Despite 6 years of economic growth, California's workforce investment system faces the following challenges: (1) meeting the needs of workers who do not earn enough to bring their families significantly above the poverty level; (2) meeting the needs of employers who face continuing shortages of workers with needed skills; and (3) meeting the needs of the millions of middle-income workers who are ineligible for most public workforce programs and increasingly cut off from private training efforts. To successfully address the needs of California's workers and firms, state policymakers must focus on productivity growth, career advancement, and agency partnerships pursuing a common workforce development strategy that includes the following components: (1) a solid foundation of basic workforce skills in K-12 education; (2) the ability of California high school graduates to attend college; (3) easy transitions from high school to career; (4) recognition that economies and labor markets throughout California are primarily regional in geographic scope; (5) emphasis on opportunities for workers within industries and sectors rather than in individual firms; (6) incorporation of the expertise of private sector employers; and (7) focus on the critical role of partnerships. The following items are appended: approaches for reducing poverty; occupational projections; and career ladder examples. (COntains 16 tables/figures.) (MN)
Shared Prosperity and the California Economy
Implications for California's Workforce Investment System

Written by the Center for Continuing Study of the California Economy

Sponsored by The James Irvine Foundation
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The metaphor of a train is used throughout this report to discuss workforce investment issues for the California economy.

The front cars are filled with workers who have the highest levels of skills and pay. Because California employers cannot find enough highly skilled workers, some seats in the front cars are vacant.

The middle cars are filled with workers with average levels of skills and pay. There are also vacant seats in the middle cars. The back cars are filled with workers with the lowest skill and pay levels, including most former welfare recipients.

Because California now has an unemployment rate of near 5 percent (lower in the urban regions, higher in rural areas), most workers are “on the train”—meaning that they are already employed. Most workers from low-income households are also already on the train. The 5 percent of California workers who are still unemployed are on the platform, hoping to get a seat on the train.

The report emphasizes the opportunities, for both workers and employers, of focusing workforce investment policies on helping workers move up to better jobs and pay. The report illustrates how workers in the middle and back cars can move up on the train by getting more training.

The cars on the train are connected, which mirrors the experience of the California economy. When people move from the middle cars to the front cars, more room is made in the middle cars for people now in the back cars. As people move from the back cars, it is easier for people on the platform to find jobs and get on the train.

Policies and programs that focus on move up opportunities help workers and their families achieve higher living standards while helping employers fill vacancies.
Executive Summary

The California economy enters the 21st century on a burst of strength. Incomes are up, unemployment and poverty are down and California industries are leaders in the world's fastest growing markets for goods and services. Despite a temporary economic slowdown in 2001, the state continues to have strong long-term growth potential. This economic strength, combined with recent legislation requiring states to develop new workforce investment strategies, presents California with an opportunity to significantly change the way it invests in its workforce.

The Center for Continuing Study of the California Economy (CCSCE) was asked by The James Irvine Foundation to identify “big picture” ideas that should be considered as the state crafts a new workforce investment system. In response to the national Workforce Investment Act (WIA) of 1998, the California Workforce Investment Board (WIB) and the state's 50 local Workforce Investment Boards are now beginning to develop new workforce investment strategies. This report is offered as an input into their work and as a contribution to the ongoing discussion of workforce investment policies in California.

The Challenge

In spite of six years of strong economic growth which have raised living standards for most residents, California's workforce investment system faces three challenges:

- Meeting the needs of workers who do not earn enough to bring their families significantly above the poverty level
- Meeting the needs of employers who face continuing shortages of workers with needed skills
- Meeting the needs of the millions of middle-income workers who are not eligible for most public workforce programs and increasingly cut off from private sector training efforts

Four Ideas for California's New Workforce Investment System

To address the challenges and opportunities facing California's workforce investment system, the report focuses on four main ideas:

1) From Job Growth to Productivity Growth. Workforce investment will be increasingly important for maintaining economic prosperity in California. Imagine the California economy as a train. During the past six years the speed of the train increased, partly because the train added more passengers (workers) and partly because those passengers became more productive. During the next 10 years the speed of the California train will depend much more on increased productivity from its passengers, for the following reasons:

California's workforce investment system refers to the institutions and programs by which people are educated, trained, upgraded and retrained for employment and participation in the workforce. Included are all segments of the system—from K-12 education and postsecondary institutions to public and private sector training programs and the workforce activities of labor, and community-based organizations. This report focuses primarily on strategies to bolster the skills of people already in the labor force. However, it is clear that the opportunities for successful skill building strategies depend on a solid K-12 education and, where necessary, on the availability of workforce readiness and family support programs.
Most workers are already employed and, therefore, “on the train.” In a low-unemployment economy, increases in living standards come almost completely from higher productivity.

Skills requirements are continually increasing—for workers in technology industries and for workers in all industries who use technology. If Californians cannot meet the challenge of acquiring higher skills, some economic opportunities will be lost to the state.

The importance of skill building is even more critical given California's high share of technology industries and high share of workers with less than a high school education.

2) From Employment to Move Up. For more than 30 years, the focus of American public workforce policy has been on helping poor and disadvantaged workers find and maintain employment. It is time to consider the need for public workforce policy to shift its emphasis from employment to move up strategies. The new California workforce investment system can best meet the needs of workers and employers by adding a primary focus on move up strategies, (meaning getting a better job through skills acquisition), to the existing focus on employment (meaning getting a job), for the following reasons:

Most workers, including most low-wage workers, are already employed. A move up focus addresses their training needs and their hopes for a higher standard of living.

Many California employers have unfilled job openings—unfilled from a shortage of workers with the appropriate skills. Existing workers, especially workers who already have some skills and experience, are the most likely candidates to move up to fill these openings. A workforce investment strategy focused on move up will simultaneously speak to the needs of low-skilled and middle-class workers.

Implementing a move up focus for public workforce investment funding will require rethinking current priorities and rules. The new Workforce Investment Act has the promise of universality—of being applicable to all workers. Move up is the central concept in moving from a categorical to a universal workforce investment approach.

3) From Single Agency Programs to Partnerships. New and innovative workforce partnerships are emerging as a significant response to the workforce investment priorities of workers and employers. The workforce partnerships involve some combination of business, labor, education and community-based organizations. In most partnerships one or more community colleges are partners. Exemplifying this new brand of partnerships is GlideTech, a partnership of Glide Church in San Francisco, Mission College and San Francisco City College and Manpower, which helps low-income residents with skills to build career pathways in information technology.

These partnerships focus on specific sectoral skill requirements and job opportunities. For example, the Cisco-Sun Academy at Opportunities Industrialization Center West (OICW) in San Mateo County prepares students to meet Cisco and Sun technician certification standards with immediate job opportunities in the $50,000 salary range.

The new partnerships have a strong regional focus serving potentially all firms in a region. For example, the auto mechanics training partnership at Shoreline College in Puget Sound, Washington,
serves the job needs of auto dealers throughout the region, just as the Fashion Design Center at Los Angeles Trade-Tech serves apparel firms throughout the Los Angeles Basin.

- Many of these partnerships include community colleges. California’s 108 community colleges represent a unique resource with the opportunity to develop region-based, sector-specific training partnerships accessible to every community in the state.

- Workforce partnerships are generally small in scale, have large waiting lists and are funded through a combination of public and private sector resources. The partnership model presents a tremendous opportunity to develop innovative, region-based approaches to workforce investment.

- The private sector is a critical workforce investment partner. Private sector firms bring essential information about skill requirements and job opportunities and can, in some cases, provide critical funding. Business participation in the new workforce investment boards has been substantially increased for precisely these reasons.

The large number of partners in California’s workforce investment system provides an opportunity to develop a wide variety of move up skill building approaches, and a challenge because no integrated workforce investment system exists today.

Partners in California’s workforce investment system include, but are not limited, to the following:

- Educational institutions from K-12 to community colleges, the California State University (CSU) and University of California (UC) systems

- Private sector firms which provide the majority ($7 billion in 2000) of training dollars

- Public sector funding and programs, including the state and local Workforce Investment Boards, the California Employment Training Panel (ETP), welfare-to-work funding and the California Employment Development Department (EDD)

- Public and private workforce training providers and the California Workforce Association

- Labor and community-based organizations

4) From Conflict to Common Purpose—One Economy, One Workforce, One Workforce Strategy. On the California economy train, all the cars are connected. Imagine that the workers with high skills and experience are riding in the front cars, workers with low skills and experience in the back cars, and the majority of workers in the middle cars.

Workers in the middle cars can acquire new skills and fill the vacant seats in the front cars. Workers in the back cars can gain skills and experience to fill the vacancies in the middle cars that were created when workers moved up to other front cars. Workers who are off the train (unemployed) now have a better chance of finding a seat on the train.

The report contends that the state’s social and economic policy objectives will be most effectively addressed if workers in all cars are the focus of California’s new workforce investment system. California’s regions share one economy and one workforce. As a result, in the CCSCE’s view, California’s regions should have one universal workforce strategy and system—a system implemented with the help of many partners.
Suggested Next Steps For California’s Workforce Investment Strategy

The first step in creating a new California workforce investment strategy is to focus the state’s policies on the development of career ladders skill-building programs to help existing workers move up to better jobs and higher pay. The second step takes this further by suggesting the state place a priority on providing these move up training opportunities to the working poor.

Components of A Successful Workforce Investment Strategy

The report identifies seven major components of a public workforce investment system that would address the needs of workers and firms in California’s economy:

1) A solid foundation of basic workforce skills in K-12 education
2) The ability of California high school graduates to attend college
3) An easy transition from high school to career
4) The recognition that economies and labor markets throughout California are primarily regional in geographic scope
5) An emphasis on opportunities for workers within industries or sectors, not individual firms
6) Incorporation of the expertise of private sector employers—from knowing the future direction of skill requirements and employment opportunities to having the experience of designing successful training programs and policies
7) Focus on the critical role of partnerships

Moving Toward Universality...

Broadening Past Priorities

Designing a universal workforce investment system will create a new set of priorities. The current major public funding sources for workforce investment, WIA and welfare-to-work, do not give priority to career ladder development or move up strategies. They continue the emphasis of the past 30 years in placing the major priority on helping poor and disadvantaged workers find and keep jobs.

There are four steps which can be taken now to support a career ladder focus and which provide direction on how best to modify or augment existing funding and funding priorities:

1) The State Workforce Investment Board should adopt a policy priority about career ladders.
2) Local Workforce Investment Boards should continue to support new and innovative partnerships that help workers acquire skills to move up to better jobs and careers. Local WIBs should use existing WIA funding, where possible, and develop non-WIA funding partnerships to support career ladder programs.
3) The California Employment Development Department, in collaboration with other workforce investment partners, should compile a directory of all existing labor market information related to career ladders.
4) Local Workforce Investment Boards, in collaboration with other workforce investment partners should compile a directory of existing career ladder development efforts in California’s regional economies and best practices in other states.

Expanding Eligibility to the Working Poor

*Shared Prosperity and the California Economy* contends that refocusing California’s workforce investment system so that it is oriented to the needs of the economy and of all workers will require commitment and time. However, there may be broad agreement about where to begin in expanding the focus of the current system. There is agreement that the working poor, which includes workers in families up to 200 percent of the official poverty level, are 1) underserved by current workforce investment patterns and 2) have the potential to immediately help themselves and the California economy through move up strategies for skill building and career development.

This ‘working poor’ skills upgrading/job mobility is the next frontier in employment policy and practice. Over the past 30 years in the United States, we have developed a job training system that to a great extent works in placing lower-income unemployed persons into entry-level jobs. The system, though, has little contact with persons who are employed in low-wage jobs. In fact, it has long been an anomaly of job training that someone who is unemployed or on welfare is eligible for far more training services than someone who eschews welfare for employment in a low-wage job.

*Michael S. Bernick, Director*  
*California Employment Development Department*

A “GI Bill” for Workforce Investment

In 2000, Governor Davis and the Legislature made a substantial commitment to increasing access to higher education with a major increase in funding for the Cal Grants program. Now is the time for California’s workforce investment partners to think about a similar commitment to existing workers and employers and to make a commitment to develop a vision and implementation strategy for a “GI Bill” for workforce investment—a universal approach to helping existing workers build skills, career ladders and income.

Who is Responsible

A successful workforce investment system in California will require leadership from: the Governor; the Legislature; the entire K-12 education system; public higher education institutions (with a primary focus on California’s 108 community colleges); the private sector (with a primary focus on giving guidance to local workforce investment boards and newly formed workforce partnerships); public workforce programs, including the participation of the state and local workforce investment boards,
the California Employment Development Department, the California Employment Training Panel and welfare-to-work programs; and labor and community-based organizations.

### California’s Economic Slowdown Does Not Affect the Report’s Findings and Recommendations

California is currently experiencing an economic slowdown. In addition, the short-term outlook for energy sufficiency is uncertain. However, the key findings and recommendations of this report are unaffected by short-term economic and energy fluctuations.

1) The long-term outlook for the California economy remains strong. Businesses will need more workers with higher skill levels.

2) Workforce investment strategies should focus on long-term opportunities and needs. Workforce programs have no tools to combat short-term economic downturns and any effort to adapt workforce programs to take account of recessions is ineffective and inappropriate.

3) The job of developing a long-term workforce investment strategy for California is both challenging and very important. To get distracted by current economic and energy uncertainties would be a huge mistake.
Introduction: An Overview of California’s Workforce Investment Strategy

The California economy enters the 21st century on a burst of strength. Incomes are up, unemployment and poverty are down and California industries are leaders in the world’s fastest growing markets for goods and services.

At the same time, technological innovation is pushing the skill requirements needed to participate in California’s economic growth steadily higher. Technological change is affecting the way work is conducted throughout the economy. The challenge of raising skills is not confined to technology industries alone.

The state’s long-term economic strength presents an invitation to significantly change the state’s workforce investment strategy. The passage of the federal Workforce Investment Act (WIA) in 1998 offers the possibility of significant change in the focus and scope of state workforce investment policies.

California’s State Workforce Investment Board (WIB) and the 50 local Workforce Investment Boards throughout the state are today crafting the new workforce investment strategy and policies for California’s workers and firms. This report is offered as an input into their work and as a contribution to the ongoing discussion of workforce investment policies in California.

What is California’s Workforce Investment System?

California’s workforce investment system refers to the institutions and programs by which people are educated, trained, upgraded and retrained for employment and participation in the workforce. Included are all segments of the system—from K-12 education and postsecondary institutions to public and private sector training programs and the workforce activities of labor and community-based organizations.

Key Components of California’s Workforce Investment System

The basic foundation of California’s workforce investment system is a solid K-12 education. California’s K-12 education can, and should, provide the skills for residents to enter the workforce either immediately, or after acquiring more education and training.

California has an array of postsecondary education and training institutions. California’s three public postsecondary education systems—community colleges, the California State University (CSU) system and the University of California (UC) system—all have programs that are directly or indirectly part of California’s workforce investment system. California also has many excellent private postsecondary institutions ranging from some of the world’s finest colleges to specialized vocational and career development programs.

The primary public sector employment and training programs are Cal Works, California’s welfare-to-work initiative, and programs funded under the new Workforce Investment Act. These programs share three characteristics relevant to California’s future workforce investment program:
1) They target residents who are disadvantaged in terms of getting and keeping a job.

2) Funding is not primarily focused on training or career development.

3) Program graduates often have incomes below, or just above, the poverty level.

The California Employment Training Panel (ETP)—with approximately $100 million in 2000 funding—is currently the only major public sector workforce program that focuses on training workers who already have jobs and who are not poor. The ETP is also the only public sector workforce program with a major focus on developing career ladders.

Currently, most training of existing workers is funded and provided by private employers. Private sector training is a critical part of California’s workforce investment system:

- Private sector programs provide significant funding for training. Private industry spent approximately $60 billion on training in 2000—equal to nearly $500 per private sector
employee. If California employer spending matched the national average, approximately $7 billion would have been spent in 2000 on employee training.

- Private sector programs develop world-class training methods and curricula.
- Private sector employers are, increasingly, partners in California’s newly emerging public-private training partnerships.

**Four Ideas for California’s New Workforce Investment System**

The Center for Continuing Study of the California Economy’s (CCSCE) was asked by The James Irvine Foundation to identify “big picture” ideas that should be considered in crafting a new workforce investment system for the state. The report focuses on four main ideas:

1) **From Job Growth to Productivity Growth.** Workforce investments will be a significant determinant of how fast the economy grows. Imagine the California economy as a train moving down the track. The speed of the train represents the rate of economic growth. The speed of the train is determined by 1) how fast workers are added to the train (labor force growth) and 2) how fast the skill level of workers on the train rise (productivity growth).

In the coming decade, productivity growth, aided by workforce investment, will play an increasing role in determining the speed of the train. Moreover, for the reasons identified in the next section, California needs a greater workforce investment effort than most states, despite the state’s impressive recent economic track record.

The speed of the train is important to all Californians. As California’s economic growth has accelerated since 1995, real earnings have surged, poverty and unemployment rates have dropped and public sector revenues have been available for needs left neglected by a long and deep recession in the early 1990s.

2) **From Employment to Move Up.** The needs of California’s workers and firms call for a shift in priorities for public workforce policy, from employment (helping unemployed workers get and keep jobs) to move up (helping workers add skills to maintain and increase their standard of living through upward career mobility).

On the California economy train, the priority of workforce policy should shift from helping workers get on the train to helping the train move faster and helping workers on the train get better seats. The shift in priorities must be implemented in a way that does not abandon our concern for poor or disadvantaged populations.

3) **From Single Agency Programs to Partnerships.** New workforce partnerships provide models for successful workforce investments. Throughout the nation, business, labor, education and community-based organizations are forming workforce partnerships. Partnership objectives range from providing high school students with specific career direction and ideas to providing specialized skills training for existing workers with immediate post-training employment opportunities.

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2 CCSCE recognizes that significant administrative and accountability issues must also be addressed. There must be ways for participants to develop effective workforce partnerships and the final system must be run on solid business principles including accountability. These administrative and accountability issues are addressed elsewhere and are not the primary focus of this report.
Move Up Strategies, Skill Building and Career Ladders

“Skill building”: refers to the acquisition of skills that help workers get a job, keep a job or move up to a better job.

“Move up strategies”: refers to programs focused on helping existing workers acquire skills in order to move up to a better and higher paying job. Move up strategies help workers and address the need of businesses for more highly skilled workers.

“Career ladders”: shows the progression of jobs from low skilled to high skilled within a given occupation or company. For example, a career ladder in restaurants shows the move up steps starting with counter clerk or cook’s aide and ending with manager or head chef. A focus on career ladders is fundamental to the success of move up strategies.

These partnerships fill some of the gaps in today's private and public sector workforce programs. Examples of successful partnerships are discussed throughout the report.

Many existing partnerships are small in scale and usually have long waiting lists. The public policy challenge for California is how to expand use of this partnership model and what the appropriate public sector roles are in partnership development.

4) From Conflict to Common Purpose—One Economy, One Workforce, One Workforce Strategy. We must reduce the tendency of workforce funding to pit one group against another. This is a time of great potential change in California’s public sector workforce strategy. CCSCE acknowledges the fear that a call for universality will mean less opportunity for poor residents. These concerns must be discussed openly if we are to move from contention to common purpose in the design of a new workforce strategy in California.

Most current public sector workforce policies reserve the majority of funds for workers who meet specific eligibility criteria, usually for workers who are unemployed or disadvantaged. Even the majority of poor workers (the working poor) are not eligible for assistance in upgrading their skills and middle-class workers are assumed to be able to fend for themselves.

In the California economy train all the cars are connected. Workers in the middle cars can acquire new skills and fill the vacant seats in the front cars. Workers in the back cars can gain skills and experience to fill the vacancies in the middle cars that were created when workers moved up to other front cars. Workers who are unemployed and, therefore, “off the train” now have a better chance of finding a seat on the train.

The Center for Continuing Study of the California Economy believes that the state’s social and economic policy objectives will be most effectively addressed if workers in all cars are the focus of California’s new workforce development system. California’s regions have one economy and one workforce. As a result, in CCSCE’s view, California’s regions should have one universal workforce strategy and system.
California's Workforce Investment System: The Target Population

Who should be the principal target population for California's new workforce investment system? The current system has evolved around two very different sets of perspectives and objectives.

The current public sector workforce programs are oriented to unemployed and disadvantaged workers. The major categories of residents who are eligible for public sector funding include welfare recipients, at-risk youth, unemployed adults and dislocated workers.

These programs serve the broad, national social objective of reducing unemployment and poverty through work. Most of these programs have been restructured several times—most recently the 1996 welfare-to-work legislation and the 1998 workforce legislation—in an attempt to better achieve the underlying social goals.

Most other parts of the workforce investment system—postsecondary training, private sector training and public-private partnerships—are oriented to the demands of the economy. These programs take their cues from the needs of employers in terms of specific skills and training.

The largest gap in today's system is the gap for workers who are "lost in the middle." California's existing public workforce funding is oriented to the state's poorest workers. On the other hand, California's system of public four-year higher education institutions and most private-sector training dollars are focused on the top 25 to 30 percent of the workforce measured by education and earnings.3

The private sector in the past provided most of the training for workers "lost in the middle" and was supplemented by the acquisition of additional skills initiated by the workers themselves. There are several reasons why declines in private-sector training have recently left many workers lost in the middle.

1. Small firms and medium-sized firms have trouble supporting training programs, and an increasing share of jobs are in these firms.

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3 According to the National Household Education Survey (U.S. Department of Education, 1995), highly educated workers get a disproportionate share of private sector training dollars. More than 20 percent of college graduates received employer required education and training compared with 10 percent of workers with less than a high school degree. Moreover, workers in the bottom 20 percent measured by wage levels are half as likely to have received training as workers in the top 20 percent.
2. The increased mobility of workers has decreased the incentive of individual firms to provide specialized training.

3. Industries with many middle-class jobs, strong union representation and established internal career development programs make up a smaller share of the nation's job base than at any time during the past 50 years.

This report argues for a public policy focus on workers who are lost in the middle. There is currently no public workforce strategy to compensate for the reduced private sector focus on career ladder development efforts for these workers.

Where to Start?

Refocusing California's workforce investment system so that it is oriented to the needs of the economy and of all workers will require commitment and time.

However, there may be broad consensus about where to begin in expanding the focus of the current system. There is agreement that the working poor, including workers in households with incomes up to 200 percent of the official poverty level, are 1) underserved by current workforce investment patterns and 2) have the potential to immediately help themselves and the California economy through strategies that build skills and advance career development.

Developing approaches that respond to the workforce investment needs of California's working poor can be the first step in building a more universal workforce investment system.
Defining the Working Poor

The U.S. Department of Labor definition of working poor has two components: 1) working—meaning working or looking for work at least 27 weeks during the year and 2) poor—living in a household whose income is below the federal poverty level—$17,029 for a family of four in 1999. In 1999, there were 6.8 million workers who met these criteria—5.1 percent of the national workforce.

Many more workers live in households with incomes between 100 percent and 200 percent of the federal poverty level—in 1999 approximately 20 million workers. These two groups share many of the same workforce challenges. CCSCE joins with other organizations in expanding the definition of working poor to include workers who meet the up to 200 percent of the poverty level criteria.
The Connections Between Economic Growth and Workforce Investment Strategy

Public policy, both in the state and nation, has two main goals related to the economy:

1) To maintain high rates of economic growth so that living standards can rise
2) To ensure the widest possible participation in prosperity and rising living standards

Policies and programs that raise skill levels are critical to meeting both objectives. The continuation of high rates of productivity and income growth will require a steady increase in the ability of workers, consumers and businesses to adapt to technological innovation. Economic growth and rising workforce skills are connected.

This section reviews current and projected trends in the California economy with a focus on answering three questions: 1) How well is the economy meeting the goals of high economic growth and broad participation in the benefits of that growth? 2) Where is the California economy headed in the next 10 years? and 3) What are the implications of California economic trends for workforce investment policy?

The U.S. and California Economy Surge Ahead

From 1995 through 2000, productivity growth in the United States was significantly higher than during any five-year period since the mid-1960s. At the same time, strong job growth pushed unemployment rates to the lowest levels in the state and nation since 1969. Moreover, strong job growth has pulled workers into the labor force such that overall labor force participation rates in the state and nation are the highest in recorded history.

Recent economic growth has raised wages and living standards for all groups, including real wage growth for the lowest paid workers. Unemployment rates for minorities are at the lowest levels since these statistics began. Poverty rates in the last three years have fallen significantly in the state and nation. In addition, economic growth has raised state and federal revenues and turned our attention to the best way to meet public investment needs long left neglected by years of slow economic growth.

The California Economy Roars Back

The California economy has produced rapid gains in jobs and income during the past five years. Three factors account for the high rates of economic growth in California since 1995:

1) High rates of job growth which tightened labor markets and pushed unemployment rates down
2) High rates of productivity growth which raised wages and profits
3) Job and wage gains in the California economy that outpaced national growth rates

Job Growth

The California economy experienced a long recession in the early 1990s—far longer and deeper than the national downturn. In 1995, California had an unemployment rate of 7.8 percent (versus 5.6 percent in the nation) and a poverty rate of 16.8 percent—far above the national rate of 13.8 percent.
Table 1

California and United States Nonfarm Wage and Salary Jobs (Thousands)

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<th>1990</th>
<th>1995</th>
<th>2000</th>
<th>Percent Change</th>
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<tr>
<td>California</td>
<td>12,449.9</td>
<td>12,422.2</td>
<td>14,531.3</td>
<td>-0.6%</td>
</tr>
<tr>
<td>United States</td>
<td>109,254.1</td>
<td>117,039.4</td>
<td>131,414.3</td>
<td>7.1%</td>
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Job growth in both the state and the nation accelerated after 1995. The gains were especially strong in California. After a small job loss (0.6 percent) between 1990 and 1995, state job levels rose by 17 percent from 1995 through 2000—far outpacing the national growth rate during this period.

The impact of these high job growth rates on unemployment and poverty was striking. In February 2001, California’s unemployment rate was 4.5 percent—half of what it was at the bottom of the recession and the lowest unemployment rate in California since 1969. The unemployment rate for Black and Hispanic workers in the state was the lowest in recorded history. California’s poverty rate in 1999 was 13.6 percent—down from the peak of 18.2 percent in 1993, but still above the national poverty rate of 11.8 percent.

![California Unemployment Rate](chart1.png)

![Poverty Rate in California](chart2.png)

Productivity Growth

Between 1995 and 2000, productivity rose at 2.7 percent per year in the United States. This is nearly double the rate of productivity growth in the preceding two decades. The last time that the U.S. economy experienced this large of a surge in productivity was in the mid-1960s.

The combination of high productivity growth and falling unemployment rates created a surge of economic growth in California and the United States during the past five years. Gross domestic product (GDP), which measures the size of the national economy, grew by more than 4 percent...
per year from 1996 through 2000. The last time U.S. growth rates were this high for a five-year period was from 1962 through 1966.

California's economic growth since 1995 has been even more striking. Gross state product (GSP) grew 5 percent per year from 1995 through 2000—the result of a sustained drop in unemployment rates and a strong increase in real wages. One result has been sustained growth in taxable income and the emergence of substantial revenue increases for the state government.

Economic growth in California has produced gains in real wages, as wage rates have risen far faster than the rate of inflation. Even as average wages are rising, there is concern that low paid workers are not participating in the economic gains. In 1996 this trend reversed and wage gains for the lowest paid workers began to rise more than the average wage, aided by strong labor force demand and an increase in the minimum wage in 1997 and 1998.

Managers are using information technology to revolutionize how they buy, make, and distribute what they sell. At United Technologies Corp., for example, Kent Brittan, vice-president of supply management, needed to cut purchasing by $750 million in 2000. He beat that by $100 million—by buying materials through Internet-based auctions and by using the company's internal Web site to coordinate and track all purchases. "We're on a roll here, and we're just going to keep expanding this search for efficiencies," says Brittan. Similarly, General Mills Inc. expects to reduce per-case shipping costs as much as 7 percent by pooling deliveries through its new Web-based alliance of carriers and manufacturers.

*Business Week*  
January 8, 2001
The red Lincoln Town Car idled in the rain near 51st Street and Lexington Avenue in New York City. It was 8 p.m., and driver Pargav Asatrian was waiting for a customer, a Philip Morris Co. employee bound for Montclair, N.J. The customer was already half an hour late. So Asatrian picked up a stylus and dashed off an e-mail on the keyboard of a tiny computer protruding from the dashboard. The device, connected to the Internet with a wireless modem, zapped the message to a dispatcher at Citicar Transportation in Queens. The response arrived a moment later. ‘Job canceled.’

The installation of this system reflects the force that swept through the telecom market in 2000. Drivers say they prefer it because it is quieter and actually faster than the old radio. In a pinch, headquarters can even e-mail a map to a driver.

*Business Week*
January 8, 2001
Productivity Growth is the Result of Technological Innovation and Investment That Affects Everyone

The surge in productivity growth has two principal determinants: 1) high rates of investment in new equipment and software and 2) the ability of a growing share of workers and households to effectively use the new technology in their daily lives and work.

The United States has seen a large and sustained increase in investment in technology—in new equipment and software—during the 1990s. Since 1992, these investments have grown by more than 10 percent annually above the rate of inflation. While these investments are the result of advances in the nation’s high tech industries, their use benefits most workers and those who use the new technology on a daily basis.

- A majority of students use technology as an aid in learning.
- Airplane and hotel reservations have been made less time consuming and more convenient for travelers through widespread use of the Internet.
- Shopping for everything from books to clothes to cars and even homes can be done on the Internet, often with significant time and money savings.
- Technology has improved productivity in retail and manufacturing sector inventory management and in the delivery of goods by truck and express services.
- Throughout the economy, technology is improving productivity and reducing costs in the production of goods and services.

High rates of productivity growth require much more than just increasing skill requirements in the technology sector. The spread of technology increases opportunities and skill requirements throughout the economy—in the production of apparel, in metalworking, in retail and financial sectors, in the delivery of mail and packages and in teaching, medicine and the design of nearly all new products.

California is the Leading Center for Technology and Innovation

The California economy is outperforming the national economy during this period of rapid technological change and strong economic growth. One major reason is that California firms have a leadership position in most high tech sectors. The state has an above average share of jobs and production in nearly every high tech sector, and in many sectors California’s share is still rising.

California firms have a rising share of national high tech manufacturing jobs, a rising share of software jobs and a dominant share of new venture capital investments. In 2000, California had a record high 21.6 percent of U.S. high tech manufacturing jobs, a record high 17.6 percent of U.S. computer service jobs and more than $30 billion in new venture capital fundings. Year after year, California gets approximately 45 percent of the nation’s venture capital funding—laying a solid foundation for future growth in jobs and income.

The significant role of technology industries in the state’s economy makes workforce training policies even more important in California. First, the state faces the challenge of accommodating rapid technological change and increasing skills requirements throughout the economy.
In addition, some California firms face the challenge of maintaining a leadership position in developing the next round of technological innovation.

**Why Does a Growing Economy Need a Workforce Investment Strategy?**

Recall the train metaphor for the California economy. With the speed of the train representing how fast the California economy is growing in terms of output and earnings, the front cars are filled with workers with the highest levels of education and training. The back cars are filled with low-skilled workers including those, like former welfare recipients, who have just gotten on the train. Most workers are in the middle cars and hold the millions of middle level jobs in California's economy.

If you look closely, you will see that seats in the front and middle cars are vacant—representing both shortages (from the employers' perspective) and opportunities (from workers' perspective). We will talk more about these vacant seats in the next section of this report.

In terms of the train metaphor, there are three reasons why a growing economy needs a workforce investment strategy:

1) Skills acquisition will determine how fast the train runs in the decade ahead.

2) There are empty seats toward the front of the train. Filling these seats helps workers and employers simultaneously.

3) Even a booming economy leaves some workers near poverty. Workforce investment strategies are one important approach to help poor families.

Workforce investment strategies are also important in a slowing economy. Higher skills are the best security against the adverse effects of an economic slowdown.
The Critical Role of Productivity Growth

For the past five years, the California economy train has been moving rapidly. The train has added workers as unemployment rates fell and workers previously out of the labor force (such as welfare recipients) joined the workforce. In addition, workers on the train have become more productive.

One reason that workforce investment is critical even with a booming economy is that the proportion of economic growth provided by productivity gains will rise in the decade ahead, while the share provided by labor force growth will fall. So the speed of the California economy train will depend more on the acquisition of skills by workers already on the train and less by the addition of workers onto the train.

Labor force growth will slow in the next 10 years as baby boomers begin to retire and most people in the labor force are already on the train (employed). The high rates of productivity growth between 1995 and 2000 can only continue if technological innovation continues and workers acquire new skills to keep pace with new technology.

You're Only as Good as Your Next Workforce

My step-mom and her family ran a small apparel manufacturing company in Los Angeles while I was growing up. It was a marvelous, vibrant place. The faces in the factory and the feelings there in the 1950s and 1960s taught me a lot about how what today we call "California's changing demographics" could be a positive force.

Whenever there was a rush of success in the business, my step-mom reminded me of the old rag trade saying, "You're only as good as your next line." The "line" was the set of girl’s blouses and dresses, which was shown to department store buyers four times each year. No matter how well the last line was designed, future success depended only on the next line.

Today’s economy is like that apparel factory. Technological innovation is constantly changing the design of goods and services and changing the way work is conducted. Innovation changes the skills required to compete successfully.

A booming economy is like a successful spring line of dresses—nice, but only as good as its next workforce.

—Stephen Levy
Center for Continuing Study of the California Economy

Shortages of High Skilled Workers

The second reason why a booming economy needs a workforce investment strategy is that California’s industries face shortages of skilled workers.

Employers throughout California are united in the call for improvement in the state’s workforce preparation system. Many employers are worried that students graduating from high school don’t have a solid foundation in reading, math and problem solving. Some employers face a shortage of workers with specific skills. Most employers face situations where skills upgrading is a continual business imperative.
Employers are concerned about worker and skill shortages, not just in technology sectors but throughout a wide variety of industries. Employers are beginning to become partners in programs to address their workforce concerns. Some of these efforts are mentioned below and discussed in more detail later in the report.

**Every industry cluster told our Panel that skills improvement through education and workforce training was its top priority. Our Panel strongly heard that California's workforce preparation programs (including vocational education, job training, adult education and school-to-career) must change. Ongoing skills improvements is necessary for California industries to maintain a leadership position in the global economy, and for creating opportunities for our workers to share in future economic growth.**

*Collaborating to Compete in the New Economy, California Economic Strategy Panel (www.commerce.ca.gov/california/economy/neweconomy)*

**High Tech**

The rapid increase in demand for workers in technology sectors has been well documented. Recently, in response to requests from high tech companies, Congress approved an increase in the number of foreign worker visas (the H-1B program) in selected occupations. The same legislation doubled the fee paid by companies (to $1,000) to fund programs to increase the supply of U.S. high tech workers.

Companies in California are developing partnerships with community colleges and universities to train workers who are, then, virtually guaranteed immediate employment. Examples of these partnerships are described throughout the report.

**Metal Working and Machinery**

More than half of the machinists in Southern California are reaching retirement age. The occupation is rapidly requiring sophisticated computer skills. The old infrastructure of high school, community college and vocational training programs in Southern California has shrunk during the past decade. The career ladder in metalworking combines good entry-level wages with prospects for substantial career advancement.

The Gateway Cities Partnership, along with the Southeast Los Angeles County Workforce Investment Board, was just awarded a $2.8 million grant from H-1B Visa matching funds to develop
technical training for machinists and Computer Numerical Control (CNC) professionals. Partners include Cerritos College, Long Beach City College, Rio Hondo College, Compton College, the International Association of Machinists and the CSU Los Angeles, Long Beach and Pomona Campuses.

Apparel

The industry employs more than 140,000 workers in California, primarily in the Los Angeles Basin. Prospects for California’s apparel industry increasingly depend on competitive advantages in the use of technology in design and production. Employers report shortages in many positions.

The innovative technology program in apparel design and manufacturing at Los Angeles Trade-Technical Community College is described on page 43.

Construction

The projected job and population growth in California, combined with past deficits in housing and infrastructure, will require a steady increase in construction activity throughout the state. Yet, even now, there are signs of worker shortages in the construction sector. Moreover, California will need even higher levels of housing and infrastructure building in the years ahead.

Construction provides a large and relatively fast growing source of high-wage job opportunities that do not require a college degree.

### California

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Jobs</td>
<td>505,900</td>
<td>679,200</td>
</tr>
<tr>
<td>Average Annual Wage</td>
<td>$32,608</td>
<td>$37,501</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department

A Strong Economy Still Leaves Many Workers With Low Incomes

Economic growth has raised incomes and reduced poverty and unemployment in California. A continuation of strong economic growth will lead to even more progress in raising incomes and reducing poverty.

Yet some workers, including most former welfare recipients, earn wages that leave their families close to poverty. Many workers, some with long work histories, find their family income between 100 percent and 200 percent of the poverty level—not in poverty, but constantly struggling to make ends meet.

While low wage workers have experienced real earnings growth since 1995 (see page 19), these gains did not erase two decades of declines in real wages. Workers in the bottom 20 percent, measured by earnings, have experienced real wage declines even after including the recent boom years.5

California’s Workforce Investment Needs Are Not Confined to Information Technology Workers and Industries

The tables in this section use statewide data. However, workforce investments should be made on the basis of regional labor markets and regional industry needs.

Local Workforce Investment Boards and local workforce investment partners need the information

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5 Workforce investment strategies are not the only policies needed to reduce poverty. For a discussion of other policies, see Appendix A.
shown below for their regional economy. The California Employment Development Department can assist local and regional partners in developing information at the regional level.

This section includes an overview of job and occupational projections for the California economy in the next 10 years. The projections demonstrate an important finding for shaping a new workforce investment strategy for the state. **New job opportunities will occur in a wide variety of industries and occupations throughout the state.**

1) Most new jobs do not involve the development of new technology products and services.
2) Job growth will occur in occupations requiring varied skill levels.
3) Retirements and occupational changes provide a demand for as many new workers in specific occupations as does net job growth.

The millions of jobs in industries and occupations outside of high tech represent needs and opportunities for workforce investment as much as jobs within the information technology sectors. Most jobs—in every sector from construction to apparel and travel industry to retailing, nursing, and teaching—are changing in ways that require the application of new technologies.

Major job and occupational projections for California are shown below. These projections can also be developed for all of California’s regional economies. It is these regional projections which will be of primary interest to the state’s new local Workforce Investment Boards.

If the goal is to know how fast the California economy will grow, a study of the state’s economic base (industries that export goods and services to other states and countries) is essential. These basic industries determine how fast the states will grow relative to the U.S. economy.

A summary of California’s economic base described in seven major sectors is shown below. These sectors included 4.3 million jobs in 2000 and most of California’s information technology sectors. Two important implications for workforce investment are:

1) **Most of California’s jobs are not in the state’s economic base. Only 4.3 million of the state’s 16.3 million jobs in 2000 were in basic industries.** More than 70 percent of total jobs are in population serving sectors, including construction, retail trade, finance, health services and state and local government—five sectors with 7.0 million jobs in 2000. Population-serving sectors provide, numerically, the largest opportunities for a new workforce investment strategy to meet the needs of workers and firms.

2) **Even within the state’s economic base, there are workforce needs and opportunities in low-tech sectors like apparel, machinery, wholesale trade, and hotels.** These sectors are represented in the examples of successful workforce investment programs designed throughout the report.

**Good Wages are Not Limited to High Tech Sectors**

It is true that information technology-intensive sectors have high average wages and strong current wage growth—in part fueled by stock options and the rising stock market. For example, between 1996 and 1999, the state added 85,000 software jobs with an average 1999 wage level of $88,970. Yet industries that do not require college degrees, and that are not heavily influenced by stock...
options, also showed strong job and wage gains. Construction and wholesale trade are two large examples. Future job prospects are good in all of the industries shown below.

**Occupational Projections**

Occupational projections prepared by the California Employment Development Department are summarized below and in Appendix B. The projections cover all jobs in California except for self-employed workers.

The summary table below, and the more detailed listing in Appendix A and on EDD’s website, show that growth is expected in a wide variety of occupations from engineers and computer scientists, to teachers and nurses, to production, sales and service occupations. These jobs cover a wide range of skill requirements and wage levels.

Moreover, the table shows that the 3.2 million new jobs projected for 1998–2008 will be augmented by 3.6 million job openings due to separations—a category including retirements and workers moving from one occupation to another.

### California Jobs by Major Basic Industry and Population-Serving Sector 1990-2010 (Thousands)

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<tr>
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</thead>
<tbody>
<tr>
<td>High Tech Manufacturing</td>
<td>390.8</td>
<td>430.2</td>
<td>510.9</td>
<td>39.4</td>
<td>80.7</td>
</tr>
<tr>
<td>Diversified Manufacturing</td>
<td>917.5</td>
<td>996.3</td>
<td>1,054.1</td>
<td>78.8</td>
<td>57.8</td>
</tr>
<tr>
<td>Aircraft, Space, Defense</td>
<td>482.1</td>
<td>218.1</td>
<td>143.0</td>
<td>-264.0</td>
<td>24.9</td>
</tr>
<tr>
<td>Resource-Based</td>
<td>473.9</td>
<td>486.7</td>
<td>522.6</td>
<td>12.8</td>
<td>35.9</td>
</tr>
<tr>
<td>Transportation &amp; Wholesale Trade</td>
<td>616.6</td>
<td>682.4</td>
<td>763.7</td>
<td>65.8</td>
<td>81.3</td>
</tr>
<tr>
<td>Tourism &amp; Entertainment</td>
<td>433.1</td>
<td>563.2</td>
<td>764.2</td>
<td>130.1</td>
<td>201.0</td>
</tr>
<tr>
<td>Professional Services</td>
<td>635.3</td>
<td>962.8</td>
<td>1,521.2</td>
<td>327.5</td>
<td>558.4</td>
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<tr>
<td>Total Basic Jobs</td>
<td>3,949.3</td>
<td>4,339.7</td>
<td>5,379.6</td>
<td>390.4</td>
<td>1,039.9</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Population-Serving Sectors</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>561.8</td>
<td>733.6</td>
<td>786.2</td>
<td>171.8</td>
<td>52.6</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>2,223.8</td>
<td>2,470.0</td>
<td>3,037.9</td>
<td>246.2</td>
<td>567.9</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate</td>
<td>808.8</td>
<td>823.2</td>
<td>1,026.0</td>
<td>14.4</td>
<td>202.8</td>
</tr>
<tr>
<td>Business Services, Exc. Computer Services</td>
<td>597.8</td>
<td>999.6</td>
<td>1,481.8</td>
<td>401.8</td>
<td>482.2</td>
</tr>
<tr>
<td>Health Services</td>
<td>760.1</td>
<td>927.5</td>
<td>1,361.7</td>
<td>167.4</td>
<td>434.2</td>
</tr>
<tr>
<td>Nonprofit Sector</td>
<td>339.0</td>
<td>467.1</td>
<td>647.8</td>
<td>128.1</td>
<td>180.7</td>
</tr>
<tr>
<td>State &amp; Local Government</td>
<td>1,712.7</td>
<td>2,046.9</td>
<td>2,259.2</td>
<td>334.2</td>
<td>212.3</td>
</tr>
<tr>
<td>Self Employed</td>
<td>1,329.2</td>
<td>1,376.5</td>
<td>1,684.1</td>
<td>47.3</td>
<td>307.6</td>
</tr>
<tr>
<td>Other</td>
<td>1,910.2</td>
<td>2,119.3</td>
<td>2,630.5</td>
<td>209.1</td>
<td>511.2</td>
</tr>
<tr>
<td>Total Population Serving Jobs</td>
<td>10,243.4</td>
<td>11,963.7</td>
<td>14,915.2</td>
<td>1,720.3</td>
<td>2,951.5</td>
</tr>
<tr>
<td>Total Jobs</td>
<td>14,192.7</td>
<td>16,303.1</td>
<td>20,294.8</td>
<td>2,110.4</td>
<td>3,991.7</td>
</tr>
</tbody>
</table>

### California Wage and Job Trends in Selected Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Jobs (Thousands)</th>
<th>Average Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>505.9</td>
<td>679.2</td>
</tr>
<tr>
<td>Fabricated Metal Prod.</td>
<td>119.9</td>
<td>128.7</td>
</tr>
<tr>
<td>Computers</td>
<td>89.7</td>
<td>95.4</td>
</tr>
<tr>
<td>Electronic Components</td>
<td>142.4</td>
<td>158.9</td>
</tr>
<tr>
<td>Trucking</td>
<td>149.3</td>
<td>163.8</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>744.0</td>
<td>799.0</td>
</tr>
<tr>
<td>Computer Services</td>
<td>186.4</td>
<td>270.3</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department

### California Occupational Projections 1998-2008 (Thousands)

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Managerial &amp; Administrative</td>
<td>1,189.3</td>
<td>228.4</td>
<td>190.1</td>
</tr>
<tr>
<td>Professional &amp; Technical</td>
<td>4,091.4</td>
<td>1,018.9</td>
<td>698.0</td>
</tr>
<tr>
<td>Sales</td>
<td>1,939.0</td>
<td>349.2</td>
<td>516.2</td>
</tr>
<tr>
<td>Clerical &amp; Admin. Support</td>
<td>2,893.4</td>
<td>419.5</td>
<td>559.2</td>
</tr>
<tr>
<td>Service</td>
<td>2,553.4</td>
<td>476.6</td>
<td>761.4</td>
</tr>
<tr>
<td>Agricultural</td>
<td>243.2</td>
<td>56.1</td>
<td>59.9</td>
</tr>
<tr>
<td>Production, Construction, Operators &amp; Material Handling</td>
<td>3,880.6</td>
<td>657.8</td>
<td>832.8</td>
</tr>
<tr>
<td>Total</td>
<td>13,584.1</td>
<td>3,206.5</td>
<td>3,617.6</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department—For a complete list of occupations see www.calnet.cahnew.gov/themfile/occupations.htm
For more than 30 years the focus of public sector workforce policy has been employment—meaning helping people find jobs. That’s why the California public agency primarily responsible for public training and job search policies is the California Employment Development Department (EDD), and why the principal focus of welfare reform was to help people find employment and move from welfare to work.

The nation’s employment policies have been focused on disadvantaged workers—workers who were unemployed as a result of low skills, plant closures, foreign trade impacts or defense cuts or who lacked the personal traits necessary for successful workforce participation. The nation’s public funding of workforce preparation programs has been heavily concentrated on disadvantaged groups that were specifically identified in legislation as having first priority on public funding.

It is now time for California’s public workforce strategy to move beyond the narrow focus of helping disadvantaged workers find jobs to a strategy focused on career development and helping workers, move up for the following reasons:

- More than 95 percent of California’s workers are employed, including the vast majority of workers in poor families. Their needs are to move beyond poverty and toward a life of rising living standards and opportunities.
- California’s employers are facing an immediate shortage of workers with specific skills.

The need for a workforce investment system that meets the needs of businesses, and all workers, was the foundation of the federal workforce policy reform in 1998.

The Workforce Investment Act of 1998 provides the framework for a unique national workforce preparation and education system designed to meet both the needs of the nation’s businesses and the needs of job seekers and those who want to further their careers.


An expanding focus for workforce policy does not require an abandonment of those remaining unemployed. Nor is it a retreat from focusing public policy toward helping people with low incomes. In fact, a focus on helping workers move up is the state’s main strategy for reducing poverty and raising incomes on a permanent basis.

From the perspective of workers and their families, of employers and the state’s economy as a whole, California’s workforce focus needs to shift from employment to move up.
A Workforce Investment System Focused on Creating Career Ladders and Move Up Opportunities

The term move up strategy is used both as a general policy focus and as a specific workforce investment approach throughout this report.

As a general policy focus, move up strategies refer to workforce investments for existing workers. In the train metaphor, move up describes the process where workers acquire skills to get better jobs and move to the next car, providing a higher standard of living for their families. More than 95 percent of the labor force is employed in California; the focus on move up strategies calls our attention to the need to adopt workforce investment strategies for existing workers. (Sometimes in workforce discussions existing workers are called "incumbent workers" and training for existing workers is called "post-employment" training.)

Move up also refers to the process where employers are likely to find workers to fill existing job or skill shortages. For several reasons, employers do not look mainly to currently unemployed workers to fill critical shortages. They look, instead, either to hiring workers from out of state or from California's existing workforce. In this sense, a focus on move up strategies will help meet the job needs of California employers through investing in California's workforce.

Developing Career Ladders is Critical

Policies to support career ladder development are one way in which workforce investment policies can meet the move up needs of workers and employers. Career ladders show the concrete steps to upward progress in a specific job. Career ladder strategies help workers get additional skills in specific, discrete increments while they are working.

Two examples of career ladders are shown on the next page. One is a career track in high tech manufacturing production compiled by EDD and the North Valley (NOVA) Workforce Investment Board. The second career ladder is for metal manufacturing compiled from a study of that industry in Los Angeles County by the Community Development Technologies Center. (For more details on these career ladder examples, see Appendix B.)

The importance of developing career ladders is mentioned frequently in discussions of state and national workforce policy for the 21st century economy. There are two principal reasons why a focus on career ladders is so important:

1) Career ladders offer hope and direction to workers. They show workers what steps are necessary to achieve gains in skills, earnings and living standards.

2) Public policy in developing career ladders is needed to fill gaps in the private sector training system created by the decline in internal career ladders, the growth of small firms and the decline in union concentration in the economy.

The Employment Training Panel (ETP) and the Employment Development Department are coordinating a joint program to help businesses identify and build job ladders designed for the
Career Ladder Examples

High Tech Manufacturing Production

Production Supervisor
Lead Operator
Production Specialist
Production Support
Operator
Entry Level Operator

Metal Manufacturing

Lead Operator/Welder
Senior Operator/Welder
Journeyman Operator/Welder
Entry Level Operator/Welder

(See Appendix C for more detail)
advancement of entry-level workers. The ETP has initially committed $15 million to be used for this pilot program for training of entry-level incumbent workers. The career ladders program will work with those industry associations and employers that are interested in building job ladders in a partnership with business, labor and government.

This program will assist employers to identify opportunities for low or unskilled workers in specific industries with demonstrated career paths. It will assist workers to move from low paying jobs to higher paying positions requiring more skills and/or more responsibility.

**Kaiser Permanente and Health Care Workers Union Local 250**

One of the first operating career ladders programs, commencing in early 2001, involves the health care giant in California, Kaiser Permanente and its main union in Northern California, Health Care Workers Union Local 250. Kaiser has approximately 84,000 employees throughout California primarily in its acute care facilities and clinical facilities. With very low unemployment throughout Northern California, Kaiser has had difficulty finding workers at all levels.

The career ladder training, jointly developed by Kaiser and Local 250, focuses on a number of the lower-wage positions in the acute care facility—housekeeping, food preparation worker, laundry worker and nurse aide. Local 250 recruits workers in these jobs for a 10-week upgrading program to become an acute care nurse assistant, medical assistant, or unit assistant. During the training, Kaiser pays the bulk of the training costs, with some government training money, and Local 250 absorbs the costs of identifying workers and providing ongoing tutoring or other training support as needed.

Recently another voice—that of the Board of Governors of the California Community Colleges—has joined the call for a focus on career ladders.

The Board of Governors of the California Community Colleges is in the process of adopting and implementing a priority on career ladders as the foundation of the colleges' approach to workforce investment. The Board of Governors Initiative Framing Document: A Career Ladder Approach to Workforce Development (www.cccco.edu) could be adopted with only minor changes in language by the State Workforce Investment Board in support of career ladders as a state workforce investment priority.

"The requirements and challenges of the new economy have yet to be fully reflected in the workforce development system. The critical elements of a unified system—employers, employment and training agencies, and educational institutions such as community colleges—are too often separate, pursuing individual programs and initiatives.

The demands of the changing economy call for a unified approach to workforce preparation and career advancement. While there is some disagreement as to the specific shape this system should ultimately take, there is a need for a strategy that is:

- **Founded on career ladders**

  Success for Californians in today's economy depends on continuing opportunities to
learn and advance. In place of short-term job training, the state's workforce development system needs to adopt career ladders as an overarching principle and framework for economic and workforce development.

- **Universal**
The current workforce and economic development system is based largely on programs targeting a single constituency: employers needing upgrade training for workers, current workers seeking upgrade training or those entirely outside the system seeking a basic minimum wage foothold. This separation is inefficient, wastes scarce resources and limits opportunities for all concerned.

Employers, welfare recipients, the working poor and current workers all share a need for one system that provides opportunities to acquire basic skills, and enter and move up in the workforce.

- **Regional**
Many current employment and economic development programs target the needs of a single community. With labor markets extending beyond city and county borders, however, the state's workforce development system needs to meet broader regional needs. Career pathways should reflect this large market, and bring together employers and training institutions throughout the region.

- **Linked to employer demands**
Today's training programs are frequently developed in isolation from employer requirements and economic needs. The system and career ladder training programs should be responsive to labor market and industry demands, while also reflecting employer-set standards and criteria for entry-level and incumbent workers.

- **Collaborative**
A system built on career ladders is well beyond the scope of any single entity now involved in workforce development. To meet the needs and demands of the economy will require a working collaboration, or partnership, among employers, community colleges and other education and training institutions, community organizations, Workforce Investment Boards, social service agencies and government.

- **Based on coordinated use of resources**
Because creation of career ladders will be expensive, this system must also integrate now separate funding sources that support workforce and economic development. Increasingly, the welfare system, employment and training system, and community colleges advocate the same goal: career progression. These now largely separate funding sources should support development of a single coordinated system that will meet the common need for better and more successful education and training.

Creating a system based on the principles described above will require new kinds of partnerships among employers, workforce development agencies, community colleges and community organizations. This challenge cannot be minimized.

The time is right, however, to begin looking beyond separate programs to creation of a
common system that reflects and supports the new economy. The clear emphasis on career pathways as the foundation for a strong economy creates a new, and overarching, mandate for economic development, workforce development, and education institutions.

Voices in Support of Career Ladders

Internal career ladders no longer work well for employees or firms. Firms are smaller and jobs less differentiated. To the extent career ladders exist at all, there are fewer of them; they have far fewer rungs; the rungs are less dependably anchored; and workers need much longer reach and bigger steps in order to pull themselves up. As a consequence, entry-level jobs are not well connected with the jobs "above" them.

*Working Together on Worker Training*
Workforce Innovation Networks Issue Brief, March 2000, U.S. Chamber of Commerce (www.uschamber.com)
Jobs for the Future (www.jff.org), Center Workforce Success-National Association of Manufacturers (www.nam.org)

As we use the term here, a 'career ladder' is simply an institutionalized career path with measures of incremental progress along it. They used to exist, especially for less-skilled workers. They don't today. Their non-existence today makes transitions out of poverty more difficult, promotes inequality, and damages the chances of moving to high-road industrial restructuring.

*Center on Wisconsin Strategy*
www.cows.org

The Common Interests of Welfare Recipients and The Working Poor

The intent of welfare-to-work legislation was to help adult welfare recipients move into the workforce, become self-sufficient and earn a higher standard of living for their families. Federal funding and substantial additional funding in California has provided support in education, child-care, health care and transportation to individuals and families in the transition from welfare support.

From October 1996 through December 2000, the welfare caseload in California was reduced by 245,800 one-parent cases and 66,300 two-parent cases. There are ongoing debates about the causes and long-term sustainability of these caseload declines, but there is no disagreement about one fact: most former welfare recipients who are now working are still in poverty. While an increase in the minimum wage would lift some out of poverty, more significant increases in income can only come from skills acquisition.
GlideTech—Gateway to the High-Tech Future

GlideTech is a partnership that helps low-income people with the skills necessary to build career pathways to the fast growing sectors of information technology and office technology. GlideTech is a partnership of Glide Church in San Francisco, Mission College, San Francisco City College and Manpower.

GlideTech's training ladder includes:

Step 1 - Basic Education
Step 2 - Office Skills Training or A+ Computer Training
Step 3 - Employability Skills
Step 4 - Unix Training or Cisco Networking Academy

Manpower assists graduates in finding jobs. The first class of 50 graduated with an average starting wage of $17/hour. Funding comes from the City of San Francisco, from Workforce Investment Act funds, from foundations and from the partners.

In 1998, California had 2.6 million working-age residents (ages 18-64) in families with poverty-level incomes and 3.3 million additional workers in families with incomes that were less than twice the poverty level. Nearly all of these workers have never been on welfare and have worked their whole adult life. Yet many of these workers have been unable to secure higher living standards for their families.

Welfare recipients were a recognized disadvantaged group in the view of public policy in the nation and in California. Resources were earmarked for the task of helping welfare recipients make the transition into the workforce—resources for job-readiness training, for childcare, for transportation and for other kinds of support.

Use workforce investment policies to boost upward mobility. Investing in training programs to help those already in the workforce achieve upward mobility can ease competition for entry-level jobs and help workers achieve higher earnings over the course of their careers. A “move-up” strategy can help address skill shortages, while freeing up positions for those not yet ready for more highly skilled occupations. Targeting training to the existing workforce can also help avert competition between the already working but poor and those leaving welfare for work by increasing wages for the former group while improving opportunity for the latter.

Will Work Pay?: Job Creation in the New California Economy
California Budget Project, April 2000
Welfare and workforce development agencies have a stake in career advancement in order to meet low-income individuals' need for gainful employment and employers' need for skilled workers.

TANF agencies can provide career advancement services to current and former welfare recipients, and even low-income working families that have not received cash assistance."

_Career Advancement for Welfare Recipients and Low-Wage Workers_
Workforce Information Network

Policy: Incorporate a "move-up" strategy within all segments of the workforce development system to continuously improve the knowledge and skills of every person in the labor force and ensure opportunities for career development and increased earnings.

_California Workforce Development: A Policy Framework for Economic Growth_
Delaine Eastin, State Superintendent of Public Instruction;
Lon Hatamiya, Secretary, California Trade and Commerce Agency;
Grantland Johnson, Secretary, California Health and Human Services Agency,
Thomas J. Nussbaum, Chancellor, California Community Colleges

Most people recognized that getting a job was just the first step on the path out of poverty. The second step was additional education and training to earn higher wages and complete the escape from poverty. In the analogy of a train representing the California economy, welfare recipients started in the position of being "off the train." They needed employment services to get a job, and to get on the train.

Now many former welfare recipients are on the back of the train with other low-wage workers, most of whom have never been on welfare. All workers in the back of the train share a common interest in getting post-employment training so they can move up to the middle of the train.

**The focus of public policy needs to move from employment to move up for both groups.**

- Groups primarily concerned with helping welfare recipients are noticing their new common interests with low-wage workers.

- Groups that are advocates for low-wage workers (including former welfare recipients) also stress the importance of a move up approach to workforce strategies in California.
A move up strategy focus is also advocated from the perspective of what is needed for the California economy.  

The Workforce Needs of Other Workers

The pace of technological change means that nearly all jobs require learning new skills. Even to maintain current levels of pay and living standards will require frequent acquisition of new skills and adaptation to new technology in the workplace.

For most workers, an increase in real earnings—pay growth faster than inflation—will require continual adaptation to new ways of doing work and repeated skills upgrading. Meeting the workforce investment needs of California’s low-wage workers will be a formidable challenge given current funding levels and eligibility constraints. However, the economy requires attention to the workforce needs of middle income and even more highly paid workers. Not all of the workforce needs of California’s employers will be met by building the skills of low-wage workers.

Two examples of programs that can be models for reaching a broad group of workers are described on the following pages.

The Ultimate Goal: A Universal Workforce Investment System

Workforce investments focused on helping workers move up to better jobs and earnings speak simultaneously to the desires of workers and employers. As the data and examples illustrate, building skills to move up is applicable to workers in nearly all industries, occupations and income levels. There is now widespread agreement that state and national workforce investment systems should have a universal scope and, therefore, be available to all workers who can benefit.

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UCSD Extension/CONNECT

The mission of University of California, San Diego (UCSD) Extended Studies and Public Programs (ESPP) is to serve the critical lifelong learning and skill development needs of individuals, organizations and the community. The UCSD Extension division strives to educate the existing workforce of technology-based companies.

UCSD Extension offers a broad variety of technology courses leading to industry standard certificates. The courses are designed with significant contributions on curriculum from companies in the region. Enrollment in information technology courses is more than 10,000 and total enrollment in 2000 was close to 40,000. Approximately 75 percent of these students already have college degrees. Approximately 95 percent of program expenses are covered by tuition, which is often supported by employers.

The ESPP also is the home of UCSD Connect, which is the UCSD Program in Technology and Entrepreneurship, started in 1985. These programs are self-supporting from membership dues, course fees, grants and corporate underwriting.

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*California Workforce Development: A Policy Framework for Economic Growth was prepared as a requirement of the Regional Workforce Preparation and Economic Development Act and is referred to as the RWPEDA report (http://www.regcolab.calwnet.gov).*
Auto Dealers, Manufacturers and Shoreline Community College Created Program to Train Auto Mechanics in the Puget Sound Region

Shoreline Community College has developed an innovative set of programs in partnership with automobile and parts manufacturers and the Puget Sound Automobile Dealers Association.

- The Dealers Association funded construction of Shoreline's Professional Automobile Training Facilities. Dealers also provide the facility, jobs for students and tuition assistance.
- Manufacturers including General Motors, Toyota, Honda and Chrysler have donated new cars, diagnostic technology, curriculum and manuals.
- Toolmakers including Snap-On Tools have loaned or donated more than $1 million in state-of-the-art tools.

Students participate in a two-year training program with alternating periods of paid employment at dealerships and study at Shoreline College. Graduates are earning from $35,000 to as much as $70,000. The program currently enrolls 80 students and has a two-year waiting list.

Voices in Support of a Universal Workforce Investment System

The Workforce Investment Act will empower all workers—young and old—with the skills and knowledge to build better lives for themselves and their families as we enter the new century.

Implementing the Workforce Investment Act of 1998
Alexis Herman, Secretary of Labor
www.usworkforce.org/wpaper3.htm

Public policies include: Universal access to workforce development information and services that enable all Californians to enter employment, advance in their careers and achieve the quality of life they desire.

California Workforce Development: A Policy Framework for Economic Growth
The Regional Workforce and Economic Development Act report
Components of A Successful Public Workforce Investment Strategy

This section goes beyond the ideas of universal move up strategies to 1) identify other components of a successful workforce investment system and 2) show examples of successful programs already in place.

There are seven major components of a public workforce investment system that would address the needs of workers and firms in California's economy:

1) A solid foundation of basic workforce skills in K-12 education
2) The ability of California high school graduates to attend college
3) An easy transition from high school to career
4) The recognition that economies and labor markets throughout California are primarily regional in geographic scope
5) An emphasis on opportunities for workers within industries or sectors, not individual firms
6) Incorporation of the expertise of private sector employers—from knowing the future direction of skill requirements and employment opportunities to having the experience of designing successful training programs and policies
7) Focus on the critical role of partnerships

Incorporate a Basic Skills Foundation in K-12 Education

The basic foundation of California's workforce investment system is a solid K-12 education. California's education system can contribute to workforce investment by incorporating a solid foundation of basic workplace skills into the regular academic curriculum.

There is new evidence that many of the skills employers want can be acquired in high school. Broadening access to, and completion of, higher education remains an important goal. However, not everyone has to graduate from a four-year college or even attend college in order to earn a decent living.

The idea that K-12 education can be refocused to provide the minimum skills needed for a good middle-class job is described in *Teaching The New Basic Skills*, by Frank Levy, Professor of Urban Economics at M.I.T., and Richard J. Murnane, Professor at the Harvard Graduate School of Education.9

Their case studies uncovered six "new basic skills." These skills came up repeatedly as Levy and Murnane interviewed human resource managers and production managers about their criteria for hiring.

None of the six basic skills requires a college degree. Levy and Murnane write, "These are the New Basic Skills, the minimum skills people now need to get a middle-class job." Levy and Murnane note that the six new basic skills can be taught in the K-12 years but often are not.

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10 Personal traits like reliability, a positive attitude, and the willingness to work hard also remain very important to employers.
The six new basic skills are:

1) The ability to read at the ninth grade level or higher
2) The ability to do math at the ninth grade level or higher
3) The ability to solve semi-structured problems where hypotheses must be formed and tested
4) The ability to work in groups with persons of various backgrounds
5) The ability to communicate effectively, both orally and in writing
6) The ability to use personal computers to carry out simple tasks like work processing

**Increase Access to College**

California workers know that the key to higher earnings is higher skills. The relationship between education and earnings is well understood by most workers—whether intuitively or by reading statistics like those shown below.

![Median Income by Educational Attainment in California](chart)

The median college graduate in California made almost $43,000 in 1999. The average for those with just an elementary school education was less than $10,000.

Partly in recognition of these facts, California made a major new commitment to higher education access in 2000. For the first time, high school graduates with good grades will get substantial financial assistance toward college through the state’s Cal Grants program. And while most of the funds are reserved for students from poor and middle-income families, some scholarships are available to all students.

**Facilitate the Transition from High School to Career**

California has both an economy that requires constant skills upgrading and a school population that is increasingly foreign born and heterogeneous in terms of cultural background. Given these two trends, it is critical that clear paths from high school to college and career be presented to students and counselors. It is particularly important to concretely show high school students that there are exciting, well-paid jobs waiting to be filled and explain the steps needed to be successful in the workplace.

Two examples of programs that meet these criteria are described in this section. The question for California’s workforce investment strategy is: How can these programs best be connected to other parts of the state’s workforce investment system?
A Bold Leap Forward in Access to Higher Education in California

California's strong economy has provided the revenue to allow legislators and Governor Gray Davis to fund a substantial expansion in the state's financial assistance to college students.

Students with a B average (3.0 GPA) will get a scholarship for full tuition and fees at a CSU or UC campus or up to $9,700 towards private university tuition. Income eligibility ranges from $23,500 for independent students to $64,000 for students from a family of four.

Smaller scholarship grants are available to students with a C average (2.0 GPA). A $1,000 scholarship grant is available to any student, regardless of income, who scores in the top 5 percent on statewide tests or in the top 10 percent at their school.

These programs should reach 144,000 students by 2006, up from 77,600 this year. Funding is estimated to reach $1.2 billion in 2006.

High School Partnership Academies

California Partnership Academies (CPA) are three-year high school programs structured as a school within a school. The programs include:

- Academic curriculum focused on a career theme that prepares students for both college and career
- A team teaching environment with approximately 100 students in each academy
- A partnership with employees that includes curriculum assistance, mentoring, job shadowing and employment opportunities
- A partnership with school districts that includes matching fund requirements and strict performance criteria

California will have 290 academies in 2000-2001 partially supported by state education funding. (For more information on the California Partnership Academy Program see www.coe.ca.gov/partacad/overview.html.)

The Los Angeles Metropolitan Transportation Authority (MTA) was an early partner in five transportation career academies in Los Angeles County receiving U.S. Department of Education funding to develop a program model. MTA now funds 70 interns in paid positions and has recruited other agencies such as Caltrans and Southern California Association of Governments (SCAG) to be part of the academy mentoring and internship program. The transportation careers academy program has relationships with community colleges and CSU and there is a Transportation Teaching Institute to provide support and training for academy high school teachers.

Job Shadowing and Mentoring for High School Students

The South Bay Economic Partnership includes business, education and public organizations in one of Southern California's oldest manufacturing centers. The South Bay Dialogue is the Partnership's effort to bring business and education leaders together to address regional workforce issues.
The largest current unfilled workforce need is for technician-level positions throughout the manufacturing sector. Employers and educators in the South Bay Dialogue agreed that most students do not recognize the high paying job opportunities in manufacturing and do not seek adequate skills preparation. The job shadowing and mentoring program was developed in response to the need to motivate students and counselors in the South Bay with regard to local manufacturing technician jobs.

The program seeks to establish a meaningful job-shadowing experience for juniors and seniors in high school—one in which local manufacturing workers show students exactly what goes on in their jobs. Employers come into the schools to work with teachers and counselors on specific curricula related to needed job skills. Other program goals include developing summer employment opportunities and ongoing mentoring relationships between students and manufacturing workers. After months of planning, the program was launched in the spring of 2001 with a goal of reaching 1,000 students and 300 counselors.

**Focusing on Sectoral Opportunities**

Most of the workforce partnerships described in this report provide training for a specific industry or sector. The main reason is that sectoral approaches are built around specific, identifiable skill needs and job opportunities. Sectoral approaches are also important because there is more leverage in working with the whole industry rather than with individual firms.

There are two main reasons why orienting workforce policies to industries, rather than to individual firms, is indicated by today’s economy: 1) more workers and firms can be helped by industry-wide approaches and 2) there are strong disincentives for many firms to provide training.

Private sector firms spend substantial amounts each year—more than $60 billion—on training. Yet private sector programs limited to individual firms face two enormous barriers. First, many firms are too small to support training efforts. In California there are many sectors, like apparel, furniture, nursing homes and metal working, where the vast majority of firms are small. Second, even for large firms, in today’s economy workers often move between firms so that the incentive for individual firms to do training is reduced by the possibility that workers may leave within a short time to work elsewhere in the industry.

The benefits of designing industry-wide training programs is one reason why the concept of workforce partnerships is being so widely recommended.

**The Role of Industry Associations**

Industry associations can become significant partners in developing sectoral workforce programs. Industry associations—and unions—can play a critical role when training benefits all firms, but is too expensive or uncertain to be undertaken by individual firms.

**Regional Focus of Labor Markets and Industries**

California’s large labor markets are regional. In the Los Angeles Basin, San Francisco Bay Area and Sacramento regions, workers often work and live in different counties. The geographical area in which residents can and do work extends far beyond the boundaries of the community where they live.
The challenges of workforce development—recruiting and retaining good entry-level workers, consistently upgrading the skills of current workers, and filling critical deficiencies in high skill occupations—can be met better through inter-firm cooperation. As small firms try to upgrade the skills of their workers, they often encounter problems of scale that drive up costs.

*Working Together on Worker Training (2000)*
U.S. Chamber of Commerce: Workforce Innovation Networks
(www.uschamber.org)

Industries are also becoming more dispersed within regions. The concentration of high-tech job opportunities in the San Francisco Bay Area now extends far beyond the boundaries of Santa Clara County. The apparel and furniture industries in the Los Angeles Basin are spreading beyond the confines of Los Angeles County. The growing high-tech complex in the Sacramento region is split between Sacramento and Placer counties.

In implementing the 1998 Federal Workforce Investment Act, California established 13 local Workforce Investment Boards (WIBs) in the nine county San Francisco Bay Area and 15 local WIBs in the five county Los Angeles Basin. The local WIBs will need to look beyond their boundaries in developing workforce strategies. For example:

Industry associations potentially add value in job training in three important ways. First, they understand the needs of their industry for workers, as they are in close touch with their employers and have credibility with employers. Second, they are able to spread the costs and benefits of training among employers. Any individual employer has limited incentive to invest in training for its low-wage workforce, since this workforce is characterized by high turnover, and since other employers can hire away workers that are trained. The industry association pools the job turnover risks, and places the costs among employers. Third, in pooling resources, the industry associations are able to provide a training infrastructure that is usually possessed only by the largest employers.

Michael S. Bernick, Director
California Employment Development Department
The Fashion Center at Los Angeles Trade-Technical College

The Southern California apparel industry has more than 115,000 workers and the majority of the region’s apparel firms have fewer than 20 employees.

The Los Angeles Trade-Technical College—one of California’s community colleges—has been developing programs to help prepare and upgrade apparel workers since the college received an Employment Training Panel grant in 1984. The program got a boost in 1996 with a large technology grant from IBM. The apparel technology vendors donated equipment to the college in the hope that students would get training and experience on the vendor’s specialized equipment.

The IBM Technology Lab in the Fashion Center offers programs during the day, at night and on the weekends. Enrollment in all the computer-related classes is oversubscribed and the college is moving to get more equipment and space to meet the demands.

- Workers will benefit from information on regional job opportunities.
- Programs to develop career ladders and industry specific training will benefit from information about all industry partners in the region.
- Local WIBs within a region will need to find ways to cooperate in the sharing of information and development of programs in order to help local area residents and firms maximize the opportunities created by local WIB programs.

Multiple Roles for the Private Sector

The 1998 Workforce Investment Act specifies that the majority of local WIBs come from the private business sector. The contributions of America’s private sector businesses in developing workforce policies and programs go far beyond merely telling local WIBs “what business wants.” There are important contributions that the private sector can provide:

- Information about skill requirements in high demand now and anticipated skills shortages
- Advice in the development of curriculum materials for skills training
- The experience of private businesses in developing internal training programs—many of world-class quality
- Input on scheduling of training to fit into the work schedules of firms and employees
- Financial and equipment contributions to public-private partnerships including financial incentives for employees
- Providing jobs, either as internships within the training programs or permanent jobs at the end of training
Alexis Herman, former Secretary of Labor, described the rationale for strong business involvement in these words:

New, strong, business-led local boards can contribute fresh thinking about the labor market and its needs—as well as about quality and continuous improvement—in a way that earns sustained support by local business leaders. We will know if we have successfully implemented this legislation if, in less than five years, businesses actively use the workforce investment system to fill their labor force needs, 'graduates' increase their skills and earnings, and more and more Americans seek access to the system's services.

*Implementing the Workforce Investment Act of 1998*
Alexis Herman, Secretary of Labor,
www.usworkforce.org/wpaper3.htm

**Partnership Approaches**

There is broad agreement that a successful workforce development system in California requires partnership approaches. The challenge is in identifying successful models and figuring out how to build on these efforts to get the kind of scale in partnership programs that offers access to all workers and employers who want to participate. The public sector challenge is to identify the role of public policy and public institutions in developing these workforce partnerships.

This report includes examples of many types of workforce partnerships involving private employers, unions, regional public-private partnerships, community colleges, universities and community-based organizations. Some of these partnerships have support from welfare-to-work, WIA and H-1B funding. Many partnerships involve little or no public funding. Many of the partnerships

**Cisco-Sun Academy**

In November 2000, the first class graduated at Cisco-Sun Academy at Opportunities Industrialization Center West (OICW)—San Mateo County's One-Stop Workforce Center. Forty-eight students participated in the program from 300 program applicants. Students developed skills needed to pass industry certification standards including A+, Cisco Certified Network Associate (CCNA), and Sun's Unix proficiency exam. Applicants were chosen based on 1) academic prerequisites, 2) commitment, and 3) financial need. Typical graduates of the nine-month program will earn $50,000 and up in their starting positions.

A second program, with expanded night hours, is now beginning with 100 students from among 800 applicants. Project funding has come primarily from Cisco and Sun Microsystems Corporations, which have also provided some volunteer program support. An H1-B grant has supported the expansion of the Cisco-Sun Academy in its second cycle. A few training slots can be supported from WIA funds although WIA training money covers less than half of the per student costs.
Puget Sound Center for Teaching, Learning and Technology

The Center is a private, not-for-profit enterprise representing a collaboration between Shoreline and Edmonds Community Colleges. The initial funding came from a $10 million challenge grant from the Morgridge Family Foundation, headed by the past CEO and current board chairman of Cisco Systems.

The mission of the Center is to meet regional market demand for future-ready information technology professionals with flexible, timely training solutions that extend beyond the reach of Shoreline and Edmonds Community Colleges. Additional funding has come from state and federal training and education funds and from a $260,000 grant from the Boeing Company.

The Center will offer courses leading to industry certificates on-campus and through distance-learning approaches. There will also be connections established with local area high schools for computer training.

These partnerships hold tremendous promise as a key component of California's workforce investment system for the following reasons:

- They respond to a demonstrated need that they were formed to address.
- Most partnership programs are open to all workers. These partnerships are relatively free of restrictive eligibility requirements.
- The partnerships all have significant participation of private employers.
- Training programs are oriented to helping existing workers acquire skills to move up.

The Challenge of the Partnership Approach

Two challenges for making workforce partnerships a central feature of California's workforce development systems are:

1) **The challenge of scale:** Most of the programs are relatively small—usually with 50 to 100 enrollees. Many existing partnerships, like the Cisco-Sun Academy or Shoreline Auto Technician program, have long waiting lists.

2) **The challenge of making partnerships a public policy priority:** Most partnerships involve a public sector partner, yet participating in these partnerships is not part of any institution's primary mission.
Next Steps: A New Direction For California's Workforce Investment Strategy

This report sets forth two new directions for the focus of California's state workforce investment strategy:

1) State workforce investment policies should give a high priority to developing career ladders and supporting skill-building programs to help existing workers move up to better jobs and higher pay.

2) To the extent that funding constraints are an issue, state workforce investment policies should place a priority on providing move up training opportunities to the working poor.

Both of these new directions will require policy changes since neither is a primary focus of existing workforce programs or funding. Major public funding for workforce investment comes from Workforce Investment Act (WIA) and welfare-to-work programs—and both sources give no priority to career ladder development or move up strategies.

Current WIA Policy and Funding Priorities

The intent of the 1998 Workforce Investment Act was to move toward a public workforce development system with universal access:

The Act authorizes ‘core’ services which will be available with no eligibility requirements to all adults and ‘intensive’ services for unemployed individuals who are not able to find jobs through core services alone. In some cases the intensive services will also be available to employed workers who need help to find or keep a job.

Core services will include job search and placement (including career counseling); labor market information; initial assessment of skills and needs; information about available services; and some follow-up services to help customers keep their jobs once they are placed.

Intensive services will include more comprehensive assessments, development of individual employment plans, group and individual counseling, case management and short-term pre-vocational services. In cases where qualified customers receive intensive services, and are still not able to find jobs, they may receive training services, which are directly linked to job opportunities in their local area.

Workforce Investment Act of 1998, The "Plain English" Version
U.S. Department of Labor, September 1998
Welfare-to-Work Policy and Funding

The promise of welfare-to-work programs is to help individuals and families reach economic self-sufficiency through their own work efforts. The first step was getting welfare recipients into the workforce. The next step, which is now facing welfare recipients and agencies, is how former welfare recipients move up to get better paying jobs and escape poverty. Current welfare-to-work policy, based on a work-first model, provides little money for training and no focus on helping former welfare recipients acquire skills to move up.

**Training dollars are limited under WIA and the priority for training dollars is currently unemployed and at-risk adults and youth.**

A report on state workforce policy was published by the Secretaries of Health and Human Services and Trade and Commerce, the Superintendent of Public Instruction and the Chancellor of the California Community Colleges as a requirement of the Regional Workforce and Economic Development Act (RWPEDA). The report recognized the conflict between the guidelines in existing workforce programs and the goal of universality in public workforce investments:

"Remove fiscal, eligibility, and other regulatory requirements that create barriers to accessing services. Congress, the Legislature and administrative agencies have created programs to serve people with specified characteristics and needs by defining eligibility requirements and delineating the services that they will receive. These categorical constraints are the largest and most difficult barrier to many of the policies proposed in this framework; they are the crux of the issue of transforming programs into a system. Removing, or at least reducing, these barriers requires long-term commitment and work by state and local agencies."

**Steps Toward a New Direction for California’s Workforce Investment Strategy**

There are four steps which can be taken now to support a career ladder focus and which provide direction on how best to modify or augment existing funding and funding priorities:

1) The State Workforce Investment Board should adopt a policy priority about career ladders.

2) Local Workforce Investment Boards should continue to support new and innovative partnerships that help workers acquire skills to move up to better jobs and careers. Local WIBs should use existing WIA funding, where possible, and develop non-WIA funding partnerships to support career ladder programs.

3) The California Employment Development Department (EDD) in collaboration with other workforce investment partners should compile a directory of all existing labor market information related to career ladders.

4) Local workforce investment boards in collaboration with other workforce investment partners should compile a directory of existing career ladder development efforts in California’s regional economies and best practices in other states.
Increase Funding for California's Workforce Investment System

Most workforce experts think that much progress can be made in improving California's workforce investment system by refocusing current funding streams. However, it is likely that existing funding will soon be inadequate to meet the workforce investment priorities suggested in this report and elsewhere.

In 2000, Governor Davis and the Legislature made a substantial commitment to increasing access to higher education with a major increase in funding for the Cal Grants program. Now is the time for California's workforce investment partners to think about a similar commitment to existing workers and employees—a commitment to develop a vision and implementation strategy for a "GI Bill" with a universal approach to helping existing workers build skills, career ladders and income.

Adopt Career Ladders as State Workforce Investment Board Priority

The California Workforce Investment Board should adopt a focus on career ladders and move up strategies as a priority for workforce investment. The Board could then begin a three-part strategy to advance the implementation of skill building programs to help workers move up to better jobs and careers:

1) Develop the information base to support career ladder programs. The state's investment in workforce programs needs the best information on industry and occupational trends as well as employer workforce needs and requirements. While some of this information is currently available, a more comprehensive, ongoing and easily accessible information base will help workforce investment partners.

2) Determine the best approach to using existing funds in support of career ladder programs. Most current workforce funding is still restricted in terms of who is eligible and whether helping existing workers get better jobs is a high priority. If career ladder programs are a priority, the State Board will need to develop a strategy for gradually redirecting existing resources and developing additional funding partnerships for career ladders.

3) Determine the best approach to direct funding toward welfare recipients and other low-wage workers who are now working but have household incomes below 200 percent of the federal poverty level. Workers in families with incomes between 100 percent and 200 percent of the federal poverty level are not a priority target for most current workforce funding. If these workers become a priority, the State Board will need to develop a strategy for increasing the opportunities within current funding streams to fund career ladder programs for the working poor. (See the description of The Board of Governors Initiative Framing Document: A Career Ladder Approach to Workforce Development on page 31.)

Create Innovative Career Ladder Programs with Local Workforce Investment Boards and Partners

The effort to change the direction of California's workforce investment strategy and to make the associated funding and program changes cannot be done overnight. It will take time to redirect the focus of workforce investment from helping unemployed workers get jobs to helping all workers get better jobs and careers and, simultaneously, meeting the needs of California's employers.

Yet local workforce investment boards have an ongoing responsibility to invest existing workforce funds under current rules while the workforce investment system in California is being reinvented.
Local boards can meet current responsibilities and help move toward future needs by continuing to develop workforce partnerships that cover the broadest range of workers and businesses. Local boards can use WIA funds, where possible, and develop non-WIA funding partnerships.

This report has identified a number of new and innovative workforce partnerships including 1) the joint effort of Kaiser Permanente and Health Care Workers Union Local 250 supported by the ETP Career Ladders program (see page 31), 2) the GlideTech partnership (see page 34) and 3) the Cisco-Sun Academy (see page 45).

New partners are emerging for local workforce investment boards:

- California community colleges are initiating a systemwide effort to support career ladder programs (see page 31). Every local WIB has a potential community college partner.
- California has a growing number of Collaborative Regional Initiatives (CRIs), each of which has a main focus on workforce improvement. The CRIs are partnerships of business, education and community leadership. (A complete description of current CRIs and their workforce activities can be found at wwww.calregions.org/civic/index.php.)

The James Irvine Foundation is currently supporting a new statewide initiative with CRIs aimed at developing regional career ladder partnerships in sectors such as manufacturing, information technology and health careers. The goal of the initiative, now being planned in five regions around the state, is to forge regional partnerships that will benefit employers as well as unemployed and current workers.

To accomplish this objective, CRIs in the five selected regions will work with EDD to help define key regional labor market needs in high-wage, high-growth jobs. CRIs will then use this information as a framework to convene partners with the goal of creating a regional, sectoral training and employment initiative. The resulting career ladders will be based on a collaboration that draws on the strengths of each partner.

Compile Labor Market Information Related to Career Ladders

Workforce investment partners can allocate workforce resources more efficiently if they have good information on industry and occupational trends and industry needs and requirements. A solid information base, organized by regional labor market area, will help workforce investment partners identify opportunities for move up and career ladder programs.

EDD can now take the lead in organizing existing labor market information related to career ladders and develop new information to fill in the gaps. By working with partners such as the California Community Colleges, local Workforce Investment Boards, employment and training providers and existing regional workforce partnerships, EDD can provide the state's workforce investment partners with an expanding and regularly updated information base in support of the development of programs to help workers get better jobs and careers.

EDD regularly compiles and updates occupational information and labor market information that can be useful in developing training partnerships focused on move up and career ladder programs. This information can be found on their website at wwww.calmis.ahwnet.gov/htmlfile/subject/occup.htm.
Many local Workforce Investment Boards, in cooperation with EDD, prepare annual occupational outlook reports as part of The California Cooperative Occupational Information System (CCOIS) which is described on the EDD website listed above.

In addition, there is a growing volume of industry and sector studies designed to inform workforce investment partners. The NOVA Workforce Investment Board has prepared a number of industry analyses featured in Appendix A. In spring 2001, NOVA published a new analysis of the construction industry in Silicon Valley. The Los Angeles Community Development Technology Center is producing a series of industry career ladder studies using a grant under the RWPEDA program. Their study on the metal working industry is described in Appendix A and in a new study on the food processing industry was released in the spring of 2001.

Compile Existing Career Ladder Programs and Best Practices

The State Workforce Investment Board would strengthen the development of a state workforce investment strategy by supporting a compilation of existing career ladder programs and best practices. The State WIB could, if appropriate, partner with one of California's foundations interested in workforce policy and in compiling this information.

Many career ladder programs have been highlighted in this report. In addition, CCSCE has collected information about other similar efforts and there are probably many programs that we are not aware of—both in California and around the country.

A compilation of existing programs and best practices would be a first step in directing future resources wisely and informing local Workforce Investment Boards, community colleges, the philanthropic community and other workforce investment partners.
A recent report prepared for the California Council on Science and Technology confirms the importance of expanding the collection of data on existing education and training programs:

The research reported in this study is a very preliminary analysis of data which heretofore has not been reported in any comprehensive or systematic way. The fact is that hundreds of thousands of California's citizens participate in non-state-funded science and technology education and training programs. Results indicate that there is a significant under-reporting by traditional agencies of the amount of education and training that is taking place in the State.

We find that there are no comprehensive studies of self-funded education and training programs within the University of California (UC) system, California State University (CSU) system, and California Community College (CCC) system, let alone studies of privately funded corporate universities or other proprietary continuing education and training programs.

Critical Path Analysis of California's S&T Education System: Alternative Paths to Competency Through Continuing Education and Lifelong Learning
California Council on Science & Technology, May 2001
Appendix A: Approaches for Reducing Poverty

Four Strategies for Reducing Poverty and Unemployment

There are four major strategies to help build on the recent success in raising incomes and reducing unemployment and poverty rates:

1) Continued strong economic growth and productivity gains
2) Expansion of income support programs such as the minimum wage, Earned Income Tax Credit, and support of broader access to health care and child care
3) Programs that support economic expansion efforts in urban areas
4) Workforce strategies that focus on helping workers move up to better jobs and higher wages

This report focuses on workforce strategies as an approach to helping families move well above poverty line. This section includes an acknowledgement and brief description of other anti-poverty approaches.

The Importance of Economic Growth

Job and productivity growth are the economy’s most powerful tools for raising incomes and reducing poverty. More individuals are helped by high economic growth rates than by all other public programs aimed at reducing poverty. Moreover, public programs, including welfare reform, are much more likely to succeed in a strong economy.

Strong economic growth also provides the context for expanding indirect income support programs like increases in the minimum wage and assistance for health care and child-care access. Economic growth also makes training efforts more likely to result in improved jobs and earnings.

The Importance of Income Support Policies

All families will not be able to raise their incomes significantly through education and training. Some workers will continue to work for part or all of their lives in jobs that pay low wages. Society always faces the social equity question of what standard of living (if any) should be guaranteed to people who work full time. America now has three major sets of policies that supplement earnings for low-income families:

1) Recent increases in the minimum wage have helped some families escape from poverty. Continuing prosperity may allow Americans to adopt minimum wage policies that explicitly seek to keep the minimum wage growing at the same rate as average wage levels or even to close the gap.
2) Assistance with health care and child-care expenditures may be even more significant in dollar terms than a $1 increase in the minimum wage. These expenditures are taking a large share of income from both low-income and middle-income families.
3) Earned Income Tax Credits are another way to supplement the income of families that work but earn relatively low wages.
The Importance of Programs to Revitalize California’s Urban Areas

Programs to help revitalize urban areas can help California in many ways: through absorbing needed housing and helping preserve open space in other areas; through providing opportunities for families to live closer to their work and close to cultural activities and; by being part of California’s strategy to help low-income residents. State Treasurer, Phil Angelides, has been an active proponent of the important opportunities available through investment (public and private) in California’s older urban areas. An excerpt from the Treasurer’s recent report, *The Double Bottom Line: Investing in California’s Emerging Markets* is presented below.

For more than 30 years, the question of growing economic inequality has been absent from the center of debate in California’s civic, political, and financial circles. Old debates about income redistribution gave way to a paucity of dialogue and action in the arena of economic opportunity.

It is time to engage in a new discussion of how to enlarge economic opportunity for the California communities struggling in our midst. That discussion must occur across a broad public policy front and must consider how the assets and capital of this most dynamic of states can be deployed in pursuit of that cause—striving to meet the “double bottom line” of prudent investment and broadened economic opportunity.

It is in this context that the Treasurer’s Office is launching a new initiative—*The Double Bottom Line: Investing in California’s Emerging Markets*—to mobilize the powerful instrument of financial capital in new and innovative ways, consistent with the highest fiduciary standards, to reinvest in the State’s at-risk communities and, thus, to build a stronger economic future for California.

In the end, if the State’s quality of life diminishes, if communities are left to languish, and if there is a large and growing underclass, future economic prospects will be undermined. That will, in turn, have a direct and negative effect on the finances of state government and on the State’s investment portfolios.

*The Double Bottom Line: Investing in California’s Emerging Markets*
California State Treasurer
Phil Angelides
## Appendix B: Occupational Projections

### California Occupational Projections 1998-2008 (Thousands)

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<td>71.7</td>
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<td>Transportation Operators</td>
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<tr>
<td>Laborers</td>
<td>683.9</td>
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Source: California Employment Development Department
Appendix C: Career Ladder Examples

Production Jobs in High Tech Manufacturing


Introduction

The production crew is responsible for delivering a tangible product that meets or surpasses quality, volume and schedule requirements. Shifts allow a manufacturing floor to operate around the clock and ensure that all staff will be present during set production times. During busy production schedules, workers are often asked to work extra shifts to meet deadlines.

Education and Qualifications

An Associate in Science (AS) degree in engineering is always helpful for getting in the door, but it is possible to advance with great job performance and motivation. Individuals with non-engineering backgrounds who possess strong statistical abilities and some training in current manufacturing quality theories may work their way up the ladder.

Skills

In order to advance, employees must be able to transfer skills from a specific part of the process to the whole. They need to increase their knowledge on a macro-systems level and must possess impeccable organizational skills.

Career Tracks

The following provides examples of common job titles and descriptions associated with production.

- **Production Schedule Support I** operators work on specific machines in the production process, learning additional skills from their supervisors. With on the job experience they may advance to Production Specialists or Production Scheduling Supports II, III and IV.

- **Production Specialists** are responsible for a variety of complex operations and duties in a production area. They monitor equipment performance and make minor adjustments such as set-ups, calibrations and alignments.

- **Production Planner/Scheduler Supports II, III and IV** are responsible for performing in planning and scheduling functions involved with coordinating products and materials various production phases. They implement planned production schedules, labor loading and capacity requirements. Production Scheduling supports review schedules to determine materials and parts requirements to ensure materials are available according to schedules. With leadership skills and additional work experience and/or training, they may advance to a production Supervisor position.

- **Production Leads** head a team of production supports, specialists and planners. They are responsible for all aspects of particular production line and they report to a production
supervisor. They may act as a liaison with vendors, customers, and engineers. They train and lead production crews. Production leads must take personal responsibility for all products in a given line; they are ultimately responsible for preventing and detecting problems which affect product quality.

- **Production Supervisors** coordinate the activities of workers engaged in processing and/or the development of a product or a service. They train new workers on how to operate the equipment. They inspect materials and products to maintain organization standards.

- **Heads of Production** monitor the operation of the entire manufacturing floor. They coordinate between production lines to maintain overall production schedules. They work with production supervisors to set goals and troubleshoot. They oversee and monitor manufacturing for timely execution of experiments and new product implementation.

**Metal Manufacturing**

*Metal Manufacturing in Los Angeles County, Part II: Employer Personnel Practices, February 2000; Community Development Technologies Center.*

All of the respondents to a "skills gap" profile of key occupations of five industries, with the exception of one firm, said they offered advancement opportunities to their employees. Although small companies hire fewer people than larger firms, small employers generally have a greater commitment to promoting from within than their larger counterparts. The emphasis on internal promotion is not surprising, since small employers cannot afford the financial and operational disruptions that come with the hiring of new employees who have to overcome a learning curve.

Several companies also gave specific examples of how some of their employees were promoted through different career pathways:

- One manufacturer described how a receptionist could advance to data entry clerk and then to customer service as a purchasing clerk. In production, a general helper could advance to general assembly, then to specialty assembly, and later to the repair and maintenance of equipment. That same employee could also move into a middle management position as a lead man, foreman, team leader or production supervisor.

- A metal finishing and plating specialist described how the need for more middle managers had opened up promotion opportunities for the firm's employees. He gave an example of how, in one instance, the company had accidentally stumbled upon a promising employee. This employee, a young Latino, had been taking computer classes on his own time. He asked for help from one of the supervisors, who only then had learned about the employee's efforts to improve himself. Impressed by his initiative, the supervisor ended up mentoring the employee. This employee is now working in the lab as a technician, but the company is also grooming him for the assumption of management responsibility.

In every case cited above, promotability depended not only upon personal initiative, skills and knowledge, but also upon access to continuous training and learning opportunities.

The above information can be found at www.novaworks.org and www.cdtech.org/workforce.
Center for Continuing Study of the California Economy

The Center for Continuing Study of the California Economy (CCSCE), located in Palo Alto, is an independent, private economic research organization specializing in the analysis and study of California. CCSCE focuses on long term economic and demographic trends in the state and its major economic regions. CCSCE works with private companies and public institutions that require an explanation and analysis of the growth process as well as detailed quantitative projections.

Shared Prosperity and the California Economy is the third in a series of CCSCE reports discussing the relationship between public policy choices in the state and California economic trends. Previous reports included Land Use and the California Economy and Smart Public Investments for the California Economy which were commissioned by Californians and the Land, a group of California foundations and organizations including The James Irvine Foundation.

Copies of Shared Prosperity and the California Economy, and all of CCSCE's foundation-sponsored research, are available at www.ccsce.com or by calling (650) 321-8550.

Stephen Levy

Stephen Levy is the author of Shared Prosperity and the California Economy and Director and Senior Economist for the Center for Continuing Study of the California Economy. Steve is the author of CCSCE's annual California economic report series and wrote the Land Use and Smart Public Investment reports. He is also currently a member of the NOVA Workforce Investment Board.

Steve lives with his wife, Nancy, in Palo Alto. They have two children, Becky and David.
The James Irvine Foundation is an independent grantmaking foundation dedicated to enhancing the social, economic, and physical quality of life throughout California, and to enriching the state's intellectual and cultural environment. The Foundation was established in 1937 by James Irvine, the California pioneer whose 110,000-acre ranch in Southern California was among the largest privately owned land holdings in the state. With assets of $1.5 billion, the Foundation makes grants of approximately $71 million annually for the people of California. For more information on the Foundation, please visit www.irvine.org.
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Corporate Source: The James Irvine Foundation

Publication Date: Fall 2001

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