214 per 100,000 residents) was almost nine times higher than the rate in the Sierras (24). The highest auto theft rates were in the San Joaquin Valley (587) and the San Francisco Bay Area (569), while the lowest rates were on the South Coast (281) and in the Sierras (191).
CRIME RATES VARY CONSIDERABLY ACROSS THE STATE

<table>
<thead>
<tr>
<th>2013 Violent Crime Rate (per 100,000)</th>
<th>2013 Property Crime Rate (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;270</td>
<td>&lt;1,977</td>
</tr>
<tr>
<td>270–391</td>
<td>1,977–2,476</td>
</tr>
<tr>
<td>&gt;392–522</td>
<td>&gt;2,477–3,021</td>
</tr>
<tr>
<td></td>
<td>&gt;3,021</td>
</tr>
</tbody>
</table>

SOURCE: Author calculation based on the California Department of Justice’s Criminal Justice Statistics Center, 2013 California Crimes and Clearances File. NOTE: Violent crime includes homicide, rape, robbery, and aggravated assault; property crime includes burglary, motor vehicle theft, and larceny theft (including non-felonious larceny theft).

• Realignment has not led to increases in violent crime but is partially responsible for the increase in property crime. California’s 2011–12 increase in violent crime does not stand out in comparison to other states: 10 others saw greater increases. Furthermore, PPIC found no convincing evidence that the increase in offenders on the street caused by the reform led to more violent crime. However, property crime—auto theft, in particular—has increased more in California than in most other states; only Montana and North Dakota experienced greater increases. While California’s property crime rates decreased in 2013, they did not drop more than in comparable states; this means that the gap that opened up in 2012 between California and those states has not closed. PPIC estimates that for each offender not incarcerated as a result of realignment there are about 1.2 more property crimes per year.

LOOKING AHEAD

Public safety realignment has provided an opportunity to implement new strategies to reduce both reoffending and reliance on incarceration in California. However, many of the issues that led to overcrowding in the state’s expensive prison system remain. Without further sentencing reform, the state’s prisons and jails will continue to be under pressure. The state needs to identify alternative crime prevention strategies and determine how much it needs to invest in capacity so that CDCR and the counties can provide effective corrections and rehabilitative services. Important steps include:

Continuing to reduce the prison population. Despite dramatic decreases, the state institutional prison population remains above the threshold of 137.5 percent of design capacity set by the federal court and the total prison population has even started to increase. In November 2014, voters approved Proposition 47, reclassifying some felony property and drug offenses as misdemeanors. This will reduce both the state prison and county jail populations, but the size of the reductions is not known yet.

Providing county jails with adequate beds and facilities. The state has provided funding for additional jail beds and facilities that will help over the next decade, but projected growth in the state’s overall population will exert future pressure on jail space. In addition, aging facilities complicate the delivery of effective services and programming. Without further jail expansion and/or new policies and practices that reduce incarceration, capacity constraints may be more severe in 2040 than they are today.
Addressing high recidivism rates. Initial analyses do not indicate significant decreases in the state’s high recidivism rates. Progress in this area could relieve pressure on county jails and state prisons. The increased emphasis on evidence-based practices may improve outcomes among released offenders if counties can identify and implement the most effective strategies, and if the state provides adequate funding.

Funding and requiring evaluation. AB 109 did not establish standards or provide funding for measuring outcomes. Without monitoring and evaluation, it will be difficult to assess what California's most significant justice reform in decades has achieved. The state could decide to fund evaluation, requiring or incentivizing counties to collect relevant data and report to the legislature. Widespread, reliable efforts to evaluate county practices would make it easier to implement the most effective strategies to reduce recidivism.
CALIFORNIA’S ECONOMY IS REBOUNDING, BUT CHALLENGES PERSIST

By many measures, California’s economy is making a strong recovery from the Great Recession. The state unemployment rate is lower than it has been in about six years, and jobs have been growing for five years straight. As the housing market continues to improve, the construction industry has regained some of the jobs lost during the recession. Many high-skill industries are experiencing strong growth, which is projected to continue over the next decade. These job market improvements are reflected in family incomes, which are finally rebounding from their recession-era low point. However, many Californians are still unemployed or underemployed. This mixed picture is reflected in Californians’ views of the economy: according to the September 2014 PPIC Statewide Survey, 45 percent believe economic bad times are likely over the next year, while 44 percent predict good times.

While recent trends are an important gauge, historical patterns are still the best guide to California’s economic future. Booms, busts, and recoveries take place in the context of long-term trends, and major industry shifts—such as the transition from manufacturing to services—can occur over decades.

CALIFORNIA JOB GROWTH TRACKS GROWTH IN THE NATION OVERALL

![Graph showing annual growth rate of California and U.S. jobs from 1950 to 2014.]

NOTE: Annual change in nonfarm employment, November to November.

CALIFORNIA’S LONG-TERM ECONOMIC PROSPECTS ARE FUNDAMENTALLY STRONG

The California economy generally keeps pace with the U.S. economy. Higher unemployment and the higher costs of doing business in California are explained or offset by strengths. And they are likely to remain permanent features of the state’s economy.

- California’s economic performance closely tracks that of the nation as a whole.
  The broadest measure of California’s economic performance—employment growth—follows the nation’s growth rate very closely. Over the past 30 years, job growth has averaged about 1.3 percent annually for both California and the nation—and both saw job growth in 2014, for the fifth year in a row. For the past three years, job growth in California (2.7%) has been stronger than growth in the U.S. (1.8%).
Unemployment is persistently higher in California. In November 2014, California’s unemployment rate was 7.2 percent; the national rate was 5.8 percent. While high, California’s rate has dropped 1.2 percentage points from December 2013 and has declined steadily from its peak of 12.4 percent during the Great Recession. California’s unemployment rate has been higher than the national rate for more than 20 years—even when the state’s employment growth surpassed national growth, as it did during the technology boom in the late 1990s. This may seem paradoxical, but it makes sense in the context of California’s fast-growing labor force: the state’s economy generates jobs at a rate similar to the national rate, but this is not enough to keep up with California’s faster-growing population. So California unemployment is likely to remain above the U.S. level for some time to come.

**UNEMPLOYMENT IS ON THE DECLINE**

![Unemployment Graph]


NOTE: Monthly unemployment rate, seasonally adjusted.

California is a high-cost, high-benefit state.

California workers, on average, earn 12 percent more than the national average—even after adjusting for differences in workers, occupations, and industries. But output per worker in California is 13 percent above the national average, and this higher productivity fully offsets the higher average wages. All of California’s immediate neighbors—Nevada, Oregon, and Arizona—have lower wages and lower output per worker.

The “business climate” debate understates California’s strengths.

California consistently scores poorly in many business climate rankings that focus primarily on taxes and other costs of doing business. But the state’s economic performance is stronger than these business climate rankings alone would indicate. Businesses locating in California face higher costs, but they also enjoy many benefits, such as the skill level of the workforce, the availability of capital, the support for new business, and the amenities that make California an attractive place to live.

Economic conditions continue to be uneven.

Improved labor market conditions have yet to contribute to sizable improvements in family income.

Despite improvements, California unemployment remains high by historical standards. Moreover, as of March 2013 the average period of unemployment was 31 weeks—only slightly lower than during the Great Recession. Largely because of labor market conditions, median household income has increased slowly and is well below its pre-recession peak. In 2013, the median family earned about $57,500, reflecting an improvement from the low in 2011 but still 8 percent lower than in 2006. Median income is higher in California than in the nation as a whole ($52,000). But incomes are skewed in California; in 2013, half of the state’s families were earning $57,500 or less and nearly one-quarter earned more than $100,000.
• **Regional economic differences are dramatic—and persistent.**

Economic differences within California are likely to continue. Unemployment tends to be higher in the Central Valley—sometimes considerably higher—than in the urban, coastal parts of the state. This variation is attributable to different industry mixes and job growth patterns—and the faster-growing workforce in the inland parts of the state. Even among urban coastal areas, California’s regional economies don’t move in concert: in most years some regions of the state grow quickly while others grow slowly or contract. Although inland California currently has higher unemployment rates, that region’s low housing costs will contribute to the growth of its workforce. The working-age population in much of inland California is projected to grow more than 25 percent between 2010 and 2030; in California overall, the growth rate will be 8.8 percent.

**INLAND CALIFORNIA’S LABOR FORCE WILL GROW FASTEST**

![Map showing projected growth rate of California's working-age population by county, 2010–2030.](image)

**SOURCE:** California Department of Finance.

**NOTE:** Projected growth rate of California’s working-age population by county, 2010–2030.

• **Housing is still expensive and probably always will be.**

Housing prices have increased year over year for 31 consecutive months in California. In November 2014, the median U.S. home was worth $177,600; in California, the median home was worth $434,200, according to Zillow. Even during the Great Recession, housing in California was much more expensive than in the nation as a whole. Expensive housing creates pressures on both households and employers and reflects the mix of jobs, industries, and amenities across the state. In the past year, median housing prices have increased across California—in both inland and coastal regions—with the largest percentage gains in the El Centro, Merced, and Vallejo metro areas (16–18% increases since November 2013) and the largest dollar increases in the San Jose, San Francisco, and Santa Rosa metro areas ($48,000 or more).
- Strong job growth in services will continue; manufacturing will continue to stagnate.

Over the past year, service industry jobs—both higher-skilled professional services, education, and health care jobs and lower-skilled jobs in accommodation, food, and administrative services—have added 66 percent of all new jobs in California and are projected to continue to lead growth. Manufacturing accounted for only 8 percent of California’s employment in November 2014; year over year, manufacturing employment was virtually unchanged, whereas almost every other industry in the state has grown. Manufacturing has been declining for decades and will continue to be a sluggish sector in California. During the recession, the construction industry contracted most sharply (dropping 37% from peak to trough). As the housing market rebounds and existing housing is being absorbed by California’s growing population, construction employment is rebounding as well. Over the past year, construction employment grew by 6.3 percent, faster than any other industry (except administrative services). Construction is projected to grow 26 percent by 2020—making construction one of the fastest growing industries in the state.

**PROJECTED PRIVATE SECTOR INDUSTRY GROWTH, 2010–2020**

- Educational services: 28.8%
- Accommodation and food services: 27.5%
- Construction: 26.2%
- Wholesale trade: 25.8%
- Professional services: 25.6%
- Health care: 24.9%
- Administrative services: 24.9%
- Retail trade: 22.0%
- Transportation, warehousing, and utilities: 16.7%
- Finance and insurance: 16.0%
- Arts, entertainment, and recreation services: 15.3%
- Other services: 13.7%
- Real estate and rental and leasing: 10.7%
- Information: 8.3%
- Manufacturing: 0.4%

SOURCE: California Employment Development Department.

NOTE: Employment growth projections for private sector only.
LOOKING AHEAD

California’s long-term economic trends reflect strengths but also create pressures that policy must respond to. The most effective economic policies require accurate assessments of California’s economic performance, a balanced view of the state’s competitiveness, and a realistic sense of the state’s strengths and weaknesses.

• Pursue policies to help create jobs and foster full-time employment.
  California’s economy is recovering, but slowly: about 1.4 million Californians remain unemployed, nearly double the number who were unemployed before the recession. Creating jobs and increasing full-time employment is key to enhancing California’s recovery. A thriving California economy is the best route to future employment growth in both the short and long run. Economic policy that stimulates business and fosters a strong, skilled workforce is crucial to job creation in California.

• Don’t pin all hopes on one industry.
  Although some industries—such as film, high-tech, and winemaking—are highly concentrated in California, the state’s economy is in fact very diversified, and its industry mix is quite similar to the nation’s. Economic policy should reflect the breadth and diversity of the state’s economy. Tempting as it is to identify the next boom industry and focus economic development efforts there, booms usually don’t deliver stable growth, as the Internet and housing industries have demonstrated. And some hyped industries fail to take off at all. Economic development policy needs to nurture new, innovative industries that might constitute California’s next boom along with established, steadily growing industries such as health care services.

• Promote economic opportunity through education.
  Education is essential to Californians’ economic well-being. Highly educated workers were somewhat protected from the impact of the Great Recession and are likely to do better during future boom and bust cycles. Promoting education is thus an important strategy for addressing inequality and ensuring economic opportunity across the income spectrum. And because the new economy demands a highly skilled workforce, education plays a crucial role in helping California remain economically competitive.
THE AFFORDABLE CARE ACT COMES TO CALIFORNIA

Major provisions of the Affordable Care Act (ACA) have gone into effect, including the expansion of Medi-Cal (the state’s Medicaid program) and the provision of subsidized coverage through the state’s insurance marketplace, Covered California. Under the ACA, most people must have health insurance or pay a tax penalty. In addition, health insurance coverage is now guaranteed, regardless of health status. There are no longer annual limits on coverage, and variations in insurance costs face specified limits.

The challenges of connecting millions of people to new coverage options and facilitating simple, streamlined enrollment were witnessed throughout the state and the nation. Despite some initial difficulties, enrollment figures exceeded expectations, with an estimated 1.4 million people enrolling through Covered California and more than two million qualifying for Medi-Cal. Translating coverage into access to health services will pose a new set of policy challenges. The next several years will require considerable monitoring, oversight, and adjustment to manage cost pressures, maintain increased insurance coverage, and ensure that the state’s health care providers are able to adequately serve those seeking care.

FIRST-YEAR ENROLLMENT EXCEEDED EXPECTATIONS

MEDI-CAL EXPERIENCES RAPID GROWTH

Medi-Cal provides comprehensive health insurance to low-income people. The ACA brought about key changes to Medi-Cal’s eligibility requirements: low-income adults no longer need to have either a qualifying disability or a dependent child to qualify for coverage.
• **Medi-Cal is the state’s second-largest General Fund expenditure after K–12 education.**

In the 2014–15 budget, the Medi-Cal program will spend an estimated $90.5 billion—an increase of more than $20 billion from the previous year’s Medi-Cal appropriation. The vast majority of additional funds are coming from the federal government, although the cost to the state’s General Fund is estimated at $17.4 billion, which represents an increase of nearly 5 percent from the previous year’s Medi-Cal budget.

• **Medi-Cal will serve nearly one in three Californians.**

According to the current budget, an estimated 11.5 million Californians will be served by the Medi-Cal program—about 30 percent of the state’s total population. This represents an increase of nearly 2.4 million people, with about 825,000 previously eligible and 1.6 million made newly eligible by the ACA. This distinction is important because the newly eligible will be funded entirely by the federal government through 2016. After that, the state’s funding share will increase incrementally through 2020, when the state responsibility will be set at 10 percent. For those previously eligible, the state is required to pay its standard 50 percent match rate.

• **Enrollment in Medi-Cal managed care plans is expanding rapidly.**

Medi-Cal managed care is expanding rapidly, with most new enrollees being signed up for managed care plans. Through the first eight months of 2014, enrollment in these plans increased by nearly 250,000 people each month, on average. Increases also occurred in 2013, with the shift of children from the Healthy Families Program into Medi-Cal and the transition from fee-for-service to managed care in the state’s rural counties.

![Average monthly enrollment in Medi-Cal managed care plans has increased substantially](chart)

**SOURCE:** California Department of Health Care Services, Medi-Cal managed care enrollment reports.

**NOTE:** Shows combined enrollment from all counties and managed care plan types.

• **Services and coverage have also expanded for mental and behavioral health.**

Mental and behavioral health services are an essential benefit under the ACA. This requirement applies to all health plans and represents new services available to Medi-Cal beneficiaries. Given the higher prevalence of mental health conditions and substance-use disorders among lower-income populations, these expanded benefits could be salutary, particularly to some made newly eligible for Medi-Cal—including the homeless and those supervised by county corrections agencies. Making full use of these expansions will require policy initiatives that ensure quality care, better integrate physical and mental health services, and expand behavioral health provider networks.
MENTAL AND BEHAVIORAL HEALTH NEEDS HIGH AMONG POTENTIAL NEW MEDI-CAL ENROLLEES

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<th>Prevalence rate (%)</th>
<th>Total adult population</th>
<th>Low-income adults (under 200% FPL)</th>
<th>Poor adults (under 100% FPL)</th>
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<tr>
<td>Alcohol or drug diagnosis</td>
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NOTE: FPL refers to the Federal Poverty Level, which is set by the federal government each year and used to determine eligibility for a variety of safety net programs.

COVERED CALIFORNIA BEGINS ITS SECOND YEAR

California’s health insurance marketplace, Covered California, provides a place where individuals and small businesses can shop for, compare, and enroll in health plans. Individuals and certain small businesses can also access federal tax credits to offset the cost of insurance purchased through Covered California.

- **Successful first-year enrollment leads to higher targets for the second year.**
  At the end of Covered California’s first open enrollment period, reports indicated that about 1.4 million people enrolled in coverage; slightly more than 1.1 million had their coverage take effect by paying the first premium. Still, enrollment levels exceeded projected targets, particularly in some regions, such as the greater Bay Area, and among some racial/ethnic groups, such as Asian Americans. But other groups, including Latinos and young people ages 18–34, were underrepresented. In its second year of enrollment, Covered California is seeking to increase enrollment by 500,000 people and expand its reach to underrepresented groups.

- **Insurance premiums for the second-year enrollment period have increased modestly.**
  All of the same health plans will participate in Covered California and have negotiated relatively modest premium increases. Statewide, the average rate for coverage increased 4.2 percent, but federal subsidies should insulate most of those enrolled through Covered California from large price shocks. Premium changes differ across regions—from a decrease of 1.9 percent (San Joaquin Valley) to an increase of 6.6 percent (San Francisco).
DESPITE INSURANCE EXPANSIONS, MILLIONS WILL REMAIN UNINSURED

- Even years after ACA implementation, millions of Californians are expected to remain uninsured.
  While it is still too soon to know the number of Californians who have gained insurance coverage, millions will continue to be uninsured. More than 70 percent of uninsured Californians plan to obtain insurance coverage, according to PPIC surveys, but barriers will continue to exist for many. Others will choose not to purchase coverage despite the new insurance mandate. Despite subsidies and coverage expansions, affordable coverage may still prove elusive for some. Also, undocumented immigrants are prohibited from purchasing coverage through Covered California and are not currently eligible for full Medi-Cal coverage. But recent federal action on immigration could extend Medi-Cal to part of the state’s undocumented population.

- Tax penalties for not having insurance will increase in future years.
  The tax penalty for not having coverage in 2015 is $325 per adult. In 2016, the tax penalty will be either 2.5 percent of income or $695 per adult, whichever is greater. Penalties for children are half that of adults, with a maximum penalty amount per family. It is not clear, however, how many people will be subject to these tax penalties. Estimates suggest that the majority of Californians who remain uninsured will be exempt from penalties because of their low income level, lack of affordable coverage options, or immigration status.

- Counties and safety net providers will continue to play a role in providing care to the uninsured.
  Given the sizable increase in Medi-Cal enrollments, the number of low-income uninsured Californians served by counties through indigent care programs and other safety net providers will undoubtedly decline. Consequently, the state budget has reduced the funds it provides to counties for indigent care by $700 million, with larger declines expected in the future. And while counties should see a decline in their indigent care program costs, it will be important to monitor anticipated and actual county savings, with particular attention to counties operating public hospital systems.

HEALTH OUTCOMES, ACCESS, AND QUALITY ARE UNEVEN ACROSS THE STATE

- The health of Californians varies significantly across communities and populations.
  Health can be measured in a number of ways, including outcomes, access to and quality of care, personal behaviors, and social and physical environments—and significant differences exist across socioeconomic, racial/ethnic, and regional groups. For example, compared to all Californians, those with a high school education or less have significantly lower life expectancies—as do African American men and women. Likewise, people living in certain regions of the state and in particular communities face greater obstacles to health.

- Regional health differences are significant.
  Asthma is one example of broad, regional variation in health. Asthma symptoms and attacks have been linked with environmental factors, although in most instances, asthma can be managed with regular preventative health care, medication, and adherence to a recommended course of treatment. But many end up in the emergency department because of severe or poorly managed asthma. Several counties in California’s Central Valley, High Sierra, and Inland Empire regions have emergency department visit rates for asthma that are above recommended targets suggested by the federal government.
EMERGENCY DEPARTMENT VISIT RATES FOR ASTHMA VARY WIDELY BY REGION

Emergency department visit rates
- Below target range
- Within target range
- Above target range
- Data not available

SOURCE: California Office of Statewide Health Planning and Development emergency department data, accessed through the California Department of Public Health, California Environmental Health Tracking Program web query system.

NOTES: Visit rates are age adjusted and include all ages. To be within target range, the rate of emergency department visits for asthma should be 49.6 visits per 10,000 residents ages 5–64. This objective is set by Healthy People 2020, a federal program that provides national objectives for health promotion and disease prevention.

LOOKING AHEAD

- **Improve enrollment system integration and streamline renewals to maintain coverage gains.**
  California has implemented the California Healthcare Eligibility, Enrollment, and Retention System (CalHEERS) to determine eligibility for federal subsidies and enroll people in plans through Covered California. CalHEERS also determines eligibility under the new income criteria for Medi-Cal, but counties continue to administer and process enrollment for the Medi-Cal program. The large initial influx of enrollees strained these systems, resulting in enrollment delays and a large backlog of Medi-Cal applications. Improvements are in progress, but it is imperative that the state’s enrollment systems be seamlessly integrated to prevent unnecessary delays. This effort is crucial if California is to sustain its insurance coverage gains.

- **Monitor access to care under Medi-Cal and Covered California health plans.**
  Getting people connected to insurance coverage is just the first step; coverage needs to translate into meaningful and continued access to health care. A sufficient number of health care providers must participate in the Medi-Cal program and in the provider networks of Covered California’s health plans. But reimbursement rates for Medi-Cal are low compared to other payers, which hinders provider participation. And many health plans offered under Covered California have smaller provider networks to keep premium costs low. Existing state law requires all health plans to provide timely access to care and puts explicit limits on wait times for health care appointments. A new state law will strengthen these standards and provide increased oversight to Medi-Cal managed care plans. It will be important to continue to monitor and assess the ability of health plans to meet these regulations.
• **Support health care safety net providers.**
  The state’s safety net providers, including public hospital systems, primary care clinics, and comprehensive health centers, are an important source of care for low-income people who have gained coverage and for those who remain uninsured. Policymakers will need to monitor the capacity and financial conditions of the state’s safety net providers, particularly county-operated public hospital systems, to ensure they remain viable.

• **Pursue payment and delivery system reforms that will control costs and better coordinate care.**
  The ACA included incentives to promote cost efficiency. As the state moves forward with its expanded Medi-Cal program, it will be important to seek strategies that provide cost-effective care that can be expanded and sustained over time. Throughout the state and the nation, various reforms will be tested to align incentives to promote improvements in both health care delivery and health outcomes and to control costs.

• **Improve data systems.**
  Effective assessments of health care services, quality of care, and costs require better integrated and available data systems. To this end, some states have mandated the creation of a database that includes insurance claims information from all health insurers in the state. Efforts to create an “all payer claims database” in California are currently underway, but are voluntary and do not include all payers. In addition, philanthropic organizations have been working to increase the availability of health data. All of these efforts are needed to increase transparency and provide needed information for consumers, purchasers, health care providers, and policymakers.
CALIFORNIA FACES A SKILLS GAP

California’s higher education system is not keeping up with the changing economy. Projections suggest that the state’s economy will continue to need more highly educated workers. In 2025, if current trends persist, 41 percent of jobs will require at least a bachelor’s degree and 36 percent will require some college education short of a bachelor’s degree. However, given current trends, the supply of highly educated workers is not on pace to meet that demand. Population and education trends suggest that by 2025 only 35 percent of working-age adults in California will have bachelor’s degrees and 28 percent will have some postsecondary training. This equates to a shortfall of one million college graduates with a bachelor’s degree. When we add in the projected supply and demand for workers with postsecondary education short of a bachelor’s degree, the total shortfall exceeds two million.

BY 2025, CALIFORNIA MAY FACE A SHORTAGE OF HIGHLY EDUCATED WORKERS

The state needs to act now to close the skills gap and meet future demand. Without a substantial improvement in educational outcomes, California’s economy will be less productive, incomes and tax revenue will be lower, and more Californians will depend on the social safety net. To close the gap, the state should set new statewide goals for higher education that are consistent with the demands of the 21st century. New investments in higher education will be necessary to meet those goals. Measuring progress and identifying programs and policies that improve student success should be a key component of those investments.

CALIFORNIA NEEDS MORE COLLEGE GRADUATES

- California’s economy increasingly demands highly educated workers.
  For decades, employment growth has been strongest for workers with college degrees. This shift toward highly educated workers has occurred as a result of changes across and within industries. Relatively fast growth in the health care and information technology sectors are driving up demand for these workers, and within those and other sectors there has been a shift toward jobs requiring higher levels of education.
• **The supply of college graduates will not keep up with demand.**
  Two demographic trends will undercut future increases in the number of college graduates. First, the baby boomers—a large and well-educated group—are reaching retirement age, meaning that for the first time ever a large number of workers with college degrees will be leaving the workforce. Second, groups with lower levels of education are a growing share of the state’s population. In particular, Latinos—who now make up California’s largest group of young adults—have historically had low rates of college completion. Those college completion rates have been improving, but not fast enough. And there will not be enough highly educated newcomers to California—from abroad or from other states—to close the skills gap.

• **Higher education is largely a public endeavor in California.**
  As in most states, the vast majority of California’s college students attend public colleges and universities. More than four of every five undergraduate students in California are enrolled in one of the state’s three public education systems: the community colleges, the California State University (CSU), and the University of California (UC). Three of every four bachelor’s degrees awarded annually in the state come from either CSU or UC.

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**THE VAST MAJORITY OF CALIFORNIA’S COLLEGE STUDENTS ATTEND PUBLIC INSTITUTIONS**

![Pie chart showing the distribution of California college students by institution type. Community colleges account for 66% of enrollments, followed by the University of California (UC) at 6%, California State University (CSU) at 13%, private nonprofit at 6%, and private for-profit at 9%.](chart)

**SOURCE:** PPIC estimates of 2012–13 undergraduate enrollment based on Integrated Postsecondary Education Data System data for degree-granting Title IV institutions.

• **Large numbers of California’s high school graduates attend college …**
  More than 60 percent of California’s high school graduates enroll in college within a year of completing high school. More go to community colleges (35%) than to four-year institutions. Open access, wide geographic distribution, and relatively low fees make California’s community colleges especially popular. Compared to students in other states, California’s college-bound high school graduates are more likely to enroll in community colleges than in four-year colleges or universities.

• **… but many never earn a degree.**
  Lack of preparation for college-level work and lack of financial resources keep many students from moving ahead in the higher education system. Approximately one in ten community college students transfer to a four-year university. Even among those who earn at least 12 credit units and take transfer-eligible courses, only about 40 percent eventually succeed in transferring. Roughly half of CSU students graduate within six years of entering as freshmen. Graduation rates are much higher in the UC system: four of every five students earn a degree within six years.
AS THE STATE HAS WITHDRAWN COLLEGE FUNDING, STUDENT COSTS HAVE RISEN

- Funding for higher education has declined dramatically as a share of state General Fund expenditures.
  Over the past few decades, public higher education institutions have faced disproportionate cuts in state funding. In 2001–02, for every General Fund dollar for corrections, the state spent $1.89 for UC, CSU, and the community colleges; in 2011–12, the state spent only 82 cents on UC, CSU, and the community colleges for every dollar it spent on corrections. Over the past ten years, per student General Fund allocations have fallen by more than 40 percent at CSU and by more than 50 percent at UC. These cuts have not been the result of a deliberative process that reprioritized the state’s goals. Rather, state policymakers have had to put out budget fires, and the General Fund’s higher education component is relatively unprotected by statutory, judicial, or federal requirements. Recent increases in General Fund allocations have been relatively small compared to the size of the previous cuts.

TUITION AND FEES HAVE INCREASED DRAMATICALLY

- Cost-cutting and increases in tuition and fees have not fully made up for General Fund cuts.
  California’s colleges have responded to funding cuts by reducing expenses, including administrative and faculty costs, and increasing tuition and fees. The revenue generated by tuition and fee increases has not fully compensated for General Fund cuts. Hence, enrollment has been restricted even in the face of strong and growing demand. Those who do enroll are facing higher costs. Indeed, more students than ever are taking out loans. In 2010, almost half of California freshmen took out student loans—in 2000, only a third did so.

- Student loan amounts have risen at both public and private colleges.
  Among freshmen in California, the average loan amount rose 36 percent between 2005 and 2010 (adjusted for inflation), reaching almost $8,000 for the first year alone. Students at private colleges are much more likely than students at the state’s public colleges to take out loans, and the amounts of those loans are substantially higher. Of particular concern are students at private for-profit colleges. Almost all students attending those institutions take out loans, and amounts are higher than at any other type of institution.
COLLEGE REMAINS A GOOD INVESTMENT

Despite the increase in debt, college is a good investment for the vast majority of students who attend public colleges and private nonprofit colleges. Labor market outcomes, including employment and wages, remain far better for college graduates than for less educated workers, and all but the lowest-paid college graduates earn enough to pay off their debts. Students who attend private for-profit colleges are much less likely to earn a degree, more likely to incur large debts, and more likely to default on their loans.

- Most Californians believe that a college degree is critical for success …
  Almost 60 percent of adults believe that a college education is necessary for success in today’s work world. Latinos are especially likely to hold this view, with 73 percent believing in the value of a college education (PPIC Statewide Survey, November 2011).

UNEMPLOYMENT RATES ARE MUCH LOWER FOR COLLEGE GRADUATES

![Unemployment rates graph](image)


- … and they are right.
  Census Bureau data show that the wages of college graduates are more than 50 percent higher than the wages of workers with only a high school education. The value of a college degree grew rapidly from 1990 to 2010 and remains near record levels. Even given persistently high unemployment, jobless rates are far lower for college graduates than for adults with less education.

- The economic benefits of college persist across majors and across workers’ lifetimes.
  Even when the costs of attending college are factored in, graduates earn hundreds of thousands of dollars more than high school graduates over the course of their lives. There are pronounced differences in earning power across majors: graduates with engineering and computer science degrees enjoy lifetime gains of more than $1 million. But even college graduates from less remunerative majors earn hundreds of thousands more than high school graduates.
LIFETIME EARNINGS ARE MUCH HIGHER FOR COLLEGE GRADUATES

![Bar chart showing the gap between college and high school graduates in different fields.](chart.png)

NOTE: Net lifetime earnings by field of study, with costs of attending college for graduates accounted for.

LOOKING AHEAD

California is facing a serious shortfall in its supply of college-educated workers. Improving the educational attainment of the state’s young adults will foster greater individual success and increase economic growth throughout the state. Without concerted efforts to improve college attendance and graduation rates, California’s economic future will be much less bright. The state needs to take several steps.

**Update higher education goals.** California has not substantively updated its Master Plan for Higher Education, which was developed more than 50 years ago. The state and its higher education institutions should increase the share of high school graduates eligible for UC and CSU, establish new goals for transfer from community colleges to four-year schools, and identify completion and time-to-degree objectives.

**Increase alternatives to traditional degrees.** Because it is unlikely that the state will be able to completely close the skills gap by increasing the number of graduates with bachelor’s degrees, other forms of postsecondary training and workforce skills development are essential to the state’s future. New pilot programs that allow some community colleges to offer applied bachelor’s degrees in vocational fields are a step in the right direction.

**Decide how to provide adequate funding to achieve state goals.** California’s higher education institutions have borne a disproportionate share of the state’s budget cuts. Shortchanging education for quick budget fixes could seriously shortchange California’s economic future. Reinvesting in higher education will require a concerted and persistent effort in the face of competing budget priorities. Efficiency in the delivery of higher education should be a part of the state’s fiscal goals: online learning is a possibility, as yet unproven, as is performance-based evaluation and funding.

**Ensure access for low-income students.** As the costs of attending college have increased, the importance of grant and scholarship aid has grown. California should ensure that its aid programs keep up with growing college costs and are targeted to institutions with good track records in graduating low-income students without saddling them with large amounts of debt.
Collect information to ensure that progress is being made. California currently lacks a comprehensive longitudinal student data system that could evaluate whether the state and its colleges are meeting higher education goals. Linking K–12 data with college data would allow policy experts to determine what policies and programs produce the best and most efficient outcomes for students, colleges, and the state as a whole.

Establish a new higher education coordinating body. With the demise of the California Postsecondary Education Commission, the state lacks a higher education coordinating body. Such a body could provide leadership in setting policy priorities and coordinating efforts between the state’s higher education and K–12 systems to improve student transitions and outcomes.

Ultimately, the significance of a college education is larger than the gains enjoyed by individual graduates. California’s future prosperity depends on public policies that promote college enrollment and completion for increasing numbers of Californians. Throughout California’s history, educational and economic progress have gone hand in hand. With the right information and the right policies, the state can continue on that path.

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This series is funded by PPIC’s Donor Circle and the S. D. Bechtel, Jr. Foundation.
California’s housing market is on the mend. Although home values in most of the state remain lower than they were at the peak of the housing boom, values have increased substantially since the nadir of the housing bust. Statewide, median home values have increased 39 percent to $430,700 (as of August 2014) from their post-boom low of $310,500 in January 2012 (according to Zillow). Moreover, vacancy rates are low compared to the rest of the United States, and rents have continued to increase. Finally, the pace of new housing construction continues to pick up, although levels remain far lower than during other recoveries.

Despite the recovery, California is still experiencing the aftereffects of the most recent housing bust, and the long-term challenges of housing California’s population haven’t gone away. The housing bubble, which popped in 2008, left the state with a foreclosure problem and large losses of construction jobs. About 652,000 California homeowners remain “underwater”—their mortgages are higher than the market value of their homes (CoreLogic, 2014 second quarter). Paradoxically, a housing recovery for some is a housing problem for others, as high rents and increasing prices place housing out of reach for many Californians.

In both the short and the long term, California’s economic performance and livability depend on its housing market. The perennially high cost of housing in coastal California reflects the fact that people and businesses are willing to pay more to be there, but it is also a consequence of geographic and policy-related barriers to building new housing in those regions. In the state’s inland areas, continued economic recovery could further ameliorate the foreclosure problem. Throughout the state, balancing new housing construction with environmental goals will be a challenge.
THE HOUSING RECOVERY IS WELL UNDER WAY

- Home values are rising throughout California.

  Gains have been uneven across the state, but all of the most populous counties have experienced increases of at least 28 percent from their lows during the housing bust. Some of the sharpest increases have occurred in counties that experienced the worst busts, including San Joaquin (57%), San Bernardino (51%), Sacramento (50%), and Riverside (49%). Even with these remarkable increases, values in these counties remain lower than they were at the peak of the housing boom. Other counties, all in the Bay Area, have experienced sharp increases even though their housing busts were less severe. In three of those counties (San Francisco, San Mateo, and Santa Clara), home values are now higher than they were during the previous boom.

MEDIAN HOUSING VALUES HAVE RISEN IN CALIFORNIA’S MOST POPULOUS COUNTIES

<table>
<thead>
<tr>
<th>County</th>
<th>Peak (2006 or 2007)</th>
<th>Low (2011 or 2012)</th>
<th>Current (August 2014)</th>
<th>Peak to current</th>
<th>Low to current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda</td>
<td>$637,200</td>
<td>$403,300</td>
<td>$607,000</td>
<td>-5%</td>
<td>51%</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>$623,200</td>
<td>$308,800</td>
<td>$469,500</td>
<td>-25%</td>
<td>52%</td>
</tr>
<tr>
<td>Fresno</td>
<td>$295,500</td>
<td>$134,400</td>
<td>$181,500</td>
<td>-39%</td>
<td>35%</td>
</tr>
<tr>
<td>Kern</td>
<td>$272,500</td>
<td>$119,600</td>
<td>$163,800</td>
<td>-40%</td>
<td>37%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>$568,500</td>
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<td>$485,500</td>
<td>-15%</td>
<td>35%</td>
</tr>
<tr>
<td>Orange</td>
<td>$721,300</td>
<td>$485,000</td>
<td>$625,900</td>
<td>-13%</td>
<td>29%</td>
</tr>
<tr>
<td>Riverside</td>
<td>$422,700</td>
<td>$200,100</td>
<td>$298,800</td>
<td>-29%</td>
<td>49%</td>
</tr>
<tr>
<td>Sacramento</td>
<td>$402,000</td>
<td>$187,300</td>
<td>$281,300</td>
<td>-30%</td>
<td>50%</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>$379,900</td>
<td>$171,100</td>
<td>$258,600</td>
<td>-32%</td>
<td>51%</td>
</tr>
<tr>
<td>San Diego</td>
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<td>$347,000</td>
<td>$471,400</td>
<td>-12%</td>
<td>36%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>$822,600</td>
<td>$667,700</td>
<td>$993,100</td>
<td>21%</td>
<td>49%</td>
</tr>
<tr>
<td>San Joaquin</td>
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<td>$148,500</td>
<td>$233,800</td>
<td>-44%</td>
<td>57%</td>
</tr>
<tr>
<td>San Mateo</td>
<td>$819,600</td>
<td>$614,200</td>
<td>$864,100</td>
<td>5%</td>
<td>41%</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>$747,600</td>
<td>$565,700</td>
<td>$821,300</td>
<td>10%</td>
<td>45%</td>
</tr>
<tr>
<td>Ventura</td>
<td>$638,000</td>
<td>$381,900</td>
<td>$488,500</td>
<td>-23%</td>
<td>28%</td>
</tr>
<tr>
<td>California</td>
<td>$538,300</td>
<td>$310,500</td>
<td>$430,700</td>
<td>-20%</td>
<td>39%</td>
</tr>
</tbody>
</table>

SOURCE: Zillow.
NOTE: Housing values are in nominal dollars. For most counties, the boom peak occurred in 2006 or 2007, and the bust low occurred in 2011 or 2012. Counties listed are the 15 most populated counties in the state.

- The number of homeowners with negative equity has declined sharply.

  According to CoreLogic, 11.2 percent of California homeowners with mortgages were underwater in the first quarter of 2014. This represents a dramatic decline since the fourth quarter of 2009, when 37 percent of mortgaged homeowners were underwater. For the first time since the housing bust, California’s rate is actually lower than the rate in the rest of the nation (12.7%).

- Foreclosure rates have fallen to the lowest level in years.

  California appears to be over the worst of the foreclosure crisis. The number of foreclosures has declined by 67 percent over the past two years (August 2012 to August 2014, according to RealtyTrac). The total number of foreclosures is lower than it has been in at least six years.
• New home construction is increasing.
Low vacancy rates, rising prices, and low interest rates are leading to increases in housing starts. New residential construction permits are on a pace to reach more than 80,000 this year, up from only 33,000 in 2009 but still far lower than the 200,000 new units built annually from 2003 to 2005 (according to the U.S. Census Bureau). For the first time in more than 25 years, permits for multifamily units exceed those for single-family units. Over the past three years, construction employment has grown much faster than employment in most other sectors. Between August 2011 and August 2014, construction employment grew at an average annualized rate of 5.8 percent, while total nonfarm employment grew at 2.4 percent.

AFTER A SHARP DECLINE, NEW HOME CONSTRUCTION IS RECOVERING

![Graph showing the recovery of new home construction](chart.png)

SOURCE: U.S. Census Bureau, Building Permits Database.
NOTE: Data extends from August 1998 to August 2014.

• Housing is more affordable in inland areas.
Despite recent price increases, overall employment gains and low interest rates make housing affordable in many inland areas of California, home to one-third of the state’s population. In the second quarter of 2014, more than 60 percent of households could afford the median-priced home in the metropolitan areas of Hanford-Corcoran, Madera, Chico, and Redding. In the Inland Empire and Sacramento, about half of households could afford the median-priced home (NAHB Wells Fargo).

HOUSING REMAINS EXPENSIVE FOR MOST OWNERS AND RENTERS

• Californians spend disproportionate shares of their incomes on housing.
Monthly housing costs are substantially higher in California than in the nation as a whole. For homeowners with mortgages, median monthly housing costs are 43.4 percent higher than nationwide, and, for renters, median rents are 35.2 percent higher than nationwide. Yet household incomes in California are only 14 percent higher than incomes nationwide, according to the 2013 American Community Survey (ACS). This means that the share of Californians with excessive housing costs is quite high: 32.6 percent of mortgaged homeowners and 47.7 percent of renters spend more than 35 percent of their total household incomes on housing (compared with 24.1% and 42.5%, respectively, nationwide).
Housing is especially unaffordable in coastal areas, where two-thirds of California's population lives.
For a seventh consecutive quarter, the San Francisco metropolitan area (San Francisco, San Mateo, and Marin Counties) was the nation's least affordable major housing market. The coastal metropolitan areas of Orange County, Los Angeles, and San Jose were also among the six least affordable nationwide. In the second quarter of 2014, less than one-fifth of households could afford the median-priced home in these areas (NAHB Wells Fargo). The five most unaffordable small housing markets in the nation were all in California: Santa Cruz–Watsonville tops the list, followed by Napa, Salinas, Santa Rosa–Petaluma, and San Luis Obispo–Paso Robles.

Rents are high and rising.
According to the Department of Housing and Urban Development (HUD), six of the 12 most expensive large metropolitan rental markets in the U.S. are in California: San Francisco is most expensive, followed by San Jose, Oakland, Orange County, Los Angeles, and San Diego. In these expensive metropolitan areas, HUD's estimated median rent for a two-bedroom apartment ranges from $1,512 in San Diego to $2,263 in San Francisco. And, unlike housing prices, typical rents were higher in 2014 than in 2006 in nearly all metropolitan areas, in nominal terms.

Vacancies are low, relative to most states.
Despite sharply falling prices in recent years and increases in vacancy rates, the residential vacancy rate in California remains among the lowest in the country. In 2013, the homeowner vacancy rate was 1.3 percent in California and 1.9 percent nationwide. Meanwhile, the rental vacancy rate in California was 4.2 percent versus 6.5 percent nationwide. In many states, foreclosure often leads to abandonment, whereas in California it often means turnover. (Vacancy rate data are from ACS.)

Homeownership rates have fallen.
Between 2006 and 2013, homeownership rates, already much lower in California than in the rest of the nation, have declined more sharply in the state than elsewhere in the country, falling to 53.8 percent of all occupied housing units in 2013 (compared to 64.7% in the rest of the nation). The number of owner-occupied housing units fell by almost 300,000 in California, while the number rented increased by about 800,000. Much of the increase in rental units has occurred among formerly owned single-family detached housing units. By 2013, California's homeownership rate was at its lowest level in more than a dozen years.

HOMEOWNERSHIP RATES HAVE FALLEN SHARPLY IN CALIFORNIA

SOURCE: American Community Survey.
LOOKING AHEAD

Demand for housing in California appears to be on the upswing. The Great Recession and ensuing economic uncertainty lowered household-formation rates, especially among younger adults, many of whom are now living with their parents rather than on their own. By inducing a drop in domestic and international migration, the recession also led to slower population growth. But household formation among younger age groups is likely to recover as more jobs are added to the economy, unleashing a significant amount of pent-up demand. In the future, as residents form new households and as the state’s population grows, housing demand will continue to increase. Because the “echo boomers” are much more racially and ethnically diverse than previous generations, a larger share of tomorrow’s young households will be Latinos and Asians. The biggest unknown is the contribution of migration to overall population growth.

An increase in housing demand will require an increase in the supply of new housing. California needs to address both immediate and long-term housing challenges with policies that improve affordability, remove unnecessary barriers to expanding the supply of housing in high-cost areas, and meet the state’s environmental goals.

• The state and local authorities should pursue policies that increase the supply of affordable housing.
  The construction of affordable housing in California is funded partly through state housing bonds, but the state has not passed a housing bond in eight years. The elimination of redevelopment areas has also led to a reduction in the development of low-cost housing. To encourage construction of affordable housing, state and local governments need to establish funding mechanisms and policies—possibly including new housing bonds, development fees, and inclusionary zoning—that lead directly to more affordable housing.

• State and local governments should look carefully at regulations that contribute to high prices.
  The supply of new housing is often constrained by geography, as most of populated California is nestled against natural barriers to construction—ocean, bay, and mountains. But it is also a result of policy choices and regulations. The state and many local governments have strong land-use and building regulations that curtail construction and keep prices high. Height restrictions, setback requirements, parking requirements, and outdated zoning that discourages new housing all serve to limit supplies and increase costs. Some argue that inclusionary zoning and rent control also restrict the supply of new housing.

• Balancing environmental goals with housing development will be a challenge.
  As part of its ambitious plan to reduce greenhouse gases, California has passed legislation to encourage local land-use planning that reduces the need to drive. The goal is to coordinate new housing development with current and planned transportation networks so that emissions (especially from cars) are reduced. Infill (new construction in built-up areas) is one way to achieve this goal, but there is a trade-off. In the past, much of California’s most affordable new housing was built on vacant land at the edge of urbanized areas. Infill housing is often more expensive and of smaller magnitude (in terms of units built) than exurban development.
CALIFORNIA’S PUBLIC SCHOOL SYSTEM IS UNDERGOING MAJOR CHANGES

California educates more than six million children in its K–12 public schools. More than half of these children are economically disadvantaged, and almost a quarter are not native English speakers (compared to less than one in ten nationwide). California is working to address these challenges, in part by adopting a new, simplified school finance system, known as the Local Control Funding Formula (LCFF). This system will provide long-term funding increases for districts with more low-income, English Learner, and foster youth students.

Along with allowing greater spending discretion, LCFF also tries to strengthen local accountability for a wide range of school and student outcomes by requiring districts to develop their own strategic plans. Working with parents and other community groups, districts must describe what they hope to achieve over the next three years and how they propose to achieve it.

In the 2014–15 school year, the Common Core State Standards—adopted across 43 states and the District of Columbia—replaced California’s old standards in mathematics and English. This same school year is also seeing the first statewide administration of new standardized tests. As these reforms take hold, school districts around the state face fundamental changes in the ways that K–12 education is delivered, assessed, and funded.

REFORMS CREATE NEW CHALLENGES

• **California’s transition to Common Core will continue well past 2014–15.**
  The Common Core standards reduce the number of topics taught in each grade, emphasizing conceptual understanding and real-world problem solving. Some districts have been working with Common Core over the past several years, but implementation has been slow in many places. Local efforts have focused on teacher training and curriculum development, and research suggests that the challenge of teaching Common Core may require several years to address. Still, 69 percent of Californians support the new standards, according to the PPIC Statewide Survey (April 2014).

• **New, computer-based testing faces critical hurdles.**
  The state’s new standardized tests, known as the Smarter Balanced assessments, will be administered fully online. Many observers have voiced concerns about the technological ability of many schools to handle this large new task. While most school districts have sufficient equipment and bandwidth, majorities have had trouble with software and with training of instructional and technology staff. Technology upgrades—particularly for very small and very large schools—are likely to be costly.

ONLINE TESTING WILL CHALLENGE DISTRICT CAPACITY

![Graph of online testing capacity](image)

**SOURCE:** 2014 California Assessment of Student Performance and Progress Survey, California Educational Technology Professionals Association.

**NOTES:** The survey sample includes 362 school districts. “Staff” includes both the number of staff needed to supply technical support and the quantity and quality of training for instructional staff, support staff, and assessment technicians.
• **School districts have developed their own local accountability plans.**
  Districts submitted their first plans, known as Local Control and Accountability Plans (LCAPs), in July 2014. LCAPs describe how districts propose to use LCFF funds to make progress on state academic goals in areas such as student achievement, graduation rates, and student engagement. These plans offer significant promise because they create a process to identify district weaknesses and supply educators with the training and tools they need to address them. To realize that promise, though, the state needs to recognize the immediate need for technical assistance of districts and county offices of education.

**STUDENT ACHIEVEMENT HAS BEEN IMPROVING, BUT . . .**

• **The switch to Common Core may affect test scores.**
  California’s students have made significant progress on state standardized tests in all subjects since 2003. However, California students have not shown similar levels of improvement on national standardized tests. California scores on these tests suggest that students will score much lower on the new Common Core–related tests than on the state’s old standardized tests—and that California should expect to see a much smaller proportion of students reaching the proficient level. Other states that have aligned their tests with Common Core, such as New York and Kentucky, have experienced significant declines in student scores.

• **Achievement gaps are still significant.**
  There are substantial gaps in standardized test scores among racial, ethnic, and socioeconomic groups. In 2013, the last year in which these tests were administered statewide, proficiency levels in English Language Arts (ELA) were higher among white (72%) and Asian (78%) students than among Latino (45%) and African American (43%) students. ELA test scores for California’s 1.3 million English Learner (EL) students are the lowest in the state (23%), substantially below those for economically disadvantaged students (45%). However, students who are former ELs are among the best performers in the state—64 percent scored proficient or above on the ELA test. Differences in math proficiency follow similar patterns, although proficiency rates for Asian students (78%) are dramatically higher than those for whites (62%), while African American students have the lowest math proficiency rates (35%). In addition, white (88%) and Asian (92%) students graduate at higher rates than African American (68%) and Hispanic students (75%).

**IMPROVED FISCAL PICTURE, WITH MORE WORK TO BE DONE**

• **The Local Control Funding Formula addresses some long-standing critiques of the school finance system.**
  California’s school finance system had long been considered to be inequitable, inadequate, and overly complex. The LCFF dramatically increases the state’s investment in districts that serve large numbers of disadvantaged students, in a more transparent and equitable manner. It provides base funding for general purposes and supplemental funding for disadvantaged students. Districts in which more than 55 percent of students are disadvantaged will receive even more funding. The LCFF also simplifies the system by consolidating most prior categorical programs (those targeted to specific student populations or educational programs).

• **LCFF funding is ahead of schedule.**
  The LCFF is expected to be implemented over the next seven years, achieving full funding by 2020–21. This expectation relies in part on revenue increases generated by Proposition 30, which temporarily increased the sales tax for all taxpayers and the income tax for upper-income taxpayers. The plan is ahead of schedule because the California economy rebounded from the recession faster than anticipated, resulting in unexpected tax revenues. However, the plan still depends heavily on sustained economic growth. But the economic recovery is in its fifth year, and historical trends suggest a recession may occur before LCFF targets are reached. Other factors also affect actual district funding levels over time, such as the numbers of EL, low-income, and foster care students.

• **LCFF did not address the issue of funding adequacy.**
  California has long spent less per pupil than other states, and it made steeper funding cuts during the recession. The California Department of Finance projects that funding will reach its peak pre-recession levels in the next couple of years. But several studies of pre-recession funding concluded that it was not high enough to prepare all students to meet the state’s educational standards. As a result, there is interest in the education community in extending the Proposition 30 tax increases or finding other new sources of revenue for schools. A majority of Californians also feel that the K–12 education budget is still a problem, worrying that per pupil spending may be insufficient even after recent increases, according to the April 2014 PPIC Statewide Survey.
CALIFORNIA’S FUNDING LEVELS ARE STILL FAR BEHIND

![Graph showing per pupil spending in California compared to the Rest of U.S.](image)

SOURCES: National Center for Education Statistics; National Education Association.

NOTES: Inflation-adjusted spending (2014 dollars). Funding is not adjusted for regional costs across states. The dashed lines represent estimated spending from the National Education Association since government data are not yet available. Recent projections have matched actual spending fairly closely.

LOOKING AHEAD

To improve the state’s economic well-being and to ensure that California’s children are equipped to succeed in the 21st century, policymakers need to take steps to help the state’s school systems maintain and build on recent improvements.

- **Clarify the state’s K–12 accountability program.**
  
The California Department of Education is currently revising the state’s central school performance measure, known as the Academic Performance Index. The state should consider a complete redesign for several reasons. By adding a broader range of performance indicators, the state could align its measure with the priorities expressed in local accountability plans. In addition, the Smarter Balanced tests will support new measures of improvement in student achievement that are more accurate and more useful. With these changes, California can align state and local accountability programs and strengthen incentives for educators to focus on student achievement.

- **Ensure that LCFF funds improve outcomes for English Learners and economically disadvantaged students.**
  
  Local Control and Accountability Plans are intended to focus districts’ efforts on key groups, including English Learners and economically disadvantaged students. However, it is difficult to track whether and how districts and schools spend their dollars on these students. Policymakers and the public alike are concerned about how LCFF dollars will be spent, and outcome measures will not be available for many months. The April 2014 PPIC Statewide Survey found that slightly more than half of Californians believe that school districts will spend LCFF dollars wisely.

- **Monitor changes to teacher tenure.**
  
  A recent ruling on teacher employment laws has the potential to radically change how teachers are hired and fired. A state superior court struck down as unconstitutional five provisions of the California education code, including laws regarding teacher tenure, seniority, and dismissal. The Brown administration has filed an appeal, and teacher unions have joined in. Given the issues at stake, it is not likely that the case will be resolved in the 2014–15 school year.
• **Provide all students with a high-quality preschool education.**

  Preschool enrollment is relatively low in California, and there are marked enrollment differences by income level. Between 2010 and 2012, 53 percent of children ages 3–4 did not attend preschool, and the share is 10 percentage points higher among children living in poverty. The 2014–15 state budget included $268 million toward early learning and child development. While this is a strong step forward, per pupil spending is still low, and the quality of these programs varies. The state should continue to expand access and improve overall quality to ensure that kindergarten readiness is within reach of all California children.

• **Develop the state’s educational data system and use the data to improve local programs.**

  The state has made considerable progress in building its educational data system. A large amount of data has been collected, but unfortunately, the system remains unfinished and there are no plans to complete it. Furthermore, educators do not have access to most of the data, and K–12 and higher education data are not linked. By linking this data and creating useful reports for local educators, the state could generate a better return on its investments in public education. Some states, for example, use their K–12 data systems to provide schools with a multiyear perspective on the progress of individual students. Other states link their K–12 and college data to monitor and improve the transition of students from high school to college.
HAS CALIFORNIA TURNED A CORNER?

In recent times, California’s highly polarized state legislature has been unable to resolve major problems, from the troubled water system to a looming pension challenge. For several years it could not approve the state budget on schedule. During this period, approval ratings for the legislature descended to record lows in the PPIC Statewide Survey (14% in November 2010). The number of voters declining to register with one of the major parties has now reached an all-time high, and voter turnout has been sliding relative to other states.

But there are positive signs of change, and the state has been implementing reforms intended to address voter turnout and legislative gridlock. New term limits offer the potential for more stability in the legislature’s membership, recent state budgets have passed on time, the deficit has shrunk rapidly, voters have passed a bipartisan water bond, and approval of the legislature has risen to 37 percent (PPIC Statewide Survey, October 2014). It is not yet clear whether the reforms directly produced these changes, but the outcomes are an improvement all the same.

THE STATE IS DEMOCRATIC BUT NOT NECESSARILY LIBERAL

- California has become a solidly Democratic state.
  For many years, California leaned Republican in its politics. But that began to change in the 1980s, and today California is one of the most Democratic states at all levels of government. This shift to the Democratic Party has been especially pronounced in the Bay Area and Los Angeles County.

- Californians are not necessarily liberal.
  While Californians are clearly Democratic, only the Bay Area is strongly liberal on both social (e.g., abortion and gay marriage) and fiscal (e.g., tax and spending) issues. Even Los Angeles County—with its high levels of support for Democratic candidates—is only modestly liberal on most subjects.

- Independents are the fastest-growing voter registration group, but they are politically diverse.
  The share of voters registering as independents (also known as “decline-to-state” or “no party preference”) has grown 20 percentage points since the 1960s, while the share of major-party registrants has declined. However, about 60 percent of independents say they lean toward one party or the other and vote reliably that way. In almost every part of the state, these “leaners” are more likely to tilt Democratic than Republican.

INDEPENDENT REGISTRATION HAS GROWN DRAMATICALLY

![Graph showing voter registration trends from 1960 to 2014](SOURCE: California Secretary of State.)
CALIFORNIA’S ELECTORATE LAGS BEHIND OTHER STATES

- California’s voter participation has fallen below the national average.
  As recently as the 1990s, turnout among Californians eligible to vote was higher than the average for the rest of the country. Over the past 15 years, turnout in California has climbed modestly in absolute terms. But its turnout relative to that of other states has dropped to the point where it matches or falls below the levels elsewhere.

- The problem lies mostly with voter registration.
  Registered voters in California have turned out at higher rates than the rest of the country throughout this period. But relatively fewer Californians are registering to vote, and California’s registration rate is below the national average.

- California’s voters and nonvoters are very different.
  Compared to those who do not vote, California’s voters are older, better educated, more rooted in their communities, and more likely to be white. They also tend to hold more conservative views on the size and scope of state government.

- Recent reforms intended to increase registration may not have much impact.
  California has been experimenting with a number of reforms to increase the registration rate, including a fully online registration process and same-day (also known as conditional) registration, which allows residents to both register and vote after the official registration deadline has passed. The evidence on the impact of these reforms in California and elsewhere suggests a minimal increase in registration—4 percentage points at most. Although the number of voters may not increase much, a larger number will probably register late under the same-day registration system.

CALIFORNIA’S VOTER TURNOUT IS ON THE DECLINE COMPARED TO OTHER STATES

CALIFORNIA’S LEGISLATURE IS UNIQUELY POLARIZED

- California has the most polarized legislature in the country.
  The best evidence to date suggests that California’s legislative parties are much farther apart than in the U.S. Congress or any other state in the nation. California’s partisan divide—the gap between the ideology of the median Republican and the median Democrat—is far wider than that of the next most polarized states, Arizona and Colorado. This level of polarization has stymied the legislature’s efforts to pass key legislation and has been at least partly responsible for the institution’s low approval ratings.
• There are many possible explanations.
Until recently, California’s legislative districts were unusually uncompetitive, its legislative term limits unusually stringent, and its initiative process unusually lenient. It was also one of only three states in the country to require a supermajority to pass both tax increases and budgets. The uncompetitive districts might have drawn legislators to the extremes by removing the need to appeal to voters of the other side. Term limits and the initiative process might have reduced the incentive to compromise. By relieving either party of full responsibility for budget decisions, the supermajority requirements probably encouraged legislators to take exaggerated positions.

• The state is implementing a flurry of reforms to address legislative dysfunction.
In just the past few years, California has adopted a number of reforms: an independent commission to draw legislative and congressional districts; new, more relaxed legislative term limits; a lower threshold for passing the budget; and a radically open primary system that allows any voter to cast a ballot for any candidate, regardless of party. It is not yet clear whether these changes will narrow the partisan divide. However, the move to a simple majority for passing a budget has already ended the budget stalemates that had become a regular feature of the legislative process in California, though at the cost of excluding Republicans from the process.

THE CALIFORNIA LEGISLATURE IS THE MOST DIVIDED IN THE NATION

NOTES: The bar for each state represents the gap between the ideology of the median Republican and the median Democrat, as measured using roll call votes that have been adjusted with responses to Project Vote Smart’s Political Courage Test (http://votesmart.org/about/political-courage-test#.UoEWPSIAbSg) to place every legislature on a common ideological scale. Estimates are for 2013; they exclude eleven states for which data were not available (Florida, Georgia, Hawaii, Iowa, Kentucky, Massachusetts, Minnesota, Missouri, Nebraska, North Dakota, and Texas). California was far more polarized than any of these eleven states in 2006, when data were last available.

LOOKING AHEAD
California’s political system is at a crossroads. The state is growing more racially and ethnically diverse, and the number of independents has grown tremendously and shows all signs of continuing in that direction. At the same time, California is moving toward the sort of one-party dominance that comes with a risk of lower accountability, at least outside of major decisions. And though approval of the legislature has risen, it remains very low. Given these realities, there are some steps the state might take to foster a robust and representative democracy.
Make voter registration as simple—and voter outreach as aggressive—as possible. It is notoriously difficult to increase turnout beyond the group of people who are already inclined to show up. To expand the electorate, California should adopt a default registration system, so that anyone who engages with the government and is qualified to vote is automatically registered to vote. This would remove virtually all barriers to registration and eliminate surges in late registration (which may prove challenging for county registrars under the new same-day registration system). Also needed is an ongoing and aggressive effort to get every voter to the polls in every election, with a special emphasis on those least likely to vote.

Eliminate differential treatment of independents and party members. Given current trends, voters who are registered without a party preference will one day be a plurality of the electorate. These voters are already allowed full participation in every congressional and legislative primary election under the state’s new top-two primary law. But they should also be granted full access to presidential primaries and internal party decisionmaking. Many of these voters think like partisans already, so the immediate impact would probably be small and the long-term gains for the two parties could be great. Without such a change, the number of voters making these decisions will continue to shrink.

Push decisions to the local level. Shifting decisionmaking from Sacramento to local governments might be a key part of the effort to reduce polarization and get the legislature working again. Corrections realignment, the new school funding formula, and the proposed lower threshold for passing school parcel taxes are three examples of relaxed constraints on local governments. Bringing decisions to the local level might lower the stakes in Sacramento and make voters—who have long expressed a preference for local government in public opinion surveys—happier with the outcomes.
GROWTH WILL PUT PRESSURE ON INFRASTRUCTURE

California has long been known for and even defined by its tremendous population growth. No other developed region of similar size anywhere in the world has sustained so much growth over such a long period. Equally remarkable has been the population’s increasing diversity. California is home to large groups of immigrants from more than 60 nations, and no race or ethnic group constitutes a majority of the state’s population. Growth has slowed in the early 21st century: growth rates have averaged less than 1 percent in each of the past nine years, making this the slowest-growing period in state history. Even so, the number of people added to the state’s population has been substantial—about 300,000 new residents each year. The most recent estimate by the California Department of Finance (July 2014) places the state’s population at 38.5 million.

California will continue to gain millions of new residents in each of the next two decades. This will lead to increased demand in all areas of infrastructure and public services—including education, transportation, corrections, housing, water, health, and welfare.

CALIFORNIA’S POPULATION WILL CONTINUE TO GROW

As growth continues, regional, racial/ethnic, and age groups will shift

- Population gains are projected to continue.

By 2025, California’s population is projected to reach 42.5 million. Annual growth rates are expected to be just 1 percent, similar to growth experienced in the first decade of this century. Even so, average annual increases between now and 2025 will exceed 350,000—equivalent to adding the population of a city the size of Anaheim each year.
• Migration will account for a small share of growth.  
Before 1990, most of California’s population growth was due to migration, primarily from the rest of the United States. Since 1990, most of the state’s growth has been due to natural increase (the excess of births over deaths). Over the past 10 years, gains through international migration have been offset by domestic migration losses. Population projections suggest this pattern will continue, with almost all of the state’s population growth expected to come from natural increase. Immigrants are projected to make up 29 percent of the state’s population in 2025, a modest increase from 27 percent in 2009.

• Inland areas will grow at higher rates.  
The inland areas of California have experienced faster growth rates than the coastal areas for many decades, but coastal counties are still home to most of the state’s population. Projections indicate that the Inland Empire, the Sacramento region, and the San Joaquin Valley will grow faster than other areas of the state.

• California’s population will continue to diversify.  
No ethnic group composes a majority of California’s population. In 2013, whites (non-Hispanic) made up 39 percent of the state’s population and Latinos made up 38 percent. By 2025, 42 percent of the state’s population will be Latino and 35 percent will be white. Latinos already make up 52 percent of children age 12 and younger. Latino increases are due to both immigration and natural increase. In the past ten years, immigration from Latin America has slowed while immigration from Asia has increased. The majority of recent immigrants are from Asia.

LATINOS WILL BECOME CALIFORNIA’S LARGEST ETHNIC GROUP

![Bar chart showing the percentage of California's population by ethnicity from 1980 to 2025.](chart.png)


• Large numbers of Californians are beginning to reach retirement age.  
In 2013, 13 percent of Californians were age 65 and older, compared to only 9 percent in 1970. By 2025, that share will grow to 17 percent. The total number of adults age 65 and older is projected to grow from 4.8 million in 2013 to more than 7 million in 2025.

• The number of children will increase very slowly.  
From the 2012–13 to the 2021–22 school year, the number of children in public schools is projected to increase by only 1 percent, according to the California Department of Finance. This is a consequence of slight declines in birth rates along with small increases in the number of women ages 15–44. By contrast, in the 1990s the number of school-age children grew by more than 20 percent.
INLAND COUNTIES WILL EXPERIENCE FASTER POPULATION GROWTH

Projected change, 2010–2025
Less than 10%
Equal to or greater than 10%

LOOKING AHEAD

The state’s growing and changing population will put pressure on a variety of infrastructure needs and public services. There are several key areas to watch.

Health and human services. Meeting the needs of a large and growing senior population will pose challenges. For example, even though Medi-Cal enrolls a far larger share of children, senior adults account for a much higher share of expenditures. Annual costs per enrollee are at least five times higher for adults older than 50 than for children. Nursing home care is especially expensive.

Housing. After seniors, adults in their late 30s will be the fastest-growing age group. Between 2013 and 2025, the number of adults ages 30–39 will increase by more than 10 percent. Because these are the ages at which young adults typically get married, start families, and establish their own households, housing demand will rise.

Schools. The relatively slow growth in the number of school-age children could give the state time to catch up on school infrastructure needs and a chance to adjust school budgets, perhaps increasing per-student expenditures. Demand for higher education should remain strong as the number of students graduating from high school plateaus at a historically high level—and if greater shares of these students seek to enroll in college.
THE SOCIAL SAFETY NET ASSISTS MILLIONS OF CALIFORNIANS

The social safety net is designed to help Californians in times of economic need. It also has several other short- and long-term goals, such as increasing employment, safeguarding adequate access to food, and improving children’s well-being. Assistance takes a number of forms, including cash grants, nutritional support, and tax credits. The largest programs help millions of Californians each year—for example, in 2013 an average of 1.32 million state residents received monthly support from CalWORKs, California’s cash assistance program for families with children, and an average of 4.16 million Californians obtained a monthly food benefit (also known as food stamps) from CalFresh. These and other safety net programs moderate poverty considerably, particularly among children: PPIC research finds that while 25 percent of children lived in poverty in 2012, 39 percent of children would have been poor if not for safety net programs.

According to the May 2014 PPIC Statewide Survey, most Californians (68%) see poverty as a big problem in our society. And most believe that government policies and programs can do some (31%) or a lot (46%) to reduce poverty.

THE SOCIAL SAFETY NET MODERATES POVERTY


NOTES: Figure shows estimates for all persons; the bars show poverty with and without resources from CalWORKs (California’s welfare program), General Assistance (GA), Supplemental Security Income (SSI), CalFresh, the Earned Income Tax Credit (EITC), and the Child Tax Credit (CTC), housing subsidies, and school meals on California Poverty Measure (CPM) poverty rates for 2012. Unlike official poverty rates, CPM rates factor large-scale safety net programs into family resources and incorporate a regionally varying cost of living adjustment. “Poverty” denotes combined resources that fall short of the CPM threshold and “deep poverty” denotes combined resources that are less than half of the CPM threshold.
THE SOCIAL SAFETY NET IS A PARTNERSHIP ACROSS ALL LEVELS OF GOVERNMENT

Major programs provide cash grants (CalWORKs and General Assistance), tax credits (the Earned Income Tax Credit and the Child Tax Credit), nutritional support (CalFresh, school meals, and the Special Supplemental Nutrition Assistance Program for Women, Infants, and Children), and housing assistance (Section 8). These programs have different eligibility requirements, funding mechanisms, and oversight structures.

• **Federal funds are essential to California’s safety net.**

There is federal involvement in nearly all programs, and some are entirely underwritten by the federal government—for example, tax credits for working families. CalFresh benefits are mostly covered by federal funds and the allocation is not capped. In contrast, federal funding for CalWORKs covers only about half of total program costs and the amount is fixed. However, the state has a great deal of decisionmaking authority in spending these dollars—far more latitude than it has with CalFresh expenditures.

• **The state and counties play key roles.**

The state covers a share of costs, which varies by program. It also provides oversight and shapes program rules to the extent allowed by federal law. State legislators have extended benefits to legal immigrants who are ineligible for federally supported CalWORKs and CalFresh benefits; the state also augments school meal payments by a small amount. The counties underwrite benefits for General Assistance and for a portion of CalWORKs and cover some administrative costs.

• **Other local agencies and nonprofits also contribute, adding to the complexity of the social safety net.**

Schools and school districts enroll students in free or low-cost meal programs, local WIC agencies provide pregnant women and mothers with nutrition education and vouchers to purchase specified foods for themselves as well as their infants and young children, and nonprofits connect families with subsidized child care. Each of California’s 58 counties has a First 5 program, dedicated to improving the lives of children age 5 and under—often with a focus on disadvantaged children—and funded with Proposition 10 tobacco revenues.

A MIX OF FEDERAL, STATE, AND COUNTY FUNDS SUPPORT PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
<th>Recipients (millions)</th>
<th>Expenditures on benefits ( billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Federal ($)</td>
</tr>
<tr>
<td>CalFresh</td>
<td>4.16</td>
<td>7.56</td>
</tr>
<tr>
<td>Earned Income Tax Credit (EITC)</td>
<td>3.21 (filers)</td>
<td>7.29</td>
</tr>
<tr>
<td>Child Tax Credit (CTC)</td>
<td>2.74 (filers)</td>
<td>3.14</td>
</tr>
<tr>
<td>School breakfast and lunch (free and reduced price)</td>
<td>2.32</td>
<td>1.96</td>
</tr>
<tr>
<td>WIC</td>
<td>1.35</td>
<td>0.63</td>
</tr>
<tr>
<td>CalWORKs</td>
<td>1.32</td>
<td>0.95</td>
</tr>
<tr>
<td>Supplemental Security Income (SSI)</td>
<td>1.30</td>
<td>9.74</td>
</tr>
<tr>
<td>Section 8 housing subsidies</td>
<td>0.48 (housing units)</td>
<td>3.60</td>
</tr>
<tr>
<td>General Assistance</td>
<td>0.15</td>
<td>–</td>
</tr>
</tbody>
</table>

SOURCES: California Department of Education; California Department of Social Services; Center on Budget and Policy Priorities; Food and Nutrition Service, U.S. Department of Agriculture; Internal Revenue Service; Office of Management and Budget; Social Security Administration.

NOTES: CalWORKs and General Assistance statistics for state fiscal year 2013–14; CalFresh, school meals, WIC, and housing subsidies statistics for federal fiscal year 2013; EITC and CTC (refundable portion only) statistics for the 2012 tax year; SSI statistics include State Supplementary Payment (SSP) and are annualized from December 2013 data. Except where otherwise noted, the table shows average recipients and total expenditures. County CalWORKs expenditures shown include the Special Fund amount provided to counties by the state. School breakfast and lunch expenditures include reimbursements for free, reduced price, and paid meals.
HEALTH INSURANCE EXPANSION COULD FURTHER INTEGRATE THE SOCIAL SAFETY NET

The federal Affordable Care Act (ACA) expands health insurance in California in two ways. All low-income working-age adults are now eligible for Medi-Cal. Through Covered California, many others who lack insurance can obtain federally subsidized coverage.

- **Annual insurance enrollment can help low-income Californians learn about their eligibility for multiple programs.** While low-income populations are typically eligible for multiple programs, they may have difficulty navigating a fragmented system. To the extent that individuals and families now enroll annually for health insurance, there will be opportunities to inform them about their potential eligibility for other means-tested programs.

- **As a result, enrollment in CalFresh may increase.**
  California’s commitment to expanding health insurance coverage may be changing the dynamic of enrollment in CalFresh and could also have implications for CalWORKs. These programs serve populations that overlap with those eligible for Medi-Cal. Recent legislation has partially coordinated eligibility for Medi-Cal and CalFresh, simplifying the safety net for those enrolling in health insurance.

THE STATE’S ECONOMIC OUTLOOK IS IMPROVING, BUT MANY STILL STRUGGLE

- **The demand for the social safety net persists.** Safety net programs tend to have fewer participants when the economy picks up—and today, California’s unemployment rate is on the decline. Still, family incomes have lagged behind the recovery and need remains high. The CalWORKs caseload grew by 1 percent in 2013, while CalFresh grew by 6 percent.

- **The 2014–15 state budget modestly expanded safety net programs.** General Fund expenditures in health and human services will increase by 2.8 percent in 2014–15. The budget increased CalWORKs grants by 5 percent and eliminated a rule that prohibited anyone convicted of a drug felony from receiving CalWORKs and CalFresh benefits. It also added $250 million to the state’s child care programs, largely focused on three- and four-year-olds.

LOOKING AHEAD

Program coordination. As the ACA rollout continues, program administrators will need sophisticated information management systems to help them manage enrollment and eligibility for multiple programs across state and county governments. California has several initiatives to update data systems and has created a new system to support the Covered California health insurance web portal. Increased coordination among systems will continue to be an important policy goal.

**Help with child care.** Child care is a major expense for families with infants and preschool-age children. Concern that subsidized child care and preschool are available to only a fraction of children whose family incomes make them eligible has prompted discussion of expanding the number of child care "slots." Balancing the program goals of supporting parents’ work and child development has also been a topic of policymaker discussion.

**Supporting work.** In addition to federal tax credits, 26 states have launched tax credits tied to low- and moderate-wage work. California has not adopted a state Earned Income Tax Credit, although proposals came under discussion in 2013–14. The state has launched a different type of work incentive: a $10-per-month supplement for CalFresh recipients who work for at least 20–35 hours a week (depending on family structure and children’s ages).

**Immigration reform.** California is home to a substantial number of low-income citizen children whose access to the safety net is complicated by their parents’ immigration status. Reaching this group could become less challenging if the federal government enacts comprehensive immigration reform. Unauthorized-immigrant parents could become eligible for CalWORKs employment services and families could receive somewhat higher CalWORKs and CalFresh benefits. Parents might also obtain Social Security numbers, which would allow those who file a tax return to claim the Earned Income Tax Credit for themselves and their children. President Obama’s recent executive order gives some unauthorized-immigrant parents of citizen children access to work permits, but these parents remain ineligible for safety net benefits.
CALIFORNIA FACES GROWING WATER MANAGEMENT CHALLENGES

Water management in California has always been difficult. The state’s variable climate is marked by long droughts and severe floods, with stark regional differences in water availability and demand. A vast network of storage and conveyance facilities delivers water from the wetter parts of the state to population and farming centers in the Bay Area, Southern California, and the San Joaquin Valley. This network is now threatened by the physical and biological fragility of the system’s hub in the Sacramento–San Joaquin Delta. California is also enduring one of the worst droughts in recorded history, creating far-reaching water management challenges.

Other challenges loom on the horizon. Although per capita water use is declining, population growth is likely to increase urban water demand in some regions. Agricultural demand is becoming less flexible, as farmers are increasing tree crops (especially nuts), which must be watered every year. Conflicts are also growing between human water use and water needed to support fish and other wildlife.

Climate change will play an important, if uncertain, role. California’s natural variability is likely to increase, accentuating droughts and floods. Rising air temperatures are expected to significantly reduce the Sierra Nevada snowpack, affecting water storage as well as winter and spring flood flows. Higher water temperatures may make it harder to maintain aquatic habitats for native fish species. Over time, all of these challenges are likely to intensify. Potential solutions involve difficult and sometimes costly trade-offs, as well as inconvenient legal and political changes.

DROUGHTS ARE A RECURRING FEATURE OF CALIFORNIA’S CLIMATE

SOURCE: Western Regional Climate Center.
NOTES: Bars indicate the statewide average precipitation in California based on water year (October–September) since 1896. Dry years are those classified as critical or dry in the Sacramento Valley based on the California Cooperative Snow Survey which takes into account the previous year’s precipitation. For 1896–1905 dry years were estimated by comparing precipitation to the rest of the record. The three-year period between October 2011 and September 2014 was the driest on record.
CALIFORNIA’S LATEST DROUGHT REVEALS STRENGTHS AND WEAKNESSES

The three years between fall 2011 and fall 2014 were the driest since recordkeeping began. Most urban areas have been coping fairly well, thanks to investments to boost resilience since the last major drought from the late 1980s to early 1990s. But the farm sector has been hit hard, fallowing roughly 500,000 acres of cropland. Drinking water wells have gone dry in some rural communities. And environmental water managers have been forced to make difficult trade-offs in allocating scarce flows for fish, birds, and other wildlife. State and federal governments have provided emergency funds to soften the drought’s effects on farm communities, drinking water systems, and the environment. If the drought continues into 2015, the state will be faced with very difficult water allocation decisions.

• **California is fortunate to have many options for meeting current and future demands.**
  Expanding traditional supply sources—particularly surface reservoirs and groundwater supplies—is more difficult today than in the past. But there is considerable scope for cost-effective expansion of nontraditional sources—such as recycled wastewater and captured stormwater—and for improving water use efficiency. Water marketing—the sale or leasing of water—plays an important role in increasing efficiency; it allows water to be transferred to growing urban areas and from lower- to higher-revenue crops.

• **Much progress has been made since the drought of the early 1990s.**
  While some small communities have struggled, most urban areas have improved their ability to weather droughts by diversifying supplies. Urban water use efficiency has risen in most areas thanks to new plumbing codes, better technology, and better pricing incentives, and many communities have stored the saved water in local reservoirs and groundwater basins. Regional cooperation is also helping utilities cope with supply emergencies. Water markets have helped to supply water to cities and high-revenue agriculture during droughts and for long-term growth.

• **Better groundwater management will improve supply reliability.**
  Groundwater typically makes up about a third of all water supplies, and much more in dry years, when pumping increases to make up for the lack of rain. But many basins are being used unsustainably, without limits on pumping in normal and wet years, which would allow groundwater levels to recover. In 2014, historic legislation was enacted, giving local agencies the tools and authority to develop and implement sustainable groundwater management plans. This legislation also calls on the state to step in if local agencies fail to act. In some areas, better basin management will also require addressing contamination problems.

• **Surface storage expansion has been very contentious.**
  Increased surface storage could make up for some loss of storage in the snowpack and could also provide more flexibility in managing floodwaters and environmental flows. However, new surface storage has not been proven to provide large new supplies of water, and it will be less valuable if climate change reduces overall precipitation. Large financial and environmental costs also raise concerns. Integrated strategies—increasing storage for dry years in groundwater basins, while allowing surface reservoirs to focus on storing water for seasonal use—may be especially cost-effective. New bond funds approved by voters in November 2014 allocate $2.7 billion to surface and underground storage projects.

• **Supplies are becoming more limited, but the potential to adapt is strong.**
  Despite little expansion of the state’s major water infrastructure since the early 1970s, California’s economy has prospered. From 1967 to 2005, per capita water use declined by half, real per capita state gross domestic product (GDP) doubled, and the economic value of each unit of water increased fourfold. These trends—temporarily slowed by the recent recession—reflect the increased efficiency of water use in all sectors as well as a decline in the relative importance of agriculture, which accounts for roughly 80 percent of human water use but only 1 to 2 percent of state GDP.
THE ECONOMIC EFFICIENCY OF WATER USE CONTINUES TO RISE

State GDP per unit of water used: 4 times higher
State GDP per capita: 2 times higher
Water use per capita: half as high

SOURCE: E. Hanak et al., Water and the California Economy (PPIC, 2012), updated to 2010 with data from the California Department of Water Resources, the California Department of Finance, and the U.S. Bureau of Economic Analysis.

NOTE: State GDP is adjusted for inflation. Water use estimates are for applied use in the agricultural and urban sectors.

INSTABILITY IN THE DELTA IS A MAJOR CHALLENGE

As the fragile hub of California’s water supply, the Delta poses serious risks to the economies of the Bay Area, Southern California, and the San Joaquin Valley. Sea level rise and earthquakes threaten the weak Delta levees. The collapse of native fish populations has led to cutbacks in pumping from the southern Delta. The Delta’s physical deterioration will not be delayed by political indecision: the state faces inevitable, fundamental change in this region.

- **Moving water beneath the Delta could reduce both ecosystem and economic risks.**
  The current system relies on pulling water directly through Delta channels to the pumps. A new management plan, known as the Bay Delta Conservation Plan, is being formulated by local, state, and federal water agencies. These agencies are considering the construction of two tunnels to tap some water upstream on the Sacramento River and move it underneath the Delta to the pumps. This change could be good for the environment: fewer native fish would be trapped in the pumps, and it would be easier to restore more natural flows within the Delta. The state’s economy could also benefit from improved water quality and water supply reliability.

- **Governance and finance solutions are needed—so is attention to the Delta economy.**
  To ensure that the tunnels are managed for environmental benefits, the project should include performance-based limits on water diversions from the Delta. Water users have said they will pay for the new conveyance infrastructure, but the current price tag raises affordability questions for farmers. The plan also assumes state and federal taxpayers will pay for the large ecosystem investments, and it will be challenging to raise these funds. Funds will also be needed to support the Delta economy, because many of the region’s islands are at high risk of inundation.

CALIFORNIA MUST IMPROVE MANAGEMENT OF AQUATIC ECOSYSTEMS

Beyond the Delta, the demand for environmental water, healthy watersheds, and clean beaches has been increasing and is likely to grow. However, the state faces major challenges in meeting some environmental goals, especially during droughts.

- **Native fish species are in decline.**
  Populations of native fish species—an important indicator of overall ecosystem health—are declining across the state, despite several decades of well-intentioned efforts and expense. These declines heighten conflicts with other water management goals because they lead to increasingly tight and costly restrictions on water supply, wastewater, and flood protection projects.
**CALIFORNIA'S NATIVE FISHES ARE IN TROUBLE**

<table>
<thead>
<tr>
<th>Year</th>
<th>Reasonably Secure</th>
<th>Special Concern</th>
<th>Listed</th>
<th>Extinct</th>
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<tbody>
<tr>
<td>1989</td>
<td>44</td>
<td>50</td>
<td>14</td>
<td>7</td>
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<tr>
<td>1995</td>
<td>38</td>
<td>53</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>2010</td>
<td>22</td>
<td>69</td>
<td>31</td>
<td>7</td>
</tr>
</tbody>
</table>


**NOTES:** “Extinct” = extirpated from California; “listed” = threatened or endangered under state or federal endangered species acts; “special concern” = in decline and could qualify for listing in the future; “reasonably secure” = widespread and abundant according to current knowledge. N = number of known species.

- **Ecosystem-based approaches can help.**

  Environmental management is often “silied,” with each agency and each project addressing particular issues in specific locations—water quality, wetlands, flows, habitat—with no integrated vision of how to contribute to the overall improvement of ecological conditions. Coordinated, flexible approaches that seek to improve environmental performance for entire watersheds would be much more effective in protecting native species—and would enable California to allocate its dollars (and environmental water) more wisely.

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**CALIFORNIA HAS ONLY JUST BEGUN TO ADDRESS EXTREME FLOOD RISKS**

Sacramento has the highest flood risk of any major U.S. city, and many other areas in the Central Valley, the Bay Area, and Southern California are at extreme risk of river flooding. Coastal areas also face flood risk from extreme high tides. These risks are expected to grow with climate change and sea level rise. Although the state has recently increased investments in flood control infrastructure, more work is needed to keep development out of harm’s way.

- **Local governments and residents have few incentives to limit flood risk exposure.**

  Federal land-use regulations only restrict new development in areas of extreme flood risk (susceptible to a “100-year flood”). State legislation enacted in 2007 requires that local governments within the Central Valley provide double that level of protection for new homes, but the weaker federal standards still apply elsewhere. Federal law also requires many individuals living in areas of extreme flood risk (in California, 4 percent of the population) to carry flood insurance. But another 17 percent of Californians live in areas with significant flood risk, and few of these residents are insured.

- **Policies do not adequately account for increasing risks from climate change and sea level rise.**

  Federal regulations do not require communities to consider future conditions when approving development. State law requires cities and counties to consider sea level rise and climate change in hazard mitigation planning but not to reduce development in areas likely to be at higher risk in the future.
CALIFORNIANS MUST DECIDE HOW TO FILL FUNDING GAPS

California faces critical funding gaps in five key areas: provision of safe drinking water in small, disadvantaged communities; flood protection; management of stormwater and other polluted runoff; aquatic ecosystem management; and integrated water management. These gaps total $2 billion to $3 billion a year. And although urban water and wastewater utilities are doing reasonably well at raising the funds to provide safe and reliable service, looming legal uncertainty and rising costs threaten these agencies as well.

- **State bonds provide valuable support …**
  Californians pay for the vast majority of water system expenditures through their monthly water and wastewater bills, but since 2000 the sector has been relying more heavily on state general obligation (GO) bonds. These bonds—reimbursed with general tax dollars—have helped local water agencies fund some innovative projects, such as water recycling and groundwater banking, and they have been essential for some flood protection, stormwater, and ecosystem management projects, which do not have adequate alternative funding sources. Yet even with the passage of a new $7.5 billion bond in November 2014, other funds are needed; bonds provide at most $1 billion per year, and they do not address all critical gaps.

- **… but California needs to go beyond bonds to fill gaps.**
  Three constitutional reforms approved by voters since the late 1970s—Propositions 13, 218, and 26—have improved transparency but also severely limited the ability of local agencies to raise funds to meet critical water sector needs. For robust solutions, California will have to better align its funding laws with the goals of modern water management. This may include legislation that introduces new special taxes and regulatory fees for water and voter-approved adjustments to the state constitution that maintain transparency while increasing flexibility for local agencies, which are responsible for most water investments.

LOCAL AGENCIES RAISE MOST OF THE MONEY SPENT ON THE WATER SECTOR

Annual water system spending (2008–2011)

<table>
<thead>
<tr>
<th>Category</th>
<th>2012 $ per year</th>
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<tbody>
<tr>
<td>Water supply</td>
<td>$16.9</td>
</tr>
<tr>
<td>Water quality</td>
<td>$10.1</td>
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<tr>
<td>Flood management</td>
<td>$2.2</td>
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<tr>
<td>Aquatic ecosystems</td>
<td>$&lt;1</td>
</tr>
<tr>
<td>GO debt service</td>
<td>$&lt;1</td>
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</table>

SOURCE: E. Hanak et al., Paying for Water in California (PPIC, 2014), Table 1.

LOOKING AHEAD

California has the tools to help secure a safe and reliable water supply, improve conditions for aquatic species, and reduce flood risks. Water managers have made significant progress toward these goals. But the challenges are increasing with population growth and climate change. Increased momentum toward policy reform—coupled with new investments—is essential to the state’s future. Some changes will be politically difficult. The following issues require sustained attention.
Preparing for droughts. California should learn from the current drought to be better prepared for the next one. The state must improve management of water rights, water transfers, ecosystems, and interagency coordination. And agencies should periodically test drought preparedness through “dry run” exercises, similar to system tests for flood and earthquake emergencies.

The Delta. The proposed new tunnels have the potential to safeguard the Delta’s environment while maintaining water supply reliability. But this solution requires solid policies on governance, finance, and mitigation for Delta landowners and residents, as well as a well-organized and well-funded science program to adapt and refine ecosystem management under changing conditions.

Ecosystem protection. Beyond the Delta, a more comprehensive, coordinated, and proactive approach is needed to support California’s aquatic ecosystems and the species that depend on them.

Water efficiency. Better pricing policies—such as tiered water rates with higher prices for greater use—can heighten incentives to conserve while allowing local water suppliers to balance their budgets.

Groundwater management. The new groundwater legislation will require sustainable management of most basins in California. But implementation will be challenging, especially for agricultural regions that rely heavily on groundwater.

Flood risk exposure. To reduce risks to new development, floodplain mapping should account for climate change and increasing flood risks. The state should pursue more multi-benefit projects that expand floodplain habitat, simultaneously improving flood protection and ecosystem conditions.

Funding. Even with new bond funds, California will need to find ways to pay for rising water infrastructure costs and to fill critical gaps in drinking water quality, flood protection, stormwater management, aquatic habitat, and integrated water management. Legal reforms are needed to enable local and state agencies to fill these gaps.