

# 2017 California Summit Review: California Leading

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# SUMMIT INTRODUCTION

California's economic landscape is a platform that fosters global engagement by bringing together leaders from around the world in both public and private sectors to forge partnerships, address global challenges, and innovate technology and culture. While the state's economic fundamentals remain strong, California faces a number of challenges that threaten its economic success—from the rising cost of living, to rapidly ailing and underfunded infrastructure. These challenges stem from resource and funding constraints, as well as disconnected long term-visioning and coordination.

<sup>1</sup> Employment Development Department.

<sup>2</sup> International Monetary Fund and the Bureau of Economic Analysis (2017).

Beyond the borders of the Golden State, any state or region's economic competitiveness is both the sum performance and inextricably linked to a number of interrelated factors. In 2016, the U.S. Bureau of Labor Statistics reported that California's gross domestic product (GDP) exceeded \$2.5 trillion, making it the fifth-largest economy in the world (edging out the United Kingdom). In the 2008-09 post-recession years, the state's recovery and growth has largely been attributed to better-than-national-average job growth, innovation in technology that supports entrepreneurial clusters, and expanding opportunities for trade and foreign direct investment.<sup>1</sup>

As reflected in the theme of the Milken Institute's 2017 California Summit, "California Leading," the Golden State's global economy is ultimately the result of a number of these contributing factors.<sup>2</sup> For the summit, five central pillars of programing and focus areas illustrate the interwoven and contributing factors of the larger California economy and the public sector's role in supporting and sustaining California's competitive edge.

# SUMMIT INTRODUCTION

## CALIFORNIA SUMMIT PILLARS

- Business Climate and Government Effectiveness
- Housing and Infrastructure
- Human Capital and Education
- Innovation and Technology
- Small Businesses and Capital Access

As leaders across the state collaborated to structure a plan toward a vibrant economic future, summit participants narrowed in on the challenge facing state leaders—the need to embrace accountable and data-driven approaches in prioritizing investments in human capital, reconciling regulatory challenges, and devising bold public financing strategies. For summit participants, cultivating a business climate that continues to promote innovation and job growth will ultimately be a result of achieving effectiveness in governance practices that better provide the state with economic resiliency by aligning strategic investments in human capital and infrastructure.

“California’s technology-driven and innovation-based economy is now twice as productive as other comparable economies per capita (notably the U.K. and France).”

- Former California State Controller Steve Westly

**Table 1. Top Venture Capital Investment Locations in the U.S.**

Metro	Venture Capital Investment (in millions)	Share of U.S. Total
San Francisco–Oakland–Hayward, CA	\$8,468	25.26%
San Jose–Sunnyvale–Santa Clara, CA	\$4,865	14.51%
New York, NY–Newark, NJ–Jersey City, PA	\$3,335	9.95%
Boston, MA–Cambridge–Newton, NH	\$3,199	9.54%
Los Angeles–Long Beach–Santa Ana, CA	\$1,695	5.06%
Washington, DC–Arlington, VA–Alexandria, MD	\$1,268	3.78%
San Diego–Carlsbad, CA	\$944	2.82%
Seattle–Tacoma–Bellevue, WA	\$873	2.61%
Dallas–Fort Worth–Arlington, TX	\$734	2.19%
Chicago, IL–Naperville, IN–Elgin, WI	\$650	1.94%

Source: CityLab 2016, <https://www.citylab.com/life/2016/02/the-spiky-geography-of-venture-capital-in-the-us/470208/>.

## SUMMIT INTRODUCTION

But the “California Leading” framing for the 2017 summit also reflected this economic juxtaposition by highlighting a number of persistent challenges that state leaders continue to grapple with. When factoring in cost of living, California has the highest poverty rate in the nation.<sup>3</sup> These challenges expressed through continued regulatory imbalances, coupled with a lack of strategic investments in human capital (i.e., continued deficiencies in housing supply, increasing pension liabilities, and diminished opportunities in higher education), impede government effectiveness and threaten the state’s business climate and prospects for longer-term economic viability. The policy platform of the 2017 California Summit attempted to coalesce and identify the crucial challenges and opportunities that lay ahead for the state in securing California’s leadership in economic and technological innovation.

<sup>3</sup> U.S. Census Bureau.

# SUMMIT SESSIONS

## **A CONVERSATION WITH STEVE BALLMER**

This year's California Summit opened with a conversation between giants of industry and philanthropy. Steve Ballmer, owner of the Los Angeles Clippers and former CEO of Microsoft, was joined by Michael Milken, chairman of the Milken Institute, for a broad-ranging discussion on California's position among the world's leading economies.

## **CALIFORNIA'S FUTURE ECONOMY**

California continues to outperform the nation as a whole in job growth because of its strength in three key industries: trade, technology, and tourism. In an increasingly competitive globalized economy, this session explored the state's economic present and future, and how California can remain a prolific laboratory for ideas and a proving ground for innovative models of finance and climate stewardship.

## **CALIFORNIA'S SOLUTIONS TO HEALTH CARE**

The state ranks 34th out of 50 states in overall access to health care, but state lawmakers, entrepreneurs, and business leaders are bringing new healthcare products and services to market. New partnerships between pharmaceutical companies and care providers are meant to achieve lower costs for providing care, such as lowering prescription drug costs or advanced free screenings for early detection. This session focused on how these new solutions affect cost management and quality of care and how many Californians remain uninsured or left behind.

## SUMMIT SESSIONS

### **ALTERNATIVE SMALL-BUSINESS FINANCING: KEEPING CALIFORNIA ON TOP AND SHARING THE WEALTH**

Small businesses in California employ nearly half of the state's private workforce, but lack the capital to grow. Banks aren't lending in the amounts that small businesses and entrepreneurs need; venture capital, angel investing, and crowdfunding have become important alternative forms of financing. In fact, California's small-business owners tap these alternative means of capital—often from Silicon Valley and Silicon Beach—far more than small business nationwide. This session focused on how the state could do more for small business, from crowdfunding legislation, to greater support for minority entrepreneurs, to reaching out beyond the world of technology.

### **SUSTAINABLE SOLUTIONS NOW**

California is in the midst of a transformation to turn its economy into a leading global incubator for renewable energy and resiliency solutions. Clean energy entrepreneurs are busy developing sustainable technologies, from flexible and wearable solar cells, to efficient water markets to ensure drought resiliency for commercial farmers. But progress requires further investment from all California businesses, not just those in the energy sector. Can the state get where it wants to go? This session featured an array of inventors, entrepreneurs, and policy innovators pursuing new ideas and advancements that are building the foundation for the green economy of tomorrow.

### **IMMIGRATION AND THE CALIFORNIA ECONOMY**

As immigration policy has become an urgent policy item in the United States and Europe, California finds itself caught squarely in the middle of competing economic and political agendas. The national immigration debate will have a significant impact on key industry sectors in California, including agriculture, tourism, manufacturing, and tech innovation. This session explored the

## SUMMIT SESSIONS

implications of a shifting immigration policy, including how the prospect of more aggressive federal deportation policies might affect California's ability to power its economy. Likewise, it explored how state leaders are cultivating and protecting the highly skilled immigrant workforce our economy needs to continue to flourish.

### **BIG CITIES, BIG DATA: HOW "SMART CITIES" IMPROVE LIVES AND SAVE MONEY**

From homelessness and housing, to pensions to public safety, more California cities are using sophisticated data analytics to help solve their biggest problems. Open data portals in Los Angeles, for instance, are enabling more affordable housing development; Long Beach is using data to coax the ports of Long Beach and Los Angeles, the region's largest air polluter, into one of the greenest ports in the nation. But what are best practices for smart cities of the future, and how they can be more efficient and effective in deploying data in addressing disparities and inequality? This session heard from various city and local officials on new approaches to data utilization and city management.

### **BLOCKCHAIN FOR SOCIAL IMPACT**

Blockchain has become a poster child for conversations about disruptive technology. It may soon change the nature of global commerce by creating a new platform for secure financial and legal transactions such as land entitlements, supply chain and asset management, and so-called "smart contracts." By providing a decentralized, transparent, and virtually hack-proof digital ledger, blockchains provide greater public accountability for, and accessibility to, public and private exchanges. This session explored the various applications of the technology as well as the question, how can California continue to foster responsible blockchain innovation and where will the market lead?

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## **CALIFORNIA LEADING THE FUTURE OF ENERGY**

Mitigating the human impact on global climate is sound environmental stewardship, but it also presents high-value investment opportunities. In the wake of the Trump Administration's plan to withdraw the United States from the Paris Agreement, California has sought a national leadership role in carbon emissions reduction. New investments and innovations in clean tech and green energy are creating a path to a sustainable energy future. This session convened senior elected state officials, business executives, and conservationists to discuss California's future climate and energy policy.

## **GREEN GOLD: CALIFORNIA'S NEW CASH CROP**

California, already the nation's largest producer of medical marijuana—a \$7 billion industry—is poised to become the largest recreational marijuana market in the world. Anticipating strong recreational sales starting in 2018, California growers are buying up former prisons, vineyards, and repair shops to stage their operations. Despite robust cash flow and consumer demand, marijuana businesses across the state still have few options for banking their cash. This session focused on the business and financial aspects of this growing industry.

## **TECH OR BUST: MAINTAINING CALIFORNIA'S EDGE IN THE WORKFORCE**

Entertainment and creative technology collectively generate a \$300 billion contribution to California's economy, but a digital (and possibly geographical) shift is underway. Entertainment now comprises not only television, movies, and music, but also gaming, e-sports, and other digital pastimes that attract capital and investment from tech hubs, world-class university labs and, indeed, Hollywood. This session explored issues such as how the shift has changed the labor pool for entertainment as we now understand it and what California can do to remain competitive with other states and countries.



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## **MADE IN CALIFORNIA: PRESENTATIONS FROM CALIFORNIA-GROWN STARTUPS**

California's venture capital (VC) isn't invested solely in tech. The state is also fertile ground for funding small manufacturing startups that are revitalizing the state's reputation as a hub of industrial innovation, from 3D-printed clothing and fashion accessories, to wearable tech. Whether it's advanced manufacturing, aerospace, biotech, and entertainment technology throughout southern California, or agriculture and framing technology in the central valley, VC interest in these startups is growing all over the state, thanks in large part to regionally based incubators that support entrepreneurial efforts. This session showcased a selection of manufacturers, incubators, and entrepreneurs who are leveraging regional characteristics to drive innovation and continue to ensure that the future is made in California.

## **INVESTING IN GROWTH FOR CALIFORNIA'S FUTURE**

California continues to outperform the national average in job growth, led by signature industries in trade, technology, entertainment, and tourism. Yet the state's long-term economic foundation is threatened by the high cost of living, the lengthy regulatory process for new businesses, and increased competition from domestic and international markets in technology. This session concluded the summit and explored how leaders in business and government must leverage opportunities around increasing investment in communities and higher education in order to support the jobs of the future and spur continued innovation and growth.

# PRIVATE SESSIONS

## **SECURING PUBLIC PENSIONS**

Many government-mandated pension schemes have accumulated large reserves while they've also become significant liabilities for cities and towns. Pension fund management has a direct effect on financial sustainability and potential benefit levels, as well as an indirect effect on the overall economy, when the funds are leveraged for the domestic capital markets. This session explored issues such as how the state and local jurisdictions can balance the need to retain the viability of the public retirement systems while also charting a path that does not unduly burden tax payers or public services.

## **LOCAL HOUSING SOLUTIONS WORKING GROUP**

The robustness of California's long-neglected housing supply remains a vital component of any strategy to invest in human capital, promote economic development, and provide social mobility. Yet cities throughout the state continue to struggle to develop adequate levels of housing. The housing crisis is not only one of supply, but of the lack of adequate policy supporting the various types of development demanded throughout the housing marketplace. This session featured discussions on California's most pressing housing needs, along with an examination of key legislative victories and local best practices.

## **COMMUNITY HEALTH APPROACHES TO LOWERING THE BURDEN OF CHRONIC DISEASES IN CALIFORNIA**

Chronic diseases have become a major public health and economic challenge facing the U.S. overall and California specifically. In California, chronic diseases cost a total of \$378.3 billion in 2016—equivalent to 15.1 percent of the state's overall economic output. Thirty percent of these costs were in the form of direct payments

## PRIVATE SESSIONS

for health care, and the remainder resulted from missed work and economic productivity losses. Cultural and language barriers, as well as differences in dietary habits, are major drivers of chronic diseases, especially in states as diverse as California. This session considered community health approaches as ways to mitigate the impact of chronic diseases through inclusive and participatory care.

### **EXPANDING NONPROFIT IMPACT THROUGH STRATEGIC PARTNERSHIPS**

Los Angeles is home to more nonprofits than any other county in the nation. With over 1.5 million registered nonprofits in the United States, the need to find ways for organizations to reduce duplication of services, inefficiencies, and competition for resources has grown. A national movement has emerged to find ways to facilitate partnerships among nonprofits that can lead to greater organizational effectiveness and efficiency. The Nonprofit Sustainability Initiative (NSI) was launched in 2013 and has become a leader in this effort. The NSI funds strategic partnerships that combine some or all aspects of two or more organizations, ranging from jointly managed programs and back-office consolidations, to shared ventures or full-scale mergers and acquisitions. Participants discussed the NSI and its potential for scalability throughout the state, as well as best practice initiatives and how nonprofit impact has been transformed through partnerships.

### **INVESTING IN CALIFORNIA'S INFRASTRUCTURE**

Infrastructure remains the indispensable driver of job creation and growth for the U.S. economy. Needed to maintain domestic productivity, efficiency, and ensure global competitiveness, infrastructure remains one of our most crucial public goods for commerce and economic development. During this private session, participants reviewed best practices in sustainable investing, the need for public-private partnerships, and standardization across key investment criteria. They discussed how different types of

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investments are able to meet the risk-return profile of investors and explored new ideas for channeling investment dollars into the sector. The group explored structures that have been successful in supporting sustainable infrastructure projects as well as further standardization and development that could increase transparency and liquidity of these products.

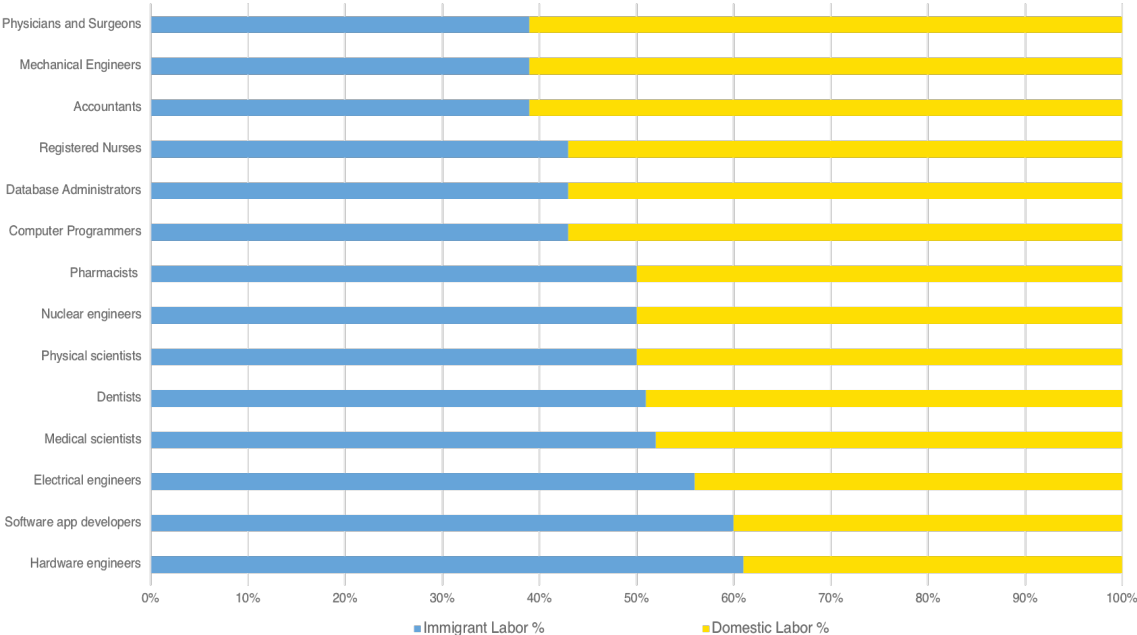
### **CALIFORNIA'S LONGEVITY LANDSCAPE: SMART CITIES FOR AN AGING POPULATION**

California is experiencing a demographic age shift that is both urban and distinctly diverse. Smart California cities can address the challenges of an aging population and harness the massive social and economic potential of older adults across the state. Enlightened leadership, policymaking, and action will not just benefit the old. The successful cities of the future will enable purposeful, productive, and healthy aging and enhance urban livability for all. This session explored whether California, the nation's leading majority-minority state, could also show the way in the movement to develop smart, age-friendly cities. This session included leaders in policy, academia, philanthropy, and business discussing promising practices that could provide better lives for the current generation of older Californians, and a better future for generations to come.

# SUMMIT INSIGHTS AND RECOMMENDATIONS

Ultimately the recommendations and roadmap set forth by the summit, directed toward government effectiveness solutions, will need to weave solutions into a number of the state’s persistent challenges. Historically, the model that produced and marketed the notion of the “California Dream” was always fundamentally linked to strategic investment in the human capital and access to higher education as a catalyst for economic growth. If California is to remain one of the leading centers for innovation and technology development in the U.S. and around the world, the state must not only continue to foster innovation from basic research to development phases but also work toward retaining and attracting the best and brightest minds. California’s economic landscape will need to reconcile existing regulatory barriers, imbalances in state revenues, and pension obligations in order to emphasize education and training investments focused on advanced skills. This will ensure younger and older workers are afforded opportunities to access the jobs needed to compete in the 21st century.

**Figure 1. California’s High Skilled Labor Pool**



Source: Partnership for a New American Economy

# SUMMIT INSIGHTS AND RECOMMENDATIONS

The aggregate of summit input provides local and state leaders a roadmap highlighting where strategic revisions in certain governance practices can strengthen the state's business climate and sustain a platform for facilitating long-term investment in human capital and infrastructure. Recommendations are organized around the five pillars of the California Summit theme.

## **BUSINESS CLIMATE AND GOVERNMENT EFFECTIVENESS**

Emphasized throughout the summit, perhaps the most vital step in cultivating a vibrant economic future depends on the adaptability of government effectiveness practices—how the public sector fosters business and addresses structural barriers that inhibit the state's ability to attract, retain, and grow businesses. For summit participants, building this economic landscape will depend on how different levels of government—local, regional and states apply 21st-century tools to tackle 21st-century challenges. Digitalization efforts alone will not lead to smarter cities if this step toward transparency and data coordination do not also inform decision-making platforms. In order for this dynamic to become a realization, governance platforms at all levels will need to be positioned as forward-looking, intersectional, and bureaucratically integrated. Speakers agreed that cultivating a business climate that continues to promote innovation and job growth will result from these effective governance practices that work to better strategically align public investments, and compensate for lack of federal funding.

**Educate citizens to help create the consensus needed for effective action.** Politics is a key factor in the discussion on many issues, including public pensions, and political consideration makes changes through legislation challenging. Public employee unions have advocated vigorously for their members and made clear that changes would be very unpopular. Raising public awareness of the key issues involved, including showing how public services are already being affected by this liability, will be helpful in spurring action. Since drastic action will be necessary after years of inaction,

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teachers will also need to plan for significantly changed retirement income.

**Pilot small projects for culture change.** Observable, uncomplicated small wins where additional data collection or technology implementation improves processes or outcomes can help build support for new approaches. Philanthropic, academic, or private sector partners can be useful allies in providing the ideas, expertise, and funding for time- and budget-constrained government departments interested in change. Strong leadership from the top is crucial, but buy-in and expertise from front-line staff is also crucial to the accuracy of data.

**Build public trust through technology and transparency that improves constituent experience of government technology, data, and websites by considering the user experience.** Encourage cities of all sizes to employ proven tools that help improve public transparency and trust such as public works applications that allow citizens to easily report problems and track government response and resolution. Considering the ease with which users can access the information or services they seek, and easing the process of doing business with government departments, can help speed interactions and build goodwill. It can also lower the barriers for engaging with government, which in the case of procurement, can bring in new innovative bidders. Users should not need to be data scientists to be able to view and understand government data. Efforts should be made to make it available in easily comprehensible and searchable forms, including maps, ranks, etc. Larger cities can hire a user experience (UX) designer to facilitate this approach.

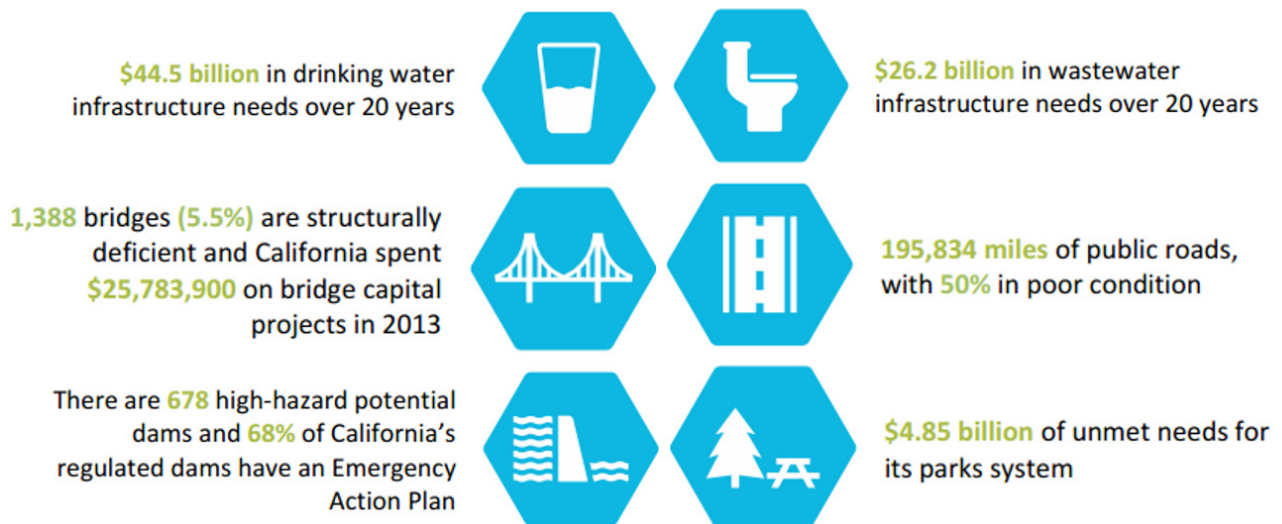
# SUMMIT INSIGHTS AND RECOMMENDATIONS

## HOUSING AND INFRASTRUCTURE

The success of California's economy relies on a network of well-maintained assets for the state's commerce, business, communications, and transportation sectors to keep goods, services, and the economy flowing. Traditionally, infrastructure financing has been a key component of state government, but, in recent decades, the level of support for investment at the state and federal levels has steadily declined. In a recent report by the American Society of Civil Engineers, California received a D+ score for its current infrastructure needs and level of ongoing maintenance and upkeep. This impedes the state's ability to compete in an increasingly global and competitive marketplace. Maintaining California's competitive advantages in the 21st century will require large-scale and sustainable leadership and investment on infrastructure at all levels of government, as well as engagement from the private and business sector of the state.

California has two critical infrastructure-related challenges ahead: 1) addressing decades of deferred maintenance, regulatory barriers and missing upgrades to the state's aging infrastructure and 2) transitioning the state to a carbon-neutral economy to meet the state's climate stewardship policy goals.

Figure 2. California's Unmet Infrastructure Needs





## SUMMIT INSIGHTS AND RECOMMENDATIONS

Cities and local jurisdictions are leading the way, by utilizing and testing new models of financing, maintenance, and operations to meet growing needs. According to the governor's latest infrastructure report, currently the Golden State has \$200 billion of unmet infrastructure development needs. With few other revenue options, public-private partnerships (P3s) have proven a successful tool for accelerating infrastructure investment in other parts of the globe, but California has been slow in adopting P3 models for financing infrastructure. However, infrastructure should not be limited to large-scale investment, such as roads, bridges, and highways, but inclusive of housing, parks and open space, and recreational amenities that provide benefits to communities and municipalities. To effectively mitigate this dynamic, state and local leaders will need to develop new tools and incentives to seek to alleviate regulatory barriers in order to increase housing supplies, especially at a local level. Housing and transportation linkages are a crucial part of the economic nexus that ensures the adequate movement of goods and services; therefore, California must include housing and mobility as part of the larger calculus of infrastructure investment.

**Explore new opportunities for public-private partnerships.** The government alone does not have enough revenue to sufficiently fund all projects necessary. Through the use of public-private partnerships in financing projects related to transportation, housing, alternative energy, education, health care, and more, private companies and the public sector can work towards providing essential services that will benefit both entities and communities at large.

**Adapt short-term thinking regarding infrastructure to long-term strategy.** Short-term thinking plagues many different sectors of the U.S. economy, and infrastructure is no different. Several attendees and discussants spoke about how the budget forces many public officers into spending annually to maintain the status quo, rather than allowing for long-term investment into the quality of their municipality's infrastructure.

## SUMMIT INSIGHTS AND RECOMMENDATIONS

### **Reprioritize incentives for local jurisdictions in housing development.**

Providing affordable and adequate supply of housing near job centers remains a critical component of any strategy to promote economic development and invest in human capital. Not only do state regulations like the California Environmental Quality Act (CEQA) lead to regulatory delays, they block housing developments at the local level where they are needed most. The state's housing development challenge will require an array of local-level solutions including strategies that prioritize development in underutilized areas, reduced parking requirements, and leverage innovation through construction technology (e.g., modular/prefabricated housing).

**Update zoning laws to reflect the need for additional housing.** Existing zoning laws are outdated and don't reflect the current demands of California's population. While accessory dwelling units (AUDs) have increased in places like Los Angeles by a factor of 10, more policy support on the local level throughout the state for higher density housing is necessary to keep residential property adequately stocked and prices attainable.

**Reduce development costs and fees that add to the state's housing affordability challenges—knowing the crisis is a result of the lack of supply.** Addressing the state's housing challenge not only requires looking to expedite the development process from experiencing costly regulatory delays, but also requires reducing added development costs and fees that are factored into the sale cost (e.g., prevailing wage provisions can add up to 25 percent of added costs to a unit, depending on the region).

“Only 3 percent of Congress has any type of technical background. Is it any wonder that we can't seem to develop clear regulatory guidelines for these new technologies?”

- Councilman Mike Spence

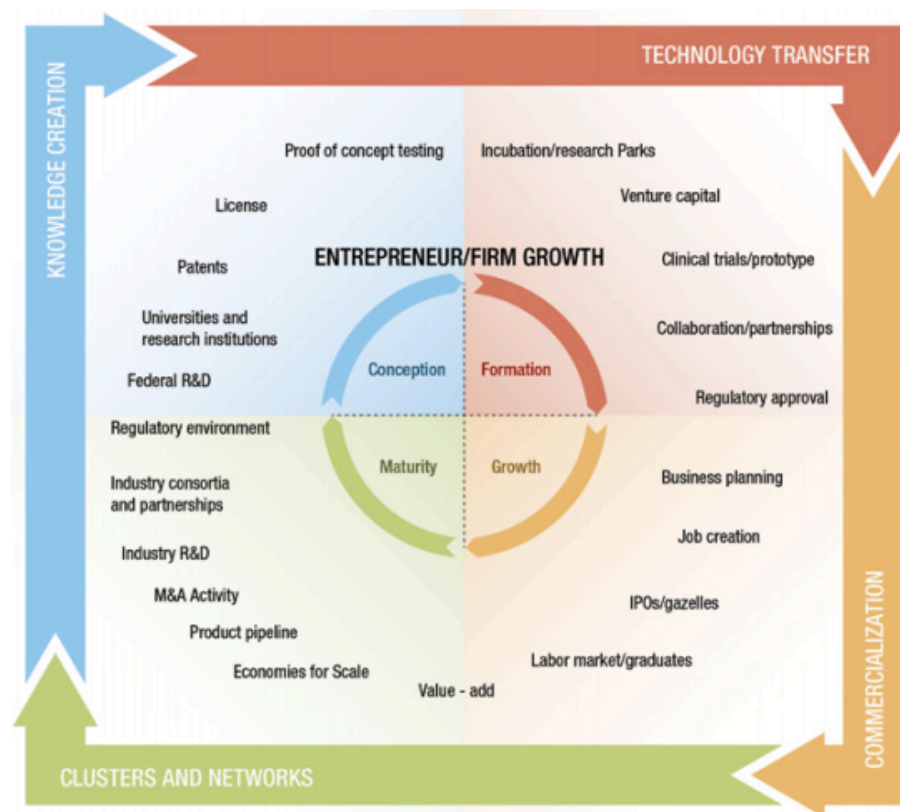
# SUMMIT INSIGHTS AND RECOMMENDATIONS

## INNOVATION AND TECHNOLOGY

<sup>4</sup> C.I. Jones (2016). Stanford University.

Innovation, the broad act of innovating or improving a product or method, has been a central component of capitalistic markets and a main driver of the global economy for the last century. In particular, technology-based innovations such as the development of new methods of production or new digital platforms, have supported much of the rise in productivity by firms and workers as well as growth in GDP and the creation of new industries, markets, and an entirely new ecosystem of companies and services.<sup>4</sup> Innovation-based economies produce high-quality, high-wage, sustainable jobs that can, in turn, lead to a rising tax base for public services and local government.

Figure 3. Regional Innovation Life Cycle



Source: *New Economy Strategies* and Milken Institute.

Innovation, therefore, is not a by-product of academic and research institutions or investment by private firms to develop new technologies, but a deliberate long-term economic growth strategy for how regional economies can maintain their competitive advantages.

## SUMMIT INSIGHTS AND RECOMMENDATIONS

The state's most prominent challenges ahead will require both the private and public sector working together. This year's theme of the California Summit, California Leading, exemplified the ways in which the state leads the nation, through direct investments, public-private partnerships, and innovative public policy that directs the business and public sectors.

**Strengthen linkages between industry and universities.** Research universities are one of the strongest assets the U.S. can use to compete in the age of innovation. Research funding should be a top priority for enhancing U.S. economic growth. University research funding can support the creation of both middle- and high-skill industry jobs through innovation, commercialization, and technology transfer. As products and services are created and licensed, there are myriad multiplier impacts felt across the economy.

**Incentivize research commercialization.** California remains the leading state in technology transfer and commercialization from public research. In part due to strong federal funding under a special commercialization pool, the state enjoys the highest number of patents and licenses issued from university research. State and federal government should prioritize and increase funding through matching grants to promote academic entrepreneurship.

**Address the confluence of policy and innovation.** In order for California to remain a leader in the innovation space, the private sector, government, and public-sector regulators must join forces to define a clear set of goals and guidelines for any type of regulatory system and application of new technologies in the public space. We are in an age of technological regulatory arbitrage in which the public and government regulation will continuously struggle to keep pace with the advancement of technology and innovations in the private sector, while still trying to balance public safety and the overall public good. Far from a failure of public policy or the inability for the public sector to respond, the current pace of innovation is a reflection of the strong partnerships and investments made, in part, by the public

“Innovation is fundamentally built on investments in human capital.”

- Senator Robert Hertzberg  
California State Senate

## SUMMIT INSIGHTS AND RECOMMENDATIONS

sector in human capital, digital and commercial infrastructure, and research and development. Therefore, in order to maintain the state's competitiveness and leadership in this realm, California must establish "regulatory sandboxes" in which policy and emerging technologies can be tested and implemented in smaller case studies for eventual long-term scalability.

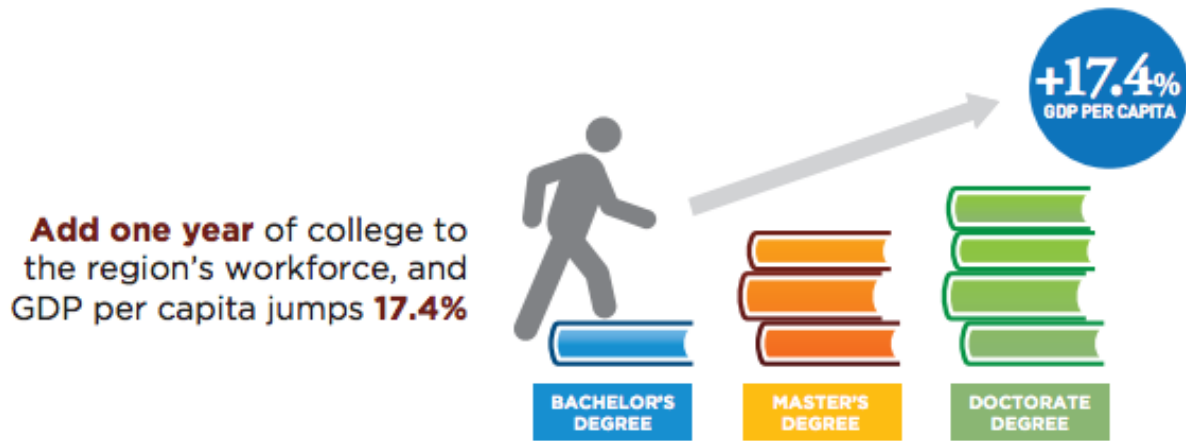
### **HUMAN CAPITAL AND EDUCATION**

Developing human capital requires creating and cultivating environments in which students and workers can rapidly learn and apply new ideas, competencies, skills, behaviors, and attitudes to the workplace. It is extraordinarily challenging to update education curricula and workforce development programs at the accelerated pace that technology is transforming entire industries. However, to keep companies, industries, and nations competitive, societies must adapt, identify, and exploit new opportunities. For example, as automation renders many technical jobs obsolete, industries will need workers trained to manage, operate, and develop the hardware, software, and systems that make automation possible.

Human capital development begins with investment in early childhood education (in fact, even earlier with regard to prenatal health) when the return on investment is exponentially higher than later inventions. Secondary schooling reinforces foundations for learning and basic skills as well as science, technology, engineering, and math (STEM) skills which are critical to preparing students to enter high-wage fields. Post-secondary education and career and technical education (CTE) programs hone specialized skills. Community colleges and in-state universities are particularly useful in delivering a diversified workforce as they tend to better reflect the population than private colleges. Partnerships between two- and four-year colleges and industry help to strengthen access points through internships, mentorships, and apprenticeships, and beyond education are the range of workforce development programs to keep the skills of those currently in the workforce up to date.

# SUMMIT INSIGHTS AND RECOMMENDATIONS

Figure 4. Return on Human Capital Investment



Source: Milken Institute.

In California, where the technology industry in particular is so critical to the state's economy, the state must educate, attract, and retain a steady pipeline of skilled workers to stay competitive. The education piece is most important for younger generations of Californians. Today, immigrants account for more than half of California's jobs in dentistry, medical science, electrical engineering, software development, and hardware engineering.<sup>5</sup> Attracting the best talent is an advantage, but the state also must prepare its own children for the jobs of the future.

<sup>5</sup> U.S. Census Bureau.

<sup>6</sup> Knowledge Universe.

**Increase investments in early childhood education.** Investments in higher education are undoubtedly important to a well-functioning society, but early education yields the highest return. Spending in the U.S. on post-secondary education is more than three times higher than it is on early childhood education.<sup>6</sup> By the time a child reaches five years old, they can be thousands of words behind their more educated peers and at a severe cognitive disadvantage. The state should reassess education funding to prioritize programs that make the most impact.

*"The 21st century is being defined by a worldwide competition for human capital."*

- Mike Milken | Milken Institute

## SUMMIT INSIGHTS AND RECOMMENDATIONS

**Strengthen STEM-focused programs to build a robust talent pipeline of technically trained workers and increase workforce readiness by training in technology fields.** Stakeholders repeatedly emphasized the need for a digitally trained workforce, valuing the ability to adapt and learn new facilities. Focusing on STEM is essential for K-12 students, including critical thinking and reasoning along with the more technical computer skills, particularly at low-performing schools. Additionally, continuing CTE for the incumbent workforce on skills they need to compete in the digital age, such as coding and software program training, is essential.

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**Encourage diversity in the workforce by engaging the private sector and creating effective career pathways.** Community colleges and other lower-cost public universities should form more partnerships with industry to enable students to seek paid internships, mentorships, apprenticeships, and fellowships. For example, a number of California Community Colleges have teamed up with companies in dominant sectors within their regions, such as Santa Monica College partnering with multimedia establishments in the Silicon Beach area of Los Angeles. Many fields, including entertainment, technology, and finance, are relationship-based—relationships that individuals from diverse backgrounds, including low-income and racially-diverse communities, do not have. Stakeholders stressed that untapped talent is everywhere due to lack of internet access or employment pipelines, and all sectors need to work harder to remedy that.

“I want to see California being a global leader in developing a curriculum for the future to make sure that our kids are job ready.”

- Former California State Controller Steve Westly

# SUMMIT INSIGHTS AND RECOMMENDATIONS

## SMALL BUSINESS AND CAPITAL ACCESS

Small businesses serve a vital role in the nation’s overall economic health by driving job creation, raising wages, and bettering standards of living in communities throughout the country. For African-American and Hispanic populations, small businesses also are a critical pathway to closing the racial wealth gap. And to start or grow any businesses, entrepreneurs need capital. Like nationally, small businesses drive California’s economy—almost 100 percent (99.8 percent) of California’s businesses are small businesses (less than 500 employees),<sup>7</sup> which encompass 49.2 percent of the state’s private workforce.<sup>8</sup> Historically, California has an excellent record cultivating entrepreneurs and promoting small businesses, particularly in technology and innovation such as green technology. However, it is important to recognize that high-growth startups—those that grow bigger and faster than the rest and tend to be in technology fields—are only a fraction of the small business landscape. Sole proprietors—firms with no employees—make up 81.3 percent of small firms in California,<sup>9</sup> while “mom and pop shops” (the dry cleaners, mechanics, medical clinics, etc.) represent a substantial portion of the workforce (16 percent).<sup>10</sup> These businesses in particular struggle with a variety of issues—from accessing capital and navigating tax regulations, to acquiring licenses and managing complex labor rules. Moreover, California can do a better job of supporting all entrepreneurs, not just the highly educated in Silicon Valley.

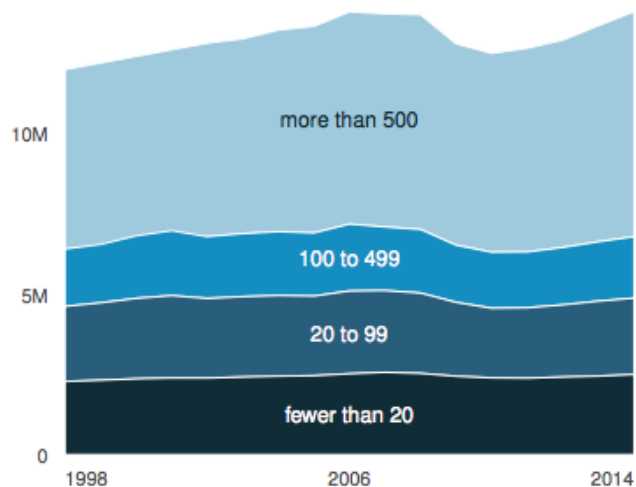
<sup>7</sup> The U.S. Small Business Administration defines generally small businesses as those employing fewer than 500 people.

<sup>8</sup> U.S. Small Business Administration Office of Advocacy (2017). *California Business Profile 2017* [Fact sheet]. Retrieved from [https://www.sba.gov/sites/default/files/advocacy/California\\_1.pdf](https://www.sba.gov/sites/default/files/advocacy/California_1.pdf).

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

**Figure 5. California Employment by Business Size (Employees)**



Source: U.S. Small Business Administration Office of Advocacy (2017).



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**Create tax incentive programs for alternative financing.** California employs various tax incentive programs to help spur small-business growth. Currently, however, there is no incentive for the use of alternative financing means. While generally perceived as risky, venture capital, angel investing, and crowdfunding would greatly benefit from the implementation of an incentive that gives alternative investors not only the confidence to move forward with supporting these promising entrepreneurs, but also the financial motivation to do so. With the explosive growth in this field, California must act quickly to ensure the appetite to support these innovators maintains strong. Without such an incentive, alternative investors will be hesitant to throw their support behind many of these “risky” companies.

**Pass statewide crowdfunding legislation.** One of the most popular forms of alternative financing is crowdfunding. After a relatively slow start post inception, crowdfunding has recently exploded onto the scene and has become a truly viable means of raising capital. However, one of the largest problems with crowdfunding in California is the inability to raise capital from out of the state. Including a revenue sharing option will also spur greater access. The majority of the alternative financing methods available today employ the use of equity. Simply put, equity is an individual’s degree of ownership in a single asset. However, rather than take part ownership in the asset, individuals have begun to opt for revenue sharing.

**Increase funding and promotion for STEM education and training.**

California should look to promote policies and educational programs that stress the importance of science, technology, engineering, and math. Startups, by definition, start small and often fail. The data shows that many of those that succeed will make critical and necessary contributions to the economy and the local community. In California, serial entrepreneurs are commonplace. The state must continue to encourage entrepreneurial thinking earlier in the educational process. The long-term success of California’s STEM programs is critical for the continued success of California’s small-business growth.

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**Increase public and private partnerships.** Entrepreneurial programs receive essential benefits from the arrangement of public and private partnerships. Whether it is in the form of a mentor, an advisor, a financial sponsor, or a service provider, these partnerships bridge the gap between the lack of resources available when only using either private or public means. Private funding is critical for off-campus facilities (incubators) that act as the main gateway for entrepreneurs to connect directly with the local community, and in many cases are scalable to other communities.

# CONCLUSION

As we look at the changing dynamics under what has been coined the “fourth industrial revolution,”<sup>11</sup> for California, as elsewhere, industries may have changed and economic landscapes may have evolved, but the fundamental components of the California model remain intact. A common theme that resonated across the 2017 California summit program as participants urged continued strategic investments in education (especially leveraged in early childhood) as a propellant for future growth. The assumed result being a renewed and strengthened state’s business climate. Yet the strength of the state’s business climate will hinge not only on innovation in specific sectors like advanced manufacturing, software development, biotech, and renewable energy technology. The strength of the state’s business climate will also depend on establishing effective governance practices that are better positioned to leverage research and development investments, access a highly diversified global talent pipeline, and fund improvements throughout the state’s business environment.

<sup>11</sup> Brookings Institute.

How can state leaders best leverage California’s economic and cultural advantages and bolster communicating the economic benefits that keep the state’s economy vibrant with national and global partners? In summary of summit recommendations, if California is to remain an economic leader and inspire innovation around the globe, local and state leaders should explore applying the state’s capacity for innovation toward issues related to governance by exploring the extent to which technology, and data coordination, can impact effective delivery of service. Moreover, to spur lacking investments in human capital, leaders were urged to look to resolve regulatory barriers that continue to impede development in the state’s housing supply while scaling public and private collaboration models that can support infrastructure development and coordination on social services delivery.

## SUMMIT INSIGHTS AND RECOMMENDATIONS

The Milken Institute California Center plans to incorporate summit recommendations in identifying strategies and delivering leaders the tools necessary to keep the state's economy vibrant and growing. With the help of our stakeholders and strategic partners in the business, policy, philanthropy, and regulatory agencies, we are taking aim at the state's most intractable issues. Through a regional economic lens that combines research and leverages the impact of convening, we are uncovering financing strategies and smart policy approaches that can build a more prosperous future for the residents of California and beyond.

# ABOUT US

## **ACKNOWLEDGMENTS**

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## **ABOUT THE MILKEN INSTITUTE**

The Milken Institute is a nonprofit, nonpartisan think tank determined to increase global prosperity by advancing collaborative solutions that widen access to capital, create jobs, and improve health. We do this through independent, data-driven research, action-oriented meetings, and meaningful policy initiatives.

## **ABOUT THE CENTER FOR REGIONAL ECONOMICS AND THE CALIFORNIA CENTER**

The Milken Institute Center for Regional Economics promotes prosperity through regional economic research, public policy analysis, and programs and initiatives that explore and target entrepreneurship, small-business growth, job creation, and industry development.

The Milken Institute California Center is dedicated to identifying solutions to strengthen California's role as a global incubator for innovation in policy, technology, and business. By focusing on the connection between government policy and the state's economy, we can ensure that the steps we take today will improve the future of California, the U.S., and the world at large.

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