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California Center | March 2014

INVESTING IN CALIFORNIA'S FUTURE

Recommendations from the Milken Institute California Summit

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ABOUT THE MILKEN INSTITUTE

A nonprofit, nonpartisan economic think tank, the Milken Institute believes in the power of finance to shape the future. The Milken Institute produces rigorous, independent economic research—and maximizes its impact by convening global leaders from the worlds of business, finance, policy, academia, and philanthropy. By fostering collaboration between the public and private sectors, we transform great ideas into action.

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INTRODUCTION

California has long been the great state of opportunities, and the Golden State's potential only continues to grow. The eighth-largest economy in the world, California is home to immense resources, from its dynamic entrepreneurial environment and highly regarded university system to its economically advantageous geography.

Entrepreneurship is a cornerstone of California's success. The state is the world's leading center of venture capital, and Los Angeles serves as the nation's de facto hub for small business. Home to a higher-education system[1] that is the envy of the world, California attracts the best and brightest from across the country and around the globe. Likewise, its oft-referenced geography presents a huge competitive advantage. The lure of California's coastal climate remains strong, and the Central Valley is one of the most productive agricultural regions in the world.

Given all of these positive factors, it has taken a number of years for the challenges facing the state and its populace to reach a critical mass, as they have over the past decade. The latest Milken Institute California Summit, held on November 21, 2013, was convened with the specific goal of examining several key challenges and determining actionable steps to address them. In the interest of open discourse, Summit attendees and participants were able to speak largely off the record, with the exception of the opening keynote speech by Gov. Jerry Brown, and the opening lunch panel on investing in the state. Both Gov. Brown's speech and the session led by Milken Institute Chairman Mike Milken affirmed many of the state's key advantages, as well as the importance of addressing major challenges now, rather than putting them off for another decade or two.

This report summarizes the findings from both the public and private sessions. Topics addressed in the sessions included improving the state's business climate, changing and expanding California's research and development tax credit, the impact of implementing the state's innovative climate-change legislation (Assembly Bill 32), the state's investment climate, the impact of proposed changes to national and state mortgage regulations, and strategies for improving government effectiveness at the state and local levels.

In this work, we focus specifically on identifying key challenges and presenting actionable recommendations. Our aim is to engage Summit attendees and other stakeholders, as well as to utilize the Milken Institute California Center's research and convening ability to facilitate change both at the legislative and executive levels in Sacramento.

—Kevin Klowden, Director of the Milken Institute California Center

1 According to the Times of London Higher Education World University Rankings for 2013-14, four California universities rank in the top 12 in the world: the California Institute of Technology (No. 1), Stanford University (No. 4), University of California, Berkeley (No. 8), and University of California, Los Angeles (No. 12).

THE CHALLENGES

In 2013, California ranked a dismal 39th in Forbes' Best States for Business index. It was another piece of evidence against the state's hostile business climate, driven by fiscal uncertainty, high costs, and regulatory hurdles. These and other factors hindering the state's economic growth took center stage in sessions at the Milken Institute California Summit. Also high on the agenda were the challenges to the state's role as a globally leading innovation economy, as well as shortcomings in the education system adversely affecting California's ability not only to provide opportunities to more people but also to power its workforce.

Policy and industry leaders at the Summit focused on core issues for creating a more business-friendly environment and made strategic recommendations to transform the state's economic climate. These practical proposals would require changes within the state government itself as well as the involvement of industry leaders.

This report summarizes the key issues and recommendations from the Summit. Specifically, they address five areas critical to increasing California's capacity for success: government efficiency, business environment, housing, energy, and innovation. The findings are detailed in the body of this report, which concludes with specific goals and commitments that the Milken Institute California Center is making in 2014 to help build a vibrant and growing economy in the Golden State.

Best states for business rankings, 2013

State	Overall rank*	Business costs	Labor supply	Regulatory environment	Economic climate	Growth prospects	Quality of life
Virginia	1	22	2	1	5	17	4
Texas	7	23	15	18	1	2	30
Washington	9	27	5	32	19	5	26
Massachusetts	13	49	6	35	7	15	1
New York	21	46	31	23	8	14	11
California	39	43	28	43	36	3	22
Maine	50	40	33	45	43	49	24

**Includes top-performing state, worst-performing state, and states that compete with California in jobs and innovation.*
Source: Forbes.

KEY ISSUES & RECOMMENDATIONS

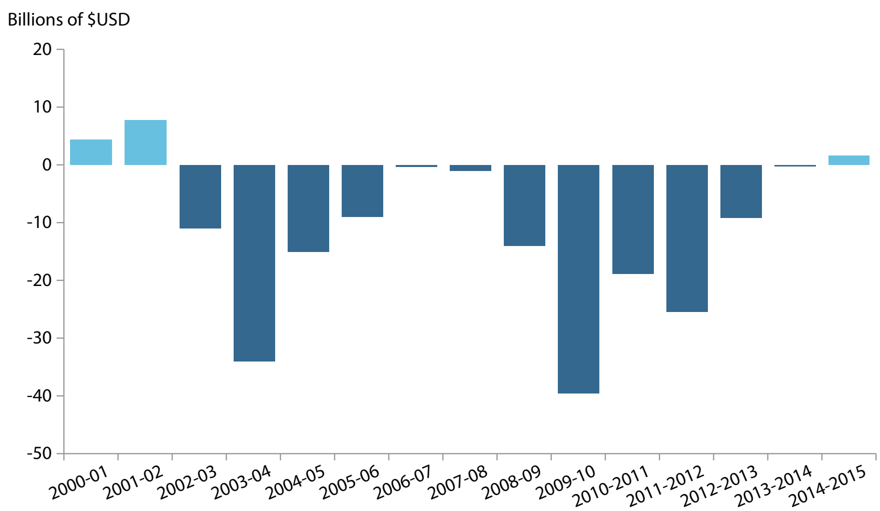
Government Efficiency

Issue: California's long-term fiscal sustainability is uncertain

Huge long-term budget obligations and volatile revenues threaten the state's fiscal sustainability. Even with the current budget surplus, the debt accumulated over the past decade is large enough to prevent easy repayment. Particularly, the amount of cash obligation raises concerns for the affordability of the state. While Proposition 30 raised the income tax and sales tax, providing some funding relief, the initiative's mechanisms will expire in just a few years (income tax in 2018 and sales tax in 2016). It should also be noted that the state surplus can be attributed to the personal income tax, which has fluctuated significantly over the last 20 years. "It is not the tax that's going to fix the math," said State Controller John Chiang. "… It is really growing the economy."

Furthermore, California has among the worst credit ratings in the nation. The unstable state budget may cause the situation to further deteriorate and erect more hurdles to attracting businesses.

Balanced budgets have been quickly followed by huge deficits



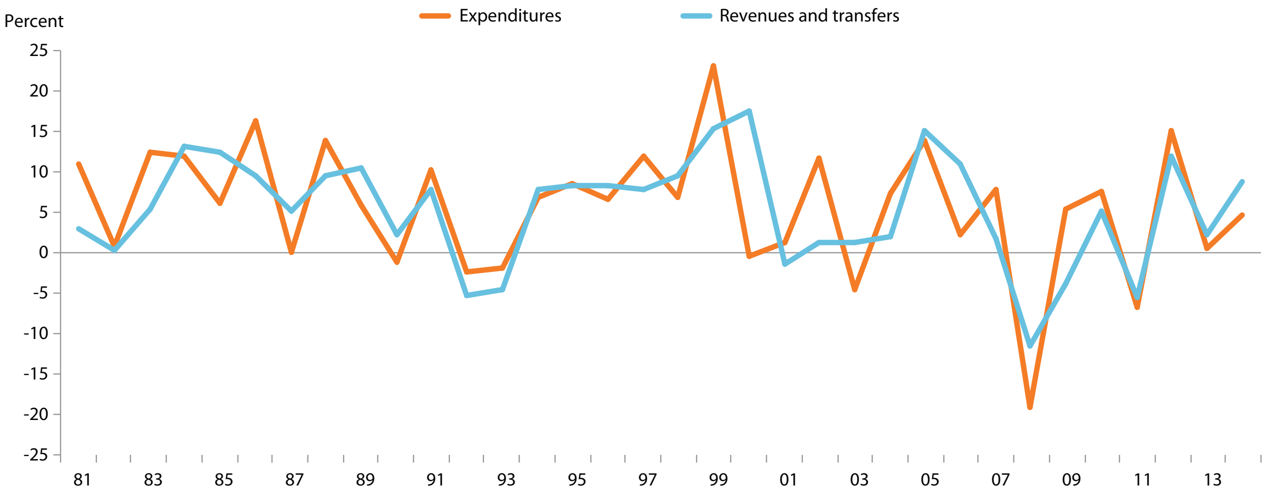
Source: 2014-15 Governor's Budget.

And while the state's finances are improving, long-term structural issues still exist and must be resolved if California is to maintain a fiscally sound budget. Although capital gains are currently on the rise, the volatility of such revenues presents challenges over the course of business cycles.

In addition, the state must better address its unfunded pension liability in some California cities. One of the greatest challenges is that some of California's pension funds are structurally underfunded, based on their current set of assumptions (e.g., the number of workers and retirees, average retirement age, life span, rate of wage growth, and investment returns). What this shortfall means is that California's pension systems have promised retirees more than they are currently able to pay. If the California pensions funding gap does not work mathematically, how can it be resolved? Will the promise of employee pensions simply disappear? After all, even if total contributions increase (from employers and employees), funds would still be severely underfunded.

General fund revenues and expenditures

California, FY 1980-81 to FY 2011-12, change from previous year



Source: California Department of Finance

Recommendations: Spend with discipline, focus on debt reduction, and establish a rainy-day fund

This three-part strategy would ensure predictability in the state's fiscal situation and consequently lead to a better business environment.

California must exercise discipline in spending to ensure its fiscal sustainability. Lawmakers would be wise to take today's surplus as motivation to plan strategically for the long term, and not as a signal to launch new programs. Specifically, reducing dependency on short-term taxes and generating new jobs, growing businesses, and promoting international trade would be sound plans for strengthening the state's economy. To correct its credit rating, the state must build up the economy, reduce its overall operating costs, and reduce the politicization of the state budget process, which has led to repeated delays in passing a budget.

Debt reduction can more easily be made possible by establishing a rainy-day fund to weather fiscal challenges such as future revenue shortfalls. As Gov. Brown noted in his speech, "money today doesn't mean money tomorrow." When the governor took office, he faced a state deficit of $27 billion and was forced to make difficult cuts. As a result, the state now enjoys a surplus, most of it driven through capital gains. However, given the volatility stemming from capital gains, Gov. Brown emphasized the importance of creating a rainy-day fund for long-term debt payments and infrastructure investment. Likewise, Assembly Speaker John Perez noted, "We need to take a portion of spiking revenues from boom years and bank them, so in down years, we can maintain stability."

Issue: Lack of interagency cooperation hinders economic growth

Because multiple agencies work individually on similar projects, a culture of "silo-ization" has emerged in California government due to inflexible federal and state regulations. Each office may focus solely on one aspect of an overall initiative, creating logistical difficulties with little or no interagency cooperation. The lack of a single, cohesive administrative strategy causes needless delays and frustration, further stymieing economic growth in the state.

Recommendation: Develop a unifying strategy for permit applications and other regulatory processes

It is imperative to evaluate all levels of government in terms of their ability to improve the state's business environment. By assessing the regulatory environment and encouraging a culture of efficiency at all levels, the state can hope to stem the business exodus. Engagement with employees to identify and execute specific strategies will accomplish this goal and increase worker participation in the decision-making process, thus improving morale at the same time. To achieve this, it is vital to convene the participating parties and facilitate an understanding of how they would benefit from any improvements, so that they have a direct stake in their execution.

CASE STUDIES

Red Tape to Red Carpet: A strong example of recognizing best practices in collaboration can be found in Orange County. The Orange County Business Council awards its annual "Red Tape to Red Carpet" honor to agencies that facilitate efficient processes encouraging business growth. In 2013, an award was given to the City of Orange for streamlining entitlements and introducing a citywide sales-tax-sharing program to encourage Volkswagen to open a dealership in the city. Other winners included Stanton for its Business Appreciation, Expansion, and Retention Program, which works directly with businesses to navigate the regulatory process, and Fullerton for its strategy of cooperation with the Korea Trade-Investment Promotion Agency.

TreePeople: TreePeople, an environmental nonprofit based in California, has found recent success in navigating interagency bureaucracy. That organization's success in facilitating the actions of multiple agencies toward a singular goal can act as a model for a more efficient and consumer-friendly government. By developing software to better facilitate water management throughout the state, TreePeople has garnered support from multiple offices across all levels of government to maximize efforts to store rainwater. Through cohesive cooperation and with the help of TreePeople's facilitation techniques, government agencies were able to step out of their "silos" and work together to better manage the state's water infrastructure development.

Issue: Procurement

With regard to obtaining machinery and IT equipment, the state government is generally effective on the front end of the procurement cycle–that is, in the purchase of goods. However, it subsequently has trouble expediting the process, particularly when an out-of-the-box solution (rather than a government-specific one) is required. Particularly problematic areas are the actual acquisition of the goods, the final execution, and the implementation. Workers often receive substandard training, so the new goods are not utilized promptly or effectively, and management exercises incomplete or improperly adapted strategies. These missteps result in problems at all levels of government. The Department of General Services (DGS) needs to revise and reform its current standards in procurement in order for Californians to get the most value from their tax dollars.

Recommendation: Collaborate with the Secretary of State's Office to develop an actionable strategy to improve procurement procedures

By developing ways to speed up the acquisition and utilization of modern technology and provide appropriate training, the overall performance and capabilities of both the Secretary of State's Office and other key state agencies can be improved. Implementation on the back end must be improved through hands-on training courses to make best use of new technologies and procedures.

CASE STUDY

DMV Online Voter Registration: The inefficient policies of the Department of General Services, combined with the existence of an IT "czar," has created an overly bureaucratic culture that business owners find cumbersome and overbearing. Recognizing that no business could operate at this level of inefficiency, the Department of Motor Vehicles (DMV) proactively developed an independent online voter registration program. The program took just nine months to design and implement, thus showcasing itself as a prime example of streamlined, efficient government. Through a combination of circumventing DGS, the waiving of certain procurement laws by the state Legislature, and lack of an overly competitive vendor bidding process, the DMV was able to design and implement its online voter registration process in less than a year. This process can serve as a model of efficiency for other programs around the state.

Recommendation: Review and revise energy-regulatory process

The solar industry, in particular, can change the way energy is delivered, especially at a time when California needs to move to a cleaner energy distribution. While technology costs associated with solar have decreased, "soft costs" such as permitting must be reduced if the state is to remain competitive in this area. Developing a more effective and efficient system for administering government regulations is essential. According to Milken, when measuring costs in the energy sector, seldom do we address the "full circle," which includes but is not limited to the cost of transporting oil, military, pollution, etc. Including these elements in the analysis would more accurately reflect the environmental effects of these issues.

Business Environment

Issue: Investment in small businesses and community banks is inadequate

Small and medium-sized enterprises play a critical role in creating jobs and expanding the economy in California, but little private capital is being invested in the small- and mid-capitalization markets. In addition, corporations are increasingly going to international suppliers, bypassing smaller domestic businesses. Investment in California's small-business-oriented community banks is also very limited. Because community banks aren't assessed by the major credit rating agencies, they miss out on advantages that rated institutions have. Also, because of their relatively small deposits, community banks have to buy capital to lend, which either erodes their profit margins or forces them to charge clients more.

Five worst cities in California for business rankings, 2013

City	California rank	National rank*	Cost of business rank*	Job growth rank*	Education rank*
Visalia	17	191	119	130	199
Salinas	18	196	150	141	157
Stockton	19	197	118	194	187
Merced	20	198	141	92	200
Modesto	21	199	138	169	191

**Out of 200 cities nationally*
Source: Forbes.

Recommendation: Provide incentives for corporations to do business with small enterprises, and find a way to prioritize investing in community banks

California needs to build access to capital for small- and mid-cap businesses. The government should provide incentives to corporations that do business in the state to work with California's small businesses instead of international suppliers. Many types of incentives could encourage these local relationships, from tax breaks to subsidies. At the same time, the state should find a fair way to help investors evaluate community banks. One solution would be to create or identify a proxy for the credit-rating agencies to assess community banks' fiscal health, which would help increase the banks' capacity and promote the credit market for small businesses.

Five best cities in California for business rankings, 2013

City	California rank	National rank*	Cost of business rank*	Job growth rank*	Education rank*
San Francisco	1	21	194	36	5
San Jose	2	41	195	60	7
Oakland	3	48	170	164	16
San Diego	4	78	182	118	46
San Luis Obispo	5	80	129	93	68

**Out of 200 cities nationally*
Source: Forbes.

Issue: It is expensive, time-intensive, and arduous to develop in California

One of the greatest hurdles for business development is the California Environmental Quality Act (CEQA). While the legislation introduced in 1970 has had a number of significant benefits for the state, the current regulatory and legal environment makes development significantly more expensive in California than in almost all peer states. Changes to CEQA have been stalled in the Legislature or blocked in state courts, adding regulatory uncertainty to developers' concerns.

Recommendation: Government agencies and private parties that support reform need to coordinate regulations at the state and local level, encouraging politicians and voters to develop a plan for CEQA reform

California has begun making changes to improve business development. For example, the law creating GO-Biz, the Governor's Office of Business Economic Development, was recently signed. However, more still needs to be done. There needs to be a synchronization of regulation between the state and local levels. If there is an effective delegation of regulations between local and state governments, then there will be fewer people requiring the services of both, reducing wait time and improving efficiency.

It is imperative that all branches of the state government work together toward CEQA reform. Political pressure from all sides needs to push CEQA reform to improve development for businesses in California. Without a strong government consensus and agreement for an effective compromise among stakeholders, there will be no real improvements. An agenda for meaningful reform should be developed for introduction to the Legislature in 2015.

Issue: The work culture in regulatory bureaucracy is not service-oriented

California has a reputation for having a state bureaucracy that is hard to deal with in terms of doing business. One major issue is that the culture within is designed to preserve the status quo, and employee unions do not appear to see themselves as a potential partner in California's success.

Recommendation: Apply private-sector models to the public sector

It is not unusual for small California businesses to have had a bad interaction with city, county, state, or federal government. To the extent that the state can introduce some type of metric that would instill accountability for customer relations, it should. For example, some governments such as the city of Long Beach and Ventura County have created "Red Teams" to expedite approvals, incorporating a concierge approach to doing business.

In the private sector, unions generally recognize that there is a mutual benefit to the employer expanding its profit and market share. Apply this outlook to public-sector unions, and it would mean employees get on board with the idea that growing the state's share of the overall economy means increasing revenues, and consequently creating and securing more state jobs. California needs to take advantage of the model that exists in the private sector and apply it to the public-sector discussion. The long-term growth of the state depends on it.

Recommendation: Maximize employee value through a variety of measures

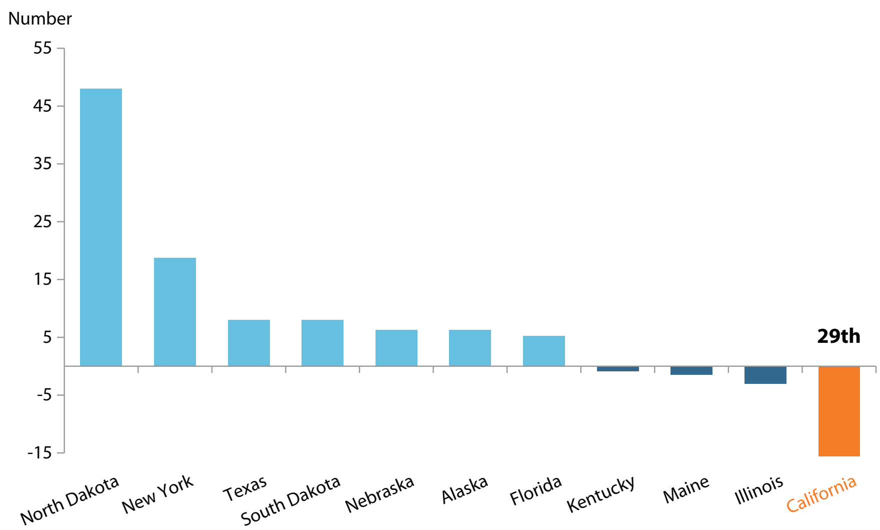
These could include converting term-limit positions to permanent positions, broadening job descriptions, and encouraging a culture of empowerment so that team members feel comfortable making recommendations to improve efficiency. Regular meetings between management and lower-level employees would go a long way toward creating an environment of cooperation. Managers should be trained to accept and evaluate new recommendations and, where appropriate, work with employees to implement more efficient procedures.

Issue: Perception of California as anti-business

The panel spent much of the time discussing the perception that California is anti-business. The state's consistently low scores in annual rankings sponsored by Forbes and others have perpetuated an ABC (Anywhere But California) mentality among businesses. Further, high tax rates, lengthy permitting processes, and a burdensome regulatory environment have all contributed to this perception.

Net number of business starts per 100,000 people

2011



Sources: Small Business Administration, U.S. Census Bureau

Recommendation: Emphasize the value of opening a business in California by focusing on the state's unique offerings

Outreach and marketing campaigns aimed at businesses should focus on California's high quality of life and its large, incredibly diverse consumer base. For most businesses, the costs of a location can be tempered by access to a strong marketplace, skilled workers, and effective government services. Too often, the state fails to promote what is available and what is done right.

It must be noted that the notion of businesses doing whatever they have to do in order to be in California no longer applies. High taxes and excessive regulations must also be reviewed, as discussed below, to prevent businesses from leaving for more business-friendly states such as Virginia and Oregon.

Issue: Permitting process is inefficient and inflexible

California's permitting process is in serious need of streamlining and evaluation. Most supervisors do not have the resources or flexibility to motivate their teams to offer alternative strategies for permitting and regulatory processes.

Government employee job descriptions are very narrow, which stymies creativity and prevents individuals from thinking outside the small boxes into which they have been placed. By broadening job descriptions, as described above in the discussion of applying private-sector models to the public sector, we can place a greater emphasis on customer care and increase efficiency at the same time.

State Sen. Fran Pavley recognized the need to place more focus on efficient procedures, leading her to introduce legislation mandating that state water funding would only be directed to offices using streamlined techniques

Recommendation: Allow applicants to view the status of their permit applications

A system that enables applicants to view information on permit applications could speed up processing and improve efficiency. If applicants can see where missing or inaccurate information is creating delays, they can be proactive in correcting any errors in their submissions rather than waiting for agencies to contact them.

Housing

Issue: California's mortgage market has been adversely affected by the housing crisis

Despite the recent recovery, pockets of weakness in the housing market persist throughout California. Many areas are still dealing with the fallout of foreclosures and high rates of underwater mortgages. In areas that have performed better, rapid appreciation in home values has priced out a significant portion of the population–affordability levels are at multiyear lows. First-time homebuyers, in particular, have been left behind.

Recommendation: Fund CalHFA initiatives through federal trust funds

Increasing attention is being paid to national legislative efforts to increase the role of private capital in housing finance. Under the bipartisan Corker-Warner bill, affordable-housing goals subsidized implicitly at the expense of taxpayers would be replaced with trust funds explicitly funded by government guarantee fees assessed on mortgage securities. These funds could be allocated to agencies like the California Housing Finance Agency (CalHFA) that are best positioned to promote affordable-housing goals.

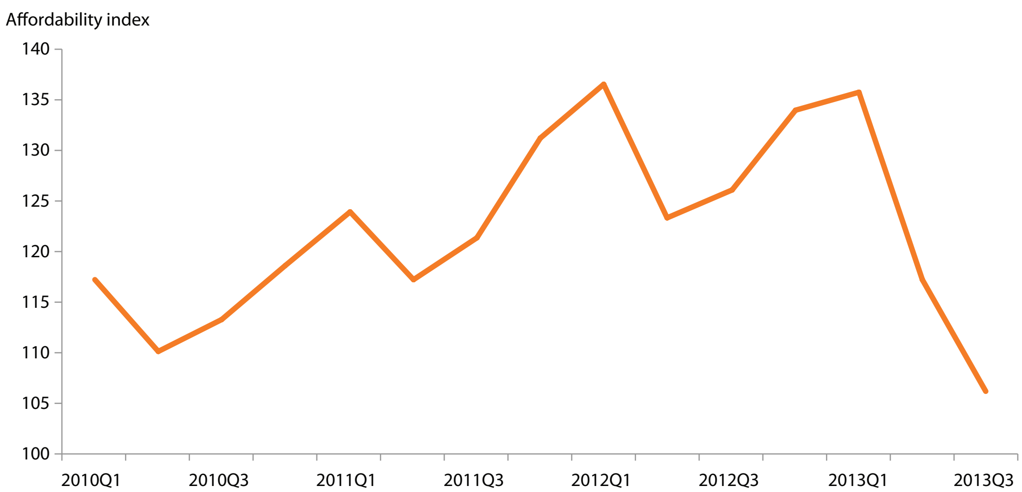
Recommendation: Regionalize loan limits

Another way to increase private capital participation in the mortgage market is to reduce the maximum mortgage amount guaranteed by government-sponsored enterprises. This may be problematic without taking into account the large price differences between states and regions. Loan limits could be adjusted based on region to provide more reasonable guarantee levels nationwide and safeguard California's housing market against any undue decreases.

Recommendation: Fund a California guarantee or credit-enhancement fund

California could take matters into its own hands and promote access to mortgage credit for worthy borrowers, which would be important to sustaining California's housing recovery. Using the fund to target good candidates could provide relief to distressed areas in lagging California submarkets and address the dearth of first-time buyers whose participation in this rebound has been unusually low. If affordable-housing goals cannot be supported directly through state ballot initiatives, CalHFA could issue bonds to fund one of these state-level vehicles that would increase Californians' access to homeownership.

First-time buyers face worst affordability prospects in three years



Sources: Moody's, National Association of Realtors

Energy

Issue: Challenges of implementing AB32

With the goal of getting carbon emissions back to 1990 levels in California by 2020, Assembly Bill 32 was passed by the state Legislature in 2006. Implementation of AB32 faces some challenges along the way. First, the pressure on utility companies to reduce emissions results in rate increases for consumers. In coming months, utility companies will be increasing electricity rates to comply with a framework focused on renewable energy. With mounting pressure on companies, there is potential for "leakage" and for businesses in California to relocate to less expensive states. Leakage occurs when a reduction in emissions in California is offset by increases outside the state. Given the cost of reducing carbon, leakage threatens California's competitiveness. When companies work to reduce carbon emissions, some of the associated costs are passed on to customers, further affecting the competitiveness of the state. As utility companies, in particular, are a big part of California's economy, it is crucial to show that the industry is not destroyed as a result of compliance to emission reductions.

CASE STUDY

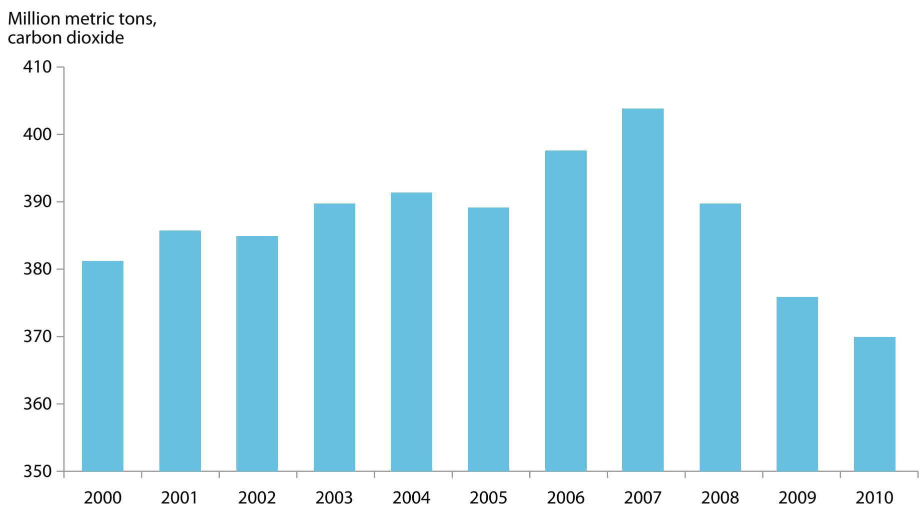
Climate Change Warrior: Safeway serves as a crucial case study of the implementation of AB32. Currently the second-largest employer in California and the largest consumer of electricity, Safeway became its own utility company and now manages its own utility accounts. The company also joined the Chicago Climate Exchange. Here, the goal was to reduce carbon by 6 percent in four years, but Safeway successfully reduced its carbon footprint by 20 percent in California. Essentially, Safeway spent millions of dollars on compliance with AB32 in 2012. The financial challenges become apparent when the money has to be recouped. The solution of raising prices is not an attractive option to either stakeholders or stockholders.

From the challenges that California faces to implement AB32, one crucial question emerges: How can California maintain balance in order to be a global leader? Several ideas for effective solutions developed over the course of the discussion:

Recommendation: For laws to succeed, get the transportation sector on board.

In 2002, state legislation went forward to reduce tailpipe emissions in cars. As a result, 13 other states followed suit in adopting clean-car standards, as auto companies moved toward innovative technology that makes cars more environmentally friendly. A next step to greener transportation would be creation of a stakeholder group to discuss policy in California and among states nationwide. This group could develop incentives for individual large-vehicle fleets to transition to clean-fuel vehicles. Next, it could create and implement infrastructure policy to place stations for electric-vehicle charging and natural-gas fueling in all communities.

California CO_2 emissions have been dropping in recent years



Sources: U.S. Energy Information Administration

Recommendation: Consider increasing cap-and-trade revenue and putting it toward housing and lower energy costs for low-income Californians.

The proceeds that arise from the cap-and-trade auctions are significant. The first auction, held in November 2012, raised $289 million, and there are four auctions per year. While diversion of proceeds has already begun, legislators need to ensure allocation of auction revenue is appropriate as time passes and the cap-and-trade market evolves. Because low-income populations tend to spend a higher percentage of their income on energy, legislators should consider putting more cap-and-trade revenues toward affordable-housing options and reducing energy costs for disadvantaged populations, which can be effective economic stimulus. In addition, legislators must also consider the rising energy costs of businesses and the effects on jobs, particularly for more vulnerable populations.

Engaging a group of stakeholders in a discussion of equitable methods to allocate program proceeds is the first step in optimal revenue distribution. This group can create an integrated energy policy roadmap to ensure a fair and feasible plan and timeline.

Recommendation: Offer incentives and credits to consumers and businesses.

Plans should focus on helping Californians become more resilient, reducing greenhouse-gas emissions, and providing immediate benefits to Californians. One specific method to achieve this goal is advancing alternative energy infrastructure, such as adding incentives for distributive generation. The first step to increase usage would be to include onsite generation under cap-and-trade and to reward businesses and/or individuals with credits for distributive solar. This can incentivize more individuals and organizations to use alternative energy production methods to power their homes and places of work. As distributive generation becomes more prevalent, legislators can work to increase storage capacity and improve the resiliency of the micro-grid, so as to efficiently use the energy generated from cleaner sources. Last, increased resources must be allocated toward research and innovation of energy storage technology.

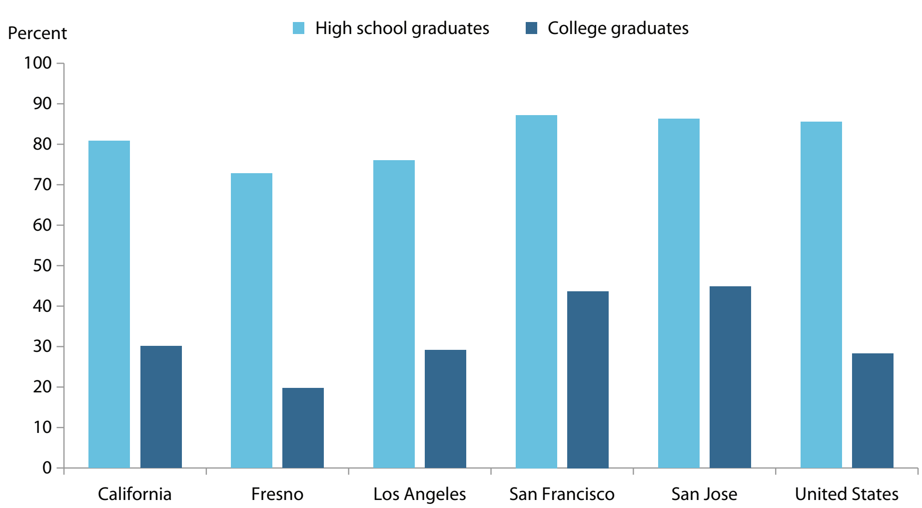
Support for Innovation

Issue: The workforce lacks the necessary skills to compete in today's knowledge-based economy

Home to the Silicon Valley, California consistently outperforms rival states in the technology and science sectors, but our education sector is not producing enough future employees for these companies and other key industries. The great demand for educated workers easily outstrips the supply. California's workforce today is not on par with the positions that need to be filled, and the state will be short 2.2 million people to fill positions requiring bachelor's degrees or technical degrees by 2025.

Share of population with advanced degrees varies widely across the state

2011



Sources: U.S. Census Bureau, Moody's Analytics.

One of the main shortfalls is California's inability to increase graduation rates among minorities. This issue is particularly acute among Latinos, who make up 50 percent of Los Angeles' and 38 percent of the state's population. Regions such as the Central Valley and Los Angeles County are particularly affected. The situation is critical in the Central Valley, where the education system is severely challenged. Currently, the region has a growing shortage of qualified workers, most prominently for middle-management positions in the agriculture industry.

One major recurring issue related to both the pension and political demography issues mentioned above is graduation rates. If graduation rates do not improve, L.A. will become a less attractive place to live and raise a family. Los Angeles public schools have one of the lowest graduation rates of any major metropolitan area in the country, limiting both the skills of the local workforce and the ability of former students to find well-paying jobs. For families, a declining school system raises concerns about the livability and affordability of the city, as many feel compelled to consider private schools.

Recommendation: Invest in education in an incremental process

California needs to invest more in education over time. The state's budget problems should not be pushed into education cuts. Rather, California should commit to stability in school funding with special focus on providing greater access and opportunities to one of the largest portions of the state's population, Latinos. California as a whole is at the very bottom (47th) in per-pupil education spending. While this may be difficult to address in the short term, panelists discussed less costly ideas to improve the education system so that it can benefit more people:

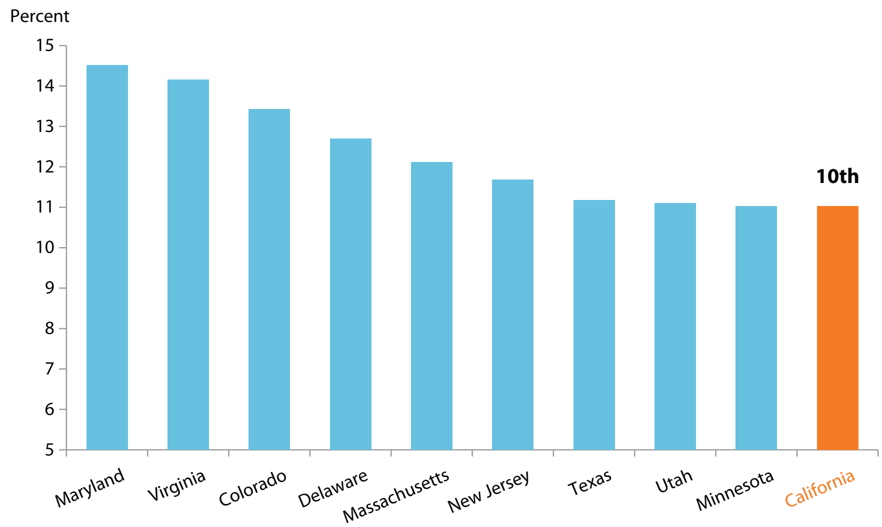
- Explore ways to hold educators and schools accountable for student performance and excellence.
- Develop a sharing network between districts of programs and ideas that work to help students achieve their dreams of advanced degrees and training.
- Focus on programs that allow working people to continue their education. Many people are not able to afford an education without working full-time.
- Offer programs that allow working individuals to layer their training, classes, and work experience into degrees or certificates.
- Continue to support preschool education. According to economists, investment at the preschool level provides higher return than at any other age.
- Create more programs to involve parents in the education process.
- Encourage more industry partnerships with local high schools and community colleges to provide training in a broader array of disciplines to help address gaps in the workforce.

Issue: How to make the most of California's research and development tax credit

Some businesses leaders are concerned about increased unpredictability in the approval of their research credit applications to the Franchise Tax Board in recent years and question the competitiveness of the current structure and scope of the credit. California's research credit, which companies can claim to reduce their state income or franchise tax burden, is still aggressive at 15 percent of qualified incremental research expenditures in California. The generated credit is not tradable or refundable as it is in some states, but it can be carried forward to future years if it is not used in the year it is generated.

To maintain its leadership in research and innovation, California must provide a competitive business environment for prospective and existing companies to conduct research in the state. With a world-class and diverse base of tech industries, strong research institutions, and an entrepreneurial culture, California has natural advantages that other states envy. However, the perception that the state is inhospitable to business in combination with competing incentives created by other states means that California cannot be complacent. As stated by panelist Paul Gladfelty: "We need to do something that really shows the world at large that we're serious about innovation. Without research and development we don't have innovation."

Percent of business births in the high-tech sector



Source: U.S. Census Bureau.

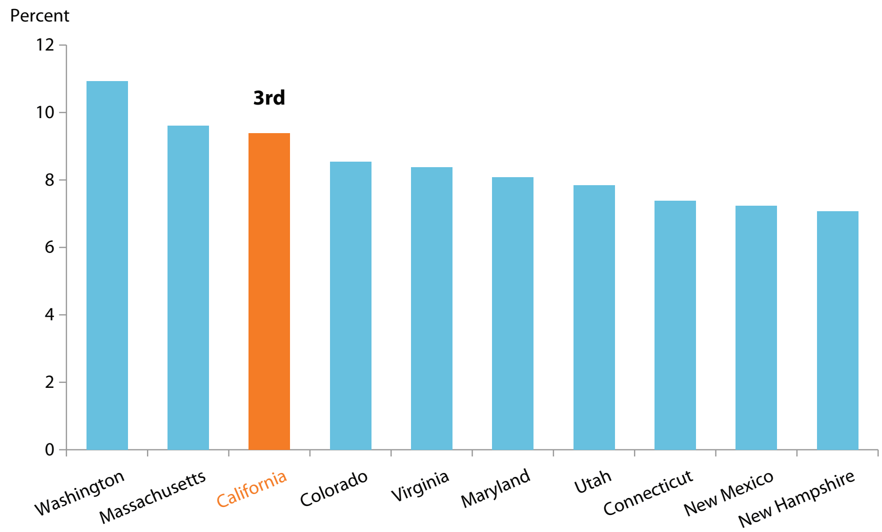
Recommendation: Review and reform structure

Building on its ongoing work monitoring innovation assets and their economic impact (such as the State Technology and Science Index), the Milken Institute should partner with key stakeholders (including the state controller, speaker of the Assembly and business organizations such as the Silicon Valley Leadership Group and Innovation State) to study the effectiveness of California's research tax credit and evaluate the economic impact of a potential expansion of the credit (such as increasing the credit or making it tradable–either only for small companies to help startups, or for all companies to foster job creation in the state). By these means, firms with R&D expenses (but with no tax liability) could trade their credits to other firms with tax liabilities. Work with Assembly and Senate leaders to introduce legislation that would make the research tax credit tradable and/or increase rate of the credit.

Recommendation: Improve implementation

Work with relevant government officials to direct the Franchise Tax Board to interpret allowable R&D expenses in a broader, more transparent manner, removing the uncertainty for companies conducting research in California and reducing the friction in obtaining the credit.

Percent of employment in high-tech NAICS codes

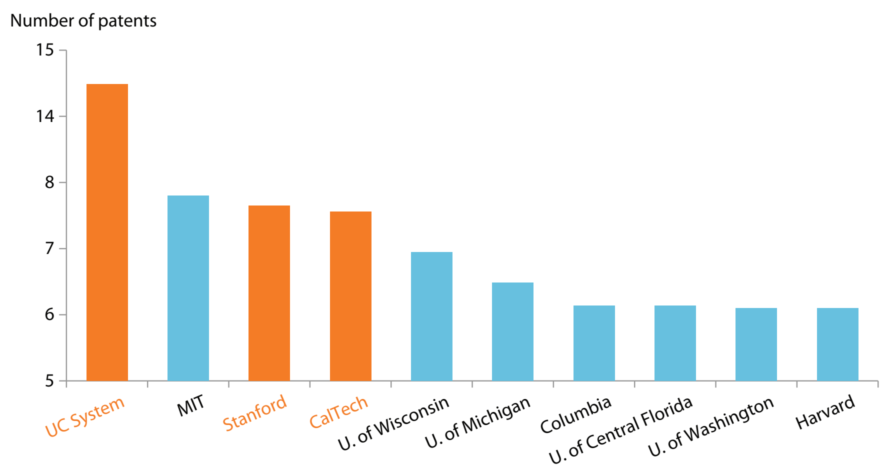


Sources: U.S. Census Bureau, Bureau of Labor Statistics, Milken Institute.

Issue: Translating university research into more California jobs and investment

Led by the state's top-tier universities and national laboratories, California research institutions create a wealth of potentially marketable intellectual property. Improving how much of this IP is translated into jobs and investment could provide a much needed boost to the California economy and spur development of the next big knowledge-based industry clusters.

Top 10 academic tech transfer offices, patents issued



Sources: Association of University Technology Managers U.S. Licensing Survey: FY2008

Recommendation: Decentralize the tech transfer process

Convene a group of experts to work with the UC system to explore opportunities to streamline and decentralize the tech transfer process, moving more control into the hands of the faculty and local tech transfer offices. Review possible modifications to the language of the licensing agreements that would simplify and streamline them.

Issue: Linking university innovation with the private sector

In terms of startups, venture capitalists often refer to the time between a startup's initial investment (angel, government grant, etc.) and the time it takes to receive broad-based, traditional investment as "The Valley of Death." Venture capitalists have typically bridged this gap by investing in startups and taking them through proof of concept. However, in recent years, most VC firms have been less willing to take the risk and bridge this gap. As such, many of the innovations at California universities die on the vine as most government-funded research lacks an outlet for testing potential commercialization.

Recommendation: Explore ways to link the research community with entrepreneurs

Analyze effective incubation centers in the state and around the world, and identify strategies for successfully linking the research community with entrepreneurs. Examine whether crowdfunding techniques could be deployed in this proof of concept phase.

Issue: Recruiting talent out of UC System and other universities for California companies

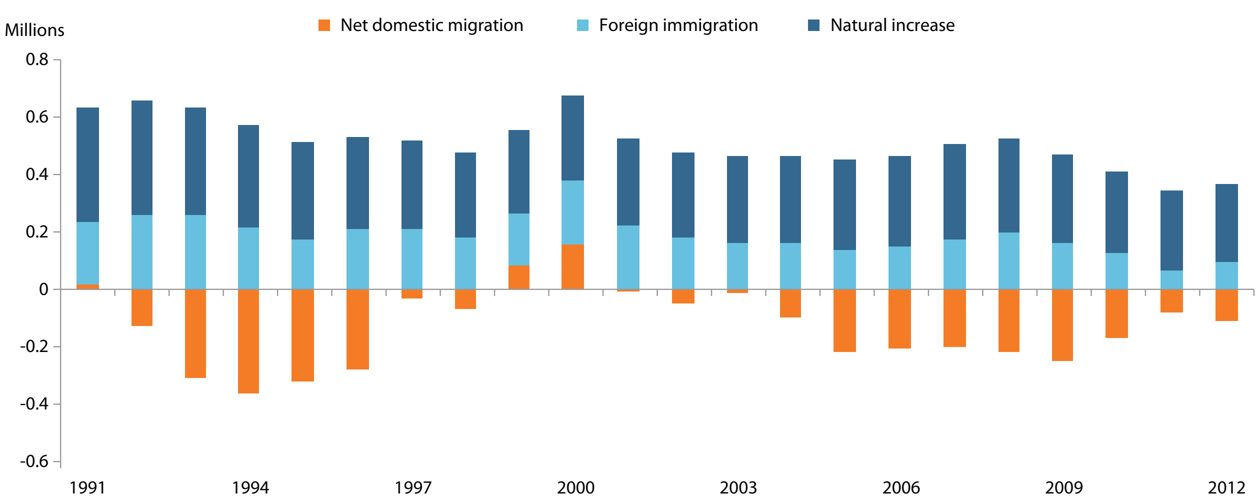
California's top-tier universities produce top-tier graduates, but many leave the state once they receive a diploma. With federal immigration policy restricting access to foreign graduates, many California companies have trouble recruiting sufficient talent out of the UC system, especially in STEM-related fields.

Recommendation: Consider co-op programs and work to keep foreign graduates in the state

Analyze successful co-op programs between universities and local employers to evaluate whether such a program would be beneficial in California. Students in co-op programs gain paid, hands-on experience while receiving tuition-free college credit. Employers are more likely to hire their co-op students upon graduation.

Engage California's congressional delegation to reform high-skilled immigration programs in areas such as the H1B program to permit more foreign graduates of California universities to remain in the state.

Population growth in California
1991-2002



Sources: California Department of Finance, Public Policy Institute of California

CONCLUSION

California Center's Next Steps for 2014

The Milken Institute California Summit has provided multiple key topics and actionable recommendations for the California Center and the Milken Institute to consider over the coming year. Several of the recommendations require a longer-term commitment, both from the Center and from our stakeholders and supporters. To facilitate this endeavor, this publication outlines the specific areas in which the Milken Institute California Center can take direct steps to improve the state's business and innovation climate over the coming calendar year. In addition, we plan to build around several of these items in developing our agenda for the 2014 Milken Institute California Summit.

Toward that end, our primary focus is to work on the key actionable steps from each of the sessions that can be addressed within the California Center framework. It is in this context that the recommendations of the session on housing finance reform will be addressed and acted upon by our fellow Center for Financial Markets in Washington. The key issues raised in implementing AB32 are important for our stakeholders, and the Milken Institute will facilitate dialogue in regards to the topic but cannot alone take the lead in implementing solutions.

The recommendations target specific issues relating to the state's business climate, innovation economy, and mechanisms for improving the ability of state government agencies to collaborate and to improve their ability to efficiently operate. In summary, the key recommendations are as follows:

1 *Advocate fiscal stability at the state level.* A positive environment for investment requires stability in fiscal policy and predictability in actions by the state government. Likewise, a stable budget and revenue system are key components in maintaining a healthy business climate and encouraging investment. The Milken Institute California Center will work with California's fiscal leaders in the executive and legislative branches to encourage fiscal discipline, and develop a rainy-day fund and a realistic strategy for reforming the state tax code. The California Center will host briefings in Sacramento and stakeholder meetings to provide an effective framework for stakeholder engagement with state leaders and develop a consensus on fiscal policy.

2 *Improve access to capital for small business by making community banks eligible for state government investment.* Because the state economy is increasingly dependent on the fortunes of small and midsized enterprises, it is essential that community lending institutions have sufficient capital to boost their expansion. The Milken Institute California Center will engage with key lending institutions and credit agencies to develop a framework for making community lenders eligible for state capital. This will allow lenders to leverage that capital to provide vital loans to smaller businesses throughout the state.

3 *Provide a framework for expanding and improving implementation of California's research and development tax credit.* Based on two key recommendations from the session on research and innovation, the Milken Institute is proposing to research and demonstrate the need for improving California's competitive position through an expansion of the research and development tax credit. In addition, the California Center will further research and demonstrate how clarification in the administrative process and improving the ease of applying for and receiving the credit will provide significant benefits for the state economy. The Institute will partner with key stakeholders to promote and develop change at the legislative level.

4 *Collaborate with the Secretary of State's Office to develop an actionable strategy to improve procurement procedures.* The Milken Institute California Center can provide effective forums for engaging experts and stakeholders, and collaborating on the development of strategies for improving state technology procurement procedures. Once initial strategies are created, the California Center will help facilitate engagement of regulatory bodies at the state level to improve procurement procedures.

5 *Provide examples of best practices in improving government efficiency and interagency collaboration that can be utilized by the state government.* Significant examples of improving government efficiency and cooperation between agencies exist in California. The Milken Institute proposes to examine regional successes in states such as Washington and Oregon, in Orange County and in parts of Los Angeles County and develop a report examining how these successes can be implemented statewide. The California Center will collaborate with key state agencies such as the Governor's Office of Business and Economic Development and key stakeholders to develop outreach between departments and mechanisms for implementation of agreed best practices.

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