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A New Foundation for Collaborative Workforce Development in Silicon Valley

IN PARTNERSHIP WITH:
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San Mateo County Workforce Investment Board
work2future
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ABOUT THIS REPORT

In May 2008, the U. S. Department of Labor awarded a Regional Innovation Grant to the three workforce investment boards in Silicon Valley—the North Valley Workforce Investment Board (NOVA), the San Mateo County Workforce Investment Board and work2future—to develop a comprehensive, integrated regional workforce development plan. Together, these three workforce investment boards provide workforce development services for employers and job seekers in Santa Clara and San Mateo County.

The workforce investment boards chose Joint Venture: Silicon Valley Network to lead the process and meet the grant’s four planning objectives:

- Achieve a common understanding of the workforce challenges facing Silicon Valley as a region.
- Develop a regional action plan that will develop new systems, infrastructure and alliances among workforce organizations.
• Form a cohesive partnership of the region’s key stakeholders and decision-makers and collectively address the workforce challenges facing Silicon Valley.

• Leverage the strength of these new partnerships to advocate supportive policy in Sacramento and Washington DC.

Silicon Valley is a large, diverse economy with a broad spectrum of employers and adult workers. The new regional workforce initiative, launched as a result of this report, seeks to unify the stakeholders around a common set of desired outcomes; to develop metrics to measure success; and to provide effective, ongoing communication about workforce development solutions.

In short, this report makes the case for a regional workforce plan in Silicon Valley.

Of course, the plan will be implemented through a process of collaboration, and neither Joint Venture—nor any regional body—presumes to provide oversight over local agencies. We simply hope the collective approach will be of greater use to employers, and that it will provide greater opportunity to our region’s transitioning workers.

The report is divided into three parts:

1. The first section describes why a fresh new regional approach to workforce development can redound to the benefit of the overall economy.

2. The second section describes the process we used to gather input from the region’s numerous stakeholders, and how we used that input to develop deliverables for the regional innovation grant.

3. The third and final section describes the new regional action plan itself, and how Silicon Valley’s workforce investment boards and other stakeholder groups intend to work together in the future.

Joint Venture and our partners in this project offer a special thank you to former NOVA Executive Director Mike Curran for his vision and his tireless efforts to bring together the resources, organization and initial momentum that made this regional workforce effort possible.
EXECUTIVE SUMMARY

THE CHALLENGE

For more than 50 years, Silicon Valley has been the epicenter of innovation and entrepreneurship. From semiconductors and software to biotechnology and nanotechnology—and even more recently with green and sustainability technologies—the industry clusters that began in Silicon Valley have developed into thriving industries that fuel opportunity and create prosperity for the nation. But the economy we built is a brutally churning one, with whole industries coming and going at a dizzying pace.

The result is that Silicon Valley's workforce must adapt very quickly as the region's employers develop new technologies, create new business models and spawn new industries. These are difficult transitions to negotiate for our region's workforce, and nothing about it is automatic.

This report argues that a regional skill-building network would be a significant boost to our local workforce and to the overall economy.

The demand for a more comprehensive, regional skill-building network is not limited to those employers directly involved in the technologies of tomorrow. In planning for the retirement of older baby boomers, employers across every major sector—including local service providers—are also seeking skilled replacement workers.

Moreover, Silicon Valley will derive particular benefit if we develop and expand skills among those sub-populations that are typically unemployed or under-employed.

This report also argues that foundational skill building is our region's best response to the prolonged recession, which has too many workers looking for too few jobs.

Silicon Valley's response to these workforce challenges will play a central role in the continued economic prosperity of the Bay Area and California as a whole. So often our region is a bellwether, showing the world new trends and technologies, and new paths to commercial success. Can Silicon Valley also provide the world a new model for skill building, adult learning, and workforce transitions?

That is the hope of this new undertaking.
A SHARED VISION
Silicon Valley’s workforce stakeholders include a large, varied group of educational institutions, organized labor, non-profits, social service organizations, industry associations, employers and workforce development agencies. Each play a critical role in the region’s workforce development, yet seldom is there collaboration or even communication across these groups.

As a result of our recent effort, funded by the Department of Labor, there is now a broadly shared vision for the outcomes we seek within Silicon Valley’s workforce development community. These desired outcomes provide an essential starting point for the Valley’s stakeholders as we undertake newly collaborative work.

We seek three outcomes:

1. **Increase our regional capability for giving adults access to skill building.** This outcome is focused on expanding the opportunities available for developing skills among those individuals currently in the regional workforce and those individuals who wish to enter it.

2. **Improve workforce readiness among the region’s low-skilled and/or low wage workers.** This outcome is focused on increasing skills and workforce readiness among residents and those individuals with the lowest levels of education and skill development.

3. **Increase the pool of qualified applicants for targeted replacement job opportunities in the region.** This outcome is focused on those industries and occupations most affected by the coming wave of baby boomer retirements, in both the public and private sectors.

Within the region, no one organization—or even single type of organization—can be responsible to produce these results. A positive and lasting impact requires a concerted and coordinated effort from each of the stakeholders to fulfill their specific role in meeting these regional workforce development goals.
OUR REGION’S RESPONSE

Now that our region has agreed upon shared outcomes, how do we plan to reach them?

While many conclusions and recommendations emerge from this initiative, we are embarked on three basic things as our next steps:

1. Measuring and reporting. On a regular basis, we will provide an overall assessment of how the regional workforce system is doing in relation to its shared vision for skill building and regional workforce development.

2. Regular Communication. We will convene regional workforce summits, at least annually, to keep employers and other key stakeholders engaged in a healthy dialogue about our progress and direction.

3. Coordination. The region’s workforce organizations will work together to develop training and re-employment efforts, identify new opportunities, and pursue discretionary grant opportunities.

Silicon Valley’s churning economy and the need to develop a skilled replacement workforce provided a valuable catalyst to examine a more collaborative approach to regional workforce challenges. Through this collaborative process, regional partners in industry, education and other community organizations developed a shared commitment to overcoming Silicon Valley’s most substantial workforce challenges. The collaboration also provided new tools to better connect regional partners and learn from one another in the process of developing and funding effective workforce solutions.
PART 1: THE CASE FOR A REGIONAL WORKFORCE ACTION PLAN

THE PLANNING AREA ECONOMY

In this report we define Silicon Valley as a planning area including all of San Mateo and Santa Clara counties, a region encompassing 2.6 million residents in 2009 and more than 1.2 million jobs in 2008 (before the local onset of the national recession).

The planning area economy is in the nation’s largest high-tech and venture capital center. The Bay Area is the major venture capital recipient in the U.S. economy with more than one-third of total U.S. venture capital funding in a typical year. Companies in the planning area account for the majority of Bay Area venture capital funding.

San Mateo County and Santa Clara County each has an above-average share of their job base in manufacturing, information services and professional, technical and scientific services. Thirty-five percent of the jobs in Santa Clara County are in these three sectors, compared to 18% in the nation. More than 70% of the manufacturing base is in high-tech manufacturing.

![Figure 2. Manufacturing, Information and Professional Services Share of Jobs](chart.png)
The large concentration of venture capital startups and high-tech companies has made the planning area one of the country's high-income centers. Median household income in San Mateo County and Santa Clara County is well above the state and national average.

In 2008, the median household income in San Mateo County was $85,153, compared to $61,021 in California and $52,029 in the United States. Median household income in Santa Clara County was slightly higher at $88,846.

In most years, except for the dot com bust following 2000, the unemployment rates in the planning area were at, or below, the national average.

Figure 3. Median Household Income in 2008

Figure 4. Unemployment Rate Comparisons
Despite the concentration of high-tech jobs and high incomes, the planning area also includes hundreds of thousands of jobs that pay modest wages and several pockets of poverty. The area has been plunged deeply into the nation’s current long and severe recession. As a result, caseloads at the planning area’s three workforce board service areas surged in the first months of 2009.

The planning area has 400,000 jobs in sectors where a majority of the jobs pay average or below average wages. In addition, many jobs in all of the other sectors do not require advanced degrees or pay high wages.

The planning area has several pockets of poverty and relatively low average education levels amid the centers of high tech and innovation. Many of these pockets of poverty are in the work2future planning area (City of San Jose and southern Santa Clara County), although these residents prepare and search for job opportunities throughout the planning area.

Unemployment rates in the planning area have not been immune from the recession’s deepening impact, with the impact spread unevenly in the region. According to preliminary data from the California Employment Development Department for September 2009, cities such as Palo Alto (6.4%) and Foster City (6.7%) represent some of the lowest levels of regional unemployment, while San Jose (13.1%) with over 60,000 people unemployed, as well as Morgan Hill (15.1%) and East Palo Alto (20.7%) are some of the communities hit hardest by the recession.
Unemployment rates in the planning area more than doubled between December 2007 (the official beginning of the recession) and September 2009. Santa Clara County had an unemployment rate of 11.8% in September 2009, compared to 4.9% in December 2007. For San Mateo County, the comparable rates were 9.0% as compared to 3.8%. Unemployment in the total planning area reached 10.9%—higher than the 9.8% national rate in September 2009.

The sharp drop in technology exports due to the worldwide economic slowdown hit the planning area economy very hard. Venture capital funding fell by 50% between the second quarters of 2008 and 2009. With area unemployment rates surging toward and past 10%, consumer spending in the planning area fell in line with the respective national drops in both spending and unemployment.

The job losses and rise in unemployment translated into a surge of customers at the planning area’s one-stop workforce centers.

The number of workforce clients increased by 117% between the first quarters of 2008 and 2009 in the San Mateo County one-stops. In the NOVA one-stop, the increase was 134% and the work2future one-stops experienced an increase of 150%. Total visits were up by 168% in San Mateo one-stops, by 60% at NOVA one-stops and by 63% at work2future.
Collaborative Workforce Development in Silicon Valley

The planning area stakeholders identified five workforce planning challenges to explore in this regional innovation planning grant process. Three are perennial workforce challenges facing the planning area, including two that face workforce planning efforts throughout the nation and one specific to the Silicon Valley planning area:

- The increased level of churn and constant change in jobs, occupations, skills and technology—how to keep pace in the fast-changing workforce world of work
- The persistence of poverty and low rates of high school graduation and post-secondary training opportunities for many residents—both for children and existing low-wage workers
- The challenge of collaboration and efficiency for three separate workforce boards facing similar workforce planning and service delivery challenges. The challenge within every program to include and coordinate the voices of workers, education and training institutions and the businesses they rely on to provide jobs and opportunities for upward mobility.

Figure 7. Increase in One-Stop Activity Q1 08-09
One challenge was added to the list before the recession began and is gaining importance as the nation’s focus expands from new jobs to new job opportunities:

- The impending retirement of the baby boom generation and the tidal wave of replacement job needs and opportunities in the planning area economy.

Another new challenge emerged as the recession deepened and the workforce resources of the planning area’s one-stops and training centers saw a surge in demand while at the same time facing funding cuts:

- The challenge that the nation will “never again” be caught unprepared if our economy plunges into deep recession, and workers have the time and need to hone their skills or acquire new skills

This review starts with the new and emerging challenges and moves to the perennial workforce challenges facing Silicon Valley.

The Tidal Wave of Retirements and Replacement Job Openings
The aging and eventual retirement from the workforce of the baby boom generation will be felt deeply in Silicon Valley. It is projected that most of the growth in the working-age population over the next ten years will be in the 55 to 64 age group, and those aged 65 years and above.

Figure 8. Silicon Valley Population
The number of residents in the 35-to-54 age group will decline slightly even with continuing foreign immigration into the planning area. Silicon Valley is fortunate to have growth in the number of younger workers who may eventually help to replace retiring baby boomers.

The current recession, coupled with the loss of retirement savings and home equity, may indeed cause a delay in retirement plans for some workers. Still, a tidal wave of retirements is imminent in Silicon Valley, which will slow workforce growth and raise serious challenges for replacement of retiring workers.

Projections from the California Employment Development Department (EDD) prepared before the recession predicted that most job openings in Silicon Valley would come from replacement job openings and not from job growth. EDD projected that for every 100 job openings created from job growth in Silicon Valley, there would be 240 openings from the need to replace retiring workers or workers who changed occupations.

The most recent EDD projections and those prepared by the U.S. Bureau of Labor Statistics (BLS)¹ cover the ten-year period from 2006 to 2016. New BLS projections to 2018 are to be published in December 2009. These new projections will almost certainly show that the number of replacement job openings will increase as the nation moves further into the tidal wave of baby boomer retirements.

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The need to plan for the replacement of retiring workers is a serious challenge in Silicon Valley and across the nation. The planning grant and previous work at the NOVA Workforce Board give Silicon Valley a chance to develop models for the nation in addressing the challenge of meeting replacement job needs.\(^2\)

At the same time, the replacement job challenge provides opportunities and hope to students and existing workers—hope that there will be a wide variety of skills needed and job openings available to give residents a chance to move toward higher-paying jobs. This is true even for those workers who do not complete a four-year college education. Job openings in blue-collar jobs will remain large from the need to replace existing workers even as these occupations have little overall job growth.

The need to “shine a light” on replacement job opportunities is made clear in a recent report by the President’s Council of Economic Advisors titled, *Preparing the Workers of Today for the Jobs of Tomorrow*.\(^3\) The report, while containing good analysis and recommendations about the jobs of tomorrow and the implications for education and training, fails to note that most job openings will come from replacement opportunities and fails therefore to discuss the policy implications of this trend.

\(^2\) For more information: [http://www.novaworks.org/whats_new/video/edgevideo.html](http://www.novaworks.org/whats_new/video/edgevideo.html).

There is now broad agreement that many, if not most, of these replacement jobs will need to be filled by what is called California’s “homegrown workforce.” Foreign immigration will continue to be important, but the sheer number of replacement jobs combined with the wide variety of skill levels will leave immigration unable to handle most of California’s workforce needs.

Recent work by Dowell Myers at the University of Southern California on California’s homegrown majority and by Hans Johnson at the Public Policy Institute of California (PPIC), emphasize both the importance and the opportunities for California to focus on education and training reforms oriented at filling the state’s many replacement job openings.

In the professional occupation categories, there will be substantial job growth, with the highest share of job openings coming from job growth versus retirements. However, even in these occupations, half of the total job openings over the next ten years will be to replace existing workers.

The bottom line is that replacement job openings are a critical component of Silicon Valley’s evolving economy. Openings of this type pose both challenges for workforce planning (addressed later in this report) and hope for workers wanting to improve their jobs and income.

For sales, administrative support, office and service occupations, the balance of job openings shifts back to replacement jobs, which will account for the majority of openings over the next ten years.

The bottom line is that replacement job openings are a critical component of Silicon Valley’s evolving economy. Openings of this type pose both challenges for workforce planning (addressed later in this report) and hope for workers wanting to improve their jobs and income.
The stakeholders organized several strategic planning groups, including adult workforce training and education, entry-level employment with job training and incumbent worker training that included a focus on replacement job training and developing qualified replacement workers.

**The Challenge of “Never Again”**

The planning area economy has been hit hard by the recession, but Silicon Valley is far from being among the hardest affected local economies across America. Still, more than 80,000 residents have become unemployed since the national recession began in December 2007. The unemployment rate in Silicon Valley surged from 4.6% in December 2007 to 10.9% in September 2009.

The federal government did respond with an extension of unemployment benefits and a small increase in benefit levels. Moreover, the American Recovery and Reinvestment Act provided millions of dollars in additional workforce program funding to the three planning area workforce boards. However, these responses came more than a year after the nation began experiencing job losses and rising unemployment.
Moreover, President Obama raised the important question of how to face the challenges and harness the opportunities created by the nation’s long and painful recession.

Despite these federal stimulus programs, there is widespread recognition that the nation’s workforce system was unprepared to deal with the impact of the current recession. Local workforce training partners, including the area’s universities, community colleges and non-profit organizations, are struggling with funding and service cuts right when the region is seeing an influx of residents looking for career advancement training opportunities.

Moreover, President Obama raised the important question of how to face the challenges and harness the opportunities created by the nation’s long and painful recession. On May 8, 2009, the President announced a new approach to dealing with unemployment:

“The idea here is to fundamentally change our approach to unemployment in this country, so that it’s no longer just a time to look for a new job, but is also a time to prepare yourself for a better job. That’s what our unemployment system should be—not just a safety net, but a stepping stone to a new future. It should offer folks educational opportunities they wouldn’t otherwise have, giving them the measurable and differentiated skills they need—not just to get through hard times, but to get ahead when the economy comes back.”

The thrust of these remarks was to recognize that unemployed workers were not going to find jobs immediately no matter how hard they tried because the economy was still shedding jobs each month. The President acknowledged that our current unemployment insurance system views looking for work and going to school as conflicting choices when, in fact, deep recessions are exactly the right time for workers to acquire new skills or hone existing ones.

Recessions bring job losses but it takes many months after a recession ends for unemployment rates to decline. While some individuals get jobs during a recession, the overall number of jobs is declining. Workforce programs are most effective at helping people get jobs when the economy is growing and the number of jobs is increasing. Training, resumé assistance and networking are less effective when the economy is shedding jobs.

There is a revolutionary but seemingly obvious conclusion that should shape workforce policies during recessions. **Workforce programs in times of recession should have a major focus on preparing workers for the future economic recovery and changes in jobs and skills requirements.**

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The President continued this discussion in a speech on July 14, 2009 when he introduced the American Graduation Initiative. He introduced several new initiatives for strengthening the ability of higher education, and community colleges in particular, to deal with the education and training needs of America and Americans. One program announced by the President offers planning grant stakeholders the opportunity to develop a strategy aimed at positioning Silicon Valley institutions to compete for future federal funding:

- **Create the Community College Challenge Fund:** Too often, community colleges are underfunded and underappreciated—lacking the resources needed to improve instruction, build ties with businesses and adopt other needed reforms. Under President Obama’s plan, new competitive grants would enable community colleges and states to innovate and expand proven reforms. These efforts will be evaluated carefully, and the approaches that demonstrate improved educational and employment outcomes will receive continued federal support and become models for widespread adoption. Colleges could:
  
  – Build partnerships with businesses and the workforce investment system to create career pathways that help workers earn new credentials and promotions step-by-step, worksite education programs to build basic skills and curriculum coordinated with internship and job placements.
  
  – Expand course offerings and offer dual enrollment at high schools and universities, promote the transfer of credit among colleges and align graduation and entrance requirements of high schools, community colleges, and four-year colleges and universities.
  
  – Improve remedial and adult education programs, accelerating students’ progress and integrating developmental classes into academic and vocational classes.
  
  – Offer their students more than just a course catalog through comprehensive, personalized services to help them plan their careers and stay in school.

There is currently another challenge within the planning area’s workforce system: California’s universities and community colleges are reducing enrollment, cutting classes and raising fees.

The **challenge for this planning grant is to prepare the workforce system so that never again will Silicon Valley enter a deep recession without the local, state and federal resources and planning to deal with a surge in unemployment, a changing economy and no immediate prospects for placing unemployed workers into jobs.**

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The Challenge of Churn and Change

The phrase “lifetime learning” is important for two reasons.

First, workers hold many jobs during their lifetime. Definitive statistics are hard to find, but a U. S. Bureau of Labor Statistics study published in June 2008 found that younger baby boomers held 10.8 jobs from age 18 to age 42. While most of these jobs were held when workers were young, the average worker still held two jobs between the ages of 33 and 37 and two jobs between the age of 38 and 42.

Second, and particularly important in Silicon Valley, rapid changes in technology require constant acquisition of new skills even if workers keep their same jobs. While some of this skill upgrading will be done by individual employers, there are other cases where it is more efficient to have specialized training programs serving multiple employers in a specific industry.

In response to these challenges, the regional innovation grant stakeholders organized two strategy groups—one on entrepreneurship and self-employment and one on incumbent worker training.

The groups worked on issues related to the constant churn and change in the economy and the need for adult workers, including highly trained workers, to have opportunities to refine their skills.

Churn and change occur throughout the regional labor market, reinforcing the challenge discussed below of developing collaboration and efficiency among the region’s many workforce investment partners.

The Challenge of Reducing Poverty and Increasing Opportunity

Even in a high-tech economy like Silicon Valley with above-average wage and household income levels, there are families living on substantially lower incomes and individuals with educational or language backgrounds that make it difficult for them to succeed in the workplace.

Twenty percent, or 165,000, of the households in the Silicon Valley planning area have incomes under $35,000, less than half of the Silicon Valley median income of $83,983. Twenty-nine percent of Valley households (239,000) earned less than $50,000 in 2007. Although Silicon Valley has a lower share of low-income households compared to the state average, there are still a substantial number of Valley households with incomes far below the Valley median.

Silicon Valley has one of the nation's highest shares of the adult population with some college education. Still, there are 525,000 residents aged 25 and older who have no post-secondary education.

Nearly half (49%) of Silicon Valley residents aged five and older do not speak English at home. In 2007, there were 1.1 million such residents in Silicon Valley homes. Of those 1.1 million residents, 21% or 489,000 do not speak English well. Some of these residents who do not speak English well are not in the workforce. However, these numbers include existing workers and students whose ability to get a good job is threatened by their lack of English.
The Challenge of Long Term Planning in an Economic Downturn

When the grant proposal was initially submitted, the region was not in recession. The grant was oriented to improving regional outcomes for our “normal” Silicon Valley economy. Even after the grant was awarded to Silicon Valley, it was prior to the recession in the region. In fact, Silicon Valley entered recession in November 2008, long after the rest of the nation.

Our grant orientation was for long-term change. Fighting the workforce challenges brought about by vicious recessions was not the original intent of the grant. The recession did, however, influence the grant and helped hone the initiative's focus.

The recession, and what happened as a result, is part of our grant strategy development process and our story. It is not an excuse and should not be seen as an excuse. It was a harsh reality that affected our strategy development process in several ways:

- Caseloads surged at the one-stops as unemployment rates doubled within a few months.

- Community colleges and non-profit partners were swamped with rising demand amid falling revenues. Many of our strategy development partners have been operating in crisis mode throughout the grant period and were unable to focus on longer-term strategy issues.

- The recession has made thinking about, and planning for, the future more difficult in terms of occupational and industry forecasts. While it’s possible that structural change may be accelerated in these times, it is also quite possible that workers might work longer, changing the replacement story timing.

It has also become clear that local and regional workforce development systems cannot be effective in national economic downturns without an infusion of funding from the state and/or federal government. Still, the regional action plan was based on a long-run baseline or “normal” economic forecast for the region and is not focused on a short-run response to the current economic downturn.
The Challenge of Collaboration and Efficiency

Three workforce investment boards serve the Silicon Valley labor market area—1) San Mateo WIB, serving San Mateo County, 2) NOVA WB, serving northern Santa Clara County and 3) work2future, serving San Jose and southern Santa Clara County. The labor market area is served by five community college districts—San Mateo in San Mateo County and Foothill-De Anza, Gavilan, San Jose-Evergreen and West Valley in Santa Clara County. The five districts include ten separate community colleges.

These workforce partners face dual challenges of providing service to local residents and employers while operating in a large and dynamic regional economy. From the employer’s perspective, their needs can be met from any of these institutions.

All of these institutions operate currently under significant financial stress. Workforce caseload demands have surged well ahead of funding that most analysts thought was inadequate from the start.

From the perspective of each workforce board or community college, programs such as the recently announced California Clean Energy Workforce Program RFP or President Obama’s challenge grants for community colleges represent important funding opportunities. Yet from the regional perspective, it is important, for example, that not every college creates a solar panel installation-training program. On the other hand, it is important that some institutions participate in developing a program for the numerically small but important job of training water technicians to replace the coming wave of retirements.

The existence of multiple workforce boards and community colleges in Silicon Valley creates the opportunity for specialization and innovation, but it also brings the challenge of coordination and efficiency.

In addition, coordination among workforce partners in a labor market area is now a requirement for funding eligibility in most new programs. Both the clean energy and community college grant programs cited above require coordination among multiple partners as a condition for applying for funds.

In response to these challenges, the regional innovation grant stakeholders organized a regional planning and coordination strategy group.
Like all major hubs of economic activity, Silicon Valley was built on competition. However, collaboration has been another key ingredient to the region’s economic success. This workforce initiative is based on that collaborative spirit for which Silicon Valley is known.

Methodologically, this initiative is built on the expertise of the three regional workforce investment boards, the tools offered in the Department of Labor’s WIRED framework, and the knowledge and long experience of Joint Venture’s collaborative approaches to regional solutions.

**ROLES IN THE INITIATIVE**
Initiative participants fell into one of the following three roles during the process:

- **Initiative Advisors** were responsible for guiding the initiative. The advisors included the executive directors of the three workforce investment boards in the region and the CEO of Joint Venture.

- **Stakeholders** included all members of Silicon Valley’s workforce community that participated in any part of the initiative process and development of the regional action plan. Potential stakeholders were initially identified by the initiative advisors and contacted through the executive interview process.

- **The Initiative Management Team** included the project manager and research economist responsible for facilitating the process and developing materials in support of the initiative.
STAKEHOLDER INPUT

Stakeholder input and expertise played a central role in every step of the regional innovation grant process. Although stakeholder input was gathered informally throughout the process, there were three data collection activities where input from stakeholders was actively sought and acted upon:

1. Initial Executive Interviews with Stakeholders: One of the first responsibilities of the project manager was to communicate with potential stakeholders. This was done through one-on-one interviews, both in-person and over the phone. Over 30 of these interviews were initially completed from November 2008 through January 2009, with additional interviews completed as new stakeholders were brought into the process.

   The interviews provided an important opportunity to gather individual feedback on the challenges, outcomes and potential strategies that could be considered in the initiative and the regional action plan. The interviews also provided valuable feedback on the resources within, and outside, the region that was used in the regional workforce assessment.

2. Three Regional Stakeholder Meetings: Stakeholder meetings were organized and implemented in March, June and September 2009. All stakeholders were invited to participate in each meeting, with each meeting having a specific objective. The March meeting focused on reaching agreement on the common outcomes for the initiative. The June meeting focused on identifying the strategies to meet the outcomes. The final September meeting was committed to finalizing and agreeing upon the regional action plan.

3. Strategy Development Groups: After the strategies were identified in the June meeting, stakeholders were invited to participate in one of five strategy development groups:

   a. Regional Workforce Planning & Coordination
   b. Entrepreneurs & Self-Employment
   c. Incumbent Worker Training
   d. Entry-Level Employment & Training
   e. Adult Workforce Education & Training

   Each working group had five to 19 stakeholder participants. Each group met at least once to discuss the programs and activities that could be involved in its strategy.
The executive interviews, regional stakeholder meetings and strategy development groups all provided valuable input for each phase of the process. The input also served as the foundation for the development of the regional workforce assessment, the inventory of the resources available in the region and ultimately, the regional action plan.

INITIATIVE PROCESS
The initiative process defined below did not follow a linear approach. In fact, a few of the steps were repeated throughout the process of the grant—but each step played a valuable role in developing a stronger foundation for the regional action plan that was created as the final phase of the initiative.

Step 1: Define the Challenge
From the outset, the advisors of this initiative believed that this grant should focus on two fundamental challenges facing the region's workforce community:

1. The ability to develop qualified replacement workers in those occupations and industries that require considerable skills and training and that face significant turnover in their workforce. The demand for replacement workers will only increase as baby boomers retire and many of the training and educational programs dedicated to these positions disappear or face capacity constraints.

2. The ability to develop qualified workers to meet the needs of our constantly evolving innovation economy. The creative destruction brought on by new technology and new industries changes the demand for workers' skills and abilities. This inherent churn in Silicon Valley's occupational makeup requires an equally responsive and flexible workforce system that retrains and develops the regional workforce for the new demands by regional employers.

As the initiative progressed, stakeholders universally confirmed the importance of these two fundamental workforce issues and their relevance as the foundation for this initiative.

Over the course of the grant, there was considerable discussion about adding an additional challenge to the initiative—developing a regional response to the economic downturn. As the national and regional economic environment worsened, the discussions became more robust. In the end, however, stakeholders agreed that the initiative should use the downturn as an important lesson and a catalyst to ensure that the region is never again unprepared for a severe economic downturn. The initiative would have as its ultimate focus long-term, regional workforce planning—not a short-term response to the recession. There was also a consensus that our regional workforce development system needs to be effective both in tight labor markets, where unemployment is relatively low, as well as much looser labor markets, where unemployment is relatively high.
Step 2: Identify Stakeholders

Silicon Valley’s workforce community is broad and diverse, with organizations and individuals representing a multitude of interests and objectives. The initial list of stakeholders was developed by the project advisors and included more than 50 individuals from more than 40 different organizations. This list included leaders from organizations in:

- **Education**, including representatives from community colleges, universities and related workforce educational institutions
- **Employers and industry associations**, including individuals from economic development organizations and chambers of commerce
- **Academia** and labor market experts
- **Labor organizations** and related organizations focused on apprenticeship training
- **Social service agencies** involved in workforce development
- **Statewide** workforce organizations

After the initial list was developed, several potential stakeholders were contacted for feedback on additional individuals and organizations that should be added to the list. Additional stakeholders were added throughout the process and they contributed feedback and expertise in the development of the regional action plan. To date, more than 100 stakeholders representing more than 80 organizations have participated in the initiative.

Step 3: Agreement on Common Outcomes

The initial stakeholders meeting in March 2009 focused on reaching an agreement on the objectives and common outcomes for the initiative. By reaching such agreement relatively early in the process, it provided an important foundation for the discussion and consensus on strategies and the eventual creation of the regional action plan.

Initiative advisors worked with the project manager to develop a list of potential common outcomes that was sent to stakeholders a week in advance of the March meeting. At the meeting, stakeholders narrowed and revised the list to three common outcomes:

**Outcome 1: Increase capability and capacity for adults to have access to skill building.** This outcome is focused on annually developing skills with individuals currently in the regional workforce and those who want to enter it.
Outcome 2: Raise the floor for workforce readiness. This outcome is focused on increasing skills and workforce readiness among regional residents with the lowest levels of education and skill development.

Outcome 3: Increase the pool of qualified applicants for targeted replacement job opportunities in the region. This outcome is focused on the industries (public and private) and occupations expected to be most impacted by retiring baby-boomers.

For a complete viewing of the final outcome document with a listing of stakeholders and beneficiaries, please see Appendix 1.

Step 4: Identify Strategies to Evaluate
The second stakeholder meeting in June 2009 focused on identifying all the strategies available to meet the outcomes listed above. It also identified individuals willing to participate in the working groups assigned to develop the identified strategies.

Stakeholder feedback from the executive interviews was the basis for the initial strategies document. Additional input from project advisors and best practices found in other regions rounded out the overall plan. A week before the June meeting, stakeholders received the initial strategies document. At the meeting, stakeholders were given the opportunity to suggest additional strategies and join a strategy development group (or groups).

Unlike previous stages, a unified consensus was not required for each strategy to move forward. If a group of key regional workforce stakeholders was willing to participate in the development of the strategy, the strategy could move forward. Certain strategies did not generate enough interest from stakeholders and were eventually dropped from the regional action plan.

Following are the strategy development groups developed at the June regional stakeholders meeting:

- Strategy Development Group 1: Regional Planning and Re-Employment. This group’s focus was on building regional planning tools that create a shared understanding of the economy and provide a clear direction of the skill building programs needed within the region. This strategy facilitated communication between stakeholders to explore opportunities to develop regional workforce solutions.

- Strategy Development Group 2: Regional Entrepreneurs and Self-Employment Training and Support. This group focused on expanding skill development programs for adult entrepreneurs and those considering self-employment.
• **Strategy Development Group 3: Incumbent Worker Training.** This group focused on providing skill-building opportunities for incumbent workers. Our current workforce development system is typically focused on supporting students or job seekers, yet a majority of working-aged adults is currently employed.

• **Strategy Development Group 4: Regional Job-Training with Entry-Level Employment.** This group focused on supporting and expanding the number of opportunities for entry-level employment that provide comprehensive job training. Job training programs would provide entry into career pathways with higher wages and opportunities for additional skill development.

• **Strategy Development Group 5: Adult Workforce Training & Education.** This group focused on developing workforce training and employment programs that benefit both the region’s lowest skilled and/or lowest wage residents as well as those higher up the socioeconomic ladder.

**Step 5: Develop a Regional Plan**

The final phase of the initiative focused on creating and finding agreement on a regional workforce action plan. The final stakeholder meeting in September 2009 introduced the key components of the regional action plan to stakeholders and gathered feedback on what was needed to finalize the document and move forward on its recommendations.
PART 3: THE REGIONAL WORKFORCE ACTION PLAN

Innovation is at the heart of what defines Silicon Valley, both in terms of the private employers in the region and the public institutions supporting the residents and businesses. In communicating with organizations outside of Silicon Valley, there is an expectation that Silicon Valley will be able to develop new and innovative models to overcome the workforce challenges facing the region and its counties. This initiative is built on the assumption that leaders from Silicon Valley’s workforce, employer, educational, labor, academic and social service communities can, and will, continue to come together and collaboratively create regional workforce solutions.

CORE THEMES OF THE REGIONAL ACTION PLAN

The regional action plan is built on core themes that can be traced back to the common outcomes agreed upon by stakeholders at the initial March 2009 meeting and feedback from stakeholders and advisors during the initial planning phases:

1. **Expand and improve the capacity for skill building among Silicon Valley’s current and future workforce.** The constant churn in the region’s innovation economy drives an ever-evolving need for new skills and abilities that are often difficult to forecast accurately. As such, the objective for this initiative is not to predict the new skills, but rather to develop the workforce infrastructure so that current and potential workers can quickly attain the new skills employers require to be relevant in Silicon Valley’s innovation economy.

2. **Improve workforce readiness among the region’s lowest skilled and lowest wage residents.** Silicon Valley, like other regions across the country, faces a growing wage gap between its most skilled and educated residents and those residents unable to attain a minimum level of education. Economists have pointed out the growing return on an educational investment\(^9\) for low-skilled workers—for not only the individual in terms of higher wages, but in terms of improved economic development opportunities for employers and the region. If Silicon Valley is going to meet the challenges of developing qualified replacement workers and preparing its workforce for the innovative occupations of tomorrow, it will need to improve the workforce readiness of the entire population.

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3. Prepare qualified replacement workers, trained and ready to assume the responsibilities of those workers that are leaving the workforce. Many of the occupations that will require a large percentage of replacement workers play a vital role not only in maintaining the region’s economic vitality but also its quality of life. The skills and abilities associated with many of these replacement occupations took considerable time to acquire. The potential “brain drain” in many of these industries and occupations will be considerable.

The demand for qualified replacement workers is not only being driven by the demographic bubble pushing baby boomers into retirement, but also the dwindling capacity and budgets for training and skill development programs among many of the region’s most critical occupations. Developing the workforce infrastructure to prepare qualified replacement workers throughout the economy remains a central component in the initiative planning objectives.

4. Build upon and leverage the resources already available in the region. Silicon Valley has a multitude of resources dedicated to supporting workforce development within the region. The state of California’s current budget challenges, coupled with the desire to limit the possibility of redundant or competing programs and infrastructure, led several stakeholders to voice support of leveraging already existing regional resources rather than building from scratch when at all possible.

5. Increase planned regional collaboration while reducing internal competition to increase overall funding for the region. In the current economic and budget environment, many organizations in the region’s workforce community are struggling to survive. They are primarily focused on finding new sources of funding to remain afloat in the coming years. Stakeholders agree that, as a region, we are more competitive for state and federal grants if we provide a proposal for regional solutions rather than taking a strictly local focus. Many new funding opportunities not only prefer a regional approach, they require it.

6. Consistent incremental changes toward a vision that transforms the entire region. Initiative participants have voiced their concern that we will not be able to get everyone in the room, and particularly the decision makers in the region, to agree on many of the big changes needed to move forward. However, several stakeholders and advisors have indicated that building collaborative regional workforce programs, even if relatively small in scope initially, will build the foundation for larger, more ambitious programs in the future.
7. **Focus on strategies and programs that are best developed and implemented regionally and respect those programs that are best maintained at the local level.** Stakeholders and advisors agreed that several aspects of workforce development should be planned and implemented regionally. However, there was also the recognition that not all aspects of workforce development should be regionalized—those components that can be done better locally should not be a part of this regional initiative.

The seven core themes provide a valuable foundation for the programs and activities in Silicon Valley’s workforce regional action plan. The following pages provide a description of the initiatives that make up this plan.

**REGIONAL WORKFORCE INITIATIVES**

The action plan identifies three distinct initiatives that are described on the following pages. However, the total vision is greater than the sum of its parts—the individual initiatives will be more successful as they develop in relation to one another. The initiatives include:

1. **Measuring regional workforce outcomes** that provide a critical barometer to the region’s workforce stakeholders. These broad, regional workforce metrics will measure how the regional workforce system is doing overall in relation to our shared workforce outcomes.

2. **Communicating annually through regional workforce summits** to determine best practices for the region and communicate directly with employers to ensure an effective industry-driven workforce system.

3. **Collaborating on a regional workforce agreement** with a shared commitment to communicating on discretionary grant opportunities, regional training and reemployment efforts and to identifying sectoral and industry cluster specialties between the regional stakeholders.

These initiatives were identified to support one another. As outcomes are measured, they will provide valuable information for regional workforce planners, who will then communicate at regional workforce summits, and lastly, coordinate and develop new programs and tactics to develop regional workforce solutions more effectively. The objective is to develop these three initiatives to work in concert with one another to overcome the region’s shared workforce challenges.
Initiative #1: Measuring Regional Workforce Outcomes

Early in the process, a set of metrics was identified that would provide a regional measure of how the region’s shared workforce outcomes are progressing. The success or failure of these outcomes, as revealed by the metrics, cannot be attributed to a single agency or organization. Instead, they illustrate the overall success of the region’s entire workforce system.

Outcome 1: Increase the region’s capability and capacity for adults to have access to skill building.

The regional metric would measure the annual percentage of the region’s workforce that has received training or completed an education program that can be used in the workplace.

This would be measured by identifying regional quantities of:

- Degrees, certificates and other academic achievements awarded
- Incumbent worker training provided
- Apprenticeships and internships completed
- On-line learning programs focused on workforce training
- Other training and educational activities connected to workforce development and career advancement (management training, soft-skills training, etc.).

As this metric is developed, stakeholders could adopt goals that provide a clear direction for what the region would like to accomplish. One example of this type of goal would be to have every adult in the region’s workforce develop new skill sets every two years.

Outcome 2: Raise the floor for workforce readiness for our low wage and/or low skill residents.

The regional metric would measure work readiness among the at-risk communities in Silicon Valley.

This would be measured by identifying and sampling at-risk communities within the region and understanding current workforce readiness in each of these communities. Assessment tools and career readiness certificates could be used to help determine current work readiness, along with skill building components used in Outcome 1.

As this metric is developed, stakeholders could adopt goals that provide a clear direction for what the region would like to accomplish. One example of this type of goal would be to reduce unemployment among Silicon Valley’s low skill and/or low wage residents by 50 percent by 2020.
Outcome 3: Increase the pool of qualified applicants for targeted replacement job opportunities in the region.

The regional metric would measure the annual percentage of mission critical jobs that are filled within 90 days.

This would be measured by communicating with employers to identify their mission critical jobs. From the list of mission critical jobs, data sources would be identified that indicate how long it took to locate qualified applicants. Proxy measures such as wage pressure on mission critical jobs could provide valuable insight into the available supply of qualified applicants given current demand for those positions.

As this metric is developed, stakeholders could adopt goals that provide a clear direction for what the region would like to accomplish. One example of this type of goal would be for all Silicon Valley employers to find qualified candidates to fill all mission critical job openings within 90 days by 2020.

These metrics will be developed and measured annually by Joint Venture as part of its regional Index. The methodology and data sources required to produce these metrics will require additional work and input from stakeholders moving forward.

Initiative #2: Regional Workforce Summits

The regional workforce summits will meet several needs of the region’s workforce system. First, they will provide an opportunity for stakeholders to communicate on issues, research and opportunities that impact the region’s shared workforce outcomes. Second, they will connect workforce stakeholders with employers and industry leaders who can provide key feedback to ensure a demand-driven workforce system. Third, they will provide a forum to respond and build upon the recommendations and ideas that have been generated throughout the regional workforce initiative process.

Program Description: This program would organize and implement a workforce forum twice a year for the region’s workforce community and regional employers. The workforce community would include the workforce investment boards, workforce educators (including community colleges and university extension programs), organized labor, relevant non-profit organizations and industry associations.

The two forums would have two distinct objectives. The first forum would focus on gathering workforce professionals and organizations from the workforce community to discuss collaborative opportunities for funding, examining best practices in training and re-employment efforts and sharing the latest workforce research findings.
This first forum would focus on the shared internal issues associated with regional workforce development efforts.

The second forum would include the workforce community and the region’s employers. The primary objective of the second forum would be to create a regional dialogue with employers to understand their needs better in the changing economic environment. This second forum could also solicit employer feedback and involvement on current training curriculum, sectoral initiatives and other relevant regional workforce programs.

This summit would build upon the agreements initiated between the workforce investment boards with regard to workforce development planning and the regional approach to developing grant proposals.

**Key Beneficiaries:** This program would focus on supporting the region’s employers and directing resources from the workforce development community more effectively.

**Expected Outcomes:** This program will measure its own ability to build new and stronger regional responses to workforce development and to create stronger relationships and programs with employers in the region and the workforce community. Ultimately, this program will look to create more effective and efficient programs for all three of the initiative’s outcomes.

**Resources within the Region:**
1. SV Works, Silicon Valley Leadership Group
2. LEED (Sacramento).

**Participating Partners:**
1. Silicon Valley’s Workforce Investment Boards
2. Regional Educators and Workforce Training Organizations (Community Colleges, Universities, ROP)
3. Economic Development and Industry Trade Associations
4. Regional Labor Organizations
5. Relevant Social Service and Non-Profit Organizations
6. Regional Employers
Initiative #3: Regional Workforce Agreement

The regional workforce agreement would begin to formalize the strategies and ideas that have been developed through this planning process. In particular, the agreement would focus on three key areas. First, regional discretionary grant opportunities would be discussed between stakeholders as they collaborate on a planned regional response—rather than having internal competition from organizations within the region. Second, stakeholders would identify regional leaders in sectoral specialties and industry cluster planning to build off the expertise of others and focus on their internal strengths. Third, the agreement would commit stakeholders to communicate on those regional training and re-employment efforts that connect employers, applicants and training programs that are not in the same locality but that can be connected within the region.

Program Description: This agreement would build upon the increasing communication and coordination between the region's three workforce investment boards and the regional workforce stakeholders that have participated in this process.

The agreement would state that each of the partners would be committed to communicating with one another on collaborative opportunities related to:

- Regional discretionary grant opportunities and related resource questions, particularly as they relate to state and federal grants. This component of the agreement would provide the first step to a regional cooperative that would have members coordinating and responding to regional discretionary grant opportunities.

- Identifying agencies that will take the lead on regional sectoral specialties, such as specific industry clusters or the needs related to specific workforce supply groups (e.g. low income, youth and aging workforce).

- Training and re-training opportunities that connect employers with potential employees from within the region but from outside of their respective local areas.

The agreement would be endorsed by each of Silicon Valley's workforce investment boards and other willing regional stakeholders. Over time, as the agreement is shown to be effective among participating organizations, it could be expanded to include all regional organizations that are involved in adult workforce development.
**Expected Outcomes:** The agreement will be measured in its ability to achieve three key outcomes:

1. Provide a more coordinated, collaborative and effective approach to funding from state and national sources-- achieving both higher total funding for the region as grant proposals from the become more competitive.

2. Develop regional sectoral and industry specialties to increase the depth of understanding and connections within the industries and reduce potential regional redundancy in industry and sectoral initiatives. This will ultimately create greater efficiency in labor market research, connections with employers and the development of sectoral programs.

3. Increase the ability of all regional stakeholders to connect workers to employers within the region and vice-versa, as well as employ training dollars to connect workers or employees to their counterparts within their community to the greater region.

**Potential Participating Partners:**

1. Silicon Valley's Workforce Investment Boards
2. Regional Educators and Workforce Training Organizations (Community Colleges, Universities, ROP)
3. Economic Development and Industry Trade Associations
4. Regional Labor Organizations
5. Relevant Social Service and Non-Profit Organizations
6. California Workforce Association
7. California EDGE Campaign
CONCLUSION

The economic churn that creates new industries and new occupational skill-sets has only intensified as the region looks to recover from the great recession. This time of economic transition has also delayed the need for skilled replacement workers but as the region recovers, the demand for these qualified replacement workers will only grow in importance. To remain the epicenter of innovation and entrepreneurship Silicon Valley must evolve to the changing needs of employers and their need for a skilled workforce.

Like most great challenges in the 21st Century our regional workforce plan ultimately requires changes in our behavior. Employers must communicate to the education and training community the changing needs of their workforce. Workers and job seekers must actively seek to acquire new skills that provide value to employers. Lastly, educators and training providers must respond quickly to the evolving needs of regional employers while providing greater flexibility in the approaches they offer workers and job seekers looking to acquire these new skill sets.

Ultimately, this workforce plan provides a blueprint for a more collaborative regional skill building system. The foundation of the regional collaboration is the three shared outcomes—improved skill building, expanded workforce readiness, and qualified replacement workers—that regional stakeholders agreed to work towards. As a response to the shared outcomes, the action plan emphasizes a regional approach to assessment, communication and collaboration between regional workforce stakeholders as tools to develop innovative workforce programs to positively affect these outcomes.
APPENDIX 1

Agreed-Upon Outcomes for the Workforce Initiative—March 6, 2009

Outcome #1: Increase capability and capacity for adults to have access to skill building. This outcome is focused on annually developing skills with those individuals that are currently in the regional workforce and those who want to enter it.

Benefactors for Outcome #1: Job-seekers and incumbent workers in Silicon Valley.

Stakeholders for Outcome #1: Education and training institutions, workforce development agencies, regional labor organizations and regional employers.

Outcome #2: Raise the floor for workforce readiness: This outcome is focused on increasing skills and workforce readiness among regional residents that have the lowest levels of educational attainment and skill development.

Benefactors for Outcome #2: Low-skill and low wage job-seekers and incumbent workers in Silicon Valley.

Stakeholders for Outcome #2: Education and training institutions, workforce development agencies, regional labor organizations and interested non-profits and social service agencies.

Outcome #3: Increase the pool of qualified applicants for targeted replacement job opportunities in the region: This outcome is particularly focused on those industries and occupations that are being impacted by retiring baby-boomers and are found among employers both public and private.

Benefactors for Outcome #3: Targeted employers who are being impacted by retiring baby-boomers.

Stakeholders for Outcome #3: Workforce development agencies, regional labor organizations and educational and training institutions.
**APPENDIX 2 - STAKEHOLDERS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Rich Allen</td>
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<tr>
<td>Allison Ascher-Webber</td>
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<td>Kathleen Barber</td>
<td>San Mateo County Electrical Joint Apprenticeship</td>
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<td>Anu Basu</td>
<td>San Jose State University</td>
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<td>Frank Benest</td>
<td>City of Palo Alto (retired)</td>
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<td>Larry Best</td>
<td>Silicon Valley Community Foundation</td>
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<tr>
<td>Denise Boland</td>
<td>County of Santa Clara</td>
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<td>Benny Boveda</td>
<td>work2future/Target</td>
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<td>Laura Caccia</td>
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<tr>
<td>Canday Capogrossi</td>
<td>Housing Authority of Santa Clara County</td>
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<tr>
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<td>NOVA</td>
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<tr>
<td>John Carrese</td>
<td>California Community Colleges, Center of Excellence</td>
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<td>Emmet Carson</td>
<td>Silicon Valley Community Foundation</td>
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<td>Dennis Cima</td>
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<td>Sandra Clark</td>
<td>University of California Extension, Silicon Valley</td>
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<td>Helyn Dahle</td>
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<td>Luther Jackson</td>
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<td>Martha Kanter</td>
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<td>Frank Kobayashi</td>
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<td>1st Act Silicon Valley</td>
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Established in 1993, Joint Venture: Silicon Valley Network provides analysis and action on issues affecting our region’s economy and quality of life. The organization brings together established and emerging leaders—from business, government, academia, labor, and the broader community—to spotlight issues, launch projects, and work toward innovative solutions.

Credits
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Steven Levy, Center for the Continuing Study of the California Economy—Contributing author
Duffy Jennings, Joint Venture: Silicon Valley Network—Executive editor
Kara Gross, Joint Venture: Silicon Valley Network—Contributing editor

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