The Public Policy Institute of California is dedicated to informing and improving public policy in California through independent, objective, nonpartisan research.
CALIFORNIA FACES SERIOUS LONG-TERM BUDGET CHALLENGES

California was hit hard by the Great Recession. In 2009, state tax revenues plummeted 14 percent from the previous year, compared to a 9 percent drop nationally. At the same time, demands escalated for Medi-Cal and other public assistance programs. As a result, the state faced record budget shortfalls of around $100 billion, or roughly a third of General Fund expenditures, from 2008 through 2010.

Nevertheless, many of California’s budget woes are long standing. The state has faced gaps between revenues and expenditures in nearly every budget cycle since the start of the decade. It contended with huge shortfalls during the recessions of the 1980s, 1990s, and early 2000s. State budgets are often passed after the start of the new fiscal year. A series of budget-related ballot measures and legislative actions has complicated the state-local fiscal relationship. Voters often express mistrust of their state government and alienation from the budget process. In addition, the state faces many long-term challenges, including large unfunded liabilities for public employee pensions and rising health care costs and debt service obligations. On a more positive note, PPIC’s Statewide Survey suggests that Californians are concerned about the state’s fiscal problems and ready for “major reforms.”

BUDGET SHORTFALLS WILL CONTINUE TO BE LARGE

WHY DO WE KEEP GETTING INTO THIS MESS?

California spends more than the average state, and it collects more in revenues. It is also distinct in the way it raises revenues, relying more on income and sales taxes and less on property taxes. Tax experts have repeatedly urged California to flatten and simplify its revenue system by broadening tax bases, lowering tax rates, and eliminating certain tax preferences.
• **California is a moderate tax burden state.**

In fiscal year 2007–2008, the latest year for which comprehensive data are available, California’s state and local governments collected $270 billion, or $7,384 per capita, from taxes, fees, charges, and other miscellaneous sources. By this measure, California had the ninth-highest revenue burden in the nation. However, as a high-income state, California also has a large tax base. When state and local general revenues are expressed as share of economic activity or personal income, California’s ranking drops to 13th nationally.

![California’s Revenue Burden Has Changed Over Time](source: Brookings-Urban Tax Policy Center)

• **Revenue volatility is an issue in California.**

California’s revenue system is highly dependent on personal income taxes (including taxes on capital gains), corporate taxes, and sales and use taxes. The income tax is a volatile revenue source because it relies on a narrow slice of taxpayers whose earnings tend to fluctuate with the economy (in 2008, 16 percent of tax filers—those with incomes above $100,000—paid 84 percent of the tax). Sales and use taxes are also tied to economic fluctuations—they were hard hit in the recession. Moreover, compared to the rest of the nation, California relies less on a relatively stable revenue source, the property tax, because of Proposition 13.

**HIGH AND RISING SERVICE DEMANDS**

As the largest state in the nation and one of the largest economies in the world, California spends more than the average state.

• **California state government is a nearly $200 billion enterprise.**

In the fiscal year ending June 30, 2010, the state spent $218 billion, of which $86 billion came from the state’s main discretionary fund, the General Fund. Another $95 billion came from federal funds (thanks in part to a considerable infusion of short-term stimulus funds), $24 billion from special funds, and $13 billion from bond funds. Spending is concentrated in education (about 40 percent) and health care (about 30 percent). Some of the fastest-growing expenditure areas are in-home supportive services, developmental services, mental health, corrections, and debt service.

• **The bulk of state spending funds local government activities.**

About three-quarters of state spending goes to local governments for K–12 education, health and social services, public safety, and other programs. The remaining 25 percent finances state operations, including the University of California and California State University systems, correctional facilities, and administration.
• **California spends more in certain areas . . .**

Historically, many of California’s public programs have had larger caseloads, or workloads, because of demographics—in particular, more school-age children and low-income families. Also, the state has made policy decisions to expand program eligibility and use in some areas—health and social services and higher education, for example. In addition, California has paid some public employees—such as those in K–12 education, public safety, and administration—more generously than other states, although the 2010 budget deal included significant public compensation reforms.

• **. . . but saves in others.**

In some programs, California’s higher participation rates are offset by expenditures per case that are lower than in other states. Examples include K–12 and higher education, Medi-Cal, and CalWORKs. In some cases, such as K–12 education, higher salaries are offset by larger class sizes and lower staffing in general.

**LOOKING AHEAD**

Faced with enormous budget gaps during the recession, California relied heavily on short-term solutions (temporary state tax increases and federal stimulus funds). Unfortunately, the tax increases and stimulus funds will soon expire, and the state Legislative Analyst’s Office projects ongoing annual budget gaps of $20 billion or more. Policymakers will face many significant long-term challenges:

**Pension funds and OPEBs.** The state and many local governments pay monthly pensions to their retirees. In addition, retired public employees often receive health, dental, and other benefits collectively known as “other post-employment benefits” or OPEBs. Longer life expectancies and rising health care costs have made pensions and OPEBs a ballooning cost for state and local governments throughout the nation. The state’s unfunded pension liabilities have been estimated at $136 billion; they may be higher, depending on the modeling assumptions (including the choice of a discount rate). In addition, recent stock market declines may leave public pensions in need of additional contributions. The 2010 budget deal included major pension reforms, including higher employee contributions, but these reforms will affect only new hires.
Debt service. Given the pressures of an aging infrastructure, increasing population, and service demands, the state treasurer has estimated that voters will need to approve $226 billion in general obligation bonds over the next 20 years. As a result, debt service costs may come close to 10 percent of projected revenues.

Tax reform. Californians may be loath to reconsider certain aspects of their tax code, such as the progressivity of the income tax or restraints on the property tax. However, the economy is also shifting to areas such as services and Internet or catalog sales. Sensible modifications to the tax code (such as extending the sales tax to services) may improve efficiency, equity, and reliability.

Budgeting for volatility. Californians may also want to consider ways to budget for peaks and troughs in revenues, which appear to be a fact of life in the state. Improvements to budget forecasting could also help to orient voters and lawmakers to future needs. In particular, the state could expand the forecasting period from four or five years to ten years and make projections more transparent, highlighting the tough choices needed to maintain voters’ priorities.

We invite you to dig deeper at ppic.org.
Related PPIC resources include:
- Statewide Survey: Californians and Their Government
- California’s State Budget
- California’s Tax Burden
- California’s Debt: What Does It Pay For?
- Public Bond Financing in California

Contact a PPIC expert:
- Tracy Gordon
- Jed Kolko
- Kim Rueben
- Margaret Weston

This publication is part of PPIC’s Planning for a Better Future project.
CLIMATE CHANGE THREATENS CALIFORNIA’S FUTURE

Increases in global emissions of greenhouse gases 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 39 to 55 inches by 2100, and the frequency of extreme events such as heat waves, wildfires, floods, and droughts is expected to increase. Higher temperatures will result in more rain and less snow, diminishing the reserves of water held in the Sierra Nevada snowpack. Even if all emissions of greenhouse gases 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 would 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 the least expensive 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. But its actions are crucial, because they set an example for other states, regions, and the rest of the world, and others are already following its lead. To be effective, the state 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 CHARTING NEW TERRITORY WITH ITS PLAN TO REDUCE EMISSIONS

- California’s climate change plans generate interest . . .
  The California Air Resources Board (CARB) is responsible for implementing the Global Warming Solutions Act. In late 2008, CARB adopted a Scoping Plan, outlining the programs designed to reach the 2020 target. Because this is the first comprehensive plan of its kind within the United States (and one of the first such plans internationally), many are looking to California as a model for efforts elsewhere.

- . . . and controversy.
  Analysis by CARB shows that AB 32 will have little effect on the state’s economy, but the Legislative Analyst has reported that the short-term impact on jobs is likely to be negative. Some legislators and interest groups have urged delaying compliance with AB 32 (and other environmental regulations) until the economy improves. In November 2010, voters rejected Proposition 23 by a large margin (61.5% voted no, 38.5% voted yes). If it had passed it would have halted AB 32 implementation until unemployment remained at or below 5.5 percent for a year. This result suggests continued support for meeting the state’s climate goals even in difficult economic times.

ENERGY AND TRANSPORTATION ARE THE LARGEST COMPONENTS OF THE SCOPING PLAN

- New standards for passenger vehicles are key.
  California adopted the first-ever greenhouse gas emission standards for passenger vehicles in 2004. These standards will reduce emissions from new passenger vehicles by approximately 30 percent by 2016. The federal government has chosen to set standards equivalent to California’s by 2016.

- Partnerships to develop a cap and trade program are also in the works.
  California is reaching out to other states and Canadian provinces, through the Western Climate Initiative, to develop a cap and trade program. Under this program, firms that would need to spend a lot to reduce emissions would be allowed to trade emission reduction credits with firms that can reduce emissions at lower cost.

- California recently adopted more pathbreaking strategies.
  Adopted in 2008, Senate Bill (SB) 375 aims to reduce emissions by integrating investments in land use and transportation. This bill provides incentives to encourage regional transportation planning agencies and local governments to develop ways to reduce passenger vehicle use. CARB adopted regional GHG emission targets for 2020 and 2035 in September 2010. Reduction targets for the four largest regions range from 13 to 16 percent by 2035.
California’s local governments are also addressing climate change.

At least three-quarters of California’s cities and counties, encompassing more than 90 percent of the state’s population, are taking measures to address climate change. In many instances, these measures are also promoted as ways to reduce energy costs and to promote broader sustainability goals. Moving forward, local governments would like more information on the costs and benefits of different actions, information on funding, and greater clarity in state law.

### DESPITE THE RECESSION, LOCAL GOVERNMENTS HAVE INCREASED EFFORTS TO ADDRESS CLIMATE CHANGE

- **Share respondents (%)**
  - Plan to do
  - Already done

<table>
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<th>Year</th>
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<th>Emission inventory—community</th>
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<tr>
<td>2010</td>
<td></td>
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### DESPITE THE RECESSION, CALIFORNIA’S SUPPORT FOR THE STATE’S CLIMATE POLICIES IS STRONG

<table>
<thead>
<tr>
<th>Policy</th>
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<tbody>
<tr>
<td>Global Warming Solutions Act of 2006</td>
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<tr>
<td>Emission standards for new passenger vehicles</td>
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</tr>
<tr>
<td>Increasing the use of renewable energy</td>
<td>85</td>
</tr>
<tr>
<td>Requiring local governments to change land-use patterns so people drive less</td>
<td>77</td>
</tr>
<tr>
<td>Requiring an increase in energy efficiency for residential and commercial buildings and appliances</td>
<td>75</td>
</tr>
<tr>
<td>Requiring industrial plants, oil refineries, and commercial facilities to reduce emissions</td>
<td>81</td>
</tr>
</tbody>
</table>

CALIFORNIA NEEDS TO PREPARE FOR THE EFFECTS OF CLIMATE CHANGE

California is well 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.**
  Spring runoff from snowpack is occurring 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.

- **Sea level rise threatens coastal infrastructure, homes, and habitat.**
  Sea level is projected to rise 39 to 55 inches by 2100. The Pacific Institute finds that at the higher end of this range, 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., sea walls or breakwaters) can help protect infrastructure and homes along the coast, but these are expensive remedies 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 poses threats to fragile Delta levees, which are currently 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 and the state's emergency preparedness agencies and health 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. Increasing 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. But in areas such as ecosystem management and flood control, the institutional and legal frameworks are ill-equipped to handle the changes. Some regions are taking the lead in thinking about adaptation (e.g., San Diego and the Bay Area). The Natural Resources Agency has developed an adaptation strategy for the state.
CALIFORNIA’S LOCAL GOVERNMENTS ARE LESS FOCUSED ON PREPARING FOR CLIMATE EFFECTS

Looking Ahead

To lessen the effects 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.**
  In some areas, failure to consider future climate changes in current planning will result in unacceptably high costs. For example, considering climate change in today’s land-use planning decisions could facilitate species’ migration as the climate changes. Limiting development in areas at increasing risk of flooding will avoid future costs.

- **Tap into local enthusiasm for undertaking climate action.**
  The state should build on local momentum to implement state-level climate policies. 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 targets and the cost-effectiveness of policy options. Assessments of climate effects at a local or regional scale will help pinpoint vulnerabilities and develop priorities for adaptation.

• **Continue to play a leadership role.**
  California is a leader on environmental policy. Climate change is no exception. This leadership is important for encouraging other governments to take actions to reduce climate change. Without global cooperation to reduce emissions, the consequences for California’s economy and society may be severe.

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**We invite you to dig deeper at [ppic.org](http://ppic.org). Related PPIC resources include:**

- *Driving Change: Reducing Vehicle Miles Traveled in California*
- *Climate Change Challenges: Vehicle Emissions and Public Health in California*
- *Preparing California for a Changing Climate*
- *PPIC Statewide Survey: Californians and the Environment (July 2010)*
- *Climate Policy at the Local Level: A Survey of California’s Cities and Counties*

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**This publication is part of PPIC’s Planning for a Better Future project.**
THE ECONOMY REMAINS A BIG CONCERN FOR CALIFORNIANS
The recent recession reveals important fundamentals about California’s economy and shows where some longer-term challenges and growth opportunities lie. Californians remain worried about the economy: in PPIC’s October 2010 Statewide Survey, 62 percent of respondents thought that the economy will face bad times over the next year. But the current downturn is neither an indicator of trouble unique to California’s economy nor a harbinger of long-term economic weakness in the state. Despite the state’s frequent booms and busts, historical patterns are the best guide to California’s economic future. Economies tend to return to growth rates and unemployment levels established over the long term, and major industry shifts—such as the transition from manufacturing to services—can take place over decades.

CALIFORNIA’S LONG-TERM ECONOMIC PROSPECTS ARE FUNDAMENTALLY STRONG
The California economy generally keeps pace with the U.S. economy. California consistently experiences higher unemployment and higher costs of doing business than other states, but these are explained or offset by the state’s strengths and are likely to remain permanent features of the California 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. Job growth over the past 30 years has averaged 1.2 percent annually for the nation and 1.1 percent annually for California. In the first 10 months of 2010, California employment grew 0.4 percent (at an annualized rate), just slightly below the national rate of 0.8 percent. Although California is emerging from the recession slightly more slowly, its long-term growth rate is likely to remain similar to that of the nation.

CALIFORNIA JOB GROWTH TRACKS GROWTH IN THE NATION OVERALL

NOTE: Annual change in nonfarm employment, December to December.
**Unemployment is persistently higher in California than in the nation.**

In the recession, California’s unemployment rose much higher than the U.S. rate, even though employment growth was only somewhat slower in California than in the U.S. In October 2010, California’s unemployment was 12.4 percent; it was 9.6 percent for the nation. But California’s unemployment rate has exceeded the U.S. rate for 20 years, even when California’s employment growth surpasses U.S. growth, as it did during the technology boom in the late 1990s.

**UNEMPLOYMENT IS THE HIGHEST IN DECADES**

![Unemployment graph](source)

This seeming paradox arises because California's labor force grows faster than the U.S. labor force. The state's economy, therefore, generates jobs at a rate similar to the national rate, but this is not enough to keep up with California's faster-growing population. California unemployment is likely to remain above the U.S. level even after full recovery from the recession.

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

California workers, on average, earn 12 percent more than the national average—even when adjusting for differences in workers, occupations, and industries. However, output per worker in California is 13 percent above the national average. Thus, California's higher productivity fully offsets the higher average wages. California's immediate neighbors—Nevada, Oregon, and Arizona—all pay their workers less and have lower output per worker.

**Businesses are not fleeing the state.**

Rhetoric aside, California loses very few jobs to other states. Businesses rarely move either out of or into California and, on balance, the state loses only 9,000 jobs annually as a result of relocation—that’s just 0.05 percent of California’s 18 million jobs. Far more jobs are created and destroyed as a result of business expansion, contraction, formation, and closure than because of relocation—primarily in locally owned businesses. Business relocations, although highly visible, are a misleading guide to the overall performance of the California economy. The employment growth rate, which takes into account job creation and destruction for all reasons—not just relocation—is a much better measure of the state’s economy.
• **The “business climate” debate understates California’s strengths.**

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

**GROWTH WILL BE UNEVEN**

• **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. These unemployment differences are due to a different industry mix and to 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: aside from the recession, in most years some regions of the state grow quickly while others grow slowly or contract. Although the recession has hit inland California hardest, the region’s low housing costs will still contribute to high growth of the workforce there. The working-age population is projected to grow more than 25 percent between 2010 and 2025 in much of inland California; in California overall, that growth will be 13 percent.
• **Housing is still expensive and probably always will be.**

Even before this decade’s real estate bubble, housing in California was much more expensive than in the nation as a whole. And although housing prices fell more in California than in the nation during the recession, housing remains far more expensive in California, especially in its coastal cities. In September 2010, the average U.S. home was worth $180,000; in metropolitan Los Angeles, the average home was worth over $400,000, and in the Bay Area over $500,000, according to Zillow. Expensive real estate makes it harder for some businesses to locate in California and attract workers, pushing growth out of state. The growing gap between high house prices on the coast and rapidly falling prices inland could accelerate the movement of businesses and households inland.

• **Services will continue to grow; manufacturing will continue to stagnate.**

Manufacturing accounted for only 9 percent of California's employment in October 2010; its share has been declining for decades, and it will continue to be California’s slowest-growing sector. In the recession, the construction industry contracted most sharply. Once the existing housing stock has been absorbed by California's growing population, construction employment will rise again, although it will not reach its boom-time levels. The fastest-growing industries over the longer term are projected to be professional services, administrative services, education, and health care; these are also the sectors least hurt by the recession.

**PROJECTED PRIVATE-SECTOR INDUSTRY GROWTH**

<table>
<thead>
<tr>
<th>Industry</th>
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</thead>
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<tr>
<td>Professional services</td>
<td>28.8</td>
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<tr>
<td>Educational services</td>
<td>28.4</td>
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<tr>
<td>Administrative services</td>
<td>24.4</td>
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<tr>
<td>Health care</td>
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<tr>
<td>Accommodation and food service</td>
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<tr>
<td>Art, entertainment, and recreation</td>
<td>18.2</td>
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<tr>
<td>Wholesale trade</td>
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<td>Information</td>
<td>14.3</td>
</tr>
<tr>
<td>Retail trade</td>
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<tr>
<td>Other services</td>
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<tr>
<td>Construction</td>
<td>12.6</td>
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<tr>
<td>Transportation, warehousing, and utilities</td>
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<tr>
<td>Finance and insurance</td>
<td>8.7</td>
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<tr>
<td>Real estate and rental and leasing</td>
<td>6.9</td>
</tr>
<tr>
<td>Manufacturing</td>
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</table>
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 business climate, and a realistic sense of the state's strengths and weaknesses.

- **Focus on the right economic measures.**
  To know how well California’s economy is doing, the best measure to examine is employment growth or gross state product growth. The unemployment rate is also an important indicator, showing how households are faring in the labor market and the demand on government services. Other indicators—such as whether businesses leave the state—can be misleading.

- **Take a broad view of the business climate.**
  Assessments of the state's economic performance should take into account all of the costs and benefits of doing business in California. Because California is a high-cost, high-benefit state, looking only at the cost side—as many business climate indices focused on taxes and regulation tend to do—fails to explain why California's growth tends to keep up with or surpass national economic growth.

- **Review housing policies that do harm.**
  California’s expensive real estate is a major cost for businesses and their workers. Housing is expensive partly because California’s climate, natural features, and topography both raise the demand for land and constrain supply. Regardless of policy, California’s housing prices will remain well above the national average, especially along the coast. But regulations that discourage new housing construction push prices up further, especially in expensive coastal cities, and raise the cost of doing business in California. Local efforts to review restrictions on housing development could boost California’s economic growth in the long term.

- **Don’t pin all hopes on one industry.**
  Although many industries—such as motion picture, high-technology, and wine-making—are highly concentrated in California, the state’s economy is in fact very diversified, and its industry mix is quite similar to the national industry mix. Economic policy should reflect the breadth and diversity of the state’s economy. Tempting as it is to identify the next boom industry—such as clean technology—and focus economic development efforts there, booms usually don’t deliver stable, steady growth, as the Internet and housing industries demonstrate. And some hyped industries fail to take off at all. Economic development policy needs to nurture both new, innovative industries that might constitute California’s next boom and established, steadily growing industries such as health care.
We invite you to dig deeper at ppic.org. Related PPIC resources include:
Business Location Decisions and Employment Dynamics in California
Do California’s Enterprise Zones Create Jobs?
The California Economy: Housing Market Update
Are the Rich Leaving California?
Does Broadband Boost Local Economic Development?

Contact a PPIC expert:
Jed Kolko

This publication is part of PPIC’s Planning for a Better Future project.
PROFICIENCY RATES ARE INCREASING, BUT MANY STUDENTS DO NOT ATTAIN PROFICIENCY

Proficiency rates among California students continue to rise. At the end of the 2009–10 school year, the share of students who demonstrated proficiency on the California Standards Test was greater than 50 percent in both English language arts (ELA) and math. California’s proficiency rates have increased more than 18 percentage points over the last seven years, and rates of proficiency growth have been similar across all student subgroups.

California schools appear to be heading in the right direction, but the fact that more than 40 percent of all students are not proficient in ELA and math suggests that we still have a long way to go. And although proficiency rates have increased in all subgroups, significant proficiency gaps—such as the gap between white and Latino students—remain. Moreover, budget cuts may make it difficult to maintain the rate of progress we have seen since 2003.

CALIFORNIA STUDENTS FACE MANY CHALLENGES

- Gaps in school readiness and academic skills are evident in kindergarten.
  
  On average, students whose parents have low education levels and low-income, African American, Latino, and English-language-learner (ELL) students begin school less prepared. These groups score lower on standardized tests that begin in second grade, and the achievement gaps persist.
• **California students are more disadvantaged than their peers in other states.**  
  Fewer than one in ten students in the United States are ELLs; in California, one out of every four students is an ELL. Half of all students in California are eligible for free or reduced-price meals; this share is higher than the national average of 42 percent.

• **Early, high-quality interventions are critical.**  
  A growing body of research indicates that investments in pre-kindergarten programs can produce both short- and long-term benefits that exceed costs. Programs targeted at low-socioeconomic-status children have the greatest returns. High-quality preschool shows particular promise, as do programs that target families. Currently, only about half of eligible children receive subsidized early care and education, and investments in early education lack statewide coordination.

• **Appropriately targeted interventions may improve graduation rates.**  
  A recent PPIC study found that students likely to fail the California High School Exit Exam (CAHSEE) can be identified as early as fourth grade. A strategic focus on support for elementary school students may reduce the need for later, more costly remediation.

### THE CALIFORNIA ECONOMY PRESENTS A CHALLENGE TO CALIFORNIA SCHOOLS

• **California school districts face significant budget challenges.**  
  K–12 education, which makes up the largest share of the state budget, has faced significant cuts in recent years. Between 2007–08 and 2010–11, the state’s contribution to K–12 has decreased by 13 percent—and when one controls for inflation the decrease is greater. District reserves, federal aid, and eased restrictions on the expenditure of categorical funds have partially mitigated the effects of these cuts. But the Legislative Analyst’s Office estimates that the funds guaranteed for K–12 education will be even lower in 2011–12 because the temporary tax increases that were part of the 2009–10 budget will expire.

• **State payment deferrals are a challenge.**  
  In recent years, the state has relied on deferrals—payments made after the close of the fiscal year for programs and services already provided—to avoid deeper cuts to K–12 funding. Cash flow problems have forced the state to delay payments to districts during the fiscal year. As a result, districts have had to take out short-term loans to cover expenses; the debt service on this borrowing leaves districts with less money to spend on instruction.

• **California spends more per capita—but less per pupil—than other states.**  
  California spends more per capita on K–12 education than the national average but less per pupil than the average state, including other similarly large, diverse states. The higher per capita expenditures do not result in higher per pupil expenditures because California has more students per capita.

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**SOURCES:** National Center for Education Statistics.
• Adjusting for costs, California’s per pupil spending ranks near the bottom.
Differences in spending across states do not account for differences in costs across states. For example, California teachers earn about 40 percent more than their peers in Florida, but teacher salaries in both states are about 5 percent lower than the salaries of similar state residents. California’s pupil-teacher ratios are among the highest in the nation, and the high cost of labor in California may prevent significant reductions in class sizes.

THE SCHOOL FINANCE SYSTEM COULD BE LESS COMPLEX AND MORE EQUITABLE
• Districts with greater challenges do not always receive greater funding.
Prominent critics charge that schools do not receive enough resources from the state to meet California’s academic performance standards. The vast majority of funding is based on past expenditures on particular programs, not on the needs of the district. For example, district revenue limits, which determine each district’s entitlement to state funding and which make up about two-thirds of a district’s revenue, are based on a district’s per pupil spending in 1972–73, not on what it actually costs each district to provide a basic education. Despite efforts to equalize revenue limits, there are still large differences across district types and sizes. For example, in four Southern California districts within a single zip code, base revenue limit rates ranged from $6,100 to $7,400 in 2009–10.

• Per pupil funding varies widely across districts and is not linked to costs.
On average, districts with more disadvantaged students get more funding per pupil, but this is not by design: less than 2 percent of the state’s K–12 budget is allocated solely on the basis of the number of disadvantaged students in a district. An equitable funding formula would acknowledge not just differences in students but also cost differences among districts. Specifically, funding formulas should take into account regional cost differences that could affect the level and quality of services provided.

ACCOUNTABILITY PROGRAMS ARE IN NEED OF IMPROVEMENT
• School demographics are a strong predictor of school success.
Accountability grades may reveal more about the type of students who attend a school than they do about the effectiveness of teachers and administrators at that school. Schools that meet accountability requirements have lower percentages of economically disadvantaged and ELL students and lower total enrollments, on average.

• Accountability systems based on achievement levels may not accurately distinguish between effective and ineffective schools.
Schools with low levels of achievement are not necessarily schools with ineffective administrators and teachers. In fact, the rate of student learning may be relatively high at some of these schools, but because students start out with very low ability levels the success of teachers and administrators goes unnoticed. Until California evaluates schools on the basis of individual student achievement gains, it will not be possible to distinguish between schools where teachers and administrators are effective and schools where they are not.

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

• Increase efforts to ready the California Longitudinal Pupil Achievement Data System (CALPADS).
CALPADS aims to merge student-level data from separate systems into a single, centralized database and to make it possible to track individual students throughout their years of enrollment in California schools. It could be essential to holding schools and districts accountable for dropout rates by making it much easier to determine whether a student who has left one district has re-enrolled in another. Also, good data is essential to finding out what works in both the short and the long run. But the development of CALPADS is behind schedule, and California is decades behind states like Texas, Florida, and North Carolina, which have implemented comprehensive data systems and are using them to improve educational quality. CALPADS will face an important test in the 2010–11 school year. State policymakers should do what they can to increase the likelihood that CALPADS will pass this test; they should also prepare for the possibility of failure.
• **Reform school finance.**
The current *Robles-Wong v. California* lawsuit gives California the opportunity to reconsider its level of funding for schools and how it allocates that funding. Despite its budget problems, the state can make low-cost structural changes now that will help it invest wisely when the economy recovers. By 2030, schools can reasonably expect a 31 percent real increase in funding. California can use this increase to strengthen its school finance system so that district revenues are more closely aligned with the actual costs of providing a basic education.

• **Start planning for the future.**
As part of the 2009 Budget Act, the state eased spending restrictions on more than 40 categorical programs, which are earmarked for specific purposes like after-school programs, adult education, and textbook purchasing. In a recent survey, districts reported positive experiences with this flexibility, and a majority would like more programs to be included in the flexibility provision. However, the provision is set to expire on June 30, 2013, creating great uncertainty for school districts. Starting discussion and evaluation of the flexibility provision now will help districts better prepare for 2013–14.

• **Use a value-added model to evaluate school and district effectiveness.**
Value-added models control for students’ initial levels of achievement. Measures of school effectiveness obtained from value-added models are likely to be more accurate than California’s current measures, which are based on levels of proficiency and comparisons of different cohorts of students. But even the best value-added model is not perfect, and it should not be forgotten that schools and districts do much more than teach math and English. School accountability scores should be based on student achievement growth over a number of years, and policymakers may want to include other performance measures as well.

We invite you to dig deeper at ppic.org. Related PPIC resources include:

- **At Issue: School Finance Reform**
- **Pathways for School Finance in California**
- **Lessons in Reading Reform: Finding What Works**
- **Higher Education in California: New Goals for the Master Plan**
- **Predicting Success, Preventing Failure: An Investigation of the California High School Exit Exam**
- **Funding Formulas for California Schools: Simulations and Supporting Data**
- **Full-Day Kindergarten in California**
- **PPIC Statewide Survey: Californians and Education**

Contact a PPIC expert:
Julian Betts  Jill Cannon  Hans Johnson  Eric Larsen  Margaret Weston

This publication is part of PPIC’s Planning for a Better Future project.
CALIFORNIA FACES IMMEDIATE AND LONG-TERM HOUSING CHALLENGES

California is still experiencing the aftereffects of the most recent housing bubble, and the long-term challenges of housing California’s population haven’t gone away. The housing bubble, which inflated and popped over the past decade, has left the state with a foreclosure problem and large losses of construction jobs, which accounted for 6 percent of California’s jobs when housing prices were at their peak (according to the California Employment Development Department).

Despite falling far below their peak, housing prices remain high in most of California. The perennially high cost of housing reflects the fact that people and businesses are willing to pay far more to be in California than almost anywhere else in the U.S.; it also reflects the barriers to building new housing in California. But the high cost of housing makes California unaffordable to many households and too expensive for many businesses, which pay rent or mortgages for their own space and also need to pay workers enough so they can afford to live here. In both the short and the long term, California’s economic performance and livability depend on its housing market.

THE HOUSING BUBBLE AFTERMATH IS FAR FROM OVER

The housing price bubble and its deflation in the century’s first decade helped trigger a national recession and global slowdown. Prices rose and fell more in California than in most of the country. The state is slowly emerging from the crisis, but prices remain at or near their post-bubble lows, construction remains slow, and 32 percent of mortgaged residential properties are “underwater” (worth less than the amount owed), according to CoreLogic.

- **Home prices in California are down 43 percent from their bubble-era peak.**
  After growing rapidly earlier in the decade, home prices peaked and then fell slightly in 2006, fell sharply in 2007 and 2008, and fell modestly in 2009 and 2010. At the end of 2010, the average home price in California had returned to its end-of-2002 level. Nationally, home prices have fallen 15 percent from the peak in the second quarter of 2007. California’s prices are no longer falling much faster than national prices: in 2010 California’s decline of 4.7 percent was only slightly worse than the national decline of 4.0 percent.

- **Foreclosures remain high, and new construction remains low.**
  Falling prices, combined with rising unemployment and resetting interest rates for adjustable mortgages, have led to very high foreclosure rates. Foreclosures skyrocketed in 2007, peaked in 2008, and have remained high in 2009 and 2010 (RAND/DataQuick and RealtyTrac). In January 2011, only Arizona and Nevada had higher foreclosure rates. Falling prices have also discouraged new construction: new residential construction permits fell from around 200,000 annually from 2003 to 2005 to tens of thousands annually from 2008 to 2010, according to Department of Housing and Urban Development (HUD) data.
Coastal metropolitan centers have fared better than inland California. During the post-bubble years, home values declined less steeply in San Francisco (18%) and San Jose (21%), as well as in Orange County (28%) and Los Angeles (29%). And in 2010 prices rose slightly or held steady in those areas. At the other extreme, prices fell 41 percent in Sacramento, 45 percent in the Inland Empire, and more than 50 percent in the Central Valley metropolitan areas of Stockton, Modesto, and Merced. Not surprisingly, foreclosure rates have been higher in these inland areas. In the Inland Empire, for instance, the foreclosure rate from 2006 to 2010 was nearly four times that of Los Angeles and Orange Counties.

Despite the bursting of the bubble, housing is expensive and the market is tight
Falling prices make housing more affordable, but this silver lining is thin. Housing in the parts of California where most people live remains expensive by any measure, and rents have actually risen (in nominal terms) during the crisis.

In most of California, housing remains expensive.
Even after years of prices falling more in California than in the U.S., housing remains far more expensive here than elsewhere. The average home in California was 1.8 times more expensive than the U.S. average in December 2010, according to Zillow. Since 2000, average prices in California ranged from 1.6 to 2.3 times the national average. These price gaps remain even after accounting for differences in housing characteristics between California and other states.

Housing is dense relative to other states.
California is often thought of as the epitome of sprawl, but its housing density is 35 percent above the national average and rising. Census data show that the Los Angeles and San Francisco metropolitan areas have the second- and third-highest residential density in the U.S., after New York, while San Jose and San Diego are also in the top ten. High density goes hand in hand with high prices: where real estate is expensive, developers build upward and more closely together, and people are willing to live in less space. California’s population density is heightened by its household structure: the typical California household has 2.1 adults and 0.7 children, as compared to the national average of 1.9 adults and 0.6 children.
HOME PRICES HAVE DECLINED MORE STEEPLY INLAND THAN ON THE COAST

SOURCE: Federal Housing Finance Agency.
NOTES: Cumulative percentage change, local price peak to fourth quarter 2010, not seasonally adjusted, from FHFA “all transactions” series. No data available for white areas.

- **Rents are high and rising.** Rental units account for 43 percent of California’s occupied housing stock, according to the American Community Survey. According to HUD, five of the ten most expensive rental markets in the U.S. are in California: San Francisco, Orange County, San Jose, Ventura County, and Los Angeles. And, unlike housing prices, typical rents were higher in 2010 than in 2006 in nearly all metropolitan areas, in nominal terms. Even more striking, since 2006 rents have risen more in the metropolitan areas with higher foreclosure rates, even though home prices have fallen more sharply where foreclosures are more widespread.

- **Vacancies are low, relative to most states.** High housing prices indicate that California’s housing market is tight; low vacancy rates confirm this. 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. Even in the San Joaquin Valley and Inland Empire, residential vacancy rates are near the national average. The other states with the highest foreclosure rates (Arizona, Florida, Georgia, and Nevada) have among the highest vacancy rates in the U.S. In these states, foreclosure often leads to abandonment, whereas in California foreclosure more often means turnover. (Vacancy rate data are from HUD, USPS, and American Community Survey.)

**LOOKING AHEAD**
Housing policy in California needs to address both immediate and long-term challenges. Policies must help resolve the foreclosure crisis, fund affordable housing construction, and remove unnecessary barriers to expanding the supply of housing.

- **With the job and housing markets recovering slowly, foreclosures will continue.** Foreclosures displace families and can ruin access to credit, but keeping people in homes they cannot afford risks slowing down recovery in the housing and financial markets. Most housing policy is set at the federal level, and most housing financial institutions—including Fannie Mae, Freddie Mac, and the large banks—are national. However, states strongly influence the foreclosure process, and the hardest-hit states including California have received federal money to help underwater borrowers. With these tools, the state should do what it can to help struggling homeowners who can potentially afford their homes and to speed up the foreclosure process for homeowners who can’t.
• **Funding for affordable housing is threatened.**
Affordable housing construction in California is funded partly through redevelopment agency set-asides and general obligation bonds. Redevelopment might be eliminated as part of the fiscal year 2011–12 budget, and continued state budget troubles raise the cost of borrowing and limit the scope for authorizing and issuing new general obligation bonds. If it wants to support affordable housing construction, California needs to establish new funding mechanisms.

• **Regulations help keep housing prices high.**
Why is housing so expensive in California? Many people and industries are willing to pay a premium to be in California, keeping demand high. At the same time, the supply of new housing is constrained both by geography and regulation. Most of populated California is nestled against the ocean, the Bay, or the mountains—natural barriers to construction. And California has unusually strong land use and building regulations, especially in the major coastal cities, which curtail construction and keep prices high. California cannot move the mountains or fill the ocean, but it can tackle some of the regulations and related rules and fees that contribute to high housing prices.

We invite you to dig deeper at ppic.org.
**Related PPIC resources include:**
- *The California Economy: Housing Market Update*
- *Housing in California*
- *California’s Newest Homeowners: Affording the Unaffordable*
- *Urban Development Futures in the San Joaquin Valley*

This publication is part of PPIC’s **Planning for a Better Future project.**

Contact a PPIC expert:
**Jed Kolko**
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 the world that is California’s size has sustained so much growth over such a long a period. Equally remarkable has been the increasing diversity in the state's population. 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. Although growth rates have slowed, the state still added 3.4 million people this decade, according to Census counts.

During the next 20 years, California’s population will continue to increase, as millions of new residents are added each decade. In all areas of infrastructure and public services—including education, transportation, corrections, housing, water, health, and welfare—population growth will lead to new demands.

CALIFORNIA'S POPULATION WILL CONTINUE TO GROW

GROWTH CONTINUES AS REGIONAL, RACIAL/ETHNIC, AND AGE GROUPS SHIFT

- Large population gains are projected to continue.

By 2025, California’s population is projected to reach 46.7 million. Annual increases will be about 500,000 people, equivalent to adding a city the size of Long Beach to the state’s population each year. Annual growth rates will average 1.2 percent, similar to growth experienced in the 1990s and this decade but slower than in earlier decades.
• **Inland areas will see higher growth.**
The inland areas of California have grown faster 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 much faster than other areas of the state. The population will increase by 3.6 million in coastal counties (including the San Francisco Bay Area) and by 4.6 million in inland counties. Key milestones expected by 2025:
- Los Angeles County will reach 11.5 million residents.
- Riverside County will reach 3 million residents.
- Santa Clara County will reach 2 million residents.
- San Joaquin County will surpass 1 million residents.

• **California’s population will continue to diversify.**
The 2000 Census found that no ethnic group in the state made up a majority of the population; non-Hispanic whites were the largest group. The California Department of Finance projects that in 2016 Latinos will replace whites as the largest ethnic group. Among children ages 9 and under, Latinos already make up 52 percent of the population. Latino increases are due to both immigration and relatively high birth rates. Immigrants are projected to make up 29 percent of the state’s population in 2025, a modest increase from 27 percent in 2009.

**LATINOS WILL BECOME CALIFORNIA’S LARGEST ETHNIC GROUP**

![Graph showing population growth by ethnicity from 1980 to 2025](screenshot)

SOURCES: 1980 Census; 2009 American Community Survey; California Department of Finance projections.

• **Large numbers of Californians will soon reach retirement age.**
In 2009, about 11 percent of Californians were age 65 and over, compared to only 9 percent in 1970. By 2025, that share will grow to 16 percent. The total number of adults age 65 and over is projected to grow from 4.2 million in 2009 to 7.6 million in 2025.

• **The number of children will change very slowly.**
From 2008 to 2015, the number of children is projected to increase only 3 percent, from 10.0 million to 10.3 million. In contrast, during the 1990s, the number of children grew by almost 20 percent. Growth in the child population will resume from 2015 to 2025 but will not exceed overall population growth rates for the state.
LOOKING AHEAD
The state’s growing and changing population will put pressure on a variety of infrastructure needs and public services. Key areas to watch:

Schools. The relatively slow growth in the number of school-aged 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. Higher education enrollments should continue to increase in the near term but will subside around 2015.

Housing. After the elderly, adults in their late 20s and early 30s will be the fastest-growing age group. Between 2009 and 2025, the number of adults ages 25 to 35 will increase by almost one-third. This is the age at which young adults typically get married, start families, and establish their own households—driving up housing demand.

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

The 2010 Census. The 2010 Census counted 37.3 million California residents, about 1.5 million fewer than had been estimated by the California Department of Finance. According to the Census, California grew at about the same rate (10 percent) as the rest of the nation during the decade, its slowest rate on record. For the first time since 1920 (when the Census was not used to reappoint the House of Representatives), California did not gain any congressional seats. A key question is whether the 2010 count was accurate. States and local jurisdictions have challenged Census counts in the past, but without much success. As additional Census data is released, technical analyses will shed more light on the accuracy of the count.

INLAND COUNTIES WILL EXPERIENCE FASTER POPULATION GROWTH

![Projected change, 2009–2025](image)

- Greater than 20%
- Less than 20%

SOURCE: California Department of Finance.
We invite you to dig deeper at ppic.org. Related PPIC resources include:
New Patterns of Immigrant Settlement in California
PPIC Statewide Survey: Californians and Population Issues
Are the Rich Leaving California?
California’s Future Population
Immigrants in California
The Inland Empire in 2015

Contact a PPIC expert:
Hans Johnson

This publication is part of PPIC’s Planning for a Better Future project.
CALIFORNIA FACES GROWING WATER MANAGEMENT CHALLENGES

Water management in California has always been difficult, especially because the state’s variable climate is marked by long droughts and severe floods. The state also features stark regional differences in water availability and demand; it relies on a vast network of storage and conveyance facilities to deliver water from the wetter parts of the state (mostly the northern and eastern mountains) to population and farming centers in the Bay Area, the San Joaquin Valley, and Southern California. This supply network is now threatened by the physical and biological fragility of the system’s hub in the Sacramento–San Joaquin Delta.

Other challenges are also on the horizon. Population growth is increasing water demand in urban areas and this demand is likely to increase even if current efforts to reduce per capita water use are successful. At the same time, conflicts are growing between human water uses and water necessary to maintain fish and other wildlife. In addition, California faces serious and growing threats to life and property from flooding, particularly in the Central Valley.

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 will involve difficult and sometimes costly tradeoffs and inconvenient legal and political changes.

RISING TEMPERATURES WILL DIMINISH THE SIERRA NEVADA SNOWPACK

CALIFORNIA’S BIGGEST WATER CHALLENGE: INSTABILITY IN THE DELTA
As the fragile hub of California’s water supply, the Delta now 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 that keep salt water at bay. Environmental concerns further affect water supplies. Since 2007, the collapse of native fish species has led to court-ordered cutbacks of 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.

AN EARTHQUAKE COULD CAUSE SALT WATER TO FILL THE DELTA’S LOW- LYING ISLANDS AND DISRUPT WATER SUPPLIES

- A **peripheral canal is the best approach for addressing both ecosystem and economic risks.** Instead of pulling water through the Delta to the pumps (the current system), a peripheral canal (or tunnel) would tap water upstream on the Sacramento River and move it around (or underneath) the Delta to the pumps. This change would be good for fish: fewer would be trapped in the pumps and most would benefit from an increase in natural tidal flows within the Delta. It would also be good for the economy, improving both water quality and water supply reliability. Dual conveyance (a peripheral canal combined with continued through-Delta pumping) is a potential near-term solution. But over the longer term, sea level rise and levee failures will make Delta waters too salty to sustain through-Delta pumping.
• Governance and finance solutions are needed; so is attention to the Delta economy. Safeguards are needed to ensure that the canal is managed for environmental benefits and to prevent a “water grab” by those who rely on Delta exports. Giving fish managers a share of canal capacity can provide environmental safeguards. Financing mechanisms are needed to ensure that water users fund the new infrastructure and support ecosystem restoration. Funds will also be needed to support transitions in the Delta. The region will lose some agricultural islands from levee failures, whether or not there is a canal, but it could benefit from new recreation opportunities.

WATER SUPPLY PLANNING NEEDS TO RELY ON A PORTFOLIO APPROACH
Since the 1980s, water supply planning has been moving toward a portfolio approach: instead of looking for “silver bullets,” planners are developing multiple supply sources and water conservation strategies, balancing costs and reliability.

• California is fortunate to have many options for meeting new demands.
Expanding traditional supply sources—particularly surface reservoirs and native groundwater supplies—is more difficult than in the past. But there is considerable scope for cost-effective expansion of nontraditional supplies, such as recycled wastewater, and for improving water use efficiency. Water marketing, which involves the sale or leasing of water, allows water to be transferred from lower- to higher-value farming and to growing urban areas.

CHANGING WATER DEMANDS CAN BE MET IN MANY WAYS

- Urban efficiency
- Recycled water
- Groundwater storage
- Surface storage (state)
- Agricultural efficiency (net)
- Forest management
- Desalination
- Cloud seeding

NOTE: Annual production potential from new water sources and conservation by 2030.

• Much progress has been made since the drought of the early 1990s.
Water markets have been valuable in supplying water to cities and high-value agriculture during droughts and for long-term growth. Urban water use efficiency has risen in most areas thanks to new plumbing codes, better technology, and better pricing incentives. Regional cooperation is helping local utilities cope with supply emergencies.
- **Underground storage has great potential but faces institutional obstacles.**
  Where space is available in aquifers, storing water underground can be a cost-effective way to save water for dry years. This “groundwater banking” will become increasingly important as the snowpack declines. The current lack of state regulation makes success dependent on agreements among local parties. Groundwater banking has increased in some areas, but much more could be done, particularly in the Central Valley.

- **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 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. Public opinion appears split: 50 percent of all adults feel that California should focus on improving water use efficiency; 43 percent prefer building new storage (PPIC Statewide Survey, July 2009).

- **California needs to decide how to pay for water investments.**
  State general obligation bonds (funded by tax dollars) have funded some local water supply investments in recent years. When investments lead to true public benefits, such as ecosystem restoration, relying on tax dollars makes sense. But this takes general revenue funds away from education and other state budget categories. One alternative is the “user pays” principle, which guided investments in the State Water Project. Also, higher water rates create incentives to use water more efficiently.

**CALIFORNIA HAS ONLY JUST BEGUN TO ADDRESS THE CHALLENGE OF EXTREME FLOOD RISKS**
Sacramento has the highest flood risk of any major U.S. city, and many other areas in the Central Valley are at extreme risk of flooding. These risks are expected to grow with climate change. Although the state has recently increased investments in flood control infrastructure, more work is needed to keep new development out of harm’s way.

- **The state has taken important steps to reduce flood risk.**
  After Hurricane Katrina, state investments in flood prevention increased considerably, thanks to voter approval of two state general obligation bonds, but the recession and resulting budget woes have made it difficult to sell the bonds. These investments are important, because federal contributions have been lagging. Local contributions can be difficult to increase, given that local assessments require voter approval.

### STATE’S PLAN TO RAMP UP FLOOD INVESTMENTS HINDERED BY RECESSIO

![Graph showing state and federal spending on flood investments from 1998 to 2009](image)

**SOURCES:** U.S. Army Corps of Engineers; Governors’ Budgets.
Local governments have few incentives to limit flood risk exposure.
Since a 2003 court decision, the state is considered liable for damage from failure of most Central Valley levees, even those maintained by local agencies. A legislative package passed in 2007 requires that locals make land-use decisions that will reduce flood risk to new homes in the Central Valley, but implementation is still several years off. Moreover, it is unclear whether climate change will be taken into account in setting new rules.

Residents also have few incentives to limit flood risk exposure.
As long as buildings are located behind levees deemed to provide protection against a “100-year flood,” there is no requirement to disclose flood risks to residents at the time of sale, even though many areas would face serious flooding if levees were breached. Within the Central Valley, the state recently began to send annual flood risk notices to landowners in these zones—a positive step. Few Californians hold flood insurance, which is required only in areas with extreme flood risk. Fifty-five percent of Californians are very (27%) or somewhat (28%) concerned that flood risks will increase with climate change (PPIC Statewide Survey, July 2009).

LOOKING AHEAD
California has the tools to help secure a safe and reliable water supply, improve conditions for aquatic species, and reduce flood risks. In recent years, water managers have made significant progress toward these goals. But the challenges are increasing with population growth and climate change.

In the final months of 2009, the state legislature passed a comprehensive package of water legislation that begins to address some key issues. For example, groundwater basins will now have to be monitored throughout California, and penalties against illegal diversions of surface water have been strengthened, as have staffing resources to enforce water rights. In addition, a new governance structure for the Delta sets the stage for more integrated management of this critical region. The legislation also requires per capita conservation targets for urban water users and better measurement by agricultural water users. Stakeholder resistance to state oversight weakened the legislation considerably in the final weeks of negotiations. Nevertheless, these are important first steps toward more sustainable management of California’s water.

The package includes an $11.14 billion bond measure. Concerns about weak voter support during the economic downturn led the legislature to delay putting it on the ballot until 2012. Whether or not voters approve the bond, the state will need to find ways to pay for water infrastructure and for critical improvements in aquatic habitat. Local funding will need to increase under any circumstances. If public policy discussions focus solely on the water bond, the state will miss an opportunity to build on the other reforms.

In short, the legislative package is a good beginning. Increased momentum in policy reform—coupled with new investments—is essential to the state’s future. Some needed changes will be politically difficult. The following issues still require sustained attention:

The Delta. A peripheral canal or tunnel has the best potential for safeguarding 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. Given the extreme environmental degradation of this region, water users must be prepared to take less water from the Delta, at least until endangered fish populations recover.

Water efficiency. Better pricing policies—such as tiered water rates with higher prices for greater use—can heighten incentives to conserve.
Groundwater management. Better basin management is a prerequisite to realizing the significant potential of groundwater banking. Many groundwater basins have effective local management protocols, especially in Southern California and Santa Clara County. But progress is needed elsewhere.

Flood risk exposure. To reduce risks to new development, state floodplain mapping should account for climate change and increasing flood risks. To boost homeowner awareness, the risks of living behind levees should be disclosed statewide, building on the new policy in the Central Valley, and flood insurance requirements should perhaps be strengthened. More forward-looking federal policies will also be needed to address changing flood risks.

Climate change. Higher water temperatures and sea level rise will alter aquatic habitat in significant but largely unexplored ways. Environmental laws will require that water users respond to these changes with potentially costly management actions (e.g., changing reservoir operations). Anticipating the likely changes would allow the design of more cost-effective responses.
CALIFORNIA FACES A SKILLS GAP

California’s education system is not keeping up with the changing demands of the state’s economy—soon, California will face a shortage of skilled workers. Projections to 2025 suggest that the economy will continue to need more and more highly educated workers, but that the state will not be able to meet that demand. If current trends persist, only 35 percent of working-age adults in California will have at least a bachelor’s degree in 2025, but 41 percent of jobs will require at least a bachelor’s degree. This equates to a shortfall of one million college graduates. Substantial improvements in educational outcomes are needed to meet the demands of tomorrow’s economy and to ensure the economic prosperity of Californians. Failure to make improvements will result in a less-productive economy, lower incomes for residents, less tax revenue for the state, and more dependence on social services.

BY 2025, DEMAND FOR COLLEGE-EDUCATED WORKERS WILL OUTSTRIP THE SUPPLY

POPULATION TRENDS COLLIDE WITH GAPS IN ECONOMIC DEMAND

- California’s economy increasingly demands more highly educated workers.
  
  For decades, California employers have needed more workers with bachelor’s degrees or more. This shift toward more highly educated workers has occurred as a result of changes both within and across industries.

- The supply of college graduates will not keep up with demand.
  
  Two demographic trends will work against future increases in the number of college graduates. First, the baby boomers—a well-educated group—will reach retirement age, marking the first time that large numbers of college graduates will leave the workforce. Second, the population is shifting toward groups with historically lower levels of educational attainment. In particular, Latinos—who now make up the largest group of young adults—have historically had low rates of college completion. And there will not be enough newcomers to California—from abroad or from other states—to close the skills gap.

SOURCE: PPIC projections.
• **California’s college enrollment rate is among the lowest in the nation.**
  Among the 20 most populous states, California ranks 18th in the share of high school graduates who go directly to college. In 2006, 55 percent of California high school graduates went to college, compared to more than 70 percent in the leading states of New York and Massachusetts. Of California’s high school graduates going to college, most went to community colleges; only 26 percent went to four-year universities.

• **Transfer rates from community colleges to four-year universities are low.**
  Only about one in ten community college students transfers to a four-year university. Even among those taking transfer-eligible courses, only about one in four eventually succeeds in transferring. Lack of preparation for college-level work and lack of financial resources impede many students’ ability to move ahead in the higher education system.

• **Only half of California State University students graduate.**
  About half of CSU students graduate within six years of entering as freshmen. Completion rates for transfer students are similar to those of other CSU juniors, with about three in four transfer students completing a bachelor’s degree. Graduation rates are much higher in the University of California (UC) system, with four of every five students earning a degree within six years of entering university.

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

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**CALIFORNIA COLLEGE GRADUATES EARN MORE, AND THE GAP IS WIDENING**

- **Most Californians believe that a college degree is necessary for success . . .**
  More than 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 80 percent believing in the value of a college education.

- **. . . and they are right.**
  Census Bureau data show that the wages of college graduates are about 90 percent higher than the wages of workers with only a high school diploma. The value of a college degree has grown rapidly over the past quarter century, and in the current economic downturn, unemployment rates are far lower for college graduates than for adults with less education.

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SOURCE: D. Reed, *California’s Future Workforce* (PPIC, 2008).
LOOKING AHEAD
California is facing a serious shortfall in its supply of college-educated workers. In a future with fewer college-educated adults, unemployment rates will be higher and wages will be lower. Improving the educational attainment of the state’s young adults will foster greater individual success and increase economic growth for the state.

- **Modest improvements can result in substantial gains.**
  Gradual increases in college enrollment rates from California’s current level to the national average, a 20 percent improvement in transfer rates, and an improvement in completion rates at CSU would, together, reduce the skills gap by one-half by 2025.

- **Reductions in higher education funding will make things worse.**
  Without concerted efforts to improve college attendance and graduation in California, the state’s economic future will be much less bright. Shortchanging education for quick budget fixes could seriously shortchange California’s economic future. One alternative would be to increase fees so that students from higher-income families pay more in fees, and to increase aid so that students from lower-income families face a lower financial burden.

- **Alternative forms of postsecondary training are needed.**
  Because it is unlikely that the state will be able to completely close the skills gap by increasing the number of college graduates, other forms of postsecondary training and workforce skills development are essential to the state’s future.
We invite you to dig deeper at ppic.org. Related PPIC resources include:
Higher Education in California: New Goals for the Master Plan
Educating California: Choices for the Future
Closing the Gap: Meeting California’s Need for College Graduates
California’s Future Workforce: Will There Be Enough College Graduates?
PPIC Statewide Survey: Californians and Higher Education

Contact a PPIC expert:
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