

# Harnessing the Intellectual Capital of the San Gabriel Valley

Strategic Plan

*Building for the  
Future  
with Education  
and Careers*



San Gabriel Valley Economic Partnership  
March 2003

**WorkForce**  
San Gabriel Valley



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## *About the San Gabriel Valley Economic Partnership*

The San Gabriel Valley Economic Partnership is a private, non-profit economic development and marketing organization dedicated to sustaining and growing the economic base of the valley through marketing and business retention programs. The Partnership is also engaged in the statewide movement to promote leadership and sustainability through Collaborative Regional Initiatives. This report is the outcome of shared values and resources brought to bear on quality-of-life issues through the California Center for Regional Leadership and The James Irvine Foundation.

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*San Gabriel Valley Economic Partnership  
Irwindale, California 2003*

*Edited and Compiled by: Robert L. Scott*

# Harnessing the Intellectual Capital of the San Gabriel Valley

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*Edited and Compiled by: Robert L. Scott  
Design: CivicCenter Group*

A collaborative process and presentation of the San Gabriel Valley Economic Partnership

Made possible by a grant from the James Irvine Foundation

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Workforce San Gabriel Valley is a publication of the San Gabriel Valley Foundation for Economic Growth, in conjunction with the San Gabriel Valley Economic Partnership, 4900 Rivergrade Road, Ste. A310, Irwindale, CA 91706  
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E-Book Revision: March 2003

For best results, use the latest version of Adobe Acrobat Reader to view this publication

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# Acknowledgements

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**Jim Antonich** California State University, Los Angeles  
**Roland Aranjo** Office of Assembly Member Judy Chu  
**Liza Becker** Mt. San Antonio College  
**Angela Bernacki** Citrus Valley Health Partners  
**Jan Billips** American Red Cross  
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**Dolly Lucero** El Monte Rosemead Adult School  
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**Rocio Maldonado** Huntington Hospital,  
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**Raina Martinez** Duarte's Promise  
**Virginia McBride** Diagramix, Inc.  
**Ralph McKnight** Business Life Magazine  
**Brenda McPheeters** SBC Pacific Bell  
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**Charles Whims** GAIN  
**Ron Whittemore** Industry Manufacturers' Council  
**Melodye Wilbur** Parsons  
**Ben Wong** Councilmember, City of West Covina/ Assistant to Board Member John Chiang, State Board of Equalization  
**Ron Wood** San Gabriel Valley Newspaper Group  
**Pam Woodbury** Monrovia Adult School  
**Martin Zitter** NASA-PSA  
**Cindy Yasuda** Los Angeles County Dept. of Sanitation



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# Introduction

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The San Gabriel Valley is situated on the leading edge of the Pacific Rim, positioned to be highly competitive in a dynamic global economy. In order to maximize its potential, and that of its residents, it is essential that the regional workforce be well educated and skilled – particularly in high-demand professions and occupations.

The past several decades have seen great change in economic markets, and the high-tech information-based economy has permanently altered the workforce landscape – particularly in the valley, with its extensive intellectual community. An unprecedented ethnic and demographic transformation has also occurred.

To take advantage of these changes and to remain competitive, the valley workforce has had to continually evolve. The sharp lines that once separated *blue collar* and *white collar* jobs have been blurred. Standard workplace requirements now include computer skills and other technology-based expertise. With automation and an ever-expanding demand for knowledge in the workplace, there are fewer and fewer positions available to those who lack basic *soft skills*. At the same time, high-end careers continue to become more and more specialized and competitive – with the average U.S. worker changing jobs nine times before the age of thirty-two.<sup>1</sup>

The majority of local employers interviewed during this collaborative process cited difficulties finding qualified employees – and concerns that many applicants lack basic skills in computers, customer service, professionalism and literacy.<sup>2</sup> Although the region is rich in opportunities for training and educating workers, many employers still have to search outside the region – or outside the U.S. – to fill certain positions.

President George W. Bush recently commented:  
*The most important indicator of our economic strength is the growing skill and efficiency of the American worker...<sup>3</sup>*

By capitalizing on its intellectual resources, the San Gabriel valley can continue developing its world-class labor force – one that supports growth industries, and increases its competitive advantage over neighboring regions. The valley can promote economic development and attract industry and commerce – thereby increasing the availability and quality of jobs in the region.

This strategic plan deals with local challenges from the points of view of civic leaders and advocates – identifying impediments, and seeking actionable

solutions. Workforce issues are addressed from several perspectives: needs of the general workforce, strengths of the educational system, level of community engagement; and through the identification and discussion of three significant industry-employment clusters.

For the most part, the career equation is made up of three major elements: employers, the workforce, and the educational community. Employers and entrepreneurs provide the capital, innovation, management and marketing required to launch new enterprises, and to grow existing companies. They provide the know-how to develop products and services that fulfill ever-changing market demands. The workforce, with their knowledge and skill, provides the time and energy needed to turn information and concepts into products and services. As a result, regional capital increases, benefiting all the stakeholders, and strengthening the local economy.

The third element – and main focus of this report – is education. Education, training and experience are the building blocks for careers and for lifelong success. Educators have the daunting task of offering programs and curricula that are relevant to the real world – to prepare learners for careers in rewarding and growing fields.

By recommending improved communication and coordination of the three elements through a *public/private/civic* partnership, this strategic plan builds upon traditional public/private approaches. With the assistance and dedication of civic facilitators, volunteers and philanthropic resources, a new inter-agency, cross-jurisdictional strategy is possible. Through this strategic partnership of regional stakeholders, it is possible to: inform and motivate residents, engage employers and assist institutions with their educational and career development objectives.

*Education is becoming more important than ever before. The new wrinkle is that – given the fast pace of technological change – workers must now commit themselves to lifelong learning. This is key to remaining competitive – as a nation and as workers – in the 21<sup>st</sup> century.<sup>4</sup>*

The goal of *Workforce San Gabriel Valley* is to help develop a *culture of education* in the region, to assist in cultivating careers, and to encourage local residents to embrace *lifelong learning*.

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<sup>1</sup> U.S. Secretary of Labor Elaine L. Chao, *Working Together to Build the 21<sup>st</sup> Century Workforce* at Texas A&M University, November 15, 2002.

<sup>2</sup> San Gabriel Valley Economic Partnership. *San Gabriel Valley Workforce Needs Assessment*. Irwindale, CA, 2002.

<sup>3</sup> President George W. Bush, Address. Economic Club of Chicago January 7, 2003.

<sup>4</sup> (Chao).



# San Gabriel Valley Intellectual Capital



The San Gabriel Valley, with its substantial educational infrastructure, is the *Intellectual Capital* of California. The region rivals education clusters throughout the world – and is without equal in the State of California. Thirty-one colleges, universities and graduate schools build upon a vast array of school districts, vocational schools and training institutions.

Among the Valley’s premiere research facilities is NASA’s<sup>1</sup> Jet Propulsion Laboratory – the lead center for robotic exploration of the solar system. The Jet Propulsion Laboratory also manages the worldwide Deep Space Network, and is affiliated with nearby California Institute of Technology. Caltech, known for its numerous scientific milestones, ranked fourth among national universities that issue doctoral degrees for 2003, according to US News and World Report’s annual *Best Colleges* report. Caltech is investigating the most challenging, fundamental problems in science and technology, and it’s faculty, alumni and students have collected thirty Nobel Prizes to date.



Three of the top liberal arts schools in the country are located in the San Gabriel Valley:<sup>2</sup> Pomona College ranked fifth overall for liberal arts college bachelor’s degree programs in 2003, and Claremont McKenna and Harvey Mudd Colleges ranked thirteenth and fifteenth respectively. Among the best undergraduate engineering programs, Harvey Mudd College ranked second. The valley is home to the largest and third largest community colleges in the nation, Mt. San Antonio College, and Pasadena City College, respectively.

The Rose Institute of State and Local Government provides research to inform the public debate on governance issues. Developing technology to diagnose and treat illnesses, the Huntington Medical Research Institute works to enhance knowledge of life processes and disease. Specialties include molecular oncology, molecular neurology, cytogenetics research, neural engineering, and magnetic resonance. Keck Graduate Institute at Claremont McKenna College is the only American graduate school dedicated to the emerging field of applied life sciences.

In addition to offering a full complement of medical services, the City of Hope National Medical Center is engaged in the quest for prevention and cures for cancer, HIV/AIDS, diabetes, and other life-threatening diseases. The center’s Beckman Research Institute is one of the nation’s premier centers for pioneering biomedical research, supporting innovative and creative research, and preparing students for careers in the biological sciences.

San Marino’s Huntington Library is one of the largest and most complete research libraries in the United States in its fields of specialization. Collections include rare books and manuscripts principally in the areas of British and American history and literature, fifteenth-century European books, history of science, maritime history, and Renaissance exploration and cartography. Altogether, there are nearly five million volumes and documents available for research use.

The San Gabriel Valley is rich in innovation, initiative and intellectual capital – ripe with opportunities for scholars and entrepreneurs alike.

<sup>1</sup> National Aeronautics and Space Administration.

<sup>2</sup> U.S. News and World Report. *America’s Best Colleges 2003*. New York.



### Summary of Action Initiatives

#### Core Concepts

1. Strategic partnerships and improved communication among businesses, employers and educational institutions
2. Community outreach to establish a *culture of education* providing support and appreciation for the benefits of education
3. Real-world connections to motivate learners, develop career paths and instill confidence

#### Strategic Proposals

- I. Workforce Development Committee within the San Gabriel Valley Economic Partnership
- II. Basic Skills for the Workplace
- III. Career-based Curricula: Targeted Educational Programs
- IV. Incumbent Employee Training Programs
- V. Career Options: Early Identification of Interests, Skills and Aptitudes
- VI. Career Counseling Available at all Levels
- VII. *Culture of Education* Promoted in all Communities
- VIII. Career Planning Symposia, Reaching Out – Information and Inspiration
- IX. Campaign Promoting Career Advancement and Education
- X. Increase in Real-world Experience – Internships and On-the-job Training
- XI. Utilization of Technology to Enhance the Education Process
- XII. Development of Entrepreneurs, Innovation and Capital
- XIII. Overarching Principles and Shared Values
- XIV. Local Implementation of Statewide Strategies

### Harnessing Intellectual Capital

As the *Intellectual Capital* of California, the San Gabriel Valley has the educational infrastructure necessary to support a highly skilled and qualified local workforce – a workforce capable of attracting new and growing industries to vitalize the region.

Intellectual capital can be measured both qualitatively and quantitatively. The valley scores well on both accounts. The region rates first in the State of California and among the top intellectual clusters worldwide. Many of the world's finest minds in science and innovation are found within valley ranks.

Intellectual firepower is provided by an army of Nobel Laureates, scholars and academics supporting world-renowned research facilities such as the City of Hope, Jet Propulsion Laboratory and the Huntington Library. The valley is home to three of the top undergraduate liberal arts colleges in the country and a number of premiere graduate institutes, along with Mt. San Antonio College, the largest community college in the nation.

### Project Goal

#### *Workforce San Gabriel Valley*

The goal of *Workforce San Gabriel Valley* is to provide a market-driven strategic plan that will utilize civic resources – reach out to a representative group of stakeholders – and optimize the natural interaction of equity and economic opportunity for valley residents. The project is also dedicated to strengthening the business climate and the economy of the San Gabriel Valley region.

This is accomplished by capitalizing on today's technologies and the powers of interactive collaboration to reach out to an ever-increasing group of stakeholders. Leaders of

the San Gabriel Valley Economic Partnership have provided a core, around which the community can continue to develop consensus on shared values and strategies. Outcomes depend heavily on the establishment of long-term implementation programs and linkages among the workforce, employers and educational institutions.

### Beneficiaries

The primary beneficiaries of this initiative are residents in the San Gabriel Valley who are in need of motivation and improved access to education and career opportunities. With knowledge of their educational alternatives, learners will have better opportunities to access quality careers within the region – increasing their potential to participate in the area's broad based prosperity.

San Gabriel Valley employers, businesses and industries will also benefit from the enhancement of the workforce. They will gain from an improved talent-pool and an expanded base of qualified employees at all levels. Tailored training is being refined in employer-specific, high-demand trades and occupations, producing vital connections between capacity and demand.

The region's educational institutions will benefit from the formation of stronger alliances and increased collaboration with employers in both the public and private sector.

A more generalized benefit is realized by the entire community with the added success and relevancy of the educational system. The economy continues to expand along with productivity, which increases employment opportunities. This, in turn, helps to reduce crime, grows the economy, and increases capital investment.

## Consensus Building and Outreach

**W**orkforce San Gabriel Valley is the product of community collaboration—a process spanning fifteen months, involving outreach and engagement. Among the stakeholders were: residents, community leaders, public institutions, city, county, state and federal officials, local agencies and educators, as well as private and public educational institutions.

The process built upon an initial *Workforce Needs Assessment*<sup>1</sup>—to determine the training and experience requirements of a broad range of area employers. Nearly 100 local employers were interviewed to determine their concerns, needs and priorities in employee recruitment and development.

The assessment was supplemented with industry data and matched with generally accepted criteria for growth industries. The information was also analyzed to arrive at several candidates for important industry-employment clusters.

In traditional clustering, the criteria for industry selection is generally limited to business success and profitability models. In selecting *employment-based* industry clusters, career opportunity criteria were also considered. Quality occupations with promising career ladders are seen as key to a healthy economy and to broad-based prosperity.

Demographics, income and educational attainment levels were analyzed and compared to geographic concentrations of selected industries and to industry employee distribution. With baseline information and assumptions in hand, an extended series of stakeholder roundtables was conducted to assess the

data, evaluate information and collaborate on strategic implementation action steps.

Dialogues were established among the stakeholders as a first step in creating long-term educational linkages among the region's workforce, employers and educational institutions.

*Workforce San Gabriel Valley* stakeholder roundtables began in May 2002 and continued through November 2002. Roundtable dialogues allowed participants to gain a collaborative understanding of the state of workforce training and education in the valley.



Finally, the roundtable groups and other stakeholders converged at a forum: *Harnessing the Intellectual Capital of the San Gabriel Valley*, held January 30, 2003. The strategic plan summary report was introduced along with a series of presentations featuring local experts, educators, business leaders and workforce professionals.

Four different panels addressed: workforce, education, employer viewpoints and strategic solutions.

The panelists shared their expertise and engaged in candid discussions of the regional economy. They addressed the future ability of the workforce and education infrastructure to support growth—particularly in the context of the area's changing demographics.

Through the collective work of the roundtables and the forum, consensus was developed on a series of implementation strategies—comprising three fundamental concepts:

*First*, it is critical for educators to monitor market demands, and be able to predict future career opportunities for students. This can be accomplished through aggressive strategic partnerships among businesses, employers and educational institutions. It is possible to improve communication and interaction with help from local civic leadership—allowing educational offerings, workforce initiatives and curricula to be better coordinated.

*Second*, increased community outreach requires a concerted effort, with valleywide campaigns to establish a *culture of education* in the region. Motivation is needed to encourage the setting and attainment of goals—along with access to the tools necessary to achieve those goals. Promoting the benefits of *lifelong learning* and education is crucial for the region's increasingly diverse population.

*Third*, a major focus of education must be to connect learning with real-world experiences. Students are far more likely to succeed when they can comprehend how their studies relate to future benefits and to their long-term quality of life.

<sup>1</sup> San Gabriel Valley Economic Partnership. *San Gabriel Valley Workforce Needs Assessment*. Irwindale, CA, 2002.



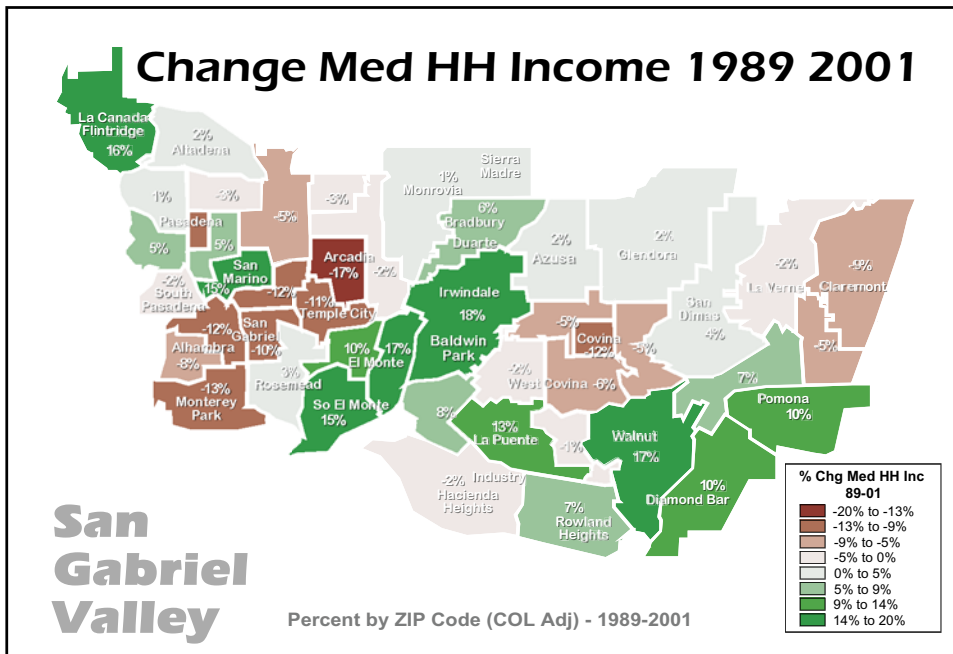


Fig. 1. Change in Median Household Income, by ZIP Code, San Gabriel Valley, 1989-2001

### Shared Concerns

Through an earlier collaborative process undertaken in 2000, leaders built consensus around a set of shared priorities for the San Gabriel Valley region.

Transportation was seen as the most pressing issue both for residents and businesses. This is being addressed to some extent with the *Alameda Corridor East* project, completion of several new freeway segments, and the 2003 launch of the 13.6 mile Metro Gold Line into downtown Los Angeles.

Transportation and infrastructure are a central focus of the San Gabriel Valley Council of Governments (COG). In the last four years the COG, working with government sources on local, state and federal levels, has succeeded in attracting over \$300 million for local infrastructure projects.

Education is a great concern virtually everywhere in the U.S., and ranked second in the San Gabriel Valley. The same rich diversity that defines the area also presents challenges in dealing with students from a multitude of

backgrounds and cultures. Students and their families need strong connections to local educational opportunities and programs.

Rounding out the top three issues is housing affordability. This does not lend itself to simple solutions, and is not expected to abate soon. Southern California is experiencing a regional shortage of housing – affordable housing in particular.

Public and private programs are underway to meet the increasing need to provide quality housing for valley residents.

On the other hand, those who are able to enjoy home ownership are benefiting from an extremely robust market, with 2003 mortgage rates in the 5% range – unprecedented in the last three decades.

The forth indicated concern is that of employment, which is a function of the economic climate. It is also dependent upon the ability of residents to fulfill the demands of regional industries. Of the residents that responded to a 2000 survey by the Rose Institute, 38% indicated they are employed outside of the San Gabriel Valley.<sup>1</sup>

The region of Southern California represented by the six-county Southern California Association of Governments is expected to add six million new residents by 2025. Changes in the San Gabriel Valley’s demographics, for the most part, are expected to mirror those observed in other SCAG sub-regions. Many Communities in the valley are becoming more urbanized.

<sup>1</sup> Rose Institute of State and Local Government. *San Gabriel Valley 2000: A Comparative Analysis of Economic, Social and Political Trends in Public Opinion*. Claremont, CA, 2000.



Fig. 2. Community Indicators 2000, Issues by Priority, San Gabriel Valley

## NEEDS ASSESSMENT

Determining and projecting workforce demands over the next three to ten years is key to implementing the San Gabriel Valley education and workforce strategic plan.

Through extensive employer interviews, a *Workforce Needs Assessment*<sup>1</sup> was conducted among local companies to gain insights into workforce training demands and recruitment issues. Employers were also asked to assess the valley's current economic environment. The needs assessment provides a foundation for the development of a workforce strategy. Support was nearly unanimous for increasing workforce training opportunities and improving community outreach.

Dozens of employers were asked to evaluate the current talent pool – which includes incumbent employees and job applicants. Over half of the interviewees suggested that the current workforce could benefit from additional training in the areas of computers and customer service. Forty-eight percent felt that specialized training was needed, with 37% wanting to refine teamwork skills.

A substantial percentage, 28%, cited weaknesses in literacy and writing, with 18% raising concerns about language proficiency.

There are a few jobs, mostly menial, that can be attained without English proficiency. But even in this diverse region, very few career paths exist that do not involve the need for fluency in English – as the common language of business and commerce. Reading, writing and communicating with

colleagues and customers is an essential part of the operations of any workplace, along with an ability to express ideas, and to properly describe articles, goods and services.

Reports, communications, reference works and manuals are crucial to the majority of job functions. Literacy and reading comprehension provide employees with the necessary competitive advantage to access opportunities and to advance in the workplace.

According to respondents, nearly 31% of positions within their companies require skilled or experienced employees. The opportunities for entry-level applicants are much lower, at 17%. Nearly 20% of positions within local industries require that employees possess certificates, licenses or degrees, and 18% must be filled by individuals who have been formally trained or educated. Finally, approximately 10% of positions within the participating companies are held by managers, with 4%

occupied by individuals who hold masters degrees and beyond. Opportunities are most abundant for applicants with college degrees, certificates, licenses and specialized training.

San Gabriel Valley employers are seeking talented employees with skills, training and literacy. Yet, area companies are often challenged to find local employees that meet this rather nominal threshold criteria.

In larger metropolitan areas employee transiency tends to be high, and loyalty at a premium. Employers are often reluctant to invest too much in training for occupations and industries where turnover is an issue. It can take many years to recapture the cost of highly specialized training.

The resources exist within the valley to develop an extremely viable workforce. Partnerships among employers and educators can lead to increased opportunities for workers through awareness

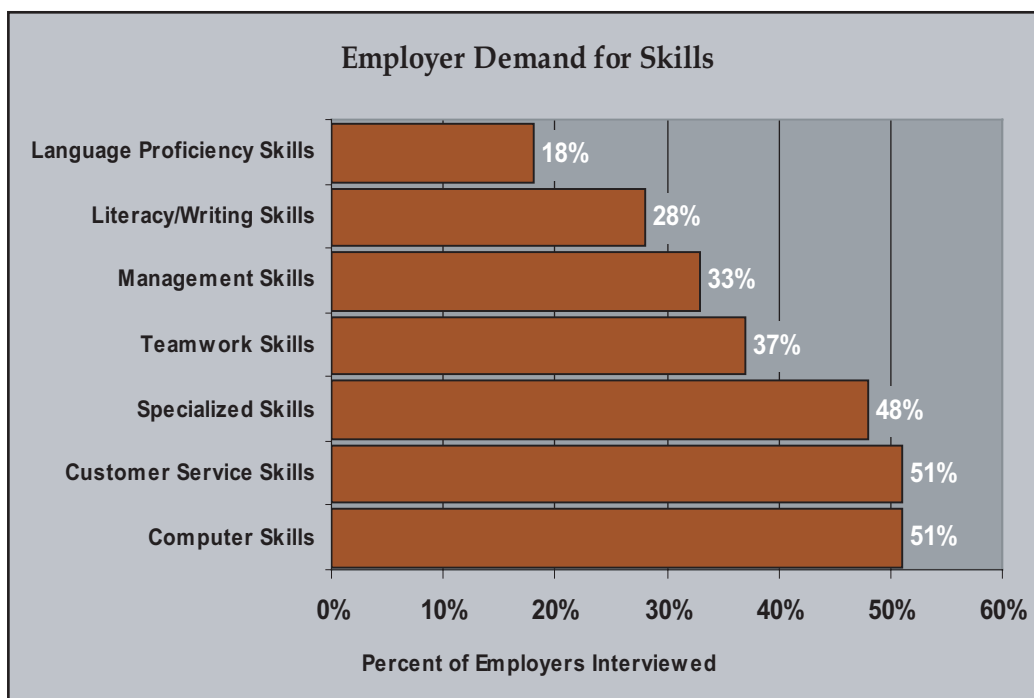


Fig. 3. Employer Demand for Skills, by Percent Responding, San Gabriel Valley, 2002



and development of real-world education and training programs.

**Computer Skills** – The last 25 years



have seen dramatic changes in the way businesses communicate, including how employees perform job functions. Keyboard skills—once the domain of the typing pool—have now become essential for virtually every employee.

With desktops, laptops, personal data assistants and a phalanx of dedicated and wireless devices, the workplace is inundated with keyboards, buttons and video displays—whether it is a police officer inputting information on the patrol car's mobile data terminal, transactions being entered into a point-of-sale terminal, or a memo being generated by a CEO on his laptop, technology is an ever-growing presence in the workplace.



Even the field of automotive repair has been overtaken by computers—with a large percentage of repair diagnostics being done by computerized test equipment. Workers lacking, what are now considered *baseline* skills, which include knowledge of computers, are less likely to be hired, and are apt to be denied opportunities for career advancement.

**Planning and Organization** - Organizational skills minimize disruption and downtime, speed transactions, and maintain order and tranquility in the working environment. This includes the ability to plan work, and to properly implement projects.



**Professionalism** – It is important for the employee to use discretion in interactions with co-workers, customers and other business contacts. There is always a need for a level of decorum in the workplace. Employers also place a premium on attention to detail—where the employee refines and optimizes work products.



**People Skills** – Employers prefer applicants who are able to successfully interact with co-workers, supervisors, vendors, and most importantly, customers. Because most endeavors involve multiple steps and a variety of skills, teamwork among employees is critical.

**Dedication** - Employees should possess a sense of responsibility for the overall mission of the organization, and to understand the importance of their roles within the company. Reliability is a highly-prized workplace attribute. Few things disrupt operations more than the failure or absence of a team member who has been given some important responsibility.

**Critical Thinking** – As employees move up the career ladder, they are generally given more responsibility and authority. With this, they become more likely to encounter unexpected challenges. The employer places a high value on employees who use common sense, initiative, creativity and innovation in solving problems and dealing with challenges.



Employees can be confronted with unforeseen circumstances at any time. Many of these situations are unprecedented. Thus, the need for workers to be adept learners, to possess the ability to comprehend new situations and utilize new technologies is essential. Employees are expected to evolve, thus contributing to the collective knowledge of the organization.



With a mastery of these skills, employees at all levels accomplish more and increase their upward mobility. Employees and applicants who understand the process for career ladder development are most likely to avail themselves of education and training opportunities, increasing the likelihood of them realizing their career goals.

<sup>1</sup> San Gabriel Valley Economic Partnership. *San Gabriel Valley Workforce Needs Assessment*. Irwindale, CA, 2002.

# THE CHANGING HUMAN LANDSCAPE

## A Changing Population

Between 1990 and 2001, the County of Los Angeles and the San Gabriel Valley saw dramatic shifts in their populations. These transformations further increased diversity in the region. The already-rich cultural quilt grew in complexity, with various groups working to take advantage of the opportunities that abound in the region.

There are now dozens of languages spoken in valley schools, with a growing number of residents claiming English as their second language. In 2000, over 1.1 million adults were enrolled in English as a Second Language (ESL) programs in the United States.<sup>1</sup>

Fundamental English literacy is one of the most important and sought-after subject areas in education. The workforce adds tens of thousands of new residents to its ranks annually. Meaningful assimilation is key to their becoming productive participants in the economy — enabling them to share in the area’s projected growth and prosperity.

## Economic Contrasts

The San Gabriel Valley is home to some of the State’s wealthiest residents and some of its poorest. The fabric of the valley ranges from gritty industrial areas and leafy bedroom communities, to thriving commercial districts and faded downtowns — ethnically mixed

neighborhoods and enclaves where many signs in shop windows are in Chinese or Spanish. Such contrasting images are often found within a few blocks of one another.

Economic diversity is also evident among the valley’s residents. The median household income of the valley’s wealthiest city, San Marino, is nearly triple that of the median

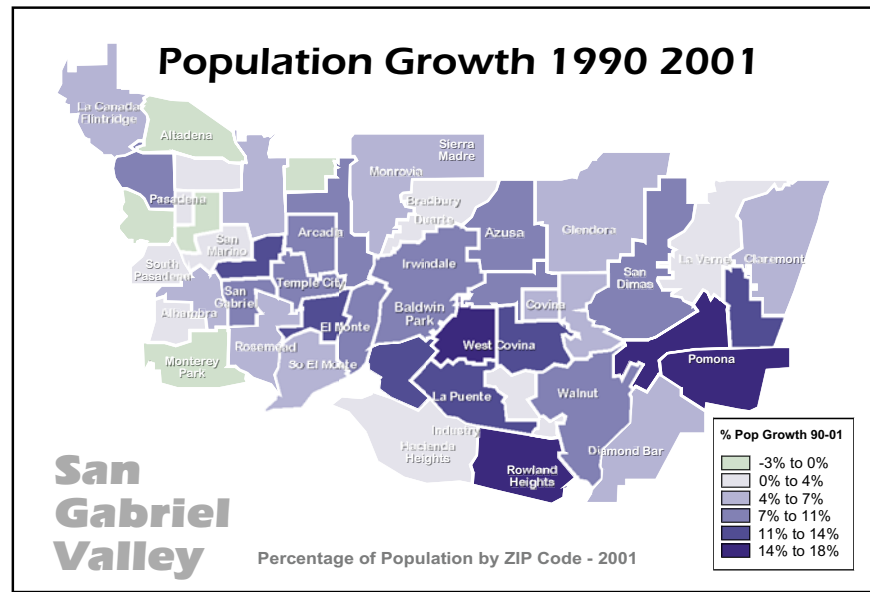


Fig. 4. Population Growth, by ZIP Code, San Gabriel Valley, 1990-2001

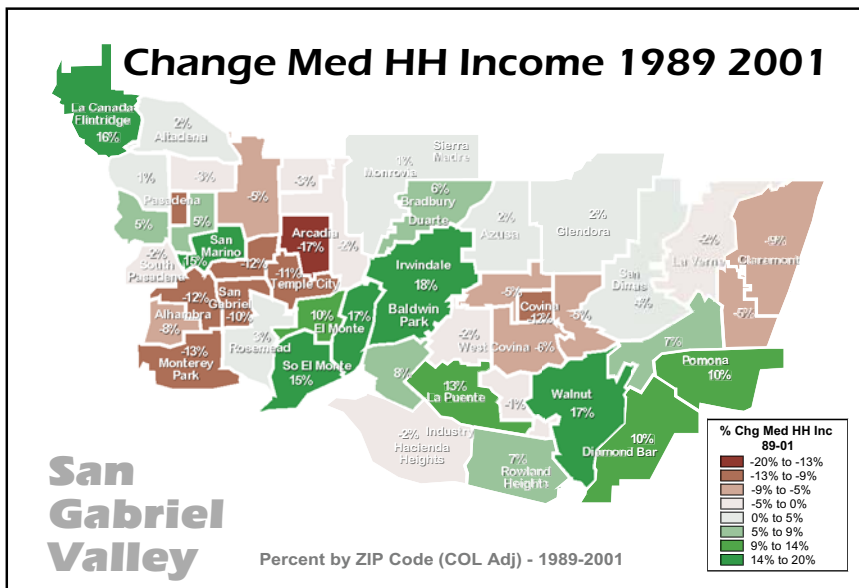


Fig. 5. Change in Median Household Income, by ZIP Code, San Gabriel Valley, 1989-2001

for some of the lower income cities in the area. Less than ten miles away, in the city of El Monte, the median household income is only about 68% of the California median.

Valley residents live in homes that range from extremely modest dwellings, to middle-range suburban homes, to multi-million-dollar estates. Close to 30% of Valley residents have some college education — a figure that exceeds that of Los Angeles County as a whole. San Marino and La Cañada/Flintridge are the valley’s wealthiest communities, with average household incomes of over \$150,000 in 2001.<sup>2</sup>



## CHANGING FORTUNES

The 2003 population of the San Gabriel Valley is an amalgam of rooted local families and new residents from around the world. In the southwest area nearly 16.7% of the current population immigrated to the United States between 1990 and 2000.<sup>3</sup>

These changes do not appear to have affected overall incomes. Between 1989 and 2001 there was a 39.82% change in unadjusted median income in the region, which is slightly over the 38.19% cost of living adjustment for the Los Angeles area<sup>4</sup> showing a nominal amount of real growth. The \$47,493 California median income for 1999 topped the national figure of \$41,994 by 13%.<sup>5</sup>

The average pay in the San Gabriel Valley in 2001 was \$34,388, putting it 14% below the Los Angeles County average of \$39,832.<sup>6</sup> While this signals lower overall cost for labor, it also indicates a larger number of lower-skill, and possibly, lower quality jobs.

A good test of the level of income diversity in an area is the ratio of median household income to average household income.<sup>7</sup> The *median* income is that amount that falls in the middle of all the incomes – e.g. half of the people have higher incomes and half are lower. A lower percentage indicates uneven distribution – fewer households with greater income, and a larger number of households in the lower brackets.

The median household income in 2000 for the San Gabriel Valley was \$50,685, with an average of \$63,813 – an income diversity factor of 79%. The factor for the U.S. was 74%, 73% for California and 69% for the County of Los Angeles.

At the top of Household incomes were San Marino with an average of \$167,653 and La Cañada/Flintridge at \$150,539. At the low end of the

spectrum were El Monte and South El Monte with medians in the \$30,000-32,000 range.<sup>8</sup>

The cities with the most even distribution of incomes were: La Puente, Glendora, Covina, West Covina, Diamond Bar and Walnut – all with factors over 85%. The greatest disparity appeared in Pasadena with a factor of only 65%.

<sup>1</sup> Source: National Center for ESL Literacy Education.

<sup>2</sup> Source: U.S. Census Bureau

<sup>3</sup> (Census).

<sup>4</sup> U.S. Bureau of Labor Statistics. *Cost of Living Index: Los Angeles-Long Beach MSA*, Washington DC, 2002; (Census).

<sup>5</sup> (Census).

<sup>6</sup> Source: CA EDD, ES202 Data, LAEDC, 2001.

<sup>7</sup> Source: Joint Venture Silicon Valley Network

<sup>8</sup> (Census).

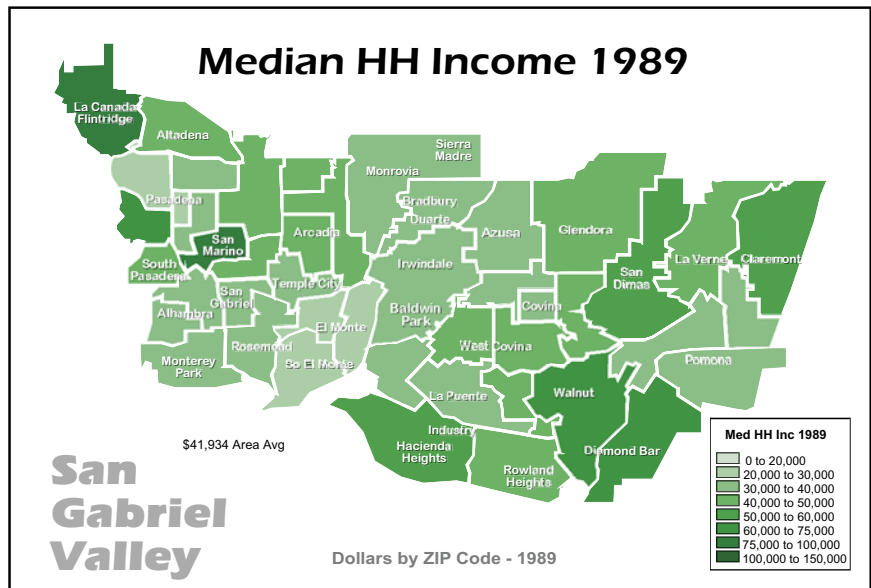


Fig. 6. Median Household Income, by ZIP Code, San Gabriel Valley, 1989

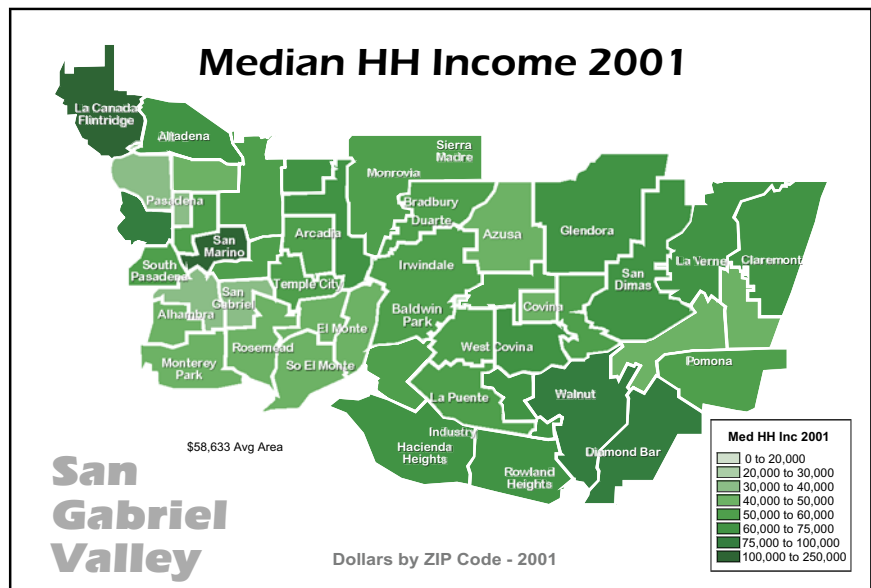


Fig. 7. Median Household Income, by ZIP Code, San Gabriel Valley, 2001

## Asian Influence and Capital

The Asian population of the San Gabriel Valley has grown steadily over the last several decades, from a nominal presence in 1960. By 1986, Asians had become a majority in the City of Monterey Park. By the year 2000, Asian Americans had achieved majority status in such Southern California cities as: Walnut, Rowland Heights, Cerritos, Diamond Bar, and San Marino.<sup>1</sup>

The immigration of Asians and Asian capital has driven economic revitalization and a sense of pride and excitement in building model multi-racial communities. In 1985, Monterey Park was honored nationally by the Citizen's Forum on Self-Government as an "all-American" city for its ethnicity and innovation in developing cross-cultural interaction among ethnic groups – in particular, newly arrived immigrants.<sup>2</sup> The Asian community makes up approximately 30% of the valley's overall population and greater than 35% of the business activity.



Twenty-three Asian banks are located in the valley.<sup>3</sup> The increase in Asian banks coincides with the development of San Gabriel Valley as a center for the Asian American population of Los Angeles. As a result, many Chinese-owned banks moved from Chinatown to the valley, and specifically Monterey Park, in the past few decades.<sup>4</sup> This proliferation, as well as an increase in numbers of Asian American-owned small businesses in San Gabriel Valley suggests that there is

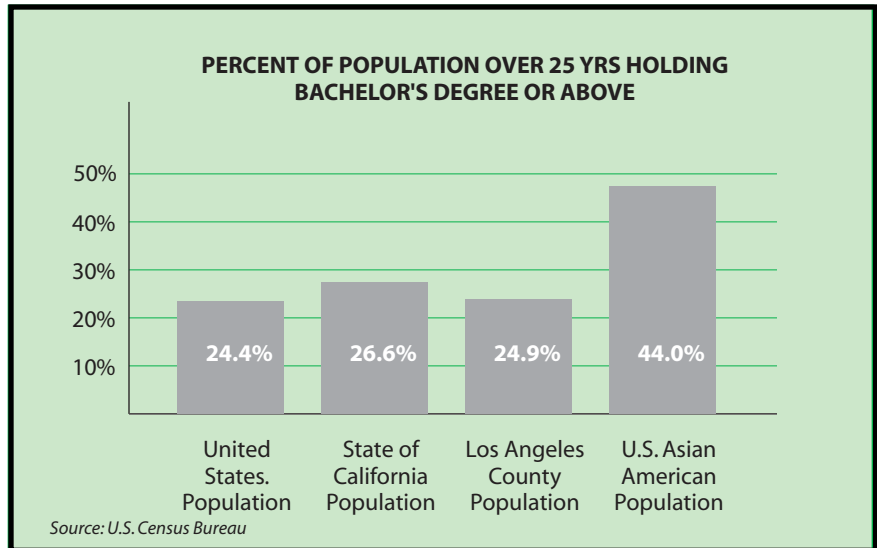


Figure 8. Percent of Population Over 25 Yrs, Holding Bachelor's Degree or Above

a growing and rooted community there for these banks to serve.

Almost all the major Chinese American media sources are also located in the area. These sources developed in response to the community's need for services tailored to the Chinese American community and, more specifically, the three main immigrant communities of mainland China, Taiwan and Hong Kong, in terms of both content and language.<sup>5</sup>

The two largest Chinese language newspapers with a worldwide circulation, *World Journal* and *Sing Tao Newspapers*, both have their Southern California offices based in San Gabriel Valley. *World Journal's* circulation in Los Angeles is approximately 150,000 to 200,000, making it the largest Chinese language newspaper circulation in Southern California. It's readership is comprised largely of first generation Chinese Americans. Similarly, most other major Chinese language media are based in the San Gabriel Valley: *The Chinese Press* in Alhambra, *International Daily News* in Monterey Park, *Worldwide Liberty Times* in Alhambra, *Xin Min Evening News* in Alhambra, *Chinese L.A. Daily News* in El Monte, *Zhong Guo News* in El Monte and radio station AM 1430 in El Monte.

In the Southwest San Gabriel Valley 66.2% of the population is of Asian descent – and the Pasadena Census County Division (CCD)<sup>6</sup> has a population that is 41.8% Asian. The

Asian percentage in the area's four CCDs is considerably higher than in the county, the state or the national level.

Nationwide 44% of Asians over the age of 25 hold bachelor's degrees and above. Although many are recent immigrants, they have the highest attainment rates of any ethnic group. Some attribute this to a cultural orientation that reveres education – and also as the result of stronger family support mechanisms.

Asians and Pacific Islanders over 25 are more likely than non-Hispanic whites to have earned a college degree, but they are also more likely than non-Hispanic whites to have less than a ninth grade education.<sup>7</sup>

<sup>1</sup> Annabel R. Chang. "The Growing Asian Demographic" *Hardboiled*, Vol. 4.6. Berkeley, California: March 2003.

<sup>2</sup> John Horton. *Ethnicity and the Politics of Growth in Monterey Park, California*. Working Papers in the Social Sciences, Los Angeles, California: Institute for Social Science Research at the University of California, Los Angeles, Vol. 4, no. 23, 1988-1989.

<sup>3</sup> Source: San Gabriel Valley Economic Partnership.

<sup>4</sup> Albert Y.M. Huang. Public Hearing. *Redistricting, Identification of Communities of Interest*, June 8, 2001, p 133.

<sup>5</sup> *Ibid* p 132-133.

<sup>6</sup> CCD: Census County Division, established by the U.S. Census Bureau. There are four CCDs in the San Gabriel Valley: (1) Pasadena, (2) Southwest, (3) East and (4) Upper Valley.

<sup>7</sup> Source: U.S. Census Bureau.



## EDUCATIONAL ATTAINMENT

Of the U.S. Population age 25 and over, 24.4% hold a bachelor's degree or above. In California the number increases to 26.6%, dropping slightly in Los Angeles County to 24.9%.<sup>1</sup>

In the City of Boston, by comparison, 35.6% of the population has attained a bachelor's degree or better, exceeding the national level, but notably not that of the Pasadena area, which rates well ahead of most other U.S. statistical areas and cities at 46%. The college towns of Cambridge, Massachusetts and Berkeley, California stand out with 65.1% and 64.3% respectively.

Attainment rates in the U.S.'s three largest metropolitan centers are slightly higher than national averages, in spite of the fact that many of the nations poor and under educated reside in the larger cities. These are the areas where the gaps between the affluent and the poor are the most pronounced – with well-educated residents providing a statistical counterbalance. In New York City the bachelor's-plus attainment rate is 27.4%, and Los Angeles ties Chicago at 25.5%.

Three of the four CCDs<sup>2</sup> in the San Gabriel Valley fall 2%-4% below the county, state and national averages with ratios in the 22% range.

Nationally 80.4% of all Americans have completed high school or above, compared to 76.8% in the State of California. This dips to a rate of 67.2% in the southwest area of the San Gabriel Valley – which is still higher than the neighboring City of Los Angeles at 66.6%. The cities of the eastern U.S. come in somewhat higher: New York, 72.3%, Chicago, 71.8% and Boston at 78.9%.

This disparity is caused, in part, by the large number of first generation immigrants entering the U.S.

as adults – from countries with different educational systems and priorities. The 1998 university-educated population of Japan was 18% with another 13% having attended an occupational school. In Mexico the university percentage was 12% with only 1% having received vocational training.<sup>3</sup>

Most quality, high paying jobs require that applicants and employees hold at least a bachelor's degree. As much as 25% of students in some areas of the valley claim to have attended "some college," but failed to obtain a degree.<sup>4</sup> Had these individuals persisted – using college as a stepping stone – many would,

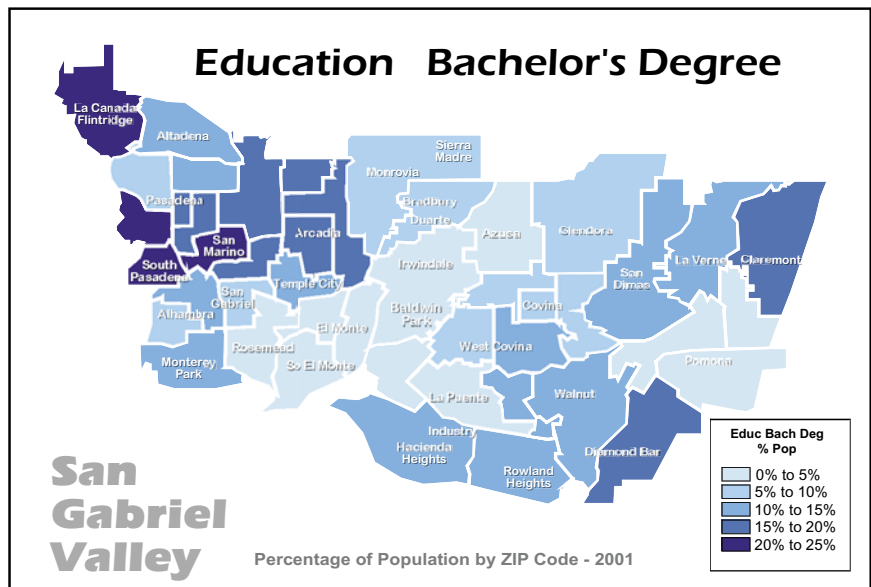


Fig. 9. Education, Bachelor's Degrees, by ZIP Code, San Gabriel Valley, 2001

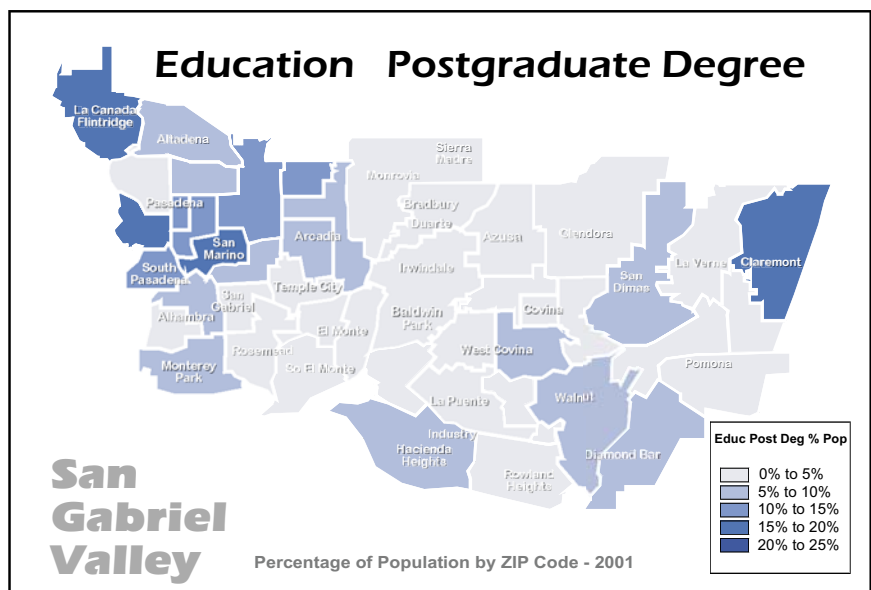


Fig. 10. Education, Postgraduate Degrees, by ZIP Code, San Gabriel Valley, 2001

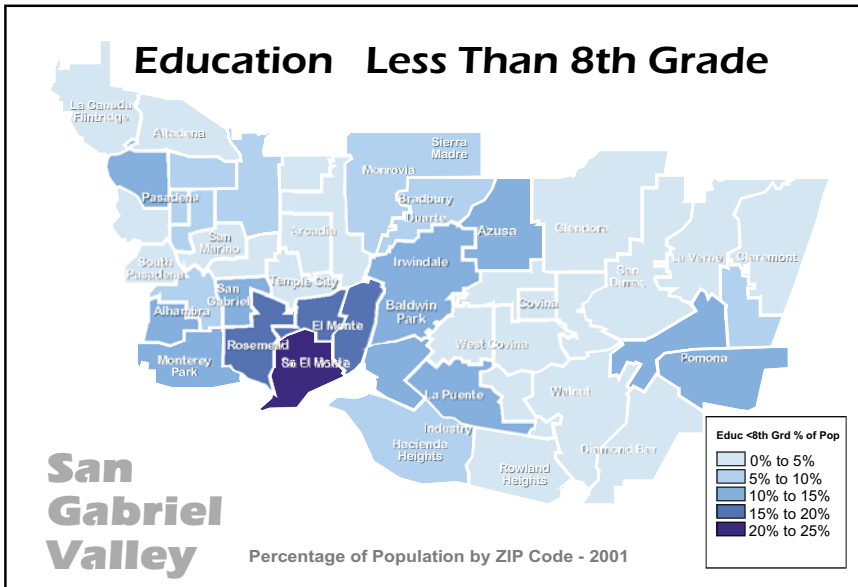


Fig. 11. Education, Less Than Eighth Grade, by ZIP Code, San Gabriel Valley, 2001

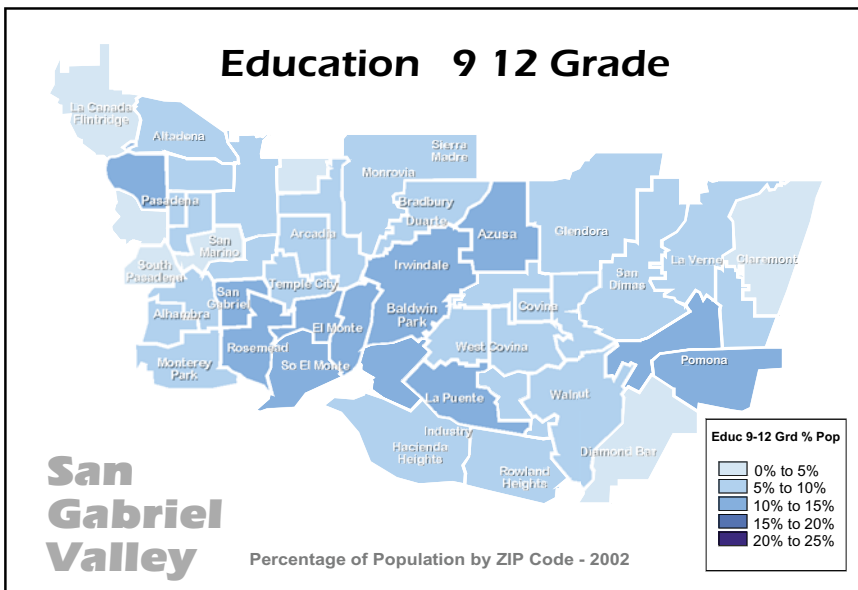


Fig. 12. Education, Ninth through Twelfth Grade, by ZIP Code, San Gabriel Valley, 2001

by now, have improved their career prospects significantly.

In the United States today, approximately 25% of all high school graduates continue on to obtain bachelor's degrees.<sup>5</sup> The other 75% are left behind to compete for jobs that are generally less rewarding—offering far fewer career options.

High-attainment populations appear to coincide geographically with education clusters situated

in the northeast, and northwest sections of the San Gabriel Valley. The University of La Verne, Citrus College and Azusa Pacific University are joined in the northeast to form a cluster with the Claremont Colleges, a consortium of five of the nation's most prestigious undergraduate institutions: Pomona, Pitzer, Claremont McKenna, Scripps and Harvey Mudd—plus the Claremont Graduate Institute and the Keck Graduate Institute of Applied

Life Sciences. In the northwest the Pasadena area is home to Caltech, JPL, Art Center College of Design, Pasadena City College, Fuller Theological Seminary, and the American Academy for Dramatic Arts.

The connection between education and success can be recognized in adjacent high-income residential communities. In La Cañada/Flintridge, 63.5% of residents have bachelor's degrees or better, and 95.9% have high school diplomas. In San Marino the numbers are similar: degrees, 69.7% and diplomas, 95.4%; Claremont: degrees, 52.4%, and diplomas, 92.4%. The southeastern City of El Monte provides a sharp contrast with only 7.1% earning a bachelor's degree or better, and less than half the population, 44.2%, completing high school. El Monte and South El Monte are also the Cities with the lowest average income in the valley.

The State of California has one of the most accessible education systems in the world. Public colleges and universities offer a full range of curricula and degrees, often at a fraction of the cost of private institutions. A wide range of grant and loan programs are available to assist willing learners.

The San Gabriel Valley's remarkable cluster of educational talent and capacity is well positioned to provide valley residents with all the tools necessary for career success, and to support the economic and industrial demands of the region.

Valley students have ready access to an array of innovative courses and fields of study, from art to aeronautics, and from retail sales to histologic technology.

<sup>1</sup> Source: U.S. Census Bureau.

<sup>2</sup> Census County Divisions.

<sup>3</sup> U.S. Census Bureau. *Statistical Abstract of the United States*. Washington DC, 2000.

<sup>4</sup> U.S. Dept. of Labor, Bureau of Labor Statistics. *Occupational Outlook Handbook*. Chicago, IL: VGM Career Books, 2002.

<sup>5</sup> (Census).



## Making Education Relevant

One objective of *Workforce San Gabriel Valley* is to increase the number of residents seeking advanced education and degrees. When looking at the programs offered by San Gabriel Valley institutions of higher learning, the educational possibilities are limitless.

Community colleges offer courses that can lead to associate degrees, certificates and licenses; as well as opportunities to transfer to four-year colleges and universities.

Graduate schools prepare students for specialized professional careers where masters of business administration, masters of bioscience and doctoral degrees such as Ph.D. and M.D. are required.

The number of students who are on career paths can best be increased through early intervention – communicating how education relates to an individual’s real-world aspirations. A cognitive connection needs to be established between hard work and those things students value – such as personal fulfillment and future quality of life. Once students understand this dynamic, they are far more likely to develop their own initiative, and to become self motivating.

*Why do I need to know this? Where am I ever going to use this? . . . Students today not only ask these questions, they react depending on the answer...Relevance of information is important to students in school.<sup>1</sup>*

Employers evaluate applicants on a number of criteria: education, training and most importantly, experience. They will nearly always give deference to college graduates. Degrees evidence a commitment to learning and are an indication of character and of a strong work ethic. All but a handful of the fifty highest paying U.S. occupations require college degrees.<sup>2</sup>

The San Gabriel Valley comprises some 400 square miles and thirty-three cities, and is home to nearly two million residents. Valley population is very diverse, not only

ethnically and socially, but also financially. Educational experiences span a wide range – and are of varying quality – as a result of the region’s complex network of school systems and educational districts.

Unfortunately, poorer communities may not always enjoy the level of resources, participation and parental involvement of their more affluent neighbors. The limited language and communication skills of many first-generation immigrants present an additional barrier to learning.

*“... giving students greater authentic choices so they can make more informed decisions”*

Caprice Young, President  
Los Angeles Unified School District

Not all residents are aware of the wealth of educational and training opportunities that are available locally, at little or no cost. Many believe that college and vocational training is beyond their reach – settling for lower level jobs that do not require education or training.

Adult schools, Regional Occupational Programs and

Centers (ROP/ROCs), WorkSource centers and other state supported programs provide free and low-cost opportunities to obtain vocational training.

One of the best investments an individual can make is a community college education. This can serve as a stepping-stone to a career, or result in a transfer to a four-year college or university. The cost is modest but, as with any educational endeavor, it does require a substantial commitment of time and energy.

Financial aid and scholarship programs are also available through various government agencies and private organizations. Most forms of higher education can be supported by some combination of these resources.

Education is priceless – an investment that will pay for itself many times over. Certificates and degrees endow their holders with the necessary elements to realize their full career potential.

<sup>1</sup> Ken Manning, *ROPs Provide Answers*, San Gabriel Valley Tribune, October 24, 2001.

<sup>2</sup> U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*, Chicago, IL: VGM Career Books, 2000.

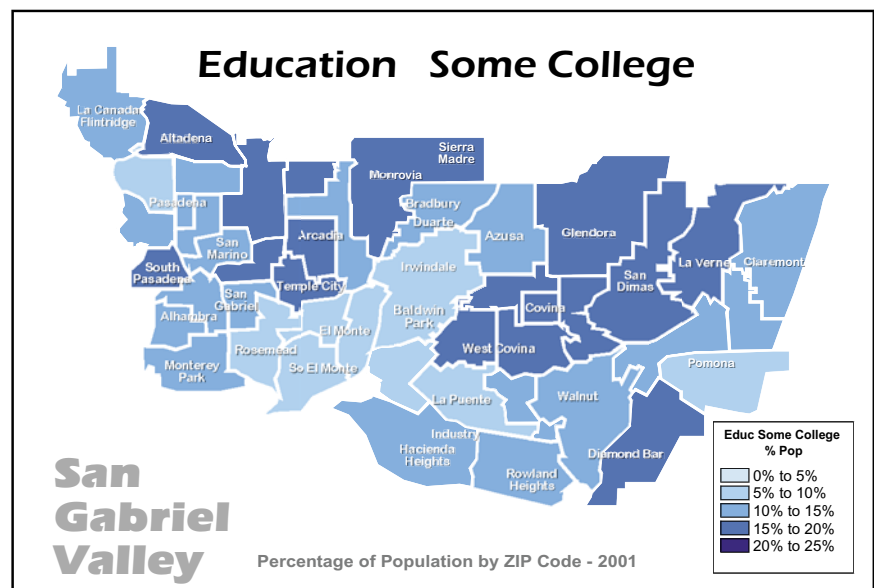


Fig. 13. Education, Some College, by ZIP Code, San Gabriel Valley, 2001

One of the more important economic strategies of the last several decades has been the identification and development of industry clusters. Harvard Business School's Michael E. Porter discusses the competitive advantages of categorical clustering of various types of businesses.

*More and more nations are embracing market economics as an alternative to military might, and finding that the focus on competitiveness results in increased supplies of goods and services, better quality, and increased prosperity for their citizens.<sup>1</sup>*

Post World War II Japan is a perfect example of a country rising from the ashes of war to become a global economic powerhouse. The Japanese were lacking in capital and natural resources, and yet were able to parlay their relatively low-wage labor pool and a keen ability for mass production techniques to rise to prominence – developing capital and ascending to world leadership in the production of durable goods. What was generally seen as shoddy, low-quality products, gradually transformed into some of the most refined and sought-after goods available anywhere in the world.

In the U.S., the same dynamics that apply on a national scale also have been widely implemented on state and regional levels. Competitive advantages develop among spatial concentrations of firms in an industry as they interact with regional and national factors conducive to their profitability.<sup>2</sup> Porter's model relates the growth of a regional industry to regional infrastructure, to the spatial proximity of upstream suppliers and downstream customers. The industry competes for workers, and collaborates – even among competitors – in industry-wide programs such as workforce development.<sup>3</sup>

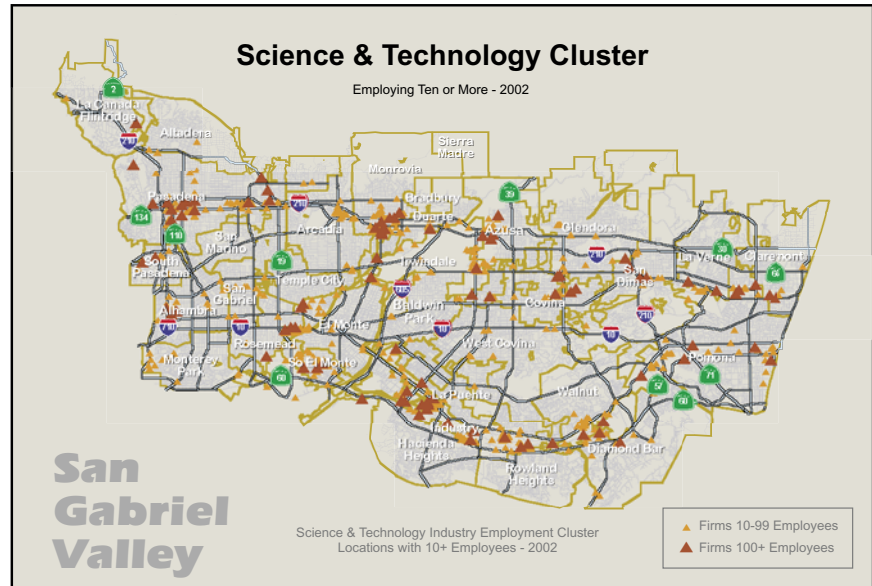


Fig. 14. Science and Technology Cluster, Locations Employing Ten or More, San Gabriel Valley, 2002

Cluster-based development presents opportunities to design and implement supportive regional policies and economic development activities, including enhancement of the educational infrastructure. Economic incentives for industry recruitment help to attract high-paid and knowledgeable individuals to the region, along with fast growing businesses.

Synergies develop in clusters where, through regional co-location,

businesses stimulate each other's growth and supply one another's needs. This provides them with access to a common pool of resources.

Clusters have *direct, indirect* and *induced* multiplier effects on the local economy, based upon revenues, business activity generated and consumer activity that results from their employment of the local workforce. In healthcare, for example, medical facilities spend

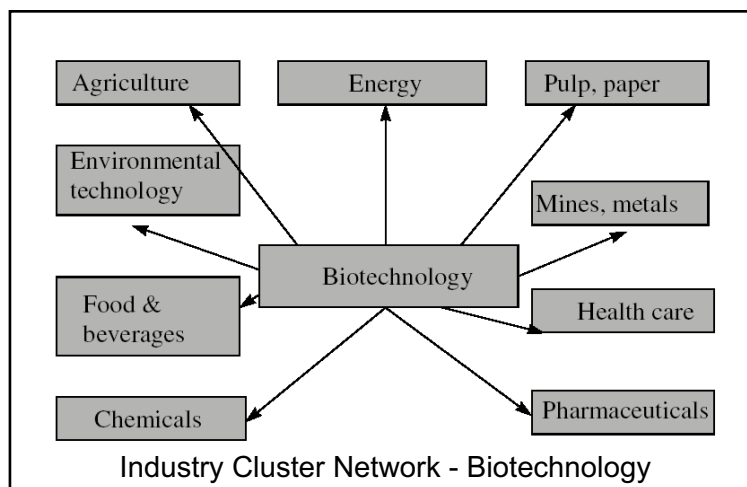


Fig. 15. Industry Cluster Network - Biotechnology, Diagram

heavily on employees, real estate, medical equipment, medicines and food. In a well developed cluster, *leakage* of dollars is minimized, and most materials and supplies are obtained from local sources.

Historically, the most common form of clusters have been those that developed where raw materials and resources are peculiar to a particular location. Industries involved in

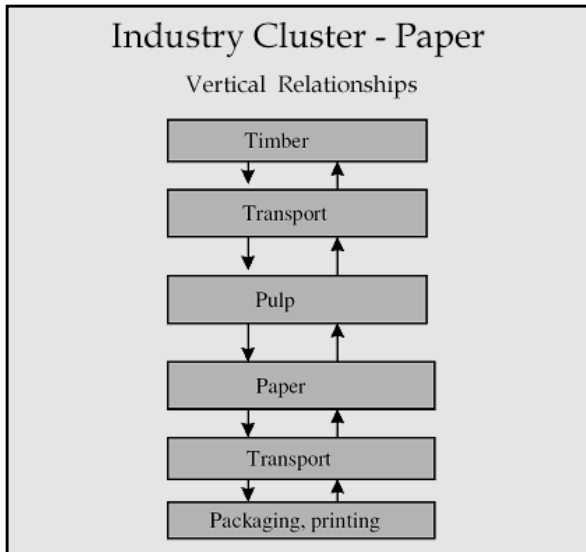


Fig. 16. Industry Cluster - Paper, Vertical Relationships

farming, extracting or processing materials such as citrus, timber, coal, aggregates, ores, seafood, paper and oil are essentially stranded, and unable to operate anywhere other than where the materials are mined or harvested. Thus, these clusters form naturally. They can be relied upon to contribute to the stability of the local economy for as long as supplies last.

Another determinant in the location of some clusters is freight and relative economies of distance. When materials and components are freight-sensitive, such as building supplies, furniture and heavy mechanical equipment, there is a greater need for proximity to materials, as well as being close to transportation lines and major distribution points.

Most industries have need for a for a skilled, experienced, well-educated workforce. By situating in the same region as colleagues,

competitors, unique suppliers and industry-specific service providers it is easier to operate and to attract necessary personnel from the common talent pool.

A *region*, for clustering purposes, might well be defined as an area within which the workforce can conveniently commute on a daily basis. The workforce is highly perishable, and constrained by the physical need to make daily journeys to and from their places of residence.

*“ . . . can source capital, goods, information, and technology from around the world, often with a click of a mouse.”*

A dynamic education infrastructure is an important competitive advantage – one that provides a constant flow of qualified individuals to fill high-demand positions in local industries. Industries have difficulty in regions where the workforce

does not keep pace with the requirements of the marketplace. In today’s knowledge-based economy, academic excellence is in great demand.

The establishment of a regional growth cluster can often be associated with the success of a single pioneering firm. California’s Silicon Valley cluster has established itself as a global leader in computers and technology.

Silicon Valley built around a few successful firms such as Hewlett Packard in Palo Alto. Southern California’s “101 Biotech Corridor” was established in large part with the success of Amgen Inc. in Newbury Park. Each new major industry enterprise brings with it a cadre of support, and the beginnings of a specialized workforce. This, in turn, is an attraction for others in the same industry.

Proximity to raw ingredients will continue to diminish as a factor in location, both as a result of manufacturing being diverted to countries outside the United States, and as a result of more efficient ordering and shipping systems.

Now, as we enter into a new century, companies are finding that they can source capital, goods,

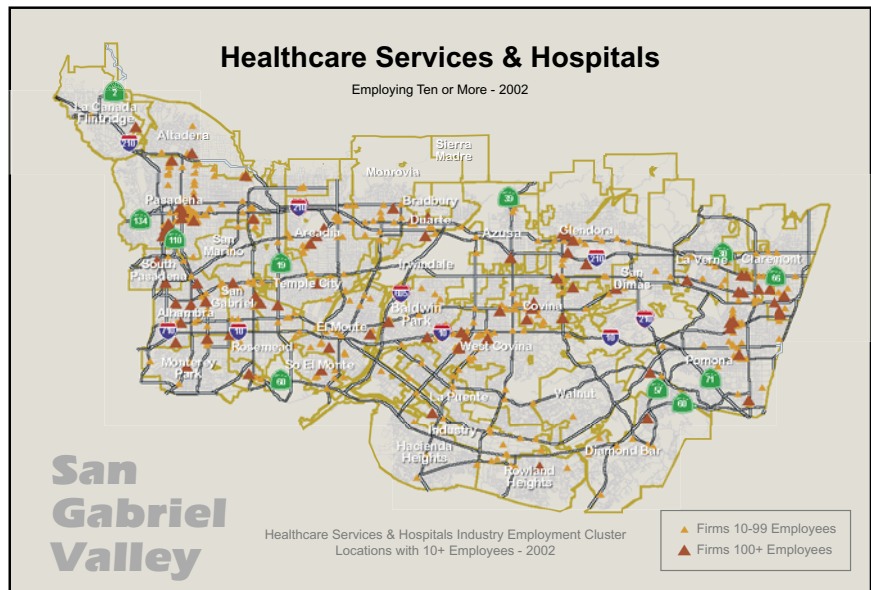


Fig 17. Healthcare Services and Hospitals Cluster, Locations Employing Ten or More, San Gabriel Valley, 2002



information, and technology from around the world – often with a click of a mouse – in some ways nullifying location as a source of competitive advantage.

Overnight shipping and *just-in-time production* have changed the entire complexion of goods sourcing. Add to that the now-instantaneous nature of communications and publication, and it is easy to see how competitiveness strategies will continue to evolve – with mastery of technology growing in importance.

Growing industries with large employee bases are the traditional targets for cluster development. But, financial growth alone may not be an indicator of the quality of jobs or the availability of career opportunities within a given sector.

So it is that some of the priority clusters county-wide were eclipsed in the strategic plan review process by an interest in education and healthcare – two industries of extraordinary importance to the San Gabriel Valley, and in which the valley takes a lead over other regions. These are also categories with complex and intriguing career lattices – offering alternative paths for success.

Healthcare, Education and Technology enjoy a natural synergy – complementing one another in a fashion that is unique to the region. The relative growth rates of these industries – and

occupations within the industries – are predicted to be above average through the year 2006.<sup>4</sup>

Job growth projections between 1992 and 2005, find six of the top ten growing industries in the healthcare field, representing 1,141,469 new positions nationwide. Two are in information technology, representing 682,000 new positions.<sup>5</sup> The depth of knowledge and intellectual capital in these fields gives the San Gabriel Valley a unique competitive advantage over other regions. Discipline crossover is common among a number of companies in the three target clusters. An example is Pall

Corporation, in the City of Industry, which develops technologies for the biopharmaceutical, general industrial, blood, aerospace, and microelectronics fields.

Clusters can range from geo-specific natural resources, to information-based groups – free to locate across the United States or around the world – tied together by only a virtual connection.

Whether physical or virtual, there is an overriding benefit in cluster development and industry co-location. From the perspective of the region, the induced (multiplying) effect of clusters on local economies can be very significant.

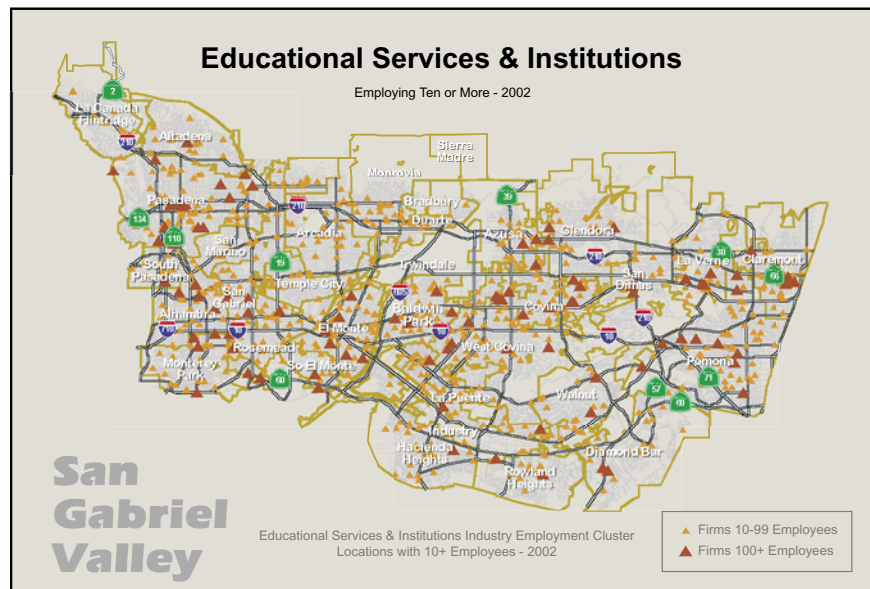


Fig. 18. Educational Services and Institutions Cluster, Locations Employing Ten or More, San Gabriel Valley, 2002

### Cluster Criteria

- The industry offers high quality jobs
- There is a potential for industry growth
- Opportunities for growth exist within companies in the region
- The industry is knowledge/value added, with a high job multiplier
- There is, and will be, a demand for employees within the industry
- The industry has competitive advantages in the San Gabriel Valley
- The industry is uniquely situated in the San Gabriel Valley

Fig. 19. Cluster Criteria, CivicCenter Group, 2002

<sup>1</sup> Michael E. Porter. *The Competitive Advantage of Nations*. The Free Press: New York 1990.

<sup>2</sup> Michael E. Porter. *On Competition*. The Harvard Business School: Boston 1998.

<sup>3</sup> University of South Florida. Report. *In Search of Michael Porter's Diamond*. Tampa, FL, 2002.

<sup>4</sup> U.S. Dept. of Labor, Bureau of Labor Statistics. *Occupational Outlook Handbook*, Chicago, IL: VGM Career Books, 2001.

<sup>5</sup> (*Occupational Outlook*).

# SIGNIFICANT EMPLOYMENT CLUSTERS

## Major Industries Within the San Gabriel Valley

Industries with a significant presence in the San Gabriel Valley were analyzed to determine growth rates, future occupational opportunities and local economic benefits. Healthcare services, education and technology were selected as three areas with the greatest ongoing demand for personnel—where the valley had a substantial presence and a distinct competitive advantage.

Key to strategic targeting of industries are the quality of employment opportunities and the availability of knowledge-based career ladders. Categories may have a significant presence and provide numerous jobs, such as retail and wholesale trade. But, these generally do not offer those benefits most sought after by employees. Service positions in the private sector, such as call centers, dining, entertainment and banking are for the most part seen as offering only short-term entry level opportunities.

The median hourly earnings for retail sales persons in 2000, for example, was only \$8.02 per hour. Retail job growth is expected, but most of the demand will come from openings caused by high rates of turnover.<sup>1</sup>

Public employment rates high in overall job quality—receiving good marks for job security, benefits and pensions. Recent decades have seen a dramatic increase in public sector incomes. Average 2001 income for public employees in the U.S., \$20.56 per hour was 33% higher than the private sector at \$15.46.<sup>2</sup>

Technology continues to reduce demand for employees in some categories such as banking. Branches are being closed, consolidated or scaled down as a

result of increased use of Internet banking and ATMs. Likewise, positions in the utility and electric services sector are decreasing in overall demand due to deregulation and increased competition within the industry.

Computer and data processing services, a subset of the technology industry, are overall, among the fastest growing industries in today's economy. For engineering and computer information systems managers, employment is expected to increase much faster than the average through the year 2010. In 2000 median earnings for this occupation were \$78,830, and the highest 10% earned over \$127,400.

Healthcare, education, research science and technology are areas in which the San Gabriel Valley excels. These industries are expected to prosper, providing high quality

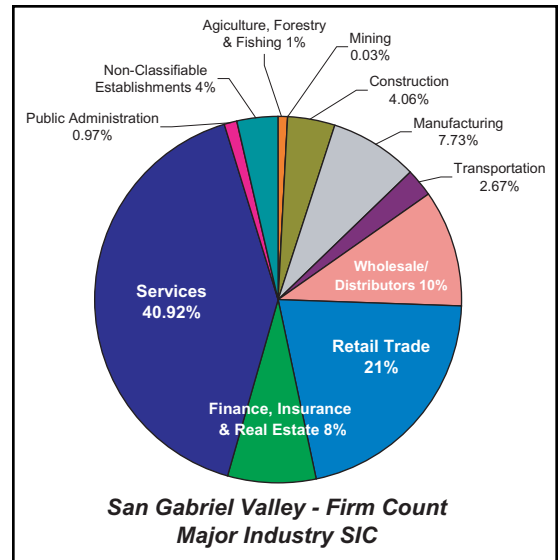


Fig. 20. Industry Distribution - SIC Categories by Number of Firms, San Gabriel Valley, 2002

jobs to local residents over the next five to ten years. Promotion of training and education to prepare individuals for employment in these dynamic fields is key to the regional strategy.

<sup>1</sup> U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*, Chicago, IL: VGM Career Books, 2001.

<sup>2</sup> U.S. Dept. of Labor, Bureau of Labor Statistics, *National Compensation Survey*, Washington DC, August 2001.

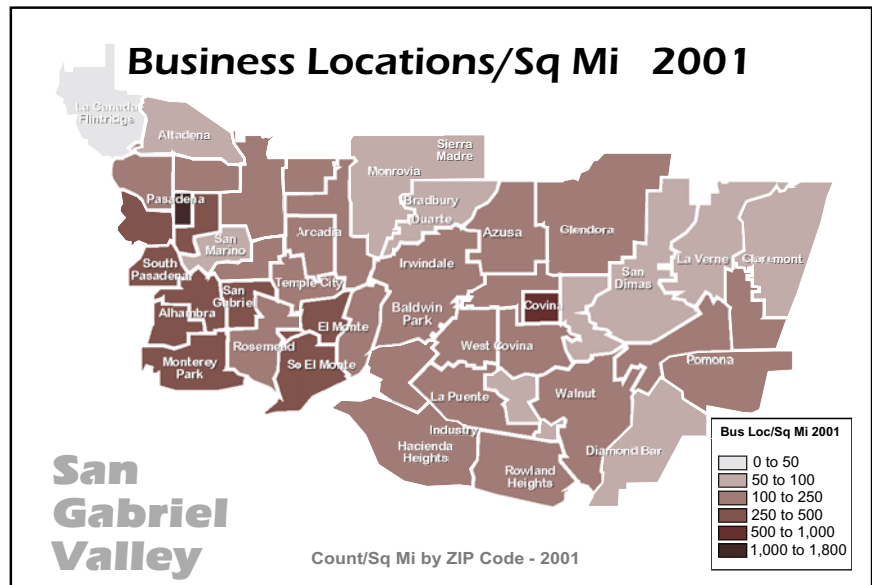


Fig. 21. Business Locations per Square Mile, Density, San Gabriel Valley, 2001

*“The healthcare industry is virtually recession-proof; whatever the economic climate, people still get sick”*

Shelly Field  
100 Best Careers for the 21<sup>st</sup> Century

## Healthcare

With an nearly 92,000 employees, healthcare firms account for 9.15% of all firms in the San Gabriel Valley,<sup>1</sup> making it one of the region’s largest employers. Twenty-nine of the careers listed in *100 Best Careers for the 21<sup>st</sup> Century*, are in the healthcare industry.<sup>2</sup> According to the United States Department of Labor, healthcare occupations are growing at twice the rate of most other jobs.<sup>3</sup>

In addition to numerous rehabilitation centers, home health organizations, urgent care facilities, specialty labs and clinics, pharmacies and private practices, the region boasts

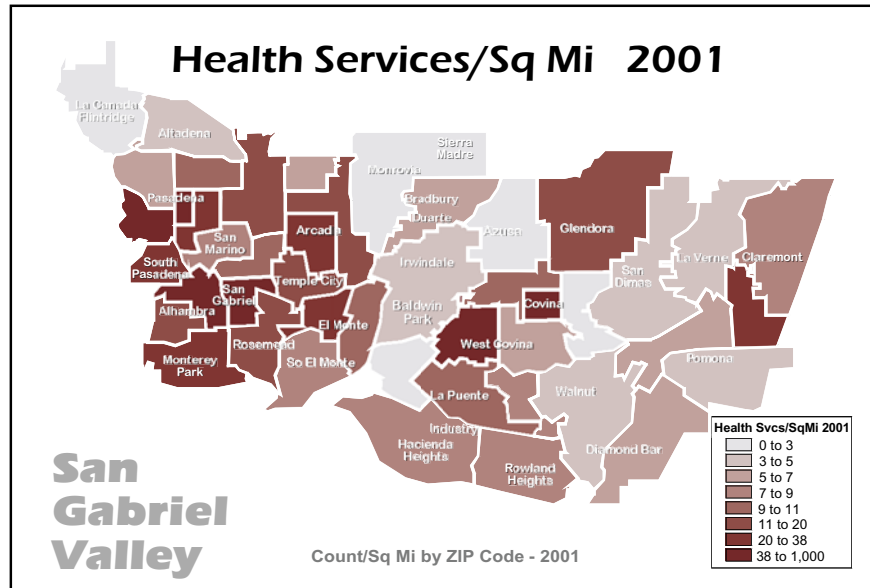


Fig. 22. Health Services per Square Mile, Concentration, by ZIP Code, San Gabriel Valley, 2001

more than ten major hospitals, and is home to the City of Hope, one of world’s most renowned patient care and research centers. At City of Hope, nearly 2,500 researchers, scientists, physicians and staff strive daily to develop cures for cancer and other life-threatening illnesses. The healthcare industry provides a wide array of quality jobs. It has also evolved important synergies with other area industries, such as biotechnical, biomedical manufacturing, education and research.

## Education & Research

Another piece of the industry puzzle lies within the education and research cluster, which employs an estimated 76,101 persons in the region – with over 13,000 in higher education. The San Gabriel Valley is home to numerous school districts, vocational institutions and training facilities – and has the greatest density of higher education institutions of any region in California.<sup>4</sup>

The Claremont McKenna Colleges are recognized for their schools and institutes such as the Rose Institute of State & Local Government and the Keck Graduate Institute – the only college in the nation offering a master of bioscience professional degree. In addition to Mt. San Antonio Community College’s occupational nursing program the college has a unique histology department, which provides graduates with opportunities to work as histologic technicians in hospital and reference laboratories, and beyond, obtaining an associate of science degree in histotechnology.

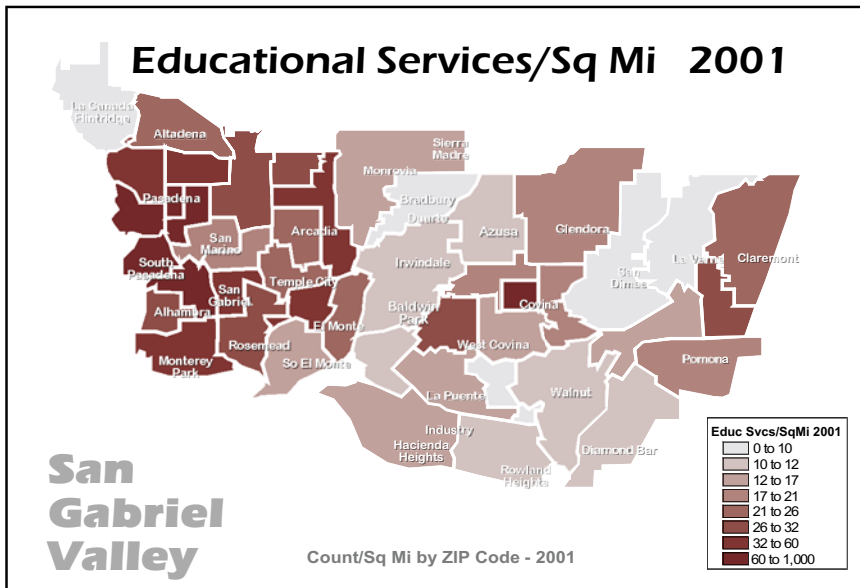


Fig. 23. Educational Services per Square Mile, Concentration, by ZIP Code, San Gabriel Valley, 2001



## Science & Technology

*“A great many new jobs will be in education... schoolteachers...college professors...vocational, technical, and trade schools, as well as for adult education classes, bilingual studies, and foreign language studies.”*

Shelly Field  
100 Best Careers for the 21<sup>st</sup> Century

In order to support the high demand for skilled employees within the growth industries, educational institutions in the region are continuing to increase the breadth of their offerings.

Institutions of research such as Caltech, Jet Propulsion Laboratory, The Rose Institute and the Huntington Medical Research Institute position the San Gabriel Valley among the leading regions of the world in academics, innovation and technology.

The science and technology cluster is another substantial employer, accounting for an estimated 88,000 jobs in the region. According to the U.S. Department of Labor, computer and data processing services are among the fastest growing industries in today’s national economy.<sup>5</sup> In addition to computers, electronics and aerospace, many of these leading companies are also involved in biotech research, development and production – intimately connected to the local healthcare cluster through collaborative endeavors.

Advances in technology range from faster computers and increased applications for fiber optics, to improved aircraft for space research and exploration. The science and technology cluster includes companies, large and small, that research, develop, manufacture and distribute products and services in the computer, biotech, aerospace, science, medical and consumer electronics fields. Many of the unique technology companies in the area emerged from the advanced brain trust at regional institutions such as Caltech, Cal Poly Pomona, NASA,

JPL, City of Hope, University of California at Los Angeles, and the University of Southern California. Multidisciplinary approaches to commercialization, spanning various scientific fields, have resulted in a number of core technologies being licensed from Caltech. These innovations and developments are just part of what gives the San Gabriel Valley its unique competitive edge.

## An Incubator for Entrepreneurship

Examples of scientific and technical innovation abound in the region. Integrated Micro Machines in Monrovia grew out of a high-tech incubator facility in Pasadena. The company develops and manufactures MEMS-based, all-optical switches. The founders were researchers at UCLA and Caltech. Micron Imaging Design Center, also in Pasadena, manufactures memory semiconductors and image sensor products, and uses image capture technology that was developed at JPL.

Spectra Sensors, Inc., in Altadena, is a technology spin-off of the NASA/Caltech Jet Propulsion Laboratory. Another example of technology-related entrepreneurship is NORAC, Inc. which was founded in 1953 by Dr. Chester McCloskey, who left Caltech to produce organic peroxide initiators for the rapidly growing fiber-reinforced polymer composites industry.

GenBasix in Duarte, a human genetics research company, was formed to spin-off genetic technologies discovered by Dr. Theodore Krontiris and his research team at City of Hope’s Beckman Research Institute. The Institute has been the site of some of the world’s most innovative research in the fields of genetics and molecular biology.

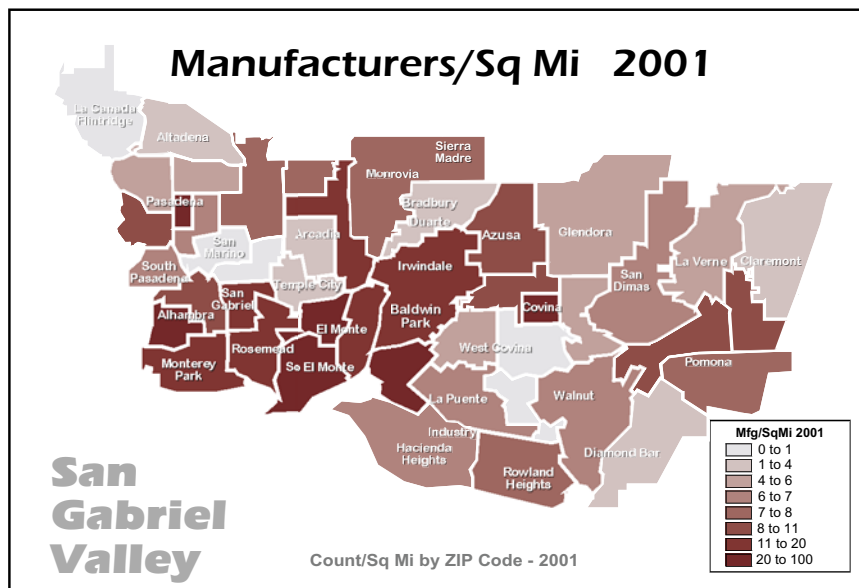


Fig. 24. Manufacturers per Square Mile, Concentration, by ZIP Code, San Gabriel Valley, 2001

## The Growth of a Biotechnology/ Biomedical Cluster

The San Gabriel Valley has a formidable biotech sector, boasting a wide array of companies that research, develop and manufacture products and provide services in this growing field. According to Natelson's *National and Regional Directory of Targeted Growth Industries*, 2002:<sup>6</sup>

*Biotechnology is not an industry in itself, but rather a composition of numerous high technology manufacturing and service industries. No universally accepted set of industries make-up biotechnology.*

The biomedical subset of biotech includes the development and manufacture of: diagnostic equipment, pharmaceuticals, dental equipment, medical prostheses, monitors, surgical equipment, reproduction equipment, therapeutic devices, home health care products, handicap aids and rehabilitation devices. This, in addition to consulting services, diagnosis, facility management, laboratory processing, custom manufacturing, research and development, and radiology services.<sup>7</sup>

Biotech careers include the fields of research, development and manufacturing. There are numerous companies in the San Gabriel Valley region that contribute to the biotech cluster by providing collaboration, expertise, equipment, supplies, goods and services.

The advanced biotech research and development firms and institutions also complement the healthcare

fields in the region through real-world strategic partnerships.

In 1994 the City of Pasadena partnered with Caltech to develop a local biotechnology corridor. The zone provides area companies with ready access to the local talent pool at Caltech as well as research institutes like JPL and Huntington Memorial Hospital.

### Successful Innovation

The San Gabriel Valley is rich in scientific innovation and entrepreneurship. Bioinformatics is one relatively new field being explored by valley firms and institutions, where the data derived from microbiology is analyzed and stored in supercomputers. The data is then refined and processed to develop a profile of the basic components of life. Computational molecular biology is a related field that originated at Caltech in Pasadena. Its mission is to understand the meaning of genomic information and expression in the human body.

Eidogen Inc., a Caltech spin-off founded in Pasadena in 2000, is a *post-genomics* company that designs computerized tools to determine the structure and function of proteins. Under an exclusive license from Caltech, the company's computational chemists and molecular physicists are at the leading edge of bioinformatics, computational chemistry, visualization and drug design.

Clinical Micro Sensors, which emerged as a entrepreneurial venture out of Caltech, develops DNA biochips that are likely to receive great attention in the years to come. Recently acquired by Motorola for \$300 million, the company is moving from R&D to a manufacturing focus, producing

*“Two big trends...aging populations and the globalization of the workplace through technology...will continue to revolutionize the world of work.”*

Martin Yate

*Career Smarts: Jobs with a Future*

handheld devices capable of instantaneously and inexpensively analyzing a patient's DNA. In addition to diagnosis, this will also assist physicians in prescribing medications, by determining which will be most effective based upon a given patient's genetic information. Applications will also include animal husbandry, where certain desirable characteristics can be identified in the field. In bio-agriculture the devices will find a number of uses, including the detection of pathogens in the environment. CMS was one of the first new occupants of the Pasadena biotech corridor.

Pasadena's Cyranose Sciences, Inc. is commercializing technology licensed from Caltech. The firm develops chemical and biological sensor technology along with software solutions for defense, homeland security, industrial and commercial markets. Its flagship product is the *Cyranose 320* – employs a proprietary polymer composite sensor technology – with which users are able to detect and digitize smell.

California is the birthplace of biotech and home to over 2,500 biotech companies. As a hub of technological research, Southern California plays a key role in biotech and biomedical advancements.<sup>8</sup>

<sup>1</sup> InfoUSA; CivicCenter Group.

<sup>2</sup> Shelly Field. *100 Best Careers for the 21<sup>st</sup> Century*. Lawrenceville, New Jersey: Arco, 1999.

<sup>3</sup> U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*. Chicago, IL: VGM Career Books, 2000.

<sup>4</sup> LAEDC, San Gabriel Valley 2002-2003 Economic Overview & Forecast. 2002.

<sup>5</sup> (*Outlook*).

<sup>6</sup> The Natelson Company, Inc., *National and Regional Directory of Targeted Growth Industries*, Yorba Linda: Natelson 2002.

<sup>7</sup> Source: CivicCenter Group.

<sup>8</sup> (*Natelson*).

The San Gabriel Valley industry-employment clusters are expected to offer a significant number of new opportunities over the next ten years. It is essential that local educators properly prepare the workforce to participate in these fields—or risk the loss of jobs for local residents and possible erosion of core industries as well.

It is difficult to find a widely accepted definition of what constitutes a *quality career*, but there are a number of common elements that most employees would consider important. A quality career should: pay well, while providing comprehensive benefits, good retirement, and job satisfaction.

The general criteria for quality careers can be defined as follows:<sup>1</sup>

1. Reasonable to excellent compensation and benefits
2. Generally seen as emotionally rewarding and satisfying
3. Allows individuals to access career ladders and lattices
4. Offers opportunities for personal and professional growth
5. Exists within a growing industry

Several other factors also need to be considered when determining job quality, including: convenience, amenities, perquisites, physical and emotional stress and job security.

Some employees insist on low stress levels, while others thrive in high-energy, competitive environments. Outdoor work may appeal to one person, while another prefers the comfort and security of an office. Employees may be creative—always looking for new challenges—and others are more comfortable with repetitive activities.

## Career Ladders and Lattices

Vertical and horizontal career dynamics will differ among occupations. Vertical occupations are highly specialized while horizontal occupations involve disciplines that are transferable across a range of industries. Specialized careers in the fields of medicine, education and technology may have limited lateral portability across categories. On the other hand, higher-level generalized qualifications, such as a master of business administration degree, provide the holder with a wide horizontal range of opportunities. The same applies to other management, accounting and administrative categories along with fields such as advertising, marketing, law, real estate and human resources.

Whether one is making career choices for himself or assessments for others, the lattice or matrix of opportunities must be considered—particularly in light of occupational projections. If an individual is entering the ninth grade and wants to pursue a specialized medical career, it is necessary to look a full

decade or more ahead to determine his prospects. The same is true in many other degree-oriented occupations and profession.

The narrower the career lattice for a particular discipline, the more careful one must be in choosing a course of study and establishing career objectives. A human resources manager might begin his career with a high tech company and later transfer his experience to an entirely different industry, such as a food service or government. The employee can cross categories because the skill is generic across industries. Most employers, regardless of industry type, utilize human resource managers. Experienced individuals who fall into this category may not have as much vertical mobility, but enjoy a wide range of horizontal options—hence the reference to a *career lattice*.

The job market is continually shifting. This is all the more reason why those seeking advanced degrees should choose very carefully, with as much information and consideration of future career opportunities as possible.

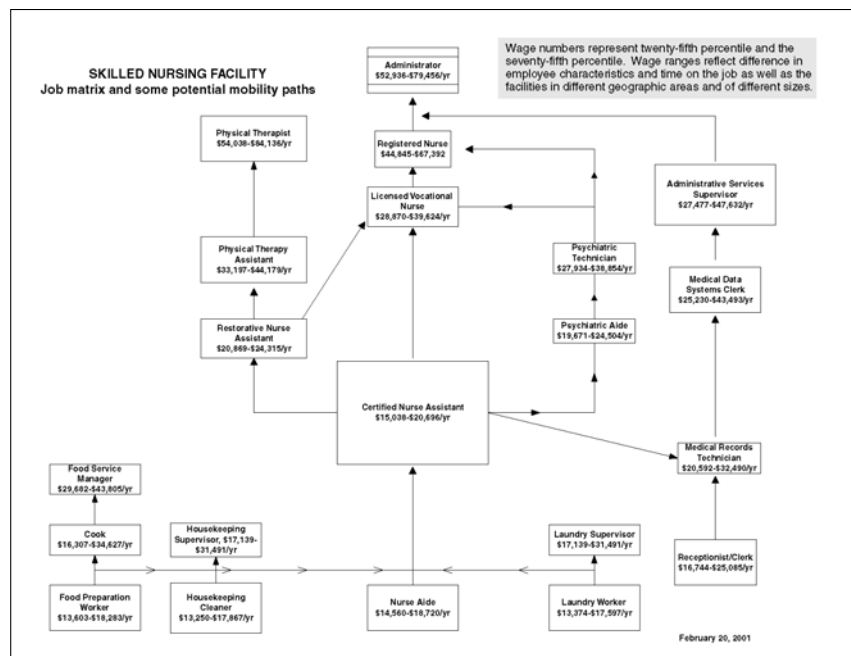


Fig. 25. Job Matrix, Skilled Nursing Facility, Diagram



## Growing Occupations Nationwide

Of the top twenty-five growing occupations nationwide, ten are within the technology and science industry, and thirteen in the healthcare field.

According to the United States Department of Labor, the following occupations are projected to grow nationwide over the next five to ten years:<sup>2</sup>

- Physicians, Registered Nurses, Medical & Health Service Managers
- Computer Engineers, Programmers & Systems Analysts, Electrical & Electronics Engineers
- College & University Faculty, Secondary & Special Education Teachers
- Social Workers
- Police Patrol Officers
- Securities & Financial Service/Sales Agents
- Advertising, Marketing & Public Relations Managers
- Management Analysts
- Paralegals & Legal Assistants
- Writers & Editors
- Artists & Commercial Artists

In the highly competitive global marketplace, there is a distinct competitive advantage to overseas labor and locales – avoiding the increasingly burdensome restrictions imposed in the U.S.

The shift from goods-producing to service-producing employment is expected to continue – with further erosion in the base of durable goods manufacturing. Nearly 75% of total wage and salary job growth will be in the services and retail trade industries.

Health services, including hospitals, home healthcare services, and health practitioners' offices, are expected to add nearly 2.8 million new U.S. jobs over the next decade. Physician assistants positions will increase 53%. Being necessity based,

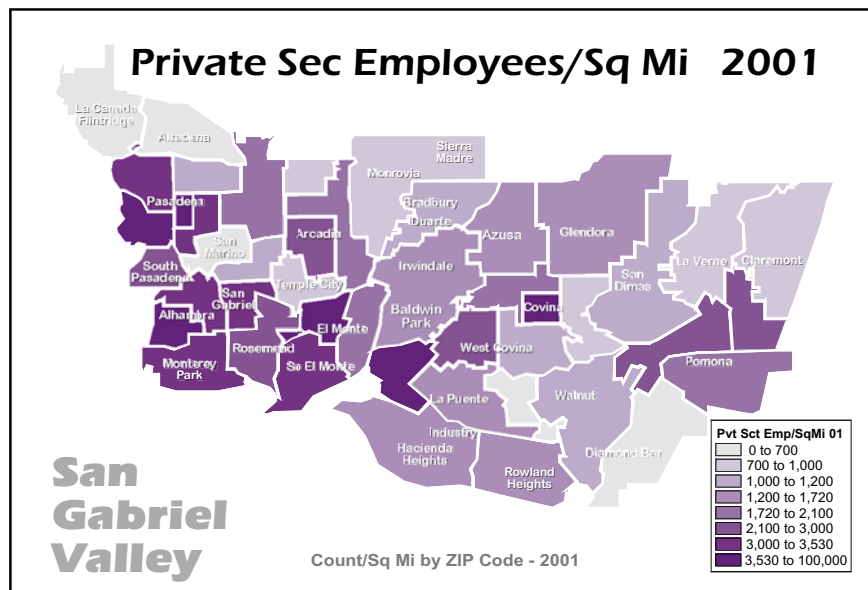


Fig. 26. Private Sector Employees per square mile, concentration, by ZIP Code, San Gabriel Valley, 2001

this market is nearly immune to the fluctuations experienced by other sectors.

Professional and related occupations are projected to account for an increase of 6.9 million new jobs by the year 2010. Approximately three-fourths of those positions will be within the knowledge-based computer, healthcare and educational fields – making degree programs all the more important.

With a projected increase from 380,000 to 760,100 jobs, computer software engineer positions in the

U.S. should double between 2000-2010.

Nationwide, the number of qualified candidates for police and detective positions exceeds the number of job openings in federal and state law enforcement agencies, but it still does not adequately meet growth and replacement needs in many local and special police departments. Therefore, many communities will continue to see an unfilled demand for law enforcement. Police and detectives held 834,000 jobs in the U.S. in 2000.

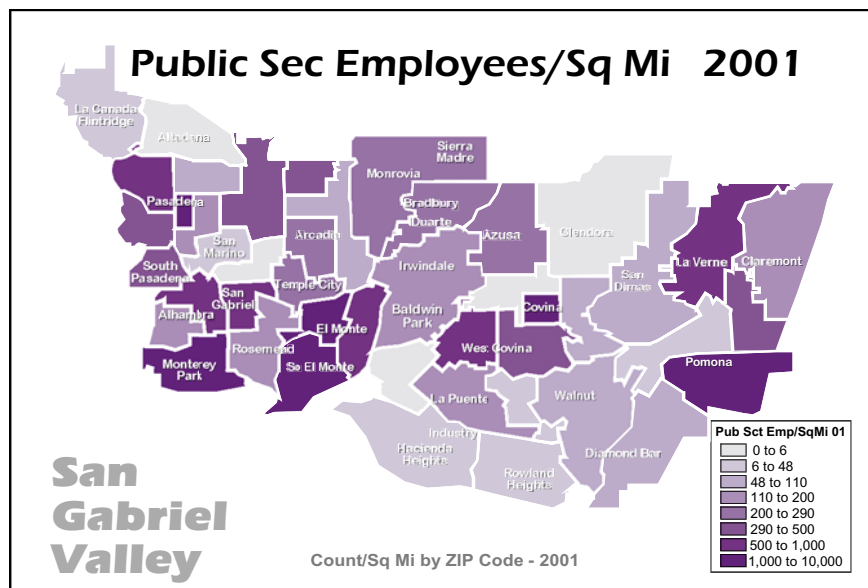


Fig. 27. Public Sector Employees per square mile, concentration, by ZIP Code, San Gabriel Valley, 2001

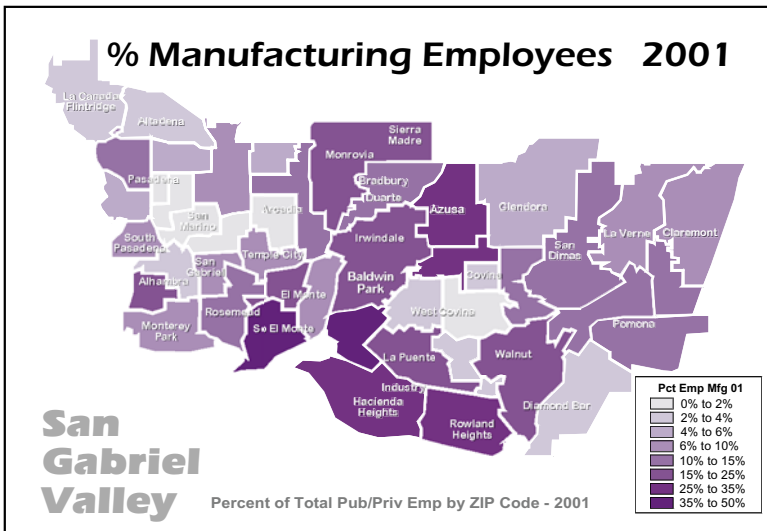


Fig. 28. Manufacturing Employees per square mile, concentration, by ZIP Code, San Gabriel Valley, 2001

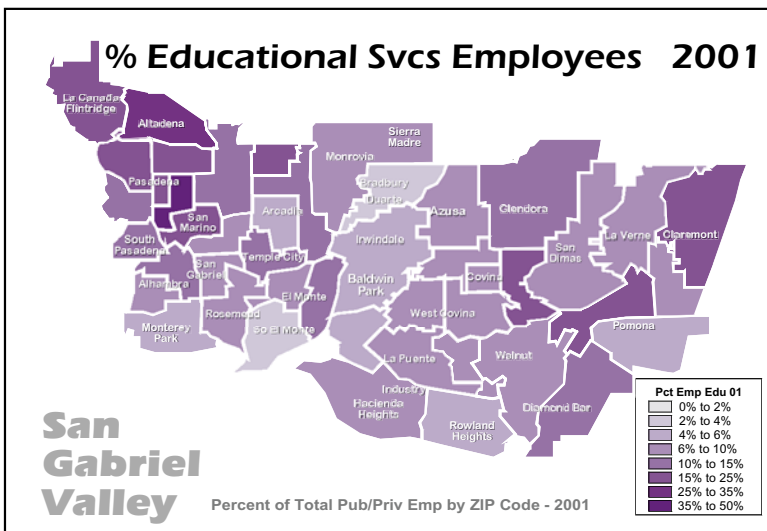


Fig. 29. Educational Services Employees per square mile, concentration, by ZIP Code, San Gabriel Valley, 2001

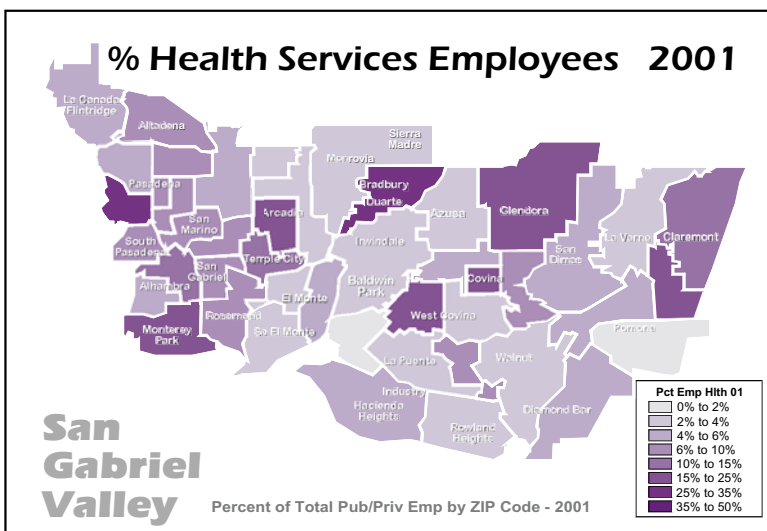


Fig. 30. Health Services Employees per square mile, concentration, by ZIP Code, San Gabriel Valley, 2001

Increases in employment are also expected in sales, transportation, office and administrative support, and the food service fields. Even though growth rates may be less, because of sector size, these will account for a substantial number of jobs in absolute terms.

Valley industries offer opportunities in many of these growing occupational categories. Yet, because of a shortage of qualified candidates in some fields employers often revert to recruitment efforts outside of the region to hire qualified employees, including out of state and overseas.

Occupations expected to decline over the next five to ten years, such as office and administrative support and production, will likely suffer due to increased automation and technology implementation within the workplace.

### Offshore Competition

India, South Africa and other offshore locales with large English-speaking populations are siphoning off customer-service-representative and call-center jobs from the United States. In ten years, the South African global contact center industry alone has evolved into a force of approaching 100,000.<sup>3</sup>

The cost of offshore labor tends to be lower, regulations less onerous, and the workforce often more motivated, stable and reliable than in many areas of the United States.

Due mainly to economic and competitive pressure, as well as the need to access adequate capacity of cost-effective skills, contact centers, particularly in North America and Western Europe, are looking to lower their operating costs by moving significant portions of their capacity to lower cost locations around the world.

<sup>1</sup> Source: Stakeholder Roundtables and industry research.

<sup>2</sup> U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*. Chicago, IL: VGM Career Books, 2000.

<sup>3</sup> Brendan B. Read, "A Murky New Dawn for EMEA Call Centers" *CallCenter Magazine*, July 2002.

## Career Opportunities and Educational Attainment

Entry into an occupation within a growth industry may not always require a formal education. However, in order to advance meaningfully in a particular field, one will likely need to seek specialized education and training. Individuals who dedicate time and effort to a particular course of study, will be rewarded with increased career opportunities and improved upward mobility.

Opportunities in the U.S. are projected to expand significantly, from 25% to 33% over the next five years for individuals who obtain associate and bachelor's degrees. On the other hand, job opportunities will continue to decline for those who do not complete their formal education—as unskilled and under qualified workers find themselves competing for a shrinking base of entry-level jobs.

Employers are becoming increasingly selective in their hiring criteria. In addition to career-based experience, they are seeking applicants with degrees, licenses, certificates, and specialized training.

Work experience and on-the-job training can provide employees with a substitute for formal education. But, experience alone may not be sufficient to fulfill the requirements of many specialized positions. And such positions generally do not offer the kind of compensation and job satisfaction associated with those requiring more advanced education and degrees.

The average hourly earnings in U.S. occupations in 2001 was \$16.23, up only 3.2% in four years from \$15.72 in 1998. Overall levels ranged from sub-ten-dollar rates in food service, parking, and agriculture to over \$60 for physicians and over \$100 for airline pilots. Both of these high-end occupations involve a combination of extended education, experience and finely-honed skills.

According to the U.S. Census Bureau, in 2001, U.S. white collar pay averaged \$19.86 per hour, blue collar, \$13.73, and service occupations, \$9.86. Regionally, the Pacific Coast had the highest hourly average in private industry at \$23.70 per hour, topping the Mountain region at \$13.78 and the Middle

| Top 20 Ranking Jobs Overall |                             |
|-----------------------------|-----------------------------|
| 1                           | Biologist                   |
| 2                           | Actuary                     |
| 3                           | Financial Planner           |
| 4                           | Computer Systems Analyst    |
| 5                           | Accountant                  |
| 6                           | Software Engineer           |
| 7                           | Meteorologist               |
| 8                           | Paralegal Assistant         |
| 9                           | Statistician                |
| 10                          | Astronomer                  |
| 11                          | Mathematician               |
| 12                          | Parole Officer              |
| 13                          | Hospital Administrator      |
| 14                          | Architectural Drafter       |
| 15                          | Physiologist                |
| 16                          | Dietician                   |
| 17                          | Website Manager             |
| 18                          | Physicist                   |
| 19                          | Audiologist                 |
| 20                          | Agency Director, Non-Profit |

Fig. 32. Les Krantz. "Top Twenty Ranking Jobs Overall" *Jobs Rated Almanac*. Fort Lee, NJ: First Barricade Books, 2002

Atlantic at \$17.46. On average, larger companies (2,500+) were found to pay more than smaller (1-99 employees) by a factor of 60%. But these are also the firms that have comprehensive human resources departments, which tend to create additional barriers for those with limited qualifications.

## Growth Occupations

The occupations listed in the following pages are projected to be some of the fastest growing, and have the largest numerical increase in employment between 1998 and 2008. They have been broken out by level of education and training required for entry into each occupational category.

| Growth Rates by Most Significant Source of Education and Training, Projected 1998-2008 |                |
|--|----------------|
|  | Percent Change |
| Associate Degree   | 33             |
| Bachelor's Degree  | 25             |
| Doctoral Degree  | 23             |
| Master's Degree  | 20             |
| Work Experience plus Bachelor's Degree or Higher                                       | 18             |
| First Professional Degree  | 16             |
| Postsecondary Vocational Training  | 15             |
| Short-Term On-the-Job Training   | 14             |
| Work Experience in a Related Occupation  | 12             |
| Long-Term On-the-Job Training  | 8              |
| Moderate On-the-Job Training   | 6              |

U.S. Dept. of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook. Chicago, IL: VGM Career Books, 2000

Fig. 31. Growth Rates by Most Significant Source of Education and Training Projected, U.S. 1998-2008



## SHORT-TERM ON-THE-JOB TRAINING<sup>1</sup>

- *Personal Care & Home Health Aides*
- *Bill and Account Collectors*
- *Ambulance Drivers and Attendants*
- *Adjustment Clerks*
- *Teacher Assistants*
- *Retail Salespersons*
- *Cashiers*
- *Truck Drivers*
- *Office Clerks*

<sup>1</sup> Short-term is defined as less than one month.

### Profile: *Teacher Assistants*

San Gabriel Valley Growth Industry Cluster: *Education and Research*

Teacher assistants aid and monitor students, provide teachers with clerical assistance, and help teachers meet the educational needs of a growing special education population. The educational requirements for teacher assistants range from a high school diploma to some college training. Nearly half of all teacher assistants work part time. Employment is expected to grow faster than average due to the need to assist more students in the classroom. In 2000 there were 1.3 million teacher assistant jobs in the United States. Some teacher assistants are aspiring teachers working toward their degree and credential. Teacher assistants can work toward obtaining their bachelor's degrees and teaching credentials while gaining experience in the workplace. This is a good way for people to familiarize themselves with the teaching environment while making career choices. A number of two-year community colleges offer associate degree programs that prepare graduates to work as teacher assistants. Student enrollments are expected to rise; therefore the demand for teacher assistants is also expected to increase over the next five years. Median annual earnings of teacher assistants in 2000 were \$17,350; the highest 10% earned over \$27,550. Nearly four out of ten teacher assistants belonged to unions in 2000.

### Profile: *Respiratory Therapists*

San Gabriel Valley Growth Industry Cluster: *Healthcare*

Respiratory therapists evaluate, treat and care for all types of patients with breathing disorders, from infants to chronic asthma and emphysema sufferers. Job opportunities will be best in the next five years for therapists who work with newborns and infants. The job requires thirty-five to forty hours per week, usually in hospitals, involves a lot of standing, and can be stressful during emergency situations. Respiratory therapists held 110,000 jobs in 2000, nine out of ten of which were in hospitals, with the remainder in home health agencies, clinics and nursing homes. The median earnings were \$37,680 in 2000, with the top 10% earning more than \$46,900. Formal training is needed to enter the field, and is offered at the postsecondary level at hospitals, medical schools, colleges and universities, trades schools, vocational-technical institutes, adult schools and the military. There are two types of respiratory therapists: Registered Respiratory Therapists (RRT) – most programs are two years and lead to an associate degree – and Certified Respiratory Therapists (CRT) – the program is one to two years for individuals who have already obtained a four-year degree and have taken college level courses in anatomy, physiology, chemistry, biology, microbiology, math and physics.

## ASSOCIATE DEGREE

- *Computer Support Specialists*
- *Paralegals and Legal Assistants*
- *Health Information Technicians*
- *Physical Therapy Assistants and Aides*
- *Respiratory Therapists*
- *Registered Nurses*
- *Dental Hygienists*
- *Electrical and Electronic Technicians and Technologists*

## POSTSECONDARY VOCATIONAL TRAINING

### Profile: *Surgical Technologists*

San Gabriel Valley Growth Industry Cluster: *Healthcare*

Surgical technologists assist in operations under the supervision of surgeons and nurses and other personnel to prepare operating rooms prior to procedures by setting up instruments and equipment, sterile linens and solutions, and check non-sterile equipment to ensure it is working properly. They also help with patient preparation and transfer, instrument and supply assistance during surgeries, and disposal of specimens taken for laboratory inspection. Most technicians work forty hour weeks, but may be on call for weekends and holidays. There were nearly 71,000 surgical technicians in the United States in 2000, most of whom are employed by hospital operating and delivery rooms. There are a few who are parts of special surgical teams for operations such as liver transplants. Educational programs are offered at community colleges, vocational schools, universities, hospitals and in the military. The duration of these programs is usually one year, and results in a certificate. As the number of surgical procedures increase, so will the demand for surgical technicians. Median income in 2000 was \$29,020, and the highest 10% earned over \$40,310 a year.

- *Data Processing Equipment Repairers*
- *Surgical Technologists*
- *Central Office and PBX Installers and Repairers*
- *Emergency Medical Technicians*
- *Manicurists*
- *Licensed Practical Nurses*
- *Automotive Mechanics*
- *Hairstylists and Cosmetologists*

## BACHELOR'S DEGREE

- *Computer Engineers*
- *Computer Systems Analysts*
- *Database Administrators*
- *Physicians Assistants*
- *Residential Counselors*
- *Teachers, Secondary School*
- *Social Workers*
- *Teachers, Elementary School*

### Profile: *Computer Engineers*

San Gabriel Valley Growth Industry Cluster: *Technology & Science*

Computer engineers design and develop new hardware and software systems, incorporate new technologies, as well as test and supervise the manufacture of devices. Employment positions for computer engineers exist in every sector of the economy. The greatest concentration of these workers is in the computer and data processing services industry. The field of computer engineering is projected to be one of the fastest growing occupations and ranks among the top twenty in the number of new jobs created over the 2000-2010 period. Computer engineers usually work about forty hours a week, and sometimes are required to work on evenings and weekends. In 2000 there were 1.5 million employed in the field, 114,000 of which were self-employed. A bachelor's degree is a pre-requisite for many jobs, some may require only a two-year degree, and for more complex positions a graduate degree is preferred. Earnings of computer engineers in 2000 consisted of a median income of \$67,000, with the top 10% bringing in over \$106,000.

## WORK EXPERIENCE + BACHELOR'S OR HIGHER DEGREE

- *Engineering, Science, and Computer Systems Managers*
- *Medical and Health Services Managers*
- *Management Analysts*
- *Artists and Commercial Artists*
- *Advertising, Marketing, and Public Relations Managers*
- *General Managers and Top Executives*
- *Financial Managers*

### Profile: *Medical and Health Services Managers*

San Gabriel Valley Growth Industry Cluster: *Healthcare*

Health services managers plan, direct, coordinate and supervise the delivery of healthcare. Earnings are high, but the job usually requires a significant time commitment. The field of healthcare is growing, and like any growing business, needs dedicated qualified individuals to manage administration functions. Employment is predicted to grow fastest in home health agencies, residential care facilities, and practitioners' offices and clinics. The occupation consisted of 250,000 jobs in the United States in 2000. Median income was \$56,370 in 2000, with the top 10% earning more than \$97,900 a year. Many clinical managers and directors have experience in the field in which they specialize. Others may have bachelor's degrees in health information or medical record administration. Health service managers must have experience with management principles. Master's degrees in health services administration, long-term care administration, health sciences, public health, business administration and other related categories are becoming the standard for filling these positions. There are exceptions, in the case of physician's offices and other facilities, where on-the-job training may be substituted for formal education. Bachelor's, masters, and doctoral degree programs are offered by colleges, universities, and schools of public health, medicine, allied health, public administration and business administration.

### Profile: *Librarians*

San Gabriel Valley Growth Industry Cluster: *Education & Research*

Librarians of today incorporate traditional administrative and user service duties with technical services and organization of resources housed in advanced mediums such as CD-ROM, the Internet, virtual libraries and other remote access repositories. Librarians may work in specialized departments of school, college and university libraries, in addition to government agency, private corporation, law firm, museum, professional association, medical center, hospital, religious organization and research libraries. A large numerical increase in employment is projected for this occupation over the next five years. In 2000 there were 149,000 librarian jobs in the United States. Two out of ten librarians work part time. Median annual income of librarians were \$41,700 in 2000, with the top 10% earning more than \$62,990 a year. Masters degrees in Library Science are usually required to hold positions, and specialized librarians often need additional graduate or professional degrees.

## MASTER'S DEGREE

- *Speech-language Pathologists and Audiologists*
- *Physical Therapists*
- *Counselors*
- *Urban and Regional Planners*
- *Archivist, Curators, and Conservators*
- *Physical Therapists*
- *Psychologists*
- *Librarians*



## DOCTORAL DEGREE

- *Medical Scientists*
- *College and University Faculty*
- *Physicists and Astronomers*
- *Biological Scientists*

### Profile: *College and University Faculty*

San Gabriel Valley Growth Industry Cluster: *Education & Research*

There are four academic ranks of faculty: professor, associate professor, assistant professor and instructor; lecturers are not on the tenure track, but also make up the faculty at colleges and universities. Attaining tenure is a major step in a traditional academic career. Not only do faculty members teach and advise college students, they also perform a large percentage of the research that is done in the United States.

College faculty usually have flexible schedules and are able to arrange their work schedules according to needs. In 2000 faculty held about 1,300,000 jobs. About 3 out of 10 worked part time, some of which are known as "adjunct faculty" and have primary jobs outside of academia in areas such as government, private industry, or non-profit research. The number of tenure-tracked positions is expected to decline as institutions seek flexibility in dealing with financial matters and adapting to changing student interests. Employment of college and university faculty is expected to increase faster than the average for all occupations through 2008 as enrollments in higher education increase, in addition to new openings arising due to retirees. Median annual earnings in 2000 were \$46,330 a year, the highest 10% earning more than \$87,850. A Ph.D. is usually required for full-time, tenure-track positions in 4-year colleges and universities.

## FIRST-PROFESSIONAL DEGREE

- *Veterinarians*
- *Chiropractors*
- *Physicians*
- *Lawyers*
- *Clergy*
- *Pharmacists*

### Profile: *Physicians and Surgeons*

San Gabriel Valley Growth Industry Cluster: *Healthcare*

Physicians diagnose illness, administer treatment and counsel patients on diet, hygiene and preventative health care. Two types of physician degrees exist. The most common is the Doctor of Medicine (M.D.) degree. The second is the Doctor of Osteopathic Medicine (D.O.) degree, which places an emphasis on the body's musculoskeletal system, preventative medicine, and holistic patient care. One third of all physicians work in primary care, while the rest are specialists. Doctors work long, irregular hours and the formal education and training requirements are among the longest of any occupation – but, earnings are among the highest of any occupation. Employment of physicians will grow faster than the average for all occupations through the year 2008 due to continued expansion of the health care industries. The number of physicians in training has leveled off and is likely to decrease over the next few years. Two out of ten doctors are employed by hospitals. A growing number of physicians are partners or salaried employees of group practices. Median earnings for physicians in 1998 were \$160,000, and for the surgeon subgroup \$240,000 – with the middle 50% of physicians earning between \$120,000 and \$240,000 a year. There were 598,000 physicians in the United States in 2000. Education can range anywhere from 6 to 8 years for undergraduate and graduate school – 4 years undergraduate and 4 years medical. Some colleges and universities offer a combined 6 year undergraduate and graduate program for those students on the medical career path. In addition to the formal education, physicians must complete 3-8 years of internship and residency, depending on whether or not they choose to enter a specialty field.

## Educational Matrix for Career Development

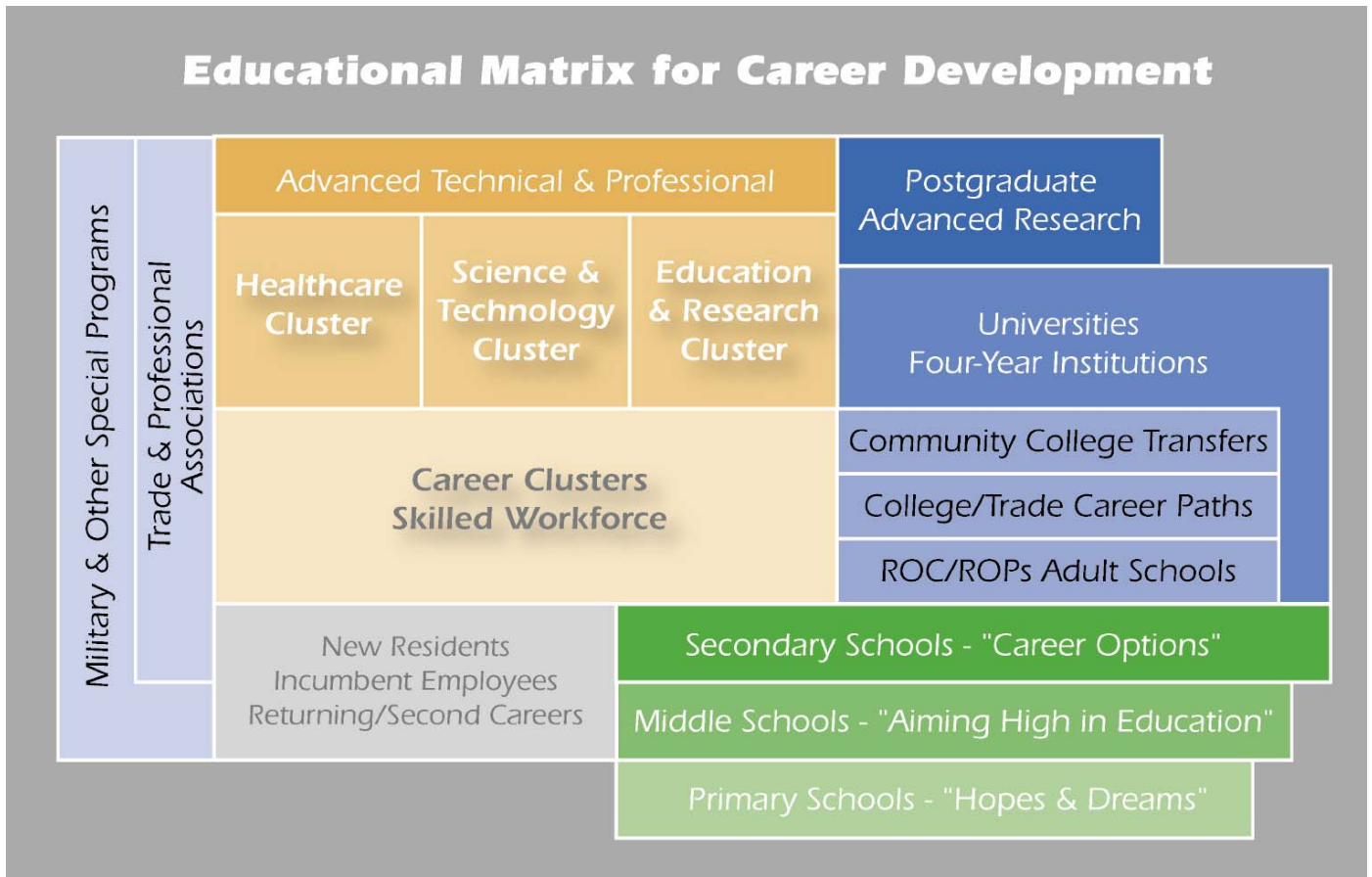


Fig. 33. Educational Matrix for Career Development, CivicCenter Group

### DEVELOPING A STRATEGY FOR REGIONAL SUCCESS

The importance of linking students to careers at an early age cannot be overstated. Career consciousness sets the stage for future success by providing context and relevance for their studies. It is far easier to explain the concrete concept of making change for a dollar, than it is the abstract notion of taking 27 away from 100.<sup>1</sup> So it is with early career orientation—making the mental connections with real-world events, that ultimately result in a lifelong focus on career growth.

Families need to share in the learning process, taking an interest in subject matter and in the progress being made. Students who have a home environment that supports study and achievement are more likely to excel academically.

Students growing up within a *culture of education*—sons and daughters of educated parents—generally are more oriented to academic achievement.

The community needs to be closely connected to schools, colleges and training centers. Reverence for, and support of education is the key to *lifelong learning*—which is especially important to those job seekers in the lower socio-economic stratum. One useful strategy is the promotion of career relevance in the classroom, focusing on the real world, and *real* career possibilities.

The San Gabriel Valley is home to an extraordinary cluster of educational systems and institutions. These institutions are well suited to educate, train, and upgrade the skills of the workforce—providing a wide variety of educational pathways, from vocational skills to postdoctoral degrees.

There is also a degree of fragmentation among the many workforce and training programs. Proper coordination and communication are critical to avoid program gaps and overlaps in a number of existing career programs with similar focus; among them: job placement, school-to-work, and workforce training.

In order for training and education to be most effective, those engaged in development need to coordinate with one another—partnering with businesses and employers to ensure that students are pursuing objectives that will coincide with future opportunities. Not only is it necessary to synchronize education with the high-demand careers of today, but also to those likely to present opportunities over the next five to ten years.

<sup>1</sup> Mel Levine. *A Mind at a Time*. Simon & Schuster: New York, 2002, p 193.

## *Understanding Employer and Workforce Interaction*

One of the most important factors in the decision of an employer to expand or relocate is access to a qualified talent pool. Baseline skills are mandatory with each industry having its own unique set of specialized skill requirements as well.

Business leaders seek highly skilled and qualified employees, and would prefer to hire residents of nearby communities whenever possible. Companies are often forced to recruit from outside the region in order to fill specialized positions. With proper coordination, it is possible for more of these positions to be filled from the ranks of the local workforce.

Unfortunately, the general public is not sufficiently familiar with the present and future demands of area employers. Equipped with knowledge of prospective opportunities, individuals are able to develop their qualifications accordingly. By targeting high-quality, high-growth industries, where the region has a competitive advantage, the economic objectives of the region and the workforce can both be realized.

Community leaders and stakeholders can assist by informing the public debate – regularly providing research reports, conducting surveys and convening forums. Working groups, once having reached consensus, can make projections of need and opportunity, using public outreach to circulate reports, and share information.

Over one-third of San Gabriel Valley students will leave high school and go directly into the workforce – permanently ending their formal process of education. Their career skills and qualifications will be limited to those obtained in high school.

As students in grades seven through twelve move rapidly toward the world of work, they often lack any concept of what is in store for them. While primary and secondary schools are appropriately focused on preparing students for college, many believe that too little effort goes into real-world career preparation.

In addition to college preparatory efforts in elementary, middle and high schools, other pathways should also be explored. Based upon aptitudes and preferences, students should be counseled on possible vocational training, or community college with possible future transfers to four-year colleges.

Although there is some controversy over differentiation among students, educators seem to be moving more in the direction of widening the range of career options, and re-emphasizing high-skill vocational training as a legitimate alternative to a college degree.

### *Career Choices*

Individuals find themselves making career decisions at some of the most challenging times in their lives, very often without sufficient serious consideration. Some drop out of high school to take jobs, while other set out armed with nothing more than a high school diploma. Unemployment is a common denominator for job-seekers – making career decisions after losing or quitting a job, re-entering the workforce after prolonged absence, or as a new resident in an unfamiliar area.

When one is worrying about making ends meet, it is not the best time to make life-changing decisions. Early career planning allows individuals to empower themselves – to visualize their destinies and to choose fields that best suite their interests.

## *Motivation*

Most endeavors begin with a spark of inspiration – the motivating factor that drives a person to take the all-important first step. The civic leadership of the San Gabriel Valley is in a position to provide that spark in the form of information and facilitation. Learners can be empowered to develop their own personal career plans, and to take steps toward reaching their goals.

Role models and mentors play an essential role in stimulating interest in career-based education. Individuals often need nothing more than to be pointed in the right direction – or to acquire enough self-confidence to visualize success in their career education endeavors.

There are a number of successful models for motivational seminars and outreach programs that connect students at all socio-economic levels to pathways and motivation for academic achievement.

### *Incumbent Employees*

Education and training are also important for the development of incumbent employees. This involves two central objectives: assisting existing personnel in establishing and ascending career ladders; and the freeing-up of entry-level and mid-level positions for newer employees.

Employees are usually more interested in developing careers with their current employers than having to hopscotch from job to job. Upward mobility results in long-term commitments to employers, and in reduced employee turnover.

Employers strengthen their human capital by cultivating and enhancing personnel at all levels. This also contributes to the strength of the local workforce – bolstering the regional economy – which benefits from the availability of well qualified workers in high-demand fields.



## Strategic Plan

### General Recommendations

There is intense competition to retain nurses, pharmacists and other high-demand medical personnel. Healthcare employers are concerned about the aging workforce – with high rates of retirement, and an absence of replacement candidates as major causes.

Medical professions provide some of the most attractive career lattice opportunities. The healthcare field offers entry points for employees at a number of levels of skill and education. This trend is expected to continue.

### Hands-on, Intern and OJT Programming

It is said that *practice makes perfect*. And in most cases, education is not a replacement for hands-on real-world experience. In recognition of this, there are numerous programs providing employers with reimbursements, subsidies and tax breaks for offering internships and on-the-job training programs.

Specific application of education and training is a fresh challenge to many, otherwise well-qualified, individuals. Even engineers and scientists with strict academic backgrounds often need seasoning in the workplace in order to develop practical problem-solving and critical-thinking skills.

Loyalty and a sense of teamwork are traits highly prized by employers. Fearing that employees may abandon them before they have recovered their investment, employers may be reluctant to *over-invest* in workplace and incumbent-employee training programs.

The *Workforce San Gabriel Valley* stakeholder roundtables and the concluding Forum: *Harnessing the Intellectual Capital of the San Gabriel Valley*, provided insights from local experts, educators, employer and workforce professionals.

Some of the general concepts, tactics and strategies identified include:

- Educate parents about the importance of career development for their children and themselves
- Connect the community with careers, focusing on careers early in the educational process
- Encourage career-based learning relevant to the real world
- Institutionalize career counseling, motivation and mentoring programs at all levels, particularly in the early stages of college
- Demystify career paths and the educational process leading up to them
- Promote vocational education as a viable alternative for entry into quality careers
- Synchronize the priorities and strategies of educators with one another, and with employers
- Create a variety of programs to accommodate learners at all levels, including early education, those re-entering the workforce, and new immigrant residents
- Develop and refine basic employability skills among applicants, students and incumbent employees
- Provide educational support systems extending to students, families and beyond, into the community
- Focus on improving literacy rates, particularly for first generation immigrants

- Educate the public on the benefits of obtaining certification, licensing and academic degrees
- Promote local training opportunities among community members
- Encourage businesses to utilize customized training opportunities
- Equip individuals with a full set of baseline soft skills, which include critical thinking, teamwork, workplace protocols and organization
- Develop relevant high-demand specialized skills
- Heighten community awareness of local training facilities such as adult schools, vocational institutions and community colleges
- Cultivate awareness of WorkSource centers and other job placement organizations
- Encourage employers to become more creative with incumbent employee training – familiarizing them with local resources
- Inform valley residents of the opportunities offered through regional occupational programs, centers and adult schools, with their and their importance in the overall workforce preparedness scheme

Unite-LA's *School-2-Career* is a good example of aggressive programming that makes critical connections between employers and educators.<sup>1</sup> This set of strategies can address many of the needs identified in the San Gabriel Valley as well:

- (1) Adopt-a-School
- (2) Provision of work experiences
- (3) Internships
- (4) Apprenticeships and cooperative education opportunities

- (5) Guest speakers for K-12 and college classrooms
- (6) Workplace field trips
- (7) Job shadowing and mentoring opportunities
- (8) Achievement-based scholarships
- (9) Participation in career fairs
- (10) Advisory committee and education partnerships
- (11) Contributions of supplies, equipment and services
- (12) Real work computer literacy training.

### Alternatives to Formal Education

Few would doubt that an individual's career horizons are broadened through specialized training and education. But, these alone do not ensure career success. Some companies would prefer an applicant with years of workplace experience and limited education. Careers such as sales, marketing and consulting often have no formal education requirements – and can be some of the highest paying occupations.

There are also many skill-based occupations where dedicated individuals can start with apprenticeships, and eventually work their way into high-paying and rewarding careers. Construction trades, precision machining and entertainment production are examples.

Those motivated to upgrade skills on the job are most likely to move up the career ladder, often without investing the years of formal education that might otherwise have been required.

Even though careers exist that do not require formal education, by embracing *lifelong learning* individual chances for success are infinitely better. Education not only develops one's natural talents, but through degree and certification provides an objective credential, attesting to a person's motivation and dedication.

### Need for Improved Communication and Coordination

At the core of the strategic plan findings are three closely allied concepts. *First* is the increased need for strategic partnerships and improved communication among businesses, employers, educational institutions and workforce professionals.

*Second*, greater efforts need to be made to reach out to the communities of the region and to encourage the establishment of a *culture of education*, providing support and appreciation for the benefits of education.

*Third*, real-world connections need to be made with learners to motivate them and encourage them to develop career paths – beginning at early ages. Heightened awareness among students and other area residents is the key.

### Competitive Advantage

*Capitalizing on International and Multi-National Opportunities*

In 2000, approximately 28.4% of the population the Pasadena area CCD,<sup>2</sup> claimed foreign origin. In the Southwest area CCD that percentage rises to 49.5%. Employers can play a significant role in increasing the level of English literacy in the local population. They would be well served to promote literacy in partnership with local training institutions.

By embracing the large immigrant population and helping with job market assimilation, the quality of the overall local workforce can be improved. Once English skills are acquired, additional skills such as computers, customer service and communications are put within reach, resulting in a workforce of highly motivated and capable individuals.

Many residents still enjoy economic and familial connections with their countries of origin. This is a unique competitive advantage for the valley, which has access to a vast network of international trade resources.

Nearby are the shipping Ports of Los Angeles and Long Beach. These connect to the Alameda Corridor and the Alameda Corridor East which extends through the heart of the San Gabriel Valley. It is the largest single public improvement project in valley history.

The San Gabriel Valley region benefits from its world-class infrastructure, entrepreneurial spirit, and tremendous human and intellectual capital.

### Public/Private/Civic Partnerships

The San Gabriel Valley is home to two-dozen world-class universities, colleges and institutions of higher learning. Dozens of major corporations, utilities, and organizations make their home in the valley as well.

With its established credibility and high profile in the region, the *San Gabriel Valley Economic Partnership* is in an ideal position to convene all of the significant stakeholders needed for meaningful regional collaboration.

As a non-profit, the *Economic Partnership* adds an important civic dimension to the public/private relationship. This establishes a starting point, along with facilitation for ongoing activities. The strategic partners will continue working with stakeholders, developing resources, growing the economy and enhancing the valley's intellectual capital.

<sup>1</sup> Source: Unite-LA, 2003.

<sup>2</sup> CCD: Census County Division, established by the U.S. Census Bureau. There are four CCDs in the San Gabriel Valley: (1) Pasadena, (2) Southwest, (3) East and (4) Upper Valley.



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## Project Strategies

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# Strategy

# I

## Strategy I

### WORKFORCE DEVELOPMENT COMMITTEE: PARTNERSHIPS FOR LEARNING

*Support and enhance the Workforce Development Committee of the San Gabriel Valley Economic Partnership by maintaining a network and providing a forum for stakeholders who are involved with education and career development issues*

#### Objectives

- Maintain the critical link between businesses, employers, educators, workforce professionals and the talent pool of the San Gabriel Valley
- Maintain a network and support forum to help facilitate communications and initiatives, including the *Workforce San Gabriel Valley* strategic plan
- Broaden the base of prosperity and increase access to opportunities for San Gabriel Valley residents through improvements in the education, skill and career levels of area residents
- Benefit businesses and employers through enhancement of the region's economy, improved availability of a quality pool of labor, management, expertise and innovation
- Support the region's education and workforce infrastructure with improved planning and strategies, enhanced communications, networking and assistance, along with identification of, and access to tools and resources

San Gabriel Valley employers have an abiding interest in the maintenance of a high quality regional workforce. Employees provide the energy, management, expertise and innovation that allow organizations to produce goods, services and intellectual properties. The San Gabriel Valley Economic Partnership has established its Workforce Development Committee – providing an opportunity for stakeholders to network and cooperate on issues and projects.

The committee is involved in education and workforce initiatives. It is comprised of volunteers from the stakeholder groups and strategic partners, including: Employers, Educational Institutions, Workforce Professionals, Private and Public Sector Industry Leaders, Community Leaders, and Elected Officials.

The Workforce Development Committee seeks to broaden the base of prosperity and increase access to education and training for residents of the region. This, in turn, benefits area employers by improving the quality of the talent pool.

The committee has an important role in helping to coordinate various efforts directed at workforce enhancement. Overlapping programs can be identified and better synchronized. Gaps can be filled in programming and services areas.

The committee requires normal administration, meeting facilities and the services of a convener. Notices, phoning and newsletters are a necessary part of group communications, which can be further strengthened through an active, creative and persistent media program.

Periodic forums can provide an interesting method for reaching out to the communities served, providing information and motivation for future campaigns and initiatives.

The project is ongoing, and the committee has been underway for several years under the auspices of the San Gabriel Valley Economic Partnership.

# Strategy III

## Strategy II SKILLS FOR THE WORKPLACE: BACK TO BASICS

*Increase the availability of workforce education in soft skills, which include literacy, writing, grammar, communication, computer skills, telephone skills, workplace protocols, public interaction, critical thinking, professionalism, planning and organization*

### Objectives

- Provide learners with skills that increase their employability and likelihood of career success
- Provide ready access to programs for those with a need for workplace skills and literacy training
- Increase English proficiency in the workforce
- Enhance overall skills for incumbent employees to promote career advancement, which will also open up entry-level positions for new candidates
- Develop and enhance professional competencies among incumbent employees through ongoing training programs
- Offer an annual employee symposium to focus on the acquisition of professional competencies
- Assist learners in becoming and remaining viable in the workforce
- Make community members aware of training tools that are available to assist them in their career advancement
- Provide benefits to employers that support *soft skill* training programs increasing the competency of incumbent employees – and increasing access to pools of qualified applicants, who are better prepared to enter the workforce

In the quest for advanced capacities, it is easy to overlook some of the more readily attainable and sorely needed basic skills. In the normal K-12 educational process, schools can be caught-up in the habit of social promotion and unearned advancement. This leaves some students without adequate math and literacy skills, even though they may have earned a high school diploma. The same problem exists with some first generation immigrants, who may have had little or no education in their country of origin.

The so-called *soft skills* include the ability to communicate effectively, cooperate in the workplace, and interface with the public, as well as being organized and professional.

Workforce strategic objectives can be achieved through outreach to the public and by informing the public debate. Residents need to be brought to the realization that ongoing education and the development of basic skills is essential – along with understanding what resources are available to assist them in their quest for knowledge.

Community colleges, adult schools, occupational centers, and WorkSource centers offer courses in basic skills, able to assist individuals and increase their employability.

Educators can benefit from input and assistance from other segments of the community in order to help develop curricula that will best fulfill identified needs. Current employer needs should be determined by poll or assessment conducted on a regular basis.

Outreach to the public can be achieved through symposia and community meetings. In order to make the point, presentations have to be interesting and motivational. Multi-media combinations with take-home materials are recommended.

Given the ever-larger percentage of the population for whom English is the second language, it is important to reach out to learners in their native tongue – in places and through groups where they are accessible.

The prime movers on this initiative would be civic groups and media, reaching out to the public, supported by institutions dedicated to providing relevant basic and remedial curricula and programming.

# Strategy III

## Strategy III CAREER-BASED CURRICULA: TARGETED EDUCATIONAL PROGRAMS

*Promote the development of career-based mainstream curricula that is relevant to projected industry and market demand, through strategic partnerships and communication networks among employers, businesses, educational institutions and workforce professionals*

### Objectives

- Coordinate the targeted offerings of adult schools, vocational and trade schools, occupational centers, community colleges and 4-year institutions with the needs of employers to improve opportunities within the marketplace
- Conduct surveys and needs assessments – to determine current and projected market demand and hiring criteria in the region
- Disseminate information to educational institutions, career counselors and prospective employees through annual forums and newsletters
- Assist educators in identifying and developing techniques, practices and tools that will better prepare students to take advantage of future career opportunities
- Convene a panel to design and recommend changes in educational curricula at all levels with a focus on careers
- Synchronize curricula with actual and projected needs of employers
- Improve employee success rates by raising the bar for career preparation and training
- Increase the number of students exposed directly to careers through job shadowing, internships and on-the-job training

Employees and prospective employees throughout the San Gabriel Valley are at risk of being underutilized, mostly as a result of being untrained and under-educated. Even though there is a vast array of inexpensive programs and opportunities for the development and enhancement of skills, this situation still exists.

Many individuals simply lack the motivation or the information to start them on the road to self-improvement through education and training.

The first element of change is knowledge of current and future occupational opportunities. This is particularly important when considering a field that requires a lengthy educational process. In some advanced professional positions, the lead time can be a decade or longer. At some blue-collar levels, current market knowledge may be sufficient, but even that can be difficult to come by without experience or training.

Once the opportunities have been identified, the next step is development of educational programming that is responsive to those opportunities. Again, as with the employee, educators do not always have the most relevant up-to-date information upon which to fashion their curricula.

Even if the first two elements are fully resolved, there is still the unmet need of reaching out to the workforce – planting the seeds of inspiration and instilling the confidence necessary for them to take the first step.

Workforce strategic objectives may be met through regular polling and assessment of the employer marketplace, supplemented with projections of experts as to future demands. Once developed, the information would be analyzed, coordinated and disseminated to the stakeholders and the public.

Prime movers in this initiative are civic leadership, the media and the education community.



# Strategy IV

## Strategy IV INCUMBENT EMPLOYEE TRAINING PROGRAMS: PROTECTING THE INVESTMENT

*Increase the number and scope of incumbent employee training programs among local businesses and employers, promoting onsite and offsite alternatives, and providing access to motivation, resources, and advanced tools and methods – intended to increase access to meaningful career ladders*

### Objectives

- Promote employee career path development through training programs, such as internal company universities
- Assist local educators in the development of regular curricula designed to upgrade the skills of incumbent workers
- Assist local educators in the development of customized education and training programs to upgrade specialized skills, and to serve the needs of the advanced workforce
- Encourage and facilitate the movement of employees up career ladders through upgrade training, which in turn opens up positions for more new applicants
- Provide technical assistance to employers to support incumbent employee and on-the-job training programs – conducted either on premises or at local venues
- Emphasize the importance of *soft skills* for everyone in the workplace, and promote the acquisition of specialized skills
- Encourage employers to take advantage of customized training programs, which can be provided by local community colleges and vocational centers
- Increase the potential of local companies through diversification and improvement of the skills of their employee skills
- Develop or identify specialized resources, such as trainers that can be matched with local employers

In the press of day-to-day operations, employers are often unwilling or unable to provide upgrade training to incumbent employees. In these situations, the employees are relegated to standing by and watching advanced positions fill from the outside – unless they take the individual initiative to access external training programs. It is unlikely that most employees will do this because of time and cost concerns.

Over the years, employers will invest tens of thousands of dollars in each employee, in lessons learned, familiarity with operations, systems, practices and adaptation of specialized skills. All of this is lost if an employee’s only avenue for advancement – their “career ladder” – can be accessed solely by switching employers.

Larger employers tend to be more aware of the value of incumbent employee development. By providing career paths within the organization, they are able to keep and reward loyal employees, all the while building up their most valuable asset – their human resources. Employers can invest in the knowledge and skills of their personnel, not only through internal training programs and universities, but also through external, subsidized training.

Workforce strategic plan objectives can be realized through the promotion and coordination of internal, on-site and off-site educational and training programs. Many community colleges and occupational centers can customize these programs to suit the needs of a particular business or organization. The public school and college systems are quite flexible, and offer these services at very nominal rates.

The prime movers in this initiative are civic and industry leaders, working to take the *culture of education* directly to the workplace, supported by specialized education and training programs.

# Strategy

# V

## Strategy V

### CAREER OPTIONS: EARLY IDENTIFICATION OF INTERESTS, SKILLS & APTITUDES

*Expose all levels of learners to the array of future opportunities to which they can aspire, by encouraging them, early on, to explore their options, evaluate their skills and aptitudes, and most of all, tap into their natural enthusiasm for specific fields of interest*

#### Objectives

- Match the employment needs of industry with learners' interests through business and education partnerships
- Encourage schools and school districts to offer career education programs on a regular basis
- Embrace and enhance the *School-to-Career* movement which equates education with rewarding, high-wage, high-skilled careers
- Enlighten students as to the purpose of education and provide them with an understanding of how their choices during elementary, middle, secondary and postsecondary schooling affect their future
- Start early in exposing students of all levels to the vast array of career paths available—giving them opportunities to target fields for which they have a natural affinity
- Develop outreach programs for high school students that focus on career development by placing value on lifestyle possibilities
- Promote annual career days at middle and high schools that place emphasis on vocations and careers, relating them to education

**E**ducation will make the difference between success, failure and mediocrity for most people. But education for its own sake does not assure that an individual's full potential will be realized. Students have to be exposed to career opportunities at the earliest stage possible, in order to develop an understanding of how education is relevant to their future careers. As young elementary schoolers, imaginations can be full of hopes and dreams for the future. Relating their future aspirations to their education, students are more likely to become self-motivated and career-oriented.

As students ascend into middle school, their thinking needs to become more concrete. Reinforcement is critical. This is the time when they are most likely to become distracted from education—to begin to see it as a burden, rather than as a critical stepping stone to their futures. They must be encouraged to aim high in education, and become focused on possible careers, making the vital connection to their schooling.

High school is the time to begin to make crucial decisions. During these years students must be encouraged to seriously evaluate their future career options, and set up their priorities accordingly. Students should be assisted in designing their own personal career paths during high school. Without some frame of reference, students are more apt to lose interest in education, which can lead to a complete disconnect in the career planning process.

Workforce strategic objectives can be accomplished through enhanced coordination and communication of educational and training offerings. The market requires continuous monitoring through polling and assessment. Curricula must be reviewed regularly based upon current and projected industry and workforce trends. Comprehensive and seamless articulation is essential, from elementary through postgraduate levels.

The prime movers on this initiative are civic leadership working with educational policymakers to infuse the process with an orientation toward career-based education pathways.

# Strategy VI

## Strategy VI CAREER COUNSELING AT ALL LEVELS: PLANTING THE SEEDS OF SUCCESS

*Heighten awareness of the importance of career counselors for students and job seekers – encouraging funding and programming to make certain that all learners have one-on-one sessions with experienced mentors or counselors during the course of their matriculation*

### Objectives

- Increase the availability of career counseling and mentoring in public and private K-12 learning environments
- Increase the level and frequency of career-oriented curricula
- Offer age- and situation-appropriate career orientation to students
- Increase the potential for success by synchronizing student capabilities and interests with career path development
- Provide counseling to students to assist each of them in developing a plan to achieve their personal set of career goals
- Develop a network of volunteers and professionals to coordinate and facilitate mentoring and career counseling programs
- Emphasize the importance of career counselors and mentors at the college level

Students at all levels can benefit from one-on-one career counseling, but accessing high school and early college students is critical. Too many individuals put off making career decisions until the worst possible times – immediately after graduation from high school or college, or after just having lost or quit a job. At difficult times, when economic survival takes priority over long-term planning, poor decisions are more likely.

On the other hand, if students are provided with professional career counseling at early stages of high school and college, they can gain an understanding of available options. They can make choices that match their personal set of interests, values, qualities and attributes. Many students, especially those from lower socio-economic levels and first generation immigrants, may not realize the dynamics of the educational process until it is too late.

Children of parents who place value on education are much more likely to be career conscious, and to establish educational priorities. Parents with academic degrees generally encourage their children to attend college in greater numbers than those who lack degrees or those who are unfamiliar with the process.

This doesn't mean that all students must go to college, but that all should have the opportunity of doing so. Some students and parents will decide that obtaining a highly skilled career through vocational training or apprenticeship is best suited to the student's interests and capabilities.

Workforce strategic objectives can be achieved through communications with education leadership and elected officials, informing the debate, and providing support for increasing career-counseling personnel – weaving them into the curricula at high schools and colleges.

Prime movers on this initiative are civic and educational leadership.



# Strategy VII

## Strategy VII PROMOTING A CULTURE OF EDUCATION: EMBRACING LIFELONG LEARNING

*Establish and enhance the “culture of education” in the San Gabriel Valley, focusing on the importance of “lifelong learning” and the development of a social and familial support system for learners at all levels*

### Objectives

- Campaign to develop a *culture of education* reaching out to the community to instill an education-based value system
- Broaden literacy rates through increased training programs and outreach to the community
- Heighten awareness of the importance and accessibility of local learning institutions
- Develop career workshops for adults in the community to motivate residents and increase training levels – offering the tools to allow individuals to improve their employment prospects
- Promote the relevancy of adult schools, occupational centers, vocational schools and skill-based community college courses within the region, highlighting the linkages between education, training, skills and career attainment
- Increase the roles of families as partners in education and career planning, providing an active support structure to learners at all levels
- Draw upon local resources to outreach to the public encouraging those with expertise, such as senior citizens, to act as mentors to younger learners
- Support parental literacy, giving parents the tools needed to instill educational values in children through motivation, assistance and support
- Increase family involvement in learning practices through participation in education-oriented organizations

Many families do not fully understand the role education plays in determining lifestyles – this being one of the main obstacles that prevent those at the lower end of the socio-economic spectrum from ascending. Sometimes, educational efforts are met with derision and even opposition. Many of those who lack an education, or the discipline needed for learning, can feel threatened, and as a result actively oppose the efforts and aspirations of others. Negative attitudes toward education can spread to large groups of people, resulting in a tragic loss of opportunity.

Students need support from their families and a social structure that reveres education and appreciates the amount of effort necessary to do well. Parents and relatives can act as role models – counseling students, and discussing interests, even if they themselves have difficulty with the subject matter. Taking an active interest in educational plans and career paths lets students know that their efforts are worthwhile.

Adult workers often do not seek additional education due to concerns about cost and lack of time. The cost issue is more perception than reality, since adult school and community college classes range from very nominal fees to free of charge. Motivation is the real issue. Those who are truly motivated will make time for education.

What is seldom discussed are the fears and social stigmas that seem to attach to adults returning to the educational process. Some are uncomfortable with the idea of admitting to weaknesses in their educational backgrounds. Others are simply intimidated by the whole notion of the size and scope of an adult school or a community college campus.

Residents need to embrace the development of a *culture of education* with a focus on *lifelong learning*. As the world changes, and as people develop, knowledge and skill acquisition change as well.

The prime movers on this initiative would be civic groups, adult education, workforce professionals and the media, reaching out to the public.

# Strategy VIII

## Strategy VIII CAREER PLANNING SYMPOSIA: NEW DIRECTIONS FOR SUCCESS

*Create a working group of educators, businesses and employers to establish annual career outreach symposia to motivate residents at all levels, creatively and aggressively presenting options and tools – and collaborating to develop education-based career plans*

### Objectives

- Create a multi-media program that includes intensive, high energy, career planning symposia – in which attendees are motivated, provided with options and tools, and assisted in developing education-based career plans
- Identify and deploy experts in motivation and education, who can provide exceptional presentations to symposium attendees, with a goal of convincing them that their greatest career potential can be targeted and achieved through education
- Tap into the resources of industry leaders, employers and educators to determine best practices, options and tools to be presented at the symposia
- Reach out to residents and students on a regular basis, helping them establish and refine their career goals
- Develop periodic workshops and seminars for job seekers that focus on interview skills and resume writing
- Provide follow-up support to assist learners in developing personalized career roadmaps

Career days, fairs and events may range from simple, with a handful of employers, to very complex and elaborate affairs. They are a regular occurrence in most region of the United States. Not all of these rise to the level of motivation or inspiration. More life changing experiences are needed.

There are three fundamental ingredients to making a life change when it comes to personal career development: (1) sufficient information to understand opportunities, (2) a personal career plan, and (3) motivation to implement the plan.

These are the three elements to be featured in the proposed symposia. In a typical example, attendees would arrive at a day-long event that begins and concludes with motivational sessions. The initial motivation stimulates them into immediate action in considering material being presented, and for the development of an actual personal career plan.

Attendees would be exposed to motivation compounded by information, and directed through facilitation. The action-packed multimedia presentation would focus on reproducing different career experiences, and upon the lifestyles of people that have made various life and career choices. What looks attractive at age twenty may look tragic at age forty. Being able to grasp the *big picture* theme of success in careers is oftentimes difficult, but it is a much needed exercise. And likewise, some of the more difficult paths tend to generate the greatest rewards, but are avoided because of the level of difficulty.

These symposia would be directed to learners at all levels – students, the existing workforce and those returning to the workforce after extended leave.

Workforce strategic objectives can be promoted through the development of protocols and outreach mechanisms for the symposia. This provides an annual event for each of a number of areas where residents can assemble, and at the end of the day emerge with a personal career plan in hand.

The prime movers on this initiative are civic leadership and the business/employer community.

# Strategy IX

## Strategy IX CAMPAIGN FOR CAREER EDUCATION: A CALL TO ACTION

*Design and implement a career education media strategy to promote a “culture of education,” focusing on concepts of “lifelong learning,” career paths, and personal achievement*

### Objectives

- Partner with media sources in outreach to increase career awareness throughout the year
- Establish ongoing media and public relations efforts to reach out to the community, encouraging positive approaches to *lifelong learning*
- Design compelling campaign materials and utilize innovative outreach techniques
- Promote strategic plan initiatives through the use of common elements and recurring themes
- Support ongoing efforts and programs of educational institutions and workforce organizations

One of the most effective tools for the implementation of any civically-driven program or strategy is the media campaign. The most important media is the coverage that comes as a result of newsworthiness, or through the support of the media outlets themselves. If properly presented, issue-oriented educational programming has the ability to draw public interest and the media interest that comes along with it. If the material is not interesting enough to warrant coverage, it may bear reconsideration.

As initiatives are undertaken, their details need to be part of the news of the day. As information is developed, the press is usually quite willing to report it. When decisions are made and conclusions are arrived at, press conferences are an effective way to reach out to the community and to leadership, informing the public debate.

The more coverage the work of the organization or project receives, the more standing it develops for credibility and for future coverage on the same topic. Outreach is a key element of several of the initiatives that are part of the strategic plan. The most effective form of outreach is through earned media – garnering coverage in the news sections of print and electronic media.

Additional outreach is achieved by developing a network of community organizations, such as churches, chambers of commerce and civic groups.

Workforce strategic objectives can be advanced through the development of a *culture of education*, understanding of available alternatives, encouragement of the concept of *lifelong learning*, and through understanding the need for the development of personal career-oriented educational plans.

Prime movers on this initiative are civic leadership and media/public relations professionals.

Civic organizations work primarily as facilitators, conveners and catalysts. They usually have the task of pulling together the resources necessary for project implementation.



# Strategy

# X

## Strategy X

### INTERNSHIPS AND ON-THE-JOB TRAINING: REAL-WORLD EXPERIENCE

*Increase opportunities for learners and job seekers at all levels to obtain real-world experience in quality occupations – promoting programs through strategic partnerships between businesses, employers, educators and workforce professionals*

#### Objectives

- Work with the business and employer community to identify existing opportunities for real-world experience in high-demand, quality careers and occupations
- Promote the establishment of internships and on-the-job training opportunities in high demand fields including healthcare, technology and education
- Provide technical assistance to employers to support incumbent employee and on-the-job training programs – conducted either on premises or at local venues
- Develop dialogues among businesses, employers, educators and workforce professionals to eliminate obstructions and misperceptions about internships and on-the-job training
- Identify and develop tools to deal with issues and concerns of businesses and employers relative to expanding internships and on-the-job training

In some circumstances, education and training alone may not be enough to connect the individual to a targeted career. There are a number of occupations where experience is the most important requisite – an understanding of the product, service, equipment, workplace or specialty.

Reading about a computer, for example, is a good way to gain a theoretical understanding of how it functions in the abstract sense. But, the best way to develop operating capabilities is to actually use the equipment on a regular basis. Many skills can only be acquired through use, repetition and practice.

One who lacks the skill or education for a particular occupation may nonetheless develop the necessary skill through on-the-job training. Thus, internships and on-site training can provide an important educational tool. Students and job seekers can leverage training and exposure opportunities into future careers.

Internships also provide students and prospective employees with opportunities to determine how well their skills and aptitudes translate into the actual workplace. At the same time, employers have the opportunity to evaluate prospective long-term employees at little or no cost – and without having to make permanent commitments. As with incumbent employee training, there are employers who avoid training and education altogether, preferring to simply hire pre-qualified talent as needed. The goal of this initiative is to increase the percentage of employer offering internships and on-the-job training, as well as the total number of positions offered.

Workforce strategic initiatives are achieved through the expansion of proven workplace training techniques, and by providing assistance to employers in working through issues that might otherwise prevent such programming.

Primary movers are business and employer leadership, working with civic organizations and workforce professionals.

# Strategy XI

## Strategy XI

### UTILIZING TECHNOLOGY IN EDUCATION: FUTURE TRENDS

*Create a working group to investigate the use of technology to better leverage teaching skills, to increase the level of personal attention to students, and to encourage self-directed remedial instruction and extended research – while also providing more remote access to education and career-related information*

#### Objectives

- Organize and convene a group of educators, businesses and employers to investigate and discuss the use of technology to enhance the educational process
- Leverage teaching skills by providing supplemental teaching technologies to allow personally-paced access to the curricula
- Develop strategies to extend course materials and lesson plans into computerized systems
- Encourage self-directed instruction and distance learning as ways to make the learning process more efficient, and to free up teaching resources for more essential tasks relating to creative pursuits, individual needs and special challenges
- Reduce class sizes and instructional efficiency by pairing self-directed instruction with lectures and dialogues
- Use technology to support remedial instruction, as a means of allowing self-directed, non-judgmental review and repetition of topics
- Encourage the use of computerized research of databases and Internet sources as a means of gaining extended knowledge on subjects of particular interest
- Develop a directory of on-line Internet career development resources for learners and residents in the region – disseminating this information through the initiatives of the strategic plan

Highly touted and not yet fully understood, the information age is well upon us. As the power of technology is brought to bear upon virtually every aspect of life, it is clear that some of its most profound effects are in the area of learning and research. Computers not only provide us with new ways to handle and process information, but also give us a window to a limitless world of information.

Bill Gates, President and CEO of Microsoft Corporation cites the Wall Street Journal:

*More than a decade of use shows that computers can help educate students – but society has learned ten hard lessons along the way. I concur with the conclusions of a November 1997 special report by the Wall Street Journal.<sup>1</sup>*

1. Computer labs are a lousy place for computers. They need to be in classrooms.
2. Struggling students often get more out of computers than higher performers.
3. Most teachers still haven't been trained in how to use computers in class.
4. School systems must plan computer use carefully.
5. Computers are a tool, not a subject. They need to be integrated into the lessons of other subjects.
6. Kids flourish when everyone has a computer.
7. Hand-me-down machines are not good enough for school use.
8. Computers don't diminish traditional skills.
9. The Internet and e-mail excite kids by giving them an audience.
10. Kids love computers.

Workforce strategic objectives may be met, in part, through the development of tools and concepts to use computers as a means to leverage the educational process.

Prime movers are educational leadership the technology community, and civic organizations.

<sup>1</sup> Bill Gates, *Business at the Speed of Thought: Using a Digital Nervous System*, New York: Warner Books, 1999, p. 402, from the Wall Street Journal, November 1997.

# Strategy XIII

## Strategy XII

### TOMORROW'S ENTREPRENEURS: INNOVATION & CAPITAL

*Emphasize programming to identify learners with entrepreneurial traits, providing motivation, specialized curricula, career alternatives, and tools to facilitate an entrepreneurial career path – including understanding the role of innovation and capital in the context of the regional economy*

#### Objectives

- Integrate the search for future entrepreneurs into education related exercises – including those contained in the strategic plan
- Outreach to the community to encourage entrepreneurship
- Provide logistical and technical support to new businesses and other enterprises
- Increase access to business- and management-related education and training – including development of enterprise curricula
- Promote involvement with business-related educational groups and organizations such as Future Business Leaders of America and Junior Achievement
- Encourage and facilitate innovation and invention as a means of enhancing the intellectual capital of the region

One of the things that sets Southern California apart from almost any other place in the world is the number and quality of its entrepreneurs. The region is home to some of the most creative and innovative minds in the nation. As the world becomes ever more competitive, marketable intellectual properties and savvy entrepreneurship will continue to provide the San Gabriel Valley with a competitive edge.

Nowhere is this more evident than in some of the spin-off organizations and commercialization projects that have emanated from the educational and research institutions in the area – biomedical, technical, aerospace and space technologies and applications among them.

Developing new employers and enterprises is a worthy goal, particularly as it promotes regional competitiveness and creates additional career opportunities. There are individuals within the population who are natural entrepreneurs. They may need encouragement, capital, education, or some combination of all three.

The skills of an entrepreneur are similar those of other professionals, but also include the elements of innovation and venture-orientation. By definition, the individual has to be able to blaze new trails, and is likely to be highly specialized in a vertical discipline. But, he still needs to be savvy in both business and social skills in order to negotiate the marketplace, develop new concepts and products, and hire and manage personnel.

Programs and activities should be made available to support and promote entrepreneurship as a viable career choice. With proper communication and outreach, these future leaders can be identified and encouraged.

Workforce strategy objectives will be achieved with the creation of new companies, and with them, new jobs. Entrepreneurial companies are the most likely endeavors to increase wealth and capital in the region through improved distribution and export of goods and services.

Prime movers are business and civic leaders with the support and facilitation of educational institutions.



# Strategy XIII

## Strategy XIII OVERARCHING PRINCIPLES: *SHARED VALUES* AND *INITIATIVES*

*Adopt and evolve a set of shared values within the Workforce Development Committee of the San Gabriel Valley Economic Partnership from which to implement the overarching principles*

### Overarching Principles

- Encourage the development of attainable career goals
- Build a long-term strategy for developing career paths and career-oriented motivation
- Improve communication between the employer community and educators, providing current and future market demand information
- Increase the involvement of businesses and civic leadership in school programming such as mentoring and job shadowing
- Monitor, analyze and assist existing career development programming, and create new programming where needed
- Heighten public awareness as to the important role of adult schools, vocational and trade schools, occupational centers and community colleges in the region
- Increase the amount of industry-specific high school academies, and cultivate industrial arts courses in K-12 public and private educational institutions
- Encourage instructors to take career planning to the next level through mentors and guest speakers from local industries, as well as promoting *Job Shadowing* and other workplace interaction.
- Promote student volunteerism in civic and community activities encouraging participation in organizations such as Project Grad, Junior Achievement, and Future Business Leaders of America

There are unlimited possibilities and strategies that could be applied to enhancing the education and the workforce in the San Gabriel Valley. The stakeholder roundtable participants found it necessary to establish priorities. Through the roundtables a number of general concepts were developed that were considered important enough to become a part of the overall plan.

As the strategies move forward, there are also a number of overarching principles that the stakeholder groups felt would be useful as policy guides .

An example of new thinking is the Small Learning Communities movement. SLCs are developing in a number of high schools around the U.S., developing closer relationships with students and bringing increased relevance to classrooms in an age of tightened budgets and growing populations.

Studies indicate that achievement,<sup>1</sup> attendance and behavior is improved<sup>2</sup> as students become more visible in learning communities of 250-300 students. This contributes to higher rates of graduation along with more efficient operation and increased teacher satisfaction. The effect is even more dramatic in schools with large concentrations of poor and minority students.<sup>3</sup>

Students feel more connected to caring adults, and teachers feel that they have more opportunity to get to know and support their students.<sup>4</sup> Students, teachers, and parents are all better served if the school is small enough to allow communications to flow, collaboration to be cultivated, and meaningful relationships to be fostered.

Each small school is unique to the local school community it serves. Each has a non-exclusive admissions policy, a coherent focus and philosophy of education, and a curriculum that is integrated around that focus. A cohesive group of teachers works closely, addressing the needs of their students in an environment of shared leadership.

<sup>1</sup> D.T. Williams. *The Dimensions of Education: Recent Research on School Size*. Working Paper Series. Clemson, SC: Clemson University. Strom Thurmond Institute of Government and Public Affairs. December 1990.

<sup>2</sup> M. Raywid & L. Oshiyama, *Musings in the Wake of Columbine: What Can Schools Do?* Phi Delta Kappan. Feb. 2000, V81, N6, 444-449; and M. Klonsky. *Small schools: The numbers tell a story, A review of the research and current experiences*. Chicago, IL: Illinois University 1995.

<sup>3</sup> K. Cotton, *Affective and Social Benefits of Small-Scale Schooling*. ERIC Digest, Clearinghouse on Rural Education and Small Schools, Dec 1996. EDO-RC-96-5.

# Strategy XIV

## Strategy XIV LOCAL IMPLEMENTATION OF STATEWIDE STRATEGIES: *BEST PRACTICES*

*Develop local plans for implementation of best practices and statewide programs for educational improvement, including the "California Master Plan for Education"*

### Plan Elements and Issues<sup>1</sup> for Local Implementation

- Expand recruitment of counselors trained in career guidance, as well as in academic and psychological fields, in order to ensure that students have the assistance needed to make informed choices about preparation for their post-high school activities<sup>2</sup>
- Support a legislative mandate for the development of transparent and sustainable articulation and transfer process to provide students with clear curricular guidance on the transition between grade levels, between high school and college, and between and among two- and four-year colleges and universities, while avoiding the complexity of campus-by-campus differentiation<sup>3</sup>
- Encourage explicit infusion of age appropriate school-to-career experiences in public schools, colleges, and universities to provide students with clear curricular and career guidance about the range of post-high school options to which they can aspire<sup>4</sup>
- Support preparation of new teachers and ongoing professional development for all existing staff in technology applications, to ensure they have the skills to help students develop the technology skills and knowledge needed for lifelong achievement and success<sup>5</sup>

A joint committee of the California State Senate and Assembly is in the process of developing a statewide California Master Plan for Education. Several elements of the plan that appear to lend themselves to local implementation have been included in this strategic plan as well.

Also included are relevant findings from a report conducted for the California Trade & Commerce Agency by the Sphere Institute in 2000.

### Findings of the Sphere Institute<sup>6</sup> – Training Recommendations

- Provide ESL courses at employer locations to bring English language instruction to some of those most in need of, and most able to benefit from, increased English proficiency.
- Offer basic skills courses such as reading, writing, basic math, and computers at employer sites

### School-2-Career Strategies:<sup>7</sup>

1. Adopt-a-School
2. Provision of work experiences
3. Internships
4. Apprenticeships and cooperative education opportunities
5. Guest speakers for K-12 and college classrooms
6. Workplace field trips
7. Job shadowing and mentoring opportunities
8. Achievement-based scholarships
9. Participation in career fairs
10. Advisory committee and education partnerships
11. Contributions of supplies, equipment and services
12. Real work computer literacy training.

<sup>1</sup> Joint Committee to Develop a Master Plan for Education. *California Master Plan for Education*. Sacramento: California State Senate/Assembly 2002.

<sup>2</sup> *Ibid* p. 197 - Recommendation 18.

<sup>3</sup> *Ibid* P. 198 - Recommendation 23.

<sup>4</sup> *Ibid* p. 199 - Recommendation 24.

<sup>5</sup> *Ibid* - Recommendation 25.

<sup>6</sup> Jennifer Gera and Laura Hill. California Trade & Commerce Agency *Summary and Ranking of Training Recommendations for the Job Creation Investment Fund*. Sphere Institute: Burlingame October 2000.

<sup>7</sup> Source: Unite-LA, 2003.

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## GLOSSARY

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**Alameda Corridor East Project**—One of three proposed projects by the San Gabriel Council of Governments to implement priority improvements along the Alameda Corridor East rail facility. The overall project scope includes improvements at 44 grade crossings located throughout the San Gabriel Valley on the Alhambra and Los Angeles Branches of the Union Pacific Railroad between the City of Los Angeles and the City of Pomona in Los Angeles County. Improvements at 20 of the 44 locations is being made by construction of grade separations.

**Bioinformatics**—Database-like activities, involving persistent sets of data that are maintained in a consistent state over essentially indefinite periods of time. The study of information content and information flow in biological systems and processes. It has evolved to serve as the bridge between observations (data) in diverse biologically-related disciplines and the derivations of understanding (information) about how the systems or processes function, and subsequent application (knowledge). A more pragmatic definition in the case of diseases is the understanding of dysfunction (diagnostics) and the subsequent applications of the knowledge for therapeutics and prognosis.

**Blue Collar**—Refers to employees who utilize general industrial skills or perform manual labor, such as in a factory. These employees usually earn wages rather than salaries and are often members of labor unions. Occupational categories for blue collar workers may be in precision production, craft, repair, machine operation, assembly, inspection, transportation, material moving, equipment cleaning and labor.

**California Center for Regional Leadership (CCRL)**—A statewide non-profit organization established to support, facilitate, and promote innovative regional solutions for the state's major economic, environmental, and societal challenges—helping to achieve a more sustainable California. CCRL works with a network of collaborative regional organizations from throughout California, to encourage and enable effective regional strategies.

**California Master Plan for Education**—The Master Plan is the blueprint for strategic planning of pre-K through university education policy and finance for the State of California. The plan will serve as a roadmap for policymakers through guidelines to improve and transform student learning over a 20-year period. The plan has two main goals: *First*, to provide families with

the information, resources, services and support they need to give every child the best possible start in life and in school; and *second*, to provide public schools, colleges and universities with the resources and authority necessary to ensure that every student receives a rigorous, quality education that prepares them to become self-initiating, self-sustaining learners for the rest of their lives.

**Career Ladder**—A course or means of advancing to ever-higher positions within a given career field, through promotions, transfers and reclassifications. The range of grades in an occupational series or specialization within any organization that represents the levels at which employees are given grade-building experience, and to which they may be promoted.

**Career Lattice**—The multidirectional movement, vertical and horizontal, of an employee's career, which may include advancement by changing fields of work, specialties, and even employers. The lattice provides a wide range of occupational opportunities, potential for increased scope of duties, responsibilities and enhanced skills development.

**Census County Divisions (CCD's)**—Each county in the U.S. has been subdivided into smaller pieces. These pieces are called Minor Civil Divisions (MCDs) where they already existed, and Census County Divisions (CCDs) where they were created by the Census Department with the assistance of the state and local governments. In addition to census tracts and cities, there are four CCDs in the San Gabriel Valley.

**Charter School**—A charter school is a public school providing instruction in any of grades Kindergarten through 12. A charter school is usually created or organized by a group of teachers, parents and community leaders, or a community-based organization. It is usually sponsored by an existing local public school board or county board of education. Specific goals and operating procedures for the charter school are detailed in an agreement (or *charter*) between the sponsoring board and charter organizers. A charter school is exempt from most laws governing school districts, except where specifically noted in the law.

**Collaborative Regional Initiatives (CRIs)**—CRIs are made up of a diverse and objective group of community stakeholders, practicing regional stewardship. The groups typically include: civic leaders, community-based organizations, educators, non-profits, business groups, homeowner and neighborhood associations,



employers and government officials. The James Irvine Foundation pioneered the development of CRIs to give California's regions the opportunity to create effective inter-agency, cross-jurisdictional solutions for economic, social and environmental challenges. By working across boundaries of geography, ideology, and sector, and by recognizing the interdependence of sustainability's four *E's* of: economy, equity, environment and engagement, the CRIs are working to improve the regional quality of life for all Californians.

**Community Indicators** – See *Indicators*.

**Culture of Education** – A comprehensive environment and belief system dedicated to the importance of education, including families, communities, schools and educational institutions.

**Curriculum** – The content of the educational process: courses, literature, methods and characterizations. May also refer to a collection of required readings.

**Deep Space Network (DSN)** – The NASA Deep Space Network - or DSN - is an international network of antennas that supports interplanetary spacecraft missions and radio and radar astronomy observations for the exploration of the solar system and the universe. The network also supports selected Earth-orbiting missions.

**Earned Media** – Also known as *free media*. Coverage that is received due to an attractive event; free newspaper, radio and television exposure as opposed to paid media or costly advertisements.

**Emerging Technologies** – Innovative new systems, services and products that are being well received by users and consumers, in spite of still being in various stages of development. New techniques, tools and equipment used in designing or delivering instruction, including virtual reality, electronic performance support systems, and multi-user object-oriented domains.

**Employment-Based Industry Clusters** – Industry clusters, which, in addition to providing economic strength, manifest quality jobs for area residents. See *Industry Clusters*.

**Entrepreneurs** – The owner or manager of a business enterprise who, by risk and initiative, attempts to make profits. Someone who perceives a need or an opportunity and creates an organization to pursue it.

**Entry-Level Positions** – Starting positions within companies that require little or no education, experience or expertise – generally identified by low compensation rates. Often providing access to other career opportunities.

**Formal Training** – The pursuit of knowledge, certification and degrees at schools, colleges and universities. Academic courses and lectures that are relevant to a particular trade or occupation, offered at schools and colleges, commercial training firms, government facilities, and other training institutions.

**Future Business Leaders of America (FBLA)** – A non-profit IRC 501(c)(3) student organization committed to preparing today's students for success in business leadership. FBLA is an important partner in the success of school-to-work programs, business education curricula, and student leadership development. FBLA is recognized by the U.S. Departments of Education and Labor as an integral part of a co-curricular approach to business and leadership education. The FBLA Mission is to bring business and education together in a positive working relationship through innovative leadership and career development programs.

**Growth Industry** – An industry that is growing faster than the overall market. For workforce and cluster purposes, an industry expected to generate an ever-increasing supply of quality jobs, as well as strengthening the regional economy.

**Human Capital** – The collective value of the employees and residents of an area to the local economy. See *Intellectual Capital*.

**Indicator** – A measurement that reflects the status of some social, economic, or environmental system over time. The term Indicator is derived from the Latin verb *indicare*, meaning "to point out or proclaim." Generally an indicator focuses on a small, manageable, tangible and telling piece of a system to give people a sense of the bigger picture. *Community Indicators* are used to monitor certain quality-of-life and sustainability features of a particular area, such as: transportation, education, air quality, etc.

**Industry Cluster** – A group of business enterprises or other organizations who share in a common geographic or network base of technology, employees, vendors and other resources. Success is based, in part, on the growth of regional infrastructure, the spatial proximity of upstream suppliers and downstream customers, collaboration among firms and industry-wide programs such as workforce development.

**Intellectual Capital** – Collective education, knowledge, research, innovation and human resources. Access to information, relationships and processes. The addition of knowledge and value to products and services, and the enrichment of the regional base of knowledge. Knowledge assets of regional research facilities and educational

institutions. In the San Gabriel Valley *intellectual capital* is a double-ended term referring also to the region's statewide leadership in intellectual assets (as in *intellectual capital*).

**James Irvine Foundation** – A private, nonprofit grant-making 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 Irvine Ranch in Southern California was among the largest privately owned land holdings in the State.

**Job Shadowing** – An academically motivating activity designed to give students an up-close look at the world of work, and to answer the question: *Why do I have to learn this?*

**Junior Achievement (JA)** – A growing number of volunteers, educators, parents, and contributors who reach out to more than 4 million students, each year, in grades K-12. An organization that inspires students to learn the economics of life through free enterprise education. JA enables business professionals to share their experience with students to show them what it takes to be successful.

**Just-In-Time-Production** – Producing the necessary units in the necessary quantities at precisely the right time, minimizing inventories and eliminating sources of waste in production.

**Leakage of Dollars** – A negative factor in industry cluster development, representing the amount of money that is spent outside of any defined cluster by industries within that cluster. *Leakage* comprises purchases of materials, supplies, goods, services and resources from vendors remote to the cluster – also reducing the induced multiplier effects of a cluster on the strength of the local economy.

**Lifelong Learning** – The learning pathway of an individual throughout his entire lifetime, which develops through schooling and other formal and non-formal types of education. Especially relevant to adult level remedial education, mid-career degrees and certification, occupational development and personal enrichment.

**Metro Gold Line** – Rail transit line, slated to open in 2003, extending 37 miles from downtown Los Angeles to the City of Claremont. The alignment links both the existing east-west Interstate 210 freeway right-of-way and the north-south leg of the former Atchison-Topeka and Santa Fe railroad right-of-way.

**Metropolitan Statistical Area (MSA)** – An MSA is an integrated economic and social unit with a large nucleus of population. Each MSA consists of one or more counties or statistically equivalent areas meeting published standards of population and metropolitan characteristics.

**On-the-Job Training** – Developmental duties, assignments, and projects undertaken by trainees at the work site. Designed to provide the knowledge and abilities that will qualify them for targeted positions and occupations.

**Pacific Rim** – Refers to the continents and islands that bound the Pacific Ocean – in particular Asia and the far east markets of: Australia, Cambodia, China, Hong Kong, Indonesia, Japan, Korea, Laos, Malaysia, New Zealand, Papua New Guinea, Philippines, Singapore, Taiwan, Thailand and Vietnam.

**Post-Genomics** – The post-sequencing future of the human genome project, and all fields of study that relate to it, such as computational genomics, structural genomics, and proteomics.

**Professional Competencies** – See *Skills, Employability*.

**Project GRAD (Graduation Really Achieves Dreams)** – Organization dedicated to the belief that going to college is the key to making dreams come true. It facilitates partnerships with K-16 teachers, administrators, parents, students, community leaders, and businesses to increase the number of students entering and succeeding in college. Project GRAD supports teacher training to improve student achievement in reading and math, and guides students in developing self-management skills in order to succeed in school and at home. It connects students with counselors to help with special academic and personal needs and awards merit college scholarships for high school graduates.

**Proteomics** – The study and analysis of protein structure and function. Becoming quite an important science with the mapping of several genomes, including the human genome, and the discovery of new proteins.

**Public/Private/Civic Partnership** – The addition of a non-traditional civic layer to the *public/private partnership* model. This new paradigm uses civic activists and organizations as convenors, facilitators and catalysts – providing community research, support, outreach and implementation.

**Quality Career** – Occupation that suits the needs of the individual employee, typically providing: reasonable to excellent compensation, benefits and job satisfaction, along with growth opportunities through access to career ladders.

**Quality of Life**— In the planning context, the overall experience of life within a community. The level of enjoyment and fulfillment derived by humans from their local economic, cultural, social, and environmental conditions. The maintenance of a pleasant, balanced and sustainable community that provides opportunities for employment, education, commerce, recreation and habitation.

**Regional Occupational Centers and Programs (ROC/ROPs)**—Facilities and programs that offer vocational preparation and career enhancement for high school students and adults—providing entry-level and advanced job training and employment assistance for high school students (from both public and private schools) and adults. A public education service that provides practical, hands-on career preparation and career guidance. There are 72 ROP's in the state of California.

**San Gabriel Valley Council of Governments (COG)**— In addition to the authority that is created through their member cities and counties, councils of governments also carry out state and federal statutory duties. While the exact combination of duties varies from region to region, the two most prevalent are to serve as the regional transportation planning agency under state law and as the federal metropolitan (transportation) planning organization (MPO). This involves preparation of long range transportation plans and, in nearly all instances, the development and adoption of transportation improvement programs which allocate state and federal funds for highway, transit and other surface transportation projects.

**SCAG**—Southern California Association of Governments. A council of local municipal and county governments functioning as the Metropolitan Planning Organization (MPO) for six counties of Southern California (excluding San Diego). The SCAG region has a population of 15 million and covers 38,000 square miles. The organization is mandated by the federal government to research and draw-up plans for transportation, growth management, and air quality.

**School-to-Career**— Also known as *School-2-Career* and *School-to-Work*. A popular movement supporting reforms in the educational system that include the integration of school-based and work-based learning, the use of contextual, applied teaching strategies, and the opportunity for students to choose career-related coursework and workplace experiences.

**Skills, Baseline**— A set of workplace skills in demand by employers, and beneficial to those seeking employment. Includes: motivation, initiative, adaptability, self-

confidence, public interaction, professionalism, teamwork, problem solving, critical thinking, and leadership abilities, along with hard skills relating to computers, telephones and other office technologies. See *Soft Skills*.

**Skills, Employability**— Understanding the operations of the employer, application of information technology, appropriate workplace behavior, talent in speaking, listening and writing, maintenance of personal standards, ability to handle numbers, response to problems, ongoing learning, planning. Includes *Baseline Skills* and *Soft Skills*.

**Skills, Soft**— A set of skills believed to be essential minimums for workplace competency. Includes: literacy, writing, grammar, communications and punctuality,

**Skills, Specialized**— Broad category of trades, professions and disciplines; normally developed through education, training and experience. Usually have a more vertical, career-ladder orientation—tending to be less transportable among different industries.

**Stakeholder**— One who has an interest in the outcome of a particular project or undertaking. Generally refers to all who might be impacted. In collaborations, *stakeholder* often refers to contributors, participants and representatives of a diverse groups of interests within the affected area. Participant in a community mobilization effort, representing a particular segment of society.

**Talent Pool**— The collective knowledge, talent and skills of a workforce in a particular area. Available pool of workers and talents from which to choose.

**Unite-LA**— Organization working with local businesses in the Los Angeles area. Mentors and schools that promote career development during the educational process. Events and activities involve *principal for a day*, *executive for a day*, *job shadowing*, *educators in the workplace*, *college is yours*, *visit your future* and *California intern summer*, as well as promotion of numerous conferences, seminars, and career academies.

**White Collar**— Refers to employees who perform primarily knowledge-based work, such as those in professional, managerial or administrative positions. Workers whose work does not involve any substantial amount of manual labor: professional, specialty, technical, executive, administrative, managerial, sales and administrative support.

**Workforce**— The total number of people employed or available for employment in a given geographic area. The total number of people employed by a company.



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# San Gabriel Valley Workforce Needs Assessment



September 2002

## I. EXECUTIVE SUMMARY

The San Gabriel Valley is a unique region, rich in social history and home to a wealth of intellectual capital and growing industry. The success of the regional economy relies upon the success of existing industry, as well as the ability to attract new enterprises. The workforce needs to include highly skilled individuals and a wide range of management, administrative, production and marketing personnel capable of staffing the valley's diverse group of growing industries.

Through the initiation of *Workforce San Gabriel Valley*, local leaders, businesspeople, community members, civic advocates and employees will be able to create and maintain a network dedicated to the principles of *lifelong learning*.<sup>1</sup> Emphasis on career development enriches lives and benefits the regional economy. A healthy, viable workforce attracts new and emerging industries and supports commercial development. Through the initiative, the San Gabriel Valley can increase its ability compete with neighboring regions, and to emerge as a leader in industry, education and workforce preparedness.

Determining the workforce demands that will be greatest over the next 3-10 years is key to implementing a workforce education strategic plan within the San Gabriel Valley. Several target growth employment sectors are also being identified through research and collaboration. The needs assessment provides insight into the workforce training needs and preferences of regional employers and target clusters – providing a foundation for collaborative efforts among the stakeholders to improve local opportunities.

Valley employers who participated in the assessment support the San Gabriel Valley Economic Partnership's launch of a local workforce education and training initiative. Employers are well aware of the key role played by education and training in skill acquisition among incumbent employees and job applicants. Competent, specialized, vertically oriented employees are in great demand in local industries. Ideally, the workforce should offer a wide array of specialized individuals, along with an inexhaustible supply of applicants with horizontally transportable baseline skills in computers, customer service, teamwork, management, literacy, writing and language proficiency.

## II. Introduction to the Assessment

During the summer of 2002 a workforce needs assessment was fielded to approximately 100 San Gabriel Valley employers. Responding individuals and firms provided the project team with many useful indicators. Through these interviews, employers gave insights into the capabilities and deficiencies of incumbent employees and job applicants; as well as profiles of their operational practices and needs.

### *Purpose*

In order for existing and new industries to flourish, the San Gabriel Valley labor force must be well educated and properly qualified for available positions – today and in the future. The responses from the assessment suggest that specialized, industry-specific skills are in high demand, along with more broadly-based skills in management, administration, production and marketing. Opportunities abound for applicants who are professional in their presentation and who possess skills in customer service, teamwork, computers and communications.

Growth industries have difficulty in regions that do not sustain a workforce with skills relevant to their needs. In order for the workforce to satisfy the needs of growing local industries, relevant, real-world training must be made available. Residents need to be made aware, and to avail themselves of the programs and educational opportunities offered in the area. This is not always the case.

Industry and career opportunities have developed in the regions of Silicon Valley, which grew up around Hewlett Packard in Palo Alto, and, with the success of Amgen in Newbury Park – the 101 Biotech corridor. The local labor force took advantage of the opportunities presented by these emerging industries, choosing courses of study relevant to the needs of local employers. Newbury Park residents were presented with many career opportunities in the 1980s and 1990s because of the success of Amgen. They were encouraged to study in areas such as biochemistry, which would enable them to seek careers in the biotech industry.

The local nursing shortage is one example of a situation that could be remedied through enhanced public awareness and increased opportunities for training. Improved coordination between local hospitals and educational institutions can help ensure that the number of nurses in the area will increase over the next 3-10 years. With aggressive outreach, expanded curricula, and on-the-job training programs, educational institutions will be able to move closer to their goals and improving their service to the community. Everyone benefits from improved workforce training and preparedness. Employers gain access to skilled and well-qualified applicants, educational institutions fulfill their mission to prepare individuals for rewarding careers, and the labor pool is provided with more career alternatives. The goal of Workforce San Gabriel Valley is to promote the concept of lifelong learning.



## ***Background***

Why is workforce training so important to the San Gabriel Valley?

The San Gabriel Valley, with average annual wages of \$34,388<sup>2</sup> falls in the lower half of the sub-regions in Los Angeles County; below Los Angeles County as a whole (\$39,832); the Westside (\$49,965), Downtown, South Bay, Crenshaw-Mid-city-Hollywood, the San Fernando Valley, and Long Beach Lakewood. The San Gabriel Valley ranks above North Gateway, Antelope Valley, Santa Clarita, East Los Angeles-Eagle Rock, and South Los Angeles, which stands at \$27,852.

Many of the new jobs being created in Southern California tend to be at the semi-skilled and entry levels. Many of the valley's industry sectors, such as warehousing and textiles, are not strong in generating tax revenues. The valley needs to increase efforts attract and sustain industries that create meaningful opportunities for the workforce – that vitalize the local economy. With more highly skilled employees in the area, the amount of industry that can be sustained rises, as do average levels of compensation.

The Bureau of Labor Statistics, *Average Annual Pay by State and Industry*, for the year 2000 showed Finance, Insurance and Real Estate with the second highest level annual average income of \$55,556. Nearly 8%<sup>3</sup> of valley firms fall into this industry category. Retail reported the lowest annual average rate at \$18,432, reflecting the large number of part-time and entry-level positions. This sector makes up 21% of the total number of firms in the valley. Service industries are one of the biggest growth sectors in the San Gabriel Valley – at 41% of total firms – with the average pay in U.S. at \$33,666 per year in 2000. This sector includes a wide range of occupations. The Mining industry tops the list with average annual earnings of \$58,121, but accounts for less than 1% of private sector employment in the U.S. and only .03% of total firms in the valley.

The San Gabriel Valley stands out among other regions with concentrations of firms in the fields of: Furniture and Fixtures, Rubber and Plastics, Industrial and Commercial Machinery, Electronic and Electrical, Measuring and Analyzing Equipment. The region also shows strength in Electric Gas and Sanitary Services, Wholesale Trade – Durable Goods, Non-Depository Credit Institutions, Educational Services, and all fields of Public Administration.<sup>4</sup>

Lower paying jobs frequently occur in flat, labor intensive organizations and in the service sector. Valley industries need to be evaluated to develop workforce-training strategies to allow employees to access career ladders, and move into higher paying positions. This also frees-up entry-level positions for newer employees entering the workforce.

## ***Occupational Dynamics***

It is important to understand the vertical and horizontal dynamics of various occupations when referring to career paths. Highly specialized careers in technology or medicine involve very focused, vertical paths or career ladders. Compensation tends to be higher and the demand greater in specialized careers – but there is limited flexibility. On the other hand, occupations, such as management, administration and marketing

involve more transportable skills allowing an individual to develop within a broader career lattice, in which he can move horizontally across different industries.

An example of a lattice opportunity can be seen in the case of a human resources manager. An individual might begin his career in a high tech company and then transfer his experience to another industry later in the career, while still performing a human resource management function. This switch can occur because most employers utilize human resource managers, regardless of their industry experience. Individuals that fall into this category can move both vertically and horizontally, hence the reference to a career “lattice.” The career of a nuclear physicist exemplifies a very vertical ladder, in which an individual may not have the same flexibility as a human resources manager. It is unlikely that the nuclear physicist will work in industry unrelated to nuclear physics. Specialized skills allow one to advance within a specific industry, while skills that can be adapted to any industry allow individuals to move among different industry types while advancing their careers.

### **III. Workforce and Demographics**

#### *The Diverse San Gabriel Valley*

The San Gabriel Valley in 2002 was one of the most diverse regions in the world. Historically, it is known for everything from aerospace engineering, manufacturing, and heavy industry, to the world-renowned Tournament of Roses parade and the Los Angeles County Fair. There is a constant need for a wide range of employees in the area due to the abundance of unique local industries and institutions. Local companies in search of specialized skills are oftentimes required to recruit beyond the regional boundaries of the valley, or even globally in order to find qualified employees. A workforce training initiative will encourage local employers and educators to work to increase the skills of local workforce, which could improve local recruitment. The identification and analysis of prominent growth industries in the San Gabriel Valley will also help in defining needs and opportunities – with the stakeholders collaborating to prepare the workforce for ongoing employment in the valley.

#### *The Employment Picture*

A specialized yet flexible workforce is essential in order to adapt to the ever-changing economy and job market. The success of the local economy depends, in large measure, on the incorporation of lifelong learning into the culture of the San Gabriel Valley’s labor force. Some see high school or college as the end of learning, with many being unwilling, or feeling embarrassed to resume education after reaching adulthood. These concerns are unfounded, and serve as obstacles to residents in realizing their full career potential.

The Bureau of Labor Statistics reported for January 2002 that in the U.S. 276 metropolitan areas had increased unemployment over the previous year, with only 46 areas being improved or unchanged. Fifteen areas had jobless increases exceeding 10%. Nine of these were located in California. The largest employment increases were seen in the Riverside-San Bernardino region, which was up by 39,200 jobs; San Diego had an increase of 28,900 jobs; and Washington, D.C. added 23,700 jobs.

Employees are learning the value of specialized skills at times when jobs are scarce. There has been a nationwide economic downturn since the events of September 11, 2001, which has affected most industries across the country. Those who possess high-demand skills are more apt to remain employed during economic downturns. The San Gabriel Valley is not immune to economic obstacles or national trends, but, with a competitive advantage in career development, the regional economy can remain healthy through difficult times.

#### IV. Review of Preliminary Research

Valley employers, in various industries, were invited to participate in the workforce needs assessment. They were asked to respond to general questions about their industry type, current employees and job recruitment. Interviewees were also asked to discuss potential growth industries in the San Gabriel Valley. The assessment sought to gauge the training capacities, needs and priorities of local employers and the workforce – and to determine regional training opportunities and deficiencies.

Highly trained employees with specialized skills and certifications will continue to be in great demand in the San Gabriel Valley. A number of valley employers have taken the initiative to provide education and training to incumbent employees – encouraging the development of career paths. In some cases, employers with union workforces commented that their employees tended to feel less dependent on training or education, and more on tenure and workplace experience. It is believed that union workers may be less likely to seek the benefits of a workforce training initiative.

#### *Industry Types Interviewed*

| Participant Industries in the San Gabriel Valley |
|--|
| Healthcare                                       |
| Manufacturing/Industrial                         |
| Science & Technology                             |
| Banking/Insurance/Real Estate                    |
| Education & Research                             |
| Public Administration/Government                 |
| Engineering/Electronics/Aerospace                |

**Figure 1.** Participant Industries in the San Gabriel Valley

#### *Methodology*

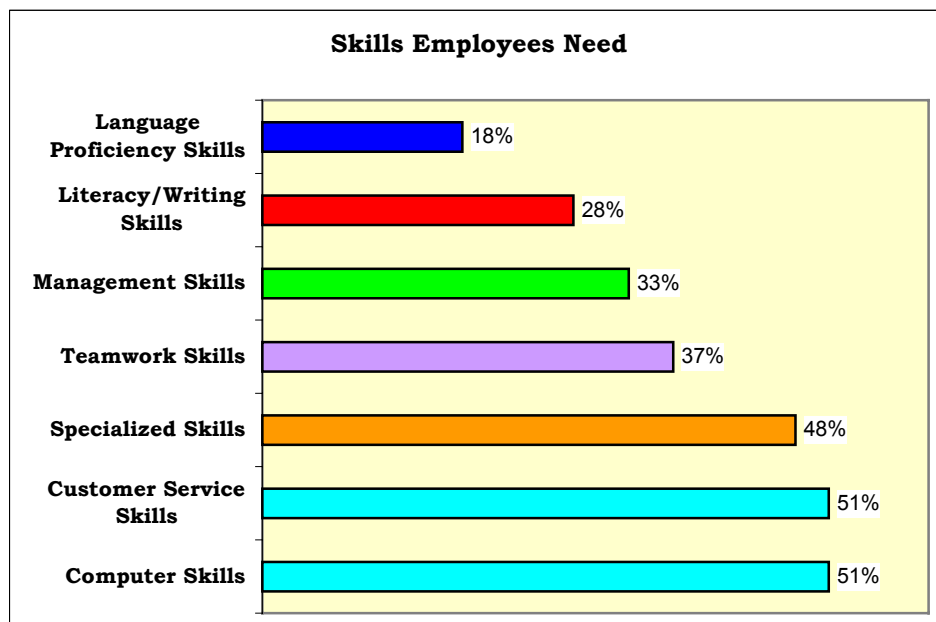
Nearly 100 of the valley's private and public employers, educational institutions and employment agencies participated in the assessment. Overall, the firms account for approximately 50,000 employees in the area. Each employer was asked to respond to a battery of questions pertaining to industry type, employee training, employee recruitment, and potential growth industries for the valley.

Employment agencies and recruiters were also interviewed in the same manner, but with a slightly modified set of questions. Their knowledge of industry and the labor pool in the area assisted in verifying assumptions of workforce training needs as suggested by individual employers.

### *Research Findings*

There are four basic types of training available to incumbent employees: mandatory in-house, voluntary in-house, mandatory external, and voluntary external. Several employers indicated that they provide tuition reimbursement for employees who wish to further their education outside of the place of business. More often than not, the course of study chosen by the individual has to be relevant to his job function. But, some employers do provide education supplements or grants for unrelated courses. A large percentage of employers in the valley have need for highly educated professionals, and encourage continuing education by subsidizing education. In addition to the skills, certificates and degrees attained, employees also develop discipline and professionalism, while increasing their self-confidence. This allows them to contribute more to the overall success of their companies.

Employers would like employees and job applicants to improve in a variety of areas. Respondents pointed out that employees and job applicants need more knowledge and proficiency in computers. Other areas where employers would like to see improvement include: leadership, management, organization, writing and language, communications and professionalism. These are basic skills that are not always covered properly in traditional curricula, but it is evident that students would benefit from their addition into their course of study. By acknowledging employer needs in the area, programming can be developed to help improve the skills of the local labor force. Individuals gain a great advantage by arming themselves with a competent set of baseline skills prior to entering the workforce.





**Figure 2.** Skills Employers Need - Chart**Skills Employees Need**

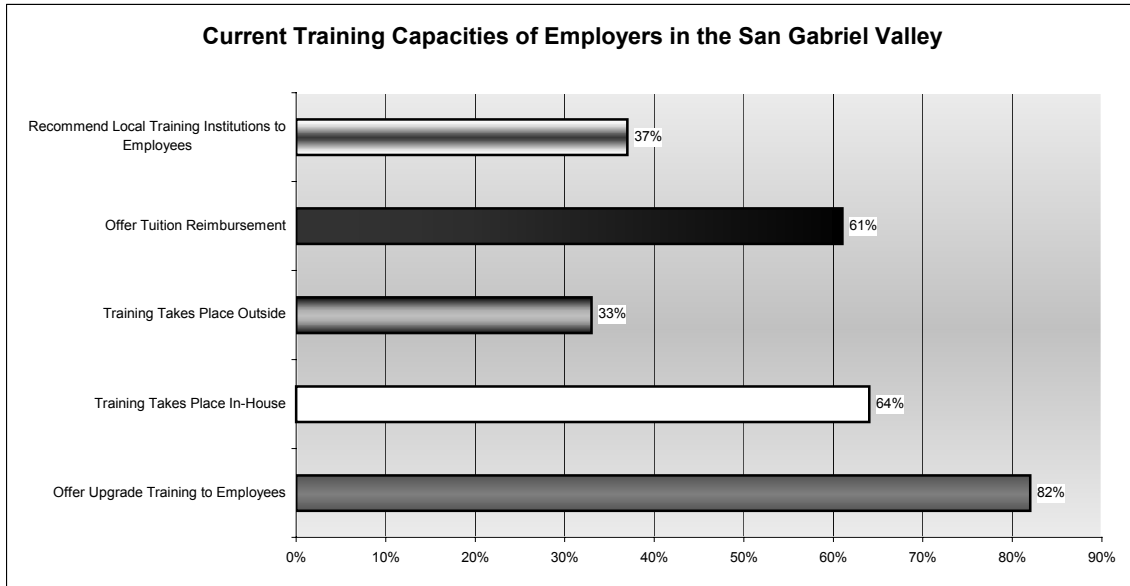
According to 51% of the respondents, applicants and current employees need improvement in computer knowledge and proficiency; 51% would like to see employees improve customer service skills; 48% want employees to obtain more industry-relevant specialized skills; 37% believe their employees need to learn to work better as part of a team, 33% would like employees to have better management skills; 28% feel literacy/writing is an area that needs improvement; and 18% feel employees need more training in language proficiency.

| <b>Skills Employers Need</b> |                     |                |
|------------------------------|---------------------|----------------|
|                              | Incumbent Employees | Job Applicants |
| Language Proficiency Skills  | 18%                 | 18%            |
| Literacy/Writing Skills      | 28%                 | 28%            |
| Management Skills            | 33%                 | 17%            |
| Teamwork Skills              | 37%                 | 41%            |
| Specialized Skills           | 48%                 | 60%            |
| Customer Service Skills      | 51%                 | 32%            |
| Computer Skills              | 51%                 | 37%            |

**Figure 3.** Skills Employers Need - Table

Employers were also asked what percentage of their workforce has skills unique to their industry. Of the employees accounted for in the assessment, 54% fall into the specialized skills category.

Training activities within local companies is normally handled by human resources and training departments. With only 3.26% of the firms' total employees engaged in human resources or training activities – it unlikely that these programs alone can meet all of the region's needs for employee development. The key to programming success is to focus not only on current needs, but the perceived needs of growing industries in the San Gabriel Valley over the next 3-10 years. Employers and educators need to increase the amount of importance placed upon career-based learning. If stakeholders understand the direct benefits of workforce training, they will be more likely to participate in the relevant programs developed by a valley-wide initiative.



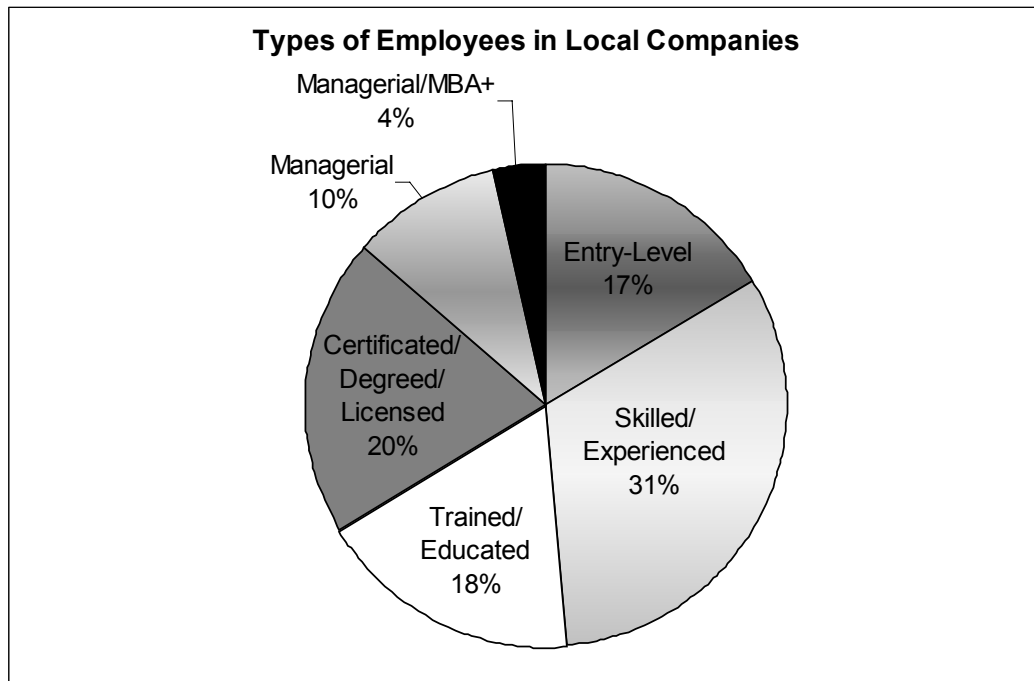
**Figure 4.** Current Training Capacities of Employers in the San Gabriel Valley

### *Training Capacities of Employers in the San Gabriel Valley*

Nearly 82% of local employers surveyed offer some type of upgrade training to their employees. The majority offers training programs that coincide with particular job functions. Most upgrade training takes place in-house – with 64% conducting training at their own facilities. Whether the instruction is provided by staff or outside consultants depends a great deal on the topic and the number of employees involved. About 33% of employers use external training facilities for some or all of their training. Tuition reimbursement is offered by 61% of employers, to employees wishing to further their education in institutions outside of the company. In most cases their choice of study must be related to their job function or provide for career development within the company. Of the respondents, 37% said they recommend training and educational institutions in the valley to their employees. Some of the training institutions mentioned include Regional Occupational Programs (ROPs), state agencies for certification, adult and night schools, as well as community colleges and universities such as: Mount San Antonio College, Azusa Pacific University, Chapman University, University of La Verne, Citrus College. Many of these provide training a little or no cost. Trade and technical schools round out this group, and are complemented by dozens of specialized vendor offerings at retail locations such as CompUSA.

### *Job Types in the San Gabriel Valley*

Employers were asked to break out the percentages of current employees based upon their qualifications and requirements. Entry-level positions accounted for only 16.5% of the current workforce on average, with 32% of the current positions requiring pre-existing skill or experience. Those with specific training and education requirements make up 18% with 20% of the employees needing to be certificated, degreed or licensed. 10% require managerial experience, with 3.5% falling into the managerial/MBA-plus category.



**Figure 5.** Types of Employees in Local Companies

In local workplaces, 83% of the positions require some sort of training or experience, existing skills or abilities. A formal education is required in 42% of the positions. In order for entry-level employees to become part of the skilled and experienced category, they must have access to training and education. Employers and educators need to encourage the labor force to develop career paths and eventually become qualified to move beyond entry-level positions.

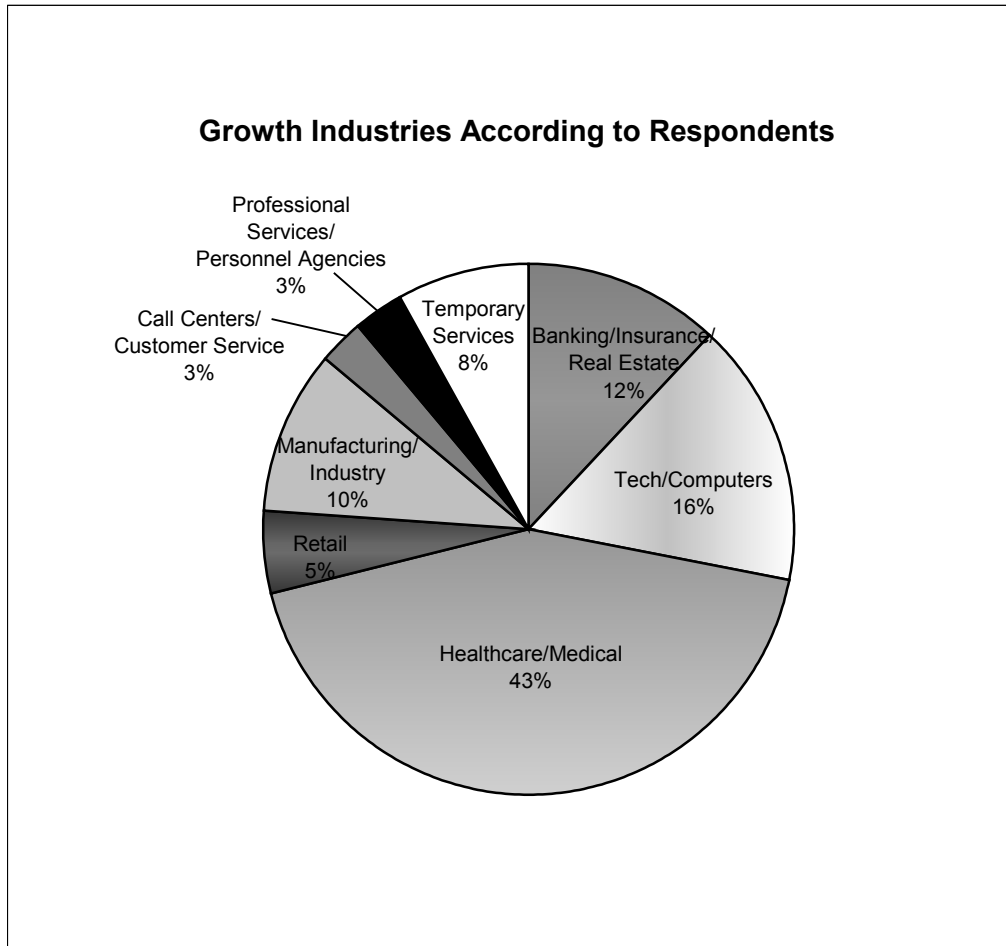
### *Employment Agencies*

Several large employment agencies in the area were contacted to determine the types of job candidates in the current labor pool. Opportunity for workforce education improvements exists within the development of relationships between personnel agencies and training institutions. Out of the nine agencies, nearly all of them recommend additional training to their job candidates, but not all of them have relationships with local training institutions. A few of the agencies have in-house computer training centers where job applicants can familiarize themselves with hardware and software through hands-on experience. This provides an excellent supplement to more traditional training programs, but has a somewhat limited overall impact.

### *Training Funds*

Depending on the type of educational program involved, funding and availability can provide other obstacles for workforce preparation. This is often more a matter of uninformed perception than anything else. There are many excellent pathways to licenses and degrees that can be accessed for relatively modest sums. Some employers

have budgets that reimburse employees for upgrade training. Individuals seeking employment come from the entire socio-economic spectrum. Some are capable of paying for their own additional training, while others have difficulty. Funding needs to be identified and considered when developing workforce training initiatives.



**Figure 6.** Growth Industries According to Respondents

### *Growth Industries According to Respondents*

Employers were asked to suggest emerging industries for growth in the San Gabriel Valley over the next ten years. Of their responses, 43% felt healthcare was a strong and significant industry, 16% indicated that the technology and computer manufacturing industry would be growing. Beyond these two major forces, 12% felt that the related fields of banking, insurance and real estate would be a growth industry of the future, 10% that manufacturing would be increasing, and 8% identified temporary services. Also mentioned was retail at 5%, call centers/customer service at 3%, and professional services and personnel agencies at 3%.

Repeatedly, healthcare emerged as a first place industry for future growth in the San Gabriel Valley. Specific careers within the medical and healthcare field that were mentioned included registered nurses, physical therapists, occupational therapists,



pharmacists, medical record coders, imaging/diagnostic/full-body scan technicians, and radiology technicians. The medical/healthcare field may prove to be one of the most promising industries for quality job growth within the San Gabriel Valley over the next 3-10 years.

## **V. Questions that Need to Be Answered**

There are several questions that need to be answered in the process of establishing a workforce training initiative for the San Gabriel Valley.

### ***What Is a Growth Industry and What Are the Criteria for Determining a Growth Industry?***

A growth industry is one that not only contributes to the overall success of the local economy but provides high quality jobs as well. Many factors must be considered when evaluating prospective employment growth industries. First and foremost is the quality of the jobs that it offers. The industry should show growth, or a high rate of workforce absorption; opportunities for career growth within the field, a high ratio of knowledge-based positions, a value-added or knowledge-added end product, and high job multiplier-induced effect. It should also be one in which the San Gabriel Valley enjoys a unique competitive advantage.

### ***What Are the Three Biggest Potential Growth Industries in the Valley?***

According to employers that responded, healthcare and medical, technology and computers and the banking, insurance and real estate group seem to be the most promising industries for economic growth in the valley. After other employment and career criteria are applied, these industries may be eclipsed.

### ***How Does a Specific Industry Leaving the Area Affect the Local Labor Pool?***

When a particular industry begins to abandon an area, former employees are left to compete for positions within industries where they may lack experience. Workers with transportable (horizontal) skill sets are more likely to find alternate employment in these situations, than employees with specialized (vertical) skill sets. If these individuals are unwilling to relocate with the industry that is leaving, they are left with the task of redefining their qualifications or cross-training for another field. Absent this, joblessness rates in the area can increase.

### ***Who Needs Training, and Why Aren't They Already Getting It?***

Everyone who is part of the labor pool can benefit from some type of workforce training. Comparatively few actually take advantage of local training opportunities. One of the goals of Workforce San Gabriel Valley is to increase this level of engagement – to help educate the community, students and the workforce on the types of training they need, in order to be successful in their careers – and where they can go to receive training.

### ***What Do the Educational Institutions Need to Do to Help the Workforce?***

Career preparedness deserves the highest priority within local educational institutions. By taking it above and beyond the realm of general curriculum, educational institutions can institute career-centric curricula within the education establishment.

The regional economy could also benefit from a more stable workforce. When individuals are focused on career goals, they are far less likely to engage in unproductive occupational “hopscotch.” According to the Bureau of Labor Statistics,<sup>5</sup> the average person in the U.S. holds 9.2 jobs between the ages of 18 and 34.

Individuals who are determined to advance their careers understand that education is key to ascertaining their goals. Working full-time alone may not be enough to maximize individual career advancement. Working, combined with continuing or specialized education and training can definitely increase the chances for career advancement. Employees with higher levels of education, training and skills are more in demand and generally receive better compensation than less educated, low skilled workers.

## **VI. Conclusion**

Through workforce education, the San Gabriel Valley has the opportunity to cultivate a diverse, dynamic labor force. With an extensive workforce to choose from, existing and emerging industries will flourish, thereby strengthening the local economy. Collaboration among local employers, educational institutions, employees, and job applicants, can lead to the development of workforce training programming that is highly relevant, and coordinated with the needs of valley employers. It is evident that highly qualified workers are in demand and valley employers would support the creation of education and training programs that prepare individuals for specialized positions within their companies and institutions.

Recognizing the need for training programs and educating the labor force on how to access training are the first steps. The labor force must also be made aware of how training affects career paths and opportunity. The combination of training and experience offers individuals career paths that lead to success and fulfillment. The workforce of the San Gabriel Valley can take advantage of the diverse industry types that exist in the area, while attracting new and growing industries, by incorporating workforce training into career development.

## **VII. Bibliography - Reference**

- U.S. Department of Education’s National Center for Educational Statistics, *Preparation Trends and Patterns in Adult Education: 1991-1999*, Washington, DC, 2000.
- U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*. Chicago, IL: VGM Career Books, 2000.
- U.S. Dept. of Labor, Bureau of Labor Statistics, *Number of Jobs Held, Labor Market Activity, and Earnings Growth Over Two Decades: Results from a Longitudinal Survey*. April 25, 2000.
- BusinessUSA*. 3<sup>rd</sup> ed. CD-ROM. Omaha: DirectoriesUSA/InfoUSA. 2002.

## CivicCenter Group

### Endnotes

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1. Lifelong Learning - The learning pathway of an individual throughout his lifetime, which is initiated at birth, develops through schooling and other formal and non-formal types of learning, and continues throughout adult life. Especially relevant to adult level courses and curricula for occupational development and personal enrichment.
2. Source: California Employment Development Dept., 2001 ES202 Data, Los Angeles Economic Development Corporation
3. Source: CivicCenter Group, *BusinessUSA*
4. (CCG)
5. Number of Jobs Held, Labor Market Activity, and Earnings Growth Over Two Decades: Results from a Longitudinal Survey (April 25, 2000); U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*. Chicago, IL: VGM Career Books, 2000..

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**CivicCenter Group**

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website: [www.civiccenter.com](http://www.civiccenter.com)





## **Citrus College**

---

1000 West Foothill Blvd., Glendora, CA 91741  
 Ph: (626) 963-0323, Fx: (626) 914-8618  
 Number of Students: 11,000 Website: [www.citrus.cc.ca.us](http://www.citrus.cc.ca.us)

### **Accreditation/Approval Agencies**

- Accrediting Commission for Community and Junior Colleges

### **Services**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Financial Aid</li> <li>• Veterans Service</li> <li>• Job Placement</li> <li>• Career Development</li> </ul> | <ul style="list-style-type: none"> <li>• Counseling</li> <li>• Child Care</li> <li>• Open Entry/Open Exit</li> <li>• Distance Learning</li> </ul> |
|--|---|

### **Degrees**

- Associate
- Certificate
- Diploma

### **Programs**

|   |   |   |
|---|---|---|
| Taxation<br>Business Administration<br>and Management<br>Accounting<br>Administrative<br>Assistant/Secretarial<br>Science<br>Forestry, General<br>Communications,<br>General<br>Computer and<br>Information Sciences<br>Cosmetologist<br>Special Education<br>Counselor Education<br>Counseling and<br>Guidance<br>Physical Education<br>Teaching and Coaching<br>Engineering<br>Water Resources<br>Engineering<br>Electrical and Electronic<br>Engineering | Heating, Air<br>Conditioning and<br>Refrigeration<br>French Language and<br>Literature<br>Spanish Language and<br>Literature<br>Child Development,<br>Care and Guidance<br>English Language and<br>Literature<br>Humanities/Humanistic<br>Studies<br>Library Science<br>Biology<br>Mathematics<br>Reading<br>Philosophy<br>Chemistry<br>Earth and Planetary<br>Sciences<br>Physics<br>Public Administration<br>and Services | Social Sciences<br>Anthropology<br>Economics<br>Geography<br>Political Science<br>Sociology<br>Auto/Automotive Body<br>Repairer<br>Diesel Engine Mechanic<br>and Repairer<br>Drafting<br>Architectural Drafting<br>Dance<br>Drama/Theater Arts<br>Photography<br>Music<br>Dental Assistant<br>Health and Medical<br>Administrative Services<br>Medical Assistance<br>Emergency Medical<br>Technician<br>Nursing |
|---|---|---|

## East Los Angeles College

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1301 Avenida Cesar Chavez, Monterey Park, CA 91754  
 Ph: (323) 265-8650, Fx: (323) 265-8631  
 Number of Students: 26, 015, Website: [www.lelac.cc.ca.us](http://www.lelac.cc.ca.us)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges

### Services

- Financial Aid
- Job Placement
- Counseling
- Child Care
- Open Entry/Open Exit

### Degrees

- Associate
- Certificate
- Diploma

### Programs

|  |   |   |
|--|---|---|
| Management Science                                 | Japanese Language and Literature            | Astronomy   |
| Taxation   | German Language and Literature              | Chemistry   |
| International Business                             | Italian Language and Literature             | Geology   |
| Management Information Systems and Business        | Portuguese Language and Literature          | Oceanography                                      |
| Finance  | Spanish Language and Literature             | Physics   |
| Office Supervision and Management                  | Family/Consumer Resource Management         | Psychology  |
| Accounting   | Child Growth, Care and Development Studies  | Fire Protection and Safety Technician             |
| Business   | Law   | Economics   |
| Environmental Science                              | Judicial Science/Legal Studies              | Geography   |
| Studies  | Speech and Rhetorical Studies               | History   |
| Architecture                                       | Library Science/Librarianship               | Political Science                                 |
| Afro-American Studies                              | Biology                                     | Sociology   |
| Asian-American Studies                             | Microbiology/Bacteriology                   | Electrical and Electronics Equipment Installation |
| Communications                                     | Anatomy                                     | Automotive Mechanic                               |
| Journalism   | Physiology, Human and Animal                | Drafting  |
| Public Relations and Organizational Communications | Mathematics                                 | Architectural Drafting                            |
| Radio and Television Broadcasting                  | Health and Physical Education               | Photography                                       |
| Broadcasting                                       | Personal Health Improvement and Maintenance | Art   |
| Computer and Information Sciences                  | Theater                                     | Music   |
| Education  | Philosophy                                  | Sign Language Interpreter                         |
| Special Education                                  | Physical Sciences                           | Medical Records Technician                        |
| Marketing Operation                                |   | Emergency Medical Technician                      |
| Teacher Education                                  |   | Respiratory Therapy Technician                    |
| Teacher Assistant/Aide                             |   | Health and Medical Diagnostic Treatment           |
| Electrical and Electronic Engineering              |   | Nursing (R.N. training)                           |
| Engineering  |   |   |
| Chinese Language and Literature                    |   |   |

## Pasadena City College

1570 E. Colorado Blvd., Pasadena, CA 91106

Ph: (626) 585-7915

Number of Students: 25,000

Website: [www.paccd.cc.ca.us](http://www.paccd.cc.ca.us), Email: [admissiona@paccd.cc.ca.us](mailto:admissiona@paccd.cc.ca.us)

### Accreditation/Approval Agencies

- Accrediting Commission for Community and Junior Colleges

### Services

- |                    |                      |                        |
|--------------------|----------------------|------------------------|
| • Financial Aid    | • Career Development | • Open Entry/Open Exit |
| • Veterans Service | • Counseling         | • Distance Learning    |
| • Job Placement    | • Child Care         |                        |

### Degrees

- Associate
- Certificate
- Diploma

### Programs

|  |   |   |
|--|---|---|
| Business Marketing and Management              | Physical Education Teaching and Coaching      | Physics   |
| Business Administration                        | Engineering                                   | Psychology  |
| General Office/Clerical Typing Service         | Computer Engineering Technician               | Criminal Justice Studies                          |
| Banking and Financial Support Services         | Electrical, Electronic and Communications     | Fire Protection and Safety Technician             |
| Office Supervision and Management              | Electrical and Electronic Engineering         | Anthropology                                      |
| Accounting                                     | Environmental & Pollution Control Technician  | Economics   |
| Legal Administrative Assistant/Secretary       | Construction/Building Technician              | History   |
| Occupational Therapy                           | Engineering Technician                        | Political Science                                 |
| Physical Therapy                               | Chinese Language and Literature               | Sociology   |
| Rehabilitation/Therapeutic Services            | Japanese Language and Literature              | Construction/Building Inspector                   |
| Veterinary Medicine                            | East & Southeast Asian Languages & Literature | Electrical and Electronics Equipment Installation |
| Food Sciences and Technician                   | German Language and Literature                | Auto/Automotive Mechanic/Technician               |
| Architecture                                   | French Language and Literature                | Drafting  |
| African Studies                                | Italian Language and Literature               | Lithographer and Platemaker                       |
| Asian Studies                                  | Spanish Language and Literature               | Printing Press Operator                           |
| Latin American Studies                         | Arabic Language and Literature                | Machinist/Machine Technologist                    |
| Russian and Slavic Area Studies                | Hebrew Language and Literature                | Welder/Welding Technologist                       |
| Afro-American Studies                          | Latin Language and Literature                 | Graphic Design, Commercial Art and Illustration   |
| American Indian/Native American Studies        | Child Development, Care and Guidance          | Industrial Design                                 |
| Asian-American Studies                         | Food Caterer                                  | Fashion Design and Illustration                   |
| Fashion Merchandising                          | Law   | Photography                                       |
| Financial Services Marketing                   | Juridical Science/Legal Specialization        | Printmaking                                       |
| Operations                                     | English Language and Literature               | Music   |
| Journalism                                     | English Literature                            | Music History and Literature                      |
| Radio & Television Broadcasting Technician     | Humanities/Humanistic Studies                 | Chiropractic                                      |
| Computer and Information Sciences              | Library Science/Librarianship                 | Speech-Language Pathology and Audiology           |
| Computer Programming                           | Biological Sciences/Life Sciences             | Dental Assistant                                  |
| Computer Systems Analysis                      | Theater                                       | Dental Hygienist                                  |
| Cosmetologist                                  | Philosophy                                    | Dental Laboratory Technician                      |
| Food/Beverage/Restaurant Operations Management | Religion/Religious Studies                    | Medical Assistant                                 |
| Teacher Education, Multiple Levels             | Philosophy and Religion                       | Emergency Medical Technician                      |
|  | Religious/Sacred Music                        | Medical Radiologic Technician                     |
|  | Chemistry                                     | Medical Technology                                |
|  | Oceanography                                  | Nursing (R.N. Training)                           |
|  |   | Optometry   |
|  |   | Pharmacy  |

## **Mt. San Antonio College**

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1100 N. Grand Ave., Walnut, CA 91789  
 Ph: (909) 594-5811, Fx: (909) 584-7861  
 Number of Students: 25,530, Website: [www.mtsac.edu](http://www.mtsac.edu)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges
- Accrediting Commission for Community and Junior Colleges

### **Services**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Financial Aid</li> <li>• Veterans Service</li> <li>• Job Placement</li> <li>• Career Development</li> </ul> | <ul style="list-style-type: none"> <li>• Counseling</li> <li>• Child Care</li> <li>• Open Entry/Open Exit</li> <li>• Distance Learning</li> </ul> |
|--|---|

### **Degrees**

- Associate
- Certificate
- Diploma

### **Programs**

|   |  |
|---|--|
| Marketing Management and<br>Research<br>Taxation<br>Business Management and<br>Administration<br>Human Resources Information<br>Information Processing/Data<br>Entry Technician<br>Financial Planning<br>Accounting<br>Agricultural Business and<br>Production<br>Fashion Merchandizing<br>Entrepreneurship<br>Computer and Information<br>Sciences<br>Computer Programming<br>Personal and Miscellaneous<br>Services<br>Adult and Continuing Education<br>Administration<br>Computer Maintenance<br>Technician<br>Water Quality and Wastewater<br>Treatment Technician | Aeronautical and Aerospace<br>Engineering Technician<br>Foreign Languages and<br>Literatures<br>Home Maintenance and<br>Improvement<br>Travel and Exploration<br>Cooking and Other Domestic<br>Skills<br>Welder/Welding Technologist<br>Woodworkers<br>Dance<br>Acting and Directing<br>Art<br>Art History, Criticism and<br>Conservation<br>Music-Voice and Choral/Opera<br>Performance<br>Medical Records Administration<br>Physical Therapy Assistant<br>Emergency Medical Technician<br>Psychiatric/Mental Health<br>Services Technician<br>Nurse Assistant/Aide<br>Home Health Aide |
|---|--|



## **Rio Hondo College**

---

10505 Valley Blvd. #308, El Monte, CA 91731

Ph: (626) 433-4720, Fx: (626) 433-4727

Website: [www.rh.cc.ca.us](http://www.rh.cc.ca.us), Email: [llerrazabal@rh.cc.ca.us](mailto:llerrazabal@rh.cc.ca.us)

### **Degrees**

- Certificate
- Associate

### **Programs**

Computer/Internet Training

Small Business Workshops (free)

International Business

Career Development Courses

Personal Development Courses

College for Youth Courses

Community Service Online Classes

Tours/Day Excursions

## **California State Polytechnic University, Pomona**

---

3801 West Temple Avenue, Pomona, CA 91768

Ph: (909) 869-3329, Fx: (909) 869-4395

Website: [www.csupomona.edu](http://www.csupomona.edu), Email: [info@csupomona.edu](mailto:info@csupomona.edu)

Number of Students: 19,041

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges
- Accrediting Commission for Senior Colleges and Universities

### **Services**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Financial Aid</li> <li>• Veterans Service</li> <li>• Job Placement</li> <li>• Career Development</li> </ul> | <ul style="list-style-type: none"> <li>• Counseling</li> <li>• Child Care</li> <li>• Open Entry/Open Exit</li> <li>• Distance Learning</li> </ul> |
|--|---|

### **Degrees**

- Certificate
- Bachelor
- Master

### **Programs**

|  |   |  |
|--|---|--|
| Management Science<br>Marketing Management<br>and Research<br>Taxation<br>Hotel/Motel and<br>Restaurant Management<br>International Business<br>Finance<br>Business Administration<br>and Management<br>Logistics and Materials<br>Management<br>Operations Management<br>and Supervision<br>Accounting<br>Agriculture/Agricultural<br>Sciences<br>Animal Sciences<br>Food Sciences and<br>Technology<br>Agronomy and Crop<br>Science<br>Horticulture Science<br>Soil Science<br>Environmental Science<br>Studies<br>Landscape Architecture<br>Asian Studies<br>Latin American Studies | Fashion Merchandizing<br>Entrepreneurship<br>Communications<br>Computer and Information<br>Sciences<br>Food and<br>Beverage/Restaurant<br>Operations Management<br>Education<br>Engineering<br>Aerospace, Aeronautical<br>and Astronautics<br>Civil Engineering<br>Electrical, Electronics and<br>Communication<br>Industrial Manufacturing<br>Engineering<br>Material Engineering<br>Mechanical Engineering<br>Ocean Engineering<br>Engineering Technology<br>Spanish Language and<br>Literature<br>Food and Nutrition<br>English Language and<br>Literature<br>Liberal Arts and<br>Sciences/Liberal Studies | Humanities/Humanistic<br>Studies<br>Biology<br>Botany<br>Microbiology/Bacteriology<br>Biotechnology<br>Zoology<br>Mathematics<br>Art<br>Music<br>Theater<br>Political Science and<br>Government<br>Philosophy<br>Religion/Religious Studies<br>Chemistry<br>Geology<br>Physics<br>Science Technology<br>Psychology<br>Criminal Justice and<br>Corrections<br>Social Sciences<br>Anthropology<br>Economics<br>Geography<br>History<br>Sociology |
|--|---|--|

## California State University, Los Angeles

5151 State University Drive, Los Angeles, CA 90032

Ph: (323) 343-3901, Fx: (323) 343-3888

Website: [www.calstatela.edu](http://www.calstatela.edu)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges
- Accrediting Commission for Senior Colleges and Universities

### Services

- Financial Aid
- Veterans Services
- Job Placement
- Counseling
- Child Care
- Distance Learning

### Degrees

- Doctorate
- Master
- Bachelor
- Certificate
- Diploma

### Programs

|  |   |   |
|--|---|---|
| Business Marketing and Marketing Management        | Elementary Teacher Education                | Navy/Marine Corps R.O.T.C./Naval Science        |
| Taxation   | Pre-elementary/Early Childhood/Kindergarten | Gerontology                                     |
| Human Resources Management                         | Secondary Teacher Education                 | Philosophy                                      |
| International Business                             | Music Teacher Education                     | Physical Sciences                               |
| Finance  | Physical Education Teaching and Coaching    | Chemistry                                       |
| Business Administration and Management             | Reading Teacher Education                   | Geology   |
| Operations Management and Supervision              | Teacher Education                           | Earth and Planetary Sciences                    |
| Accounting   | Engineering                                 | Physics   |
| Health Professions and Related Sciences            | Civil Engineering                           | Psychology                                      |
| Business   | Electrical, Electronics and Communication   | School Psychology                               |
| Vocational Rehabilitation                          | Industrial/Manufacturing Technology         | Criminal Justice Studies                        |
| Counseling   | Industrial Production Technology            | Forensic Technology                             |
| Latin American Studies                             | Japanese Language and Literature            | Fire Protection and Safety Technician           |
| Afro-American Studies                              | French Language and Literature              | Fire Services Administration                    |
| Hispanic-American Studies                          | Home Economics                              | Social Work                                     |
| Journalism   | Family and Marriage Counseling              | Social Sciences                                 |
| Public Relations and Organizational Communications | Child Development, Care and Guidance        | Anthropology                                    |
| Radio and Television Broadcasting                  | English Language and Literature             | Economics                                       |
| Computer and Information Sciences                  | English Creative Writing                    | Applied and Resource Economics                  |
| Computer Science                                   | Speech and Rhetorical Studies               | Geography                                       |
| Bilingual/Bicultural Education                     | Liberal Art and Sciences                    | History   |
| Curriculum and Instruction                         | Biology                                     | Political Science                               |
| Educational Supervision                            | Biochemistry                                | Sociology                                       |
| Educational Psychology                             | Microbiology/Bacteriology                   | Aviation and Airway Science                     |
| Special Education                                  | Miscellaneous Biological Specializations    | Dance   |
| Education of The Gifted and Talented               | Mathematics                                 | Graphic Design, Commercial Art and Illustration |
| Education of The Multiple Handicapped              | Applied Mathematics                         | Drama/Theater Arts                              |
| Education of The Physically Handicapped            | Air Force R.O.T.C./Air Science              | Art   |
| Education of The Specific Learning Disabled        | Army R.O.T.C./Military Science              | Art History, Criticism and Conservation         |
| Counselor- Education                               |   | Music   |
| Counseling and Guidance                            |   | Music- General Performance                      |
|  |   | Visual and Performing Arts                      |
|  |   | Speech-Language Pathology and Audiology         |
|  |   | Health System/Health Services Administration    |
|  |   | Medical Technology                              |
|  |   | Nursing (R.N. Training)                         |

## Allian University at California School of Professional Psychology

---

1000 S. Fremont Ave. Unit 5, Alhambra, CA 91803

Ph: (626) 284-2777, Fx: (626) 284-0550

Website: [www.cspp.edu](http://www.cspp.edu)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges
- Accrediting Commission for Senior Colleges and Universities

### Services

- Financial Aid
- Veterans Service

### Degrees

- Doctorate
- Master
- Certificate
- Diploma

### Programs

Organizational Behavior Studies  
Clinical Psychology

Forensic Technology/Technician  
Physical Therapy Assistant



## American Pushington University

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3179 West Temple Ave. Ste. 120. Pomona, CA 91768

Ph: (909) 595-4800, Fx: (909) 598-0075

Website: [www.americanpu.org](http://www.americanpu.org), Email: [info@americanpu.org](mailto:info@americanpu.org)

### Accreditation/Approval Agencies

- Bureau for Private Post Secondary and Vocational Education

### Services

- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### Degrees

- Doctorate
- Master
- Bachelor
- Associate
- Certificate
- Diploma

### Programs

Acupuncture and Oriental  
Medicine

Religion/Religious Studies

## Art Center College of Design

---

1700 Lida Street, Pasadena, CA 91103

Ph: (626) 396-2200, Fx: (626) 796-9564

Number of Students: 1500

Website: [www.artcenter.edu](http://www.artcenter.edu), Email: [admissions@artcenter.edu](mailto:admissions@artcenter.edu)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges
- National Association of Schools of Art and Design

### Services

- Financial Aid
- Veterans Service
- Job Placement
- Counseling
- Open Entry/Open Exit

### Degrees

- Master
- Bachelor

### Programs

|   |   |
|---|---|
| Environmental Science                     | Film/Cinema Studies                     |
| Advertising                               | Photography                             |
| Computer Programming                      | Art                                     |
| Liberal Arts and Sciences/Liberal Studies | Art History, Criticism and Conservation |
| Graphic Design, Commercial Art            | Drawing                                 |
| Industrial Design                         | Painting                                |
|   | Printmaking                             |

## California Institute of Technology

---

1200 East California Blvd., Pasadena, CA 91125

Ph: (626) 395-6811, Fx: (626) 449-9374

Number of Students: 2,146, Website: [www.caltech.edu](http://www.caltech.edu)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges
- Accrediting Commission for Senior Colleges and Universities

### Services

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Child Care

### Degrees

- Bachelor of Science
- Master
- Doctorate

### Programs

|   |                                 |
|---|---------------------------------|
| Natural Resources Conservation          | Biology                         |
| Environmental Studies                   | Applied Mathematics             |
| Computer Science                        | Science, Technology and Society |
| Engineering                             | Computational Skills            |
| Aerospace, Aeronautical and Astronautic | Astronomy                       |
| Chemical Engineering                    | Chemistry                       |
| Civil Engineering                       | Geology                         |
| Engineering Science                     | Geochemistry                    |
| Electrical and Electronic Engineering   | Geophysics and Seismology       |
| Mechanical Engineering                  | Physics                         |
| English Language and Literature         | Social Sciences                 |
|   | Economics                       |
|   | History                         |

## Claremont McKenna College

---

500 E. Ninth St., Claremont, CA 91711  
 Ph: (909) 621-8099, Number of Students: 1,044  
 Website: [www.claremontmckenna.edu](http://www.claremontmckenna.edu)  
 Email: [publicaffairs@claremontmckenna.edu](mailto:publicaffairs@claremontmckenna.edu)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges

### Services

- Financial Aid
- Veteran's Service
- Career Development
- Counseling
- Child Care
- Distance Learning

### Degrees

- Bachelor
- Master

### Programs

|                                     |                                    |
|-------------------------------------|------------------------------------|
| 4 +1 BA/MBA Program                 | History                            |
| Accounting                          | International Relations            |
| Asian-American Studies              | Korean                             |
| American Studies                    | Leadership                         |
| Asian Studies                       | Legal Studies                      |
| Biology                             | Literature                         |
| Biology-Chemistry                   | Management Engineering             |
| Black Studies                       | Mathematics                        |
| Chemistry                           | Military Science                   |
| Chicano Studies                     | Neuroscience                       |
| Civilization                        | Philosophy                         |
| Computer Science                    | Philosophy and Public Affairs      |
| Economics                           | Philosophy, Politics and Economics |
| Econ-Accounting                     | Physics                            |
| Environment, Economics and Politics | Psychology                         |
| Environmental Science               | Religious Studies                  |
| Ethics                              | Science and Management             |
| French                              | Senior Thesis                      |
| Film Studies                        | Spanish                            |
| Gender Studies                      | Speech                             |
| German                              | Theatre                            |
| Government                          |                                    |

## DeVry Institute of Technology

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901 Corporate Center Drive, Pomona, CA 91768

Ph: (909) 622-8866, Fx: (909) 868-4165

Website: [www.pom.devry.edu](http://www.pom.devry.edu)

### Accreditation/Approval Agencies

- North Central Association of Colleges and Schools
- Commission on Institutions of Higher Education
- Technology Accreditation Commission

### Services

- Financial Aid
- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### Degrees

- Associate
- Bachelor
- Master

### Programs

Business Administration and Management  
Accounting  
Communications Technology

Computer and Information Sciences  
Electrical and Electronic Engineering



## **Fuller Theological Seminary**

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135 North Oakland Ave., Pasadena, CA 91182

Ph: (626) 584-5200, Fx: (626) 584-5449

Website: [www.fuller.edu](http://www.fuller.edu), Email: [admissions@fuller.edu](mailto:admissions@fuller.edu)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges
- Association of Theological Schools

### **Services**

- Financial Aid
- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Doctorate
- Master

### **Programs**

Bible/Biblical Studies  
Theology/Theological Studies  
Psychology

## Harvey Mudd College

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301 East Street, Claremont, CA 91711

Ph: (909) 621-8091, Fx: (909) 621-8494

Website: [www.hmc.edu](http://www.hmc.edu), Email: [career\\_services@hmc.edu](mailto:career_services@hmc.edu)

### Degree

- Bachelor

### Programs

Biology

Chemistry

Computer Science

Engineering

Mathematics

Physics

Humanities

Social Sciences

Anthropology

## Hsi Lai University

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1409 N. Walnut Grove Ave., Rosemead, CA 91770

Ph: (626) 571-8811, Fx: (626) 571-1413

Website: [www.hlu.edu](http://www.hlu.edu), Email: [info@hlu.edu](mailto:info@hlu.edu)

### Accreditation/Approval Agencies

- Bureau for Private Post Secondary and Vocational Education

### Services

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### Degrees

- Doctorate
- Master
- Bachelor
- Certificate
- Diploma

### Programs

Business Administration and  
Management  
East Asian Studies  
Education

Teaching English as a Second  
Language  
Religion/Religious Studies  
Nursing (R.N. Training)

## **Ivy University**

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1000 S. Fremont Ave A12, Alhambra, CA 91803

Ph: (626) 282-1096, Fx: (626) 282-8362

Website: [www.ivyuniv.edu](http://www.ivyuniv.edu)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Master
- Bachelor

### **Programs**

Hospitality/Administration  
Management  
International Business  
Business Administration and  
Management

Accounting  
Financial Services Marketing  
Operations  
Public Administration

## **Mt. Sierra College**

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101 E. Huntington Dr., Monrovia, CA 91016

Ph: (888) 828-8800, Fx: (626) 359-1378

Website: [www.mtsierra.com](http://www.mtsierra.com)

### **Accreditation/Approval Agencies**

- Accrediting Commission of Career Schools and Colleges of Technology
- Bureau for Private Postsecondary and Vocational Education
- Accrediting Commission for Community and Junior Colleges

### **Services**

- Financial Aid
- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Bachelor of Science

### **Programs**

Business/e-Business  
Multimedia Design  
Computer Information  
Telecommunications



## **Pacific Oaks College**

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5 Westmoreland Place, Pasadena, CA 91103

Ph: (800) 684-0900, Fx: (626) 397-4946

Website: [www.pacificoaks.edu](http://www.pacificoaks.edu), Email: [admissions@pacificoaks.edu](mailto:admissions@pacificoaks.edu)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Financial Aid
- Veterans Assistance
- Job Placement
- Career Development
- Counseling
- Child Care
- Open Entry/ Open Exit
- Distance Learning

### **Degrees**

- Master
- Bachelor
- Certificate
- Diploma

### **Programs**

Teacher Education, Multiple Levels  
Family and Marriage Counseling  
Child Growth, Care and Development

## Pitzer College

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1050 N. Mills Ave., Claremont, CA 91711

Ph: (909) 621-8000

Website: [www.pitzer.edu](http://www.pitzer.edu)

### Degrees

- Bachelor

### Programs

|  |  |
|--|--|
| American Studies                         | Linguistics                                    |
| Anthropology                             | Mathematical Economics                         |
| Art                                      | Mathematics                                    |
| Asian American Studies                   | Media Studies                                  |
| Biology                                  | Modern Languages,<br>Literatures, and Cultures |
| Black Studies                            | Music  |
| Chemistry                                | Neuroscience                                   |
| Chicano Studies                          | Organizational Studies                         |
| Classics                                 | Philosophy                                     |
| Dance                                    | Physics  |
| Economics                                | Political Economy                              |
| English and World Literature             | Political Studies                              |
| Environmental Science                    | Psychology                                     |
| Environmental Studies                    | Religious Studies                              |
| French                                   | Science, Technology &<br>Society               |
| Gender & Feminist Studies                | Sociology                                      |
| German                                   | Spanish  |
| History                                  | Theater  |
| Human Biology                            |  |
| International & Intercultural<br>Studies |  |

## Pomona College

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333 N. College Way, Claremont, CA 91711

Ph: (909) 621-8000

Website: [www.pomona.edu](http://www.pomona.edu)

### Degree

- Bachelor

### Programs

|                     |                           |
|---------------------|---------------------------|
| Art and Art History | Neuroscience              |
| Chinese             | Physics                   |
| Classics            | Psychology                |
| English             | Anthropology              |
| French              | Economics                 |
| German              | History                   |
| Japanese            | Politics                  |
| Linguistics         | Sociology                 |
| Music               | American Studies          |
| Philosophy          | Asian Studies             |
| Religious Studies   | Black Studies             |
| Romance Languages   | Chicano Studies           |
| Russian             | German Studies            |
| Spanish             | International Relations   |
| Theatre and Dance   | Latin American Studies    |
| Biology             | Media Studies             |
| Chemistry           | Philosophy, Politics, and |
| Computer Science    | Economics                 |
| Geology             | Science, Technology, and  |
| Mathematics         | Society                   |
| Molecular Biology   |                           |

## **Scripps College**

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1030 Columbia Ave., Claremont, CA 91711

Ph: (909) 621-8223, Fx: (909) 607-8004

Website: [www.scrippscol.edu](http://www.scrippscol.edu)

### **Degree**

- Bachelor

### **Programs**

|                            |   |
|----------------------------|---|
| Anthropology               | Italian                                 |
| Studio Art                 | German                                  |
| Art History                | Politics and International<br>Relations |
| Classics                   | Languages and Literature                |
| Dance                      | Mathematics                             |
| Economics                  | Music                                   |
| English                    | Philosophy                              |
| French Studies             | Psychology                              |
| Gender and Women's Studies | Religion                                |
| Hispanic Studies           | Science                                 |
| History                    |   |

## **University of La Verne**

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1950 Third St., La Verne, CA 91750

Ph: (909) 593-3511, Fx: (909) 392-2759

Website: [www.ulv.edu](http://www.ulv.edu), Email: [admissions@ulv.edu](mailto:admissions@ulv.edu)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- |                      |                        |
|----------------------|------------------------|
| • Financial Aid      | • Counseling           |
| • Veterans Service   | • Child Care           |
| • Job Placement      | • Open Entry/Open Exit |
| • Career Development | • Distance Learning    |

### **Degrees**

- |             |            |
|-------------|------------|
| • Doctorate | • Bachelor |
| • Master    | • Diploma  |

### **Programs**

|   |   |  |
|---|---|--|
| Business Marketing and Marketing Management | Counselor Education   | English Language and Literature              |
| Marketing Research                          | Counseling and Guidance Services                            | Comparative Literature                       |
| Human Resources Management                  | Secondary Teacher Education                                 | General Studies                              |
| International Business                      | Teacher Education, Multiple Levels                          | Mathematics                                  |
| Business Administration and Management      | Music Teacher Education                                     | Peace and Conflict Studies                   |
| Accounting                                  | Physical Education Teaching and Coaching                    | Gerontology                                  |
| Technician                                  | Reading Teacher Education                                   | Theater                                      |
| Medical                                     | Teacher Education, Specific Academic and Vocation Education | Philosophy                                   |
| Administrative Assistant                    | Computer Engineering  | Religion/Religious Studies                   |
| Business                                    | Environmental and Pollution Control Technology              | Chemistry                                    |
| Latin American Studies                      | Engineering Technology                                      | Analytical Chemistry                         |
| Ethnic and Cultural Studies                 | German Language and Literature                              | Psychology                                   |
| Communications                              | French Language and Literature                              | Counseling Psychology                        |
| Journalism                                  | Spanish Language and Literature                             | Public Administration                        |
| Broadcast Journalism                        | Family and Marriage Counseling                              | Social Sciences                              |
| Computer Science                            | Gerontological Services                                     | Anthropology                                 |
| Special Education                           | Child Growth, Care and Development Studies                  | Criminology                                  |
| Education of the Disabled                   | Pre-law Studies   | History                                      |
|   | Paralegal/Legal Assistant                                   | International Relations and Affairs          |
|   |   | Political Science                            |
|   |   | Sociology                                    |
|   |   | Art  |
|   |   | Music  |
|   |   | Health System/Health Services Administration |
|   |   | Pre-dentistry Studies                        |
|   |   | Pre-medicine Studies                         |



## Claremont Graduate University

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171 E. Tenth St. , Claremont, CA 91711  
Ph: (909) 607-3371, Website: [www.cgu.edu](http://www.cgu.edu)

### Degrees

- M.A.
- M.F.A.
- Ph.D.
- M.Phil.
- D.C.M.
- D.M.A.
- M.S.
- Teaching Credential
- M.S.E.C.
- M.I.S.
- M.S.
- Certificates, M.A.M., E.M.B.A., and M.S.A.M.
- M.B.A.
- M.S.F.E.

### Programs

|                        |                         |
|------------------------|-------------------------|
| Art                    | Religion                |
| Cultural Studies       | Information Science     |
| English                | Management              |
| History                | Economics               |
| Music                  | Politics and Policy     |
| Philosophy             | Applied Women's Studies |
| Human Resources Design | Botany Department       |
| Psychology             | Engineering Department  |
| Education              | Financial Engineering   |
| Teacher Education      |                         |

## **Kaiser Permanente School of Anesthesia- Nurses**

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100 South Los Robles, Ste. 550, Pasadena, CA 91188

Ph: (626) 564-3007, Fx: (626) 564-3099

Website: [www.kpsan.org](http://www.kpsan.org), Email: [michael.j.boytim@kpsan.org](mailto:michael.j.boytim@kpsan.org)

### **Accreditation/Approval Agencies**

- American Association of Nurse Anesthetists

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- 
- Career Development
- Counseling
- Distance Learning

### **Programs**

Nursing Anesthetist (Post R.N.)

## **Keck Graduate Institute of Applied Life Sciences**

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535 Watson Dr., Claremont, CA 91711  
Ph: (909) 607-8590, Fx: (909) 607-8086  
Website: [www.kgi.edu](http://www.kgi.edu), Email: [info@kgi.edu](mailto:info@kgi.edu)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Financial Aid
- Job Placement
- Career Development
- Counseling

### **Degree**

- Master

### **Program**

Biology

**Keller Graduate School of Management Inc.**

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901 Corporate Center Drive, Pomona, CA 91768

Ph: (909) 865-0402, Fx: (909) 865-3863

Website: [www. Keller.edu](http://www.Keller.edu), Email: [whillsctr@keller.edu](mailto:whillsctr@keller.edu)

**Accreditation/Approval Agencies**

- North Central Association of Colleges and Schools

**Services**

- Financial Aid
- Veterans Service
- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

**Degrees**

- Master
- Certificate

**Programs**

Financial Management and  
Services  
Human Resources  
Management

Business Systems Networking and  
Telecommunications  
Business Administration and  
Management  
Accounting

## **Likie Fashion and Technology College**

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8450 E. Garvey Ave. Ste. 201, Rosemead, CA 91770

Ph: (626) 572-8506, Fx: (626) 572-7423

Website: [www.likie.aan.net](http://www.likie.aan.net), Email: [info@likie.com](mailto:info@likie.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Master
- Associate
- Certificate
- Diploma

### **Programs**

Marketing Management and  
Research  
Business Information and  
Data Processing  
Business Administration and  
Management

Accounting  
Entrepreneurship  
Marketing Operations/Marketing and  
Distribution  
Fashion Design and Illustration



## **Logos Evangelical Seminary**

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9358 Telstar Ave., El Monte, CA 91731

Ph: (626) 571-5110, Fx: (626) 571-5119

Website: [www.les.edu](http://www.les.edu), Email: [logos@les.edu](mailto:logos@les.edu)

### **Accreditation/Approval Agencies**

- Association of Christian Schools and Institutes
- Association of Theological Schools
- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Doctorate
- Master

### **Programs**

Management Science

Bible/Biblical Studies

Divinity/Ministry (B.D., M. Div.)

## **Valley International Christian Seminary**

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260 E. College St., Covina, CA 91722

Ph: (626) 915-5305, Fx: (801) 730-9572

Website: [www.valleyics.org](http://www.valleyics.org), Email: [valleyics@aol.com](mailto:valleyics@aol.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Doctorate
- Master
- Bachelor

### **Programs**

Religion/Religious Studies  
Bible/Biblical Studies  
Religious Education

Theology/Theological Studies  
Divinity/Ministry (B.D. M. Div.)  
Psychology

## **Western States Baptist Bible College**

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395 San Bernardino Ave., Pomona, CA 91767  
Ph: (909) 622-2921, Fx: (909) 865-1125

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Bachelor
- Associate
- Certificate

### **Programs**

Elementary Teacher Education  
Missions/Missionary Studies and Missiology  
Pastoral Counseling and Specialized Ministry

## **Western University of Health Sciences**

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309 E. 2<sup>nd</sup> Street, Pomona, CA 91766  
Ph: (909) 623-6116, Fx: (909) 469-5357  
Website: [www.westernu.edu](http://www.westernu.edu)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Financial Aid
- Veterans Services
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Doctorate
- Master

### **Programs**

Health Professions and Related Sciences  
Physical Therapy  
Nursing, Family Practice (Post R.N.)  
Osteopathic Medicine (D.O.)  
Pharmacy (B. Pharm, Pharm. D.)

## **William Adrian School & Agency**

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1021 E. Walnut St. Ste. 101, Pasadena, CA 91106  
Ph: (626) 795-2560, Fx: (626) 795-2560

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Open Entry/Open Exit

### **Programs**

Fashion Modeling  
Advertising



## **William Carey International University**

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1539 E. Howard St., Pasadena, CA 91104

Ph: (626) 398-2141, Fx: (626) 398-2111

Website: [www.wciu.edu](http://www.wciu.edu), Email: [admissions@wciu.edu](mailto:admissions@wciu.edu)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Distance Learning

### **Programs**

Development Economics  
International Business

## **A.D. Banker & Company**

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Sheraton  
303 East Cordova St., Pasadena, CA 91101  
Ph: (800) 866-2468, Fx: (913) 451-3766  
Website: [www.adbanker.com](http://www.adbanker.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Open Entry/Open Exit
- Distance Learning

### **Degree**

- Certificate

### **Programs**

Insurance and Risk Management  
Insurance Marketing Operations

## **ACI Institute**

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1041 S. Garfield Ave. #208, Alhambra, CA 91801  
Ph: (626) 300-8352, Fx: (626) 308-9422

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Programs**

Teaching English as a Second Language  
English Language and Literature

**Chicana Service Action Center Inc.**

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151 E. Second Street, Pomona, CA 91766  
Ph: (213) 639-5800, Fx: (909) 629-3171

**Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

**Services**

- Job Placement

**Programs**

General Office/Clerical and Typing Service

**China Evangelical Seminary North America Campus, Inc.**

1633 N. Hacienda Bl., La Puente, CA 91744  
Ph: (626) 917-9482, Fx: (626) 917-2792

**Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

**Degrees**

- Master
- Certificate

**Programs**

Religion/Religious Studies

**Chinese for Christ Calvin Chao Theological Seminary**

2021-2027 W. Garvey Ave., Alhambra, CA 91803

Ph: (626) 289-8199

**Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

**Degrees**

Diploma

**Programs**

Theology/Theological Studies

Divinity/Ministry (B.D., M. Div.)



## **Los Angeles Urban League's Pomona Valley Tec Center**

264 E. Monterey St., Pomona, CA 91767

Ph: (909) 623-9741, Fx: (909) 620-8845

Website: [www.laul.org](http://www.laul.org)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Programs**

Child Care Provider/Assistant

Job Seeking/Changing Skills

## **Mt. Olive Alternative Education**

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1620 Huntington Dr., Duarte, CA 91010  
Ph: (626) 358-1191, Fx: (626) 930-0335

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Degrees**

- Diploma

### **Programs**

High School Diploma  
High School Equivalence Certificate

## **Emmanuel Bible College**

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1539 East Howard St., Pasadena, CA 91104  
Ph: (626) 791-2575

### **Accreditation/Approval Agencies**

- American Association of Bible Colleges

### **Programs**

Biblical Studies

## **Gateway Companies**

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622 W. Huntington Dr., Monrovia, CA 91016  
Ph: (626) 305-0511, Website: [www.gateway.com](http://www.gateway.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Child Care

### **Program**

Computer Programming  
Data Processing Technician

## **Instituto Evangelico**

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14864 Valley Boulevard, La Puente, CA 91744  
Ph: (626) 330-1908

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development

### **Degree**

- Bachelor

### **Programs**

Religion/Religious Studies

## **Alhambra Beauty College**

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200 West Main Street, Alhambra, CA 91801  
Ph: (626) 282-6433, Fx: (626) 282-1626

### **Accreditation/Approval Agencies**

- National Accrediting Commission of Cosmetology

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

- Cosmetologist



## **Golden City Professional Studies**

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2550 W. Main St. Ste. 105, Alhambra, CA 91801

Ph: (626) 457-8836, Fx: (626) 457-8852

Website: [www.goldtax.com](http://www.goldtax.com), Email: [goldtax@juno.com](mailto:goldtax@juno.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Open Entry/Open Exit
- Distance Learning

### **Degree**

- Certificate

### **Programs**

- Taxation

## **Language Services**

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317 W. Main St. Ste. 328, Alhambra, CA 91801

Ph: (626) 284-8400

Website: [www.unis.net](http://www.unis.net)

### **Accreditation/Approval Agencies**

- California State Department of Education

### **Services**

- Counseling
- Open Entry/Open Exit

### **Degree**

- Certificate

### **Program**

- Teaching English as a Second Language

## **Language Systems International College of English**

100 E. Huntington Dr. Ste. 209, Alhambra, CA 91801  
Ph: (626) 284-9852, Fx: (626) 284-9893

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Open Entry/Open Exit

### **Degree**

- Certificate

### **Program**

- Teaching English as a Second Language

## **Oriental Medicine Institute in America**

701 W. Valley Blvd., Alhambra, CA 91803  
Ph: (626) 281-8640

### **Accreditation/Approval Agencies**

- Accreditation for Acupuncture & Oriental Medicine

### **Programs**

Acupuncture and Oriental Medicine

## **Accounting Annex Inc.**

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41 E. Foothill Blvd. Ste. 201, Arcadia, CA 91006  
Ph: (626) 445-8526, Fx: (626) 445-0381

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling

### **Degree**

- Certificate

### **Programs**

- Accounting and Computer Science

## **California Technology University**

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630 Duarte Rd. Ste. 303, Arcadia, CA 91006  
Ph: (626) 294-0318, Fx: (626) 294-0069

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Counseling
- Open Entry/Open Exit

### **Degree**

- Diploma

### **Programs**

Business Administration and Management  
Information Sciences and Systems



## **First Presbyterian School**

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556 Las Tunas Dr. #107, Arcadia, CA 91007  
Ph: (626) 294-9219, Fx: (626) 294-0362

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Counseling

### **Degrees**

- Diploma

### **Programs**

High School Equivalence Certificate

## **International College of Qigong and Acupressure**

158a-160 W. Live Oak Ave., Arcadia, CA 91007

Ph: (626) 821-0825

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Programs**

Acupuncture and Oriental Medicine

## **Santa Anita Center for Ministerial and Spiritual Studies**

226 West Colorado , Arcadia, CA 91007  
Ph: (818) 446-8206

### **Accreditation/Approval Agencies**

- Association of Theological Schools

### **Programs**

Biblical and Other Theological Language  
Bible/Biblical Studies  
Theological and Ministerial Studies

## **El Monte Truck Driving School**

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1187 West Arrow Hwy., Azusa, CA 91702  
Ph: (626) 969-4543, Fx: (626) 969-1620

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Truck, Bus and Other Commercial Vehicles

## **American Graduate University**

---

733 North Dodsworth Ave., Covina, CA 91724

Ph: (626) 966-4576, Fx: (626) 915-1709

Website: [www.agu.edu](http://www.agu.edu), Email: [agu@ix.netcome.com](mailto:agu@ix.netcome.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education
- Council for Higher Education
- Accrediting Commission of the Distance Education

### **Services**

- Veterans Services
- Distance Learning

### **Degrees**

- Master
- Certificate
- Diploma

### **Programs**

Management Science

## **Anthony Schools of Northern California**

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379 E. Rowland Street, Covina, CA 91723

Ph: (800) 272-2162, Fx: (626) 339-6436

Website: [www.anthonyschools.com](http://www.anthonyschools.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Taxation

Purchasing, Procurement and Contracts

## **Deloux Cosmetology School**

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151 E. College Street, Covina, CA 91723  
Ph: (925) 602-1041, Fx: (626) 966-7173

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Diploma

### **Programs**

Cosmetologist



## **National Bartenders School**

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200 S. Citrus Ave., Covina, CA 91723  
Ph: (626) 966-7555, Fx: (626) 858-5293  
Website: [www.nationalbartenders.com](http://www.nationalbartenders.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Service
- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Bartender/Mixologist

## **Rightway Computer Training Centers, Inc.**

1270 E. Garvey Ave. N. Ste. 240, Covina, CA 91724  
Ph: (626) 331-5667, Fx: (626) 331-5107  
Website: [www.rightway.com](http://www.rightway.com), Email: [info@rightway.com](mailto:info@rightway.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Degrees**

- Certificate

### **Programs**

Computer Programming  
Data Processing Technology  
Graphic Design, Commercial Art and Illustration

## **Interactive Systems Technology, Inc.**

556 North Diamond, Diamond Bar, CA 91765

Ph: (909) 978-2188, Fx: (909) 978-2171

Website: [www.ist.net](http://www.ist.net), Email: [info@ist.net](mailto:info@ist.net)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Data Processing Technician

Graphic Design, Commercial Art and Illustration

## **Scuba Habitat**

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3220 B. Brea Canyon Rd., Diamond Bar, CA 91765

Ph: (909) 594-7927

Website: [www.scubahabit.com](http://www.scubahabit.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Degrees**

- Certificate

### **Programs**

Diver (professional)

## **A+ Network Computer**

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9324 E. Garvey Ave. #1, El Monte, CA 91733  
Ph: (626) 448-3789, Fx: (626) 448-3638

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Degrees**

- Certificate

### **Programs**

Computer Installer and Repairer

## **Bryman College**

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3208 Rosemead Blvd. Ste. 100, El Monte, Ca 91731

Ph: (626) 573-5470, Fx: (626) 280-4011

Website: [www.bryman-college.com](http://www.bryman-college.com), Email: [mselter@cci.edu](mailto:mselter@cci.edu)

### **Accreditation/Approval Agencies**

- Accrediting Commission of Career Schools and Colleges
- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

- Health Professions and Related Sciences
- Business
- Dental Assistant
- Medical Office Management
- Medical Assistant

## **California Business Institute**

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3550 Johnson Ave., El Monte, CA 91731

Ph: (626) 444-7779, Fx: (626) 444-4268

Website: [www.cbi2000.com](http://www.cbi2000.com), Email: [info@cbi2000.com](mailto:info@cbi2000.com)

### **Accreditation/Approval Agencies**

- Accrediting Council for Continuing Education

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Diploma

### **Programs**

- Business Computer Facilities Operator
- Accounting
- Accounting Technician
- Computer and Information Sciences
- Medical Office Management
- Medical Assistant



## **Contractors State License Schools**

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1741 Colorado , El Monte, CA 90041  
Ph: (323) 344-7004, Fx: (323) 344-9044  
Website: [www.csls.com](http://www.csls.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Services
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Construction/Building Technician  
Construction/Building Inspector

## **Gelong Network Engineering, Inc.**

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9645 Telstar Ave. #203, El Monte, CA 91731

Ph: (626) 401-0828, Fx: (626) 317-0353

Website: [www.gelong.com](http://www.gelong.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Distance Learning

### **Degrees**

- Certificate

### **Programs**

- Computer Programming

## **International Technical School, Inc.**

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2714 Durfee Ave., El Monte, CA 91732

Ph: (626) 575-4826, Fx: (626) 575-7480

Website: [www.its.edu](http://www.its.edu), Email: [apagmia@yahoo.com](mailto:apagmia@yahoo.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education
- WIA Eligible Training Provider

### **Services**

- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Data Processing  
Computer Maintenance  
Instrumentation  
Electrician  
Computer Installer and Repairer  
Automotive Mechanic  
Fashion Design and Illustration

## **Pacific Beauty College**

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10053 Valley Blvd. #7, El Monte, CA 91731  
Ph: (626) 444-2329

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Cosmetologist

## **Professional Institute of Beauty**

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10801 E. Valley Mall, El Monte, CA 91731

Ph: (626) 443-9401, Fx: (626) 443-0401

Website: [www.rgmsfas.com](http://www.rgmsfas.com), Email: [rosepib@rgmsfas.com](mailto:rosepib@rgmsfas.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

- Cosmetologist

## **Dynasty Institute, Inc.**

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2373 S. Hacienda Blvd., Hacienda Heights, CA 91745

Ph: (626) 855-0455, Fx: (626) 855-0465

Website: [www.dynastyschool.com](http://www.dynastyschool.com), Email [dynastyschool@yahoo.com](mailto:dynastyschool@yahoo.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate

### **Programs**

Taxation  
Foods and Nutrition Studies  
Nursing

## **Premiere Career College**

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12901 Ramona Blvd. Ste. D, Irwindale, CA 91706

Ph: (626) 814-2080, Fx: (626) 814-3242

Website: [www.premcol.com](http://www.premcol.com), Email: [premiere@premcol.com](mailto:premiere@premcol.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

General Office/Clerical and Typing Service  
Accounting  
Medical Assistant  
Surgical/Operating Room Technician



## **Camino Real Career Schools**

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13674 East Valley Blvd., La Puente, CA 91746

Ph: (626) 968-9135, Fx: (626) 968-9254

Website: [www.crschool.com](http://www.crschool.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education
- WIA Eligible Training Provider

### **Services**

- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Truck, Bus and Other Commercial Vehicles

## **Community Employment Project Inc.**

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15439 E. Valley Blvd., La Puente, CA 91746

Ph: (626) 937-2299, Fx: (626) 937-2296

Website: [www.cepinc.org](http://www.cepinc.org), Email: [Robert@cepinc.org](mailto:Robert@cepinc.org)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Regular High School Diploma

Data Processing Technician

Teaching English as a Second Language

Reading, Literacy and Communication Skills

Electrical and Electronics Equipment Installation

## **Elegante Beauty College**

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17337 East Valley Blvd., La Puente, CA 91744

Ph: (626) 965-2532, Fx: (626) 839-8330

Website: [www.bc.ofearth.net](http://www.bc.ofearth.net)

### **Accreditation/Approval Agencies**

- National Accrediting Commission of Cosmetology

### **Services**

- Financial Aid
- Veterans Services
- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Barber/hairstylist  
Cosmetologist  
Teacher Assistant/Aide

## **Latin American Bible Institute**

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14209 E. Lomitas Ave., La Puente, CA 91746

Ph: (626) 968-1328, Fx: (626) 961-7253

Website: [www.labi.edu](http://www.labi.edu)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Bachelor
- Associate
- Certificate
- Diploma

### **Programs**

Bible/Biblical Studies  
Theology/Theological Studies  
Divinity/Ministry (B.D., M. Div.)

## **CompUSA Inc. Technology Training**

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745 West Huntington Dr., Monrovia, CA 91016

Ph: (626) 930-8650, Fx: (626) 930-8683

Website: [www.compusa.com](http://www.compusa.com), Email: [bobbychavez@compusa.com](mailto:bobbychavez@compusa.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Degrees**

- Certificate

### **Programs**

Data Processing Technician

## **Practical Data Processing School**

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840 S. Myrtle Ave., Monrovia, CA 91016  
Ph: (626) 358-9555, Fx: (626) 359-5855

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Human Resources Management  
Enterprise Management and Operation  
Accounting  
Computer and Information Sciences  
Data Processing Technician  
Computer Typography and Composition Equivalence

## **Studio of Creative Make-up Art/Special Fx**

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123 E. Colorado Blvd., Monrovia, CA 91016  
Ph: (626) 821-5410, Fx: (626) 358-6788

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Open Entry/Open Exit

### **Programs**

Make-up Artist



## **American English Academy**

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111 N. Atlantic Blvd. Ste. 112, Monterey Park, CA 91754

Ph: (626) 457-2800, Fx: (626) 457-2808

Email: [admission@aea-usa.com](mailto:admission@aea-usa.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational

### **Degrees**

- Certificate

### **Programs**

Teaching English as a Second Language

## **American Feng Shui Institute**

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108 N. Ynez Ave. Ste. 202, Monterey Park, CA 91754

Ph: (626) 571-2757, Fx: (626) 571-2065

Website: [www.amfengshui.com](http://www.amfengshui.com), Email: [fsinfo@fengshui.com](mailto:fsinfo@fengshui.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Degrees**

- Certificate

### **Programs**

Environmental Studies

## **Century 21 Real Estate School**

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2360 S. Garfield, Monterey Park, CA 91754  
Ph: (800) 872-4679, Fx: (714) 834-9134

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education
- California State Department of Real Estate

### **Services**

- Counseling
- Distance Learning

### **Degrees**

- Certificate

### **Programs**

Taxation

## **Chosen Travel & Tours**

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214 S. Garfield, Monterey Park, CA 91754

Ph: (626) 280-0078, Fx: (626) 280-6778

Email: [chosentravel@aol.com](mailto:chosentravel@aol.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Travel-tourism Management

## **Edgewood Language Institute**

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660 Monterey Pass Rd., Monterey Park, CA 91754

Ph: (626) 282-5088, Fx: (626) 282-5009

Website: [www.edgewood-usa.com](http://www.edgewood-usa.com), Email: [info@edgewood-usa.com](mailto:info@edgewood-usa.com)

### **Accreditation/Approval Agencies**

- Teachers of English to Speakers of Other Languages
- American Association of Intensive English Program

### **Services**

- Counseling

### **Degrees**

- Certificate

### **Programs**

Business Communications

Teaching English as a Second Language

## **Gemology & Jewelry Institute International Inc.**

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670 Monterey Pass, Monterey Park, CA 91754  
Ph: (626) 308-1292, Fx: (626) 308-1776

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

- Watch, Clock and Jewelry Repairer

## **Monterey Park College**

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583 S. Monterey Pass Rd., Monterey Park, CA 91754

Ph: (626) 576-2444, Fx: (626) 576-2540

Website: [www.montereyparkcollege.com](http://www.montereyparkcollege.com)

### **Accreditation/Approval Agencies**

- Accrediting Council for Independent Colleges and Schools

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling

### **Degrees**

- Certificate

### **Programs**

General Office/Clerical and Typing Services  
Accounting Technician  
Computer and Information Sciences  
Data Processing Technician  
Teaching English as a Second Language  
Computer Engineering Technician  
Computer Maintenance Technician

## **Royal Real Estate School**

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230 S. Garfield Ave., Monterey Park, CA 91755

Ph: (626) 571-8118, Fx: (626) 571-8824

Email: [royalschool@msn.com](mailto:royalschool@msn.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education
- California Department of Real Estate

### **Degrees**

- Certificate

### **Programs**

Taxation



## **California Institute for Counseling Studies**

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100 N. Lake Ave. Ste. 202, Pasadena, CA 91101  
Ph: (626) 568-1144, Fx: (626) 791-0942

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Alcohol/Drug Abuse Counseling

## **Esquire College Inc.**

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37 N. Holliston Ave., Pasadena, CA 91105

Ph: (626) 583-8071, Fx: (626) 583-8075

Website: [www.esq.com](http://www.esq.com), Email: [esquireclg@aol.com](mailto:esquireclg@aol.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Executive Assistant/Secretary  
Paralegal/Legal Assistant

## **H & R Block Tax School**

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953 E. Colorado Blvd., Pasadena, CA 91106

Ph: (626) 792-7164, Fx: (626) 792-2617

Website: [www.hrblock.com](http://www.hrblock.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement

### **Degrees**

- Certificate

### **Programs**

Taxation

## **Institute of Scientific Aesthetics**

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107 S. Fair Oaks Ave. Ste. 218, Pasadena, CA 91105

Ph: (626) 683-7303, Fx: (626) 683-7323

Website: [www.delordskincare.com](http://www.delordskincare.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Career Development

### **Degrees**

- Certificate

### **Programs**

- Make-up Artist

## **Integrated Digital Technologies**

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2850 E. Foothill Blvd. 2<sup>nd</sup> Floor, Pasadena, CA 91107

Ph: (626) 585-6320, Fx: (626) 585-0616

Website: [www.idnetwork.com](http://www.idnetwork.com)

### **Accreditation/Approval Agencies**

- Accrediting Commission of Career Schools and Colleges

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

- Data Processing Technician

## **Le Baron Academy of Investigation**

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1021 E. Walnut, Ste. 201, Pasadena, CA 91106  
Ph: (626) 683-9698, Fx: (626) 683-3702

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling

### **Degrees**

- Certificate
- Diploma

### **Programs**

Business  
Teaching English as a Second Language  
Security and Loss Prevention Services

## **Living Word Bible College**

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2495 E. Mountain St., Pasadena, CA 91104

Ph: (626) 791-7295, Fx: (626) 791-7634

Website: [www.livingwaters.org](http://www.livingwaters.org), Email: [lwbc4mail@aol.com](mailto:lwbc4mail@aol.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Services
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate
- Diploma

### **Programs**

Biblical and Other Theological Language

Bible/Biblical Studies

Missions/Missionary Studies and Misology

Theological and Ministerial Studies

Pastoral Counseling and Specialized Ministry

History

Dance

Drama/Theater Arts

## **Los Angeles Music Academy**

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370 S. Fair Oaks Ave., Pasadena, CA 91115

Ph: (626) 568-8850, Fx: (626) 568-8854

Website: [www.lamusicacademy.com](http://www.lamusicacademy.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Services
- Job Placement
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Music



## North-West College of Medical and Dental Assistants

### Pasadena Location

530 E. Union St.  
Pasadena, CA 91101  
Ph: (626) 796-5815

### Pomona Location

134 Holt Ave.  
Pomona, CA 91768  
Ph: (909) 623-1552

### West Covina Location

2120 W. Garvey Ave. N.  
West Covina, CA 91791  
Ph: (626) 960-5046  
Fx: (626) 960-9190

Website: [www.north-westcollege.com](http://www.north-westcollege.com)  
Email: [mitchellf@north-westcollege.com](mailto:mitchellf@north-westcollege.com)

### Accreditation/Approval Agencies

- Accrediting Commission of Career Schools and Colleges

### Services

- Financial Aid
- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### Degrees

- Certificate
- Diploma

### Programs

|  |  |
|--|--|
| Receptionist                               | Medical Office Management                      |
| Health Professions and<br>Related Sciences | Medical Records Technician                     |
| Computer and Information<br>Sciences       | Medical Assistant                              |
| Dental Assistant                           | Pharmacy Technician                            |
|  | Optometric/Ophthalmic Laboratory<br>Technician |

## **Paralegal Training Centers**

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110 S. Rosemead Blvd. Ste. H, Pasadena, CA 91107

Ph: (626) 583-4742, Fx: (626) 396-9933

Website: [www.paralegaltrainingcenters.com](http://www.paralegaltrainingcenters.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Career Development
- Counseling

### **Degrees**

- Certificate
- Diploma

### **Programs**

Paralegal/Legal Assistant

## **Pasadena International Music Academy**

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1210 E. Green St. #200, Pasadena, CA 91106

Ph: (626) 577-1751, Fx: (626) 577-1765

Website: [www.pimamusic.com](http://www.pimamusic.com), Email: [pimamusic@pimamusic.com](mailto:pimamusic@pimamusic.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Music

Music Theory and Composition

Music-Voice and Choral/Opera Performance

## **Poly Languages Institute Inc.**

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350 S. Lake Ave. #200, Pasadena, CA 91101

Ph: (626) 449-4441, Fx: (626) 449-3280

Website: [www.polylanguages.com](http://www.polylanguages.com), Email: [info@polylanguages.com](mailto:info@polylanguages.com)

### **Accreditation/Approval Agencies**

- Accrediting Council for Continuing Education and Training
- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Counseling

### **Degrees**

- Certificate

### **Programs**

Teaching English as a Second Language  
Foreign Languages and Literature

## **Right-Track Learning Center**

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2085 E. Colorado Blvd., Pasadena, CA 91107  
Ph: (626) 578-7225, Fx: (626) 578-7243

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Service
- Job Placement
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Data Processing Technician

## **American Nanny College Inc.**

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260 S. Garey Ave., Pomona, CA 91768  
Ph: (909) 624-7711, Fx: (909) 624-9261  
Website: [www.bcity.com/anc](http://www.bcity.com/anc), Email: [ind@prodigy.net](mailto:ind@prodigy.net)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Special Education  
Pre-elementary/Early Childhood/Kindergarten  
Child Care and Guidance Workers and Managers  
Child Care Services Manager  
Child Care and Guidance Workers and Manager

## **Becker CPA Review Course of California**

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3101 Temple Ave., Pomona, CA 91768

Ph: (800) 868-3900, Fx: (818) 986-4634

Website: [www.beckerconviser.com](http://www.beckerconviser.com), Email: [becker@primenet.com](mailto:becker@primenet.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Distance Learning

### **Degrees**

- Certificate

### **Programs**

Accounting

## **Computer Education Institute**

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980 Corporate Center Dr., Pomona, CA 91768

Ph: (909) 865-9008, Fx: (909) 865-2049

Website: [www.computer-education.com](http://www.computer-education.com)

### **Accreditation/Approval Agencies**

- WIA Eligible Training Provider
- Accrediting Council for Continuing Education and Training
- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Data Processing Technician

Computer Installer and Repairer



## **Nationwide Beauty College**

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252 E. Second St., Pomona, CA 91766  
Ph: (909) 622-8542, Fx: (909) 622-2799

### **Accreditation/Approval Agencies**

- National Accrediting Commission of Cosmetology

### **Services**

- Financial Aid
- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Barber/Hairstylist  
Cosmetologist  
Massage

## **Rebecca's Vocational School**

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196 W. Halt St., Pomona, CA 91768  
Ph: (909) 622-3805, Fx: (909) 622-2994  
Email: [rebec.268@gointernet.com](mailto:rebec.268@gointernet.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Interior Architecture  
Floristry Marketing Operations  
Advertising  
Computer Programming  
Baker/Pastry Chef  
Teaching English as a Second Language  
Education  
Citizenship Activities  
Upholsterer  
Graphic Design, Commercial Art and Illustration  
Fashion Design and Illustration

## **Westech College**

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500 W. Mission Blvd., Pomona, CA 91766

Ph: (909) 622-6486, Fx: (909) 622-5045

Website: [www.westechcollege.com](http://www.westechcollege.com)

### **Accreditation/Approval Agencies**

- Accrediting Commission of Career Schools and Colleges
- Bureau for Private Post Secondary and Vocational Education
- WIA Eligible Training Provider

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling

### **Degrees**

- Certificate
- Diploma

### **Programs**

Insurance and Risk Management  
Accounting Technician  
Medical Administrative Assistant/Secretary  
Computer and Information Sciences  
Drafting

## **Don Bosco Technical Institute**

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1151 San Gabriel Blvd., Rosemead, CA 91770

Ph: (626) 940-2000, Fx: (626) 940-2001

Number of Students: 100-249

Website: [www.boscotech.org](http://www.boscotech.org)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Associate
- Certificate

### **Programs**

|                             |                             |
|-----------------------------|-----------------------------|
| Computer Science            | Health and Physical         |
| Education                   | Education                   |
| Transportation and Highway  | Philosophy                  |
| Engineering                 | Religious Education         |
| Electrical, Electronics and | Science                     |
| Communication Engineering   | Technologies/Technician     |
| Construction/Building       | Social Sciences             |
| Technology                  | American Government and     |
| Surveying                   | Politics                    |
| English Language and        | Electrical and Electronics  |
| Literature/Letters          | Equipment Installer         |
| Humanities/Humanistic       | Drafting                    |
| Studies                     | Welder/Welding Technologist |
| Radiation                   | Graphic Design, Commercial  |
| Biology/Radiobiology        | Art and Illustration        |
| Mathematics                 | Drawing                     |

## **Cal Lion Co.**

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2547 N. San Gabriel Bl. #C, Rosemead, CA 91770

Ph: (626) 571-6100, Fx: (626) 571-6196

Website: [www.learncd.com](http://www.learncd.com), Email: [learningcd@us.sina.com](mailto:learningcd@us.sina.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Career Development

### **Degrees**

- Certificate

### **Programs**

Computer Science

## **The East-West Institute of Hand Therapy**

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7728 E. Garvey Ave. #6, Rosemead, CA 91770  
Ph: (626) 288-6797

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Massage

## **Golden Hyde Real Estate Center**

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1168 San Gabriel Blvd. #J, Rosemead, CA 91770  
Ph: (626) 571-0751, Fx: (626) 571-0873

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Degrees**

- Certificate

### **Programs**

Taxation

## **Rosemead Beauty School**

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8531 E. Valley Blvd., Rosemead, CA 91770  
Ph: (626) 286-2147, Fx: (626) 286-6058

### **Accreditation/Approval Agencies**

- National Accrediting Commission of Cosmetology
- WIA Eligible Training Provider

### **Services**

- Financial Aid
- Veteran Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Cosmetologist



## **Rosemead College of English**

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8705 E. Valley Blvd., Rosemead, CA 91770

Ph: (626) 285-1846, Fx: (626) 285-1351

Website: [www.rce-college.com](http://www.rce-college.com), Email: [rce888@aol.com](mailto:rce888@aol.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Career Development
- Counseling

### **Degrees**

- Certificate

### **Programs**

Teaching English as a Second Language

## **Christian Zion Seminary**

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2628 Fullerton Rd., Rowland Heights, CA 91748  
Ph: (626) 810-5222, Fx: (626) 810-6823

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Counseling

### **Degrees**

- Certificate
- Diploma

### **Programs**

Foreign Language Interpretation and Translation

## **English As A Second Language Academy**

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19119 E. Colima Rd. #201, Rowland Heights, CA 91748

Ph: (626) 810-2003, Fx: (626) 810-2073

Website: [www.eslacademy.com](http://www.eslacademy.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Career Development

### **Degrees**

- Diploma

### **Programs**

Teaching English as a Second Language

## **Ivy League School**

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19271 Colima Rd. #G, Rowland Heights, CA 91748  
Ph: (626) 912-7366, Fx: (626) 912-6506

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Distance Learning

### **Degrees**

- Certificate
- Diploma

### **Programs**

English Language and Literature  
Mathematics  
Science, Technology and Society

## **Pacific Rim Language Institute**

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1719 Fullerton Rd., Rowland Heights, CA 91748

Ph: (626) 964-0888, Fx: (626) 913-9658

Website: [www.prl.com](http://www.prl.com), Email: [jwilliams@prli.com](mailto:jwilliams@prli.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

- Technical Teacher Education
- Teaching English as a Second Language

## **Universal Advanced Beauty Institute Inc.**

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19217 Colima Rd. Ste. A, Rowland Heights, CA 91748  
Ph: (626) 965-3150, Fx: (626) 810-9640

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Cosmetologist

## **USA Pain Care College**

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19091 E. Colima Rd., Rowland Heights, CA 91748  
Ph: (626) 854-2898, Fx: (626) 854-0457

### **Accreditation/Approval Agencies**

- California State Department of Education

### **Degrees**

- Certificate

### **Programs**

Massage

## **Century 21 Citrus Realty**

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1100 Via Verde, San Dimas, CA 91773

Ph: (909) 592-8500, Fx: (909) 592-1437

Website: [www.century21citrus.com/index.html](http://www.century21citrus.com/index.html), Email: [c21citrus@aol.com](mailto:c21citrus@aol.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Taxation



## **Kotai Real Estate School**

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802 E. Mission Rd. , San Gabriel, CA 91776  
Ph: (626) 237-2170, Fx: (626) 287-0768

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Degrees**

- Certificate

### **Programs**

Taxation

## **Health and Career Institute**

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2001 Tyler Ave. Ste. 204, South El Monte, CA 91733

Ph: (626) 401-1395, Fx: (626) 401-3707

Email: [hciirene@earthlink.net](mailto:hciirene@earthlink.net)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Programs**

General Office/Clerical and Typing Service

Investments and Securities

Accounting

Medical Administrative Assistant/Secretary

Computer and Information Sciences

Teaching English as a Second Language

Graphic Design, Commercial Art and Illustration

Medical Records Technician

## **L.A. Fashion Institute**

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9646 E. Garvey Ave., South El Monte, CA 91733  
Ph: (626) 443-8218, Fx: (626) 443-7808

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Career Development
- Counseling

### **Degrees**

- Certificate

### **Programs**

Fashion Design and Illustration

## **Interfirst Capital Corporation**

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1499 Huntington Dr. Ste. 1, South Pasadena, CA 91030

Ph: (626) 441-5599, Fx: (626) 441-8323

Website: [www.interfirst.com](http://www.interfirst.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate

### **Programs**

Investments and Securities

## **Southern California School of Culinary Arts**

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1416 El Centro St., South Pasadena, CA 91030

Ph: (626) 403-8490, Fx: (626) 403-4834

Website: [www.scsca.com](http://www.scsca.com), Email: [scsca@earthlink.net](mailto:scsca@earthlink.net)

### **Accreditation/Approval Agencies**

- Accrediting Council for Independent Colleges and Universities

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Associate
- Certificate

### **Programs**

Culinary Arts/Chef Training

## **United States Truck Driving School**

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924 W. Rialto Ave., Rialto, CA 92376  
Ph: (909) 875-8000, Fx: (909) 875-9889  
Website: [www.ustruck.com](http://www.ustruck.com)

### **Accreditation/Approval Agencies**

- Accrediting Commission of Career Schools and Colleges
- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Truck, Bus and Other Commercial Vehicle

## **Computer Career Center**

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1515 W. Cameron Ave. Ste. 240, West Covina, CA 91790

Ph: (626) 813-1566, Fx: (626) 813-0046

Website: [www.computercareer.com](http://www.computercareer.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Accounting and Computer Science  
General Office/Clerical and Typing Services  
Computer Programming  
Data Processing Technology/Technician

## **IT Tracks**

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2231 Garvey Ave., West Covina, CA 91791

Ph: (626) 858-8996, Fx: (626) 858-8597

Website: [www.ittracks.com](http://www.ittracks.com), Email: [info@ittracks.com](mailto:info@ittracks.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Job Placement
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Data Processing Technology/Technician

Graphic Design, Commercial Art and Illustration



## **ITT Technical Institute**

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1530 W. Cameron Ave., West Covina, CA 91790

Ph: (626) 960-8681, Fx: (626) 337-5271

Website: [www.itt-tech.edu](http://www.itt-tech.edu)

### **Accreditation/Approval Agencies**

- Accrediting Commission of Career Schools and Colleges

### **Services**

- Financial Aid
- Veterans Services
- Job Placement
- Career Development

### **Degrees**

- Bachelor
- Associate
- Certificate

### **Programs**

Business Systems Networking and Telecom  
Electrical, Electronic and Communications Engineering  
Electrical and Electronic Engineering  
Drafting  
Graphic Design, Commercial Art and Illustration

## **Marinello School of Beauty**

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118 Fashion Plaza , West Covina, CA 91790

Ph: (800) 648-3413, Fx: (562) 693-0752

Website: [www.marinello.com](http://www.marinello.com)

### **Accreditation/Approval Agencies**

National Accrediting Commission of Cosmetology

### **Services**

- Financial Aid
- Veterans Services
- Job Placement
- Counseling
- Open Entry

### **Degrees**

- Diploma

### **Programs**

Cosmetologist

## **Travel Agent Training Center**

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1104 Wescove Pl. Ste. A, West Covina, CA 91790

Ph: (626) 917-9341, Fx: (626) 917-9347

Website: [www.amttravel.com](http://www.amttravel.com), Email: [info@amttravel.com](mailto:info@amttravel.com)

### **Accreditation/Approval Agencies**

- Bureau for Private Post Secondary and Vocational Education

### **Services**

- Financial Aid
- Job Placement
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate

### **Programs**

Travel Services Marketing Operations

## **American Academy of Dramatic Arts West**

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300 North Halstead St., Pasadena, CA 91107

Ph: (626) 229-9777, Fx: (626) 798-5047

Website: [www.aada.org](http://www.aada.org), Email: admissions/ca@aada.org

Number of Students: 251

### **Accreditation/Approval Agencies**

- Accrediting Commission for Community and Junior Colleges
- National Association of Schools of Theater

### **Services**

- Financial Aid
- Veterans Service
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Associate
- Certificate

### **Programs**

Visual and Performing Arts  
Acting and Directing

## **Baldy View Regional Occupational Program**

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135 S. Spring St.  
 Claremont, CA 91711  
 Ph: (909) 624-0063  
 Fx: (909) 621-6214  
 Website: [www.baldyviewrop.com](http://www.baldyviewrop.com)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

|   |   |
|---|---|
| Agricultural Animal Husbandry and Production Management | Electrical, Electronics and Communication Engineering |
| Horticulture Services Operations and Management         | Construction/Building Technician                      |
| Hospitality Services Management                         | Child Care and Guidance Workers and Managers          |
| Administrative Assistant/Secretarial Science            | Clothing, Apparel and Textile Workers and Managers    |
| Sports Medicine Residency                               | Law Enforcement/Police Science                        |
| Landscaping Operations and Management                   | Security and Loss Prevention Services                 |
| Agricultural Animal Health                              | Fire Protection and Safety Technician                 |
| Fashion Merchandising                                   | Construction and Building Finishers and Managers      |
| Financial Services Marketing Operations                 | Auto/Automotive Body Repairer                         |
| Floristry Marketing Operations                          | Auto/Automotive Mechanic/Technician                   |
| General Marketing Operations                            | Small Engine Mechanic and Repairer                    |
| General Distribution Operations                         | Civil/Structural Drafting                             |
| Tourism Promotion Operations                            | Cabinet Maker and Millworker                          |
| Tourism and Travel Services                             | Graphic Design, Commercial Art and Illustration       |
| Marketing Operations                                    | Commercial Photography                                |
| Vehicle Parts and Accessories                           | Dental Assistant                                      |
| Marketing Operations                                    | Medical Records Technician                            |
| Computer and Information Sciences                       | Medical Assistant                                     |
| Computer Systems Analysis                               | Pharmacy Technician/Assistant                         |
| Cosmetic Services                                       | Emergency Medical Technician                          |
| Cosmetologist   | Nurse Assistant/Aide                                  |
| Civil Engineering                                       | Nursing   |
|   | Optical Technician                                    |

## Tri-Community Adult Education

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342 South Fourth St., Covina, CA 91723  
Ph: (626) 974-6801, Fx: (626) 974-6815

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges

### Services

- Veterans Service
- Job Placement
- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit

### Degrees

- Certificate
- Diploma

### Programs

|  |   |
|--|---|
| Taxation   | Basic Skills  |
| High School Equivalence Certificate              | Art   |
| Management Information Systems and Business Data | Heating, Air Conditioning and Refrigeration Mechanics |
| Accounting                                       | Watch, Clock and Jewelry Repairer                     |
| Medical Administrative Assistant/Secretary       | Drafting  |
| Court Reporter                                   | Upholsterer   |
| Computer and Information Sciences                | Welder/Welding Technologist                           |
| Cosmetologist                                    | Furniture Designer and Maker                          |
| Spanish Language and Literature                  | Cabinet Maker and Millworker                          |
| Child Development, Care and Guidance             | Photography   |
| Mathematics                                      | Ceramic Arts  |
|  | Medical Records Administration                        |
|  | Nursing (R.N. Training)                               |
|  | Practical Nurse (L.P.N. Training)                     |

## **Azusa Unified, The Adult Alternative Education Center**

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1134 S. Barranca  
Glendora, CA 91740  
Ph: (626) 852-8400  
Fx: (626) 852-8407  
Contact: Tina Treto  
Website: [www.azusausd.k12.ca.us](http://www.azusausd.k12.ca.us)  
Email: [jerryh@azusausd.k12.ca.us](mailto:jerryh@azusausd.k12.ca.us)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate
- Diploma

### **Programs**

|   |   |
|---|---|
| High School Equivalence Certificate         | Occupational Safety and Health Technician |
| Business Computer Programming/Programmer    | Spanish Language and Literature           |
| General Office/Clerical and Typing Services | Family Living and Parenthood              |
| Accounting Technician                       | English Language and Literature           |
| Administrative                              | American Citizenship Education            |
| Assistant/Secretarial Science Receptionist  | Art                                       |
| Floristry Marketing Operations              | Cooking and Other Domestic Skills         |
| General Marketing Operations                | Reading                                   |
| Computer and Information Sciences           | Economics                                 |
| Driver and Safety Teacher Education         | Geography                                 |
| Computer Maintenance Technician             | History                                   |
|   | American/U.S. History                     |
|   | American Government and Politics          |
|   | Crafts, Folk Art and Artisanry            |
|   | Film/Video and Photographic Arts          |
|   | Drawing                                   |
|   | Painting                                  |
|   | Medical Technology                        |

## Hacienda La Puente Adult School

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14101 E. Nelson St., La Puente, CA 91746

Ph: (626) 934-2800, Fx: (626) 855-3169

Website: [www.hlpusd.k12.ca.us](http://www.hlpusd.k12.ca.us)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges

### Services

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit
- Distance Learning

### Degrees

- Certificate
- Diploma

### Programs

|  |   |
|--|---|
| Taxation                                     | Pet Ownership and Care                          |
| High School Equivalence Certificate          | Electrical and Electronics Equipment Installer  |
| Administrative Assistant/Secretarial Science | Computer Installer and Repairer                 |
| Medical Administrative Assistant/Secretary   | Auto/Automotive Mechanic/Technician             |
| Vocational Rehabilitation                    | Machinist/Machine Technologist                  |
| Counseling                                   | Welder/Welding Technologist                     |
| Landscaping Operations and Management        | Vehicle and Equipment Operators                 |
| Data Processing Technician                   | Printmaking                                     |
| Cosmetologist                                | Dental Assistant                                |
| Teaching English as a Second Language        | Medical Transcription                           |
| Child Development, Care and Guidance         | Medical Assistant                               |
| Family Living and Parenthood                 | Veterinarian Assistant/Animal Health Technician |
| Custodian/Caretaker                          | Respiratory Therapy Technician                  |
| General Studies                              | Optometric/Ophthalmic Laboratory Technician     |
| Basic Skills                                 | Psychiatric/Mental Health Services Technician]  |
|  | Nursing (R.N. Training)                         |
|  | Nurse Assistant/Aide                            |



## **Alhambra Adult Education**

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15 West Alhambra Rd., Alhambra, CA 91801  
Ph: (626) 308-2210, Fx: (626) 300-8672  
Website: [www.alhmbra.k12.ca.us](http://www.alhmbra.k12.ca.us)

### **Accreditation/Approval Agencies**

- California State Department of Education

### **Services**

- Veterans Services
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

Vocational High School Diploma  
Business Computer Facilities  
Operator  
General Office/Clerical and  
Typing Service

Banking and Financial Support Services  
Home Economics  
Child Care Provider/Assistant  
General Studies  
Auto/Automotive Mechanic/Technician

## **El Monte Rosemead Adult School**

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10807 Ramona Blvd., El Monte, CA 91731  
Ph: (626) 443-9491, Fx: (626) 452-8916  
Website: [www.emuhsd.k12.ca.us](http://www.emuhsd.k12.ca.us)

### **Accreditation/Approval Agencies**

- California State Department of Education

### **Services**

- Veterans Services
- Job Placement
- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate
- Diploma

### **Programs**

|                                       |  |
|---------------------------------------|--|
| Taxation                              | Custodial, Housekeeping and Home Service |
| High School Equivalence Certificate   | English Language and Literature          |
| Business Computer Programming         | General Studies                          |
| Cosmetologist                         | Security and Loss Prevention Services    |
| Electrical and Electronic Engineering | Machinist/Machine Technologist           |
|                                       | Medical Assistant                        |
|                                       | Nurse Assistant/Aide                     |

## **Glendora Adult School**

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1134 S. Barranca Ave., Glendora, CA 91740  
Ph: (626) 852-8400, Fx: (626) 852-8407

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate
- Diploma

### **Programs**

High School Equivalence Certificate  
Vocational Rehabilitation Counseling  
Home Economics  
Adult and Continuing Teacher Education  
Family Living and Parenthood

## **Bassett Adult School**

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904 North Willow Ave., La Puente, CA 91746  
Ph: (626) 931-7903, Fx: (626) 931-7915  
Website: [www.bassett.k12.ca.us](http://www.bassett.k12.ca.us)

Accreditation/Approval Agencies  
California State Department of Education

### Services

Veterans Service  
Job Placement  
Career Development  
Counseling  
Child Care  
Open Entry/Open Exit  
Distance Learning

### Degrees

Certificate  
Diploma

### Programs

Regular High School Diploma  
General Office/Clerical and  
Typing Service  
Administrative  
Assistant/Secretarial Science  
Data Processing Technician  
Cosmetologist  
Education

Teaching English as a Second  
Language  
Home Economics  
Exercise Sciences/Physiology and  
Movement  
Printing Press Operator  
Upholsterer  
Fiber, Textile and Weaving Arts

## **La Puente Valley Regional Occupational Program**

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18501 E. Gayle Ave. Ste. 100, Industry, CA 91740

Ph: (626) 810-3300, Fx: (626) 581-9107

Website: [www.lpvrop.org](http://www.lpvrop.org)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Agricultural Animal Husbandry  
and Production Management  
Horticulture Services Operations  
and Management  
Business Computer Facilities  
Operator  
General Office/Clerical and  
Typing Services  
Landscape Architecture  
Fashion Merchandising  
Floristry Marketing Operations  
Food Products Retailing and  
Wholesaling Operations  
Cosmetologist  
Industrial/Manufacturing  
Technician  
Child Care and Guidance  
Workers and Managers

Institutional Food Workers and  
Administrators  
Security and Loss Prevention Services  
Computer Installer and Repairer  
Auto/Automotive Body Repairer  
Auto/Automotive Mechanic/Technician  
Drafting  
Cabinet Maker and Millworker  
Truck, Bus and Other Commercial  
Vehicle Operator  
Commercial Photography  
Film-Video Making/Cinematography and  
Production  
Printmaking  
Medical Office Management  
Medical Assistant  
Emergency Medical Technician  
Nurse Assistant/Aide

## **Monrovia Adult School**

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920 S. Mountain Ave., Monrovia, CA 91016  
Ph: (626) 471-3035, Fx: (626) 471-3036

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Veterans Services
- Job Placement
- Career Development
- Counseling
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Certificate
- Diploma

### **Programs**

High School Equivalence  
Certificate  
Business Computer Facilities  
Operator  
General Office/Clerical and  
Typing Service  
Accounting Technician

Medical Administrative  
Assistant/Secretary  
Computer and Information Sciences  
Teaching English as a Second  
Language  
General Studies  
Medical Assistant

## Pomona Adult School

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1515 W. Mission, Pomona, CA 91766  
 Ph: (909) 469-2333, Fx: (909) 623-3841  
 Website: [www.pusd.org/ace](http://www.pusd.org/ace)

### Accreditation/Approval Agencies

- Western Association of Schools and Colleges

### Services

- Veterans Services
- Job Placement
- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit

### Degrees

- Certificate
- Diploma

### Programs

|   |  |
|---|--|
| Business Computer Facilities Operator       | Child Care and Guidance Workers and Managers     |
| General Office/Clerical and Typing Services | Career Exploration/Awareness Skills              |
| Banking and Financial Support Services      | Leisure and Recreational Activities              |
| Business                                    | Self-awareness and Personal Assessment           |
| General Retailing and Wholesaling Operation | Corrections/Correctional Administration          |
| Data Processing Technician                  | Protective Services                              |
| Cosmetologist                               | Auto/Automotive Mechanic/Technician              |
| Driver and Safety Teacher                   | Drafting   |
| Education                                   | Desktop Publishing Equipment Operator            |
| Teacher Assistant/Aide                      | Machinist/Machine Technologist                   |
| Education                                   | Woodworkers                                      |
| Spanish Language and Literature             | Cabinet Maker and Millworker                     |
| Child Development, Care and Guidance        | Truck, Bus and Other Commercial Vehicle Operator |
| Family/Individual Health                    | Dance  |
| Family Living and Parenthood                | Medical Assistant                                |
|   | Pharmacy Technician                              |
|   | Health and Medical Assistants                    |
|   | Nurse Assistant                                  |
|   | Home Health Aide                                 |

## **Los Angeles County Pasadena ROP**

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1201 S. Marengo Ave. ROP C154, Pasadena, CA 91106  
Ph: (626) 441-4151, Fx: (626) 441-4623

### **Accreditation/Approval Agencies**

- California State Department of Education

### **Services**

- Job Placement
- Counseling
- Open Entry/Open Exit

### **Degrees**

- Certificate

### **Programs**

Floristry Marketing Operations  
Data Processing Technician  
Child Care Provider/Assistant  
Custodian/Caretaker  
Security and Loss Prevention  
Services

Auto/Automotive Mechanic  
Graphic Design, Commercial Art and  
Illustration  
Photography  
Emergency Medical Technician  
Nurse Assistant/Aide



## **E. San Gabriel Valley Regional Occupational Program**

1501 W. Del Norte Ave., West Covina, CA 91790

Ph: (626) 962-5080, Fx: (626) 472-5125

Website: [www.esgvrop.k12.ca.us](http://www.esgvrop.k12.ca.us)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Financial Aid
- Veterans Service
- Job Placement
- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit
- Distance Learning

### **Degrees**

- Associate
- Certificate
- Diploma

### **Programs**

|   |   |
|---|---|
| Agricultural Animal Husbandry and Production Management | Environmental Control Technology/Technicians    |
| Horticulture Services Operations and Management         | Child Care and Guidance Workers and Managers    |
| Business Statistics                                     | Institutional Food Workers and Administrators   |
| Business Systems Networking and Telecommunications      | Technology Education/Industrial Arts            |
| General Office/Clerical and Typing Services             | Law Enforcement/Police Science                  |
| Accounting Technician                                   | International Relations and Affairs             |
| Accounting  | Construction Trades                             |
| Health Professions and Related Sciences                 | Auto/Automotive Mechanic/Technician             |
| Business  | Small Engine Mechanic and Repairer              |
| Apparel and Accessories Marketing Operations            | Drafting  |
| Fashion Merchandising                                   | Mechanical Typesetter and Composer              |
| Entrepreneurship  | Machine Shop Assistant                          |
| Floristry Marketing Operations                          | Tool and Die Marker/Technologist                |
| Flood Products Retailing and Wholesaling Operations     | Precision Production Trades                     |
| General Marketing Operations                            | Aviation and Airway Science                     |
| Tourism Promotion Operations                            | Graphic Design, Commercial Art and Illustration |
| Broadcast Journalism                                    | Fashion Design and Illustration                 |
| Radio and Television Broadcasting                       | Photography                                     |
| Technology/Technician                                   | Community Health Liaison                        |
| Computer and Information Sciences                       | Dental Assistant                                |
| Cosmetologist   | Medical Assistant                               |
| Electrical, Electronic and Communications Engineering   | Physical Therapy Assistant                      |
|   | Emergency Medical Technician                    |
|   | Nurse Assistant/Aide                            |
|   | Home Health Aide                                |

## **Rowland Unified School District Adult Education**

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19100 E. Killian Ave., Rowland Heights, CA 91748

Ph: (626) 965-5975, Fx: (626) 854-1191

Website: [www.rhs.rowland.k12.ca.us](http://www.rhs.rowland.k12.ca.us), Email: [rbettar@mail.rowland.k12.ca.us](mailto:rbettar@mail.rowland.k12.ca.us)

### **Accreditation/Approval Agencies**

- Western Association of Schools and Colleges

### **Services**

- Career Development
- Counseling
- Child Care
- Open Entry/Open Exit

### **Degrees**

- Certificate
- Diploma

### **Programs**

|                               |                                   |
|-------------------------------|-----------------------------------|
| Taxation                      | American Citizenship Education    |
| Business Computer Facilities  | Art                               |
| Operator                      | Cooking and Other Domestic Skills |
| Accounting Technician         | Dance                             |
| Administrative                |                                   |
| Assistant/Secretarial Science |                                   |

## **Los Angeles Music Academy**

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370 South Fair Oaks Ave., Pasadena, CA 91105

Ph: (626) 568-8850, Fx: (626) 568-8854

Website: [www.lamusicacademy.com](http://www.lamusicacademy.com)

### **Programs**

Performing Musician

Studio Musician

Band Leader/Soloist

Orchestra/Group Member

Floor Show Band

Backup Singer

Rehearsal Musician

Instrument Demonstrator for Retail and Musicians

## **Westech College**

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500 W. Mission Blvd., Pomona, CA 91766  
Ph: (909) 622-6486, Fx: (909) 622-5045  
Email: [info@westech.edu](mailto:info@westech.edu), Website: [www.westech.edu](http://www.westech.edu)

### **Accreditation/Approval Agencies**

- Accrediting Council of Career Schools and Colleges in Technology (ACCSCT)

### **Services**

- State Funded Training for private, for profit employers who pay CA Unemployment Insurance Tax and are seeking to improve productivity in the workplace

### **Programs**

|                       |                        |
|-----------------------|------------------------|
| AutoCAD I             | Geographic Information |
| AutoCAD II            | Sytem                  |
| Architectural Desktop | InRoads/Select CAD     |
| Mechanical Desktop    | Pro-E                  |
| MicroStation          |                        |



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# Executive Summary

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Public education is a vital interest of our state. It provides Californians with the capacity, knowledge, and skills to sustain our system of government, to foster a thriving economy, and to provide the foundation for a harmonious society. Today, students require education throughout their lives, and they bring increasingly diverse learning needs to each classroom. To be responsive to Californians' needs, our state must have a comprehensive, coherent, and flexible education system in which all sectors, from pre-kindergarten through postsecondary education, are aligned and coordinated into one integrated system.

This Master Plan for Education has two primary goals: to provide every family with the information, resources, services, and support it needs to give every child the best possible start in life and in school; and to provide every public school, college, and university with the resources and authority necessary to ensure that every student receives a rigorous, quality education that prepares him/her to become a self-initiating, self-sustaining learner for the rest of his/her life.

Because of the continual and rapid change that characterizes contemporary society, the primary need of every student is to become a capable learner who can readily learn whatever content becomes relevant to her/his life and work. It follows that the fundamental principle of this Master Plan is that an effective and accountable education system must focus first and foremost on the learner. Education policies, practices, structures, and financing must all be supportive of learners and their acquisition of the knowledge and skills that will enable them to be successful throughout their lifetimes.

This Master Plan addresses a number of major issues that have been impediments to the success of our education system: considerable educational disparities, especially for students living in poverty and for students of color; large enrollment growth; and fragmented governance and the attendant lack of accountability. A comprehensive, long-term approach to refocusing education in California is clearly needed, and this approach must have a clear focus on improved student achievement. This Master Plan should be used by the Legislature as a template to ensure that proposed education legislation in coming years is consistently directed toward reaching the goals contained in this Plan.

## *A Vision for California's Educational System*

We are guided by this vision for education in our state: California will develop and maintain a coherent system of first-rate schools, colleges, and universities that prepares all students for learning, and for transition to and success in successive levels of education, the workplace, and society at large, and that is fully responsive to the changing needs of our state and our people.

We have sought to identify ways in which our educational institutions can become more coherent or 'seamless,' providing learners with school and college experiences free of educational and bureaucratic impediments. We have sought to ensure equity within California's education

system through recommendations for distributing the resources and opportunities necessary to provide a high-quality education to every student, irrespective of his or her circumstances. We have sought to make the critical evolution from *access* to *success*, by focusing greater attention on the academic achievement and career preparation of all students. Further, we have sought to create effective and comprehensive accountability for the entire education system by delineating authority and responsibility for all of its participants in a manner that ensures that each can be held accountable for ensuring that all students learn.

This Master Plan is comprehensive in scope, reflecting the size, complexity, and diversity of California and its people. It focuses on four critical areas of California's educational system – access, achievement, accountability, and affordability – as a means to describe how we can attain our vision. The report provides a factual context to open each section, followed by specific recommendations on the goals California should pursue over the next two decades. We provide in this Executive Summary a snapshot of how we envision the operation of this Plan in each thematic area.

### *Access*

We envision an education system in which students are provided access to quality education opportunities throughout the state, and in which specific rights, obligations, and expectations for students and education providers will be clearly expressed, so that all participants in the educational process, including families, can understand them. These rights, obligations, and expectations would embrace what we consider to be the essential elements of the high-quality teaching and learning to which all students and education providers should have access. The Joint Committee proposes that these rights, obligations, and expectations be defined as follows:

#### **Every student would be entitled to:**

- Be taught by a competent, fully qualified teacher or faculty member;
- Receive a clear statement of the academic standards that define what s/he is expected to know and be able to do at every educational level;
- Receive an education, including intervention when necessary, that is sufficient to allow successful transition into the next levels of education and into the workforce;
- Receive supplementary educational services when needed to meet grade/class level expectations;
- Be provided access to high-quality learning materials and resources, including textbooks and technologies that foster and support the knowledge and skills s/he is expected to learn;
- Receive counseling and academic advising to assist in successful educational progress and planning;
- Advance to the next level of education upon demonstrating success in attaining stated academic standards;
- Attend school or college in a clean, modern, and safe environment that is conducive to learning;
- Be provided with sufficient information regarding educational, economic, social, and political options to be able to make informed choices for his or her future; and
- Receive adequate financial support for postsecondary education attendance.

**Every student would be expected to:**

- Attend school, college, or university regularly and participate in the educational opportunities that are provided;
- Commit to the level of effort needed to succeed; and
- Contribute to maintaining a safe, positive school, college, or university environment.

**Every education provider would be expected to:**

- Assess each student’s knowledge and ability relative to the statement of expectations for the appropriate educational level;
- Evaluate the effectiveness of instructional strategies and use of other institutional resources to promote student achievement, modifying practices when warranted to achieve improved outcomes; and
- Contribute to maintaining a safe, positive, and stimulating school, college, or university environment.

**All parents would be expected to:**

- Serve as children’s first teachers by exposing them to activities that stimulate their innate disposition for learning;
- Work with school officials as partners to promote the development and achievement of their children; and
- Encourage and support their children in their efforts to succeed in their educational endeavors.

**The State would be expected to:**

- Provide adequate funding to ensure that the essential pre-conditions for quality teaching and learning would be provided at every public school; and
- Monitor the performance of education institutions to ensure that every public education institution develops a capacity to help all students meet or exceed specified achievement standards.

Within this context, students would attend school regularly, prepared to apply themselves to the lessons and assignments they were given by their teachers. When they didn’t fully understand course content, they would ask for clarification rather than remaining silent. Teachers would continuously monitor student performance with an eye toward identifying those students who are having difficulty understanding material or who could progress more rapidly than the class as a whole. They would refer students to supplemental learning support or accelerated learning opportunities, as appropriate. Teachers would feel free and empowered to supplement traditional instructional materials and would improve instructional practices to facilitate student learning, including initiating programs to enlist parents as partners in the teaching-learning process. Within this rich teaching and learning environment, students, parents, and education professionals would all work toward ensuring that each student completed high school fully prepared to transition successfully to work or to further education at a postsecondary education institution.

Parents would know and understand what they could expect the school or college to provide to their children and would feel free to ask how they could support teaching and learning



objectives. They would offer their assistance confidently, knowing that school personnel would help them acquire any skills they needed to be most effective in assisting their children or would direct them to community resources from which appropriate assistance could be obtained. Parents would ensure that an appropriate study location were provided to their children and regular time set aside for them to complete any homework that might have been assigned by their teacher. Parents would feel welcome at school sites and would ensure that their children respected their schools by contributing to keeping them clean and safe. They would easily engage in ongoing dialogue with school counselors, advisors, health, and other school personnel to maintain mutual alertness to any conditions that might have an effect on the learning of their children and would collaborate on ways to address such conditions, when discovered.

State policymakers would identify these student rights as essential pre-conditions for every public school, college, or university and would endeavor to ensure that annual budget decisions reflected a priority for these items in the education budget. This vision reflects a historical commitment to supporting public education but also a firm understanding that a substantial increase in education investment will be required, and a belief that this additional investment will result in fewer Californians' not having the capacity to acquire gainful employment and/or eventually falling under the supervision of the criminal justice system.

### *Achievement*

Student achievement is a central tenet of this Master Plan for Education. We envision an education system in which all students enrolled in public schools, colleges, or universities in this state will have educational experiences that provide them with a measurable set of knowledge and skills that equips them for success at every level of their educational journey. That journey would begin at birth with parents providing the nourishment, health care, and stimulating experiences that foster a disposition for learning in children. The State would broker federal, state, and local resources to ensure that those families needing assistance to help their children become ready learners would be able to find such assistance in their local communities, perhaps at their local school sites, where they could establish early relationships with education providers.

We envision California's schools, colleges, and universities staffed by qualified teachers, administrators, and other professional staff who would view themselves more as advanced learners than expert dispensers of knowledge and skills. They would clearly communicate the learning expectations they would have for the students who come to them, determine those students' respective strengths and weaknesses, create formal and/or informal teaching and learning plans to help those students meet their learning expectations, and would convey an enthusiasm for teaching and learning. Informed by a clear set of state standards for teaching, learning, and facilities, educational providers would collaborate with each other continuously to ensure that curriculum were aligned across grade levels and sectors and that a variety of assessments were developed to measure both teaching and learning outcomes. These assessments would be used strategically to determine how well students were mastering the course content, and students would be provided timely feedback on their progress. When appropriate, students who could benefit from it would be provided supplemental learning support, including accommodations for physical or cognitive disabilities, to help them meet

learning expectations, or would be provided opportunities for advanced learning. A shared objective of every public school would be to dramatically reduce the number of students who drop out of school prior to earning a high school diploma.

Teachers and faculty also would reflect on the impact of their efforts to instill a disposition for learning in all the students with whom they work – a critical factor in retaining students – and on mastery by their students of the academic content and skills they teach. They would share their successes and failures with colleagues in an effort to learn of more effective, or at least more promising, strategies that could be tried to achieve more positive outcomes among the students with whom they have been least effective. They would participate in customized professional development activities, to help them learn new skills to improve their effectiveness with diverse students, remain current in the range of career and technical applications of the knowledge and skills they teach, and/or develop comfort with the effective use of technology to better achieve their instructional objectives.

School and campus administrators would continuously monitor the condition and maintenance of facilities to ensure that they provide a positive teaching and learning environment. They would communicate regularly with teachers/faculty to determine their needs and would strive to ensure that teachers have the tools they need to continue being effective with every student. They would regularly review data on student achievement to identify teaching and learning trends that might warrant more attention, and institutional performance data to determine if resources were being used most effectively and efficiently. They would actively engage with representatives of community groups and agencies both to attract fiscal and political support for their institutions and to build broader ‘learning communities’ that reinforce the learning objectives of the institutions when students return to their homes and neighborhoods. This support would be channeled into supplemental service-learning opportunities that teachers could use to build a sense of civic and community involvement and to reinforce learning objectives.

Required state testing would serve two purposes. First, it would provide an aggregate picture to state agencies as one indicator of how well public education institutions were performing in meeting California’s standards for teaching and learning with the resources made available to them. Testing data would be balanced by an institutional profile of the teaching and learning opportunities within which educational providers work and students learn and would also be aligned with the academic content standards that guide what is taught in every public school. Second, the National Assessment of Educational Progress (NAEP) would be used in conjunction with California’s standards-based test to permit California to compare the achievement of its students with that of students in other states.

We envision California’s postsecondary education institutions’ developing an assessment instrument that would provide an indicator of how well public colleges and universities were doing in helping postsecondary education students master the common body of knowledge represented by the general education requirements that all undergraduate students are expected to complete. As part of their regular program review process, faculty within public colleges and universities would begin to develop standards for knowledge and skills that students majoring in specific academic disciplines would be expected to master, and would routinely assess achievement of these expectations. Our public colleges and universities would continuously

review data on student achievement in an effort to identify the types of learning and social support that might result in greater success and persistence through certificate, credential, or degree completion by each enrolled student. Academic strengths and weaknesses of students revealed through this data analysis would be used to focus continuous faculty dialogue with high school teachers and, in the case of our two public university systems, with their community college counterparts.

Public colleges and universities would revise their reward structures to recognize faculty who were particularly effective in promoting student achievement and would actively encourage them to serve as mentors to newly hired faculty. Differentiation of function among faculty would be an accepted practice within public colleges and universities. Faculty who were particularly effective researchers would collaborate with colleagues who were particularly effective teachers, in a continuous effort to infuse new knowledge into the curriculum to which students would be exposed. Faculty who were particularly good at developing learning modules and course curriculum would routinely collaborate with technologists to develop effective ways to promote learning for every student, whether the student is physically present in a classroom or participating in learning activities at a different place and time. Faculty would blend their collective strengths and skills to provide professional development activities for all faculty that would enable each of them to improve their abilities to be effective teachers.

In short, we envision California's education system's becoming one of more- and less-advanced learners, with more-advanced learners (our current teaching, administrative, and professional personnel) engaged in continuous reflection on the teaching-learning process, in an effort to improve educational outcomes for all learners. Parents would be deliberately engaged as primarily responsible for preparing their children to become ready learners prior to the age of compulsory school attendance. State control agencies would review data on institutional and student performance to identify areas of need for improved learning opportunities for all children, particularly in schools serving communities with high concentrations of low-income families, and would seek to broker resources to ensure that needed services were provided and used effectively.

### *Accountability*

We envision an education system in which student achievement will not be left to chance or 'innate' intelligence, which will not tolerate sorting of students into tracks in which less is expected of some students than others, and which will categorically reject the notion that student achievement must be distributed along a bell curve. California would build and sustain an education system that would hold itself collectively accountable for the achievement of all students at or above a common standard; collect and analyze data regularly to evaluate the strengths and weaknesses of its education providers; direct resources to build capacity in schools, colleges, and universities performing below desired levels; encourage replication of effective practices; and allow flexibility in the approaches taken by education institutions to achieve desired outcomes.

Our accountability system would have clear statements of a limited set of goals for each level of education provided in the state. We would begin a process of expanding access to preschool for

all families who desire to take advantage of it and would make full day kindergarten a requirement for all children of compulsory attendance age. We would phase in these educational services both to better manage the cost of implementation and to ensure particular attention to the improvement of the educational opportunities for students residing in neighborhoods served by our lowest performing schools before extension of those benefits to families served by higher performing schools. We would regularly review data on the achievement of students who participate in preschool and extended day kindergarten to determine how their achievement compared with that of their peers who did not participate in these services. We would also review data on the qualifications and experiences of the teachers of these students and note where additional school capacity might be required. We would require that all students enrolling in kindergarten undergo developmental screening, or have parents provide evidence that such screening had already been conducted, to ensure that any disabilities that might impede learning were identified early and appropriate interventions prescribed.

We would adhere to our academic content standards, establish desired proficiency levels for each area, strengthen our teacher preparation programs to ensure all new teachers have the content knowledge and skills to teach to those standards, complete development of criterion-referenced assessment instruments to measure student achievement, and routinely mail school report cards to parents of enrolled students. These report cards would contain information on student achievement, and average school, district, and state achievement results. We would expand the School Accountability Report Card and include in it indicators of the ‘opportunities for teaching and learning’ that are provided in the schools, and thereby assist parents in understanding both the achievement of their children relative to the opportunities provided to them, and the opportunities their children receive in comparison to the opportunities indicators that derive from the California Quality Education Model. We would direct local districts to carefully monitor student achievement data and expenditures at each school under their jurisdiction but would require annual submission of only a limited set of data on student characteristics and achievement, personnel characteristics, and status of compliance with state standards. We would identify a clear set of progressive interventions to be implemented based on evaluation of institutional performance. For low-performing schools, emphasis would be given to assessing the balance between institutional capacity and motivation. Early interventions would be aimed at increasing institutional capacity, while more severe interventions would involve dissolution of district or school leadership and appointment of new supervisory teams drawn from local constituencies and monitored by regional offices of education on behalf of the State. For high-performing schools, early interventions would focus on public recognition of schools and/or districts and listing of them as a referral for technical assistance in replicating effective practices. Continuous high performance would be rewarded with supplemental appropriations to districts/schools to enhance professional development, capacity to provide technical assistance to other schools, and improvement of teaching and learning conditions.

We envision making substantial progress in our efforts to measure student achievement in a common body of knowledge taught by all postsecondary education institutions, allowing for locally defined measures unique to our California Community Colleges, California State University, and University of California systems. Each of our public postsecondary education systems would agree to use a modified high school exit examination as a basis for determining readiness of high school students to enroll in collegiate courses within their sector. The exam

would be administered in the 11<sup>th</sup> grade year, and each system would determine an achievement score appropriate to expectations of student readiness. High school students interested in attending the California State University or the University of California, but not achieving high enough scores on the exit exam, would focus their efforts in the 12<sup>th</sup> grade on achieving the necessary levels of proficiency, and eliminating any need for remedial instruction upon college enrollment. Both the California State University and the University of California systems would provide assistance to high schools by training successful undergraduate and graduate students to provide learning support to high school students and/or encouraging them to engage in service learning activities as part of their curricular requirements. Local community colleges would provide opportunities for high school seniors to enroll concurrently to further strengthen their readiness for college or university enrollment and to accelerate their progress toward earning collegiate certificates or degrees. All three public sectors of postsecondary education would routinely provide feedback to high school principals, and to English or math department chairs as appropriate, data on the academic performance of their graduates in English and math courses completed at their respective system campuses.

We would establish a transfer associate degree program that would smooth the transition of community college students to the California State University and the University of California systems, or to California's independent colleges and universities with minimal or no loss of time or credits. The academic senates of the individual system would collaborate to revise and enhance the charge of their voluntary Intersegmental Council of Academic Senates to take the lead in efforts to align courses among the systems and class levels and to promote efficient updates when course content were revised to reflect new knowledge generated through the research of their peers. Faculty within the University of California and the California State University systems would strengthen their collaboration with each other to articulate graduate programs at the masters and doctorate levels as a means of recruiting students from underrepresented groups into, and expediting their completion of, advanced degree programs. While limiting their initial efforts to masters and doctoral programs within the same discipline, faculty would be prompted by the potential benefits to students to next turn their attention to opportunities for articulating graduate programs across disciplines.

We would clearly communicate the state expectation that adult education programs are intended to equip adults with skills and knowledge to be self-sufficient. A set of indicators would be in place permitting regular evaluation of the effectiveness of adult education programs. We would ensure that adequate funding would be provided to support provision of basic educational skills, English literacy and proficiency, vocational preparation, and civics in every adult education program. Adult education providers would also collaborate with the State's Labor and Workforce Development Agency, which would be assigned primary responsibility for public and private workforce preparation programs, in order to ensure coordination and alignment of training production and workforce demand. Adult education programs would also be customized throughout the state by augmentation of services in the previously mentioned priority areas with other courses and training needed by adults in local communities to become self sufficient and productive members of society.

Beyond their traditional goal of providing broad access to postsecondary education, state officials would also be clearly focused on ensuring the success of those students who chose to

enroll. To further this end, the California Community Colleges, the California State University, and the University of California systems would be required to annually submit all data required by the National Center for Educational Statistics and a limited set of additional data on desired student outcomes and characteristics, personnel characteristics, expenditures, and compliance with state standards. All required data would be reported by unique student identifier, to enable longitudinal monitoring of student outcomes and would be consistently submitted to the State's intersegmental education commission. Independent and private colleges and universities would be requested to submit similar data and, for certain key data on student outcomes, we would condition continued eligibility to participate in the State's financial aid program on compliance with this request.

We would take steps to better ensure quality in the educational offerings of private, for-profit institutions offering degrees, by transferring oversight and program approval to the State's postsecondary education commission. We believe this step would be necessary to ensure that students who chose to enroll in these institutions received an education of a quality equivalent to that of public and not-for-profit, accredited independent institutions and to facilitate transitions, with minimal or no loss of credits, between and among all postsecondary education institutions approved to operate in the state. This accomplishment would not only provide greater equity in expectations for quality but would contribute to a more efficient postsecondary education enterprise by relieving some of the demand for enrollment in public institutions. The State's intersegmental education commission would monitor data on student outcomes in each type of institution and advise the Legislature and Governor of any trends indicating a need for increased scrutiny and of practices associated with high performance that might warrant replication.

We would anticipate the educational needs of Californians in the future by charging the State's education commissions to regularly engage in long-term planning, using comprehensive educational and demographic data as a basis for that planning. The education commission would also collaborate with the Department of Finance's Demographic Research Unit to incorporate the unit's forecasts of California population trends and progression through public schools, and with the Governor's chief state education officer to evaluate the effectiveness of state policy intended to improve education outcomes and coordination.

### *Affordability*

In absolute dollars, California now invests more money in its public education system than any other state in the nation, by a considerable margin; but we also enroll considerably more students than any other state. We envision a system, however, in which we will be far less concerned about how California's investment compares to that of other states than we will about how well we are providing the resources we believe are necessary to make possible the education system we desire. Our annual appropriations for each level of education would be determined by our best estimates of what it costs to provide the educational resources that make a difference in promoting student achievement. We would fully expect all public schools, colleges, and universities to be efficient in their operations and use of public funds; but we would also realize that quality education is expensive. We would not expect public education to sacrifice effectiveness simply to achieve greater economy.

We would commit ourselves to providing adequate compensation, benefits, and working conditions that would position California to attract and retain education personnel with professional qualifications and attitudes that would match our vision of public education at all levels. We would modify our compensation schedules and reward systems to provide opportunities for increased compensation without requiring excellent teachers to leave the classroom or disproportionately devote their time to research unrelated to excellence in teaching and learning. We would earmark a modest proportion of state-funded research to advance our knowledge of what works in promoting learning and achievement among diverse student groups, in recognition of the fact that the greater public benefit derives from Californians who develop a disposition for learning and acquire from their educational experiences the tools of learning that enable them to continue to learn over a lifetime.

Our goals-based approach to financing public education would enable us to strike a better balance between state and local control over the use of education resources. The State would focus clearly on the academic achievement goals it wanted for all students and the resources necessary to achieve those goals, but would clearly understand that there is no single ‘best way’ to achieve those goals. We would therefore dramatically reduce state reliance on categorical allocation of funds. Rather, we would ensure that all education institutions had the base of funding determined to be adequate to achieve the goals established for them, and allow them to locally determine how best to use those funds to achieve the learner outcomes we expect. We would establish state standards for physical facilities, to ensure appropriate conditions for teaching and learning, and for teaching and administrative qualifications, to ensure all students are taught by qualified teachers. All education institutions would be run by educational leaders who understand how to maintain school cultures that are supportive of teaching and learning, knew how to evaluate achievement data, and emphasize continuous improvement. These educational leaders would also publicly report educational progress within their institutions to enable regular review and evaluation of both student achievement and institutional performance. The resources needed to gather and report appropriate data would be considered essential components of quality and would be built into the adequate base of funding.

All public schools, colleges, and universities would maintain an array of supplemental learning support designed to assist students in meeting the learning expectations we had for them at each level of public education. This support would include learning centers, academic tutoring, and supplemental instruction; it would also include use of technology to facilitate independent replication of problem solving, retrieval of lecture and/or lab notes after hours, accommodation of diagnosed disabilities, and embedded assessments to assist students in accelerating their learning. Professional staff would be available to assist students in grounding their learning in real-world contexts through service learning experiences, career exploration, internships, apprenticeships, and career and academic planning. These contextual learning opportunities, too, would be considered essential components and would be built into our base of adequate funding.

We would systematically upgrade and expand public education facilities through a combination of direct General Fund appropriations and issuance of General Obligation bonds. We would focus first on upgrading schools and colleges with the oldest facilities and with the facilities in the worst state of repair. Not only would this focus be both logical, and equitable to students and communities, it would contribute to satisfaction of our commitment to ensure that qualified

teachers were available to teach students in every public school classroom, by ensuring they had modern, well-maintained campuses in which to teach. We would follow the advice of economists by using bonds to amortize the costs of facility construction and modernization, spreading their repayment across future generations whose children would derive the greatest benefits from the facilities. We would be mindful, however, that some of those future costs could be mitigated through direct appropriation of General Fund monies for facility needs when state revenues permitted, thereby avoiding financing costs to the State and on-going expenditures that would be more difficult to reduce during poor fiscal times.

We would reaffirm our state's long-standing commitment to providing Californians affordable access to public colleges and universities. We would adhere to the belief that students have an obligation to assume responsibility for paying a fair share of the costs of attending college. That share, after possible readjustment, would include health care, laboratory fees, intercollegiate athletics, and student services. Additional costs could be incurred by students who chose to reside on campus or park personal cars on campus. Any suggested increase in student fees would be based on increases in these costs and would be limited by changes in per capita family income. The State would assume responsibility for meeting increases in operational costs related to instruction and state-supported research. Changes in housing and parking costs would be annually communicated to students in writing and would be considered legitimate costs of attendance for which needy students could receive financial assistance, as would other costs used to determine mandatory student fees. During times of poor economic conditions, state policymakers would negotiate with the governing boards of each public system to limit any increases in student fees and to balance trade-offs between enrollment growth, compensation increases, and investment in other quality education components.

We would be obligated to be prudent in the use of public funds, even for as important a state investment as public education. We would seek to carry out this responsibility in several ways. First, we would actively encourage schools, colleges, and universities to build and maintain linkages with businesses throughout the state. Business would be not only a consumer of education products but a provider itself. The State would provide certain incentives to businesses to engage in such partnerships with education institutions.

Second, we would seek to take greater advantage of the impressive array of private and independent schools, colleges, and universities within California. At the postsecondary level, we would continue a long-standing commitment to providing financial assistance to Californians who choose to enroll in independent institutions rather than public colleges or universities. We would incorporate private, proprietary colleges and universities into our education system to ensure that students who choose to enroll in such institutions would have access to comparable quality in educational programs, enrollment in which, in turn, would qualify them for need-based financial assistance from state and federal sources.

Finally, we would reaffirm our belief that differentiation of function is more efficient than redundancy in function among California's education providers, particularly at the postsecondary education level. Our mechanism for coordination would reflect this belief.



Our vision of California's education system would be expensive but efficient. We would steadily improve our understanding of the relationship between component costs and the goals we adopted for public education. A portion of the research capacity of this state would be continuously focused on this relationship to guide state policymakers in making difficult funding decisions when the State entered poor fiscal circumstances. Our clarity of vision and understanding of the relationship between education goals and their costs would also guide reinvestment decisions when economic times improved, so that we would reinvest in things that matter most rather than simply attempting to restore cuts or unrealized gains of the past.

### *Conclusion*

This Plan is ambitious in its scope and its full implementation will require a sustained commitment on the part of all Californians and substantial investment from the State, local communities, and business. This Plan cannot be implemented without the engagement of our entire state and all of its component parts. Parents, students, educators, policymakers, community-based organizations, and employers each and all have a responsibility to support quality teaching and learning and must both accept and fulfill their respective responsibilities for implementation of this Plan. No other state has undertaken what is being proposed in this Master Plan for Education: creation of a framework to guide educational policy for all aspects of education, from early childhood education to postsecondary education levels, driven by an uncompromised commitment to promoting student achievement and the ability to learn for a lifetime. We believe that virtually every student can and should be assisted in realizing her/his potential to become a learner for life, and in meeting (or even exceeding) high standards of achievement. An education system that remains focused on helping learners achieve this potential must also be focused on continual improvement.

Because learning takes place within the context of learners' lives, the needs to which our education system must respond will inevitably change over time. Today's instruction is not limited to use of slates and chalkboards, as it was in the past; and it is appropriate to conclude that instruction will not be limited to printed textbooks and face-to-face interaction between teachers and learners in the future. The changes generated by science, technology, and use of information are increasingly generating new opportunities and new tools for workers, learners, teachers, and researchers alike. At the same time, the increasingly diverse population in California is creating opportunities for new community linkages and opening new paths for students to become engaged citizens. The committee recognizes this fact and recommends that this Master Plan for Education be reviewed comprehensively at least every 10 years and modified, as necessary, to ensure a continued focus on learners within California's education system. While this Master Plan should undergo a comprehensive review at least every 10 years, the Joint Committee further believes that an interim review should occur every three to five years during the initial years of implementation. Among the issues that rapid change suggests may warrant attention during interim reviews are the following:

- The potential impact of distance and electronically-mediated learning on the effectiveness of teaching and learning, as well as on the variety of learning options from which Californians could choose to pursue their interests in acquiring new knowledge and new skills;

- The variety of formats in which textbooks and other instructional materials could be available and the possibilities that these formats could offer for assuring that every learner enrolled in a public education institution has access to current information and learning support;
- The findings of research on effective ways to create and sustain small learning communities that may suggest new ways to structure and finance public schools; and
- New information learned about ways to effectively cultivate educational leadership and collaborative governance arrangements that could improve the effectiveness and seamlessness of California’s education system.

This call for interim reviews is also driven by the focus of this Plan on student achievement and its commitment to both equity and accountability in providing high quality educational experiences for every student enrolled in California schools, colleges, and universities. With all Californians supporting these basic principles, we will be able to provide more educational access, quality, and success to more students than ever before – a goal that is uniquely Californian and to which we can all aspire. The balance of this Master Plan provides greater detail on this and other educational goals can be achieved.



## The *San Gabriel Valley* 2000 Survey

The San Gabriel Valley Economic Partnership and The San Gabriel Valley Council of Governments commissioned the 2000 San Gabriel Valley Survey. The Rose Institute of State and Local Government fielded the survey in June of 2000. All interviews were conducted by telephone with a scientifically chosen random sample of 828 adult San Gabriel Valley residents. Calls were made during weekday evenings and during weekend days. The margin of sampling error is +/- 3.4% at the 95% confidence level.

The survey permits the measurement and monitoring of economic, social, and political trends over time and provides valuable information to private and public decision-makers. The Rose Institute of State and Local Government at Claremont McKenna College in Claremont, California is known for its work in demographic studies, fiscal analysis, and regulatory studies. The Institute has specialized in survey research for many years, having conducted surveys in cities and regional areas throughout southern California.

Selected questions relating to education, business and economic development in the San Gabriel Valley:

### What do you like best about the San Gabriel Valley? (OPEN)

Base: 828 Respondents

|  | Frequency | Percentage |
|--|-----------|------------|
| Convenient central location;<br>Accessibility          | 178       | 21%        |
| Quiet; Safe; Less crime; Low-key                       | 150       | 18%        |
| Weather; Climate                                       | 54        | 7%         |
| Natural beauty:<br>Mountains;<br>Green space;<br>Parks | 42        | 5%         |
| Community;<br>Neighbors;<br>People                     | 42        | 5%         |
| Good schools   | 29        | 4%         |
| Specific areas/cities                                  | 28        | 3%         |
| Proximity to employment;<br>Job/Business opportunities | 27        | 3%         |
| Beauty of area:<br>Clean; Houses                       | 21        | 3%         |
|  | Frequency | Percentage |

|  |    |     |
|--|----|-----|
| Atmosphere:<br>Suburban; Small-town                    | 19 | 2%  |
| Nice area; Just like the area                          | 18 | 2%  |
| It is home;<br>Friends & family                        | 16 | 2%  |
| Everything   | 14 | 2%  |
| Cultural diversity                                     | 13 | 2%  |
| Shopping; Stores                                       | 12 | 1%  |
| Familiarity with area                                  | 9  | 1%  |
| Variety of things to do                                | 9  | 1%  |
| Good city services: Library;<br>Police; Senior centers | 8  | 1%  |
| Proximity to LA  | 7  | 1%  |
| Nothing  | 9  | 1%  |
| Other  | 10 | 1%  |
| Don't know   | 90 | 11% |

**What do you like least about the San Gabriel Valley? (OPEN)**

Base: 828 Respondents

|   | Frequency | Percentage |
|---|-----------|------------|
| Smog; Air quality   | 148       | 18%        |
| Traffic; Congestion; Freeways; Transportation             | 129       | 16%        |
| Unsafe; Crime; Drugs; Gangs                               | 68        | 8%         |
| Weather; Heat   | 53        | 6%         |
| Over-crowding; Population                                 | 34        | 4%         |
| Dirty; Unkempt; Pollution                                 | 25        | 3%         |
| People's attitudes; Neighbors                             | 21        | 3%         |
| Cost of living: Taxes; Lack of job opportunities; Housing | 13        | 2%         |
| Growth; Change  | 13        | 2%         |
| Immigration   | 12        | 1%         |
| Nothing to do; Proximity to activities                    | 10        | 1%         |
| Local government and services                             | 8         | 1%         |
| Specific areas/ cities                                    | 7         | 1%         |
| School system   | 6         | 1%         |
| Other   | 11        | 1%         |
| None  | 98        | 12%        |
| Don't know  | 172       | 21%        |

**What is your occupation or employment status?**

Base: 828 Respondents

|                 | Frequency | Percentage |
|-----------------|-----------|------------|
| Service         | 337       | 41%        |
| Retail          | 49        | 6%         |
| Manufacturing   | 57        | 7%         |
| Retired         | 170       | 21%        |
| Unemployed      | 61        | 7%         |
| Homemaker       | 134       | 16%        |
| Other: Employed | 20        | 2%         |

**Do you work in the San Gabriel Valley?**

Base: 463 Respondents

|     | Frequency | Percentage |
|-----|-----------|------------|
| Yes | 286       | 62%        |
| No  | 177       | 38%        |

**How far is your typical commute, one-way?**

Base: 463 Respondents

|                    | Frequency | Percentage |
|--------------------|-----------|------------|
| 10 miles or less   | 210       | 45%        |
| 11 to 20 miles     | 116       | 25%        |
| 21 to 30 miles     | 65        | 14%        |
| 31 to 40 miles     | 29        | 6%         |
| 41 to 50 miles     | 7         | 2%         |
| More than 50 miles | 16        | 3%         |
| Don't know         | 20        | 4%         |

**Which type of medium do you MOST depend on for news and current events?**

Base: 828 Respondents

|            | Frequency | Percentage |
|------------|-----------|------------|
| Television | 528       | 64%        |
| Radio      | 63        | 8%         |
| Newspapers | 201       | 24%        |
| Magazine   | 2         | 0%         |
| Internet   | 28        | 3%         |
| Other      | 6         | 1%         |

**Where do you get local news about your community and the San Gabriel Valley?  
(OPEN) (MULTIPLE RESPONSE)**

Base: 828 Respondents

|  | Frequency | Percentage |
|--|-----------|------------|
| SGV Tribune                                | 136       | 16%        |
| LA Times                                   | 130       | 16%        |
| Network TV: 2, 4, 5, 7, 9, 11              | 117       | 14%        |
| Cable TV: CNN, PBS, 10, 22, 34, 52, 55, 56 | 115       | 14%        |
| City/ Local newspaper                      | 97        | 12%        |
| Pasadena Star News                         | 66        | 8%         |
| Daily Bulletin                             | 29        | 4%         |
| Mailers; Newsletters; Weekly               | 26        | 3%         |
| TV: No specific channel                    | 21        | 3%         |
| Word of mouth                              | 17        | 2%         |
| Radio                                      | 16        | 2%         |
| Chinese TV: 18, 59, 62                     | 16        | 2%         |
| Chinese newspaper                          | 15        | 2%         |
| La Opinion                                 | 14        | 2%         |
| Newspaper: none specific                   | 6         | 1%         |
| Other                                      | 10        | 1%         |
| None/ Don't get any                        | 11        | 1%         |
| Don't know                                 | 50        | 6%         |

**Do you feel that you and your family are financially better off or worse off today than you were a year ago?**

Base: 828 Respondents

|            | Frequency | Percentage |
|------------|-----------|------------|
| Better off | 388       | 47%        |
| Same       | 354       | 43%        |
| Worse off  | 77        | 9%         |
| Don't know | 9         | 1%         |

**Agree or Disagree: We should try to attract more manufacturing plants to the San Gabriel Valley.**

Base: 828 Respondents

|                   | Frequency | Percentage |
|-------------------|-----------|------------|
| Strongly agree    | 40        | 5%         |
| Agree             | 351       | 42%        |
| Disagree          | 319       | 39%        |
| Strongly disagree | 55        | 7%         |
| Don't know        | 63        | 8%         |



**Please help me rate the performance of the following functions of government in your city:**

Base: 828 Respondents

|                               | Excellent | Good | Fair | Poor | Don't know |
|-------------------------------|-----------|------|------|------|------------|
| City Government               | 52        | 370  | 252  | 53   | 101        |
|                               | 6%        | 45%  | 30%  | 6%   | 12%        |
| Public schools                | 91        | 302  | 200  | 125  | 110        |
|                               | 11%       | 36%  | 24%  | 15%  | 13%        |
| Police and Fire               | 170       | 447  | 130  | 26   | 25         |
|                               | 21%       | 58%  | 16%  | 3%   | 3%         |
| Parks and Recreation          | 115       | 465  | 158  | 35   | 55         |
|                               | 14%       | 56%  | 19%  | 4%   | 7%         |
| Highways and road maintenance | 48        | 423  | 239  | 102  | 16         |
|                               | 6%        | 51%  | 29%  | 12%  | 2%         |
| Trash collection              | 112       | 561  | 115  | 20   | 20         |
|                               | 14%       | 68%  | 14%  | 2%   | 2%         |

**Would you be willing to pay more in taxes in order to: \_\_\_\_\_ ?**

Base: 828 Respondents

|                                       | Yes | No  | Don't know |
|---------------------------------------|-----|-----|------------|
| Reduce air pollution                  | 474 | 297 | 57         |
|                                       | 57% | 36% | 7%         |
| Clean up graffiti                     | 419 | 367 | 42         |
|                                       | 51% | 44% | 5%         |
| Improve the quality of drinking water | 552 | 238 | 38         |
|                                       | 67% | 29% | 5%         |
| Improve bus and Metrolink service     | 421 | 346 | 61         |
|                                       | 51% | 42% | 7%         |
| Improve streets and freeways          | 527 | 271 | 30         |
|                                       | 64% | 33% | 4%         |
| Add more police                       | 465 | 308 | 55         |
|                                       | 56% | 37% | 7%         |
| Improve public education              | 625 | 165 | 38         |
|                                       | 75% | 20% | 5%         |

**What is your highest level of education?**

Base: 828 Respondents

|                            | Frequency | Percentage |
|----------------------------|-----------|------------|
| Less than some high school | 141       | 17%        |
| High school graduate       | 150       | 18%        |
| Some college               | 243       | 29%        |
| College graduate           | 181       | 22%        |
| Post graduate              | 107       | 13%        |
| Refused                    | 6         | 1%         |

**Which of the following devices do you personally own or have available at home?  
(MULTIPLE RESPONSE)**

Base: 828 Respondents

|                               | Frequency | Percentage |
|-------------------------------|-----------|------------|
| Computer                      | 522       | 65%        |
| Pager                         | 296       | 37%        |
| Cellular telephone            | 414       | 51%        |
| Cable television              | 438       | 54%        |
| Satellite television          | 131       | 16%        |
| Internet access               | 422       | 52%        |
| Handheld electronic organizer | 148       | 18%        |
| None of the above             | 93        | 12%        |



| <b>Target Industries for Los Angeles County</b> |                           |             |             |                  |                                  |                                  |  |   |            |                 |  |  |
|---|---------------------------|-------------|-------------|------------------|----------------------------------|----------------------------------|--|---|------------|-----------------|--|--|
| Source: LAEDC                                   |                           |             |             |                  |                                  |                                  |  |   |            |                 |  |  |
| <b>Industries</b>                               | <b>Average Employment</b> |             |             | <b>Will grow</b> | <b>Has cluster that provides</b> | <b>Offers job</b>                | <b>Ladder that entrants can access</b> | <b>Good pay scales (5)</b>                | <b>SIC</b> |                 |  |  |
|   | <b>(in thousands)</b>     | <b>1995</b> | <b>1998</b> | <b>2000f (1)</b> | <b>in next 5 years</b>           | <b>competitive advantage (2)</b> | <b>"ladder"</b>                        | <b>(\$7.82+/hr)</b>                       |            |                 |  |  |
| <b>Business &amp; Prof. Mgmt. Svcs.</b>         | 399.3                     | 444.4       | 474.9       | X                |                                  |                                  |  |   |            |                 |  |  |
| Business Services                               | 237.1                     | 274.5       | 300.0       | X                |                                  | X                                | X                                      | \$11.22/hr                                |            | 73 (except 737) |  |  |
| Legal   | 47.4                      | 49.0        | 50.0        | X                |                                  |                                  |  | \$31.36/hr                                |            | 81              |  |  |
| Engr./Mgmt./Acctng.                             | 114.8                     | 120.9       | 124.9       | X                | X                                |                                  |  | \$20.65/hr                                |            | 87              |  |  |
| <b>Health Services/Bio-med.</b>                 | 284.7                     | 292.1       | 297.1       | X                |                                  |                                  |  |   |            |                 |  |  |
| Health  | 259.6                     | 266.0       | 270.0       | X                | X                                | X                                | X                                      | \$17.83/hr                                |            | 80              |  |  |
| Bio-med. (3)                                    | 25.1                      | 26.1        | 27.1        | X                | X                                |                                  |  | \$21.00/hr                                |            | 283, 384        |  |  |
| <b>Tourism</b>                                  | 250.2                     | 262.3       | 275.7       |                  | X                                |                                  |  |   |            |                 |  |  |
| Hotels & Lodging                                | 37.0                      | 39.5        | 44.0        | X                | X                                | X                                | X                                      | \$9.14/hr                                 |            | 70              |  |  |
| Amusement & Recreation                          | 49.2                      | 51.4        | 53.0        | X                | X                                | X                                | X                                      | \$27.17/hr                                |            | 79              |  |  |
| Other (retail, transportation)                  | 164.0                     | 171.4       | 178.7       | X                |                                  | X                                | X                                      | n.a.                                      |            | 52-59, 45-47    |  |  |
| <b>International Trade</b>                      | 239.7                     | 262.0       | 266.0       | X                | X                                |                                  |  | n.a.                                      |            | n.a.            |  |  |
| <b>Motion Picture/TV Production</b>             | 209.8                     | 248.2       | 250.0       | X                | X                                |                                  |  | \$20.45/hr                                |            | 781             |  |  |
| <b>Distribution/Logistics (4)</b>               | 206.1                     | 218.0       | 230.0       | X                | X                                | X                                | X                                      | \$20.16/hr durable, \$16.75/hr nondurable |            | 50-51           |  |  |
| <b>Technology</b>                               | 177.9                     | 191.5       | 190.5       |                  | X                                |                                  |  |   |            |                 |  |  |
| Computer Mfg.                                   | 9.8                       | 6.6         | 6.1         |                  | X                                |                                  |  | \$23.91/hr                                |            | 375             |  |  |

|  |       |       |       |   |   |   |   |  |            |  |                  |  |
|--|-------|-------|-------|---|---|---|---|--|------------|--|------------------|--|
| Communications Equipment   | 4.3   | 4.1   | 4.1   |   | X | X |   | \$30.85/hr                               |            |  | 366              |  |
| Electronics  | 16.1  | 17.8  | 17.9  |   | X | X |   | \$17.88/hr                               |            |  | 365, 367         |  |
| Aircraft & Parts   | 62.4  | 65.3  | 59.0  |   | X | X |   | \$26.44/hr                               |            |  | 372              |  |
| Space Equipment  | 4.6   | 3.2   | 3.0   |   | X | X |   | \$32.87/hr                               |            |  | 3764             |  |
| Search & Navigation Equip.   | 33.1  | 35.8  | 35.1  |   | X | X |   | \$31.09/hr                               |            |  | 381              |  |
| Measuring Instruments  | 7.5   | 8.8   | 9.6   | X | X | X |   | \$20.23/hr                               |            |  | 382              |  |
| Software   | 40.1  | 49.9  | 55.7  | X |   |   |   | \$27.49/hr                               |            |  | 7371             |  |
| <b>Apparel Design/Mfg./Dist.</b>   | 143.9 | 148.5 | 146.5 |   | X | X | X | \$8.55/hr mfg., \$15.14/hr distribution  |            |  | 23, 513          |  |
| <b>Financial Services</b>  | 111.1 | 110.8 | 112.8 | X |   |   |   | \$19.74/hr                               |            |  | 60-69            |  |
| <b>Food Products Mfg./Agri.</b>  | 50.1  | 61.8  | 65.0  | X | X | X | X | \$15.66/hr mfg.                          |            |  | 20               |  |
| <b>Furniture Design/Mfg./Dist.</b>   | 34.0  | 38.2  | 41.2  | X | X | X | X | \$16.50/hr wholesale, \$12.09/hr mfg.    |            |  | 25, 502          |  |
| <b>Auto Design/Aftermarket</b>   | 33.2  | 31.2  | 32.0  |   | X |   |   | \$20.68/hr distribution, \$15.12/hr mfg. |            |  | 371, 5088        |  |
| <b>Toy Design/Distribution/Mfg.</b>  | 5.8   | 8.5   | 11.2  | X | X | X |   | \$22.95/hr distribution, \$12.66/hr mfg. |            |  | 3942, 3944, 5092 |  |
| <b>Metal Fabrication</b>   | 82.4  | 94.0  | 95.4  | X |   |   | X | X  |            |  |                  |  |
| Fabricated Metal Products  | 45.9  | 49.6  | 51.0  | X |   |   | X | X  | \$16.55/hr |  | 34               |  |
| Ind. Mach. (ex. Computers)   | 36.5  | 40.8  | 40.8  |   |   |   | X | X  | \$18.20/hr |  | 35 (except 357)  |  |
| Nonferrous Castings  | 3.6   | 3.6   | 3.6   |   |   |   |   |  | \$14.72/hr |  | 3364             |  |
| Notes: (1) Assumes no change in current economic development policy, plus slower growth in 1999                  |       |       |       |   |   |   |   |  |            |  |                  |  |
| (2) A cluster would include educational institutions, trade associations, unique infrastructure, and market size |       |       |       |   |   |   |   |  |            |  |                  |  |
| (3) Includes production and research of pharmaceuticals and instruments  |       |       |       |   |   |   |   |  |            |  |                  |  |
| (4) Reflects ports, airports, highway and rail access  |       |       |       |   |   |   |   |  |            |  |                  |  |
| (5) All workers  |       |       |       |   |   |   |   |  |            |  |                  |  |

## What We've Learned

(The Wall Street Journal, Monday, November 17, 1997)

### 1. Computer labs are a lousy location for computers.

Most schools start out in computing with a single room where kids pile in once a week or so to try their hands at the keyboards. Often, it's a waste of time.

"What we've learned is that 30 minutes a week doesn't have any impact," says Linda Roberts, director of the U.S. Department of Education's Office of Educational Technology. "The lab concept was to introduce kids to computers. We've come to introduce kids to computers. You want them to use computers."

Many teachers say even a single computer in the classroom has more value than occasional access to a lab.

Alan Haught, a physics teacher at Weaver High School in Hartford, Conn., says, "I'm uncomfortable going to the computer lab in the middle of a physics experiment. It's like having to go next door to use the phone. It may be cost-effective, but it tends to inhibit you." So Dr. Haught makes do with \$80 graphing calculators that can be handed out to each student daily, and an aging Macintosh computer and laser printer that kids use to type up reports.

### 2. Struggling students often get more out of computers than average or above-average performs.

Study after study has shown that it's the slower kids who benefit the most when using computers. No doubt that's partly because they have so much more room for improvement. But it's also because computers are effective at drilling basic skills like reading, writing and math. "People say drill-and-practice isn't interesting, but [computers have] been interesting to these kids as a way to reinforce basic elements," says Ms. Roberts.

In Orlando, Florida, the Orange County Public School District applied technology to one of its biggest problems: middle-schoolers who were functionally illiterate and were doomed to drop out as soon as they became old enough.

Orlando developed a program, which has been used on 2,000 children since 1993, to take children out of regular classes for two-hour blocks each day and put them in half-size classes. There they spend a quarter of the time reading and answering questions on a computer that includes video, animation and text; the rest of the time they read from books.

The program, developed by researchers at Vanderbilt University, employs tougher vocabulary words and more complex stories than normal elementary reading programs. It corrects student mistakes and gives personal feedback via headphones. "We'd like every teacher to do that with every child, but with 15 students they can't always do that," says Rose Taylor, senior director for curriculum development in the Orange County Public School System in Orlando, Florida. "For some kids, it's a better way."

On average, the children have gained more than a year of literacy for each year in the program, giving them a better shot at "reaching a level great enough to graduate, to read the newspapers and function in society," Ms. Taylor says.

### **3. Most teachers still don't know how to use computers in class.**

Computer extremists once thought machines might replace teachers. But it turns out that today's computers are pretty much useless unless a teacher intervenes, scripting careful lesson plans and guiding students along the way.

The trouble is, most teachers are woefully unprepared. McKinsey & Co., a New York management-consulting firm, estimates that nearly half the teachers in America have little computer experience. Nationally, only 13% of school systems mandate computer training for teachers, and more than half don't provide stipends or other incentives to encourage them, according to the Education Department. So it's little surprise that only 20% of teachers use computers regularly to teach classes, according to the agency.

Part of the problem is that even teachers who know how to use computers have never been taught how to teach with them. Indeed, even younger, more computer savvy educators learned teaching methods by observing classrooms where computers are hardly used.

"You can't just teach people how to run a computer and have it revolutionize education," says Jerry Willis, an Iowa State University professor of curriculum who is editor of the *Journal of Technology and Teacher Education*.

### **4. School systems must plan their computer use carefully.**

In the past few years, schools have installed computers willy-nilly, without any thought on how to integrate them into the curriculum. Now many states have learned their lesson, requiring school districts to have comprehensive technology plans with budgets for training and support and corporate-style "mission statement."

Mandating that all students produce something on the computer is a start. The Boston school system now required all fourth-graders to produce a travel brochure about Boston, retrieving information from computerized encyclopedias, paper reference books and, in schools with on-line connections, the Internet.

"You need to get clear what your goals are," says Harvard's Dr. Wiske. With proper planning by teachers, she says, computers can help students memorize facts, develop basic skills in teamwork and problem analysis, and help understand fundamental concepts in math or social science.

### **5. Computers are a tool, not a subject.**

Most students develop computer skills best if they learn them in regular classes, such as math, where computers can demonstrate difficult concepts in algebra and probability, and English, where the machines make rewriting easy.

Anthony Amato, superintendent of New York City's District six, says that in one class studying the environment, students watched the effects of pouring various amounts of water across a tilted table of sand, then fed the results into a

computer. "They were putting information into the computer and seeing it on graphs," he says. By using the PC's to get an abstract representation of the results, the kids "captured the essence of predictive models."

Thomas Weaner, a humanities teacher at Renaissance Charter School in Boston, says the computer is especially useful in teaching writing. In one class I said, "This is a really nice sentence, but it doesn't belong in this paragraph." The students decided where to move it by cutting and pasting in the word-processing program.

"The most difficult thing for a kid to do is to rewrite a composition," adds Ms. Roberts of the Education Department. "If you give them good word-processing software, you take away the drudgery and let them focus on the substance of the composition, not mechanics."

## **6. Kids flourish when everyone has a computer-but schools aren't spending enough to guarantee that.**

Adults don't share computers in offices if companies want maximum productivity. Similarly, kids with computers of their own are likely to benefit the most. In places where computer makers have fully equipped classrooms with computers, students and teachers are enthusiastic.

Janice Gordon, a fifth-grade teacher in the Mott-Hall public school in New York, whose class was entirely equipped with laptops in a program co-sponsored by Microsoft Corp. and Toshiba Corp., says "kids wrote a huge amount more" with the machines. Students worked in groups, scheduled tasks for writing reports and made presentations to the class.

Since every child had his or her own computer, there weren't any fights over keyboard access, and many weaker students blossomed using the computer, Ms. Gordon says. "None of the other classes made such substantial progress" during the year, she adds.

Superintendent Amato says the success of Ms. Gordon's class persuaded him to develop a plan to get every student a laptop. He says he has arranged a leasing plan under which the schools can pay \$35 a month for each child's computer, and their parents can put up matching donations. In three years, the families will own the laptops.

Such special deals may be the only way schools can get every student a computer. In the 1995 school year, the nation spent \$3.3 billion on computer hardware, networks, teacher training and infrastructure, estimates McKinsey & Co. That isn't nearly enough to give all children frequent access to computers. And the amount that is needed is staggering: McKinsey says even getting one computer for every five children would require spending \$47 billion by 2005 - 20% of it on improved electrical wiring and air conditioning - plus a \$14 billion annual bill for operations and maintenance. That would amount to almost 4% of the nation's total K-12 education budget in 2005, or triple the 1.3% proportion spent today.

To make matters worse, most of the computers installed in schools before 1994 need to be replaced. "Technology changes every day, so you can't just do it



once," says Charlotte Wright, director of technology in Anderson County, Ky. "It's very hard for boards of education to understand.

### **7. Schools can't handle hand-me-downs.**

Children can get some benefit from almost any computer that can run a word-processing program or drill them on spelling or multiplication tables. In a second-grade classroom at Trotter School in Boston, Alma Wright has scrounged 15 computers of various types for her class. And they work all right, as far as they go: On a recent morning, seven-year-old Julia Ryan works on addition steadily for 12 minutes using an ancient International Business Machines Corp. PCjr with a black-and-white monitor. The machine flashes "7+8." She frantically counts on her fingers to 15, types in the answer and is rewarded by seeing a stick figure slam-dunk a basketball.

However, keeping track of each system's secret handshakes can be a strain for Ms. Wright and can confuse youngsters as they bounce from machine to machine.

Some educators find the confusion too great to handle. Ann Grady, director of the Center for Instructional Technology in Boston's public-school system, says, "We don't accept old computers as donations," because they lack sound and video capabilities and because "if we don't have standard parts, it's difficult to repair them." She notes that teachers volunteer to be network managers in each school, and "to ask them to support a hybrid network of computers is too much."

Adds Peter Lenkway, director of technology in Florida's Department of Education, where there is one computer for every six students: "The younger students need the more-sophisticated equipment because they require the most sound and graphics and video" since they can't read.

### **8. Computers don't diminish traditional skills.**

Some teachers say that kids with spell-checkers actually become better spellers than kids with dictionaries, apparently because they always get instant correction and reinforcement when they misspell a word. Computer math programs also can reduce the drudgery of practicing multiplication tables for both teachers and students.

Ms. Wright of Trotter School says that her student teachers "were amazed how fast" second-graders learned to tell time by using computer programs - "and not just on digital clocks," she adds. They use an IBM program called Measuring, Time and Money that shows students the digital 8:30, and then prompts them to move the hands on an analog clock on the screen, using a mouse. If they make a mistake, the program asks them to try again.

What about fears that computers in the classroom would breed antisocial behavior? Educators report that in many classrooms, computers actually foster teamwork, as small groups of students jointly discuss what's on the screen. This even occurs in schools where most children have their own computers, teachers say.

And, contrary to popular belief, many students who use computers to improve their reading skills still embrace books. "Books are better," says Scotland Willis,

a Boston second-grader who practices with a Macintosh phonics program. (He wouldn't elaborate.)

### **9. The Internet and e-mail excite kids by giving them an audience.**

Joe Greenwald, an English and social-studies teacher at Champlain Valley Union High school in Hinesburg, Vt., says he has a guaranteed method for spurring kids to write: He regularly publishes students' stories on the school's Web page. "That extra little incentive, that this isn't just going to the class, makes all the difference in the world," he says.

Many other schools have adopted similar community strategy, developing electronic pen-pal relationships with schools across the country. Science projects such as tracking the migration of the monarch butterfly, reporting local weather conditions or analyzing acid rain become more meaningful when the students' work is shared with other schools and included in databases of information collected by scientists at universities.

A few years ago, Mr. Greenwald says, he needed to prepare juniors and seniors with poor writing skills for a new state graduation requirement that included an eight-page research paper. He received a grant to install a computer at a nearby retirement home and then recruited 20 residents to correspond with the students via e-mail, critique drafts of their work and encourage them to improve their writing.

"These kids had been hearing it from teachers and ignoring them for years," he says. "Hearing it from the senior citizens made a difference to a number of them."

In three years the program has been around, all but one of the remedial students completed the research paper, Mr. Greenwald says, "which is a higher average than the school itself."

### **10. Kids love computers**

Second-grader Barbara Williams reluctantly removes her earphones and steps away from her Macintosh, where she has been mouthing sounds along with the computer as part of a remedial phonics program at Boston's Trotter School. "I like to read and type on the computer," she says. "It's fun. My mother says she'll buy me a computer because I like to so much."

In a survey of 1,000 teachers and superintendents last year for software maker Jostens Learning Corporation and the American Association of School Administrators, 61% said computers resulted in a "great improvement" in student motivation, and most of the rest said they caused at least a small improvement.

Indeed, many schools say attendance improves and discipline problems drop when computers are available in classrooms. "Kids don't miss school," says Giulia Cox, laptop project coordinator for a New York school that experimented last year with giving every child in a class a laptop. "We had 100% attendance for 40 consecutive days."

Brent David, a senior at Plainfield High School in Plainfield, Ind., says he was getting a C-minus in modern U.S. history last year until he got excited about

doing a multimedia presentation on the development of the atomic bomb. "I researched it on the Internet, where I got a lot off the National Lab in Los Alamos, on # encyclopedias in the library, on microfiche at the public library," he says. "I did book research, too, and I rented movies."

He says he even wrote a little program: "You typed in how many tons of TNT, and it would calculate how many square miles were destroyed." He adds proudly, "By the time I was done, I had an A-minus in history."





